

*The Times of India*  
**DIRECTORY  
& YEARBOOK**

**INCLUDING WHO'S WHO**

**1967**





Over 100 Years of Banking in India

# **NATIONAL AND GRINDLAYS BANK LIMITED**

(Amalgamating National Bank of India Limited, Grindlays Bank Limited,  
and the Eastern Branches of Lloyds Bank Limited)

Registered in London under the Companies Act of 1862 on the  
23rd March, 1866. The Liability of Members is Limited.

**HEAD OFFICE : 26, BISHOPSGATE, LONDON, E.C.2**

London Branch :

**13, ST. JAMES'S SQUARE, S.W.1**

**ISSUED CAPITAL AND RESERVES EXCEED £ 12½ MILLIONS**

Branches throughout Aden, Ceylon, India, Kenya,  
Pakistan, Rhodesia, Somalia, Tanzania, Uganda  
and Zambia.

**The Bank conducts all classes of Banking and  
Exchange Business throughout the world.**

**Bombay Branches :**

90, Mahatma Gandhi Road ; 270/272, Dr. Dadabhoy Naoroji Road,  
(Lloyds Branch) ; Mint Road, (Corner of Mint Road and Sir P. M.  
Road), 21/29, Princess Street, (Lloyds Branch) ; 117-119, Kazi  
Syed Street, Mandvi ; 65F, Linking Road, Santa Cruz ; 574,  
Gowalia Tank Road, Cumballa Hill ; Shivaji Mandir, N. C. Kelkar  
Road, Dadar, (Safe Deposit Lockers) ; 24B, Club Road, Byculla.  
THANA : Agra Road, Kolbad Road, (Near Castle Mills).

**Associated Banks : Lloyds Bank Limited • National Provincial Bank Limited**

SHB2/NGB-86 R



# The Times of India DIRECTORY & YEARBOOK

INCLUDING WHO'S WHO

1967

EDITOR  
N. J. NANPORIA

*Editor, The Times of India*

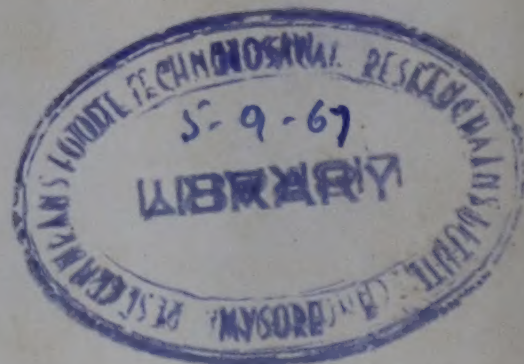


THE TIMES OF INDIA PRESS, BOMBAY

*Regional Offices :*

3, ALBEMARLE STREET, LONDON, W. 1; 7, BAHADUR SHAH ZAFFAR MARG, NEW DELHI  
13/1 & 13/2, GOVT. PLACE EAST, CALCUTTA; 39-A, WHITES ROAD, ROYAPETTAH, MADRAS 11

PRICE : Rs. 50-00



**NOT FOR EXPORT**  
Copies of this edition of the DIRECTORY are not to be sold outside India  
A separate De-luxe edition is simultaneously published for EXPORT  
Enquiries from the trade and exporters are solicited.



W. 62.

# British Banking *in* Asia



These are the territories served by THE CHARTERED BANK and its subsidiary, The Eastern Bank Limited, through a system of one hundred and forty branches extending to most centres of commercial importance in the Middle East, South and South-East Asia and the Far East. These branches provide com-

plete and up-to-date banking services, sustained by expert knowledge and long experience of Eastern trade, finance and industry. An effective credit information service and skilled assistance and advice are available to merchants and manufacturers seeking new business connexions in Asian Markets.

## THE CHARTERED BANK

(Incorporated by Royal Charter 1853)

HEAD OFFICE: 38 BISHOPSGATE, LONDON, E.C.2.

Offices in the United Kingdom also at Manchester and Liverpool, in Germany at Hamburg and in the United States at New York and San Francisco  
Branches in India at: Amritsar, Bombay, Calcutta, Calicut, Cochin, Delhi, Kanpur, Madras, New Delhi and Vasco de Gama

### THE EASTERN BANK LIMITED

Head Office: 2 and 3 Crosby Square, London, E.C.3.

ASSOCIATED BANKS: The Irano British Bank (Inc. in Iran)

Allahabad Bank Limited (Inc. in India) • The Commercial Bank S.A.L. (Inc. in Libya) • The Chartered Bank of London (Inc. in California)



# CONTENTS

All possible care is taken to check the information given in this volume. But the publishers cannot take responsibility for chance errors or omissions. Authoritative corrections will be gratefully received.

There is in some cases a discrepancy between the figures from the Central and a State Government relating to the same subject. This is generally pointed out in a foot-note.

|                                                          | Page               |                                       | Page |
|----------------------------------------------------------|--------------------|---------------------------------------|------|
| Index to Advertisers .. .. .                             | vi                 | Glass Industry .. .. .                | 98   |
| Trade Directory for Buyers .. .. .                       | ix                 | Vegetable Oil Industry .. .. .        | 98   |
| Political Map of India .. .. .                           | <i>Opp. page</i> 1 | Woollen Industry .. .. .              | 100  |
| Physiography .. .. .                                     | 1                  | Family Planning .. .. .               | 101  |
| Meteorology .. .. .                                      | 2                  | Handicrafts .. .. .                   | 103  |
| Metric System of Weights and Measures ..                 | 5                  | Import & Export Trade .. .. .         | 103  |
| Defence Services .. .. .                                 | 7                  | Indians Overseas .. .. .              | 112  |
| Institutions for the Blind in India ..                   | 12                 | Prohibition .. .. .                   | 116  |
| Posts & Telegraphs .. .. .                               | 13                 | Government Industrial Undertakings .. | 117  |
| Social Welfare in India .. .. .                          | 15                 | Bhoodan .. .. .                       | 131  |
| A Tourist's Guide .. .. .                                | 17                 | Broadcasting .. .. .                  | 132  |
| U.N. Aid to India .. .. .                                | 26                 | Housing .. .. .                       | 134  |
| Colombo Plan .. .. .                                     | 27                 | Public Health .. .. .                 | 135  |
| Community Development Projects and<br>Panchayats .. .. . | 31                 | Education .. .. .                     | 141  |
| The Cooperative Movement (1963-64) ..                    | 35                 | Population .. .. .                    | 150  |
| Index Number .. .. .                                     | 39                 | Research .. .. .                      | 166  |
| Overseas Communications Service ..                       | 40                 | Roads .. .. .                         | 172  |
| Production (Industrial) 1965 .. .. .                     | 40                 | Shipping Companies and Airways ..     | 175  |
| Areca nut Industry .. .. .                               | 44                 | Banking .. .. .                       | 180  |
| Coffee Industry .. .. .                                  | 45                 | Insurance .. .. .                     | 181  |
| Coir Industry .. .. .                                    | 46                 | Refugees and Rehabilitation .. ..     | 185  |
| Jute Industry .. .. .                                    | 47                 | U.S. Aid to India .. .. .             | 187  |
| Lac Industry .. .. .                                     | 48                 | Cement Industry .. .. .               | 191  |
| Paper Industry .. .. .                                   | 49                 | Hides, Skins & Leather .. .. .        | 192  |
| Sericulture and Silk .. .. .                             | 50                 | Miscellaneous Industries .. .. .      | 193  |
| Sugar Industry .. .. .                                   | 53                 | Non-Ferrous Industry .. .. .          | 196  |
| Textile Industry .. .. .                                 | 55                 | Petroleum Industry .. .. .            | 199  |
| Tobacco Industry .. .. .                                 | 58                 | Plastics Industry .. .. .             | 201  |
| Administration of Justice .. .. .                        | 59                 | Rayon Industry .. .. .                | 202  |
| Constitution of India .. .. .                            | 61                 | Rubber Industry .. .. .               | 204  |
| Laws of 1964 .. .. .                                     | 65                 | Shipping Industry .. .. .             | 206  |
| Churches in India .. .. .                                | 66                 | Small Scale Industries .. .. .        | 208  |
| Ports .. .. .                                            | 67                 | Tea Industry .. .. .                  | 210  |
| Labour .. .. .                                           | 71                 | Educational Statistics (1963-64) ..   | 212  |
| Christian Missions in India .. .. .                      | 82                 | Awards and Prizes .. .. .             | 221  |
| Electric Power Development .. .. .                       | 83                 | Bullion .. .. .                       | 225  |
| Some All India Corporations .. .. .                      | 85                 | Capital Market .. .. .                | 227  |
| State Corporations .. .. .                               | 89                 | Industrial Structure & Policy .. ..   | 230  |
| Alcohol Industry .. .. .                                 | 93                 | Mines & Minerals .. .. .              | 232  |
| Cottage Industries .. .. .                               | 94                 | Foreign Exchange Controls .. .. .     | 239  |
|                                                          |                    | Money Supply .. .. .                  | 240  |



# YOUR SAVINGS IN UNION BANK

## HELP GROWING INDUSTRIES GROW EVEN BIGGER

Union Bank helps industries. From Steel and Engineering to Textiles Plantations and Public Utilities, Union Bank channels your savings into many useful industries. This stimulates production, encourages economic development and conserves vital foreign exchange, besides earning you interest on your savings.

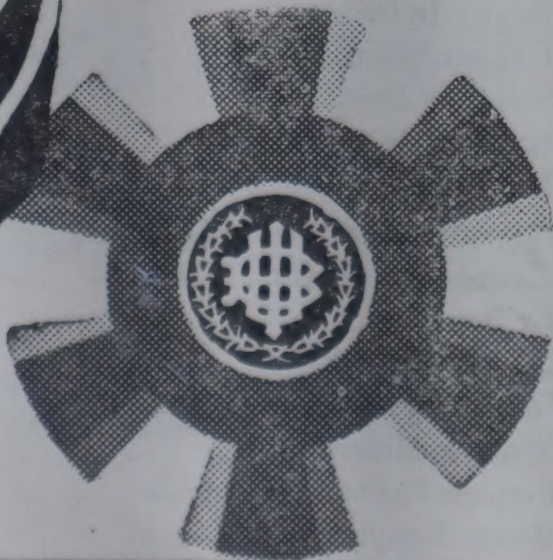
Issued, Subscribed & Paid-up capital Rs. 1.25 crores  
Deposits over Rs. 69 crores  
Total working fund over Rs. 89 crores  
Reserve fund Rs. 92 lakhs

Branches all over the country.  
Correspondents in 66 countries with a network of 26,161 offices.  
Telex contact with countries all over the world.



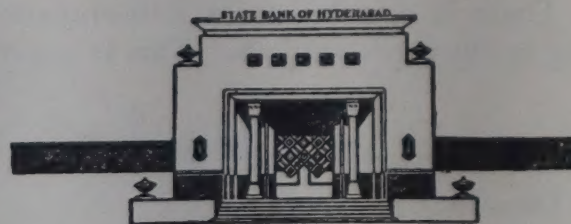
### THE UNION BANK OF INDIA LTD.

66/80 Apollo Street, Fort, Bombay 1. Telex PR-11 • Calcutta: Telex 228 • Madras: Telex 332 • New Delhi: Telex 311 • Coimbatore: Telex 221 • Hyderabad: Telex 270 • Madurai: Telex 222 • Kanpur: Telex 210 • Nagpur: Telex 213 • Bangalore: Telex 238 • Ahmedabad: Telex 205. Poona: Telex 237



## STATE BANK OF HYDERABAD

(Subsidiary of the State Bank of India)



All types of Banking and Foreign Exchange Business undertaken through H.O. and branches.

**ANDHRA PRADESH :** Head Office in Hyderabad and 71 branches, including 20 in Hyderabad.

**MAHARASHTRA STATE :** 23 branches, including 2 in Bombay.

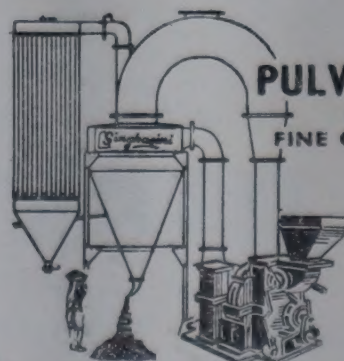
**MYSORE STATE :** 19 branches.

**MADRAS STATE :** 2 branches.



## Singhasini

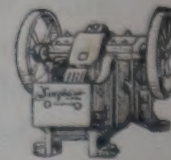
WELL DESIGNED PLANTS & MACHINERY



**PULVERISER**  
FOR FINE GRINDING



**DISINTEGRATOR**  
FOR MEDIUM & COARSE GRINDING



**JAW CRUSHER**  
FOR PRIMARY CRUSHING

For particulars please contact:  
**SINGHASINI ENGINEERING WORKS**  
84/25, FACTORY AREA, KANPUR.

KRISHNA





# CONTENTS

|                                                                  | Page |                                          | Page |
|------------------------------------------------------------------|------|------------------------------------------|------|
| National Income .. .. .                                          | 241  | Himachal Pradesh .. .. .                 | 343  |
| Chemical & Pharmaceutical Industry ..                            | 243  | Jammu and Kashmir State .. .. .          | 344  |
| Public Services .. .. .                                          | 247  | Kerala .. .. .                           | 346  |
| Civil Aviation .. .. .                                           | 251  | Laccadive, Minicoy & Amindivi Islands .. | 352  |
| Fisheries .. .. .                                                | 253  | Madhya Pradesh .. .. .                   | 354  |
| Scheduled Castes, Scheduled Tribes &<br>Backward Classes .. .. . | 259  | Maharashtra .. .. .                      | 360  |
| Steel Industry .. .. .                                           | 261  | Greater Bombay .. .. .                   | 370  |
| Film Industry .. .. .                                            | 263  | Rainfall of Bombay .. .. .               | 376  |
| Foreign Investments in India : 1962 ..                           | 266  | Ahmednagar District .. .. .              | 377  |
| Agriculture .. .. .                                              | 269  | Akola District .. .. .                   | 377  |
| Important Events of the Year 1966 ..                             | 276  | Amravati District .. .. .                | 377  |
| Fourth Five Year Plan .. .. .                                    | 277  | Aurangabad District .. .. .              | 377  |
| The Press .. .. .                                                | 284  | Bhandara District .. .. .                | 378  |
| Automobile Industry .. .. .                                      | 289  | Bhir District .. .. .                    | 378  |
| Railways .. .. .                                                 | 293  | Buldana District .. .. .                 | 378  |
| Irrigation .. .. .                                               | 299  | Chanda District .. .. .                  | 378  |
| Indo-Pakistan Relations .. .. .                                  | 303  | Dhulia District .. .. .                  | 379  |
| Forests .. .. .                                                  | 304  | Jalgaon District .. .. .                 | 379  |
| Food .. .. .                                                     | 307  | Kolaba District .. .. .                  | 379  |
| Livestock .. .. .                                                | 310  | Kolhapur District .. .. .                | 380  |
| Andaman & Nicobar Islands .. .. .                                | 315  | Nagpur District .. .. .                  | 380  |
| Andhra Pradesh .. .. .                                           | 316  | Nanded District .. .. .                  | 380  |
| Assam State .. .. .                                              | 321  | Nasik District .. .. .                   | 381  |
| North East Frontier Agency .. .. .                               | 325  | Osmanabad District .. .. .               | 381  |
| Delhi .. .. .                                                    | 326  | Parbhani District .. .. .                | 381  |
| Goa, Daman & Diu .. .. .                                         | 329  | Poona District .. .. .                   | 381  |
| Dadra and Nagar Haveli .. .. .                                   | 331  | Ratnagiri District .. .. .               | 383  |
| Gujarat .. .. .                                                  | 332  | Sangli District .. .. .                  | 383  |
| Ahmedabad District .. .. .                                       | 338  | Satara District .. .. .                  | 383  |
| Amreli District .. .. .                                          | 338  | Sholapur District .. .. .                | 384  |
| Banaskanta District .. .. .                                      | 338  | Thana District .. .. .                   | 384  |
| Baroda District .. .. .                                          | 339  | Wardha District .. .. .                  | 384  |
| Bhavnagar District .. .. .                                       | 339  | Yeotmal District .. .. .                 | 385  |
| Broach District .. .. .                                          | 339  | Manipur .. .. .                          | 385  |
| Bulsar District .. .. .                                          | 339  | Mysore State .. .. .                     | 385  |
| Dangs District .. .. .                                           | 340  | Nagaland .. .. .                         | 394  |
| Jamnagar District .. .. .                                        | 340  | Pondicherry .. .. .                      | 395  |
| Junagadh District .. .. .                                        | 340  | Punjab .. .. .                           | 396  |
| Kaira District .. .. .                                           | 340  | Rajasthan State .. .. .                  | 397  |
| Kutch District .. .. .                                           | 341  | Tripura .. .. .                          | 401  |
| Mehsana District .. .. .                                         | 341  | West Bengal .. .. .                      | 403  |
| Panch Mahals District .. .. .                                    | 341  | Bihar State .. .. .                      | 406  |
| Rajkot District .. .. .                                          | 342  | Madras State .. .. .                     | 413  |
| Sabarkanta District .. .. .                                      | 342  | Maharashtra State—(Contd.) .. .. .       | 419  |
| Surat District .. .. .                                           | 342  | Orissa .. .. .                           | 421  |
| Surendranagar District .. .. .                                   | 342  | Uttar Pradesh .. .. .                    | 425  |
| Haryana .. .. .                                                  | 343  | State Associations .. .. .               | 432  |
|                                                                  |      | Andhra Pradesh .. .. .                   | 432  |



# THE BANK OF MAHARASHTRA LTD.

1177, BUDHWAR PETH, POONA-2.

## Board of Directors.

**Padmabhushan Shri S. L. Kirloskar**  
(Chairman)

**Shri B. M. Gupte**

**Shri S. L. Kirloskar**

**Shri R. B. Banthia**

**Shri V. R. Daffe**

**Shri M. S. Parkhe**

**Shri M. V. Shah**

**Shri J. K. Rege**

**Shri V. S. Shirgaonkar**

**Shri M. L. Apte**

**Shri V. S. Vaidya**

**Shri M. P. Chitle.**

*More than 113 Branches in Maharashtra, Madhya Pradesh, Andhra Pradesh, Gujarath, Goa and Mysore.  
Complete Range of Banking Service of every sort, including Foreign Exchange.*

*Working Funds exceed Rs. 58 crores.*

**C. V. Joag,**  
General Manager.



## Huge Deposits?

Yes, but not deposits alone. It is really the ability to provide BIG service. Big in every respect. From encouraging thrift amongst youngsters to providing expert financial service to businessmen. Including advice and assistance for overseas operations through a wide network of foreign branches and correspondents. And, the benefit of experienced management by a Board of Directors made up of leaders in industry and business.

### Directors:

**R.D. Birla (Chairman)**  
**Kantilal Nahalchand**  
**Naval H. Tata**  
**Anandlal Hirālāl Sheth**  
**Chinubhai Chimanbhai**  
**B.K. Daphtary**  
**Lt.-Col.H.H. The Maharaja**  
**Fatehsinh Gaekwad**  
**of Baroda**

**Keshav Prasad Goenka**  
**Narsing Dass Bangur**  
**Rasesh Navinchandra**  
**Mafatlal**  
**Navnitlal M. Chokshi**  
**(Managing Director)**  
**A.M.M. Arunachalam**  
**Navnitlal S. Shodhan**

### Capital Structure and Reserves as on 31.12.1965:

**Capital Authorised** ..... Rs. 8,00,00,000  
**Capital Issued and Subscribed** ..... Rs. 4,00,00,000  
**Capital Called Up and Paid Up** ..... Rs. 2,00,00,000  
**Reserve Fund and Other Reserves** ..... Rs. 2,60,66,510



## THE BANK OF BARODA LIMITED

(Estd. 1908) Regd. Office: Mandvi, Baroda

Over 240 branches in India. Also branches in London, East Africa, East Pakistan, Fiji Islands, Mauritius and Guyana.



|                                                                                              | Page    |                                                          | Page    |
|----------------------------------------------------------------------------------------------|---------|----------------------------------------------------------|---------|
| Assam .. .. .                                                                                | 433     | West Bengal (Commercial Firms in Calcutta) .. .          | 851     |
| Bihar .. .. .                                                                                | 433     | Classified List of Trades & Professions in Calcutta .. . | 864-913 |
| Delhi .. .. .                                                                                | 434     | States Administrative Personnel .. .                     | 914-928 |
| Gujarat .. .. .                                                                              | 441     | Government of India Personnel .. .                       | 929-942 |
| Kerala .. .. .                                                                               | 443     | Indian Political Representatives Abroad .. .             | 943     |
| Madhya Pradesh .. .. .                                                                       | 445     | Indian Government Trade Representatives Abroad .. .      | 949     |
| Madras .. .. .                                                                               | 445     | Embassies in India .. .                                  | 950     |
| Maharashtra .. .. .                                                                          | 450     | Legations in India .. .                                  | 951     |
| Trade and Commerce Associations in Greater Bombay .. .                                       | 450     | High Commissions in India .. .                           | 951     |
| Chambers of Commerce in Greater Bombay .. .                                                  | 455     | Foreign Consular Offices in India .. .                   | 952     |
| Clubs in Greater Bombay .. .                                                                 | 456     | U. N. Bodies in India .. .                               | 954     |
| Benevolent Institutions in Greater Bombay .. .                                               | 456     | Trade Commissions .. .                                   | 955     |
| Cultural, Political, Professional, Scientific and Social Institutions in Greater Bombay .. . | 459     | Who's Who in India .. .                                  | 956     |
| Educational Institutions in Greater Bombay .. .                                              | 465     | Late Particulars .. .                                    | 1044    |
| Hospitals in Greater Bombay .. .                                                             | 469     | Akhil Bharat Hindu Mahasabha .. .                        | 1044    |
| Missionary and Religious Societies in Greater Bombay .. .                                    | 470     | All India Forward Bloc .. .                              | 1044    |
| Mysore .. .. .                                                                               | 473     | Bharatiya Jan Sangh .. .                                 | 1044    |
| Orissa .. .. .                                                                               | 475     | Communist Party of India (Marxist) .. .                  | 1045    |
| Haryana & Punjab .. .. .                                                                     | 475     | " " " (Right) .. .                                       | 1045    |
| Rajasthan .. .. .                                                                            | 476     | Dravida Munnetra Kazhagam .. .                           | 1046    |
| Uttar Pradesh .. .. .                                                                        | 477     | Indian National Congress .. .                            | 1046    |
| West Bengal .. .. .                                                                          | 479     | Peasants and Workers Party of India .. .                 | 1048    |
| States Commercial Firms & Classified List of Trades and Professions .. .                     | 485     | Praja Socialist Party .. .                               | 1048    |
| Andhra (Commercial Firms) .. .                                                               | 485     | The Republican Party of India .. .                       | 1049    |
| " (Classified List of Trades and Professions) .. .                                           | 486     | Revolutionary Socialist Party .. .                       | 1049    |
| Delhi (Commercial Firms) .. .                                                                | 490     | Samyukta Socialist Party .. .                            | 1049    |
| " (Classified List of Trades and Professions) .. .                                           | 498     | Shiromani Akali Dal .. .                                 | 1049    |
| Goa (List of Trades and Professions) .. .                                                    | 527     | Swatantra Party .. .                                     | 1050    |
| Gujarat (Commercial Firms) .. .                                                              | 528     | General Elections (1967) .. .                            | 1052    |
| " (Classified List of Trades and Professions) .. .                                           | 529     | Awards (Contd.) .. .                                     | 1079    |
| Madras (Commercial Firms) .. .                                                               | 548     | All India Corporations (Contd.) .. .                     | 1081    |
| " (Classified List of Trades and Professions) .. .                                           | 553     | State Corporations (Contd.) .. .                         | 1081    |
| Banks and Bankers (Maharashtra) .. .                                                         | 575     | Education (Contd.) .. .                                  | 1082    |
| Classified List of Overseas Firms with names of Bombay Agents/Representatives .. .           | 582     | Foreign Aid to India .. .                                | 1083    |
| Commercial Firms (Bombay) .. .                                                               | 597-665 | Government Industrial Undertakings (Contd.) .. .         | 1087    |
| Classified List of Trades and Professions (Bombay) .. .                                      | 666-843 | India's Frontier with China .. .                         | 1089    |
| Poona District (Trades & Professions) .. .                                                   | 843     | Rubber Industry (Contd.) .. .                            | 1091    |
| Mysore Trades and Professions .. .                                                           | 845     | Posts and Telegraphs (Contd.) .. .                       | 1092    |
| Rajasthan Trades and Professions .. .                                                        | 848     | A Tourist's Guide (Contd.) .. .                          | 1092    |
|                                                                                              |         | Fourth Plan (Contd.) .. .                                | 1092    |
|                                                                                              |         | Maharashtra (Contd.) .. .                                | 1093    |
|                                                                                              |         | Rajasthan (Contd.) .. .                                  | 1093    |
|                                                                                              |         | Sports .. .                                              | 1093    |
|                                                                                              |         | Public Finance .. .                                      | 1094    |
|                                                                                              |         | Budgetary Position of States 1965-66 to 1967-68 .. .     | 1103    |
|                                                                                              |         | Railways (Contd.) .. .                                   | 1104    |
|                                                                                              |         | Famous Houses and Institutions Serving India .. .        | 1107    |
|                                                                                              |         | General Index .. .                                       | 1111    |



# INDEX TO ADVERTISERS

|                                                     | PAGE                   |                                                   | PAGE                            |
|-----------------------------------------------------|------------------------|---------------------------------------------------|---------------------------------|
| A. D. Wills Rowat (India) P. Ltd. . . . .           | 762                    | Chunilal & Co. . . . .                            | 755                             |
| A. H. Shah & Co. P. Ltd. . . . .                    | 597                    | Cipla . . . . .                                   | 1110                            |
| A. V. John & Co. . . . .                            | 597                    | Columbia Chemi-Colour Industries P. Ltd. . . . .  | 718                             |
| Aarpee . . . . .                                    | 597                    | Concrete Association of India . . . . .           | 612                             |
| Abbas & Co. . . . .                                 | 712                    | Continental Steel Corpn. . . . .                  | xxvii                           |
| Abdulahsein Peerbhai & Sons . . . . .               | 807                    | Cox & Kings (Agents) Ltd. . . . .                 | 613                             |
| Abdullahbai Fidaalli & Co. . . . .                  | 823                    | Crompton Greaves Ltd. . . . .                     | 613                             |
| Aditya Textile Industries P. Ltd. . . . .           | 808                    | D. Jamnadas & Co. . . . .                         | 697                             |
| Ahmedabad Electricity Co. Ltd. . . . .              | 534                    | Damodar Mangalji & Co. P. Ltd. . . . .            | 527                             |
| Ahura Printing Press . . . . .                      | 797                    | Davidson of India P. Ltd. . . . .                 | xi                              |
| Amrutlal Bhurabhai & Co. . . . .                    | 600, 696               | Deepak Industries . . . . .                       | 680, 729                        |
| Arc Brazier . . . . .                               | 838                    | De-Lite Industrial Corpn. . . . .                 | 723                             |
| Ardeec Rubber & Automobile P. Ltd. . . . .          | 833                    | Devidayal Cable Industries Ltd. . . . .           | 690                             |
| Armstrong Smith Ltd. . . . .                        | 601                    | Dharamdas M. Jhaveri & Co. . . . .                | 830                             |
| Artytoys . . . . .                                  | 779                    | Dhiraj Steel Co. . . . .                          | 829                             |
| Arya Vaidya Sala . . . . .                          | viii                   | Duke & Sons P. Ltd. . . . .                       | 669                             |
| Aryan Brush Co. Ltd. . . . .                        | 688                    | Durga Laboratories . . . . .                      | 718                             |
| Asbestos Packing & Mfg. Co. . . . .                 | 676                    | Dwarkadas Velji Talpatriwala . . . . .            | 820                             |
| Asgarali & Co. . . . .                              | 742                    | Electronics Mfg. Division . . . . .               | 728                             |
| Ashok Metal Industries . . . . .                    | 601                    | Engineering Plastics . . . . .                    | 793                             |
| Ashok Sunil & Co. . . . .                           | 796                    | Everest Calendar Co. . . . .                      | 691                             |
| Asian Chemical Co. . . . .                          | 695                    | Evergreen Wirecloth Factory . . . . .             | 733, 840                        |
| Asian Tools Trading Co. . . . .                     | 732                    | Express Block & Engraving Studios P. Ltd. . . . . | 798                             |
| Asiatics . . . . .                                  | xvi                    | Famous Ladders Mfg. Co. . . . .                   | 674, 759                        |
| Asiatic Electric Trading Co. . . . .                | 725                    | Fancy Corpn. Ltd. . . . .                         | 729                             |
| Asiatic Travel Service . . . . .                    | 832                    | Finlay, James & Co. Ltd. . . . .                  | 619                             |
| Associated Instrument Mfrs. (India) P. Ltd. . . . . | 524                    | Forbes Forbes Campbell & Co. Ltd. . . . .         | 621                             |
| Associated Steel & Tool Corpn. . . . .              | 828                    | Frezar Engineering Corpn. . . . .                 | 763                             |
| Associated Tube Wells (India) P. Ltd. . . . .       | 520                    | G. K. Kansara . . . . .                           | 767                             |
| Auto Accessories (India) Ltd. . . . .               | 602                    | G. T. Industries . . . . .                        | 816                             |
| Azad Brush Co. . . . .                              | 688                    | Gifts land . . . . .                              | xiv                             |
| Bank of Baroda Ltd. . . . .                         | iv                     | Gini Construction & Sales Corpn. . . . .          | 840                             |
| Bank of Maharashtra Ltd. . . . .                    | iv                     | Goldfilled Mercantile Co. . . . .                 | 783                             |
| Bharat Chemicals Co. . . . .                        | 696, 710               | Golden Dyes Corpn. (India) P. Ltd. . . . .        | 718                             |
| Bharat Dyes & Chemical Co. . . . .                  | 717                    | Goolamhosein Valiji Arsiwalla . . . . .           | 739                             |
| Bhavnagar Oil & Chemical Industries P. Ltd. . . . . | 778                    | Great India Net Industry . . . . .                | 840                             |
| Blow Plast P. Ltd. . . . .                          | 793                    | Guest, Keen, Williams Ltd. . . . .                | 625                             |
| Boehringer-Knoll Ltd. . . . .                       | 785                    | Gupta Cycle Co. . . . .                           | xiv                             |
| Bombay Co. P. Ltd. . . . .                          | 607                    | Gyro Laboratories P. Ltd. . . . .                 | 727                             |
| Bombay Miscellanies P. Ltd. . . . .                 | 675                    | H. P. Brothers . . . . .                          | 712                             |
| Bombay Philatelic Co. . . . .                       | 813                    | Haribhai Jeebhai & Co. . . . .                    | 697                             |
| Bombay Stationery Mart . . . . .                    | 813                    | Hepack P. Ltd. . . . .                            | 682                             |
| Boxpack Paper Industries P. Ltd. . . . .            | 692                    | Heptoola Noonedin & Co. . . . .                   | 807                             |
| C. Itoh & Co. Ltd. . . . .                          | 609                    | Hindustan Engg. Works . . . . .                   | 817                             |
| Calcutta Fan Works P. Ltd. . . . .                  | xviii                  | Hindustan Machine Tools Ltd. . . . .              | 845                             |
| Cambay Tool Steel Co. . . . .                       | 829                    | Hindustan Plastic Co. . . . .                     | 792                             |
| Cambin P. Ltd. . . . .                              | 752                    | Hindustan Scale Co. . . . .                       | 837                             |
| Canning Mitra Phoenix Ltd. . . . .                  | 728                    | Hindustan Tiles & Cement Industries . . . . .     | xxi                             |
| Chettinad Cement Corpn. Ltd. . . . .                | 557                    | Honesty Trading Corpn. . . . .                    | 831                             |
| Chartered Bank . . . . .                            | <i>Facing Contents</i> | Imanes P. Ltd. . . . .                            | 812                             |
| Chhuttan Lall Mattumal . . . . .                    | 513                    | Imperial Tobacco Co. . . . .                      | <i>Facing Inside Back Cover</i> |
| Chinubhai Kalidass & Bros. . . . .                  | 704                    | India Tool Steel Mart . . . . .                   | 829                             |



|                                               | PAGE     |                                                                              | PAGE                      |
|-----------------------------------------------|----------|------------------------------------------------------------------------------|---------------------------|
| Indian Oxygen Ltd. . . . .                    | 630      | Multiweld Wire Co. P. Ltd. . . . .                                           | xxviii                    |
| Indian Textile Journal . . . . .              | 773      | Mysore Sugandhi Dhoop Factory . . . . .                                      | 669                       |
| Industrial Mill Gin Stores . . . . .          | 730      | N. Jamnadas & Co. . . . .                                                    | 833                       |
| Industrial Plastics Corpn. P. Ltd. . . . .    | 793      | N. J. Metal Screens Mfrs. P. Ltd. . . . .                                    | 546                       |
| International Burner Mfg. Co. . . . .         | 751      | Nasik Industrial Engg. Corpn. . . . .                                        | xii                       |
| International Research Laboratories . . . . . | 718      | National & Grindlays Bank Ltd. . . . .                                       | <i>Inside Front Cover</i> |
| Itlab Engg. P. Ltd. . . . .                   | xx       | National Organic Chemical Industries Ltd. . . . .                            | 644                       |
| J. B. Advani & Co. . . . .                    | 1108     | Navalakha Agencies . . . . .                                                 | 844                       |
| J. K. Organisation . . . . .                  | 1109     | Navbharat Corpn. . . . .                                                     | 808                       |
| Jaam Chemie-Colour Co. . . . .                | 738      | Neiveli Ceramics & Refractories Ltd. . . . .                                 | xxv                       |
| Jafkay Engg. Corpn. . . . .                   | 672      | Neptune Waterproof Mfg. Co. . . . .                                          | 836                       |
| Jai Hind Roadways . . . . .                   | 831      | New Era Steel Co. . . . .                                                    | 830                       |
| Jairamdas & Sons . . . . .                    | 802, 827 | New India Industries Ltd. . . . .                                            | 546                       |
| Jash Engineering Industries . . . . .         | xviii    | New Kem Insulations . . . . .                                                | 753                       |
| Javahar Engineers P. Ltd. . . . .             | 843      | New Standard Chemicals Co. P. Ltd. . . . .                                   | 698                       |
| Jayant Paper Box Factory . . . . .            | 692      | Noble Paint & Varnish Co. P. Ltd. . . . .                                    | 781                       |
| Jayantilal M. Mehta . . . . .                 | 718      | Noble Stationery Mart . . . . .                                              | 814                       |
| Jemco Chuck Mfg. Works . . . . .              | 702      | Organo Chemical Industries & Organo Rubber<br>Reclaiming Co. P. Ltd. . . . . | 523                       |
| Jyoti-Calor Emag . . . . .                    | 721      | Oriental Power Cables Ltd. . . . .                                           | xii                       |
| K. Wadia . . . . .                            | 756      | Oswal Book Mfg. Depot . . . . .                                              | 685                       |
| K. C. P. Ltd. . . . .                         | 564      | P. Ratilal & Co. . . . .                                                     | 736, 769                  |
| Kamani Engg. Corpn. Ltd. . . . .              | 510      | P. K. Velu & Co. P. Ltd. . . . .                                             | 649                       |
| Kangan P. Ltd. . . . .                        | 740      | Packing Materials Corpn. . . . .                                             | 837                       |
| Kapadia Brothers . . . . .                    | 781      | Parry & Co. Ltd. . . . .                                                     | 646                       |
| Karamchand Premchand P. Ltd. . . . .          | 546      | Paulson Paint Cellulose Works . . . . .                                      | 781                       |
| Kashyap Chemical Industries . . . . .         | 695      | Pest Control (India) P. Ltd. . . . .                                         | 648                       |
| Kemi Color Industries . . . . .               | 822      | Pfizer Ltd. . . . .                                                          | 649                       |
| Kilburns . . . . .                            | 636, 716 | Pluck & Co. . . . .                                                          | 668, 680                  |
| Kirtikumar Chandulal & Co... . . . .          | 698      | Popular Scientific Works . . . . .                                           | xxv, xxvi                 |
| Konel Corporation . . . . .                   | 765      | Power Products Mfg. Co. . . . .                                              | 720                       |
| Kooverji Devshi & Co. P. Ltd. . . . .         | 734      | Premier Metals & Engg. Co. . . . .                                           | 775                       |
| Kwality Tool Steel Corpn. . . . .             | 830      | Progressive Industries . . . . .                                             | 666                       |
| Lakhanpal P. Ltd. . . . .                     | 638      | Pure Ice Cream Co. . . . .                                                   | 747                       |
| Laxmi Steel Co. . . . .                       | 830      | R. J. Mistry Sons & Co. . . . .                                              | 600                       |
| Lee & Muirhead (India) P. Ltd. . . . .        | 704, 832 | R. S. Traders . . . . .                                                      | 787                       |
| M. Somnath & Co. . . . .                      | 814      | Radio & Electricals Mfg. Co. Ltd. . . . .                                    | 847                       |
| M. G. Shahani & Co. P. Ltd. . . . .           | 611      | Raj & Co. . . . .                                                            | 796                       |
| M. V. Joshi & Co. Talpatriwala . . . . .      | 821      | Rajat Stationery Mart . . . . .                                              | 685                       |
| Mahavir Refractories Corpn. . . . .           | 734      | Rapid Transport Co. . . . .                                                  | 832                       |
| Mangatram Bros. . . . .                       | 831      | Rewa Printery . . . . .                                                      | 797                       |
| Manubhai Shah & Co. . . . .                   | 696      | Rex Stores . . . . .                                                         | 798                       |
| Martin Burn Ltd. . . . .                      | 850      | Richardson & Cruddas Ltd. . . . .                                            | 652                       |
| Mehta Engg. Stores . . . . .                  | 828      | Rockhand Fire Engineers . . . . .                                            | 735                       |
| Mehta Mfrs. . . . .                           | 689      | S. K. Kabbur P. Ltd... . . . .                                               | 719                       |
| Merchant Bros. . . . .                        | 803      | Sachin & Co. . . . .                                                         | 726                       |
| Metal Perforators P. Ltd. . . . .             | 548      | Safeglas Corpn. P. Ltd. . . . .                                              | 739                       |
| Metal Printers Co. . . . .                    | 826      | Sanjay Ball Bearing Centre . . . . .                                         | 681                       |
| Milan Spring Works . . . . .                  | 812      | Satyadev Chemicals P. Ltd. . . . .                                           | 547                       |
| Modern Glass Mart . . . . .                   | 739      | Saurashtra Paints P. Ltd. . . . .                                            | 781                       |
| Mohamadi Fine Art Litho Works . . . . .       | 761      | Shriram Vinyl & Chemical Industries . . . . .                                | xxiv                      |
| Morarji Peraj & Co. Talpatriwala . . . . .    | 642, 820 |                                                                              |                           |



|                                       | PAGE                     |                                                 | PAGE  |
|---------------------------------------|--------------------------|-------------------------------------------------|-------|
| Shah Book Mfg. Depot .. .. .          | 685                      | Swastik Rolling Shutters & Engineering Works .. | 803   |
| Shalimar Hotel .. .. .                | 746                      | T. Lakhamshi Ladha & Co. Talpatriwala ..        | 821   |
| Shantilal & Brothers .. .. .          | 727                      | Tata Iron & Steel Co. Ltd. .. .. .              | 660   |
| Sheth Stores Trading Co. .. .. .      | 681                      | Three Brothers & Files .. .. .                  | 667   |
| Shri Ramtirth Yogashram .. .. .       | <i>Inside Back Cover</i> | Tradeco (India) .. .. .                         | 770   |
| Shroff Transport Service .. .. .      | 832                      | Transacto .. .. .                               | 819   |
| Simplex Machine Tools Co. .. .. .     | 828                      | U. K. Agencies .. .. .                          | xvii  |
| Simplex Timber Mart .. .. .           | 673, 758                 | Unichem Laboratories Ltd .. .. .                | 787   |
| Singer Sewing Machine Co. .. .. .     | 656                      | Union Acid & Chemical Co. .. .. .               | 666   |
| Singhasini Engg. Works .. .. .        | ii                       | Union Bank of India Ltd. .. .. .                | ii    |
| Solanki & Sons .. .. .                | 735                      | United Steel Agency .. .. .                     | 830   |
| Sopher & Co. .. .. .                  | 725                      | United Steel Companies (India) P. Ltd. ..       | 662   |
| Sorabji Nowroji & Co. .. .. .         | 657, 750                 | Universal Book Corpn. .. .. .                   | 686   |
| Sosyo Products .. .. .                | 668                      | Universal Calendar Mfg. Co. .. .. .             | 691   |
| Special Steels Ltd. .. .. .           | 816                      | Variety (Agents) P. Ltd. .. .. .                | 830   |
| Standard Garage .. .. .               | 679                      | Velhari Steel Industries .. .. .                | 817   |
| Standard Trading Co... .. .           | 879                      | Victory Flask Co. P. Ltd. .. .. .               | 834   |
| State Bank of Hyderabad .. .. .       | ii                       | Vinay Calendar Co. .. .. .                      | 691   |
| Sterling Dyes P. Ltd. .. .. .         | 719                      | Vulcan—Laval Ltd. .. .. .                       | 663   |
| Suessen Textile Bearings Ltd. .. .. . | 681                      | Weikfield Products Co. (India) Unit—4 ..        | 844   |
| Sun Process Works .. .. .             | 798                      | Western India Marine Mills & Engineers ..       | 808   |
| Supreme Industrial Works .. .. .      | 764                      | Workshop Engg. & Equipment Co. .. ..            | xxvii |
| Supreme Mill Stores .. .. .           | 770                      | Zenith Steel Pipes Ltd. .. .. .                 | 665   |
| Surat Electricity Co. Ltd. .. .. .    | 548                      |                                                 |       |

Vaidyaratnam P. S. Varier's

# ARYA VAIDYA SALA



ESTABLISHED : 1902

KOTTAKAL (Kerala State)

Phone No. 44 (Tirur Exchange)

Registered Trade Mark

## BRANCHES:

Genuine Standard Ayurvedic Medicines and expert medical advice available at our Head Office at Kottakal and branches.

Medical advice through correspondence given by our Chief Physician at Kottakal.

Special treatments like Pizhichil, Navarakkizhi, etc., are conducted under the supervision of our Chief Physician at our GOLDEN JUBILEE NURSING HOME at Kottakal.

For further particulars please apply to:

Managing Trustee

**ARYA VAIDYA SALA, Kottakal**

- 1 KOZHIKODE (Phone No. 2155), Kallai Road
- 2 TIRUR (Phone No. 31), Station Road
- 3 PALGHAT (Phone No. 104), Vadakkanthara
- 4 PALGHAT Sales Depot, G. B. Road. Phone No. 584
- 5 ERNAKULAM (Phone No. 3026), Mahatma Gandhi Road  
ERNAKULAM Physician's Residence. Phone No. 674
- 6 TRIVANDRUM (Phone No. 3924), Statue Road
- 7 ERODE (Phone No. 172), 45, Kaveri Road
- 8 ALWAYE Sales Depot, Bank Road



# TRADE DIRECTORY FOR BUYERS

## ABRASIVES & GRINDING WHEELS

### CHANDRAKANT SHAH & CO.,

3, Narayan Dhuru Cross Lane, Bombay-3.

Authorised Dealers of Coated and Bonded Abrasives made by Carborundum Universal Ltd., Grinding Wheels of all Varieties, Sticks, Stones, Bricks, Valve Grinding Compound, Emery Cloth, Sand Papers, Waterproof Ab. Papers, Belts, Rolls, Discs etc., Phone : 326958.

## ABRASIVES & GRINDING WHEELS

### M. DESAI & CO.,

163, Narayan Dhuru Street, Bombay 3.

Authorised Dealers of Bonded & Coated Abrasives by Carbo Uni. Ltd., Grinding Wheels of all types; Emery, Aloxit & Silicon Carbide Paper & Cloth in Sheets, Rolls, Belts & Discs etc.

Phone : 323248. Grams : "EMDESAICO."

## ACCOUNTS & EXERCISE BOOKS MFRS.

### CRYSTAL STATIONERY MART,

146, Abdul Rehman Street, Bombay 3.  
Manufacturers of Exercise and Account Books and other Stationery.

Phones : 324461, 324461.

Grams : "CRISMART."

## ACCOUNTS & EXERCISE BOOKS MFRS.



**Scholar**

### JANATA BOOK MANUFACTURING DEPOT

Manufacturers of Scholar Regd. I. M. Exercise Books, Accounts Books and Allied Products;  
219, Abdul Rehman St., Bombay-3 B.R.;

Phone : 325890.

## ADVERTISING AGENTS & CONSULTANTS

### TALCHERKARS PUBLICITY & DISPLAY,

11, Bruce Street, Bombay.

For Advertising Agency Service having own set up of printing and outdoor Publicity.  
Recipient of State Awards.  
Phone : 256312.

## ACIDS, CHEMICALS ETC.

### NAVSARI OIL PRODUCTS PRIVATE LTD.

Factory & Head Office : Navsari; Bombay  
Office : Mehta House, Apollo Street, Bombay-1; Leading Manufacturers and Suppliers of Stearic Acid, Oleic Acid, Glycerine, Metallic Stearates, Fatty Acids in both distilled and undistilled grades, Wire Drawing Lubricants, Nickel Catalyst for Oil hydrogenation.

## ADVERTISING GIFTS & NOVELTIES

### THE PREMIER LEATHER KRAFTS

Manufacturers of Gift-cum-Advertising articles, Diaries, Plastic & Leather Wallets, Key Cases, Folio Cases and other Stationery & Publicity articles including Bank Pass Book Covers etc., Files with or without metal Fittings a speciality.

35/37, Hamam Street,  
Bombay-1.

Phone : 254880 & 474757.

## AIR-CONDITIONING & REFRIGERATION

### PRAYAG AGENCIES,

Shewa Niketan, Pinjari Street, Bombay 3.  
Importers and Dealers in Airconditioning and Refrigeration Machinery, Ice making & Cold-Storage equipments, Copper tubings, Refrigerant Gases, (Sealed & open type compressors and Spare Parts etc.

Phone : 32-7866. Grams : "PRAYAG COOL"

## AIR-CONDITIONING & REFRIGERATION

### GORAKHRAM HARIBUX,

Choksi Chamber, Zaveri Bazar, Bombay-2.  
Largest dealers and stockists for starting and Running Capacitors; Daiflon/Freon/Areton/Frigen Refrigerant Cases, Open Type Compressors & Tools used in Refrigeration;  
Phones : 329497 & 328526.

## AIR-CONDITIONING & REFRIGERATION

### REFRIGERATION ENGINEERING CORPORATION,

4-C, Empress Mahal, Dadar T.T.,  
Bombay-14.

Importers & Dealers in Airconditioning and Refrigeration Parts (Commercial & Domestic).  
Phone : 445695.

## ALUMINIUM INDUSTRY

### THE ALUMINIUM INDUSTRIES LTD.,

Regd. & Head Office : No. 1, Ceramic Factory Road, Kundra, (Kerala).

Phone : 21-3, 44 & 52. Grams : ALUMINIUM. Manufacturers of conductor grade Aluminium Rods, ACSR (Aluminium Conductor Steel Reinforced), All-Aluminium Conductors, Conductor Accessories and Tools, High Tensile Galvanised Steel Core Wire, Insulated Aluminium Cables for Outdoor Weather proof and indoor wiring applications as well as underground Power Transmission.

Managing Agents :

SESHASAYEE BROTHERS (Travancore)  
Pr. LTD.

## ALUMINIUM

For Promptness & Reliability Contact

### J. NAGARDAS & COMPANY

55/3, Canning Street, Calcutta-1

Stockists of Aluminium Sheets, Corrugated, Circles, Extrusions, Sections, Mouldings, Wires, Rivets, Tubings, Ingots, Architectural Hardware Fittings, Covered Conductors etc., etc.

Phone : 341872, Grams : "UNNATI."

## ALUMINIUM INDUSTRY

### ALUMINIUM ALLOYS & CASTINGS PVT. LTD.,

Udhna, Dist. Surat.

Manufacturers of Aluminium Alloys, Aluminium Castings, Zinc Based Alloys and Zinc Based Alloy Castings, Door Fittings and Door Closers.

## ANTIFRICTION METALS EYRE SMELTING (P) LTD.,

MFRS. of "TANDEM", White Metals, "EYRE" Solders, "FRYOLUX" Solder Paint, Cored Solder Wire, "FRY'S" Printing Metals, Aluminium Alloys, Zinc Alloys, Soldering Fluxes, Galvanising Salts, Lining Compounds. Enquiries to : GOODLASS NEROLAC PAINTS PVT. LTD., Forbes Bldg., Home Street, Bombay-1. Phone : 26-8081 (10 Lines).



# TRADE DIRECTORY FOR BUYERS

## ASBESTOS PRODUCTS

### F. PESTONJI & CO.,

Stockists of Asbestos Packing, Mill Boards & H.P. Jointings Sheets, Rubber Hoses & Sheetings, 85% Asbestos Magnesia & Glass Wool & Fire Fitting Hoses & Brake Linings.  
Address : 94, Nagdevi Street, Bombay-3.

Phone : 329122.

## ASBESTOS PRODUCTS

### R. MOHANLAL & CO.,

38, Bibijan Street, Bombay-3.

Phone : 324929. Grams : "HANDTAPS."

Speciality : All kinds of Asbestos Packings, Jointings, Leather & Rubber Beltings, Vulcanised Fibre Sheets and Allied Accessories.

## ASBESTOS CEMENT PRODUCTS

### NOORMOHAMED ADAM CHUNAWALA & CO.,

333, S. V. Road, Andheri, Bombay-58.

Authorised Stockists for "CHARMINAR" Hyderabad Asbestos Cement Products; A.C. Sheets & Plainboards, Roofing Contractors.  
Phone : 572437. Grams : "NOORANI".

## ASBESTOS TEXTILES PACKINGS AND JOINTINGS

Contact :

### HIRALAL GOKALDAS DALAL & CO.,

45, Nagdevi Cross Lane, Bombay-3 BR.

Phone : 321594. Grams : "HIRAGOCUL."  
Importers & Dealers of Mill gin Stores, Engineering Hardware Tools etc.  
(Estd : 1910)

## AUTOMOBILE PARTS & ACCESSORIES

### ASSOCIATED AUTO PARTS PVT. LTD.

445, Lamington Road, BOMBAY 4 BR.

Distributors : G. M. Parts and Accessories, Hella Horns, Flashers and Head Lamps, Tex Wiper Arms and Blades, QHF Tie Rod Ends, Dunlop wheels, Banco-Royal Gaskets, Runwell Leyland Parts, Genuine Parts for Fiat & Fargo, H & D Products, Brakes India Products; ABC-STEYER Bearings, AN Fancy Wheel Covers. Stockists of :—Lucas-TVS Electric Parts & Diamond Timing chains.

Tel. Address :  
"CHEVPARTS."

Phone :  
352354-352355

Phone : 121 (9 Lines) 122 (9 Lines), Grams :  
"AUTOSERVIS."

## AUTOMOBILE PARTS & ACCESSORIES AUTO SERVICE

P.O. Box 39, Vasco Da Gama, Goa.  
Distributors for : Hindustan Ambassador Cars, Bedford Trucks, Perkins Engines, Massey-Ferguson Tractors & Implements, Crompton Batteries.

## AUTOMOBILE PARTS & ACCESSORIES HARCHARAN MACHINERY STORES,

2, Dwarkadas Mansion, Benham Hall Lane, Bombay-4.  
Importers, Exporters & Stockists of Genuine Motor Car & Truck Spares; Authorised Stockists of Victor Gaskets (India) Ltd. & Gabriel Shock Absorbers.  
Phone : 353016. Grams : "GURMEET".

## AUTOMOBILE PARTS & ACCESSORIES

### Messrs. KHUBCHAND SAGARMAL,

Hindustan Motors Dealers, Jalgaon.

Bedford Trucks & Ambassador Cars, Petrol, Motor Spare Parts, Tyres, Tubes etc.

## AUTOMOBILE PARTS & ACCESSORIES

### UNITED ENGINEERING WORKS,

Manufacturers of Cylinder Liners (Sleeves), Valve Guides, V. Seat Bars, P. O. Box No. 1023, Ramkumar Mills Compound, Saraspur, Ahmedabad-2.

Phone : 24032. Grams : "AUTOLINE".

## AUTOMOBILE PARTS & ACCESSORIES

### CHAMPION AUTO PARTS CO.,

Avantikabai Gokale Road, Bombay-4.

Phone : 30624. Grams : "CHAMPAUTO."  
Importers & Stockists of Automobile Parts.

## AUTOMOBILE PARTS & ACCESSORIES

### CHANDOK AUTO INDUSTRIES,

431, Lamington Road, Bombay-4.  
Specialise in Spares of Tata-Mercedes-P. 6, Dodge, Willy's and other Trucks & Cars; Only precision Auto Parts Manufacturers.  
Phone : 353223.

## AUTOMOBILE PARTS & ACCESSORIES

### SAROSH MOTORS PRIVATE LTD.,

Kings Road, Ahmednagar.  
Dealers in Automobiles & Parts.

## AUTOMOBILE PARTS & ACCESSORIES

### CHEAP MOTOR STORES,

Stockists of Genuine 'FORD' Parts and T. M. B. Parts, Opera House Tram Terminus, Bombay-4.

Phone : 356275. Grams : "CHEAPMOTOR."

## AUTOMOBILE PARTS & ACCESSORIES KOTHARI ENGINEERING CORPN.,

148, New Stock Exchange Bldg., 5th Floor' Bombay-1; Manufacturers of 'K' Products Automobile Parts, Accessories, Bus Body Fittings, Wind-Shield Rubber Frames, Rubber Kits, Mats, Regu. M/C & Handles; Phone—Office : 25275; Resi. : 242800.

## AUTOMOBILE PARTS & ACCESSORIES

### LA-PRENCA INDUSTRIES PVT. LTD.,

III-A, Mahatma Gandhi Road, Bombay-1.

Manufacturers of Piston Assemblies for Automobiles, Tractors, Compressors and Industrial Engines; Phone : 252967 (Office), 692457 (Factory).

## AUTOMOBILE PARTS MFRS.

### ENGINE VALVES LTD.,

Madras-16.

Manufacturers of TRANCO-Valves for all internal Combustion Engines in Technical Collaboration with FARNBOROUGH ENGINEERING CO. LTD., U.K. & ATE Valves for Tata Mercedes Benz and Shaktiman Vehicles under Licence from ALFRED TEVES KG., West Germany.

Phone : 80197 (3 Lines). Grams : "VALVES".

## AUTOMOBILE PARTS & ACCESSORIES

### SUNDER & KAPOOR

107-108, Commerce House, Medows Street, Bombay-1.

Manufacturers of "SUNKAP" & "UNION" Auto Bulbs.

Phone : 256548.

## AUTOMOBILE PARTS & ACCESSORIES

### UNION MANUFACTURING CO.,

362-A, Vithalbhai Patel Road, Bombay-4.  
Mfrs. of UMC Brand Tempered Automobile Laminated Springs & Leaves for all Cars, Trucks, Trailers and as per Customers Specification.

Phone : 351671.



# TRADE DIRECTORY FOR BUYERS

## AUTOMOBILE PARTS & ACCESSORIES

### DECCAN AUTOMOBILE CO.,

Opera House Tram Terminus,  
Bombay-4.

Stockists of genuine Perkins||P. 6 Spare Parts.  
Phone : 353024.

### BALL & ROLLER BEARINGS BALL BEARING & MACHINERY CORPORATION

172-74, Nagdevi Street, Bombay-3.

Phone : 327377 & 326096

Grams : "BUSYAR."

Stockists and Sole Agents of SEALMASTER,  
FEDERAL & SRO Swiss Bearings; Also  
Stockists of Precision NORMA & NBC  
Bearings.

### BALL & ROLLER BEARINGS

#### SINTERED PARTS &

#### SELF LUBRICATING BEARINGS

### FLEXICONS LIMITED,

Udhna, Dist. Surat.

Manufacturers of Self-lubricating Bearings &  
Structural Parts both Ferrous & Non-Ferrous.

### BALL & ROLLER BEARINGS SHETH STORES TRADING CO.,

Specialists in Ball & Roller Bearings, Author-  
ised Stockists in SKF, NBC NORMA BEAR-  
INGS.

238, Masjid Bunder Road, Bombay-3.

Phone : 322757. Grams : "TROLLEY."

### BALL & ROLLER BEARINGS HARCHANDRAI SONS,

172||74, Nagdevi Street,  
Bombay-3.

Sole Agents for :

Stephens Adamsons Mfg. Co.,  
(Sealmaster Ball Bearing Pillow Block Units)  
Aurora, Illinois, U.S.A.

Phone : 327377 & 326096

### BALL & ROLLER BEARINGS BHARAT TRADING CO.

71, Nagdevi Cross Lane,  
BOMBAY 3.

Importers & Stockists of Industrial &  
Automobile Bearings.

PHONE : 323250 & 324338.

## BALL & ROLLER BEARINGS

### PURUSHOTTAM SOMABHAI & CO.,

36, Sarang Street, Post Box 3014, Bombay-3.

Grams : "FORESIGHT."

Importers and Stockists of wide Range, all  
brands of world renowned Ball and Roller  
Bearings for Automobiles, Textile & Paper  
Mills, Sugar Mills and all other Industries.

### BALL & ROLLER BEARINGS SOUTHERN BEARING CO.,

43, General Patters Road, Madras-2.

Stockists & Agents for World Renowned  
ZKL Czechoslovakia Bearings; Stockists of  
Ball, Roller Taper & Thrust Roller Bearings  
of all kinds and types, Also for NORMA,  
BBL & SKF India.

Phone : 81540. Grams : "SOUTHBALL".

H.O. 514, S. V. P. Road, Bombay-4.

### BALL & ROLLER BEARINGS

#### RAJNIKANT & CO.,

Stockist of everything in Ball, Roller, Thrust  
Bearing, Steel Balls and Pedestals; Authorised  
Stockists of BBL and NORMA Bearings.

3rd. Floor, Dada Manzil, Mohamadali Road,  
Bombay-3.

Phone : 322919 Grams : 'ROWBEARING'.

### BALL & ROLLER BEARINGS ANIL BEARING STORES,

163, Narayan Dhuru Street, Bombay 3.

Authorised Stockists : SKF & NBC Bearings,  
Ball & Taper Roller Bearings and Steel Balls.

Phone : 323552; Grams : "CHEAPSTORE."

### BALL & ROLLER BEARINGS

#### BOMBAY BALL BEARING SUPPLYING CO.,

349/353, Samuel Street, Bombay-3.

Phone : 321151. Grams : "GOLABADAM."  
Stockists of all kinds of Ball & Roller Bearings.

### BALL & ROLLER BEARINGS INTERNATIONAL BEARING CO.,

61, Commercial Chambers, Masjid Bunder  
Road, Bombay 3; Importers and Stockists  
of all kinds of Ball, Roller, Taper Roller &  
Thrust Bearings.

Phone : 324712. Grams : "INTERDEAL."

### BALL & ROLLER BEARINGS SHAH BROTHERS,

524, Sandhurst Road, Bombay 4.

Phone : 352508, 351653.

Grams : 'TAPEROUER'

Importers & Stockists of Tapered Ball &  
Roller Bearings.

## BALL & ROLLER BEARINGS

### MASRANI MILLGIN STORES,

46, Nagdevi Cross Lane, Bombay-3.

Direct Importers & Stockists of Ball, Roller  
& Tapper Roller Bearings. Specialists in Steel  
Balls.

Phone : 321646. Grams : 'BEARINGS'.

### BALL & ROLLER BEARINGS

#### UNITED (INDIA) AGENCIES,

1st. Floor, Hassan Chambers, Parsi Bazar  
Street, G.P.O. Box No. 109A, Fort, Bombay-1.  
Importers & Stockists of Ball, Roller &  
Tapered Bearings of all sizes and of all types  
in various makes.

Phone : 253623. Grams : 'HARISMASIN'.

### BELTING (TEXTILE) MFRS. & SUPPLIERS

#### DINESHCHANDRA & CO.,

89, Mohamedali Road, Bombay-3.

Mfrs. of Dinesco Brand Leather Beltings,  
Picking Bands, Spring Buffers, All types of  
Pickers & Weft Forks, Stockists of Hair,  
Rubber, V-Belts & Link Belts, Variable Speed  
& Cone Drum Belts.

Phone : Office : 328038. Resi : 691433.  
Grams : "DINCOBELTS".

## BLOWERS

Sirco Centrifugal & Axial Fans for Every  
Application. Also Dust-Separators & Pneu-  
matic Conveying Plants. Now manufactured  
in India. For details Contact :

### DAVIDSON OF INDIA PVT. LTD.,

44-M. Abdul Gaffer Road, Worli,  
Bombay-18 (WB).



# TRADE DIRECTORY FOR BUYERS

**BOILER TUBES**

(with Test Certificate)

**M. J. PATEL & CO.**

177, Nagdevi Street, Bombay 3.

Stockists of Hydraulic Tubes, Steam Pipes,  
Boiler Tubes & Fittings.

Phone : 327931

**BOLTS, NUTS & SCREWS**

## NASIK INDUSTRIAL ENGINEERING CORPORATION

Ram Nivas, Panchavati, Nasik, India.

Phone : 98 Nasik. Grams : 'INDUSTRY'—  
Nasik.Manufacturers and Exporters of HORSE  
brand Steel and Brass Gate hooks, eyes,  
Screw hooks, M. Suit, B. Eyes, Cup Hooks,  
Nickel plated electro galvanised J. hooks,  
Bolts & L. hooks with nuts, Iron bright  
polished, Galvanised or Copper oxidised.

Ask for NIECO Products.

**BOLTS, NUTS & SCREWS****S. MOHANLAL & CO.**Manufacturers & Suppliers of all kinds of  
bolts, nuts & screws made from Brass & Steel.  
Sole Selling Agents for "SURELOCK"  
Superior Steel Spring Washers. Main Distribu-  
tors for Maharashtra & Gujarat for High  
Tensile Bolts, Nuts & Screws manufactured  
by Sundram Fasteners Pvt. Ltd. (TVS Group),  
Madras. Distributors for "UNBRAKO"  
Socket Head Cap Screws & Set Screws.Tawawala Building, 34 Pathakwadi,  
Bombay 2 BR.

Phones : 30240 &amp; 20915.

Grams : "SOCKETREWS".

**BOLTS, NUTS & SCREWS****FREE INDIA METAL PRODUCTS CO.,**Manufacturers and Stockists of Bolts, Nuts,  
Rivets, Washers, General Hardware, Mill  
gin Stores and Commission Agents; 65-67,  
Bhajibala Lane, Bombay 3; Phone : 326924.  
Grams : "ROUNDBOLT."**BOLTS, NUTS & SCREWS****MAHARASHTRA HARDWARE  
STORES,**Stockists for G.K.W. Products, Bolts, Nuts,  
Screws, Washers, Rivets Sheet Metal Screws,  
Rose Nails, Wire Nails, Coast Screws, etc.,  
94, Sarang Street, Bombay 3.

Phone : 327991. Grams : "BOLTARAM."

**BOOKSELLERS, PRINTERS &  
PUBLISHERS****INTERNATIONAL BOOK  
HOUSE PRIVATE LTD.,**9, Ash Lane, Opp. Clock Tower,  
Bombay-1.Stockists of Scientific, Technical, Legal and  
general Books; Chief Subscription Agents  
in India for the Readers' Digest; American,  
British & Indian Magazines at lowest rates;  
Head Office & Books Dept. : 252069; Readers'  
Digest Dept. : 243278.**BOOKSELLERS, PRINTERS &  
PUBLISHERS****BOMBAY BOOK HOUSE,**Kamani Chambers, Nicol Road, Ballard  
Estate, Bombay-1.Books on all Subjects — Technical, Scientific,  
Humanities, Social Sciences, Management,  
Commerce, Industry and General.

Phone : 261347.

**BROOMS****SHAH LALJI RAVJI & CO.,**186, Narsi Natha Street, Bombay-9 (BR).  
Dealers in Grass-Brooms, Coconut Brooms,  
Mats, Fans, Winnows, Brushes, Jute Brooms,  
Dusters & Coir Mats; Contractors.Grams : 'CHUNIGALA'—Jalgaon (Maha-  
rashtra). Phone : 332662.**BRIGHT BARS & SHAFTINGS****BRIGHT STEEL CORPORATION,**51, 'Advent', 12-A Foreshore Road, Bombay 1.  
Phone : 214036 & 212833. Grams : 'TIDAL-  
WAVE'. Leading Stockists of ENIA Free  
Cutting Steel in all sizes and sections; Also  
ready stock of Mild Steel Shaftings and Alloy  
Steel.**BRIGHT BARS & SHAFTINGS****SAYABLU CORPORATION,**

Post Box 6533, Bombay-26.

Stockists and Exporters of M.S. Shaftings  
turned/Drawn in Round, Square & Hexagonal  
barbed wire, H.B. wire etc.

Phone : 326173. Grams : "SAYABLU".

**BUILDERS HARDWARE****VERTEX MANUFACTURING CO.  
LTD.,**222, Sir Mathuradas Vissanji Road, Andheri  
(East), Bombay-69; Phones : 572438, 574565.  
Manufacturers of Vertex Builders Hardware  
such as Brass hinges, Barrel Bolts, Mortice  
Locks, handles etc.**BUILDING MACHINERY****CONCRETE BLOCK MAKERS**Hand operated Combination Plain & Hollow  
Concrete Block Making Machinery.

Contact :

**KATHIAWAR METAL & TIN  
WORKS PRIVATE LTD.,**

9, Lati Plot, Rajkot (India).

Phone : 523.

Grams : 'KAMETIN'.

**CABLES & WIRES****PYROTENAX INDIA LTD.,**Manufacturers of Alpyro Mineral Insulated  
Copper or Aluminium Covered Cables.

9, Wallace Street, Bombay-1.

Phone : 266196. Grams : "ALPYRO."

**CABLES & WIRES**

## ORIENTAL POWER CABLES LTD.,

P. O. Cable Nagar, Dist. Kota (Rajasthan).

(In technical collaboration with Sumitomo  
Electric Industries Ltd., Japan); Manufac-  
turers of Paper Insulated Power Cables upto  
33 Kv Paper Insulated Cables for use in  
mines PVC Insulated, PVC Sheathed Cables;  
Can manufacture above cables to any speci-  
fication. Bombay Office: Warden House,  
3rd floor, Sir P. M. Road, Bombay 1.



# TRADE DIRECTORY FOR BUYERS

**CABLES & WIRES****ESSELL CONDUCTORS PRIVATE LTD.,**

Super Enamelled Copper & Aluminium wires;  
PVC Cables with Aluminium Conductors  
(Bearing ISI Mark).  
82, Ghodbunder Road, Nr. Irla Bridge,  
Andheri, Bombay-58.  
Phone : 573746.

**CALENDAR MFRS.****ARUNODAYA PICTURE WORKS,**

Yusuf Mansion, Khetwadi Back Road,  
Bombay-4.

Photo offset & Colour Printers; Specialists in  
Calendars, Cardboard — Labels — Posters &  
Pictures etc.

Phone : 357737.

**CARDBOARD BOX MFRS.****STANDARD PAPER BOX MFG. CO.,**

51, Mangaldas Road, Lohar Street, Bombay-2.  
Phone : 20774. Grams : "ROSYTONE."

Factory at : Hanuman Lane, Gowallia Chawl  
Lane, Bombay.

Manufacturers of Cardboard and Corrugated  
Boxes.

**CARDBOARD BOX MFRS.****PAKRITE,**

27, 10th Kamathipura, Bombay-8.

Specialists in Paper Packaging for Industries,  
Makers of Corrugated Board Boxes, Corrugated  
Streets, Cardboard Boxes & Folding Cartons  
of all types, Spet. in Radio Cartons & Export  
Cases.

Phone : 373243.

**CASEIN****CREAM, BUTTER, GHEE****WESTERN CREAMERIES**

Opp. Prabhat Cinema,

Station Road, Nadiad (Gujarat).

**CASEIN MFRS.****THE CHAMPION DAIRY CO.**

(Estd : 1903)

New Petit Mansion,  
Sleater Road, Grant Road,  
Bombay 7.

Phones: 373383, 378845. Grams: "CREAM".  
Manufacturers of Superfine and Other Varieties  
of Lactic Casein.

**CASEIN AND DAIRY EQUIPMENTS****DOSHI BROTHERS**

Polson Road,  
P. O. Box 11, Anand  
(Gujarat).

Products : Lactic Casein, Dairy Equipments.

**CARPETS MFRS. & DEALERS****PAHILAJ**

The Carpetman of Bombay.

Show Room : Opp. Edward Theatre, Kalbadevi  
Road, Bombay-2.

Phone : 39683.

Head Office : 38566.

**CASTINGS****SURESH ENGINEERING CO.  
PVT. LTD.,**

414-B, Walbat Road, Goregaon East,  
Bombay 63 NB

Phone : 692832.

Manufacturers of Grey Iron Castings to I.S.I.  
grades upto 3 tonnes individual casting.

**CASTOR WHEELS****MUTUAL TRADING CO.,**

30, Princess Street, Bombay-2.

Sole Selling Agents for 'STAR CASTOR'S &  
CASTOR WHEELS' for Apparatus, Furniture,  
Hospital, Light Portable Equipments &  
Trolley.

Phone : 23854.

**CASTINGS**

For Grey Iron Castings Suitable for all  
Industries in Various Grades and Tensile  
Strength.

Contact :

**MURLIMAL SHRIKISHANDAS  
& CO. (INDIA) PVT. LTD.,**

Agra Road, Bhandup, Bombay-78.

Phone : 581933.

**CEMENT****SNOWCEM INDIA LTD.,**

The House of Cement Specialities.

Makers of SNOWCEM Decorative Waterproof  
Cement Coating.

IMPERMO Cement Waterproofing Compound.  
COLORCRETE Coloured Portland Cement.  
HARDCRETE Concrete Waterproofing &  
Hardening Liquid.

SURFACIT Concrete Surface Hardening  
Liquid.

Office : 31, Murzban Road, Fort, Bombay 1.

Phone : 265201.

**CASTINGS**

Pressure-Tight Castings of Gun Metal, Bronze,  
Aluminium, Stainless Steel, completely  
machined at very competitive.

Contact:

**INDUSTRIAL CASTING CO.,**

B-69, Road No. 16, Industrial Area, Thana.

Phone : 251493.

**CHEMICALS**

For

Your requirements in Chemicals, Solvents

&

Intermediates

Please Contact :

**SHANTILAL DHARMSHI**

349/53, Samuel Street, Bombay-3.

Phone : 323058, 325763. Grams : 'SANTI-  
TOLIA', Bombay-3.

**CHAIN (POWER TRANSMISSION &  
CONVEYORS)****ASHTON GREEN & CO.,**

118, Vir Vithaldas Chambers, 16, Apollo  
Street, Bombay-1.

Stockists of all types of Roller, Bush, Malleable  
& Tooth Chains & Spares; Also Pinions &  
Sprocket Wheels etc.

Phone : 254375.

**CHEMICALS****THE ASIATIC CHEMICAL CO.,  
(BOMBAY),**

47, Abdul Rehman Street, Bombay-3.

Importers & Stockists of Heavy Chemicals,  
Solvents for Paint, Sugar, Glass, Textile,  
Plastic Industries, Viz. Toluene, Benzene,  
Zinc Chloride, Sulphate, Hydro Caustic Soda  
etc.

Phone : 322964.

**CHEMICALS****HENRY S. CLARK & CO.,**

Manufacturers of Bismuth & Iron Salts,  
Citrates, Fine Chemicals & Drugs; P-33,  
Mission Row Extension, Calcutta-13.

Phone : 235888. Grams : "BRITARKE".

**CHEMICALS****MENTHOL B. P. INDIAN**

Manufactured by :

BHAVANA CHEMICALS LTD.,  
Baroda-2.

Distributors :

GOPALJEE & CO.,

218, Samuel Street, Vadgadi, Bombay-3.  
Phone : Office : 323421, 324206. Res. : 473346.  
Grams : "HINGMAKER."



# TRADE DIRECTORY FOR BUYERS

## CHEMICALS & FINE MATERIALS

### KIRTIKUMAR & CO.

(Established 1948)

80, Bhandari Street, Mandvi, Bombay 3.  
Direct Importers & Stockists of Industrial Chemicals.

Phone: 321583.

'GRAMS: "LALITKIRTI."

### CHEMICAL ENGINEERING EQUIPMENTS

Phone: 8389; Grams: "SARAYANTRA."

### SARABHAI MACHINERY

(Karamchand Premchand Pr. Ltd.)

Post Box No. 72, Baroda.

Manufacturers of equipment for Chemical Industry, e.g., Reaction Kettles, Vacuum Dryers, Forced Draught Dryers, Sterilizers, Blenders, Fractionating Columns, Germinators and other custom-built equipments in Stainless Steel, Mild Steel, Copper, Aluminium, Monel and Hastelloy.

### CIRCLIPS

### FAIRFIELD MANUFACTURING CO.,

Hanuman Bldg., 4th Floor, Tambakanta, Pydhonie, Bombay-3 (BR).

Phones: 324323 & 323758.

Grams: "MASRANICOY."

Manufacturers of Spring Washers, Shakeproof Washers, Circlips and Precision Strip Forms; Factory at: Masrani Estate, Halav Bridge, Kurla, Bombay-70 (AS).

## CLEARING & FORWARDING AGENTS

### MANILAL PATEL & CO.,

Licensed Clearing, Forwarding, Shipping, Warehousing & Insurance Agents.

Kamer Bldg., 3rd Floor, 38, Cawasji Patel Street, Bombay-1.

Phone: 251307.

Grams: 'PATCO'.

Branch: Ahmedabad & Surat.

### COCKS & VALVES

### ABDUL SAMAD ABDUL KADAR & SONS,

1839, Panchpatti, Kalupur, Ahmedabad 1.

Phone: 24543; Grams: "FOOTVALVE".

Manufacturers of Gun-metal and Cast Iron Valves & Cocks for Water, Steam, Oil, Chemicals & Boiler Mountings, Pipe Fittings, Sanitary Fittings, Fire Fighting Appliances, Hose Fittings, Agricultural Implements and Textile Machinery Spares.

### COLLAPSIBLE TUBES

### COLRIGE LTD.,

Tiecicon House, Dr. E. Moses Road, Mahalaxmi, Bombay-11.

Mfrs. of aluminium collapsible tubes for packing Tooth paste, Ointments, Adhesives, Cosmetics and rigid containers for packing Tablets and Powders etc.

Phone: 370370 & 373152.

## CONDIMENTS & SPICES

### BEDEKAR & SONS PVT. LTD.,

V. P. Mugbhat, Bombay-4.

Mfrs. & Exporters of Mango, Lemon, Chilly & Mixed Pickles in Oil, Mango Chutney, Curry Powder, Papads and Indian Condiments.

Phone: 356673. Grams: 'BEDEMASALA'.

## CONDIMENTS & SPICES

### MERWANJEE POONJIAJEE & SONS PRIVATE LTD.

Poonjiajee Building,

Prince's Dock, Frere Road, BOMBAY 9.

Phone: 332933 'GRAMS: "CHUTNEY"

Manufacturers & Exporters of "Sun Brand" Chutneys, Pickles, Curry Powder and other Indian Condiments; Also Manufacturers of 'Knight' Jelly Crystals, Custard Powder, Corn Flour, Toilet Papers etc.

## CONDUIT PIPES & ACCESSORIES

### NATIONAL CONDUITS

Manufacturers & Suppliers of High grade Conduit Pipes and Accessories.

15, Ganesh Chandra Avenue, Post Box 851, Calcutta-1.

Factory: Regent Grove, Tollygunge, Calcutta-40.

Phones: 233230, 239005, 239681.

Office: 237985.

Factory: 467437.

## CONFECTIONERY MFRS.

### SATHE BISCUIT & CHOCOLATE CO. LTD.,

POONA-2

Manufacturers of  
Chocolate & Biscuits

## CONSTRUCTION-EARTHMOWING EQUIPMENTS

### RAMESHCHANDRA JESHINGBHAI,

Advani Chambers, Sir P. M. Road, Bombay-1

Importers-Dealers in Machinery, Machine-tools, Elec. Motors, Pumps, Compressors, Ball-Roller Bearings, Sintered Bushes, Circlips, Oil-Seals etc. and Spares for Indl. Marine Diesel Engines and Constn. Earth-moving Equipments.

Phone: 261555. Grams: 'AGRIQUIP'.

## CONVEYOR BELTS MFRS.

### R. D. ASHER (Engineering Division),

10, Bruce Street, Bombay-1.

Phone: 255777 & 591236

Conveyor Belts & Conveyors.

Manufacturers of EUREKA Steel Processing Conveyor Belts & Conveyors.

## CORRUGATED PAPER & BOARDS MANUFACTURERS

### SUBANDHU CORRUGATING INDUSTRIES,

123, Bhimpura, Dongri Street, Bombay-9.

Factory: Hathi Baug, Love Lane, Mazagaon, Bombay-10.

Leading Manufacturers of Corrugated Paper & Boards.

Phone: Office: 333758; Factory: 72740.

## CUTLERY MFRS.

### GIFTSLAND

Manufacturers of most elegant & aristocratic Cutlery in Stainless Steel & Silver deposits; Other Specialities: Cigarette Cases, Cigarette Boxes, Pan Boxes, Lady's Baby's & Gent's Brush Sets.

Address: 25, M. G. Marg, Allahabad.

Phones: 5279, 2883, 3985.

Grams: "TURNERS".

## CYCLES & CYCLE ACCESSORIES

Visit or write

### GUPTA CYCLE COMPANY

Export & Import Merchants

172, Princess Street,

BOMBAY No. 2 BR.

Manufacturers' accredited Dealers for India Hercules, Philips, B.S.A., Raleigh, Humber, Robinhood, Atlas, Eastern Star Cycles and Dunlop Goodyear, National Rubber Tyres & Tubes.

and also Leading Export House in  
CYCLES, CYCLE SPARE PARTS  
& ACCESSORIES

well represented in Middle East, South East Asia and East and West Africa.

'Phone:  
38588.

'GRAMS:  
"GUPTACYCLE."

## DECORATORS (INTERIOR)

### KABE ARTS,

36, B-Sleater Road, Bombay-7 (WB).

Always at your Service for Exhibition Pavilions, Stalls, Display Decoration, Animating Publicity, Working Models, Tableaux, Floats etc.

Phone: 377995.



# TRADE DIRECTORY FOR BUYERS

## DIES & JIGS

Combination Dies to Maximum Accuracy.  
Undertake Fabrication of Metal Parts and  
Machines to Drawing.

### KIV GROUP INDUSTRIES

Sun Mill Compound,  
Lower Parel, Bombay-13.

Phone : 375103.

## DIAL & THERMOMETERS

**KRISHNA**  
FOR THERMOMETERS

Stockists, Mfr. Rep. & Foreign Indentors of  
Dial/Glass Thermometers Temp. Recorders/  
Controllers/Pyrometers, Thermostats for In-  
dustry & Research; Also Magnifiers, Stroke/  
Rev/Hand/RPM/Counters

### KRISHNA INSTRUMENTS

425, Chira Bazar, Bombay-2  
Phone : 38604.

## DIAMOND DRESSING TOOLS

### J. K. ENGINEERING (DIAMOND WORKS),

Agra Mahal, Agra Road, Bombay-70.

Manufacturers of Diamond Dressers, Cone  
Penetrators, Diamond Wheels, Impregnated  
Diamond Tools, Diamond Powders and Pastes;  
Also Selected Industrial Diamonds.  
Phone : 51874.

## DIAMOND DRESSING TOOLS

### DIAMOND CUTTING & TRADING CO. (P) LTD.,

Daya Mandir, 123/125, Mumbadevi Road,  
Bombay-3.

Manufacturers of Diamond Wire Drawing  
Dies, Diamond Dressing Tools, Diamond Nibs,  
Diamond Powder etc. Resetting Service.  
Phone : 324818.

## DIESEL ENGINES

### KIRLOSKAR OIL ENGINES LTD.,

Office & Factory : Elphinstone Road, Kirkee,  
Poona-3.

Phone : 57346, 57347 & 57348.

Grams : "KOEL"—Poona.

Manufacturers of High Speed Diesel Engines  
and Thinwalled Bearings.

## DIESEL ENGINES & SPARES

### RAMESHCHANDRA JESHINGBHAI, Advani Chambers, Sir P. M. Road, Bombay-1.

Importers-Dealers in Machinery, Machine-  
tools, Elec. Motors, Pumps, Compressors,  
Ball-roller Bearings, Sintered Bushes, Cir-  
clips, Oil-Seals etc. and Spares for Indl.  
Marine Diesel Engines and Constn. Earth-  
moving Equipments; Phone : 261555.  
Grams : "AGRIQUIP".

## DRAWING OFFICE EQUIPMENT DRAWING OFFICE EQUIPMENT CO.

Dealers in Drawing & Artists' Materials,  
Survey & Mathematical Instruments.

Himalaya House,  
79-C, Palton Road,  
Bombay 1.

Phone : 261403.

## DRAWING OFFICE EQUIPMENT

Artists' Materials, Surveying and Mathe-  
matical Instruments

### ALLIED DRAWING STORES

Govt. Contractors & Suppliers,  
29, Hornby Road, Bombay 1.

Phone : 261403. Grams : "ARTCORNER."

## DRAWING OFFICE EQUIPMENT

### EASTERN INDUSTRIES,

Kasturchand Mill Estate, Dadar Road, Dadar  
(West), Bombay-28 DD.

Mfrs. of Camera Brand Ferro & Ammonia  
Papers, Tracing Papers, Reproduction Papers,  
Liquor Ammonia & Other Drawing Office  
Requisites.

Phone : 451578. Grams : 'DIAZOPAPER'.

## DRUMS MANUFACTURERS

### K. T. KUBAL & CO. PRIVATE LTD. (Estd. 1926)

40, Foras Road, Bombay 8.  
Phone : 373219.

Manufacturers of Electrical Welded Drums  
and Containers; Manufacturers and Exporters  
of famous "KUBAL" Masala Curry Powder,  
Pickles etc.

## DUPLICATORS

*Ewaat*

### APEX ENTERPRISES

Manufacturers of "EWAAT" Duplicating  
Machines.

17, 5th Floor, Mohatta Market, Palton Road,  
Bombay-1.

Phone : 266314. Grams : "APEXRISES."

## DUPLICATORS

### MERCHANT TRADERS

Ganesh Wadi, Kalyan (Bombay).

Here is a duplicator that provides perfectly  
clear copies without stencils, special pens,  
printing ink or paper and calls for no technical  
ability.

## ELECTRIC METERS

### BARODA ELECTRIC METERS LTD.,

Vallabh Vidyanagar, Via Anand, Gujarat.

Manufacturers of Single Phase and Polyphase  
Electric House Service Meters, Ammeters,  
Wattmeters, Voltmeters, Instrument Trans-  
formers.

Phone : 313 Anand. Grams : 'POLYPHASE'

## ELECTRIC MOTORS MFRS.

### OGALE GLASS WORKS LTD.,

P. O. Ogalevadi, Dist. Satara,  
Maharashtra State.

Phone : Karad 238. Grams : "GLASWORKS"  
Ogalevadi.

Manufacturers of Glassware, Lanterns, Stoves,  
Enamelware, Electr Induction Motors.

## ELECTRIC SWITCHGEARS MFRS.

### KIRON TEXTILE INDUSTRIES,

Yusuf Bldg., Mahatma Gandhi Road,  
Bombay-1.

Phone : 253224. Grams : "YANTRAYUG."

Manufacturers of L.T. & H.T. Electrical  
Switch and Controlgears, Switchboard Panels,  
Circuit Breakers, H.T. Gang operated Airbreak  
Switches, Dropont Fuses, etc.

## ELECTRIC SWITCHGEARS MFRS.

### VERTEX MANUFACTURING CO. LTD.,

222, Sir Mathuradas Vissanji Road, Andheri  
(East), Bombay-69.

Phones : 572438, 574565.

Manufacturers of "Sentinel" Metal Clad  
Switch & Fusegear such as Switch-Fuses,  
Isolators, Changeover Switches and Distribu-  
tion Fuseboards.

## ELECTRIC TRANSFORMERS

### WESTERN ENG. & MFG. WORKS

Near Gandhi Baug,  
Dhrangadhra (Gujarat).

Phone : 140. Grams : "GODSPEED".

Manufacturers of all types of Electrical Power  
Transformers.

## ELECTRICAL ACCESSORIES & MOTORS

### POPULAR ELECTRIC STORES (Estd. 1933)

414, Hararwala Building,  
Corner of Golpitha, BOMBAY 4.

Wholesale and Retail dealers in everything  
Electrical. Stockists of Electrical  
Motors and Dynamos.

Phone No. 332359.

## ELECTRICAL ENGINEERS, LICENSED CONTRACTORS & DEALERS

### SHAH ELECTRIC CO.,

Old Hanuman Lane, Bombay-2.

Phone : 38632/23915 (Resi.).

Lighting-Domestic & Power Installations;  
Temporary illuminations; Fans of all types  
on Hire; Dealers : All sorts of Electric Fans,  
Fittings & Wiring Installation Materials.



# TRADE DIRECTORY FOR BUYERS

## ELECTRICAL CONTRACTORS

### FORWARD ENGINEERING CO.,

Kothari Mansion, Opp. G.P.O., Bombay-1.  
Consulting Electric Engineers, Licensed  
Electric Contractors, Undertaking H.T. & L.T.  
Substation Work, Industrial Installations,  
Out-door-Indoor Lighting.  
Phone : 266419.

## ELECTRICAL ENGINEERS

### ASMOPAL ENGINEERING CO.,

Sunder Mahal, 141, Marine Drive, Bombay-1.  
Engineers & Manufacturers; Specialists in  
Electrical Rewinding, Meters/Instruments  
repairs, manufacture of Electric Motors  $\frac{1}{2}$  to  
10 HP Testing of Boudon gauges, Pressure  
Vessels, Cranes and lifting Tackles under the  
Factories Act.

Phone : 242848, Ext. : 2;

Grams : "RAJVALUER".

Factory : C/16-17, Shri Ram Industrial Estate,  
Wadala, Bombay-31.  
Phone : 441597-98.

## ELECTRICAL ENGINEERS

### HARSHAD & CO.,

Electrical Engineers & Contractors.  
Pavri House, 20, Gunbow Street, Bombay-1.  
Contact for festival lighting, Lighting &  
Domestic Installations and Indl. Power  
Installations.  
Phones : 264158, 266243.

## ELECTRICAL EQUIPMENT LAXMI ELECTRIC TRADING CO.

(Estd. 1930)

Stockists of everything Electrical including  
Fans, Marlex Appliances such as Pressure  
Cookers, Vibro Tools, Musical Bells, Gong  
Bells, Sirens etc., Also Refrigerators.

### SALES & SERVICE

21-23, Lohar Chawl, P.O. Box No. 2494,  
Bombay 2.  
Phone : 29048 Grams : "LAXELAC."

## ELECTRICAL GOODS

### B. NANDKUMAR BROS.,

Dealers in Everything Electrical

Address : 102, Kika Street, Gulawadi,  
Bombay-4 (BR)

Phone : Co 333707. Grams : PATELWORKS.

## ELECTRICAL GOODS AJIT RADIO CORPORATION,

Manufacturers of RASHMI Brand Fluorescent  
Chokes, Mercury Vapour Chokes, Transfor-  
mers, Fluorescent Fittings & Fixtures, Stamp-  
ings (Laminations). Phone : 571963, 533746,  
30717. Grams : "QUICKSTART"  
Sole Selling Agents : Ajit Bros., 34, Vithaldas  
Road, P.B. No. 2084, Bombay-2(BR);  
Phone : 30717, 571963. Grams : RASHMI-  
CHOK.

## ELECTRICAL GOODS

### AJIT INDUSTRIES,

Dealers in :

Everything Electrical

Address : 35, Vithaldas Road,  
Bombay-2.

Phone : 30851, 572815 & 573698.  
Grams : 'AJITCHOKE'.

## ELECTRICAL & MECHANICAL ENGINEERS

# ASIATICS

The House for everything in Heavy & Light  
Electricals, Earth & Building Machineries,  
Hydel & Irrigation Products, Requisites, etc.  
etc.

Address : H1-18B, Mirza Ismail Road, Jaipur.  
Phone : Office : 75341; Resi. : 75226.

Grams : "TICS".

Branches :

45, South Raj Mohalla, Indore City, Nayapura,  
Kota.

## ELECTRICAL GOODS

Phone : 264883. Grams : "BETWITCH."

### RAVIN TRADING CO.,

5, Mohatta Market, Palton Road, Bombay 1.  
Dealers in Everything Electrical, Specialists  
in H.T. & L.T. Underground Cables, H.T. &  
L.T. Insulators, Tropodur, Wires, Switches &  
Motor Control Gears.

Branch : Mody Chambers, Deharmendra Road,  
Rajkot.

## ELECTRICAL GOODS

### ALLIANCE ELECTRIC MART

Importers & Exporters

67, Lohar Chawl, Bombay 2.

Dealers in Wires & Cables, Electrical Switch-  
gear, Accessories, Fans, Fluorescent & Lighting  
Fittings.  
Phone : 39229.

## ELECTRICAL GOODS AMERICAN ELECTRIC & ENGINEERING CO.

Electrical Engineers, Importers, Stockists &  
Contractors

11-12, "Himalaya House", Hornby &  
Palton Roads,  
BOMBAY-1

Phone : 263575. Grams : "AMERICTRIC."

## ELECTRICAL GOODS

### COSMIC TRADERS

Yusuf Bldg., Veer Nariman Road,  
Bombay-1.

Phone : 253224, 254768.

Grams : "YANTRAYUG."

Distributors for H.T. & L.T., P.V.C. & P.I.L.C.  
underground cables and wires.

## ELECTRICAL GOODS



## ASIATIC ELECTRIC TRADING COMPANY

46-48, Lohar Chawl, Bombay 2.

Phone : 29886. Tel. Add. : "ASIALIGHT"

Specialised Suppliers & Service Engineers  
for all types of Heating & Cooking Equip-  
ments; Stockists of Wires & Cables, Switch-  
gear Material. All types of Fans, Air Circu-  
lators & Exhaust Fans, Labour Saving &  
Kitchen Aid Appliances, Lighting Equipment  
etc., etc.

## ELECTRICAL GOODS

### B. B. ELECTRIC & AUTO STORES

98, Princess Street, Bombay 2.

'GRAMS : "BIBIELECT". Phone : 30795.  
Direct Importers of all types of Electrical  
Goods, Winding Wires & Insulating Materials.

Show Room :

Peerbhoy Building, Pathak Wadi, Lohar  
Chawl.

Trade inquiries invited.

## ELECTRICAL GOODS

### BIPINKUMAR ELECTRIC CORPN.

Direct Importers of Everything Electrical.

Sole Selling Agents for

TROPEX CABLES V.I.R., C.T.S. & W/P.  
PHILCO Resin Cord Solder Wires

Post Box No. 2308.

14, Tavawala Building, Lohar Chawl,  
Bombay 2.

Grams : "BIPINDEV." Phone : 30684 & 22185.

## ELECTRICAL GOODS

Specialists in Pipes, Fittings, Wires  
& Switchgears.

Stockists of Everything Electrical,  
Distributors for

"C.T.L." Conduit Pipes, Dahisar.

### CHANDRODAYA ELECTRIC CO.

Bhangwadi, Kalbadevi Road,  
Bombay 2.

Phone : 22579. Grams : "TRICYCLE."

## ELECTRICAL GOODS

### RAICHAND & SONS

5, Picket Cross Road,  
BOMBAY 2.

Dealers in 'SIEMENS', Electrical Equipment  
& Electrical goods.

Phone : 23838 and 357750 (Resi.)  
Grams : "PARAMITE."



# TRADE DIRECTORY FOR BUYERS

## ELECTRICAL GOODS INTERNATIONAL ELECTRIC TRADING CO.

63, Princess Street, 1st floor, BOMBAY 2.  
Direct Importers & Distributors of M.E.M.  
I.C. Switches, Fuse Units & Motor Control  
Gears, Conduit Pipes & Conduit Accessories,  
Fans, Meters, Wires & Cables, Fluorescent  
Tubes and its Accessories, Electric Lamps and  
accessories and Copper Wire. Phone: (Office)  
20613, Res.: 472289; Grams: "INTERLITE".  
Bombay-2 BR.

## ELECTRICAL GOODS RAVAL & CO.

Shreeji Bhuvan, Lohar Chawl, Bombay 2.  
Phone: 23720. Grams: "GODSPEED".  
Branch at 12-B, Lower Chitpur Road,  
Calcutta. Phone: 345651.  
Stockists of:  
I.C.C. & C.C.I. Wires, Trailing, Flexibles,  
PILCDSTA Power & PVC. Tropodur Control  
Cables and Transformers.

## ELECTRICAL GOODS

## BENGAL LAMP

for

BETTER LIGHT WITH LONGER LIFE

## "UKA" ACCESSORIES

SUCH AS SWITCH, PLUG HOLDER,  
CEILING ROSE ETC.

for

SUPERIOR QUALITY—BETTER  
WORKMANSHIP



SOLE DISTRIBUTORS:

## U. K. AGENCIES

2/16 Western India House, Sir Pherozeshah  
Mehta Road, Bombay 1.

Phone: 253195. Grams: "BEBELT."

## ELECTRICAL GOODS

### B. MANIAR & CO.,

Mani Bhuvan, 2nd Floor, 9, Pathakwadi,  
Lohar Chawl, Bombay-2.

Stockists of TROPDUR P.V.C. Insulated  
Cables for Power & Control, Wires of all Sizes,  
TRAINING FLEXIBLE Cables and imported  
D.Z. & T.D.Z. Cartridge Fuse Units.

Phone: 20802. Grams: "CARTFUSE."

## ELECTRICAL GOODS

### S. K. & COMPANY

Gopal Nivas, 133, Princess Street,  
BOMBAY 2.

Phone: 28240.

Dealers in everything Electrical.  
Stockists of Fluorescent Lamps and other  
Accessories.

## ELECTRICAL GOODS

### ALL-INDIA ELECTRIC CO.,

Bombay—Madras.

Everything Electrical.

Address: 76-78, Dwarkadas Bldg., Mangaldas  
Road, Lohar Chawl, P.B. No. 2324, Bombay-2.

Phone: 29716. Grams: "KITKAT."

## ELECTRICAL GOODS

Factories & Contractors

for

Wires, Switchgear, Accessories & Other  
Electrical Materials.

Please Contact:

## EXPRESS TRADING CO.,

Sai Bhuvan, 141, Princess St., Bombay-2.

Phone: 22152.

## ELECTRICAL GOODS

### SHREE MAHAVIR ELECTRIC TRADING CO.

182, Zaveri Bazar, Bombay 2.

Direct Importers and Stockists of Nichrome,  
Eureka Wires, Autowire & Insulating Mate-  
rials; Distributors for SMICO Electrical  
Gas lighters, MONO flush type Accessories &  
JOYTHSON Bed Switch.

Phone: 38782. Grams: "DIPOTSAVI."

## ELECTRICAL GOODS

Reliable House for Electrical Requisites.  
Manufacturers of "SUNRISE" Switchgears  
—Fans—Lamps—Meters, etc., etc.

### ZENITH ELECTRIC STORES

51, Lohar Chawl,  
BOMBAY 2.

Phone: 83125. Grams: "ALLANABANDA."

## ELECTRICAL GOODS & ACCESSORIES

### GETCO PRODUCTS,

Andheri (East), Bombay-69.

Manufacturers of Getco Electrical Appliances  
& Accessories such as Geysers, Toasters,  
Ovens, Room Heaters, Food Warming  
Plates, Bells, Night Lamps, Table Fittings etc.

Phone: (Factory): 571628, (Office): 38850.

## ELECTRICAL GOODS & ACCESSORIES GLOBE ELECTRIC & TRADING CO.,

Devkaran Mansion, 14/16, Vithaldas Road,  
Lohar Chawl, Bombay-2.

Homa Geysers, Irons, Gas Lighters, Industrial  
Lamps, Ovens, Electric Massagers, Pressure  
Cookers, Air Circulators, also Rallis Fans.

Phone: 29022.

## ELECTRICAL GOODS & ACCESSORIES VISHWANATH VAIJNATH & CO.,

1, Bhandari Street, Cross Lane, Vadgadi,  
Bombay-3.

Dealers in Electric Cables, Wires, Auto Cables,  
Underground Cables, Conduit Pipes, Fittings  
and Electrical Accessories.

Phone: 323588. Grams: "VIMAKIRAM".

## ELECTRICAL GOODS & ACCESSORIES

### V. N. BOLINJKAR & SONS.

Nimmco Bldg., Industrial Estate, Lalbaug,  
Bombay-12.

Specialise in Electrical Stampings & acces-  
sories, Press Tools, Industrial Holloware of  
Small Size, Sheet Metal fabrication.

## ELECTRICAL CONTROLS & DEVICES

## JASHVANT C. SHAH & CO.

Navroz Baug, Navrozi Lane, Ghatkopar,  
Bombay-77.

India's Foremost Indenting House

(For Details Please See Com. Firms Section)

## ELECTRICAL GOODS & ACCESSORIES

### GREENS ELECTRIC CORPN.,

Stockists & Suppliers of MEM Fuse Units,  
Switch Gears, KAY Products, Meters, Wires  
& Cables and overhead Line materials.

33, Pathakwadi, Lohar Chawl, P.O. Box 2343,  
Bombay-2 BR.

Phone: 29392.

## ELECTRICAL WIRING CLIPS MFRS.

### FIDAHUSEIN GULAMHUSEIN & CO.,

Tavawala Bldg., Lohar Chawl, Bombay-2.

Mfrs.: All kinds of Link & Joint Clips, Copper  
Earthing Clips, Conduit Saddles etc.; Sole  
Mfrs. of 'Camel' & 'Lion' Brand Clips.

Phone: 39469.



# TRADE DIRECTORY FOR BUYERS

## ELECTRICALS & MACHINERY

Sole Agents for MARLEX Electric Appliances—Pressure Cookers, Musical Bells, Gas Lighters, Sirens, Hooters, Gong Bells, Portable Blowers-cum-Vacuum Cleaners, Vibro Tools, Soldering Irons, Transformers and Ventura Exhaust Fans.

### VEEJAY'S TRADING CORPORATION

Ahmed Bldg., Lohar Chawl, Bombay 2.  
Phone : 39637. Grams : "LAXELEC."

## ELECTRONIC PROCESS CONTROL

### SELF SHINE INDUSTRIES

Behind State Bank of India, Saki-Vihar Road, Saki-Naka.

Bright Chromium, Bright Zinc and Bright Silver Plating.

Phone : 581784.

## ENAMEL SIGNBOARDS

Advertisement Signboards, Name Plates, Notice Boards, Canal Gauges, Caution Boards, House Numbering Plates, etc.

### THE PIONEER ENAMELLING WORKS

24, Lakshmi Building,  
Sir P. M. Road, Bombay 1.  
Phone : 26-3464.

## ENGINEERING TOOLS

### BARODA ELECTRIC METERS LTD.,

Vallabh Vidyanagar, Via Anand, Gujarat.  
Specialists in Design and Manufacture of PRESS TOOLS, MOULDS, JIGS and FIXTURES.

Phone : 313 Anand. Grams : "POLYPHASE".

## ENGINEERS & CONTRACTORS

# JASH ENGINEERING INDUSTRIES

(Formerly National Engineering Works), Industrial Estate, Pologround, Indore-3, M.P.; Manufacturers of Machine Tools, Surface Plates, Straight Edges, Inspection and Marking Tables, C.I. & M.S. Bed Plates, Work Holding Tables, Assembly Tables, Sluice Gates for Irrigation, Sewage & Water Treatment Plants etc. Specific Job Orders involving Heavy Castings, Fabrication, Stress & relieving, Machining, Repairs etc. Undertaken. Installed Capacity to manufacture the largest Cast Iron sluice gates in the Country.

### LARGE ACCURATE FLAT SURFACE OUR BUSINESS

Phone : 5681 & 6958. Grams : "NATIONAL".

## ENGINEERS & CONTRACTORS

### THE UNION LAND AND BUILDING SOCIETY LTD.,

Empire House, Dr. Dadabhoy Naoroji Road, Fort, Bombay-1.

Engineers & Contractors.

Phone : 261213, 264100.

## ENGRAVERS & DIE-SINKERS

Phone : 8389. Grams : "SARAYANTRA."

### SARABHAI MACHINERY

(Karamchand Premchand Pr. Ltd.)  
Post Box No. 72, Baroda.

Manufacturers of intricate moulds of special nature and high precision machined parts to customers' requirements.

## ENVELOPE MFRS.

### S. I. LALVANI & CO.,

308, Bazargate Street, Bombay-1.

Manufacturers of High Class Writing Pads and all sorts of Envelopes and Dealers in all kinds of paper.

Phone : Office : 252498 ; Factory : 378941.

## EXPORT HOUSES

### ROSHANI TRADING CO.,

140, Meadows Street, Bombay-1.

Undertake export of your products such as Machinery Machine Tools, Engg. Goods, Small Tools, Electrical Goods, Sanitaryware, Tubes, Tyres, etc.

Phone : 255077.

## EYELETS & RINGS

### M. S. PATEL & CO.,

Eyelet House, Vihar Lake Road, Kurla, Bombay-70.

(In Collaboration with England)

Mfrs. & Exporters of all types of Eyelets; Suppliers to all Govt. Depts., and Reputed Mfrs. of Shoes, Tarpaulins, Tents, Radios, Electrical & Electronics Equipments.

Phone : 581574, 581157.

## FABRICATION

Water & Oil Storage tanks, Chimneys, Trolleys GRILLS, etc., Small machines as per Drawings

### MAXON ENGINEERING WORKS

22, Apollo Street, Bombay-1.

Phone : 251151.

## FIREBRICKS & REFRECTORIES

### J. CHANDRAVADAN & CO.,

53, C. P. Tank Road, Bombay-4.

Stockists of A.C.C. Fire-Bricks-Clay, Accoset-SO, Accocid Firecrete, Firecrete Super Acco-proof.

Phone : 334403. Grams : COLORSTONE.

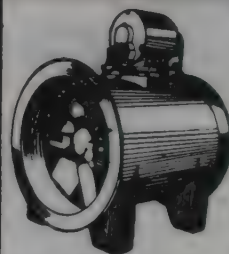
## FAN MFRS. & DEALERS

# NAME THE PURPOSE

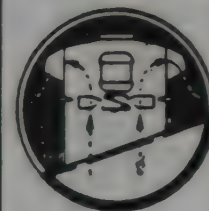
YOU HAVE A SIZE AND TYPE OF

# CALCUTTA FAN

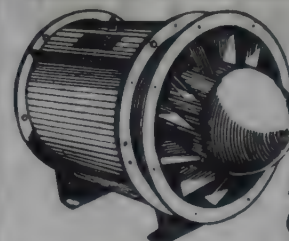
TO MEET YOUR SPECIFIC NEED.



BELT DRIVEN  
EXHAUSTS



ROOF  
EXTRACTOR



AXIAL FLOW  
(DUCT) FANS



MANCOOLERS



SHEET METAL  
IMPELLER  
EXHAUST



AIRCIRCULATORS  
(Pedestal & Bracket Models)



**CALCUTTA FAN  
WORKS PVT. LTD.**  
Calcutta 16.

Manufacturers of all types of  
Domestic & Industrial Fans

CF/PA/S-66



# TRADE DIRECTORY FOR BUYERS

**FIRE EXTINGUISHERS & APPLIANCES****RADIANT FIRE PROTECTION ENGINEERS,**

Sir Vithaldas Chambers, Bruce Street,  
Bombay-1

Approved Contractors for Hydrant & Automatic sprinkler Installations, Fire proof Doors & Suppliers of Fire Extinguish and appliances; Phone: 370385, 255296.

**FIRE WORKS MFRS.****DADA FIRE WORKS PRIVATE LTD.,**

(Inc. 1953)

H.O. 240/42, Juma Masjid, Bombay-2.  
Phone: 325662.

Grams: "DADASPARKS (KB)."

Manufacturers and Exporters of "Dada" Sparklers & Crackers; Factory: Dadanagar, Fursungi, Taluka Haveli, Dist. Poona.

**FISH & FISH PRODUCTS****ABDUL HAMID AHMED & CO.,**

Sewri Cross Road, Bombay-15 DD.

Dealers in Boombil, Prawns, Fishmeal, Oyster shell, Fishoil, Organic Fishmanure, Whole and Powder Fish and Fish Products.

Phone: 442964.

**FOOTWEARS****BENGAL WATERPROOF WORKS (1940) LTD.,**

377, D. Naoroji Road, Bombay-1.

Duckback manufacturers of Gum Boots Glazed, Industrial Gum Boots heavy type, Hats, Knee Boots, Snow ankle Boots, Hill-climber, Over shoes etc.

Phone: 254800.

**FOUNDRY EQUIPMENTS****P. S. PURI & CO.,**

Dhunvilla, Versova Beach, Bombay-58-AS.

Consulting Metallurgical Engineers & Mfrs. of Complete Range of Shell Moulding and Co<sup>3</sup> process Equipments; PSP/Bonded Sand PSP Wetting Agents, Parking Fluid etc.

Phone: 573925.

**FOUNDRY PATTERNS**

Suitable for Hand & Machine Moulding  
Please Contact:

**DIAMOND PATTERN WORKS,**

1, Veena Vihar, Near Shanmukhananda Hall  
King's Circle, Bombay-22.

Phone: 472017. Grams: "CONMEF."

**FOUNTAIN PENS****GEM & CO.**

Pen Specialists

325-326, Netaji Bose Road,  
Madras 1.

Direct Importers  
Wholesale & Retail  
Sales and Service

**FURNITURE****MINERVA FURNITURE WORKS**

Furnishers and Interior Decorators, Painting Contractors, Dealers in Electric Fittings, Venetian Blinds, Iron Grills and Shutters, Complete Home & Office Furnishing — Authorised Dealers in Dunlopillo Cushions, Salva Mattresses, and Azok Folding Chairs — Also Furniture on Hire.

67-71, Queen's Road, Opp. Marine Lines  
Station, Bombay 2. Phone: 29708.

**FURNISHING FABRICS****FURNISHING TEXTORIUM**

(Prop: K. Haridas & Co.)

411, Sheikh Memon Street, Bombay-2.

All types of Furnishing Fabrics, Cloth for Curtains, Windows & doors, upholstery & loose covers for sofas, chairs, Motor car seat covers in attractive shades & Designs.

Phone: 323231 & 20529.

**GASKETS & PACKING MATERIAL MANUFACTURERS****DIKSON & CO.,**

8, Bharat House, 104, Apollo Street,  
Bombay-1.

Guaranteed Gaskets of all types; Please write for Price list; we Solve your Gasket Problems.

Phone: 256848.

**GLASS****NATIONAL GLASS HOUSE,**

Office: 108, Undria Street, Bombay-8.

Shop: 72, Abdul Rehman Street, Bombay-3.  
Dealers in all Kinds of Glass sheets, plate, decorative mirrors, plywoods, hardboard, teakwood, glass cutters etc.

Phone: 322869.

**GLASS**

Phone: 8389. Grams: "SARAYANTRA."

**SARABHAI MACHINERY**

(Karamchand Premchand Pr. Ltd.)

Post Box No. 72, Baroda.

Manufacturers of intricate moulds of special nature.

**GLASSWARE MFRS.****KRISHNA SILICATE & GLASS WORKS LTD.,**

Ghodbunder Road, Majiwada, Thana.

Mfrs. of quality glass bottles, Vials & Phials both in Automatic & Semiautomatic machines.

Phone: 591322, 592420.

**GLASS TOUGHENED MFRS.****LIGHT GLASS INDUSTRIES**

43-A-B, Govt. Industrial Estate, Char Kop, Kandivali, Bombay 67 N.B.

Manufacturers of 'LIGHT' Toughened Glass for all types of Automobiles, Original equipment Suppliers to PREMIER, TELCO, STANDARD etc.

Phone: 692003.

**GLASSWARE MFRS.****OGALE GLASS WORKS LTD.,**

P. O. Ogalevadi, Dist. Satara, Maharashtra State.

Phone: Karad 238.

Grams: "GLASWORKS", Ogalevadi.

Manufacturers of Glassware, Lanterns, Stoves, Enamelware, Electric Induction Motors.

**GLASSWARE MANUFACTURERS****UNITED GLASS WORKS Private LTD.**

Manufacturers of Bottles and Glassware.

111, Bhandari-Chakla Street,  
Bombay 3 (BR.).

Factory: —326, Bail Bazar, Old Kurla,  
Bombay 70 (AS.). Phone: 51459.

Phone: 322381-3. Grams: "GLASSBOTS."

**GLOVES**

Available from Ready Stock

**INDUSTRIAL RUBBER GLOVES**

Acid & Alkali Proof from Colloid Dipping Tank

Manufacturers:

**S. THAKOR & CO.**

Khadia, Char Rasta, Ahmedabad-1.

**GREETING CARDS****SHABBAR TRADING CORPORATION**

212, Abdul Rehman Street,  
Bombay 3.

Manufacturers of X'mas, New Year, Divali, Idd, Sankrant, Birthday and Wedding Invitation Cards.

Phone: 321893.

Grams: "GREETCARDS."

**GREETING CARDS****LUCKY TRADING CORPORATION,**

272, Abdul Rehman Street, Bombay 3.

Manufacturers of Greeting Cards for Divali, X-mas, New Year, Idd, Birthday and Wedding Cards in New various attractive designs.

Phone: 327760.

**GREETING CARDS****TAJ PRINTING WORKS,**

46/A, Cawasji Patel Street, Fort, Bombay-1.  
Phone: 252432.

Commercial and Art Printers, Manufacturers of Invitation Cards, Greeting Cards and Calendars.

**GRINDING WHEELS****ENGG. EQUIPMENT CORPN.,**

44, Nagdevi Cross Lane, Bombay-3 (BR).

Authorised distributors for Grinding Wheels, Segments, Sharpening Stones, Bricks & Other Abrasive Products of Grindwell Abrasives Ltd.

Phone: 321553.



# TRADE DIRECTORY FOR BUYERS

## MOTORS & TRUCKS

### DEE-KAY INDUSTRIES,

Lake Road, Bhandup, Bombay-78.

Clutch Plates for Cars, Trucks, Cranes  
Industrial Engines & Machinery.

Phone : 582034.

## METALLIZING

### INDIAN METALLIZING CO.,

Ashram, Andheri-Kurla Road, Bombay-69.

Metallizing for Corrosion protection of Ships  
& Steel Structures; we spray all metals and  
reclaim worn-out parts i.e. crank shafts, Rolls,  
Rams etc.

Phone : 574081.

## OFFICE EQUIPMENTS

### AJAX PRODUCTS CO.

Unit No. A2, Industrial Estate, Ambattur,  
Madras-58

Phone : 60284.

Manufacturers of Filing Cabinets, Tubular  
Furniture and Office Equipments.

## OIL MILLS (COMPANIES)

### ALFA ENGINEERING WORKS,

8, Anees Chamber, Carnac Road, Bombay-1.  
Works : Station Road, Bhandup, Bombay-78.

Grams : "STEELHARD."

Mfrs. of Oil Expellers, Filter Presses, Dis-  
integrators, Conveyors, Elevators and Spares  
for all types of Expellers.

Phone : 581283.

## OIL SEALS

### "SPARE-AGE"

### SPARE-AGE MOTORS (INDIA)

9-B, Purshottam Bldg., Tribhuvan Road,  
Bombay-4.

Factory Phone : 522213.

## PACKING MATERIALS

### CORRUGATING & PAPER

### PROCESSING CO. (P) LTD.,

Manufacturers of Packaging both for inland  
and export purposes.

243, Barrackpore Trunk Road, Calcutta-36.

Phone : 563058, 563059.

## PAINTS

### RAJKAMAL SUPPLYING STORES

Direct Importers and Stockists of Paints,  
Dry Colours, Brushes, Varnishes and Artist  
Materials, Manufacturers of Chromes, Lakes,  
Dry Distemper & Poster Colours.

193, Abdul Rehman Street,  
BOMBAY 3.

Phone : 321895. Grams : "RAJPAINT."

## PAINTS & VARNISHES ALLIED TRADING CO.

30, Nagdevi Street, BOMBAY 3.

Importers and Stockists of Cellulose Lacquers,  
Thinners, Synthetic Enamel Paints, and  
Spray Painting Equipment, Marine Paints.  
Importers of Spray Painting equipment and  
guns & Respirators, Rother Brushes etc.

Phone : 323581, 324160.  
'GRAMS : "LINSEED OIL."

## PAINTS & VARNISHES

### NOBLE PAINTS

Chief Stockists :

### KAPADIA BROTHERS (Estd. 1910)

Paint Merchants & Painting Contractors.

81, Abdul Rehman Street, Bombay-3.

Phone : 324108. Grams : "DECORATORS."

## PAINTING CONTRACTORS

### AMAR DECORATORS,

69, Mody Street, Bombay-1 BR.

Painters & Decorators of Buildings, Factories  
& Flats etc., Furniture, Partition, French  
Polishing, False-ceiling & Bldg., repair works  
undertaken.

Phone : 264251. Grams : "UNDERCOAT."

## PAINTING CONTRACTORS

### NEW COLOUR SCHEME,

Painting & Decorating Contractor of Buildings,  
Flats, Offices, Factories etc., Free Estimate on  
Request.

Contact at : 18, Commercial Chambers, Masjid  
Bunder Road, Bombay-3 or 8, Lubina, 76,  
Turner Road, Bandra.

Phone : 324668. Resi : 534739.

## PAINTS & VARNISHES

### HUSENI A. KAYUM RANGWALA,

31-33, Babu Khote Cross Street, Bombay-3.

Chief Stockists of Asian Paints, Noble Paints  
& Hindustan Oil Mills; Suppliers to Honest  
Industries at very reasonable rates.

Phone : 332476. Grams : "HAKSCOLIN."

## PAPER

### BHARAT PAPER MART

(Estd. : 1932)

Bharat Bhuvan, 51, Sutar Chawl,  
Bombay 2

Grams : "GLAZE." P.O. Box 2245.

Phone : Office : 325329; Resi. : 355727.

Distributors for Titagur Paper Mills,  
India Paper Pulp Co., Bengal Paper  
Mill Co. Ltd., Calcutta.

## PAPER

### CHARLES MORGAN & CO., LTD.

Bombay Agent :

Wiggins Teape & Alex. Pirie

Branch of Tribeni Tissues Pvt. Ltd.

Kamani Chambers, 32, Nicol Road, Bombay 1.

Telegrams :

Tel. No.

"WINCHMORE."

261622.

## PAPER & BOARDS

### SHREE KRISHNA COMMERCIAL CORPORATION.

75/79, Old Hanuman Lane, Bombay-2.

Phone : 38548.

Grams : 'ANJNIPUTRA' BR-2.

Distributors for :

The West Coast Paper Mills Ltd., The Andhra  
Pradesh Paper Mills Ltd.

## PAPER

### WIGGINS, TEAPE OVERSEAS SALES LTD.

"GATEWAY" PAPERS, MANUFACTURERS.

Group Office : Wiggins Teape & Alex. Pirie.

Branch of Tribeni Tissues Pvt. Ltd.

Kamani Chambers,

32, Nicol Road, Bombay 1.

Telegrams :

Tel. No.

"WINCHMORE."

261622.

## PAPER (ART & CHROMO)

### "SUNCOTE"

Art & Chromo Paper

Ideally suited to the needs of the Indian  
Printing Industry.

For Details Contact :

### SUN COATED PAPER CO.,

Janmabhoomi Chambers, Fort Street,  
Bombay-1.

Phone : 262810.

## PHARMACEUTICAL MACHINERY & SUPPLY

For Pharmaceutical Industries Stainless Steel

PL

FILTER PRESS with TRANSFER PUMP

Manufacturers :

### PHARMALAB INDUSTRIES

Star Metal Compound, Vikhroli, Bombay 83.

Phone : 581327.



# TRADE DIRECTORY FOR BUYERS

**PAPER STRAW BOARDS****THE ROYAL PAPER STORES**

Direct Importers & Stockists of all kinds of Paper, Straw Boards and Bookbinding Materials.

187-89, Abdul Rehman St.,  
Mapla Building,  
BOMBAY 3.

Phone: 321103. Grams: "ROSTOPAPER."  
Trade Enquiries Solicited.

**PHOTOGRAPHIC STORES****MODERN PHOTO STORES STUDIO**

358, Lamington Road,  
BOMBAY 7.

Authorised Dealers  
of

KODAK — GEVAERT — ILFORD-SELO &  
AGFA.

**PIPES & FITTINGS****AHFY TRADING CO.,**

50, Nagdevi Street, Bombay-3.

Specialists in Cast Iron Pipes & Specials  
Water Meters & Pipe Fittings.

Phone: 329007. Grams: "AHFYTRAD".

**PIPES & FITTINGS****B. C. MASHRUWALA & BROS.,**

657, Kapasia Bazar, Ahmedabad-2.

Importers & Stockists of all Sorts of Pipes,  
Pipe-Fittings, Boiler Tubes, Beam Pipes,  
English Hopkinsons' Bronze Iron & Steel  
Valves & Boiler Mountings. Agents: "Venus"  
Brand G. M. & Iron Valves; Branch: 139,  
Nagdevi Street, Bombay 3.

**PIPES & FITTINGS****HATIMBHOY GOOLAMHUSEIN &  
BROS.**

(Estd: 1894)

193-A, Nagdevi Street, Bombay-3.

Phone: 326752. Grams: "FITTINGS."

Stockists of all kinds of Pipes, Fittings, Hard-  
ware Material, Valves & Cocks etc.

**PIPES & FITTINGS****STANDARD PIPES & FITTINGS CO.**

93-A, Nagdevi Street,  
Bombay-3.

Phone: 323444. Grams: "STANDPIPES".

Importers and Stockists of Pipes & Fittings  
for Water, Gas and Steam, Sanitary Wares,  
Hardware & Mill Stores.

**PLASTIC GOODS MFRS.****MUTUAL STEEL INDUSTRIES**

47, Kandivli Industrial Estate,  
Kandivli (West), Bombay-67 NB.

Phone: 692843.

Plastic Moulders in Compression and Injection;  
Manufacturers of Bakelite and Plastic  
Radio Cabinets and "TIDY HOME" Plastic  
Housewares.

**PLASTICS****M. G. INDUSTRIES PRIVATE LTD.,**

Offer:

PVC Flooring Tiles, Rolls, Rigid Sheets,  
Thin Decorative Sheets, Conduit Pipes,  
Staircase Nosings, Protecting Corners, Profile  
Tiles, Extruded Structural Components, etc.

And

PVC Compound of all grades for Cable Manu-  
facturers.

National Insurance Building,  
204, Dadabhoy N. Road,  
Bombay-1.

Phone: 265321-2. Grams: "HEADTYPE".

**PLASTIC GOODS MFRS.****SUPREME INDUSTRIES LTD.**

Wadala, Bombay-31.

Manufacturers of Plastic Articles for House-  
hold & Industry, buckets, trays, commode  
seats, Polythene films, bags, Pipes, Welding,  
Spraying, Coating, Industrial & Artists Paints'  
Adhesives, Waterproofing compounds etc.

Phones: 442181-2.

Grams: "SILPRODUCT"—Bombay (Dadar).

**PLAYING CARD VARNISH MFRS.****BOMBAY VARNISH  
MANUFACTURING CO.,**

Mahajan Silk Mill Compound, Agra Road,  
Vikhroli, Bombay-79 (NB).

Mfrs. of Picture, Paper, C. Board, Playing  
Card, Non-yellowing Playing Card, Plastocast  
Synthocast, Super Glass etc. Types of  
Varnishes.

Phone: 581677.

**PLYWOOD MFRS. & DEALERS****NATIONAL GLASS HOUSE,**

Office: 108, Undria Street, Bombay-8.

Shop: 72, Abdul Rehman Street, Bombay-3.

Dealers in all kinds of Plywood, teak, hard-  
board, blockboard, charis, seat, amsonite and  
all kinds of glass etc.

Phone: 322869, 370428.

**POLYTHENE BAGS & SHEETS****THE TARUN  
PLASTIC**

Mfrs. of Polythene Tubings, Bags, Drum  
Liners & Rolls; Polythene Black Pipes and  
all sorts of Extension jobs.

Office: 24-B, Raja Bahadur Compound, Raja  
Bahadur Mansion, Hamam Street, Fort,  
Bombay-1.

Factory: Old Nagardas Road, Mogra-Pada,  
Andheri (East), Bombay-59.

Phone: Office: 253014. Factory: 571518.

**PLYWOOD MFRS. & DEALERS****NOORMOHAMED ADAM  
CHUNAWALA & CO.,**

333, S. V. Road, Andheri, Bombay-58.

Stockists of all kinds of Plywoods, Decorative  
Commercial Plyareels, Hardboards. Authorised  
Stockists of 'CHARMINAR' A. C. Products;  
Also General Timber Merchants.

Phone: 572437. Grams: "NOORANI".

**PNEUMATIC CYLINDERS  
& AIR CONTROL VALVES**

For Low-Cost Production  
in your Industry

**IRON & METAL TRADERS PRIVATE  
LTD.,**

Post Box 6210, Bombay-10.

Phone: 376104-5-6.

Also at Calcutta, New Delhi, Madras.

**PRECIOUS & SEMI-PRECIOUS STONES  
& DIAMONDS****SAYABLU CORPORATION,**

Post Box 6533, Bombay-26-WB.

Stockists & Exporters of Real Ruby,  
Sapphires, Emeralds and all kinds of Semi  
Precious Stones etc.

Phone: 326173. Grams: 'SAYABLU'.

**PRINTING INK MFRS.****UNITED INK & VARNISH CO.,**

Office & Factory: 37/40, Paranjape 'B'  
Scheme, Vile Parle, Bombay-57-AS.

Manufacturers of all kinds of Printing Inks,  
Varnishes, Lead Chromes, Extenders, Hot &  
Cold Rubber Marking Crayons and Poly-  
urethane Printing Rollers.

Phone: 572338 & 573600.

**PRINTING PRESS MATERIAL &  
MACHINERY****PAPER PULP & MACHINE CO.,**

7, Kumpta Street, Ballard Estate, Bombay-1.

Phones: 263386.

Grams: "LIONBRAND".

Sole Importers into India of the Products of  
John Dickinson & Co. Ltd., London.

**PROCESS BLOCK MAKERS****UNIQUE BLOCKS,**

157, Modi Street, Bombay-1.

Phone: 266504.

\* DESIGNS \* LINE, HALFTONE &  
MULTICOLOUR BLOCKS \* MATRICES  
STEREOS



# TRADE DIRECTORY FOR BUYERS

## RADIATOR CORES & COMPONENTS

### AUTOMOBILE ANCILLARIES OF INDIA (P) LTD.,

Plot No. 37, Kandivli Industrial Estate, M. G. Road, Kandivli (West), Bombay-67. Manufacturers of Automotive, Industrial Radiator Cores and Components. Suppliers to Ministry of Defence for Nissan Project, Mahindra & Mahindra Ltd., for Vidy's Jeeps all models, Premier Automobiles Ltd., for Dodge Rams all models, Fiat 1100 cars and Dodge Army Power Wagons, Bajaj Tempo Ltd., for Tempo 3 Wheelers, Jessop & Co. Ltd., for Road Rollers, Kirloskar Cummins Ltd., for Cummins Engines and other Industrial Engine Equipment Mfrs. in Pumps, Diesel generating sets, Concrete Mixers, Earth moving Equipment etc.

Phone : 692348 & 692806.

## RESINS & COMPOUNDS

Quality P.V.C. Resins and Compounds are freely available from our Factory at Kota for a wide range of applications such as :

Wires & Cables, Flexible Sheetings, Rigid Sheetings, Corrugated Sheets, Tubes and Pipes, Footwear, Upholstery, Tiles, Crystal Clear Articles, Rain-wear, Brief-cases, Toys, Handbags, Book Binding Paper.

## SHRIRAM VINYL & CHEMICAL INDUSTRIES

P. B. 671, New Delhi 1.

## ROPERIES

### SHA GOVINDJI PADAMSHI KATHAWALA

(Katha Department)

Cair String, Cair Ropes, Bamboo Mattings

371-73, Narshi Natha Street, Katha Bazar, Bombay 9 (BR).

Phone : 323738. Grams : "BAMBOOMATS". Branch : Jew Town, Mattanchery P.O., Cochin

## ROPERIES

### OCHHAVLAL CHHOTALLAL & CO.,

Stockists of : Manila, Sisal Ropes, Spurn Yarn etc.

Manufacturers of : Cotton & Jute Ropes, Tubular Bandings, Twines, Strings, Line Dori Jute & Hemp Healed Cord, Webbing Newars, Tapes etc.

Address: 207-209, Nagdevi Street, Bombay-3.

Phone : 29648. Grams : "KACHERIA."

## ROPE MERCHANTS

Phone : 322485. Grams : "RAJKOTWALA".

### ADAMJI KADERBHOY

(ESTD. 1894).

337, Katha Bazar, P.O. Box : 5046 Bombay 9.

Manufacturers : Stockists of Manila, Sisal, Hemp, Wire and Coir Ropes, Coir Mattings, Jute Ropes and Products, Flax, Twines, Cordages, Flax Canvas and Tarpaulins, Chains, Chain Slings and all kinds of lifting Tackle and Shipchandlery Stores. Exporters and Importers.

Selling Agents :

The Ganges Rope Co. Ltd., Calcutta.

Sole Agents in India (Except South)

WEBSTER & CO., LTD.

Sunderland (England).

## RUBBER GOODS MFRS.

### BENGAL WATERPROOF WORKS (1940) LTD.,

377, D. Naoroji Road, Bombay-1.

Duckback-Rubber goods viz. Hot Water Bags, Ice Bags, Inflatable Bed Pan, Hospitable Sheeting, etc.

Phone : 254800

## RUBBER GOODS MFRS.

### GENERAL COMMERCIAL CO.,

6, Raghavji Trust Bldg., French Bridge, Bombay-7.

Dealers in Automobile Rubber goods as Radiator Hoses, Engine Mountings, Rubber Bushings, Mattings, Glass Channels, Sponge Rubber, Surgical Tubes, etc.

Phone : 356087.

## SAFETY EQUIPMENTS STANDARD EQUIPMENT CORPORATION

A/6, Shri Ram Industrial Estate, 13, Katrak Road, (Naigaun X Rd.), Bombay 31 (DD). Specialised in all types of hand gloves, Apron, Safety Goggles, Respirators, Face Guard, Hand Shield, Gum Boots, Leg Guards etc. Also ask for Industrial Trolley Wheels and Tyres, Ebonite Rods & Sheets and Industrial Rubber and Ebonite parts to your specification.

## ROTARY DUPLICATORS

### SHOURIE DUPLICATORS PVT. LTD.,

Industrial area, Najafgarh Road, New Delhi-15.

Phone : 51333. Grams : "SHOURIE".

Marketing & Complete range of hand & electrically operated duplicators in F'Cap & double F'Cap Sizes.

## SANITARY APPLIANCES—PLUMBING MATERIALS

### THAKUR DASS SUREKA,

Manufacturers of T.D.S. Products—Sanitary, Drainage, Plumbing & Tubewell Requisites. 40, College Street, Calcutta-12.

Phones : 342461 & 346947.

Grams : "FLUSHPIPE".

## SANITARYWARE

By

### PARSHURAM

Vitreous-Hygienic

Super-White

also in pleasing

Pastel Colours, Complete Range in Sanitaryware, Wash Basins, Closets Indian and European Style, Stall Urinals & Sinks for Laboratory & Kitchens bidet etc.

## THE PARSHURAM POTTERY WORKS CO. LTD.,

Morvi, Gujarat (India).

People Prefer Parshuram.

Grams : "POTTERY".

## SANITARYWARES & FITTINGS

### R. MOOLCHAND & CO.,

44, Nagdevi Cross Lane, Bombay-3.

Direct Importers, Sanitarywares, Tiles, Bath Tube, Fancy Bathroom Fittings.

Phone : Office : 324207. Resi : 76837.

Grams : "POTTERY".



# TRADE DIRECTORY FOR BUYERS

## SANITARYWARES & FITTINGS

### NEIVELI CERAMICS & REFRACTORIES LTD.

(A Seshasayee Associate)

Vadalur P.O., South Arcot Dist., Madras State.

Manufacturers of elegant NEYCER KERAMAG Vitreous China Sanitarywares in technical collaboration with KERAMAG of West Germany. Available in Sparkling White and pastel shades; Wash-basins, Indian and European type water closets, urinals Pedestals, Sinks, Cisterns, Toilet accessories and for the first time in India anti-splash European type water closets — all produced with sleek elegance, are sturdy and strong to last for a life time.

## SANITARYWARES & FITTINGS

### THE MYSORE STONEWARE PIPES & POTTERIES LTD.,

(Estd. 1937)

Regd. Office : 80, Sixth Cross Road, Gandhinagar, Bangalore City.

Phone : 22368. Grams : "MYSTONPIPE".

Manufacturers of Sanitary Sewer Pipes, Fittings, Firebricks and other Sanitary articles, Salt Glazed Acid resisting Tiles and Chemical Stoneware.

## SANITARYWARES MARBLES & TILES

### NOORMOHAMED ADAM CHUNAWALA & CO.,

333, S. V. Road, Andheri, Bombay 58;

Stockists of all types of Glaze tiles, Polish, Rengh tiles and all types of Bath Room fittings;

Phone : 572437. Grams : "NOORANI"

## SCIENTIFIC & LABORATORY EQUIPMENTS

### POPULAR SCIENTIFIC WORKS,

Udyognagar, Udhna, Gujarat.

Phone : 68.

Manufacturers of QUICO brand Suction and Vacuum Pumps, Ovens, Incubators, Water Baths & Stills, Shadowless Lamps, Stirrers and Shakers, Autoclaves & Sterilisers, Operation Tables and Hospital furnitures, Centrifuges and Hot Plates, Kgheldal Distillation Units, Soxhlet Heaters, Laboratory Appliances etc. etc.

## SPORTS & GAMES

Please Contact :

### A. N. KAPUR & CO.,

Court House, Dhobitalao, Bombay-2.

Phone : 22776. Grams : "SANDAL".

## SHAKEPROOF WASHERS

### FAIRFIELD MANUFACTURING CO.

Hanuman Bldg., 4th Floor, Tambakanta,

Pydhonie, Bombay-3 (BR).

Phones : 324323 & 323758.

Grams : "MASKANICOY".

Manufacturers of Spring Washers, Shakeproof Washers, Circlips and Precision Strip Forms; Factory at : Masrani Estate, Halav Bridge, Kurla, Bombay-70 (AS).

## SPRING WASHERS

### FAIRFIELD MANUFACTURING CO.,

Hanuman Bldg., 4th Floor, Tambakanta,

Pydhonie, Bombay-3 (BR).

Phones : 324323 & 323758.

Grams : "MASKANICOY".

Manufacturers of Spring Washers, Shakeproof Washers, Circlips and Precision Strip Forms; Factory at : Masrani Estate, Halav Bridge, Kurla, Bombay-70 (AS).

## STATIONERY

### JAGJIVANDAS NANDLAL & CO.,

GOLDEN JUBILEE YEAR 1916-1966.

237, Abdul Rehman Street, Bombay 3.

Wholesale Stationers, Sole Distributors for Electric Pen-Pencil Typewriting Carbon Papers, Electric Staples in Sizes : 24/6, 26/6 and B. 8.

Phone : 323634. Grams : "SWANHOUSE".

## STEEL

### STEEL TUBES OF INDIA,

157, Princess Street, Bombay 2.

Manufacturers of ERW MS Steel tubes & G. I. Pipes in Technical Collaboration with Kashiharas, Japan. Factory : 27-34, Industrial Estate, Indore (M.P.).

### STEEL & ALLOY STEEL CASTINGS

### STEEL CAST CORPORATION,

Ravapari Road, Bhavnagar.

Specialists in Steel & Alloy Steel Castings as per Customers' Specification.

### STEEL & ALLOY STEEL

### SPRING STEEL STRIPS

Indentor & Stockists

### INDUSTRIES COMBINE

32, Apollo Street,

Bombay-1.

Phone : 251469. Grams : "JYOTRASHMI".

## STEEL BARRELS

### HEPACK PRIVATE LTD.,

Manufacturers of Heavy duty Steel Barrels — 200 litre Capacity, 14, Gauge Plain Black, Epoxy — Lined and Galvanised for packing Solvents, Liquid chemicals and oils.

85, Dr. Annie Besant Road, Worli, Bombay-18.

Phone : 76722.

Factory : Udyognagar Industrial Estate, Goregaon, Bombay.

## STEEL CASTINGS

Manganese, Carbon, Chrome, Heat-resistant Steels to B.S., I.S., I.R.S. or Customers' own Specifications for Cement, Sugar, Mining, Automobiles, Railways, Defence.

### INDIAN STEEL INDUSTRIES CORPORATION

Khetani Compound, 106, Bazar Ward, Kurla, Bombay-70.

Phone : 55739.

### STEEL DOORS & WINDOWS MANUFACTURERS

### MISTRY CHHAGANLAL RAMJI

Office : 98-100, Umerkhadi Road, Bombay-9. Phone : 332131.

Factory : 238-A, Bombay-Agra Road, Opp. Petrol Pump, Naupada, Thana.

Phone : 591823.



# TRADE DIRECTORY FOR BUYERS

## STEEL FILES

**SHAH & BROTHERS,**  
234, Nagdevi Street, Bombay 3.

Authorised Distributors for J.K., Johnbaker  
and Hindustan Files.

Phone : 326797. Grams : "STEELGRIPS".

## STEEL FURNITURE MFRS.

**CHANDAN METAL PRODUCTS  
PRIVATE LTD.**

Manufacturers of Steel Furniture and Equip-  
ment for Offices, Homes, Hospitals, Canteens,  
Libraries, etc. Executive Office & Works: Gorwa  
Road, Chemical Industries P.O., Baroda-3.

## STEEL PIPES

**RAMESHCHANDRA  
SANTARAM,**

205, Sant Tukaram Road, Carnac Bunder,  
Bombay-9.

Phone : 322214.

For water Pipes and ERW and Seamless Tubes  
from 1" to 12".

## STONE CRUSHERS & SPARE PARTS NEW RUBY MECHANICAL WORKS

Founders, Engineers & Contractors.

Manufacturers of Ruby Stone Crushers' spare  
parts and other machinery parts.

Office & Factory : 74-B, Saki Naka, Vihar  
Lake Road, Kurla, Bombay 72-AS.

Phone : 581148 (Bombay).  
Grams : "RUBYSARES" (Kurla).

## STRUCTURAL & MECHANICAL ENGINEERS

**INDIAN COMMERCE &  
INDUSTRIES CO. PVT.  
LTD.,**

Beehive Bldg., 95, Broadway, Madras 1.

Phone : 21071.

Grams : "LUCKLY & BEEHIVE".

Manufacturers of Steel Structural, Ferrous  
& Non-ferrous Alloys & Steel Castings,  
Machinery Parts, Electric Overhead Line  
materials, Transformers Structures, Cross  
Arms, Lamp Brackets & Fittings.

## SURGICAL & SCIENTIFIC EQUIPMENTS

**POPULAR  
SCIENTIFIC  
WORKS,**

Udyognagar, Udhna, Gujarat.  
Phone : 468.

Manufacturers of 'QUICO' Brand Hydraulic  
Operation Tables, Shadowless Lamps, High  
Pressure Sterilizers, Hot & Cold Water  
Sterilizers, Autoclaves, Blood Suction Pump.  
Khan Shakers, Hot Air Ovens, Bacteriological  
Incubators, Pyrogen Free Water Distilleries,  
Vacuum Pumps etc.

## SURGICAL GOODS

**K. CHAPMAN & CO.,**

462, Sardar Vallabhbhai Patel Road,  
Bombay-4.

Phone : 351548. Grams : "TRUSSWORKS".  
Manufacturers of Hernia Trusses, Abdominal  
Belts, Deformity Appliances and Artificial  
Limbs.

## SWITCHGEAR

Automatic Control Panels, Starters and  
Distribution Boards, Crane Control Panel with  
Master Controller

**BHARAT SWITCHGEAR AND  
CONSULTANTS**

105, Princess Street, P.O. Box 2747, Bombay-2.  
Phone : 23553.

## TALLOW MFRS.

Manufacturers of CONC. TEX TALLOW and  
other Textile Auxiliaries.  
Dr. YAJNIK'S

**KEMICOLOR INDUSTRIES,**

195, D. Naoroji Road, Bombay-1.  
Phone : 261192.

## TELEPHONE ENGINEERS & CONTRACTORS

**SUPER SERVICES (INDIA),**

13, New Queen's Road, Bombay-4.  
Superphone Intercom Telephone.

Manufacturers : Supertone Record Players,  
Grundig, Siemens, Bush Pye-Sharp, Sanyo  
Transistors, Garrard Ampligrams, Telerad  
Hi-Fi Radios.  
Phone : 352136.

## TANK MFRS.

**THE STEEL STRUCTURES PVT.  
LTD.,**

Ismail Bldg., Flora Fountain, Bombay-1.  
Fabrication of Steel Tanks, Chimneys, Indtl.  
Fabricated Equpts., Structural Works, PWD  
Vehicles, Tanks, Trailers, S. Windows, S. S. &  
Alum., Fabr. in Arc.  
Phone : 256735.

## TENTS & TARPAULINS

**RATANSI LALJI,**

56, H. Rasul Jiwa Compound, Clerk Road,  
Jacob Circle, Bombay-11 B.C. India.  
Manufacturers and Exporters of 'Rajendra'  
brand Tarpaulin and Dealers in all kinds of  
Canvas.

(Proofing Dept. Rajendra Waterproofing Co.).  
Phone : 377839. Grams : "RATANKARIA".

## TEXTILE AUXILIARIES & INDUSTRIAL EMULSIFIERS MFRS.

**DAI-ICHI KARKARIA PRIVATE  
LTD.,**

Liberty Bldg., New Marine Lines,  
Bombay-1.

Manufacturers of Nonionic Surface Active  
Agents, Textile Auxiliaries and Industrial  
Emulsifiers.

Phone : 243633. Grams : "NONIONIC".

## TIMBER MERCHANTS

**ANDHERI SAW MILLS & TIMBER  
MERCHANTS,**

332, S. V. Road, Andheri, Bombay-58.

Dealers in all kinds of C.P. Teak, Round Logs,  
Ballies, Junglewood, Commercial, Decorative  
Plywood and Manufacturers.

Phone : 572437. Grams : "NOORANI".

## TOOLS

**GUJARAT  
MACHINE TOOLS  
INDUSTRY**

1-10, Industrial Estate, Baroda 3.

Manufacturers of Drill-Sleeves,  
Dowel Pins, Jig-Bushes, Allen Bolts,  
Allen Key & Precision Parts.

## TOOLS

**CONET CORPORATION,**

73, Nagdevi Cross Lane, Bombay-3 (BR).  
'Dowidat' quality Tools, Distributors for  
Maharashtra, Gujarat and Goa.

Phone : 322324.



# TRADE DIRECTORY FOR BUYERS

## TOOL, ALLOY & SPECIAL STEEL

Tool & Alloy Steel  
Specialists in  
Bohler & Saville's Steel.

### INDIA TOOL STEEL MART (Importers & Stockists)

200, Trimbak Pursuram Street, Golpitha,  
Bombay 4 (BR).

Phone : 331420 & 334531.  
Grams : "RAPIDEXTRA".

## TOOLS

### HANSA TOOLS INDUSTRIES,

P. O. Baroda Rayon, Udhna (Dist. Surat).

Manufacturers of Engineers' Files, Dread-  
naught Files, Precision Files, Needle Files,  
H.S.S. Tool Bits (All types), Plane Irons &  
Firmer Chisels.

## TOOL, ALLOY & SPECIAL STEEL

### Continental Steel Corporation

Stockists of:

### BOHLER STEELS

High Speed Steels, High Carbon, High Chro-  
mium Steels, Oil Hardening Non-Shrinking  
Steels, Carbon Steels, Stainless Steels, Nickel  
Chrome Steels, Silver Steels, Hot Die Steels,  
EN Spfn. Steels.

Office : Haji Manzil, 82, Abdul Rehman Street  
Opp. State Bank, Bombay-3.

Phone : 325817 & 323893.

Shop : 12/14, Dady Ardeshir Street, Golpitha,  
Bombay-1.

## TOOL, ALLOY & SPECIAL STEEL MINING TOOLS CO.,

Empire House, Dr. Dadabhai Naoroji Road,  
Bombay-1.

Call—262025.

Manufacturers of Tungsten Carbide Tipped  
Rock Drill Stems and Rotary Coal Boring  
Tools.

Factory—Phone : 581196.

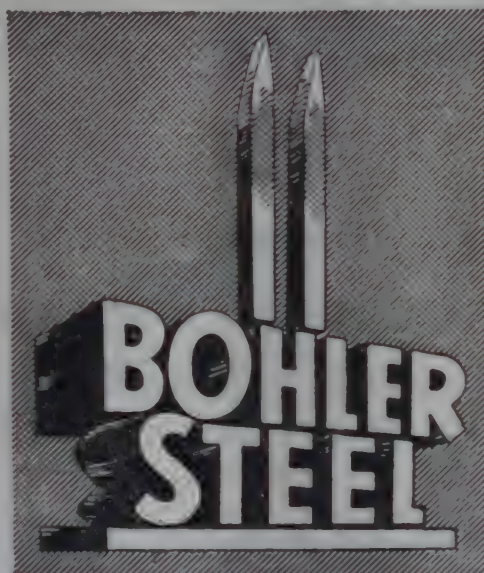
## TOOL, ALLOY & SPECIAL STEEL MULTIPLE AGENCIES (BOMBAY)

11, Nafees Chambers, Carnac Road,  
P. B. No. 1086, Bombay-1.  
Stockists of High Speed, Stainless, Hot Die,  
H.C.H.C., O.H.N.S., Carbon, Silver, Nickel  
Chromium R E N Series Steel ; Phone : 263218.  
Grams : "OLDFRIEND".

Branch :

253, Linghi Chetty Street, P. B. No. 1782.  
Madras-1.

## TOOL, ALLOY & SPECIAL STEEL



### ★ BOHLER Tool & Alloy Steels

- \* O.H.N.S. Die Steels,
- \* H.C.H.C. Steels
- \* Nickel Chromium Steels
- \* High Speed Steels
- \* Hot Die Steels
- \* Carbon Tool Steels
- \* Stainless Steels,
- Magnetic & Non-magnetic,
- \* Silver Steels
- \* E.N. Specification Steels etc.
- Cut to size

Contact:  
**WORKSHOP ENGINEERING &  
EQUIPMENT CO.,**  
30-32, Bhajipala Street, Bombay 3.  
Telephone : 322270—323336  
Telegrams : "WEARRESIST"

## TOOL, ALLOY & SPECIAL STEEL

### LACHHMIDHAR KANSHIRAM

201, Masjid Bunder Road,  
Bombay 3.

Stockists of High Speed, High Carbon, High  
Chromium, Oil Hardening Non-Shrinking,  
Carbon, Silver, Stainless and En Specifica-  
tion Steels.

Phone : 322048. Grams : "IRONGOODS".

## TRANSPORT CONTRACTORS

### PRAKASH ROADLINES PVT. LTD.,

296, Carnac Road, Dhobi Talao, Bombay-2.  
Quickest Daily Road Service to the States of  
Madras, Mysore, Kerala, Andhra. For Safety,  
Quickness, Dependability & Economy.

Phones : 20948, 38182.

## TRANSPORT CONTRACTORS BOMBAY GENERAL FREIGHT CARRIERS PVT. LTD.,

Regd. Office : 323/325, N. Natha Street,  
Framji House, Bombay-9.

Splt. for carrying Heavy Machinery.  
Branches : Delhi, Kanpur, Calcutta.  
Bkg. to all important cities in India.

Phones : 323689, 328067.

## TRANSPORT CONTRACTORS ECONOMIC TRANSPORT ORGANISATION,

19/20, Mohamedali Road, Opp. Mandvi Post  
Office, Bombay-3.

H.O. Calcutta-7.

Daily Service to all over India, even the  
remotest places in Andhra, Mysore, Madras  
& Kerala States.

Phones : 335538, 335669, 333774.

## U-FOAM

### JAYANT INDUSTRIAL HOME, 6, Trafford House, Prescott Road, Fort, Bombay-1.

Distributors for U-Foam, the amazing Multi-  
Purpose Urethane foam manufactured by  
U-FOAM PRIVATE LTD., Sanatnagar,  
Hyderabad-18.

## UMBRELLA MFRS.

### BHARAT UMBRELLA MFG. CO.,

65, New Hanuman Lane, Bombay-2.

Grams : "DHARUV".

Exporters, Specialists in Umbrella Cloth.  
Phone : 39319.



# TRADE DIRECTORY FOR BUYERS

## VALVES

Stainless Steel, 316 Bar Stock-Gate, Needle & Gauge Glass Valves, Ammonia Cylinder Valves Y, Y<sub>2</sub>, E & B types, Chlorine cylinder valves, S. S. Non-Return Valves, H. P. Bronze Valves tested to 2,000 lbs. P.S.I. Contact :

### RAMNIKLAL JIVANLAL KINARIVALA & CO.,

Raja Mehta St., Ahmedabad No. 1.

Phone : 24559.

## WATER-PROOF PAPER

### ODHAVJI BHIMJI & CO.,

97, New Barden Lane, Bombay-3.

Dealers in Hessian, Gunny, Twine, Jute, Canvas & Waterproof Paper.

Phone : 323713.

Grams : "KESHU".

## WATER PROOFING PRODUCTS MFRS. & DEALERS

### AJMERA INDUSTRIAL & ENGINEERING WORKS,

30-A, Agra Road, Kurla, Bombay-70.

Full range of protected waterproof metal clad & I.C. Plugs & Sockets, I.C. Switchgear, Flameproof Fittings, Mercury Vapour Fittings, Cargo, Cluster Lights etc. for industrial, outdoor & Marine Installations. Also Special types of articles manufacturers according to Specifications.

Phone : Factory : 51368.

Office : 30655.

## WELDING ACCESSORIES

### POONAM TRADING CO.,

Importers and Stockists of Welding Electrodes, Cast Iron Machinable and Non-Machinable, Mild Steel, Stainless Steel, Manganese Steel, Bronze & Hard Facing Electrode Stellite, Rods, Gas & Arc Welding Accessories.

133-C, Dharamtolla Street, Calcutta-13.

Phone : 245337. Grams : "WELDINGROD".

## WIRE PRODUCTS MFRS.

### MULTIWELD WIRE CO. PRIVATE LTD.,

59, Marol-Maroshi Road, Marol,  
Bombay 59.

Manufacturers of 'MULTIWELD' Welded wire fabrics — better than Woven or crimped wire fabrics — Available in Sheets, rolls. Suitable for all types of Protection & for Concrete reinforcement.

Phones : 573169 & 574718.

Grams : "MULTIWELD", Andheri, Bombay.

## WIRE ROPES

### ELDEE WIRE ROPES PVT. LTD.,

Eldee Chambers, 3, Broach Street, Bombay-9

Phones : 321141, 327848, 327689.

Grams : "ELDEEROPES."

Manufacturers of quality Steel Wire Ropes & Stranded Wire; Works at : Lekhraj Devraj Industrial Estate, Saki Naka, Kurla-Vihar Road, Bombay 70. Registered with D.G.S. & D., Railways and State Governments.

## WIRE ROPES

### VISHWANATH VAJNATH & CO.,

1, Bhandari Street, Cross Lane, Vadgadi,  
Bombay-3.

Stockists & Dealers in Steel Wire ropes, wire rope fittings, Chain Pulley Blocks, Chains, Manila & Sisal ropes, Electric Cables, Wires, Conduit Pipes & Fittings & Electrical Accessories.

Phone : 323588. Gram : "VIMAKIRAN".

## ZIP FASTENERS

### HOME INDUSTRIES CORPORATION

Home of "HOMCO" Brand Zip Fasteners.  
Available in all Sizes & Lengths.

Inquire :

64, Commercial Chambers,  
Masjid Bunder Road, Bombay-3.

Phone : 34997. Grams : "DESIHUNAR".











# PHYSIOGRAPHY

## STATES, TERRITORIES

The country is divided into 16 States† and nine Territories. The latter are under Central administration.

The 16 States (with the capital towns in brackets) are:

Andhra Pradesh (Hyderabad), Assam (Shillong), Bihar (Patna), Gujarat (Ahmedabad\*), Kerala (Trivandrum), Madhya Pradesh (Bhopal), Madras (Madras), Maharashtra (Bombay), Mysore (Bangalore), Nagaland (Kohima), Orissa (Bhubaneswar), Punjab† (Chandigarh), Rajasthan (Jaipur), Uttar Pradesh (Lucknow), West Bengal (Calcutta), Jammu and Kashmir (Srinagar).

The nine Territories (with capital towns in brackets) are:

The Andaman and Nicobar Islands (Port Blair), the Laccadive, Minicoy and Amindivi Islands (temporary headquarters: Kozhikode, Kerala), Delhi (Delhi), Himachal Pradesh (Simla), Manipur (Imphal), Tripura (Agartala), Dadra and Nagar Haveli (Diu), Goa, Diu and Daman (Panjim) and Pondicherry (Pondicherry).

In addition, there is one territorial unit: The North-East Frontier Agency, administered by the Governor of Assam as Agent of the Central Government.

## GEOGRAPHY

India is about 1,850 miles from east to west, and about 2,000 miles from north to south. Its land frontier is about 9,425 miles long and the sea frontier about 3,535 miles.

The total land area is 12,61,817 sq. miles.

According to the 1961 census the total population is 439,234,771.

This population grows roughly at the rate of about four and half millions a year.

The land frontier with Pakistan is about 4,959 miles long (east and west together). Of this about 2,810 miles are demarcated.

In shape India is like a triangle with its base resting on the Himalaya Mountains in the north and its apex running far into the ocean in the south. At the southern extremity the triangle tapers with a pear-shaped curve to a point called Cape Comorin now called Kanya Kumari.

India lies entirely to the north of the equator. From south to north including Kashmir, it stretches from 8° north latitude to 37° north latitude, with the Tropic of Cancer cutting it roughly into two halves. West to east it stretches from about 68° 20' east longitude to 97° east longitude.

Broadly speaking, India is shut off from the mainland of Asia by the Himalaya Mountains, the highest mountain range in the world. Going from west to east along the country's land frontier are Pakistan, Chinese Turkestan, Tibet, China, Burma and Pakistan.

In the south, the country is surrounded on all sides by water—the Arabian Sea in the west, the Indian Ocean in the south and the Bay of Bengal in the east.

India is so vast and diversified that expressions like 'average rainfall,' 'average temperature' have no meaning. The average annual rainfall in the Thar desert is 4 inches, while that in Cherrapunji is 425.

Similarly places in Kashmir have a minimum temperature of 49° F. while places in Rajasthan have recorded a maximum temperature of 120° F. So one can only speak of local averages rather than of national averages.

Compared with the size of the country, the coast-line is short, as there are few bays or inlets. Hence there are also very few harbours. The fact is the west coast is rocky and the sea is deep near the coast, while in the east the sea is extremely shallow so that big ocean-going ships have to weigh anchor at some distance from the shore.

The only so-called natural harbours are Bombay and Goa, while Madras, Vishakapatnam and Port Okha are examples of purely artificial harbours built by human enterprise.

The principal ports in India are (going from west to east along the coast), Kandla, Bedi Bunder, Port Okha, Porbandar, Surat, Bombay, Mormugao, Mangalore, Kozhikode (Calicut), Cochin, Alleppey, Quilon, Tuticorin, Dhanushkodi, Nagapattinam, Karikal, Cuddalore, Pondicherry, Madras, Masulipatnam, Kakinada, Vishakapatnam and Calcutta.

## MOUNTAIN WALL

India can be divided into three natural regions—1. the mountain wall, 2. the Plain of Hindustan, and 3. the Indian Plateau.

Let us take the mountain wall first. From the Pamir Knot in the far north two mountain ranges radiate one in the south-east and easterly direction called the Himalayas, and the other in a south-western direction reaching almost down to the sea, called the Sulaiman Range in the north and the Kirthar Range in the south.

In the east the mountain wall between India and Burma is called by different names in different places. In the north, for instance, it is known as the Patkoi Hills, further south as the Naga Hills. In Assam it is called Jaintia, Khasi and Garo. Southward are the Lushai Hills, then lastly there are the Arakan Yoma which finally reach the sea at Cape Negrais and continue in the Andaman and Nicobar Islands.

Of the various ranges which constitute the mountain wall of India the Himalayas are the most noteworthy. Extending like a scimitar for a distance of 1,500 miles along the northern frontiers of the country they form the loftiest mountain range in the whole world, and contain many of the highest mountain peaks, Mount Everest 29,141 ft., Mount Godwin Austen 28,250 ft., and Kanchenjunga 28,146 ft.

There are no easy ways in and out through the mountain wall which shuts off India from the rest of Asia, but there are a few difficult passes. In the very north are the Zojila Pass and the Shipki Pass which lead out of Kashmir and Punjab respectively. Then from Shipki right down to Darjeeling there is no route across the mountain wall. Across the Burma frontier again there are a few routes but they are of little use for purposes of communication.

The following is a more detailed description of the mountain region.

In the east on the border of Burma the mountain wall is much lower. Here it can more accurately be described as a range of hills rather than of mountains. This region is wet, forested and very thinly populated. The region round about Cherrapunji in Assam has the highest rainfall in the world.

Then from Darjeeling to Kashmir are the Himalayas proper, over 1,500 miles in length and 150 to 300 miles in breadth. The Himalayas are thus not a mountain chain in the proper sense of the word. They can be described as a series of parallel but converging ranges intersected by valleys and big plateaus.

Hence the Himalayas themselves can be further sub-divided into three parallel zones, the Great Himalayas with an average elevation of 20,000 ft., always covered with snow; the Lesser Himalayas, the middle range, with an

average elevation of 15,000 feet; and finally the Outer Himalayas lying between the Lesser Himalayas and the plains with an average elevation of about 3,500 feet.

Two of the longitudinal valleys which separate the mountain ranges are worth a note. They are the Vale of Kashmir and the valley of Kathmandu in Nepal. Both the valleys are fertile, extensive and from a tourist's point of view a dream of beauty.

## PLAIN OF HINDUSTAN

Geologically, the Ganges plain can be considered as the fore-deep of the mountains to the north of it. This fore-deep extends thousands of feet below the sea-level, though since its formation it has been filled in by deposit. In the east this deposit consists of alluvial material from the mountains, in the west it consists of material blown by the wind. All through the deposit is fine grained made up chiefly of muds and sands.

The Plain of Hindustan extends from the Bay of Bengal in the east to the Pakistan frontier in the west; that is to say, it is about 1,500 miles long and from 150 to 200 miles broad. Throughout this vast tract of land not a hill can be seen. The slope from the mountains to the sea is so gradual that about 100 miles from the mouth of the River Ganges the surface is no more than 500 feet above sea-level.

The Plain of Hindustan is probably the most important part of the country. For one thing, it contains some of the richest soils in the world. Second, it is on the Plain of Hindustan that the whole drama of race conflict and race assimilation was played out, a drama which finally shaped the political and cultural destiny of both India and its neighbour Pakistan.

Going into more detail the Plain of Hindustan is formed by the basins of three distinct river systems. In the far west are the Beas and Sutlej, tributaries of the Indus draining into the Arabian Sea. Further east is the River Ganges with its tributaries the Jamuna, Gogra, Rapti and Gandak which flows south-eastwards into the Bay of Bengal. The capital of the Indian Republic Delhi stands on the water-shed between the Indus and the Ganges river basins. The third of the three river systems, the Brahmaputra rises beyond the Himalayas, turns east and enters India at its eastern extremity and joins the Ganges before reaching the Bay of Bengal. The Brahmaputra has no important tributaries.

The rivers of Hindustan are notable in three respects: 1. They give a constant supply of water, 2. The land through which they flow is broad, flat and fertile and eminently suitable for irrigation, 3. Because water flows perennially they are navigable through the greater part of the year.

As we go from west to east in the plain rainfall increases and so do the fertility of the soil and the density of population.

## INDIAN PLATEAU

The third of the natural regions into which the country is divided is called the Indian Plateau because it comprises a three-sided table-land covering the whole of the country in the south except for two narrow coastal strips in the east and the west.

The Indian Plateau is marked off from the Plain of Hindustan by a confused mass of hill ranges running with a general direction of east to west. Three of these ranges have been distinguished by the names of Vindhya, Satpura and Ajanta respectively. They stand from 1,500 feet to over 4,000 feet high and though pierced by road and railway at the present time were not easy to cross in the

\* Actually a new capital is to be built outside the city.  
† The Punjab is to be divided into the Punjabi Suba consisting of the Punjabi speaking areas in the present State and Haryana Prant consisting of the Hindi speaking areas.



old days and thus formed a barrier of hill and jungle between the northern and the southern portions of the country.

The Indian Plateau is higher in the west and the south than in the east and north. Along the western and eastern edges of the plateau run the Western and Eastern Ghats. They start southward, from the extremities of the Vindhya mountain system and run along the western and eastern coasts of the country and unite to form a sort of upheaved angle towards their southern extremity.

The Western Ghats run through the States of Maharashtra and Mysore and ascend to an average height of about 3,000 feet while some of the peaks are anything between 5,000 feet and 9,000 feet high.

The Eastern Ghats stretch down the States of Andhra Pradesh and Madras and have an average elevation of 1,500 feet.

The inner triangular plateau which the Western and Eastern Ghats form far in the south is seamed with little ranges of hills exceeding 4,000 feet in height the best known among which are the Nilgiris. It is on the Nilgiris that Ootacamund the famous summer capital of Madras State stands.

**Drainage Systems.**—There are three systems of drainage in the Indian Plateau—one towards the north, the second towards the west and the third towards the east. The drainage from the northern or Vindhya edge of the plateau falls into the Ganges. Two rivers Narmada and Tapi carry the rainfall of the southern slopes of the Vindhya and Satpura mountains respectively in almost parallel lines into the Arabian Sea.

Further south, as we have already stated, the plateau is much higher in the west than the east. So the drainage has to make its way across the whole breadth of the plateau eastwards until it falls into the Bay of Bengal.

The most important rivers are the Mahanadi, the Godavari, the Krishna and the Cauvery. These rivers differ from the rivers of the Plain of Hindustan in three ways: 1. They are fed only by the monsoon rains and therefore do not yield a constant supply of water. 2. Their valleys are less suitable for irrigation. 3. And finally, they are not navigable for certain seasons in the year when parts of the river dry up.

From a geological point of view the Indian Plateau consists mainly of very old crystalline rocks—much older than the Himalayan fold mountains.

On some of the edges of the plateau in the north-east for instance, are areas of sedimentary rocks from which the country obtains most of its coal. About nine-tenths of the coal resources of India lie in Jharia in Bihar and Ranigunj in West Bengal, though coal-bearing beds are also found in the valley of the Godavari and the northern slopes of the Vindhyas.

The north-west of the plateau is covered by vast stretches of lava called the Deccan lavas. This region is one of the largest areas of lava in the world, covering as it does an area of 250,000 square miles with a total thickness of several thousand feet. In spite of the great extent of the lavas there are few or no signs of volcano.

In the rest of the Plateau valuable minerals occur here and there among old crystalline rocks. Gold is obtained in Mysore, manganese in Andhra, Mysore and Madhya Pradesh, copper and iron in Bihar and Orissa, mica in Andhra and the south-east. The point about diamonds is of some interest. They occur in sand-stones or conglomerate in Panna in Madhya Pradesh or Kurnool in Andhra, though no diamond bearing igneous rocks are found.

Two groups of very small islands in the Bay of Bengal, the Andamans and the Nicobars, and one group in the Arabian Sea the Laccadives are part of the Republic of India.

So is the quasi-island of Kutch off the Kathiawar Peninsula in western India. Kutch is a dry, rocky, treeless country.

The main cultivated plants include rice, wheat, pulses and grains. Among the important seeds grown are castor, sesamum and ground-nut.

The chief fruit trees include mango, coconut, arecanut and certain citrus fruit. Apples, peaches, pears, apricots and walnuts are confined chiefly to the Himalayan valleys.

There are tea plantations over large areas on the mountains in the north-east and south, while coffee, cardamom, pepper and rubber are extensively grown in the south. In some of the damper regions the cinchona is successfully cultivated.

Among the wild animals are the tiger, the elephant, leopard, panther, the cheetah, the marbled and jungle cat, the wolf, jackal, wild dog, the black and the Himalayan bear, the rhinoceros, crocodile, wild hog, wild ass, antelope, gazelle, sambhar, spotted deer, bison, wild buffalo, many kinds of reptile (cobra, Russel's viper).

Among the domestic animals are cattle, buffaloes, sheep, goats, horses and ponies, mules and donkeys, camels, and of course, fowl.

Birds include the parrot, peacock, maina, different kinds of vulture and eagle, kingfisher, pigeons, ducks, partridges, plover, quail and snipe.

Among the more useful insects are the bee, silk worm, cocoon laca (the one that gives lac). Mosquitoes abound everywhere. Locust invasions are not frequent.

Edible fish include the carp family, cat fishes the hilsa and mahseer.

## METEOROLOGY

Normal Monthly and Annual Maximum Temperature in Shade at Selected Stations in India.

| Stations               |    |    |    |    | Eleva-<br>tion in<br>metres | Jan.  | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year. |      |
|------------------------|----|----|----|----|-----------------------------|-------|------|------|------|------|------|------|------|-------|------|------|------|-------|------|
| HILL STATIONS          |    |    |    |    |                             | ° C.  | ° C. | ° C. | ° C. | ° C. | ° C. | ° C. | ° C. | ° C.  | ° C. | ° C. | ° C. | ° C.  |      |
| Darjeeling             | .. | .. | .. | .. | ..                          | 2,128 | 9.2  | 10.1 | 13.8 | 17.3 | 17.8 | 18.8 | 19.6 | 19.4  | 19.2 | 17.8 | 14.4 | 11.2  | 15.7 |
| Shillong               | .. | .. | .. | .. | ..                          | 1,500 | 15.6 | 16.9 | 21.3 | 23.4 | 23.3 | 23.6 | 24.1 | 23.9  | 23.5 | 21.7 | 18.9 | 16.4  | 21.1 |
| Simla                  | .. | .. | .. | .. | ..                          | 2,202 | 8.6  | 9.3  | 13.9 | 18.8 | 22.9 | 23.9 | 21.6 | 20.2  | 20.2 | 17.9 | 14.6 | 10.3  | 16.9 |
| COASTAL STATIONS       |    |    |    |    |                             |       |      |      |      |      |      |      |      |       |      |      |      |       |      |
| Bombay                 | .. | .. | .. | .. | ..                          | 11    | 28.4 | 28.4 | 30.1 | 31.7 | 32.8 | 31.4 | 29.7 | 29.4  | 29.7 | 31.6 | 31.9 | 30.3  | 30.3 |
| Madras                 | .. | .. | .. | .. | ..                          | 16    | 29.6 | 31.3 | 33.0 | 35.3 | 38.5 | 37.6 | 35.7 | 34.9  | 34.4 | 32.3 | 29.7 | 28.9  | 33.4 |
| STATIONS ON THE PLAINS |    |    |    |    |                             |       |      |      |      |      |      |      |      |       |      |      |      |       |      |
| Allahabad              | .. | .. | .. | .. | ..                          | 98    | 23.8 | 26.2 | 33.2 | 39.2 | 41.7 | 39.3 | 35.4 | 31.9  | 33.1 | 32.4 | 28.6 | 24.3  | 32.3 |
| Calcutta               | .. | .. | .. | .. | ..                          | 6     | 26.4 | 28.7 | 33.6 | 36.0 | 35.3 | 33.6 | 31.9 | 31.7  | 32.2 | 31.8 | 29.0 | 26.3  | 31.4 |
| Kanpur                 | .. | .. | .. | .. | ..                          | 126   | 22.2 | 25.0 | 31.9 | 37.4 | 41.2 | 39.3 | 33.6 | 32.1  | 32.7 | 32.9 | 28.2 | 23.3  | 31.7 |
| Cuttack                | .. | .. | .. | .. | ..                          | 27    | 28.4 | 31.2 | 35.9 | 38.4 | 38.6 | 35.3 | 31.9 | 31.7  | 32.2 | 32.1 | 29.4 | 27.3  | 2.7  |
| New Delhi              | .. | .. | .. | .. | ..                          | 216   | 21.1 | 24.3 | 30.6 | 37.1 | 41.2 | 40.2 | 35.1 | 33.6  | 33.7 | 33.3 | 28.8 | 23.1  | 31.8 |
| Lucknow                | .. | .. | .. | .. | ..                          | 111   | 23.3 | 25.9 | 32.7 | 38.6 | 40.8 | 37.9 | 33.6 | 32.5  | 33.3 | 33.0 | 28.8 | 24.4  | 32.1 |
| Patna                  | .. | .. | .. | .. | ..                          | 53    | 22.8 | 25.4 | 32.1 | 37.2 | 37.9 | 35.7 | 32.6 | 31.7  | 32.1 | 31.4 | 27.8 | 23.7  | 30.9 |
| PLATEAU STATIONS       |    |    |    |    |                             |       |      |      |      |      |      |      |      |       |      |      |      |       |      |
| Dehra Dun              | .. | .. | .. | .. | ..                          | 682   | 18.9 | 20.7 | 26.3 | 32.2 | 35.6 | 34.3 | 30.3 | 29.2  | 29.3 | 28.3 | 24.1 | 20.4  | 27.5 |
| Nagpur                 | .. | .. | .. | .. | ..                          | 310   | 28.6 | 32.1 | 36.5 | 40.2 | 43.3 | 38.3 | 31.3 | 30.7  | 31.3 | 32.1 | 29.9 | 28.4  | 33.5 |



Normal Monthly and Annual Minimum Temperature in Shade at Selected Stations in India.

| Stations               |    |    |    |    | Elevation in metres | Jan. | Feb. | Mar. | Apr. | May  | June | July | Aug. | Sept. | Oct. | Nov. | Dec. | Year. |
|------------------------|----|----|----|----|---------------------|------|------|------|------|------|------|------|------|-------|------|------|------|-------|
| HILL STATIONS          |    |    |    |    |                     | ° C. | ° C. | ° C. | ° C. | ° C. | ° C. | ° C. | ° C. | ° C.  | ° C. | ° C. | ° C. | ° C.  |
| Darjeeling             | .. | .. | .. | .. | ..                  | 2.9  | 3.8  | 7.1  | 10.3 | 12.3 | 14.5 | 15.3 | 15.2 | 14.4  | 11.1 | 7.2  | 3.6  | 9.8   |
| Shillong               | .. | .. | .. | .. | ..                  | 3.8  | 5.8  | 10.4 | 13.9 | 15.1 | 17.2 | 18.1 | 17.8 | 16.4  | 12.7 | 7.9  | 4.4  | 11.9  |
| Simla                  | .. | .. | .. | .. | ..                  | 1.9  | 2.3  | 6.4  | 10.3 | 14.3 | 15.6 | 15.1 | 15.1 | 13.5  | 10.8 | 6.8  | 4.1  | 9.7   |
| COASTAL STATIONS       |    |    |    |    |                     |      |      |      |      |      |      |      |      |       |      |      |      |       |
| Bombay                 | .. | .. | .. | .. | ..                  | 19.3 | 19.7 | 22.2 | 24.5 | 26.4 | 25.9 | 24.8 | 24.5 | 24.3  | 24.2 | 22.5 | 20.4 | 23.2  |
| Madras                 | .. | .. | .. | .. | ..                  | 19.5 | 20.2 | 22.4 | 25.6 | 27.6 | 27.3 | 26.3 | 25.6 | 25.1  | 23.9 | 22.2 | 20.5 | 23.9  |
| STATIONS ON THE PLAINS |    |    |    |    |                     |      |      |      |      |      |      |      |      |       |      |      |      |       |
| Allahabad              | .. | .. | .. | .. | ..                  | 8.4  | 10.5 | 16.1 | 21.9 | 26.6 | 28.3 | 26.6 | 25.8 | 24.8  | 19.5 | 12.4 | 8.4  | 19.0  |
| Calcutta               | .. | .. | .. | .. | ..                  | 12.6 | 15.2 | 20.4 | 24.2 | 25.3 | 25.9 | 25.9 | 25.7 | 25.6  | 23.2 | 17.6 | 12.8 | 21.2  |
| Kanpur                 | .. | .. | .. | .. | ..                  | 7.6  | 10.6 | 15.6 | 21.4 | 26.9 | 28.3 | 26.6 | 25.9 | 24.6  | 18.9 | 12.2 | 8.1  | 18.9  |
| Cuttack                | .. | .. | .. | .. | ..                  | 15.4 | 18.2 | 22.1 | 25.3 | 26.6 | 26.4 | 25.7 | 25.6 | 25.4  | 23.6 | 18.8 | 14.8 | 22.3  |
| New Delhi              | .. | .. | .. | .. | ..                  | 7.3  | 9.4  | 14.8 | 21.4 | 26.7 | 28.7 | 26.9 | 26.1 | 24.3  | 18.5 | 11.4 | 6.8  | 18.5  |
| Lucknow                | .. | .. | .. | .. | ..                  | 8.4  | 10.8 | 15.9 | 21.6 | 25.7 | 27.6 | 26.4 | 25.9 | 24.7  | 19.2 | 12.3 | 8.5  | 18.9  |
| Patna                  | .. | .. | .. | .. | ..                  | 10.6 | 12.7 | 17.9 | 23.1 | 25.6 | 26.6 | 26.6 | 26.5 | 26.1  | 22.7 | 16.1 | 11.3 | 20.5  |
| PLATEAU STATIONS       |    |    |    |    |                     |      |      |      |      |      |      |      |      |       |      |      |      |       |
| Dehra Dun              | .. | .. | .. | .. | ..                  | 6.7  | 8.1  | 12.3 | 16.9 | 21.2 | 23.4 | 23.2 | 22.7 | 20.8  | 15.7 | 10.6 | 7.3  | 15.7  |
| Nagpur                 | .. | .. | .. | .. | ..                  | 12.8 | 15.3 | 19.2 | 24.1 | 28.7 | 26.9 | 24.1 | 23.8 | 23.3  | 19.7 | 13.9 | 11.7 | 20.8  |

For elevation, see table of maximum temperature normals

Normal Monthly and Annual Rainfall at Selected Stations in India.

| Stations               |    |    |    |    | Elevation in metres | Jan. | Feb. | Mar. | Apr.  | May   | June  | July  | Aug.  | Sept. | Oct.  | Nov.  | Dec.  | Year.  |
|------------------------|----|----|----|----|---------------------|------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|-------|--------|
| HILL STATIONS          |    |    |    |    |                     | mm.  | mm.  | mm.  | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.   | mm.    |
| Darjeeling             | .. | .. | .. | .. | ..                  | 13.5 | 30.2 | 47.7 | 105.2 | 244.6 | 614.2 | 836.2 | 674.6 | 480.1 | 137.4 | 20.6  | 6.9   | 3211.2 |
| Shillong               | .. | .. | .. | .. | ..                  | 13.2 | 26.9 | 50.0 | 129.5 | 286.8 | 461.3 | 846.7 | 317.3 | 299.5 | 170.7 | 40.9  | 7.1   | 2149.9 |
| Simla                  | .. | .. | .. | .. | ..                  | 66.3 | 74.2 | 59.9 | 46.0  | 64.3  | 153.4 | 414.0 | 428.0 | 169.7 | 30.0  | 13.2  | 31.5  | 1550.5 |
| COASTAL STATIONS       |    |    |    |    |                     |      |      |      |       |       |       |       |       |       |       |       |       |        |
| Bombay                 | .. | .. | .. | .. | ..                  | 3.6  | 2.0  | 1.3  | 0.8   | 16.5  | 484.1 | 616.5 | 340.1 | 263.9 | 64.5  | 13.5  | 2.0   | 1803.8 |
| Madras                 | .. | .. | .. | .. | ..                  | 35.8 | 10.4 | 7.4  | 15.5  | 26.2  | 47.2  | 91.4  | 116.3 | 118.9 | 305.8 | 354.6 | 138.4 | 1267.9 |
| STATIONS ON THE PLAINS |    |    |    |    |                     |      |      |      |       |       |       |       |       |       |       |       |       |        |
| Allahabad              | .. | .. | .. | .. | ..                  | 21.6 | 16.0 | 14.2 | 4.3   | 16.0  | 123.0 | 319.0 | 254.8 | 212.3 | 59.4  | 7.9   | 8.6   | 1062.1 |
| Calcutta               | .. | .. | .. | .. | ..                  | 9.4  | 29.7 | 34.5 | 44.5  | 139.5 | 296.9 | 325.4 | 323.2 | 252.7 | 113.8 | 20.6  | 4.6   | 1599.8 |
| Kanpur                 | .. | .. | .. | .. | ..                  | 14.2 | 16.8 | 7.4  | 5.6   | 8.1   | 81.0  | 273.1 | 254.5 | 172.5 | 33.0  | 8.9   | 7.1   | 912.2  |
| Cuttack                | .. | .. | .. | .. | ..                  | 8.1  | 19.8 | 26.4 | 27.2  | 90.7  | 252.7 | 327.4 | 340.4 | 247.9 | 135.6 | 41.1  | 5.8   | 1523.1 |
| New Delhi              | .. | .. | .. | .. | ..                  | 25.1 | 21.1 | 12.9 | 8.4   | 13.2  | 77.0  | 178.6 | 183.6 | 122.9 | 10.2  | 2.5   | 10.9  | 666.4  |
| Lucknow                | .. | .. | .. | .. | ..                  | 19.3 | 18.3 | 8.6  | 6.3   | 19.6  | 113.3 | 304.8 | 292.1 | 188.0 | 32.5  | 5.6   | 8.1   | 1016.5 |
| Patna                  | .. | .. | .. | .. | ..                  | 15.0 | 18.8 | 10.7 | 6.9   | 35.6  | 181.4 | 294.1 | 332.5 | 218.4 | 58.4  | 8.6   | 5.8   | 1180.0 |
| PLATEAU STATIONS       |    |    |    |    |                     |      |      |      |       |       |       |       |       |       |       |       |       |        |
| Dehra Dun              | .. | .. | .. | .. | ..                  | 58.9 | 62.7 | 32.0 | 16.5  | 36.8  | 217.2 | 668.0 | 731.3 | 269.7 | 32.0  | 8.9   | 25.9  | 2159.9 |
| Nagpur                 | .. | .. | .. | .. | ..                  | 9.4  | 16.5 | 15.2 | 15.2  | 19.3  | 224.0 | 370.8 | 290.1 | 203.5 | 55.1  | 19.6  | 11.9  | 1250.6 |

For elevation, see table of maximum temperature normals



## Statement of Sub-divisional means of rainfall in millimeters during the period June to September 1965.

| SUB-DIVISIONS                                               | Actual | Normal | Departure from normal | Percentage departure from normal |
|-------------------------------------------------------------|--------|--------|-----------------------|----------------------------------|
| Bay Islands .. .. .                                         | 1839   | 1777   | + 63                  | + 4                              |
| North Assam (including N.E.F.A.) .. .. .                    | 1435   | 1445   | - 10                  | - 1                              |
| South Assam (including Nagaland, Manipur & Tripura) .. .. . | 1637   | 1362   | +275                  | +20                              |
| Sub-Himalayan West Bengal .. .. .                           | 2460   | 2287   | +173                  | + 8                              |
| Gangetic West Bengal .. .. .                                | 1066   | 1123   | - 57                  | - 5                              |
| Orissa .. .. .                                              | 952    | 1146   | -194                  | -17                              |
| Bihar Plateau .. .. .                                       | 883    | 1124   | -241                  | -21                              |
| Bihar Plains .. .. .                                        | 914    | 1017   | -104                  | -10                              |
| Uttar Pradesh, East .. .. .                                 | 585    | 909    | -323                  | -36                              |
| Uttar Pradesh, West .. .. .                                 | 625    | 895    | -270                  | -30                              |
| Punjab (including Delhi) .. .. .                            | 434    | 573    | -139                  | -24                              |
| Himachal Pradesh .. .. .                                    | 529    | 1173   | -645                  | -55                              |
| Jammu and Kashmir .. .. .                                   | 160    | 359    | -199                  | -55                              |
| Rajasthan, West .. .. .                                     | 215    | 264    | - 49                  | -18                              |
| Rajasthan, East .. .. .                                     | 415    | 624    | -209                  | -34                              |
| Madhya Pradesh, West .. .. .                                | 616    | 945    | -329                  | -35                              |
| Madhya Pradesh, East .. .. .                                | 820    | 1219   | -399                  | -33                              |
| Gujarat Region (including Daman, Dadra & N. Haveli) .. .. . | 558    | 815    | -257                  | -32                              |
| Saurashtra and Kutch (including Diu) .. .. .                | 380    | 488    | -108                  | -22                              |
| Konkan (including Goa) .. .. .                              | 2103   | 2073   | + 30                  | + 1                              |
| Madhya Maharashtra .. .. .                                  | 476    | 511    | - 35                  | - 7                              |
| Marathwada .. .. .                                          | 650    | 653    | - 3                   | 0                                |
| Vidarbha .. .. .                                            | 766    | 970    | -204                  | -21                              |
| Coastal Andhra Pradesh .. .. .                              | 509    | 527    | - 19                  | - 4                              |
| Telangana .. .. .                                           | 851    | 784    | + 67                  | + 9                              |
| Rayalaseema .. .. .                                         | 443    | 405    | + 37                  | + 9                              |
| Madras State (including Pondicherry) .. .. .                | 269    | 266    | + 4                   | + 1                              |
| Coastal Mysore .. .. .                                      | 2462   | 2925   | -463                  | -16                              |
| Interior Mysore, North .. .. .                              | 639    | 584    | + 55                  | + 9                              |
| Interior Mysore, South .. .. .                              | 356    | 417    | - 61                  | -15                              |
| Kerala .. .. .                                              | 1274   | 1730   | -456                  | -26                              |
| Arabian Sea Islands .. .. .                                 | 679    | 915    | -236                  | -26                              |

Note :—In calculation of excess and defects and their percentages, rainfall figures are taken correct to 0.1 mm.

## MONSOON RAINFALL SUMMARY

June to September, 1965

## Season as a whole—

The monsoon set in over south Kerala on 26th May about five days earlier than the normal date but advanced slowly with a delay of 10 to 15 days as compared with the normal dates over most parts of north and central India. It established itself over the entire country by 17th July about a week later than the normal date. On the whole the monsoon activity was sub-normal over north and central India and normal over the Peninsula. Break monsoon conditions prevailed for about a fortnight in August. Spells of heavy rains leading to floods occurred in northeast India in July and August and in west Madhya Pradesh in July. The withdrawal of the monsoon from the country outside the south Peninsula was completed by 13th October which is about the normal date. The noteworthy feature of this year's monsoon was the sub-normal activity over most parts of north and central India.

The rainfall for the season was in large defect in Himachal Pradesh and Jammu & Kashmir, in moderate defect in Uttar Pradesh, east Rajasthan, Madhya Pradesh, Gujarat Region, Kerala and the Arabian Sea Islands and in slight defect in Orissa, Bihar Plateau, the Punjab, West Rajasthan, Saurashtra and Kutch, Vidarbha and coastal and south Interior Mysore. It was normal over the rest of the country outside south Assam where it was in slight excess.

## Chief Features—

- (i) Early onset of the monsoon in South Kerala but slow advance later;
- (ii) Sub-normal monsoon activity over north and central India with break monsoon conditions for about a fortnight in August;
- (iii) Heavy rains leading to floods in northeast India in July and August and in west Madhya Pradesh in July; and
- (iv) Withdrawal of the monsoon by the normal date from the country outside south Peninsula.

## June —

The monsoon set in over south Kerala on 26th May about 5 days in advance of the normal date. Under the influence of a severe cyclonic storm in the Bay of Bengal which moved northward towards East Pakistan during the last week of May, the Bay branch of the monsoon advance into South Bay at the beginning of that week and extended into the East central Bay by the end of the month. A further advance into the northeast Bay and eastern parts of Assam took place during the first week of June.

In association with a trough of low pressure persisting over the east central Arabian Sea off the west coast during the first fortnight, the monsoon advanced slowly northwards along the west coast and covered the Konkan by the middle of the month. Fairly well distributed rainfall occurred over the Peninsula during this period with a number of heavy falls along the west coast. The monsoon did not advance further northwards during the second fortnight and its activity was moderate over the Peninsula during this period. However, it was quite active in Kerala during the third week and in parts of Maharashtra State during the last week of the month.

The rainfall activity over Assam and Sub-Himalayan West Bengal decreased considerably after the first week. A trough of low pressure persisting over the north and adjoining central Bay of Bengal caused an increase in the monsoon activity over the Bay Islands during the second week. The monsoon advanced somewhat slowly during the third week over the Central parts of the country. As upper air cyclonic circulation which developed over Gangetic West Bengal and neighbourhood on 24th intensified and a low pressure area formed over East Pakistan on 29th. Under its influence, there was well distributed rainfall over northeast India.

A western disturbance moving across the extreme north of the country during the later part of the first week caused a few thundershowers over northwest India.

## July —

The well marked low pressure area lying over East Pakistan and adjoining Gangetic West Bengal at the end of June moved westnorthwestwards in Rajasthan, weakened and later moved away northeastwards across the Western Himalayas by 6th July. Under its influence, the monsoon advanced into Gujarat State and southeast Rajasthan and extended further into Uttar Pradesh and Madhya Pradesh by the end of the first week. The axis of the monsoon trough shifted northwards and lay close to the foot of the Himalayas from 6th to 10th causing heavy rains in the northern parts of northeast India. Most of the rivers in Assam, Sub-Himalayan West Bengal and Bihar Plains rose in spate and inundated vast areas, particularly in Jorhat sub-division and in Darbhanga and Jalpaiguri districts, Western Himalayas and adjoining plains also received good thundershowers during the second week. Earlier a western disturbance moving across the extreme north of the country had caused a few thundershowers in Western Himalayas.

The monsoon activity increased generally over the country during the second fortnight as a result of the development of two deep depressions in the Bay of Bengal, a land depression over west Madhya Pradesh and a low pressure area over Orissa. The first depression formed over the northwest Bay on 13th and moving westnorthwest to northwest it merged into the seasonal low by 17th. Under its influence, the monsoon advanced further westwards and covered the entire country by 17th. The monsoon was particularly active in north Peninsula, Gujarat State and west coast. Bombay (Santa Cruz) recorded 37 cm of rain on 16th. A number of rivers in Maharashtra State were in spate affecting road traffic. This depression was followed by a low pressure area which moved from Orissa to Gujarat and thence northwestwards during the period 19th to 23rd. The second depression formed over the northwest Bay on 26th and moving inland weakened over east Uttar Pradesh by 30th. The third depression formed over west Madhya Pradesh centred near Gwalior on 31st. Abu recorded 82 cm of rain on 31st. According



to newspaper reports, a number of rivers in Orissa and adjoining Bihar State were in spate causing inundation of low lying areas. Road and rail traffic in and around Bhopal were also reported to be dislocated due to heavy rains.

#### August —

The depression lying centred near Gwalior on 31st July moved northeastwards, weakened and merged into the seasonal trough of low pressure by 2nd August. Under its influence, there was good monsoon activity over most parts of the country till 2nd. A low pressure area persisting over East Pakistan and Gangetic West Bengal on 1st and 2nd moved northwards and merged into the seasonal trough of low pressure by 4th. In association with it there was good rainfall activity over northeast India during the first week.

With the northward shift of the axis of the monsoon trough to the foot of the Himalayas by 8th, break monsoon conditions prevailed over the country for about a fortnight from the middle of the first week, when the main rainfall regions were confined to the northern parts of northeast India and to the Peninsula outside the west coast. According to press reports most of the rivers in Assam, Sub-Himalayan West Bengal and Bihar plains were in spate inundating low lying areas and damaging standing crops. Two upper air troughs moved successively westwards from the southwest Bay across the Peninsula causing good rainfall activity over the southern and northwestern parts of the Peninsula.

A well marked upper air trough moving north-eastwards from the west Central Bay of Bengal

concentrated into a depression by the evening of 23rd centred about 100 kms east of Chandballi. Moving northwestwards it crossed coast near Balasore in the early morning of 24th, weakened and merged into the seasonal trough of low pressure over Uttar Pradesh by 28th. Under its influence, the monsoon activity revived over the country with heavy rains over the belt extending from Orissa to Gujarat State and also over Uttar Pradesh. Another low pressure area moving from the east into the east central Bay of Bengal on 28th also intensified and concentrated into a depression by the morning of 31st with centre near Lat. 18°5'N and Long. 90°5'E. It caused good monsoon rains in the Bay Islands, parts of northeast India, in Madhya Pradesh and north-eastern parts of the Peninsula towards the end of the month.

#### September —

The depression lying over the north and adjoining central Bay of Bengal on 31st August moved in a westerly direction and crossed coast near Gopalpur on 1st September. Later it moved northwestwards, weakened over Uttar Pradesh and merged into the seasonal trough of low pressure by 6th. It caused good rainfall activity over central and adjoining parts of north India. Another well marked low pressure area moving from the northeast Bay of Bengal to Uttar Pradesh during the period 5th to 9th became unimportant by 11th. Under its influence, the monsoon was active in the western parts of north-east India, in east Madhya Pradesh and east Uttar Pradesh. In the wake of this disturbance the monsoon withdrew from northwest India

outside east Rajasthan by the middle of the month, which is the normal date.

Over the Peninsula the monsoon was feeble till 9th. Later a few showers occurred in association with a trough of low pressure persisting over the central Bay of Bengal from 12th to 16th. A low pressure area moving from the east across the north Andaman Sea on 16th concentrated into a depression by the morning of 19th with centre near Lat. 15°0'N and Long. 84°0'E. Crossing the Andhra Coast between Ongole and Masulipatam on the night of 19th-20th, it recurved northeastwards. It persisted over Bihar State from 24th but weakened and became unimportant by 27th. In the course of its movement, it caused heavy rains in the Peninsula particularly in the northern parts, in east Madhya Pradesh and northeast India. Sabour recorded a very heavy fall of 35 cm of rain on 25th. An upper air trough appearing over the north Andaman Sea on 25th moved slowly westwards and lay over the west central Bay of Bengal on 30th. Under its influence, the monsoon was fairly active in the Bay Islands and south peninsula.

After the withdrawal of the monsoon from northwest India, weather remained mainly dry over the area except for a spell of showers over the Western Himalayas and adjoining plains caused by a western disturbance moving eastwards across the area towards the end of the third week. The monsoon withdrew further from the remaining parts of north and central India and also from north Peninsula in stages and from 13th October, it was, confined to the south Peninsula.

## METRIC SYSTEM OF WEIGHTS AND MEASURES

**F**OLLOWING the acceptance of the metric system in principle by the Lok Sabha, the Government of India sponsored in Parliament legislation to adopt the metric system. The Standards of Weights and Measures Bill received the President's assent in December 1956. This Act defines the primary units of mass and length, units of capacity, time, electric current and luminosity, and the scale of temperature.

### PRIMARY UNITS

The primary unit of length is the metre and of mass the kilogram. The international definitions of the metre and the kilogram have been adopted in substance. According to the new definition, the metre is the length equal to 1,650,763.73 wavelengths, in vacuum, of the radiation corresponding to the transition between the 2P<sub>1/2</sub> and 5d<sub>5/2</sub> levels of the krypton atom of mass 86.

The litre or the volume of one kilogram of water under specified conditions, would be the unit of capacity. The second, the unit of time, has been defined with reference to the length of the tropical year 1900. The unit of electric current would be the ampere, and of luminosity the candela. Temperature would be measured by the Centigrade scale.

### REFERENCE STANDARDS

Since weights and measures are enforced by the State Governments they must have standard weights and measures of high accuracy. The Act has placed on the Central Government the duty of supplying a set of such Standards free to each State Government. These are called Reference Standards. The Reference Standards of weight and length are manufactured by the Bombay Mint, and verified against the National prototypes by the National Physical Laboratory. The Bombay Mint is the only organisation in India which is capable of manufacturing standards of this accuracy.

The Act lays down only the primary units. The Central Government has been authorised to declare secondary units with reference to primary

units. There is an important stipulation that every secondary unit must be an integral power of 10, positive or negative, of the corresponding primary unit.

### LAW TO ENFORCE WEIGHTS AND MEASURES

It was decided by the Central Govt. to draft a Model Weights and Measures (Enforcement) Bill in consultation with the State Governments. All the States accepted the Model Bill, and State Legislatures have enacted it into law. The Union Territories of Delhi, Himachal Pradesh, Tripura and Manipur have adopted the Rajasthan Weights & Measures (Enforcement) Act, 1958. All the States and Union Territories have also accepted and enforced Model Rules recommended to them. The Weights & Measures (Enforcement) Acts in force in States and Union Territories are, therefore, virtually identical.

The main purpose of the enforcement laws is to:

- (i) specify denominations, shapes, designs and accuracy of weights and measures used in trade, as well as the capacities, sensitiveness, accuracy and constructional details of weighing and measuring instruments,
- (ii) lay down procedures for verifying weights, measures and instruments,
- (iii) prohibit the use in transactions of non-standard or false weights, measures and instruments, and prescribe penalties for their use,
- (iv) authorise the appointment of Controllers and other officers for enforcing weights and measures, and to define their duties and powers.

Specifications for weights, measures and instruments were drawn up by a Committee appointed by the Indian Standards Institution.

Manufacturers, technical experts and the Departments of Weights and Measures, were represented in the Committee. These specifications were virtually incorporated in the States Weights and Measures (Enforcement) Rules.

### METRIC SYSTEM IN INDUSTRY

All the major industries have adopted the metric system. In buying materials and stores and selling products, prices and quantities are expressed in metric units. Accounts and statistics are also maintained in the metric system. Significant changes are introduced in the quality or design of products, to conform to the metric system. The technical descriptions of products are being progressively indicated in metric units. A number of basic products like steel, steel sections, non-ferrous sections, paper containers etc. are already being produced to national standard dimensions. Change over in the remaining spheres is now in hand.

### KILOMETRE STONES ON ROADS

The kilometre has been adopted as the unit of distance by rail. Distances along rail tracks have been marked in kilometres. With the adoption of the metric system in road transport, it has become necessary to mark distances on roads also in kilometres. But setting up kilometre stones on roads is more arduous and costly. The total length of roads including National Highways and State Roads, is about 6,000,000 kilometres. There are also other roads like District and Village Roads, Canal Roads and Forest Roads. The work will be carried out first on National Highways. The mile stones will be allowed to stand for the time being; the kilometre and the mile stones would be on opposite sides of the roads. On roads to be built in future, only kilometre stones will be set up. They will be put up on the left side of a person standing with his back to the starting point.

Kilometre stones are to be of the same design throughout the country. A suitable design recommended by the Indian Roads Congress has been accepted by the Governments. Distances will be marked on the stones in international numerals. Local or Devnagri numerals will not



be used. Place names will be written in Roman, Devnagri or the local script, only one script being used on any particular stone. The writing on the stone at the starting point or zero kilometre will be in the Roman script. Successive stones will be in Devnagri, local script, Roman script, and so on, in that order. The stone will have a white background with letters in black. The top semi-circular portion will be painted canary yellow on National Highways, brilliant green on State Roads, and white on major District Roads.

#### METRIC SYSTEM IN EDUCATION

This involves revision of school syllabi, and more important, of text-books; this task has now been accomplished.

Technical institutions imparting higher education have, however, adopted the metric system according to a phased programme. In engineering and medical colleges teaching is now based mainly on the metric system.

The metric system of weights & measures has now become compulsory throughout the country

in trade and commerce. This is a significant land-mark in the history of India where a welter of weights & measures has so long prevailed.

#### OTHER SPHERES

Metric System is now being introduced progressively in more complicated fields like the building industry, irrigation, printing and stationery, land records, transport, forests, highways etc. This complex change-over is expected to be effected during the IV Five Year Plan.

### SIMPLE CONVERSION TABLES

#### WEIGHTS

##### Tons to Metric Tonnes

|                       |      |      |      |      |      |      |      |      |      |       |
|-----------------------|------|------|------|------|------|------|------|------|------|-------|
| Tons .. .. .          | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10    |
| Metric Tonnes .. .. . | 1.02 | 2.03 | 3.05 | 4.06 | 5.08 | 6.10 | 7.11 | 8.13 | 9.14 | 10.16 |

##### Pounds (av) to Kilograms

|                   |      |      |      |      |      |      |      |      |      |      |
|-------------------|------|------|------|------|------|------|------|------|------|------|
| Pounds .. .. .    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
| Kilograms .. .. . | 0.45 | 0.91 | 1.36 | 1.81 | 2.27 | 2.72 | 3.18 | 3.63 | 4.08 | 4.54 |

##### Tolas to Grams

|               |       |       |       |       |       |       |       |       |        |        |
|---------------|-------|-------|-------|-------|-------|-------|-------|-------|--------|--------|
| Tolas .. .. . | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9      | 10     |
| Grams .. .. . | 11.66 | 23.33 | 34.99 | 46.66 | 58.32 | 69.98 | 81.65 | 93.31 | 104.97 | 116.64 |

##### Seers to Kilograms

|                   |      |      |      |      |      |      |      |      |      |      |
|-------------------|------|------|------|------|------|------|------|------|------|------|
| Seers .. .. .     | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
| Kilograms .. .. . | 0.93 | 1.87 | 2.80 | 3.73 | 4.67 | 5.60 | 6.53 | 7.46 | 8.40 | 9.33 |

##### Maunds to Quintals

|                  |      |      |      |      |      |      |      |      |      |      |
|------------------|------|------|------|------|------|------|------|------|------|------|
| Maunds .. .. .   | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
| Quintals .. .. . | 0.37 | 0.75 | 1.12 | 1.49 | 1.87 | 2.24 | 2.61 | 2.99 | 3.36 | 3.73 |

#### LENGTH

##### Miles to Kilometres

|                    |      |      |      |      |      |      |       |       |       |       |
|--------------------|------|------|------|------|------|------|-------|-------|-------|-------|
| Miles .. .. .      | 1    | 2    | 3    | 4    | 5    | 6    | 7     | 8     | 9     | 10    |
| Kilometres .. .. . | 1.61 | 3.22 | 4.83 | 6.44 | 8.05 | 9.66 | 11.27 | 12.87 | 14.48 | 16.09 |

##### Yards to Metres

|                |      |      |      |      |      |      |      |      |      |      |
|----------------|------|------|------|------|------|------|------|------|------|------|
| Yards .. .. .  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
| Metres .. .. . | 0.91 | 1.83 | 2.74 | 3.66 | 4.57 | 5.49 | 6.40 | 7.32 | 8.23 | 9.14 |

##### Inches to Millimetres

|                     |       |       |       |        |        |        |        |        |        |        |        |        |
|---------------------|-------|-------|-------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Inches .. .. .      | 1     | 2     | 3     | 4      | 5      | 6      | 7      | 8      | 9      | 10     | 11     | 12     |
| Millimetres .. .. . | 25.40 | 50.80 | 76.20 | 101.60 | 127.00 | 152.40 | 177.80 | 203.20 | 228.60 | 254.00 | 279.40 | 304.80 |

#### AREA

##### Acres to Hectares

|                  |      |      |      |      |      |      |      |      |      |      |
|------------------|------|------|------|------|------|------|------|------|------|------|
| Acres .. .. .    | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
| Hectares .. .. . | 0.40 | 0.81 | 1.21 | 1.62 | 2.02 | 2.43 | 2.83 | 3.24 | 3.64 | 4.05 |

##### Square Yards to Square Metres

|                       |      |      |      |      |      |      |      |      |      |      |
|-----------------------|------|------|------|------|------|------|------|------|------|------|
| Square Yards .. .. .  | 1    | 2    | 3    | 4    | 5    | 6    | 7    | 8    | 9    | 10   |
| Square Metres .. .. . | 0.84 | 1.67 | 2.51 | 3.34 | 4.18 | 5.02 | 5.85 | 6.69 | 7.53 | 8.36 |

#### CAPACITY

##### Gallons (Imperial) to Litres

|                 |      |      |       |       |       |       |       |       |       |       |
|-----------------|------|------|-------|-------|-------|-------|-------|-------|-------|-------|
| Gallons .. .. . | 1    | 2    | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
| Litres .. .. .  | 4.55 | 9.09 | 13.64 | 18.18 | 22.73 | 27.28 | 31.82 | 36.37 | 40.91 | 45.46 |



## DEFENCE SERVICES

*Chief of the Army Staff, General P. P. Kumaramangalam.*

*Chief of the Naval Staff, Vice-Admiral A. K. Chatterji.*

*Chief of the Air Staff, Air Chief Marshal Arjan Singh, D.F.C.*

THE supreme command of all the Armed Forces of the Indian Republic is vested in the President. Since the attainment of Independence, the Ministry of Defence has become the central agency for formulating and obtaining policy decisions of the Government of India on defence matters and for transmitting them to, and seeing to their implementation by the three Defence Services Headquarters.

The partition of India in 1947 was an important landmark in the history of the Armed Forces of India. They were divided between the two countries on a communal-cum-optional basis, which worked out to an approximate proportion of one-third to Pakistan and two-thirds to the Union of India. British forces, including the Royal Air Force, were completely withdrawn from India early in 1948.

In order to deal with the emergency created by the full-fledged Chinese aggression in October-November 1962, a National Defence Council has been set up with the Prime Minister as Chairman. The Council was reconstituted on Jan. 2, 1965 with 28 members. The Prime Minister

is the Chairman. This Council advises the Central Government in such matters as directly or indirectly affect the defence of the country.

The functions of the Council are to (i) take stock of the situation and arrangements for national defence, from time to time, and advise Government on matters relating to defence, (ii) assist in building up and suitably guiding the national will to fight the aggressor, (iii) suggest to the Central Citizens' Committee such measures as may be considered necessary for the utilisation of public participation in national defence, and (iv) advise Government generally on such other matters as may be helpful in prosecuting the fight against the aggressor.

The Council has formed a Military Affairs Committee with the Defence Minister as Chairman and the Service Chiefs of Staff, Lt.-Gen. Sant Singh, Lt.-Gen. S. P. P. Thorat, Dr. D. S. Kothari and the Defence Secretary as members.

The total defence outlay on revenue and capital account for 1966-67 is estimated at Rs. 918 crores as against the revised estimates of Rs. 888 crores during 1965-66.

The following is the break-up of the net Defence Services expenditure (in crores of rupees) since 1959-60 :

| Year                       | Effective |      |           | Non-Effective | Defence Capital Outlay | Total |
|----------------------------|-----------|------|-----------|---------------|------------------------|-------|
|                            | Army      | Navy | Air Force |               |                        |       |
| 1959-60 (Actuals)          | 143       | 14   | 59        | 15            | 36                     | 267   |
| 1960-61 (Actuals)          | 164       | 17   | 52        | 15            | 33                     | 281   |
| 1961-62 (Actuals)          | 198       | 20   | 53        | 19            | 23                     | 313   |
| 1962-63 (Actuals)          | 314       | 19   | 74        | 18            | 49                     | 474   |
| 1963-64 (Actuals)          | 532       | 21   | 134       | 17            | 112                    | 816   |
| 1964-65 (Actuals)          | 524       | 23   | 126       | 20            | 113                    | 806   |
| 1965-66 (Revised)          | 570       | 28   | 149       | 22            | 119                    | 888   |
| 1966-67 (Budget Estimates) | 600       | 30   | 145       | 23            | 120                    | 918   |

(See also under Public Finance).

### DEFENCE ORGANISATION

Since August 15, 1947, each Service has been placed under a separate and independent head, their present designations being Chief of the Army Staff, Chief of the Naval Staff and Chief of the Air Staff.

With the appointment of three Service Chiefs independent of each other, the task of co-ordination of the activities of the three Services has devolved on the Defence Ministry. In order to ensure expeditious handling of work, a network of committees has been established at different levels.

At the top is the Defence Committee of the Cabinet which is, for all practical purposes, the Government so far as the Services are concerned. All important policy questions relating to defence are decided by this Committee, which is presided over by the Prime Minister. Since the beginning of the present emergency, the Emergency Committee of the Cabinet, which is an ad hoc Committee of the Cabinet, deals with all important matters relating to the present emergency, including defence.

The Defence Minister is responsible to Parliament for all matters relating to the Defence Services, including appropriation and allotment of funds, correlation of all civil and ministerial activities for purposes of defence and control and direction of research policy.

The Ministry of Defence consists of the ministry proper which is responsible for work

connected with the three Services and Inter-Service Organisations, the Department of Defence Production, the Department of Defence Supplies, the Research and Development Organisation and the Border Roads Development Board.

There are a number of Inter-Services organisations, directly administered by the Defence Ministry, dealing with matters of common concern to the three Services. Some of them are the National Cadet Corps, the National Defence College, the Defence Services Staff College, the National Defence Academy, the School of Foreign Languages, the Directorate-General of Armed Forces Medical Services, the Resettlement Directorate, the Indian Soldiers', Sailors' and Airmen's Board, the Combined Inter-Services Historical Section, the Directorate of Military Lands and Cantonments, the Joint Cipher Bureau and the Directorate of Public Relations.

Among the major steps which the Government of India took after the Chinese attack was to set up in November 1962 a separate Department of Defence Production in the Defence Ministry to direct, co-ordinate and strengthen the production base for building a sound defence system.

In view of large-scale expansion in defence science activity in the country, a Research and Development Council was constituted in the middle of 1962, with the Defence Minister as Chairman, to formulate defence science programmes. It, however, does not work in isolation,

and is closely associated with civilian organisations engaged in the effective application of scientific knowledge. Apart from the Defence Minister, the other members of the Council are the Minister of Defence Production (Vice-Chairman), the Defence Secretary, the Secretary for Defence Production, the Scientific Adviser to the Defence Minister, the Director-General of C.S.I.R., the Chiefs of Staff of the Army, Navy and Air Force, the Director-General of Armed Forces Medical Services, the Financial Adviser (Defence), the Chief Controller of Research and Development and the Director-General of Inspection. The Council has under it the Defence Research and Development Organisation, headed by the Scientific Adviser, who is assisted by the Chief Controller and the Chief Scientist.

The Defence Minister's Production Committee forms part of the higher defence control evolving a co-ordinated policy in regard to the manufacture of military stores and equipment. It has under it the Department of Defence Production, for the overall production effort for meeting the requirements of the Services by the maximum utilisation of the existing capacity and creating additional capacity in the Ordnance Factories. The Director-General of Ordnance Factories, the six public sector undertakings and two departmental undertakings come under the Department of Defence Production. The Directorate-General of Inspection is responsible for the inspection of all stores for which orders are placed with the Ordnance Factories, other defence and public undertakings and private trade.

Two major changes made during 1965-66 in the Defence Ministry are the creation of a separate Department of Defence Supplies for dealing with planning for substitution of import requirements for defence purposes, implementation of schemes in this regard and co-ordination of scientific and technological research and development work in the country with that of the Defence Research and Development Organisation.

A Planning Cell has also been established in the Ministry of Defence with an Additional Secretary in charge for dealing with all wider aspects of development planning which have a bearing on the defence efforts and to ensure that planned schemes having a bearing on defence efforts are given appropriate priorities.

A Directorate of Planning and Co-ordination was formed in 1964 to provide the Secretariat for the newly constituted Defence Production Board and to discharge the planning functions in respect of defence production. In addition to reviewing and reviving the periodical defence production plans, the Directorate was also made responsible for initiating planning action on new development projects.

A Directorate of Technical Development and Production (A.I.R.) was set up in 1954 for preparing and maintaining technical data including detailed specifications for aeronautical equipment and stores used by the defence services and for advising the Indian Air Force on technical matters.

### RESEARCH & DEVELOPMENT

The Research and Development Organisation which is closely associated with the Production Organisation, includes technical establishments dealing with weapons, ammunition, military explosives, metallurgy, electronics and optical instruments. Whereas research is carried on in the laboratories, development work is concentrated at the various technical establishments scattered all over the country.



As a supporting organisation of the Armed Forces, the R. and D. Organisation has to (a) render scientific advice to Service Headquarters, (b) carry out applied research to solve the problems of the Services, (c) design and develop weapons and equipment based on the operational requirements defined by the Services, (d) evaluate and carry out technical trials of new weapons and equipment or those developed in the country, and (e) render technical guidance to civil trade for the development of new equipment. It today undertakes basic, applied and operational research and development of products and processes related to fabrication of instruments, weapons, ammunition, engineering stores and tele-communication equipment.

The Institute of Armament Technology (formerly known as the Institute of Armament Studies), apart from training Service officers, provides facilities for a comprehensive scientific study and research in the performance of weapons and equipment.

There are at present about 30 establishments, major and minor, under the R. and D. Organisation, catering to the needs of the Armed Forces. Among the new research units are the Institute of Nuclear Medicine, the Institute of Physiology, the Food Research Laboratory, the Solid State Physics Laboratory, the Electronics Research Laboratory and the Institute of Work Study.

A chain of laboratories is being established to cover new fields of activity and to evaluate the stringent conditions in different terrains of the country's frontiers. Field research stations have also been set up.

A Psychological Research Directorate of the Science Organisation was formed in 1949 under a Chief Psychologist, the main function of which is to conduct research in the assessment of human personality so that the right type of officers may be selected for the Armed Forces.

During 1964-65 the R.D. Organization was engaged in the development of a mountain-gun and anti-tank mine, and completed projects for the development of gun and mortar sights and the telescopes for the Sniper.

There are two major electronic Development Establishments in the country dealing with communication equipment, tele-communication line equipment and radars. A beginning has been made on a third establishment for the development of missiles.

A Defence Science Service has been instituted to include all civilian scientists engaged in research, development, inspection or teaching in any of the three Services or in the Ministry of Defence.

Theoretical training for the engineering profession to those already receiving practical training, consisting of lectures and tutorial classes, is now being given at defence installations in practically all parts of the country to prepare students for the Associate Membership examinations of the Institution of Engineers (India), the Institution of Tele-Communication Engineers and the Aeronautical Society of India, a pass in which is regarded as equivalent to an engineering degree. There are more than 4,800 students at present receiving this instructional training.

The Defence Production Board has been set up to examine and recommend to Government plans for defence production, production of new items and stock-piling of raw materials.

### ORDNANCE FACTORIES

The Production Organisation, which has under it 26 odd Ordnance Factories, is so designed as

to achieve self-sufficiency in respect of stores required by the three Services and has made continuous efforts to establish production of items hitherto imported. The organisation represents one of the biggest State-owned integrated enterprises.

The Ordnance Cable Factory for the manufacture of field cables for the Army started functioning in September 1963, the New Explosives Factory—in December 1964. The Heavy Vehicles (Tank) Factory has gone into production. The first Indian-made medium tank, 'Vijayanta', rolled out of the factory on Dec. 29, 1965. Of the five more ordnance factories to be set up, the Small Arms Ammunition Factory, went into production in Oct. 1964, with U.S. aid, much ahead of schedule. Another factory the Ordnance Factory, Tiruchirapalli was inaugurated by the Prime Minister on July 3, 1966. Two other new factories have been set up.

Apart from substantially augmenting the manufacture of established armaments and equipment, the Ordnance Factories took up the production of several new items during 1963-64. Significant amongst these are a 7.62 m.m. semi-automatic Ishapore rifle and its ammunition, a new heavy mortar with a longer range and its ammunition, new types of tank ammunition, new anti-tank ammunition, an anti-aircraft gun and its ammunition, improved carbines to replace sten-guns, and modified light machine-guns and bolt-action rifles to take the new rimless 7.62 ammunition.

A light mountain gun, with a higher range, has been successfully developed and its production started. A new plant has been set up at the Cordite Factory for the manufacture of semi-solvent propellants for rockets and commissioned, and so also a plant at another ordnance factory for a new type of ammunition for the Air Force.

To ease the transport problems of the Army, about 6,700 three-ton Shaktiman trucks, with an indigenous content of about 70 per cent had been manufactured in the Ordnance Factories by the end of March 1966. In addition, 12,566 one-ton Nissan carriers and 4,600 Nissan jeeps, with an indigenous content of 38 and 28 per cent respectively, have rolled out of the assembly lines so far.

The production of conventional arms, snow and ski equipment, winter and cotton clothing, supply-dropping parachutes, line-gear and saddlery items has also been greatly stepped up.

Over the years, the value of production in the Ordnance Factories has jumped from about Rs. 5 crores in 1947-48 to Rs. 19.65 crores in 1958-59, Rs. 25.37 crores in 1959-60, Rs. 33.35 crores in 1960-61, Rs. 41.88 crores in 1961-62, Rs. 64 crores in 1962-63, Rs. 111.34 crores in 1963-64 and Rs. 104.9 crores in 1964-65. During 1965-66 it was expected to be more than that in 1964-65.

### HINDUSTAN AERONAUTICS LIMITED

(See under article "Government Industrial Undertakings").

#### A.M.D. AND A.I.L.

The Aircraft Manufacturing Depot, set up at Kanpur in 1960 under the Air Force for the manufacture of the Avro-748—a medium twin-engined, turbo-prop, pressurised and air-conditioned transport aircraft, capable of short take-offs and landings, with ability to operate from unprepared surfaces—was in 1963 made a departmental undertaking under the direct control of the Department of Defence Production.

This factory has so far (1965-66) delivered five aircrafts, three Series I and two Series II to the I.A.F. One more Series II aircraft has been completed and sent to U.K. for installation of the equipment required by I.A.C.

Production of single-seater and double-seater gliders has also been undertaken by the factory. The present order is for 20 single-seater and 85 double-seater gliders. Sixty double-seater and one single-seater gliders have already been completed.

The Aeronautics (India), Ltd., was registered in Delhi in August 1963 to undertake the manufacture, under a licence agreement with the Government of the U.S.S.R., of a modified, single-engined MIG-21 supersonic fighter aircraft, complete in all respects.

The project reports prepared with the help of Soviet specialists have been accepted by the Govt. and work on setting up the factories at Nasik, Hyderabad and Koraput, is in full swing.

To streamline aircraft manufacturing industry in the country, all the existing units have been brought under the unified control of the Aeronautics (India) Ltd.

### BHARAT ELECTRONICS LTD.

(See under article "Government Industrial Undertakings.")

### SHIP-BUILDING AND REPAIRS

The Production Organisation has also under it the Mazagon Dock, Ltd., Bombay,† and the Garden Reach Workshop, Ltd., Calcutta.† While these shipyards continue to carry out refits and repairs of commercial ships, they also do so for naval ships. Their acquisition has greatly facilitated naval ship-building.

A programme, costing about Rs. 3.5 crores, has been approved for expanding the existing facilities at the Mazagon Docks, including the construction of a new building slipway. They have also been entrusted with the building of frigates for the Navy. This is the first step towards the building of modern warships for which they are suitably equipped.

A small repair yard in Goa has been handed over to the Mazagon Docks for re-activation and its permanent acquisition is under consideration.

The Praga Tools Ltd., Secunderabad and the Bharat Earth Movers Ltd., Bangalore, are the other public sector undertakings under the Department of Defence Production in the Ministry of Defence.

### NATIONAL CADET CORPS

The National Cadet Corps came into being in 1948. The aim of the Corps is (1) to develop character, comradeship, ideal of service and capacity for leadership in young men and women, (2) to stimulate interest among youth in the defence of the country, and (3) to build up a reserve of manpower to enable the Armed Forces to expand rapidly in a national emergency. The organisation is, thus, mainly of an educational and nation-building character. Officers and cadets have no liability for active military service.

A certain percentage of the total intake of candidates for commissioned ranks in the Army, Navy and Air Force, on the basis of direct entry to the Armed Forces training institutions, has been reserved for N.C.C. cadets of the three Services.

The N.C.C. consists of three divisions: (1) Junior, (2) Senior and (3) Girls'.

The strength of the Corps as on March 31, 1966, was as follows:—

| Senior Division |           |            |        |          |        | Junior Division |          |            |        |          |        | Girls' Division |        |             |        |
|-----------------|-----------|------------|--------|----------|--------|-----------------|----------|------------|--------|----------|--------|-----------------|--------|-------------|--------|
| Army Wing       |           | Naval Wing |        | Air Wing |        | Army Wing       |          | Naval Wing |        | Air Wing |        | Senior Wing     |        | Junior Wing |        |
| Officers        | Cadets    | Officers   | Cadets | Officers | Cadets | Officers        | Cadets   | Officers   | Cadets | Officers | Cadets | Officers        | Cadets | Officers    | Cadets |
| 5,985           | 10,03,400 | 236        | 11,800 | 114      | 11,400 | 4,502           | 4,34,000 | 487        | 47,000 | 568      | 54,800 | 434             | 78,800 | 768         | 75,300 |

Grand Total—Senior Division—10,32,935, Junior Division—5,41,357, Girls' Division—1,55,302.

The strength of the Corps a year earlier was: Senior Division 9,72,523, Junior Division 2,53,266 and Girls' Division 1,16,098.

† See under article "Government Industrial Undertakings." for more details.



The Senior Division provides Service training to young students and recruitment to it is from amongst students of universities and colleges. It is composed of three wings, viz. Army, Navy and Air. Recruitment to the Junior Division is from amongst students of secondary schools. It is also composed of Army, Navy and Air Wings.

The object of the Girls' Division is to develop all-round personality among girls. This Division has two wings, Senior and Junior, units of the Senior Wing being raised in colleges and universities and those of the Junior Wing in schools.

In order to better fit cadets of the N.C.C. for the officer ranks of the Armed Forces and to increase the cadet intake into the Services, Government decided in 1959 to raise Officer Training Units (O.T.U.) in the Corps all over the country. The overall strength of these training units has been fixed, for the present, at 750, the period of training being spread over three years. Eighty of the vacancies at the Indian Military Academy, Dehra Dun, have been allotted for these cadets for pre-commission training of Army officers.

From the academic session beginning from July 1963, N.C.C. training has been made a compulsory subject in the university curriculum.

In 1964 a uniform course of military training of three years was introduced for all able-bodied male college students.

The N.C.C. Organisation is headed by a Director-General in the rank of a Maj.-Gen. who has his office in New Delhi. There are 16 Directors in various States in the rank of Brigadier or Colonel. The units in each Directorate are organised into groups of ten each under the command of a Lt.-Col. There are 111 such group headquarters. The expenditure on the N.C.C. is shared between the Centre and the State Governments.

The Auxiliary Cadet Corps has been replaced by the National Fitness Corps Scheme.

The Director-General of N.C.C. is Maj.-Gen. Prem Chand.

### TRAINING INSTITUTIONS

The important training institutions common to the three Services are given below:

**National Defence College:** The National Defence College was started in 1960 in New Delhi for the training of senior officers of the three Services on the pattern of the Imperial Defence College in the U.K. Its main purpose is to enable students to study the military, scientific, industrial, social, economic and political factors involved in war as also the higher direction and strategy of warfare. Concurrently with this study, it offers a unique opportunity to senior Service officers and highly-placed civil servants of getting together and exchanging ideas so as to give them both a clearer and better understanding of each other's problems in peace and in war. The training lasts about a year and officers selected for attending the course are ordinarily of the rank of Brigadier in the Army and equivalent ranks and status in the Navy, the Air Force and the civil services, including scientists. Only those in the age-group of 38-45 years who are considered to be potential leaders in their professions are selected for the course.

*Commandant, Air Marshal R. Rajaram.*

**Defence Services Staff College:** The Defence Services Staff College is located in Wellington in the Nilgiri Hills in South India. One hundred officers drawn from all the three Services, including six officers from the U.S.A. and Commonwealth countries, are trained every year. The aim of the course is to prepare officers to hold second-grade or equivalent staff appointments or higher staff or command appointments.

*Commandant, Maj.-Gen. D. Som Dutt.*

**National Defence Academy:** The National Defence Academy at Khadakvasla, near Poona, started functioning in its present location in January 1955. Previously, it had been set up at

Dehra Dun in January 1949 as an experimental measure, with a Joint Services Wing and a Military Wing. On its move to Khadakvasla, the J.S.W. came to be known as N.D.A. At this Academy, Army, Navy and Air Force cadets receive three years' combined basic training. The first two years are devoted to common preliminary training and the third to specialised training in the respective Services. Thereafter, Army cadets join the Indian Military Academy at Dehra Dun for a further one-year course, while Naval and Air Force cadets proceed to their respective Service establishments for advanced training.

*Commandant, Maj.-Gen. Ranbir Bakshi.*

**Rashtriya Indian Military College:** Run on the lines of public schools, the Rashtriya Indian Military College, located in Dehra Dun, brings up future officers of the three Services by imparting preliminary pre-cadet training to such pupils as desire subsequently to choose a military career. It thus serves as a feeder to the National Defence Academy, which provides combined basic training to cadets of all the three Services. Called until recently as Sainik School and previously as Prince of Wales Royal Indian Military College, it was started in 1922 with the primary object of catching would-be officers of the Armed Forces at an impressionable age to be able easily to mould their character. By a carefully-framed compulsory system of P.T., drill, parades and games, students are groomed to attain certain physical standards to fit them for a Service career. Special attention is paid to fostering in them discipline, self-reliance and an aptitude for soldiering. Social training forms an important extra-curricular activity.

*Principal, S. P. Sharma.*

**School of Foreign Languages:** Located in New Delhi, the School of Foreign Languages was started in 1949 to meet the growing demand for qualified linguists. It also conducts examinations in various Indian languages for service personnel.

*Director, P. N. Banerjee.*

**Armed Forces Medical College:** The Armed Forces Medical College is an inter-services post-graduate institution designed to meet the requirements of the integrated medical services of the Army, Navy and Air Force, and is located in Poona. The College has departments of medicine, surgery, pathology, hygiene, radiology, blood transfusion and dentistry. It also now holds an M.B.B.S. course and is affiliated to Poona University.

*Commandant, Maj.-Gen. P. N. Bardhan.*

**King George's Schools:** Located at Bangalore, Ajmer, Chail, Belgaum and Dhoolpur, King George's Schools provide public-school education for the children of serving personnel.

**Sainik Schools:** There are at present 15 Sainik Schools located in the States of Andhra Pradesh, Assam, Bihar, Gujarat, Kerala, Madhya Pradesh, Madras, Maharashtra, Mysore, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal, imparting middle and secondary school public education with a military bias.

### ARMED FORCES MEDICAL SERVICES

The Directorate-General of Armed Forces Medical Services was created in 1948 with a view to integrating the medical services of the Armed Forces.

An officer of the rank of Lieut.-General is the head of this inter-Services organization, who maintains close contact with the three Directors of Medical Services (Army, Navy and Air Force). He is responsible to the Ministry for the over-all medical policy relating to the Armed Forces. The entire organisation relating to medical equipment and stores is directly under him. The Directorate has under it the Armed Forces Medical College and the Artificial Limb Centre now claims to be the fourth largest institution of its kind in the world.

The Centre, which functions under the control of the Director-General of Armed Forces Medical Services, also produces various types of orthopaedic boots and shoes, belts, trusses and spinal braces.

### RESETTLEMENT DIRECTORATE

The Directorate-General of Resettlement in the Defence Ministry deals with matters relating to the rehabilitation of ex-Servicemen in civil life.

In collaboration with other Ministries of the Central Government, the State Governments, the Post-War Reconstruction Fund Trust Committees and other organisations, the Defence Ministry has formulated schemes for resettling ex-Servicemen in Government and private service, land colonies, vocational and technical trades and motor transport services.

In the matter of employment, the Government have accorded preference to ex-Servicemen in filling up appointments in police, excise, watch and ward and other departments for which military training is a qualification.

Through the efforts of the Defence Services Liaison Organization, set-up in May 1956, 727 retired Armed Forces officers were selected for appointment in civil posts under the Central or State Governments and 88 in the private sector up to the end of December 1965.

### SOLDIERS', SAILORS' AND AIRMEN'S BOARD

The Indian Soldiers', Sailors' and Airmen's Board is the most important official institution connected with the welfare of serving personnel of the Armed Forces and ex-Servicemen and their families.

The Board has its seat at New Delhi and co-ordinates the activities of State boards which exist in each State. Under the control of these State boards, there exists throughout the country a network of district boards, reinforced in some cases by tehsil or taluka committees and other kindred bodies. These boards are established in all districts from which recruits have been obtained in sufficient numbers. The President of the District Board is the Collector or the Deputy Commissioner.

The Indian Soldiers', Sailors' and Airmen's Board Fund is now used primarily for payment of special pensions to blinded ex-Servicemen and to meet the expenditure on miscellaneous items, such as bank charges and audit fees in connection with the administration of the fund.

A sum of Rs. 25 lakhs was collected on the 1964 Flag Day.

### GALLANTRY AWARDS

Three gallantry awards were instituted by the President after Independence for gallantry in combat with the enemy. They are designated the Param Vir Chakra, the Maha Vir Chakra and the Vir Chakra. They came into force with effect from August 15, 1947.

The Param Vir Chakra is awarded for most conspicuous bravery, or some daring or pre-eminent act of valour or self-sacrifice whether on land, at sea or in the air. It ranks first among all awards.

The Maha Vir Chakra is awarded for conspicuous acts of gallantry whether on land, at sea or in the air.

The Vir Chakra is awarded for acts of gallantry whether on land, at sea or in the air.

A fourth gallantry decoration, named the Ashoka Chakra, in three grades, viz. Class I, Class II and Class III, was instituted for acts of gallantry other than in the face of the enemy. This also came into force with effect from August 15, 1947.

Class I of the Chakra is awarded for most conspicuous bravery, or some daring or pre-eminent act of valour or self-sacrifice. Class II of the Chakra is awarded for conspicuous gallantry and Class III for gallantry.

If a recipient of any of these Chakras again performs such an act of bravery as would have made him or her eligible to receive the same decoration, such further act of bravery is recognised by the award of a Bar attached to the ribbon by which the Chakra is suspended, and for every such additional act of bravery, an



additional Bar is added, and any such Bar or Bars is/are also awarded posthumously. For every Bar awarded a replica in miniature of the Chakra concerned, and in the case of the Param Vir Chakra of the "Indra's Vajra", is added to the riband when worn alone.

Every recipient of any of these decorations who is junior in rank to a 2nd Lieutenant in the Army, a Sub-Lieutenant in the Navy, or a Pilot Officer in the Air Force, is entitled, from the date of the act by which the decoration has been gained, to a special pension, and each additional Bar conferred carries with it an additional pension for life.

A system of Mention-in-Despatches was also instituted. A 'lotus leaf' emblem is worn by the awardees on the ribbon of the campaign/war medal concerned.

### NEW SERVICE MEDALS

On the occasion of 1960 Republic Day, the Government of India instituted six awards for the Armed Forces—Vishisht Seva (Distinguished Service) Medal, Sainya Seva (Services) Medal, Videsh Seva (Overseas) Medal, Sena (Army) Medal, Nao Sena (Navy) Medal and Vayu Sena (Air Force) Medal.

The Vishisht Seva Medal is awarded to personnel of all the three Services in Classes I, II and III in recognition of distinguished service of the "most exceptional", an "exceptional" and a "high" order respectively. Sainya Seva Medal to all Service personnel in recognition of non-operational duties under conditions of hardship and severe climate, and the Videsh Seva Medal to all ranks of the Armed Forces for duties outside India. The Army, Navy and Air Force medals are awarded in recognition of such individual acts of exceptional devotion to duty or courage as have special significance for the Service concerned.

### INDIAN ARMY

**Army HQ:** The Head of the organisation located in New Delhi, is the Chief of the Army Staff. He is assisted by the Vice-Chief of the Army Staff and four other Principal Staff Officers (the Deputy Chief of the Army Staff, the Adjutant General, the Quartermaster General, the Master General of the Ordnance) and two Heads of Branches (the Military Secretary and the Engineer-in-Chief). The functions of the Branches are indicated below:—

(i) The General Staff Branch—(i) organisation and employment of the Army, Military operations, intelligence, training combat-development, military survey including maintenance and supply of maps and plans and engineer staff matters which are dealt with by VCOAS and (ii) staff duties, selection and scale of weapons and equipment, co-ordination of policy regarding equipment including provisioning, Armoured Corps, Artillery, Signals, Infantry, Territorial Army and Defence Security Corps which are dealt with by DCOAS.

(ii) The Adjutant General's Branch deals with manpower, recruitment, leave, pay and allowances and pensions and other conditions of service, and discipline. It also deals with welfare and health of personnel and military law.

(iii) The Quartermaster General's Branch deals with movement of personnel, Stores and equipment; provision, storage, inspection and issue of fuel, food-stuffs and forage; military farms, remount and veterinary services, Army Postal, pioneer and canteen services, works policy; fire fighting services and technical examination of MES works bills.

(iv) The Master General of the Ordnance Branch deals with all aspects of procurement policy, provision, storage, recovery, repair, maintenance and issue of all stores and equipment of Ordnance Supply including M.T. vehicles, weapons and ammunition, signal equipment, general stores and clothing as well as supply of common-user items to the Navy and the Air Force.

(v) The Military Secretary's Branch deals with the issue of commissions in the Army, postings, transfers, promotions, releases, retirement, resignation, invalidment and transfer to the Reserve of all non-medical officers of the Army; maintenance of confidential reports and personal records of all non-medical officers of the Army; providing the secretariat for Selection Boards which recommend officers for promotion to the rank of Lt.-Colonel and above; recommendations for grant of honours and awards to Army officers and Honorary Commissions in the Army to civilians.

(vi) The Engineer-in-Chief's Branch deals with all matters relating to Engineering units and Engineer stores; administration of personnel of the Corps of Engineers and the MRS; design, construction and maintenance of all accommodation and works for the Defence Services.

Under the Army H.Q., the Indian Army is organised into four Commands—Eastern, Western, Southern and Central, each being under a General Officer Commanding-in-Chief of the rank of Lieutenant-General. The Commands are divided into Areas, each under the command of a G.O.C. of the rank of Major-General. The Areas, in their turn, are sub-divided into Sub-Areas each under the command of a Brigadier.

The organisation of Commanders remains broadly the same except that in 1965 Delhi was carved out of the old Delhi and Rajasthan area, Rajasthan being placed under a separate G.O.C.

Mobile formations are the Corps, Divisions, Brigade group, Independent Brigade and Brigades. Two or more Divisions or a combination of Divisions, Brigade Groups and Independent Brigades are constituted into a Corps under a Corps Commander of the rank of Lt. General, who functions under the control of the Army Commander.

### EXPANSION PROGRAMME

The Chinese aggression brought out several shortcomings and underlined the need of strengthening the Army in many ways. A Directorate of Combat Development was set up in the General Staff Branch to formulate tactical concepts. The Weapons and Equipment Directorate under the Master-General of the Ordnance was taken over as a direct responsibility of the General Staff Branch, while the Directorate of Military Intelligence was strengthened. A Recruiting Directorate was established in the Adjutant-General's Branch. A new organisation was also formed under the Master-General of the Ordnance for the procurement of equipment and stores from foreign countries.

Soon after the beginning of the emergency, six new divisions were sanctioned, and of these four were raised as mountain divisions and the remaining two as standard Infantry divisions. One of the existing Infantry divisions was reorganised as a mountain division, thus bringing the number of mountain divisions to five. Two scout battalions are also being raised, one for the Punjab-Himachal Pradesh and the other for Uttar Pradesh borders with Tibet. These battalions, drawn from the hilltribes of these areas, will perform a role similar to that assigned to the Assam Rifles in N.E.F.A.

The experience gained during the Indo-Pakistan fighting is being studied and suitable measures are being formulated and implemented to improve the state of fitness of our defence Forces.

The Army consists of a number of arms and services. They are Infantry, Armoured Corps, Regiment of Artillery, Corps of Engineers, Corps of Signals, Army Service Corps, Army Ordnance Corps, Army Medical Corps, Army Dental Corps, Corps of Electrical and Mechanical Engineers, Army Education Corps, Remounts, Veterinary and Farms Corps, Corps of Military Police and Defence Security Corps.

### TERRITORIAL ARMY

The Territorial Army was formed in India and started functioning in October 1949 to serve as a second line of defence.

The Territorial Army consists of various arms and service, i.e., the Regiment of Artillery, including anti-aircraft and coastal defence units, the Corps of Engineers, including port and railway units, the Corps of Signals, including P. and T. units, Infantry, the Medical Corps and the Corps of Electrical and Mechanical Engineers. The units raised are of two types, i.e. provincial units recruited from rural areas which undergo annual training of two to three months' duration at a stretch, and urban units recruited from large towns where Territorial Army units have been raised. They undergo training on the weekly drill system, i.e. in the evenings, Sundays and holidays with a short camp of not less than four consecutive days.

All able-bodied persons, from unskilled labourers to highly qualified technicians, provided they are citizens of India, are eligible for recruitment. The age-limits are 18 and 35 years, relaxable in the case of ex-Servants (Army, Navy and Air Force) personnel and civilians possessing technical qualifications. Government servants and employees of private concerns are also eligible to join the Territorial Army.

The role of the Territorial Army is to

- (i) relieve the Regular Army of static duties and support civil power if required.
- (ii) provide coastal defence and anti-aircraft units,
- (iii) provide units for the Regular Army if and when required.

When embodied, called out or under training, Territorial Army personnel receive the same pay and allowances as are admissible to the corresponding ranks of the Regular Army. It is obligatory for every civilian employer to reinstate a member of the Territorial Army in his civilian post on termination of his military training.

In order to provide an incentive to Territorial Army personnel for hard and meritorious work, 2½ per cent of the actual vacancies available at the Indian Military Academy are reserved for such personnel. On successful completion of the course at the Academy, they are granted regular commissions in the Army.

No officer or enrolled person is required to perform military service beyond the limits of India, save under a general or special order of the Central Government.

The Territorial Army is an auxiliary force to the regular Army and is the second line of Defence. This force consists of citizens who follow their normal avocations and receive military training in their spare time, and undergo active military service when embodied. The present authorised strength of the Territorial Army is 51,416. The actual strength is 48,213.

When Territorial Army units are embodied, the personnel of the units are assigned duties as in the regular Army.

During 1965, 65 persons were granted Officers' Commissions and 58 persons Junior Officers' Commissions in the Territorial Army. A revised policy for administering, training, etc. of Territorial Army units is under consideration. During 1965, various benefits enjoyed by the regular Army personnel were extended to the Territorial Army personnel.

Territorial Army officers have been made eligible for promotion to the acting rank of Brigadier, against a specific vacancy, on completion of 20 years of service.

Civil Government servants embodied for service in the Territorial Army are allowed to retain their civil family accommodation for two months from the date of their joining military duty if they are posted to a non-commissioned area, or until their transfer to a peace station if they are required to serve in a commissioned area.

It has been agreed by the Director of Employment Exchange, Ministry of Labour, that Territorial Army personnel embodied for service during the present Emergency would be treated as "Discharged Government Employees" and



accorded "Priority III" by Employment Exchanges for the purpose of civil employment provided they are employed on a whole-time basis against regular establishment for a period of six months or more.

### TRAINING INSTITUTIONS

Recruitment for the permanent cadre of commissioned ranks in the Army is done through the National Defence Academy, Khadakvasla, and the Indian Military Academy, Dehra Dun. After completion of their three-year course at the N.D.A., Army cadets have to spend another one year at the Military Academy before being commissioned. Direct admission to the Academy at higher age-levels also continues, though the number of cadets so taken is limited.

The Military Academy at present conducts courses for ex-N.D.A., direct-entry, T.A. and N.C.O. cadets, serving personnel, and technical graduates. Regular and direct-entry cadets commissioned in the technical branches are sent on specialised post-commission courses. The technical graduates' course was specially introduced in January 1948 as a temporary measure to give military training to qualified technicians and engineers for the Corps of Engineers, the Corps of Signals and the Corps of Electrical and Mechanical Engineers to cope with the increased requirements of technicians for the Army.

There is an Officers' Training School at Madras to train emergency commission candidates for the Army. The school is now designed to run courses for short service regular commissions.

The Armoured Corps Centre and School at Ahmednagar trains recruits as well as regimental instructors. The School of Artillery at Deolali provides training in the field, anti-tank, anti-aircraft and coastal artillery branches. The Army Ordnance School at Jabalpur imparts specialised training to all officers and ORs in identification, handling and storage of various types of items, including ammunition and explosives. Training for other ranks of the Army Ordnance Corps is also given at the AOC Centre, Secunderabad.

The Infantry School at Mhow is the home of infantry doctrines and a centre for developing infantry weapons. The School also conducts courses for senior officers and junior commanders of all corps in the Army. The Army Service Corps has two schools, one at Meerut and the other at Bangalore, giving training in organisation and administration, animal transport, mechanical transport and supplies. The Army Medical Corps has its training centres at Lucknow and Hyderabad.

The College of Military Engineering at Kirkee, near Poona, trains officers of the Corps of Engineers, the Corps of Signals and the Corps of Electrical and Mechanical Engineers to the degree standard in civil, tele-communication and electrical and mechanical engineering respectively.

The Madras, Bombay and Bengal Engineer Groups at Bangalore, Poona and Roorkee provide basic technical and specialised Corps training to officers and ORs of the Corps of Engineers as also civilian officers of the Military Engineering Service.

The Corps of Electrical and Mechanical Engineers has its training centres at Secunderabad and Bhopal, while the School of Signals, which gives technical training in tele-communication engineering to personnel of the Corps of Signals, is situated at Mhow. The Army Signals School, which trains officers and ORs of all arms as instructors in regimental signals, is located at Jabalpur.

The other training institutions in the Army are the Remounts, Veterinary and Farms Centre and School at Meerut, the Education Corps School and the Military School of Music at Pachmarhi, and the Intelligence Corps School and the Physical Training School at Poona.

The various ranks in the Army from the top downwards are: General, Lieutenant-General,

Major-General, Brigadier, Colonel, Lieutenant-Colonel, Major, Captain, Lieutenant, Second Lieutenant, Subedar-Major/Risaldar-Major, Subedar/Risaldar, Naib Subedar/Dafadar, Havildar, Naik, Lance-Naik and Sepoy/Sowar.

### INDIAN NAVY

The Indian Navy is controlled both administratively and operationally from Naval HQ in New Delhi through a chain of commands. Under the Chief of the Naval Staff are various authorities, ashore and afloat, who are directly responsible to him for the day-to-day administration of the Service.

At the Naval HQ, the Chief of the Naval Staff is assisted in his task by four Principal Staff Officers, namely the Deputy Chief of the Naval Staff, the Chief of Personnel, the Chief of Material and the Chief of the Naval Aviation.

The Deputy Chief is responsible for naval operations, policy and tactics, planning, intelligence, civil engineering and communications, as also overall co-ordination of staff. The Chief of Personnel looks after recruitment, service conditions, education and training, medical services, welfare and discipline of personnel, supply and victualling. The Chief of Material is concerned with fleet maintenance, weapons and equipment, marine engineering, naval construction, electrical engineering, armament supply and inspection and naval stores. The Chief of Naval Aviation deals with all questions relating to development of the naval air service.

The Naval Secretary, who functions also as the Secretary to the Chief of the Naval Staff, is responsible for the administration of the civilian staff of Naval Headquarters, secretarial procedures, naval budget and parliamentary questions.

The Naval HQ exercises control over the Navy through the following four commands:

1. Flag Officer Commanding, Indian Fleet.
2. Flag Officer, Bombay.
3. Commodore-in-Charge, Cochin.
4. Commodore, East Coast, Vishakapatnam.

Today, the Indian Fleet consists of I.N.S. VIKRANT (Flagship of the Navy), an aircraft-carrier, I.N.S. MYSORE, a Colony-class cruiser, I.N.S. DELHI, a Leander-class cruiser, two Destroyer Squadrons (I.N.S. RANJIT, RAJPUT, RANA, GODAVARI, GOMATI and GANGA) and a number of Frigate Squadrons, including some of the latest types of anti-submarine and anti-aircraft frigates. These new types of frigates, specially constructed for the Navy in the U.K. are I.N.S. BRAHMAPUTRA, BEAS, BETWA, KHUKRI, KIRPAN, KUTHAR, TALWAR, and TRISHUL. The former frigates are I.N.S. CAUVERY, KISTNA, AND TIR, which are now being used for cadets' training. The three Mine-sweeping Squadrons are formed by I.N.S. KONKAN, KARWAR, KAKINADA, CANNANORE, CUDDALORE, BASSEIN and BIMPATAM.

In addition, the Fleet has some survey ships, a tanker and some auxiliary craft. The survey unit of the Navy, which now comprises I.N.S. INVESTIGATOR, JUMNA, SUTLEJ and DARSHAK, carries out the necessary survey of India's coast and approaches to harbours. I.N.S. DARSHAK of 2,750 tons displacement is the first naval ship built in India.

With a beginning having already been made to build certain smaller types of naval craft in India, plans are now afoot to construct major warships, like destroyers and frigates, in the country's shipyards. The naval craft which have already been completed include the seaward defence boats—I.N.S. AJAY, ABHAY and AKSHAY, and more are now under construction. A mooring vessel I.N.S. DHURVAK has already been launched at the Hindustan Shipyard Ltd., Visakhapatnam.

The Dockyard is now equipped with a foundry, boiler, engine and ship-fitting shops, electronic and radar workshops, blacksmith, plater, joiner and carpentry shops, sail-making lofts, machine-shops, and gun-mounting and torpedo workshops. Its main function is to carry out all

types of major refits of ships of the Navy and the associated harbour craft services. To meet the demands of the growing Service, this Dockyard is being rapidly expanded.

A newly-constructed cruiser-graving dock at this Dockyard, which can also accommodate the Navy's aircraft-carrier, was commissioned for service in January 1962.

A Resident Naval Officers' Organisation has been set up at Port Blair with the necessary transport and communication facilities. Appropriately named I.N.S. JARAWA, after an ancient tribe of the Andaman and Nicobar Islands, the new establishment was commissioned on February 15, 1964. A naval garrison, with facilities for moving to the various islands on patrol, has also been stationed in the Andamans and Nicobars.

It is proposed to develop a naval base and dockyard at Visakhapatnam for which an area of about 550 acres of land is being acquired from the Port authorities. It has also been decided to develop Mormugao as a naval base; it was formally commissioned in March 1964 as I.N.S. GOMANTAK. The base includes INS HANSA the Naval Air Station at Dabolim, where facilities for the operation of jet aircraft are being developed.

All the Coast Batteries in the country hitherto run by the Army, have recently been taken over by the Navy. The Naval Coast Battery in Colaba, Bombay, has been commissioned as INS TRATA.

### NAVAL AVIATION

The Naval Air Arm, which is one of the youngest branches of the Navy, came into being in 1948 for training aircrew, followed soon after by the setting up of a Naval Air Station at Cochin. Later, the formation of a Fleet Requirements Unit was approved, aircraft, equipment and spares acquired and officers and ratings deputed for training courses abroad. The civil airfield at Cochin was acquired for the Navy in 1953 to be converted into the first Naval Air Station. Soon after, the first batch of Sealant aircraft were purchased from the U.K. and later the station was named I.N.S. GARUDA. Early in 1955, a number of Firefly target-towing aircraft were obtained from the U.K. for providing gunnery-training facilities for the Fleet. The strength of the Fleet Requirements Unit was further augmented when HT-2 aircraft were acquired from the H.A.L. to give instructional training to aircrew and other personnel. A jet flight has been added to the Fleet Air Arm with a number of Vampire jet aircraft, and forms a separate Naval Aviation Establishment, named I.N.S. HANSA.

The first aircraft-carrier, I.N.S. VIKRANT, acquired by the Indian Navy was commissioned at Belfast on March 4, 1961, in the United Kingdom. Formerly known as H.M.S. HERCULES, this light fleet aircraft-carrier, which has a displacement of 20,000 tons (full load), was acquired for the Navy in 1957. The carrier has a complement, including her flying personnel, of over 1,300 officers and sailors. The carrier arrived in India in November 1961 and a number of Sea-Hawks and Breguet-Alize aircraft have since been acquired for it. A Naval Air Training School has been set up at Cochin to train ratings in the maintenance and repair of aircraft. At the same time, the Government are considering setting up a School for Naval Airmen for training non-technical personnel.

To meet the meteorological needs of the Fleet Requirements Unit, a Naval Weather Service Organisation, manned by trained instructor officers, was established at I.N.S. GARUDA towards the end of 1952. Since then, more and more instructor officers have been trained to take over meteorological duties, both ashore and aboard ships. This organisation now also conducts courses of instruction in meteorology for naval ratings.

### TRAINING ESTABLISHMENTS

The training of other naval personnel is carried out in the shore establishments of I.N.S.



**VENDURUTHY**, Cochin, I.N.S. **CIRCARS**, Visakhapatnam, I.N.S. **ANGRE**, Bombay, I.N.S. **KUNJALI**, Bombay, I.N.S. **SHIVAJI**, Lonavla, I.N.S. **VALSURA**, Jamnagar, and I.N.S. **HAMLA**, Bombay. I.N.H.S. **ASVINI** at Bombay, I.N.H.S. **SANJIVANI** at Cochin, I.N.H.S. **KALYANI** at Vishakhapatnam and the recently commissioned I.N.H.S. **JEEVANTI** at Goa are the four naval hospitals.

The various ranks in the Navy from the top downwards are: Admiral, Vice-Admiral, Rear-Admiral, Commodore, Captain, Commander, Lieut.-Commander, Lieutenant, Sub-Lieutenant, Midshipman, Chief Petty Officer, Petty Officer, Leading Rate, Able Rate and Ordinary Rate.

### INDIAN AIR FORCE

The Air HQ is divided into three main branches—Air Branch, which deals with operations, training, policy and plans, signals, reserves and intelligence, Administration Branch and Maintenance Branch. Each is under a Branch P.S.O. who, in turn, has several Directorates under him.

There are three Operational Commands of the Air Force with headquarters at Palam, Allahabad and Shillong, respectively known as Western, Central and Eastern Air Commands. The Maintenance Command has moved from Kanpur to Nagpur, while the Training Command remains located at Bangalore.

The Operational Commands control all flying units—fighter, bomber, reconnaissance and air-transport squadrons. The Training Command has under its control training schools and colleges for both officers and airmen for technical and non-technical ground training and for aircrew flying training. The Maintenance Command controls all technical and equipment units in the Air Force. All the five Commands are headed by Air Officers Commanding-in-Chief in the rank of Air Vice-Marshal.

A build-up of the Air Force is being planned in keeping with its role to give support to ground forces and provide protection to vital establishments. Some mobile radar sets have been given by the U.S. to provide limited training to Air Force personnel. The U.K. Government has provided electronic and communication equipment and the Canadian Government has supplied a number of transport aircraft. The U.S.S.R. Government has supplied several aircraft and helicopters and other air defence equipment and given training facilities for Air Force personnel.

The fleet of transport aircraft was substantially increased during 1963-64. A number of heavy transport AN-12 planes were purchased from the U.S.S.R. under deferred payment terms. Sixteen Caribou medium transport planes were contracted for purchase from Canada under a loan given by the Canadian Government, and have already arrived in India. In addition, Canada gave a gift of eight Dakota aircraft.

The U.S.A. supplied, under its military assistance programme, 24 Fairchild-Packet aircraft in addition to two Caribous supplied earlier. The U.S.S.R. supplied some Mi-4 helicopters under deferred payment terms. A contract was signed for the purchase of some Alouette helicopters from France.

The different types of aircraft used by the Air Force are:

**Training:** HT-2, Harvard, Vampire and Dakota.

**Fighter:** Vampire, Toofani (Ouragon), Mystere, Hunter, Gnat and MIG-21.

**Transport:** Dakota, Devon, Fairchild-Packet, Otter, Viscount-Ilyushin, 14, Caribou, AN-12, Super Constellations and M1-4, Bell and Alouette-2 Helicopters.

**Bomber:** Canberra.

**Reconnaissance:** Liberator and Canberra.

### TRAINING ESTABLISHMENTS

The Air Force Flying College at Jodhpur is the nursery of pilots, navigators and air-signallers. Advance flying training to aircrew is provided at Hyderabad, a Jet Training Wing and a Transport Training Wing having been set up at Hakimpet and Begumpet respectively as part of the Air Force Station. On successful completion of their one-year training at Jodhpur, pupil aircrew have to undergo a year's training at Hakimpet or Begumpet before being awarded their wings and commissioned.

The Air Force Administrative College at Coimbatore trains officers of the ground duty branches. The Air Force Technical College at Jalahalli, near Bangalore, imparts training to engineering officers and technical airmen of certain advanced signals trades. The No. 1 Ground Training School at Jalahalli trains non-technical airmen. The No. 2 Ground Training School at Tambaram (Madras) trains technical tradesmen (airmen). The No. 3 Ground Training School at Jalahalli is intended for airmen trainees of higher signals trades.

A School of Land/Air Warfare has been set up at Secunderabad to train Army and Air Force officers in the doctrine and planning of joint operations by air and ground forces, namely close air support, air transport support and air defence. The School has been organised into three wings corresponding to these distinct categories. Likewise, instructional staff of the institution is drawn from the two Services.

The School of Aviation Medicine, set up in Bangalore in 1957, runs courses for the training of medical officers and airmen in the science of aviation medicine. It has also undertaken research in this somewhat new, though extremely fascinating, field and has already established itself as an essential link in the training and research organisation of the Air Force. Aviation medicine seeks to help in the selection of aircrew and in investigating and solving problems

associated with military aviation in general and high-speed, high-altitude jet and space flight in particular.

The I.A.F. Paratroopers' Training School at Agra, started in 1949, continues to train paratroopers for the Army, personnel for the I.A.F. Para-Medical Flights and instructors for the School itself.

### EMERGENCY MEASURES

Since the emergency, a scheme for the induction and initial training of pilots at an accelerated pace at Air Force training establishments was taken up. An Initial Training Wing was started at the Air Force Administrative College, and two new institutions were opened, one for training cadets in the flying of jet planes and the other for training in the flying of transport planes. In addition, five flying clubs have helped in the training programme by imparting elementary stage flying training.

A joint training exercise, known as 'Exercise Shiksha', with the Air Forces of U.S.A., the U.K., and Australia was held in November 1963. About 4,000 Indian officers and airmen participated in it along with about 750 personnel of the U.S.A., U.K. and Australian Air Forces. Apart from giving an opportunity for assimilation of the use of modern radar equipment under operational conditions, the exercise enabled Indian squadrons to practise alongside fighter aircraft of the three countries, and Indian personnel thus gained valuable experience in the latest techniques of air defence.

Now armed with the latest jet trans-sonic aircraft, the Air Force has made rapid headway in the sphere of technical development. It comprises a network of repair units backed by a chain of equipment and storage depots.

### AUXILIARY AIR FORCE

In pursuance of the Reserve and Auxiliary Air Forces Act of 1952, seven Auxiliary Air Force Squadrons have so far been raised at Delhi, Bombay, Calcutta, Allahabad, Madras, Bhubaneswar and Chandigarh. Similar auxiliary squadrons will be formed in other principal cities of India.

The A.A.F. is intended to assist the Regular Air Force in aerial defence and to provide air support to the Regular Army and the T.A. in an emergency. It provides part-time Air Force training to citizens and does not interfere with their normal vocational pursuits in civil life.

The various ranks in the Air Force from the top downwards are: Air Chief Marshal, Air Marshal, Air Vice-Marshal, Air Commodore, Group Captain, Wing Commander, Squadron Leader, Flight Lieutenant, Flying Officer, Pilot Officer, Master Warrant Officer, Warrant Officer, Flight Sergeant, Sergeant, Corporal, Leading Aircraftsman, Aircraftsman Class I and Aircraftsman Class II.

## INSTITUTIONS FOR THE BLIND IN INDIA

**Andhra Pradesh:** Government School for the Blind, Cuddapah; Lutheran School for the Blind, Guntur District; Government School for the Blind, Malakpet, Hyderabad; Disabled Children's School for the Blind, Amravati Road, Guntur; School for the Blind, Kottagudan; National Association for the Blind, Andhra Pradesh Branch; Andhra's Blind Model School, Rest House Road, Bhimavaram, West Guntur District; Indian Conference of Social Work Building, Red Hills, Hyderabad.

**Assam:** Blind School attached to the Sreemantha Shankar Mission, P. O. Nowgong, New Gond District.

**Bihar:** Home for the Homeless, Muzaffarpur; Maharani Adhirani Kameshwari Priya Andh Vidyalaya, Darbhanga; Netraheen Chhatra Vidyalaya, Mundichak, Bhagalpur; S.P.G.

Mission Blind School, Ranchi; Patna Blind School, P.O. Kadam Kuan, Patna; Blind Relief Society, Dhanbad; Netrabihin Kalyan Sangh and Nissahaya Balak Grih, Dayalniwas, Sinha Library Road, Patna.

**Delhi:** Blind Relief Association, Room No. 37, Theatre Communications Building, Connaught Circus, New Delhi; Blind Social Welfare Society, 96, Panchkuin Road, New Delhi; Institution for the Blind, Panchkuin Road, New Delhi; Rashtriya Virja Nand Andh Kanya Vidyalaya, New Rajinder Nagar, Shankar Road, New Delhi; National Society for the Prevention of Blindness, 11/B, Gangaram Hospital Marg, New Delhi 5.

**Gujarat:** Andh Kanya Prakash Grih (Light House for Blind Girls), Narayanapura, Ellis Bridge, Ahmedabad; Andh Mahila Vikash Grih, Gondal Road, Near Swami Narayan Gurukul,

Rajkot; Blindmen's Association Maganbha Kendra, Kameswari Poll, Ahmedabad; Krishnakumarsinhji School & Home for the Blind, Bhavnagar, Kathiawar; School for the Blind, Ellis Bridge, Ahmedabad; Govt. Blind School, Baroda; School for the Blind, Visavadar, Saurashtra; The Tata Agricultural & Rural Training Centre for the Blind, Phansa; Government School for Deaf, Mutes and Blind, Maliya Bhavan, Rajkot; The Kalpana Nursery School and Home for Deaf, Dumb and Blind Children, C/o. School for Deaf Mutes and the Blind, Navrangpura, Ahmedabad; Adult Training Centre for the Blind, Navrangpura, Ahmedabad; A. M. Andh-janshala, Race Course, Athwa Lines, Surat; The Baroda Association for the Blind, Mahajan Lane Raopura, Baroda; Dohad Andh Jan's Vidyalaya, Dohad; Meghji Pethraji Blind School, Junagadh; National Association for the Blind



(Gujarat State Branch), C/o Adult Training Centre for the Blind, Behind University Professors' Quarters, University Campus, Navrangpura, Ahmedabad 9; Shikshan Samiti, Bodehdy, P.O. Kinwat, Nadiad District; Shri Andh Sarvodaya Mandal, Gondal Road, Near Swaminarayan Gurukul, Rajkot; Shri Bharatiya Pragna Chakshu Gurukul, Porbunder.

**Jammu-Kashmir:** Residential School for the Blind, Ved Mandir, Jammu; Shri Abedananda Home for the Blind, Srinagar, Kashmir.

**Kerala:** Kerala Blind Welfare Association, Mankadapallipuram, Malappuram; School for the Blind, Kunnamkulam, Talapally, Trichur Dt.; School for the Blind, Deaf & Dumb, Trivandrum; Rotary School for the Blind, Alwaye; School for the Blind, Olessa, Kottayam; National Association for the Blind (Kerala State Branch), C/o Government Ophthalmic Hospital, Trivandrum 1.

**Madhya Pradesh:** Madhya Pradesh Welfare Association for the Blind, 83, Bozanket Market, Pandey's Building, Indore; Shri Madhav Andh Ashram, Nai Sarak, Laskar, Gwalior; School for the Blind attached to the Christian Hospital & Dispensaries, Mungeli, Bilaspur Dt.; Deaf, Dumb & Blind Vidhyalaya, Indore; Government Blind and Deaf School, Bhopal; Child Guidance Clinic & Handicapped Children's Colony, 102, Cherital, Jabalpur.

**Madras:** Blind Relief Association, 17, Gang Shala, Pondicherry; Blind Relief Association, 48, Thennamaram Street, Vellore; Government School for the Blind, Poonamallee; Government School for the Blind, Shivpet, Salem; Madras Christian College (Students Service for the Blind); Tambaram, Chingleput Dt.; School for the Blind & Deaf, Cathedral Post, Madras 6; School for the Blind, Palayamkottai, Tirunelveli 2; School for the Blind, Swedish Mission Hospital, Tirupattur, Ramanathapuram Dt.; School for the Blind, Sir T. Desikachariar Building, Puttur, Tiruchirappalli; TELC Home & School for the Blind, Moses Gnanabaraam Eye Hospital, Coimbatore-1; National Academy of Teacher of the Blind, C/o School for the Blind, Palayamkottai, Tirunelveli 2; National Association for the Blind, (Madras State Branch), 27/1-A, Mount Road, Saidapeth, Madras 15; St. Louis Institute for the Deaf and Blind, Madras 20.

**Maharashtra:** Andh Pragati Mandal, 52, B.D. D. Chawl, Worli, Bombay-18; Blind Boy's Institute, Ajini Ambajari Road, Nagpur; Blind Men's Association, 177/170, Lamington Cross Road, Bombay-7; Blind Relief Association, Congress Bhuvan, Bassein, Thana District; Blind Relief Association, 475-83, Kalbadevi Road, Bombay-2; Dadar School for the Blind, 160, Dadasaheb Phalke Road, Dadar, Bombay-14; Government School for the Blind, Nasik; Haji Allarakha Sonawala Andh & Anath Stree Ashram, 37, Gilbert Hill, Versova Road, Andheri, Bombay-58; Happy Home & School for the Blind, 52, B.D.D. Chawls, Worli, Bombay-18; Industrial Home for Blind Women, 160, Dadasaheb Phalke Road, Dadar, Bombay-14; Kishanlal Jalan Charity Trust, 339-41, Kalbadevi Road, Bombay-2; M. N. Banajee Industrial Home for the Blind, 280, Swami Vivekananda Road, Jogeshwari, Bombay-60; National Christian Council, Nagpur, Maharashtra; N.S.D. Industrial Home for the Blind, 52, B.D.D. Chawl, Worli, Bombay-18; Poona School & Home for the Blind, Koregaon Park, Poona; Poona Blind Men's Association, 82, Rasta Peth, Poona; Rambai Mukti Mission, Kedgaon, Poona District; Victoria Memorial School for the Blind, 73, Tardeo Road, Bombay 7; The Workshop for the Blind, Dr. Annie Besant Road, Worli, Bombay-18; Blind Home, Chembur, Bombay-71; Government School for the Blind, Bhandara; Industrial Institute for the Blind, Deaf & Dumb, Near Tata Parsi Girls' High School, Nagpur. School for the Blind, Deopur, Dhulia; National Association of the Instructors of the Blind, 22, Jal Bungalow, Arab Lane Corner, Grant Road, Bombay 8; School for the Blind, Bodadi, Distt. Nanded.

**Mysore:** Blind Relief Association, Bijapur; Government School for the Blind, Hubli, Dharwar District; School for the Blind, Mysore; Vocational Institute for Women at Mysore City with a Section for Blind Girls, Mysore; Divine Light School for the Blind, White Field, Bangalore; Government School for the Blind, Kasargod, South Kanara District.

**Orissa:** Red Cross School for the Blind, C/o Orissa State Council for Child Welfare, Bhuvaneswar.

**Punjab:** Bharatiya Andh Hitakarini Sabha, 2212-13, Gurudwara Building, Inside Lohgarh Gate, Amritsar; District Council for the Welfare of the Handicapped, Home for the Blind, Tulsi-ram Ashram, Ferozepore; Government Institute for the Blind, Panipat; Institute for the Blind, Andh Vidyalaya, Amritsar; S.D. Institute for the Blind, Ambala Cantt.; Soorma Singh Ashram, Amritsar; Training Centre for the Adult Blind, Sonapat; Home for the Blind, Hissar, Punjab; Central Khalsa Orphanage and Surma Singh Ashram, G. T. Road, Punjab.

**Rajasthan:** Government School for the Blind, Adarshnagar, Ajmer; Seth Anandilal Poddar Institute for the Deaf, Dumb & Blind, Jaipur; Education Department, Government of Rajasthan, Bikaner; School for the Blind, Bikaner.

**Uttar Pradesh:** Ahmedi School for the Blind, Civil Lines, Aligarh; Central Braille Press, Rajpur Road, Dehra Dun; Kashi Seva Samiti, Varanasi; Model School for Blind Children, Rajpur Road, Dehra Dun; School for the Blind (Andh Vidyalaya), 110/26, Nehru Nagar, Kanpur; School for the Blind attached to the Eye Hospital, Sitapur; Sharp Memorial School for the Blind, Rajpur Road, Dehra Dun; Training Centre for Adult Blind, Rajpur Road, Dehra Dun; Kunwarlal Singh Industrial School for the Blind, Kutcheri Road, Manipuri; Government School for the Blind, Lucknow; Allahabad School & Home for the Blind, P.O. Naini, Allahabad; Madrasa Nabeena, Nageena, Bijnor; Government School, Gorakhpur; Blind Association, 9-C, Civil Lines, Gorakhpur; Blind School, Bhadaini, Varanasi.

**West Bengal:** Blind Persons' Association, 174, Shyam Prasad Mookerjee Road, Calcutta 26; Kalimpong Home for the Blind, Kalimpong, Darjeeling District; Light House for the Blind, 174, Shyam Prasad Mookerjee Road, Calcutta 26; Ramkrishna Mission Ashram, P.O. Narendrapur, Dist. 24 Parganas; Calcutta Blind School, P.O. Behala, Calcutta-23; Association for the Prevention of Blindness, 94, Chittaranjan Avenue, Calcutta; The National Association for the Blind, 18, Netaji Subash Road, Calcutta-1.

## POSTS AND TELEGRAPHS

THE Indian Posts and Telegraphs Department comes under the administrative control of the Government of India, in the Department of Communications. The Secretary of the Department holds charge of the office of the Director-General, Posts and Telegraphs as also that of the Chairman of the Posts and Telegraphs Board. The Posts and Telegraphs Board and the Director-General, Posts and Telegraphs between them exercise all the powers of the Department of Posts and Telegraphs in administrative matters. The Department discharges also certain agency functions like the work of Post Office Savings Bank, issuing National Savings Certificates and Postal Life Insurance Policies, collection of Broadcasting Receiver Licence and antipiracy work on behalf of other Departments of the Government.

The six members of the Posts and Telegraphs Board, who are ex-officio Joint Secretaries to the Government of India, are in charge of Posts, Telecommunications Development, Banking and Insurance, Telecommunications operations, Administration and Finance.

For purposes of administration the whole country has been divided into a number of territorial and functional units. The major units are under the charge of officers in the senior administrative grade and (the minor units) under officers of junior administrative grade. There are at present 14 territorial units called P. & T. circles viz., Andhra, Assam, Bihar, Gujarat, Kerala, Madhya Pradesh, Madras, Maharashtra, Mysore, Orissa, Punjab, Rajasthan,

U.P. and West Bengal, five functional telephone units at Bombay, Bangalore, Calcutta, Hyderabad and Madras, two Telecommunication Units viz. Delhi, Jammu & Kashmir and one postal functional unit, viz. Delhi.

In addition to these, administrative units on an All-India functional basis have also been set up viz. Additional Chief Engineer, P. & T., Jabalpur; Director, Training Centre, Jabalpur; General Manager, P. & T. Workshops, Calcutta; General Manager, Electrification Circle, Calcutta; Chief Controller of Telegraph Stores, Calcutta; Deputy Director of Postal Life Insurance, Calcutta; Superintendent of Forms and Seals, Aligarh; Posts & Telegraphs Training Centre, Saharanpur. Besides, there are other regional administrative units viz. Regional Directors Telecommunications, Bombay, Madras, Calcutta; Regional Directors, R.M.S./Bombay/Madras/Lucknow, Postal Stores Depots at Calcutta/Nasik and the Postal Training Centres, Baroda and Mysore.

### Budget Estimates (1966-67).

The revised estimates for 1965-66: revenue receipts: Rs. 137.61 crores; working expenses (net): Rs. 131.41 crores; dividend to general revenues from current receipts: 6.20 crores.

1966-67 Budget: revenue receipts: 165.14 crores; working expenses (net): Rs. 145.88 crores; dividend to general revenues: Rs. 15.23 crores.

On 1st April 1965 the total capital outlay of the department stood at Rs. 243.42 crores. At the end of 1965-66 and ensuing years it was expected to be at Rs. 275.19 crores and Rs. 300.84 crores respectively.

**Staff:** 475,179 (including 176,616 extra departmental employees) and 2,686 gazetted officers (as on March 31, 1965).

**Traffic Statistics:** (1965-66 estimates): (Figures are in millions): Postal articles 6,274; Registered articles 159.1; Money orders 97.7; Savings Bank transactions 47.3; Telegrams 41.8; Trunk Calls 80.9; Value of money orders issued (in crores of rupees) 486.1; Telephones (in thousands) 871.

The no. of complaints received during 1965-66 was 723,812 and those finally disposed of were 724,116. This works out to 0.0115 per cent of the total traffic (about 6,274 millions) against 0.118 per cent in 1964.

The procedure for the licensing of Broadcast Receiver Sets has been radically revised effective from Nov. 1, 1965. The old licence in sheet form has been dispensed with.

According to the new scheme a separate licence has to be taken for every radio set without any concession for the second and subsequent sets. Issues of licences in the form of a small book which will last for the year of issue and five renewals. Renewals can be made either yearly or upto five years. A concession of Rs. 9 for renewals for five years and Rs. 3 for renewal



for 3 years respectively is allowed. Free transfer of registration will be allowed on application either at the old post office or at the office to which transfer is sought.

### POSTS

The opening of post offices in rural areas continued to be governed by the liberalised policy which came into force from 1st March 1959.

Out of the 23,000 post offices proposed to be opened during the Third Five Year Plan, 19,377 offices were opened during the first four years of the Plan period and 1,070 offices during the current financial year up to the end of December 1965, bringing the total number of new Post Offices to 20,447. Of this number 1,580 are in the urban areas and the rest in rural areas.

**Night Post Offices:**—There are 13 night post offices in the country. The names of the Night Post Offices and the circles attached to them respectively (the names of the circles being in brackets) are: Secunderabad (Andhra); Surat (Gujarat); Trivandrum (Kerala); Raipur (Madhya Pradesh); Madurai (Madras); Mysore (Mysore); Cuttack (Orissa); Chandigarh (Punjab); Ajmer (Rajasthan); Allahabad, Aminabad Park, Meerut City (Uttar Pradesh) and Siliguri (West Bengal).

Total number of letter boxes as on 1st Dec. 1964: 189,280 (rural 143,394; urban 45,886); Total number as on 1st Dec. 1965: 194,904 (rural 145,128; urban 49,776).

In India a post office covers an average area of 35.48 sq. kilometres.

**Philatelic Deposit Account Scheme:**—This scheme introduced in four philatelic bureaux viz., Bombay, Calcutta, Delhi and Madras with effect from Aug. 1, 1965 proved popular. Under this scheme philatelists open account with an initial deposit of Rs. 50.

**Mobile Post Offices:**—The urban mobile post offices at Delhi, Madras, Calcutta, Bombay and Nagpur continued to function during the year on all days including Sundays and Postal holidays. Mobile post offices for Hyderabad and Bhillai and an additional one for Delhi have also been sanctioned. A rural mobile P.O. for serving the industrial colliery belt of Hazaribagh District in Bihar State has also started functioning on an experimental basis.

**National Savings Certificates:**—With effect from 1st April 1965, 10-Year N. S. C. (first issue) of the denomination of Rs. 10, 100, and 1,000, which can be purchased by an adult or a minor or an adult on behalf of a minor or two adults jointly, have been introduced. The maximum holdings in these certificates is Rs. 25,000 for single holders and Rs. 50,000 for joint holders. On maturity after 10 years, the amounts payable on the certificates will be Rs. 18, 180 and 1,800 respectively. Interest on these certificates is liable for income-tax.

**Savings Banks:** The number of Post Offices as on Nov. 30, 1965, doing Savings Bank work, was 50,442 out of which 36,290 were Branch Offices. The limits of maximum balance for the purpose of accrual of interest were raised with effect from July 1, 1965 to Rs. 25,000 and Rs. 50,000 for individual and joint accounts respectively.

The number of Savings Bank transactions are estimated at 47.8 million for 1965-66 as against 41.6 million in 1964-65.

**Postal Life Insurance:** Total number of policies for postal life insurance accepted from April to December 1965 was 11,567 for Rs. 3,49,30,100.

**Way Pouches:** The 'Way Pouch' system, which is intended to develop local postal traffic and secure more expeditious inter-change of unregistered mails between offices lying on mail

routes, was extended to 40 more mail motor lines during 1965-66.

**Commemorative Stamps:** Occasion, date and denomination respectively are as follows:

International Co-operation Year, 26th June 1965, 0.15 P.; Indian Mt. Everest Expedition, 1965, 15th Aug. 1965, 0.15 P.; 78th Birth Anniversary of Govind Ballabh Pant, 10th Sept. 1965, 0.15 P.; 90th Birth Anniversary of Vallabhbhai Patel, 31st Oct. 1965, 0.15 P.; Birth Anniversary of Chittaranjan Das, 5th Nov. 1965, 0.15 P.; Vidyapati—celebrated poet of Mithila, 17th Nov. 1965, 0.15 P.; Jai Jawan, 26th Jan. 1966, 0.15 P.; Lal Bahadur Shastri, Republic Day 1966, 0.15 P.; Kamber—Tamil Poet Saint, 5th April 1966, 0.15 P.; 75th Birth Anniversary of Dr. Ambedkar, 14th April 1966, 0.15 P.; Babu Kunwar Singh—a hero of the 1857 War of Independence, 23rd April 1966, 0.15 P.; Birth Centenary of Gopal Krishna Gokhale, 9th May 1966, 15 P.; Acharya Mahavir Prasad Dwivedi, Hindi Writer, 15th May 1966, 0.15 P.; Dr. H. J. Bhabha, Scientist, 4th August 1966, 0.15 P.

### TELEGRAPHS

More than 4,000 telegraph offices have been opened, some even at a loss to provide telegraph facilities at district, sub-divisional and tehsil headquarters in different parts of the country. Telephone facilities are also provided at tehsil and equivalent headquarters, block headquarters, Police stations and at places with population of over 5,000. From April 1, 1965-Dec. 31, 1965, 260 offices have been provided with telegraph facilities bringing the total number of such offices to 8,555.

### TELECOMMUNICATIONS

**Departmental Telegraph Offices:** In order to ensure exclusive handling of telegraph traffic the telegraph branches of larger combined offices are being converted into Departmental Telegraph Offices. In pursuance of this policy telegraph branches of 11 combined offices have been converted into Departmental Telegraph Offices during 1965-66. The total number of such offices is 198.

**Teleprinters:** The total number of teleprinters in use as on Dec. 31, 1965 was 4,124.

**Auto-Working:** For the speedy disposal of telegraph traffic between major telegraph offices the system of advanced punching of tapes and transmitting them through auto-transmitters has been introduced on 28 circuits.

**Telex and International Telex:**—The most important development in the subscriber to subscriber transmission of printed messages was the commissioning of teleprinter exchanges at New Delhi, Bombay, Calcutta and Madras on June 24, 1963. This service has now been extended to Coimbatore, Kanpur, Ahmedabad, Bangalore, Hyderabad, Nagpur and Madurai. The department is serving 950 subscribers at the above mentioned places.

**International Telex Service from India** is available to 58 countries.

**Phonogram Service:** The total number of stations provided with phonogram service on Dec. 31, 1965 was 1,369. From April to December 1965 over 3.7 million messages were booked and 9.6 lakhs messages were conveyed to addressees on phone.

**Indian Language Telegraph Service in Devnagri Script:** This system has been introduced in 21 more offices during the year by which the total number of such offices has gone up to 2,288 on 30th December 1965.

**Greetings:** Over 2.0 million greeting telegrams in English and 13,419 in Devnagri Script were delivered in pictorial forms and envelopes during the year 1965-66.

### TELEPHONES

There has been a steady progress in the implementation of extending telephone facilities to rural and undeveloped areas.

The total number of telephones in the country as in Dec. 1965 was about 7,72,000. By the end of the Third Plan, telephone connections are expected to touch a figure of 8,61,000. As on March 31, 1966, 3,30,000 persons were waiting for telephone connections.

The total number of connections given under O.Y.T. scheme upto December 31, 1965 was 91,597 and the revenue accrued from the subscribers under the scheme was Rs. 21,89,28,083.

At present this system is in force at Ahmedabad, Amritsar, Bangalore, Bombay, Calcutta, Delhi, Hyderabad, Kanpur, Madras, Nagpur and Verawal.

**Subscriber Trunk Dialling:** In this system, a subscriber can himself directly dial the number of the distant exchange subscriber thus eliminating the need for booking and putting through of calls by operators. This facility already existed on March 31, 1965 on four routes, viz., Lucknow-Kanpur, Delhi-Agra, Delhi-Jaipur and Agra-Kanpur. S.T.D. has been commissioned in the Delhi-Patna route and Delhi-Lucknow route on July 20, 1965 and Aug. 14, 1965 respectively. In the routes of Delhi-Meerut, Delhi-Jullundur, Madras-Bangalore and Kanpur-Varanasi the above system was to be commissioned before 31st March 1966.

**Trunk Automatic Exchanges:** This system which provides facilities in connecting with different routes of S.T.D. is being installed in Bombay, Delhi, Kanpur and Madras.

**Coaxial Cables:** In order to provide a large number of high grade circuits between important cities in the country, the laying of control trunk cable was taken up in 1958.

The Bombay-New Delhi-Calcutta co-axial cable scheme, is under execution. This envisages laying of large tube co-axial cable with 2 cores for 2,960 kms., small tube co-axial cable with 2 cores for 160 kms., and paired cables for 82 kms. on the different sections of this route. This scheme would provide trunk telephonic communication connecting Calcutta, New Delhi and Bombay and other important cities on the route.

Other co-axial cable schemes taken up for execution are: New Delhi-Jullundur, New Delhi-Hapur, Bombay-Madras, Madras-Ernakulam, Ahmedabad-Rajkot, Jullundur-Amritsar.

**Microwave:** Plans have been finalised and equipment ordered for introducing microwave transmission for the first time in the public telephone network in India.

The work in respect of the Calcutta-North Bengal-Assam, Jullundur-Srinagar, Ambala-Chandigarh-Simla, Calcutta-Kharagpur and Delhi-Jaipur microwave schemes were in progress during the year 1965.

### WIRELESS

**New Wireless Links opened during 1965:**—(1) Kilar in Pangl Valley of H.P. in Aug. 1965; (2) R/T/P circuit between Delhi and Jammu, Sept. 1965; (3) Wireless station at Tuting in NEFA; (4) R/T circuit between Shillong and Tezu; (5) and temporary W/T circuit between Poonch and Jammu Tawi, Oct. 1965.

Number of wireless stations functioning in the P. & T. Deptt. at the end of 1965 was 215.

The number of wireless circuits functioning at the end of the year was: Radio Telegraph Circuits 107; Radio Teleprinter Circuits 13; Radio Telephone Circuits 19 and leased 25.

**Workshops:** The P. & T. workshops produced line and equipment stores worth Rs. 426.23 lakhs from April to Dec. 1965 against Rs. 330.80 lakhs in the corresponding period during 1964. The target for 1965-66 was Rs. 545.00 lakhs.



## SOCIAL WELFARE IN INDIA

At present there are about twenty Schools of Social Work in India, and recently they have formed an Association of Schools of Social Work. The alumni from the schools of social works have now formed a professional association namely the Indian Association of the Alumni of Schools of Social Work.

The new profession generally covers the following fields of social work: Community Welfare Services; Family, Child and Youth Welfare Service; Public Welfare Administration; Social Security Services; Services for the Mal-adjusted and Handicapped Groups; Social Defence and Correctional Administration; Services for Emergency Relief and Rehabilitation; Social Legislation and Social Action; Social Research; Training in Social Work; Tribal Welfare and Rural Welfare and Social Work Research.

The 13th biennial session of the Indian Conference of Social Work was held at Varanasi in 1964, the theme of which was "Changing Trends in Social Welfare." Besides holding conferences, it also organises national seminars. In 1964 seminars were held on "The Role of Volunteer in Social Work" in Bombay and Madras in co-operation with the Cleveland International Programme for Youth Leaders and Social Workers, Inc., U.S.A. A seminar was also held at Bhopal on "Welfare of Tribes and Denotified Communities" in 1964. In 1966 it organised a Seminar on "Vocational Rehabilitation and the Use of Normal Facilities of the Handicapped" in Co-operation with the Indian Society for Rehabilitation of the Handicapped.

Research in social welfare is becoming an important activity in the field of social work. Funds for the same are available from the Research Programmes Committee of the Planning Commission, the Dept. of Social Security and the University Grants Commission, as well as other foreign bodies such as the U.S.A.I.D. The Indian Conference of Social Work is carrying out two research projects with the financial assistance of the U.S.A.I.D., which have been approved by the Government of India.

### SOCIAL LEGISLATION

According to the present Constitution, social legislation can be formulated and implemented both by the Central and State Governments. Most social subjects are on the concurrent list, i.e. they can be legislated upon by the Central or State Governments. These subjects include: marriage and divorce, social security and social insurance, economic and social planning, welfare of labour, charities and charitable institutions, vagrancy and mental deficiency.

The Indian Conference of Social Work together with the Tata Institute of Social Sciences and Institute of Social Services and the Family Welfare Agency is promoting the Indian Adoption of Children's Bill which safeguards the rights of the adoptive parents, the child and the natural mother. It has provided for adoption in all communities and has such procedures as social investigation, probation, etc.

The Department of Social Welfare is now in charge of tribal welfare, welfare of backward classes, social security measures, chiefly relating to industrial labour as well as the implementation of old age pension schemes. It is also in charge of welfare of the handicapped, the weaker section of the society and social defence.

The States of Assam, Andhra Pradesh, Maharashtra, Gujarat, Madhya Pradesh, Punjab, Rajasthan, Uttar Pradesh and West Bengal have Departments of Social Welfare, whereas Madras possesses a Women's Welfare Department.

A scheme of family and child welfare is being organised in 2,500 blocks in close cooperation with the Community Development Department and the Central Social Welfare Board. It was proposed to set up 50 pilot projects and

training centres during 1965-66 many of which have already been set up.

The Social Defence (Care) Schemes in the Third Five Year Plan involve an outlay of Rs. 3.58 crores. It is aimed at prevention of juvenile delinquency, enforcement of suppression of Immoral Traffic in Women and Girls Act, prevention and treatment of beggary and vagrancy, welfare services in prisons and probation.

### SOME ALL-INDIA ACTS

The Special Marriage Act, 1954; The Hindu Marriage Act, 1955; The Hindu Succession Act, 1956; The Hindu Adoption and Maintenance Act, 1956; The Hindu Minority and Guardianship Act, 1956; The Mines Maternity Benefit Act, 1941; The Apprentices Act, 1950; The Children Pledging of Labour Act, 1933; The Employment of Children Act, 1938; The Reformatory Schools Act, 1897; The Lepers Act, 1898; The Indian Lunacy Act, 1912; The Untouchability Offences Act, 1955; Suppression of Immoral Traffic in Women and Girls Act, 1956; The Women's and Children's Institutions Licensing Act, 1956; The Orphanages and other Charitable Institutions Supervision and Control Act, 1960; The Probation of Offenders Act, 1958; The Union Territories Children's Act, 1960.

### Traffic in Women

The Suppression of Immoral Traffic in Women and Girls Act 1956 was implemented in most States in May 1958. It applies to the whole of India, and from the date of the coming into force of this Act, all other State Acts relating to the suppression of immoral traffic in women and girls or to the prevention of prostitution stand repealed.

From the time the Act was enforced on May 1, 1958 to March 1960 the Central Social Welfare Board set up 63 protective homes in the country.

There were no brothels in Manipur. The Laccadive, Minicoy and Amindivi Islands were also free from traffic in women and children.

The Central Social Welfare Board appointed an Advisory Committee to study the problem of social and moral hygiene in the country. Another Committee, appointed to lay down procedures for implementing the recommendations of the above Committee recommended the following pattern for setting up different types of Homes and Shelters in each State (their recommendations have been accepted):

At the State level: (i) One home for rescued women needing a fairly long period of adjustment prior to rehabilitation. (ii) Two homes for the aftercare of persons discharged from correctional institutions. (iii) Two short term rehabilitation homes for those discharged from non-correctional institutions. (iv) Strength of each Home not to exceed 100. At the District level: (i) One shelter temporarily housing persons needing aftercare (maximum period 3 months). (ii) One Reception Centre for temporary stay of women rescued from moral danger.

To meet the expenses of setting up Homes and District Units throughout the country, a total provision of Rs. 1,055 crores was made in the Second Five Year Plan.

The Association for Moral and Social Hygiene in India, which was established in the year 1928, has got fourteen State Branches with a number of Dist. Branches. (Details are given under Delhi Associations).

The Association runs a Student Counselling Centre in the University of Delhi. Centres for Family Counselling and Marriage Guidance are established in the other parts of the country. It also conducts periodical research.

The Association has its Headquarters at 6-Bhagwan Dass Road, New Delhi.

The Maharashtra Branch of the Association conducted "A Study of Prostitutes in Bombay" with reference to their family background and the report has been published under the same title based on the case histories of 350 common prostitutes. This study also gives a detailed analysis of the causes of prostitution showing that 30.50 per cent of it is due to causes of high emotional significance, 14.40 per cent due to economic causes, 28.39 per cent due to social causes, 6.78 per cent due to biological causes and 19.93 per cent due to physical causes.

### Children

Children's Acts in relation to delinquency are in force in the States of Andhra Pradesh, Gujarat, Maharashtra, Madhya Pradesh, Madras, Mysore, Punjab, Kerala, U.P., West Bengal and all Union Territories.

The Borstal Schools Acts, which are slightly different in scope, are in operation in the States of Andhra, Gujarat, Maharashtra, Madras, Mysore, Punjab, U.P., West Bengal and Kerala.

The Reformatory Schools Act of 1897 has also been enforced in all the major States and some Union Territories. But where Children's Acts are in force, the Reformatory Schools Acts are not enforced. In States where Children's Acts exist but are not enforced, the Reformatory Schools Act applies.

The problem of juvenile delinquency is mainly the concern of State Governments.

The Central Bureau of Correctional Services was established in August 1961 with the aim of developing and co-ordinating a uniform policy to standardise the collection of statistics on a national basis. It exchanges information with foreign governments and the United Nations Agencies. It promotes research, training and studies and surveys in the field of prevention and crime. The Central Government have sponsored a care programme under which assistance is given to the States. Under this programme, 40 remand homes, 17 certified schools, 5 borstal schools, 15 boys' clubs and probation hostels have been established. In addition to these, there are private institutions, as well as those existing prior to the operation of the above programme. Given below are details regarding various States:

In Andhra Pradesh there are 7 certified schools, 3 juvenile courts, and a Juvenile Aid Police Bureau of the Police Department; in Assam there is one beggars' home, in Bihar there are 7 remand homes, 2 probation hostels, 1 borstal school; in Gujarat there are 8 remand homes, 8 observation homes, 7 certified schools, 17 fit person basis institutions. There is one remand home, one certified school, one probation hostel in Delhi; one certified school, one probation hostel in Himachal Pradesh. 9 remand homes, 1 borstal school, 5 boys' clubs exist in Kerala; two remand homes, 2 certified schools, 3 probation hostels in Madhya Pradesh. In Madras one remand home, 20 State certified schools, a Juvenile Aid Police Court. In Maharashtra there are 33 certified schools, 89 fit person institutions, 24 remand homes and 21 juvenile courts. There is also a juvenile aid police unit and a certified school for mentally deficient children. In Mysore there are 18 remand homes and juvenile courts, 7 certified schools, one probation hostel. In Orissa one remand home; one certified school in Rajasthan and one certified school in Tripura.

Under the Children's Act, more children come under its purview as a result of destitution than delinquency.

A new trend in Child Welfare is the development of foster family homes, which provide homes for children in need of such home on a temporary basis. This is being promoted by the Central Social Welfare Board, through voluntary welfare agencies in Bombay and Madras. Families caring for such children are usually given a small sum for maintenance of the children.



**Beggars**

The Criminal Procedure Code treats vagrants and vagabonds alike and provides penalties under Sections 55 (i)(b) and 109(b).

Beggars may be proceeded against under Section 133 as those committing public nuisance.

Beggary within railway premises was prohibited by law as from February 15, 1941.

Special Acts have been passed by most of the States to prohibit begging in public places. In others, the municipal and police Acts provide measures against begging.

To deal effectively with persons who kidnap children for the purpose of exploiting them for begging, the Indian Penal Code (Amendment) Act, 1959, was enacted. The Act makes kidnapping or obtaining custody of a minor and the maiming of minors for the purpose of begging specific offences and provides deterrent punishment, which may extend to life imprisonment where children are maimed.

There are institutions in the States for the custody, care and assistance of beggars in their rehabilitation.

Some 26 Beggar Homes have come into existence during the Second Five Year Plan and these provide for about 25,000 beggars. 33 more homes were expected to be established before the end of the Third Plan.

**SOCIAL SERVICE AGENCIES**

The groups of voluntary social work in India largely fall under the following heads: Administrators; Professional social workers; Missionaries; The Gandhian social workers; and voluntary social workers belonging to the various private agencies.

Of these the religious believe in the traditional form of charity, the Missionaries in institutionalised social work, the Gandhian in the 14-point constructive programme.

A new experiment in Voluntary Social Work is the development of the Indian Peace Corps (Theosophy Hall, New Marine Lines, Bombay-1) on lines similar to the American Peace Corps.

The group of professionally trained social workers is small though most compact. This group consists of alumni and teachers of the following Post-graduate schools of social work in India:

The Tata Institute of Social Sciences, Sion, Trombay Road, Chembur, Bombay 71; Delhi School of Social Work, 3, University Road, Delhi 6; the Faculty of Social Work of the M. S. University of Baroda, Camp Road, Baroda; Shri Kashi Vidyapeeth, Banaras, Chavin, Banaras 2; Madras School of Social Work, 1, Jarretts Gardens (upper flat), 23-24, Casa Major Road, Egmore, Madras 8; The All India Institute of Social Welfare and Business Management, College Square West, Calcutta 7. The J. K. Institute of Sociology and Human Relations, Lucknow University, Lucknow also imparts training in social work, while the Patna University has a department to train social workers for industrial welfare work. The other institutions are: Institute of Social Service, Nirmala Niketan, New Marine Lines, Bombay 1; P. S. G. School of Social Work, Peelamedu, Coimbatore; Bombay Labour Institute, (Government of Maharashtra), Dadabhai Chamarbaugwala Road, Parel, Bombay 12; National Institute of Social Sciences, Bangalore; Udaipur School of Social Work, Udaipur; Xavier Labour Relations Institute, Jamshedpur; Department of Economics and Sociology, Andhra University, Waltair; Institute of Social Sciences, Agra University, Agra; University School of Social Sciences, Gujarat University, Ahmedabad; Department of Sociology, Labour and Social Welfare, Bihar University, Bhagalpur; Vikram University Dept. of Social Work, Indore, M.P.; Loyola College, Madras; Institute of Social Work, Bendore, Mangalore; Stella Maris College, Mysapore, Madras 2; Xavier Institute of Social Service, St. Xavier's College, Ranchi.

Schools for teaching Social Work on an undergraduate level, are slowly opening up—such as the Karve Institute of Social Services in Poona.

An association of schools of social work has been formed which is setting up criteria for accredited schools of social work. Over and above the professional schools of Social Work, there are various other training centres run by voluntary bodies for training welfare workers. Training schemes for training workers for particular programmes are also being undertaken by the Govt. in cooperation with voluntary welfare agencies.

Voluntary Social Service Agencies operating on an All-India basis are mentioned below:—

**Child Welfare**

Balkan-ji-Bari (Juhu Road, Santa Cruz (West), Bombay 54, AS); Society for the Protection of Children in India (2-B, Camac Street, Calcutta); Indian Council for Child Welfare, Room 14-15, Block 'A', 'B' Barracks, Queensway, New Delhi; Indian Council for Child Education (Sumanas, 39, Edward Elliotts Road, Madras 4).

**Youth Welfare**

Y.M.C.A. (5, Russel Street, Calcutta 16); Y.W.C.A. (Parliament Road, New Delhi); Bharat Scouts and Guides Association (Regal Building, Parliament Street, New Delhi); Bharat Sevak Samaj (27-A, Theatre Communication Buildings, Connaught Place, New Delhi); Y.M.C.A., New Delhi; Youth Welfare Association (193-E, Devnagar, New Delhi); Poor Welfare Association (29/24, Shakti Nagar, Delhi 6); 'Gyan Prakash Yuvak Sangh' (653, Chuna Kankar, Mathura, U.P.); Youth Hostels Association (2, East Park Road, New Delhi 5); Social Service League (Indraprastha College, Alipur Road, Delhi); All India Boys Scouts Association (7, Jungpura—B—Mathura Road, New Delhi 14).

**Women's and Family Welfare**

All India Women's Conference (C/o Family Planning Association of India, Metropolitan House, Dadabhoy Naoroji Road, Bombay 1); Family Planning Association of India (Metropolitan House, Dadabhoy Naoroji Road, Bombay 1); National Council of Women in India (Town Hall, Bombay 1); Kasturba Gandhi National Memorial Trust (Kasturba Gram, P.O. Indore, Madhya Pradesh).

**Health**

Tuberculosis Association of India (20, Red Cross Road, New Delhi 2); Indian Red Cross Society (20, Red Cross Road, New Delhi 2); All India Cancer Prevention Society (Tata Memorial Hospital, Parel, Bombay 12); Hind Kusht Niwaran Sangh (Red Cross Road, New Delhi); Akhil Bharat Shririk Sikshan Mahamandal (Tilak Road, Nagpur, Maharashtra).

Indian Medical Association, Hanging Bridge, Daryaganj, Delhi 7.

**Rehabilitation of the Handicapped**

Convention of the Teachers of the Deaf in India (50, Bondel Road, Ballygunj, Calcutta); All India Lighthouse for the Blind (89, Elliot Road, Calcutta); National Association for the Blind (Jehangir Wadia Building, Mahatma Gandhi Road, Bombay 1); All India Blind Relief Society (11-F, Lajpatnagar, New Delhi); The Fellowship of the Physically Handicapped, Hornby Vellard, Haji Ali Park, Bombay-34; Society for the Education of the Crippled (Child and Adult) (Chunilal Mehta Hut, Mahatma Gandhi Road, Bombay 1); The Indian Council for Mental Hygiene (Cumbatta Chambers, Eros Building, 42, Queen's Road, Bombay).

**Rural Welfare**

Sarva Sewa Sangh (K33-4 Golghar, Varanasi, U.P.); India Village Service (I.V.S. House, Marhera, Dist. Etah, U.P.).

**General Social Welfare**

Servants of India Society (Poona 4); Ramkrishna Mission (Belur, Dist. Howrah); Gandhi Memorial Fund (5, Mansingh Road, New Delhi);

Salvation Army (Moreland Road, Bombay 8); Friends' Service Unit (1, Upperwood Street, Calcutta 16); All India Seva Samiti (Seva Samiti Building, Allahabad); Indian Co-operative Union Ltd. (Janpath, New Delhi); Bharat Sevak Samaj (27A, Theatre Communication Building, Connaught Place, New Delhi).

**Rural Women's Welfare**

Kasturba Gandhi National Memorial Trust (Kasturbagram, Indore, Madhya Pradesh); Bharatiya Grameen Mahila Sangh (9/104 Jamnabar Hutments, Block II, Mansingh Road, New Delhi-11).

**Relief and Rehabilitation**

United Council of Relief and Welfare (Rashtrapati Bhavan, New Delhi).

**Social Education**

Indian Adult Education Association (17-B, Indraprastha Marg, New Delhi); Jamia Milia (Okhla, Delhi); Literacy House (Lucknow); All India Mass Education Society (Gonda).

**Welfare of Under-Privileged Groups**

Harijan Sewak Sangh (Kingsway, Delhi); Bhartiya Adimjati Sevak Sangh (Kingsway, Delhi 9).

**Social Defence**

All India Crime Prevention Society (Behari Niwas, Kanpur, U.P.); Association for Moral and Social Hygiene in India (Room No. 211, 'P' Block, Raisina Road, New Delhi).

**Co-ordination**

The national organization for the co-ordination of all welfare services is the Indian Conference of Social Work located at 42, Queen's Barracks, Foreshore Road, Bombay 1.

There is also a South-East Asia and Western Pacific Regional Office of the International Conference of Social Work which has been established in conjunction with the Indian Conference of Social Work in Bombay.

**International Welfare Agencies in India**

The following are some of the International agencies and organisations working in the country: International Conference of Social Work (Regional Office for South-East Asia and Western Pacific, 42, Queen's Barracks, Foreshore Road, Bombay 1); Asia Foundation (Post Box 149, New Delhi); Ford Foundation (32, Ferozshah Road, New Delhi); World Health Organisation (S.E.A. Office, Patiala House, Harding Avenue, New Delhi); Rockefeller Foundation (20/39, Diplomatic Enclave, Kautilya Marg, New Delhi); International Labour Organisation, Indian Branch (Mandi House, New Delhi); International Union for Child Welfare (Consultant for Far East Asia, Rooms Nos. 14 & 15, Block A, Barracks B, Queensway, New Delhi); United Nations International Children's Emergency Fund (UNICEF House, 11, Jor Bagh, Delhi); United Nations Educational, Scientific and Cultural Organisation (Old Mill Road, New Delhi); Food and Agricultural Organisation, UNO (21, Curzon Road, New Delhi); Cleveland International Programme for Youth Leaders and Social Workers Inc. (12, Hailey Road, New Delhi); The American Peace Corps in Delhi (61, Sundar Nagar, New Delhi-11).

**Bhoodan Movement**

Special mention must be made of the Bhoodan Movement initiated by Acharya Vinoba Bhave, one of the ablest disciples of Gandhiji. He is effecting a silent but nevertheless remarkable social revolution within the country by the voluntary gift of land (Bhoodan), wealth (Sam-pattidan), labour (Shramdan) and life (Jeevan-dan).

**CENTRAL SOCIAL WELFARE BOARD**

The Central Social Welfare Board was set up in August 1953. Its functions as defined in the resolution of Government of India setting up the Board, are to survey the needs and requirements



of social welfare organisations, evaluate their programmes and objectives, coordinate the assistance given by various Central Ministries and Departments and State Departments, promote the development of voluntary organisations in the areas where no such organisations exist, and to render financial assistance to deserving agencies. The Chairman of the Board is Smt. Achamma J. Matthal and Secretary is Shri K. Nath.

At the State level, there are 24 State Social Welfare Advisory Boards. These State Boards advise and assist the Central Board in the formulation of its policies and interpretation of its programmes to voluntary organisations. The Chairmen of State Boards are experienced social workers.

### PROGRAMMES

**General - Grants - In - Aid Programmes:** From its inception upto the end of March 1966, the Board had sanctioned nearly 25,300 grants amounting to about Rs. 6.16 crores under its general-grants-in-aid programme. These grants cover services for children, women and the handicapped groups of persons.

**Welfare Extension Projects (Rural):** At the end of Third Five Year Plan 264 such projects with 2,342 centres were functioning. In addition 624 voluntary organisations or newly formed Mahila Mandals were conducting the activities of 1,629 centres for which grants amounting Rs. 142.50 lakhs had been given. Mahila Mandals and local voluntary organisations are running 1,638 centres in these areas.

**Welfare Extension Projects (Urban):** The activities undertaken in these projects provide community welfare centres, creches, balwadis, anti-natal and post-natal advisory services, welfare health centres, hobby clubs, vocational guidance, and other services. By the end of March 1966, 65 such projects were functioning in 16 States for which the Board had provided assistance of Rs. 37.61 lakhs.

**Socio-Economic Programme:** Under this scheme, grants are given to voluntary welfare institutions for setting up production units of small industries, units as ancillary to large industries, handloom training-cum-production units, handicrafts training, procurement and production units, coir spinning and weaving

units, and silk spinning and reeling units. The Board has so far sanctioned 90 units, out of which 58 have started functioning and are providing work and wages to about 2,200 needy women and handicapped persons.

**Condensed Courses of Education For Adult Women:** Under this programme adult women of the lower income group are prepared for middle school or matriculation examinations in condensed courses of two years duration. Upto the end of March 1966, the Board sanctioned 825 courses in different parts of the country. A Secretariat Course has been sanctioned for Kerala to meet their special need of training educated women for secretariat jobs.

**Holiday Homes:** This scheme enables children of low income groups to be taken to holiday camps at hill stations or other summer or sea resorts, outside their home towns, during vacations, free of cost. Till now nearly 677 camps benefitting over 33,000 children have been organised with assistance totalling Rs. 23.94 lakhs sanctioned by the Board.

**Night Shelters:** Twenty-two night shelters were running at the end of March 1966 and they have been given assistance by the Board amounting to Rs. 0.26 lakhs. The implementation of this programme has been entrusted to the Bharat Sevak Samaj, with grants from the Board, according to a schematic budget. Through this scheme the Board provides shelter to the pavement dwellers in cities and towns.

**Border Area Programmes:** The Chinese Aggression of 1962, highlighted the need for welfare services in areas bordering China, Tibet and Pakistan. As a first step towards organising welfare services, a State Social Welfare Advisory Board was formed in NEFA. 12 multipurpose centres providing maternity and child welfare services, balwadis, craft classes, social education for women etc. had been sanctioned in 1962 in NEFA, three centres in Ladakh, eight centres in Lahaul and five centres in Kinnaur (H.P.). These were continued and, in addition, fifteen Welfare Extension Projects in the districts of Chamoli, Pithagarh and Uttar Kashi in Uttar Pradesh and 20 centres in Kutch and Banaskanta districts of Gujarat were started during 1965-66. Grants for organising welfare camps for women in West Bengal, five in Tripura and ten in Gujarat were also sanctioned.

A comprehensive scheme for intensifying welfare services in all border districts has been prepared and is proposed to be launched in the Fourth Five Year Plan.

**Special Child Welfare Programmes:** Demonstration projects of integrated child welfare services for meeting the total needs of children in the age group 0-6 have been set up during the Third Plan. Over 424 balwadis have been set up in 13 projects. The other special child welfare schemes which the Board took up during the Third Plan include training courses for Balsevikas (Child Welfare Workers) required for Child Welfare Services. Six Balsevikas Training Centres offering a two year course have been started in the States of Andhra Pradesh, Assam, Gujarat, Madhya Pradesh, Mysore and Orissa. Nine integrated pre-school projects have been started in the States of Assam, Gujarat, Kerala, Madras, Punjab, Rajasthan, Uttar Pradesh, West Bengal and Delhi. A foster care service unit was started at Bombay. Other programmes taken up in hand are production of pictorial literature for children of the pre-school age; standardisation of educational and recreational equipment and material for pre-schools, starting of integrated pre-school projects in urban areas; preparation of guidance material to child welfare workers; adoption of financial assistance to Indian children by foreign nationals; Channelising the milk feeding programmes for Balwadi Children and study and evaluation of social welfare projects and activities.

**Evaluation of Programmes:** The main purpose of the scheme is to maintain up-to-date information about the changing needs in the field of social welfare, evaluate the effectiveness of current programmes—and pin-point their deficiency—if any, with a view to initiating remedial action.

**Publicity:** The Board brings out two monthly journals "Social Welfare" in English and "Samaj Kalyan" in Hindi. Some of the State Boards also bring out bulletins in regional languages. Documentaries, through the Films Division of the Government of India, are also produced by the Board.

**Encyclopaedia of Social Work in India:** The manuscript of the publication is in the press. The publication is expected to be released in early 1967.

\* See main article "Bhoodan" for statistical information.

## A TOURIST'S GUIDE\*

*For all information and assistance, visitors are advised to contact the Government of India tourist offices in India. The representatives of the Tourist Department are stationed on duty at the airport and in the case of Bombay a representative of the Tourist Office always meets all important passenger liners.*

In the second half of the article we give a list of places which have come into prominence through post-independence development activity—mostly connected with the Five Year Plans.

**THE** following hints meant for foreign tourists may be useful:

1. Every foreign tourist entering India should be in possession of a valid passport issued by his Government.

He should also obtain before leaving his country a tourist visa from the Indian representative abroad (or the British representative in countries where there are no Indian representatives). Commonwealth citizens (except those of Pakistan and Ceylon) are exempt from the visa requirement, provided their passports are valid for travel to India. Persons of non-Indian origin domiciled in South Africa are, however, required to obtain visas for India.

Transit visas are not required for through air/ship passengers in direct transit by the same flight or by the next regularly scheduled flight irrespective of whether the flight is of the same or a different Airline, provided the period does not exceed 72 hours and they leave from the same place. One can however leave the airport

or ship by obtaining a landing permit for 72 hours on depositing his passport.

The normal period of stay cannot be stated. It depends upon the stay period granted by the visa issuing authority.

Normal period of stay on transit visa is 15 days.

No hard and fast rule can be laid down as regards the extension of visas. It will depend on the merits of each case. However, genuine tourists can stay for a maximum period of six months.

For short visits not exceeding 2 weeks to Pakistan, Nepal, Ceylon and Burma tourists may obtain return visas from the Deputy Commissioner of Police, Special Branch II, C.I.D., Head Police Office, Annexe-2, Crawford Market, Bombay or from State Governments. For visits exceeding 2 weeks, they may apply for 'no objection' to return to India endorsements to the Deputy Commissioner of Police, Special Branch II, C.I.D., Bombay or State

Government. However in such cases they will have to obtain visas from the Indian authorities abroad before entering India.

2. No registration is required for foreigners staying in India for 90 days or less provided they have come on visas of 3 months or less. If they land in India with visas for more than 3 months' stay, then they must report for registration within 7 days to the Registration Officer of their destination and present the "B" Form (temporary registration certificate) issued to them at the place of entry.

Commonwealth citizens are exempt from registration formalities.

Return visa or double/triple entry visa holders would be required to get themselves registered after 30 days of their actual stay in India and not after 30 days of their first entry into India.

**Departures:** Tourists, if they are registered, are exempted from reporting their movements and also from taking departure endorsements from the Registration Officer with whom they are registered.

\* NOTE: When the population of a town is not given it may be generally assumed that it is less than 20,000.



It should be brought to the notice of tourists to surrender their registration papers at the time of their departure, as it is found that tourists or others who get themselves registered before the expiry of 30 days and leave India also before completion of 30 days, carry registration papers with them.

**For holders of Entry Visas:** Visitors holding registration certificates have to obtain before departure exit endorsements from the Registration Offices of the District in which they are initially registered.

3. The Government of India have placed no health restrictions on persons entering India by sea or air, except in regard to yellow fever.

However, all persons are advised, in their own interest, to be protected against small-pox and cholera according to international requirements.

Citizens of the U.K., Australia, Canada, New Zealand, Federation of Rhodesia and Nyasaland, Singapore, Malaya, Ghana and Ireland (Eire), excluding missionaries, and nationals of Nepal, wishing to proceed to India from a place other than Nepal, are required to possess valid passports without visas.

Nepalese and Bhutanese when proceeding from their respective countries by the inland route, require no passport or visa. Inhabitants of the border districts of Tibet Region of China require passports and visas.

Nationals of Commonwealth countries (except Pakistan and Ceylon) and of the Republic of Ireland wishing to proceed to India for missionary work require special endorsements.

Nationals of all other countries require valid passports with visas. No visa is required for visitors in direct transit by air or sea within 72 hours from the same port.

Individuals without nationality or of undetermined nationality (Stateless persons, IRO refugees, persons receiving legal and political protection, holders of Nansen passports, etc.) should have valid identity documents or sworn affidavits with visas.

Diplomats when travelling as tourists receive the same facilities as their countrymen.

Collective passports and family passports issued by other Governments are recognised by the Government of India. However, if any person other than parents is an adult e.g. if he has attained the age of 16, a separate visa is necessary in addition to the one for the rest.

Tourist visas are generally valid for a single journey only, but visitors who wish to proceed on short trips to other countries and return to India within the period of validity of the Indian visa, should apply for double or triple entry visas or entry-cum-transit/transit-cum-entry visas. If a visitor coming on short term visas wishes to extend his stay in India, he can, after arrival in India, apply for further extension of stay.

Foreigners who come on visits not exceeding three months for recreational or sightseeing purposes or for attending meetings convened by the Government of India or international bodies should, in their own interest, apply for tourist visas and not entry visas. Holders of tourist visas are entitled to the grant of Tourist Introduction Cards and All-India liquor permits, reservation of accommodation in Government-owned Rest Houses and Retiring Rooms at railway stations, etc.

Foreigners who wish to break journey in India for short periods while in transit, should apply for transit visas which are issued for a maximum period of 15 days and entitle the holder to travel from the port of entry to the port of departure by a prescribed route which is not necessarily the shortest one.

Visitors holding tourist visas are advised to obtain from the visa issuing authority a printed Tourist Introduction Card. In case a bona fide tourist has not already obtained a Tourist Introduction Card from the visa issuing authority, he can obtain one from one of the Government of India Tourist Offices in India or over-

This card introduces the tourist to various Governmental authorities in India and will enable him to receive all possible assistance from them in matters concerning immigration, customs, clearance, air and rail reservations, liquor permits and reservation of accommodation in rest houses, dak bungalows and retiring rooms in railway stations.

4. All baggage is subject to customs examination. Articles of high value e.g. radios, cameras, binoculars, type-writers, transistors, etc. are exempted from duty provided they are entered in the re-export declaration form and re-exported within 6 months.

Certain personal effects are allowed to enter free. Also alcoholic liquor up to one quart of spirits or wine, provided the tourist can procure a permit on arrival by producing his Tourist Introduction Card. Liquor permits are issued to tourists at the Santa Cruz Airport, Bombay and at Ballard Pier, on application, immediately on landing. Failing this, the permit may be obtained from the Foreign Liquor Permit Office, Old Customs House, Mint Road, Fort or from the excise official at the following hotels: Taj Mahal, Greens, Ambassador, Grand, West End, Ritz, Airlines, Nataraj, Shalimar and Sun-n-Sand.

5. Tourists are allowed to bring into India foreign currency notes or coins subject to declaration:

There is no limit on the amount of Travellers' Cheques. Import and export of Indian currency are banned.

The official rates of exchange are as follows: £1 equal to Rs. 21-00; U.S. \$1 equal to Rs. 7-50. The actual buying and selling rates, however, differ slightly from these rates.

Foreign currency can be exchanged at any authorized dealer or money changer.

6. If the tourist expects any baggage to follow or his baggage has already arrived, he should obtain a "LANDING CERTIFICATE" from the Customs official on arrival, failing which all his un-accompanied baggage would be liable to import duty.

#### Additional concessions for tourists:

**Liquor Permits:**—Bona fide tourists having tourist visas/Tourist Introduction Cards can obtain All-India liquor permits valid for three months from Indian Missions abroad or from the Tourist Offices of the Government of India at Delhi, Bombay, Madras and Calcutta if they have not already an All-India Liquor Permit from Indian Missions abroad. The Government of India Tourist Office at Bombay is at 123, Queen's Road, Churchgate, Bombay-1.

**Sporting Fire-arms:**—Not more than three sporting fire-arms brought in by a tourist are allowed free of duty. These must, however, be re-exported within a period of six months.

**Cartridges:**—100 cartridges are allowed duty-free under the normal rules. Each tourist is allowed to bring in 300 cartridges, on payment of customs duty, but without an Import Trade Control Licence.

**Film:**—A tourist is allowed to import 25 rolls of film for still cameras and 8 reels of substandard movie films duty free under the normal rules. Besides he can import any number of rolls of films without limit in quantity for still cameras after paying full customs duty without a licence. The quantity in excess of the duty free limit is subject to being entered on the Re-Export Form.

On production of a certificate from an authorised officer of the Tourist Department of the Government of India, foreign tourists are allowed a concession of 15 per cent on the basic air-conditioned first class fares and 'Travel As You Like' ticket on the Indian Railways, available for 30 days in an air-conditioned class of accommodation and in first class where air-conditioned accommodation was not available at a lump sum rate of Rs. 560.

## TRAVEL AGENCIES

List of Travel Agencies Approved by the Government of India with their telegraphic addresses within inverted commas:

**Ahmedabad:** Lee & Muirhead (India) Pvt. Ltd., Kothari Mansion, Belief Road, Ahmedabad. (Branch): "LEMUIR".

**Bangalore:** Bharat Travel Service (P) Ltd., D-9, 5th Main Road, Ganjhinagar, Bangalore-9. (Branch): "EXCURSION", Ram Mohan & Co., Chamber of Commerce Building, Kempe Gowda Road, Bangalore-9. (Branch): "GACANPAC"; Thos. Cook & Son Ltd., 200, Mahatma Gandhi Road, Bangalore. (Branch): "COUPON"; Trade-Wings (P) Ltd., 15, St. Mark's Road, Bangalore. (Branch): "TRAVEL".

**Bombay:** American Express Co., Inc., Oriental Building, 364, Dr. Dadabhai Naoroji Road, P.B. No. 507, Bombay-1. (Head Qtrs.): "AMEXCO"; Asiatic Travel Service, Post Box No. 1568, 12, Murzban Road, Fort, Bombay-16. (Head Qtrs.): "AIRASIA"; Balmer Lawrie & Co. Ltd., 5, Graham Road, Ballard Estate, Bombay-1. (Branch): "BALMER"; Cox & Kings (Agents) Ltd., Lloyds Bank Building, Dadabhai Naoroji Road, P.B. No. 398, Bombay-1. (Head Qtrs.): "COXSHIP"; Everett Travel Service, 221, Dadabhai Naoroji Road, Post Box No. 523, Bombay-1. (Branch): "TRAVERETT"; Hind Musafir Agency (P) Ltd., Khorshed Building, Sir P. M. Road, Bombay-1. (Head Qtrs.): "PRAVASI"; Ind-travels (Travel Division of Airfreight (P) Ltd., Neville House, Nicol Road, Ballard Estate, Bombay. (Head Qtrs.): "AIR-FREIGHT"; Jeena & Company, Post Box No. 849, 10, Veer Nariman Road, Fort, Bombay-1. "JUSTITIA"; Lee & Muirhead (India) Pvt. Ltd., 12, Rampart Row, Fort, Bombay-1. (Head Qtrs.): "LEMUIR"; Mercury Travels (India) Pvt. Ltd., 70, Forbes Street, Fort, Bombay-1. (Branch): "MERCOTRAVEL"; N. Jamnadas & Co., Travel Agents, 16, Bank Street, Fort, Bombay. (Head Qtrs.): "ENJAYTOURS"; Orient Express Co. (Private) Ltd., Petit Building, 359, Dadabhai Naoroji Road, Bombay-1. (Branch): "OREXPRESOCO"; Thos. Cook & Son (Continental & Overseas) Ltd., P.B. No. 46, Cooks Building, Dadabhai Naoroji Road, Bombay-1. (Head Qtrs.): "COUPON"; Trade Wings (Private) Ltd., 30/32, Rampart Row, Fort, Bombay-1. (Head Qtrs.): "TRAVEL"; Travel Corporation (India) Pvt. Ltd., Queen's Hotel, Apollo Bunder, Bombay-1. (Head Qtrs.): "TURING"; Vensimal Bassarmal & Bros., 521, Kalbadevi Road, P.B. No. 2112, Bombay-2. (Head Qtrs.): "VENSIMAL"; Freight Carriers (P) Ltd., 43, Tamarind Lane, Fort, Bombay-1 (BR). (Head Qtrs.): "QUICKFREIT"; Sita World Travel India Private Ltd., Airlines Hotel, Bombay-1.

**Calcutta:** American Express Co., Inc., P.B. No. 2311, 21, Old Court House Street, Calcutta. (Branch): "AMEXCO"; Balmer Lawrie & Co. Ltd., 21, Netaji Subhash Road, P.B. No. 4, Calcutta-1. (Head Qtrs.): "BALMER"; Everett Travel Service, 1, Old Court House Street, Calcutta-1. (Head Qtrs.): "TRAVERETT"; Indian Air Travels Ltd., 22, Chittaranjan Avenue, Calcutta. (Head Qtrs.): "SKYMASTER"; Jeena & Company, 25, Netaji Subhash Road, Calcutta-1. (Branch): "TRAVELJENA"; Mercury Travels (India) Pvt. Ltd., Oberoi Grand Hotel, Calcutta. (Head Qtrs.): "MERCOTRAVEL"; N. Jamnadas & Co., 61, Lyons Range, Calcutta-1. (Branch): "ENJAYTOURS"; National Travel Agency, 3, Wellesley Place (Dalhousie Square), Calcutta-1. (Head Qtrs.): "SENOSEN"; Orient Express Co. (P) Ltd., Norton Building, 1 & 2, Old Court House Corner, Calcutta. (Branch): "OREXPRESOCO"; Sita World Travel (India) Private Ltd., 24-B, Theatre Road, Calcutta. (Branch): "SITATRAVEL"; Trade Wings (Calcutta) Pvt. Ltd., 15, Old Court House Street, Calcutta-1. (Head Qtrs.): "TRAVELLING"; Travel Corporation (India) Pvt. Ltd., Great Eastern Hotel, Calcutta. (Branch): "TRAVELAIDS"; Vensimal Bassarmal & Bros., 9, Pagiya Pally, Burra Bazar,



Calcutta. (Branch): "VENSIMAL"; Speedways International, 8, Chowringhee Square, Calcutta-13. (Head Qtrs.): "SKYINT".

**Cochin:** Harrison & Crossfields Ltd., Post Box No. 4, Cochin-1 (Head Qtrs.): "CROSFIELD".

**Dehra Dun:** A. S. Chugh & Co., 6, Astley Hall, Dehra Dun (U.P.). (Head Qtrs.): "CHUGH".

**Delhi:** American Express Co., Inc., Hamilton House, A-Block, Connaught Place, New Delhi-1. (Branch): "AMEXCO"; Ambassador Travels Private Ltd., 60, Regal Building, New Delhi-1. (Head Qtrs.): "AMBTREVEL"; Asiatic Travel Service, 1/90, Connaught Place, New Delhi-1. (Branch): "AIRASIA"; Cox & Kings (Agents) Ltd., Indra Palace, Connaught Circus, P.B. No. 134, New Delhi-1. (Branch): "COXSHIP"; Everett Travel Service, Prem House, C-Block, Connaught Place, New Delhi-1. (Branch): "TRAVERETT"; Hind Musafir Agency (P) Ltd., 2, Scindia House, Janpath, New Delhi-1. (Branch): "PRAVASI"; Iyer & Son (P) Ltd., United India Life Building, F-Block, Connaught Place, New Delhi-1. (Head Qtrs.): "TYRANSON"; Jeena & Co., 'Jeena House', 50, Hanuman Road, Connaught Place, New Delhi-1. (Branch): "TRAVELJENA"; Mercury Travels (India) Pvt. Ltd., Hotel Imperial, Janpath, New Delhi. (Branch): "MERC-TRAVEL"; N. Jannadas & Co., Hotel Metro, Janpath, New Delhi. (Branch): "ENJAY-TOURS"; Orient Express Co. (P) Ltd., 70, Janpath, New Delhi. (Head Qtrs.): "OREXPRESO"; Saha & Rai Travels Ltd., A-4/7, Connaught Place, Central Ring, New Delhi-1. (Head Qtrs.): "TWAGENT"; Sita World Travels (India) Pvt. Ltd., Hotel Imperial, Janpath, New Delhi. (Head Qtrs.): "SITA-TRAVEL"; Trade Wings (P) Ltd., 60, Janpath, New Delhi. (Branch): "TRAVIT"; Travel Corporation (India) Pvt. Ltd., C-35, Connaught Place, New Delhi-1. (Branch): "TRAVELAIDS".

**Hyderabad:** Canara Bank Ltd., Abid Road, Hyderabad. (Head Qtrs.): "AMBID-BANK"; Princely Travel India, No. 4 & 5, Green Gates, Secretariat Road, Saifabad, Hyderabad-22 (A.P.). (Head Qtrs.): "PROMOTERS"; Trade Wings (P) Ltd., Post Box 475, Abid Road, Hyderabad. (Branch): "TRAVEL".

**Madras:** Asian Travel (India) Pvt. Ltd., 1, Patullos Road, Mount Road, Madras-2 (Head Qtrs.): "WORLDTRAVEL"; Bharat Travel Service (P) Ltd., 310/311, Linghi Chetty Street, P.B. No. 210, Madras-1 (Head Qtrs.): "EXCURSION"; M. H. Taxis, Connemara Hotel, Madras-2 (Head Qtrs.): "TAXICABS"; Mercury Travels (India) Pvt. Ltd., Hotel Ashoka, Pantheon Road, Egmore, Madras-8 (Branch): "MERCOTRAVEL"; Ram Mohan & Co. Pvt. Ltd., 302, Netaji Subhash Road, P.B. No. 1723, Madras (Head Qtrs.): "GACANPAC"; Thos. Cook & Son (Continental & Overseas), 4/5, First Line Beach, Madras-1 (Branch): "COUPON"; Trade-Wings (P) Ltd., Purushottam Buildings, 193, Mount Road, Madras (Branch): "TRAVEL-AGES"; Orient Express Co. Private Ltd., 35, Mount Road, Madras (Branch): "OREXPRESO".

**Poona:** Trade Wings (P) Ltd., 321, Mahatma Gandhi Road, Poona (Branch): "TRADEWINGS".

**Srinagar:** Mercury Travel (India) Pvt. Ltd., Oberoi Palace Hotel, Srinagar (Branch): "MERCOTRAVEL"; Travel Corporation (India) Pvt. Ltd., Kaul Building, Hotel Road, Srinagar (Branch): "TRAVELAIDS".

**Trivandrum:** Kerala Travels, Mascot Hotel, Trivandrum-1 (Head Qtrs.): "WEL-COME".

### SHIKAR OUTFITTERS

The following is a list of recognised shikar outfitters: Indian Shikar & Tours (P) Ltd., Jumna Bhawan, 3/14A, Asaf Ali Road, New

Delhi; Allwyn Cooper (P) Ltd., Wardha Road, Nagpur; Asaf Ali of Porla, Porla, Distt. Chanda, Maharashtra; Jungleways, Prop.: Lt.-Col. S. A. H. Granville, Pachmarhi, M.P.; Tiger Camps (P) Ltd., Dumri, P.O. Sardarnagar, Distt. Gorakhpur, U.P.; Tiger Shikars, Dr. Franklyn Woods, 49, Danning Road, Jabalpur, M.P.; Big & Small Game Hunting, Prop.: Thakur Dharamchandra, Kesaragarh Castle, Jaipur, Rajasthan; Safaris India, Prop.: P. M. Dinshaw, 102, Simrole Road, Mhow; Shikarees, Prop.: Nawabzada M. F. Khan, Bashirbagh Palace, Hyderabad; P. C. Dhir Birbar, Prop.: Shikar India, Talcher, Dhenkanal, Orissa; Hunters & Hunters, 212, Olympus Apartments, Altamont Road, Bombay-26; Rao Naidu Shikars, Tara Villa, Bezonbagh, Nagpur 4; Rajput Hunters, Kishangarh, Rajasthan; Tiger Sports, Bhadri House, 5, Shahnajal Road, Lucknow; A. Imam, "The Grove", P.O. Hazaribagh, Bihar; Kumaon & Hunters Pvt. Ltd., Tajpur Estate Farms, P.O. Afzalgarh, Dist. Bijnor, U.P.

### TOURIST OFFICES

The following is a list of Government of India tourist offices in India and abroad:

Director, Govt. of India Tourist Office, 123, Queen's Road, Bombay-1.

Director, Govt. of India Tourist Office, 88, Janpath, New Delhi.

Director, Govt. of India Tourist Office, 13, Old Court House Street, Calcutta.

Director, Govt. of India Tourist Office, 35, Mount Road, Madras.

Manager, Govt. of India Tourist Office, Krishna Vilas, Station Road, Aurangabad.

Manager, Govt. of India Tourist Office, The Mall, Agra.

Manager, Govt. of India Tourist Office, 15-B, The Mall, Banaras.

Manager, Govt. of India Tourist Office, Willingdon Island, Cochin-3.

Manager, Govt. of India Tourist Office, Rajasthan State Hotel, Jaipur.

Director, Govt. of India Tourist Office, 19 East 49th Street, New York 17, N.Y.

Director, Govt. of India Tourist Office, 685, Market Street, San Francisco 5, California.

Director, Govt. of India Tourist Office, Indisches Verkehrsburo, Baseler Stress, 46, Baseler Houschous, Frankfurt/Main, W. Germany.

Director, Govt. of India Tourist Office, Leonard House, 46, Elizabeth Street, Melbourne (Australia).

Director, Govt. of India Tourist Office, 8, Boulevard, de la Madeleine, Paris-9.

Information Assistant, Govt. of India Tourist Office, Railway Station, Jaigaon.

Director, Govt. of India Tourist Office, 177-79, King Street (West), at University, Toronto, Canada.

Govt. of India Tourist Office, No. 1, Ginza, 7 Chome, Chuo-Ku, Tokyo (Japan).

Govt. of India Tourist Office, Palmer House, Room Nos. 684-685, Chicago (U.S.A.).

Note: Most of the State Governments have Tourist Offices at the important centres.

### TOURIST CENTRES

**Mount Abu** (hill station): Pop. 8,076 (1961) in Rajasthan, about 4,000 feet above sea-level. *Places worth a visit:* 1. the Dilwara Jain temples (11th-13th century, A.D.) containing the finest marble carvings in India, 2. Achalgarh temples (15th-16th century, A.D.) and Mandakini Kund, 3. Ruins of an ancient town called Chandravati, 4. Nakki Talao (lake), 5. Arbuda Devi, a shrine cut in rock, 6. Guru Shikhar (5,646 ft.), highest point in Abu, 7. Sunset point, 8. Palanpur point, 9. Gaumukh Temple and Agni Kund, 10. the

Municipal Park. Mount Abu is reached by railway and road.

**Agra:** Pop. 5,08,680 (1961), a city in U.P., stands on the banks of the Jamuna. It was the capital of the Moghul Empire. *Places worth a visit:* 1. the Taj Mahal, regarded by many as the most beautiful building in the world, 2. the Fort, 3. the Juma Masjid, 4. Moti Masjid, 5. the tomb of Itmad-ud-Daula, 6. Akbar's tomb at Sikandra about five miles from Agra, 7. Dayal Bagh, 8. Twenty-three miles from Agra is the deserted city of Fatehpur Sikri founded by Akbar.

**Ahmedabad:** in Gujarat is the second largest textile centre in India. It contains numerous monuments of the fifteenth and sixteenth centuries. Pop. 11,49,918 (1961).

*Places worth visiting are:* 1. Jumma Masjid (1423); 2. Shah Alum's Mausoleum (1475); 3. Rani Sipri's Mosque (1540); 4. Mosque of Sidi Sayyad (1572) for traceried windows with palm and parasite design; 5. Shaking Minarets; 6. Shahi Baug where Gurudeo Tagore stayed during his youth and which supplied him with material for his *Hungry Stones* (story); 7. Teen Darwaza (three Gates); 8. Mahatma Gandhi's Sabarmati Ashram; 9. Kankaria Tank; 10. Gujarat University & Gujarat Vidyapitha; 11. ATIRA, Textile Research Institute.

**Aiholi:** near Bagalkot in Mysore State contains about fifty temples important in the development of Hindu architecture and sculpture.

**Ajanta Caves:** are 66 miles north of Aurangabad in Maharashtra. The rock-cut caves are 29 in number (5 chaityas or shrines and 24 viharas or monasteries, all Buddhist) and present a record of a unique combination of painting, sculpture and architecture of a period extending over nine centuries from about the 2nd Century B.C. to about 7th Century A.D. The caves can be reached from Aurangabad where there is a good hotel conducted by the Central Railway.

**Ajmer:** city of considerable antiquity in Rajasthan, Hindu and Muslim religious centre, contains Western Railway workshop. Pop. 2,31,240 (1961). *Places worth a visit:* 1. the Durgah of Khwaja Sahib (tomb of Muslim saint), 2. the Magazine (Akbar's old palace now museum), 3. Ana Sagar Lake (the marble pavilions round the lake were built by Shah Jehan), 4. Adhal-din-ka-bhopra (Hut of two and a half days), 5. Taragarh (Fortress built by Akbar), 6. Mayo College, 7. Pushkar, a most sacred lake in India, is about seven miles away.

**Allahabad:** (also called Prayag); city in U.P. situated at the confluence of the Ganga and the Jamuna. It has an old fort and an Asoka pillar. Sixty-five miles from Allahabad is Kosambi, where the ruins of an ancient capital are being excavated. Pop. 4,11,955 (1961).

The confluence of the Ganga and Jamuna at Prayag is the holiest bathing place for Hindus in India. Every 12 years, Kumbha Mela (religious fair) is held attracting over 40 lakhs of pilgrims during the four weeks; a smaller fair occurs every six years—Adha Kumbhi.

The old Mughal Fort contains an underground temple where well carved images are seen and the pilgrims worship at a small tree taking it to be the Eternal Banyan Tree (Akshaya Vata.)

**Almora:** headquarters of the district of the same name, in U.P. 83 miles from Kathgodam Railway Station, it is the main town in Kumaon Hills (q.v.). Perched at an elevation of 5,600 ft., it is about two miles in length, like a saddle, and is said to have been founded four hundred years ago by Raja Kalyan Chand. Almora has moderate rain-fall, temperate climate, the temperature seldom rising above 88°F., even during the summer days, and comparative freedom from fog. Within easy distance of Almora are many Himalayan peaks—Seehee Debi, Bandnee Debi and Binsar being the chief ones. Binsar Hill also known as Jhandi Dhar is only 13 miles from Almora and the bridge path leading to it, passes through enchanting jungle scenery.



Pindari Glacier can be reached from Almora at a distance of 75 miles, in eight stages, attaining an altitude of 13 to 14,000 ft. The most suitable time for this trip is either May-June or September-October.

Two other places in the Kumaon Hills are: Ranikhet and Naini Tal.

**Alwar, Bikaner, Jodhpur, Kotah**: famous for Rajput historical monuments.

**Amritsar**: city in the Punjab, sacred to the Sikhs. Pop. 3,76,295 (1961). Amritsar is the very centre of the Sikh religion and has a big trade in grain and textiles. *Places worth a visit*: 1. the Golden Temple, 2. Baba Atal Tower, 3. Akal Takht, 4. Ram Bagh Gardens, 5. Fort Govind Garh, and 6. Jalianwalla Bagh Memorial.

**Aurangabad**: in Maharashtra. *Places worth a visit are*: 1. Bibi-ka-Mughbara—the tomb of Aurangzeb's wife which is a replica of the famous Taj, 2. Panchakki (old water-mill), 3. The shrine of Shah Musafir lies nearby, 4. Eight Buddhist caves near the town. Pop. 87,579 (1961).

**Badami**: in Mysore State, is famous for sculptured caves of the 6th century and for a group of Hindu temples. Fifteen miles from Badami is Pattadakal with another group of early Hindu temples (7th or 8th century), examples of pure Dravidian architecture.

**Bangalore**: Largest city in Mysore and a health resort, is about 3,000 feet above sea-level. *Places worth a visit*: 1. Cubbon Park, 2. Lal Bagh, 3. Band-stand, 4. Race Course, 5. Maharaja's Palace, 6. Tipu's Palace, 7. Venkateswaramanaswamy Temple, 8. Vidhan Soudha (new Secretariat). Pop. 9,05,134 (1961).

**Baroda**: Capital of the former Baroda State, now part of Gujarat State, is about 250 miles to the north of Bombay, pop. 2,95,144 (1961). *Places worth a visit*: 1. Laxmi Vilas Palace (the residence of the Maharaja, one of the most beautiful palaces in India), 2. Old Nazar Bagh Palace, 3. Museum and Public Park, 4. Jubilee Garden, 5. L. F. Battery, 6. Kirti Mandir, 7. Baroda University, and 8. Kala Bhavan (Technical School).

**Belur**: in Mysore State, noted for its elaborately sculptured temples of the Hoysala period.

**Banaras\***: town in U.P. on the banks of the Ganges, very sacred to the Hindus and Buddhists alike. It is in fact the religious capital of Hindu India and contains about 1,500 comparatively large temples besides countless minor shrines. It is also reputed to be the oldest city in the country. Pop. 4,71,258 (1961). *Places worth a visit*: 1. Vishwanath Temple, 2. Bharat Mata Temple, 3. Manmandir, with Jaisingh's Observatory, 4. Aurangzeb's Mosque, 5. Gyan Wapi, 6. Nandeswar Kothi, 7. Ramnagar Fort, 8. Banaras Hindu University, and 9. Sarnath, a great Buddhist centre with many architectural remains, is about six miles from Banaras. The Buddha preached his first sermon here.

**Bharatpur**: town in Rajasthan is famous for its historic fort. Pop. 49,778 (1961).

**Bhubaneswar**: Orissa's new capital; city of temples once said to number 7,000. Pop. 38,211. *Places worth a visit*: 1. Lingaraj Temple, 2. Mukteswar Temple, 3. Parasurameswar Temple, 4. Raj Rani Temple. Nearby are the Jain and Buddhist rock-cut caves of Khandagiri and Udayagiri and Asoka's Rock Edict at Dhauhi. Bhubaneswar is on the main S. E. R. line between Waltair and Howrah, about 20 miles from Cuttack and 38 miles from Puri.

**Bijapur**: town in Mysore State, capital of the old Adilshahi Sultans of Bijapur is rich with the remains of palaces, mosques and tombs. *Places worth a visit*: 1. Jami Masjid (the greatest mosque in South India), 2. Gol Gumbaz (the tomb of Muhammad Adil Shah and the second largest dome in the world), also called the Whispering Gallery, 3. Mehtar Mahal, 4. Ashar Mahal, 5. Gagan Mahal, 6. Chini Mahal, 7. Mecca Masjid, 8. Tas-Bavry (water-tank), 9. Malik-I-Maidan (Great Gun), 10. Landi-Kasab Gun, 11. Haidar

Burj (tower), 12. Ibrahim Roza (the tomb and mosque of Ibrahim II), 13. Jala Mandir (reservoir), 14. Chand Bavri (old tank), 15. Granary, 16. Jod Gombaz (double tombs), 17. Bara Kaman Masjid, and 18. Begum Tank. Bijapur is a railway station on the Gadag-Sholapur section of the Southern Railway. Pop. 78,854 (1961).

**Bombay**: second city and port in India called the Gateway to India. Pop.†: 4,152,056. Area (Greater Bombay) 174 sq. miles. *Places worth a visit*: 1. the Gateway of India, 2. Apollo Bunder, 3. Prince of Wales Museum, 4. the Town Hall, and Central Library, 5. Rajabai Tower and University Building, 6. Victoria Terminus of the Central Railway, 7. the General Post Office, 8. Crawford Market, 9. Brabourne Stadium, 10. Chowpatty sands, 11. Malabar Hill, Hanging Gardens and Kamala Nehru Park, 12. Central Station, Terminus of the Western Railway, 13. Race Course, 14. Bhandarwada Reservoir and Gardens, 15. Victoria Gardens and Albert Museum. *Places near Bombay worth a visit*: 1. Juhu (sea-side resort), 2. Versova (sea-side resort), 3. Vihar Lake (from which the city gets part of its water-supply), 4. Kanheri Caves (rock-cut caves of Buddhist origin), 5. Jogeshwari Caves, 6. Vajreshwari (temple and hot springs of medicinal property), 7. Mandapeshwar (cave temple), 8. Nirmal (temple and lake), 9. Ambarnath (temple), 10. Pawai Lake and the Technical Institute, 11. Pali (hot springs and small game shooting), 12. Elephanta Caves, 13. Vaitarna (water supply scheme), 14. Aarey Milk Colony, 15. The oil refineries at Trombay, 16. The Atomic Energy Establishment at Trombay. The chief means of conveyance in Bombay are buses, electric railway, taxis and gharis. (See also under *Maharashtra*).

**Brindavan**: See under Mathura.

**Buddh Gaya**: near Gaya, in Bihar, a Buddhist centre of pilgrimage. It contains the famous mediaeval Buddhist temple near the Bodhi Tree under which Gautam did penance and attained Enlightenment. Pop. 6,299 (1961).

**Bundi**: in Rajasthan is well-known for its buildings. Jungles nearby provide plenty of tiger shooting. Pop. 26,478 (1961).

**Calcutta**: until March, 1912, the headquarters of the Indian Government, and now, as then, the commercial capital of India. It is the terminus of three great railways, and the port of an immense river traffic. Though it lies 84 miles from the Bay of Bengal on the River Hooghly, it has a larger foreign trade than any other Indian port, and its enterprising Port Trust has the largest revenue among Indian port authorities. It is the centre of five great industries—jute, tea, hides and skins, coal and lac. Population of (1961), West Bengal is 34.93 millions and of Calcutta City (Corporation) 2,927,289. *Places worth a visit*: 1. Victoria Memorial (contains a picture-gallery and museum), 2. the Indian Museum, 3. the Zoological Gardens, 4. the Jain Temple, 5. the Kalighat Temple, 6. Belvedere House (where the British Viceroys stayed when on visit to Calcutta), now the National Library, 7. Raj Bhavan (residence of the Governor of West Bengal), 8. Marble Palace (containing art treasures property of the Mullik family), 9. Fort William, 10. the Eden Gardens, 11. the Town Hall, 12. Haig Market, 13. Dalhousie Square, 14. the Race Course, 15. Dhakuria Lake, 16. the Hindu bathing ghata, 17. Dakshineswar Temple. *Places near about Calcutta which are worth a visit are*: 1. Bally (holy place), 2. Belur (home of the Ramakrishna Mission), 3. the Botanical Gardens (contains the biggest banyan tree in existence), 4. Diamond Harbour (fort and customs house), 5. Dum Dum (airport of Calcutta).

**Cape Comorin**: also called Kanya Kumari in Madras State, is the southern-most tip of India.

It is the place where the Arabian Sea and the Bay of Bengal meet the Indian Ocean. Tourists go to have a view of sun-rise and sun-set.

It is easily reached from Trivandrum by public transport buses or private conveyance.

The spot is sacred to the Hindus and a place of pilgrimage as the reputed abode of Kanya Kumari the virgin goddess to whom the temple there is dedicated.

**Chandigarh†**: capital of Punjab is the youngest of Indian Capital cities. Chandigarh is situated near Kalka railway station of the Northern Railway.

**Conjeevaram (Kanchipuram)**: the city of temples, the Banaras of the South, is about 45 miles to the south-west of Madras. It is one of the seven holy cities of India and the only one in the South. The place is divided into three parts, Shiva Conjeevaram, Vishnu Conjeevaram and Pillayar Paliyam, a testimony to the part played by all the main Hindu religious sects in the history of the city. There are over a thousand temples in all. *Places worth a visit*: 1. Kailasnath Temple (over 1,000 years old), 2. Vaikunth Perumal Temple (over 1,000 years old), 3. Ekambareswar Temple (400 years old), 4. Vedaraja Perumal Temple. Pop. 92,714 (1961).

Conjeevaram is on the Renigunta-Chingleput section of the Southern Railway and is easily accessible from Madras via Chingleput.

**Cooch-Behar**: in West Bengal, is known for the facilities and opportunities which it offers to shikaris in search of big game hunting. Pop. 41,922 (1961).

**Coonoor**: hill station on the Nilgiri Hills in Madras State, is about 6,000 feet above sea-level. The climate is mild and genial neither too hot in the summer nor too cold in the winter. The mean day temperature is 64 degrees. *Places worth a visit*: 1. Sim's Park (contains collection of plants), 2. Low's Waterfall, 3. Tiger Rock (hill fort). There are innumerable places for excursion and picnic purposes, e.g. the Droog, the Dolfin Nose, the Lamb's Rock, Laz Falls, Lady Canning Seat, the Ralliah Dam and Catherine Falls. The chief means of conveyance are cars which can be hired.

Coonoor lies on the narrow-gauge Mettupalayam-Ootacamund line of the Southern Railway. It is also connected by road with Ootacamund, and Kotagiri, another hill station. Pop. 30,690 (1961).

**Darjeeling**: hill station in West Bengal, lies on the lower slopes of the Himalayas about 370 miles to the north of Calcutta. It is 7,110 feet above sea-level. The maximum temperature in the summer is about 70 degrees and the minimum in the winter is about 35. The town commands picturesque views including that of Mount Kanchenjunga and on a clear day of Mount Everest. Various sports are available during the season such as fishing, shooting and horse-riding. Darjeeling has also a first-class sanatorium known as Eden Sanatorium. *Places worth a visit*: 1. Government House, 2. Town Hall, 3. Museum, 4. Observatory Hill (from where a magnificent view of Kanchenjunga can be obtained), 5. the Mall, 6. Natural History Botanical Gardens, 7. Birch Hill Park, 8. Senchal Lakes, 9. Ghoom Monastery, 10. Tiger Hill (from where the sunrise over Everest is generally viewed on clear October mornings).

Darjeeling is the terminus of the meter-gauge Darjeeling-Himalayan section of the N.E. Railway and is about 27 hours' journey from Calcutta. From Siliguri where the visitor has to change, Darjeeling can also be reached by car. Pop. 40,651 (1961).

**Daulatabad**: in Maharashtra near Aurangabad, contains the famous rock-hewn 12th century fortress. Close by is the tomb of the Moghul Emperor Aurangzeb.

**Delhi (New)**: the capital of India and the seat of the Union Government. New Delhi houses the President's House (now called Rashtrapati Bhavan), the Parliament, and the Secretariat. Pop. 2,61,545 (1961).

**Delhi (Old)**: also called Shahjahanabad, the ancient capital of India stands on the Jamuna and is enclosed by a stone wall with seven gates. No city in India contains as many historical remains as Old Delhi. Pop. 9,14,790.

\* The official name is Varanasi.

† Greater Bombay.

‡ Population 89,321 (1961).



(1951). *Places worth a visit*: Red Fort, Jama Masjid, Rajghat (Mahatma Gandhi's Samadhi), Ashoka Pillars, Feroze Shah Kotla, Purana Quila, Humayun's Tomb, Isa Khan's Tomb, Lodi Park and Lodi Tombs, Safdar Jang's Tomb, Kutab Minar, Tughlaqabad, India Gate or War Memorial Arch, Shanti Ghat (Jawaharlal Nehru's Samadhi), Rashtrapati Bhavan, Parliament House, National Museum, Shri Lakshmi Narayan Temple, Jantar Mantar or the Observatory.

Delhi is directly connected by rail and air with Bombay, Calcutta and Madras. Delhi also lies on the direct East-West transworld air routes linking India with all the major cities of the world.

**Elephanta Caves**: on an island of the same name, about 6 miles from Bombay harbour, are mainly dedicated to Shiva and the sculpture shows that God in His many forms. These belong to the 7-8th century. The main cave, almost 125 ft x 125 ft, is the only impressive structure, and the rest of the island is used more as a picnic spot by holiday makers. There is a launch service as well as a ferry steamer. An official of the Archaeological Department is available on the spot.

The main figure of three-heads, Mahesh Murti, is considered among the world's most impressive sculptures, for its size, beauty and execution.

**Ellora Caves**: are situated about 15 miles to the north-west of Aurangabad in Maharashtra. The caves which are excavated in the face of a hill are 34 in number and run north to south for a distance of a mile and a quarter. The hill has the shape of a crescent the southern, the centre, and the northern being occupied respectively by Buddhist, Hindu and Jain temples. There are 12 Buddhist caves, 17 Hindu caves and 5 Jain caves. The Hindu caves are more lavishly decorated than others and Kailash temple which is the most impressive is also the biggest cave temple in India. It stands in a court averaging 154 feet wide, 276 feet long with a scrap 107 feet high at the back. Among other notable caves are caves X, XII, XIV, XV, XXIX, XXXIII, XXXIV. It is believed that the Ellora Caves are about a thousand years old. They are reached from Aurangabad by bus or car. Thrishneshwar temple near the caves is an important place.

**Ernakulam**: in Kerala State, is famous for its backwaters. Pop. 1,17,253 (1961).

**Fatehpur Sikri**: City founded by Akbar in 1569 but abandoned soon after, is situated 23 miles from Agra. The place contains a number of palaces, shrines, mosques built of marble and red sandstone. *The more notable among the monuments are*: 1. Buland Darwaja, the Gateway of Victory, built to commemorate the conquest of Khandesh. It is 176 feet high and is the highest gateway in India. It forms the southern gateway to the most imposing structure in Fatehpur Sikri, 2. the Jami Masjid, said to be a copy of the mosque at Mecca or Medina, 3. Panch Mahal, 4. Diwan-i-Khas (Hall of Private Audience), 5. Mariam's House, 6. Palace of Jodh Bai, 7. House of Birbal, 8. Elephant Tower and 9. Khas Mahal. Fatehpur Sikri has a railway station, and the city can be easily reached by car.

**Gaya**: big town in Bihar, on the Phalgu river, sacred to Hindus and Buddhists alike. The Vishnupada, a temple, built over the footprint of Vishnu is the centre of the pilgrimage and the Akshaya Vata, the Eternal Banyan tree, is an object of veneration. See also Budha Gaya. Population 1,51,105 (1961).

**Gersoppa Falls**: See Jog Falls.

**Golconda**: 5 miles from Hyderabad is an ancient spectacular fort (Andhra).

**Gopalpur-on-Sea**: in Orissa is a sea-side resort for a quiet holiday.

**Gulmarg**: an ideal hill station in Kashmir, about twenty-nine miles from Srinagar, is a little less than 9,000 feet above sea-level. The place boasts of all modern facilities and is particularly

noted as a winter playground affording scope for skating, ski-ing, tobogganing, and golf. Round about are ideal places for walks, rides and excursions.

**Gwalior**: in Madhya Pradesh, best known for its fort lies about 200 miles to the south of Delhi. *Places worth visiting*: 1. Gwalior fort includes Man Singh's Palace and a number of temples and shrines, 2. Tansen's Tomb, 3. Rani (of Jhansi) Laxmi Bai's Chhatra, 4. the Chhatris of other Mahratta rulers, 5. Tomb of Mahomed Ghaus, 6. Jami Masjid, 7. State Museum, 8. King George Park and Zoo, 9. Motimahal Palace. Seventy-two miles from Gwalior is Shivpuri or Sipri famous for its lake and scenery. Survaya which is twelve miles again from Shivpuri contains the remains of a fortress of the early mediaeval period. Gwalior is on the main Central Railway line between Bombay and Delhi. Pop.† 3,00,587 (1961).

**Halebid**: in Mysore State is well known for its elaborately sculptured temples of the Hoysala period.

**Hampi**: in Mysore State, is the ruined capital of the Vijayanagar Empire. It is 8 miles from the Hospet Railway Station on the Southern Railway.

**Hardwar**: in U.P. on the Inner Himalayas, on the Ganga banks is a great Hindu pilgrim centre. It is situated at the foot of the Siwalik hills on the right bank of the Ganga where the river enters the plains. The object of attraction is the bathing ghat called Hari Ki Payri (step of Hari). Every twelfth year the Kumbh Mela is held, which has a special sanctity. Devout pilgrims proceed from here further up to Rishikesh, and to Badrinath. Pop. 58,513 (1961).

**Hyderabad-Secunderabad**: the twin city linked together by the Hussain-Sagar (lake), is the capital of Andhra Pradesh and is centrally situated for all-India communications. It is a railway junction as well as an important air-port, and stands on the banks of the river Musi. It has many attractions. 1. Char Minar (four Minarets) dominates the City with 80 ft. high-minarets, built in 1591; 2. Osmania University with its impressive building and Ajanta Pavilion; 3. Town Hall; 4. State Museum and Art Gallery; 5. Salarjung Museum—one of the richest and most varied collections in Asia; 6. Health Museum and Public gardens. Golconda Fort forms one of the suburbs of Hyderabad. Many new industries are coming up in the city. Pop. 12,51,119 (1961).

**Imphal**: north-east frontier town and capital of Manipur. It is celebrated for its Manipuri dance and handloom products. Pop. 67,717 (1961).

**Jabalpur**: in Madhya Pradesh; fourteen miles from Jabalpur are Marble Rocks and Dhunva Dhar (water-falls) on the Narmada. Pop.† 3,67,014 (1961).

**Jaipur**: capital of Rajasthan State, is a well laid-out modern city. Jaipur pottery, brass ware, sculpture, ivory and sandalwood work and jewellery have enjoyed a great reputation from ancient times. Pop. 4,03,444 (1961). *Places worth a visit*: 1. Maharaja's Palace, 2. Jai Singh's Observatory, 3. Amber (ancient capital), 4. Hawa Mahal, 5. Palace Armoury, 6. Cenotaphs of the Queens, 7. Galta (place of pilgrimage) and Ghat, 8. School of Arts, 9. Public Library, 10. Transport Gardens, 11. Museum.

Jaipur is on the metre-gauge line of the Western Railway between Ahmedabad and Delhi.

**Jamshedpur**: in Bihar, famous as India's 'steel town'. Pop. 3,28,044 (1961).

Today besides the two-million ton steel plant there are many subsidiary units. Tata Locomotive Engineering Co. Ltd. manufactures metre gauge locomotives and boilers and Mercedes-Benz trucks and buses. The National Metallurgical Laboratory is also situated here. The town is well-laid out with modern amenities and welfare schemes.

**Jog Falls**: also known as Gersoppa Falls in Mysore State, are one of the highest waterfalls in the world. The river Sharavati takes a big leap down a steep rock from a height of 830 feet. The breadth of the stream here is 230 feet and in four separate cascades known as the Raja, Roarer, Rocket and La Dame Blanche, it takes a magnificent leap. The best time to see them is early December.

**Junagadh**: in Gujarat, is situated below the celebrated Girnar Hill and is one of the most ancient cities in India. The temples on the hill are noted for their architecture and delicate painting. On the way to Girnar is a rock with an Asoka edict. Pop. 74,298 (1961).

In Junagadh is the famous Gir Forest—the only place in Asia where lions are found.

**Kangra Valley**: famous for its picturesque landscapes and historic temples, lies in the Punjab. Semi-urban hill stations are Kangra and Dharamsala. *Places worth a visit in Dharamsala are*: 1. Bhagsunath Water Springs, 2. State Quarries, 3. Himalayan Snow View. The chief means of conveyance are cars and buses. There is also a dak bungalow at Dharamsala where visitors can stay. To get to the Kangra Valley a visitor has to change at Pathankot into the narrow-gauge railway which runs to Nagrota. Dharamsala can also be reached from Pathankot by car.

**Kanheri**: near Bombay, is famous for its Buddhist caves dating back to the 1st century A. D. It is about twenty miles from Bombay.

**Kashmir**: unsurpassed for the beauty of its mountains, lakes and valleys is a part of the State of Jammu and Kashmir, situated in the far north of India. Its capital Srinagar on the Jhelum is 5,000 ft. above sea-level and famous for its shawls and carpets and the exquisite beauty of its wood-work, rich embroidery and papier-mache articles. Its fruits and vegetables are equally well-known. Well-furnished, luxurious house-boats moored along the winding Jhelum or in the Dal Lake provide all necessary comforts amidst gorgeous natural surroundings. The normal recreations include Shikara rides on the lakes and canals, mountain-climbing, big and small game hunting, golf, fishing and swimming. Gulmarg, Sonamarg and Pahalgam are favourite holiday resorts in the neighbouring mountains and can be reached by motorable road. The way to Srinagar is via Pathankot, which is a railway terminus. From Pathankot one goes to Srinagar by road passing Jammu on the way. There is a regular air service from Delhi to Srinagar. *Places worth a visit*: 1. The Moghul Gardens, like a. Shalimar, b. Chashmashahi, c. Acchabal, d. Nishat. 2. The lakes like a. Dal Lake, b. Wular Lake, c. Anchar Lake, d. Manasbal Lake and so on. 3. Places of historical and religious interest like a. Martand temple, b. Pandranthan temple, c. Bhaumazu caves, d. Avantipura, e. Pari Mahal and f. Sankaracharya Hill.

**Khajuraho**: in Chhattarpur in Madhya Pradesh, is famous for its group of highly ornate mediaeval Hindu temples. From the nearest railway station Harpalpur on the Jhansi-Manikpur line, it is about 60 miles by motorable road. It has dak bungalows and circuit house rooms.

**Kodaikanal**: famous hill station on the Palni Hills in Madras State. It is about 7,000 feet above sea-level and has a temperate climate. The place affords plenty of scope for such recreations as walking, hiking, boating, fishing, hill climbing and golf. For the more adventurous there is big game hunting. Kodaikanal is the delight of the gardener and flowers are in bloom all the year round. *Places worth a visit*: 1. the lake skirted by a three-mile road, 2. the water falls like a. Fairy Falls, b. Silver Cascades, c. Bear Shola Falls, d. Glen Falls, e. Pambur Falls; 3. There are viewpoints like a. Coaker's Walk, b. Pillar Rocks, c. Prospect Point, d. Vembadi Shola Peak, e. Dolphin's Nose; 4. the Solar Observatory.

There are a number of boarding houses. Kodaikanal is reached from Kodaikanal Road railway junction on the Southern Railway

† Including Morar Cantt.

‡ Including Cantt. and Khamarira.



via Tiruchirapalli. Kodaikanal town is 50 miles from the railway station and the journey can be done by car, taxi or bus on a very good motoring road. Pop. 12,860 (1961).

**Kolar Gold Fields:** in Mysore State. The entire mining and residential area is known as KGF (Kolar Gold Fields) and is a modern and self-contained unit with water supply, electricity and hospital facilities. The city occupies an area of over 30 sq. miles, and houses nearly 160,000 people. It is about 90 miles by road from Bangalore. The mines have reached a depth of about 12,000 ft. Pop. 1,46,811 (1961).

**Konarak or Konark:** in Orissa, is a huge Temple of the Sun also called the Black Pagoda. It is remarkable both as an example of ancient Indian architecture and sculpture and of engineering skill. Konarak is about 50 miles from Puri, 40 miles from Bhubaneswar. The road is open from November to May.

**Kotagiri:** A hill station on the Nilgiris. It is about 6,500 feet above sea-level and has a mean day temperature of 62°F. The town has electricity, a number of shops and boarding houses, a local board hospital and golf course. Kotagiri is reached from Coonoor or Ootacamund by car or bus. The roads are excellent and there is a regular bus service. Between Kotagiri and Ootacamund the road goes over Doddabetta the highest peak (8,760 ft.) in the Nilgiri Hills (Madras State). Pop. 15,509 (1961).

**Kulu Valley:** well-known for the variety of its scenery, fruit orchards and places of historical interest is situated in the Punjab, north of Simla. It is ideal for hiking and trout fishing. The important part of the valley from the tourist's point of view is the road which runs from Pathankot or Nagrota the rail-heads into the valley. The summer is never uncomfortably hot. The main centres of the Kulu Valley are: 1. Kulu or Sultanpur, the principal town, about 4,000 feet above sea-level. It is the main shopping centre and has a dak bungalow, and a number of rest-houses. 2. Raison, 8 miles from Sultanpur and 4,700 feet above sea-level. The available sports are golf, tennis and swimming. Mayflower and the Shacks are two hotels. 3. Katrain, is in the widest part of the Valley, 12 miles from Sultanpur and 4,800 feet above sea-level. 4. Naggar, summer headquarters, is 5,800 feet above sea-level. 5. Manali, the head of the valley and terminus of the motor road, is 23 miles from Sultanpur and is situated amid typical Alpine scenery. Accommodation for visitors is available at Sunshine Orchard, Departmental rest houses and Mission Hospital. Pathankot is the rail-head for Kulu. From Pathankot Kulu is reached by bus or car, or from Pathankot to Nagrota by metre-gauge railway and from there by bus to Kulu.

**Kumaon Hills:** in U.P. form part of the Himalayas and are known as the sportsman's paradise. Three important summer resorts are Almora, Nainital and Ranikhet. Most mountaineering parties establish their base at Ranikhet for ascent to the Pindari Glacier.

(See also 'Almora', 'Nainital', 'Ranikhet').

**Lansdowne:** in U.P. in Garhwal about half way between Mussoorie and Nainital. Pop. 6,381 (1961).

**Lonavla-Khandala:** in Maharashtra, lies in the heart of the Western Ghats. Hill forts associated with Maratha rule are in the vicinity. The Karla, Bheda and Bhaja caves, 10 miles from Lonavla, are an added attraction (see also under Poona District).

**Lucknow:** the city of gardens is the capital of U.P. It is full of places of historical interest and of architectural beauty and is generally regarded as the cultural capital of North India. It is well-known for its pottery, copper and brassware, wood and ivory carvings and gold and silver embroidery on cloth, and rich perfumes. Pop. 595,440 (1961). *Places worth a visit:* 1. Great Imambara, 2. Small Imambara, 3. Tombs of Wajid Ali Shah and his Begum, 4. Kaiser Bagh Palace, 5. Chattr Manzil, 6. Dilkusha Palace, 7. Moti Mahal, 8. Machi Bhavan

Palace, 9. Jumma Masjid, 10. Charbagh, 11. Alambagh, 12. Sikander Bagh, 13. Musa Bagh, 14. Wingfield Park, 15. Residency, 16. Have-lock's Tomb, 17. Clock Tower, 18. Museum, 19. Observatory, 20. Iron Bridge. Lucknow is a big junction on the Northern Railway.

**Madras:** the third largest city in the sub-continent and the capital of Madras State. Pop. 17,29,141 (1961 census). *Places worth a visit:* 1. Fort St. George (contains the oldest Protestant church in the country where Clive was married), 2. High Court, 3. Light House, from the top of which one can get a panoramic view of the city, 4. Marina. The Marina is one of the most beautiful promenades in the world; sea-bathing is possible at certain points, 5. The Museum, 6. Connemara Library, 7. the Zoo, 8. the Observatory, 9. Moore Market, 10. Parthasarathy Temple, 11. Mylapore Tank and Kapaleswar Temple, 12. St. George's Cathedral, 13. St. Thomas Mount, 14. Race Course, 15. The Integral Coach Factory at Perambur, where passenger coaches are made, 16. Adyar, where the headquarters of the Theosophical Society are located., 1. the ruins of the Gingee Fort famous in the days of the Vijayanagar Empire are about 95 miles from Madras and can be reached by rail and road, 2. the seven Pagodas of Mahabalipuram are 35 miles by road from Madras and can also be reached by road from Chingleput Railway Junction.

**Madurai:** the second biggest city in Madras State, is a great religious centre, a seat of Tamil literature and Hindu temple art. The silk-weaving and textile industries of Madurai are also noteworthy. *Places worth a visit:* 1. The Great Temple, actually made up of two temples one of Meenakshi and the other of Shiva, 2. Tirumala Nayak's Palace, 3. Gandhi Museum and Gandhigram. Pop. 4,24,810 (1961).

**Mahabaleshwar:** a hill station in Maharashtra.

(See under Satara District.)

Mahabaleshwar can be reached from Poona by road.

**Murud:** Maharashtra's first sea-side holiday camp, set up by the State Dept. of Tourism, can be reached by sea in four hours from Bombay. By road it is 150 miles away.

**Mandu:** in Madhya Pradesh is one of the greatest mediaeval city sites in India with extensive remains including fortifications and palaces. Seventy-eight miles west of Mandu by road via Dhar are Bagh caves adorned with fine old frescoes.

**Matheran:** the nearest hill station to Bombay is 2,650 feet above sea-level. In a walk round the eighteen-mile circumference of the hill the visitor can reach no fewer than thirty-three points of which the following deserve mention: 1. Garbut Point, 2. Panorama Point, 3. Porcupine Point, 4. Louisa Point, 5. Chowk Point, 6. Alexandra Point, 7. Belvedere Point, 8. Echo Point, 9. Monkey Point. At every one of these points the visitor will find comfortable seats, shady trees and fine views. Among other places which are worth a visit are: 1. Charlotte Lake, 2. Paymaster Park, 3. Band-stand, 4. Castle Hill Tower, 5. Race Course. The chief recreations are walking and riding. Rickshaws, munchis and horses are the chief means of conveyance.

Matheran is reached from Neral Station on the main railway line between Bombay and Poona. From Neral there is a light railway to Matheran which is about one-and-a-half-hour's journey. Alternatively one can do the journey by rickshaw or pony by previous engagement at Matheran.

**Mathura-Brindavan:** in U.P. is an important place of pilgrimage for Hindus, because of its associations with Shri Krishna. Near the railway station is an archaeological museum which houses unique relics of Kushan art. Six miles from Mathura is Brindavan. *Places worth a visit:* 1. Govind Dev Temple, 2. Gopinath Temple, 3. Ranganath Mandir.

There are travellers' bungalows. Brindavan is accessible by railway or road from Mathura. Pop. 125,258 (1961).

**Mussoorie:** A hill station in U.P. lies 18 miles to the north of Dehra Dun. It is 6,580 feet above sea-level. The town has excellent water-supply, electric lighting system, hospitals, nursing homes and some of the best schools in India both for boys and girls. Hiking and going on excursion or picnic are among the main recreations. *Places worth a visit:* 1. The falls like a. Bhatta Falls, b. Kamptee Falls, c. Hearsay Falls, d. Mossey Falls, 2. Wimper's Tank, 3. Band-stand. Mussoorie is reached from Dehra Dun by car or bus and is about two hours' journey. Pop. 9,849 (1961).

**Mysore (State):** Mysore is a picturesque land of forest and mountain presenting the most diversified and beautiful scenery. In the southern forests are found wild elephants for the capture of which khedda operations are undertaken from time to time. Tigers, leopards, bears and bisons are also numerous. *Places worth a visit in Mysore State:* 1. The Chenna Kesava Temple at Belur, 24 miles from Hassan, 2. Sivasamudram Falls on the Caverry River, 3. Hoysaleswara Temple at Halebid, 4. Gersoppa Falls also called the Jog Falls on the Sharavati River, the most famous beauty spot in Mysore. The falls are higher than Niagara, 5. Kolar Gold Fields, the biggest in India worked by electric power, 6. Nandidurg, a hill station near Bangalore, and the summer residence of Tippu Sultan, 7. Srirangapatnam of historical and religious interest as the capital of Tippu and as the city of many temples, 8. Shravanabelgola, the great Jain religious centre with the huge monolith Gomateshwara and of course the city of Bangalore and the town of Mysore.

**Mysore (City):** second city in the State, It attracts great crowds twice a year namely the Maharaja's birthday and the Dasarah. *Places worth a visit:* 1. The palaces like the Maharaja's Palace, Jaganmohan Palace and so on, 2. Chamundi Hill, with the Bull and the Temple, 3. Zoological Gardens, 4. Silk Factory, 5. Sandalwood Factory, 6. Krishnarajasagar Dam and the Brindavan Gardens, among the most beautiful in the world, about 12 miles from Mysore. Mysore is one of the termini of the Southern Railway. Pop. 2,53,865 (1961).

**Naini Tal:** hill station is about 6,350 feet above sea-level. Among the principal recreations are hiking, boating and yachting on the lake around which the town stands, and fishing and riding. *Places worth a visit:* 1. Cheena Peak, 2. Land's End, 3. Lariya Kanta Peak, 4. Sher-ka-Danda Peak, 5. Tiffin Top or Dorothy Seat, 6. Camel's Peak or Deopatta Peak. Naini Tal is 22 miles from Kathgodam railway station which is connected with Bareilly and Mathura. From Kathgodam one goes by bus or car to Naini Tal which is 22 miles away. Pop. 14,995 (1961).

**Nalanda:** in Bihar, approachable from Patna by rail or motor, contains a group of ruined Buddhist temples and monasteries and a small local museum. It was the seat of an ancient Buddhist university.

**Nasik:** in Maharashtra and 117 miles from Bombay on the N.E. line of the Central Railway, is a place of pilgrimage for Hindus and is famous for Buddhist rock-cut temples of the first century B.C. and later. Pop. 1,31,103 (1961). The golf links at near-by Deolali are an added attraction.

**Ootacamund:** hill station in Madras State stands 7,500 feet above sea-level on the Nilgiris. *Places worth a visit:* 1. Botanical Gardens, 2. Race Course, 3. Assembly Room, 4. Doddabetta, the highest peak in the Nilgiris, 5. Pykara Hydro-Electric Dam which is about 18 miles from Ootacamund. Ootacamund is the terminus of the Nilgiri mountain railway and 6. Kundah Hydro-electric Scheme which includes many lakes, dams and power houses. Pop. 50,140 (1961).



**Pachmarhi:** hill station, was summer capital of Madhya Pradesh, lies on the Mahadeo hills of the Satpura Range and is about 3,500 feet above sea-level. *Places worth a visit:* 1. Bee Dam, 2. Mahadeo Caves, 3. Dhupgarh, highest point in the Satpuras, 4. Dorothy Deep Falls, 5. Duchess Falls, 6. Lansdowne Hill, 7. Nilphur springs, 8. Waters Meet, 9. Big Falls, 10. Pansy Pool, 11. Twipram Pool, 12. Saunder's Pool, 13. Pandava Caves. Pachmarhi is reached from Pipariya Station on the main Central Railway line from Bombay to Jabalpur. From Pipariya, Pachmarhi is 32 miles. There are facilities for swimming, trekking and riding. Pop. 653 (1961).

**Padmanabhapuram:** in Kerala, is the ancient capital of the former Travancore State. *Place worth a visit:* Palace.

**Pahalgam:** in Kashmir in the lap of the Lidder Valley is situated 60 miles from Srinagar and is famous for its camping sites, and as a base for the Amarnath Cave and Kolahoi glacier. Pop. 1,920 (1961).

**Palitana:** in Saurashtra, is famous for its holy hill Shatrunjaya (see separate note) and its Jain temples. Pop. 24,561 (1961).

**Pandharpur:** town in Sholapur District in Maharashtra. It stands on the Bhima river and is one of the most frequented places of pilgrimage in Maharashtra. The centre of devotion is the temple dedicated to Vithoba, an incarnation of Vishnu. Fairs are held annually in honour of the God. Pop. 45,421 (1961).

**Patna:** capital of Bihar, stands on the site of the ancient city of Pataliputra. Pop. 3,63,700 (1961).

**Poona:** in Maharashtra and 120 miles from Bombay, has many historical buildings and one of the best race courses in India. *Places worth a visit are:* Shanwar Wada, the National Chemical Laboratory, the Defence Academy and the Central Water and Power Research Station at Khadakvasla. Other show-places near Poona are: Sinhagad and Purandar. The factory which manufactures antibiotics at Pimpri is worth a visit. See also Poona District. Pop. 7,21,896† (1961).

**Porbandar:** in Gujarat, is the birth-place of Mahatma Gandhi and an attractive summer resort. Pop. 75,081 (1961).

**Prabhas Patan:** in Gujarat, is the site of the famous Somnath Temple, which was destroyed and rebuilt several times. Its last construction was begun in 1951.

**Puri:** (*Jagannath Puri*): famous for the Jagannath Temple, is a coastal town in Orissa. Other places worth a visit are the monastic establishments (maths). Fifty miles from Puri is Konarak, the Sun Temple. Pop. 60,815 (1961).

**Rameshwaram:** This holy town in Madras State is built on an island in the Palk Straits. It contains one of India's most venerated temples, perhaps the finest example of South Indian architecture. It is in the form of a quadrangular enclosure 650 ft. by 1,000 ft. The temple is renowned for its vast pillared corridors nearly 4,000 ft. long. It is near the tip of the Indian peninsula. Pop. 6,801 (1961).

**Ranchi:** hill station and summer resort of Bihar, noted for its picturesque scenery and fine roads. It is the site of heavy machine building plants. Pop. 1,40,253.† (1961).

**Ranikhet:** is a hill station in U.P. on the Kumaon Hills. Most mountaineering parties establish their bases at Ranikhet.

**Sanchi:** small village near Bhopal in Madhya Pradesh, famous for the Buddhist stupa which is the largest and the best preserved in India. Sanchi is on the main Central Rly. near Bhopal.

**Santiniketan:** in West Bengal, is the home of the famous Visva Bharati, the international university founded by Tagore. *Places worth a visit are:* Rabindra Bhavan (the poet's residence) where his personal belongings, manuscripts, etc. are on display and the poet's mud hut where he wrote many of his famous books.

The place is 91 miles from Calcutta on the Eastern Railway and 2 miles from Bolpur Station.

**Sasaram:** in Bihar is known for the magnificent tomb of Sher Shah, Emperor of Delhi. Pop. 37,782 (1961).

**Seringapatam:** or Srirangapattana in Mysore State, 9 miles by road from Mysore city was the ancient capital of Tipu Sultan. It is situated on an island on the Kaveri. It has the Sultan's fort, mosque and palaces. There are also many old temples. Pop. 11,423 (1961).

**Sevagram:** near Wardha in Maharashtra is the village where Mahatma Gandhi founded his ashram. It has been the home of many Gandhian institutions.

**Shatrunjaya Hills.**—Shatrunjaya, near Palitana in Saurashtra, is also known to the Jains as Siddhagiri or Siddhachala or the Hill of the Perfected Ones. It is the most sacred place (*tirtha*) of Shvetambara Jains. There are a great number of temples in groups on *touks* or summits.

**Shillong:** is the capital of the Assam Government. Thirty-six miles from here is Cherrapunji, the wettest place in the world. Pop. 72,438 (1961).

**Shivpuri:** also known as Sipri is in Madhya Pradesh, 72 miles from Gwalior. It is an interesting tourist resort with good hunting and boating possibilities. Pop. 28,681 (1961).

**Simla:** the former summer capital of the Government of India and the Government of the Punjab, it is situated on a spur of the Himalayas at a height of 7,200 feet. Among the recreations of the place are hiking, riding and shooting. The roads are excellent. *Places worth a visit:* 1. President's House, 2. Race Course, 3. Jakko Hill, 4. Observatory Hill, 5. Prospect Hill, and 6. Mashobra-Mahasu, seven miles away. All through the scenery is superb, with mountain peaks or luxuriant foliage. Simla is now the capital of Himachal Pradesh. Pop. 42,597 (1961).

**Somnath:** see under Prabhas Patan.

**Sraavanabelgola:** in Mysore State, is noted for its Jain temples and the colossal statue of Gomatesvara which is 65 ft. high, the tallest monolithic in the world. It was erected in 983 A.D.

**Srirangam:** an island on the cauvery, two miles north of Tiruchirapalli (Trichinopoly), contains one of the largest temples in South India. The temple is consecrated to Ranganath (Vishnu) and contains a hall of 1,000 columns. The north gopuram is 152 feet high. Pop. 41,949 (1961).

**Tanjore:** in the delta of the Cauvery river in Madras State is noted for its temples and palaces. It was the capital of the Cholas.

*Places worth a visit:* 1. the temple of Brihadishvara built by Raja-Raja the great, 2. Naik's Court, 3. Maratha Court (the two together are often called the Palace in Tanjore).

Tanjore is reached from Madras by the Southern Railway. Pop. 1,11,099 (1961).

**Tiruchirapalli (Trichinopoly):** the third largest city in Madras State is situated on the Cauvery. It is now a great educational centre. *Places worth a visit:* 1. the Rock temple, 2. the two huge masses of granite known as the Golden Rock and Fakir Rock, 3. the Jambukeshwar Temple, two miles north of Trichinopoly dedicated to Appulinga or Siva. Pop. 2,49,862 (1961). See also Srirangam.

**Travancore:** (now constituent part of Kerala State): the most beautiful and fertile region in all southern India, has many charms to offer the traveller within its domains.

**Trivandrum:** the capital of Kerala, is accessible by well-kept roads and railway, and is also now connected by air with Bombay, Madras and Colombo. *Places worth a visit:* 1. the Palaces, 2. Museum, 3. Picture Gallery, 4. Zoo, 5. Aquarium and 6. Padmanabha Temple.

North of Trivandrum is the ancient town of Quilon and to the north of this again, a pleasant trip by boat along delightful backwaters or by car along a good motor road, is the busy seaport of Alleppey.

About seven miles south of Trivandrum is Kovalam, a pleasant seaside resort with good facilities for bathing.

On the way to Cape Comorin from Trivandrum is Shuchindra Temple which should also be seen. Pop. 239,815 (1961).

**Udaipur:** in Rajasthan, is a city of lakes with island palaces. Seventy miles from Udaipur is Chittorgarh, the abandoned capital of Mewar, famous for its Tower of Victory. Pop. 1,11,139 (1961).

**Ujjain:** on the Sipra in Madhya Pradesh, is one of the seven cities sacred to the Hindus. Also known as Avanti. The Oriental Museum has many valuable manuscripts and pieces of sculpture. Is supposed to be the seat of King Vikrama. Mahakaleswar temple is an attraction of pilgrimage. Pop. 1,44,161 (1961).

## NEW INDIA

The new India has its own show places, where much of the country's industrial life is centred. Most of them are connected with the Five Year Plan programme and are in the main a post-independence development. Some of these we give in the notes on the older towns above. Some other typical centres we give below:

**Anand:** town half way between Baroda and Ahmedabad, where the headquarters of the cooperative society producing milk, butter, cheese and baby food are located—Amul. The cooperative dairy, without keeping any cattle of its own is an up-to-date and modern unit with 40,000 farmers spread over an area of 1,300 square miles around it as members.

**Bailadia:** in Madhya Pradesh, is a rich iron ore deposit mine (public sector), capable of producing four million tons of ore per year. It is being developed with Japanese help for exporting ore to Japan. (App. cost Rs. 16 crores).

**Berauni:** Oil refinery in Bihar for processing crude oil into gasoline, turbine fuel, kerosene, diesel oil, furnace oil etc., being developed with USSR assistance. Full capacity in three stages, first two stages being complete already (capacity 2 million tonnes, App. cost Rs. 39 crores.) Also a Thermal Power Station.

**Batanagar:** an industrial town near Calcutta. The Bata Shoe Factory is located here.

**Bhadravati:** in Mysore State. The Mysore Government's iron and steel plant is located here.

**Bhakra-Nangal:** twin-towns, which have grown recently round the huge Rs. 170 crore hydro-electric and irrigation project the biggest in the country, in which the waters of the Sutlej are controlled by dams, and diverted for irrigation and the generation of electric power. A modern fertilizer factory was built and commissioned on Feb. 22, 1961 at Naya Nangal.

**Bhilai:** in Drug district of M.P., 176 miles from Nagpur on the Howrah line is the site of an integrated iron and steel plant, set up in the public sector with Russian help.

**Bokaro:** in Bihar, site of the Bokaro Steel (public sector) plant, (distinct from Bokaro thermal power station of the D.V.C.) being built with Soviet help. Bokaro Steel Ltd., as a new Co., was established in 1964.

**Burnpur and Kulti:** twin towns in which the Indian Iron and Steel Co. Ltd. has its works. Situated near Asansol on the border of West Bengal and Bihar, on the Grand Trunk Road, these works present an impressive view to the railway passengers by day or by night.

**Cambay:** a city of antiquity and an old international port in Gujarat. Today it has acquired importance again as the place—at Lunej—where oil and natural gas have

† Including Poona Cantt. & Kirkee Cantt.

‡ Including Dorenda.



been discovered. Drilling with foreign (Russian) technical help is in progress. (See article on 'Petroleum').

**Chandigarh**: Capital of Punjab was planned and built by Mons. Corbusier.

**Chandrapura**: Thermal power station of the D.V.C. (near Gomoh) 320 Km West of Calcutta, within easy reach of Dugda Coal Washery. Bokaro Steel Plant would be within 6-7 Km across the Damodar river. Three units of 125 MV, each to be set up, two already functioning.

**Chittaranjan**: near Asansol, on the border of Bihar and W. Bengal. The industrial colony came into being with the establishment of the broad gauge locomotive and boiler factory.

**Dalmianagar**: is situated on the west bank of the river Sone, 350 miles by rail from Calcutta. The Rohtas Industries Limited and Ashoka Cement Limited, manufacturers of cement paper, sugar, vanaspati, asbestos, cement sheets, etc., are located here providing employment direct and indirect to 60,000 persons.

**Durgapur**: in West Bengal, 100 miles from Calcutta, near Asansol is the site of an integrated iron and steel plant in the public sector, set up with British help. The Durgapur Coke Ovens plant run by the Government of West Bengal, the Durgapur Barrage, the canal system and thermal power house (of the D.V.C.) are also located in the vicinity. An optical glass unit is to be started nearby. Coal Mining Machinery Plant of Heavy Engineering Corp. Ltd.; a Technical Institution and Alloy Steel Plant are fast coming up.

**Dhuvaran**: In Gujarat, a thermal power station, using gas from Cambay region, with four turbo-alternators with 62.5 MW capacity each.

**D. V. C.**: The Damodar Valley Corporation, looks after the big Rs. 132 crore multi-purpose project on the Damodar River in Bihar-Bengal. Tilaiya, Konar, Maithon and Panchet Hill are the sites of the four dams with hydel generating stations attached except at Konar and thermal stations at Bokaro, Chandrapura and Durgapur. There is an extensive canal system for irrigation attached to the storage lakes.

The D.V.C. area, roughly from Hazaribagh to Durgapur in east Bihar, contains the highest concentration of high-grade mineral wealth in the country—coal, iron ore, copper and mica. A host of industries have sprung up or are under construction: Sindri, Hindustan Cables, Chittaranjan, Durgapur Steel Plant, Coke Ovens project, the heavy machine building group of industries, the Kargali and Dugda coal washeries.

**Gandhigram**: about 25 miles from Madurai (South India) is a new colony formed to put Gandhian principles into actual practice in day-to-day life. A pilot health survey project covering over 70 villages in the neighbourhood has been undertaken with American aid.

**Gandhigram (Visakhapatnam)**: near Waltair in Andhra, is one of the major ports and the site of a ship-building yard. Also, the Caltex Oil Refinery.

**Gomia**: In Hazaribagh district, site of a high explosive factory, in private sector.

**Harike**: In Punjab, site of a barrage across the Sutlej, for two canal systems (i) Rajasthan Feeder (134 miles) and (ii) Rajasthan Canal, (291 miles).

**Hirakud**: the site of the Rs. 30-crore multi-purpose project across the River Mahanadi in Orissa to provide irrigation facilities and electric power. Power is being supplied to industries round about and to the Rourkela Iron and Steel Plant. (See also under 'Irrigation').

**Jetsar**: Near Suratgarh, in Rajasthan, site of another mechanised farm about 30,000 acres.

**Jwalamukhi**: in the Kangra Hills where gas has been discovered. Drilling is in progress with foreign (Rumanian) technical help. (See article on 'Petroleum').

**Kiriburu**: Iron ore mines, in the Bonal range of Keonjhar and Singhbhum districts (Orissa &

Bihar), being developed with USA's ADF and Japanese help for exporting two million tonnes of ore annually.

**Kirloskarvadi**: In Sangli District, Maharashtra, is an industrial colony established over 50 years ago, where agricultural implements and a variety of engineering goods have been manufactured.

**Korba**: in Madhya Pradesh is the site of a new coal mine and a thermal station for the M.P. Grid, from which the Bhilai Steel Project gets most of its power supply. Coal from Korba will also be used in Bhilai.

**Kosi**: The Rs. 45-crore multi-purpose project in Bihar for flood protection, irrigation and electric power. The barrage on the river is about 30 miles below Chatra in Nepal. (See under 'Irrigation').

**Koynanagar**: in Satara district, Maharashtra, is approachable by road (30 miles) from Karad station on the Southern Railway. Here the turbulent waters of the Koyna are controlled and diverted through an underground tunnel on the other side of the hill for generating electricity in an underground power house.

**Mallapuram (Tungabhadra)**: in Bellary District in Mysore State is the site of the Rs. 60-crore Tungabhadra Dam, one of the greatest multi-purpose projects in the country.

**Motipur**: one of a large number of villages in the U.P. terai in the districts of Bijnor, Pilibhit, Naini Tal and Rampur. These villages form the largest concentration of mechanized farms in the country, the best known of which is the State Government's Terai State Farm.

**Nagarjunasagar**: See under VIJAYA-PURI.

**Nepanagar**: in M.P. on the Central Railway is the site of the only newsprint factory in India. (See also 'Government Industrial Undertakings').

**Neyveli**: in South Arcot District, in Madras State, about 150 miles from Madras, the site of lignite mines and centre of industrial development.

**Perambur**: a suburb of Madras where an integral railway coach factory is situated.

**Pimpri**: near Poona, is the place where the Hindustan Antibiotics factory is located. It manufactures penicillin. (See also under 'Government Industrial Undertakings').

**Pipri**: in Mirzapur District in U.P. is the site of the Rs. 46-crore Rihand dam across the Rihand, whose waters are used for the generation of power.

**Rourkela**: in Orissa State, about 250 miles from Calcutta on the main line to Nagpur, is the site of an Iron and Steel Plant in the public sector set up with German help. In addition, a special fertilizer plant is also being erected here.

**Rupnarayanpur**: near Chittaranjan, is a small township for telephone cable manufacturing concern—the Hindustan Cables Ltd.

**Sindri**: the site of the big fertilizer plant in Bihar.

**Suratgarh**: in Rajasthan is the largest single mechanised agricultural farm (30,000 acres) utilising complete set of machinery and equipment presented by U.S.S.R.

**Tiruverumbur**: Near Trichy (Tiruchirappalli) high pressure boiler manufacturing Plant and township, under Bharat Heavy Electricals, developed with Czech help.

**Vijayapuri (East & West)**: on either side of the Nagarjunasagar dam across the River Krishna in Andhra Pradesh 90 miles from Hyderabad.

On the site of Vijayapuri once stood the capital of the Ikshvaku Kings. The great Buddhist sage and philosopher Nagarjunacharya lived and taught here. It was a great centre of learning and the University was known as Nagarjun-konda. Extensive excavations have brought to

light important pieces of sculpture, housed in a big museum nearby.

**Walchandnagar**: In Poona district, Maharashtra, can be reached either from Poona or from Bhigvan (Central Railway) railway station. It is an industrial colony, with extensive cane cultivation on mechanised scale, sugar and alcohol production, huge workshop for manufacturing sugar making machinery, plastic buttons and dairy products.

## HOTELS

Here is a list of Western style hotels and rest houses.

### AGRA CANTT.

LAURIE'S HOTEL: Mahatma Gandhi Road. CLARKS SHIRAZ: 54, Jaj Road; IMPERIAL: Mahatma Gandhi Road; GRAND HOTEL: 137, Station Road.

### AHMEDABAD

CAMA HOTEL: Khanpur Road; RITZ HOTEL: Lal Darwaza.

### ALLAHABAD

BARNETT'S HOTEL: 14, Canning Road; ROYAL HOTEL: 24, South Road, Civil Lines.

### ALWAR

CIRCUIT HOUSE: Alwar; SILISERH TOURISTS HOME: Alwar.

### ALWAYE

TOURIST BUNGALOW.

### AMBALA CANTT.

CECIL HOTEL: 127, Staff Road; PARRY'S HOTEL: 126, Staff Road.

### AMRITSAR

GUEST HOUSE: 10, Cantonment; RITZ HOTEL: 45, The Mall; HOTEL AIRLINES: Cooper Road.

### AURANGABAD

AURANGABAD HOTEL: Aurangabad.

### BANGALORE

TOURIST HOTEL: Race Course Road; HOTEL BROADWAY: 12, Kempegowda Road; LOBO'S HOTEL: Cubbon Road, Bangalore 1; MADRAS WOODLANDS HOTEL: 5, Sampangi Tank Road, Bangalore 1; SHILTON HOTEL: St. Mark's Road, Bangalore 1; WEST END HOTEL: High Grounds.

### BELGAUM

HOTEL GREEN: 164, Camp.

### BHOPAL

IMPERIAL SABRE: Palace Grounds; PAGODA HOTEL: Hamidia Road.

### BHUBANESHWAR

TOURIST BUNGALOW; STATE GUEST HOUSE; CIRCUIT HOUSE.

### BIKANER

CIRCUIT HOUSE: Bikaner.

### BODHGAYA

TOURIST BUNGALOW: Bodhgaya.

### BOMBAY

AIR LINES HOTEL: Churchgate Reclamation; AMBASSADOR HOTEL: Churchgate Extension; ASCOT HOTEL: 38, Garden Road; GRAND HOTEL: Ballard Estate; GREEN'S HOTEL: Apollo Pier; SEAFACE HOTEL: 29, Marine Drive; SEA GREEN SOUTH HOTEL: Marine Drive; SEA GREEN HOTEL: Marine Drive; TAJ MAHAL HOTEL: Apollo Pier; RITZ HOTEL: Churchgate Reclamation, Fort; SHALIMAR, Cumballa Hill; SUN-N-SAND, Juhu; WEST END HOTEL: 45, Marine Lines; HOTEL WALDORF: 16, Arthur Bunder Road; MIRABELLE HOTEL: 33A, Marine Lines; HOTEL NATARAJ: Marine Drive; HOTEL PARKWAY: 926, Ranade Road.

### BUNDI

CIRCUIT HOUSE.

### CALCUTTA

GREAT EASTERN HOTEL: 1-3, Old Court House Street; HOTEL MINERVA: 11, Ganesh Chandra Avenue, Calcutta 13; OREROI GRAND HOTEL: 15, Chowringhee, Calcutta 13; CARLTON HOTEL: 2, Chowringhee Place; SPENCER'S HOTEL: 4, Wellesley Place; LYTTON HOTEL: 14, Sudder Street; MAJESTIC HOTEL: 46, Master Street.



## CALICUT

ALAKAPURI GUEST HOUSE: Calicut 2.

## CANNANORE

TOURIST BUNGALOW.

## CAPE COMORIN

CAPE HOTEL; KERALA HOUSE TOURIST BUNGALOW.

## CHANDIGARH

OBEROI MOUNT VIEW: Sector 10.

## CHHATARPUR

CIRCUIT HOUSE, (M.P.).

## COCHIN

MALABAR HOTEL: Willingdon Island, Cochin 3; SEA LORD HOTEL: Ernakulam; GRAND HOTEL: Ernakulam; INTERNATIONAL TOURIST HOME: Mahatma Gandhi Road; TOURIST BUNGALOW: Bolghatty, Ernakulam; WOODLANDS HOTEL: Willingdon Island, Cochin.

## COONOR (Nilgiri Hills).

HAMPTON HOTEL; RITZ HOTEL.

## DALHOUSIE

CLAIRE'S HOTEL: Court Road; GRAND VIEW HOTEL.

## DARJEELING

BELLEVUE HOTEL; OBEROI MOUNT EVEREST: Gandhi Road; WINDAMERE HOTEL: Observatory Hill; CENTRAL HOTEL: Robertson Road.

## DEHRA DUN

HOTEL WHITE HOUSE: 15-A, Lytton Road.

## DELHI

AIRLINES HOTEL: Opp. New Delhi Railway Station; ASHOKA HOTELS: Diplomatic Enclave. New Delhi; CLARIDGE'S HOTEL: 12, Aurangzeb Road, New Delhi; CENTRAL COURT HOTEL: Connaught Circus; FLORA HOTEL: Dayanand Road, Daryaganj, New Delhi; HOTEL AMBASSADOR: Sujana Singh Park, New Delhi; HOTEL BHAGIRATH PALACE; HOTEL BROADWAY: Asaf Ali Road, New Delhi; HOTEL IMPERIAL: Janpath, New Delhi; HOTEL JANPATH: Janpath, New Delhi; HOTEL MANOR: Mathura Road; NIRULA'S HOTEL: L-Block, Connaught Circus, New Delhi; OBEROI INTER CONTINENTAL: Wellesley Road; HOTEL GROVES: Asaf Ali Road; HOTEL METRO: Janpath; HOTEL SHAKHAR: 1, Daryaganj; OBEROI SWISS: 2, Alipur Road, Delhi 6; RAJDOOT HOTEL: Mathura Road, Y.W.C.A. TOURIST HOTEL: A, Jaisingh Road.

## DEOLALI

RUGBY HOTEL: 83, Rest Camp Road.

## FARIDABAD (DELHI)

HOLIDAY INN.

## GOPALPUR-ON-SEA

OBEROI PALM BEACH HOTEL: Gopalpur-on-Sea, Dist. Ganjam, Orissa.

## GULMARG (Kashmir).

GOLF VIEW HOTEL; NEDOU'S HOTEL.

## Gwalior

CIRCUIT HOUSE.

## HYDERABAD

RITZ HOTEL: Hill Fort Palace; ROCK CASTLE HOTEL; PERCEY'S HOTEL: Secunderabad.

## INDORE

INDORE HOTEL: G. P. O. Indore; LANTERN HOTEL: North Tukoganj; VIRAM HOTEL: 5, South Tukoganj.

## JABALPUR

JACKSON'S HOTEL: Civil Lines.

## JAIPUR

JAI MAHAL PALACE HOTEL: Civil Lines; KAISER-I-HIND: Near Railway Station; KHETRI HOUSE; RAJASTHAN STATE HOTEL; RAMBAG PALACE.

## KASAVLI

ALASLA HOTEL.

## KALIMPONG

HIMALAYAN HOTEL.

## KANPUR

BERKELEY HOUSE: Civil Lines.

## KHANDALA

KHANDALA HOTEL.

## KHAJURAHO

CIRCUIT HOUSE (M. P.); TOURIST BUNGALOW.

## KODAIKANAL

CARLTON HOTEL: Lake Road; HOLIDAY HOME: Golf Links Road.

## KONARAK

TOURIST BUNGALOW.

## KOTAH

CIRCUIT HOUSE.

## KOTTAYAM

HOTEL AMBASSADOR: K. K. Road; TOURIST BUNGALOW.

## KUSHINAGAR

TOURIST BUNGALOW.

## LUCKNOW

CAPOORS HOTEL: Hazratganj; CARLTON HOTEL: Shahnajaf Road.

## MADRAS

AIRLINES HOTELS: 177-179; Mount Road; CLARIDGE HOTEL: Thambuswamy Road; CONNEMARA HOTEL: Binny's Road; GUPTA'S AJANTA HOTEL: 32, Royapetta High Road; GUPTA'S STATES HOTEL: 61, Kutchery Road; HOTEL DASAPRAKASH: 50, Poonamallee High Road; HOTEL OCEANIC: 29, San Thome High Road; WOODLANDS HOTEL: 1/23, Edward Elliotts Road, Mylapore; ASHOKA HOTEL: No. 22, Pantheon Road; SAVOY HOTEL: 39, Mount Road; TOURIST HOME: 5, Gandhi Irwin Road; VICTORIA HOTEL: 3, Gandhi Irwin Road.

## MANGALORE

WOODLANDS HOTEL: Bunts Hostel Road.

## MAHABALESHWAR

FREDERICK HOTEL; RACE VIEW HOTEL.

## MANALI (Kulu-Punjab)

SUNSHINE ORCHARDS GUEST HOUSE; TOURIST BUNGALOW.

## MANDU

TOURIST BUNGALOW; ARCHAEOLOGICAL REST HOUSE.

## MANGALORE

WOODLANDS HOTEL: Bunts Hostel Road.

## MATHERAN

LORD'S CENTRAL HOTEL.

## MOUNT ABU

MOUNT HOTEL: Dilwara Road; PALACE HOTEL: Bikaner House.

## MUNNAR

TOURIST BUNGALOW.

## MUSSOORIE

HAKMAN'S GRAND HOTEL: The Mall; SAVOY HOTEL; HOTEL ROAN OKE; LIBRARY CLUB HOTEL: The Mall.

## MYSORE

HOTEL DASAPRAKASH: Gandhi Square; HOTEL KRISHNARAJASAGAR: P.O. Krishnarajasagar; HOTEL METROPOLE: Viceroy Road; HOTEL RITZ: Bangalore-Nilgiri Road.

## NAGPUR

CIRCUIT HOUSE.

## NAINI TAL

GRAND HOTEL: The Mall; BELVEDERE HOTEL; SWISS HOTEL.

## OOTACAMUND

HOTEL CECIL; SAVOY HOTEL.

## PACHMARHI

HOTEL BLOCK (PACHMARHI HOTEL); NEW PACHMARHI HOTEL.

## PAHALGAM (Kashmir)

PINE VIEW HOTEL.

## PANJIM (GOA)

HOTEL MANDOLI

## PATIALA

GREEN'S HOTEL.

## PATNA

PALACE HOTEL: Gandhi Maidan; HOTEL REPUBLIC: Lawly's Building, Exhibition Road.

## PEERMAD (Kerala).

HOTEL INTERNATIONAL; TOURIST BUNGALOW.

## PERIYAR

ARANYA NIVAS; TOURIST BUNGALOW: Edapalayam.

## PONDICHERY

GRAND HOTEL D'EUROPE: 12, Rue Saffren.

## POONA

POONA HOTEL; WELLESLEY HOTEL: 12-A, Connaught Road.

## PURI

SOUTH EASTERN RAILWAY HOTEL.

## QUILON

HOTEL NEELA; TOURIST BUNGALOW.

## RANCHI

SOUTH EASTERN RAILWAY HOTEL.

## RANIKHET

MOON HOTEL; WEST VIEW HOTEL: Mahatma Gandhi Marg.

## SALEM

HOTEL DWARAKA: Five Roads.

## SANCHI

TOURIST BUNGALOW.

## SECUNDERABAD

PERCY'S HOTEL: Secunderabad; RITZ HOTEL: Hill Fort Palace.

## SHILLONG

PINWOOD HOTEL.

## SIMLA

OBEROI CECIL: The Mall.

## SRINAGAR

NEDOU'S HOTEL; OBEROI PALACE HOTEL.

## THEKADY (Kerala)

ARANYA NIVAS, Thekady; TOURIST BUNGALOW: Edapalayam.

## TIRUCHIRAPALLI

ASHBY'S HOTEL: Spencer Buildings.

## TRICHUR

TOURIST BUNGALOW.

## TRIVANDRUM

MASCOT HOTEL; HOTEL MAGNET: Thycad.

## UDAIPUR

LAXMI VILAS PALACE HOTEL; LAKE PALACE HOTEL.

## VARANASI (BANARAS)

CLARK'S HOTEL: The Mall.

## VIJAYAWADA

WELCOME HOTEL: Sumathi Building.

## VISAKHAPATNAM

MARINA HOTEL: Beach Road.

Besides the hotels in different places there are tourist bungalows in Bijapur, Bhubaneswar, Gaya, Khajuraho, Konarak, Madurai, Mahabalipuram, Mandu, Sanchi and Tanjore.

## TOURIST TRAFFIC

TOURIST ARRIVALS IN INDIA—1965

The number of tourists arrived in India during 1965 was 1,47,900.

North America: Canada 2,974; U.S.A. 39,309.

South America: Mexico 640; Others 1,259.

Western Europe: Austria 722; Belgium 597; Denmark 760; France 5,507; Germany 6,452; Italy 1,752; Netherlands 1,295; Sweden 1,250; Switzerland 2,249; U.K. 22,368; Others 1,443.



**Eastern Europe :** Czechoslovakia 784 ; U.S.S.R. 2,377 ; Others 1,828.

**Africa :** Kenya 7,640 ; Malawi 344 ; South Africa 1,386 ; Tanzania 2,449 ; Uganda 1,789 ; Zambia 347 ; Others 1,692.

**West Asia :** Aden-Oman 1,265 ; Bahrain-Qatar 1,023 ; Iran 849 ; Others 2,144.

**East Asia :** Afghanistan 1,975 ; Ceylon 7,147 ; Japan 4,600 ; Malaysia 8,693 ; Philippines 538 ; Thailand 890 ; Others 3,507.

**Australia :** Australia 5,079 ; New Zealand 751 ; Others 226.

### DEVELOPMENT OF TOURISM

The Third Plan for development of tourism included an allocation of Rs. 8 crores—Rs. 3.5 crores in the Central Sector and Rs. 4.5 crores in the State Sector.

The Government of India has set up two corporations in the public sector for promoting tourism and providing facilities for tourist traffic in the country. For more details about the corporations see article on "All India Corporations".

**Fourth Plan :** A sum of Rs. 25 crores has been tentatively allocated for the development of tourism in the Fourth Plan. Of this Rs. 5 crores have been set apart for the recently set up India Tourism Hotel Corporation and the India Tourism Corporation.

The India Tourism Corporation proposes to open shortly "Duty Free Shops" at Bombay, Delhi and Calcutta. A duty-free shop is a tourist facility provided by many countries at international airports.

### INDIA'S REGIONAL BALANCE OF PAYMENTS ON CURRENT ACCOUNT

| Region                             | Item : Travel         |             |             | (Crores of Rupees).           |            |             |
|------------------------------------|-----------------------|-------------|-------------|-------------------------------|------------|-------------|
|                                    | 1964-65 (Preliminary) |             |             | April-June 1965 (Preliminary) |            |             |
|                                    | Credits               | Debits      | Net         | Credits                       | Debits     | Net         |
| 1. Sterling Area .. ..             | 0.4                   | 3.2         | -2.8        | 0.1                           | 0.9        | -0.8        |
| 2. Dollar Area .. ..               | 1.6                   | 3.2         | -1.6        | 0.3                           | 0.6        | -0.3        |
| 3. O.E.C.D. Countries* ..          | —                     | 1.7         | -1.7        | —                             | 0.5        | -0.5        |
| 4. Rest of Non-Sterling Area .. .. | -0.3                  | 2.1         | -1.8        | —                             | 2.0        | -2.0        |
| <b>TOTAL .. ..</b>                 | <b>2.3</b>            | <b>10.2</b> | <b>-7.9</b> | <b>0.4</b>                    | <b>4.0</b> | <b>-3.6</b> |

*Note :* Data for receipts for the quarter January-March 1963 and thereafter are incomplete.

\* Hitherto shown as O.E.E.C. Countries.

## U. N. AID TO INDIA

INDIA participates in the development programmes of the United Nations family both as a contributor and recipient of aid. UN aid is provided to Governments on request. Beginning in 1966, the UN's two main aid programmes—provided under the Expanded Programme of Technical Assistance and the UN Special Fund—were merged into the U.N. Development Programme (UNDP). In addition, some forms of assistance are given under the regular programmes of the U.N. and its related agencies. These last are financed by the organizations' regular budgets, whereas UNDP projects are financed by the voluntary contributions of Governments.

India has received aid under each of these categories. In 1965, India contributed \$850,000 to technical sector of UNDP and \$2,150,000 to the Special Fund Sector of UNDP.

### THE TECHNICAL ASSISTANCE

The Technical Assistance combines the assistance activities of the UN itself and nine participating agencies: International Atomic Energy Agency (IAEA), International Labour Organization (ILO), Food and Agriculture Organization (FAO), United Nations Educational, Scientific and Cultural Organization (UNESCO), International Civil Aviation Organization (ICAO), World Health Organization (WHO), International Telecommunication Union (ITU), World Meteorological Organization (WMO), and Universal Postal Union (UPU).

Illustrating the two-way nature of the UN technical co-operation programme is the fact that, also in 1965, Indian nationals numbering 174 served as EPTA experts in other countries, and India was host to 120 UN fellowship holders from outside.

Projects under Technical Assistance are being carried out in India in the following fields :

#### United Nations (Technical Assistance Operations)

Fertiliser manufacture ; D.N.T. and penicillin manufacture ; raw materials substitution to save foreign exchange ; training in water resources development ; petroleum geology ; port development and lighthouse engineering ; statistics, town planning and techno-economic surveys.

#### IAEA (International Atomic Energy Agency)

Training programme in prospecting, mining and processing of nuclear raw materials.

#### ILO (International Labour Organization)

Labour conditions ; social security ; employment information ; safety in mines ; productivity and management and manpower organization including vocational training.

#### FAO (Food and Agriculture Organization)

Dairy production, dairy engineering, dairy plant management, dairy technology, dairy economics and dairy training ; poultry development ; pork technology ; manufacture of egg powder and egg pulp ; improved animal husbandry methods, animal climatology, animal vaccine production and disease control, grassland management, hides and skins ; fish harbour development, fish processing, power fishing, mechanization and design of fishing craft, reservoir fishing ; physical oceanography ; river pollution ; land use and water management, forestry development, plywood research ; improvement of plant protection measures, mushroom cultivation, plant nematodes, pesticide analysis and residue limits in food ; nutrition ; establishment of a catering college and home economics education programme ; crop insurance ; horticulture.

#### UNESCO (United Nations Educational, Scientific and Cultural Organization)

Development of advanced centres of university studies in physics, botany, chemistry and geophysics, mathematics, chemical technology and post-graduate studies in engineering and technology. Assistance to the Indian Institute of Technology, Bombay (in thermo-dynamics liquid fuel technology, physical metallurgy, wood and cellulose chemistry, machine building, etc.) ; assistance to Madras University (Chemical engineering, fluid mechanics, etc.) ; Zoological Survey of India, Indian School of Mines, Dhanbad (Petroleum wing) and literacy planning. Other fields of UNESCO assistance include : Scientific documentation, research on desert problems, development of science teaching and apparatus, and assistance to the Education Commission's survey of educational objectives.

#### ICAO (International Civil Aviation Organization)

Pilot training ; radar control ; air traffic control and airport costing.

#### WHO (World Health Organization)

Control of communicable diseases, particularly malaria, tuberculosis, smallpox, trachoma and leprosy ; education and training of public health

personnel, planning and strengthening of health services, especially in rural areas ; maternal and child health ; environmental sanitation and water supply.

#### ITU (International Telecommunication Union)

Inter-city dialling, and V.M.F./V.H.F. techniques.

#### WMO (World Meteorological Organization)

Training programme in Meteorology.

### THE SPECIAL FUND

In 1965-66 the UNDP (Special Fund) was assisting 38 development projects in India involving an overall expenditure of some \$123 million over a period of five years. Of this amount, the Government of India was to provide \$86 million and the Special Fund \$37 million. The 27 projects receiving Special Fund assistance were : Industrial Instructor Training Institute, Calcutta, Regional Labour Institutes at Calcutta, Madras and Kanpur, Central Mechanical Engineering Research Institute, Durgapur, Central Public Health Engineering Research Institute, Nagpur, Power Engineering Research Organization, Bhopal and Bangalore, Fisheries Training Institute, Bombay, Central Mining Research Station, Dhanbad, Survey of Potential Hydropower Sites, Survey of Water Supply Resources of Greater Calcutta, Central Scientific Instruments Organization, Chandigarh, Cavitation Research Centre, Poona, National Aeronautical Laboratory, Bangalore, Vocational Training Scheme for Industrial Trades including a Central Instructors Training Institute in Kanpur, Central Instructor Training Institute, Madras, Institute for Petroleum Exploration, Dehra Dun, National Institute for Training in Industrial Engineering, Bombay, Central Instructor Training Institute, Hyderabad, Central Sheep and Wool Research Institute, Rajasthan, Central Instructor Training Institute, Ludhiana, Institute of Tropical Meteorology, Poona and International Meteorological Centre, Bombay, Pre-Investment Study of Forest Resources, Teacher Training for Engineering Colleges, Warangal, Assistance to Six Regional Engineering Colleges, Assistance to the Survey of India for Pre-Investment Surveying and Mapping, Establishment of Four Logging Training Centres, Centre for Research and Training on the use of Satellite Communications, Ahmedabad, Refining and Petrochemical Division, Indian Institute of Petroleum, Dehra Dun.



Extension of the Calcutta Water Resources Survey, Grassland and Fodder Development, Groundwater Surveys in Rajasthan and Uttar Pradesh, Soil Survey and Soil and Water Management Research and Demonstration in the Rajasthan Canal Area, Groundwater Investigations in Madras State, National Institute of Foundry and Forge Technology at Ranchi, Bihar, Assistance to the Calcutta Metropolitan Water and Sanitation Authority, Improvement of Milk Production in the Calcutta Area, Institute for Petroleum Exploration, Dehra Dun (Phase II), Pre-Investment Survey of Fishing Harbours, Training and Advisory Services in Tool, Die and Mould Making for the Plastic and Other Industries, Guindy, Madras.

#### AID UNDER REGULAR PROGRAMMES

Under its Regular Programme of Technical Assistance (financed under the regular United Nations budget) the United Nations has given India advisory services and help on the social and economic aspects of housing, lens grinding, transport, economics, evaluation of community development and the rehabilitation of the handicapped.

#### ILO

The ILO has one project in its regular programme of technical assistance. It concerns the utilization of rural man power much of which is currently underemployed.

#### FAO

FAO's work is to assist the Government of India in the field of agricultural production, marketing and consumption, including animal husbandry, forestry and fisheries development, plant and animal disease control, agricultural research, and improved nutrition, etc. FAO and UNICEF are taking part in the Government of India's \$25 million Applied Nutrition Programme and also in the extensive programmes to improve milk production. FAO is giving technical guidance and advice and UNICEF is contributing \$17 million towards these schemes, a considerable part of which consists of funds from FAO's Freedom From Hunger Campaign.

FAO also organizes seminars, exchanges information and advises and helps in spheres such as land reform, agricultural legislation, agricultural extension and education and in the development of agro-industries.

So far FAO is responsible for eight Special Fund projects in forestry, fisheries, sheep and wool, fodder crops and land drainage and reclamation, involving an expenditure of about

20 million dollars. Under the FAO/FFHC programme there are a considerable number of projects involving an expenditure of more than one million dollars.

#### UNESCO

UNESCO gives assistance to educational and research centres, such as, the Asian Institute of Educational Planning and Administration and the Unesco Research Centre on Social and Economic Development in Southern Asia in New Delhi and the Indian Ocean Biological Centre in Cochin. The East-West and the Reading Materials Projects are designed to promote better international understanding through exchange and provision of fellowships and literature. In addition, UNESCO organizes seminars, symposia and short training course in subjects such as soil biology, adult education, literacy, arid zone, oceanography, technical education, geology, etc.

#### WHO

The World Health Organization has an extensive programme of assistance under its regular budget. This includes: communicable disease control (malaria, tuberculosis, small-pox, trachoma, leprosy etc.); education and training of public health personnel; maternal and child health services; strengthening of rural health services as part of community development; environmental sanitation; community water supply, assistance to the Indian Council of Medical Research; medical rehabilitation; industrial and occupational health; health education.

#### UNICEF

Basic health including community development; disease control; school and pre-school feeding; nutrition education, milk conservation; pediatrics training; relief and emergency supplies. The total value of approved UNICEF assistance from May 1949 to June 1965 was \$54,000,000.

#### The World Food Programme

Intensive cattle development centres in Gujarat and Andhra Pradesh; assistance in increasing pork production in West Bengal; intensive egg and poultry production and marketing throughout India; reconstruction of bunds and tanks in Uttar Pradesh and Madhya Pradesh; manufacturing double-toned milk for low income groups in Delhi State.

Value of total approved WFP assistance in 1965: \$4,187,025.

Value of total approved WFP assistance upto June 1964: \$1,514,200.

#### International Bank for Reconstruction and Development

The total value of loans provided to India by the World Bank was \$1,010.11 million at the end of June 1965, consisting of 13 loans to the railways, six for power projects, six to ICICI for promoting industry, four to steel mills, two for coal mining and one each for agriculture and multi-purpose projects.

#### International Development Association

A loan of \$494 million was provided to India by IDA between 1961 and June 1965 for 14 development projects. During 1963 and up to July 1965 the following eight projects received sanction:

Purna Project; Koyna Project; Port of Bombay; Indian Posts and Telegraphs Department; Indian Railways; Kothagudem Project; Industrial Imports and Telecommunications in India.

#### International Finance Corporation

Assistance was rendered by the IFC to the following eight projects up to the end of June 1965 for operational investments and standby and underwriting commitments by IFC:

Republic Forge Company Ltd.; KSB Pumps Ltd.; Kirloskar Oil Engines Ltd.; Assam Sillimanite Ltd.; Precision Bearing of India Ltd.; Fort Glester Industries; Mahindra Ugin Steel Co. Ltd.; Lakshmi Machine Works Ltd.

Operational investments in all these totalled \$10,864,842.

#### India's Support for UN Aid Programmes

With contributions to Global Operating Costs:

(Figures given in US Dollars)

Pledges made to:

|                                |           |
|--------------------------------|-----------|
| Expanded Programme (1965) ..   | 850,000   |
| Special Fund (1965) .. ..      | 2,150,000 |
| World Food Programme (1963-65) | 500,000   |

Subscriptions to World Bank and its affiliates:

|                                                   |            |
|---------------------------------------------------|------------|
| World Bank (IBRD) .. ..                           | 800,000    |
| International Development Association (IDA) .. .. | 40,350,000 |
| International Finance Corporation (IFC) .. ..     | 4,431,000  |

Note: The major part of contributions is in Rupees.

## COLOMBO PLAN\*

(See also under Foreign Aid)

COLOMBO Plan Bureau, P.O. Box No. 596, Colombo.

Director: D. A. Strachan (United States); Information Officer: F. D. Douglas (Pakistan); Assistant Information Officer: L. P. Goonetilleke (Ceylon).

Plan period: 1951-71.

The Colombo Plan (for Co-operative Economic Development in South and South-East Asia) was conceived at a meeting of the Foreign Ministers of the Commonwealth held in Colombo in January 1950.

Over the years, the membership of the Colombo Plan has grown to 22; 16 countries within South and South-East Asia and six countries outside it.

The 16 countries within the area are Afghanistan, Bhutan, Burma, Cambodia, Ceylon, India, Indonesia, South Korea, Laos, Malaysia, Maldives

Islands, Nepal, Pakistan, the Philippines, Thailand and Viet-Nam.

The six countries outside the area are Australia, Britain, Canada, Japan, New Zealand and the United States.

Nearly one-fourth of mankind lives in the area covered by the activities of the Plan. The total population of the countries of the area is estimated to have increased from 624 million in 1950 to nearly 900 million in 1966.

The Colombo Plan is an international programme which is bilateral in operation even though it is multi-lateral in approach. It is bilateral in operation even though it is multi-lateral in approach because negotiations for assistance are made, not through any international agency, but direct between the donor and the receiving country. This procedure allows complete flexibility of action without interference from a third party and in actual practice it has resulted in considerable smoothness in operation.

The multi-lateral approach of the Colombo Plan is ensured through the deliberations of the Colombo Plan Consultative Committee and the Colombo Plan Council for Technical Cooperation in South and South-East Asia, which constitute the Colombo Plan Organization.

The Consultative Committee which is the highest deliberative body of the Colombo Plan and which meets once a year in one of the member countries takes note of the progress of the Plan and the role which external assistance plays in the development of the area and makes recommendations on the problems that arise in the implementation of development programmes. The Colombo Plan Council, located at Colombo, supervises the operation of the Colombo Plan Technical Co-operation Scheme and the dissemination of information on the Colombo Plan. The Executive arm of the Council in carrying out these purposes is the Colombo Plan Bureau, situated in Colombo.

\* Owing to the cancellation of the annual Colombo Plan Consultative Committee meeting in 1965, up-to-date aid figures had not been officially announced at the time of going to press.



Assistance has been given primarily in three forms—financial assistance and equipment for development projects; food and other commodity assistance as contribution towards economic stability and growth; and technical assistance to increase the number and range of skills and strengthen the economic and social institutions. The major part of the assistance under the Colombo Plan has come from member countries from outside the area. Internally, in the area, mutual assistance has progressively increased in recent years.

### EXTERNAL ASSISTANCE

The total of aid provided by donor countries under the Colombo Plan since its inception has been almost \$14,864 million, including technical assistance, loans and grants, provision of agricultural commodities and supply of equipment. The value of such aid contributed in 1963-64 was about \$2,165 million.

By far the greater part of the assistance under Colombo Plan comes from the six member countries outside the area—Australia, Britain, Canada, Japan, New Zealand and the United States. Brief details of some of the major items of capital aid and technical assistance given by these countries up to 1963-64 as recorded in the Thirteenth Annual Report of the Colombo Plan Consultative Committee are as follows:—

**AUSTRALIA:** During the year 1963-64, Australia's expenditure on capital aid and technical assistance under the Colombo Plan amounted to £A 4,982,280 bringing the total Australian contribution since the beginning of the Colombo Plan to £A 53,425,067. The arrival of another 711 Colombo Plan students in Australia during 1964-65 brought the total number of Australian training awards to 5,903.

In 1964-65, 307 awards were granted under the correspondence scholarship scheme, inaugurated by Australia in 1955, which brought the total number of awards to 4,104.

On 30 June, 1965, 70 Australian experts were in the field, bringing the total of Australian experts and advisers since the beginning of the Colombo Plan to 679.

Australian expenditure on technical equipment during 1963-64 was £A 697,497 which brought the total since the inception of the Colombo Plan to £A 3,091,497 and the number of projects implemented, or in the process of being met, to some 361 in 14 countries.

Expenditure of £A 2,636,000 on capital aid during 1963-64 brought Australia's contribution in this field to £A 38,477,000 spread over 135 projects in 14 countries. In addition to the above, Australia has contributed aid to the Colombo Plan area through the Indus Basin Development Fund (£A 3,000,000), Commonwealth Co-operation in Education and the Australian International Award Scheme. Australia has also given technical assistance to the Mekong Committee to the extent of £235,000.

**BRITAIN:** During the year 1963-64, the British Government spent £47.22 million on capital aid and technical assistance for development in South and South-East Asia, bringing the total of such expenditure since the beginning of the Colombo Plan in 1951 to £294.4 million. Additional commitments of the Government at 30 June, 1964, amounted to £150 million, including Britain's £12 million contribution to the Indus Basin Development Fund, which will be paid over the period up to 1971-72.

During the year ended 30 June, 1964, the British Government spent £44.97 million on capital aid, bringing the total of such expenditure since 1951 to £281.98 million. Additional capital aid commitments at 30 June, 1964 amounted to £148 million. British companies and private investors continued to be active within the Colombo Plan area. The total of British private investment in the area in 1963 is estimated to have been £33 million.

During the year ended 30 June, 1964, the British Government expenditure on technical assistance totalled £1.881 million, bringing the total of such expenditure since 1951 to £12.388

million. Commitments at 30 June 1964 totalled £2.77 million; on 30 June 1965, there were 597 Asian students in Britain undergoing training, bringing the number who have received instruction in Britain under the Colombo Plan since 1951 to 6,256; during the year ended 30 June, 1965, 93 experts were provided compared with 86 in the previous year, bringing the total provided since 1951 to 731. Equipment for training and research was provided during 1964-65 to the value of £337,865.

Out of the total of £130,000 of aid promised by Britain for the Mekong project, £69,000 had been spent by the end of June, 1963. During 1963-64 the British Government spent £.97 million from the grant of £20.8 million which it has agreed to subscribe to the Indus Basin Development Fund over the period from 1960 to 1972.

In addition, Britain has provided education assistance to the region through the Commonwealth Scholarship and Fellowship Plan and the Commonwealth Teacher Training Bursary Scheme. An important contribution to Britain's technical co-operation in South and South-East Asia is made by the British Council, a non-Government agency, which does educational work, the cost of which is not included in the figures of aid expenditure given above.

**CANADA:** To the end of the fiscal year 1963-64 Canada has made available a total of \$464.7 million for capital and technical assistance to member countries of the Colombo Plan, all in the form of grants, requiring no repayment of principal or interest. The amount made available during 1964 was \$41.5 million.

Of the \$464.7 million, approximately 48 per cent has been allocated for capital assistance, mainly in the form of construction projects (chiefly power stations, transmission lines, ground and aerial surveys, roads, bridges and harbours). Non-project items such as locomotives, transport vehicles and industrial and agricultural equipment as well as surveys and feasibility studies requiring little or no equipment are likewise included under capital assistance.

Commodity assistance accounted for about the same proportion of Colombo Plan allocation as capital assistance—i.e. about 48 per cent. Canadian commodity assistance has been concentrated in the larger countries of the area, mainly India and Pakistan.

Although technical assistance accounts for only slightly under 4 per cent of Canadian Colombo Plan aid, it is a very important aspect of the Canadian programme. Canadian technical assistance expenditure to 30 June 1965 was £7.5 million. A total of 2,997 trainees have been brought to Canada from Colombo Plan countries to the end of the last fiscal year and a total of 427 advisers and teachers have been sent to the region.

In addition to its Colombo Plan contribution as such, Canada has provided since 1951, to certain member countries loans and grants totalling \$115 million for purchase of wheat and flour. Since 1961-62 Canada has also pledged under World Bank consortium arrangements, special long-term credits for use by India and Pakistan. To the end of 1963-64 long-term credits totalling \$37.5 million had been pledged for India and \$22.5 million for Pakistan. Canada has also financed studies in Canada for students from Commonwealth countries under the Commonwealth Scholarship Plan. An aerial survey of the Lower Mekong river, costing \$1.3 million was completed in 1962-63.

**JAPAN:** Since her participation in the Colombo Plan in 1954, Japan's contributions to the Colombo Plan countries have steadily increased year by year. During the period between fiscal years 1954-55 and 1964 inclusive, budgetary appropriations for technical assistance to the Colombo Plan region have totalled 8,835 million yen.

During this period Japan sent 704 experts (including 92 for technical co-operation centres) to Colombo Plan countries and received 1,525 trainees for training in Japan. In addition, 1,887

participants from Colombo Plan countries came to Japan under the Japan-United States Third Country Training Programme. On June 30, 1964, the actual disbursements since 1956 under Japan's economic assistance to Colombo Plan countries amounted to 81,445 million yen and the outstanding balance of commitments to 126,060 million yen, including grants under the Agreements for Economic and Technical Co-operation with Cambodia and Laos and loans and lines of credit supplied to India, Indonesia, Pakistan, the Philippines and Viet-Nam under inter-governmental agreements.

During the period from 1 July 1963 to 30 June 1964, Japan provided the services of 109 experts. Japan's total expenditure on the Mekong River Development project amounted to 360 million yen.

Expenditure on experts and trainees during 1963-64 amounted to 721 million yen. In addition, Japan contributed assistance to the region through the Japanese Government scholarship programme (85 million yen for 1964), private technical co-operation by semi-governmental agencies and through private organisations mainly in the form of training awards.

**Private Investment:** The outstanding balance of Japanese private investment in the area as of 30 June 1964, amounted to 30,810 million yen, while payments made under reparations agreements for development in the Colombo Plan area amounted to 173,465 million yen, in Burma, Philippines, Indonesia and Viet Nam.

**NEW ZEALAND:** New Zealand has made available, up to 31 March 1964, a total amount of £13,146,142 for capital and technical assistance under the Colombo Plan. A further £1,000,000 has been appropriated for 1964-65.

During the year ended 30 June 1964, New Zealand's expenditure on capital aid and technical assistance amounted to £1,044,015 which brought the total expenditure on Colombo Plan activity since 1951 to £10,957,025.

The expenditure of £334,617 during 1963-64 brought the total of New Zealand's contribution in the form of capital equipment and cash grants to £7,511,434. This amount includes New Zealand's contribution to the Mekong River Survey and to the Indus Basin Development Fund. Most of New Zealand's capital aid has taken the form of direct transfers of overseas funds.

New Zealand's technical assistance expenditure during the year amounted to £709,398 bringing the total expenditure since 1951 to £3,445,591.

The arrival in New Zealand during 1964-65 of another 207 students brought the total number of New Zealand training awards to 1,763.

During 1964-65, 24 New Zealand experts were assigned to countries of the region, bringing the total number of experts since the inception of the Plan to 244.

New Zealand's expenditure on aspects of the Mekong River Survey to 30 June 1963 amounted to £61,400. A further contribution of £50,000 was transferred during 1963-64, bringing New Zealand's total to the Indus Basin Development Fund to £350,000 to date.

**UNITED STATES:** United States Government obligations and commitments for economic and technical assistance to members of the Colombo Plan totalled \$2 billion in 1964. Under the Foreign Assistance Programme, \$955 million were provided through the Agency for International Development in the form of loans, grants and technical assistance. Under the Agricultural Trade Development and Assistance Act, \$934.5 million equivalent was provided in local currency derived from the sale of agricultural commodities and additional assistance provided for emergencies and voluntary relief agencies. The Export-Import Bank provided \$76.4 million in long-term credits. Since July 1, 1951, the United States Government has provided approximately \$13.5 billion to member countries to assist in their economic development.



As of 30 June 1964, 1,385 Peace Corps members were sent to Colombo Plan countries and an additional 331 volunteers were in training.

A total of 15,709 persons from Colombo Plan countries were trained under U.S. Government auspices from 1950-65. Of these 1,825 came to the U.S. and 444 were sent to other countries for training in 1964-65 alone. The third-country training programme is a co-operative training programme in which other countries share in the training and its costs for U.S. sponsored participants.

The U.S. investment guarantee programme is designed to stimulate the flow of private capital to these areas. During fiscal year 1964, new dollar investments in the Colombo Plan region totalling \$185.3 million were guaranteed against inconvertibility, expropriation and war damage. This represents a large increase over prior years.

The International Bank for Reconstruction and Development

Up to 30 June 1964 the International Bank for Reconstruction and Development made available over U.S. \$1,702 million to member countries in the area of which about U.S. \$124 million was provided in 1963-64.

The International Development Association which came into existence in September 1960 as an affiliate of the I.B.R.D., starting operations a few months later, had committed U.S. \$482 million by the end of June 1964 (compared with U.S. \$346.5 million at the end of June 1963). The International Finance Corporation has invested U.S. \$23 million in enterprises in the area.

Since its inception in 1959 the United Nations Special Fund has approved an expenditure of U.S. \$92.3 million on projects within the Colombo Plan region.

The United Nations and its specialised agencies had provided under the Expanded Programme for 1963 \$10.5 million for countries in the Colombo Plan area.

### TECHNICAL CO-OPERATION\*

Technical co-operation—the provision of mutual assistance in expert manpower, equipment and training opportunities—remains an important and necessary element in the economic development in the area.

The total expenditure on technical assistance under the Colombo Plan in 1964-65 amounted to £39.5 million, which represents an increase of about 30 per cent over the average expenditure for the last five years. This brings the cumulative total expenditure for the 15 years of the life of the Colombo Plan to £220.6 million.

During the year 1964-65, expenditure on the provision of experts amounted to £17.6 million. This enabled a total of 1,186 experts to be provided, mainly in transport and communications, education (technical and general), administration and engineering. The cumulative total number of experts provided for the 14 year period now stands at 7,167.

Over 56 per cent of the 1,186 experts provided this year have been from the United States (673). India (238) is the second largest supplier of experts with Britain (93) coming next.

The largest recipient of experts is Viet Nam (362) which is followed by Nepal (283) and Pakistan (103). The majority of experts to Nepal have been provided by India and they have been assigned to capital aid projects such as the Trisuli Hydel Project as well as in technical assistance fields as surveyors, road engineers, construction engineers, university lecturers etc. The majority of experts to Pakistan and Viet Nam have been provided by the United States.

Expenditure on equipment amounted in 1964-65 to £14.7 million compared with £16.1 million in the previous year, bringing the cumulative total to over £84 million. A good part of the equipment was provided for training and research institutions in the region.

### Expenditure on Technical Co-operation (£ Sterling)

The following table gives the expenditure by supplying and receiving country, 1 July 1960 to 30 June 1965.

| Receiving<br>Country | Supplying Country |            |       |           |         |           |           |          |                |          |             |                  | Total       |
|----------------------|-------------------|------------|-------|-----------|---------|-----------|-----------|----------|----------------|----------|-------------|------------------|-------------|
|                      | Australia         | Britain*   | Burma | Canada    | Ceylon  | India     | Japan     | Malaysia | New<br>Zealand | Pakistan | Philippines | United<br>States |             |
| Afghanistan          | 6,720             | 22,469     | —     | —         | —       | 2,572     | 56,238    | —        | 366            | —        | —           | 6,032,134        | 6,120,499   |
| Australia            | —                 | —          | —     | —         | —       | 3,044     | —         | —        | —              | 1,215    | —           | —                | 4,259       |
| Bhutan               | —                 | —          | —     | —         | —       | —         | 3,956     | —        | —              | —        | —           | —                | 39,56       |
| Brunei               | 25,727            | 710        | —     | 6,571     | —       | 915       | 538       | 5,671    | 3,151          | —        | —           | —                | 43,283      |
| Burma                | 756,859           | 1,021,713  | —     | 455,570   | —       | 19,553    | 86,631    | 2,668    | 182,580        | 5,488    | —           | 666,785          | 3,202,262   |
| Cambodia             | 203,266           | 150,472    | —     | 227,150   | 4,410   | 60,986    | 182,700   | 829      | 790            | 1,004    | —           | 6,055,141        | 6,882,347   |
| Ceylon               | 602,136           | 1,490,205  | —     | 686,836   | —       | 119,061   | 291,478   | 8,898    | 294,019        | 2,557    | —           | 2,587,095        | 6,082,285   |
| India                | 1,025,741         | 3,917,789  | —     | 1,402,565 | —       | —         | 423,162   | 322      | 173,021        | —        | —           | 22,797,109       | 29,739,709  |
| Indonesia            | 2,219,986         | 531,921    | —     | 732,424   | 562     | 26,037    | 302,126   | 3,591    | 728,785        | 12,631   | —           | 36,436,256       | 40,994,319  |
| Japan                | —                 | —          | —     | 7,915     | —       | 4,108     | —         | —        | —              | 1,082    | —           | —                | 13,105      |
| Korea                | 88,443            | 55,833     | 315   | 10,885    | —       | 10,286    | 19,559    | 1,856    | 10,206         | 2,496    | —           | 6,922,470        | 7,122,349   |
| Laos                 | 260,780           | 298,092    | —     | 143,491   | —       | 1,003     | 36,787    | 1,130    | 3,590          | 209      | —           | 8,115,262        | 8,859,744   |
| Malaysia             | 3,581,596         | 1,103,911  | 2,160 | 1,669,483 | 2,155   | 80,976    | 247,363   | 23,645   | 1,500,449      | 12,240   | —           | —                | 8,223,989   |
| Maldives             | —                 | —          | —     | 122       | —       | 2,876     | —         | —        | —              | —        | —           | —                | 2,998       |
| Nepal                | 92,817            | 242,688    | 605   | 8,071     | 1,570   | 1,057,054 | 22,077    | 1,124    | 47,512         | 18,924   | —           | 6,705,741        | 8,199,183   |
| Pakistan             | 1,053,345         | 3,743,319  | 275   | 1,220,241 | 493     | 7,722     | 358,033   | 10,385   | 128,315        | —        | —           | 17,797,842       | 24,324,970  |
| Philippines          | 656,210           | 502,817    | 761   | 167,599   | 1,650   | 59,606    | 155,022   | 2,351    | 58,271         | 4,089    | —           | 10,293,105       | 11,901,481  |
| Thailand             | 1,009,097         | 727,648    | 1,334 | 227,389   | 645     | 63,818    | 503,237   | 10,510   | 228,977        | 1,197    | 107         | 19,631,800       | 22,405,849  |
| United States        | —                 | —          | —     | —         | —       | —         | —         | —        | —              | —        | —           | —                | 2,405       |
| Viet Nam             | 877,018           | 195,280    | 114   | 613,550   | 187     | 17,595    | 81,555    | 276      | 289,100        | 1,395    | —           | 31,997,836       | 34,073,906  |
| Entire Area          | 1,367,275         | 271,492    | 2,450 | 3,685     | 122,956 | —         | 246,881   | 1,815    | 396,503        | 7,502    | 10,457      | —                | 2,431,016   |
| Mekong River†        | —                 | 24,476     | —     | —         | —       | —         | 56,623    | —        | —              | —        | —           | —                | 81,099      |
| Total                | 13,832,416        | 14,300,835 | 8,020 | 7,583,552 | 134,628 | 1,537,217 | 3,073,975 | 77,476   | 4,045,635      | 72,029   | 10,654      | 176,038,576      | 220,715,013 |

\* Figures do not include aid given by Britain under the Colonial Development and Welfare Acts and for Educational Co-operation in the Commonwealth.  
† Expenditure on Technical Assistance to the Mekong project by other countries is included elsewhere.



New training places provided under the Colombo Plan during 1964-65 numbered 4,920 compared with 4,551 in 1963-64. The largest number of awards were in the field of Education—1,262. Technical education awards amounted to 357 in 1963-64 as in 1964-65. Other major fields of training include Administration (704) Food, Agriculture and Forestry (690) and Medical and Health (546).

The United States has provided 2,269 i.e. 46 per cent of the training places and ranks as the major donor. Australia (711) and Britain (597) are second and third largest donors respectively, while Canada (382) retains fourth position followed by Japan (366) and India (280).

India (828) was the major recipient of training awards: she is followed by Thailand (650) and Malaysia (573). A significant feature is that an increasing proportion of training awards are being taken up by the newer members of the Plan.

### MUTUAL AID

From the inception of the Colombo Plan in 1950 to June 1965, the countries of the region have taken in 3,446 trainees from neighbouring countries, representing 9 per cent of the total number of training places (37,966) provided during the same period.

India ranks as the major donor of training places within the region, having provided 2,720 of which 1,628 were to Nepal and 1,092 to other countries of the region. The other countries have provided 726 training places; Malaysia (341) and Pakistan (218) are second and third largest donors respectively. Other participants in providing intra-regional training are Ceylon (77), Philippines (30), Burma (32), Indonesia (18) and Thailand (10).

During the year 1964-65, 388 training places have been provided within the region as compared with 367 provided last year. India, the major donor, has provided 280 places during the year i.e. 73 per cent of the total. Pakistan is the second largest donor within the region having provided 54 places. Malaysia (46) is the third most important regional donor, while Burma provided 7 places and the Philippines provided one place.

### AID FROM INDIA

During 1964-65 India provided 280 training places to the following countries: Australia (4), Burma (3), Ceylon (45), Korea (20), Malaysia (38), Philippines (23), Thailand (54), Nepal (89). Since the inception of the Colombo Plan 2,720 training places have been provided by India as follows: Australia (7), Burma (74), Ceylon (147), Cambodia (2), Indonesia (56), Japan (10), Korea (28), Laos (12), Malaysia (302), Nepal (1,628), New Zealand (1), Pakistan (39), Philippines (166), Thailand (206) and Viet Nam (27). Training facilities were provided in general education; civil, mechanical and electrical engineering; statistics; forestry; fisheries; community development and co-operation; social services; water resources development; agriculture; medicine and allied subjects; sanitation, sericulture; economic planning; power and fuel development; transport and communications; parliamentary affairs; insurance; banking, chartered accountancy; budgetary procedures; taxation; atomic energy and handloom production and tourism. The cost of these services has been over £ 1.5 million.

India also provided training facilities for trainees from Colombo Plan countries in the fields of accounting and auditing of public co-operations, agriculture, meteorology, demography, community development and statistics, under the United Nations Technical Assistance Programme, and for 51 trainees from Colombo Plan countries in the fields of jeep maintenance, literacy education, irrigation practices, community development, agricultural planning and malaria eradication, under the United States Third Country Programme.

India has so far provided 90 experts, including 238 during 1964-65.

These experts covered various fields such as irrigation, sericulture, iron and steel (works and training), organisation of urban milk supply, railways, electrical engineering, taxation, broadcasting, organization and methods, banking and insurance, timber research, small savings, sugar technology, tractor engineering, forestry, road research, leather technology, use and maintenance of HT2 aircraft, cultivation of potatoes and cashewnuts, statistics, doll-making and small scale industries, agriculture, transport and aeronautical ground engineering.

### Mekong River Project

India's assistance for the Tonle Sap Sector of the Mekong River Project was stepped up. An Indian team went to Cambodia to prepare designs and cost estimates. A silt and concrete laboratory has been set up in Cambodia. Also investigational work is going on in Poona on proposed barrages on the Mekong system.

### Assistance to Nepal

During 1963-64 the financial and technical aid given by India was around Rs. 37 million. About 200 Indian experts and technical personnel were working with their Nepalese counterparts in several fields like road, airport and building construction, irrigation, agriculture, education, and health. In the Chatra Canal Project under the Colombo Plan, excavation works totalling 990 million cubic feet are completed. With the ending of the tripartite agreement for road construction, work on the Kathmandu-Trisuli Road, was continued under bilateral agreement. Work on the Tripureshwar-Thankot Road linking the capital with Tribhuvan Rajpath has been completed; considerable progress has been made on the Kathmandu-Daksinkali Road. Considerable progress was also made in the construction of airports, including ancillary buildings at Pokhara, Bhairawa, Janakpur and Simra and also in the completion of preliminaries at Biratnagar.

In the field of irrigation and water supply, progress was marked by the commencement of the laying of pipes required for the Rs. 8 million Kathmandu water supply scheme.

Work on the Trisuli Hydel Project continued to make progress, as also excavation, concreting and masonry work on the barrage, power channel, aqueducts, balancing reservoir, intake structure and power house. All the generating equipment etc. have been received. The dam, power channel and earth-work for power house foundations for Pokhara Hydel Scheme have been completed and necessary equipment and material received at Bhairawa for air-lifting to site.

In the fields of horticulture valuable research and field experiments were carried out at the research stations and trial orchards and the results were made available to progressive farmers.

Six more veterinary-cum-cattle breeding centres were established during the year. The construction of the Biological Products Laboratory is nearing completion and equipment etc. are being procured. The Rinderpest Eradication campaign has been restarted and another six million cattle were vaccinated. The programme of training Stock Supervisors was completed and the last batch of stockmen was receiving training at the end of the year.

The first phase of the Industrial Estate at Patan was inaugurated and different industries were functioning in the various workshops. The construction of the second phase has been taken up. The main building of the Institute for the training of rangers and foresters together with a hostel building is being constructed and all the necessary ancillary buildings have been completed for shifting the institute at Hathauda.

The construction of the Science Block building at the new campus of the Tribhuvan University is nearing completion and work on their buildings has begun. The Science extension for the Trichandra College has been completed and equipped. Preliminary work on provision of buildings for the second phase of the Tribhuvan Adarsh Vidyalaya has been started. Under the National

Archives Scheme, the construction of the Stack portion of the buildings and preparation of catalogues, micro-filming of selected manuscripts etc. continued with the help of the Indian Experts.

Indian assistance was also continued in other fields such as Archaeology, running of engineering schools, construction of nurses' quarters and kitchen block for the Maternity Home Child Welfare Centre and for the geological surveys and mineral investigations and topographical survey in Nepal.

### AID TO INDIA

**AUSTRALIA:** Australian capital aid valued at £ A 492,000 was provided to India during 1963-64 and included diesel locomotives and 2,000 units of rolling stock for the Railways; Radio and electrical equipment and heavy earthmoving equipment and commodity aid earmarked for the Tungbhadra Dam Project. This brought the total value of capital aid provided by Australia to £A 13,208,800. Australia has continued her programme of paper supplies for school texts and equipment for the Bombay Milk Scheme.

Since the inception of the Plan, 698 training awards have been provided for India. 33 Australian experts and advisers have visited India, 2 in 1964-65. Technical equipment provided by Australia included a cobalt 60 beam source, workshop equipment for the Government Precision Instruments Factory, Lucknow, equipment for the Central Road Research Institute, equipment for the Arid Zone Research Institute at Jodhpur.

**CANADA:** To the end of the fiscal year 1963-64 Canada had allocated \$ 238,956,000 million for capital assistance to India.

A summary of the Canadian 1963-64 capital and commodity assistance programme is as follows:

|                              |       | \$                  |
|------------------------------|-------|---------------------|
| Umtru Power Project          | .. .. | 650,000             |
| Idikki Power Project         | .. .. | 3,000,000           |
| Gamma Cell Units             | .. .. | 60,000              |
| Cobalt Therapy Units         | .. .. | 200,000             |
| Power Transmission Equipment | .. .. | 2,800,000           |
| <b>Commodities:</b>          |       | <b>\$</b>           |
| Wheat                        | .. .. | 1,500,000           |
| Copper                       | .. .. | 3,000,000           |
| Aluminium                    | .. .. | 3,000,000           |
| Zinc                         | .. .. | 2,150,000           |
| Asbestos                     | .. .. | 2,000,000           |
| Nickel                       | .. .. | 500,000             |
|                              |       | <b>12,150,000</b>   |
|                              |       | <b>\$18,860,000</b> |

Under Canadian technical assistance arrangements, 810 Indian students have received training in Canada and 47 Canadian advisers or teachers have served in India.

In 1963-64 Canada pledged Rs. 130 million for the Rajasthan Atomic Power Station. Canadian allocations for the Indus Basin Fund now stand at \$13.1 million.

**JAPAN:** Forty-two Indian trainees went to Japan for training. Of these 7 were in agriculture, engineering (24), power and fuel (2), medical and health (1), transport and communications (4) and administration (3). Japan provided six experts: agriculture (5) and transport and communications (1). At the tenth Consortium Meeting in May 1964, Japan expressed her readiness to extend additional credits of 21,600 million yen during the Fourth year of the Five Year Plan, bringing the total commitments by Japan to 82,800 million yen.

**NEW ZEALAND:** The total capital aid contribution by New Zealand to India since 1951 stands at £2,738,949 the highest to any one country. Of this £2,581,932 has taken the form of capital assistance, roughly half for the All-India Institute of Medical Sciences and half for dairy development in various parts of the country. In the latter field grants totalling



£170,000 were approved in 1963-1964 for projects at Bombay and Dehra Dun, and negotiations are under way for further substantial assistance. Another adviser in dairying was assigned to India during 1963-64, bringing the total sent since 1951 to 18, and 18 new training awards were granted in 1964-65 making a total of 116. Most of the training provided has been in the field of agriculture, and the experts have been mainly in this field and that of health.

**UNITED KINGDOM:** United Kingdom loan aid to India's Second Five-Year Plan (1956-61) amounted to £80.5 million. The aid which has been pledged so far to the Third Five-Year Plan (1961-66) amounts to £155 million, against which loan agreements totalling £125 million had been agreed up to 30 June 1964. New agreements concluded between 1 July 1963—30 June 1964 amounted to £26.5 million. Disbursements of United Kingdom aid in this period amounted to £29.9 million. 140 new training places were provided in 1964-65 bringing the total training awards by Britain to 2,032, and 307 experts and advisers have visited India, 27 of whom were sent in 1964-65.

New appointments of experts included 8 in technical education subjects, and 3 in medical and health (a team visit to several centres in India to demonstrate a special application of neuro-surgery). A Plant Pathologist was provided for six months to study a potato virus disease at Ootacamund in Madras State. During the year British equipment was supplied to the Indian Institute of Technology, Delhi, in continuation of a programme of assistance under which eight professors have been provided for the Institute by the United Kingdom Government since 1960, and seven more are to be provided over the next two to three years, as well as other experts. Up to June 1964, nearly £140,000 worth of equipment was supplied by the United Kingdom Government, and a further £77,000 worth was provided by British Industry. This is part of the programme under which £650,000 worth of equipment is altogether being provided for the Institute by the Government and British industry over a period of years. Other United Kingdom Government gifts of equipment

included £2,500 worth to the Tractor Testing and Training Station, Budni, and £5,700 worth to the Indian School of Mines, Dhanbad, in continuation of earlier aid.

During 1963-64 the United Kingdom Government paid £967,000 into the Indus Basin Development Fund, bringing up to £8.734 million the sums disbursed by 30th June 1964, from the original United Kingdom grant contribution of £20.86 million for the Indus Basin Development Plan. The United Kingdom Government has agreed, subject to Parliamentary approval to commit a further sum of £13.9 million under the Supplemental Agreement signed in April 1964.

**UNITED STATES:** United States assistance to India continued in 1964 with the following categories of aid: (1) development grants for technical assistance (\$6.9 million); (2) development loans for commodity and capital goods imports (\$337.2 million); (3) agricultural commodities under PL 480 (\$501.1 million) and (4) Export-Import Bank loans (\$57.2 million).

During fiscal year 1964-65, 49 resident American technicians were in India to work on joint projects or project support. Training programmes were planned for 454 participants. "Training of trainers" projects have been increasingly emphasized. Prominent among the projects are those contributing to the founding of new educational training institutions.

Development loans are extended by the United States to India to finance the purchase and importation of capital goods, commodities, and related services, for development projects and programmes. Credits have been extended mainly for public power development, railroad improvement and expansion, steel imports, fertilizer, and for capital goods imports required by the private and public sectors for industrial expansion. The Export-Import credits assist in the implementation of India's Third Five Year Plan and will find factories to produce fertilisers, cellulose and plastics.

The \$501.1 million in United States agricultural commodities supplied to India under sales

agreements and grants have constituted a major factor in India's ability to feed and clothe her people and to carry out her economic development programme. The \$24.5 million donated under Title III consisted of milk, cornmeal and other commodities distributed by CARE, UNICEF and three other voluntary agencies.

The Peace Corps has been active in India since December 1961. As of 30 June 1964, 153 volunteers were active in agriculture, health, nursing and teaching activities.

#### WORLD BANK, I.D.A. AND I.F.C.

Thirty-one of the 80 loans made by the I.B.R.D. (World Bank) have been to India, whose total borrowings of \$847 million make it easily the Bank's largest single customer.

I.D.A. extended a credit of \$90 million to enable companies in three major industries—commercial vehicles, industrial machinery and construction equipment—to import components and materials on a larger scale than has been possible up to now, and thus to make fuller use of existing capacity and to produce more capital goods.

I.D.A. extended two other credits—one of \$33 million for the development of telecommunications and another of \$62 million to help finance the railway development programme.

I.F.C. undertook the following commitments: to invest \$1.2 million in loan and share capital to help complete the financing of an \$8.4 million programme to enlarge and diversify the electric cable production of a company in Calcutta, to provide loan and share capital amounting to \$3.4 million to a new company which will build and operate a cotton textile machinery plant.

A study of the problems of coal transport has been completed at a cost to the Bank of some \$855,000. Field work on a study looking toward a new crossing on the Hooghly River was completed. The Bank has allocated \$116,000 to cover part of the cost.

The Bank continued to station a Resident Representative in New Delhi.

## COMMUNITY DEVELOPMENT PROJECTS AND PANCHAYATS

At the Centre the Ministry that is responsible for community development projects is the Ministry of Community Development and Co-operation. The Ministry is responsible also for village panchayats.

The C. D. programme, which was launched on Oct. 2, 1952, entered its 14th year of operation on Oct. 2, 1965.

The Government proposes to set up 1,000 additional community development blocks during the Fourth Plan period.

The entire country has now been covered by the C. D. programme. Out of 5,261 blocks into which the entire rural India has been delimited 2,315 are in stage I, 2,167 in stage II and 759 in the post stage II face.

Out of the 450 Tribal Development Blocks which were to be opened during the Third Plan period 415 have so far been allotted.

#### BUDGET

(Rs. in lakhs)

|                                                                                                                     | Revised<br>Estimates<br>1965-66 | Budget<br>Estimates<br>1966-67 |
|---------------------------------------------------------------------------------------------------------------------|---------------------------------|--------------------------------|
| <b>I. Revenue Expenditure:—</b>                                                                                     |                                 |                                |
| Grants to States for C. D. Programme:—                                                                              |                                 |                                |
| Plan .. .. .                                                                                                        | 2,695.00                        | 1,783.75                       |
| Non-Plan .. .. .                                                                                                    | ..                              | ..                             |
| Grants to States for Central Schemes:—                                                                              |                                 |                                |
| Plan .. .. .                                                                                                        | 57.25                           | 62.18                          |
| Non-Plan .. .. .                                                                                                    | 26.46                           | 1.28                           |
| Direct Central expenditure on Central schemes:—                                                                     |                                 |                                |
| Plan .. .. .                                                                                                        | 19.342                          | 8.60                           |
| Non-Plan .. .. .                                                                                                    | 38.818                          | 38.95                          |
| <b>Total Revenue Expenditure ..</b>                                                                                 | <b>2,826.77</b>                 | <b>1,894.76</b>                |
| <b>II. (a) Capital Expenditure:—</b>                                                                                |                                 |                                |
| Capital outlay on schemes of Govt. Trading                                                                          |                                 |                                |
| Material and Equipment under T. C. A. Programmes ..                                                                 | 4.00                            | 2.00                           |
| <b>(b) Grants to State and Union Territory Govts. for</b>                                                           |                                 |                                |
| <b>development .. .. .</b>                                                                                          | <b>692.00</b>                   | <b>710.00</b>                  |
| <b>Total Capital Expenditure ..</b>                                                                                 | <b>696.00</b>                   | <b>712.00</b>                  |
| <b>III. Debt Head—Loans &amp; Advances by Central Govt. to States/<br/>Territories, Pilot Projects etc. .. .. .</b> | <b>2,075.21</b>                 | <b>1,591.10</b>                |

#### COMMUNITY DEVELOPMENT

An outlay of over Rs. 4,137.44 lakhs for the Community Development programme has been approved by the Planning Commission for 1966-67.

An analysis of the utilization of Plan outlay under Community Development during the Third Plan period shows that for the country as a whole, out of the total approved Plan outlay of Rs. 287.57 crores only Rs. 273.82 crores (95.2 per cent) have been spent at the close of the Third Plan period.

**Agriculture:** Agricultural production has continued to be the main focus of Community Development. The administrative structure has been streamlined from the State to the village level to achieve a rapid increase in agricultural production.

During the year 1965-66, guidelines were indicated to the State Governments suggesting specific responsibilities to be assigned to Panchayati Raj institutions and the Community Development Organisations in the emergency food production drive.

The Committee on Agriculture and Irrigation of the National Development Council and the Panel of Experts on Agricultural Administration suggested that the States should be requested to undertake a comprehensive review of the legislative, organisational and administrative measures required to enable the Panchayati Raj institutions to make the maximum possible contribution to agricultural production.



The recommendations of the Working Group on classification of blocks for developing an intensive approach to selected programmes was pursued by the State Govts. The Planning Commission had indicated to the State Governments that the categorisation of the blocks on the lines suggested by the working group should be kept in view, whilst formulating agricultural production plans for the Fourth Plan.

**Fisheries :** Considerable progress was recorded in the implementation of the special scheme for intensive development of fisheries in 786 selected blocks. An additional 430 blocks are proposed to be brought under the programme in 1966-67.

**Poultry :** Poultry programme recorded good progress during the year under review. Development of poultry in C. D. blocks around large urban centres was taken up by 13 States and three Union Territories. The States have been asked to strengthen arrangements for marketing poultry produce on cooperative lines.

**Village and Small Scale Industries :** Almost all States have accepted the minimum target of four village industries in each block. This target has been achieved in almost all cases. To encourage the development of small industries in the rural areas, an amount of Rs. 50 lakhs has been earmarked for issuing import licences for raw materials required by units in rural industrial estates, rural industries project areas, industrial cooperatives and Panchayati Samiti industries. The Khadi and Village Industries Commission has agreed to provide necessary funds for promoting Khadi and Village Industries programmes in the block.

**Health :** There were 4,742 Primary Health Centres at the end of Sept. 1965.

**Adult Literacy :** During the year ending Sept. 1965, about 54,000 adult literacy centres and 13,400 rural reading rooms/libraries were started; nearly 11 lakh adults attended the literacy centres, making a total of about 97 lakh adults made literate.

**Community Listening Sets. :** About 2 lakh community listening sets have been already supplied and located in the rural areas. The number of radio rural forums exceeded 12,500 by Dec. 1965.

### SPECIAL PROGRAMMES

**Applied Nutrition :** The Applied Nutrition Programme has been taken up for implementation in 222 selected blocks. The programme aims at increased production at the village level of various protective and body-building foods and training and education of the villagers in the

production, preparation and consumption of these foods. This programme is now in operation in 220 blocks in the States of Andhra Pradesh, Bihar, Delhi, Himachal Pradesh, Kerala, Madhya Pradesh, Madras, Maharashtra, Mysore, Orissa, Punjab, Rajasthan, Uttar Pradesh and West Bengal.

**Youth and Women's Programme :** The strengthening of the youth and women's groups is being given special emphasis in the blocks selected for applied nutrition and intensive production programmes and also an effective programme for rural youth and women through Yuvak and Mahila Mandals was maintained. During 1965-66 the membership of the above organisations was 25 lakhs and 14 lakhs respectively.

**Balwadis :** The Coordinated Welfare Extension Projects continued to function in 300 blocks. The integrated Child Welfare Projects promoted by the Deptt. of Social Welfare, continued likewise in all States. A little over 21,000 balwadis were reported to be functioning during the year.

**Rural Works :** The programme which started in 1960 on a pilot basis in 32 blocks, now covers 998 blocks. This programme seeks to create additional employment opportunities to agricultural workers in areas exposed to unemployment and underemployment. An amount of Rs. 5 crores has been provided for this programme for 1965-66.

### PANCHAYATI RAJ

Panchayati Raj was in force at the end of 1965-66 in all the States except Madhya Pradesh, Kerala, Jammu & Kashmir and Nagaland.

### CONSULTATIVE COUNCIL

During 1964-65 a consultative council on Panchayati Raj was set up. The interim report of the committee is yet to be finalised. (March 1966).

#### Santhanam Committee

The recommendations of the Santhanam Committee were considered at length by the last annual conference which accepted them as guidelines for policy; it was felt that they could be taken into account when opportunities for amending the existing legislations arose in the future.

The more important of the recommendations endorsed by the annual conference are :

(a) At the Village Panchayat level all members should be elected. Co-option might, however be resorted to if reservation for women,

Scheduled Castes/Scheduled Tribes beca infructuous for want of candidates ;

(b) There should otherwise be no nomination or co-option on the score of eminence or experience ;

(c) The Chairmen of Samitis and Parishads should be elected by a broad-based electoral college ;

(d) Ability to read and write the local language should be laid down as the minimum qualification for election as Sarpanch of the village institution and member or office bearer of a Panchayat Samiti or Zila Parishad ; and

(e) It would be desirable to entrust supervision of Panchayati Raj elections to the State Chief Electoral Officer.

The above recommendations are at various stages of implementation in the States.

**Finance :** The Santhanam Study team made a series of recommendations designed to increase the tax proceeds of Panchayati Raj bodies. The more important among them included compulsory levy of house tax, profession tax and vehicle tax, prescription of maximum and minimum rates for profession tax and specification of minimum rates of vehicle tax and levy of pilgrim tax by the higher tier Panchayati Raj institutions. The Consultative Council on Panchayati Raj had also made several suggestions including assignment of larger revenues to Panchayati Raj institutions and provision of matching assistance and equalisation grants to these bodies. The above recommendations are at different stages of implementation in the States.

**Safeguards :** Regarding safeguards the annual conference recommended that powers of recruitment, promotion and disciplinary action in respect of the staff working in Panchayati Raj institutions should vest in an authority independent of the elected wing of these bodies. Precise definition of the financial powers of the Panchayati Raj Institutions, the Standing Committees and their chief executive officers and formulation of an appropriate code of conduct for the elected representatives and office bearers of Panchayati Raj institutions were also recommended.

### TRAINING

The training programmes have been maintained on a country-wide basis for both officials and non-officials engaged in the implementation of the development programmes. This is a continuous process.

### TRAINING PROGRAMME

| Description of the Training Centre (figures in bracket give the number of Training Centres) | Category of persons trained                            | Duration of training                                 | Number trained during the year 1965-66 | Total trained |
|---------------------------------------------------------------------------------------------|--------------------------------------------------------|------------------------------------------------------|----------------------------------------|---------------|
|                                                                                             | (b) Mukhya Sevikas (Condensed course)                  | 6 months                                             | 10                                     | 19            |
| Integrated training centres for Extension Officers (2)                                      | Extension Officers (Industries)                        | 12 months                                            | 38                                     | 38 (a)        |
| Gram Sevak Training Centres (100)                                                           | Gram Sevaks                                            | 2 years                                              | 4,673                                  | 74,948        |
| Gram Sevika Training Centres (45)                                                           | Gram Sevikas                                           | 1 year                                               | 796 (b)                                | 8,375         |
| Rural Institute for Higher Education (12)                                                   | Higher Training for selected Gram-Sevaks               | Diploma in Rural Service 2-3 years for B.Sc. (Agri.) | 67 (c)                                 | 129           |
| Agricultural University/Colleges (4)                                                        |                                                        |                                                      |                                        |               |
| Orientation Training Centres for Health Personnel (3)                                       | Medical Officers, Sanitary Inspectors and others       | 8 weeks                                              | 159                                    | 2,690         |
| Central Institute for Training and Research in Panchayati Raj (1)                           | Principals /Instructors of Panchayati Raj Trg. Centres | 8 months                                             | 34                                     | 317           |

\* Includes the members of trained in Orientation and Study courses.

(a) 3,478 Industrial Extension Officers were trained previously at Khadi Gramodhyog Vidyalayas and Small Industries Service Institutions.

(b) Upto June 30, 1965. (c) Scholarships allotted.



## TRAINING PROGRAMME—(Contd.)

| Description of the Training Centre (figures in bracket give the number of Training Centres) | Category of persons trained                                          | Duration of training | Number trained during the year 1965-66           | Total trained                   |
|---------------------------------------------------------------------------------------------|----------------------------------------------------------------------|----------------------|--------------------------------------------------|---------------------------------|
| Panchayati Raj Training Centres (121) .. .. .                                               | (a) Sarpanches, Up-Sarpanches and Panchayat Samiti Members           | 1 week               | 16,617 (d)                                       | 1,07,774 (e)                    |
|                                                                                             | (b) Nyaya Panches and women members of Panchayat Samities            | 10 days              |                                                  |                                 |
|                                                                                             | (c) Part time Panchayat Secretaries and Nyaya Panchayat Secretaries. | 30 days              |                                                  |                                 |
| PERIPATETIC                                                                                 | Panches                                                              | 8 days               | 6,870 (d)                                        | 2,14,386 (e)                    |
| Gram Sevak Trg. Centres (100) and Social Education Organiser's Trg. Centres (8)             | Youth Workers                                                        | 12 days              | 2,752 (f)                                        | 13,655                          |
| Gram Sevika Trg. Centres (45) and Mukhya Sevika Trg. Centres (10) ..                        | Associate Women Workers                                              | 30 days              | 2,176                                            | 4,529                           |
| Block Camps .. .. .                                                                         | Gram Sahayaks                                                        | 3-5 days             | 5,70,000<br>(During the year ending Sept. 1965). | 70,30,000<br>(Upto Sept. 1965). |
| Regional Training Institutions for training in Applied Nutrition (3) ..                     | (a) Public Health Instructors of Gram Sevak Training centres         | 30 days              | 5                                                | 53                              |
|                                                                                             | (b) Nutrition Instructresses of Gram Sevika Trg.                     | 30 days              | 6                                                | 49                              |
|                                                                                             | (c) Other Instructors of G.S.T. Cs., M.S.T.Cs., & S.E.O.T.Cs.        | 15 days              | 110                                              | 388                             |

(d) The information is for 103 centres, for 90 centres upto Sept. 30, 1965 and for 13 upto June 30, 1965.

(e) The information is for 99 centres.

(f) The information is upto Sept. 30, 1965.

## STAFF POSITION (as on Sept. 1, 1965@).

Essential Staff : Block Development Officers (Men)/Extension Officers (Panchayats) 5,956; Industry) 2,820; Mukhya Sevikas 2,520; Extension Officers (Cooperation) 4,675. Overseers 4,859; Gram Sevikas 7,549; Other Staff : Extension Officers (Animal Husbandry) 4,234; Extension Officers (Village Medical Officers 2,971; Progress Assistants (Agriculture) 5,392; Social Education Organisers 3,560.

## PROGRAMME ACCORDING TO STATES

Blocks allotted as on 1st January 1966 :—

| State/Union Territory        | No. of blocks allotted |               |         |                                 | Population covered (lakh nos). | Villages covered | Area (In sq. Km. covered). |
|------------------------------|------------------------|---------------|---------|---------------------------------|--------------------------------|------------------|----------------------------|
|                              | No. of Blocks          | Pre-extension | Stage I | Stage II (Incl. post-Stage II). |                                |                  |                            |
| Andhra Pradesh .. .. .       | 445                    | ..            | 224     | 221                             | 334                            | 27,100           | 274,900                    |
| Assam .. .. .                | 160                    | 8             | 68      | 84                              | 118                            | 25,700           | 122,000                    |
| Bihar .. .. .                | 575                    | ..            | 219     | 356                             | 452                            | 67,700           | 173,900                    |
| Gujarat .. .. .              | 224                    | ..            | 79†     | 144†                            | 194                            | 18,600           | 187,000                    |
| Jammu & Kashmir .. .. .      | 70                     | ..            | 10      | 60                              | 32                             | 6,600            | 123,300                    |
| Kerala .. .. .               | 143                    | ..            | 84      | 59                              | 162                            | 1,600            | 38,700                     |
| Madhya Pradesh .. .. .       | 416                    | ..            | 218     | 198                             | 309                            | 70,400           | 443,100                    |
| Madras .. .. .               | 375                    | ..            | 59      | 316                             | 303                            | 14,100           | 130,200                    |
| Maharashtra .. .. .          | 425                    | ..            | 222†    | 202†                            | 328                            | 35,900           | 306,600                    |
| Mysore .. .. .               | 268                    | ..            | 134     | 134                             | 217                            | 26,400           | 192,200                    |
| Nagaland .. .. .             | 17                     | 1             | 9       | 8                               | 4                              | 800              | 16,500                     |
| Orissa .. .. .               | 307                    | ..            | 127     | 180                             | 174                            | 46,500           | 155,800                    |
| Punjab .. .. .               | 229                    | ..            | 79      | 150                             | 192                            | 21,300           | 121,900                    |
| Rajasthan .. .. .            | 232                    | ..            | 90      | 142                             | 189                            | 32,200           | 342,300                    |
| Uttar Pradesh .. .. .        | 899                    | ..            | 401†    | 498                             | 690                            | 112,600          | 293,600                    |
| West Bengal .. .. .          | 341                    | ..            | 240     | 101                             | 301                            | 38,500           | 87,400                     |
| A. and N. Islands .. .. .    | 5                      | 1             | 2       | 2                               | 0.6                            | 400              | 8,300                      |
| Dadra & Nagar Haveli .. .. . | 2                      | ..            | ..      | 2                               | 0.6                            | 100              | 500                        |
| Delhi .. .. .                | 5                      | ..            | ..      | 5                               | 3.0                            | 300              | 1,500                      |
| Goa, Daman & Diu .. .. .     | 11                     | ..            | 11      | ..                              | 5.5                            | 250              | 3,700                      |
| Himachal Pradesh .. .. .     | 38                     | ..            | 9       | 29                              | 13.6                           | 10,400           | 28,200                     |
| Manipur .. .. .              | 14                     | ..            | 4       | 10                              | 6.7                            | 1,900            | 22,300                     |
| NEFA .. .. .                 | 41                     | 8             | 15      | 18                              | 3.4                            | 2,200            | 81,400                     |
| Pondicherry .. .. .          | 4                      | ..            | †       | 3†                              | 3.7                            | 400              | 500                        |
| Tripura .. .. .              | 15                     | ..            | 9       | 6                               | 9.4                            | 4,900            | 10,500                     |
| TOTAL .. .. .                | 5,240*                 | 18            | 2,315   | 2,927                           | 4,046                          | 566,900          | 3,166,100                  |

\* Excludes 79† additional C.D. Blocks on account of Tribal Development Blocks.

@ Information for Assam, Jammu &amp; Kashmir, Mysore, and Andaman &amp; Nicobar Islands relate to the period March 1965.



Achievements during the year ending September 1964-65 and achievement per block during the same period respectively are :

**Agriculture :** Improved seeds distributed (Quintals) 43,11,000; 1,022; Chemical fertilizers distributed (Quintals) 2,10,55,000; 4,473; Chemical pesticides distributed (Quintals) 2,45,958; 73; Improved implements distributed (Nos.) 7,68,244; 163; Agricultural demonstrations held (Nos.) 11,46,000; 243; Compost pits dug (Nos.) 1,10,66,000; 2,338.

**Animal Husbandry :** Improved animals supplied (Nos.) 30,190; 7.8; Improved birds supplied (Nos.) 10,86,547; 232; Fish fingerlings supplied (Nos.) 8,69,49,000 18,472; Animals castrated (Nos.) 40,36,000; 857; Animals artificially inseminated (Nos.) 7,63,000; 162.

**Health and Rural Sanitation :** Rural latrines constructed (Nos.) 88,800; 19; Pucca drains constructed (metres) 31,87,000; 677; Village

lanes paved (sq. metres) 18,86,000; 455; Soakage pits constructed (Nos.) 2,50,700; 65; Drinking water wells constructed (Nos.) 37,968; 8.1; Drinking water wells renovated (Nos.) 44,743; 9.5.

**Social Education :** Adult literacy centres started (Nos.) 53,710; 12; Adults made literate (Nos.) 10,90,857; 232; Reading rooms and libraries started (Nos.) 13,259; 2.8; Youth Clubs and Farmers' Unions started (Nos.) 40,917; 8.7; No. of members in Youth Clubs and Farmers' Unions 7,57,400; 161; Functional Gram Sahayaks' camps held (Nos.) 12,695; 3.3; Functional Gram Sahayaks' Leaders trained (Nos.) 5,70,415; 121.

**Women's Programme:** Mahila Samitis/Mandals Started (Nos.) 30,179; 6.4; Membership in Mahila Samitis/Mandals 4,75,773; 101; Women's camps held (Nos.) 7,665; 1.7; No. of women who participated in the Women's camps held 1,89,385; 40; Balwadis/Nurseries started (Nos.)

11,198; 2.7; Children attending Balwadis/Nurseries 2,81,500; 68.

**Communications :** New kacha roads constructed (Kilometres) 28,285; 6.0; Existing roads improved (Kilometres) 54,032; 11.5; Culverts constructed (Nos.) 22,947; 49.

**Village and Small Industries :** Ambar Charkha introduced (Nos.) 6,060; 1.8; Brick kilns started (Nos.) 18,027; 5.3; Bricks manufactured (000) 16,78,400; 540; Tiles manufactured (000) 4,87,700; 157; Sewing machines distributed (Nos.) 8,084; 2.1; New tannery pits introduced (Nos.) 1,399; 0.4; Improved ghanis introduced (Nos.) 530; 0.2; Flaying centres started (Nos.) 18,885; 5.6; Bee-hives introduced (Nos.) 229; 0.1; Value of improved tools and appliances distributed for blacksmithy (Rs.) 5,25,645; 156; Value of improved tools and appliances distributed for carpentry (Rs.) 5,53,815; 164.

**Minor Irrigation :** Net additional area likely to be irrigated through minor irrigation works (Hectares) 5,62,754; 148.

### PANCHAYATS AS ON 31st MARCH 1965

| State            | No. of Panchayats | No. of Panchayat Samities | No. of Zila Parishads | No. of Villages covered by Panchayats | Rural population* covered by Panchayats (in lakhs) | Percentage villages covered by Panchayats | Percentage rural population covered by Panchayats |
|------------------|-------------------|---------------------------|-----------------------|---------------------------------------|----------------------------------------------------|-------------------------------------------|---------------------------------------------------|
| Andhra Pradesh   | 15,268            | 321                       | 20                    | 27,084                                | 297                                                | 100                                       | 100                                               |
| Assam (Plains)   | 2,570             | 120                       | 16                    | 17,717                                | 83                                                 | 100                                       | 100                                               |
| Bihar            | 10,725            | 71†                       | 3†                    | 67,679                                | 421                                                | 99                                        | 99                                                |
| Gujarat          | 11,755            | 182                       | 17                    | 18,247                                | 163                                                | 100                                       | 100                                               |
| Jammu & Kashmir  | 960               | ..                        | ..                    | 6,550                                 | 30                                                 | 100                                       | 100                                               |
| Kerala           | 922               | ..                        | ..                    | 1,574                                 | 144                                                | 100                                       | 100                                               |
| Madhya Pradesh   | 12,801            | ..                        | ..                    | 70,414                                | 277                                                | 100                                       | 100                                               |
| Madras           | 12,905            | 373                       | 22                    | 13,983                                | 247                                                | 99                                        | 100                                               |
| Maharashtra      | 20,287            | 295                       | 25                    | 35,492                                | 281                                                | 99                                        | 99                                                |
| Mysore           | 7,450             | 172                       | 20                    | 25,880                                | 183                                                | 100                                       | 100                                               |
| Orissa           | 2,340             | 313                       | 13                    | 47,939                                | 163                                                | 94                                        | 96                                                |
| Punjab           | 13,476            | 226                       | 17                    | 22,532                                | 162                                                | 100                                       | 100                                               |
| Rajasthan        | 7,388             | 232                       | 26                    | 32,241                                | 169                                                | 100                                       | 100                                               |
| Uttar Pradesh    | 72,333            | 854                       | 51                    | 1,12,624                              | 643                                                | 100                                       | 100                                               |
| West Bengal      | 19,649            | 325                       | 14                    | 38,530                                | 264                                                | 100                                       | 100                                               |
| A. & N. Islands  | 32                | ..                        | ..                    | 110                                   | 0.5                                                | 80                                        | 93                                                |
| Delhi            | 215               | 5†                        | ..                    | 276                                   | 3                                                  | 100                                       | 100                                               |
| Goa, Daman & Diu | 159               | ..                        | ..                    | 265                                   | 5                                                  | 100                                       | 100                                               |
| Himachal Pradesh | 638               | ..                        | 5                     | 10,424                                | 13                                                 | 100                                       | 100                                               |
| Manipur          | 227               | ..                        | ..                    | 581                                   | 5                                                  | 31                                        | 63                                                |
| Tripura          | 248               | ..                        | ..                    | N.A.                                  | N.A.                                               | N.A.                                      | N.A.                                              |
| <b>TOTAL</b>     | <b>2,12,398</b>   | <b>3,489</b>              | <b>247</b>            | <b>55,002</b>                         | <b>35,385</b>                                      | <b>99</b>                                 | <b>99</b>                                         |

\* 1961 Census. N.A. Not available.

† Panchayat Raj bodies have been constituted in 3 districts, viz. Ranchi, Bhagalpur and Dhanbad. ‡ Non Statutory Panchayat Samities.



## THE CO-OPERATIVE MOVEMENT (1963-64)\*

### CREDIT SOCIETIES

The number of all types of co-operative credit societies stood at 2,32,961 at the close of the year 1963-64, representing a decrease of 1,101 from the previous year. The five States of Uttar Pradesh, Maharashtra, Punjab, Andhra Pradesh and Bihar accounted for more than half of the total number of societies.

The membership of the primary credit societies at 320.31 lakhs as on 30 June 1964 meant an increase of 24.57 lakhs or about 8 per cent over the last year. By the end of 1963-64, roughly 33.87 per cent of the total population was covered by the primary credit societies. The owned funds and working capital of all credit societies increased from Rs. 282.60 crores and Rs. 1,384.84 crores as on 30 June 1963 to Rs. 326.13 crores and Rs. 1,648.34 crores respectively as on 30 June 1964. Loans advanced by all primary credit societies during 1963-64 were Rs. 523.06 crores, representing an increase of Rs. 77.21 crores over the amount advanced during the previous year. Total loans repaid during 1963-64 amounted to Rs. 433.79 crores as against Rs. 368.68 crores last year, while loans outstanding stood at Rs. 584.27 crores as compared to Rs. 495.56 crores in the previous year. Overdues at the end of the year showed a very slight increase, being Rs. 91.54 crores as against Rs. 89.33 crores at the end of the previous year and formed 15.6 per cent of total loans outstanding.

### STATE CO-OPERATIVE BANKS

The state co-operative banks numbered 21. There was a net decline in the membership by 447; the reduction in the membership of co-operative institutions by 677 was offset by the increase in membership of individuals and others by 230. The paid-up share capital of the state co-operative banks in all States increased by Rs. 2.30 crores to Rs. 25.48 crores as on 30 June 1964. Of this increase, only Rs. 0.23 crore was accounted for by contribution by Government. The total working capital which stood at Rs. 281.51 crores as on 30 June 1963 increased to Rs. 328.21 crores as on 30 June 1964. The increase was mainly due to increase in deposits and borrowings from the Reserve Bank of India of the order of Rs. 14.97 crores and Rs. 24.79 crores respectively.

#### Working Capital of State Co-operative Banks (Crores of rupees)

| Item                      | 30 June 1964<br>Amount |
|---------------------------|------------------------|
| 1. Working capital .. ..  | 328.21                 |
| 2. Owned funds .. ..      | 36.23                  |
| 3. Deposits .. ..         | 112.28                 |
| 4. Borrowings from :      |                        |
| (i) Government .. ..      | 12.43                  |
| (ii) Reserve Bank .. ..   | 163.66                 |
| (iii) Other sources .. .. | 3.61                   |

The distribution of resources of the apex banks as on 30 June 1964 revealed that Rs. 42.97 crores (including call deposits of Rs. 17.95 crores) were in the form of cash and balances with banks, Rs. 51.61 crores represented investments (Rs. 32.79 crores in government and trustee securities, Rs. 13.63 crores in fixed deposits and Rs. 5.18 crores in other investments, chiefly shares of other co-operative institutions), while outstanding loans accounted for Rs. 241.23 crores. Among individual apex banks, Maharashtra was, by far, the largest with a working capital of Rs. 69.08 crores, followed by the Uttar Pradesh and Madras banks.

### CENTRAL CO-OPERATIVE BANKS

The number of central co-operative banks showed a further decline from 375 (excluding the

industrial co-operative banks) on 30 June 1963 to 372 on 30 June 1964. The reduction in number was accounted for by Uttar Pradesh (2 banks) and Madhya Pradesh, West Bengal and Rajasthan (one bank each) and was offset by an increase of 2 banks in Kerala. The membership of the central co-operative banks stood at 3,65,009 recording a decline of 25,655 mainly on account of the fall in membership of individuals and others by 29,781. The membership at the end of June 1964 consisted of 1,878 central societies, 2,54,673 primary societies and 1,08,458 individuals and others. The working capital of central banks showed an increase from Rs. 394.85 crores as on 30 June 1963 to Rs. 460.32 crores as on 30 June 1964, representing an increase of 16.6 per cent.

#### Working Capital of Central Co-operative Banks (Crores of rupees)

| Item                     | 30 June 1964<br>Amount |
|--------------------------|------------------------|
| 1. Working capital .. .. | 460.32                 |
| 2. Owned funds .. ..     | 82.20                  |
| 3. Deposits .. ..        | 172.27                 |
| 4. Borrowings .. ..      | 205.84                 |

The working capital of central banks in Maharashtra was Rs. 92.51 crores, of those in Madras Rs. 64.80 crores, Gujarat Rs. 52.94 crores, Uttar Pradesh Rs. 54.20 crores and Andhra Pradesh Rs. 34.96 crores.

Total loans advanced by central co-operative banks during 1963-64 amounted to Rs. 529.14 crores as against Rs. 434.11 crores during 1962-63. The former comprised Rs. 497.74 crores of short-term loans and Rs. 31.39 crores of medium-term loans respectively. Advances by central co-operative banks in the three States of Maharashtra (Rs. 144.07 crores), Gujarat (Rs. 94.39 crores) and Madras (Rs. 79.42 crores) accounted for nearly 60 per cent of the total. The other important States were Uttar Pradesh (Rs. 49.49 crores) followed by Mysore (Rs. 35.66 crores), Madhya Pradesh (Rs. 31.92 crores), Andhra Pradesh (Rs. 30.51 crores) and Punjab (Rs. 20.95 crores).

The outstanding loans of central co-operative banks as on 30 June 1964 amounted to Rs. 340.10 crores, of which Rs. 337.36 crores were due from societies and Rs. 2.74 crores from individuals and others. The total overdues amounted to Rs. 53.51 crores, constituting 15.7 per cent of the outstandings; the corresponding figures at the end of 1963 were Rs. 51.92 crores and 17.9 per cent respectively.

### AGRICULTURAL CREDIT SOCIETIES

The primary agricultural credit societies numbered 2,09,622 as on 30 June 1964 as against 2,11,182 at the end of 30 June 1963. In ten of the major States and five of the Centrally administered areas there was a net increase in the number. Of the total, two-thirds were of the limited liability and the remaining of the unlimited liability type. The number of dormant societies at the end of 1963-64 was 33,675 as against 39,129 at the end of 1962-63 and they constituted 16.0 per cent of the total number of societies as against 18.5 per cent in 1962-63.

The membership of agricultural credit societies was 237.28 lakhs at the end of 1963-64 as against 217.34 lakhs at the beginning of the year, a rise of 9.1 per cent. All the States excepting Orissa shared the increase. The rise in membership during the previous year was 11.0 per cent.

Though the number of members who borrowed during the year increased from 104.53 lakhs to

109.19 lakhs, their percentage to the total decreased from 48 during 1962-63 to 46 during 1963-64.

As on 30 June 1964, the working capital of primary agricultural credit societies amounted to Rs. 440.39 crores representing an increase of Rs. 70.36 crores over the previous year, the percentage of increase being 19 as against 12.1 during 1962-63. The paid-up share capital of these societies amounted to Rs. 92.28 crores, of which Rs. 9.00 crores were contributed by the State Governments in 17,104 societies. The total deposits of these societies increased by Rs. 5.73 crores to Rs. 26.06 crores forming 5.9 per cent of their working capital. Their total borrowings amounted to Rs. 296.54 crores and formed about 67.3 per cent of the working capital. Of these, as much as Rs. 282.05 crores were from central co-operative banks. On the assets side, the cash on hand and balances with banks together amounted to Rs. 26.37 crores and investments to Rs. 57.25 crores, while loans and advances stood at Rs. 342.93 crores comprising short-term loans of Rs. 293.33 crores and medium-term loans of Rs. 49.60 crores. Of the active societies, only 1,65,554 societies issued loans amounting to Rs. 297.14 crores consisting Rs. 268.00 crores under short-term and Rs. 29.14 crores under medium-term. Their total recovery during the year amounted to Rs. 246.76 crores, the overdues amounting to Rs. 77.31 crores and forming 22.5 per cent of the loans outstanding, as compared to Rs. 77.18 crores overdues at 25.5 per cent of outstandings at the end of 1962-63.

The all-India averages of membership, share capital, deposits, working capital and loans advanced per borrowing member for agricultural credit societies; recorded a slight improvement over the previous year.

### AGRICULTURAL CREDIT SOCIETIES— ALL-INDIA AVERAGES

(Amounts in rupees)

| Item                                         | 1963-64 |
|----------------------------------------------|---------|
| 1. Membership per society ..                 | 114     |
| 2. Working capital per society ..            | 21,009  |
| 3. Share capital :                           |         |
| (a) per society .. ..                        | 4,402   |
| (b) per member .. ..                         | 39      |
| 4. Deposits :                                |         |
| (a) per society .. ..                        | 1,243   |
| (b) per member .. ..                         | 11      |
| 5. Loans advanced per borrowing member .. .. | 272     |

The non-credit operations of agricultural credit societies comprised mainly marketing of agricultural produce and distribution of agricultural requisites and consumer goods. 4,736 societies marketed agricultural produce of the value of Rs. 12.57 crores during 1963-64 as against 4,519 societies of the value of Rs. 11.52 crores during 1962-63. There were a few agricultural credit societies in Gujarat and Maharashtra which undertook processing also. In regard to supply of farmer's requisites, the number of societies engaged in the work increased from 76,769 during the previous year to 89,347 during 1963-64, while the value of goods distributed by them increased from Rs. 51.25 crores to Rs. 95.61 crores. Consumer goods, fertilizers and seeds were important constituents. The value of seeds and fertilizers distributed showed an increase from Rs. 6.03 crores and Rs. 25.52 crores to Rs. 6.39 crores and Rs. 36.77 crores respectively, while the value of consumer articles increased substantially from Rs. 14.07 crores to Rs. 44.26 crores.

As on 30 June 1964, Uttar Pradesh had the largest number of agricultural credit societies at

\* Source : Statistical Statements Relating to Co-operative Movement in India, 1963-64 by Reserve Bank of India.



46,231, while Maharashtra came next with 19,938 societies; the number of such societies in Punjab, Bihar and Madhya Pradesh was 19,801, 19,568 and 17,494 respectively. More than 30 per cent of the societies were dormant in Assam, Rajasthan and West Bengal. The membership of these societies in Uttar Pradesh was 45.85 lakhs, while in Madras it was 37.46 lakhs.

The value of produce marketed by agricultural credit societies during 1963-64 in Maharashtra, Gujarat and Assam amounted to Rs. 4.19 crores, Rs. 3.03 crores and Rs. 1.66 crores respectively. The value of goods distributed amounted to Rs. 22.49 crores in Gujarat, Rs. 22.00 crores in Maharashtra, Rs. 10.82 crores in Uttar Pradesh and Rs. 10.64 crores in Punjab, these four States together accounting for over 69 per cent of the value of goods distributed by agricultural credit societies in all the States.

### GRAIN BANKS

The number of grain banks showed a fall from 9,083 as on 30 June 1963 to 9,007 as on 30 June 1964, the reduction being accounted for by Madhya Pradesh 21, Maharashtra 183, Mysore 4, and Madras 1; there was an increase in their number in Andhra Pradesh 2, Bihar 9, Orissa 18 and West Bengal 94. Of the total as much as 3,109 grain banks were dormant, while 5,898 were active. Their overall operations, however, showed some increase. Their working capital which stood at Rs. 7.00 crores as on 30 June 1963 increased to Rs. 7.35 crores as on 30 June 1964. The loans advanced by them during the year 1963-64 amounted to Rs. 3.14 crores as against Rs. 3.08 crores in the previous year. The grain banks were active mainly in Orissa and the loans advanced by them during 1963-64 amounted to Rs. 2.74 crores. 2,336 grain banks in the State had 7.07 lakh members, their membership being even more than those of agricultural credit societies in the State viz. 4.20 lakhs. The overdues of all grain banks in the country and in Orissa as on 30 June 1964 were Rs. 2.75 crores and Rs. 1.77 crores forming 47.7 per cent and 40 per cent of the amount outstanding respectively.

### NON-AGRICULTURAL CREDIT SOCIETIES

The non-agricultural credit societies mainly consisting of urban banks and employees' credit societies, which cater to the credit requirements of small traders, government servants, other salaried employees and other urban and semi-urban residents including artisans, numbered 13,323 as on 30 June 1964, as against 12,850 at the end of the previous year. Their membership also showed an increase from 55.03 lakhs to 56.77 lakhs. The working capital of these institutions was of the order of Rs. 217.85 crores, showing an increase of about Rs. 32.53 crores over the previous year. Their deposits at Rs. 135.95 crores compared favourably with those of all the state and central co-operative banks in the country, which amounted to Rs. 112.28 crores and Rs. 172.27 crores respectively on the same date. Two-thirds of these deposits were accounted for by the three States of Maharashtra, West Bengal and Madras. Individually, Maharashtra accounted for Rs. 40.37 crores, West Bengal for Rs. 35.72 crores and Madras for Rs. 15.54 crores. The loans advanced by these societies during 1963-64 amounted to Rs. 199.57 crores, showing an increase of over Rs. 33.36 crores over the previous year.

### LAND MORTGAGE BANKS

**Central Land Mortgage Banks:** The number of central land mortgage banks showed a decline from 19 to 18 over the year 1963-64 because one central land mortgage bank in Ajmer (Rajasthan) continued to remain dormant and data in respect of this were excluded this year. The membership of all central land mortgage banks as on 30 June 1964 consisted of 573 primary land mortgage banks, 196 other co-operative institutions and 2,65,755 individuals (regular members) as against 553, 177 and 2,334,451 respectively at the end of the previous year. Their share capital showed an increase from Rs. 7.81 crores to Rs. 9.59 crores. Total borrowings of all central land mortgage banks as on 30 June 1964 amounted to Rs. 99.87 crores, of which Rs. 92.59 crores were in the form of debentures, as compared to Rs. 75.17 crores and Rs. 68.19

crores respectively, as on 30 June 1963. Total investments on 30 June 1964 amounted to Rs. 23.77 crores, of which Rs. 20.56 crores were in respect of sinking fund, while the loans outstanding to them stood at Rs. 90.18 crores. Their overdues on 30 June 1964 were Rs. 1.92 crores. These banks floated debentures of the value of Rs. 25.04 crores during the year 1963-64, while Rs. 24.99 crores were actually subscribed to. Of the 18 central land mortgage banks in the country, 11 issued ordinary debentures worth Rs. 23.21 crores and 6 issued rural debentures worth Rs. 1.78 crores during the year. The loans advanced by them during 1963-64 amounted to Rs. 29.58 crores against Rs. 24.62 crores during the previous year. During 1963-64 an amount of Rs. 15.22 crores was advanced for land improvement, Rs. 8.58 crores for purchase of machinery and Rs. 3.93 crores for redemption of debt.

**Primary Land Mortgage Banks:** The primary land mortgage banks increased in number from 571 as on 30 June 1963 to 583 as on 30 June 1964 (including the land mortgage banking sections of 9 central co-operative banks). Mysore, Andhra Pradesh and Madras accounted for about 65 per cent of the total number of primary banks. In some of the States such as Gujarat, Jammu & Kashmir, Bihar and Uttar Pradesh, the central land mortgage bank continued to finance individual members directly or through branches. The membership of the primary land mortgage banks showed an increase from 10.51 lakhs to 12.78 lakhs, while their working capital increased from Rs. 55.02 crores to Rs. 74.08 crores. The loans outstanding to these banks as on 30 June 1964 were Rs. 68.88 crores as against Rs. 51.36 crores in the previous year.

### STATE PARTNERSHIP

The following table shows the participation by Government in the share capital of various types of societies. The total of such contribution as at the end of 1963-64 was Rs. 38.21 crores as against Rs. 35.09 crores at the end of the previous year.

## GOVERNMENT CONTRIBUTION TOWARDS THE SHARE CAPITAL OF CO-OPERATIVE CREDIT SOCIETIES—By State and Type of Society

(Thousands of rupees).

| State                                          | Credit Societies |                          |                            |                        |                            |                    |
|------------------------------------------------|------------------|--------------------------|----------------------------|------------------------|----------------------------|--------------------|
|                                                | Total            | State Co-operative Banks | Central Co-operative Banks | Agri. Credit Societies | Non-agri. Credit Societies | Central L.M. Banks |
| Andhra Pradesh .. .. .                         | 3,60,59          | 68,00                    | 1,65,000                   | 61,59                  | ..                         | 66,00              |
| Assam .. .. .                                  | 61,40            | 22,00                    | 14,00                      | 16,31                  | 9                          | 9,00               |
| Bihar .. .. .                                  | 1,32,97          | 41,00                    | 44,50                      | 33,47                  | ..                         | 14,00              |
| Gujarat .. .. .                                | 4,22,85          | 86,49                    | 1,80,39                    | 1,04,59                | 1,38                       | 50,00              |
| Jammu & Kashmir .. .. .                        | 24,84            | 8,00                     | 5,00                       | 8,84                   | ..                         | 3,00               |
| Kerala .. .. .                                 | 1,41,21          | 23,00                    | 50,00                      | 37,42                  | ..                         | 30,79              |
| Madhya Pradesh .. .. .                         | 2,85,67          | 78,60                    | 1,10,13                    | 79,91                  | 3                          | 17,00              |
| Madras .. .. .                                 | 3,73,16          | 1,01,00                  | 1,52,10                    | 80,05                  | ..                         | 40,01              |
| Maharashtra .. .. .                            | 7,24,58          | 1,77,92                  | 3,44,30                    | 1,22,36                | ..                         | 80,00              |
| Mysore .. .. .                                 | 3,22,42          | 70,90                    | 1,28,77                    | 87,22                  | 53                         | 35,00              |
| Orissa .. .. .                                 | 91,05            | 17,00                    | 24,66                      | 32,61                  | 2,53                       | 14,25              |
| Punjab .. .. .                                 | 2,28,54          | 64,33                    | 93,28                      | 45,93                  | ..                         | 25,00              |
| Rajasthan .. .. .                              | 1,44,89          | 40,00                    | 43,74                      | 46,15                  | ..                         | 15,00              |
| Uttar Pradesh .. .. .                          | 3,93,19          | 47,20                    | 2,15,70                    | 1,09,29                | ..                         | 31,00              |
| West Bengal .. .. .                            | 64,73            | 15,00                    | 25,00                      | 19,73                  | ..                         | 5,00               |
| Andaman & Nicobar Islands <sup>1</sup> .. .. . | 39               | ..                       | ..                         | 39                     | ..                         | ..                 |
| Delhi .. .. .                                  | 4,26             | 1,50                     | ..                         | 2,76                   | ..                         | ..                 |
| Goa, Daman & Diu .. .. .                       | 3,02             | 2,00                     | ..                         | 1,02                   | ..                         | ..                 |
| Himachal Pradesh .. .. .                       | 14,78            | 8,00                     | ..                         | 3,78                   | ..                         | 3,00               |
| Manipur .. .. .                                | 8,00             | 5,50                     | ..                         | 2,59                   | ..                         | ..                 |
| Pondicherry .. .. .                            | 8,24             | 3,10                     | ..                         | 1,14                   | ..                         | 4,00               |
| Tripura .. .. .                                | 9,80             | 5,00                     | ..                         | 3,30                   | ..                         | 1,50               |
| <b>Total 1963-64 .. .. .</b>                   | <b>38,20,67</b>  | <b>8,85,54</b>           | <b>15,96,57</b>            | <b>9,00,45</b>         | <b>4,56</b>                | <b>4,33,55</b>     |
| <b>Total 1962-63 .. .. .</b>                   | <b>35,09,34</b>  | <b>8,62,93</b>           | <b>14,56,55</b>            | <b>8,01,13</b>         | <b>4,55</b>                | <b>3,84,18</b>     |

<sup>1</sup> Data relate to 1962-63.



**Profit and Loss of Credit Co-operatives:** The net result of the operations of co-operative credit societies during 1963-64 and 1962-63: The first two figures represent the number of societies which earned a profit and the profit earned in Rs. lakhs in 1963-64 giving within brackets the number which earned profit and the profit earned in Rs. lakhs respectively in 1962-63. The next figures indicate the number of societies which incurred a loss and the loss incurred in Rs. lakhs in 1963-64 showing within brackets the number of societies which incurred a loss and the loss incurred in Rs. lakhs during the year 1962-63: State co-operative banks 20; 2,33 (21; 2,18); 1; 0.16 (—;—); Central co-operative banks 356; 5,21 (357; 4,58); 9; 2 (12; 3); Industrial co-operative banks 12; 8 (10; 7); 3; 0.11 (—;—); Primary agricultural societies 146,064; 8,52 (143,666; 6,74); 44,473; 195 (48,940; 1,86); Grain banks 4,561; 44 (4,552; 40); 878; 10 (1,069; 11); Central land mortgage banks 16; 62 (18; 53); 2; 0.10 (—;—); Primary Land mortgage banks 369; 37 (321; 26); 198; 12 (224; 11); Primary non-agricultural societies 8,594; 4,23 (8,350; 3,81); 2,295; 25 (2,459; 19); Total: 159,992; 21,80 (157,295; 18,57); 47,859; 2,44 (52,704; 230).

### NON-CREDIT SOCIETIES

The number of all types of co-operative non-credit societies, both agricultural and non-agricultural, which stood at 1,23,448 at the close of the year 1963-64 represented an increase of 11,337 over the position at the end of the previous year. In number, the weavers (12,871) and other industrial societies (25,065) continued to be the largest single groups. Next in importance are consumers societies (10,096), other processing societies (10,049), housing societies (9,896), sugarcane supply societies (9,340), milk supply societies (6,068), farming societies (5,868), marketing societies (3,347) and fisheries societies (2,933).

The membership of all primary non-credit societies which stood at 131.90 lakhs as on 30 June 1964 showed an increase of 12.40 lakhs or about 10 per cent over the position as on 30 June 1963.

### AGRICULTURAL MARKETING SOCIETIES

**National and State Marketing Societies:** The National Agricultural Marketing Federation with its headquarters at Delhi continued to function with 37 societies as members. It sold agricultural produce worth Rs. 72.85 lakhs.

At the State level, there were 21 state societies consisting of 19 general purpose marketing societies, one society for arecanut in Mysore and one for fruits and vegetables in Delhi. The state societies had 4,939 societies and 546 individuals and others as their regular members and 462 nominal members. Their working capital as on 30 June 1964 amounted to Rs. 14.48 crores, consisting of Rs. 3.88 crores of owned funds, Rs. 0.48 crore of deposits, and Rs. 10.11 crores of borrowings; Rs. 7.63 crores of the borrowings were from Government. The societies in Assam, Gujarat and Maharashtra had effected sales of agricultural produce of over Rs. one crore each while 9 societies had effected sales less than Rs. 10 lakhs. The total value of agricultural produce sold by them, both as owners and as agents was Rs. 11.97 crores as compared to Rs. 9.38 crores in 1962-63. These institutions also sold agricultural requisites of the value of Rs. 28.17 crores, of which as much as Rs. 26.71 crores represented fertilizers.

**Central Societies:** These societies which were functioning at the district or regional level numbered 159 as on 30th June 1964. Of these, 4 dealt in cotton, 4 in fruits and vegetables, 1 in tobacco and 150 were of the general purpose type. Their sales of agricultural produce amounted to Rs. 11.05 crores; the sales by the societies in the three States of Madras, Maharashtra and Uttar Pradesh accounted for the major part of the total sales. The value of agricultural requisites sold by them was higher at Rs. 33.46 crores and was mainly accounted for by 6 States namely, Maharashtra, Andhra Pradesh, Madras, Punjab, Uttar Pradesh and Gujarat. The value of consumer

articles sold by them amounted to Rs. 25.75 crores as against Rs. 4.70 crores in the previous year; the important States in this regard were Maharashtra, Madras and Punjab.

**Primary Marketing Societies:** The total number of primary marketing societies in the country as on 30th June 1964 was 3,166 comprising 94 societies dealing in cotton, 227 in fruits and vegetables, 23 in arecanut, 14 in tobacco, 62 in coconut, 105 in other specialised commodities and 2,641 general purpose marketing societies. Their membership consisted of 1,30,567 societies, 17,16,800 individuals and others as regular members and 68,278 nominal members. Their working capital as on 30th June 1964 was Rs. 41.49 crores consisting of Rs. 10.82 crores of share capital, Rs. 6.44 crores of reserve and other funds, Rs. 4.12 crores of deposits and Rs. 20.11 crores of borrowings. The total value of their purchases was Rs. 106.36 crores while their total sales amounted to Rs. 176.71 crores, of which as much as Rs. 83.22 crores were as agents. Of the total sales, agricultural produce accounted for Rs. 82.62 crores and agricultural requisites for Rs. 40.53 crores. Important commodities, under agricultural produce, dealt with by the societies were paddy (Rs. 14.83 crores), other foodgrains (Rs. 10.02 crores), cotton (Rs. 7.05 crores), wheat (Rs. 5.84 crores), oilseeds (Rs. 5.15 crores), jaggery (Rs. 4.56 crores), and fruits and vegetables (Rs. 2.32 crores). Sales of agricultural requisites consisted chiefly of fertilizers which accounted for Rs. 27.89 crores. During the year, 657 societies advanced loans to societies and 1,266 societies advanced loans to individuals, to the extent of Rs. 5.14 crores and Rs. 24.87 crores respectively. The working results also showed improvement; 1,881 marketing societies earned a profit of Rs. 1.94 crores and 809 societies incurred loss of Rs. 0.40 crore, while 476 societies worked without profit or loss. 1,548 marketing societies owned 2,651 godowns with an estimated capacity of 2 lakh cubic feet and 69.50 lakh quintals. 1,268 societies hired 4,193 godowns.

**Sugarcane Supply Societies:** Most of the sugarcane supply societies were concentrated in Bihar and Uttar Pradesh. At the end of 1963-64 there were 9,340 societies consisting of 2 states societies, 69 central societies and 9,269 primary societies. The state societies were located in Uttar Pradesh and Delhi. All the 69 central societies and 9,098 primary societies out of a total of 9,269 were in Bihar. The membership of primary societies numbered 2,107 societies and 26.73 lakh individuals; of these, 2,089 societies and 21.41 lakh individuals were in Uttar Pradesh. The working capital of the state, central and primary societies stood at Rs. 43.81 lakhs, Rs. 95.32 lakhs and Rs. 1,361.71 lakhs respectively. The value of sugarcane marketed by the primary societies was Rs. 65.28 crores; of this, the societies in Uttar Pradesh alone accounted for Rs. 58.48 crores. The primary sugarcane supply societies also distributed agricultural requisites of the value of Rs. 8.15 crores, both as agents and as owners.

**Co-operative Sugar Factories:** The number of co-operative sugar factories increased by 2 during the year bringing the total to 68 at the end of 1963-64. They had 10,538 societies, 2.18 lakh growers and 11,484 others (including non-grower individuals and institutions other than co-operative societies and Government) as their members during 1963-64 as against 10,803, 1.99 lakhs and 16,955 respectively during the previous year.

During 1963-64, 48 factories were in production as against 39 during the previous year. The paid-up share capital of all sugar factories was Rs. 23.52 crores of which Government contribution was Rs. 8.82 crores as against Rs. 21.51 crores and Rs. 8.57 crores respectively in the previous year. Their borrowings at the end of 1963-64 were of the order of Rs. 47.79 crores, of which Rs. 14.99 crores were from co-operative banks, Rs. 4.87 crores from the State Bank of India, Rs. 19.20 crores from the Industrial Finance Corporation and Rs. 0.95 crore from Government. Fixed assets amounted to Rs. 66.01 crores, of which Rs. 45.98 crores were in plant

and machinery and Rs. 12.32 crores in land and buildings. The value of sugar produced by the factories was Rs. 64.70 crores during 1963-64 as against Rs. 47.80 crores in the previous year, while their sales of sugar during 1963-64 amounted to Rs. 64.71 crores as against Rs. 64.98 crores in 1962-63. The value of sugar stocks at the end of the year stood at Rs. 17.37 crores as against Rs. 16.68 crores at the end of 1962-63 and Rs. 31.21 crores at the end of 1961-62. Among the States, Maharashtra had the largest number of sugar co-operatives viz., 20 and all of them were in production. The value of sugar produced by them was Rs. 37.55 crores, forming more than half of the total production by co-operative sugar factories in the country. Sixteen of the twenty factories in Maharashtra assisted in the recovery of loans advanced by 871 primary agricultural credit societies for production purposes to the extent of Rs. 5.31 crores and in Gujarat one factory recovered loans to the extent of Rs. 0.26 crore advanced by 52 credit societies.

**Agricultural Processing Societies-Cotton Ginning and Pressing Societies:** All the 151 societies engaged in cotton ginning and pressing were primary societies, and they had 4,963 societies and 78,868 individuals as members; besides these, 51 marketing societies undertook processing. The cotton ginning and pressing societies had a total working capital of Rs. 5.80 crores. Of these, 97 societies operated 97 ginning factories and ginned 25.64 lakh quintals of cotton. Forty-eight societies having 54 pressing units, pressed 5.76 lakh bales during 1963-64. These societies sold cotton of the value of Rs. 19.09 crores; they also sold agricultural requisites amounting to Rs. 0.87 crore. They advanced, mostly in Gujarat, Rs. 8.76 crores as loans and recovered Rs. 8.67 crores. Six of these units recovered loans advanced by 78 agricultural credit societies to the extent of Rs. 0.28 crore. Of the total sales of Rs. 19.09 crores, sales valued at Rs. 17.86 crores were effected by the societies in Gujarat.

**Other Agricultural Processing Societies:** Other agricultural processing societies are mainly grouped under the following five heads: (i) Paddy husking other than rice mills, (ii) Rice mills; (iii) Oil crushing; (iv) Fruits and vegetables; (v) Others.

### OTHER NON-CREDIT SOCIETIES

#### Agricultural Non-credit Societies

(a) **Farming Societies:** There has been 30.1 per cent increase in the number of joint farming societies which stood at 4,034 as on 30 June 1964 as against 3,101 as on 30 June 1963; their total membership increased from 67,351 to 86,642. The number of members working full-time in field operations increased from 31,143 to 40,950, while those engaged in part-time field operations increased from 12,376 to 13,474. The area commanded by these societies was 5.20 lakh acres of which 3.77 lakh acres were under cultivation as compared to 4.37 lakh acres and 3.25 lakh acres, respectively in 1962-63. The value of production showed an increase from Rs. 1.87 crores to Rs. 2.15 crores, while their sales increased from Rs. 1.60 crore to Rs. 2.17 crores.

Over the year 1963-64, the collective farming societies increased in number from 1,411 to 1,834 while their membership rose from 46,488 to 61,117. The area commanded and brought under cultivation by them also increased from 2.46 lakh acres and 1.55 lakh acres to 2.96 lakh acres and 1.91 lakh acres respectively. The value of their production increased from Rs. 0.60 crore to Rs. 0.66 crore while their sales remained steady at Rs. 0.63 crore.

(b) **Irrigation Societies:** The number of irrigation societies showed a slight increase from 1,466 to 1,499 while the area commanded by them decreased from 2.95 lakh acres to 2.92 lakh acres. The area actually irrigated by them slightly increased from 1.53 lakh acres to 1.68 lakh acres. The societies had Rs. 182.33 lakhs worth of irrigation works at the end of the year 1963-64.



(c) **Fisheries Societies:** The fisheries societies numbered 2,933 as on 30 June 1964 with 3.01 lakh members as against 2,729 societies and 2.79 lakh members at the end of the previous year. They advanced loans to the extent of Rs. 71.38 lakhs. The value of their catch was Rs. 1.71 crores, while their sales were of the order of Rs. 2.52 crores.

### INDUSTRIAL SOCIETIES

**Handloom Weavers' Co-operative Societies:** There were 21 apex weavers' societies, 117 central societies and 12,733 primary weavers' societies as on 30 June 1964. The apex societies had 6,286 societies and 1,537 individuals as members; the central societies had 3,235 societies and 4,460 individuals as members and the primary societies had 68 societies and 13.13 lakh individuals as members. The total working capital of the apex societies was Rs. 7.68 crores consisting of Rs. 1.18 crores of share capital, Rs. 0.92 crore of reserve and other funds respectively and Rs. 5.59 crores of borrowings. Of the total borrowings, Rs. 2.86 crores were from Government and Rs. 2.22 crores were from co-operative banks. The value of cloth purchased, including production, by them amounted to Rs. 9.38 crores, while their sales were of the order of Rs. 10.35 crores.

The central weavers' societies had Rs. 1.55 crores of working capital of which Rs. 0.92 crore were in the form of borrowings (Rs. 0.28 crore from Government and Rs. 0.33 crore from central financing agencies). The value of cloth sold by them amounted to Rs. 1.88 crores.

The primary weavers' societies had Rs. 27.12 crores as working capital consisting of Rs. 5.28 crores of share capital, Rs. 3.56 crores and Rs. 2.05 crores of reserve and other funds respectively, and Rs. 18.25 crores of borrowings. Of the total borrowings, Rs. 6.76 crores were from Government, Rs. 6.46 crores were from the

central financing agencies and Rs. 3.02 crores from other sources. The primary weavers' societies produced during 1963-64 cloth worth Rs. 48.25 crores and sold cloth valued at Rs. 52.11 crores. They had 1,594 sale depots, 65 pattern making factories and 684 dye houses. The total number of looms under these societies was 12.82 lakhs, of which 7.23 lakhs were active. Of the total production, Madras accounted for Rs. 11.91 crores followed by Andhra Pradesh, (Rs. 8.44 crores), Maharashtra (Rs. 5.78 crores), West Bengal (Rs. 4.25 crores), Uttar Pradesh (Rs. 3.96 crores) and Bihar (Rs. 3.38 crores).

**Other Industrial Societies:** There were 17 State, 98 central and 24,950 primary industrial societies as on 30 June 1964. The membership of the primary societies consisted of 3,480 societies and 11.62 lakh individuals. The working capital of the state, central and primary societies stood at Rs. 1.75 crores, Rs. 1.76 crores and Rs. 23.13 crores respectively. The value of production by the societies at the three levels was Rs. 0.33 crore, Rs. 0.56 crore and Rs. 16.53 crores respectively; their sales amounted to Rs. 0.93 crore, Rs. 2.39 crores and Rs. 17.93 crores respectively.

**Spinning Mills:** The total number of co-operative spinning mills as on 30 June 1964 was 47 with 9,288 societies and 22,950 individuals as members. These societies had a total working capital of Rs. 13.15 crores and the number of spindles under their fold was 5.03 lakhs. The value of yarn sold by them during 1963-64 amounted to Rs. 4.73 crores. They had fixed assets valued at Rs. 8.68 crores, of which Rs. 5.29 crores represented plant and machinery.

**Consumers' Stores:** The number of wholesale consumers' stores nearly doubled from 100 to 196 during the year under review. There were 32 societies in Maharashtra, 26 in Uttar Pradesh, 19 in West Bengal and 16 in the Punjab. Their sales increased from Rs. 5.60 crores in 1962-63

to Rs. 27.53 crores in 1963-64. As many as 138 societies worked at profit. The primary stores also showed an increase from 8,407 to 9,900. The primary stores had a net-work of 1,036 branches and had 19.33 lakh members. As on 30 June 1964, their paid-up share capital was Rs. 4.04 crores and reserve and other funds Rs. 3.71 crores; their borrowings amounted to Rs. 4.86 crores and the total working capital was Rs. 12.61 crores. The purchases and sales of the primary stores during the year 1963-64 amounted to Rs. 56.33 crores and Rs. 60.05 crores respectively.

**Housing Societies:** There were 10 state and 9,886 primary housing societies at the end of 1963-64 with 4,154 and 6.20 lakh members respectively. The two States Maharashtra (3,091) and Gujarat (2,292) accounted for more than half the total number. The working capital of state societies amounted to Rs. 18.67 crores of which borrowings accounted for Rs. 16.27 crores. The total working capital of primary societies amounted to Rs. 95.73 crores, of which Rs. 73.75 crores were in the form of borrowings. The amount of loans outstanding to them was Rs. 26.71 crores, while the value of land and buildings owned by them amounted to Rs. 74.20 crores. The number of independent houses and tenements constructed by these societies during 1963-64 was 10,211 and 18,952 valued at Rs. 8.61 crores and Rs. 28.94 crores respectively, while the number of houses constructed by members was 13,890 valued at Rs. 11.16 crores.

### STATE PARTNERSHIP IN NON-CREDIT SOCIETIES

The following table shows the participation by Government in the share capital of various types of non-credit societies. The total of such contribution as at the end of 1963-64 was Rs. 23.38 crores as against Rs. 20.42 crores at the end of the previous year.

### GOVERNMENT CONTRIBUTION TOWARDS THE SHARE CAPITAL OF CO-OPERATIVE NON-CREDIT SOCIETIES—

By State and Type of Society

(Thousands of rupees)

| State                                 | Total    | Marketing Societies |         |         | Sugar-cane Supply Societies | Farming Societies | Cotton ginning & pressing Societies | Sugar-factory Societies | Other agri-cultural processing Societies | Weavers' Societies | Other industrial Societies | Spinning mills | Fisheries Societies |
|---------------------------------------|----------|---------------------|---------|---------|-----------------------------|-------------------|-------------------------------------|-------------------------|------------------------------------------|--------------------|----------------------------|----------------|---------------------|
|                                       |          | State               | Central | Primary |                             |                   |                                     |                         |                                          |                    |                            |                |                     |
| Andhra Pradesh                        | 2,54.98  | 2.50                | 16.89   | 49.05   | ..                          | 91                | ..                                  | 1,25.00                 | 17                                       | 18.15              | 5.36                       | 85.17          | 1.78                |
| Assam                                 | 66.80    | 9.00                | 22      | 25.70   | ..                          | 60                | 11                                  | 29.00                   | 25                                       | 1.40               | 42                         | ..             | 10                  |
| Bihar                                 | 85.61    | 10.00               | ..      | 50.25   | ..                          | 40                | ..                                  | 10.00                   | 41                                       | 3.00 <sup>1</sup>  | 55                         | 11.00          | ..                  |
| Gujarat                               | 1,79.04  | 23.00               | 2.64    | 20.77   | ..                          | 3.13              | 37.21                               | 55.00                   | 7.10                                     | 1.26               | 6.58                       | 14.35          | 8.00                |
| Jammu & Kashmir                       | 7.64     | 2.00 <sup>1</sup>   | 1.00    | 4.44    | ..                          | 20                | ..                                  | ..                      | ..                                       | ..                 | ..                         | ..             | ..                  |
| Kerala                                | 86.05    | 4.00                | 40      | 10.60   | ..                          | 2.02              | ..                                  | 50.00                   | 1.25                                     | 6.05               | ..                         | 11.73          | 19                  |
| Madhya Pradesh                        | 88.04    | 10.93               | ..      | 66.00   | ..                          | 4.08              | 1.77                                | ..                      | 3.39                                     | 80                 | 1.07                       | ..             | ..                  |
| Madras                                | 3,03.05  | 3.00                | 12.91   | 26.40   | ..                          | ..                | ..                                  | 1,27.50                 | ..                                       | 8.12               | 6.18                       | 1,18.77        | 17                  |
| Maharashtra                           | 5,02.58  | 8.00                | 23.81   | 48.66   | 50                          | 10.17             | 36.15                               | 2,20,000                | 34.01                                    | 15.82              | 47.15                      | 54.12          | 4.19                |
| Mysore                                | 2,41.75  | 4.18                | 1.40    | 79.60   | ..                          | 4.81              | 3.10                                | 66.00                   | 15.50                                    | 8.85               | 28.98                      | 28.24          | 1.00                |
| Orissa                                | 99.57    | 1.00                | ..      | 40.86   | ..                          | 62                | ..                                  | 25.00                   | 10.18                                    | 5.73               | 5.16                       | 10.00          | 1.02                |
| Punjab                                | 1,61.51  | 3.60                | 51      | 23.45   | ..                          | 3.18              | 84                                  | 1,15.00                 | 6.63                                     | 50                 | 7.80                       | ..             | ..                  |
| Rajasthan                             | 33.66    | 4.00                | ..      | 24.24   | ..                          | 3.06              | 1.20                                | ..                      | 65                                       | 51                 | ..                         | ..             | ..                  |
| Uttar Pradesh                         | 1,79.78  | 20.00               | 2.40    | 61.12   | 50                          | 7.26              | ..                                  | 59.99                   | 5.96                                     | ..                 | ..                         | 22.53          | ..                  |
| West Bengal                           | 82.43    | 5.50                | ..      | 16.87   | ..                          | 5                 | ..                                  | ..                      | 36                                       | 6.06               | 3.08                       | ..             | 51                  |
| Andaman & Nicobar Islands             | 19       | ..                  | ..      | 19      | ..                          | ..                | ..                                  | ..                      | ..                                       | ..                 | ..                         | ..             | ..                  |
| Delhi                                 | 45       | ..                  | ..      | 35      | ..                          | 10                | ..                                  | ..                      | ..                                       | ..                 | ..                         | ..             | ..                  |
| Goa, Daman & Diu                      | 3.80     | ..                  | ..      | ..      | ..                          | ..                | ..                                  | ..                      | ..                                       | 1                  | 3.70                       | ..             | 9                   |
| Himachal Pradesh                      | 2.61     | 80                  | 71      | 96      | ..                          | 14                | ..                                  | ..                      | ..                                       | ..                 | ..                         | ..             | ..                  |
| Laccadive, Minicoy & Amindivi Islands | 90       | ..                  | ..      | 90      | ..                          | ..                | ..                                  | ..                      | ..                                       | ..                 | ..                         | ..             | ..                  |
| Manipur                               | 3.30     | 2.73                | ..      | 15      | ..                          | 20                | ..                                  | ..                      | 15                                       | 7                  | ..                         | ..             | ..                  |
| Pondicherry                           | 27       | ..                  | ..      | 20      | ..                          | 4                 | ..                                  | ..                      | ..                                       | ..                 | 3                          | ..             | ..                  |
| Tripura                               | 3.82     | 80                  | ..      | 3.00    | ..                          | 2                 | ..                                  | ..                      | ..                                       | ..                 | ..                         | ..             | ..                  |
| Total 1963-64                         | 23,38.00 | 1,15.04             | 62.89   | 5,53.76 | 1.00                        | 40.99             | 80.38                               | 8,82.49                 | 86.01                                    | 76.33              | 1,16.06                    | 3,05.91        | 17.14               |
| Total 1962-63                         | 20,41.72 | 91.47               | 53.37   | 4,93.68 | 1.80                        | 22.14             | 67.51                               | 8,57.00                 | 69.48                                    | 74.89              | 82.35                      | 2,14.99        | 13.04               |

<sup>1</sup> Data relate to 1962-63.



## CO-OPERATIVE UNIONS AND INSTITUTES

At the end of 1963-64, there was one national union, viz., National Co-operative Union of India, 19 state unions and 207 divisional, district and sub-divisional unions and institutes. The state and central unions had 52,716 and 44,702 societies affiliated to them respectively. The state unions imparted training during the year to 10,586 members of staff of co-operative institutions, 89,078 honorary office bearers and 4,72,252 members, while the central unions trained 3,383, 19,573 and 73,073 persons of the above categories respectively. The state unions had 868 teaching and propaganda staff while the central unions had 219 of such staff. The state unions and central unions received Rs. 100.67 lakhs and Rs. 8.81 lakhs as Government grants respectively.

## GENERAL INSURANCE SOCIETIES

The number of these societies increased by one to 7 at the end of December 1963 while their membership increased to 11,033 from 10,195 during the year 1963. Their income by way of premia (less reinsurance paid) amounted to Rs. 85.94 lakhs as against Rs. 73.99 lakhs in 1962. They paid claims of the value of Rs. 37.15 lakhs during 1963 as against Rs. 19.11 lakhs in previous year.

SOCIETIES (both credit and non-credit)  
UNDER LIQUIDATION

The number of societies under liquidation at the beginning of the year was 25,447, of which 17,525 were pending for two years and more. 6,495 societies were brought under liquidation during the year, while the liquidation proceedings were finalised in respect of 3,613 societies, leaving 28,303 societies under liquidation at the end of the year. The assets realised and the liabilities paid off during the year were Rs. 1.12 crores and Rs. 1.07 crores respectively. The total liabilities and assets of societies under liquidation at the end of the year were Rs. 12.18 crores and Rs. 10.58 crores respectively.

**Profit and Loss of Non-Credit Co-operatives:** The net result of the operations of non-credit co-operative societies during 1963-64 and 1962-63: The first two figures represent the number of societies which earned a profit and the profit earned in Rs. lakhs in 1963-64 giving within brackets the number earning profit and the profit earned in Rs. lakhs respectively in 1962-63. The next figures indicate the number of societies which incurred a loss and the loss incurred in Rs. lakhs in 1963-64 showing within brackets the number of societies which incurred a loss and the loss incurred in Rs. lakhs during the year 1962-63:

Marketing societies 2,017; 3,02 (1,772; 2,05); 841; 1,22 (1,087; 60); Sugarcane supply societies 121<sup>1</sup>; 51 (6,651; 28); 42<sup>1</sup>; 5 (1,743; 9); Milk supply unions and societies 2,860; 62 (2,265; 47); 2,057; 23 (1,648; 20); Ghee, eggs and other livestock products 582; 4 (466; 3); 495; 2 (433; 2); Irrigation societies 339; 7 (313; 12); 490; 6 (524; 6); Farming societies 2,190; 37 (1,599; 22); 2,311; 40 (1,856; 30); Cotton ginning and pressing societies 94; 13 (66; 8); 47; 4 (56; 4); Sugar factory societies 28; 1,40 (30; 1,39); 25; 2,76 (26; 1,25); Other agricultural processing societies 2,746; 25 (2,342; 18); 3,992; 36 (3,416; 25); Other non-credit societies (Agricultural) 4,427; 3,60 (3,704; 75); 2,242; 27 (2,949; 25); Other non-credit societies (Non-agricultural) 4,833; 153 (4,382; 1,21); 2,957; 74 (2,819; 58); Consumers' Co-operative stores 4,655; 1,27 (3,293; 81); 2,676; 65 (2,366; 50); Housing societies 3,406; 96 (3,026; 70); 3,655; 56 (3,188; 54); Weavers' societies 5,329; 2,33 (5,013; 2,04); 4,608; 1,48 (4,623; 1,41); Other industrial societies 8,049; 1,04 (7,599; 89); 9,685; 1,21 (8,776; 91); Spinning mills 21; 21 (14; 16); 15; 26 (10; 26); Fisheries societies 1,092; 15 (1,067; 16); 1,193; 14 (1,050; 10); Total 42,789; 17,50 (43,602; 11,54); 37,331; 10,45 (36,470; 7,36).

<sup>1</sup> Bihar figures not available.

## INDEX NUMBER

## INDEX NUMBERS OF WHOLESALE PRICES—BY GROUPS

[1952-53 = 100]

| Period.         | All commodities. | Food articles. | Liquor and tobacco. | Fuel, power, light and lubricants. | Industrial raw materials. | Manufactures. |
|-----------------|------------------|----------------|---------------------|------------------------------------|---------------------------|---------------|
| 1958-59 .. .. . | 112.0            | 115.2          | 95.4                | 115.4                              | 115.6                     | 108.3         |
| 1959-60 .. .. . | 117.1            | 119.0          | 99.5                | 116.5                              | 123.7                     | 111.7         |
| 1960-61 .. .. . | 124.0            | 120.0          | 109.0               | 120.0                              | 145.4                     | 123.9         |
| 1961-62 .. .. . | 125.1            | 120.1          | 100.3               | 122.1                              | 142.6                     | 126.6 (R)     |
| 1962-63 .. .. . | 127.9            | 126.1          | 100.9 (R)           | 124.4 (R)                          | 136.5                     | 128.8 (R)     |
| 1963-64 .. .. . | 135.3            | 136.8          | 119.6               | 139.4 (R)                          | 139.5                     | 131.1         |
| 1964-65 .. .. . | 152.7            | 159.9          | 131.2               | 144.0                              | 162.7                     | 137.3         |
| 1965-66 .. .. . | 165.1            | 168.0          | 136.6               | 150.0                              | 189.1                     | 149.1         |

Source of information:—Index Number of wholesale prices in India (Revised series) issued by the office of the Economic Adviser.  
(R) = Revised.

## CONSUMER PRICE

The following table shows the working class consumer price indices for 1960-61 to 1965-66.

## CONSUMER PRICE INDEX NUMBERS—WORKING CLASS

[Year 1949 = 100]

| Centre.             | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 |
|---------------------|---------|---------|---------|---------|---------|---------|
| All-India .. .. .   | 124     | 127     | 131     | 137     | 157     | 169     |
| Bombay* .. .. .     | 95      | 98      | 100     | 104     | 119     | 130     |
| Calcutta* .. .. .   | 100     | 102     | 108     | 114     | 124     | 131     |
| Delhi* .. .. .      | 101     | 104     | 108     | 114     | 128     | 136     |
| Madras City .. .. . | 146     | 149     | 150     | 153     | 177     | 192     |

\* Revised series year (1960 = 100). Consumer price Index Numbers (Dec. 1965) for Industrial workers of certain centres (revised series year 1960=100) are: Ahmedabad 132; Amritsar 144; Bangalore 153; Digboi 140; Hyderabad 147; Indore 144; Jaipur 141 (Nov. 1965); Jamshedpur 141 (Sept. 1965); Kanpur 152 (Sept. 1965); and Srinagar 145.



## OVERSEAS COMMUNICATIONS SERVICE

**INDIA'S Overseas Telecommunications network** of telegraph, telephone, radio-photo and telex services are managed by the Overseas Communications Service. The administrative Head of the department is the Director-General with headquarters at Bombay.

The Service has 4 gate-way Centres for handling international communications at Bombay, Calcutta, New Delhi and Madras. The network consists of submarine telegraph cable systems from Bombay and Madras and wireless telegraph and radio-telephone systems from all the 4 Centres. The submarine telegraph cables as such are owned and maintained by Cable & Wireless Limited, London.

As on 20th June 1966, the Overseas Telecommunications network of India consists of:—

**Direct Wireless Telegraph Services:—**With Afghanistan, Australia, United Kingdom (4 independent circuits), Burma, China (2 links: Peking & Shanghai), U.A.R., France, Federal Republic of Germany, Indonesia, Iran, Iraq, Italy, Japan, Malaysia, Poland, Philippines, Roumania, Switzerland, Thailand, U.S.A. (2 independent circuits), U.S.S.R., Viet Nam (North), Viet Nam (South) and Yugoslavia.

**Direct Radio-Telephone Services:—**With Aden, Afghanistan, Australia (2 independent circuits), Bahrain, United Kingdom (4 independent circuits), Burma (2 independent circuits) (2 links from Poona & Calcutta), China, Kenya, U.A.R., Ethiopia, France, Federal Republic of Germany, Hongkong, Indonesia, Iran, Iraq, Italy, Japan (2 independent circuits), Singapore, Poland, Saudi Arabia, Switzerland, Thailand, U.S.S.R. and Viet Nam (South).

**Direct Radio-photo Services:—**With United Kingdom, China, France, Federal Republic of Germany, Italy, Japan, Poland and U.S.S.R. All these services, with the exception of those with China and Poland, are operated directly from Bombay, Calcutta as well as New Delhi. The above services, with the exception of those with Japan, China and Poland are also operated directly from Madras. The services with China and Poland are operated from New Delhi only. Through these direct connections with international trunk routes, telegraph services are available with practically all the countries of the world. Similarly telephone service is available with a large number of countries in the world as given below.

**Switched Radio-Telephone Services:—**Alaska, Algeria, Argentina, Austria, Balearic Islands, Barbados, Belgium, Bermuda, Brazil, British Guinea, Bulgaria, Burundi, Canada, Canary Islands, Central Africa Republic, Ceuta, Chad Republic, Chile, Congo, Cuba, Costa Rica, Cyprus, Czechoslovakia, Denmark, Doha, Dubai, Faroe Islands, Federal Republic of Germany, Fiji, Finland, France, French Sahara, Forbisher Bay (Canada), Gabon Republic, German Democratic Republic, Ghana, Gibraltar, Goosbay Labrador (Canada), Greece, Guatemala, Hawaii, Honduras, Hungary, Iceland, Irish Republic (Eire), Israel, Italy, Jamaica, Jordan, Kenya, Kuwait, Lebanon, Leeward Islands, Libya, Luxembourg, Malawi, Malaysia, Malta, Mauritius, Mongolian People's Republic, Manila, Mexico, Morocco, Muscat, Netherland Antilles, Netherlands, Newfoundland, New Zealand, Nicaragua, Nigeria, Norway, Panama, Philippines, Poland, Qatar, Rhodesia, Roumania, Ruanda, Ryukyu Islands, Sarawak, Sierra Leone, Spain, Spanish North Africa, South Africa, South West Africa, Sudan, Sweden, Switzerland, Tanzania, Tangier, Trinidad, Tunisia, Uganda, U.A.R., United States of America, Vatican City, West Irian, Windward Islands, and Yugoslavia, Zambia and Ocean Liners which are equipped with the necessary equipment.

Radio-photo service is available with 24 other countries as shown below:

**Switched Radio-photo Services:—**Australia, Belgium, Canada, Czechoslovakia, Cyprus, Denmark, U.A.R., Finland, France, Germany, Greece, Ghana, Italy, Jamaica, Malaysia, Nigeria, Norway, Portugal, Roumania, Sweden, South Africa, Switzerland, Yugoslavia and U.S.A.

**Multi-Address Press Broadcast (Telegraph) Services:—**The Overseas Communications Service provides news transmissions by radio-telegraph on behalf of the Ministry of External Affairs simultaneously to about 39 Indian Consular posts around the world. Similar facilities for broadcasting news transmission to multiple reception-point are also provided to the Press Trust of India from Bombay.

**Programme Transmissions Service:—**Facilities are offered for "programme transmissions" i.e. spoken despatches by representatives and correspondents of foreign Broadcast Organisations for broadcast by their respective principals.

**Leased Telegraph Channels Service:—**Leased teleprinter channels for private customers on rental basis were introduced as a new facility by O.C.S. in the year 1957. This Service has since then expanded rapidly and 25 such channels are in use, as on 20th June 1966, by business concerns etc. This facility provides means of communication by teleprinters directly between the parties.

**International Telex Services:—**The international telex service is the most modern form of facility available to the public and, as with other countries in the world, there is a very large and phenomenally growing demand for the provision of such service.

International telex service was introduced for the first time in India in June, 1960 linking the Bombay/Ahmedabad group of subscribers with London, and via London with a number of countries in the world.

**Direct Telex Services:—**United Kingdom (3 independent circuits—one each from Bombay, Calcutta and New Delhi) Japan, Federal Republic of Germany and Philippines. Through these direct connections with International network, telex service is available with 58 other countries as shown below.

**Switched Telex Services:—**Aden, Algeria, Argentina, Australia, Austria, Bahrain, Belgium, Bermuda, Brazil, Bulgaria, Canada, Chile, Czechoslovakia, Denmark, Doha, Dubai, Ethiopia, Faroe Islands, Fiji, Federal Republic of West Germany, Finland, France, German Democratic Republic, Ghana, Greece, Hongkong, Hungary, Iceland, Irish Republic, Israel, Italy, Jamaica, Kenya-Uganda-Tanzania, Lebanon, Luxemburg, Malaysia, Malta, Mexico, Netherlands, New Zealand, Norway, Peru, Philippines, Poland, Republic of Sudan, Roumania, Singapore, Spain, Sweden, Switzerland, Turkey, Uruguay, U.S.A., USSR, Thailand and Yugoslavia.

All International Telex services are integrated with the internal telex system, which the Indian P. & T. has made available to the Indian public in 13 cities viz. Calcutta, Bombay, New Delhi, Madras, Ahmedabad, Secunderabad-Hyderabad, Bangalore, Kanpur, Coimbatore, Nagpur, Patna, Madurai and Poona.

## PRODUCTION (INDUSTRIAL) 1965

| Industry                                                   | Accounting Units | No. of Units | Estimated Production | Industry                                          | Accounting Units | No. of Units | Estimated Production |
|------------------------------------------------------------|------------------|--------------|----------------------|---------------------------------------------------|------------------|--------------|----------------------|
| <b>INDUSTRIAL MACHINERY</b>                                |                  |              |                      | <b>INDUSTRIAL MACHINERY—Contd.</b>                |                  |              |                      |
| Sugar Mill Machinery ..                                    | Rs. in lakhs     | 18           | 833.00               | Agricultural Machinery Pesticide equipments ..    | Rs. in lakhs     | 2            | 210.00               |
| Boilers ..                                                 | "                | 13           | 561.40               | Others ..                                         | "                | 15           | 68.00                |
| Cement Mill Machinery ..                                   | "                | 6            | 323.20               | Ceramic Machinery ..                              | "                | 3            | 9.60                 |
| Conveyors ..                                               | "                | 22           | 208.30               | Cooling Towers ..                                 | "                | 3            | 125.00               |
| Drilling Equipment ..                                      | "                | 5            | 166.96               | Electroplating Equipment ..                       | "                | 2            | 18.25                |
| Reduction Gear ..                                          | "                | 5            | 138.35               | Industrial Dry-cleaning Equipment ..              | "                | 1            | 14.10                |
| Gas Cylinder ..                                            | "                | 2            | 56.41                | Food Processing Equipment ..                      | "                | 2            | 1.46                 |
| Printing Machinery ..                                      | "                | 4            | 6.60                 | Oil Filtration equipment including centrifuges .. | "                | 2            | 33.28                |
| Mining and Coal Machinery ..                               | "                | 10           | 25.00*               | Industrial oil firing equipment ..                | "                | 3            | 12.57                |
| Paper Mill Machinery ..                                    | "                | 15           | 149.00               | Paint and Varnish Machinery ..                    | "                | 3            | 4.42                 |
| Chemical Machinery ..                                      | "                | 50           | 663.00               | Rubber Machinery ..                               | "                | 4            | 8.16                 |
| Construction Machinery ..                                  | "                | 20           | 330.00               | Tea Machinery ..                                  | "                | 10           | 147.37               |
| Metallurgical Machinery ..                                 | "                | 7            | 39.00                | Weighing Machinery ..                             | "                | 6            | 165.37               |
| Biscuit and Bread Making Machinery ..                      | "                | 1            | 4.50                 | Rice, Dal and Flour Mill Machinery ..             | "                | 18           | 42.38                |
| Gas Producer Plant ..                                      | "                | 1            | 9.50                 | Oil Mill Machinery ..                             | "                | 20           | 52.48                |
| Rayon Machinery ..                                         | "                | 1            | 32.50                |                                                   |                  |              |                      |
| Dairy Machinery ..                                         | "                | 4            | 60.80                |                                                   |                  |              |                      |
| Industrial Air-conditioning and Refrigeration Equipment .. | "                | 18           | 337.04               |                                                   |                  |              |                      |

\* Due to lack of orders, the production figures do not include coal handling plant.



| Industry                                 | Accounting Units | No. of Units | Estimated Production |
|------------------------------------------|------------------|--------------|----------------------|
| <b>TOOLS &amp; ABRASIVES INDUSTRIES</b>  |                  |              |                      |
| Machine Tools .. ..                      | Rs. in lakhs     | 65           | 2,203.03             |
| Machine Tools Accessories ..             | "                | 9            | 61.40                |
| Wood Working Machines ..                 | "                | 3            | 2.91                 |
| Portable Tools .. ..                     | "                | 7            | 180.79               |
| Other Metal Forming                      |                  |              |                      |
| Machines .. ..                           | "                | 3            | 46.25                |
| Furnaces .. ..                           | "                | 12           | 187.01               |
| Gas Welding Cutting Equip-<br>ment .. .. | "                | 2            | 95.12                |
| Electric Welding .. ..                   | "                | 1            | 15.36                |
| Others (Re-rolling Plants etc.)          | "                | 1            | 4.79                 |
| Grinding Wheels .. ..                    | Kgs.             | 7            | 41,99,935            |
| Coated Abrasives .. ..                   | Reams            | 4            | 1,74,756             |
| Steel Files .. ..                        | Nos.             | 6            | 70,50,784            |
| Twist Drills .. ..                       | "                | 6            | 82,71,929            |
| Reamers .. ..                            | "                | 8            | 1,52,273             |
| Threading Tools .. ..                    | "                | 7            | 22,40,297            |
| Milling Cutters .. ..                    | "                | 10           | 2,49,188             |
| Bandsaw Blades .. ..                     | R.M.             | 4            | 5,01,661             |
| Hacksaw Blades .. ..                     | Nos.             | 6            | 3,24,03,509          |
| Tungsten Carbide .. ..                   | Kgs.             | 4            | 39,755               |
| Lathe Tools (Tool Bits) ..               | Nos.             | 9            | 8,66,788             |
| Diamond Drill Bits .. ..                 | "                | 4            | 33,475               |

**AUTOMOBILES AND ANCILLARIES**

|                                           |              |    |             |
|-------------------------------------------|--------------|----|-------------|
| <b>Automobiles :</b>                      |              |    |             |
| a) Commercial Vehicles ..                 | Nos.         | 5  | 37,299      |
| b) Jeeps .. ..                            | "            | 1  | 10,483      |
| c) Passenger Cars .. ..                   | "            | 3  | 24,790      |
| <b>Motor Cycles, Scooters etc. :</b>      |              |    |             |
| a) Motor Cycles .. ..                     | "            | 3  | 21,364      |
| b) Three Wheelers .. ..                   | "            | 3  | 1,884       |
| c) Scooters .. ..                         | "            | 3  | 26,064      |
| d) Mopeds .. ..                           | "            | 1  | 6,318       |
| Agricultural Tractors .. ..               | "            | 5  | 8,875       |
| Petrol/Kerosene Engines ..                | "            | 62 | 2,02,392    |
| Power Driven Pumps .. ..                  | "            | 3  | 1,546       |
| Petrol Dispensing Pumps ..                | "            | 1  | 67          |
| Locomotives/Diesel Shunters               | "            | 8  | 2,496       |
| Air Compressors .. ..                     | "            | 29 | 82,242      |
| Diesel Engines (Stat.) ..                 | "            | 9  | 2,810       |
| Fans and Blowers .. ..                    | "            | 5  | 1,241       |
| Road Rollers .. ..                        | "            | 4  | 299         |
| Fork Lift Trucks .. ..                    | "            | 1  | 71          |
| Mobile Cranes .. ..                       | "            | 2  | 23          |
| Bulldozers .. ..                          | "            | 2  | 68          |
| Shovels/Excavators .. ..                  | "            | 2  | 20          |
| Scrapers .. ..                            | "            | 2  | 8,821       |
| Diesel Engines (Vehicular<br>type) .. ..  | "            | 2  |             |
| <b>Automobile Ancillaries :</b>           |              |    |             |
| <b>Fuel Injection Equipment :</b>         |              |    |             |
| a) Injection Nozzles .. ..                | "            | 2  | 9,41,911    |
| b) Nozzle Holders .. ..                   | "            | 2  | 3,75,260    |
| c) Elements .. ..                         | "            | 2  | 10,05,847   |
| d) Delivery Valves .. ..                  | "            | 2  | 9,31,640    |
| e) Single & Multi-Cylinder<br>Pumps .. .. | "            | 2  | 1,55,221    |
| Filters (Oil, Air & Fuel) ..              | "            | 4  | 86,669      |
| Filter Inserts .. ..                      | "            | 4  | 9,49,650    |
| Thin Walled Bearings .. ..                | "            | 3  | 58,34,752   |
| Radiators .. ..                           | "            | 6  | 80,195      |
| Dynamos .. ..                             | "            | 4  | 85,720      |
| Starter Motors .. ..                      | "            | 4  | 81,897      |
| Electric Horns .. ..                      | "            | 5  | 1,68,989    |
| Gaskets .. ..                             | "            | 3  | 3,83,38,728 |
| Wheels and Rims .. ..                     | "            | 3  | 5,75,909    |
| Engine Valves .. ..                       | "            | 4  | 27,25,671   |
| Oil Seals .. ..                           | "            | 5  | 24,98,035   |
| Piston Rings .. ..                        | "            | 2  | 1,02,82,000 |
| Pistons .. ..                             | "            | 3  | 9,21,120    |
| Cylinder Liners .. ..                     | "            | 3  | 1,78,095    |
| Shock absorbers .. ..                     | "            | 5  | 5,68,148    |
| Clutch facings .. ..                      | Kgs.         | 2  | 1,13,930    |
| Brake linings .. ..                       | "            | 3  | 23,44,440   |
| <b>Clutch Assembly :</b>                  |              |    |             |
| a) Driven Plates .. ..                    | "            | 1  | 1,04,487    |
| b) Cover Assembly .. ..                   | "            | 1  | 55,052      |
| Spark Plugs .. ..                         | Nos.         | 2  | 20,44,731   |
| Dash Board Instruments ..                 | Rs. in lakhs | 2  | 150.00      |
| Tie Rod Ends .. ..                        | Pairs        | 1  | 1,94,244    |

| Industry                                  | Accounting Units | No. of Units | Estimated Production |
|-------------------------------------------|------------------|--------------|----------------------|
| <b>AUTOMOBILES AND ANCILLARIES—Contd.</b> |                  |              |                      |
| Taxi Meters .. ..                         | Nos.             | 1            | 414                  |
| Propeller Shafts .. ..                    | "                | 1            | 63,456               |
| Fly Wheel Ring Gears .. ..                | "                | 1            | 58,123               |
| Carburetors .. ..                         | "                | 1            | 3,855                |
| Wiper Motors .. ..                        | "                | 1            | 12,114               |
| Wiper Arms and Blades ..                  | Sets             | 1            | 1,74,189             |

**HEAVY ELECTRICAL & OTHER ENGINEERING INDUSTRIES**

|                                                                     |            |    |           |
|---------------------------------------------------------------------|------------|----|-----------|
| Electric Motors .. ..                                               | H.P.       | 28 | 16,75,000 |
| Transformers .. ..                                                  | KVA        | 20 | 43,00,000 |
| Motor Starters .. ..                                                | Nos.       | 19 | 2,90,000  |
| Electrical Steel sheets ..                                          | Tonnes     | 1  | 26,500    |
| Cables & Wires (VIR and PVC<br>Cables) .. ..                        | Kilometres | 31 | 4,10,800  |
| A.C.S.R. and All Aluminium<br>Conductors .. ..                      | Tonnes     | 20 | 45,000    |
| <b>Winding Wires :</b>                                              |            |    |           |
| a) Enamelled Wires .. ..                                            | "          | 16 | 10,500    |
| b) Paper and Cotton Cove-<br>red Wires and strips ..                | "          | —  | —         |
| Paper Insulated Power<br>Cables .. ..                               | Kilometres | 5  | 4,650     |
| Steel Forgings .. ..                                                | Tonnes     | 45 | 65,000    |
| Cast Iron Pressure pipes<br>including cast iron spun<br>pipes .. .. | "          | 16 | 2,49,644  |
| Malleable Iron Castings ..                                          | "          | 21 | 13,883    |
| Steel Castings .. ..                                                | "          | 25 | 60,602    |

**LIGHT ELECTRICAL AND OTHER ENGINEERING INDUSTRIES**

|                               |            |    |             |
|-------------------------------|------------|----|-------------|
| G.L.S. & other similar lamps  | Lakh Nos.  | 13 | 690.00      |
| Miniature Lamps .. ..         | "          | 10 | 280.00      |
| Fluorescent Tubes .. ..       | "          | 4  | 44.00       |
| Electric Fans .. ..           | Nos.       | 28 | 14,60,000   |
| Radio receivers .. ..         | "          | 21 | 5,50,000    |
| Storage Batteries .. ..       | "          | 12 | 7,70,000    |
| Dry Batteries .. ..           | Lakh Cells | 5  | 3,050.00    |
| House Service Meters ..       | Nos.       | 13 | 11,30,000   |
| Domestic Refrigerators ..     | "          | 6  | 31,500      |
| Room Air-Conditioners ..      | "          | 8  | 11,000      |
| Measuring Instruments ..      | "          | 8  | 1,10,000    |
| Electrical Wiring Accessories | "          | 14 | 1,80,00,000 |
| Brass Lamp Holders .. ..      | "          | 7  | 49,00,000   |

**INSTRUMENTS**

|                          |          |   |          |
|--------------------------|----------|---|----------|
| Box Cameras .. ..        | Nos.     | 3 | 51,900   |
| Clinical Thermometers .. | In Lakhs | 3 | 14.73    |
| Levels .. ..             | "        | 7 | 6,050    |
| Geometry Boxes .. ..     | Gross    | 3 | 22,750   |
| Microscopes .. ..        | Nos.     | 8 | 7,617    |
| Pressure Gauges .. ..    | "        | 5 | 9,50,000 |
| Theodolites .. ..        | "        | 5 | 964      |
| Water Meters .. ..       | "        | 6 | 1,21,592 |

**MEDICAL INSTRUMENTS**

|                                                            |                                                        |               |
|------------------------------------------------------------|--------------------------------------------------------|---------------|
| Medical/Surgical Instruments,<br>Equipments and Appliances | Rs. Lakhs (1) Private Sector 15<br>(2) Public Sector 1 | 93.00<br>7.00 |
|                                                            |                                                        | 100.00        |

**HEAVY MECHANICAL INDUSTRIES**

|                                                         |                                |     |           |
|---------------------------------------------------------|--------------------------------|-----|-----------|
| Slotted angles and Cold Form<br>Sections .. ..          | Tonnes                         | 4   | 1,080     |
| Bright bars .. ..                                       | "                              | 5   | 29,000    |
| Cranes .. ..                                            | "                              | 20  | 10,000    |
| Welding Electrodes .. ..                                | Th. running Metres             | 9   | 2,21,291  |
| Lifts .. ..                                             | Number                         | 5   | 392       |
| Conduit Pipes .. ..                                     | R. Metres                      | 15  | 59,38,984 |
| Steel Pipes and Tubes ..                                | Tonnes                         | 15  | 2,58,000  |
| Large dia and fabricated pipe                           | "                              | 6   | 19,500    |
| Penstock .. ..                                          | "                              | 4   | 11,600    |
| Wire Ropes .. ..                                        | "                              | 7   | 12,961    |
| Steel structurals (Light &<br>Medium) .. ..             | "                              | 127 | 1,08,561  |
| Steel structurals (Heavy) ..                            | "                              | 18  | 1,06,141  |
| Steel Tubular Structural and<br>pipe Manipulation .. .. | "                              | 3   | 2,270     |
| Transmission Towers .. ..                               | "                              | 12  | 45,000    |
| Railway Wagons .. ..                                    | Nos. in terms of<br>4 wheelers | 15  | 25,407    |
| Electric/Air Hoists Blocks ..                           | Nos.                           | 7   | 1,700     |



| Industry | Accounting Units | No. of Units | Estimated Production |
|----------|------------------|--------------|----------------------|
|----------|------------------|--------------|----------------------|

**CEMENT & ASBESTOS CEMENT PRODUCTS**

|                              |        |    |             |
|------------------------------|--------|----|-------------|
| Cement .. .. .               | Tonnes | 38 | 1,05,78,000 |
| Asbestos Cement Products ..  | "      | 8  | 4,27,021    |
| Asbestos Textile Products .. | "      | 4  | 3,748       |

**CARBON PRODUCTS**

|                            |            |    |        |
|----------------------------|------------|----|--------|
| Cinema Arc Carbons ..      | Lakh pairs | 3  | 17.00  |
| Calcined Petroleum Coke .. | Tonnes     | 1  | 32,361 |
| Pencils .. .. .            | Lakh Gross | 12 | 11.30  |
| Graphite Crucibles .. ..   | Tonnes     | 11 | 944.30 |
| Lead Slips .. .. .         | Lakh Gross | 1  | 2.74   |

**LIGHT MECHANICAL ENGINEERING INDUSTRIES**

|                             |           |    |           |
|-----------------------------|-----------|----|-----------|
| Bicycles Complete .. ..     | Nos.      | 20 | 15,23,419 |
| Bicycles spare parts .. ..  | Lakh Rs.  | 55 | 998.00    |
| Ball and Roller Bearings .. | Lakh Nos. | 5  | 78.4      |
| Duplicators .. .. .         | Nos.      | 4  | 5,756     |
| Incand Lamps .. .. .        | "         | 4  | 1,27,675  |
| Sewing Machines .. .. .     | "         | 8  | 4,25,032  |

**Stoves :**

|                            |   |   |          |
|----------------------------|---|---|----------|
| a) Pressure type .. ..     | " | 5 | 1,72,913 |
| b) Non-pressure type .. .. | " | 2 | 3,07,747 |
| Typewriters .. .. .        | " | 4 | 41,200   |

**Beltings :**

|                                         |        |    |           |
|-----------------------------------------|--------|----|-----------|
| a) Cotton and Hair .. ..                | Tonnes | 10 | 666.7     |
| b) Rubber Ply Transmis-<br>sion .. .. . | "      | 8  | 2,520.0   |
| c) Conveyor Beltings .. ..              | "      | 5  | 2,605.0   |
| Zip Fasteners .. .. .                   | Metres | 6  | 29,16,170 |
| Steel Belt Lacing .. ..                 | Tonnes | 4  | 444.0     |

**Needles :**

|                                                 |                |    |             |
|-------------------------------------------------|----------------|----|-------------|
| a) Gramophone .. ..                             | Lakh Nos.      | 2  | 2,680.00    |
| b) Sewing Machines .. ..                        | "              | 2  | 63.1        |
| c) Hand Sewing .. .. .                          | "              | 1  | 2,609.00    |
| Steel Balls .. .. .                             | 100 Nos.       | 4  | 1,11,41,524 |
| Addressing Machines .. ..                       | Nos.           | 2  | 636         |
| Data Processing Machines ..                     | "              | 2  | 1,143       |
| Calculating and Adding<br>Machines .. .. .      | "              | 2  | 3,838       |
| Expanded Metal .. .. .                          | Tonnes         | 5  | 1,988.00    |
| Grinding Media .. .. .                          | "              | 7  | 9,200.00    |
| Auto Leaf Springs .. ..                         | "              | 12 | 24,324.00   |
| Steel Furniture .. .. .                         | "              | 24 | 41,913.00   |
| Machine Screws .. .. .                          | Lakh Nos.      | 13 | 6,120.00    |
| Wood Screws .. .. .                             | "              | 20 | 16,800.00   |
| Building Hardware .. ..                         | Tonnes         | 23 | 9,180.00    |
| Razor Blades .. .. .                            | Lakh Nos.      | 6  | 9,600.00    |
| Crown Cork .. .. .                              | "              | 6  | 9,600.00    |
| Hurricane Lantern .. ..                         | "              | 10 | 60.00       |
| Time Pieces .. .. .                             | "              | 4  | 3.85        |
| Watches .. .. .                                 | "              | 2  | 2.08        |
| H. T. Bolts & Nuts .. ..                        | Tonnes         | 3  | 4,474.00    |
| Collapsible Tubes .. ..                         | Nos.           | 6  | 182.04      |
| Umbrella Ribs .. .. .                           | Lakh Doz. Sets | 6  | 3.60        |
| Steel Link Chains .. ..                         | Tonnes         | 3  | 625.00      |
| Wire Products, Wire Net-<br>ting, Gauge .. .. . | "              | 5  | 960.00      |
| Bolts, Nuts & Rivets .. ..                      | "              | 42 | 43,600.00   |
| Clocks .. .. .                                  | Lakh Nos.      | 5  | 65          |
| Valves & Clocks .. .. .                         | "              | 9  | 12.40       |

**ALKALIES & ALLIED INDUSTRIES**

|                              |        |   |        |
|------------------------------|--------|---|--------|
| Bromine .. .. .              | Tonnes | 1 | 200    |
| Bromides .. .. .             | "      | 1 | 10     |
| Sodium Bicarbonate .. ..     | "      | 2 | 1,250  |
| Sodium Hydro Sulphite .. ..  | "      | 3 | 4,500  |
| Calcium Carbide .. .. .      | "      | 5 | 50,000 |
| Potassium Chlorate .. ..     | "      | 3 | 8,800  |
| Sodium Chlorate .. .. .      | "      | 1 | 300    |
| Calcium Carbonate (pptd). .. | "      | 4 | 7,600  |
| Hydrogen Peroxide .. ..      | "      | 1 | 2,300  |
| Sodium Perborate .. .. .     | "      | 1 | 500    |
| Borax .. .. .                | "      | 1 | 3,500  |
| Boric Acid .. .. .           | "      | 1 | 450    |
| Sodium Sulphite .. .. .      | "      | 4 | 900    |
| Sodium Bi-sulphite .. ..     | "      | 5 | 1,000  |
| Sodium Thio-sulphite .. ..   | "      | 6 | 1,600  |
| Phosphorous Trichloride ..   | "      | 1 | 200    |
| Aluminium Chloride .. ..     | "      | 1 | 50     |

| Industry | Accounting Units | No. of Units | Estimated Production |
|----------|------------------|--------------|----------------------|
|----------|------------------|--------------|----------------------|

**ACIDS & MISCELLANEOUS CHEMICALS**

|                                                    |        |    |          |
|----------------------------------------------------|--------|----|----------|
| Nitric Acid (Industrial Use)                       | Tonnes | 22 | 14,540   |
| Phosphoric Acid (Industrial<br>Use) .. .. .        | "      | 2  | 1,900    |
| Ammonium Sulphate .. ..                            | "      | 9  | 4,37,380 |
| Double Salt .. .. .                                | "      | 1  | 47,640   |
| Calcium Ammonium Nitrate ..                        | "      | 2  | 5,50,040 |
| Ammonium Chloride .. ..                            | "      | 2  | 22,530   |
| Sodium Sulphate .. .. .                            | "      | 18 | 33,920   |
| Aluminium Sulphate (Iron<br>free & ferric) .. .. . | "      | 22 | 90,880   |
| Alums .. .. .                                      | "      | 11 | 1,800    |
| Bichromates .. .. .                                | "      | 5  | 6,820    |
| Copper Sulphate .. .. .                            | "      | 4  | 3,080    |
| Ferrous Sulphate .. .. .                           | "      | 10 | 7,200    |
| Magnesium Sulphate .. ..                           | "      | 16 | 3,180    |
| Sodium Sulphide .. .. .                            | "      | 5  | 3,320    |
| Zinc Chloride .. .. .                              | "      | 3  | 640      |
| Calcium Chloride .. .. .                           | "      | 3  | 1,940    |
| Magnesium Chloride .. ..                           | "      | 3  | 6,050    |

**Industrial Gases :**

|                             |                 |    |        |
|-----------------------------|-----------------|----|--------|
| a) Oxygen Gas .. ..         | Thu. Cu. Metres | 22 | 29,000 |
| b) D. Acetylene Gas .. ..   | "               | 12 | 5,000  |
| c) Hydrogen Gas .. .. .     | "               | 5  | 360    |
| d) Nitrogen Gas .. .. .     | "               | 7  | 480    |
| e) Argon Gas .. .. .        | "               | 1  | 67     |
| f) Nitrous Oxide Gas .. ..  | Lakh Litres     | 1  | 1,710  |
| g) Carbon Dioxide Gas .. .. | Tonnes          | 20 | 10,300 |

**Basic Electroplating Salts :**

|                                        |   |   |        |
|----------------------------------------|---|---|--------|
| a) Nickel Sulphate .. ..               | " | 6 | 455.00 |
| b) Nickel Carbonate .. ..              | " | 5 | 12.00  |
| c) Nickel Chloride .. ..               | " | 6 | 91.00  |
| d) Nickel Ammonium<br>Sulphate .. .. . | " | 4 | Nil    |
| e) Nickel Oxide .. .. .                | " | 1 | 0.2    |
| f) Cadmium Oxide .. .. .               | " | 2 | 4.0    |
| g) Chromic Acid .. .. .                | " | 5 | 253.0  |

**Compounded Electroplating  
Salts (Still, Dull, Vat Type):**

|                         |        |   |       |
|-------------------------|--------|---|-------|
| a) Nickel Salts .. .. . | "      | 6 | 167.0 |
| b) Copper Salts .. .. . | "      | 4 | 30.0  |
| c) Bronze Salts .. .. . | "      | 2 | 1.2   |
| d) Brass Salts .. .. .  | "      | 3 | 8.0   |
| e) Zinc Salts .. .. .   | "      | 4 | 35.0  |
| f) Cadmium .. .. .      | "      | 5 | 19.0  |
| g) Tin Salts .. .. .    | "      | 4 | 6.0   |
| h) Silver Salts .. .. . | "      | 3 | 0.8   |
| i) Gold Salts .. .. .   | Kg.    | 3 | 4.0   |
| j) Chromium Salts .. .. | Tonnes | 4 | 54.0  |

**Bright Plating type :**

|                    |   |   |       |
|--------------------|---|---|-------|
| a) Nickel .. .. .  | " | 5 | 100.0 |
| b) Copper .. .. .  | " | 2 | 0.2   |
| c) Cadmium .. .. . | " | 2 | 2.0   |
| d) Zinc .. .. .    | " | 2 | 6.0   |
| e) Silver .. .. .  | " | 1 | 0.4   |
| f) Gold .. .. .    | " | 1 | 0.2   |

**Electroplating Brighteners :**

|                            |           |   |       |
|----------------------------|-----------|---|-------|
| a) Nickel .. .. .          | "         | 3 | 83.0  |
| b) Copper .. .. .          | K. Litres | 1 | —     |
| c) Zinc .. .. .            | Tonnes    | 1 | 3.5   |
| d) Cadmium .. .. .         | "         | 1 | 0.7   |
| e) Gold .. .. .            | Litres    | 1 | 100.0 |
| Electroplating leveller .. | Tonnes    | 2 | 18.0  |

**Miscellaneous Electroplating  
Chemicals :**

|                               |           |   |     |
|-------------------------------|-----------|---|-----|
| a) Passivating Salts .. ..    | "         | 4 | 6.2 |
| b) Oxidising Salts .. ..      | K. Litres | 3 | 2.2 |
| c) Copper Correcting Salts .. | Tonnes    | 1 | —   |
| d) Decolorater .. .. .        | "         | 1 | —   |

**Anti Rust Preparation :**

|                            |        |   |         |
|----------------------------|--------|---|---------|
| a) Metal Cleaner .. ..     | "      | 8 | 1,000.0 |
| b) Antirust Composition .. | "      | 1 | 11.0    |
| c) Degreasing Salts .. ..  | "      | 1 | 30.0    |
| d) Star Bond .. .. .       | Litres | 1 | 0.6     |
| e) Starpick .. .. .        | "      | 1 | 200.0   |



| Industry                                                 | Accounting Units | No. of Units | Estimated Production | Industry                                            | Accounting Units | No. of Units | Estimated Production |
|----------------------------------------------------------|------------------|--------------|----------------------|-----------------------------------------------------|------------------|--------------|----------------------|
| <b>ACIDS &amp; MISCELLANEOUS CHEMICALS—Contd.</b>        |                  |              |                      | <b>CERAMICS</b>                                     |                  |              |                      |
| <i>Heat Treatment and Case hardening Compounds :</i>     |                  |              |                      | Refractories .. .. Tonnes                           | 58               | 7,20,000     |                      |
| a) Cyanide type .. .. Tonnes                             | 2                | 500          |                      | White Wares .. .. "                                 | 44               | 23,400       |                      |
| b) Non-Cyanide type .. .. "                              | 4                | 410          |                      | Sanitaryware .. .. "                                | 21               | 12,500       |                      |
| c) Tempering Salts .. .. "                               | 1                | 38           |                      | Glazed Tiles .. .. "                                | 7                | 6,400        |                      |
| d) Economiser Tempering Cutting Salts .. .. "            | 1                | 560          |                      | H. T. Insulators .. .. "                            | 9                | 10,270       |                      |
|                                                          |                  |              |                      | L. T. Insulators .. .. "                            | 17               | 3,900        |                      |
|                                                          |                  |              |                      | S. W. Pipes .. .. "                                 | 21               | 69,000       |                      |
|                                                          |                  |              |                      | Others (S. W. Jars) .. .. "                         | 25               | 9,000        |                      |
|                                                          |                  |              |                      | Abrasive Grains .. .. "                             | 3                | 1,030        |                      |
| <i>Water Treatment Chemicals :</i>                       |                  |              |                      | <b>GLASS AND ALLIED INDUSTRIES</b>                  |                  |              |                      |
| a) Sod. Hexameta Phosphate .. .. "                       | 1                | 360          |                      | Glass and Glassware .. .. Tonnes                    | 113              | 2,84,742     |                      |
| b) Alflor Powder .. .. "                                 | 1                | 380          |                      | Enamel-ware .. .. Lakh Pcs.                         | 24               | 370.00       |                      |
| c) Sod. Aluminate .. .. "                                | 2                | 740          |                      | Liquid Gold .. .. Lakh Gramms.                      | 5                | 10.8         |                      |
|                                                          |                  |              |                      | Synthetic Stones .. .. Th. Kilos.                   | 1                | 13.2         |                      |
| <i>Phosphate Salts :</i>                                 |                  |              |                      | <b>PAPER INDUSTRY</b>                               |                  |              |                      |
| a) Acid Sodium Pyrophosphate .. .. "                     | 1                | —            |                      | Paper & Paper Board .. .. Tonnes                    | 55               | 5,20,000     |                      |
| b) Mono. Sod. Phosphate .. .. "                          | 1                | 650          |                      | Newsprint .. .. "                                   | 1                | 30,800       |                      |
| c) Di. Sod. Phosphate .. .. "                            | 1                | 160          |                      | Rayon Grade Pulp .. .. "                            | 1                | 46,500       |                      |
| d) Tri. Sod. Phosphate .. .. "                           | 2                | 4,000        |                      | <i>Carbon Paper Industry :</i>                      |                  |              |                      |
| e) Sodium Tripoly phosphate .. .. "                      | 1                | 49           |                      | a) Carbon Paper .. .. Th. Boxes of 100 sheets each  | 6                | 4,506        |                      |
| f) Mono. Amm. Phosphate .. .. "                          | 1                | 21           |                      | b) Duplicating Stencils .. .. Reams                 | 3                | 78,968       |                      |
| g) Di. Amm. Phosphate .. .. "                            | 1                | 17           |                      | c) Typewriter Ribbons .. .. Lakh Nos.               | 6                | 24.4         |                      |
| h) Tetra Sod. Pyrophosphate .. .. "                      | 1                | 25           |                      |                                                     |                  |              |                      |
| <i>Fluxes :</i>                                          |                  |              |                      | <b>TIMBER INDUSTRY</b>                              |                  |              |                      |
| a) Gas Welding Fluxes .. .. "                            | 3                | 21           |                      | <i>Plywood :</i>                                    |                  |              |                      |
| b) Soldering Fluxes .. .. "                              | 1                | 2            |                      | a) Teacheat .. .. Lakh Sq. meters                   | 65**             | 103.86       |                      |
| c) Submerged Arc Welding Fluxes .. .. "                  | 2                | 70           |                      | b) Commercial .. .. "                               | —                | 124.68       |                      |
|                                                          |                  |              |                      | Hard Board .. .. "                                  | 2                | 41.04        |                      |
|                                                          |                  |              |                      | Insulation Board .. .. "                            | 1                | 6.51         |                      |
|                                                          |                  |              |                      | Particle Board .. .. Lakh Sq. meters                | 5                | 7.97         |                      |
|                                                          |                  |              |                      | Match .. .. Lakh Boxes of 50 sticks                 | 6†               | 42,540       |                      |
|                                                          |                  |              |                      |                                                     | 57†              | 10,410       |                      |
|                                                          |                  |              |                      | <i>Cork Products :</i>                              |                  |              |                      |
|                                                          |                  |              |                      | a) Cork Stoppers .. .. Lakh Nos.                    | 2                | 3,343.9      |                      |
|                                                          |                  |              |                      | b) Cork Discs .. .. "                               | 2                | 13,882.8     |                      |
|                                                          |                  |              |                      | c) Cork Sheets .. .. Lakh Sq. meters                | 2                | 10.78        |                      |
|                                                          |                  |              |                      | <b>LEATHER INDUSTRY</b>                             |                  |              |                      |
|                                                          |                  |              |                      | Vegetable Tanning of Hides .. .. Cow Hides          | 32               | 34,16,665    |                      |
|                                                          |                  |              |                      | Chrome Tanning of Hides .. .. Hides                 | 12               | 8,85,058     |                      |
|                                                          |                  |              |                      | Western Type of Leather Foot-wear .. .. Pairs       | 12               | 88,52,561    |                      |
|                                                          |                  |              |                      | Indigenous Type of Leather Foot-wear .. .. "        | 12               | 67,11,669    |                      |
|                                                          |                  |              |                      | Glue .. .. Kgs.                                     | 6                | 29,59,741    |                      |
|                                                          |                  |              |                      | Pickers .. .. Nos.                                  | 5                | 21,35,131    |                      |
|                                                          |                  |              |                      | Myrobalan Extracts .. .. Tonnes                     | 3                | 2,099        |                      |
|                                                          |                  |              |                      | <b>RUBBER MANUFACTURERS</b>                         |                  |              |                      |
|                                                          |                  |              |                      | Giant Tyres .. .. Nos.                              | 8                | 14,02,395    |                      |
|                                                          |                  |              |                      | Giant Tubes .. .. "                                 | 7                | 13,39,620    |                      |
|                                                          |                  |              |                      | Motor tyres .. .. "                                 | 7                | 7,99,515     |                      |
|                                                          |                  |              |                      | Motor Cycle tyres .. .. "                           | 4                | 2,46,195     |                      |
|                                                          |                  |              |                      | Motor tubes .. .. "                                 | 7                | 8,14,965     |                      |
|                                                          |                  |              |                      | Motor cycle tubes .. .. "                           | 4                | 3,27,600     |                      |
|                                                          |                  |              |                      | Bicycle tyres .. .. "                               | 12               | 1,83,40,200  |                      |
|                                                          |                  |              |                      | Bicycle tubes .. .. "                               | 12               | 1,83,71,010  |                      |
|                                                          |                  |              |                      | Aero tyres .. .. "                                  | 1                | 10,230       |                      |
|                                                          |                  |              |                      | Aero tubes .. .. "                                  | 1                | 1,989        |                      |
|                                                          |                  |              |                      | A. D. V. Tyres .. .. "                              | 3                | 1,28,400     |                      |
|                                                          |                  |              |                      | A. D. V. Tubes .. .. "                              | 3                | 1,65,975     |                      |
|                                                          |                  |              |                      | Tractor tyres .. .. "                               | 3                | 99,870       |                      |
|                                                          |                  |              |                      | Tractor tubes .. .. "                               | 3                | 1,01,250     |                      |
|                                                          |                  |              |                      | Off the Road tyres .. .. "                          | 3                | 8,430        |                      |
|                                                          |                  |              |                      | Off the Road tubes .. .. "                          | 3                | 12,780       |                      |
|                                                          |                  |              |                      | Cab tyres .. .. Met.                                | 2                | 34,905       |                      |
|                                                          |                  |              |                      | Ebonite .. .. Kg.                                   | 10               | 1,49,595     |                      |
|                                                          |                  |              |                      | Water proof fabrics .. .. Met.                      | 12               | 41,71,800    |                      |
|                                                          |                  |              |                      | Latex Foam Sponge .. .. Kg.                         | 7                | 11,66,475    |                      |
|                                                          |                  |              |                      | Rubber Footwear .. .. Pairs                         | 17               | 5,25,27,900  |                      |
|                                                          |                  |              |                      | Dipped Rubber goods .. .. Nos.                      | 5                | 29,40,13,350 |                      |
|                                                          |                  |              |                      | Radiator Hoses .. .. "                              | 8                | 3,94,950     |                      |
|                                                          |                  |              |                      | Vacuum Brake Hoses .. .. "                          | 7                | 7,55,250     |                      |
|                                                          |                  |              |                      | Other types of Hoses .. .. Met.                     | 16               | 70,23,750    |                      |
|                                                          |                  |              |                      | Fan Belts .. .. Nos.                                | 6                | 14,82,450    |                      |
|                                                          |                  |              |                      | Industrial 'V' Belts .. .. "                        | 5                | 20,65,950    |                      |
|                                                          |                  |              |                      | Rubber Components of Rly. fitting (Springs) .. .. " | 5                | 10,16,250    |                      |
|                                                          |                  |              |                      | Camel back .. .. Kg.                                | 8                | 82,59,900    |                      |
| <b>PLASTICS AND PLASTIC CHEMICAL</b>                     |                  |              |                      |                                                     |                  |              |                      |
| <i>Injection/Compression Moulding .. .. Million Nos.</i> | 49               | 990          |                      |                                                     |                  |              |                      |
| P. F. Moulding Powder .. .. Tonnes                       | 5                | 3,400        |                      |                                                     |                  |              |                      |
| U. F. Moulding Powder .. .. "                            | 3                | 1,220        |                      |                                                     |                  |              |                      |
| Polystyrene Moulding Powder .. .. "                      | 1                | 5,669        |                      |                                                     |                  |              |                      |
| Polyethylene .. .. "                                     | 2                | 12,915       |                      |                                                     |                  |              |                      |
| PVC resins .. .. "                                       | 2                | 12,182       |                      |                                                     |                  |              |                      |
| Polyethylene films, layflat tubing and pipings .. .. "   | 8                | 2,646        |                      |                                                     |                  |              |                      |
| PVC Sheets (unsupported) .. .. "                         | 2                | 3,597        |                      |                                                     |                  |              |                      |
| Phenolic Laminates .. .. "                               | 3                | 2,202        |                      |                                                     |                  |              |                      |
| Plasticizers .. .. "                                     | 2                | 2,400        |                      |                                                     |                  |              |                      |
| Plywood Synthetic Resin .. .. "                          | 3                | 2,836        |                      |                                                     |                  |              |                      |
| Leather Cloth .. .. Km.                                  | 6                | 9,370        |                      |                                                     |                  |              |                      |
| Linoleum .. .. "                                         | 1                | 780          |                      |                                                     |                  |              |                      |
| Photographic Paper .. .. Th. Sqr. met.                   | 4                | 1,395        |                      |                                                     |                  |              |                      |
| Hydroquinone .. .. Kg.                                   | 2                | 55,010       |                      |                                                     |                  |              |                      |
| <b>INDUSTRIAL EXPLOSIVES INDUSTRY</b>                    |                  |              |                      |                                                     |                  |              |                      |
| Nitro Compounds .. .. Tonnes                             | 1                | 19,000.00    |                      |                                                     |                  |              |                      |
| Elec. Detonators .. .. Lakh Nos.                         | 1                | 65.5         |                      |                                                     |                  |              |                      |
| Safety Fuse .. .. Lakh Coils                             | 2                | 118.9        |                      |                                                     |                  |              |                      |
| Liquid Oxygen Explosive .. .. Tonnes                     | 1                | 1,700.00     |                      |                                                     |                  |              |                      |

\*\* 6 Units have been temporarily removed from the approved list.

† These are non-mechanised 'B' Class Units.

† These are Mechanised 'A' Class Units.



| Industry                                       | Accounting Units | No. of Units | Estimated Production | Industry                               | Accounting Units | No. of Units | Estimated Production |
|------------------------------------------------|------------------|--------------|----------------------|----------------------------------------|------------------|--------------|----------------------|
| <b>PAINTS &amp; SURFACE COATING MATERIAL</b>   |                  |              |                      | <b>FOOD PROCESSING INDUSTRY—Contd.</b> |                  |              |                      |
| Paints .. .. .                                 | Tonnes           | 51           | 73,000               | Chocolates & Cocoa Powder :            |                  |              |                      |
| Titanium Dioxide (A & Rutile) .. .. .          | "                | 1            | 4,536                | a) Chocolate including                 |                  |              |                      |
| Aluminium Paste .. .. .                        | "                | 1            | 589                  | Drinking Chocolate .. .. .             | "                | 3            | 1,436                |
| Zinc Oxide .. .. .                             | "                | 6            | 10,529               | b) Cocoa Powder .. .. .                | "                | 3            | 140                  |
| Red Lead .. .. .                               | "                | 4            | 2,680                | Sweetened Condensed Milk .. .. .       | "                | 4            | 4,953                |
| White Lead .. .. .                             | "                | 1            | 767                  | Infant Milk Food .. .. .               | "                | 4            | 5,498                |
| Synth. Resins .. .. .                          | "                | 18           | 9,222                | Milk Powder .. .. .                    | "                | 6            | 2,100                |
| Chrome Colours .. .. .                         | "                | 8            | 1,387                | Malted Milk Foods .. .. .              | "                | 6            | 5,026                |
| N. C. Lacquers (including ancillaries) .. .. . | Lakh Litres      | 8            | 20.60                | Malt extract .. .. .                   | "                | 4            | 2,143                |
|                                                |                  |              |                      | Gaur Gum .. .. .                       | "                | 4            | 12,231               |
| <b>FOOD PROCESSING INDUSTRY</b>                |                  |              |                      | <b>COSMETICS AND TOILETS</b>           |                  |              |                      |
| Biscuits .. .. .                               | Tonnes           | 29           | 40,200               | Soap .. .. .                           | Tonnes           | 61           | 1,66,333             |
| Confectionery .. .. .                          | "                | 29           | 23,850               | Glycerine .. .. .                      | "                | 12           | 7,848                |
| Liquid Glucose .. .. .                         | "                | 3            | 13,717               | Fatty Acids .. .. .                    | "                | 8            | 9,227                |
| Dextrose Powder .. .. .                        | "                | 2            | 5,208                | Metallic Stearates .. .. .             | "                | 5            | 187                  |
| Flour Milling .. .. .                          | "                | 89           | 19,54,900            | Tooth Pastes .. .. .                   | Kgs.             | 10           | 31,69,333            |
| Cigarettes .. .. .                             | Lakh Pcs.        | 13           | 4,91,490             | Tooth Powder .. .. .                   | "                | 7            | 3,02,667             |
| Breakfast Foods :                              |                  |              |                      | Toilet Powder & Talcum Powder .. .. .  | "                | 16           | 47,46,667            |
| a) Corn & Wheat Flakes .. .. .                 | Tonnes           | 1            | 352                  | Face Powder .. .. .                    | "                | 12           | 2,93,333             |
| b) Processed & Rolled Oats .. .. .             | "                | 1            | 371                  | Face Cream & Snow .. .. .              | "                | 16           | 7,74,667             |
| c) Processed Barley .. .. .                    | "                | 3            | 2,174                | Synthetic Detergent .. .. .            | Tonnes           | 3            | 8,280                |
|                                                |                  |              |                      | Garboxy methyl Cellulose .. .. .       | "                | 2            | 2,493                |
|                                                |                  |              |                      | Textile Auxiliaries .. .. .            | "                | 10           | 10,333               |

## ARECANUT INDUSTRY

**A**RECANUT is one of the most important commercial crops of India. It has an important place in the religious, social and cultural life of our people irrespective of caste, creed or social status. Chewing of arecanut with betel leaves and lime (Thambulam, Pan Supari) has become a habit with some people and a luxury of many in the country.

India ranks first in the world both in the acreage and production of arecanut. It is a source of livelihood for nearly three million people in the country.

The chief arecanut growing States in the country are Kerala, Mysore and Assam. These States accounted for nearly 94 per cent of the area under cultivation and 95 per cent of the total production of the crop according to the latest official estimates. The other arecanut growing States are Maharashtra, West Bengal and Madras. It is also grown as stray in Andhra Pradesh and Orissa.

The overall average per capita consumption of betelnut in India is estimated at 0.33 kg. The highest per capita consumption is in Assam with 2.8 kg. In Kerala it is 0.67 kg. and in Mysore 0.66 kg. Among the cities, Delhi and Nagpur are two of the most important consuming markets.

Betelnut (processed arecanut) varieties are numerous in India and can be broadly classified into unboiled, boiled and coloured varieties.

It is estimated that during 1964-65 the country had 125,145 hectares under arecanut cultivation with a production of 117,602 tonnes of cured nuts. Statewise details of area and production during 1964-65 are given below :

| State                  | Area Hectares  | Production (Metric tons) |
|------------------------|----------------|--------------------------|
| Kerala .. .. .         | 59,500         | 48,700                   |
| Mysore .. .. .         | 34,170         | 38,500                   |
| Assam .. .. .          | 24,574         | 24,048                   |
| West Bengal .. .. .    | 2,198          | 2,460                    |
| Maharashtra .. .. .    | 2,088          | 1,480                    |
| Madras .. .. .         | 2,380          | 2,246                    |
| Andhra Pradesh .. .. . | 208            | 162                      |
| Orissa .. .. .         | 27             | 6                        |
| <b>Total .. .. .</b>   | <b>125,145</b> | <b>117,602</b>           |

The internal production continued to be insufficient to meet the requirements and imports had to be continued.

### IMPORTS OF ARECANUT

| Year            | Quantity in thousands of quintals | Value in lakhs of Rupees |
|-----------------|-----------------------------------|--------------------------|
| 1959-60 .. .. . | 141.75                            | 71.86                    |
| 1960-61 .. .. . | 111.70                            | 64.63                    |
| 1961-62 .. .. . | 100.41                            | 45.32                    |
| 1962-63 .. .. . | 89.78                             | 34.61                    |
| 1963-64 .. .. . | 28.10                             | 13.87                    |
| 1964-65 .. .. . | 32.75                             | 19.26                    |

### EXPORT OF ARECANUT

| Year            | Quantity in quintals | Value in lakhs of Rupees |
|-----------------|----------------------|--------------------------|
| 1959-60 .. .. . | 2,078                | 12.68                    |
| 1960-61 .. .. . | 1,513                | 9.73                     |
| 1961-62 .. .. . | 1,229                | 8.60                     |
| 1962-63 .. .. . | 1,099                | 8.62                     |
| 1963-64 .. .. . | 957                  | 7.24                     |
| 1964-65 .. .. . | 2,150                | 14.80                    |

(The quantity available for consumption for the year 1964-65 was 12.07 lakh quintals of arecanut.)

**Development :** During the Fourth Five Year Plan, it is proposed to have an additional production of 8,500 metric tonnes. The various measures proposed for the purpose are distribution of fertilisers and plant protection materials, issue of loans for digging wells for irrigation purposes and purchase of pump sets etc. and raising and distributing quality seedlings for underplanting in the existing gardens. The Fourth Plan programme is proposed to be restricted to the major arecanut growing states of Kerala, Mysore and Assam. No increase in area under arecanut is proposed during the Fourth Plan.

**Agricultural Research :** To step up production of arecanut and thereby making the country self-sufficient, the erstwhile Indian Central Arecanut Committee had established a Central Arecanut Research Station at Vittal, South Kanara, Mysore State, and a series of Regional Research Stations in Kerala, Mysore, Assam and West Bengal. The Regional Arecanut Research Station functioning at Thiruvahallur under the administrative control of the Mysore State Govt. was also sponsored and partly financed by the Committee. The administration of the Central and Regional Research Station has since been passed on to the Indian Council of Agricultural Research.

Apart from distribution of quality seedlings, the Central and Regional Research Stations undertake fundamental and applied research in Botany, Physiology, Agronomy, pests and diseases of the crop. Researches into the causes and remedial measures of serious diseases like *Mahali* (fruit-rot), *Hidimundigae* disease (which makes the palm barren), *Anabe Roga*, root, bud and stem rot, and yellow leaf diseases are also undertaken.

**Technological Research :** To find ways and means for utilising arecanut and its by-products for industrial and other purposes, researches have been undertaken by the various institutes and Universities in the country. The Arecanut Technological Research Institute, Mysore, has evolved a new technique by which the fresh ripe fruits can be preserved with standard preservatives for a sufficiently long time. The preserved nuts retain the original colour and the kernel is also seen to retain its freshness. A boiler-cum-drier for drying arecanuts has also been devised.

**Nurseries :** To meet the demand of quality seedlings, a net-work of nurseries (Grant-in-aid nurseries, State nurseries, nurseries attached to Research Stations and certified nurseries) has been established in all the States where arecanut crop is grown. To demonstrate improved methods of its cultivation to the growers, demonstration plots have also been laid out in suitable centres.

**Marketing :** The Indian Central Arecanut Committee has been bestowing particular attention to the development of marketing of arecanuts with special emphasis on co-operative marketing, by encouraging organisation and



development of co-operative marketing societies for arecanut growers in all the important arecanut growing states. The Committee gives financial assistance to meet the cost of management of the societies during the initial period in collaboration with the concerned State Governments. There are thirty four arecanut Co-operative marketing societies located in the States of Kerala, Mysore, Madras, Maharashtra, West Bengal and Assam, of which five societies are receiving financial assistance from the committee during 1964-65. Mysore State occupies a predominant position in the co-operative marketing of arecanuts. The co-operative societies in Mysore handled about 40 per cent of the marketable surplus during 1964-65. To co-ordinate the activities of the primary arecanut marketing co-operative societies, a co-operative marketing federation has been organised in Mysore State with its area of operation extended to cover also the neighbouring States of Kerala, Madras and Maharashtra, so as to confer the benefits of co-operative marketing of arecanuts to the members of the primary

arecanut marketing societies of these States. With a view to preventing adulteration of arecanuts, the Indian Central Arecanut Committee has sponsored a scheme for analysis of arecanuts for prescribing quality grade standards which is being worked at the Central Food Technological Research Institute, Mysore. Another scheme for grading of arecanuts on an experimental basis in selected grading centres through the arecanut co-operative marketing societies, is in operation in the States of Mysore and Madras with financial assistance from the Central and the concerned State Governments.

The total quantity of arecanuts sold by the co-operative marketing societies during 1964-65 was 1,18,127 quintals valued at Rs. 6.16 crores, which formed about 13 per cent of the total marketable surplus in the country, against 1,06,728 quintals valued at Rs. 6.02 crores sold during 1963-64. The total membership and share capital of these societies rose from 28,181

and Rs. 17.22 lakhs during 1963-64 to 34,600 and Rs. 21.61 lakhs respectively during 1964-65.

**Regulated Markets:** With a view to regulating the market practices and preventing exploitation of primary producers, regulated markets have been established in the important assembling centres in Mysore and Kerala States under the Agricultural Produce Markets Act. The regulated markets also collect and disseminate market intelligence for the benefit of growers and traders.

**Publicity:** Necessary steps have been taken by the Government to publish, for the information of the general public, the useful results of the research done and scientific methods of cultivation of arecanut, control of arecanut pests and diseases etc. Market prices of important trade varieties in forwarding, distributing and consuming markets and other matters of general importance to the farmers are also published from time to time.

## COFFEE INDUSTRY

**C**OFFEE cultivation is mainly confined to the hilly tracts of south India, from one thousand to six thousand feet above the mean sea level, and is centred in the Malnad area of Mysore, Madras and Kerala. In the lower elevations, which have a higher rainfall, the more delicate but better quality Arabica coffee has given place to the harder but coarser Robusta coffee.

Investments on coffee estates in India have been estimated at 1,500 million rupees. The daily labour employed is about 2,22,000\*. Ancillary industries like curing and transport employ about 20,000.

The coffee industry's contribution to agricultural income is estimated at 190 million rupees out of a total of 67,780 million rupees or 0.3 per cent.

There are only two types of coffee grown on commercial scale in India, the one most extensively cultivated being Coffee Arabica and the best in quality, with Robusta coming next in importance. About 50 species and sub-species of coffee are being grown in the Coffee Board's research stations. Many of the coffee estates are interplanted with orange, cardamom and pepper. There are about 47,000 coffee estate owners.

The area and production from 1959-60 of the two varieties of coffee are as under:

### AREA IN THOUSAND ACRES

| Year    | Arabica | Robusta | Total |
|---------|---------|---------|-------|
| 1958-59 | ..      | 167     | 105   |
| 1959-60 | ..      | 174     | 121   |
| 1960-61 | ..      | 174     | 123   |
| 1961-62 | ..      | 179     | 129   |
| 1962-63 | ..      | 180     | 132   |
| 1963-64 | ..      | 186     | 134   |

### PRODUCTION IN M. TONNES

| Year        | Arabica | Robusta | Total  |
|-------------|---------|---------|--------|
| 1959-60     | ..      | 32,300  | 17,490 |
| 1960-61     | ..      | 39,445  | 28,575 |
| 1961-62     | ..      | 29,300  | 16,750 |
| 1962-63     | ..      | 34,000  | 22,200 |
| 1963-64     | ..      | 39,120  | 30,180 |
| 1964-65     | ..      | 42,290  | 18,725 |
| 1965-66 (E) | ..      | 38,750  | 21,400 |

(E) Estimates.

\* Provisional and subject to revision.

Final receipts of 1964-65 crop into the pool amounted to 60,610 tonnes made up of 31,200 tonnes plantation, 10,920 tonnes arabica cherry and 18,490 tonnes robusta. The receipts of 1963-64 crop were 68,922 tonnes comprising 28,400 tonnes plantation, 10,470 tonnes arabica cherry and 30,052 tonnes robusta. The deliveries of 1965-66 crop and the pool have so far amounted to 42,896 tonnes comprising 23,795 tonnes plantation, 10,503 tonnes arabica cherry and 8,595 tonnes robusta upto 18th March 1966.

Increase in production has been followed by a rise in exports and internal consumption.

The following table gives the trend of exports :

| Year    | Exports in Metric Tons* |
|---------|-------------------------|
| 1958-59 | .. .. 16,400            |
| 1959-60 | .. .. 18,180            |
| 1960-61 | .. .. 32,271            |
| 1961-62 | .. .. 19,829            |
| 1962-63 | .. .. 22,411            |
| 1963-64 | .. .. 33,005            |
| 1964-65 | .. .. 23,003            |

\* Out of the season's crop.

There is no export duty on coffee at the moment.

The annual average prices realised in the pool sales for each type of coffee from the year 1958 (in Rs. per 50 kg. inclusive of Central Excise Duty).

| Year | Plantation 'A' | Arabica cherry Flats/Arabica cherry AB | Robusta cherry Flats/Robusta cherry AB |
|------|----------------|----------------------------------------|----------------------------------------|
|      | Rs. P.         | Rs. P.                                 | Rs. P.                                 |
| 1958 | 214.80         | 182.79                                 | 157.21                                 |
| 1959 | 236.02         | 186.96                                 | 155.64                                 |
| 1960 | 222.46         | 180.72                                 | 157.54                                 |
| 1961 | 229.45         | 189.27                                 | 152.94                                 |
| 1962 | 247.85         | 200.61                                 | 153.42                                 |
| 1963 | 247.19         | 210.73                                 | 176.78                                 |
| 1964 | 268.48         | 225.32                                 | 205.33                                 |
| 1965 | 259.50         | 218.00                                 | 225.82                                 |

The possibilities of further expansion of the coffee cultivation in Andhra, Assam and West Bengal States and in the Andamans are being explored at present. Some coffee plantations have already been started in Andhra and the Andamans.

Loans totalling Rs. 57,81,184 were sanctioned to 750 applicants as on 31st March 1966.

### AVERAGE INDEX NUMBERS OF WHOLESALE PRICES OF COFFEE (Base 1952-53 : 100).

| Year | Index      |
|------|------------|
| 1955 | .. .. 80.3 |
| 1956 | .. .. 81.0 |
| 1957 | .. .. 86.6 |
| 1958 | .. .. 85.7 |
| 1959 | .. .. 88.7 |
| 1960 | .. .. 87.1 |
| 1961 | .. .. 87.6 |
| 1962 | .. .. 90.7 |

### COFFEE BOARD

The Coffee Board is a statutory organisation constituted under the Coffee Act, (Act No. VII of 1942), and functions under the administrative control of the Government of India in the Ministry of Commerce. The functions of the Board are as under :

- (1) the promotion of the sale and consumption in India and elsewhere of the coffee produced in India ;
- (2) the promotion of agricultural and technological research in the interest of the coffee industry ;
- (3) assistance to coffee estates for their development ;
- (4) the securing of better working conditions and the provision and improvement of amenities and incentives for workers ; and
- (5) the working of the measures enumerated in the Act relating to the operations of the surplus pool.

The Coffee Board consists of the Chairman and 32 other members representing the interests of coffee growers, the State Governments of Mysore, Madras and Kerala, labour, curing establishments, the trade and such other interests as in the opinion of the Central Government ought to be represented on the Board. The Board was re-constituted as from 19th April 1965 for a period of three years.



## COIR INDUSTRY

**COIR** is the trade name given to the fibre obtained from the husk of the coconut fruit. This golden coloured fibre is also known in Europe as "Cocos Fibre".

India and Ceylon have a virtual monopoly in the production of this by-product of the coconut industry.

India produces about 4,720 million coconuts a year. The area under coconut cultivation is about 7.46 lakh hectares.

In India the coir industry is practically confined to the coastal strip of Kerala State. It accounts for 5.05 lakh hectares of the coconut growing areas out of a total of 7.46 lakh hectares under coconut cultivation in India. The distribution of the area under cultivation and production of coconuts for 1961-62 (latest available) is as follows :—

| States.                          | Area in hectares. | Production of nuts in thousands. |
|----------------------------------|-------------------|----------------------------------|
| Kerala .. ..                     | 5,04,818          | 32,47,000                        |
| Madras .. ..                     | 55,153            | 4,45,348                         |
| Mysore .. ..                     | 97,044            | 4,36,926                         |
| Andhra Pradesh ..                | 33,866            | 3,06,005                         |
| Maharashtra ..                   | 7,096             | 27,237                           |
| Gujarat .. ..                    | 5,261             | 27,300                           |
| Orissa .. ..                     | 4,491             | 61,581                           |
| West Bengal ..                   | 6,677             | 22,205                           |
| Assam .. ..                      | 3,148             | 10,232                           |
| Andaman and Nicobar Islands ..   | 7,487             | 33,273                           |
| Laccadive & Amin-divi Islands .. | 2,371             | 8,751                            |
| Pondicherry ..                   | 1,279             | 12,538                           |
| Goa .. ..                        | 16,997            | 82,000                           |
|                                  | 7,45,688          | 47,20,396                        |

Source : Indian Central Coconut Committee, Ernakulam.

The coir industry is organised partly on cottage basis and partly in factories. The production of coir fibre, yarn and rope is essentially a cottage industry, while coir mats, mattings, rugs, carpets, mourzouks, etc. are manufactured in factories.

It is estimated that in the spinning sector the industry provides employment to about

five lakhs of people. The spinning sector is spread along the entire coastal region of Kerala State. In the manufacturing sector about 25,000 people are engaged. The manufacturing sector is mainly concentrated in and around Alleppey and Shertallai. The Kerala Government have fixed minimum wages under the Minimum Wages Act in respect of the spinning sector of the industry.

About 1,62,000 metric tonnes of coir fibre and 4,43,000 metric tonnes of coir yarn are estimated to be produced annually.

The yarn produced in the spinning districts is marketed chiefly in Alleppey where there are a large number of factories for the manufacture of mats, mattings, rugs, carpets, mourzouks, etc. and also exporters of yarn.

On an average, 25,700 metric tons of coir yarn are utilised in the manufacture of coir floor coverings such as mats and mattings; 54,800 metric tons are exported as coir yarn; and about 62,500 metric tons are consumed within India itself for various purposes including manufacture of coir cordages and ropes.

According to the latest information available there were 144 coir factories in Kerala State registered under the Factories Act as on 31st December 1965.

One of the recent innovations is the manufacture from Coir Fibre of rubberised coir which is an effective substitute for foam rubber for a variety of purposes. The rubberised coir is extensively used in the manufacture of mattresses, pillows, moulded cushions, upholstery parts, packaging material etc. These products are considerably cheaper than foam rubber, but have all the advantages and comforts of foam rubber.

On an average exports of coir and coir products earn about Rs. 12 crores of foreign exchange every year.

The Act also provides for the control of the industry by the Union Government for the levy of a customs duty on export of coir fibre, coir yarn and coir products.

At present, the duty levied on coir fibre, coir yarn is at the rate of 98 P. per quintal. The annual revenue on this account comes to about Rs. 6 lakhs.

The coir industry in India is subject to violent fluctuations in prices and exports, causing often hardship to a large section of the population. This induced the Government of India to set up a Coir Board by special legislation called the Coir Industry Act, 1953.

The Coir Board was established on July 7, 1954. Its chief function is the improvement of markets at home and abroad, thereby establishing a balance between internal consumption and exports so as to give the industry the required economic stability. The Board was reconstituted in 1963-64.

In view of the importance of the coir industry in its export and the internal consumption aspects the Government of India had allotted a sum of Rs. 313.41 lakhs for the development of the coir industry during the 3rd Five Year Plan. Rs. 75.00 lakhs for Central Schemes to be executed by the Board direct, Rs. 234.40 lakhs for State Schemes and Rs. 4.01 lakhs for the Union Territories' Schemes.

The Third Five Year Plan Schemes of the Coir Board envisaged the establishment of Research Institutes, sending out foreign delegations for market survey and study of the uses of yarn in importing countries, opening of show-rooms and sales-depots and propaganda.

A Central Coir Research Institute has been established at Kalavoor, Alleppey District. A mechanised factory for the manufacture of coir mattings on power looms is being set up by the Coir Board at Kalavoor shortly. A Regional Coir Research Station has started functioning at Uluberia, West Bengal. A National Coir Training and Design Centre has been set up recently at Alleppey.

The Central Scheme consists of two parts, viz. continuation schemes and new schemes.

Continuation schemes include scientific research on chemical, biological and other basic properties of coir fibre and coir yarn, applied research on the various methods of extraction of fibre, studies on motorised spinning machine, work on utilisation of coconut pith and coir waste, studies dyeing of coir in the fibre and yarn, working of the Coir Research Station in West Bengal, statistical and economic research, maintenance of show-rooms, etc.

New schemes include setting up of a mechanised coir factory at Kalavoor for the manufacture of mattings on powerlooms and dye house, etc.

A compulsory pre-shipment inspection scheme for export of coir door mats of the types creel, bit, fibre and rod has come into force with effect from the 20th December 1965. The Coir Board is the agency for inspection. The basis of inspection is the specifications recognised under the scheme. A voluntary pre-shipment inspection scheme for export of coir yarn is introduced with effect from April 1966.

### STATEMENT SHOWING THE EXPORT OF COIR AND COIR GOODS FROM THE INDIAN PORTS DURING THE YEARS

1960-61 to 1964-65 (April-March)

| Year<br>(April-March) | Coir fibre |       | Coir yarn |        | Coir Products<br>(excluding rope) |        | Coir cordage<br>and ropes |       | Total    |          |
|-----------------------|------------|-------|-----------|--------|-----------------------------------|--------|---------------------------|-------|----------|----------|
|                       | Q.         | V.    | Q.        | V.     | Q.                                | V.     | Q.                        | V.    | Q.       | V.       |
| 1960-'61 ..           | 12,707     | 1,197 | 5,45,914  | 59,175 | 1,74,293                          | 29,399 | 17,272                    | 2,705 | 7,60,186 | 92,476   |
| 1961-'62 ..           | 14,950     | 1,855 | 5,61,619  | 77,661 | 1,80,109                          | 31,222 | 24,087                    | 2,790 | 7,60,765 | 1,13,528 |
| 1962-'63 ..           | 12,582     | 1,617 | 5,76,536  | 83,670 | 1,68,248                          | 33,458 | 25,310                    | 3,196 | 7,82,685 | 1,21,941 |
| 1963-'64 ..           | 8,907      | 1,108 | 5,56,390  | 77,865 | 1,91,997                          | 38,416 | 19,945                    | 2,621 | 7,77,239 | 1,20,010 |
| 1964-'65 ..           | 14,469     | 1,734 | 5,38,372  | 73,090 | 1,83,991                          | 38,298 | 14,243                    | 1,708 | 7,51,075 | 1,14,825 |

Note : Q. — Quantity in quintals.

V. — Value in Rupees 000's.

Coir products include coir mats and matting and coir carpets & floor rugs.

Source : 1. Director-General of Commercial Intelligence & Statistics, Calcutta. 2. Daily/weekly lists of exports issued by the Collectors of Customs.



## JUTE INDUSTRY

The jute industry maintains its position as India's largest foreign exchange earner. The total value of jute goods exports in 1965 was approximately Rs. 185 crores which was 23 per cent of total foreign exchange earnings during the year. As a dollar-earner, jute goods accounted for about 50 per cent of the total receipts of that currency. The value of manufactured jute exported was Rs. 150 crores in 1962, Rs. 159 crores in 1963 and Rs. 162 crores in 1964. Total production of jute goods in 1965 was the highest on record at an estimated 14.40 lakh metric tons, representing an increase of 70,000 metric tons over 1964.

There are 79 mill companies in India with a total loomage of 75,265. Of the 79 mill companies, 68 are in West Bengal, 4 in Andhra, 3 in Bihar, 3 in U.P., and 1 in M.P. The mills in West Bengal are concentrated in and around Calcutta on both banks of the Hooghly.

The industry has spent Rs. 50 crores on the modernisation of its productive apparatus. Good progress has also been made towards an increase in capacity utilisation. As compared with 1948/49, the output in 1964/65 was about 25 per cent higher in tonnage, the share of carpet backing being about eight per cent. About 10 per cent of this increase can be attributed to increased capacity utilisation. The remainder is

entirely due to the increase in productivity in both looms and spinning frames.

The industry employs about 2½ lakh workers.

The jute industry has diversified its production. It is a supplier of wide hessian backing cloth for tufted carpets to the U.S.A. Intensive research on fibre technology and product development, both locally and overseas, goes to employ the world's best talents in textile science and engineering.

**Raw Jute Production:** The Government of India has fixed a production target of 11 million bales of raw jute and mesta for the last year of the Fourth Plan against the Third Plan achievement of an average of 76 lakh bales per year.

The additional production of 34 lakh bales is sought to be achieved partly through double cropping 8,30,000 acres of land with jute and paddy in canal and tube-well irrigated areas but mainly through an increase in the unit yield from the present 2.8 bales to 4.5 bales per acre by intensive cultivation methods. In recent years the average consumption of jute by mills has been 80 lakh bales.

The table below gives the production and exports of jute goods during the past few years:

### PRODUCTION AND EXPORTS OF JUTE GOODS

| Year<br>(July-June) |    |    | Hessian | Production (000 tons) |        | Total | Exports<br>(all-India)<br>April-March<br>(000 tons) | April-March<br>Value<br>(Rs. in<br>crores) |
|---------------------|----|----|---------|-----------------------|--------|-------|-----------------------------------------------------|--------------------------------------------|
|                     |    |    |         | Sacking               | Others |       |                                                     |                                            |
| 1960-61             | .. | .. | 366     | 524                   | 116    | 1,006 | 788                                                 | 135.05                                     |
| 1961-62             | .. | .. | 408     | 500                   | 144    | 1,052 | 780                                                 | 144.79                                     |
| 1962-63             | .. | .. | 507     | 523                   | 169    | 1,199 | 860                                                 | 155.66                                     |
| 1963-64             | .. | .. | 525     | 488                   | 217    | 1,230 | 894                                                 | 157.42                                     |
| 1964-65             | .. | .. | 518     | 566                   | 216    | 1,300 | 935                                                 | 168.35                                     |
| 1965-66             | .. | .. | —       | —                     | —      | —     | 882                                                 | 182.85                                     |

#### Production of raw jute in the Indian Union:—

| Year<br>Average |    |    | Lakh acres | 000 bales<br>(1 bale =<br>400 lbs) |
|-----------------|----|----|------------|------------------------------------|
| 1960-61         | .. | .. | 15.12      | 3,982                              |
| 1961-62         | .. | .. | 22.80      | 6,347                              |
| 1962-63         | .. | .. | 21.03      | 5,406                              |
| 1963-64         | .. | .. | 21.45      | 6,136                              |
| 1964-65         | .. | .. | 20.72      | 5,973                              |
| 1965-66         | .. | .. | 18.49      | 4,449                              |

N.B.—The jute season is from July to June.

The all-India yield per acre was 1,110 lbs. in 1963-64, as against 1,153 lbs. in 1964-65 and 962 lbs. in 1965-66. Production of jute and mesta during 1964-65 (according to official forecast) was 75.5 lakh bales and during 1965-66 (according to official forecast) about 60 lakh bales.

Supply and distribution of jute and mesta during the seasons 1964-65 and 1965-66 are as follows:

|                     |         | (Lakh bales)             |       |
|---------------------|---------|--------------------------|-------|
|                     | 1964-65 | 1965-66<br>(Provisional) |       |
| <b>Supply</b>       |         |                          |       |
| Opening stocks with |         |                          |       |
| mills (godown)      | ..      | 18.00                    | 10.95 |
| J.B.S.A.            | .. ..   | 6.70                     | 1.85  |
| Other Stockists     | ..      | 3.86                     | 7.70  |
| Total               | ..      | 28.56                    | 20.00 |
| Crop:               | Total   | ..                       | 70.00 |
| Import:             | .. ..   | 5.24                     | 12.40 |
| Total Supply        | ..      | 103.80                   | 91.00 |

(Lakh bales)

|                      | 1964-65    | 1965-66<br>(Provisional) |
|----------------------|------------|--------------------------|
| <b>Distribution</b>  |            |                          |
| Mill consumption     | .. 80.80   | 76.00                    |
| Exports              | .. .. 1.00 | 2.00                     |
| Domestic consumption | 2.00       | 1.00                     |
| Total distribution   | .. 83.80   | 79.00                    |

The following table gives the trend of I.J.M.A. mill consumption of raw jute:—

| Year ended June | Lakh bales                |
|-----------------|---------------------------|
| 1960-61         | .. .. 57.82               |
| 1961-62         | .. .. 60.24               |
| 1962-63         | .. .. 69.55               |
| 1963-64         | .. .. 72.04               |
| 1964-65         | .. .. 75.85               |
| 1965-66         | .. .. 70.50 (Provisional) |

### INDEX NUMBER OF WHOLESALE PRICES (Base 1952-53 = 100)

| Period    |      | Raw Jute | Manufactured Jute |
|-----------|------|----------|-------------------|
|           | 1960 | .. 179   | 115               |
|           | 1961 | .. 203   | 134               |
|           | 1962 | .. 146   | 114               |
|           | 1963 | .. 148   | 100               |
|           | 1964 | .. 108   | 159               |
|           | 1965 | .. 197   | 137               |
| January   | 1965 | .. 170   | 122               |
| February  | "    | .. 175   | 124               |
| March     | "    | .. 172   | 126               |
| April     | "    | .. 185   | 137               |
| May       | "    | .. 203   | 144               |
| June      | "    | .. 202   | 143               |
| July      | "    | .. 195   | 130               |
| August    | "    | .. 197   | 135               |
| September | "    | .. 196   | 145               |
| October   | "    | .. 205   | 143               |
| November  | "    | .. 223   | 144               |
| December  | "    | .. 246   | 153               |
| January   | 1966 | .. 247   | 152               |

Source: Jute Situation—Issued by the Directorate of Economics and Statistics, Ministry of Food and Agriculture, Govt. of India.



## LAC INDUSTRY

**L**AC is a resin which finds extensive application in industries. It is a resinous protective secretion of an insect which lives by sucking the sap of certain trees and shrubs called lac hosts.

There are four crops of sticklac, named after the Hindu months in which the collection of each crop commences. These are 'Baisakhi' and 'Katki' from one strain of the insect (Rangeeni) and 'Jethwi' and 'Aghani' from another strain (Kusumi). The first processed product, after the crushing and washing of sticklac is known as 'seedlac'. From this shellac is manufactured either by melting it (seedlac) manually in cloth bags held near a fire place called 'bhattas' or by the mechanised process of extraction with suitable solvents.

### PRODUCTION

India is the chief source of supply of sticklac and till 1950 accounted for nearly 85 per cent of the world production. But since then production in Thailand has rapidly increased and now accounts for about 30 per cent of the world production. The average production of sticklac in different States based on the annual production during the years 1954-64 is as follows:—

| State                  | Average Crop<br>(in tonnes*) |
|------------------------|------------------------------|
| Bihar .. .. .          | 1,92,820                     |
| Madhya Pradesh .. .. . | 1,26,140                     |
| West Bengal .. .. .    | 53,455                       |
| Maharashtra .. .. .    | 18,895                       |
| Uttar Pradesh .. .. .  | 10,825                       |
| Orissa .. .. .         | 6,560                        |
| Assam .. .. .          | 2,370                        |
| Gujarat .. .. .        | 2,680                        |
| Other States .. .. .   | 5,505                        |
| <b>Total .. .. .</b>   | <b>4,19,240</b>              |

The actual production in 1964-65 was 17,660 tonnes as against 28,720 tonnes in 1963-64.

The average annual production of shellac including buttonlac is 15,500 tonnes and that of seedlac 11,000 tonnes.

### MARKETING

There are no regulated markets for trading in sticklac. The manufacture of shellac is a cottage industry and the number of shellac factories varies from season to season. According to the latest information there are about 210 factories in the country; only one of these located in Calcutta is fully mechanised.

Yield from sticklac varies from year to year and locality to locality.

Roughly the yield of seedlac and shellac is 65 per cent and 55 per cent of sticklac respectively.

The cost of manufacturing one maund of shellac from seedlac is about Rs. 16 and of converting sticklac into seedlac is Rs. 3. In 1939 these were roughly Rs. 3-8 and As. 8 respectively.

### PRICES

The falling tendency in prices observed during 1957-58 continued and by April 1958 prices of T.N. Shellac touched the lowest level of Rs. 57 in post-war years. This necessarily caused concern to Government and the trade alike.

The general objectives of the Government of India in regard to lac industry therefore were: (i) that the country should earn the maximum foreign exchange possible by export of the commodity without impairing the competitive strength of the commodity against the only competitor Thailand and (ii) to create conditions so that the cultivator or primary producer

gets the maximum possible price on the basis of the export prices. This policy has continued throughout.

**Minimum Export Prices:** In regard to the first when the export prices of the commodity started dwindling rapidly since 1956-57, the Government of India encouraged in 1958 the formation of the Indian Lac Exporters' Association and assisted that Association to operate a system of minimum export prices. This measure ensured a dependable rate of foreign exchange earning although the actual value earned still depended upon the quantities exported. Since, however, the demand for Indian lac, as judged from the exports during the past few years, has dropped by about 20 per cent, the earnings have also naturally dropped proportionately.

The minimum export prices were also revised twice downwards once in 1961 and again in 1963 by about 10 per cent on each occasion as a stimulant for export.

**Regulation of Prices:** In order to reduce the gap between the internal price and the minimum export price and thus mop up the excessive profit of the middlemen, an export duty of Rs. 160 per tonne on seedlac or shellac and Rs. 125 per tonne on other lacs was levied from October 1961. This, however, was abolished from January 1964 as it was considered, the situation did not warrant its continuance.

**Buffer Stocks:** In regard to the prices received by the cultivators, these had not been, in recent years, in any way related to the minimum export prices. There was an ever widening gap between the two. For this reason, the Government had to introduce other price stabilization measures. The State Trading Corporation was authorized to set up a Seedlac Buffer Stock. The Indian Lac Exporters' Association also had earlier set up a limited buffer stock at Calcutta. The State Trading Corporation operated in a comparatively bigger way, purchasing seedlac in most of the major lac refining centres. Despite this, the cultivators' condition remained unchanged.

In regard to the buffer stock price, the State Trading Corporation started purchasing seedlac in different centres at different rates based on minimum export price at Calcutta. The price differential for the various centres was worked on the basis of the cost of handling and transport from the respective centres to Calcutta. This was later revised and a single price for the whole country at a reduced level was introduced in 1963. The prices have now been revised upwards from March 1964 by about 5 to 10 per cent because of the general rise in the market prices. Nevertheless no lac is being offered to the State Trading Corporation's buffer stock at the moment.

The State Trading Corporation on the other hand have liquidated their buffer stocks periodically on the basis of 25 per cent of the export requirements of individual shippers on production of relevant export orders.

**Non-Price Measures:** (a) The main aim is to increase the off-take of Indian lac by consuming countries. Towards this end, publicity campaigns in the largest consuming country, namely, United States, were partly financed by the Indian Lac Exporters' Association. The Indian Lac Exporters' Association also sponsors research in overseas laboratories for developing new and improved uses of lac.

The Government of India is providing increasing funds for intensifying research at the Indian Lac Research Institute.

(b) An official delegation jointly sponsored by the Indian Lac Exporters' Association and the Shellac Export Promotion Council visited Thailand, the only other country producing lac, to arrive at a suitable price and trade policy for mutual advantage.

**Cumulative Effect:** The prices for raw lac received by cultivators declined continuously during the last four years and reached perhaps the lowest levels in the post-war period towards the end of 1963. The result has been that the major portion of Katki crops of 1963 was not harvested and there was no incentive to initiate further cultivation with the result that all the four lac crops of the year failed and were lowest on record. This shortfall in production resulted in pushing up the prices substantially. With prices remaining at reasonably steady levels during 1964, infection was done on a larger scale and crops during 1965, favoured by good climatic conditions fared better. In order however to meet fully the export commitments, the Government of India allowed imports of lac to the extent of 40 per cent of the export value. The position further improved during 1966 and prospects of a normal crop are bright.

### EXPORTS

About 90 per cent of the total quantity of processed goods is exported.

The U.S. is the best customer followed by the U.K. and Germany. Since 1953 the U.S.S.R. and China have also been buying sizable quantities.

Exports of all kinds of lac to foreign countries have averaged seven lakh maunds in the past five years; but there has been a drop in foreign exchange earnings to the tune of over Rs. 3 crores due to lower prices of lac during 1958 and 1959. The average value of exports which stood at Rs. 10 crores till 1956-57 has now declined to about Rs. 5 crores.

The table below gives exports of lac to important countries during 1963-64 and 1964-65.

(The figures are in quintals†)

|                                      | 1963-64            | 1964-65            |
|--------------------------------------|--------------------|--------------------|
| <b>SHELLAC AND BUTTONLAC</b>         |                    |                    |
| U.K. .. .. .                         | 18,876             | 26,018             |
| U.S.A. .. .. .                       | 19,539             | 20,446             |
| China .. .. .                        | —                  | —                  |
| U.S.S.R. .. .. .                     | 30,583             | 18,023             |
| W. Germany .. .. .                   | 4,142              | 4,964              |
| Brazil .. .. .                       | 11,191             | 3,464              |
| Australia .. .. .                    | 4,408              | 4,774              |
| France .. .. .                       | 3,738              | 4,183              |
| Other countries .. .. .              | 52,106             | 45,860             |
| <b>Total quantity .. .. .</b>        | <b>1,44,583</b>    | <b>1,27,732</b>    |
| <b>Total value in rupees .. .. .</b> | <b>3,62,25,116</b> | <b>3,45,78,622</b> |
| <b>SEEDLAC</b>                       |                    |                    |
| U.S.A. .. .. .                       | 30,445             | 17,744             |
| West Germany .. .. .                 | 12,736             | 11,029             |
| U.K. .. .. .                         | 6,414              | 4,852              |
| Other countries .. .. .              | 5,735              | 5,684              |
| <b>Total quantity .. .. .</b>        | <b>55,330</b>      | <b>39,309</b>      |
| <b>Total value in rupees .. .. .</b> | <b>94,45,209</b>   | <b>67,48,952</b>   |
| <b>OTHER KINDS OF LAC</b>            |                    |                    |
| Total quantity .. .. .               | 6,651              | 5,274              |
| Total value in rupees .. .. .        | 5,53,766           | 4,14,964           |
| <b>Total of all kinds of lac:</b>    |                    |                    |
| Quantity .. .. .                     | 2,06,564           | 1,72,316           |
| Value in rupees .. .. .              | 4,62,24,091        | 4,17,42,538        |

Lac has made significant contributions to the development of art and industry.

Shellac is consumed chiefly by five industries. The gramophone industry consumes about 11 to 13 thousand tons.

The varnishes and paint industry absorbs something like 4 to 6 thousand tons.

\* One tonne = 1,000 Kg. = 26.79 maunds.

† One quintal = 100 Kg. = 2.679 maunds.



The total demand from the electrical industry is estimated at 3,000 tons as against 1,000 tons in pre-war years.

Nearly 3,000 tons are used in the hat industry as a stiffening material.

The manufacture of sealing wax requires about 1,500 tons.

For the promotion of the improvement of methods of cultivation and manufacture of lac in India the Indian Lac Association for Research was formed by traders in Calcutta in 1921 and the Government found the funds by levying a cess on all exports of lac other than refuse lac at annas four per maund and for refuse lac annas two per maund. This association set up the Indian Lac Research Institute at Namkum (Ranchi).

The Indian Lac Research Institute at Namkum along with all research schemes has merged in the Indian Council of Agricultural Research. Other activities, namely, Development, Statistics, Marketing etc. have been taken over by the Department of Agriculture, Government of India.

An Export Promotion Council for shellac has also been formed under the Central Ministry of Commerce to promote exports of shellac.

At the suggestion of the Bihar Shellac Enquiry Committee and the Indian Lac Cess Committee the Government of India banned future trading in shellac and seedlac.

A new office has been created namely "Regional Office, Lac Development", at Ranchi under the Ministry of Food and Agriculture, Community Development and Cooperation (Deptt. of Agriculture) with effect from April 1, 1966. The head of the office has been designated as Director, Lac Development.

The Indian Lac Cess Committee has been dissolved with effect from April 1, 1966.

#### RESEARCH AND DEVELOPMENT

Nucleus Broodlac Farms which had been set up continued to supply broodlac which, along with that purchased was used for supply to various State Governments and other agencies for extension of lac cultivation. In pursuance of

the decision of the working group on the Fourth Five Year Plan, emphasis is being shifted to extend cultivation of lac of the improved variety, namely, of the Kusumi and Moghania varieties.

Service trials of the shellac *etch primer* in the railways and road transports have been completed and reports of satisfactory performance received from the Chief Mechanical Engineer, S.E. Bly and Works Manager, Maharashtra State Road Transport Corporation, Poona. The commercial manufacturers are continuing its production and supply on a large scale.

In the meanwhile a heat and water proof French polish has been developed by combining shellac and synthetic resins. A water composition of baking type has also been developed which holds particular promise for use in tin plate lacquers.

As a price support policy, a Processing Unit has been set up at the Indian Lac Research Institute to process sticklac into seedlac purchased by the co-operative organizations for sale to the State Trading Corporation.

## PAPER INDUSTRY

THE bulk of the production comprises the more common types of paper, especially printing and writing paper. The manufacture of superior varieties is

also undertaken but on a restricted scale.

The following table gives the trend of production :—

(In thousand tonnes)

|                            | 1960   | 1961  | 1962  | 1963  | 1964  |
|----------------------------|--------|-------|-------|-------|-------|
| Printing & Writing .. .. . | 216.7  | 229.5 | 234.4 | 300.0 | 320.5 |
| Wrapping .. .. .           | 67.4   | 59.9  | 75.5  | 75.0  | 85.0  |
| Special Varieties .. .. .  | 8.53   | 9.0   | 8.0   | 6.6   | 6.5   |
| Paper Boards .. .. .       | 57.37  | 65.5  | 69.7  | 80.0  | 80.4  |
| Total .. .. .              | 350.00 | 363.9 | 387.6 | 461.6 | 492.4 |

According to the Annual Survey of Industries the total factory sector as a whole employed Rs. 91.5 crores (productive capital) in paper industry in 1962.

At present there are 56 paper mills manufacturing paper and paper boards with a total installed capacity of 6.5 lakh tonnes. The aggregate installed capacity of the paper industry was 433,800 tonnes in 1962, as compared to 409,992 tons in 1961, 400,000 tons in 1960, 321,000 tons in 1959, 268,600 tons in 1958. The consumption of paper was 411,000 tons in 1962-63 and 399,000 tons in 1961-62. The demand was expected to reach 7 lakh tons per annum by 1965-66 and at the end of the Fourth Plan it is expected to reach 1.2 million tonnes.

The Statewise distribution of the industry as on March 1, 1964 is as follows:

| State                  | Position as on 1-3-1964 |                                  |
|------------------------|-------------------------|----------------------------------|
|                        | No. of units            | Annual installed capacity (tons) |
| West Bengal .. .. .    | 5                       | 1,14,550                         |
| U.P. .. .. .           | 2                       | 31,200                           |
| Bihar .. .. .          | 2                       | 63,000                           |
| Orissa .. .. .         | 3                       | 98,000                           |
| Punjab .. .. .         | 4                       | 45,760                           |
| Gujarat .. .. .        | 5                       | 15,050                           |
| Maharashtra .. .. .    | 11                      | 48,310                           |
| Andhra Pradesh .. .. . | 2                       | 43,000                           |
| Mysore .. .. .         | 5                       | 53,640                           |
| Kerala .. .. .         | 1                       | 8,640                            |
| Madras .. .. .         | 1                       | 20,000                           |
| Madhya Pradesh .. .. . | 1                       | 8,000                            |
| Total .. .. .          | 42                      | 5,49,150                         |

The following are the leading industries in paper and paper industries having an annual installed capacity of more than 30,000 tonnes, statewise.

| State             | Name and location of the company                | Annual capacity (tonnes) |
|-------------------|-------------------------------------------------|--------------------------|
| West Bengal ..    | Messrs. Titaghur Paper Mills, Titaghur .. ..    | 50,000                   |
|                   | Bengal Paper Mills, Raniganj .. ..              | 36,000                   |
| Bihar ..          | .. Rohtas Industries Ltd., Dalmianagar .. ..    | 60,000                   |
| Orissa ..         | .. Orient Paper Mills Ltd., Brajrajnagar .. ..  | 68,000                   |
| Punjab ..         | .. Shree Gopal Paper Mills Ltd., Yamunanagar .. | 40,000                   |
| Andhra Pradesh .. | Sirpur Paper Mills Ltd., Sirpur .. ..           | 40,000                   |
| Mysore ..         | .. West Coast Paper Mills, Dandell .. ..        | 30,000                   |

The Madhya Pradesh Government sanctioned the establishment of a paper mill at Amlai (Sahdot), with an annual capacity of 48,000 tonnes. This project costing Rs. 17 crores was inaugurated on April 16, 1965 and is expected to produce well over 200 tons of fine writing printing grades of paper per day. Two new factories for the manufacture of paper will soon be established in Maharashtra. These units will be located at Ahmednagar District by Mr. Sohan Lal of New Delhi and Messrs. K. L. Gupta & Co.,

of Bombay, the annual capacity of these units being 42,000 and 37,200 tonnes respectively.

India imported paper and paper boards worth Rs. 13 crores in 1964-65. Exports were valued at Rs. 71 lakhs in 1964-65. The leading countries importing Indian paper and paper boards were Indonesia, Turkey, Egypt, Ceylon and East and West Pakistan. Cigarette paper alone accounted for Rs. 43 lakhs in 1964-65.

The Tariff Commission in its report submitted to the Government in 1959, recommended a substantial reduction in the ex-works and selling price of paper and paperboards and fixed fair prices of paper and paperboards of 24 varieties.

The selling prices of white printing and creamlaid paper have now been fixed at Rs. 1.55 and Rs. 1.61 respectively (per Kg.), excluding excise duties, State Government and local levies.

#### DEVELOPMENT PROGRAMME

The Union Government have also approved and granted licence for 15 new (large) units with a total capacity of 397,000 tonnes and 35 small units for production of paper and paperboards. Out of these 15 (large) units, 11 will be bagasse based units. The three units, which are reported to manufacture paper and paper boards from bagasse are, Rohtas Industries, Mandya National Paper Mills, and Seshasayee Paper and Boards Ltd.

The Planning Commission had envisaged production and capacity targets of 70,000 tons and 90,000 — 100,000 tons per year respectively, for 1965-66. As on March 1, 1964 there were 30 units with an annual capacity of 92,404 tonnes. Fourteen new units with an annual capacity of 47,100 tonnes have been licensed. With the implementation of these schemes, the indigenous capacity would increase to 1.4 lakh tonnes.

The target for paper and paper boards in the Fourth Plan is 1.5 million tons against the Third Plan target of 820,000 tons. In order to reach the Fourth Plan target, it was estimated that 25 to 30 new paper mills each having a capacity of 100 tons per day would have to be set up. The Fourth Plan target suggested by the Development Council for Paper, Pulp and Allied Industries are: 1) Paper and Paperboard 1.4 million tons; 2) Newsprint 330,000 tons; 3) Pulp 220,000 tons.

The Second Plan envisaged the establishment of three hardboard factories. Of these, one, namely, Anil Hardboard Ltd. in Bombay, went into production in November 1958. The



annual capacity of this factory is 6,000 tons. The company proposes to double the capacity of its hardboard plant and secured licence to import plant and machinery worth Rs. 29 lakhs. The other two factories now being set-up are the 6,000 tons Madhya Pradesh Industries Ltd. and

the 3,700-ton Western Indian Plywood Ltd. at Baliapattam.

The progress made by the paper industry during the First and Second Plan periods and the targets set for it in the Third Plan are indicated below :

(In '000 tons)

|                                        | Paper and<br>paper board | Newsprint | Security<br>paper<br>(In tons) |
|----------------------------------------|--------------------------|-----------|--------------------------------|
| 1955-56 Production .. .. .             | 187                      | 4.2       | ..                             |
| 1960-61 Production (anticipated) .. .. | 320                      | 28        | ..                             |
| <b>Third Plan</b>                      |                          |           |                                |
| 1965-66 Target Capacity .. .. .        | 820                      | 150       | 1,500                          |
| 1965-66 Target production .. .. .      | 700                      | 120       | 1,500                          |

An increase in the production of paper to the extent of 700,000 tons was envisaged during the Third Plan period, i.e., by 1965-66.

In order to achieve self-sufficiency, a production target of 700,000 tons and a capacity target of 820,000 tons was fixed. It was expected to attain production of 680,000 tons by 1965-66. The utilization of capacity in the paper industry has been over 95 per cent during the last several years.

The National Industrial Corporation of the Government of India has prepared the feasibility report for setting up two paper plants costing Rs. 22 crores in Jammu and Kashmir to be implemented during the IV Plan, for manufacturing rayon grade pulp and newsprint and white printing paper.

Besides, it has been proposed to start one newsprint factory in Punjab and another in U.P. with a capacity of 60,000 tonnes and 30,000 tonnes per year respectively.

The *per capita* consumption of paper in India at present stands at 2.6 lbs., as compared with 453 lbs. in the U.S., 126.4 lbs. in Japan and 207 lbs. in the U.K. Hence, it is imperative that

the industry should expand even though there is actually a glut in certain varieties of paper such as ordinary writing paper, printing and wrapping paper.

### NEWSPRINT

The National Newsprint and Paper Mills Ltd. (NEPA) is India's first newsprint mill. (For details see under Government Industrial Undertakings.)

The total licensed capacity of newsprint at present is 180,000 tonnes per year. Of the three new schemes licensed, viz. Messrs. Birla Gwalior Pvt. Ltd. (U.P.), Shree Gopal Paper Mills Ltd. (Punjab) and Rohtas Industries (Maharashtra), only the first two are likely to materialise by the end of the Fourth Plan. It has also been agreed in principle to expand the capacity of the NEPA Mills from 30,000 tons to 60,000 tons per annum.

It was estimated by the Planning Commission that by 1965-66, the annual demand for newsprint would be of the order of 150,000 tons. An inhibiting factor in the growth of these industries was the dearth of raw materials. In the Third Plan, a target capacity of 150,000 tons per year had been fixed for newsprint, to meet

the estimated consumption of 120,000 tons in 1965-66. This demand is based on the actual consumption of newsprint under the restrictive policy for newsprint adopted by the Government. The target for the Fourth Plan is 330,000 tons.

The table below will throw some light on the expansion of the newsprint industry during the Plan periods.

The following table summarises the development of paper and paper board industry envisaged during the period of the Third Plan.

('000 tons)

|                                | 1960-61 | 1965-66  |
|--------------------------------|---------|----------|
| Annual rated capacity          | 410.0   | 820.0    |
| Production                     | 343.2   | 700.0    |
| Annual rated capacity          | 30.0    | 150.0    |
| Production                     | 22.9    | 120.0    |
| Paper and paper board          | 77.4    | 90-100.0 |
| Newsprint ..                   | 30.0    | 22.9     |
| Strawboard and boards other .. | 77.4    | 54.5     |

The Import of newsprint is given in the table below.

| Year                         | Value<br>(Rs. crores) |
|------------------------------|-----------------------|
| 1960-61 .. .. .              | 5.95                  |
| 1961-62 .. .. .              | 9.71                  |
| 1962-63 .. .. .              | 7.63                  |
| 1963-64 (April-Dec.) .. .. . | 5.06                  |
| 1964-65 .. .. .              | 7.40                  |

The main supplying countries of newsprint to India are Canada, Finland, Norway, Poland Sweden and U.S.S.R.

## SERICULTURE AND SILK

**N**EXT to handloom and khadi, sericulture is the biggest village industry extending part or full employment to about 2.8 million people and generating income to the tune of Rs. 90 million in a year. Sericulture provides raw materials for India's traditional handlooms which consume over 90 per cent of raw silk output. Exports of pure silk fabrics fetched Rs. 21 million in foreign exchange in 1964. The target of pure silk exports during the Fourth Plan has been fixed at Rs. 20 crores. Silk cultivation today upholds not only a cherished tradition, but also plays a vital role in India's economic planning.

A provision of Rs. 15 crores for the development of sericulture industry has been proposed for the Fourth Plan. The industry was allocated Rs. 7.03 crores in the Third Plan and Rs. 5 crores in the Second Plan.

The target fixed for the Fourth Plan is 31 lakh kgm. of silk of all varieties against the estimated production of 21.53 lakh kgm. at the end of the Third Plan.

Silk is cultivated in 12 out of 15 States and in three of ten Union Territories. Mulberry is raised mainly in three States of Mysore, West Bengal and Jammu and Kashmir which jointly contribute about 98 per cent of the total mulberry silk production. The rest of the States having a small mulberry production are Andhra Pradesh, Assam, Bihar, Kerala, Madhya Pradesh, Madras, Punjab and Uttar Pradesh and the

Union Territories of Himachal Pradesh and Manipur. The non-mulberry culture is confined to the eight States of Andhra Pradesh, Assam, Bihar, Madhya Pradesh, Maharashtra, Orissa, Uttar Pradesh and West Bengal and the Union Territories of Manipur and Tripura. Among the non-mulberry kinds, tasar is extensively grown in the dense forests of Bihar, Madhya Pradesh, and Orissa and, on a limited scale, in Andhra Pradesh, Tripura, West Bengal and Maharashtra. Sericulture is practised mainly in Assam claiming over 90 per cent of eri silk production and, on a minor basis, in Bihar, Orissa and West Bengal. The *muga* is exclusively reared within Assam. In some of the States sericulture has been extended in the recent years. Even among the three non-producing States, Maharashtra and Rajasthan have very recently taken to silk cultivation on experimental basis. The only exception is Gujarat which though a traditional silk weaving State has no sericulture.

There are at present two spun silk mills—one Government spun mill at Channarayana in Mysore State and the other—Assam Spun Silk Mills at Jagi Road near Gauhati.

### SILK INDUSTRY IN STATES

The extent and nature of silk industry in each State is briefly as follows :

#### Andhra Pradesh

Andhra Pradesh has a small production of both mulberry and eri silk but has a substantial

potential for wild tasar. Mulberry silk industry is spread over the districts of Anantpur, Chittoor, Karimnagar, Visakhapatnam and Warangal and ericulture in Mahbubnagar and Kurnool and tasar in the forests flanking the river Godavari.

Introduced in recent years, mulberry silk cultivation is growing. The bulk of cocoons is, however, exported to Mysore. For development of mulberry silk industry the State has at present 2 graft nurseries, 10 sericultural farms, 2 chawki units, one grainage and 2 reeling units. A silk throwing factory with 2,426 spindles is located at Peddapuram. Ericulture in the State has good prospects. Although about 8 lakh acres are under castor cultivation, only a limited percentage is used for silkworm rearing, the bulk being used for oilseed purposes. There are 2 eri seed farms and one propaganda station. Tasar cultivation is traditional with tribals deriving their livelihood therefrom. There are 5 tasar seed stations. The State has production of tasar silk to the tune of 340 kgms.

#### Assam

Assam is the biggest non-mulberry State having an extensive ericulture, exclusive *muga*-culture and a little of mulberry silk production. The main silk-cultivating districts are Goalpara, Kamrup and Nowgong (in the Assam Valley) having silk fauna producing eri, *muga* and *pat* (mulberry). Sibsagar is the main area for mulberry production. Since there are no large-scale



industries in this border State, silk cultivation plays a vital role in its economy. It is estimated that over 8.5 lakh people, mostly backward belonging to *Jago* or *Katoni* caste and a few Mohammedan families, derive their livelihood from silk cultivation.

There are 11 silk farms, one mulberry grafts nursery, four mulberry silk reeling units, 10 muga farms, 12 eri grainages and 27 cocoon growers' and reeler's cooperatives and one experimental tasar seed station. Reeling units are at Aljal, Gaurisagar and Shillong and the eri and muga production centres at Domta, Kamrup, Rana and Saulkuchi. Three cocoon marketing centres have been set up. There is also a well-equipped sericultural training institute and a research institute at Titabar. For utilisation of silk waste, the State Government has recently inaugurated a 3,000-spindle Assam Spun Silk Mills at Jagi Road.

#### Bihar

Bihar is predominantly a tasar-producing State, contributing about 40 per cent of India's total tasar silk production. It is also the biggest eri silk-cultivating State after Assam. Bihar has also a small mulberry silk production. About 100,000 people, it is estimated, derive their livelihood from silk cultivation.

Tasar cultivation is almost exclusively practised by *Adibasis*, *Santhals*, *Pahadias* and other scheduled tribes. Bihar produces over 1,03,181 kgs. of tasar raw silk annually. For development of tasar silk industry, the State Government has set up in recent years 13 tasar seed supply stations, 25 sub-stations, 10 training centres, four marketing centres and 15 co-operatives. There is also a silk institute in Bhagalpur. Under the Third Plan more such centres were expected to be set up.

The eri silk production is about 8,295 kgs. Eri silk is spun by *takli*, spinning wheels and improved pedal spinning machines. There are at present six eri seed supply stations and 28 demonstration units. There is also a research centre at Ranchi. Mulberry cultivation in Purnea is practised on the lines of adjoining areas in West Bengal. The output is over 1,032 kgs.

The State recently reorganised the sericulture section into three divisions with an Assistant Director in charge of each division with a view to supervising the implementation of developmental programme. The Central Silk Board has established a central tasar research station at Ranchi in 1964.

#### Jammu & Kashmir

Kashmir is considered as a prolific source for univoltine silk in India. The industry is mainly practised in the districts of Anantnag, Baramulla, Doda, Jammu, Rajasi and Udhampur. The annual production of raw silk is estimated at about 53,074 kgs. or about 7 per cent of the total mulberry silk output. The industry provides employment to about 3,60,000 persons. The Kashmir Valley has the most suitable climate for univoltine silkworm rearing.

There are also 32 mulberry nurseries — 18 in Jammu and 14 in Kashmir, and 4 basic graft nurseries — 2 in Jammu and 2 in Kashmir. In recent years two basic seed cocoon farms have been set up. Besides, there are two hibernation centres at Srinagar and Batote. The CSB has also established a Central Silkworm Seed Station in Srinagar for production of grand parent stock seed and evolving suitable race of silkworms.

The entire cocoon output is reeled by filatures. The factory at Srinagar has three units. The installed capacity of both these units is 192 basins each. There are no cottage basins or charkas in the State.

The State Government have recently reconstituted the small-scale and cottage industries as a commercial undertaking "J. & K. Industries Limited" which includes sericulture and is being looked after by a Manager in each province. A sericultural training school has been recently started at Srinagar.

#### Kerala

Sericulture was extended to this State by bringing about 16 hectares of land under mulberry at Ambalavayal in Wynad in 1962, a colony of ex-military personnel. About 20 hectares are under private mulberry plantations and the rest is owned by the Government. The total cocoon yield is about 500 kgs.

#### Madhya Pradesh

Madhya Pradesh is the leading tasar producing State. The industry provides employment for about 42,000 rural people.

There are nine mulberry silk farms, one grainage, one graft nursery and a reeling unit—eight tasar seed farms, two tasar training centres, six tasar cocoon markets, a tasar research unit and one reeling and spinning unit. The Central Silk Board established a Central Tasar Seed Supply Station at Lakha in 1964.

#### Madras

The sericulture industry in Madras is at present confined to the districts of Coimbatore, Nilgiris, Salem and Tirunelveli. The industry provides employment to about 6,000 people. Mulberry is raised as 'bush'. The area under mulberry was 1,478 hectares by 1964. There are 11 mulberry graft nurseries, one basic seed farm, four Government silk farms, one Government grainage, two chawki units, one reeling unit, 25 basins, four cocoon markets, one gut section at Coonoor and a Sericultural Cooperative Society at Talvadi. Madras State at present produces about 3,000 kgs. of raw silk.

#### Maharashtra

Bhandara and Chandrapur districts have traditional tasar culture; the State has also taken up eri cultivation on experimental basis. Under the Second Plan, two schemes—one relating to training-cum-production centre for eri at Nasik and second for tasar development in Vidarbha—were executed. Under the Third Plan programme a third scheme had been sanctioned.

#### Mysore

Mysore is now the biggest polyvoltine mulberry silk producing State in India contributing over three-fourths of the total mulberry silk production. The industry is concentrated in the districts of Bangalore, Kolar, Mandya, Mysore and Tumkur and to a small extent in Belgaum and Coorg. About five per cent of the total population of the State derives livelihood from silk cultivation. Recently the State Sericultural Department spotted the presence of tasar silkworm in the forests of Sirsi (North Kanara District) and a scheme for development of tasar industry was approved in 1964-65.

There are about 77,000 hectares under mulberry cultivation. The yield of leaf per acre from rainfed plantations is about 1,800 kgs. and from irrigated areas about 3,600 kgs. per year. Nearly 5 to 6 crops are taken from irrigated plantations and 4 to 5 from rain-fed ones. There are four graft nurseries producing over six lakh grafts of improved strains.

At present there is a silk rearing station at B. R. hills for preservation of stock races and their amelloration.

Raw silk reeling is done by traditional *charkas*, recently by improved *cottage basins* and also by modern filatures. Mysore produces about 5,76,000 kgs. of *charka* silk (and 38,000 kgs. of dupion silk), over 3,63,000 kgs. of cottage basin and 1,03,000 kgs. of filature silk. The State has at present over 3,100 active *charkas*, 3,074 cottage basins and 936 filature basins (active).

The Silk Marketing Co-operative Society, Bangalore, has recently set up a branch at Nanjangud. There are 61 government cocoon markets established under Mysore Silkworm Seed Act in addition to a voluntary cocoon market at Ramnagaram. The State established four sericultural cooperatives. For utilisation

of silk waste, the State has recently reopened the Mysore Spun Silk Mills. Besides, the State has a sericultural training school at Channapatna and a silk conditioning house in Bangalore. The Central Sericultural Research and Training Institute, Mysore is a central project functioning at Mysore.

#### Orissa

Orissa is a non-mulberry State having both traditional tasar and eri silk industries. The annual production of tasar silk is about 16,500 kgs. and eri 48 kgs. About 23,000 rural people depend for their bread on these two pursuits. The State has no mulberry culture.

The State has now three seed supply stations, two eri seed stations, one reeling and spinning centre, one research unit and 19 tasar rearers' cooperative societies. The State has established a Tasar Cooperative Society in 1963. Besides tasar rearers Cooperatives, four weavers Cooperatives have also been organised.

#### Punjab

Punjab has a century-old sericulture industry, although silk weaving dates to antiquity. The industry is practised mainly in districts of Amritsar, Gurdaspur, Hoshiarpur and Kangra and to some extent in Ferozepur, Jullundur and Karnal. It provides employment to about 1,500 families. The State produces about 1,690 kgs. comprising mostly of *charka* silk.

Mulberry is raised as tree growing as high as 12 metres, mainly cultivated for their fruits and timber. Mulberry nurseries and demonstration farms have been set up under the Plan schemes. There are about 65,000 mulberry trees and 71 hectares under bush mulberry.

The silkworm seed requirement is to a great extent met by two grainages at Dalhousie and Palampur. A foreign race seed station is functioning at Nagrota. Several chawki rearing centres have come up in recent years. About 75 per cent of total cocoon output is reeled on 'charkas'. A demonstration training centre has been opened in Dinanagar. For cocoon marketing, a society has been recently formed in Pathankot district. Under the Third Plan, efforts are made towards extension of mulberry area, augmenting seed production and improvement in all sectors of silk industry. A small unit of filature has been established in Dinanagar.

#### Rajasthan

Tasar culture is just being introduced in this State in Shahbad area and a number of tribals practise tasar cultivation as a cottage industry. The State Government intends to establish a demonstration centre for spinning and weaving in this area.

#### Uttar Pradesh

Mulberry silk industry is practised in 6 districts of Dehra Dun, Etawah, Garhwal, Gorakhpur, Nainital and Saharanpur. Sericulture is carried on in two districts of Rampur and Deoria and tasar culture is found in Mirzapur district.

Mulberry is cultivated both as 'bush' and 'tree'. From over 6,40,431 mulberry trees growing in the State only about 50,000 are utilised for silkworm rearing, the large number being used for obtaining timber for sport goods. The area under bush mulberry comprising Government farms and private gardens is about 214 hectares. There are 13 mulberry farms and 7 graft nurseries.

Both univoltine and polyvoltine silkworm races are reared. 45 chawki rearing centres and four demonstration silk farms have been set up. For production of disease-free seed, there are three grainages, and for production of basic seed cocoons, four farms. The cocoons are purchased by the State department at fixed rates and sold to the Doon Valley Sericultural Society. Recently 35 rearers' cooperatives and an apex society have been organised in the State. A cooperative silk filature of 30 basins has been established in 1964. The annual production of raw silk in the State is 3,585 kgs.

W. 62  
LIBRARY



## West Bengal

At present mulberry culture is practised in the districts of Bankura, Birbhum, Darjeeling, Malda and Murshidabad. The annual production of mulberry silk in the State is 3,10,565 kgms. Mulberry is cultivated as 'bush'. There are about 6,494 hectares under mulberry. There are eight mulberry nurseries, and grainages and 21 aided grainages. The State has also four mulberry graft nurseries three in Malda and one in Murshidabad district. Three tasar seed stations with their sub-stations and three eri seed stations are functioning in the State.

The State has already got four fixed hybrids called *Nismo*, *Nistid*, *Ichol* and *Itan*, which give better yield than indigenous races. There is a foreign race seed station at Kalimpong and a hill nursery for raising F1 seed of foreign races at Matigara. Two chawki rearing centres have also been set up.

Raw silk reeling is done on native *charka*. Efforts are made to introduce cottage basins. A 100-basin filature is also being set up at Malda. The State has established two training institutes — one for sericulture at Berhampore and other for reeling at Peddie (Malda). Besides, the Central Government's Central Sericultural Research Station is also located at Berhampore. The silk conditioning house is stationed at Calcutta.

## UNION TERRITORIES

## Himachal Pradesh

Producing about 251 kgms. of raw silk, Himachal Pradesh is a potential univoltine zone. Mulberry Silk cultivation is at present conformed mainly to two districts, Mandi and Sirmoor. Out of about 100,000 mulberry trees growing in the Territory, only about 15,500 are used for silkworm rearing. The Territory has 12 mulberry farms, five nurseries and two reeling demonstration-cum-training centres. A number of development schemes have been initiated with the object of fully exploiting the existing potential for sericulture industry.

## Manipur

Situated in the neighbourhood of Assam, Manipur has both mulberry and eri silk cultivation and a potential for muga culture. Manipur produces about 434 kgms. of mulberry and over 591 kgms. of non-mulberry silk. The Territory has 3 silk farms, and demonstration centres for eri and muga.

## Tripura

Sericulture has been recently introduced. During the Second Plan, two demonstration centres one for eri rearing and the other for tasar-rearing have been set up. Some 50 families have taken up silk cultivation as source of their livelihood.

## Mulberry Raw Silk Production—1965

(Figs. in Kg.)

| State                    | Production |           |               |        | Total     |
|--------------------------|------------|-----------|---------------|--------|-----------|
|                          | Filature   | Charka    | Cottage Basin | Dupion |           |
| Andhra Pradesh .. .. .   | ..         | 880       | ..            | ..     | 880       |
| Assam .. .. .            | ..         | 14,000    | ..            | ..     | 14,000    |
| Bihar .. .. .            | ..         | 1,032     | ..            | ..     | 1,032     |
| Jammu & Kashmir .. .. .  | 52,402     | ..        | ..            | 672    | 53,074    |
| Madhya Pradesh .. .. .   | ..         | ..        | 580           | ..     | 580       |
| Madras .. .. .           | ..         | ..        | 1,537         | 112    | 1,649     |
| Mysore .. .. .           | 1,04,000   | 9,40,000  | 1,79,000      | 22,000 | 12,45,000 |
| Punjab .. .. .           | 831        | 1,626     | 89            | ..     | 2,546     |
| Uttar Pradesh .. .. .    | 3,059      | —         | 176           | 350    | 3,585     |
| West Bengal .. .. .      | 13         | 2,90,967  | 19,585        | ..     | 3,10,565  |
| Himachal Pradesh .. .. . | 251        | ..        | ..            | ..     | 251       |
| Manipur .. .. .          | ..         | 387       | 27            | 20     | 434       |
| Tripura .. .. .          | ..         | ..        | 6             | ..     | 6         |
| Total .. .. .            | 1,60,556   | 12,48,892 | 2,01,000      | 23,154 | 16,33,602 |

## Non-Mulberry Raw Silk Production—1965

(Figs. in Kg.)

| State                  | Tasar    | Eri      | Muga   | Total    |
|------------------------|----------|----------|--------|----------|
| Andhra Pradesh .. .. . | 340      | 50       | ..     | 390      |
| Assam .. .. .          | ..       | 1,87,500 | 58,000 | 2,45,500 |
| Bihar .. .. .          | 1,03,181 | 8,295    | ..     | 1,11,476 |
| Madhya Pradesh .. .. . | 1,20,000 | ..       | ..     | 1,20,000 |
| Maharashtra .. .. .    | 865      | ..       | ..     | 865      |
| Orissa .. .. .         | 16,500   | 48       | ..     | 16,548   |
| Uttar Pradesh .. .. .  | 42       | 84       | ..     | 126      |
| West Bengal .. .. .    | 16,359   | 5,680    | ..     | 22,039   |
| Manipur .. .. .        | ..       | 505      | 14     | 519      |
| Tripura .. .. .        | ..       | 4,66     | ..     | 466      |
| Total .. .. .          | 2,57,287 | 2,02,628 | 58,014 | 5,17,929 |

## Mulberry Silk Waste Production—1965

(Figs. in Kg.)

| State                    | Production |          |               |        | Total    |
|--------------------------|------------|----------|---------------|--------|----------|
|                          | Filature   | Charka   | Cottage Basin | Dupion |          |
| Andhra Pradesh .. .. .   | ..         | 632      | ..            | ..     | 632      |
| Assam .. .. .            | ..         | 6,500    | ..            | ..     | 6,500    |
| Bihar .. .. .            | ..         | 1,032    | ..            | ..     | 1,032    |
| Jammu & Kashmir .. .. .  | 65,136     | ..       | ..            | 1,491  | 66,627   |
| Madhya Pradesh .. .. .   | ..         | ..       | 300           | ..     | 300      |
| Madras .. .. .           | ..         | ..       | 788           | ..     | 788      |
| Mysore .. .. .           | 60,000*    | 2,99,000 | 70,000        | 10,000 | 4,48,000 |
| Punjab .. .. .           | 317        | 636      | 55            | ..     | 1,008    |
| Uttar Pradesh .. .. .    | 823        | ..       | 96            | 103    | 1,022    |
| West Bengal .. .. .      | 8          | 1,77,501 | 10,970        | ..     | 1,88,474 |
| Himachal Pradesh .. .. . | 56         | ..       | ..            | ..     | 56       |
| Manipur .. .. .          | ..         | 19       | 2             | ..     | 21       |
| Tripura .. .. .          | ..         | ..       | 1             | ..     | 1        |
| Total .. .. .            | 1,26,335   | 4,85,320 | 91,212        | 11,594 | 7,14,461 |

\* Estimated.



## Non-Mulberry Silk Waste Production—1965

(Figs. in Kg.)

| State                  | Tasar    | Eri    | Muga   | Total    |
|------------------------|----------|--------|--------|----------|
| Andhra Pradesh .. .. . | 302      | 44     | ..     | 346      |
| Assam .. .. .          | ..       | 62,500 | 28,000 | 90,500   |
| Bihar .. .. .          | 77,363   | ..     | ..     | 77,363   |
| Madhya Pradesh .. .. . | 60,000   | ..     | ..     | 60,000   |
| Maharashtra .. .. .    | 433      | ..     | ..     | 433      |
| Orissa .. .. .         | 8,700    | 535    | ..     | 9,235    |
| Uttar Pradesh .. .. .  | 18       | 12     | ..     | 30       |
| West Bengal .. .. .    | 34,123   | ..     | ..     | 34,123   |
| Manipur .. .. .        | ..       | 7      | ..     | 7        |
| Tripura .. .. .        | ..       | ..     | ..     | ..       |
| Total .. .. .          | 1,80,939 | 63,098 | 28,000 | 2,72,037 |

## CENTRAL SILK BOARD

An apex body consolidating and coordinating the sericulture industry in States, is the Central Silk Board, set up in 1949 by the Government of India. CSB is a 'body corporate' charged with functions 'to promote development of silk industry by such measures as it thinks fit.' The measures include rendering financial and technical assistance, 'undertaking, assisting or encouraging scientific, technological and economic research', 'devising means for improvement of all sectors', collection of statistics and to advise the Central Government on all matters relating to the raw silk industry, including import and export of raw silk.

**Liaison Offices:** In order to co-ordinate the developmental activities of silk industries in the States, the Board has recently strengthened its liaison offices by providing technical officers at Bangalore, New Delhi, Calcutta. A new liaison office has also been set up at Srinagar in 1965.

CSB's main activities are:

1. **Providing Funds for Silk Schemes:** CSB extends financial assistance in the form of either grant-in-aid or loan for execution of silk schemes by the State Governments. For the Third Plan Rs. 70 million have been earmarked for sericulture development.

2. **Providing Technical Know-How:** CSB gives assistance for scientific and technical work undertaken by State's sericulture departments and helps them to secure technical personnel and guidance. The Board has so far sponsored

visits of four sericultural experts from Japan and deputed 20 Indian sericulture officials to Japan and two to China. CSB also appoints experts' committees to help States to overcome major problems.

**Service Stations:** CSB has established two service stations—All India Sericultural Training Institute at Mysore for training personnel deputed by the State Governments and Central Silkworm Seed Station at Srinagar for production of basic seed. Besides, it has also taken over from the Government of Madras, the Hill Rearing Station at Coonoor (Nilgiri District) now named as Silkworm Seed Station, to function as a sub-station for the Central Silkworm Seed Station at Srinagar. The Board is also setting up a pilot centre in Himachal Pradesh for demonstrating application of modern methods and appliances.

In 1964, the Central Tasar Silkworm Seed Station was set up at Lakha (Madhya Pradesh) to cater to the needs of tasar States in regard to basic seed of tasar silkworm.

**Sericultural Research:** CSB has decided to centralise and coordinate sericultural research on Japanese model. CSB has taken over regional research stations. Under the research project the CSB has already taken over the Central Sericulture Research Institute, Mysore from the Government of Mysore and has got technical control over the Central Sericultural Research Station, Berhampur (W.B.). Besides, the Board has also set up a research cell for univoltine area at Dehra Dun.

The Board has taken over the Central Tasar Research Station, Ranchi.

The Board also renders financial and technical assistance to the Sericulture Research Institute, set up by the Government of Assam at Titabar for tackling the problems of eri and muga silk industries.

**Distribution of Imported Silk:** CSB advises Government of India on import policy.

**Export Promotion:** With effect from 1st July 1964, the exporters of mulberry and tasar silk fabrics, ready-made garments and made-up articles of raw silk of these varieties are permitted to import raw silk themselves against their entitlements.

With effect from 2nd January 1965, the Central Silk Board introduced two new schemes viz., Quality Inspection of Tasar Silk Fabrics and Stamping of "Centrosilk" Certification Trade Mark for pure silk fabrics. The former is compulsory. The tasar fabrics to be exported from the year 1965 will have to conform to minimum specifications prescribed with a view to ensuring a sound foundation for export trade in tasar fabrics. The latter one is purely voluntary. The main object of the scheme is to counter the unhealthy tendency of passing cheap substitute as pure silk, with a view to creating confidence in overseas buyers. The response to this scheme has been quite encouraging.

The export of pure silk fabrics has been steadily increasing in the non-traditional markets of Europe and America. Each year pure silk fabrics worth approximately Rs. 21 million are exported to over 50 countries of the world. The exports include sarees, brocades, scarves and piece-goods. Pure silk worth Rs. 173.10 lakhs was exported during 1965 as against exports of Rs. 138.51 lakhs during 1964. The export of tasar fabrics has risen remarkably particularly to the United States—from Rs. 0.3 million in 1958 to about over Rs. six million in 1965. In 1965, 6.41 lakh metres of tasar silk fabrics worth Rs. 71.87 lakhs were exported. The tasar fabrics are exported under the Indo-American trade agreement. In 1964, silk production was 19.43 lakh kg. as against 19 lakh kg. in 1963.

**Protection to Sericulture Industry:** The Government of India have accepted the recommendation of the Tariff Commission that protection to the sericulture industry should be continued for a further period of three years up to the 31st of December 1966 at the existing rate of protective duty.

## SUGAR INDUSTRY

THE sugar industry is today ranked as the second largest industry in the country next only to textiles. It provides employment to 2,00,000 skilled and unskilled workers and about 3,600 university educated men, and caters to the sugar needs of the vast populace about 485 million. The total earnings of workers and benefits are about Rs. 30 crores. Besides, the industry supports another 20 million cultivators and their families who derive about Rs. 190 crores as payment for cane. The industry's contribution to the national exchequer in levies was about Rs. 88 crores in 1964-65.

The Third Plan target initially fixed at 30 lakh tonnes was revised to 35 lakh tonnes.

1965-66 Season:

During 1965-66 which incidentally is the last year of the Third Five Year Plan cane crop prospects were satisfactory. With Gur and Khandasari prices ruling at a rather low level, factories generally obtained sufficient cane for crushing. Up to 30th April, 1966, factories had already produced about 32.10 lakh tonnes of sugar and out of the total number of 198 factories working in the season, 124 factories continued to crush. The production trends clearly indicate that the prospects of not only attaining but exceeding the Third Plan production target of 35 lakh

tonnes are also there. The Sugar Industry had to its credit the unique distinction of exceeding production targets laid down during First, Second and Third Plan periods.

**Exports:**

Against about 2.80 lakh tonnes exported last year, there are prospects of exporting 4.5 to 5 lakh tonnes of sugar from the country in the current season.

The country-wise break-up of sugar exports during the years 1964 and 1965 are given below:

(metric tonnes)

| Country                    | 1964     | 1965     |
|----------------------------|----------|----------|
| U.S.A. .. .. .             | 99,583.7 | 92,094.0 |
| Japan .. .. .              | 60,865.7 | —        |
| U.K. .. .. .               | 10,525.4 | 75,842.1 |
| South Viet Nam .. .. .     | 19,346.1 | —        |
| Malaya & Singapore .. .. . | 12,034.6 | 35,961.0 |
| Hongkong .. .. .           | 10,469.3 | —        |
| Italy .. .. .              | 19,153.3 | —        |
| Canada .. .. .             | —        | 52,761.6 |
| Korea .. .. .              | —        | 9,519.0  |
| Persian Gulf .. .. .       | —        | 999.9    |
| Viet Nam .. .. .           | —        | 9,725.0  |

The statewide destination break-up of raw sugar production in 1964 and 1965 is given below:—

(metric tonnes)

| State               | 1964       | 1965       |
|---------------------|------------|------------|
| Bihar .. .. .       | 1,135.2    | 9,946.7    |
| U.P. .. .. .        | 84,966.2   | 42,843.3   |
| Andhra .. .. .      | 39,818.0   | 60,273.1   |
| Maharashtra .. .. . | 98,050.0   | 1,57,026.8 |
|                     | 2,23,969.4 | 2,70,089.9 |

In 1963, 1964 and 1965 India exported 4.78, 2.32 and 2.77 lakh tonnes respectively. The respective foreign exchange earnings are Rs. 32.25 crores, Rs. 18.09 crores and Rs. 11.54 crores.

**Enquiry Commissions:**

The Sugar Enquiry Commission appointed by Government on 3rd August 1964 under the chairmanship of Dr. S. R. Sen of the Planning Commission to inter alia enquire into determination of price submitted its report to the Government in October 1965. The report is a comprehensive document which deals with the various aspects of the sugar industry in detail.



**Increased Excise Duty :**

Under the 1966-67 Budget proposals excise duty on sugar has been increased by Rs. 8.35 per quintal i.e. from Rs. 28.65 to Rs. 37 per quintal. Sugar even before the increase in excise duty was subject to very high taxation at the hands of both the Central and State Governments and the levies amounted to about 45% of the cost of production. With the recent increase in excise duty this would go up further to 55 per cent.

Even before the imposition of the higher duty the tax disparity between sugar and khandasari was as much as Rs. 11.50 per quintal. Now this difference has been widened to 15.50 per quintal. Consequently the problem of large diversion of cane from factory areas is likely to be aggravated in seasons of cane shortage and sugar output is bound to suffer. If appropriate relief from the heavy tax burden is not provided the precarious balance between the divergent forces of supply and demand will be violently disturbed and the industry will never be able to get out of the recurring cycle of over production and shortages.

**Second Wage Board :**

In September, 1965 the Second Wage Board for the Sugar Industry was appointed on the understanding that workload studies in the sugar industry will be conducted as recommended by the First Wage Board for the Sugar Industry in 1960, and the report of the Workload Studies will be made available to the Second Wage Board within one year.

**Sugarcane**

The principal raw material is sugarcane. The total cane crushed in 1964-65 season was 33.46 million tonnes for a production of about 32.60 lakh tonnes. Approximately, 30 per cent of cane is consumed by factories while the balance goes to production of gur and khandasari for chewing and for other purposes.

The following table gives the area under cane and sugar production for the last few years:

| Year                         | Acre under sugarcane (000 acres) | Total production of sugarcane (000 tonnes) |
|------------------------------|----------------------------------|--------------------------------------------|
| 1959-60 .. ..                | 5,220                            | 76,404                                     |
| 1960-61 .. ..                | 5,789                            | 1,04,122                                   |
| 1961-62 .. ..                | 5,988                            | 98,276                                     |
| 1962-63 .. ..                | 5,635                            | 92,978                                     |
| 1963-64 .. ..                | 5,577                            | 1,04,907.9                                 |
| 1964-65 Final estimate .. .. | 6,286.7                          | 1,22,126                                   |

The system of linking the cane price with recovery was continued in 1963-64, 1964-65, and 1965-66 seasons also. The ultimate objective of the scheme is to pay the cane price to individual growers also. The minimum cane price presently fixed is Rs. 2 per maund linked to a recovery of 10.4 per cent.

The ultimate objective of the scheme is to pay cane price to individual growers on the basis of the quality of their cane. The cane price presently paid on collective basis will be extended to village and group levels, the ultimate objective being to extend it to individual growers. In fact some factories in the South have successfully paid cane price to individual growers on the basis of the quality of cane supplied by them.

**Fourth Plan**

The Development Council for Sugar Industry has recommended for a production and capacity target of 45 lakh tonnes for the Fourth Five Year Plan. Against this Fourth Plan capacity target, Government have already licensed capacity of 43.3 lakh tonnes.

The licensed capacity of the sugar industry in the 1964-65 season stood at about 32 lakh tonnes. Thereafter Government has issued industrial licences to 89 sugar factories to effect substantial expansion and 16 new units have been licensed raising the total licensed capacity in the sugar industry to 43.3 lakh tonnes.

The intensive cane development schemes initiated in the State of Uttar Pradesh a couple of years ago, has started yielding results. The cane yield per acre in the intensive development blocks has increased to 473 maunds from 425 maunds. Almost all the sugar factories have joined the scheme of intensive cane development, under which the expenses are to be borne by the Central Government, State Government, the sugar factories and the cane growers in the ratio of  $\frac{1}{3} : \frac{1}{3} : \frac{1}{3}$ . The development scheme, initially started to cover 4,000 acres has been extended to a second block of 4,000 acres. Similar schemes are also envisaged in the States of Bihar and the Punjab. In order to crush the increasing quantities of cane that will be available in their respective areas, the factories concerned should have additional capacity, as otherwise the cane growers will be confronted with the acute problem of marketing their produce.

**SUGAR MACHINERY**

Two consortia of manufacturers, the first consisting of Messrs. Walchandnagar Industries, TEXMACO and Indian Sugar and General Engineering Corporation, and the second consisting of K.C.P. Ltd., Binny & Co., and Buckau Wolf New India Engineering Works Ltd. Pimpri, Poona 18, have been formed to manufacture complete plants in India.

The Third Plan has envisaged a target of 14 complete plants valuing Rs. 10 crores. 85 per cent of the plants will have indigenous content.

The production of sugar machinery in the country has been gradually increasing and the value of such machinery was as follows : 1955 : Rs. 19 lakhs, 1956 : Rs. 32 lakhs, 1957 : Rs. 162 lakhs, 1958 : Rs. 200 lakhs, 1959 : Rs. 320 lakhs, 1960 : Rs. 350 lakhs (est.).

By the time the existing manufacturers are expected to achieve full production, the industry will be in a position to supply every year 12 complete sugar plants of the capacity of 1,000 to 1,250 tonnes and the equivalent of about nine complete plants by way of expansion and replacement requirements of the sugar industry. This will meet the needs of the country except in regard to turbo-alternators and mill engines.

**CO-OPERATIVE SECTOR**

The position of production of sugar of the co-operative sugar factories is compared in the following table with the total production and the production in the private sector :

(From Nov. 1st to 28th Feb.)

(Fig. in lakh m. tons)

|                     |    |    |    |    |    | INCREASE |         |            |
|---------------------|----|----|----|----|----|----------|---------|------------|
|                     |    |    |    |    |    | 1965-66  | 1964-65 | Quantity % |
| Co-operative Sector | .. | .. | .. | .. | .. | 5.50     | 4.87    | 0.63 12.04 |
| Private Sector      | .. | .. | .. | .. | .. | 15.58    | 15.51   | 0.07 0.45  |
| Total               | .. | .. | .. | .. | .. | 21.08    | 20.38   | 0.70 3.43  |

The following table shows the position of Co-operative Sugar Factories as on 31st December, 1965 in different States.

|                                            |    |    |          |                               | Rs. in lakhs   |                               |                                           |                        |
|--------------------------------------------|----|----|----------|-------------------------------|----------------|-------------------------------|-------------------------------------------|------------------------|
| States and number of factories in brackets |    |    |          |                               | No. of Members | Total Amount of share capital | State Govt. Contribution to share Capital | I.F.C. Loan Sanctioned |
| 1                                          | 2  | 3  | 4        | 5                             |                |                               |                                           |                        |
| ANDHRA PRADESH (10)                        | .. | .. | 42,097   | 285.80                        | 125.00         | 435.00                        |                                           |                        |
| ASSAM (1)                                  | .. | .. | 7,739    | 47.42                         | 29.00          | 60.00                         |                                           |                        |
| BIHAR (1)                                  | .. | .. | 5,102    | 35.08                         | 24.00          | 90.00                         |                                           |                        |
| GUJARAT (4)                                | .. | .. | 8,787    | 155.59                        | 55.00          | 142.50                        |                                           |                        |
| KERALA (2)                                 | .. | .. | 6,194    | 80.92                         | 50.00          | 180.00                        |                                           |                        |
| MADHYA PRADESH (1)                         | .. | .. | 486      | 0.64                          | ..             | ..                            |                                           |                        |
| MADRAS (6)                                 | .. | .. | 20,903   | 313.34                        | 142.50         | 443.00                        |                                           |                        |
| MAHARASHTRA (21)                           | .. | .. | 52,677   | 903.32                        | 220.00         | 1,444.00                      |                                           |                        |
| MYSORE (5)                                 | .. | .. | 22,116   | 166.05                        | 74.84          | 275.00                        |                                           |                        |
| ORISSA (2)                                 | .. | .. | 5,407    | 46.43                         | 32.00          | 85.00                         |                                           |                        |
| PUNJAB (6)                                 | .. | .. | 78,041   | 294.04                        | 120.00         | 421.00                        |                                           |                        |
| RAJASTHAN (1)                              | .. | .. | N.A.     | Factory licensed in Aug. '65. |                |                               |                                           |                        |
| U.P. (5)                                   | .. | .. | 12,559   | 317.96                        | 89.99          | 290.00                        |                                           |                        |
| Grand Total                                | .. | .. | 2,62,108 | 317.96                        | 962.33         | 3,865.50                      |                                           |                        |



The total quantity of sugar produced by co-operative sugar factories during 1964-65 was 8.06 lakh metric tons. Total cane crushed during 1964-65 season was 75.70 lakh metric tons.

The co-operative sugar factories in the country produced 5.50 lakh metric tonnes (excluding 0.35 lakh metric tonnes produced prior to 1st Nov.) of sugar upto 28th February 1966 during 1965-66, as against 4.87 lakh metric tons (excluding 0.23 lakh metric tonnes) produced by them during the corresponding period last year.

Out of the 65 co-operative sugar factories licensed so far, 51 factories started their crushing operations during 1965-66, as against 50 factories in 1964-65.

The co-operative sugar factories are manufacturing raw sugar this season also. Nearly 1.91 lakh metric tons of raw sugar has been manufactured upto 28-2-66.

It would be seen that the production of co-operative sugar factories this year upto 28th Feb. 1966 shows an increase of about 13 per cent over that of last year for the same period, while the corresponding increase in the private sector is about 0.45 per cent and for the industry as a whole is 3.43 per cent.

During the 1964-65 season 50 cooperative sugar-factories were in production. They crushed 75.70 lakh metric tons of sugarcane. Nearly 90 per cent of the total crush was supplied by the members and only 10 per cent of sugarcane was drawn from non-members.

A National Federation of Cooperative Sugar Factories was set up in December 1960 with a view to coordinating and facilitating the working of cooperative sugar factories. State and Zonal Federations are assisting in the promotion of organisation of new cooperative sugar factories.

Total sugarcane crushed and sugar produced respectively in metric tons during the 1964-65 season in the States:

**Andhra Pradesh** (Total): 9,37,415; 86,734; Amadalavalasa 1,16,207; 11,060; Anakapalle 64,133; 5,970; Chittoor 1,79,090; 17,467; Chodavaram 1,30,040; 11,729; Etikoppaka 1,35,879; 12,589; Palakol 1,56,829; 14,871; Tuni 54,691; 4,536; Nizamabad 1,00,546; 8,512; **Assam** (Total): 66,697; 6,081; Barubamungaon 66,697; 6,081; **Gujarat** (Total): 4,26,258; 43,416; Bardoli 1,06,440; 10,907; Gandevi 50,553; 4,634; Kodinar 2,69,265; 27,875; **Madras** (Total): 6,82,139; 63,610; Amravathi M 65,361; 6,187; S 1,10,053; 10,319; Ambur 1,51,990; 14,871; Madurantakam 1,41,871; 11,671; Salem M 1,63,750; 15,895; S 49,114; 4,667; **Mysore** (Total): 6,49,447; 68,673; Kampli 2,44,458; 22,204; Pandavapura 2,30,826; 26,318; Sankeshwar 1,74,163; 20,151; **Maharashtra** (Total): 3,532,809; 4,14,911; Ashoknagar 2,13,521; 24,573; Bhogawati 2,14,211; 24,959; Dudhganga 1,30,084; 14,729; Ganeshnagar 1,88,537; 22,171; Girna 1,56,846; 17,388; Kumbli-Kasari 1,51,260; 17,534; Karad (Krishna) 2,46,533; 31,905; Kopargaon 1,84,145;

21,855; Malegaon 1,83,780; 22,093; Panchganga 2,30,699; 26,236; Pravaranagar 2,33,919; 26,629; Rahuri 1,98,263; 22,423; Sangli 2,53,773; 29,281; Sansar 1,23,530; 13,722; Shriram (Phaltan) 1,72,197; 20,819; Someshwar 84,377; 10,586; Sanjivani 1,45,424; 17,017; Warananagar 1,66,955; 21,713; Yeshwant 1,71,182; 20,101; Niphad 83,573; 9,177; **Punjab** (Total): 5,32,402; 44,360; Bhogpur 66,408; 5,423; Batala 49,552; 4,023; Morinda 80,341; 7,153; Panipat 1,90,956; 16,062; Rohtak 1,45,145; 11,699; **Kerala** (Total): 1,91,849; 16,713; Mannam M 33,034; 2,625; S 27,757; 2,244; Chittur M 18,621; 1,642; S 1,12,437; 10,202; **Uttar Pradesh** (Total): 4,99,969; 46,110; Bagpat 1,50,613; 13,414; Sarsawa 1,23,956; 10,346; Bazzpur 2,25,400; 22,350; **Orissa** (Total): 51,332; 4,248; Aska 51,332; 4,248; All India Total 7,570,317; 7,94,856.

Besides processing of sugarcane, the cooperative sugar factories have all along been exploring the possibilities of reducing the cost of manufacture of sugar. In this, the idea of utilising effectively the bye-products of the industry i.e. Bagasse, Molasses and Press Mud etc. has been mooted out. A group of cooperative sugar factories have joined together forming a society or establishing paper plant for utilising Bagasse. Three such societies have been formed and a licence has already been issued for establishing a newsprint Plant in Sangli, Maharashtra State. Factories have combined together for establishing distilleries for utilising Molasses.

## TEXTILE INDUSTRY

THE cotton textile industry is the largest single industry in the country. India holds the third place among the countries of the world in its capacity for yarn and cloth based on mechanical equipment and stands second on the basis of cotton consumption.

In addition to providing means of livelihood for nearly 10 million handloom weavers, the mill industry provides direct employment to nearly 800,000 workers.

The total number of mills in the country in January 1966 was 519, the number of spindles installed 16.00 million, of looms 209,005. The average number of workers employed daily in all shifts was 789,809 and the consumption of raw cotton (in bales of 180 Kg. each) was 436,396.

The capital invested is estimated at Rs. 137 crores, and the annual value of the output amounts to Rs. 430 crores.

### THIRD FIVE-YEAR PLAN

Out of the total target for cotton cloth of 9,300 million yards, 3,500 million yards had been allocated as the share of the decentralised sector (handloom, powerloom and khadi). The production target allocated to the mill sector was 5,800 million yards as against the current level of output and estimated effective capacity of about 5,000 million yards. To achieve the additional production of 800 million yards in the mill sector, it was envisaged that about 25,000 automatic looms will have to be installed during the Third Plan.

On the basis of a cloth production target of 9,300 million yards, and taking into account also the yarn required for purposes other than cloth weaving, e.g. hosiery and newar, the yarn production target had been fixed at 2,250 million lb. To reach this target of 2,250 million lb. of yarn it was necessary to increase the active spindleage of the mills to about 16.5 million as compared to 12.7 million at the end of the Second Plan. Out of the additional capacity for spindles and looms envisaged for installation during the Third Plan, it was proposed that a substantial proportion of the additional loomage shall be export-oriented.

**Automatic Looms**  
The estimated cost of 4 million spindles and 25,000 automatic looms—the additional equip-

ment that was proposed to be acquired during the five-year period of the Third Plan—was Rs. 120 crores.

The following table gives details about the distribution of mills in India as in January 1966.\*

| State                         | No. of Mills<br>in existence | Spindles<br>installed | Looms<br>installed | Average No.<br>of workers<br>employed<br>daily in<br>all shifts | Consumption<br>of raw<br>cotton (In<br>bales of<br>180 kg.) |
|-------------------------------|------------------------------|-----------------------|--------------------|-----------------------------------------------------------------|-------------------------------------------------------------|
| Andhra Pradesh .. ..          | 23                           | 3,55,008              | 1,242              | 14,451                                                          | 11,679                                                      |
| Assam .. ..                   | 2                            | 22,820                | ..                 | 977                                                             | 1,010                                                       |
| Bihar .. ..                   | 3                            | 59,092                | 809                | 1,215                                                           | 1,001                                                       |
| Gujarat .. ..                 | 100                          | 32,70,296             | 60,536             | 1,79,805                                                        | 82,625                                                      |
| (a) Ahmedabad City .. ..      | 65                           | 23,65,441             | 45,363             | 1,33,821                                                        | 62,069                                                      |
| (b) Rest of Gujarat .. ..     | 35                           | 9,04,855              | 15,173             | 45,984                                                          | 20,556                                                      |
| Kerala .. ..                  | 28                           | 3,00,340              | 1,046              | 8,463                                                           | 4,071                                                       |
| Madhya Pradesh .. ..          | 19                           | 5,86,258              | 13,033             | 45,855                                                          | 21,856                                                      |
| Madras .. ..                  | 164                          | 36,44,049             | 9,355              | 98,408                                                          | 72,427                                                      |
| Maharashtra .. ..             | 81                           | 45,19,395             | 81,093             | 2,49,093                                                        | 1,25,588                                                    |
| (a) Bombay City .. ..         | 53                           | 34,69,628             | 63,200             | 1,97,423                                                        | 99,184                                                      |
| (b) Rest of Maharashtra .. .. | 28                           | 10,49,767             | 17,893             | 51,670                                                          | 26,404                                                      |
| Mysore .. ..                  | 23                           | 5,85,172              | 5,568              | 31,630                                                          | 17,860                                                      |
| Orissa .. ..                  | 2                            | 94,900                | 866                | 5,258                                                           | 3,154                                                       |
| Punjab .. ..                  | 11                           | 2,55,451              | 2,207              | 14,287                                                          | 16,185                                                      |
| Rajasthan .. ..               | 14                           | 2,75,798              | 2,847              | 14,951                                                          | 10,835                                                      |
| Uttar Pradesh .. ..           | 21                           | 9,13,270              | 13,979             | 52,546                                                          | 33,810                                                      |
| (a) Kanpur City .. ..         | 11                           | 5,61,084              | 11,369             | 38,385                                                          | 21,094                                                      |
| (b) Rest of U.P. .. ..        | 10                           | 3,52,186              | 2,610              | 14,161                                                          | 12,716                                                      |
| West Bengal .. ..             | 27                           | 8,02,315              | 10,353             | 44,401                                                          | 21,271                                                      |
| Delhi .. ..                   | 4                            | 1,81,428              | 3,812              | 20,484                                                          | 9,198                                                       |
| Pondicherry .. ..             | 4                            | 1,18,824              | 2,259              | 76,799                                                          | 3,826                                                       |
| Jammu & Kashmir .. ..         | 1                            | 12,600                | ..                 | 306                                                             | ..                                                          |
| <b>Total .. ..</b>            | <b>519</b>                   | <b>1,59,97,016</b>    | <b>2,09,005</b>    | <b>7,80,800</b>                                                 | <b>4,36,396</b>                                             |

\* The No. of textile mills as of Sept. 1966 was 577 with about 17 million spindles and about two lakh looms.



## PRODUCTION

The actual production of yarn and cloth by the mills sector is as follows:—

| Year   | Yarn in 000 kg | Cloth in 000 metres |           |           |          |           |           |
|--------|----------------|---------------------|-----------|-----------|----------|-----------|-----------|
|        |                | Coarse              | Medium B  | Medium A  | Fine     | Superfine | Total     |
| 1961.. | 8,62,294       | 7,90,162            | 15,27,564 | 19,86,345 | 1,79,325 | 2,18,046  | 47,01,442 |
| 1962.. | 8,59,563       | 7,60,778            | 14,03,866 | 19,46,346 | 1,96,660 | 2,52,604  | 45,60,254 |
| 1963.. | 8,92,574       | 8,09,750            | 13,20,991 | 18,07,914 | 2,04,257 | 2,79,945  | 44,22,857 |
| 1964.. | 9,64,819       | 8,68,474            | 14,75,272 | 18,07,974 | 1,95,035 | 3,06,754  | 46,53,509 |
| 1965.. | 9,39,236       | 8,02,623            | 14,04,025 | 18,40,351 | 2,19,540 | 3,20,927  | 45,87,466 |

The production of cotton yarn in million kilograms, cloth yarn in million metres, and Stock position — sold and unsold — in lakh bales from Aug. 1965 to Jan. 1966 are given in the following table:

|                   | Production       |               | Composite mills stock (lakh bales) |        |
|-------------------|------------------|---------------|------------------------------------|--------|
|                   | Million kilogram | Million metre | Sold                               | Unsold |
| August 1965 ..    | 79               | 386           | 1.92                               | 1.94   |
| September 1965 .. | 78               | 379           | 1.99                               | 2.23   |
| October 1965 ..   | 70               | 340           | 2.02                               | 2.27   |
| November 1965 ..  | 75               | 368           | 1.90                               | 2.19   |
| December 1965 ..  | 77               | 377           | 1.77                               | 1.95   |
| January 1966 ..   | 68               | 325           | 1.61                               | 1.69   |

The total production of mill-made cloth in January-Dec. 1965, touched 4,587 million metres showing a shortfall of 67 million metres over the output of 4,654 million metres in the last year.

The total production of yarn in the year 1965 was 939 million kgs. compared to 965 million kgs. in the year 1964.

The total production of cotton cloth by all the sectors in India during 1965 was about 7,643 million metres. Of this the mill sector accounted for 4,587 million metres and the decentralised sector for 3,056 million metres.

The exports of cotton textiles produced by the mills in 1965 works out to 500 million metres fetching foreign exchange to the extent of 4,676 lakhs of rupees.

In the production of mill-made cloth, Maharashtra leads other States. Maharashtra accounted for about 1,565 million metres in 1965 out of a total output of 4,587 million metres.

The production figures for different States during the year 1965 are as follows: (Figures are in million metres):

Andhra Pradesh 34; Bihar 1.6; Gujarat 1,378; Kerala 19; Madhya Pradesh 380; Madras 151; Maharashtra 1,565; Mysore 94; Orissa 36; Punjab 76; Rajasthan 66; Uttar Pradesh 328; West Bengal 244; Delhi 161; Pondicherry 52; Total 4,587.

During 1965 the cotton consumption by mills was 61.13 lakh bales of 180 kg. each of which, Indian cotton accounted for 53.64 lakh bales and foreign cotton for 7.49 lakh bales.

Unsold stock of cloth with the mills at the end of 1965 was 292 million metres equivalent to about 13 days production. The stock shows a rise from the level of 227 million metres at the end of 1964.

**Third Shift Working:** The need for increased utilisation of the existing installed capacity as a means of ensuring greater production has been repeatedly impressed on the industry and it is somewhat gratifying that there has been a slow but steady increase in the number of spindles and looms worked in the second as well as in the third shifts. The daily average number of spindles

worked in each of the 3 shifts during 1962 to 1965 are as shown in the table given below.

| (In million) |           |           |           |  |
|--------------|-----------|-----------|-----------|--|
|              | 1st Shift | 2nd Shift | 3rd Shift |  |
| 1962 ..      | 12.4      | 12.2      | 8.0       |  |
| 1963 ..      | 12.6      | 12.5      | 8.7       |  |
| 1964 ..      | 13.2      | 13.2      | 10.1      |  |
| 1965 ..      | 13.3      | 13.4      | 10.0      |  |

So far as looms are concerned the shift-wise working is given in the table below:

| Daily average number of looms worked in |           |           |           |  |
|-----------------------------------------|-----------|-----------|-----------|--|
|                                         | 1st Shift | 2nd Shift | 3rd Shift |  |
| 1962 ..                                 | 1,80,429  | 1,75,021  | 51,906    |  |
| 1963 ..                                 | 1,78,854  | 1,73,815  | 51,488    |  |
| 1964 ..                                 | 1,84,025  | 1,80,834  | 61,859    |  |
| 1965 ..                                 | 1,84,822  | 1,80,326  | 61,599    |  |

A target of 78 lakh bales of cotton production under the 3rd Five Year Plan was recommended by the Cotton Forecast Sub-Committee of the Indian Central Cotton Committee.

## TEXTILE ENQUIRY COMMITTEE

The Report of the Committee was unanimous. It was signed on 15th July 1958 and submitted to the Government thereafter.

The composition of the Committee, the report as well as Government reaction are summarized in the 1959-60 edition of the Directory.

## IMPORTS AND EXPORTS

The following table gives the sea-borne export trend of all cloth:—

| Year                 | Twist and Yarn |               | Cloth        |               |
|----------------------|----------------|---------------|--------------|---------------|
|                      | Million Kgs.   | Rs. in crores | Million mts. | Rs. in crores |
| 1959 ( Jan. to Dec.) | 9.68           | 3.80          | 745.0        | 55.44         |
| 1960 ( Do. )         | 6.42           | 3.70          | 635.4        | 58.29         |
| 1961 ( Do. )         | 6.90           | 3.76          | 522.0        | 45.85         |
| 1962 ( Do. )         | 10.44          | 5.30          | 464.9        | 39.96         |
| 1963 ( Do. )         | 13.58          | 6.21          | 485.7        | 41.02         |
| 1964 ( Do. )         | 12.37          | 5.88          | 502.9        | 48.86         |
| 1965 ( Do. )         | 12.76          | 6.03          | 499.6        | 46.76         |

**Cotton Textiles Export Promotion Council:** The Cotton Textiles Export Promotion Council is an autonomous body incorporated under the Companies Act. The Council is a non-profit making

## N.I.D.C.'s WORKING GROUP FOR THE COTTON TEXTILE INDUSTRY

Several important proposals of the National Industrial Development Corporation's Working Group for the cotton textile industry, including the one calling for a "minimum level of modernisation of the industry," had been accepted by the Government, according to a resolution presented to Parliament on March 29, 1961.

The other proposals accepted by the Government included the establishment of five new units for the production of quality cloth for export the setting up of a suitable machinery to help resolve problems of rationalisation and compulsory scrapping of units where "rehabilitation is not worth-while."

Headed by the then Textile Commissioner Mr. D. S. Joshi, the Working Group, set up in August, 1959, by the N.I.D.C., comprised Mr. K. Thakersey, Mr. G. D. Somani, Mr. K. Sreenivasan, Mr. S. R. Vasavada, Mr. Ram Ratan Gupta, Mr. Trilokinath Sharma, Mr. N. Majumdar and Mr. K. R. Aravamuthan.

The cost of modernisation and rehabilitation in the textile industry in India is estimated to be about Rs. 180 crores according to the Working Group.

## CENTRAL WAGE BOARD

The first Central Wage Board for the cotton textile industry was set up in 1957 with Mr. Feroze Jeejeebhoy as Chairman.

The Government of India has appointed in August 1964, a second wage board for textile industry to consider further revision of the wage structure with headquarters in Hyderabad.

The Board consists of: **Chairman:** K. Bhimasankaran; **Members:** D. C. Kothari, Surettam P. Hatheesing (representing employers); G. Ramanujam, A. N. Buch (representing employees); Tulsidas Jadhav, M.P., and Prof. M. B. Desai (independent members).

## COTTON

The statistical position of cotton in India during the season 1964-65 is summed up in the following table:—

| (In lakh bales)                                               |    |    |       |                     |
|---------------------------------------------------------------|----|----|-------|---------------------|
| Stocks carried over from the previous year (Indian & Foreign) | .. | .. | 18.55 |                     |
| Actual production                                             | .. | .. | 54.98 |                     |
|                                                               |    |    |       | (Bales of 392 lbs.) |
| Total import                                                  | .. | .. | 8.17  |                     |
|                                                               |    |    |       | (180 kg.)           |
| Total consumption:—                                           |    |    |       |                     |
| Indian                                                        | .. | .. | 56.12 |                     |
|                                                               |    |    |       | (180 kg.)           |
| Foreign                                                       | .. | .. | 7.59  |                     |
|                                                               |    |    |       | (180 kg.)           |
| Total export                                                  | .. | .. | 2.39  |                     |
|                                                               |    |    |       | (180 kg.)           |

## HANDLOOM CLOTH

(See under "Cottage Industries").

## AMBAR CHARKHA

(See under "Cottage Industries").

organisation and was set up in 1954 for the promotion of exports of mill-made cotton yarn and piece-goods, cotton manufactures and all hosiery and ready-made garments.



## EXCISE DUTIES EFFECTIVE FROM 1ST MARCH 1966—PAISE PER SQ. METRE

|                                   | BASIC                |                          | Addl. Excise Duty | Handloom cess | Compounded Duty | Special Excise Duty | TOTAL                |                  |
|-----------------------------------|----------------------|--------------------------|-------------------|---------------|-----------------|---------------------|----------------------|------------------|
|                                   | For controlled cloth | For non-controlled cloth |                   |               |                 |                     | Non-controlled cloth | Controlled cloth |
| 1. SUPERFINE                      |                      |                          |                   |               |                 |                     |                      |                  |
| (a) Grey .. .. .                  | 22.0                 | 22.0                     | 15.5              | 1.9           | 10.0            | 2.0                 | 51.4                 | 51.4             |
| (b) Bld. Dyed & Ptd. .. .. .      | 32.0                 | 32.0                     | 15.5              | 1.9           | 10.0            | 2.0                 | 61.4                 | 61.4             |
| (c) Mercerized .. .. .            | 52.0                 | 52.0                     | 15.5              | 1.9           | 10.0            | 2.0                 | 81.4                 | 81.4             |
| (d) Shrink-proofed .. .. .        | 67.0                 | 67.0                     | 15.5              | 1.9           | 10.0            | 2.0                 | 96.4                 | 96.4             |
| 2. FINE                           |                      |                          |                   |               |                 |                     |                      |                  |
| (a) Grey .. .. .                  | 16.0                 | 16.0                     | 9.6               | 1.9           | 7.5             | 1.5                 | 36.5                 | 36.5             |
| (b) Bld. Dyed & Ptd. .. .. .      | 26.0                 | 26.0                     | 9.6               | 1.9           | 7.5             | 1.5                 | 46.5                 | 46.5             |
| (c) Mercd. .. .. .                | 46.0                 | 46.0                     | 9.6               | 1.9           | 7.5             | 1.5                 | 66.5                 | 66.5             |
| (d) Shrink-proofed .. .. .        | 61.0                 | 61.0                     | 9.6               | 1.9           | 7.5             | 1.5                 | 81.5                 | 81.5             |
| 3. MEDIUM—'A'                     |                      |                          |                   |               |                 |                     |                      |                  |
| (a) Grey .. .. .                  | 2.5                  | 5.0                      | 4.8               | 1.9           | 6.0             | 0.6                 | 18.3                 | 15.8             |
| (b) Bld. Dyed & Ptd. .. .. .      | 7.5                  | 15.0                     | 4.8               | 1.9           | 6.0             | 0.6                 | 28.3                 | 20.8             |
| (c) Mercd. .. .. .                | 17.5                 | 35.0                     | 4.8               | 1.9           | 6.0             | 0.6                 | 48.3                 | 30.8             |
| (d) Shrink-proofed .. .. .        | 25.0                 | 50.0                     | 4.8               | 1.9           | 6.0             | 0.6                 | 63.3                 | 38.3             |
| 4. MEDIUM—'B'                     |                      |                          |                   |               |                 |                     |                      |                  |
| (a) Grey .. .. .                  | 1.5                  | 3.0                      | 4.8               | 1.9           | 4.0             | 0.4                 | 14.1                 | 12.6             |
| (b) Bld. Dyed & Ptd. .. .. .      | 4.0                  | 8.0                      | 4.8               | 1.9           | 4.0             | 0.4                 | 19.1                 | 15.1             |
| (c) Mercd. .. .. .                | 9.0                  | 18.0                     | 4.8               | 1.9           | 4.0             | 0.4                 | 29.1                 | 20.1             |
| (d) Shrink-proofed .. .. .        | 16.5                 | 33.0                     | 4.8               | 1.9           | 4.0             | 0.4                 | 44.1                 | 27.6             |
| 5. COARSE                         |                      |                          |                   |               |                 |                     |                      |                  |
| (a) Grey .. .. .                  | 0.5                  | 1.0                      | 3.6               | 1.9           | 2.0             | 0.2                 | 8.7                  | 8.2              |
| (b) Bld. Dyed & Ptd. .. .. .      | 3.0                  | 6.0                      | 3.6               | 1.9           | 2.0             | 0.2                 | 13.7                 | 10.7             |
| (c) Mercd. .. .. .                | 8.0                  | 16.0                     | 3.6               | 1.9           | 2.0             | 0.2                 | 23.7                 | 15.7             |
| (d) Shrink-proofed .. .. .        | 15.5                 | 31.0                     | 3.6               | 1.9           | 2.0             | 0.2                 | 38.7                 | 23.2             |
| RATE FOR FENTS—PAISE PER KILOGRAM |                      |                          |                   |               |                 |                     |                      |                  |
| Superfine—Fents .. .. .           |                      | 66.1                     | 22.0              |               | 100.0           | 20.0                | 208.1                | 208.1            |
| Fine .. .. .                      |                      | 66.1                     | 22.0              |               | 75.0            | 15.0                | 178.1                | 178.1            |
| Medium—'A' } .. .. .              |                      | 11.0                     | 4.4               |               | 40.0            | 4.0                 | 59.4                 | 59.4             |
| Medium—'B' } .. .. .              |                      |                          |                   |               |                 |                     |                      |                  |
| Coarse .. .. .                    |                      | 11.0                     | 4.4               |               | 15.0            | 1.5                 | 31.9                 | 31.9             |

Processing Surcharges to be added to the above in appropriate cases.

|                                                                                          |  |  |  |  |  |  |  |  | Non-controlled cloth | Controlled cloth |
|------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|----------------------|------------------|
| (i) Bleached or/and dyed or/and printed :                                                |  |  |  |  |  |  |  |  |                      |                  |
| (a) Superfine/Fine .. .. .                                                               |  |  |  |  |  |  |  |  | 10.0                 | 10.0             |
| (b) Medium-A .. .. .                                                                     |  |  |  |  |  |  |  |  | 10.0                 | 5.0              |
| (c) Medium-B/Coarse .. .. .                                                              |  |  |  |  |  |  |  |  | 5.0                  | 2.5              |
| (ii) Mercerised or/and waterproofed (including rubberised) :                             |  |  |  |  |  |  |  |  |                      |                  |
| (a) Superfine/Fine .. .. .                                                               |  |  |  |  |  |  |  |  | 20.0                 | 20.0             |
| (b) Medium-A .. .. .                                                                     |  |  |  |  |  |  |  |  | 20.0                 | 10.0             |
| (c) Medium-B/Coarse .. .. .                                                              |  |  |  |  |  |  |  |  | 10.0                 | 5.0              |
| (iii) Processed in any other manner including shrink-proofed and/or organdie processed : |  |  |  |  |  |  |  |  |                      |                  |
| (a) Superfine/Fine .. .. .                                                               |  |  |  |  |  |  |  |  | 30.0                 | 30.0             |
| (b) Medium-A .. .. .                                                                     |  |  |  |  |  |  |  |  | 30.0                 | 15.0             |
| (c) Medium-B/Coarse .. .. .                                                              |  |  |  |  |  |  |  |  | 20.0                 | 10.0             |

## FIVE-YEAR PLANS

The following table summarises the programme of development of the whole industry as approved by the Planning Commission for the Five-Year Plans :—

|                                        | Unit     | 1952-53    | 1955-56    | 1960-61        | 1965-66      |
|----------------------------------------|----------|------------|------------|----------------|--------------|
| <b>Rated Capacity of Mill industry</b> |          |            |            |                |              |
| Spindles .. .. .                       | No.      | 11,175,283 | 12,051,209 | 13,621,209     | 17,621,209** |
| Yarn .. .. .                           | m. lb.   | 1,704.2    | 1,840      | 2,080          | 2,250        |
| Looms .. .. .                          | No.      | 195,849    | 202,901    | 2,20,901††     | 245,901*     |
| Cloth .. .. .                          | m. yd.   | 4,778.7    | 4,950      | 5,444          | 5,800        |
| <b>Actual Output—</b>                  |          |            |            |                |              |
| Yarn .. .. .                           | m. lb.   | 1,510      | 1,630      | 1,650          | —            |
| Mill Cloth .. .. .                     | m. yd.   | 4,600      | 5,094      | 5,444          | —            |
| Handloom Cloth .. .. .                 | "        | 1,300      | 1,753      | 3,000 to 3,500 | —            |
| <b>Exports—</b>                        |          |            |            |                |              |
| Yarn .. .. .                           | m. lb.   | —          | —          | —              | —            |
| Cloth .. .. .                          | m. yd.   | 1,000      | 873        | 1,000          | 850          |
| <b>Cotton Needed—</b>                  |          |            |            |                |              |
|                                        | m. bales | 4.5        | 4.9        | 6.1            | 7.0†         |

\* 25,000 automatic looms had been sanctioned for the Third Plan period.

† For cotton mills' consumption alone.

†† Including 18,000 automatic looms.

\*\* While four million additional spindles had been sanctioned for the Third Plan, licences for three million spindles had been given for immediate release. The question of the balance of one million spindles was expected to be considered in the third year of the Plan.



## TOBACCO INDUSTRY

INDIA is the third most important tobacco producing country next to U.S.A. and China and accounts for 8 to 9 per cent of the total world tobacco production. She is also the fourth biggest exporter of tobacco in the world.

It is estimated that about 9 lakhs of tobacco growers and about 6 lakhs of curers are engaged in the tobacco industry, besides several lakhs employed in grading, marketing and manufacturing. The annual value of the tobacco crop in the country at present is estimated to be about 58 to 62 crores of rupees. During 1964-65, it fetched to the national exchequer a revenue of about Rs. 96 crores by way of Central Excise Duty. It earned about Rs. 25.8 crores of foreign exchange during the same year. It also brings about 2 crores of rupees by way of agricultural cess on export, and import duty.

India produces several types of tobacco which fall under two botanical species namely *N. tabacum* and *N. rustica*, and are used for different purposes such as in the manufacture of cigarettes, bidis and for chewing, hookah, snuff, etc. The estimated production of tobacco in million kg. under different types during the last 3 years ending 1964-65 is given below :

| Types                              | 1962-63 | 1963-64 | 1964-65 |
|------------------------------------|---------|---------|---------|
| Virginia Tobacco                   | 84.3    | 104.4   | 110.5   |
| Bidi Tobacco                       | 102.5   | 86.0    | 90.0    |
| Snuff Tobacco ..                   | 5.5     | 4.5     | 5.5     |
| Cigar & Cheroot Tobacco ..         | 22.0    | 20.5    | 19.5    |
| Hookah Tobacco..                   | 43.0    | 36.0    | 37.0    |
| Chewing Tobacco                    | 66.0    | 62.0    | 62.0    |
| Others including Natu, Burley etc. | 42.5    | 45.0    | 45.2    |
| Total ..                           | 365.8   | 358.4   | 369.7   |

Andhra Pradesh, Gujarat, Mysore, Madras, Maharashtra, Uttar Pradesh, Bihar and West Bengal are the important tobacco growing States in the country. Virginia flue-cured tobacco is largely produced in Andhra Pradesh and to a small extent in Mysore and Gujarat, bidi tobacco in Gujarat, Mysore and Maharashtra States, chewing, hookah and snuff tobacco in Madras, Uttar Pradesh, Bihar and West Bengal while cigar and cheroot tobacco are mainly grown in Madras and Andhra Pradesh.

In view of the importance of tobacco to the nation, the Government of India in November, 1945 set up the erstwhile Indian Central Tobacco Committee for coordinating all measures for the improvement in production and marketing of tobacco in the country. For undertaking agricultural research, the Committee established the Central Tobacco Research Institute, Rajahmundry for fundamental research on all types of tobacco and regional research stations one each at Veda sandur, Madras State, for cigar, Cheroot and Chewing tobacco, at Pusa (Bihar) for Hookah and Chewing tobacco, at Dinhat (West Bengal) for Chewing, Wrapper and Hookah tobacco, at Guntur (Andhra Pradesh) for Cigarette and Natu tobacco and at Hunsur (Mysore State) for V.F.C. tobacco. Besides, the Committee also financed fully the Bidi Tobacco

Research Scheme, Anand and the Bidi Tobacco Research Station, Nipani and several other schemes with the State Governments of Uttar Pradesh, Punjab, Madras, Orissa, etc.

Since the inception of the Committee and the establishment of Research Institute/Research Stations, several findings of important practical value relating to manuring, topping, irrigation, improved varieties and control measures for pests and diseases have been recommended and adopted by the farmers.

Effective research work has been taken up in the States of Andhra Pradesh, Mysore, Madras, Gujarat, Bihar and Uttar Pradesh through demonstrations and training imparted to the tobacco growers in the proper methods of cultivation, curing, handling, grading etc. and through supplying pure seeds and seedlings. The all India cultivation of tobacco during 1964-65 with area and production respectively was 4,231,000 hectares and 3,69,700 kilograms.

With a view to locating new areas suitable for production of quality tobacco for export, small plot trials were laid out in the different States. On the basis of small trials conducted in several areas, trials on larger scale have been undertaken for flue-cured Virginia tobacco in Hosur area of Madras state, Thasra and Jabugam areas of Gujarat State, and for Burley tobacco in Bihar and Mysore States.

Based on the recommendations of the Second Joint Indo-American Team appointed in 1959, the Govt. of India have reorganised the agricultural research on all commodities including tobacco in the interest of consolidating the Central Agricultural Research Programme and assuring adequate coordination, to bring all Central Institutes under the full technical and administrative control of the Indian Council of Agricultural Research, the Commodity Committees have been abolished and the research work conducted by them integrated with the I.C.A.R.

There are 13 cigarette manufactories.

Export of tobacco is allowed without any restrictions. There is no export duty on tobacco meant for export, but an agricultural produce cess of half per cent *ad valorem* is collected on all tobacco exported outside India. The excise duty collected on tobacco is refunded if the tobacco is exported to foreign countries.

Statewise figures of tobacco production, are as follows :—

Production of Tobacco in thousand Kilograms.

| State                            | 1964-65 |
|----------------------------------|---------|
| Andhra Pradesh .. ..             | 175,900 |
| Bihar .. ..                      | 11,100  |
| Gujarat .. ..                    | 78,000  |
| Madras .. ..                     | 24,900  |
| Maharashtra .. ..                | 11,300  |
| Mysore .. ..                     | 21,000  |
| Uttar Pradesh .. ..              | 10,500  |
| West Bengal .. ..                | 12,700  |
| Other States & Union Territories | 24,300  |
| Total .. ..                      | 369,700 |

Source :—Directorate of Economics and Statistics, Ministry of Food, Agriculture, Community Development & Cooperation, New Delhi.

### IMPORTS AND EXPORTS OF RAW TOBACCO (BY SEA AND AIR)

|               | 1964-65              |                   |
|---------------|----------------------|-------------------|
|               | Quantity in '000 kg. | Value in '000 Rs. |
| Imports .. .. | 486                  | 39.35             |
| Exports .. .. | 78,116               | 2,424.75          |

During the calendar year 1964, exports of raw tobacco were of the order of 71,740,679 kg. valued at Rs. 22,37,99,467, out of which Flue-cured Virginia tobacco accounts for nearly 85 per cent in quantity and 90 per cent in value.

### EXPORTS OF RAW TOBACCO BY COUNTRY OF DESTINATION (BY SEA AND AIR)

| Countries         | 1964-65              |                   |
|-------------------|----------------------|-------------------|
|                   | Quantity in '000 kg. | Value in '000 Rs. |
| United Kingdom    | 17,486               | 10,01,95          |
| U.S.S.R. ..       | 36,826               | 8,61,87           |
| Aden .. ..        | 4,148                | 70,40             |
| Netherlands ..    | 1,154                | 23,25             |
| Belgium .. ..     | 1,730                | 36,38             |
| Fr. West Africa   | 984                  | 8,41              |
| Egypt .. ..       | ..                   | ..                |
| Irish Republic .. | ..                   | ..                |
| Hong Kong ..      | 262                  | 4,91              |

Source : Department of Commercial Intelligence and Statistics, Calcutta.

### PRODUCTION OF CIGARETTES

(in crore pieces)

| 1962  | 1963  | 1964  |
|-------|-------|-------|
| 4,095 | 4,074 | 4,621 |

Source :—Journal of Industry and Trade, Ministry of Commerce.



## ADMINISTRATION OF JUSTICE

THE Indian Union though a dual polity has no dual judiciary at all. The Supreme Court and the High Courts form one single integrated judiciary having jurisdiction and providing remedies in all cases arising under the constitutional law, the civil law or the criminal law. This is done in order to eliminate all diversities in remedial procedure.

The writs are now issued by the Supreme Court of India and the various High Courts in the territory of India. All laws which existed before independence continue to operate in India as before subject to adaptation and modification made therein. Article 372 of the Constitution provides *inter alia* that, subject to the other provisions of the Constitution all laws in force in the territory of India immediately before the commencement of the Constitution shall continue in force therein until altered, repealed or amended by a competent Legislature or other competent authority.

The indigenous law of India is personal and divisible with reference to the two great classes of the population, Hindu and Muslim.

### SUPREME COURT

Art. 124 of the Constitution provides for the establishment of a Supreme Court of India consisting of a Chief Justice of India and seven other judges. There is provision in law for the appointment in all of 13 other judges. At present there are 11 judges including the Chief Justice (see Act 17 of 1960). Every judge of the Supreme Court shall be appointed by the President and shall hold office until he attains the age of sixty-five years. In the course of appointment of a Judge the Chief Justice shall always be consulted. Only a citizen of India who has been for at least 5 years a judge of a High Court, or for 10 years an advocate of a High Court, or a person, who in the opinion of the President, is a distinguished jurist, is qualified to be appointed judge of the Supreme Court.

A judge of the Supreme Court is not liable to be removed from his office except by an order of the President passed after an address by each House of Parliament, supported by a majority of the total membership of that House, and by a majority of not less than two-thirds of the members of that House present and voting, has been presented to the President in the same session for such removal, on the ground of proved misbehaviour or incapacity. No person who has held office as a judge of the Supreme Court shall plead or act in any court or before any authority within the territory of India.

The Supreme Court is a court of record with all the powers of such a court including the power to punish for contempt. The seat of the Court is to be in Delhi or such other place as the Chief Justice with the approval of the President may from time to time appoint.

The Supreme Court has exclusive original jurisdiction in any dispute (a) between the Government of India and one or more States; (b) between Government of India and one or more States on the one side and one or more other States, on the other; (c) between two or more States, if and in so far as the dispute involves any question (whether of law or fact) on which the existence or extent of a legal right depends (Article 131).

The appellate jurisdiction of the Supreme Court extends over all appeals from any judgment, decree or final order of a High Court, in civil, criminal or other proceedings, if the High Court certifies that the case involves a substantial question of law as to the interpretation of the Constitution. If the High Court refuses such a certificate the Supreme Court may grant special leave to appeal in a proper case (Art. 136). An appeal shall also lie to the Supreme Court from a High Court in civil matters, when the amount or value of the subject matter in dispute is not less than Rs. 20,000 or the High Court certifies the

case to be a fit one for appeal to the Supreme Court (Art. 133).

In criminal matters under Art. 134 an appeal lies to the Supreme Court from any judgment, final order or sentence of a High Court, if the High Court has (a) on appeal reversed an order of acquittal of an accused person and sentenced him to death; or (b) has withdrawn for trial before itself any case from a subordinate court and has in such trial convicted the accused person and sentenced him to death; or (c) the High Court has certified that the case is a fit one for appeal.

For purposes of appeals to the Supreme Court, the Judicial Commissioners' Courts are to be considered as High Courts.

Under Art. 136 discretion is given to the Supreme Court to grant special leave to appeal from any judgment, decree, sentence or order, in any matter passed by any Court or Tribunal in the territory of India.

The Supreme Court has also power to review its own judgement (Art 137).

The jurisdiction and powers of the Federal Court under the existing law are also exercisable by the Supreme Court (Art. 135) including the advisory power to give its opinion on questions of law or fact referred to it by the President (Art. 143).

The law declared by the Supreme Court shall be binding on all courts in the territory of India excepting the Supreme Court itself.

The dual system in the Supreme Court was abolished with effect from January 26, 1955.

Parliament has the power to legislate on the constitution, organisation, jurisdiction and powers of the Supreme Court.

Article 32 of the Constitution guarantees the right to move the Supreme Court by appropriate proceedings for the enforcement of Fundamental Rights; and for the enforcement of such rights the Supreme Court has power to issue directions or orders or writs, including writs in the nature of Habeas Corpus, mandamus, prohibition, *quo warrant* and *Certiorari* whichever may be appropriate.

Power is given to Parliament to enlarge the jurisdiction of the Supreme Court by appropriate legislation (Art. 138).

The royal prerogative to grant pardons, reprieves, respites or remissions of punishments now resides in the President (Art. 72).

Under Art. 348, all proceedings in the Supreme Court and in every High Court in India and the authoritative text of all Bills and Acts of Parliament and the State Legislatures and of all Ordinances promulgated by the President or Governors and of all orders, rules and regulations issued under the Constitution or any law shall be in the English language. If this language is to be replaced by any other language, Parliament must legislate to that effect. Parliament has passed the Official Languages Act (No. 19 of 1963). Though the Act enables the Governor of a State to authorise the use of Hindi or the official language of the State in the High Court, it does not include any provision, with respect to the language in the Supreme Court.

All authorities, civil and criminal in the territory of India, have to act in aid of the Supreme Court (Art. 144). The independence of the judges of the Supreme Court, is secured by charging their salaries on the Consolidated Fund of India, and by prohibiting any discussion in the legislature on the conduct of the judges in their official capacity.

### HIGH COURTS

Every High Court is a court of record and has all powers of such court including the power to commit for contempt of itself.

Every judge of a High Court is appointed by the President after consultation with the Chief Justice of India, the Governor of the State and the Chief Justice of the particular High Court; and he holds office until he attains the age of sixty-two years.

A person is not qualified to be appointed a judge of a High Court unless he is a citizen of India and has either held judicial office or practised as an advocate for 10 years in any of the States.

A High Court judge is not liable to be removed from his office except in the manner provided in Art. 124 (4) for the removal of a judge of the Supreme Court of India.

There is provision in the Constitution for the appointment of additional or acting judges.

The High Courts have powers of superintendence over all subordinate Courts and tribunals within their respective jurisdiction.

Legislation affecting constitution and organisation of the High Courts can be passed by Parliament alone.

The Law Commission appointed by the Government of India has rejected the suggestion that the powers of the High Courts under Art. 226-227 should be curtailed.

The Commission has also recommended to the Government of India that a High Court should not have Benches. It has also expressed the view that the establishment of tribunals will be necessary in view of the ideal of a Welfare State.

Some of the other recommendations of the Commission were given in the previous edition of the Directory.

On an average more than 14,000 cases are filed in the High Courts of India every month.

The Central Government has made separate judicial arrangements in the Union Territories, Delhi, Goa, Daman and Diu, Himachal Pradesh, Manipur, Tripura, Andaman and Nicobar Islands and Laccadive, Minicoy and Amindivi Islands.

Under Article 241 of the Constitution, Parliament can by law constitute a High Court or a Union Territory or declare any court in any such territory to be a High Court for all or any purposes of the Constitution. Judicial Commissioner's Court in Goa, Daman and Diu is declared a High Court for certain purposes.

There is a proposal to constitute a Central High Court for taxation cases. This High Court will have benches at Delhi, Calcutta, Bombay and Madras.

### LOWER COURTS

The Code of Criminal Procedure provides for the constitution of inferior criminal courts styled as courts of session and courts of magistrates.

Every State, outside the towns of Madras, Bombay and Calcutta, is divided into sessions divisions consisting of one or more districts, and every sessions division has a court of session and a sessions judge, with assistants if need be. These stationary sessions courts are like the English Assizes, and are competent to try all accused persons duly committed, and to inflict any punishment authorised by law, but sentences of death are subject to confirmation by the highest court of criminal appeal in the State.

Magistrates' courts are of three classes with descending powers. Provision is made and largely utilised in the towns, for the appointment of honorary magistrates. In the towns of Madras, Bombay and Calcutta, Presidency Magistrates deal with magisterial cases and benches of Justices of the Peace or Honorary Magistrates dispose of the less important cases.



Next come the Subordinate Judges and Munsiffs, the extent of whose original jurisdiction varies in different parts of the country.

There are in addition a number of Courts of Small Causes, with jurisdiction to try money suits up to Rs. 500. In the towns of Madras, Bombay and Calcutta where the High Courts have original jurisdiction, Small Causes Courts dispose of money suits up to Rs. 3,000.

In Bombay and Madras there are also City Civil Courts. The City Civil Court in Bombay has a pecuniary jurisdiction of upto Rs. 25,000.

As Insolvency Courts the High Courts of Calcutta, Bombay and Madras have jurisdiction in the Presidency towns. In the mofussil similar powers are conferred on the District Courts by the Provincial Insolvency Act of 1920.

There are Coroners only for the Presidency Towns of Calcutta and Bombay. Elsewhere their duties are discharged by the ordinary staff of magistrates and police officers unaided by jurors.

### SPECIAL COURTS

Labour Courts and Industrial Courts now exist in most States.

A Labour Court consists of a single judge.

These Courts decide upon disputes regarding (a) propriety or legality of an order passed by an employer, (b) the application and interpretation of standing orders, (c) they also decide disputes referred to them by Government for arbitration. Legality or otherwise of strikes or lock-outs or closure, etc. is also decided by them.

An appeal against the judgment of the Labour Courts lies to the Industrial Court. This court has also original jurisdiction regarding matters referred to it by the Government or by representative Unions. It decides upon questions of law referred to it by Wage Boards and references regarding interpretation of the Act and the Rules. It has power of superintendence over Labour Courts.

The Industrial Disputes Act was passed by the Central Legislature in 1947 for the investigation and settlement of industrial disputes.

Industrial Tribunals were established under this Act. If the conciliation bodies set up under this Act fail to bring about a settlement, the matter is referred to the Industrial Tribunals.

Neither party to a dispute is entitled to be represented by a legal practitioner except with the consent of the other party and by leave of the Tribunal.

Industrial Tribunals are not permanent Courts. Whenever a matter is referred to the Government regarding an industrial dispute the Government appoints one or more persons as Industrial Tribunal to adjudicate upon the dispute.

The Industrial Disputes (Amendment and Miscellaneous Provisions) Act No. 36 of 1956 makes provision for the constitution of the following courts and tribunals:

1. Labour Courts to be constituted by the appropriate Government. A court is to consist of one judge only.

2. Industrial Tribunals. A Tribunal is to consist of one judge only. A person is not qualified to be a member of a Tribunal unless he has been judge of a High Court. The Tribunals will be constituted by the appropriate Government.

3. National Tribunals. These Tribunals will be constituted by the Central Government. Here also a tribunal is to consist of one judge only.

This Act came into force on 1st Sept., 1956.

The Industrial Disputes (Amendment) Act 41 of 1956 and the Dock Workers (Regulation of Employment) Act, 1948, are two other Acts with respect to labour cases.

Administration of labour laws is a divided responsibility. The Central Government has the following organisations for the administration of labour laws. (1) The Office of the Chief Labour Commissioner, New Delhi. (2) The Office of the Coal Mines Welfare Commissioner, Dhanbad. (3) The Office of the Coal Mines Provident Fund Commissioner, Dhanbad. (4) The Office of the Welfare Commissioner, Mica Mines Labour Welfare Fund, Dhanbad and Nellore. (5) The Office of the Chief Inspector of Mines, Dhanbad. (6) The Office of the Chief Adviser of Factories, New Delhi. (7) The Office of the Director-General, Employees' State Insurance Corporation, New Delhi. (8) The Office of the Controller of Emigrant Labour, Shillong. (9) The Office of the Director, Labour Bureau, Simla. (10) The Office of the Central Provident Fund Commissioner, New Delhi.

The State Governments also have their own organisations for the administration and enforcement of labour laws.

Juvenile offenders are tried by the Juvenile Courts.

Panchayat Courts (called Nyaya Panchayat) are in existence in many States. The members

of the Panchayat Court are elected by the Village Panchayat. Sections 30-44 of the Act lay down rules about the suits that may be tried and the suits that may not be tried by the Court. A Nyaya Panchayat cannot alter or revise its decision. An appeal against a decision of the Nyaya Panchayat lies to the District Judge.

Under the Defence of India Act (No. 51 of 1962) provision is made for the establishment of Special Tribunals (section 13) for trying offences under any rule made under section 3.

### LAW OFFICIALS

The Government of India have their own law colleague in the Law Minister of the Union Cabinet. All Government measures are drafted in his Ministry after their substance is decided upon by the administrative departments concerned.

Outside the Cabinet the principal law officers of the Government of India are the Attorney-General, Solicitor-General and Additional Solicitor-General appointed by the President. At Bombay and Calcutta the Government of India have their own law officers.

Each of the State Governments has its own Advocate-General.

In addition to the Advocate-General there is also a Government Pleader in many States. He usually belongs to the Appellate Side of the High Court while the Advocate-General belongs to the Original Side where the High Court has both Original and Appellate Sides. The Government Pleader is assisted by an Assistant Government Pleader and they look after criminal work.

The State Governments have their own law officers, in addition to the Advocate-General and the Government Pleader. The law officer is designated Remembrancer of Legal Affairs.

Sheriffs are attached to the High Courts of Bombay, Calcutta and Madras.

There are Official Assignees in three States—Maharashtra, W. Bengal and Madras. The appointment is made by the Chief Justice of the High Court concerned.

In addition to the Official Assignee, a Deputy Official Assignee may also be appointed. Another officer of the court is the Insolvency Registrar who may be vested with the powers mentioned in section 6 of the Presidency Towns Insolvency Act.

### HINDU LAW REFORM

As a result of increasing consciousness on the part of Indian women of their social and political status, there has in recent years been a move to revise and codify the somewhat vague and contradictory law governing the Hindu home, especially as it affects marriage, divorce, succession to property, etc.

The following are the various enactments in this connection.

In 1937 the Indian Legislature enacted the Hindu Women's Rights to Property Act. This Act, for the first time, gave to Hindu widows a right to claim a share in the husband's property and demand partition.

The Hindu Marriage Disabilities Removal Act of 1946, legalised marriages between Hindus belonging to the same Gotra or Pravara.

The Hindu Married Women's Right to Separate Residence and Maintenance Act of 1946 enabled a married Hindu woman to claim from her husband separate residence and maintenance on certain grounds.

The Hindu Marriage Validating Act, 1949 removed the caste-barriers from the sphere of marriages and validated even the Pratiloma marriages.

The Child Marriage Restraint (Amendment) Act of 1949 raises the marriage age of girls from 14 to 15 years.

The Madras Legislature passed the Madras Devadasis (Prevention of Dedication) Act in 1947. This Act puts an end to the unhealthy practice of dedicating Hindu women as 'devadasis' to Hindu deities.

Bombay Hindu Women's Right to Property Act (Extension to Agricultural Land) extended the application of the Hindu Women's Right to Property Act, 1938 to agricultural land also. A similar law was passed in Madras.

Though the Hindu Code Bill was dropped, the Government of India have passed several Acts affecting Hindu Law.

The Special Marriage Act of 1954 repeals the Special Marriage Act of 1872. Though the Act of 1954 is not a part of Hindu Code, it affects Hindus in so far as it provides for civil marriages both for Hindus and non-Hindus.

The Hindu Marriage Act of 1955 came into force on 18th May, 1955. The Act has repealed the following laws:—

1. The Hindu Marriage Disabilities Removal Act of 1946;
2. The Hindu Marriage Validity Act of 1949;
3. The Hindu Divorce Act of 1947 (Bombay Act);
4. The Prevention of Hindu Bigamous Marriage Act of 1946;
5. The Madras Hindu (Bigamy Prevention and Divorce) Act;

6. The Saurashtra Prevention of Hindu Bigamous Marriage Act;
7. The Saurashtra Hindu Divorce Act.

Under the Hindu Marriage Act 25 of 1955, monogamy has become a rule in Hindu Society. Divorce is allowed on certain grounds. Inter-caste marriages and Sagotra marriages are valid.

The Hindu Minority and Guardianship Act (32 of 1956) seeks to regularise the law regarding guardianship.

The Hindu Succession Act 29 of 1956 aims at simplifying the Hindu Law of succession. It does away with the distinction between the Mitakshara and Dayabhaga law of succession. However, special provision is made for regulating succession to the property of intestates governed by Marumakkattayam, Aliyasantana or Nambudri laws of inheritance. The Act creates two classes of heirs. Preferential heirs are included in Class I. The Act confers a right to a share on a daughter, a provision unknown to the previous Hindu Law.

The Hindu Succession Act has also made the following changes, which are revolutionary, in the old Hindu Law:

All property held by a Hindu woman is now her absolute property and there are no restrictions on her rights.



The heirs of a deceased Hindu are entitled to get a share even in the undivided interest in the Mitakshara coparcenary property. A Hindu can make a will even of his undivided interest in the coparcenary property.

The Hindu Adoptions and Maintenance Act 79 of 1956 was passed in December 1956. Under the Act the adoption of a son or a daughter is permitted. The consent of the wife is necessary

for adoption, which is now purely secular in character.

### SOCIAL REFORMS

Besides these laws, Parliament has passed two important Acts relating to social reform. The Suppression of Immoral Traffic in Women and Girls' Act (No. 104 of 1956) was passed in December 1956. This Act provides in pursuance

of the International Convention signed at New York on 9th May 1950 for the suppression of immoral traffic in women and girls. The Women's and Children's Institutions Licensing Act (No. 105 of 1956) was passed in December 1956. This Act provides for the licensing of such institutions and of matters relating to them.

Yet another Act, in social reform is the Probation of Offenders Act (20 of 1958).

### LAW COMMISSION REPORT

A Law Commission to revise the Statute Law of the country and suggest ways and means of improving the system of judicial administration was appointed on Aug. 5, 1955 with Mr. M. C. Setalvad as Chairman. The names of the other members are given in the 1961-62 Directory.

The Commission was to function in two sections. The first section consisting of the Chairman and the first three members was to deal mainly with the question of the reform of judicial administration. The second was to consist of the other seven members and was to deal with the revision of statute law. The two sections would however work in close co-operation under the direction of the Chairman.

While the section dealing with the revision of statute law submitted periodical reports, the one dealing with judicial administration submitted its full report sometime in the second half of 1958. It was laid on the table in Parliament on 25th Feb. 1959.

In Dec. 1958 the Law Commission was re-constituted for a period of three years with Mr. T. L. Venkatarama Iyer as Chairman to enable it to continue the work of statute revision. Names of other members are given in 1961-62 Directory.

In Dec. 1961, the Commission was again re-constituted with Mr. Justice J. L. Kapur as

Chairman. The Law Commission has till now (June 66) submitted to the Government altogether 30 reports.

In Dec. 1964 the Commission was again reconstituted with the following members: Mr. Justice J. L. Kapur (*Chairman*); Mr. S. K. Hiranandani, Mr. S. P. Sen-Verma, Mr. K. G. Datar (*Whole-time members*); Principal T. K. Tope, Mr. Rama Prasad Mukherjee (*Part-time members*).

A summary of the report of the Law Commission on judicial administration is given in the 1959-60 edition of the Directory.

## CONSTITUTION OF INDIA

THE present constitution of India was drawn up by a Constituent Assembly which first met on 9th December 1946. A draft constitution was published in February 1948. The constitution with amendments in the original draft was finally adopted on 26th November, 1949. It came into effect on 26th January 1950.

There were seventeen amendments to the constitution upto the end of May 1966. One more amendment the eighteenth amendment was passed in Aug. 1966.

A whole Schedule, the Ninth Schedule, was added by an amendment in 1951. This Schedule was considerably amended by the 17th amendment.

A major amendment was concerned with the re-formation of the constituent units of the Union. The States as re-formed came into existence on 1st Nov., 1956.

A smaller change came on May 1, 1960 when one of the States Bombay was divided into two States, Maharashtra and Gujarat. A proposal to divide the State of Punjab into two States has been passed in the Parliament.

### STATES

India, that is, Bharat is a sovereign democratic republic.

It is variously called the Republic of India, the Union of India, The Indian Union.

The Union is made up of 16 States† and 9 Union Territories.

The States with their capitals given in brackets are:

Andhra Pradesh (Hyderabad); Assam (Shillong); Bihar (Patna); Maharashtra (Bombay); Gujarat (Ahmedabad)\*; Kerala (Trivandrum); Madhya Pradesh (Bhopal); Madras (Madras); Mysore (Bangalore); Orissa (Bhubaneswar); Punjab (Chandigarh); Rajasthan (Jaipur); Uttar Pradesh (Lucknow); West Bengal (Calcutta); Nagaland (Kohima).

Jammu and Kashmir (Srinagar).

The 9 Union Territories with their capitals in brackets are:

Delhi (Delhi); Himachal Pradesh (Simla); Manipur (Imphal); Tripura (Agartala); Laccadive, Minicoy and Amindivi Islands (Kozhikode, provisional headquarters); Andaman and Nicobar Islands (Port Blair); Dadra

and Nagar Haveli (Silvassa); Pondicherry (Pondicherry); Goa, Diu & Daman (Panjim).

The States are administered by State Governments, the Union Territories by the Central Government. The Union Territories of Himachal Pradesh, Manipur, Tripura, Goa, Daman and Diu and Pondicherry have a legislature and a Council of Ministers, under an Act of Parliament. (Act 20 of 1963).

In addition to the States and Territories mentioned above there is one administrative unit—the North-East Frontier Agency, called NEFA for short.

The NEFA is administered by the Governor of Assam as agent of the Central Government.

### FEDERATION

The constitution of India is quasi-federal in nature.

The distribution of power between the Centre and the local administrations follows the accepted principle that subjects which for convenience and efficiency ought to be administered on an all-India basis are vested in the Union Government, while others (of the nation-building sort) which can be conveniently administered on a local basis are vested in the State Governments.

Thus, defence, foreign affairs, transport and communications, currency and coinage, banking, customs and export duties, and the administration of justice at the higher level are all Central subjects, while State powers include those over police, public health, education, agriculture, forests and so on.

There is a third group of subjects that fall betwixt and between such as trade and industry, economic and social planning, social security and insurance, labour welfare, price control, electricity, newspapers and books and vital statistics. On these subjects both the Centre and the State can freely legislate, it being understood that whenever there is conflict between Union and State legislation the Union laws will ordinarily prevail.

Three detailed lists of subjects are drawn up, the Union List, the State List and the Concurrent List, and the residuary power rests with the Union. That is to say, if at any time, a subject which does not figure in any of the three lists, comes up for consideration the power of dealing with it lies with the Union Government.

The three lists are given in the Seventh Schedule.

It may be added that the Union List has 97 entries, the State List 65 and the Concurrent List 47.

All elections are directed and controlled by an Election Commission. Elections to the Lok Sabha and the Legislative Assemblies of the States are on the basis of adult suffrage. Seats are reserved in the Lok Sabha for the Scheduled Castes and the Scheduled Tribes.

There is a Public Service Commission for the Union and also for the States. Two or more States may agree to have only one Commission for the group. Actually, every State has a Public Service Commission at present while the Union Public Service Commission operates for the Union Territories as well. Appointment of members of the Commission are made by the President or the Governor as the case may be. The Commissions conduct examinations for appointments to the services of the Union or the States. The Union Commission submits an annual report to the President.

Provision is made for removing differences between the various States by empowering the President to establish an Inter-State Council. Such a Council, however is not established as yet.

### FUNDAMENTAL RIGHTS

In the Indian Union the rights of Indian citizenship are given to 1. One who is born in India, 2. Either of whose parents was born in India, and 3. Who has been a resident of India for five years. Provision is also made for persons who are affected by the partition of the sub-continent.

Details were filled in by the Citizenship Act of 1955 which also provides for the termination and deprivation of citizenship under certain conditions. The Act also empowers Government to extend the rights of citizenship to any country in the Commonwealth and the Republic of Ireland on a reciprocal basis.

Certain fundamental rights are guaranteed to every citizen for the first time. All persons are equal before the law and no discrimination is made on grounds of religion, sex, caste, etc. All citizens have equal opportunities.

Freedom of speech and expression is guaranteed, and the right to hold meetings (without arms), to form unions and associations, to move freely in India and to reside in any part, to acquire property and to practise any profession are also assured to the citizens of India under the Constitution.

† It has been decided to divide one of the 16 States—the Punjab—into two States, the Punjabi Suba and Haryana Prant.

\* Temporary Capital.



Life and personal liberty are protected under the law, and there will not be punishment for the same offence more than once. Preventive detention is also forbidden except in certain cases.

Children under the age of 14 will not be allowed to be employed in factories and forced labour like *begar* is prohibited.

India is a secular State and as such there is freedom of conscience. Citizens are allowed to profess, practise and propagate any religion; and the State will not ordinarily interfere in religious questions. The minorities are assured of cultural and educational rights.

The State can acquire compulsorily property for public purposes, but compensation may be paid to the owner of the property concerned although questions relating to the quantum of compensation are not justiciable. But property may also be acquired without compensation in certain cases.

All titles, except military or academic, are also abolished, though honours for meritorious service may be conferred.

Untouchability is abolished.

These fundamental rights can be enforced by the Supreme Court and by High Courts which have the authority to issue prerogative writs such as *habeas corpus*, *certiorari*, *prohibition*, etc.

In respect of the Defence Forces, however, Parliament has power to legislate on these fundamental rights and restrict these rights as regards them.

It must also be pointed out that some of these fundamental rights can be suspended in case of emergency, and the remedies available for their enforcement may also be suspended by an order of the President. Accordingly as a result of the proclamation of emergency in October 1962, fundamental rights guaranteed by Article 19 are suspended and the President has also issued an order declaring that enforcement of rights under articles 14, 21 and 22 will remain suspended.

There are also certain Directive Principles in accordance with which the State has to direct its policy. These principles are of a recommendatory character and cannot be enforced in a court of law. However the State is expected to look upon them as a kind of touch-stone for its policy and action.

These principles include organization of village panchayats, provision for just and humane conditions of work, equal pay for equal work, unemployment benefit, assistance in old age and sickness, maternity relief, a uniform civil code for the citizens, provision for compulsory and free education of children and separation of judiciary from executive.

Other principles are the organization of agriculture and animal husbandry on modern and scientific lines, prohibition of intoxicating drinks and drugs, protection of national monuments, promotion of international peace and security and settlement of international disputes by arbitration.

There are special provisions to safeguard the interests of two groups—The Anglo-Indians and the Scheduled Castes and Tribes.

The Scheduled Castes and Tribes have special representation in the legislatures of the country upto 1970 (see separate articles on the Scheduled Castes and Tribes). In certain tribal areas there are autonomous administrative bodies.

As for Anglo-Indians, the President may nominate not more than two members of the Anglo-Indian community to the Lok Sabha if he thinks that the community is not adequately represented. Similar power is given to the Governor of a State. The Governor can nominate one member to the Legislative Assembly. In West Bengal, however, he can nominate not more than two.

The claims of the Scheduled Castes and the Scheduled Tribes are to be considered in making appointments to services, and for two years after the commencement of the Constitution the Anglo-Indians were to have the same proportion in the services as they had immediately before 15th August 1947. This reservation was to be progressively reduced by 10 per cent every two

years in such a way that it was to cease completely ten years after the commencement of the Constitution. Accordingly it ceased in 1960.

Originally all reservation including reservation of seats for Scheduled and Tribal classes were to cease ten years after the commencement of the Constitution.

In 1960 the constitution was amended—it was the eighth amendment to the constitution—to extend the period of reservation of seats in the legislatures for another ten years from 1960.

A special officer for the Scheduled Castes and the Scheduled Tribes has been appointed.

### UNION EXECUTIVE

The executive head of the Indian Union is the President. He is elected by the elected members of the Houses of Parliament and the Legislative Assemblies of all the States. His term of office is five years, and he is eligible for re-election. Only a person who is a citizen of India and has completed the age of thirty-five years is qualified to contest the election.

He is the Supreme Commander of the Armed Forces.

He has the power to grant pardons or remission of punishment.

The President is entitled to the use of an official residence without payment of rent, and a salary of Rs. 10,000 per month and allowances. Provision has also been made by an Act of Parliament for a pension of Rs. 15,000 per annum. He is also entitled to a maximum of Rs. 12,000 per annum for the sake of secretarial staff and other expenses.

The President has the power of summoning, proroguing and dissolving Parliament. At the commencement of each session he addresses both Houses of Parliament assembled together. He has the right of sending messages to Parliament and sending back a Bill presented to him for his assent. This power however can be used by him only once.

The President has legislative powers under certain circumstances. When neither of the Houses of Parliament is in session and the President is satisfied that circumstances exist which make immediate action necessary he may promulgate an ordinance.

Such ordinance must be put before both the Houses of Parliament and will cease to operate at the expiration of six weeks from the re-assembly of Parliament.

The President can also declare emergency if he is satisfied that the security of India or any part thereof is threatened either by war or internal disturbances when the legislature is in session. Such a proclamation would give additional powers to the Union executive and the Legislature.

Accordingly the President issued the proclamation of emergency in October 1962 as a result of the Chinese aggression.

The judges of the Supreme Court and the High Courts, the Attorney-General of India and

the Comptroller and Auditor-General of India are all appointed by the President. The heads of States, i.e., Governors are also appointed by the President.

The President has the power of appointing ambassadors abroad and receiving diplomatic representatives of foreign States.

The President places a number of annual reports before Parliament: the Annual Financial Statement, the report of the Auditor-General of India relating to the accounts of the Government of India, the annual report of the Union Public Services Commission and the report of the Special Officer for Minorities.

All executive action of the Government of India is taken in the name of the President and it is the duty of the Prime Minister to communicate to the President all decisions of the Council of Ministers.

Provision is made for the impeachment of the President, by Parliament, for violation of the Constitution. If such a resolution is passed by a majority of not less than two-thirds of the total membership, such a resolution has the effect of removing the President from office.

In the exercise of his functions, the President has the aid and advice of a Council of Ministers, with the Prime Minister at the head of it. The President appoints the Prime Minister and other Ministers are appointed on the advice of the Prime Minister.

The Council of Ministers is collectively responsible to the Lok Sabha (the Lower House). Every Minister must be a member of either House of Parliament, and he is required to take an oath of office and secrecy.

The salaries and allowances of Ministers are determined by Parliament.

There is a Vice-President of India, who is ex-officio Chairman of the Rajya Sabha (the Upper House). The Vice-President acts as President during a casual vacancy in the office of the President. He is elected by the members of both Houses of Parliament and his term of office is five years.

### UNION PARLIAMENT

The Parliament consists of the President and two Houses known as, as already mentioned, the Lok Sabha and the Rajya Sabha. It must meet at least twice a year. The maximum strength of the two Houses is fixed at 250 (12 nominated) for the Rajya Sabha and 525 for the Lok Sabha (not more than 500 from the States and 25 from the Territories).

In January 1965 the Rajya Sabha had a total strength of 238. Of these members 12 were nominated by the President.

In January 1965, the Lok Sabha had a total strength of 510. Of these 13 members were nominated. The fourth General Election to the Lok Sabha will be held in February 1967.

A new delimitation order was issued in March 1963. The allocation of seats for the next General Election would be as follows:—

| Name of the State         | Total No. of Seats | Scheduled Castes | Scheduled Tribes |
|---------------------------|--------------------|------------------|------------------|
| Andhra Pradesh .. .. .    | 43                 | 6                | 2                |
| Assam .. .. .             | 12                 | 1                | 2                |
| Bihar .. .. .             | 53                 | 7                | 5                |
| Gujarat .. .. .           | 22                 | 2                | 3                |
| Kerala .. .. .            | 18                 | 2                | Nil              |
| Madhya Pradesh .. .. .    | 36                 | 5                | 8                |
| Madras .. .. .            | 41                 | 7                | Nil              |
| Maharashtra .. .. .       | 44                 | 3                | 3                |
| Mysore .. .. .            | 26                 | 4                | Nil              |
| Orissa .. .. .            | 20                 | 3                | 5                |
| Punjab .. .. .            | 22                 | 5                | Nil              |
| Rajasthan .. .. .         | 22                 | 4                | 3                |
| Uttar Pradesh .. .. .     | 86                 | 18               | Nil              |
| West Bengal .. .. .       | 36                 | 8                | 2                |
| Jammu & Kashmir .. .. .   | 6                  | 1                | —                |
| Union Territories .. .. . | 21                 | —                | —                |
| Nominated .. .. .         | 2                  | —                | —                |
| <b>Total ..</b>           | <b>510</b>         | <b>76</b>        | <b>33</b>        |



A Delimitation Commission has been appointed to recommend the allotment of seats in the various Houses of Legislature and the House of the People.

The Rajya Sabha is elected by the elected members of the Legislative Assemblies of the States and of the Union Territories of Himachal Pradesh, Manipur, Tripura and Pondicherry, while the Lok Sabha is elected directly by the voters in the country.

The electoral college for the Territory of Delhi consists of persons who were members of the Delhi Legislative Assembly immediately before 1st November 1956.

A bill providing a Metropolitan Council for Delhi was introduced in Parliament in 1965 (Bill No. 72 of 1965). The Bill also provides for the administrator's Executive Council.

The elections to the Lok Sabha are based on adult suffrage and joint electorates. There is no reservation of seats for any group except Scheduled Castes and Scheduled Tribes.

The representatives of Jammu and Kashmir in the Lok Sabha are appointed by the President on the recommendation of the legislature of the State.

The Rajya Sabha is a permanent body with one-third of its members retiring every second year. The Vice-President of the Union is also the Chairman of the Rajya Sabha. The Rajya Sabha has also a Deputy Chairman.

The Lok Sabha has a duration of five years, ordinarily. There is a Speaker and a Deputy Speaker of the House both of whom are elected by its members.

All these posts carry a salary and allowances.

Under certain circumstances, the members can be disqualified and their seats declared vacant.

All legislation requires the consent of both Houses of Parliament, and every question is decided by a simple majority of those present and voting except on amendments to the constitution.

Money Bills can be introduced only in the Lok Sabha. The Rajya Sabha can only return a bill with its recommendations to the Lok Sabha within a period of fourteen days of its receipt. Bills passed by Parliament are submitted to the President for his assent. Only on such assent being given does the Bill become law.

A Bill normally goes through the following stages. It is first published. After introduction there is a general debate. Third, there is a clause-by-clause discussion. Then it is voted upon. A specially important measure may go before a select committee or a joint select committee. A Money Bill has a slightly different passage. After it has been passed in the Lok Sabha it is sent to the Rajya Sabha which has to return it within fourteen days with its recommendations which may be accepted or rejected.

The quorum is fixed at one-tenth of the membership of the House.

The language used in Parliament is either Hindi or English.

#### Distribution of Seats

The distribution of seats in the Rajya Sabha is as follows:

Andhra Pradesh 18; Assam 7; Bihar 22; Gujarat 11; Kerala 9; Madhya Pradesh 16; Madras 18; Maharashtra 19; Mysore 12; Orissa 10; Punjab 11; Rajasthan 10; Uttar Pradesh 34; West Bengal 16; Jammu and Kashmir 4; Delhi 3; Himachal Pradesh 2; Manipur 1; Pondicherry 1; Tripura 1; Nagaland 1; Total 226.

The President has nominated 12 members. Thus the total of elected and nominated members is 238.

The allocation of seats in the Lok Sabha is as follows:

Andhra Pradesh 43; Assam 12; Bihar 53; Gujarat 22; Kerala 18; Madhya Pradesh 36; Madras 41; Maharashtra 44; Mysore 26;

Orissa 20; Punjab 22; Rajasthan 22; Uttar Pradesh 86; West Bengal 36; Jammu and Kashmir 6; Delhi 5; Himachal Pradesh 4; Manipur 2; Tripura 2; Andaman and Nicobar Islands 1; Laccadive, Minicoy and Amindivi Islands 1; Nagaland 1; North-East Frontier Tract 1; Dadra & Nagar Haveli 1; Goa 2; Pondicherry 1; two Anglo-Indians are nominated.

As mentioned above the six members from Jammu and Kashmir are also nominated by the President on the recommendation of the State legislature.

Parliament's control over the administration is also exercised through a series of committees. The Committees can summon witnesses or require documents to be produced. There is a Committee on Privileges which sees to breaches of Parliamentary privilege, a Business Advisory Committee which helps the Ministry of Parliamentary Affairs in drawing up the programme for a session.

Two very important Committees are the Public Accounts Committee and the Estimates Committee. They are elected by the House of the People and Ministers are barred from membership. The Public Accounts Committee ensures that money is spent for the purpose for which Parliament has voted it, and criticises cases of waste, or extravagance. The Estimates Committee examines possibilities of economy and reform in financial administration and the manner in which estimates may be presented to Parliament.

The programme of work for any session is worked out by the Ministry of Parliamentary Affairs.

#### SUPREME COURT

(See under 'Administration of Justice'.)

#### STATE GOVERNMENT

The 16 States have Governors at their heads, the Union Territories Andaman & Nicobar Islands, Delhi, Manipur and Tripura have Chief Commissioners, Himachal Pradesh, Goa and Pondicherry have Lieutenant-Governors, Laccadive and Dadra have Administrators.

#### Zonal Councils

The States and Union Territories are grouped into geographical zones, and for each zone there is a Zonal Council, which is an advisory body.

These came into existence as part of the scheme relating to the reorganization of States embodied in the States Reorganization Act of 1956.

There are five zones: Northern zone (Punjab, Rajasthan, Kashmir, Delhi and Himachal Pradesh); Central zone (Uttar Pradesh and Madhya Pradesh); Eastern zone (Bihar, West Bengal, Orissa, Assam, Manipur and Tripura); Western zone (Gujarat, Maharashtra and Mysore); Southern zone (Andhra Pradesh, Madras, and Kerala and also Mysore as a permanent invitee).

(More details were given in the previous edition of the Directory).

#### States

The Governor of a State is appointed by the President. Executive power is vested in the Governor who is appointed for a term of five years, ordinarily. Only a citizen of India and one who has completed 35 years of age, is eligible for such an appointment.

The Governor, like the President, has power to grant pardon, etc. He will have a Council of Ministers to aid and advise him. The Governor also appoints an Advocate-General for the State.

#### Legislature

Ten States, Andhra Pradesh, Bihar, Kashmir, Madhya Pradesh, Madras, Maharashtra, Mysore, Punjab, Uttar Pradesh, West Bengal have two Houses of Legislature; the others, only one. The two Houses are called the Legislative Assembly (sometimes Vidhan Sabha) and the Legislative

Council (sometimes Vidhan Parishad). The former has a duration of five years, while the latter is a permanent body with one-third of the members retiring every second year.

The minimum strength of an Assembly is 60 and the maximum 500.

The minimum strength of a Council is 40, and the maximum one-third of the State Assembly.

An Assembly is elected directly on a basis of adult franchise with reservation of seats for the Scheduled Castes and Tribes. The composition of a Council is more complicated. About a third are elected by the Assembly, another third by local authorities (municipalities, district boards), about a twelfth by registered teachers in schools not lower than the secondary school standard, and about a twelfth by registered graduates of not less than three years' standing. And the rest are nominated by the Governor from among persons who have distinguished themselves in art, science, literature, co-operation and social service.

The Legislature must meet at least twice a year. While the Assembly consists of members who are directly elected from territorial constituencies, the Council consists of members nominated by the Governor, elected by the Assembly and of representatives of local bodies and special interests.

The legislature can frame its own rules of procedure but it is more or less the same as in Parliament. The quorum for a meeting is one-tenth of the membership or ten whichever is higher.

In case of disagreement, if the Bill is passed a second time after three months of its reference to the Council it automatically becomes law after one month of its passage in the lower house.

The State legislature too has its Committees like Parliament.

The number of seats (including nominated members) in the Legislative Assembly and the Legislative Council is as follows (the first figure shows the number of seats in the Assembly, and the second in the Council):

As on June 1, 1964: Andhra Pradesh: 301; 90; Assam: 105; —; Bihar: 319; 96; Gujarat: 154; —; Kashmir: 100; 36; Kerala: 127; —; Madhya Pradesh: 289; 90; Madras: 207; 63; Maharashtra: 265; 78; Mysore: 209; 63; Nagaland: 46; —; Orissa: 140; —; Punjab: 154; 51; Rajasthan: 176; —; Uttar Pradesh: 430; 108; West Bengal: 256; 75.

The total number of seats in the Vidhan Sabha of Himachal Pradesh is 43, Legislative Assembly of Manipur 30 and of Tripura 30. The number of seats in the Pondicherry Legislative Assembly is 30. Goa Legislative Assembly 30.

About the Kashmir Assembly it may be mentioned that 25 seats are now vacant waiting to be filled in by members from that part of Kashmir now under occupation by Pakistan troops.

The effective strength of the Assembly is 75.

The right of summoning, proroguing and dissolving the legislature is vested in the Governor, who addresses the legislature at the commencement of each session.

Like the Parliament there is a Speaker, a Deputy Speaker, a Chairman and a Deputy Chairman for the Legislative Assembly and the Legislative Council respectively. These officers of the legislatures are entitled to salary and allowances.

The language in the legislature can be either Hindi or English or any other language allowed by the Speaker.

The State Legislatures cannot discuss the conduct of any judge of the Supreme Court or of a High Court in the discharge of his duties.

As the Governor is a part of the legislature, he has certain legislative powers. He can promulgate ordinances during the recess of the legislature; such ordinances must be placed before the legislature and cease to operate at the expiration of six weeks from the reassembly of the legislature.



The salary of the Governor is Rs. 5,500 per month and he is also entitled to certain allowances.

If the government of a State cannot be carried on in accordance with the provisions of the Constitution, and the Governor makes a report to that effect to the President, the President may by proclamation assume to himself all or any of the functions of the Government of the State. He may also declare that the powers of the State legislatures shall be exercised by Parliament, and suspend any provision of the constitution relating to the State.

However, he cannot assume to himself, or suspend any of the provisions of the Constitution relating to High Courts.

### UNION TERRITORIES

(See the earlier part in this article).

There are special provisions for Hill Areas of Manipur (Section 52).

The Act also provides for appointment of a Judicial Commissioner.

Provision is also made for introduction of President's rule in case of failure of constitutional machinery in the Union Territory.

There is a High Court for each State and a Judicial Commissioners' Court each for the Union Territories of Himachal Pradesh, Manipur, Tripura and Goa, Daman and Diu.

The salary of a Chief Justice of a State is Rs. 4,000, and of a High Court Judge Rs. 3,500.

The highest court for Delhi is the District Court. Appeals from here go to the Punjab High Court, a circuit bench of which sits in Delhi. There is a proposal to have a separate High Court for Delhi. For Andamans, the highest court is the Chief Commissioner's Court. Appeals go to the Calcutta High Court.

### OFFICIAL LANGUAGE

(See article on "Official Language Problem.")

### EMERGENCY PROVISIONS

If the President is satisfied that a grave emergency exists, and the security of India or any part thereof is threatened either by war or internal disturbance, he may make a declaration to that effect. Such proclamation must be approved by both the Houses of Parliament, before the expiration of two months, otherwise it ceases to operate at the end of that period. As a result of this proclamation Parliament will be authorised to legislate on items included in the State list and the President, to issue directions to the Governor. The President of India made a Proclamation of Emergency in October 1962 after the Chinese aggression.

The President may proclaim a failure of constitutional machinery in a State if he learns that the Government of the State cannot be carried on according to the provisions of the constitution. If this is done, President's rule will be introduced in the State.

This, however, would not be applicable to the functions of the High Courts. Somewhat similar provision is also made for financial emergency.

### AMENDMENT OF THE CONSTITUTION

For purposes of amendment the items are divided into three classes with a different procedure for each class.

For amendment of the provision with respect to the Supreme Court and the High Courts, the distribution of legislative powers between the Centre and the States, the representation of the States in Parliament, etc., the amendment must be passed by both the Houses of Parliament by a majority of the total membership of the House and by a majority of two-thirds of the members present and voting, and must further be ratified by the legislatures of not less than one-half of the States.

In other cases no reference to the State legislatures is necessary. Parliament by itself can amend the Constitution in the manner mentioned above. In some cases amendments can be effected even by a bare majority such as is required for the passing of any ordinary law.

There were eighteen amendments to the Constitution from the coming into force of the constitution on 26th January 1950 to the end of August 1966.

The Constitution (First Amendment) Act, 1951 aimed among other things at enabling the State to make special provision for the advancement of socially and educationally backward classes. It also gave the State broader powers to restrict freedom of speech and writing in the interests of friendly relations with foreign States, public order, decency, morality and in relation to defamation or incitement to an offence.

Two new articles were added after Art. 31 to save the laws relating to the acquisition of estates and the validation of certain land reforms, Acts and Regulations passed by certain States. These Acts were specified in an extra Schedule added to the list, the Ninth Schedule.

The Articles affected by the First Amendment were 15, 19, 85, 87, 174, 176, 341, 342, 372 and 375. It added two new Articles 31A and 31B and a new Schedule, the Ninth Schedule.

The object of the Constitution (Second Amendment) Act, 1952 was to make adjustments in the representation in the Lok Sabha consequent on the completion of the 1951 census. The Article affected was Article 81.

The Constitution (Third Amendment) Act, 1954 changed entry No. 33 in the Concurrent List in the Seventh Schedule by adding food-stuffs, cattle fodder, raw cotton and jute whose production and supply could be controlled by the Centre if necessary.

The Constitution (Fourth Amendment) Act, 1955 enables the State to acquire private property compulsorily for a public purpose and bars any reference about the quantum of compensation fixed by the legislature to a court of law. Also, the temporary taking over of private property in the public interest or to secure better management is excluded from the compensation clause. Laws providing for State monopolies are also saved from invalidation. Seven new entries were made to the Ninth Schedule.

The Articles affected were 31, 31A, 31(2) and 305.

The Constitution (Fifth Amendment) Act, 1955 merely fixed a time for State legislatures to give their opinion on Central laws affecting the area, boundary etc. of the State concerned. The Article affected was 3.

The Constitution (Sixth Amendment) Act, 1956 added a new entry in the Union List in the Seventh Schedule, thus giving the Centre authority to legislate on the taxes, on the sale and purchase of goods in the course of inter-State transactions.

The Constitution (Seventh Amendment) Act, 1956 dealt with a whole host of problems thrown up by the reorganisation of the States, such as the alteration of State boundaries, the creation of new States, the classification of certain areas as Union Territory, the allocation of seats in the Rajya Sabha, the provision of a bicameral legislature for certain States. Other points the Amendment dealt with are the original jurisdiction of the Supreme Court, the High Courts and safeguards for linguistic minorities.

Some articles affected were 1, 80, 81, 82, 131, 168, 216, 217, 220, 222, 224 and the First Schedule, and the Fourth Schedule. Four new Articles 290A, 350A and 350B and 372A were added.

The Constitution (Eighth Amendment) Act, 1959 is concerned with the representation of Scheduled Castes and Tribes and Anglo-Indians in Parliament and State legislatures. Article 334 of the Constitution lays down that the reservation of seats in these bodies should cease ten years after the commencement of the Constitution, that is, in 1960. The Amendment proposes that the reservation of seats for the Scheduled Castes and Tribes and the representation of Anglo-Indians by nomination should continue for a further period of ten years—till 1970.

Article 333 is also amended so that the number of members so nominated to a State legislature may be fixed—not more than two in West Bengal and not more than one elsewhere.

The Constitution (Ninth Amendment) Act, 1960, gives effect to the transfer of territories between India and Pakistan under the Nehru-Noon Agreement of 1958.

The Constitution (Tenth Amendment) Act amends the First Schedule to the Constitution of India for integration of the territory of Dadra and Nagar Haveli with the Union of India.

The Constitution (Eleventh Amendment) Act provides for a slightly new procedure for the election of the President and Vice-President.

The Constitution (Twelfth Amendment) Act incorporates Goa, Daman and Diu in India and designates it as Union Territory.

The Constitution (Thirteenth Amendment) Act introduces a new Art. 371A regarding the administration of the State of Nagaland.

The Constitution (Fourteenth Amendment) Act incorporates Pondicherry as a Union Territory.

The Constitution (Fifteenth Amendment) Act among other things raises the retirement age of judges from 60 to 62 and also amends the clause on disciplinary action against Government servants.

The Constitution (Sixteenth Amendment) Act. This Act amends Art. 19 with a view to conferring on the Government adequate powers for maintaining the integrity and sovereignty of the Union. Arts. 84 and 173 are also amended.

The Constitution (Seventeenth Amendment) Act amends Art. 31A by inserting an additional proviso after the existing proviso and the ninth schedule. Forty-four new Acts are added to the ninth schedule.

The Constitution (Eighteenth Amendment) Bill which would enable the linguistic reorganisation of the Punjab into a Punjabi-speaking State and a Hindi-speaking Haryana.



## LAWS OF 1964

**T**HE Indian Parliament placed on the Statute book altogether 55 Acts during the year 1964. It also passed the Constitution (Seventeenth) Amendment Act. The date mentioned against the Act indicates the date on which the corresponding Bill received the assent of the President.

1. The Appropriation (Railways) Act No. 1 of 1964 : 14th March 1964.

2. The Appropriation (vote on account) Act No. 2 of 1964 : 18th March 1964.

3. The Appropriation Act No. 3 of 1964 : 19th March 1964.

4. The Appropriation (Railways) No. 2 Act No. 4 of 1964 : 19th March 1964.

5. The Finance Act No. 5 of 1964 : 28th April 1964.

This Act gives effect to the financial proposals of the Government of India for the financial year 1964-65. The Act *inter alia* made certain categories of assesses liable to annuity deposit.

6. The Appropriation (No. 2) Act No. 6 of 1964 : 29th April 1964.

7. The Companies (Profits) Surtax Act No. 7 of 1964 : 2nd May 1964.

8. The Appropriation (No. 3) Act No. 8 of 1964 : 5th May 1964.

9. The Armed Forces (Special Powers) Continuance Act No. 9 of 1964 : 9th May 1964.

10. The Public Employment (Requirement as to Residence) Amendment Act No. 10 of 1964 : 9th May 1964.

This Act extends for a further period of five years domicile rules framed under section 3 in respect of the Telangana area of Andhra Pradesh or the Union Territories of Himachal Pradesh, Manipur or Tripura for appointment in subordinate services.

11. The Taxation Laws (Continuation and Validation of Recovery Proceedings) Act No. 11 of 1964 : 12th May 1964.

12. The Indian Railways (Amendment) Act No. 12 of 1964 : 12th May 1964.

13. The Drugs and Cosmetics (Amendment) Act No. 13 of 1964 : 12th May 1964.

The provisions of the Drugs and Cosmetics Act 1954 did not apply to medicines and substances exclusively used or prepared in accordance with the Ayurvedic or Unani system of medicine. This Act brings these drugs within the scope of the 1954 Act.

14. The Dakshina Bharat Hindi Prachar Sabha Act No. 14 of 1964 : 12th May 1964.

This Act declares the Dakshina Bharat Hindi Prachar Sabha to be an institution of national importance. It empowers the Sabha to grant degrees, diplomas and certificates for proficiency in Hindi.

15. The East Punjab Ayurvedic and Unani Practitioners (Delhi Amendment) Act No. 15 of 1964 : 12th May 1964.

16. The Goa, Daman and Diu Judicial Commissioners Court (Declaration as High Court) Act No. 16 of 1964 : 16th May 1964.

This Act declares the Judicial Commissioners Court for Goa, Daman and Diu to be a High Court for certain purposes.

It provides for appeals to the supreme court under the provisions of Articles 132 or 133 or 134.

17. The Indian Coinage (Amendment) Act No. 17 of 1964 : 16th May 1964.

18. The Industrial Development Bank of India Act No. 18 of 1964 : 16th May 1964.

This Act establishes a new institution known as the Industrial Development Bank of India. It is a wholly-owned subsidiary of the Reserve Bank of India. This Bank will be able to provide finance for industries.

19. The Oil and Natural Gas Commission (Amendment) Act No. 19 of 1964 : 16th May 1964.

This Act substitutes a new section in place of old section 24 and empowers the Commission to acquire land for the purpose of carrying out its function under the Act. It further lays down that such acquisition shall be deemed to be for public purpose.

20. The Durgaha Khawaja Saheb (Amendment) Act No. 20 of 1964 : 16th May 1964.

21. The Advocates (Amendment) Act No. 21 of 1964 : 16th May 1964.

22. The Appropriation (No. 4) Act No. 22 of 1964 : 10th June 1964.

23. The Delhi (Delegation of Powers) Act No. 23 of 1964 : 16th June 1964.

24. The Indian Medical Council (Amendment) Act No. 24 of 1964 : 16th June 1964.

25. The Coir Industries (Amendment) Act No. 25 of 1964 : 16th June 1964.

26. The Salaries and Allowances of Members of Parliament (Amendment) Act No. 26 of 1964 : 20th September 1964.

This Act raises the salary of the Members of Parliament to Rs. 500 per month and daily allowance to Rs. 31 per day. It also entitles them to two return air journeys during a session of two months duration and one return air journey for a session of lesser duration where the members have their places of residence beyond 750 Kilometers.

27. The High Court Judges (Conditions of Service) Amendment Act No. 27 of 1964 : 30th September 1964.

28. The Legal Tender (Inscribed Notes) Act No. 28 of 1964 : 30th September 1964.

29. The Appropriation (No. 5) Act No. 29 of 1964 : 3rd October 1964.

30. The Kerala State Legislature (Delegation of Powers) Act No. 30 of 1964 : 5th October 1964.

This Act confers on the President of India the power of the Legislature of the State of Kerala to make laws.

31. The Direct Taxes (Amendment) Act No. 31 of 1964 : 6th October 1964.

32. The Companies (Amendment) Act No. 32 of 1964 : 9th October 1964.

This Act inserts a new section 635 D in the Companies Act.

33. The Representation of the People (Amendment) Act No. 33 of 1964 : 9th October 1964.

34. The Wakf (Amendment) Act No. 34 of 1964 : 10th October 1964.

This Act amends the Wakfs Act of 1954 in order to ensure better management of wakfs by mutawallis.

35. The State Bank of India (Amendment) Act No. 35 of 1964 : 10th October 1964.

36. The Industrial Disputes (Amendment) Act No. 36 of 1964 : 9th December 1964.

37. The Food Corporations Act No. 37 of 1964 : 10th December 1964.

This Act provides for the establishment of Food Corporations for the purpose of trading in food grains and food stuffs.

38. The Indian Trade Unions (Amendment) Act No. 38 of 1964 : 10th December 1964.

39. The Appropriation (No. 6) Act No. 39 of 1964 : 17th December 1964.

40. The Anti-Corruption Laws (Amendment) Act No. 40 of 1964 : 18th December 1964.

This Act amends the Indian Penal Code, the Code of Criminal Procedure, the Criminal Law Amendment Ordinance 1944, the Delhi Special Police Establishment Act 1946, the Prevention of Corruption Act 1947 and the Criminal Law Amendment Act 1952 for certain purposes.

41. The Mineral Oils (Additional Duties of Excise and Customs) Amendment Act No. 41 of 1964 : 18th December 1964.

42. The Kerala Appropriation Act No. 42 of 1964 : 20th December 1964.

43. The Slum Areas (Improvement and Clearance) Amendment Act No. 43 of 1964 : 20th December 1964.

44. The Hindu Marriage (Amendment) Act No. 44 of 1964 : 20th December 1964.

This Act amends section 13 of the Hindu Marriage Act by substituting new clauses (VIII) and (IX) in place of the old clauses.

45. The Provisional Collection of Taxes (Amendment) Act No. 45 of 1964 : 22nd December 1964.

46. The Wealth-Tax (Amendment) Act No. 46 of 1964 : 22nd December 1964.

47. The Essential Commodities (Amendment) Act No. 47 of 1964 : 24th December 1964.

48. The Official Trustees (Amendment) Act No. 48 of 1964 : 25th December 1964.

49. The Prevention of Food Adulteration (Amendment) Act No. 49 of 1964 : 25th December 1964.

50. The Appropriation (Railways) No. 3 Act No. 50 of 1964 : 25th December 1964.

51. The Indian Tariff (Amendment) Act No. 51 of 1964 : 28th December 1964.

52. The Repealing and Amending Act No. 52 of 1964 : 29th December 1964.

53. The Payment of Wages (Amendment) Act No. 53 of 1964 : 30th December 1964.

54. The Standards of Weights and Measures (Amendment) Act No. 54 of 1964 : 30th December 1964.

55. The Foreign Exchange Regulation (Amendment) Act No. 55 of 1964 : 30th December 1964.



# CHURCHES IN INDIA

## CATHOLIC CHURCH

India is divided into Dioceses and Prefectures Apostolic, which are grouped in 17 Ecclesiastical Provinces or Archdioceses, as follows:—Archdiocese of: 1. Agra with the Dioceses of Ajmer-Jaipur, Allahabad, Jhansi, Lucknow, Meerut and the Prefecture Apostolic of Banaras and Gorakhpur; 2. Bangalore with the Dioceses of Bellary, Mangalore, Mysore, Chikmagalur; 3. Bombay with the Dioceses of Ahmedabad, Belgaum, Poona; 4. Calcutta with the Dioceses of Dibrugarh, Jalpaiguri, Krishnagar, Bhagalpur, Patna, Dumka, Darjeeling, Shillong, Tezpur and the Prefectures Apostolic of Haflong; 5. Changanacherry (Syro-Malabar) with the Dioceses of Kottayam and Palai; 6. Delhi with the Dioceses of Simla-Chandigarh and the Prefectures Apostolic of Jammu-Kashmir and Jullundur; 7. Ernakulam (Syro-Malabar) with the Dioceses of Kothamangalam, Tellicherry and Trichur; 8. Goa and Daman; 9. Hyderabad with Dioceses of Guntur, Nellore, Vijayawada, Visakhapatnam and Warangal; 10. Madras-Mylapore with the Dioceses of Coimbatore, Ootacamund and Vellore; 11. Madurai with the Dioceses of Kottar, Tiruchirappalli and Tuticorin; 12. Nagpur with the Diocese of Amravati and the Prefecture Apostolic of Raipur and the Oriental Ordinariate of Chanda; 13. Pondicherry and Cuddalore with the Dioceses of Kumbakonam, Salem, and Tanjore; 14. Ranchi with the Dioceses of Cuttack, Jamshedpur and Sambalpur; 15. Trivandrum (Syro-Malankara) with the Diocese of Tiruvalla; 16. Verapoly with the Dioceses of Alleppey, Calicut, Cochin, Quilon, Trivandrum (Latin) and Vijayapuram; 17. Bhopal, with the Dioceses of Indore, Jabalpur, Raigarh-Ambikapur.

In all there are 17 Archdioceses (Metropolitan Sees), 55 Dioceses (Suffragan Sees) and 5 Prefectures Apostolic. At the head of an Ecclesiastical Province or Archdiocese there is an Archbishop; at the head of a Diocese there is a Bishop; and at the head of a Prefecture Apostolic there is a Prefect Apostolic.

**The Apostolic Internuncio:** His Excellency The Most Rev. Dr. James R. Knox (Apostolic Internunciature, Chanakya Puri, New Delhi 21).

**The Cardinal:** His Eminence Valerian Gracias, D.D., M.Agg. (Archbishop's House, Bombay 1).

## PROTESTANT CHURCHES

Below are given particulars about Protestant churches in India which may be of interest.

**Places of Worship:** 28,533; **Ordained Ministers:** National: 6,885; Foreign: 1,033; **Laymen:** National: 24,636; Foreign: 363; **Women Foreign Workers:** 1,426; **Christian Colleges:** 46; **High Schools:** 314; **Industrial Schools:** 42; **Hospitals:** 258; **Leprosy Institutions:** 49; **Tuberculosis Sanatoria:** 12; **Homes for Blind Deaf, etc.:** 8; **Homes for Women:** 15; **Orphanages:** 85; **Social & Welfare Organisations:** 87.

### Assemblies of God

**Assemblies of God in Great Britain and Ireland in India:** 25, Third Street, Tatabad, Coimbatore.

**Australian Assemblies of God Mission:** Mission Bungalow, Khed, Taluka Khed, Poona Dist.

**South India Assemblies of God:** Bethel Bible School, Punalur P.O., Kerala.

### Baptist Churches

**Baptist Union of India, Pakistan, Burma and Ceylon:** The union functions as the representative of the affiliated churches and missions in relation to the National Christian Council, the Baptist World Alliance and in other ways that call for concerted voice and action.

**Address:** Ramapatnam, Nellore Dist., Andhra Pradesh.

**Council of Baptist Churches in Northern India:** 44, Acharya Jagadish Bose Road, P.O., Park Street, Calcutta-16.

**Baptist Union of North India:** Collier Memorial Hostel, Bankipore, Patna.

**Bengal Baptist Union:** 95-A, Elliott Road, Calcutta-16.

**South Mizo Presbytery, Assam (Zo Ram Baptist Church):** Baptist Mission, Lungbh, Mizo Dist., Assam.

**Utkal Christian Church Central Council:** Madhusudhan Road, Cuttack, Orissa.

**United Christian Missionary Society:** 336, Napier Town, Jabalpur, M.P.

**Samavesham of Telugu Baptist Churches:** C. A. M. Compound, Nellore, Nellore Dist., A.P.

**American Baptist Telugu Mission:** C.A.M. High School Compound, Nellore, A.P.

**Christian Service Society:** Balasore, Orissa.

**Council of Baptist Churches in Assam and in Manipur:** A. B. Mission, Gauhati, Assam.

**Garo Baptist Union:** Bagpara P.O., Bongalgaon, Goalpara Dist., Assam.

**Mid Missions:** Makunda, Hatikhira P.O., Cachar Dist., Assam.

**North Bank Baptist Association:** Biswanathghat, Darrang, Assam.

**Baptist General Conference of America:** Baptist Mission, Tezpur, Assam.

**Convention of the Baptist Churches of the Northern Circars:** McLarin High School, Kakinada P.O., E. Godavari, Andhra Pradesh.

**Canadian Baptist Mission:** Kakinada, Andhra Pradesh.

**Goalpara Boro Baptist Church Union:** Bengtol P.O., via Bongalgaon, Dist. Goalpara, Assam.

**North Goalpara Garo Baptist Union:** P.O. Bongalgaon, Dist. Goalpara, Assam.

**Australian Baptist Foreign Mission Inc.:** Bongalgaon, Goalpara Dist., Assam.

**Tripura Baptist Christian Union:** Arundhatinagar P.O., Agartala, Tripura.

**New Zealand Baptist Missionary Society:** Arundhatinagar, Agartala, Tripura.

**Central India Baptist Mission:** Ellichpur, P.O., Amravati.

**Freewill Baptist Mission:** Krishnaganj, Purnea Dist., Bihar.

**Strict Baptist Mission:** Morupatti, Mettupalayam, Tiruchirappally.

**Swedish Baptist Mission:** Padrauna, Deoria Dist., U.P.

**Christian & Missionary Alliance of India:** Akola, Maharashtra.

### Church of the Brethren

**First District Church of the Brethren:** Anklesvar, Broach District.

**Second District Church of the Brethren:** Ahwa, Dangs District.

**The Joint Council Church of the Brethren:** J. C. Office, Bulsar, Surat Dist.

**General Brotherhood Board, Church of the Brethren (U.S.A.):** Post Box 92, Bombay 1.

### Churches of Christ

**Conference of Churches of Christ in Western India:** P.O. Box 26, Baramati, Dt. Poona.

**Australian Churches of Christ Foreign Mission Board Inc.:** Shrigonda, Ahmednagar Dt.

**Convention of Churches of Christ:** Jabalpur P.O., M.P.

**Mandliyon Ki Pratinidhi Kamiti:** Nawa Bhandaria, Palamanu Dist., Bihar.

**United Christian Missionary Society:** B. D. 336, Napier Town, Jabalpur P.O., M.P.

**Churches of Christ in Great Britain and Ireland Missionary Committee:** Nawa Bhandaria, Palamanu District, Bihar.

**Kulpahar Church of Christ Mission:** Kulpahar, Hamirpur Dist., U.P.

## Churches of God

**American Churches of God Mission:** Ulubaria, Howrah District, W. Bengal.

**Church of God Mission (Orissa):** The Shelter, Cuttack, Orissa.

**Church of God in South India:** Grideepam, Chengannur, Kerala.

**Church of God, Autonomous Churches in Assam, W. Bengal and Orissa:** Goalapetty, Shillong, Assam.

**Church of God in India:** Mulakuzha, Chengannur, Kerala.

**Church of God:** P.B. 60, Coimbatore, Madras State.

**Open Bible Church of God:** Site No. 141, Tatabad, Coimbatore, Madras State.

## The Church of India, Pakistan, Burma & Ceylon

**Bishop's House,** 51, Chowringhee Road, Calcutta-16.

**Dioceses in India:** Assam (Bishop's Kutl, Shillong); Amritsar (Taylor Road, Amritsar, Punjab); Barrackpore (86, Middle Road, Barrackpore, W. Bengal); Bhagalpur (Bishop's House, P.O. Champnagar, Bhagalpur, Bihar); Bombay (S. John's House, Duxburylane, Colaba, Bombay 5); Calcutta (Bishop's House, 51, Chowringhee Road, Calcutta-16); Chota Nagpur (Bishop's Lodge, Ranchi 1, Bihar); Delhi (1, Church Lane, New Delhi); Lucknow (Bishop's House, 11, Mahatma Gandhi Road, Allahabad, U.P.); Nagpur (Cathedral House, Nagpur); Nasik (No. 1, Outram Road, Ahmednagar, Maharashtra); Nandyal (Bishop's House, Nandyal, Kurnool, Andhra Pradesh).

**Oxford Mission to Calcutta:** 111, Vivekananda Road, Calcutta-6.

**Cambridge Mission to Delhi:** 7, Court Lane, Delhi-6.

**Dublin University Mission to Chota Nagpur:** P.O. Box 5, Hazaribagh, Bihar.

**Old Church Chinese Mission & Old Church Hebrew Mission:** 11, Mission Row, Calcutta.

## The Church of South India

**The Synod Office, Cathedral, Madras-6.**

**Moderator and Bishop in Dornakal:** Most Rev. P. Solomon, B.D., Bishop's House, Dornakal, C. Rly.

**Dioceses:** Coimbatore (Diocesan Office, Coimbatore); Dornakal (Diocesan Office, Dornakal, Warangal Dist.); Jaffna (C.S.I. Araby, Vaddukoddai, Ceylon); Kanyakumari (C.S.I. Nagarcoil, Kanyakumari Dist.); Krishna and Godavari (Bishop's House, Eluru, W. Godavari Dist.); Madras (Diocesan Office, Cathedral P.O., Madras-6); Madurai and Ramnad (College Compound, Tallakulam, Madurai-2); Medak (Bishop's House, Medak, Andhra Pradesh); Mysore (2, Mission Road, Bangalore-2); Madhya Kerala (Bishop's House, Kottayam, Kerala); North Kerala (Diocesan Office, Shoranur, Kerala); Rayalseema (Cuddapah); Tiruchirappally-Tanjore (Diocesan Office, Puthur, Tiruchirappally); Tirunelveli (Palamcottah, Tirunelveli Dist.); South Kerala (Diocesan Office, Trivandrum 1, Kerala).

## Local Autonomous Churches

Throughout the country there are a large number of local churches, generally of a congregational order, which are fully autonomous.

This group consists of hundreds of local independent churches or assemblies on the simple N.T. pattern throughout India, having no common centralised set up but maintaining close fellowship with one another.

## Other Groups

Some of the other Independent Churches have been unified under two organisations:



(1) THE ALL INDIA FEDERATION OF NATIONAL CHURCHES. (2) THE FELLOWSHIP OF CHRIST IN INDIA—BHARAT CHRIST SANGH—in Northeast India.

### Lutheran Churches

**Federation of Evangelical Lutheran Churches in India:** is an expression of the spiritual unity of the Lutheran churches.

The Federation started in July 1953, a Theological College in Madras. This institution is named as *The Gurukul Lutheran Theological College and Research Institute*. It is established at Gurukul, Madras 10.

**Andhra Evangelical Lutheran Church:** Guntur, Andhra Pradesh.

**United Lutheran Church Mission:** Rajahmundry, Andhra Pradesh.

**Arcot Lutheran Church:** Tiruvannamalai, North Arcot Dist., Madras State.

**Northern Evangelical Lutheran Church:** Benagaria P.O., Santal Parganas, Bihar.

**Santal Mission of the Northern Churches:** Dumka P.O., Santal Parganas, Bihar.

**Evangelical Lutheran Church in Madhya Pradesh:** Saugor, M.P.

**Evangelical National Missionary Society of Stockholm:** Chindwara, M.P.

**Gossner Evangelical Lutheran Church:** Ranchi, Bihar.

**India Evangelical Lutheran Church:** Ambur, North Arcot Dist., Madras State.

**Jeypore Evangelical Lutheran Church:** Jeypore, Koraput Dist., Orissa.

**South Andhra Lutheran Church:** Nayudupet, Nellore Dist.

**American Lutheran Conference:** Pilar Chittoor Dt., Andhra Pradesh.

**Tamil Evangelical Lutheran Church:** Tranqualliar House, Tiruchirapalli 1.

**Church of Sweden Mission:** Margaret Cottage, Raja Street, Coimbatore 1.

### Elim Churches

**Elim Churches of India:** Dudhi, Mirzapur Dist., U.P.

**Elim Church (New Zealand):** Karmala P.O., Sholapur Dist.

**The Evangelical Alliance Mission:** Parola, Jalgaon.

### Mennonite Churches

**Mennonite Church in India:** Dhamtari P.O., Raipur District, M.P.

**Telugu Mennonite Brethren Convention and American Mennonite Brethren Mission:** Shamshabad, Hyderabad Dist., Andhra.

**Mennonite Brethren Churches of North America:** Medical Centre, Jadcherla, Andhra Pradesh.

**General Conference Mennonite Church:** Jagdeeshpur P.O., via Mahasamund, Raipur Dist., M.P.

**Danish Missionary Society:** Gunupur, Koraput Dist., Orissa.

### The Methodist Church

**The Methodist Church of North India:** P.O. Garh-Raipur, Bankura Dist., W. Bengal.

**Methodist Missionary Society:** Wesley House, 62, The Causeway, Bombay-1.

**Methodist Overseas Mission:** Azamgarh, U.P.

**The Methodist Church in Southern Asia:** Robinson Memorial, Sankli Street, Byculla, Bombay; Inter Mission Business Office, P.O. 92, Bombay-1.

**Wesleyan Methodist Church, India Conference:** Pardi, Surat Dist.

**Wesleyan Methodist Church of America Missionary Society:** Pardi, Surat Dist.

**Free Methodist Church of North America, General Missionary Board:** Garden Bungalow, Yeotmal.

### Pentecostal Churches

**Ceylon Pentecostal Mission:** 48, Main Road, Royapuram, Madras.

**India Christian Assemblies (Finnish Pentecostal Mission):** Chhllakalapudi, Krishna Dist.

**Indian Pentecostal Church of God:** The Indian Pentecostal Church of God is a group of indigenous independent churches established since 1924 in several parts of India and having fellowship with one another.

**Address:** Faith Home, Vijayawada 2, Andhra. **Maisihi Mandli (Autonomous and Indigenous Church):** Dehra Dun, U.P.

**Pentecostal Holiness Church:** Madhupur, Santal Parganas, Bihar.

**Swedish Free Mission:** 25, New Cantt. Road, Dehra Dun, U.P.

**United Pentecostal Church:** Box 347, Kanpur, U.P.

### The Presbyterian Church

**Commission on Ecumenical Mission and Relations of the United Presbyterian Church in the U.S.A.:** "Lowrison", 51, Rajpur Road, Dehra Dun, U.P. & C.O. Inter Mission Business Office, P.O. 92, Bombay 1.

**Bible Presbyterian Church of India:** Box 347, Kanpur, U.P.

**Independent Board for Presbyterian Mission:** Box 347, Kanpur, U.P.

**Canadian Presbyterian Mission:** Amkhut, via Dohad, M.P.

**Reformed Presbyterian Mission:** Roorkee, U.P.

**Presbyterian Church of Ireland Foreign Mission:** I. P. Mission, Parantij, Sabarkantha Dist.

**Presbyterian Church of Wales Foreign Mission:** Theological College, Cherrapunji, Assam.

**Church of Moravian Brethren:** Leh-Ladakh, Kashmir.

**Presbyterian Church of New Zealand Mission:** Committee, U.N.C.I. Compound, Ferozepur Cantt., Punjab.

### Seventh Day Adventist Church

(Salisbury Park, Poona).

See under 'Christian Missions' for detailed note.

### Syrian and Armenian Churches

**The Apostolic Holy Church of Armenia:** The church of the first nation to become Christian. Efforts to evangelise date from A.D. 34 (Thaddeus and Bartholomew). The *See of Edgmatzen* (near Eravan) dates from A.D. 300. In Calcutta the oldest church belongs to the Armenians—The *Holi Church of Nazareth* (1704); there are a college and Girls' High School also. Other churches in India are in Bombay, Surat, Saldabad, Madras, Chinsurah and Agra.

**Apostolic Legation of the Holy See of Antioch in Malabar:** Omallur, Kaipattur P.O., Kerala.

**Chaldean Syrian Church:** Church of the East, Trichur, Kerala State.

**Mar Thoma Syrian Church:** Sabha Office, P.O. Thiruvalla, Kerala State.

**Mar Thoma Syrian Christian Evangelic Association of Malabar:** Thiruvalla, Kerala.

**The Orthodox Syrian Church of Malabar:** Kottayam, Kerala State.

**Malabar Independent Syrian Church:** Thoshiyoor, Kottapadi, S. Malabar, Kerala State.

**Malankara Syrian Knanaya Diocese:** Mar Ephraim Seminary, Chingavanam P.O., Kerala.

### United Basel Mission Church

**Address:** Balmatta, Mangalore-1.

### The United Church of Northern India

**Head Quarters:** 41, Red Cross Road, Civil Lines, Nagpur-1.

The United Church of Northern India was organised in 1924 from the union of the Presbyterian Church and the Congregational Church in Northern India.

**Moderator:**—The Rt. Rev. Dr. Gurbachan Singh, Gass Memorial Centre, Raipur (Madhya Pradesh).

**Vice-Moderator:**—The Rev. P. S. Bhonsale, "Hillcrest", Satara (Maharashtra).

**Executive Secretary:**—The Rev. R. S. Bhandare, 41, Red Cross Road, Civil Lines, Nagpur-1. "Hillcrest", Satara (Maharashtra).

## PORTS

**THIRD** Plan allotment for major and minor ports were Rs. 75 crores and Rs. 6.5 crores respectively.

There are eight major ports in India, 21 intermediate ports and 144 working minor ports. Mangalore and Tuticorin are being developed as major ports.

Technically a major port is one which is capable of taking in ocean-going steamers with a registered tonnage of 4,000 or more and berth them along wharves.

The eight major ports are Bombay, Calcutta, Cochin, Kandla, Madras, Marmugao, Paradip and Visakhapatnam.

State-wise distribution of intermediate ports and the number of minor ports respectively are:

**MYSOOR:** Karwar and Mangalore and 10 minor ports.

**MADRAS:** Cuddalore, Nagapattinam and Tuticorin and seven minor ports.

**MAHARASHTRA:** Ratnagiri and Redi, and 47 minor ports.

**GUJARAT:** Okha, Porbander, Bhavnagar, Navlakhi, Bedi, Veraval, Broach, Mandvi, Sikka and Surat, and 40 minor ports.

**Kerala:** Alleppey and Kozhikode, and nine minor ports.

**ORISSA:** There is one minor port.

**ANDHRA PRADESH:** Masulipatam and Kaklana, and five minor ports.

**PONDICHERRY:** There is one minor port of Pondicherry only.

**ANDAMAN & NICOBAR ISLANDS:** There are 15 minor ports.

All the major ports with the exception of Paradip are administered by Port Trusts, which are statutory bodies. The Port of Paradip is administered by the Ministry of Transport and Aviation, Government of India.

The intermediate and minor ports are administered by State Governments.

**The National Harbour Board:** The Board which was set up in 1950 to advise the Central Government on matters of general policy relating to port management and development including their effects on industry, commerce, shipping, railways etc. so as to ensure integrated consideration of all important port matters, has been meeting once in every year.



## FIVE-YEAR PLANS

The capacity achieved at the end of the Second Plan was about 38 million tons as detailed below (in million tons):

Calcutta 12.16; Bombay 14.50; Madras 3.20; Cochin 3.25; Visakhapatnam 3.50; Kandla 1.60. The capacity of major ports including Paradip at the end of the Third Plan period has been estimated to be 60 m. tonnes.

The overall cost of the physical programme relating to major ports included in the Third Five Year Plan was about Rs. 175 crores including Rs. 30 crores for the development of a satellite dock system to Calcutta at Haldia, Rs. 14 crores for the development of Tuticorin into a major port and Rs. 15 crores for the development of Mangalore into a major port. But the financial ceiling for expenditure to be incurred during the Third Five Year Plan was Rs. 75 crores.

During 1964-65 the seven major ports had between themselves handled a total traffic of 48.4 m. tonnes. It is expected that at the end of the Fourth Plan the capacity of the major ports will be about 80 m. tonnes.

The schemes relating to major ports are making satisfactory progress.

(i) **Calcutta Port:** The work relating to the development of "B" Berth, K. G. Dock into a general Cargo Berth and conversion of "C" Berth into an Oil Berth has been completed. All the twelve berths in Dock No. 1, Kidderpore Docks, have been reconditioned. Two floating cranes, one of 30-ton and the other of 60-ton, have been acquired. A new bucket dredger "Ajoy" and a new suction dredger "Churni" have been commissioned. The reconditioning of the existing dredger "Gunga" has been completed. One Estuarine Dredger "Mohana" has been acquired. The building of a new tea warehouse has been completed. Two new pilot vessels, one grab dredger and two additional copper barges have also been delivered.

Considerable progress has been made in the detailed planning of the various facilities to be provided at the new docks at Haldia.

(ii) **Bombay Port:** The work relating to dock expansion scheme is in progress.

**Cruiser-Dock:** One of the most modern docks of its type and size in the East, this dry-dock is the first major project of the Naval Dockyard Expansion Scheme to be brought into use.

The Pir Pau oil jetty in Bombay is being modernised at a cost of Rs. 23 lakhs to help the movement of products from the Trombay oil refineries to storage installation at Sewri. The scheme is part of the Rs. 10 crore project to develop the oil terminal at Butcher Island.

(iii) **Madras Port:** The sixth-berth wet dock known as "Jawahar Dock" has been commissioned. A scheme for the installation of a new plant for mechanical handling of iron ore costing about Rs. 3.60 crores is under active consideration. The work relating to the preparation of detailed designs has been entrusted to an Indian firm.

(iv) **Visakhapatnam Port:** The programme for Visakhapatnam port provides for the completion of four additional berths, a lighterage wharf and the installation of an iron ore handling plant at the ore berths. The scheme estimated to cost Rs. 7 crores is in progress. The two ore berths have been commissioned. A mechanical iron ore handling plant has been installed.

(v) **Cochin Port:** All the 4 berths constructed at Ernakulam channel have been put into commission. The construction of a new oil jetty is in progress. A floating crane has been acquired. A fire float has been ordered for.

(vi) **Kandla Port:** The fifth cargo berth has been completed. The work relating to the sixth berth has been postponed for the present. A new dredger has been acquired.

(vii) **Mangalore and Tuticorin Ports:** Work relating to the development of these ports into major ports is making satisfactory progress.

(viii) **Haldia Port:** The preliminaries relating to the setting up of a satellite port at Haldia have been completed. The final project report is being drawn up.

(ix) **Mormugao Port:** A comprehensive project for expansion of facilities at Mormugao Port to handle iron-ore in bulk is under active consideration. Meanwhile, a dredger has been acquired.

(x) **Paradip Port:** The work relating to Paradip Port has been taken over by the Central Government from the Orissa State with effect from June 1, 1965. The Project is estimated to cost Rs. 20 crores. The harbour, which was inaugurated on 12th March, 1966, can accommodate 60,000-ton ships.

**Minor Ports:** A provision of Rs. 6.5 crores against the physical programme of Rs. 11.09 crores had been made for the development of minor ports in the Third Plan.

## LIGHTHOUSES

Lighthouses are divided into general and local according to the utility of a particular lighthouse to navigation. The superintendence and management of general lighthouses are vested in the Union Government while local lighthouses are managed by the local lighthouse authorities such as State Governments, Port Trusts, etc.

The Department of Lighthouses & Lightships is a self-supporting Department; its revenues being derived from the light dues levied on shipping under the provisions of the Indian Lighthouse Act, 1927.

A statutory body—the Central Advisory Committee for Lighthouses, appointed under the Indian Lighthouses Act, advises the Union Government on matters connected with the erection, additions, alterations, improvements, etc. of lighthouses.

There are 269 lighthouses, 8 lightvessels, 156 lightbuoys, 236 unlighted buoys, 233 beacons, 7 fog signals, 5 M. F. radio beacons, 2 harbour radars, 2 Decca navigator chain, 299 land marks; 716 other marks, making a total of 1,936 aids to navigation strewn over the coastline of approximately 4,340 miles including Andaman, Nicobar, Laccadive and Minicoy Islands.

**Fourth Five Year Plan:** The Planning Commission has tentatively allocated a sum of Rs. 6 crores for the development of aids to navigation during the 4th Plan Period. This includes also the expenditure on 3rd Plan carry-over Schemes. The new items included in the IVth plan comprise the construction of 45 new lighthouse towers and their ancillary buildings; purchase and installation of 45 optical equipments; establishment of one Decca Navigator Chain, two Radio Beacons, Four V.H.F. sets, a Fog Signal, a buoy, a buoy tender and a factory for manufacturing the equipment; provision of radar reflectors; and construction of workshop-cum-office building at Madras, office building at Jamnagar, residential and office accommodation at Port Blair, Buoy Yard at Port Blair, etc.

**Programme For The Year 1966-67.** (a) Establishment of new powerful lights at Savai Bet, Minicoy, Gopalpur, Chandrabagha, Landfall Island, Sir Hugh Rose Island, Androth Island, Kiltan, Diu Head, False Devi Point, Mangalore, Pudimadaka, Trivandrum, Cape Comorin, Narasapur, Perseverance Point, Manner's Strait, Car Nicobar and Darlapur; (b) Fog signal at Okha; (c) Improvement of Nagapattam, Tapti, Vengurla point and Piram Island Lighthouses; (d) Provision of lightvessels for Lushington Shoal and Perigee Rocks; (e) Provision of buoys at Goose and Siri Reefs (Lighted), Lushington Shoal and Wreck Marking Buoys for S. & K., Calcutta, Madras Lighthouse District; (f) Purchase of Motor Launches for Andaman and Car Nicobar Islands; and for Piram Island and a sailing craft for Navinal; (g) Purchase of V.H.F. sets for Sangor, False Point, Khanderi and Diu Head Lighthouses.

**Progress of Work During The Year 1965-66.** Capital and development works which were started in the previous years have been progressing satisfactorily.

The following major works have been completed: (1) Construction of a lighthouse tower, etc. at Coondapur; (2) Construction of foundations, etc. for the lighthouse tower at Landfall Island; (3) Construction of a tower, etc. at Tapti; (4) Construction of compound wall at Pulicat lighthouse; (5) Laying of buoys in the Mormugao Harbour and installation of lighting equipment on them; (6) Laying of deep sea tail fairway buoy and installation of lighting equipment on it at Sikka; (7) Laying of a Deep sea tail buoy at Gurur Shoal; (8) Installation of optical and fog signal equipments at Veraval lighthouse; (9) Installation of optical and fog signal equipments at Rajapur Bay Lighthouse; (10) Installation of optical equipment at Coondapur lighthouse; (11) Installation of optical equipment on the Mundra Port Beacon; (12) Installation of optical and fog signal equipments at Mithivirdi Lighthouse; (13) Installation of optical equipment on board Lushington Shoal Lightvessel; (14) Replacement of optical equipment on board Perigee lightvessel; (15) Manufacture of 7 nos. BTB-15 sets and 6 nos. 140 m/m equipment by the lighthouse workshops, Madras.

The following aids have been commissioned into service during the year 1965-66: (1) New light at Jakhu; (2) New light and fog signal at Rajapur Bay; (3) New light and fog signal at Navinal; (4) New main and auxiliary lights at Ratnagiri; (5) Fairway light buoy at Sikka; (6) New light at Mithivirdi; (7) New light at Coondapur; (8) New light at Mundra new port.

**Other Important Works in Progress.** (1) Construction of lighthouses at Cavalerio (Diu), False Devi Point, Trivandrum, Narasapur, Kiltan, Darlapur, Chandrabagha, Gopalpur, Nagapattam, Cape Comorin, Diu Head, Piram Island, etc.; (2) Installation of optical and Fog Signal equipment at Savai Bet, Radio Beacon at Vengurla Point, and optical equipment at Tapti.

**Lighthouse Tending Service M.V. 'Sagar-deep.'** The Lighthouse tender M.V. 'Sagar-deep' attended to the following works during 1965-66. (a) Recovery of Ranwara Shoal buoy; (b) Laying of deep sea tail buoy at Sikka; (c) Laying of deep sea tail buoy at Gurur Shoal; (d) Tending of the Veraval buoy; (e) Transporting the new Lushington Shoal lightvessel from Bombay to Bedi Port; (f) Transporting the moorings from Goa to Port Blair and laying the same there. (g) Search for the Meteorological Department's floating weather station (NOMAD) in the Bay of Bengal.

**Navigational aids in the Minor Ports of Mysore State:** At the instance of the Mysore State Government, the Central Lighthouse Department has undertaken the work of providing additional navigational aids at the ports of Karwar, Bhatkal, Malpe, Honavar, Belkeri and Coondapur. The civil engineering works are in progress and the lighting equipment therefore have been ordered from abroad.

**Lighthouse workshops:** The Lighthouse Workshops at Bombay, Madras, Calcutta, and Jamnagar continued to attend to the defects and repair works at various lighthouses. Besides carrying out the schedule of maintenance works, the Madras Lighthouse Workshop has completed manufacture of 6 nos 140 m/m equipments and 7 nos. IBTB-15 sets for the Ganga-Brahmaputra Water Transport Board, and also flashers required for the Androth Island Lighthouse.

**Optical Laboratory:** In addition to the research work on the various problems connected with lighthouse engineering, the equipments manufactured in the departmental workshops are being checked in the laboratory for their optical as well as other performances. Research on the atmospheric transmission factor for the various stations on the coastline is also in progress.

**Training centre:** A course of training for Assistant Lightkeepers was commenced in December 1965 at the Training Centre, Calcutta.

**Laying of Buoys in the Mormugao Harbour:** Four lightbuoys have been laid in the Mormugao Port to facilitate night navigation in the port.



## MAJOR PORTS

| Ports            | Receipts for<br>1964-65 | Expenditure for<br>1964-65 | No. of<br>passengers<br>embarked | No. of<br>passengers<br>disembarked | Imports<br>in tonnes,<br>1964-65 | Exports<br>in tonnes,<br>1964-65 | Weight of cargo<br>in tonnes, handled<br>in 1964-65 |
|------------------|-------------------------|----------------------------|----------------------------------|-------------------------------------|----------------------------------|----------------------------------|-----------------------------------------------------|
|                  | Rs.                     | Rs.                        |                                  |                                     |                                  |                                  |                                                     |
| Bombay .. ..     | 17,39,81,000            | 15,93,71,000               | 4,33,000                         | 4,45,000                            | 12.13§                           | 5.21§                            | 17.34§                                              |
| Calcutta .. ..   | 18,39,42,697            | 18,34,28,404               | 6,460                            | 273                                 | 60,83,278                        | 49,79,955                        | 1,10,63,233                                         |
| Cochin .. ..     | 1,02,42,000             | 1,41,49,000                | 2,816                            | 3,221                               | 22,60,527†                       | 4,51,088†                        | 27,11,615                                           |
| Kandla @ .. ..   | 1,37,16,800             | 1,31,54,000                | 90,791                           | 83,821                              | —                                | 25,04,894‡                       | 25,04,894                                           |
| Madras .. ..     | 4,44,76,644             | 3,76,85,420                | 30,071                           | 64,110                              | 20,92,865                        | 14,05,283                        | 43,98,148                                           |
| Mormugao .. ..   | 1,45,74,909             | 73,94,439                  | 15,375                           | 22,386                              | 2,16,352                         | 64,03,356                        | 66,19,708                                           |
| Visakhapatnam .. | 2,53,15,564             | 2,50,07,132*               | 12,858**                         |                                     | 19,07,032                        | 20,68,547                        | 39,75,579                                           |

@ Figures are for 1965-66. § Million contributed towards capital expenditure.

† M. Tons. ‡ Imports and exports. \*\* No. of passengers embarked and disembarked.

\* This excludes a sum of Rs. 69,77,734

**Bombay:** The Port of Bombay has three wet docks—Prince's Dock, Victoria Dock and Alexandra Dock, and two dry docks, Merewether Dock and Hughes Dock. Trans-oceanic passenger traffic is mostly dealt with at the Ballard Pier. Coastal and Harbour Passenger traffic is dealt with at the Ferry Wharf. There are along the harbour front a number of bunders or open wharves and basins where the traffic carried by sailing vessels is handled.

There is now a Marine Oil Terminal at Butcher Island within the Bombay Harbour for the speedy discharge and loading of oil.

The Port maintains its own railway system.

The dock expansion scheme of the Bombay Port Trust provides for four new deep berths in the Alexandra dock basin and three medium-deep berths among the harbour wall.

The scheme, estimated to cost Rs. 13.25 crores, is expected to be completed in about four years time and will result in an addition of 1.5 to 2 million tonnes to the existing dock capacity.

The Bombay Port Trust has also undertaken another scheme to extend the Ballard Pier southwards by 750 feet to provide a second passenger berth at the mole station, equipped with modern passenger terminal buildings.

**Chairman:** L. M. Nadkarni, I.C.S.; **General Manager:** P. R. Subramanian; **Secretary:** S. D. Chittar.

**Calcutta:** There are two docks Kidderpore Docks and King George's Docks. There are five dry docks two in King George's Docks and three in Kidderpore Docks.

There are nine jetties with a total length of 4,735 feet of which only five namely Nos. 2, 3, 7, 8 and 9 are available for ocean-going steamers.

Anchorage are available at Saugor Roads, Haldia, Kalpi, Diamond Harbour, Royapur, Ulubaria, Buj Buj and Garden Reach of which Royapur, Ulubaria, Buj Buj and Garden Reach are available only for deep laden vessels outward bound or in emergency. The other anchorages are used by ships on passage to and from the Port.

There are petroleum wharves at Budge Budge about 14 miles below the entrances to the docks.

There are two tea warehouses, a grain and seeds depot at Kantapur, two sheds at Jhinjerapuri, A and B sheds at Kidderpore, the Fairlie, Clive, Canning and Strand Warehouses situated close to the Calcutta jetties.

Kidderpore Dock No. 2 has six coaling berths and there is one at Garden Reach Jetty.

The port can handle a sea-borne traffic of nearly 11 million tonnes a year without congestion or delay.

The chief exports from Calcutta are coal, tea, sugar, gunnies, bone and bone-meal, bunker oil, iron and steel manufactures, lac, scrap, ores and mica. The principal imports are salt, food-grains and flour, sulphur, tinplate, machinery, petroleum, iron and steel, metals other than iron and steel, lubricating oil, cement, soda, timber,

fertilisers, bricks, chemicals, oils, railway material.

Facilities exist for lightening food ships and topping up outward bound ships by using barges at Haldia Anchorage which is about 56½ miles downstream, during the fair weather season—November to February.

Communication between the various points in the Docks and jetties is maintained by the Commissioner's Railway.

The Port is administered by a Port Commission with jurisdiction under the Calcutta Port Act from Budge Budge to Konnagar.

**Chairman:** B. B. Ghosh; **Dy. Chairman:** S. K. Ghosh; **Secretary:** T. R. Raghupathi.

**Cochin:** The Port of Cochin is open for deep water traffic in the worst monsoons and provides a splendid anchorage at all times of the year. Any ship drawing upto 30 ft. draft can enter the port even in the roughest weather.

The Cochin Harbour Railway is connected with the Broad Gauge and Metre Gauge systems of the Southern Railway. Inside the Harbour there are 12 stream berths, 2 coal berths, 8 wharf berths, 1 Boat Train Pier Jetty with facilities for discharging and loading bunker oil and two tanker berths. One of the twelve stream berths is a swinging berth capable of accommodating vessels upto 565 ft. overall in length and 28 ft. draft. The tanker berths in the Ernakulam Channel provide facilities to discharge oil direct to the shore installations. The length of each of the wharves is 2,000 ft. and vessels of the above length can be accommodated at some of the berths.

The number of vessels excluding sailing vessels, which entered the port during 1963-64 was 1,356 with a tonnage of 46.50 lakhs against 1,330 vessels with a tonnage of 44.80 lakhs the previous year. Sailing vessels, which visited the port, numbered 113 with a tonnage of 13,000 against 131 with a tonnage of about 16,000 the previous year.

The principal imports are foodgrains, mineral oils, coal, cashewnuts, hardware, chemicals and manure. The principal exports are coir and coir products, tea, rubber, cashew kernels, coconuts, spices and ores.

**Chairman:** K. P. K. Menon, I.A.S.

**Kandla:** The major port of Kandla now has the following main facilities:—

A Cargo Jetty with (a) 2,700 ft. of quayage and designed depth of 32 ft. of water alongside at L.W.O.S.T. to accommodate four large size ships or five liberty type ocean-going vessels; (b) Three single storeyed transit sheds, each 450 ft. long and 140 ft. wide, having a floor area of 63,000 sq. ft. each and with a total storage capacity of about 15,000 tons of cargo; (c) Board Wharves served with three dual gauge (BG & MG) railway lines and roads; (d) 21 electric quay cranes, the most modern type, of 3 tons, 6 tons and 10 tons capacities with 80 ft. each; (e) Spacious open stacking grounds served with railway and road sidings; (f) Four double storeyed Warehouses, each with a floor area of

1,16,678 sq. ft. and storage capacity of 15,000 tons, with overbridge connections to the roofs of the transit sheds, and provided with modern cargo lifts, chutes and loading platforms; (g) 'Grinnell' automatic sprinkler and fire alarm system has been provided in one warehouse as a measure for protection against fire, for the storage of cotton cargo in the warehouse; (h) The construction of an additional 1,125 ft. of quay, designed for a depth of 32 ft. of water at L.W.O.S.T. has been completed except for the work of dredging alongside. This additional quay will be put into operation after the requisite dredging alongside has been done.

Three circular steel tanks of a total capacity of 650 tons for the storage of vegetable oils.

Fumigation arrangements for cotton to handle 1,000 bales per day.

Six Mooring Buoy berths consisting of 3 general cargo, one salt, one explosive and (one deep draft, mooring for vessels upto 36 ft. draft) for vessels to load or discharge cargo in stream by lighters.

An oil berth capable of taking oil tankers upto 16,000 tons dead weight, with two pipe lines of 16" and 12" diameters and a Booster Pumping Station connected with the oil installations situated 7 miles away.

A tidal basin 500' x 300' for lighters and sailing vessels provided with two transit sheds having 30,000 sq. ft. total floor area, stacking platforms, 4 quay cranes—two of three tonnes and one each of six and ten tonnes and a gantry crane of 60 tons capacity for handling heavy lifts. The Bunder is well served with railway tracks and roads.

A fishing jetty for fishing crafts and trawlers with a crane is ready.

DK-168 type Vac-u-vators for discharge of food-grains in bulk.

A floating dry dock capable of taking vessels upto 200 ft. length and 30 ft. wide for carrying out repairs.

The port is equipped with the latest version of a harbour radar having a range of 20 miles with V. H. F. radio telephones and a coastal wireless station with about 500 miles range.

A steam driven, twin screw stern well and side suction, pipe trailing cutter, suction, hopper dredger for the maintenance dredging in the harbour and approaches.

One fire float in addition to the shore fire fighting facilities has been added to the fleet of vessels maintained by the Kandla Port.

Three steam driven twin screw 900-1,000 N.P. shipping tugs for assisting ships in berthing and unberthing.

Two Harbour Towing Tugs, a fleet of cargo barges and launches for efficient working of Port.

Two most modern passenger jetties for ferry services.

Separate sheds for dangerous and inflammable goods are provided 700 ft. away from the warehouses.



A large stacking area covering 15½ acres for stacking the iron ore and served by Railway sidings and roads.

The port is connected to its hinterland at present by means of metre gauge, *via* Deesa-Palanpur and broad gauge rail link to Ahmedabad is under construction.

The construction of the National Highway connecting Kandla to Ahmedabad is in progress.

A Free Trade Zone has been established at Kandla.

The chief imports are mineral oil, foodgrains, maize, chemicals, fertilizers and machinery whereas the principal items of export are iron ore, zinc concentrate, iron scrap, salt, ethyl alcohol, cotton, sugarbones and bone meals.

The Port has handled 2.5 million tonnes of cargo during 1965-66. It is expected to handle 3 million tonnes of cargo per annum when fifth berth and third pipeline are commissioned and broad gauge line is ready.

279 ships and tankers have called during 1965-66.

*Chairman* : N. C. Patel.

*Secretary* : Dr. R. P. Bhargava.

**Madras** : There is accommodation for 21 vessels inside the harbour, 3 at Moorings and 18 at Quays besides the Petrol Berth at which dangerous petroleum is discharged. The depth at moorings and quay berths ranges from 7.9 metres to 9.6 metres.

The chief imports are coal, foodgrains, mineral oils, metals, timber, textiles, machinery, hardware, paper including old newspapers, dyeing and tanning substances, chemical manures, asphalt, chemicals, cotton, etc.

Ores, piecegoods, hides and skins (raw and tanned), onions, raw tobacco, twist and yarn, mica, etc. form the principal exports.

Three oil tanks have been erected for storage of vegetable oil in bulk and three other tanks for the storage of molasses in bulk have also been installed by private shipping companies at their cost.

The affairs of the Port are administered by a Board of Trustees.

*Chairman* : T. K. Palaniappan, I.A.S.

*Secretary* : T. K. Parameswaran Namblar, B.A.

**Vishakapatnam** : Ships drawing upto 33 ft. and having a length of up to 635 ft. can enter the harbour at all times of the year.

The harbour now provides the following facilities :

The inner harbour consists of a turning basin, four quay berths of a total length of 2,300 feet long and equipped with portal electric cranes, transit sheds, and railway lines, both behind and on the quay-side of the transit sheds and three concrete jetty and wharf berths for coal and oil. Besides, there are six mooring berths which are served by a fleet of lighters owned and operated by the port authorities and shallow water channels with timber jetties for lightering work. The quay berths No. 1 and 2 are specially equipped and reserved for the expeditious handling of manganese and iron ore, ferro-manganese and pig iron : on an average, approximately 3,000 tons are loaded in a day.

A 1,200 ft. long quay berth, capable of accommodating two oil tankers simultaneously has been constructed to provide the necessary Port and Harbour facilities for the Caltex Oil Refinery at Vishakapatnam which is in full operation.

On the west of the Northern Arm, two deep drafted berths have been newly constructed for the ore carriers. Though they are constructed for berthing of 50,000-ton ships (750 ft. long and 30 ft. draft) at present, ships of 635 ft. length and 33 ft. draft can be accommodated here. A mechanical iron ore handling plant has been installed on the berths capable of loading 2,666 tons of iron ore per hour for export.

A Dry Dock 450 ft. long and 60.5 ft. wide with a depth of 18½ ft. below low water has been in use at the Port for the docking of vessels.

The Port has floating cranes capable of dealing with heavy lifts up to 60-ton capacity.

The Port Trust is administered by a Chairman appointed by the Government of India.

*Chairman*—C. B. Reddy. *Secretary*—T. S. Narasimhan.

### EAST COAST PORTS

| Ports          | Receipts for 1965-66<br>Rs. | Expenditure for 1965-66<br>Rs. | No. of passengers embarked and disembarked 1965-66 | Imports in tons 1965-66 | Exports in tons 1965-66 | Weight of Cargo in tons handled in 1965-66 |
|----------------|-----------------------------|--------------------------------|----------------------------------------------------|-------------------------|-------------------------|--------------------------------------------|
| Bheemunipatnam | 137                         | 4,071.00                       | Nil                                                | Nil                     | Nil                     | Nil                                        |
| Cuddalore      | 5,75,811                    | 3,72,923                       | Nil                                                | 1,47,120                | 2,73,771                | 4,20,891                                   |
| Kakinada ..    | 6,85,400                    | 14,39,953                      | Nil                                                | 76,440†                 | 2,67,494†               | 3,43,934                                   |
| Machilipatnam  | 1,04,324                    | 2,38,317                       | Nil                                                | 14,929†                 | 22,784†                 | 37,713                                     |
| Nagapattinam   | 2,73,310.64                 | 3,31,924.51                    | 18,648                                             | 62,938                  | 10,218                  | 73,156                                     |
| Tuticorin      | 22,40,676.25                | 23,49,271.29                   | 11,512                                             | 4,65,349                | 5,08,034                | 9,73,384                                   |

† M. Tons.

### MAHARASHTRA STATE PORTS

(Under Ports Organisation)

| Ports              | No. of passengers embarked and disembarked 1965-66 | Imports in tons 1965-66 | Exports in tons 1965-66 | Weight of Cargo in metric tons handled in 1965-66 |
|--------------------|----------------------------------------------------|-------------------------|-------------------------|---------------------------------------------------|
| Vengurla Group     | .. 95,799                                          | 16,798                  | 3,58,271                | 3,75,069                                          |
| Vijaydurg Group    | .. 1,38,343                                        | 23,819                  | 11,749                  | 35,568                                            |
| Ratnagiri Group    | .. 3,07,987                                        | 82,428                  | 9,098                   | 91,526                                            |
| Rajpuri Group      | .. 57,885                                          | 4,355                   | 7,799                   | 12,154                                            |
| Bandra Group .. .. | 11,16,584                                          | 1,16,701                | 2,44,785                | 3,61,486                                          |
| Total .. ..        | 17,16,098                                          | 2,44,101                | 6,31,702                | 8,75,803                                          |

*Chief Ports Officer, Maharashtra State, Headquarters, Bombay 1* : Capt. V. V. Javadekar.

Total receipt and expenditure of Maharashtra State Ports for 1965-66 respectively were Rs. 8,49,075 and 19,05,552.

### GUJARAT PORTS

Director of Ports (Gujarat State) : B. C. Mehta.

| Ports                                | Ports and Pilotage Revenue Receipts 1964-65<br>Rs. | Revenue expenditure 1964-65<br>Rs. | No. of passengers embarked and disembarked 1964-65 | Imports in metric tons 1964-65 | Exports in metric tons 1964-65 | Weight of cargo in metric tons handled in 1964-65 |
|--------------------------------------|----------------------------------------------------|------------------------------------|----------------------------------------------------|--------------------------------|--------------------------------|---------------------------------------------------|
| Mandvi Group of Ports                | 5,07,714                                           | 6,11,841*<br>3,21,404†             | 45,627†                                            | 13,445                         | 1,37,082                       | 1,50,527                                          |
| Navlakhi .. ..                       | 21,92,262                                          | 18,90,696*<br>17,956†              | 2,02,055†                                          | 2,13,533                       | 54,173                         | 2,67,706                                          |
| Bedi Group of Ports (Excl. Navlakhi) | 35,51,844                                          | 26,48,878*<br>8,74,848†            | 1,481                                              | 1,01,126                       | 6,76,526                       | 7,77,652                                          |
| Okha Group of Ports                  | 29,36,449                                          | 12,91,704*<br>33,73,620†           | 9,317                                              | 4,33,339                       | 2,63,614                       | 6,96,953                                          |
| Porbandar Group of Port.             | 6,94,234                                           | 10,46,256*<br>12,06,752†           | 4,378                                              | 37,319                         | 1,20,724                       | 1,58,043                                          |
| Veraval Groups of Ports ..           | 14,10,643                                          | 11,18,729*<br>9,95,460†            | 763†                                               | 74,406                         | 1,92,828                       | 2,67,234                                          |
| Mahuva Group of Ports ..             | 2,97,755                                           | 80,088*<br>1,94,524†               | 2,027                                              | 34,663                         | 1,18,930                       | 1,53,593                                          |
| Bhavnagar Group of ports.            | 39,47,486                                          | 43,19,104*<br>4,79,795†            | —                                                  | 4,47,924                       | 2,05,366                       | 6,53,290                                          |
| Broach Group of Ports ..             | 1,09,087                                           | 2,62,943*<br>17,62,247†            | —                                                  | 48,822                         | 20,701                         | 69,523                                            |

\* Revenue Expenditure.

† Capital Expenditure.



## WEST COAST PORTS

| Ports               | Receipts for<br>1965-66<br>Rs. | Expenditure for<br>1965-66<br>Rs. | No. of passengers<br>embarked and<br>disembarked<br>1965-66 | Imports in<br>metric tons<br>1965-66 | Exports in<br>metric tons<br>1965-66 | Weight of cargo<br>in metric tons<br>handled in<br>1965-66 |
|---------------------|--------------------------------|-----------------------------------|-------------------------------------------------------------|--------------------------------------|--------------------------------------|------------------------------------------------------------|
| Alleppey .. .. .    | 1,59,160                       | 1,67,121                          | Nil                                                         | 6,753                                | 24,166                               | 30,919                                                     |
| Kollthottam .. .. . | Nil                            | 7,075                             | Nil                                                         | Nil                                  | Nil                                  | Nil                                                        |
| Quilon .. .. .      | 62,372                         | 10,781                            | Nil                                                         | 51,405                               | 4,668                                | 56,073                                                     |
| Trivandrum .. .. .  | 17,076                         | 35,395                            | Nil                                                         | 18,112                               | Nil                                  | 18,112                                                     |
| Calicut .. .. .     | 4,70,157                       | 2,74,791                          | 2,790                                                       | 79,841                               | 1,84,515                             | 2,64,356                                                   |
| Mangalore* .. .. .  | 9,24,561                       | 11,72,653                         | 15,291                                                      | 84,024                               | 4,20,403                             | 5,13,427                                                   |
| Tellichery .. .. .  | 15,500                         | 19,700                            | Nil                                                         | 9,135                                | 2,811                                | 11,946                                                     |

\* The receipts and expenditure is the tentative aggregate total of Mangalore Port Fund and Mangalore Port Trust Fund.

## LABOUR

THE general position in 1962-63 was as follows :—

Total Labour Force (1961 census): 18,84,10,000.  
Estimated increase during the Third Plan 17 million.

No. employed in factories coming under the Factories Act of 1948 .. .. 43,62,000

No. of trade unions on register .. 11,679

No. of trade unions which submitted returns of membership .. .. 7,147

No. of members of trade unions submitting returns .. .. 3,565,000

The Central co-ordinating authority in India for questions connected with labour legislation is the Ministry of Labour and Employment of the Government of India with the Labour Minister in charge. The administration of matters, connected with the English and Indian Merchant Shipping Acts, the Mercantile Marine Department and Indian Seamen is with the Ministry of Transport. In respect of all the Railways, the Labour Minister is responsible for the administration of the Payment of Wages Act, 1936, trade disputes, hours of work for employees not covered by the Factories Act and regulation of employment of children. He is also responsible for regulation of labour and safety in respect of mines and oilfields; trade disputes in industries, businesses or undertakings carried on by the Central Government, and inter-State migration.

Among the more important Acts that govern labour conditions and relations in India are the following: 1. Indian Factories Act, 1948; 2. Indian Mines Act; 3. Payment of Wages Act; 4. Minimum Wages Act; 5. Workmen's Compensation Act; 6. Maternity Benefit Act (States); 7. Indian Trades Union Act; 8. Industrial Disputes Act; 9. Industrial Disputes (Appellate Tribunal) Act; 10. Tea Districts Emigrant Labour Act; 11. Shop Assistants Act (States); 12. Employees' State Insurance Act; 13. Collection of Statistics Act; 14. Employees Provident Funds Act.

## FACTORIES ACT, 1948

The Act covers all industrial establishments employing 10 or more workers and using power and establishments employing 20 or more workers and not using power. The State Governments have been empowered to apply the provisions of the Act to any premises, irrespective of the number of persons employed, where a manufacturing process is carried on with or without the aid of power, except where the work

is done by the worker solely with the aid of his family.

The Act stipulates certain conditions as regards the safety measures, working hours—both for children and adults, both men and women—health conditions, age, overtime, leave etc.

The Act was amended in 1954. Under this amendment eligibility of leave, over-time payment, night-duty in newspaper printing press etc. have been specified.

(More details have been given in the previous edition of the Directory).

## FACTORY STATISTICS

Under the provisions of the Factories Act, 1948, registered factories submit annual and half yearly returns on employment to the Chief Inspectors of Factories in the various States. All-India figures are compiled by the Labour Bureau and are published in the *Indian Labour Journal*.

The number of factories on registers in the areas covered by the States during the first half of 1963 and 1964 were 54,678 and 57,739 respectively.

The following table sets out the statistics of the average daily numbers of persons employed in factories during the half year ending 30th June 1964.

## WORKERS EMPLOYED (1964 First-half)

| Industry                                                         | Average<br>Number of<br>Workers<br>Employed<br>Daily |
|------------------------------------------------------------------|------------------------------------------------------|
| Processes allied to agriculture ..                               | 1,55,295                                             |
| Food except beverages .. ..                                      | 5,72,255                                             |
| Beverages .. .. .                                                | 10,763                                               |
| Tobacco .. .. .                                                  | 1,85,667                                             |
| Textiles .. .. .                                                 | 12,95,017                                            |
| Footwear, other wearing apparels and made up textile goods .. .. | 39,727                                               |
| Wood and Cork except furniture ..                                | 66,210                                               |
| Furniture and fixtures .. ..                                     | 19,886                                               |
| Paper and paper products .. ..                                   | 49,094                                               |
| Printing, publishing and allied industries .. .. .               | 1,31,457                                             |
| Leather and leather products ..                                  | 25,401                                               |
| Rubber and rubber products ..                                    | 55,622                                               |
| Chemicals and Chemical products ..                               | 1,83,541                                             |

## WORKERS EMPLOYED (1964 First-half)—Contd.

| Industry                                                                      | Average<br>Number of<br>Workers<br>Employed<br>Daily |
|-------------------------------------------------------------------------------|------------------------------------------------------|
| Products of petroleum and coal ..                                             | 17,451                                               |
| Non-metallic mineral products (except products of petroleum and coal) .. .. . | 2,15,784                                             |
| Basic metal industries .. ..                                                  | 2,31,298                                             |
| Metal products (except machinery and transport equipment) ..                  | 1,85,747                                             |
| Machinery (except electrical machinery) .. .. .                               | 2,79,958                                             |
| Electrical machinery, apparatus, appliances and supplies .. ..                | 1,25,965                                             |
| Transport equipment .. ..                                                     | 4,13,473                                             |
| Miscellaneous industries .. ..                                                | 1,45,372                                             |
| Electricity, gas and steam .. ..                                              | 48,863                                               |
| Water and sanitary services .. ..                                             | 8,672                                                |
| Recreation services .. .. .                                                   | 3,648                                                |
| Personal services (Laundries, Dyeing and cleaning) .. ..                      | 6,612                                                |
| Total .. .. .                                                                 | 44,55,178                                            |

## State-wise Figures

The following para. shows the average daily employment in factories in the first half of 1964 by State :—

Andhra Pradesh 2,50,444; Assam 68,874; Bihar 2,18,446; Gujarat 4,08,136; Kerala 1,77,122; Madhya Pradesh 1,94,903; Madras 3,59,018; Maharashtra 9,21,297; Mysore 2,34,405; Orissa 41,610; Punjab 1,61,666; Rajasthan 73,131; Uttar Pradesh 3,89,540; West Bengal 8,65,952; Andaman & Nicobar Islands 2,212; Delhi 84,155; Himachal Pradesh 2,223; Manipur 652; Tripura 1,392; Total 44,55,178.

## MINES ACT

With a view to amending and consolidating the law relating to the regulation of labour and safety in mines, the Mines Act, 1952 was brought into force from July 1952. The Act extends to the whole of India except Jammu and Kashmir. The Mines Amendment Act, 1959, came into force from Dec. 16, 1960. The important features of the Amendment Act are given in the previous editions of the Directory.



## MINING STATISTICS

The average daily number of workers employed in mines in 1939, 1951, 1952, 1953, 1954, 1955, 1956, 1957, 1958, 1962, 1963 and 1964 was 698,069 and 686,761 respectively. A break-up of the figures for 1963 and 1964 is given below :—

## EMPLOYMENT IN MINES BY STATE 1963 AND 1964

| States              | Belowground Males |         | Opencast workings |         |         |         | Aboveground |         |         |         | Total   |         |
|---------------------|-------------------|---------|-------------------|---------|---------|---------|-------------|---------|---------|---------|---------|---------|
|                     |                   |         |                   |         |         |         |             |         |         |         |         |         |
|                     | 1963              | 1964    | 1963              | 1964    | 1963    | 1964    | 1963        | 1964    | 1963    | 1964    | 1963    | 1964    |
|                     |                   |         | Males             | Females | Males   | Females | Males       | Females | Males   | Females |         |         |
| Andhra Pradesh ..   | 20,132            | 21,490  | 5,995             | 1,928   | 6,255   | 2,173   | 5,804       | 2,419   | 6,948   | 2,320   | 36,278  | 39,186  |
| Assam .. ..         | 2,423             | 2,268   | 888               | 32      | 687     | 34      | 4,309       | 87      | 4,718   | 84      | 7,739   | 7,791   |
| Bihar .. ..         | 128,497           | 122,265 | 48,867            | 18,629  | 42,975  | 16,281  | 61,597      | 15,770  | 60,185  | 15,396  | 273,360 | 257,102 |
| Delhi .. ..         | ..                | ..      | 184               | ..      | 172     | ..      | 1           | ..      | 9       | ..      | 185     | 181     |
| Goa .. ..           | ..                | 14      | ..                | ..      | 5,640   | 1,985   | ..          | ..      | 956     | 228     | ..      | 8,823   |
| Gujarat .. ..       | 18                | 28      | 4,380             | 1,679   | 3,974   | 1,504   | 1,577       | 186     | 2,312   | 125     | 7,840   | 7,943   |
| Himachal Pradesh .. | 64                | 22      | 15                | ..      | 28      | ..      | 55          | 14      | 56      | 9       | 148     | 115     |
| Kerala .. ..        | ..                | ..      | 325               | 214     | 400     | 359     | 246         | 54      | 301     | 70      | 839     | 1,130   |
| Madhya Pradesh ..   | 31,018            | 30,899  | 18,628            | 10,433  | 18,513  | 8,741   | 19,671      | 3,177   | 21,040  | 3,156   | 82,927  | 82,849  |
| Madras .. ..        | 76                | 26      | 9,255             | 3,651   | 11,495  | 3,660   | 1,359       | 514     | 1,119   | 1,259   | 14,855  | 17,559  |
| Maharashtra .. ..   | 4,902             | 5,080   | 6,246             | 3,418   | 6,295   | 3,414   | 3,379       | 682     | 3,705   | 844     | 18,627  | 19,338  |
| Mysore .. ..        | 9,193             | 8,554   | 12,559            | 6,154   | 11,760  | 6,002   | 7,833       | 1,297   | 7,169   | 1,134   | 37,036  | 34,619  |
| Nagaland .. ..      | ..                | 59      | ..                | ..      | 8       | ..      | ..          | ..      | 88      | ..      | ..      | 155     |
| Orissa* .. ..       | 4,366             | 4,525   | 20,728            | 15,146  | 20,320  | 13,031  | 11,633      | 3,116   | 12,111  | 3,663   | 53,138  | 53,650  |
| Punjab .. ..        | ..                | 47      | 1,536             | 10      | 1,518   | ..      | 439         | 7       | 148     | 6       | 1,992   | 1,989   |
| Rajasthan .. ..     | 3,748             | 3,145   | 9,676             | 2,251   | 9,156   | 2,649   | 4,651       | 502     | 4,056   | 543     | 20,828  | 19,549  |
| Uttar Pradesh .. .. | ..                | 17      | 2,461             | 69      | 2,376   | 6       | 333         | ..      | 604     | 12      | 2,863   | 3,015   |
| West Bengal .. ..   | 85,465            | 81,620  | 11,532            | 2,332   | 8,677   | 1,867   | 33,219      | 6,876   | 33,141  | 6,962   | 139,414 | 132,267 |
| Total* .. ..        | 289,902           | 280,059 | 153,275           | 64,085  | 150,249 | 61,706  | 156,106     | 34,701  | 158,936 | 35,811  | 698,069 | 686,761 |

\* Revised figures for 1963.

## EMPLOYMENT IN MINES BY TYPE OF MINING 1963 AND 1964

Average daily number of persons.

| Minerals         | Belowground Males |         | Opencast Workings |         |         |         | Aboveground |         |         |         | Total    |         |
|------------------|-------------------|---------|-------------------|---------|---------|---------|-------------|---------|---------|---------|----------|---------|
|                  |                   |         |                   |         |         |         |             |         |         |         |          |         |
|                  | 1963              | 1964    | 1963              | 1964    | 1963    | 1964    | 1963        | 1964    | 1963    | 1964    | 1963     | 1964    |
|                  |                   |         | Males             | Females | Males   | Females | Males       | Females | Males   | Females |          |         |
| Coal .. ..       | 2,61,120          | 253,300 | 47,213            | 15,984  | 39,498  | 13,325  | 1,04,742    | 21,620  | 103,768 | 20,866  | 4,50,679 | 430,757 |
| Mica .. ..       | 14,105            | 12,308  | 1,925             | 162     | 1,271   | 100     | 5,273       | 1,738   | 4,827   | 1,554   | 23,248   | 20,060  |
| Manganese .. ..  | 1,025             | 1,429   | 15,584            | 12,280  | 18,629  | 13,033  | 5,370       | 2,364   | 6,009   | 3,099   | 36,623   | 42,199  |
| Iron Ore .. ..   | 8                 | 48      | 22,626            | 9,270   | 25,887  | 10,508  | 10,550      | 2,376   | 12,922  | 2,517   | 44,830   | 51,882  |
| Gold .. ..       | 9,119             | 8,500   | ..                | ..      | ..      | ..      | 5,718       | 602     | 5,456   | 554     | 15,439   | 14,510  |
| Limestone* .. .. | ..                | ..      | 33,713            | 13,850  | 34,685  | 13,061  | 8,804       | 1,444   | 8,156   | 1,291   | 57,811   | 57,193  |
| Others .. ..     | 4,480             | 4,474   | 32,214            | 12,339  | 30,279  | 11,679  | 15,649      | 4,557   | 17,798  | 5,930   | 69,439   | 70,160  |
| Total* .. ..     | 2,76,868          | 280,059 | 153,275           | 64,085  | 150,249 | 61,706  | 156,106     | 34,701  | 158,936 | 35,811  | 698,069  | 686,761 |

\* Figures for 1963 have been revised.

**Collieries:** During the month of Jan. 1965 the number of collieries working was 827 and the workers employed in them were 4,20,316. The average cash earnings of the workers per week for the whole of India was Rs. 28.95 and the number of working hours was 48.

## DOCK WORKERS' ACT

The Dock Workers' (Regulation of Employment) Act, 1948 passed in March 1948 has in view the elimination of hardship caused to workers on account of the casual nature of the work. It enables the Central and State Governments to frame schemes for the registration of dock workers to ensure greater regularity of employment and to regulate the employment of workers whether registered or not and the terms and conditions of such employment.

It provides for registration, rates of wages, hours of work, holidays with pay, prohibits, restricts or controls the employment of workers to whom the scheme does not apply, training

and welfare, health and safety measures, minimum payment for the period of unemployment. It also provides for the setting up of an Advisory Committee consisting of Government, labour and employers, and for the employment of Inspectors.

## PAYMENT OF WAGES ACT

The Act applies only to wages and salaries which average below Rs. 400 per month.

The Act was amended in Dec. 1964 with a view to removing difficulties experienced in the working of the Act.

Main features of the Act already appear in the previous editions of the Directory.

## MINIMUM WAGES ACT, 1948

The Act covers the following industries or types of establishments. Woollen carpet making or shawl weaving; rice, flour or dal mills; tobacco manufactories (including bidi making); plantations; oil mills; employment under any local authority; road construction or building operations; stone breaking or stone crushing; lac manufactories; mica works; public motor transport; tanneries and leather manufactories; tanneries, and agriculture. The appropriate Governments can extend the application of the Act to any industry wherein, in their opinion, minimum wages should statutorily be fixed.

The Act requires the Central or State Governments, as the case may be, to fix minimum rates of wages payable to persons employed in the industries mentioned above.



The Act provides for the fixation of minimum time rates, minimum piece rates, guaranteed time rates and overtime rates appropriate to different occupations, or localities and for adults, adolescents, children and apprentices. The minimum rate may consist of a basic rate and a cost of living allowance and/or cash value of concessions or it may be an all-inclusive rate.

The Central or the State Governments, as the case may be, can fix the number of hours of work per day, provide for a weekly holiday, etc., in regard to any employment in which minimum wages have been fixed under the Act.

### WORKMEN'S COMPENSATION ACT

Under the Act payment of compensation has been made obligatory on all employers whose employees come within its scope, and injured workmen or the dependents of those killed can obtain compensation in all cases where personal injury has been caused by accident arising out of and in the course of employment and where, except in the case of injury resulting in death, the accident is not directly attributable to the workman having been at the time of the accident under the influence of drink or drugs or to wilful disobedience of rules or orders or wilful disregard of safety devices.

An Amendment Bill—Workmen's Compensation Amendment Bill 1958—was passed by Parliament in Feb. 1959.

(Details are given in the previous editions of the Directory).

The Act has been amended since 19th Dec. 1962 to raise the applicability of the Act to persons getting Rs. 500 per month.

### STATISTICS

An annual note on the working of the Act is published regularly in the *Indian Labour Journal*.

The latest available statistics on the subject will be found in the following table :—

| Year       | Total number of cases | Total compensation paid |
|------------|-----------------------|-------------------------|
|            |                       | Rs.                     |
| 1957 .. .. | 71,908                | 61,86,746               |
| 1958 .. .. | 83,338                | 84,87,795               |
| 1959 .. .. | 76,227                | 71,43,684               |
| 1960 .. .. | 88,955                | 94,93,304               |
| 1961 .. .. | 93,738                | 79,92,996               |
| 1962 .. .. | 89,356                | 74,37,147               |
| 1963 .. .. | 1,17,250              | 1,21,86,870             |

The table below shows the accident rate per thousand workers and the average compensation paid in the main industry groups during 1963.

| INDUSTRY                    | 1963                        |                                     |
|-----------------------------|-----------------------------|-------------------------------------|
|                             | Accident Rate per thousand. | Average compensation paid per case. |
|                             |                             | Rs.                                 |
| Factories .. ..             | 20.07                       | 78                                  |
| Plantations .. ..           | 3.52                        | 71                                  |
| Mines .. ..                 | 72.01                       | 83                                  |
| Railways .. ..              | 17.81                       | 148                                 |
| Docks and Ports ..          | 38.83                       | 193                                 |
| Tramways .. ..              | 50.35                       | 64                                  |
| Posts & Telegraphs          | 1.16                        | 240                                 |
| C.P.W.D. .. ..              | —                           | —                                   |
| Buildings & Construction .. | 20.76                       | 267                                 |
| Municipalities .. ..        | 0.17                        | 1,761                               |
| Miscellaneous .. ..         | 33.00                       | 121                                 |
| Average .. ..               | 22.43                       | 104                                 |

### MATERNITY BENEFIT ACT

The Government of India passed the Mines Maternity Benefit Act in 1941. Maternity Benefit Acts have been passed by all the States.

The scope, qualifying conditions and rate of benefit are not uniform under the various State Acts.

The qualifying period of service is generally 9 months.

The administration of the Acts in the States is the responsibility of the Factory Inspectorates. The enforcement of the Mines Maternity Benefit Act in the coal mines is the responsibility of the Coal Mines Welfare Commissioner. In other mines, it is administered by the Chief Inspector of Mines.

### MATERNITY BENEFIT PAID IN VARIOUS STATES, FACTORIES, PLANTATIONS AND MINES DURING 1963

| States.              | Average No. of women employed in establishments submitting returns. | No. of women who claimed maternity benefit. | No. of women who were paid maternity benefit in full or in part. | No. of cases in which bonuses were paid. | Total amount paid |
|----------------------|---------------------------------------------------------------------|---------------------------------------------|------------------------------------------------------------------|------------------------------------------|-------------------|
|                      |                                                                     |                                             |                                                                  |                                          | Rs.               |
| Andhra Pradesh .. .. | 88,186                                                              | 419                                         | 380                                                              | 20                                       | 17,891            |
| Assam .. ..          | —                                                                   | —                                           | —                                                                | —                                        | —                 |
| Bihar .. ..          | 8,256                                                               | 304                                         | 300                                                              | —                                        | 69,285            |
| Gujarat .. ..        | 31,698                                                              | 1,222                                       | 1,300                                                            | 4                                        | 33,822            |
| Kerala .. ..         | 52,699                                                              | 6,641                                       | 6,416                                                            | 1,101                                    | 4,39,440          |
| Madhya Pradesh .. .. | 6,219                                                               | 83                                          | 76                                                               | —                                        | 7,969             |
| Madras .. ..         | 45,988                                                              | 777                                         | 629                                                              | 484                                      | 89,377            |
| Maharashtra .. ..    | 34,615                                                              | 264                                         | 334                                                              | 1                                        | 26,816            |
| Mysore .. ..         | 22,093                                                              | 1,587                                       | 1,540                                                            | 712                                      | 1,29,800          |
| Orissa .. ..         | 3,645                                                               | 80                                          | 57                                                               | —                                        | 9,276             |
| Punjab .. ..         | 3,141                                                               | 9                                           | 9                                                                | 1                                        | 2,214             |
| Rajasthan .. ..      | —                                                                   | —                                           | —                                                                | —                                        | —                 |
| Uttar Pradesh .. ..  | 3,402                                                               | 23                                          | 23                                                               | 1                                        | 3,651             |
| West Bengal .. ..    | 26,189                                                              | 601                                         | 597                                                              | 21                                       | 1,22,272          |
| Total .. ..          | 3,26,131                                                            | 12,010                                      | 11,661                                                           | 2,345                                    | 9,51,813          |

#### Plantations—

|                   |          |        |        |    |           |
|-------------------|----------|--------|--------|----|-----------|
| Assam .. ..       | 2,23,501 | 42,753 | 41,425 | NA | 39,48,090 |
| Kerala .. ..      | 45,340   | 8,193  | 8,304  | 76 | 5,96,184  |
| West Bengal .. .. | 71,655*  | 19,713 | 19,323 | —  | 17,69,869 |
| Total .. ..       | 3,40,496 | 70,659 | 69,052 | 76 | 63,14,143 |

#### Mines—

|              |        |       |       |     |          |
|--------------|--------|-------|-------|-----|----------|
| Coal .. ..   | 16,022 | 2,514 | 2,441 | —   | 4,32,789 |
| Others .. .. | 31,103 | 3,937 | 4,018 | 310 | 2,04,179 |
| Total .. ..  | 47,125 | 6,451 | 6,459 | 310 | 6,36,968 |

N.A. — Not available. \* Including 3,670 women workers employed in factories.

### AMOUNT OF MATERNITY BENEFIT PAID UNDER EMPLOYEES' STATE INSURANCE ACT, 1948 DURING THE YEAR 1963

| States               | No. of claims accepted and paid either fully or partially. | Amount of benefit paid. |
|----------------------|------------------------------------------------------------|-------------------------|
|                      |                                                            | Rs.                     |
| Andhra Pradesh .. .. | 537                                                        | 82,733                  |
| Assam .. ..          | —                                                          | —                       |
| Bihar .. ..          | 256                                                        | 5,778                   |
| Gujarat .. ..        | —                                                          | —                       |
| Kerala .. ..         | 2,217                                                      | 3,52,612                |
| Madhya Pradesh .. .. | 489                                                        | 1,16,687                |
| Madras .. ..         | 1,889                                                      | 5,73,797                |
| Maharashtra .. ..    | 1,526                                                      | 6,05,056                |
| Mysore .. ..         | 377                                                        | 1,11,821                |
| Orissa .. ..         | 31                                                         | 7,320                   |
| Punjab .. ..         | 75                                                         | 6,713                   |
| Rajasthan .. ..      | 181                                                        | 29,854                  |
| Uttar Pradesh .. ..  | 81                                                         | 8,340                   |
| West Bengal .. ..    | 289                                                        | 58,682                  |
| Delhi .. ..          | 136                                                        | 12,783                  |
| Total .. ..          | 8,084                                                      | 20,24,187               |

The average amount of maternity benefit paid per case was about Rs. 250 taking all States together.



## STATISTICS OF TRADE UNIONS

Registered Trade Unions and Membership—March, 1963

| States/Union Territories                       | Number of Unions |                    | Membership of Unions Submitting Returns |                 |                  |
|------------------------------------------------|------------------|--------------------|-----------------------------------------|-----------------|------------------|
|                                                | On Register      | Submitting Returns | Men                                     | Women           | Total            |
| <b>Central Unions</b>                          |                  |                    |                                         |                 |                  |
| Andhra Pradesh .. ..                           | 102              | 92                 | 96,585                                  | 10,626          | 1,07,211         |
| Bihar .. ..                                    | 14               | 14                 | 8,787                                   | 1,425           | 10,212           |
| Gujarat .. ..                                  | 5                | 5                  | 2,064                                   | ..              | 2,064            |
| Madras .. ..                                   | 57               | 37                 | 24,469                                  | 298             | 24,767           |
| Maharashtra .. ..                              | 41               | 27                 | 1,43,545                                | 1,382           | 1,44,927         |
| Orissa .. ..                                   | 32               | 25                 | 33,404                                  | 9,711           | 43,115           |
| Punjab .. ..                                   | 71               | 53                 | 10,019                                  | 203             | 10,222           |
| Rajasthan .. ..                                | 36               | 30                 | 5,918                                   | 485             | 6,403            |
| Uttar Pradesh .. ..                            | 11               | 11                 | 36,831                                  | 46              | 36,877           |
| West Bengal .. ..                              | 16               | 5                  | 1,976                                   | ..              | 1,976            |
| Delhi .. ..                                    | 33               | 28                 | 1,77,685                                | 639             | 1,78,324         |
| Himachal Pradesh .. ..                         | 2                | 2                  | 421                                     | 3               | 424              |
| <b>Total .. ..</b>                             | <b>420</b>       | <b>329</b>         | <b>5,41,704</b>                         | <b>24,818</b>   | <b>5,66,522</b>  |
| <b>State Unions</b>                            |                  |                    |                                         |                 |                  |
| Andhra Pradesh .. ..                           | 452              | 244                | 80,042                                  | 58,386          | 1,38,428         |
| Assam .. ..                                    | 138              | 99                 | 96,735                                  | 18,707          | 1,15,442         |
| Bihar .. ..                                    | 604              | 524                | 3,40,353                                | 28,002          | 3,68,355         |
| Gujarat .. ..                                  | 488              | 344                | 1,94,179                                | 12,648          | 2,06,827         |
| Kerala .. ..                                   | 1,688            | 804                | 1,66,684                                | 53,832          | 2,20,516         |
| Madhya Pradesh .. ..                           | 432              | 102                | 38,825                                  | 4,701           | 43,526           |
| Madras .. ..                                   | 1,113            | 732                | 2,41,049                                | 23,318          | 2,64,367         |
| Maharashtra .. ..                              | 1,448            | 884                | 4,54,057                                | 42,184          | 4,96,241         |
| Mysore .. ..                                   | 506              | 299                | 1,23,953                                | 18,623          | 1,42,576         |
| Orissa .. ..                                   | 96               | 71                 | 35,780                                  | 2,256           | 38,036           |
| Punjab .. ..                                   | 552              | 390                | 80,166                                  | 638             | 80,804           |
| Rajasthan .. ..                                | 209              | 165                | 38,618                                  | 1,573           | 40,191           |
| Uttar Pradesh .. ..                            | 1,085            | 978                | 2,52,918                                | 4,530           | 2,57,448         |
| West Bengal .. ..                              | 2,165            | 955                | 5,47,481                                | 49,594          | 5,97,075         |
| Andaman & Nicobar Islands ..                   | 14               | 12                 | 2,629                                   | 28              | 2,657            |
| Delhi .. ..                                    | 345              | 282                | 90,448                                  | 728             | 91,176           |
| Himachal Pradesh .. ..                         | 14               | 14                 | 3,236                                   | 21              | 3,257            |
| Tripura .. ..                                  | 48               | 18                 | 5,015                                   | 2,397           | 7,412            |
| <b>Total .. ..</b>                             | <b>11,397</b>    | <b>6,917</b>       | <b>27,92,168</b>                        | <b>3,22,166</b> | <b>31,14,334</b> |
| <b>Total of Central and State Unions .. ..</b> | <b>11,817</b>    | <b>7,246</b>       | <b>33,33,872</b>                        | <b>3,46,984</b> | <b>36,80,856</b> |

The membership of the four Central Trade Union Organisations recognised by the Central Government, viz. the Indian National Trade Union Congress, the All-India Trade Union Congress, the Hind Mazdoor Sabha and the United Trade Union Congress, was as follows :

| Name of Organisation                 | No. of Affiliated Unions |         | Membership |            |
|--------------------------------------|--------------------------|---------|------------|------------|
|                                      | 1963-64                  | 1964-65 | 1963-64    | 1964-65    |
| Indian National Trade Union Congress | 1,965*                   | 2,000†  | 20,03,354* | 20,08,183† |
| All-India Trade Union Congress ..    | 1,697                    | 1,710   | 11,59,395  | 11,76,466  |
| Hind Mazdoor Sabha .. ..             | 480*                     | 485†    | 7,42,809*  | 7,89,931†  |
| United Trade Union Congress .. ..    | 346                      | 354@    | 1,94,086   | 1,98,216@  |

## TRADE UNIONS ACT, 1926

This Act was brought into operation with effect from 1st June 1927 and was slightly amended in 1928.

Apart from the necessary provisions for administration and penalties, the Indian Trade Unions Act, 1926, makes provision for three matters: (1) conditions governing the registration of trade unions; (2) the obligations to which a trade union is subject after registration; and (3) the rights and privileges accorded to registered unions. 'Trade Union' has been defined in such a way as to cover both combinations of workers and of employers but not of workers and employers. Persons under the age of 15 are debarred from membership of any registered union.

The administration of the Act is entirely on a State basis and each State Government is required to appoint a Registrar of Trade Unions. Any seven or more members of a union can apply for registration but no union can be registered unless at least fifty per cent of the executive consist of members actually engaged

in the unit or group of units which the union proposes to cover.

## INDUSTRIAL DISPUTES ACT

The Act provides for the setting up of two types of organisations, namely, (1) Works Committees and (2) Industrial Tribunals for the prevention or settlement of disputes. It makes conciliation compulsory in all disputes in public utility services and optional in other cases.

Important features of the main Act and amendments in 1953 and 1956 appear in the previous editions of the Directory.

The Act was further amended in Dec., 1964. The following are some of the important changes effected by the amended Act: (a) Provision for appointment of a serving or a retired district judge or additional district judge of not less than three years standing as a Presiding Officer of the Tribunal; (b) Provision for the appointment of Umpires in case of differences of opinion between an even number of arbitrators; (c) Prohibition of strikes and lock-outs during

arbitration proceedings; (d) Only a majority of workmen shall have the right to terminate a settlement or an award; (e) Provision that every application for recovery of money due from an employer shall be made within one year.

## STATISTICS

Statistics presented in this section relate to industrial disputes which have resulted in work-stoppages involving 10 or more workers and exclude sympathetic and political strikes.

The time-loss due to industrial disputes was 7.8 million man-days in 1958, it was 5.6 million in 1959, 6.5 million in 1960, 4.9 million in 1961, 6.1 million in 1962 and 3.3 million in 1963.

There were 1,471 industrial disputes during 1963 as compared with 1,491 during 1962.

As compared with 1962, there was a decrease of 45.9 per cent in time-loss due to industrial disputes in 1963. While the time-loss was generally low in the first five months of the year, the highest time-loss was recorded in Dec., 1963.

Analysis of the statistics by industries shows that the manufacturing sector accounted for 77.2 per cent of the total time-loss. Among other sectors, electricity, gas, water and sanitary services accounted for 7.2 per cent, agriculture, forestry, fishing etc. for 4.1 per cent, mining and quarrying for 3.0 per cent, transport and communications (other than workshops) for 2.5 per cent, services for 2.5 per cent, activities not adequately described for 1.6 per cent, construction for 1.4 per cent and commerce for 0.5 per cent. In the manufacturing sector, the highest time-loss was recorded by the group 'textiles' (51.3 per cent). As compared to the preceding year, the time-loss decreased in all the groups except electricity, gas, water and sanitary services, construction and commerce.

Classifying the disputes by causes, wages and allowances accounted for the highest number (408) of disputes followed by "personnel" 369 cases. Both these groups constituted together 53 per cent of the total number of disputes and accounted for 46.2 per cent of workers involved and 47 per cent of the total time-loss.

From the point of view of the employees 23.4 per cent of the total number of disputes were successful, 17.9 per cent were partially successful and 41 per cent were unsuccessful. In case of 17.7 per cent of the disputes, work was resumed without any final decision having been reached.

Distribution of the disputes according to their duration shows that 71.7 per cent lasted upto 5 days, 13.6 per cent lasted for more than 5 days upto 10 days, 6.2 per cent lasted for more than 10 days upto 20 days, 3.8 per cent for more than 20 days upto 30 days and 4.7 per cent for more than 30 days.

Of the 1,422 terminated disputes, during 1963, 610 were terminated as a result of Government intervention, 287 by mutual settlement and 453 by voluntary resumption.

The following table sets out the number of disputes in some of the years since 1953, the number of workers involved in these disputes and the total time lost in man-days:

| Year    | Number of disputes | Number of workpeople involved | Number of man-days lost |
|---------|--------------------|-------------------------------|-------------------------|
| 1953 .. | 772                | 466,607                       | 3,382,608               |
| 1954 .. | 840                | 477,138                       | 3,372,630               |
| 1955 .. | 1,166              | 527,767                       | 5,697,848               |
| 1956 .. | 1,203              | 715,130                       | 6,992,040               |
| 1957 .. | 1,630              | 889,371                       | 6,429,319               |
| 1958 .. | 1,524              | 928,566                       | 7,797,585               |
| 1959 .. | 1,531              | 693,616                       | 5,633,148               |
| 1960 .. | 1,583              | 986,268                       | 6,536,517               |
| 1961 .. | 1,357              | 511,860                       | 4,918,755               |
| 1962 .. | 1,491              | 7,05,059                      | 6,120,576               |
| 1963 .. | 1,471              | 5,63,121                      | 3,268,524               |

\* Figures as on March 31, 1965.

† Figures as on March 31, 1966.

@ Figures as on December 31, 1965.



Number of disputes resulting in work-stoppages, workers involved and man-days lost for the year 1964.

| State                             | No. of disputes | No. of workers involved | No. of man-days lost |
|-----------------------------------|-----------------|-------------------------|----------------------|
| Andhra Pradesh .. .. .            | 106             | 67,697                  | 5,17,135             |
| Assam .. .. .                     | 38              | 17,150                  | 52,363               |
| Bihar .. .. .                     | 104             | 62,164                  | 5,36,716             |
| Goa .. .. .                       | 17              | 8,717                   | 78,455               |
| Gujarat .. .. .                   | 76              | 15,535                  | 1,20,599             |
| Jammu & Kashmir .. .. .           | 2               | 1,235                   | 4,700                |
| Kerala .. .. .                    | 210             | 78,707                  | 8,68,734             |
| Madhya Pradesh .. .. .            | 60              | 27,782                  | 2,35,494             |
| Madras .. .. .                    | 236             | 77,978                  | 4,44,552             |
| Maharashtra .. .. .               | 636             | 2,85,395                | 15,80,243            |
| Mysore .. .. .                    | 110             | 53,431                  | 2,17,393             |
| Orissa .. .. .                    | 25              | 9,436                   | 1,30,532             |
| Punjab .. .. .                    | 46              | 5,822                   | 61,087               |
| Rajasthan .. .. .                 | 54              | 12,486                  | 62,341               |
| Uttar Pradesh .. .. .             | 171             | 78,227                  | 7,35,317             |
| West Bengal .. .. .               | 211             | 1,00,306                | 20,15,055            |
| Andaman & Nicobar Islands .. .. . | 9               | 2,382                   | 11,658               |
| Delhi .. .. .                     | 36              | 8,045                   | 49,839               |
| Himachal Pradesh .. .. .          | —               | —                       | —                    |
| Manipur .. .. .                   | —               | —                       | —                    |
| Pondicherry .. .. .               | 1               | 62                      | 248                  |
| Tripura .. .. .                   | 3               | 398                     | 2,228                |
| Total .. .. .                     | 2,151           | 10,02,955               | 77,24,694            |

Average time-loss per dispute was 2,222 man-days.

#### WORKING JOURNALISTS' ACT

(See under article on the Press)

#### THE EMPLOYEES' PROVIDENT FUNDS ACT, 1952

The Employees' Provident Funds Scheme, 1952 framed under section 5(1) of the Employees' Provident Funds Act, 1952 came into force in its entirety with effect from 1st November, 1952.

The Act applies to all establishments employing 20 or more persons. The Act, however, does not apply to: (a) any establishment registered under the Co-operative Societies Act, 1912 or under any other law relating to co-operative societies employing less than 50 persons and working without the aid of power, (b) to any other establishment employing 50 or more persons or between 20 and 49 persons until the expiry of three years in the former case and five years in the latter, from the date of their establishment, (c) The State of Jammu & Kashmir (The State Government has instituted a separate provident fund scheme on the lines of Employees' Provident Funds Scheme with effect from 1st June, 1961).

The rate of contribution is 6½ per cent of pay i.e., basic wages plus dearness allowance including cash value of food concession and retaining allowance (if any). The statutory rate of provident fund contribution has been enhanced to 8 per cent of pay in respect of the establishments employing 50 or more persons and engaged in any of the following industries with effect from the date noted against them:—

From Jan. 1, 1963: Cigarettes; Iron and Steel; Electrical, mechanical or general engineering products; and Paper other than hand made paper.

From April 1, 1963: Cement.

From Nov. 1, 1963: Textiles (made wholly or in part of artificial silk and wool); Matches; Edible oils and fats other than vanaspathi; Rubber and rubber products; Electricity including generation, transmission and distribution thereof; Tea; Printing (other than printing industry relating to newspaper establishments as defined in the Working Journalists (Conditions of Service) and Miscellaneous Provisions Act 1955) including the process of composing types for printing, printing by letter press, lithography, photogravure or other similar process or book binding; Glass; Stoneware pipes; Sanitaryware; Electrical porcelain insulators of high and low tension; Refractories; Tiles; Heavy and fine chemicals excluding fertilizers but including turpentine rosin, medical and pharmaceutical preparations; Toilet preparations; Soaps; Inks; Intermediates; Dyes; Colour lakes and toners; Fatty acids; Oxygen; Acetylene and carbon-dioxide gases; Indigo; Non-edible vegetable and animal oils and fats; Mineral oil refining; and Newspaper establishments.

From Dec. 1, 1963: Textiles (made wholly or in part of cotton).

From Feb. 1, 1965: Tea plantations (other than the tea plantations in the State of Assam); Rubber plantations; Cardamom plantations; Limestone mines; Industrial and power alcohol; Asbestos cement sheets.

From June 1, 1965: Coffee plantations; Sept. 1, 1965: Coffee curing establishments; April 1, 1966: Every establishment engaged in the manufacture of textiles made wholly or in part of natural silk.

The members and employers are allowed to contribute at any higher rate if desired by them.

Qualifications for membership:—Basic wage, dearness allowance and cash value of food concession and retaining allowance (if any) not to exceed Rs. 1,000 per month; and one

year's continuous service or 240 days' actual work during a period of 12 months or less.

Employees working outside the precincts of a covered establishment in connection with its work and also those with emoluments exceeding Rs. 1,000 per month, if they apply for membership of the Fund with the consent of their employers, have now been brought within the ambit of the Scheme.

Where an establishment has its own Provident Fund, gratuity or pension scheme and if the total quantum of benefits is not less than that under the statutory Scheme, either such an establishment could apply for exemption under section 17(1) of the Act from the provisions of the Scheme or any person or a class of persons employed in such an establishment can opt out under section 17(2) of the Act read with para. 27-A of the Scheme.

Full accumulations with interest are refunded in the event of death, permanent disability, superannuation, retrenchment or migration from India for permanent settlement abroad and also on leaving service for any reason after 15 years' membership, or ceasing to subscribe to the Fund consequent on the employer ceasing to give effect to the provisions of the Act in pursuance of the provisions of the proviso to section 1(5) of the Act. In other cases, the member's own share of contribution together with the interest thereon is refunded along with a portion of the employer's contribution depending upon the length of membership.

The Central Government have also authorised full refund of employer's contribution in the following contingencies:—Where a factory establishment is closed, the employees who are not retrenched but transferred by the employer to other establishments not covered under the Employees' Provident Funds Act; Where a member is transferred from a covered establishment to another under the same employer but not covered under the Act; Where employees are discharged and are given retrenchment compensation under the Industrial Disputes Act; where members cease to subscribe to the Fund as a result of an establishment going out of the purview of the Act under section 16(1)(a) thereof.

Non-refundable advances from the Fund can be made for payment towards a policy of life insurance of the member; for purchase of a dwelling house, a dwelling site or for construction of dwelling house privately or under the subsidised housing schemes for industrial workers, or for construction of a house under the Low Income Group Housing Scheme, or for purchasing shares of Consumers' Cooperative Societies, or in special cases to members who are thrown out of employment due to temporary closure of any factory or establishment, or in cases of (a) hospitalisation lasting one month or more or (b) major surgical operation in a hospital or (c) members suffering from T.B., leprosy, paralysis, cancer, or asthma for the treatment of which leave has been granted by the employer or in the case of an individual retrenchment pending final withdrawal of provident fund.

The Fund vests in the tripartite Central Board of Trustees. The Central Provident Fund Commissioner is the Chief Executive Officer. He is appointed by the Central Government and is subject to its general control and superintendence. He is assisted by fifteen Regional Provident Fund Commissioners one in each region.

In the following regions tripartite Regional Committees have been constituted to advise the Central Board of Trustees on matters referred to them:—Maharashtra, Bihar, Madhya Pradesh, Andhra Pradesh, Orissa, Gujarat, Madras, Uttar Pradesh and West Bengal.

A special reserve fund has been created to pay the provident fund accumulations to outgoing members or their heirs, where the employers have failed to pay the whole or a part of the provident fund contributions to the fund and which were deducted from the wages of the members. A sum of Rs. 60-18 lakhs has been paid out from this Fund till the



end of Dec. 1965 and a sum of Rs. 9.33 lakhs was recovered from the employers towards the arrears against which payment was made from this Fund.

A Death Relief Fund has been set up for affording financial assistance to nominees/heirs of deceased members whose pay (i.e. basic wages, dearness allowance, etc.) does not exceed Rs. 500 per month. This fund has been constituted on a trial basis for one year with effect from 1st January, 1964 and is being continued for a further period of one year more with effect from Jan., 1, 1966. Relief from this fund would be given in respect of deaths which take place on or after 1st January, 1964. The quantum of the benefits from this fund, will be the difference by which the amount standing to the credit of the deceased member falls short of Rs. 500 so that a minimum of Rs. 500 is assured to the nominee(s)/heir(s). The amount standing to the credit of the deceased member will comprise the sum actually credited to the member's account in the ledger card; any sum payable out of the Special Reserve Fund; the sum of non-refundable advance(s) taken by members; outstanding balance of any refundable advance and interest.

No. of industries covered: 103 (upto 31-1-1966).

No. of covered establishments (both exempted and unexempted): 32,976 (as on 31-12-1965).

No. of subscribers: Over 44.77 lakhs (as on 31-12-1965).

Amount of Provident Fund contributions as on 31-12-1965:

(i) Provident Fund Contributions collected: Rs. 732.73 crores.

(ii) Amount paid as loans, advances, in final settlement of claims, etc.: Rs. 226.97 crores.

(iii) Amount invested in Government Securities: Rs. 511.01 crores.

No. of unexempted establishments covered under the Act up to the end of December 1965: 310,555; No. of subscribers in such establishments: Over 27.86 lakhs; total accumulations of provident fund in such establishments: Rs. 326.09 crores; Amount of provident fund invested in respect of such establishments: Rs. 252.70 crores.

Rate of interest paid at present on members' accumulations: 4.75 per cent (for 1964-65).

The Central Government has accepted the recommendation of the Central Board of Trustees of the Employees' Provident Fund to raise the rate of interest from 4.25 per cent to 4.5 per cent for the year 1966-67.

The provident fund contributions are invested in defence certificates and Government of India securities. The interest received on investments during 1965 amounted to Rs. 8.01 crores.

The number of establishments covered on a voluntary basis rose from 637 to 849 upto 31-12-1965.

### TEA DISTRICTS EMIGRANT LABOUR ACT

The Tea Districts Emigrant Labour Act, 1932, was brought into effect from the 1st of October 1933.

Full details are given in the previous editions of the Directory.

### PLANTATION LABOUR ACT, 1951

The Plantation Labour Act was passed by the Government of India in 1951 with a view to ameliorating the working and living conditions of about 12 lakhs of workers employed in plantations. The Act applies to tea, coffee, rubber, cinchona and cardamom plantations and the State Governments have been empowered to extend it to any other class of plantations.

Details have been given in the previous editions of the Directory.

The following table shows the total No. of estates/plantations covered by the Act and

average daily labour employed in various States/Union Territories.

| State/Union Territory  | No. of Estates/Plantations | Average daily labour employed |
|------------------------|----------------------------|-------------------------------|
| Assam .. ..            | 665                        | 4,92,793                      |
| Bihar .. ..            | 13                         | 579                           |
| Kerala .. ..           | 450                        | 2,00,000                      |
| Madras .. ..           | 289                        | 74,738                        |
| Mysore .. ..           | 274                        | 27,229                        |
| Punjab .. ..           | 18                         | 1,528                         |
| Uttar Pradesh .. ..    | 17                         | 1,532                         |
| West Bengal .. ..      | 281                        | 1,64,454                      |
| Himachal Pradesh .. .. | 1                          | 81                            |
| Tripura .. ..          | 57                         | 2,808                         |

### SHOPS AND COMMERCIAL ESTABLISHMENTS ACTS

Subject to certain exceptions the Acts apply to shops, commercial establishments, restaurants and places of amusement in certain selected urban centres. Some employees such as those employed in a confidential capacity and those whose work is of an intermittent character are excluded from the scope of the Acts.

By the above Acts an attempt has been made to bring into force the general rules and conditions of the Factory Act to those employed in the shops and commercial establishments with suitable modifications. More important features of the Acts were given in the previous editions of the Directory.

The number of shops and commercial establishments and the number of persons employed by States for 1963 are given below.

| State/Union Territory           | No. of Establishments | No. of persons employed |
|---------------------------------|-----------------------|-------------------------|
| Andhra Pradesh .. ..            | 1,33,228              | 1,18,823                |
| Assam .. ..                     | 8,227                 | 12,525                  |
| Bihar .. ..                     | 30,202                | 36,023                  |
| Gujarat .. ..                   | 1,02,325              | 1,15,219                |
| Jammu & Kashmir .. ..           | —not available—       | —                       |
| Kerala .. ..                    | 37,923                | 74,781                  |
| Madhya Pradesh .. ..            | 1,01,988              | 68,742                  |
| Madras .. ..                    | 1,78,671              | 2,06,302                |
| Maharashtra .. ..               | 2,50,641              | 5,20,435                |
| Mysore .. ..                    | 85,794                | 92,534                  |
| Orissa .. ..                    | 5,231                 | 22,667                  |
| Punjab .. ..                    | 2,04,930              | 1,18,484                |
| Rajasthan .. ..                 | 82,599                | 45,749                  |
| Uttar Pradesh .. ..             | —not available—       | —                       |
| West Bengal .. ..               | 2,18,272              | 4,36,944                |
| Andaman & Nicobar Islands .. .. | 358                   | 520                     |
| Delhi .. ..                     | 84,238                | 1,55,457                |
| Himachal Pradesh .. ..          | 2,262                 | 1,174                   |
| Manipur .. ..                   | 1,986                 | 2,401                   |
| Tripura .. ..                   | 1,466                 | 2,307                   |
| Total .. ..                     | 15,30,271             | 20,31,087               |

### INDUSTRIAL EMPLOYMENT (STANDING ORDERS) ACT, 1946

The Industrial Employment (Standing Orders) Act, 1946 which applies to industrial establishments employing 100 or more workers provides for the framing of Standing Orders laying down the conditions of employment of workers employed in the establishments.

The Act extends to the whole of India except the State of Jammu and Kashmir, and is administered both by the Central and State Governments.

The total number of establishments coming within the purview of the Act at the end of 1964 was 11,603 of which 9,960 establishments with 30.23 lakh workers belonged to the State sphere and 1,643 with 9.71 lakh workers, to the Central sphere. The employment strength of all these establishments was about 39.94 lakhs.

The number of establishments which had certified Standing Orders in both the spheres at the beginning of 1963 was 11,209 which formed 76.5 per cent of the total covered. Of these 9,741 were in the State sphere and 1,478 in the Central sphere.

The percentage of workers having certified Standing Orders to the total number of employees came to 83.0.

### COLLECTION OF STATISTICS ACT, 1953

This Act which replaces and embodies the main provisions of the Industrial Statistics Act is designed to facilitate the collection of statistics of certain kinds relating to industries, trade and commerce. It empowers the Statistics Authority appointed by the Central or State Govts. to collect necessary informations from different industrial and commercial concerns. More details were given in the previous editions of the Directory.

### MOTOR TRANSPORT WORKERS ACT, 1961

The Act seeks to regulate hours and limitations of employment (8 hours in a day and 48 hours in a week) with daily intervals for rest, weekly rest, provision for medical facilities, canteens, rest rooms, wages and leave of workers employed in motor transport undertakings. The Act is now in force in all States except Jammu and Kashmir.

### THE APPRENTICES ACT, 1961

The Act provides for the regulation and control of training of apprentices in trades and for matters connected therewith.

The Act also provides for the hours of work, overtime, leave and holidays of apprentices and for their health, safety and welfare.

Further details of the Act were given in the previous editions of the Directory.

### WAGES

Central Wage Boards were set up for eight industries—cotton, cement, jute, coffee plantations, tea plantations, rubber plantations, sugar, iron-ore, limestone and dolomite mining industries. All the eight Boards have made their reports. (See under individual industry.)

The function of a Wage Board is to fix a wage structure on the principle of fair wages.

A steering group consisting of representatives of Government, employers and workers is engaged in drawing up a wage map of India both industry-wise and region-wise to serve as a guide for authorities who have to fix wages.

Average Annual earnings in states of factory employees drawing less than Rs. 200 per month. Figures in Rs. for 1962 and 1963 respectively: Andhra Pradesh 1,082; 1,082; Assam 1,055; 1,262; Bihar 1,385; 1,431; Gujarat 1,666; 1,613; Kerala 1,128; 1,130; Madhya Pradesh 1,794; 1,685; Madras 1,496; 1,467; Maharashtra 1,699; 1,731; Mysore 1,210; 1,435; Orissa 1,813; 1,289; Punjab 1,180; 1,192; Rajasthan 1,310; 1,286; Uttar Pradesh 1,277; 1,278; West Bengal 1,325; 1,350; Andaman & Nicobar Islands 1,244; 1,262; Delhi 1,671; 1,577; Himachal Pradesh 1,292; 1,162; Average 1,459; 1,475.



MINIMUM WAGES AND DEARNESS ALLOWANCE IN THE COTTON MILL INDUSTRY FOR A STANDARD MONTH  
OF 26 WORKING DAYS.

| Period           | Bombay | Ahmedabad | Sholapur | Baroda | Indore | Nagpur | Madras | Kanpur | West Bengal |
|------------------|--------|-----------|----------|--------|--------|--------|--------|--------|-------------|
|                  | Rs.    | Rs.       | Rs.      | Rs.    | Rs.    | Rs.    | Rs.    | Rs.    | Rs.         |
| Min. Basic wages | 40.00  | 38.00     | 34.00    | 36.00  | 33.00  | 32.00  | 36.00  | 33.00  | 36.17       |
| D.A. Monthly     |        |           |          |        |        |        |        |        |             |
| Average 1960 ..  | 89.25  | 87.81     | 59.52    | 73.91  | 63.70  | 67.01  | 67.68  | 59.49  | 32.50       |
| " 1961 ..        | 91.79  | 86.95     | 66.59    | 78.25  | 63.65  | 64.77  | 75.85  | 59.94  | 35.79       |
| " 1962 ..        | 95.76  | 88.52     | 73.02    | 78.99  | 65.07  | 64.69  | 79.09  | 65.43  | 44.01       |
| " 1963 ..        | 96.08  | 85.15     | 72.84    | 76.63  | 66.98  | 67.36  | 83.05  | 66.40  | 50.53       |
| " 1964 ..        | 114.79 | 103.44    | 92.23    | 92.30  | 76.45  | 80.72  | 96.68  | 86.36  | 55.38       |
| " 1965 ..        | 127.08 | 125.90    | 96.33    | 103.31 | 88.78  | 101.65 | 115.14 | 101.92 | 60.81       |
| 1965 January ..  | 123.95 | 110.09    | 96.72    | 99.00  | 85.50  | 100.02 | 113.12 | 105.24 | 61.38       |
| February ..      | 123.70 | 115.13    | 92.30    | 103.66 | 85.50  | 103.22 | 114.94 | 103.85 | 63.33       |
| March ..         | 122.00 | 130.37    | 90.22    | 117.33 | 85.50  | 104.68 | 114.16 | 104.10 | 63.33       |
| April ..         | 120.30 | 126.91    | 91.00    | 114.22 | 88.50  | 105.08 | 113.38 | 96.12  | 63.33       |
| May ..           | 122.55 | 124.22    | 92.56    | 111.80 | 88.50  | 101.29 | 113.38 | 93.40  | 57.93       |
| June ..          | 123.40 | 124.22    | 93.08    | 111.80 | 88.50  | 98.30  | 113.90 | 88.14  | 57.93       |
| July ..          | 125.65 | 128.06    | 95.16    | 115.26 | 88.50  | 97.23  | 113.90 | 91.18  | 57.93       |
| August ..        | 127.65 | 126.91    | 97.50    | 114.22 | 88.50  | 99.12  | 115.46 | 102.96 | 59.53       |
| Sept. ..         | 130.75 | 128.06    | 98.80    | 115.26 | 88.50  | 100.89 | 115.46 | 107.71 | 59.53       |
| Oct. ..          | 133.85 | 131.53    | 101.14   | 113.37 | 92.62  | 102.51 | 116.76 | 108.47 | 59.53       |
| Nov. ..          | 135.00 | 131.53    | 104.26   | 113.37 | 92.62  | 104.14 | 117.02 | 108.47 | 64.13       |
| Dec. ..          | 136.15 | 130.37    | 103.22   | 117.33 | 92.62  | 102.65 | 120.14 | 108.28 | 64.13       |

DEARNESS ALLOWANCE

The scale of the allowance varies not only from centre to centre and industry to industry, but also, except where these matters are adjudicated upon, from unit to unit in the same industry at the same centre.

Several Adjudicators have granted dearness

allowance either at the Bombay Millowners' Association scale which was Rs. 127.65 in Aug. 1965 or at a percentage, varying from 66½ per cent to 85 per cent. of that scale. The rate of dearness allowance payable to Bombay City cotton mill workers itself was increased by a decision of the Labour Appellate Tribunal by 5 per cent

when the Bombay Cost of Living Index Number is between 326 and 335; by 7½ per cent when it is between 336 and 350; and by 10 per cent when it is above 350. The enhanced rate was given retrospective effect from May 1953; the average dearness allowance for a month of 26 working days comes to Rs. 127.08 for 1965.

INDEX OF EARNINGS (1951 = 100)\*

| Year | All India Consumer Price Index | Factory workers         |                        | Miners                  |                        |
|------|--------------------------------|-------------------------|------------------------|-------------------------|------------------------|
|      |                                | Index of money earnings | Index of real earnings | Index of money earnings | Index of real earnings |
| 1960 | 113.1                          | 130.1                   | 110.2                  | 189.0                   | 160.5                  |
| 1961 | 120.0                          | 138.0                   | 115.5                  | 198.0                   | 165.0                  |
| 1962 | 123.8                          | 144.0                   | 116.3                  | 204.9                   | 165.5                  |
| 1963 | 127.0                          | 145.2                   | 113.8                  | 218.7                   | 171.4                  |
| 1964 | 144.8                          | 147.7(P)                | 120.0(P)               | 220.8                   | 152.5(P)               |

\* The figures exclude those for Railway Workshops and groups of industries seasonal in character consisting of Food, Beverages, Tobacco, Gin and Presses.  
(P) Provisional.

CENTRAL PAY COMMISSION

See article "Public Services."

COST OF LIVING

On the basis of the results of the fresh family living surveys, new series of consumer price index numbers for industrial workers are now being compiled by the Labour Bureau. It was decided by the Technical Advisory Committee to adopt the Calendar year 1960 as the base period for all these new series of index numbers.

Labour Bureau, Simla has published new series of Consumer Price Index for industrial workers in all the centres except the following:

| State          | Factory Centres | Mining Centres | Plantation Centres |
|----------------|-----------------|----------------|--------------------|
| Andhra Pradesh | .. Guntur       | Gudur          |                    |
| Bihar          | .. Jamshedpur   |                |                    |
| Madhya Pradesh | .. Gwalior      |                |                    |
| Madras         | .. Madras       |                | Coonoor            |
|                | .. Madurai      |                |                    |
|                | .. Coimbatore   |                |                    |
| Maharashtra    | .. Bombay       |                |                    |
|                | .. Sholapur     |                |                    |
|                | .. Nagpur       |                |                    |
| Punjab         | .. Yamunagar    |                |                    |
| Rajasthan      | .. Jaipur       |                |                    |
|                | .. Ajmer        |                |                    |



## EMPLOYMENT AND TRAINING

The Millowners' Association, Bombay conducts special classes for the training of Mill Labour Officers and actively supervises and controls the work done by all such officers where they have been appointed through the Association. Following the example of the Millowners' Association, Bombay, the University of Calcutta, in co-operation with the Indian Jute Mills Association, has a special course of social work for giving suitable training to Labour Welfare Officers engaged in jute mills. Among other institutions imparting training for Labour Officers mention may be made of the Tata Institute of Social Sciences, Bombay; Institute for Training of Welfare Workers, Bombay; Delhi School of Social Work, Delhi; Institute of Social Sciences, Banaras; Xavier Labour Relations Institute, Jamshedpur; Department of Labour and Social Welfare, Patna University; J. K. Institute of Sociology and Human Relations, Lucknow University; and the training course conducted by the Madhya Bharat Millowners' Association, Indore.

## Employment Service Techniques

The Directorate-General of Employment and Training, Government of India have set up the Central Institute for Research in Employment and Training in Oct. 1964, which conducts training course for Employment Officers. Intensive training is given during such courses in employment exchange work and procedure as well as in the techniques of collection of employment market information and administration of Vocational Guidance and Adult Counselling.

## Employment Exchanges

The number of Exchanges functioning in Dec. 1965 was 376 which includes nine Special Exchanges for the handicapped. In addition 36 University Employment Information and Guidance Bureaux were in existence at the close of 1965. Vocational Guidance facilities are available at these bureaux as well as at 166 employment exchanges.

## Employment Information

Complete information in respect of the public sector is being collected from all over the country. Employment during 1961-65 rose by 29.1 lakhs from 120.9 lakhs to 150 lakhs indicating an increase of 24.1 per cent. Of the total rise, the public sector accounted for 19.1 lakhs while establishments in the non-agricultural private sector employing 25 or more persons showed an increase of 10 lakhs.

The number of registered applicants with the Employment Exchanges was 25,85,473 at the end of Dec. 1965. During the period Jan.-Dec. 1965 on an average 47,516 persons were placed in employment each month. The monthly average number of vacancies notified during the period was 78,840. Of the placements effected, 11,754 were under the Central Government, 21,193 under the State Governments, 8,213 under quasi-Government establishments and local bodies and 6,356 under private establishments.

In 1965 on an average 29,776 women were registered with the exchanges every month and an average 4,087 women were provided jobs every month.

## WORKING OF THE EMPLOYMENT EXCHANGES\* IN INDIA

|                          | No. of<br>exchanges<br>at the end<br>of the<br>month | No. of<br>registra-<br>tions<br>during<br>the month | No. of<br>applicants<br>placed in<br>employ-<br>ment<br>during the<br>month | No. of<br>applicants<br>on the live<br>registers<br>at the end<br>of the<br>month | No. of<br>employers<br>using the<br>exchanges | No. of<br>vacancies<br>notified<br>during<br>the month |
|--------------------------|------------------------------------------------------|-----------------------------------------------------|-----------------------------------------------------------------------------|-----------------------------------------------------------------------------------|-----------------------------------------------|--------------------------------------------------------|
| Average for 1964 .. .. . | 365**                                                | 3,19,325                                            | 45,402                                                                      | 24,92,874**                                                                       | 13,742                                        | 76,381                                                 |
| 1965                     |                                                      |                                                     |                                                                             |                                                                                   |                                               |                                                        |
| January .. .. .          | 365                                                  | 2,94,588                                            | 45,663                                                                      | 24,59,921                                                                         | 12,829                                        | 71,376                                                 |
| February .. .. .         | 366                                                  | 2,63,044                                            | 43,694                                                                      | 24,25,516                                                                         | 12,420                                        | 68,538                                                 |
| March .. .. .            | 368                                                  | 2,87,153                                            | 45,377                                                                      | 23,95,618                                                                         | 13,420                                        | 81,619                                                 |
| April .. .. .            | 368                                                  | 3,20,430                                            | 42,669                                                                      | 24,10,004                                                                         | 13,782                                        | 75,036                                                 |
| May .. .. .              | 369                                                  | 3,26,130                                            | 46,581                                                                      | 24,81,054                                                                         | 14,722                                        | 86,486                                                 |
| June .. .. .             | 376                                                  | 3,81,486                                            | 48,204                                                                      | 25,00,446                                                                         | 15,186                                        | 86,417                                                 |
| July .. .. .             | 376                                                  | 4,28,154                                            | 48,762                                                                      | 26,00,839                                                                         | 15,616                                        | 78,260                                                 |
| August .. .. .           | 376                                                  | 3,63,428                                            | 47,545                                                                      | 26,51,333                                                                         | 14,935                                        | 79,766                                                 |
| September .. .. .        | 376                                                  | 3,34,164                                            | 48,684                                                                      | 26,52,695                                                                         | 14,876                                        | 83,282                                                 |
| October .. .. .          | 376                                                  | 2,69,577                                            | 47,338                                                                      | 26,00,066                                                                         | 12,561                                        | 76,725                                                 |
| November .. .. .         | 376                                                  | 3,45,586                                            | 51,534                                                                      | 26,00,550                                                                         | 14,275                                        | 80,814                                                 |
| December .. .. .         | 376                                                  | 3,43,865                                            | 54,140                                                                      | 25,85,473                                                                         | 12,636                                        | 77,763                                                 |

\* Excluding University, Employment Information and Guidance Bureaux.

\*\* Figures as on 31-12-64.

## Training of Craftsmen

The Craftsmen training facilities were expanded during the 3rd Five Year Plan by adding seats to the existing Industrial Training Institutes and also by opening new ITIs. At the end of the third Five Year Plan the number of Institutes was 357 and the total training places were 1,13,622. It is proposed to expand the training scheme further during the 4th Five Year Plan by adding about 1 lakh seats. Of these, 30,000 additional seats are proposed to be introduced at the existing ITIs./Centres during the 1st year of the 4th Five Year Plan.

## Scheme of Part-time Classes for Industrial Workers :

In order to improve the theoretical knowledge of industrial workers, a scheme of Part-time Classes for Industrial Workers had been started during the Second Five Year Plan. The classes are held in technical institutes or within the factory premises of an industrial establishment at convenient localities. The duration of the course is two years and the classes are held thrice a week. The course consists of instructions in workshop mathematics, reading of blueprints and elementary trade theory and use of precision instruments. At the end of 1965, 4,280 seats had been introduced under the scheme and 2,772 trainees were undergoing training in 34 centres where theory classes are being conducted.

## Training of Craft Instructors

The scheme for the training of Craft Instructors has been designed to improve the efficiency of the Instructors both in the public and private institutions with a view to meeting the increasing demands of the country. The Government of India in the Ministry of Labour and Employment have set up 7 Central Training Institutes for Instructors, one of which meant exclusively for women, is functioning in New Delhi while the other 6 are located at Calcutta, Bombay, Kanpur, Madras, Hyderabad and Ludhiana. The total training places at these Institutes is 2,380 at the end of the Third Plan of which 448 were being introduced as advance action of Fourth Plan Expansion Programme. During Fourth Plan 1,172 more seats are proposed to be introduced. Training is imparted in 16 engineering and 4 non-engineering trades and the duration of

training is 9 months. These Institutes provide instruction in the theoretical aspects of the various trades and also impart practical instruction in the latest techniques of workshop practice.

## Apprenticeship Training Act, 1961

The Apprentices Act, 1961 was enacted in December, 1961 to regularise the programmes of practical training in industry in such a way as to conform to standards, syllabi, period of training etc. and to utilise fully the facilities available in industry for imparting practical training.

## EMPLOYMENT IN FOREIGN COMPANIES

The position in regard to employment of Indians and non-Indians on salaries of Rs. 1,000 and above in foreign-owned/controlled concerns on the 1st of January each year was as follows:—

|              | Year | Indians | Foreigners* | Total  |
|--------------|------|---------|-------------|--------|
| 1960 .. .. . |      | 9,113   | 4,809       | 13,922 |
| 1961 .. .. . |      | 10,229  | 4,864       | 14,593 |
| 1962 .. .. . |      | 11,535  | 4,001       | 15,536 |
| 1963 .. .. . |      | 12,434  | 3,570       | 16,004 |
| 1964 .. .. . |      | 13,824  | 3,185       | 16,959 |

\* Excluding short-term foreign technicians.



Salary-group Rs.1,000-Rs. 2,000 : The number of Indians increased from 9,273 in 1963 to 10,088 in 1964.

Salary-group Rs. 2,001 to Rs. 3,000: The number of Indians increased from 2,185 in 1963 to 2,510 in 1964.

Salary-group Rs. 3,001 and above : The number of Indians increased from 972 in 1963 to 1,226 in 1964.

### ABSENTEEISM

One of the commoner complaints of Indian industrialists has been the high percentage of absenteeism and the large labour turnover in Indian factories, mines, etc.

#### ABSENTEEISM IN MANUFACTURING INDUSTRIES IN INDIA

(Percentage of man-shifts lost to man-shifts scheduled to work)

| Period     | Cotton Mill Industry |           |          |        |        |            | Woollen Industry |          |
|------------|----------------------|-----------|----------|--------|--------|------------|------------------|----------|
|            | Bombay               | Ahmedabad | Sholapur | Madras | Madura | Colmbatore | Kanpur           | Dhariwal |
| 1960 .. .. | 10.4                 | 7.3       | 17.1     | 8.3    | 13.3   | 11.9       | 14.2             | 9.0      |
| 1961 .. .. | 11.9                 | 16.0      | 14.7     | 7.7    | 13.5   | 12.0       | 15.1             | 10.6     |
| 1962 .. .. | 11.3                 | 8.3       | 15.3     | 8.0    | 13.8   | 12.8       | 27.4             | 11.9     |
| 1963 .. .. | 11.8                 | 8.0       | 18.3     | 8.0    | 13.5   | 13.1       | 15.3             | 14.2     |
| 1964 .. .. | 11.6                 | 7.9       | 16.9     | 8.1    | 12.2   | 12.8       | 12.5             | 14.7     |
| 1965 .. .. | 18.4                 | ..        | 15.3     | ..     | ..     | ..         | ..               | ..       |

#### ABSENTEEISM IN MANUFACTURING INDUSTRIES IN INDIA—Contd.

(Percentage of man-shifts lost to man-shifts scheduled to work)

| Period     | Engineering Industry | Telegraph Work-shops | Tramway Work-shops | Iron and Steel Industry | Ordnance Factories | Cement Factories | Match Factories | Leather Industry |
|------------|----------------------|----------------------|--------------------|-------------------------|--------------------|------------------|-----------------|------------------|
|            | Bombay               | West Bengal          | All India          | All India               | All India          | All India        | All India       | Kanpur           |
| 1960 .. .. | 13.9                 | 10.3                 | 12.8               | 8.3                     | 12.0               | 10.9             | 13.4            | 9.6              |
| 1961 .. .. | 12.7                 | 13.3                 | 13.8               | 9.0                     | 12.5               | 10.9             | 13.1            | ..               |
| 1962 .. .. | 13.9                 | 13.2                 | 13.4               | 10.4                    | 12.3               | 9.7              | 13.4            | ..               |
| 1963 .. .. | 13.4                 | 12.9                 | 12.1               | 9.4                     | 11.5               | 9.5              | 11.5            | ..               |
| 1964 .. .. | 13.1                 | 12.9                 | 15.6               | 10.3                    | 11.7               | 11.9             | 12.1            | ..               |

### EMPLOYEES' STATE INSURANCE CORPORATION

Head Office: E.S.I.C. Bldg., Kotla Road, New Delhi.

Regional Offices: See under 'Govt. of India Personnel.'

The Corporation came into existence as an autonomous body in 1948, which applies to all non-seasonal factories using power wherein 20 or more persons work. All employees employed directly or through an immediate employer on any work of the factory whether in a manual or non-manual capacity, on a remuneration not exceeding Rs. 400 per month, are covered by this Act.

The Scheme at present provides for medical care for the insured persons and in some areas for their families also and sickness, maternity, disablement and dependents' benefit in cash.

The Scheme covered an additional number of about 1,86,250 employees and about 1,38,475 family (I.P.) units during 1964-65. A sum of Rs. 6,35,80,663 was disbursed by way of cash benefit during 1964-65.

Upto 31st Dec. 1965 the Act was extended to cover 30,48,300 employees, in 240 centres. 30,26,500 family (I.P.) units have been covered for medical benefit upto 31st Dec. 1965.

The Employees' State Insurance Scheme covers about 34,67,525 insured persons working in 259 centres (as on March 31, 1966).

The total number of beneficiaries entitled to medical benefit is estimated at about 1,23,69,625 including the members of families of workers (as on March 31, 1966).

The Corporation provided medical care to well over 123 lakh persons by the end of the Third Plan period.

The scheme is in force in all the States except Jammu & Kashmir.

Hospitals: The Corporation has already constructed and put into use 13 full-fledged ESI Hospitals.

The Employees' State Insurance Corporation was maintaining 5,530 beds in hospitals. Out of these, 3,600 were in general and maternity hospitals and the balance of 1,930 were T.B. beds.

During the year 1965-66, the Corporation sanctioned a sum of Rs. 526.88 lakhs for construction of hospitals, annexes and dispensaries

under the ESIC Scheme in various States. So far the Corporation sanctioned about Rs. 2,857.31 lakhs for the construction of hospitals and dispensaries.

Total receipts of Corporation for 1964-65: Rs.19,60,67,730. Total benefits: Rs.13,69,93,593. Administrative expenses: Rs. 1,87,63,568. Employees' Contribution: Rs. 9,96,74,412. Employers' Contribution: Rs. 8,87,93,177.

Budget estimates for 1965-66: Receipts Rs. 22,99,17,000; expenditure Rs. 20,68,48,000. Surplus Rs. 2,30,69,000.

Amounts (Rs.) distributed under some heads for 1964-65 are as follows:—

| States             | Maternity Benefit | Disablement             |                             | Sickness (including extended sickness) | Dependent Benefit (Capitalised value) |
|--------------------|-------------------|-------------------------|-----------------------------|----------------------------------------|---------------------------------------|
|                    |                   | T.D.B. (Actual payment) | Capitalised value of P.P.D. |                                        |                                       |
| Andhra Pradesh ..  | 1,00,234          | 1,56,355                | 2,31,300                    | 16,42,191                              | 96,800                                |
| Assam .. ..        | 385               | 12,247                  | 51,800                      | 74,848                                 | —                                     |
| Bihar .. ..        | 50,658            | 67,932                  | 84,800                      | 6,60,499                               | 76,400                                |
| Delhi .. ..        | 14,817            | 2,27,165                | 5,15,200                    | 15,77,719                              | 1,26,400                              |
| Gujarat .. ..      | —                 | 1,25,759                | —                           | —                                      | —                                     |
| Kerala .. ..       | 5,56,399          | 1,48,431                | 1,90,200                    | 20,60,356                              | 35,300                                |
| M.P. .. ..         | 1,08,482          | 2,43,555                | 2,76,400                    | 22,51,342                              | 1,42,000                              |
| Madras .. ..       | 5,50,751          | 4,68,139                | 5,60,500                    | 63,62,638                              | 1,60,400                              |
| Maharashtra ..     | 6,69,957          | 13,80,895               | 22,04,500                   | 1,85,78,812                            | 7,52,400                              |
| Mysore .. ..       | 2,34,475          | 1,63,104                | 3,92,000                    | 18,48,605                              | 1,03,500                              |
| Orissa .. ..       | 11,014            | 44,884                  | 1,34,800                    | 3,40,270                               | 24,400                                |
| Punjab .. ..       | 7,614             | 1,41,513                | 3,46,100                    | 6,45,033                               | 89,900                                |
| Rajasthan .. ..    | 27,809            | 43,499                  | 76,200                      | 3,36,201                               | 68,300                                |
| U.P. .. ..         | 9,466             | 3,34,822                | 4,48,500                    | 31,93,770                              | 2,09,200                              |
| W. Bengal .. ..    | 82,080            | 15,99,779               | 17,92,400                   | 68,39,459                              | 3,92,000                              |
| <b>Total .. ..</b> | <b>24,24,141</b>  | <b>51,63,079</b>        | <b>73,04,700</b>            | <b>4,64,11,743</b>                     | <b>22,77,000</b>                      |



## ACCIDENTS

The Indian Factories Act requires the manager to report all accidents which cause death or bodily injury whereby the person injured is prevented from returning to his work in the factory during the 48 hours next after the occurrence of the accident.

It is the duty of the Inspector of Factories to make an investigation as soon as possible into the causes of and the responsibility for a fatal or serious accident, and to take steps for the prosecution of the person concerned if

it is found that the death or serious injury resulted from any infringement of the provisions of the Act or of the rules framed under the Act.

The Department of Mines has been strengthened to facilitate more frequent inspection of mines. As an emergency measure, the Coal Mines (Temporary) Regulations, 1955 have been promulgated for the prevention of apprehended danger and for the speedy remedy of the conditions likely to cause danger. The entire codes of coal and non-coal mines regulations are being revised to provide for more comprehensive measures for safety in mines.

Figures for the years 1957 to 1963 are given in the table below.

| Year | FACTORIES |           |          | MINES |           |       |
|------|-----------|-----------|----------|-------|-----------|-------|
|      | Fatal     | Non-Fatal | Total    | Fatal | Non-Fatal | Total |
| 1957 | 346       | 1,31,149  | 1,31,495 | 261   | 3,732     | 3,993 |
| 1958 | 357       | 1,36,031  | 1,36,400 | 504*  | 3,925     | 4,429 |
| 1959 | 341       | 1,41,675  | 1,42,016 | 288   | 4,084     | 4,372 |
| 1960 | 454       | 1,44,549  | 1,45,003 | 317   | 4,661     | 4,978 |
| 1961 | 474       | 1,59,271  | 1,59,745 | 344   | 5,173     | 5,517 |
| 1962 | 528       | 1,28,935  | 1,69,283 | 308   | 4,943     | 5,313 |
| 1963 | 364       | 1,31,805  | 1,32,168 | 344   | 4,110     | 4,454 |

\* Includes those killed in two disasters (Chinakuri 173 and Central Bhowra 26).

## WELFARE ACTIVITIES

Section 47 of the Factories Act, 1948 makes it obligatory for all factories employing more than 150 workers to provide adequate shelters and a suitable lunch room for the use of workers during periods of rest. Almost all large industrial establishments had provided tiffin rooms and rest shelters for their workmen. Most concerns had also permitted the establishment of tea stalls on the premises but apart from this, little effort had been made to run co-operative canteens on the lines of those which are associated with most of the large factories in the West.

The Act of 1948 provides for the setting up of creches in factories that employ more than 50 women.

Except for the Ahmedabad Textile Labour Association, the Railwaymen's Unions, and the Mazdoor Sabha of Indore, labour unions have not done much by way of labour welfare. This has been due largely to lack of funds. Some of the Railwaymen's Unions have organised co-operative societies, and various kinds of funds for the provision of specific benefits, such as, legal defence, death and retirement benefits, unemployment and sickness benefits and life insurance, etc.

Other types of welfare work done by factories relate to the provision of recreational facilities, amenities for the education of workers and their children, the provision of cost price grain shops, the establishment of co-operative societies, etc.

On railways there are educational facilities for the children of the employees mostly free of charge. Staff Benefit Funds have also been created which give monetary help to the children and widows of the deceased employees.

Medical facilities provided by employers range from first-aid posts and dispensaries to first-class hospitals.

## WORKERS' EDUCATION SCHEME

The Scheme of Workers' Education, which is run by an autonomous Central Board, consisting of representatives of workers, employers, educational institutions and the Government comprises three stages of training. The first stage consists of training of top level instructors known as Teacher-Administrators who are post-graduates in one of the social sciences. After successfully completing the course they conduct whole-time training courses for selected workers who are called Worker-Teachers. This

course is open to whole-time trade union officials also. This is the second stage of the scheme. The workers so trained revert to their places of employment and conduct programmes at the unit level for the rank and file of workers. This constitutes the third and final stage. The medium of instruction at the regional and unit level is the regional language and the syllabi are also adjusted to suit local conditions.

The object of the Scheme is to create over a period of time, despite lack of general education, a well-informed, constructive and responsible minded industrial labour force capable of organizing and running trade unions on sound lines without leaning heavily on outsiders and without lending themselves to exploitation by extraneous interests.

By the end of March 1966, 7,384 worker-teachers were trained in 334 sessions at the various regional and sub-regional centres under the Board while 349 worker-teachers were under training during the month; and 3,25,795 workers were trained while 34,082 were under training.

Trade Union Organisations which are receiving grants-in-aid from the Board trained 2,229 workers including 68 worker-teachers. By the end of March 1966, a total number of 3,57,577 workers were trained under "Workers Education", at the various institutions under the Workers' Education Programme.

By the end of Dec. 1965, 44 booklets in English and 378 in regional languages were published by the Board.

## COAL MINES WELFARE FUND

This Fund was constituted under the Coal Mines Labour Welfare Fund Act of 1947 for financing measures for promoting the welfare of labour employed in the coal mining industry.

The main source of income to the Fund is a cess levied on all coal and coke despatched from collieries by rail and road. The cess is being levied at the rate of 49-21 Paise per metric tonne. The income of the Fund which was Rs. 3,53,16,640 during 1963-64 was expected to be Rs. 3,47,81,923 during 1964-65.

Other welfare measures include a scheme of financial assistance to the wives and school-going children of those colliery workers who die of accidents in mines, provision of a holiday home for miners at Rajgir, running of a special train for Bharat Darshan, provision of rehabilitation centres for disabled colliery workers and cured T.B. patients, for imparting training

in physical education, leadership and discipline, mass physical efficiency test for coal miners, etc.

**Mica Mines Labour Welfare Fund.**—The Mica Mines Labour Welfare Fund Act, 1946, which was designed to constitute a similar fund for the benefit of mica workers, provides for the levy of an *ad valorem* duty not exceeding 6½ per cent on all mica exported from India. The Govt. of India apportions the cess so realised annually among Bihar, Andhra Pradesh, Rajasthan and other States.

In Bihar, the Fund has provided medical, educational and recreational facilities for the welfare of mica miners.

**Andhra Pradesh:** The percentage share of cess is 18.5. The income and expenditure of the Mica Mines Labour Welfare Fund in Andhra Pradesh in 1965-66 were Rs. 5,99,681 and Rs. 6,59,872.40 respectively.

## AGRICULTURAL LABOUR

An enquiry on Income and Consumer Expenditure of rural households including agricultural labour households was conducted in 8,472 villages spread over 15 States and four Union Territories selected on the principle of stratified random sampling and staggered evenly over a period of 12 months. This enquiry was integrated with the 18th round of the National Sample Survey. Data on employment, unemployment earnings and indebtedness of rural households, including agricultural labour households were collected in the course of the 19th round of the N.S.S.

## MINIMUM WAGES

One of the protective measures to improve incomes of agricultural labourers is the Minimum Wages Act, 1948, which *inter alia* applies to employments in agriculture. In so far as agricultural employments are concerned section 3 (1) (d) of the Act lays down that the appropriate Government may, instead of fixing minimum rates of wages for the whole State, fix such rates for a part of the State or for any specified class or classes of such employments in the whole State or part thereof.

Minimum wages for agricultural workers have been fixed in most of States and by the Central Govt. in certain agricultural farms/research institutes, military farms and depots and archaeological gardens at Delhi, Agra, Lucknow, Deeg and Khajuraho.

Consumer Price Index numbers for agricultural Labour on base 1960-61 (July-June) = 100 from Sept. 1964 onwards are being published by the Labour Bureau, Govt. of India for 14 States, together with all India figures, regularly every month in the *Indian Labour Journal*.

## WORKERS' EDUCATION

A semi-autonomous body called the Central Board for Workers' Education consisting of the representatives of Government, employers, workers and educational institutions has been set up for carrying on workers' education. The Board is invested with full authority for the framing and execution of the programmes in cooperation with trade unions, educational institutions, etc. It is financed by grants-in-aid from the Government of India.

The Board has so far opened 30 Regional and 43 Sub-Regional Workers' Education Centres in different parts of the country. Of the 43 Sub-Regional Centres, six have since been converted into full-fledged Centres.

Upto the end of March 1966, 7,384 Worker-Teachers and 3,25,795 workers have been trained.

## Training-cum-Orientation Course

Under the scheme, special instructions in business management are given to the selected trainees during the last 9 months of the 18th months' institutional training under the Craftsmen Training Scheme. So far (March 1966), these revised courses have been sanctioned



n Assam, Gujarat, Kerala, Madhya Pradesh, Madras, Maharashtra, Mysore, Punjab and Uttar Pradesh.

**Trade Union Methods:** Over 3,25,000 Industrial workers have received training in trade union methods and philosophy under the three-tier country-wide scheme of workers' education. Nearly 33,730 workers are undergoing training at various centres (March, 1968).

### CODE OF DISCIPLINE

The Code of Discipline lays down certain do's and don'ts both for managements and unions with a view to ensuring better discipline in industry. Managements have undertaken not to increase work-loads unless agreed upon, not to support or encourage unfair labour practices, to take prompt action for the redress of their grievances and to recognise the unions which fulfil certain agreed conditions. Unions on the other hand have undertaken not to indulge in physical duress, non-peaceful and rowdy demonstrations, to discourage unfair labour practices. Both the managements and unions have also agreed not to take any unilateral action in an industrial matter but to settle disputes at appropriate levels, not to resort to strike or lock-out without notice or to coercion, intimidation, victimisation or go-slow tactics, to establish a mutually agreed grievance procedure for the speedy settlement of disputes and to take prompt action to implement awards, agreements and settlements. The Code applies to both the public and the private sectors.

The Central Implementation and Evaluation Committee has decided that a review of the working of the Code of Discipline in all its aspects, particularly the functioning of the State Implementation Committees, should be undertaken and placed before the next Indian Labour Conference. The eleventh meeting of the Committee was held on November 26, 1965. Besides discussing some individual cases of infringements of the Code of Discipline, the Committee took some important decisions. These are described below:

- (i) when a union is recommended for recognition by the Implementation machinery after proper verification of its membership, the employer must recognise it within a month. If he fails to do so, he should be considered responsible for infringing the Code of Discipline and action would be taken against him by the Central Organisation concerned.
- (ii) A union which is not affiliated to any of the four central organisations of workers, should wait for a period of one year after it has accepted the Code of Discipline before its claim for recognition can be considered.
- (iii) When a breach of the Code of Discipline by a union has been established by the appropriate Implementation Machinery, it would be open to the employer concerned to de-recognise it.

All public undertakings working as companies and corporations are already covered by the Code. The Reserve Bank of India, the State Bank of India, the Life Insurance Corporation and the General Insurance Companies and their employees' organisations have accepted the Code of Discipline with certain clarifications. The Port Trusts, the private banks and their employees' organisations too have accepted the Code with some clarifications except those on the criteria for Recognition of Unions. The Ministry of Railways and the Ministry of Defence are also being persuaded to adopt the Code.

During 1965 the Central Implementation and Evaluation Division received 1,399 complaints about breaches of the Code of Discipline in the Central sphere. Of these, 233 did not require action as these were referred to the Division only for information or pertained to cases which were subjudice. Of the remaining cases, 1,166 cases on which action was required to be taken by the C.I. & E. Division, 85 were not substantiated on enquiry; in 61 the parties were brought

together and mutual settlements were arrived at; in 453 the infringements were either rectified or parties were advised to avoid them in future and the rest of the cases have been taken up with the parties concerned for rectification.

**Industrial Truce Resolution:** The Truce aims at total elimination of work stoppages, improvement in production and productivity, reduction of costs to the maximum possible extent, ensuring price stability through organisation of Consumers' Cooperatives for industrial workers, increasing savings etc.

**Voluntary Arbitration:** Voluntary arbitration which the Code of Discipline advocates as a means of settling disputes has been further stressed in the Industrial Truce Resolution. Since the inception of the Industrial Truce Resolution voluntary arbitration is being agreed to in more and more cases. Of the 2,264 cases in the Central sphere, in which conciliation failed during the period Nov. 1962-Dec. 1965, voluntary arbitration was agreed to in 518 cases.

### THE SCHEME OF JOINT MANAGEMENT COUNCILS

The Industrial Policy Resolution of 1956 stated that "in a socialist democracy, labour is a partner in the common task of development and should participate in it with enthusiasm."

The essential features of the scheme are consultation, sharing of information and the delegation of some administrative responsibilities.

At present the scheme of Joint Management Councils is in operation in 116 establishments in the public, private and cooperative sectors. These include manufacturing, mining, plantation and banking industries. Efforts are being directed to extend the scheme to as many establishments as possible. The Government at the Centre and in the States have set up special agencies for expeditious implementation of the scheme.

### TRIPARTITE LABOUR MACHINERY

The Tripartite Labour Machinery at the Centre consists of (a) Indian Labour Conference, (b) Standing Labour Committee and (c) Industrial and other Committees. There is also the Labour Ministers' Conference, which though not tripartite in character, is closely associated with the tripartite labour machinery.

The Indian Labour Conference advises the Government of India on all labour matters referred to it.

The Standing Labour Committee, though originally intended to be a Standing Committee of the Indian Labour Conference and was to examine such questions as might be referred to it by the Conference or the Government, now functions as an independent body.

Many other Industrial Committees also have been set up to consider the problems peculiar to individual industries and make suitable recommendations.

### LABOUR ADMINISTRATION

Apart from the main Secretariat of the Ministry of Labour it has several attached and subordinate offices. The activities of some of these have been described in the relevant sections, such as Miners' Welfare Fund, and notes on some others are briefly given below.

**Chief Labour Commissioner** in the Ministry of Labour, Employment and Rehabilitation.—The Chief Labour Commissioner is responsible for prevention and settlement of industrial disputes, enforcement of labour laws, promotion of labour welfare and maintenance of healthy relations in the undertakings falling in the Central sphere and verification of membership of trade unions. A Central Institute for Training in Industrial Relations has also been set up under him for imparting specialised training to the officers of the industrial relations machinery at the Centre and in the States. There are two

Deputy Chief Labour Commissioners and nine Regional Labour Commissioners working under him.

**Director General of Factory Advice Services and Labour Institutes:**—The organisation functions in an advisory capacity to co-ordinate and ensure uniformity in the administration of the Factories Act and the rules framed thereunder relating to safety, health and welfare of workers in factories. It is also responsible for the administration of the Indian Dock Labourers Act 1934, the Indian Dock Labourers' Regulations Act 1948 framed thereunder and also the Dock Workers (safety, health and welfare) Scheme 1961. The organisation has under its control the Central Labour Institute at Bombay and the three Regional Labour Institutes at Calcutta, Madras and Kanpur which provide a comprehensive service to industry in the country as a whole on labour and allied problems relating to the human factor.

The organisation has been entrusted with the work of implementation of the Schemes for Shram-Vir National Awards and National Safety Awards and a scheme for the setting up of a National Safety Council to ensure the fullest participation of all the parties concerned in creating safety consciousness in industry.

### EMPLOYMENT FOR HANDICAPPED

Special Employment offices for the physically handicapped are at present functioning at Bombay, Delhi, Madras, Hyderabad, Calcutta, Kanpur, Bangalore, Ahmedabad and Jullundur.

### CENTRAL LABOUR INSTITUTE

The Institute comprises the following sections: (1) Industrial Safety, Health and Welfare Centre, (2) Industrial Hygiene Laboratory, (3) Productivity Centre, (4) Staff Training Centre, (5) Industrial Physiology Section, (6) Industrial Psychology Section, (7) Library-cum-Information Centre, (8) Training Centre, and (9) Industrial Medicine Section.

The Government of Maharashtra has made available free of cost an 18-acre plot of land near Sion in Bombay and the building for housing the Institute has been constructed at a cost of about Rs. 30 lakhs. The opening ceremony of the Institute by Dr. S. Radhakrishnan took place on Feb. 9, 1966.

### INDIA AND THE I.L.O.

India joined this organisation at the very start and since 1922 has been one of the ten countries of chief industrial importance and as such has been allotted a permanent seat on the Governing Body of the Organization. India also contributes liberally towards the finances of the Organisation. For 1966 India's contribution amounts to U.S. \$5,91,833 which is 2.91 per cent of the total contribution of all member States, as against U.S. \$5,084,468 for 1965 which is 25 per cent. of the total contribution of all member States. India's share in the appointments of the office is, however, somewhat inadequate.

At the headquarters in Geneva the number of Indian nationals employed in 1965 as PI and above is 16. The entire staff of the Indian Branch in New Delhi is Indian.

India has been the venue of two Asian Regional Conferences, the first in 1947 and the fourth in 1967.

India has been receiving technical assistance from the I.L.O. in the spheres of manpower, vocational training, Rural Employment Promotion, Productivity, and so on and experts from India have been recruited by the I.L.O. for assignments in other underdeveloped countries in such subjects as Cooperation, Cottage Industries and Employment Information.

Out of 122 Conventions adopted by the International Labour Conference, India has so far ratified 30 Conventions. She has in addition incorporated into her national legislation the essential features of many other Conventions.



**BONUS COMMISSION\***

The Commission was appointed on Dec. 6, 1961. It submitted its report to the Government in January 1964. According to the report, every worker should be guaranteed a minimum bonus of four per cent of his consolidated wage whether his employer makes a profit or not, or Rs. 40 whichever is higher, and a maximum limit of bonus at 20 per cent of the total annual earnings (basic and dearness allowance).

**Modification**

The Govt. of India has accepted the Bonus Commission's recommendations, subject to certain modifications relating to prior charges on gross profits before amounts available for distribution are computed. Such prior charges include direct taxes and fixed percentages of return on capital as well as provision for reserves.

The commission's formula is applicable also to public undertakings which compete with the private sector.

Existing agreements between managements and their employees providing for a larger amount of bonus will not be disturbed, but whenever a dispute arises, the commission's formula will prevail.

The modifications introduced by the Government are :

(1) In computing the "available surplus," all direct taxes for the time being in force will be deducted as prior charges. Tax concessions given to the industry to provide resources for development will also be accepted as prior charges. Steps are to be taken to ensure by law that the amounts involved in such concessions are used for the purposes for which they are given.

(2) The rate of return on capital to be allowed as a prior charge deductible before calculating available surpluses should be : (A) The actual rate payable on preference share capital, (B) eight per cent., taxable, on paid-up equity capital, and in the case of banks 7.5 per cent; and (C) six per cent. on reserves, in the case of banks five per cent.

(3) The Government considered it desirable that beyond a certain limit, bonus should be paid in the form of securities or investment, instead of in cash. This matter is to be discussed and decided by negotiations with the parties concerned, including labour organisations, and, if necessary, by tripartite discussions.

The President issued an ordinance embodying the Government's decision on the recommendations of the Bonus Commission on May 31, 1965.

The Bill was passed in the Lok Sabha and Rajya Sabha on Sept. 9, 1965 and Sept. 22, 1965 respectively.

The Payment of Bonus Act received the assent of the President on Sept. 25, 1965.

Subject to the maximum of 20 per cent which an employee is entitled by way of bonus, the Act protects the benefits which the employees got in the previous accounting year, as given in Section 34 of the Act. The Section reads as follows :

If in respect of any accounting year the total bonus payable to all the employees in any establishment under this Act is less than the total bonus paid or payable to all the employees in that establishment in respect of the base year under any award, agreement, settlement or contract of service, then, the employees in the establishment shall be paid bonus in respect of that accounting year as if the allocable surplus for that accounting year were an amount which bears the same ratio to the gross profits of the said accounting year as the total bonus paid or payable in respect of the base year bears to the gross profits of the base year.

\* Sections 33, 34 (2) and 36 were struck down by the Supreme Court as being "ultra vires" of Article 19.

**CHRISTIAN MISSIONS IN INDIA****CONGREGATIONAL SOCIETIES****The Evangelical Alliance Mission.**

*Western India Headquarters* :—Amalner, Jalgaon District.

**Hindustani Covenant Church.**

*Moderator* : Rev. B. Thoma, 3, Transport Line, Poona 2.

**Swedish Hindustani Mission.**

*Chairman* : Rev. Karl G. Henningson, 29, Souter Street, Bombay 8.

**LUTHERAN SOCIETIES****The Council of the India Mission of the Lutheran Church in America.**

*Secretary* : Miss Dolores I. Dohlen, Lutheran Industrial Home, Rajahmundry.

**Federation of Evangelical Lutheran Churches in India.**

*President* : The Rt. Rev. Dr. R. B. Manikam, Tranquebar House, Tiruchirappalli, South India.

*Vice-President* : Rev. K. Devasahayam, Church office, Guntur. *Secretary* : Rev. & Dr. M. Bage, Gosner E. Lutheran Church, Ranchi.

There is an institution named The Gurukul Lutheran Theological College and Research Institute in Madras.

**Tamil Evangelical Lutheran Church.—**

*President* :—The Rt. Rev. Dr. R. B. Manikam, M.A., B.D., Ph.D., D.D., S.T.D., Bishop of Tranquebar, "Tranquebar House", Tiruchirappalli, S. India.

**India Evangelical Lutheran Church.**

Immaneul Lutheran Church, Ambur, N.A. District, S. India.

**INTER-DENOMINATIONAL MISSIONS****Bible and Medical Missionary Fellowship.**

*International Secretary* :—A. E. Norrish.

*Field Secretary* :—Rev. E. Lowe., Edgehill, Landour P.O., Mussoorie, U.P.

**Leprosy Mission**

The Secretary for Southern Asia is V. P. Das, Purulia (S.E. Rly.), West Bengal.

**National Missionary Society of India.**

*Address* :—N. M. S. House, Royapettah, Madras 14.

**Christa Seva Vidhyalaya.**

(Training College for Women Church Workers of advanced Education).

*Secretary* : Miss S. E. Laul, 7/2, College Road, Madras 6.

**Dohnavur Fellowship.**

*Secretary* : V. Thyagaraj Ananda, Dohnavur, Tirunelveli Dt., S. India.

**Nasrapur Spiritual Life Centre Fellowship.**

Spiritual Life Centre, Nasrapur, Poona Dist.

**Old Church Hebrew Mission.**

Old Mission Church 5, R. N. Mukherjee Road, Calcutta 1.

**Ramabai Mukti Mission.**

*Superintendent, Secretary and Treasurer* :—Miss G. Fletcher, R. M. Mission, Kedgaon, Poona District.

**Student Christian Movement of India.**

S.C.M. House, 2-E, Mission Road, Bangalore 2.

**MISCELLANEOUS****American Advent Mission.**

*Chairman* : Miss M. R. Damon, M.R.E. Guindy, Madras 32.

**American Baptist Bengal-Orissa-Bihar Missionary Fellowship.**

*Field Secy.* : Rev. C. L. Kau, Jamda, Jhargram, W. Bengal.

**American Friends' Mission.**

*Superintendent* : Rev. M. E. Coleman Chhatrapur (M.P.).

**Behat Village Mission.**

Mission House-Behat P.O., Saharanpur Dist., U.P.

**Bharat Evangelical Mission.**

Post Box 41, Rajahmundry, Andhra Pradesh. (Helen Clerke Children's Home, Home for Orphans and Destitutes of both sexes; Babies are also admitted).

*Founder and Director* : Rev. Johnson Edwards

**Bharat Evangelical Mission.**

41, Main Road, St. Thomas Mount, Madras 16.

**Board of Christian Institutions.**

*Chairman* : Dr. Gurbachan Singh, Gass Memorial Centre, Raipur, M.P.

**Boys' Christian Home Mission.**

Dhond, Poona Dist.

**Brethren in Christ Mission.**

P.O. Banmankhi, Dist. Purnea, Bihar.

**Brethren in Christ Church**

P.O. Banmankhi, Dist. Purnea, Bihar.

**Buchanan Memorial Orphanage**

89, James Street, Poonamallee, Madras-56.

**Central Asian Mission.**

The Mission Hospital, Manali, Kulu Valley, Punjab.

**Christian and Missionary Alliance.—**

*Chairman* :—The Rev. E. F. Eicher, Akola, Maharashtra.

**Church of the Brethren (American).**

Mission House, Bulsar, Gujarat.

**Church of the Nazarene Mission.**

*Mission Chairman* :—Rev. J. W. Anderson, Basin, Akola Dt., Maharashtra.

**Church of the Nazarene of Bharat.**

*Dist. Supt.* :—Rev. S. T. Gaikwad, Buldana, Maharashtra.

**Dipti Mission.**

*Superintendent* : Mrs. K. M. Clemence, M.A., B.Ed., Sahibganj, Bihar; *Treasurer* : L. Clemence.

**Evangelical Missionary Society in Mayurbhanj.** Rairangpur, Mayurbhanj Dist., Orissa.

**Free Church of Finland Mission.**

*Field Secretary* :—Miss Rilita Silkanen, Ghoom, Darjeeling, West Bengal.

**Home Missionary Society of India.**

*Secretary and Treasurer* :—Mrs. K. Mc. Dermott, 22, Stephens Road, Frazer Town, Bangalore-5.



**World Mission to Children.**

House of Praise, Hoskote, Bangalore Dist.

**House of Worship.**

Bethamangala, Kolar Dt., Mysore State.

**India Christian Mission.**

Champawat P.O., Almora Dist., U.P.

**India Church Council of the Disciples of Christ.**

Exec. Secretary: P. Solomon, Damoh, M.P.

**India Gospel Fellowship Mission.**

Secretary:—Rev. J. Darashah, B.A., Lake View, Woodcock Road, Ootacamund, Nilgiris.

**India Industrial Mission.**

Cossipore, Calcutta-2.

**India Mission.**

Trimulgherry, Hyderabad Dist., A.P.

**Lakher Pioneer Mission.**

P.O. Serkawr, South Mizo Dist., Assam.

**Metropolitan Church Association.**

P.O. Sitait, Allahabad Dist., U.P.

**Mission to Indian Villages.**

Secretary:—Rev. Mrs. C. Benfield, Latur Osmanabad, Marathwada.

**NATIONAL CHRISTIAN COUNCIL OF INDIA**

Address:—The National Christian Council, Christian Council Lodge, Nagpur 1, Maharashtra.

**Nepal Evangelistic Band.**

Christian Dispensary, Nautanwa, Gorakhpur, U.P.

The Nepali Isai Sahitya Sangha, B. K. Gomga Road, Darjeeling.

**North East India General Mission.**

P.O. Mission Compound, Churachandpur, Manipur.

**Norwegian Free Evangelical Mission.**

N.F.E.M., Banda, U.P.

**Oriental Missionary Society.**

Director for India:—Dr. W. Duewel, 20, Stanley Rd., Allahabad, U.P.

**Pilgrims Mission.**

Varanasi Cantt., U.P.

**Poona and Indian Village Mission.**

Mission Headquarters, 10, Napier Road, Poona-1.

**Scripture Union & Children's Special Service Mission.**

Secretary-Treasurer: O. C. Mathew, B.Sc., Kottooreth, Chengannur (Kerala State).

**Swedish Alliance Mission.**

Secretary:—Rev. Sigurd Ohlsson, Nandurbar, Dhulia District, Maharashtra.

**Swedish Women Missionary Society.**

E. Pihlquist, Dinhatta P.O., Cooch Behar, West Bengal.

**United Missionary Society.**

Field Superintendent:—Rev. Weyburn Johnson, 10, St. George's Gate Road, Calcutta 22.

United Presbyterian Church in the U.S.A. in association with the United Church of Northern India.

Representative:—The Rev. Gordon M. Buff, 51, Rajpur Road, Dehra Dun, U.P.

**United World Mission.**

Field Secretary:—Rev. S. L. Rassmann, Bahraich, U.P.

**Woman's Union Missionary Society.**

Secretary:—Miss Helen L. Mollenth of Broadwell Hospital, Fatehpur, U.P.

**World Gospel Mission.**

Anandagiri, Box 20, Bangarapet (Mysore State).

The Anandagiri Christian Fellowship, Anandagiri, Box 20, Bangarapet (Mysore State).

**World Mission Prayer League, Inc.**

Mission House, Darjeeling.

**Free Methodist Mission of North America.**

Field Superintendent:—Rev. Elmer S. Root, Chikalda, Amravati Dist., Maharashtra.

**SEVENTH-DAY ADVENTIST CHURCH****Southern Asia Division.**

The general headquarters for India, Pakistan, Burma and Ceylon are located at Salisbury Park, Poona. R. L. Lowry, President; C. B. Guild Secretary; B. H. Stickle, Treasurer (Office Address: Post Box 15, Poona.)

**SALVATION ARMY**

The work of the Salvation Army in India and Ceylon was commenced in 1882 by the late Commissioner Booth-Tucker and was for many

years under his control, with Headquarters in India. For some time now, the areas occupied have been divided for administrative purposes into 6 Territories, (2 of which are outside India) each under a Territorial Commander; and one smaller Command.

**North-Eastern Territory.**—The area in this Territory is the Salvation Army work in the Punjab (India), Uttar Pradesh, Orissa, Bengal, Delhi, Assam, Bihar, Manipur and Cachar.

Evangelistic work is extensively carried on. There are boarding and day schools, Social Service Centre in Calcutta, a Young Women's Hostel, and orphanages for both girls and boys. A home and school for the Blind at Kalimpong. 'Red Shield' Guest House, Calcutta.

Territorial Headquarters: 37, Dharamtala Street, Calcutta 13.

Territorial Commander:—Lt. Commissioner Arthur G. Long.

**Madras and Andhra Territory.**—Embraces Madras City, the central and northern districts of Madras, Andhra Pradesh and Mysore.

Territorial Headquarters:—The Salvation Army, 1C, Bitherdon Road, P.O. Box 453, Vepery, Madras 7.

Territorial Commander:—Lt. Commissioner S. Gnanaseelan.

Chief Secretary:—Lt. Col. Clifford Draper.

**Southern India Territory.**—The Territorial Headquarter is in Trivandrum in Kerala State.

In 1,128 Corps and Centres of work, the majority of officers labour among the village population. The Army has a membership in South India of 107,222.

This territory is divided, for administrative purposes into 14 divisions, 5 among the Tamil-speaking people and 9 among those who speak Malayalam.

The Territory runs the Catherine Booth Hospital at Nagercoil and the Evangeline Booth Leper Hospital at Puthencurizu in Central Kerala.

Territorial Headquarters:—Kowdiyar, Trivandrum 3.

Territorial Commander:—Commissioner J. Dahya.

**Western India Territory.**—This territory comprises Corps 247; Outposts 515; Social Institutions 16; Day Schools 65; Boarding Schools 2; Training College 1.

Territorial Headquarters:—P.O. Box 4510, Morland Road, Byculla, Bombay 8. B. C.

Territorial Commander:—Col. Henry Warren

## ELECTRIC POWER DEVELOPMENT

(By courtesy of the Central Water and Power Commission, Power Wing.)

THE revised figures in respect of the aggregate generating capacity in kW for 1963-64 and the provisional figures for 1964-65 are given below: 1963-64: 6,228,533; 1964-65: 7,335,897.

The total installed capacity at the end of March, 1964 was 6,228,533 kW, of which 3,166,764 kW was water power; 2,696,480 kW steam and 365,289 kW oil power. Out of the total capacity of 7.6 million kW on 31st March 1964, which includes public utilities and non-utilities, electricity supply undertakings in the public sector accounted for 4.7 million kW, public limited companies 1.5 million kW and industrial establishments meeting their own requirements 1.4 kW million.

The production and sale of electric power for the years 1963-64 and 1964-65 were as follows (in million kWh):

|                       | Generated  | Sold       |
|-----------------------|------------|------------|
| 1963-64               | 25,497,772 | 21,379,664 |
| 1964-65 (Provisional) | 29,542,754 | 24,425,486 |

An analysis of electric power consumption in million kWh is given below. The figures in

brackets show the percentage of total energy consumption.

|                                                     | 1963-64                     | 1964-65<br>(Provisional)    |
|-----------------------------------------------------|-----------------------------|-----------------------------|
| Domestic or Residential light and small power .. .. | 2,062,399<br>(9.7)          | 2,314,466<br>(9.5)          |
| Commercial light and small power .. ..              | 1,179,716<br>(5.5)          | 1,497,171<br>(6.1)          |
| Industrial Power .. ..                              | 15,705,179<br>(73.5)        | 17,421,159<br>(71.3)        |
| Traction .. ..                                      | 477,923<br>(2.2)            | 873,237<br>(3.6)*           |
| Public lighting .. ..                               | 244,470<br>(1.1)            | 277,423<br>(1.1)            |
| Irrigation .. ..                                    | 1,153,180<br>(5.4)          | 1,415,847<br>(5.8)          |
| Water Works .. ..                                   | 556,797<br>(2.6)            | 626,183<br>(2.6)            |
| <b>TOTAL .. ..</b>                                  | <b>21,379,664<br/>(100)</b> | <b>24,425,486<br/>(100)</b> |

The following statement shows the number of electrified towns and villages at the end of 1963-64.

| Population              | Number of towns or villages | Number with electric supply |
|-------------------------|-----------------------------|-----------------------------|
| Over 100,000 .. ..      | 75                          | 75                          |
| 50,000 to 100,000 .. .. | 111                         | 111                         |
| 10,000 to 50,000 .. ..  | 1,272                       | 1,227                       |
| Below 10,000 .. ..      | 5,70,051                    | 39,803                      |
| <b>TOTAL .. ..</b>      | <b>5,71,509</b>             | <b>41,216</b>               |

\* 1964-65 fig. includes 409,936 mill. kWh used by Railways from their own generation in Chola Power Station.



Some individual industries have power stations of their own. The number of installations and the installed capacity are as follows (as on 31st March, 1965):

| Industry                 | No.        | Capacity (kW)  |
|--------------------------|------------|----------------|
| Aluminium (Primary)      | 5          | 22,832         |
| Aluminium (Secondary)    | 9          | 250            |
| Cement (Primary)         | 26         | 124,283        |
| Cement (Secondary)       | 24         | 630            |
| Chemicals                | 34         | 22,681         |
| Collieries               | 148        | 63,270         |
| Copper (Primary)         | 1          | 8,975          |
| Copper (Secondary)       | 1          | —              |
| Cotton Textiles          | 331        | 121,944        |
| Ferromanganese           | 6          | 32             |
| Fertilisers              | 5          | 82,403         |
| Gold                     | 1          | 6,700          |
| Iron (Primary)           | 7          | 311,794        |
| Iron & Steel (Secondary) | 16         | 800            |
| Jute                     | 75         | 27,558         |
| Oil & Petroleum          | 6          | 9,591          |
| Paper                    | 24         | 79,441         |
| Silk                     | 17         | 1,480          |
| Soap                     | 10         | 532            |
| Sugar                    | 100        | 102,229        |
| Tanneries                | 7          | 737            |
| Wool                     | 10         | 3,574          |
| Miscellaneous            | 1          | 66             |
| Engineering              | 25         | 4,454          |
| <b>TOTAL</b>             | <b>889</b> | <b>996,625</b> |

The generating plant capacity (in public utilities) by ownership is as follows:

| Capacity (kW)               |                  |                  |
|-----------------------------|------------------|------------------|
|                             | 1963-64          | 1964-65          |
| State owned (Public Sector) | 4,741,709        | 5,743,748        |
| Companies (Private Sector)  | 1,486,824        | 1,592,149        |
|                             | <b>6,228,533</b> | <b>7,335,897</b> |

The number of undertakings reckoned on ownership basis at the end of 1963-64 and 1964-65 was distributed as follows:

|                         | 1963-64    | 1964-65    |
|-------------------------|------------|------------|
| State Government        |            |            |
| State Electricity Board | 23         | 23         |
| Power Corporation       | 1          | 1          |
| Municipality            | 57         | 52         |
| Companies               | 218        | 194        |
| <b>TOTAL</b>            | <b>299</b> | <b>270</b> |

The total number of consumers at the end of 1963-64 was 6,925,750 in all (Domestic 5,110,782; Commercial 1,196,409; Industrial 241,791; Public lighting 37,316; Irrigation 335,207).

The State-wise analysis of plant, generation and sales for 1964-65 is as follows:

| State                                 | Installed capacity (kW) | Energy generated (mln. kWh) | Energy sold (mln. kWh) | Capacity in Industrial Establishments (kW) | Annual per capita consumption (excluding self-gen. industries & railways) (kWh) | Annual per capita consumption (including self-gen. industries & railways) (kWh) |
|---------------------------------------|-------------------------|-----------------------------|------------------------|--------------------------------------------|---------------------------------------------------------------------------------|---------------------------------------------------------------------------------|
| Andhra Pradesh                        | 323,851                 | 1,388,871                   | 894,075                | 48,255                                     | 23.29                                                                           | 27.62                                                                           |
| Assam                                 | 59,865                  | 73,897                      | 59,051                 | 9,516                                      | 4.46                                                                            | 6.64                                                                            |
| Bihar                                 | 505,474                 | 2,349,530                   | 1,757,265              | 291,409                                    | 35.07                                                                           | 55.54                                                                           |
| Gujarat                               | 547,499                 | 1,934,344                   | 1,577,201              | 34,699                                     | 69.66                                                                           | 74.54                                                                           |
| Jammu & Kashmir                       | 29,088                  | 93,602                      | 102,500                | —                                          | 27.41                                                                           | 27.41                                                                           |
| Kerala                                | 193,705                 | 795,108                     | 683,365                | 2,951                                      | 37.04                                                                           | 37.48                                                                           |
| Madhya Pradesh                        | 358,490                 | 1,265,001                   | 833,029                | 83,413                                     | 23.62                                                                           | 31.08                                                                           |
| Madras                                | 901,250                 | 3,825,164                   | 2,811,174              | 21,724                                     | 79.01                                                                           | 88.38                                                                           |
| Maharashtra                           | 1,081,504               | 5,073,268                   | 4,327,912              | 63,923                                     | 100.58                                                                          | 105.04                                                                          |
| Mysore                                | 356,796                 | 1,410,524                   | 1,245,860              | 37,713                                     | 43.81                                                                           | 53.40                                                                           |
| Nagaland                              | 725                     | 0,871                       | 0,842                  | —                                          | 2.00                                                                            | 2.00                                                                            |
| Orissa                                | 288,210                 | 992,553                     | 882,282                | 94,914                                     | 46.63                                                                           | 73.02                                                                           |
| Punjab                                | 689,796                 | 3,212,839                   | 2,396,388              | 19,978                                     | 107.80                                                                          | 111.17                                                                          |
| Rajasthan                             | 77,993                  | 181,774                     | 859,671                | 39,201                                     | 16.29                                                                           | 27.33                                                                           |
| Uttar Pradesh                         | 777,393                 | 2,623,912                   | 1,970,609              | 70,765                                     | 23.06                                                                           | 25.12                                                                           |
| West Bengal                           | 1,019,277               | 4,034,687                   | 3,882,750              | 151,153                                    | 100.00                                                                          | 113.15                                                                          |
| <b>UNION TERRITORIES—</b>             |                         |                             |                        |                                            |                                                                                 |                                                                                 |
| Delhi                                 | 114,230                 | 317,029                     | 566,766                | 25,291                                     | 184.01                                                                          | 218.12                                                                          |
| Andaman & Nicobar Islands             | 1,430                   | 2,121                       | 1,571                  | —                                          | 19.64                                                                           | 19.64                                                                           |
| Goa, Daman & Diu                      | 5,562                   | 8,657                       | 7,141                  | —                                          | 11.33                                                                           | 11.33                                                                           |
| Himachal Pradesh                      | 1,015                   | 2,326                       | 8,610                  | —                                          | 5.00                                                                            | 5.00                                                                            |
| Laccadive, Minicoy & Amindivi Islands | 141                     | 0,041                       | 0,037                  | —                                          | 1.85                                                                            | 1.85                                                                            |
| Manipur                               | 850                     | 2,076                       | 1,855                  | —                                          | 2.13                                                                            | 2.13                                                                            |
| Pondicherry                           | —                       | —                           | 52,392                 | 1,851                                      | 130.98                                                                          | 130.98                                                                          |
| Tripura                               | 1,753                   | 3,959                       | 3,140                  | —                                          | 2.25                                                                            | 2.25                                                                            |
| <b>TOTAL</b>                          | <b>7,335,897</b>        | <b>29,542,754</b>           | <b>24,425,486</b>      | <b>996,256</b><br>291,827@                 | <b>51.24</b>                                                                    | <b>68.50</b>                                                                    |

@ Capacity of Railway power station.



Installed capacity in kW for 1964-65 in the public utilities:

(Provisional)

| State                                         | Steam            | Gas Turbine   | Hydro            | Diesel         | Total            |
|-----------------------------------------------|------------------|---------------|------------------|----------------|------------------|
| Andhra Pradesh .. .. .                        | 83,500           | 20,000        | 207,000          | 13,351         | 323,851          |
| Assam .. .. .                                 | —                | 12,500        | 27,940           | 19,425         | 59,865           |
| Bihar .. .. .                                 | 58,770           | —             | —                | 22,704         | 81,474           |
| Gujarat .. .. .                               | 482,600          | —             | —                | 64,899         | 547,499          |
| Jammu and Kashmir .. .. .                     | 1,500            | —             | 26,052           | 1,536          | 29,088           |
| Kerala .. .. .                                | —                | —             | 192,500          | 1,205          | 193,705          |
| Madhya Pradesh .. .. .                        | 238,400          | —             | 92,000           | 28,090         | 358,490          |
| Madras .. .. .                                | 851,500          | —             | 549,750          | —              | 901,250          |
| Maharashtra .. .. .                           | 503,250          | —             | 523,888          | 54,866         | 1,081,504        |
| Mysore .. .. .                                | 1,100            | 20,000        | 319,500          | 16,196         | 356,796          |
| Nagaland .. .. .                              | —                | —             | —                | 725            | 725              |
| Orissa .. .. .                                | 5,750            | —             | 270,000          | 12,460         | 288,210          |
| Punjab .. .. .                                | 18,100           | —             | 655,076          | 16,620         | 689,796          |
| Rajasthan .. .. .                             | 48,604           | —             | —                | 29,389         | 77,993           |
| Uttar Pradesh .. .. .                         | 382,739          | —             | 351,970          | 42,688         | 777,393          |
| West Bengal .. .. .                           | 776,670          | —             | 7,508            | 10,099         | 794,277          |
| UNION TERRITORIES—                            |                  |               |                  |                |                  |
| Delhi .. .. .                                 | 91,600           | —             | —                | 22,630         | 114,230          |
| Andaman and Nicobar Islands .. .. .           | 1,100            | —             | —                | 330            | 1,430            |
| Goa, Daman and Diu .. .. .                    | —                | —             | —                | 5,562          | 5,562            |
| Himachal Pradesh .. .. .                      | —                | —             | 745              | 270            | 1,015            |
| Laccadive, Minicoy & Amindivi Islands .. .. . | —                | —             | —                | 141            | 141              |
| Manipur .. .. .                               | —                | —             | —                | 850            | 850              |
| Pondicherry .. .. .                           | —                | —             | —                | —              | —                |
| Tripura .. .. .                               | —                | —             | —                | 1,753          | 1,753            |
| Damodar Valley Corporation .. .. .            | 545,000          | —             | 104,000          | —              | 694,000          |
| <b>TOTAL .. .. .</b>                          | <b>3,590,170</b> | <b>52,500</b> | <b>3,827,920</b> | <b>365,280</b> | <b>7,335,897</b> |

*Notes:* The installed capacities of jointly owned power stations have been included in the States in which the power stations are located.

## SOME ALL INDIA CORPORATIONS

## AGRICULTURAL REFINANCE CORPORATION

Amar Building, P.B. No. 363, Bombay-1.

The Agricultural Refinance Corporation started functioning from 1st July 1963.

**Authorised Capital:**—Rs. 25 crores divided into 25,000 shares of Rs. 10,000 each.

**Subscribed Capital:**—Rs. 5 crores consisting of 5,000 shares of Rs. 10,000 each.

**Objects:** The Agricultural Refinance Corporation is primarily a refinancing agency and its object is to provide financial accommodation of a medium-term or long-term nature to the various special schemes of agricultural development which cannot be satisfactorily financed by the existing credit agencies either on account of the volume of funds involved or the terms and conditions of repayment or because the projects as such cannot be brought within the normal rules of business under which the land mortgage banks and State Co-operative banks are functioning.

**Amount disbursed:** As at the end of March 1966 the Corporation disbursed a sum of Rs. 415.31 lakhs to the central land mortgage banks and Rs. 8.30 lakhs to the scheduled banks under the various schemes approved by it.

**Chairman:** M. R. Bhide, Deputy Governor, Reserve Bank of India; **Managing Director:** V. Sivaraman; **Secretary:** Dr. M. V. Hate.

## CEMENT CORPORATION OF INDIA LTD.

(A Govt. of India Undertaking)

National Herald Building, 5-A, Bahadur Shah Zafar Marg, New Delhi-1.

Registered under the Indian Companies Act in 1965 under the Ministry of Industry.

The Corporation is charged with the responsibility of installing additional capacity of producing 1.6 million tonnes of cement annually as soon as possible and at the latest by the end of the Fourth Plan in 1970-71.

**Chairman:**—Dr. B. V. Keskar; **Managing Director:**—H. D. Singh.

## CENTRAL ROAD TRANSPORT CORPORATION LIMITED

18, Rabindra Sarani, Calcutta 1.

The Corporation was incorporated on 6th March, 1964 with an authorised capital of Rs. 2 crores divided into 2 lakh equity shares of Rs. 100 each.

The main function of this Corporation is to supplement the transport capacity by road on inter-state routes in India, specially the eastern sector of the country. The Corporation has a fleet of about 170 Leyland and TBM trucks which was expected to rise to 200 by March, 1967. The trucks of the Corporation are at present plying on Calcutta, North Bengal-Assam, Calcutta-Delhi and Calcutta-Bombay routes.

The activities of the Corporation are expected to be extended on almost all important routes in India in future.

**Chairman:**—P. C. Mathew; **Managing Director:**—A. K. Muzumdar.

## CENTRAL WAREHOUSING CORPORATION

(A Govt. of India Undertaking)

G-10, New Delhi South Extension Part II, New Delhi 16.

The Central Warehousing Corporation started functioning from July 1957. The Corporation was reconstituted with effect from 18th March, 1963, under the new Act—the Warehousing Corporation Act, 1962.

The main aims and objects of the warehousing scheme are:—

(i) To help storage of agricultural produce and other commodities as are declared to be "Notified Commodities" by the Central Government under Entry 33 of the concurrent list of the Seventh Schedule of the constitution by notification in the Government Gazette, on modern scientific lines so as to avoid loss due to dampness, pests, etc. and (ii) To assist the depositors to secure cheap credit, avoid distress selling and sell

his produce as and when the market is favourable to him.

The notified commodities referred to in para (i) will include essential Civil Supplies such as cement, steel, textiles, leather and rubber goods, coal and coal goods etc.

**Share Capital:**—The authorised capital of the C.W.C. is Rs. 20 crores divided into two hundred thousand shares of the face value of one thousand rupees each.

**Warehousing Facility:**—The Corporation had, by the end of March 1965, 85 warehouses with a total storage capacity of 2.07 lakh tonnes.

The stocks at the end of March 1965 stood at 1.09 lakh tonnes and the percentage of occupancy of warehouses was 53. About 118 types of commodities were handled at these warehouses.

By the end of March 1965, the total built up capacity owned by the Corporation was 1,06,065 tonnes.

**Credit Facility:**—The various scheduled banks make advances against the pledge of warehouse receipts issued at the warehouses.

The total outstanding advances against the pledge of warehouse receipts issued by the Central & State warehouses was over Rs. 12 crores as at the end of March, 1965.

**General:**—The C.W.C. conducts training courses for Superintendents and Technical Assistants in which intensive training (both theoretical and practical) is given on the various aspects of warehousing business and other connected matters. By the end of March 1965, 827 candidates were trained by the C.W.C.

**State Corporations:**—The State Governments have with the approval of the Central Warehousing Corporation established a Warehousing Corporation in each State.

The 14 S. W. C. had, by the end of March 1965, set up 444 warehouses, 93 sub-warehouses and a cold storage with a total storage capacity of 5,60,712 tonnes.

**Mg. Director:** C. S. Ramachandran.



**DEPOSIT INSURANCE CORPORATION**

113, Clive Road, Masjid Bunder,  
P. Bag No. 5127, Bombay 9.

Established on the 1st of January 1962.

Main object: To give a measure of protection to depositors, in particular small depositors, from the risk of loss of their deposits in the event of a bank's inability to meet its liability.

Every functioning commercial bank covered by the Banking Regulation Act, 1949 is registered as an insured bank with the Corporation and all its depositors (except Central and State Governments, Foreign Governments and Banking Companies) get the protection afforded by the Corporation. The Corporation provides insurance to the extent of Rs. 1,500 in respect of each depositor. The limit is in respect of the total amount held by a depositor in all his deposit accounts in the same right and capacity with an insured bank at its offices in India.

The insured banks are required to pay to the Corporation a premium on their deposits at the rate of 5 paise for every one hundred rupees per annum. The amount of premium received from banks from time to time is held in the Deposit Insurance Fund which is utilised for payment of the claims of the depositors.

The Corporation has a capital of Rs. one crore which is held by the Reserve Bank of India.

*Chairman*: P. C. Bhattacharyya; *Manager*: Mangesh S. Nadkarni.

**EXPORT CREDIT & GUARANTEE CORPORATION LTD.**

(A Government of India Concern.)  
4, Rampart Row, Bombay 1.

The main object of the Corporation is to facilitate the growth of India's Export trade by providing credit insurance cover to Indian exporters and furnishing guarantees to banks with a view to assisting Indian exports to get credit facilities necessary for expanding their export trade.

In 1965, the policies and guarantees in force were 1,584 as against 1165 in the previous year. The value of risk covered amounted to Rs. 55.04 crores as against Rs. 34.96 crores in 1964. The premium income rose to Rs. 13.46 lakhs as against Rs. 8.93 lakhs in the previous year.

The authorised capital of the Corporation is Rs. 5 crores of which Rs. 1 crore is paid up.

*Chairman*: B. R. Patel I.C.S.; *Managing Director*: C. M. Ghorpade; *Secretary*: C. K. Srinivasan.

**THE FILM FINANCE CORPORATION LTD.**

"White House", 91, Walkeshwar Road,  
Bombay 6.

Established in 1960.

The authorised capital of the Corporation is Rs. one crore. The issued and paid up capital is Rs. 50 lakhs. This is wholly subscribed by the Central Government.

To supplement this capital an amount of Rs. 40 lakhs has been received by the Corporation by way of loan from the Central Government.

Profit in Rs. lakhs: 0.27 in 1961-62; 1.65 in 1962-63; 2.58 in 1963-64. In 1964-65 it suffered a loss of Rs. 1.28 lakhs.

The total loans sanctioned upto March 31, 1966 amounted to Rs. 1,35,22,067 of which a sum of Rs. 1,08,60,255 has been disbursed. The loans and advances outstanding on that date aggregated to Rs. 71,41,386.

The number of applications received and sanctioned in 1965-66 were 37 and 8 respectively. The total amount involved was Rs. 1,03,78,832 and Rs. 20,52,582 respectively. 3 applications which were accepted involving a sum of Rs. 6,95,000 were withdrawn/cancelled in 1965-66. The number of applications received and sanctioned from inception till 31st March 1966 is 161 including 87 for Hindi films and 46 respectively.

101 applications for a sum of Rs. 3,18,40,910 were rejected in full or part and 14 applications involving a sum of Rs. 27,83,250 lakhs were under consideration.

21 pictures have been released upto March 1966. Loans disbursed to them amount to Rs. 57,03,018. Out of these 21 producers, seven have paid back the loans with interest amounting to Rs. 20,66,745. Of the remaining, the amount recovered so far amounts to Rs. 11,95,730.

*Hon. Chairman*: M. D. Bhat. *General Manager*: V. C. Desai.

**THE FOOD CORPORATION OF INDIA**

153, Mount Road, Madras 2.

Established: 1st January 1965.

The head office of the Corporation is at Madras. Eight Regional offices of the Corporation have been set up at Hyderabad, Bangalore, Madras, Trivandrum, Bhubaneswar, Jaipur, Chandigarh and Ahmedabad, with jurisdiction extending over the respective States in the capitals of which they have been located. District offices are also being set up in some important centres in these States and also at Delhi.

Under the Act, the original capital of the Corporation shall be such sum not exceeding Rs. 100 crores as the Central Government may fix; however, the Central Government may from time to time increase the capital of the Corporation to such extent and in such manner as that Government may determine. The total capital provided by the Central Government to the Corporation up to the end of March 1966 is Rs. 9 crores equity and Rs. 30 crores loan.

*Chairman*: K. T. Chandy; *Managing Director*: N. P. Sen

Main functions: To undertake the purchase storage, movement, transport, distribution and sale of foodgrains and other foodstuffs. The corporation may also, with the previous approval of the Central Government, promote the production and other activities connected with foodgrains and food stuffs.

**THE HANDICRAFTS & HANDLOOMS EXPORTS CORPORATION OF INDIA LIMITED**

Lok Kalyan Bhavan,  
11A, Rouse Avenue Lane, New Delhi 1.

The Corporation undertakes direct exports of handicrafts and handloom goods, with the main object of introducing new items and exploring new markets.

The Corporation has opened offices in New York and Montreal both for booking wholesale orders and also undertaking retail sale.

The authorised share capital of the Corporation is Rs. 1 crore, divided into 100,000 equity shares of Rs. 100 each.

B. P. Patel, I.C.S. (*Chairman*); S. P. S. Sondhi, I.A.A.S. (*Secretary*).

**HOTEL CORPORATION OF INDIA†**

63, Sunder Nagar,  
New Delhi.

The corporation has an authorised capital of Rs. 4 crores and will build new hotels at selected tourist centres all over the country.

*Chairman*: V. Shankar, Secretary, Ministry of Civil Aviation; *Managing Director*: Gajraj Singh.

**THE INDIAN MOTION PICTURES EXPORT CORPORATION LTD.**

(Registered Office)

Harchandral House, 1st Floor, 81, Queen's Road, Bombay 1.

Authorised share Capital: Rs. 25 lakhs.

The Corporation is primarily intended as a trading body. However, in addition to its trading activities it also performs the functions of the Export Promotion Organisation in the interest of increasing the export of Indian films to the traditional markets and exploration of new markets for Indian films. Furthermore, the

Corporation has been empowered to execute agreements with foreign organisations for the import or export of films.

*Chairman*: A. S. Naik, I.C.S.; *Managing Director*: E. K. Vasudevan; *Secretary*: H. G. Bhatt.

**INDIA TOURISM CORPORATION†**

Marshall House, Hanuman Road,  
New Delhi.

The Corporation has an authorised capital of Rs. 50 lakhs. It will produce and distribute tourist publicity material including films, and set up shops in Bombay, Delhi, Calcutta, Madras and certain other cities where imported articles such as photographic goods, cosmetics, cigarettes, etc. would be sold to tourists against payment in foreign exchange. It will also establish duty free shops at ports of entry and departure and provide entertainment to tourists.

A subsidiary of this Corporation is the India Tourism Transport Undertaking, which caters to the needs of tourists by way of luxury cars, tourist buses etc.

*Chairman*: Naval H. Tata; *Managing Director*: Gajraj Singh.

**THE INDUSTRIAL CREDIT & INVESTMENT CORPORATION OF INDIA LTD.**

163, Backbay Reclamation, Bombay 1.

The Corporation was established in 1955 with the object of assisting industrial enterprises in the private sector by providing finance in the form of long or medium-term loans or equity participations, sponsoring and underwriting new issues of shares and securities, guaranteeing loans from other private investment sources, furnishing managerial, technical and administrative advice to Indian industry.

The authorised capital of the Corporation is Rs. 25 crores and paid-up capital Rs. 7.5 crores in 7.5 lakh ordinary shares of Rs. 100 each.

The Government of India have advanced to the Corporation 4 loans aggregating Rs. 32.50 crores. The International Bank for Reconstruction and Development has granted 6 loans aggregating U.S. \$140 million and the Agency for International Development a loan of U.S. \$6 million. Four lines of credit aggregating DM40 million have been obtained from the Kreditanstalt für Wiederaufbau (Federal Republic of Germany).

The Eleventh Annual Report for the year ending December 31, 1965, disclosed that the Corporation sanctioned financial assistance to 69 companies for a total of Rs. 2,420 lakhs (gross): Rupee assistance in the form of loans, underwriting of and direct subscriptions to Ordinary and Preference Shares and Debentures amounted to Rs. 1,240 lakhs to 34 companies and foreign currency loans for the equivalent of Rs. 1,180 lakhs to 46 companies. During the year, underwriting agreements for 22 issues for a total of Rs. 565 lakhs were signed.

The accounts for the year ended December 31, 1965, disclosed a net profit of Rs. 88,23,329, which together with the amount of Rs. 3,97,647 brought forward from the previous year made a total of Rs. 92,20,976.

*Chairman*: G. L. Mehta; *General Manager*: H. T. Parekh.

**INDUSTRIAL DEVELOPMENT BANK OF INDIA\***

Post Box No. 1241,  
Reserve Bank Building, Bombay 1.

The Industrial Development Bank of India (IDBI) was set up in July 1964, under a special statute, viz. the Industrial Development Bank of India Act, 1964. It is both an apex institution, co-ordinating the operations of banks and other financial institutions providing term finance to industry, and an agency providing direct financial assistance by filling in the gaps that remain after taking into account the assistance available from other institutions. It has been conceived as a

\* During the year 1965-66 the number of applications for assistance sanctioned in the form of refinance, direct loans, underwriting of shares and debentures, subscriptions to shares and bonds and rediscounting of bills, increased from 170 to 244 and the total assistance sanctioned from Rs. 50.5 crores to Rs. 70.1 crores. Refinance assistance sanctioned amounted to Rs. 21.8 crores against Rs. 21.9 crores in the previous year, while the disbursements totalled Rs. 22.3 crores (Rs. 21.2 crores). Direct loans amounted to Rs. 35.6 crores (Rs. 16.1 crores). While disbursement aggregated Rs. 19.9 crores (nil). The bank undertook underwriting of shares and debentures of Rs. 7.5 crores (Rs. 6.6 crores), while subscriptions to shares and bonds of financial institutions were Rs. 1.7 crores (Rs. 2.2 crores). Rediscounting of bills totalled Rs. 2.2 crores (Rs. 0.1 crore). Guarantees for loans and deferred payments amounted to Rs. 15.9 crores (Rs. 7 crores).

† Merged with India Tourism Transport undertaking from 1-10-1966 to form India Tourism Development Corporation.



financing as well as a developmental agency for locating and filling up the gaps in the industrial structure. A wholly owned subsidiary of the Reserve Bank of India, the Industrial Development Bank of India has been endowed with substantial financial resources and considerable operational flexibility.

*Authorised Capital:* Rs. 50 crores.

*Issued Capital:* Rs. 10 crores.

The operations of the IDBI fall into two broad groups: (i) assistance to other financial institutions and (ii) direct assistance to industrial concerns, either on its own or in participation with other institutions.

Since its inception on July 1, 1964 upto the end of December 1965, the IDBI sanctioned direct financial assistance on 61 applications in respect of 47 industrial concerns for a total amount of Rs. 53.70 crores, the distribution according to type of assistance being as follows: 17 loans for Rs. 35.33 crores, 40 underwriting arrangements in respect of equity, preference shares and debentures including convertible notes for Rs. 12.78 crores, and 4 guarantees for loans and deferred payments amounting to Rs. 5.59 crores. The amount of direct assistance disbursed by the Bank by way of loans and underwriting amounted to Rs. 2.78 crores. IDBI's assistance covered a wide range of industries, including such sophisticated sectors as petrochemicals, fertilisers and vital industries like alloy and special steels, cement, machinery manufacture, etc.

The IDBI took over the business of the Refinance Corporation for Industry Ltd. (RCI) on September 1, 1964.

Since the inception of RCI in 1958 upto the end of December 1965, 894 applications for refinance of loans (including export credits) for Rs. 143.5 crores were received, of which 622 applications for Rs. 97.6 crores were sanctioned. Total disbursements amounted to Rs. 74.4 crores, of which Rs. 59.8 crores were outstanding at the end of December 1965.

In addition, the IDBI also operates a scheme, introduced in April 1965, for the rediscounting bills/promissory notes arising out of sales of indigenous machinery pertaining to cotton textiles, jute, paper, cement, sugar, silk and art-silk industries on deferred payments basis. The number of institutions (including banks) eligible under the scheme now stands at 82. Total credit limits sanctioned under the scheme amounted to Rs. 15.45 crores at the end of December 1965 and the amount of bills rediscounted to Rs. 85 lakhs.

The IDBI also provides assistance to State Financial Corporations.

On 1st April 1966, the IDBI introduced a scheme for participating in industrial loans and guarantees to supplement its refinance operations with a measure of risk—sharing with other institutions on a systematic basis. The financial institutions covered under the scheme are those scheduled banks, State Co-operative banks and term-lending institutions which are eligible for refinancing facilities.

*Chairman:* P. C. Bhattacharyya; *Vice-Chairman:* Dr. B. K. Madan; *General Manager:* S. L. N. Simha.

## THE INDUSTRIAL FINANCE CORPORATION OF INDIA

(See Late Particulars)

## THE MINERALS & METALS TRADING CORPORATION OF INDIA LTD.

Express Bldg., 9 & 10, Bahadur Shah Zaffar Marg, New Delhi-1.

*Incorporated:* 29-9-1963.

*Authorised capital:* Rs. 5 crores.

The Corporation undertakes export of minerals and ores.

*Chairman:* Govind Narain; *Secretary:* Virendra.

## NATIONAL BUILDINGS CONSTRUCTION CORPORATION LIMITED

44, Ring Road, Lajpat Nagar III, Post Box, No. 3044, New Delhi-14.

The National Buildings Construction Corporation Ltd., was set up in November, 1960, with the principal objectives of reducing the cost of construction and improving the quality of work in the building industry. The Corporation has undertaken construction works to the tune of over Rs. 20 crores for the Central and State Governments, as well as for various public sector undertakings through open competitive tenders or through negotiations.

The authorised capital of the Corporation is Rs. 2 crores divided into 20,000 equity shares of Rs. 1,000 each.

*Chairman:* P. C. Malhotra; *Mg. Director:* D. Dutt; *Secretary:* V. P. Sarvaria.

## NATIONAL COAL DEVELOPMENT CORPORATION LTD.

Darbhanga House, Ranchi.

The National Coal Development Corporation was formed in September 1956, with an authorised capital of Rs. 50,00,00,000, divided into 5,00,000 equity shares of Rs. 1,000 each.

N.C.D.C. operations extend to five states viz. Bihar, Bengal, Madhya Pradesh, Orissa and Maharashtra. The total investment in the N.C.D.C. stands at Rs. 134 crores (March, '66). It produced 9.68 million tonnes of coal during the year 1965-66. It is a Government of India undertaking under the Ministry of Mines and Metals.

The collieries and projects have been divided into seven regions, each under a General Manager. These regions are: (i) Karanpura, (ii) Bokaro-Kargali and (iii) Giridih in Bihar, (iv) Korba and (v) Madhya Pradesh in the State of Madhya Pradesh, (vi) Talcher in Orissa and (vii) Nagpur in Maharashtra.

The most important of N.C.D.C. activities has been the opening of deep shaft mines for producing coking coal in the Central Jharia coalfields (Dhanbad, Bihar) with Polish collaboration. N.C.D.C. expect to produce about 14 million tonnes of coking coal by the end of the Fourth Plan. N.C.D.C. is at present operating one coal washery at Kargali. The Kathara washery being erected with Russian collaboration, having an annual capacity of three million tonnes of raw coal will be N.C.D.C.'s largest washery. It will cost Rs. 8 crores and is expected to be completed by the end of 1967.

N.C.D.C. has set up a net-work of large mechanised mines in Madhya Pradesh, Maharashtra and Orissa, which has been a great contributing factor to the industrial development of many backward areas in these regions. N.C.D.C. is one of the largest employers in the country with about 65,600 workers and staff on its pay roll.

An important scheme, under contemplation by N.C.D.C. during the Fourth Five Year Plan is the Ramgarh Chemical Complex. The scheme would be implemented in two stages at an estimated cost of Rs. 65 crores.

*Chairman:* S. Lall; *Managing Director:* S. T. Raja; *Deputy General Manager (Technical):* S. C. Dey.

## NATIONAL CO-OPERATIVE DEVELOPMENT CORPORATION

C56, South Extn. II, New Delhi-16.

The N.C.D. Corporation was set up in 1962.

The functions of the Corporation are to plan and promote programmes for the production, processing, marketing, storage, export and import of agricultural produce and notified commodities through cooperative societies. In this connection, the Corporation is specifically empowered to undertake the following activities:—

(a) to advance loans or grant subsidies to State Governments for financing co-operative societies and for employment of

staff for implementing programmes of cooperative development;

(b) to provide funds to State Governments for financing cooperative societies for the purchase of agricultural produce and notified commodities on behalf of the Central Government; and

(c) to plan and promote programmes, through cooperative societies for the supply of seeds, manures, fertilisers, agricultural implements and other articles for the development of agricultural produce.

During the financial year 1966-67, the Corporation has drawn up a programme of activities for which total financial estimate of about Rs. 20 crores has been worked out. The programme includes a variety of schemes relating to agricultural cooperatives such as subsidy to cooperative credit institutions of various types for additional managerial personnel and assistance in different forms to cooperative marketing and processing institutions. The Corporation would also be providing assistance towards a programme of cooperative godowns. The Corporation also subsidises the State Governments for strengthening the State Cooperative Departments. In addition to the schemes which are financed as part of the plan, the Corporation also utilises its owned funds for promoting a number of schemes such as technical cells in apex marketing societies, cooperative rice mills, etc. The Corporation also is assisting the National Agricultural Cooperative Marketing Federation and the All India Central Land Development Banks Cooperative Union Ltd.

*Chairman:* C. Subramaniam, Min. for Food & Agriculture, Govt. of India; *Dy. Chairman:* S. D. Misra, Dy. Minister in Charge of Co-operation, Govt. of India.

## THE NATIONAL INDUSTRIAL DEVELOPMENT CORPORATION LTD.

P.O. Box No. 458, Udyog Bhavan, Maulana Azad Road, New Delhi.

Main functions are (a) the investigation and initial processing of a number of vital projects considered necessary for filling up gap in the industrial structure of the country, (b) provision of consultancy and engineering services mainly to public sector projects and (c) the grant of special loans to certain selected industries for the purpose of modernisation, rehabilitation, etc.

The Corporation has an authorised capital of Rs. one crore of which Rs. 10 lakhs have been issued and subscribed by the Government.

The Corporation is acting as the agency of the Government of India for the grant of loans to jute and cotton textile industries for modernisation and rehabilitation and to machine tool units for expansion also. Loans sanctioned to these industries upto the end of March, 1966 amount to Rs. 28.02 crores, out of which Rs. 17.13 crores have so far been disbursed. The Corporation is not at present entertaining any fresh applications for loan.

*Chairman:* D. C. Bajjal; *Managing Director:* K. B. Rao; *Secretary:* K. C. Bhalla.

## NATIONAL MINERAL DEVELOPMENT CORPORATION LIMITED

61, Ring Road, Lajpat Nagar III, New Delhi-14.

*Administrative Ministry:* Ministry of Mines & Metals.

Started in November, 1958.

*Authorised Capital:* Rs. 15,00,00,000, divided into 1,50,000 equity shares of Rs. 1,000 each.

*Paid-up Capital:* Rs. 11,30,36,000.00. All shares are held by or in the name of the President.

The main business of the Corporation is to exploit minerals in the public sector, excluding coal, lignite, oil and natural gas, and for this purpose, the Corporation may purchase, take on lease or otherwise acquire mines for prospecting and developing, and work them for producing minerals.



The following projects have so far been assigned to the Corporation:

(i) Kiriburu Iron Ore Project, Kiriburu (Orissa); (ii) Diamond Mining Project, Panna (Madhya Pradesh); (iii) Copper Project, Khetri (Rajasthan); (iv) Iron Ore Project, Bailadila (Madhya Pradesh).

The Kiriburu Iron Ore Project has been completed. The other projects are in various stages of planning and construction.

**Chairman:** S. N. Bilgrami; **Secretary:** J. Padmanabha Iyer.

### NATIONAL PROJECTS CONSTRUCTION CORPORATION LTD.

E9, Defence Colony, New Delhi 3.

The Corporation, an enterprise in the public sector, sponsored by the Union Ministry of Irrigation & Power, was set up in 1957 with an authorised capital of Rs. 2 crores. Its paid-up capital at present amounting to Rs. 2 crores was subscribed by the Government of India and the State Governments of Madhya Pradesh, Bihar, Rajasthan, Kerala, Gujarat, Jammu & Kashmir, Punjab, Assam, Uttar Pradesh, West Bengal and Mysore. Central Government has subscribed Rs. 1 crore whereas the State Governments (except Mysore and Kerala which have subscribed Rs. 5 lakhs each) have subscribed Rs. 10 lakhs each to the Corporation.

The main object of floating this Corporation is to provide the Central and State Governments with an organisation capable of undertaking the execution of River Valley Projects and allied Civil Engineering works requiring high technical skill, mechanical execution, precision and strict adherence to specifications and quality standards.

The value of work done till the end of the financial year 1965-66 exceeded Rs. 9 crores by the Corporation.

**Managing Director:** A. R. Venkataraman; **General Manager & Chief Engineer:** Vacant; **Financial Adviser & Chief Accounts Officer:** B. L. Jain.

### NATIONAL RESEARCH DEVELOPMENT CORPORATION OF INDIA

Mandi House, Lytton Road, New Delhi 1.

The Corporation was incorporated on 31st December 1953 with an authorised capital of Rs. one crore. The paid-up capital is Rs. 34 lakhs as on 31st March 1966. All the shares are held by the President of India and/or his nominees.

The main function of the Corporation is to stimulate development and commercial exploitation of patents and inventions arising from national research efforts and where feasible, in the public interest, of patented inventions from individuals also. For this purpose, it forms a connecting link between research and industry.

Since its inception, the Corporation has successfully negotiated licences for 165 patents and processes: and out of these 90 have already gone into production by the end of March 1965. Amongst these, mention may be made particularly of carboxy methyl cellulose, infant food, synthetic pine oil, mica insulating bricks, Bituminous Emulsions, Plastipeel, Duplicating and Allied Black Inks, Carbions and ceramic capacitors. The value of production based on processes licensed by the Corporation and in production during 64-65 was Rs. 3.15 crores. The processes licensed by NRDC are all foreign exchange saver and potential foreign exchange earner.

Besides licensing of patents and processes, the Corporation's major activity is development of scientific research by arranging pilot plant and instituting developmental projects. Till now, the Corporation has instituted 17 projects at a cost of about Rs. 59 lakhs.

**Chairman:** Dr. Atma Ram, **Director General, Scientific and Industrial Research;** **Vice-Chairman:** Arvind N. Mafatlal; **Executive Director:** Dr. A. N. Kapur.

### NATIONAL SEEDS CORPORATION LIMITED

E-19, South Extension, Part II,  
Ring Road, New Delhi-16.

Incorporated as a Limited Company under the Companies Act, 1956 on March 19, 1963 with an authorised capital of Rs. 5,00,00,000. It is a Government of India Undertaking under the Ministry of Food & Agriculture (Department of Agriculture).

The Corporation aims at organising a healthy "seed" industry in the country. For this purpose it concentrates on production of Foundation Seed of promising varieties evolved by research and aims to introduce the quality concept of "certified seed" in the country. The Corporation at present produces foundation seed stocks of hybrid maize, sorghum (jowar), *bajra*, jute, berseem and other fodder crops, and some of the vegetables. It also produces certified seeds of some of these crops.

The Corporation has established two Foundation Seed Units—one at Hampur (Nainital-Tarai, U.P.) and the other at Nandikotkur (Kurnool, A.P.). The Corporation encourages progressive farmers in the production of certified seeds of various crops.

**Chairman:** I. J. Naidu; **General Manager:** Dr. Y. R. Mehta; **Secretary and Chief Administrative Officer:** J. Veeraraghavan.

### THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.

(See Late Particulars).

### REHABILITATION INDUSTRIES CORPORATION LIMITED

(A Govt. of India Undertaking).

25, Free School Street, Calcutta 16.

The Corporation was incorporated in April 1959 with an authorised capital of Rs. 5 crores. All the shares are held by the President of India and/or his nominees.

The principal object of the Corporation is to create employment opportunities through industries for the large number of unemployed and partially employed displaced persons from East Pakistan as well as to promote or advance the setting up of industries to provide employment to the migrants from West Pakistan (who have entered Indian territory as a result of the recent conflict with Pakistan), repatriates from Burma & Ceylon and persons of Indian origin migrated from other countries with the intention of permanently settling in India.

In the last 42 months (May, 1966) the Corporation has organised 25 Industrial Units in different parts of India and created about 6,000 employment for the displaced persons through its own Industrial Units, assisted Industries and Industrial Estates.

**Chairman:** V. Ramakrishna; **Managing Director:** H. K. Ghosh, I.A.S.; **Jt. Managing Director and Secretary:** M. N. Chaudhuri, I.A.S.

### THE STATE TRADING CORPORATION OF INDIA LTD.

Express Bldg., 9 & 10; Bahadur Shah Zafar Marg,  
P.B. No. 79, New Delhi 1.

Incorporated on 18th May, 1956.

The authorised capital is Rs. five crores of 5,00,000 equity shares of Rs. 100 each.

The subscribed capital is Rs. two crores.

The President of India holds all the shares excepting three held by the officers of the Government of India in their official capacity.

The central aim of the Corporation is to broaden and enlarge the scope of Indian exports and to arrange for essential imports on an economical basis.

It has already helped 20 manufacturers to export 27 different products to 27 different countries.

The Corporation has significantly contributed to the development of India's trade abroad particularly with the East European countries, and has created new markets abroad for a large number of different commodities. Its total trade in 1964-65 was about Rs. 90-10 crores. The Corporation participates in international fairs and exhibitions and has trade centres-cum-depots and offices abroad.

**Chairman:** B. P. Patel; **Secretary:** Z. K. Joseph; **Financial Adviser:** M. L. Kala.

### UNIT TRUST OF INDIA

**Head Office:** Bombay Life Building, 45, Veer Nariman Road, Bombay-1.

The Unit Trust of India was established on Feb. 1, 1964 under the Unit Trust of India Act, 1963. The basic objective in establishing the Unit Trust of India is to afford the small investor a means of acquiring a share in the widening prosperity based on steady industrial growth of the country which combines the advantages of a minimum risk and a reasonable return.

A Unit Trust pools the savings of the community and invests them in securities of various types. To pool the savings, the Trust sells "units". All units rank equal for the distribution of income, no matter when they are acquired. The Trust offers one other important and unique advantage: it is always ready both to sell and buy its units at prices published by it. A Unit holder is thus assured of the liquidity of his investment.

It has an initial capital of Rs. 5 crores contributed as follows: the Reserve Bank of India Rs. 2.5 crores, the L.I.C. Rs. 75 lakhs, the State Bank and its subsidiary banks Rs. 75 lakhs and other scheduled banks and other specified financial institutions Rs. 1 crore.

The general direction and management of the affairs and business of the Trust is vested in a Board of Trustees, consisting of a Chairman appointed by the Reserve Bank, four other Trustees, also nominated by the Reserve Bank, one Trustee nominated by the L.I.C., and one Trustee nominated by the State Bank, two Trustees elected by other institutions contributing to the initial capital of the Trust. In addition, one Executive Trustee is appointed by the Reserve Bank. There is an Executive Committee consisting of the Chairman of the Board, the Executive Trustee and two other Trustees nominated in this behalf by the Reserve Bank.

Under the Unit Trust of India Act, 1963, the Trust has formulated the Unit Scheme 1964 under which units are being offered for sale to the public, from July 1, 1964.

Some salient features: Units are sold through the network of over 4,000 offices of the State Bank of India and its subsidiary banks as well as the commercial banks which have contributed to the initial capital of the Trust.

1,34,724 applications were received upto June 30, 1965, the sum subscribed to being over Rs. 19 crores.

The Trust is exempt from payment of income-tax and other taxes on income.

Income from the Unit Trust by individual unit holders upto Rs. 1,000 is free from income tax. Further, income from Unit Trust received by individuals and Hindu undivided families like interest on Government securities, will be treated as earned income for purposes of surcharge on income tax.

Units can be sold back to the Unit Trust of India any time from November 16, 1964 onwards. The sale and repurchase prices of units are determined in accordance with the provisions laid down in the Unit Scheme and are announced daily.

Transfer of units to third parties is possible after June 30, 1965. A unit holder can always transfer units in favour of a bank for purposes of borrowing.

**Board of Trustees:** B. S. Bhatt (Chairman); R. C. Sachdeva (Executive Trustee).



## STATE CORPORATIONS

### ANDHRA PRADESH INDUSTRIAL DEVELOPMENT CORPORATION LIMITED

B-1-174, Fateh Maidan Road, Hyderabad-4.  
(A State Government Undertaking).

Set up on December 16, 1960.

Principal functions: (a) Providing financial assistance in the form of long or medium term loans; (b) Guaranteeing loans from other financial institutions; (c) Underwriting of new issues of shares and securities; (d) Participation in share capital of new industrial projects with or without controlling interest; (e) Promoting industries directly; (f) Acting as holding company for specific projects.

Authorised capital: Rs. 3 crores (divided into 30,000 Equity Shares of Rs. 1,000 each).

Financial assistance: Since the inception upto March 31, 1966, the Corporation received 54 applications for financial assistance aggregating Rs. 1,457.06 lakhs. Till 31st March 1966 assistance was extended to 38 companies, the total amount sanctioned being Rs. 588.90 lakhs.

Chairman: A. V. Bhanaji Row; Managing Director: Dr. Ram K. Vepa, I.A.S.

### THE ANDHRA PRADESH MINING CORPORATION LTD.

Fateh Ma dan Road, Hyderabad-4.

Set up in Feb. 1961.

Objects: Prospecting and exploitation of some of the important minerals in the State. Setting up of mineral based industries with the collaboration of private sector wherever desirable and possible.

Authorised capital: Rs. 50 lakhs.

Chairman: V. K. Rao, I.O.S.; Managing Director: Khader Ali Khan, I.A.S.

### ANDHRA PRADESH STATE FINANCIAL CORPORATION

Chapel Road, Gunfoundry, Hyderabad-1.

Established in Nov. 1956.

Object: Financial assistance to medium, small scale industries, hotel industry (Tourist hotels only) established within the State.

Authorised Capital: Rs. 4 crores.

Following are figures for the year ending March 31, 1966.

No. of applications received 58. No. of applications sanctioned 48; Amount of loans sanctioned Rs. 2,23,27,600; Rate of interest 8½ per cent per annum with a rebate of ½ per cent for prompt payment of instalments with interest; Net Profit Rs. 12,74,817; Provision for taxation Rs. 5,62,247.

Chairman: B. Venkatratnam; Managing Director: O. Swaminatha Reddy, B.Com. (Hons.), A.C.A.

### THE ASSAM FINANCIAL CORPORATION ('Glenerquart,' Shillong)

(Position as on March 31, 1966)

The Corporation came into being on 14th August 1954. Its jurisdiction has been extended to the States of Tripura and Manipur.

AIMS AND OBJECTS: To contribute to the industrialisation of the States of Assam, Tripura and Manipur by providing credit, medium and long term to industrial concerns.

AUTHORIZED CAPITAL: Rs. two crores divided into two lakh shares. Issued and subscribed: one lakh shares.

Total number of loan applications received 558; Total number of applications accepted for loan: 280; Total amount of loan sanctioned: Rs. 6,41,19,000; Total amount of loan advanced: Rs. 5,18,76,735.

Income Rs. 27,37,458; Expenditure Rs. 16,00,605; Profit Rs. 11,36,853.

### ASSAM GOVT. CONSTRUCTION CORPORATION LTD.

Shillong (Assam)

It is a State Govt. Organisation, registered as a limited Company on 24th March 1964. The object of the Corporation is to construct, execute, carry out, improve, work, develop, administer, manage or control in Assam and elsewhere works and conveniences, of all kinds and to do other business.

Chairman: B. P. Chaliha, Chief Minister, Assam; Managing Director: M. Das.

### BIHAR STATE FINANCIAL CORPORATION

Fraser Road, Patna

The Corporation came into being on 2nd November 1954.

AUTHORISED CAPITAL: Rs. 2 crores. ISSUED AND PAID-UP CAPITAL: Rs. 1 crore.

Following are the figures for the year ending March 31, 1966: Applications pending from previous year 42; amount involved Rs. 1,75,33,538; applications received during the year 49; amount involved Rs. 1,66,69,500; applications sanctioned 18; amount involved Rs. 31,17,600; applications rejected 13; amount involved Rs. 64,85,945; applications lapsed 9; amount involved Rs. 25,62,000; loans disbursed Rs. 23,59,600; instalments repaid Rs. 21,97,688; net profit Rs. 8,62,515.

Chairman: Paramananda; Managing Director: V. N. Prasad.

### BIHAR STATE INDUSTRIAL DEVELOPMENT CORPORATION LTD.

Hasan Manzil,  
Fraser Road,  
Patna.

The Company was registered by the Government of Bihar on 5th November, 1960, with the object of setting up, owning and operating on behalf of the Government industrial undertakings in the medium and large-scale industries sectors. This is a private limited Company with an authorised capital of Rs. 5 crores. The issued, subscribed and paid-up share capital upto March 31, 1966 is Rs. 177.97 lakhs. The entire contribution has come from the State Government. The Company has at present two factories under operation:—(i) Bihar State Superphosphate Factory at Sindri, which produces superphosphate and sulphuric acid; and (ii) High Tension Insulator Factory at Ranchi, which produces high tension and low tension electric insulators.

The Company also assists the private sector in setting up new industrial undertakings by extending financial assistance in the form of loan, contribution to the share capital and underwriting of shares.

Chairman: Rajandhari Sinha, M.I.C.; Vice-Chairman: Ranchor Prasad, I.A.S.; Managing Director: U. N. Rai, I.A.S.

### THE BIHAR STATE SMALL INDUSTRIES CORPORATION LTD. (A GOVERNMENT OF BIHAR UNDERTAKING)

Firdaus Building, Exhibition Road, Patna.  
(Incorporated on 24th October 1961.)

Authorised Share Capital: Rs. 1,25,00,000. The subscribed capital is Rs. 54,42,200 only. The Governor of Bihar holds all the shares excepting three held by the Officers of the State Government in their official capacity.

The Corporation is engaged in regular manufacturing of small industries products like bicycles, auto-batteries, locks, agricultural implements, wooden furniture, cottage industries and handicrafts products and their marketing.

Chairman: D. N. Yadava; Vice-Chairman: Ranchor Prasad; Managing Director: S. Prasad; Secretary: J. S. Das.

### GUJARAT INDUSTRIAL DEVELOPMENT CORPORATION

1, Mill Officers Colony, Opp. Mill Owners' Assoc. Bldg., Ashram Rd., Navrangpura, Ahmedabad 9.

Established in August 1962.

The main functions of the Corporation are (1) generally to promote and assist in the rapid and orderly establishment, growth and development of industries, (2) to establish and manage industrial estates at places selected by the State Government, (3) develop industrial areas selected by the State Government, and (4) develop land on its own account or for the State Government, for the purpose of facilitating the location of industries thereon.

The State Govt. has made provision of Rs. 17 lakhs (Rs. 15 lakhs for acquisition and Rs. 2 lakhs for development of lands) for 1966-67.

Chairman, Chinubhai Chimanbhai Sheth; Vice-Chairman, Babubhai Jashbhai Patel; Member-Secretary and Chief Executive Officer: A. Sharma.

### GUJARAT MINERAL DEVELOPMENT CORPORATION LIMITED

"Shiva-Prasad", Opp. Sardar Patel Stadium, Navrangpura, Ahmedabad-9.

Aims and Objects: To undertake mining and development of minerals in the State of Gujarat.

Authorised Capital: Rs. 50,00,000.

The Corporation has undertaken the working of the Silica-sand Project at Chotila Taluka of Surendranagar Dist. for mining of Silica-stone and Fluorspar Project at Ambadungar in Chhoti-Udepur Taluka for mining of fluorspar deposits.

Chairman: Babubhai Jashbhai Patel; General Manager: C. K. Shah.

### GUJARAT SMALL INDUSTRIES CORPORATION LTD.

Ambica Nivas, Ashram Road, Navrangpura, Ahmedabad 9.

The State-sponsored Gujarat Small Industries Corporation has made a profit of Rs. 4.25 lakhs in 1965 before providing for taxation. The turnover during the year was Rs. 2.10 crores.

The disposable profit was placed at Rs. 1.86 lakhs in 1965.

Chairman: Chinubhai Manibhai; Managing Director: J. M. Mehta.

### THE GUJARAT STATE FINANCIAL CORPORATION

Opp. Relief Cinema, Relief Road, P.O. Box 262, Ahmedabad.

Established May 1960.

Object: Financial assistance to small and medium scale industries and underwriting of shares of industrial units in Gujarat.

Authorised Capital: Rs. Two crores.

Following are figures for the year ending 31st March 1966 (since inception on 1-5-1960): No. of applications received 418; No. of applications sanctioned 247; Amount of loans sanctioned Rs. 4,95,37,000; Loans disbursed Rs. 3,17,53,500.

Preference Issues underwritten by the end of March 1966 stand at Rs. 73,50,000.



The Corporation is also working as agents of State Government for granting loans under State Aid to industries for amount exceeding Rs. 10,000 but not exceeding Rs. 25,000 at a rate of interest of 4 per cent per annum payable half yearly and on a margin of 25 per cent to be retained in favour of Government on the net value of fixed assets.

Following are the figures up to 31st March, 1966, regarding agency arrangement: Number of applications received 353; Number of applications sanctioned 126; Amount of loans sanctioned (net) Rs. 37,93,500; Amount disbursed Rs. 20,65,200.

**Board of Directors:** Navnitlal Sakarlal Shodhan (*Chairman*); W. J. F. Vaz; N. H. Shah (*Managing Director*); I. R. Joshi (*Secretary*).

#### JAMMU & KASHMIR STATE FINANCIAL CORPORATION

P.W.D. Buildings, Residency Road, Srinagar.

Established: December 1959.

**Aims and objects:** To stimulate the establishment of small and medium scale industries and the expansion and modernisation of existing industries by providing financial assistance on medium and long term basis. Loans are also granted to hotel and transport industries.

**Authorised capital:** Rs. 50 lakhs.

Business transacted up to 31st March 1966:— Total number of loan applications received 254; Total number of loans sanctioned 157; Total amount of loans sanctioned Rs. 82,86,000; Total amount of loans advanced Rs. 51,07,000; Total number of loan applications cancelled after sanction 19; Total amount of loans cancelled after sanction Rs. 9,09,000; Net Profit Rs. 2,47,761.

**Chairman:** E. N. Mangat Rai, I.C.S.; **Managing Director:** D. Maitra.

#### KERALA FINANCIAL CORPORATION

K.F.C. Buildings, Vellayambalam, Trivandrum-1.

Established on 1st Dec. 1953, with an authorised capital of Rs. 2 crores. The Corporation was started with the object of providing financial assistance in one form or other to industrial concerns established or to be established in order to quicken long term credit to industrial concerns in Kerala State in need of financial assistance and the pace of industrialisation of the State.

Some figures for 1965-66:

Net profit Rs. 7,24,897; Provision for reserve Rs. 1,54,136; Provision for taxation Rs. 3,39,100; Balance available for guaranteed dividend Rs. 2,13,538; Transfer to Statutory Reserve Fund Rs. 18,123; No. of loan applications received 79; Amount involved Rs. 170.04 lakhs.

Amount sanctioned Rs. 146.87 lakhs; amount disbursed including amount sanctioned during previous years Rs. 60.92 lakhs.

**Chairman:** K. R. Elenkath; **Managing Director:** A. Prabhakaran; **Secretary:** C. Nilakanta Menon.

#### KERALA STATE INDUSTRIAL DEVELOPMENT CORPORATION LTD.

Vellayambalam, Trivandrum 1.

Registered on 21st July 1961 as a private limited company under the Companies Act, 1956.

**Authorised capital:** Rs. 5 crores.

Joint Stock Companies registered in India and Co-operative Societies which are engaged or have for their objects the establishment and operation of industries and have a share capital of not less than Rs. 5 lakhs are eligible to receive assistance from the Corporation.

The assistance will be given to large-scale and medium sized industries. It will normally entertain applications for loans from industrial concerns only if the amount involved exceeds Rs. 10 lakhs in the case of Private Limited

Companies and Rs. 20 lakhs in the case of Public Limited Companies.

The assistance will be granted in the form of:—

- Direct participation in the equity or preference capital or debentures;
- Underwriting of equity or preference capital or debentures;
- Granting of medium and long term loans, and
- furnishing of guarantees.

The Corporation will also receive fixed deposits at attractive rates of interest.

**K. R. K. Menon** (*Chairman*); **M. Abdussalam, I.A.S.** (*Managing Director*); **A. S. Unny** (*Secretary*).

#### KERALA STATE SMALL INDUSTRIES CORPORATION LIMITED

Pattom-Kawdiar Road, Trivandrum-4.

**Capital:** Rs. 31 lakhs.

**Main activities:** Stocking and distributing important raw material such as S. S. Copper; Construction and management of industrial states; Managing service-workshop, viz. Engineering Service Workshop, Wood Workshop and Ceramic Service Centre; Running various production centres, manufacturing, Theodolites, precision instruments, waterproof cloth goods, tiles, bricks, strawboards, small machine tools, dies and tools, Optical items (Laboratory), wooden furniture, die cast components etc.; Running of sales emporium at Ernakulam for display and sale of products of Small Scale Industrial Units in the State; Supply of machinery on hire purchase basis.

**Chairman:** Dr. Venkitanarayanan, M.A., Ph.D., **Managing Director:** Tampi Thomas; **Secretary:** K. Pushpangadan.

#### MADHYA PRADESH FINANCIAL CORPORATION

(Shiv Vilas Palace, Indore City).

Started functioning on 1st July 1955.

The object of the Corporation is to assist and further the industrialisation of the State by providing institutional credit, medium and long term, to industrial concerns in Madhya Pradesh.

The period of loan is decided on the merits of each case, but does not ordinarily exceed 10 to 12 years though the maximum period upto which loans can be granted has been fixed at 20 years.

**Authorised share capital:** Rs. 2 crores.

The Corporation has fixed the minimum limit of the loan at Rs. 10,000 with a view to encouraging small scale industries. The Corporation has also reduced the margin of security from 50 per cent to 40 per cent and upto 25 per cent in the case of small scale industries. The Corporation has started sanctioning loans to Hotels and Transport Industries. Margin of security in case of loans to hotels is 50 per cent.

Since inception the Corporation received 592 completed loan applications till 31st March 1966. The Corporation sanctioned advances to 303 industrial concerns for Rs. 8,78,73,200 and rejected 90 cases for Rs. 1,37,59,000. 158 applications for Rs. 3,19,05,200 were withdrawn by the applicants. 41 applications for Rs. 82,49,000 were under consideration as on 31st March 1966.

**Chairman:** R. N. Malhotra; **Managing Director:** K. L. Agrawal.

#### THE MADHYA PRADESH STATE INDUSTRIES CORPORATION LTD.

Industrial Estate Pologround, Indore City 3.

A State Government undertaking, incorporated in April, 1961.

**Authorised and issued capital:** Rs. 1,50,00,000.

**Object:** To take over and run from the Government of Madhya Pradesh existing medium industries and to undertake development of new industries.

The Government of Madhya Pradesh have transferred the following industries to the Corporation: Cotton Spinning Mill, Sanawad (cost Rs. 70 lakhs); Cotton Seed Solvent Extraction Plant, Ujjain (cost Rs. 60 lakhs); Ratlam Alcohol Plant, Ratlam (cost Rs. 35 lakhs); Gwalior Potteries, Gwalior; Gwalior Engineering Works, Gwalior; Gwalior Leather and Tent Factory, Gwalior; and Calendering Plant, Ujjain.

**Chairman:** S. N. Mehta, I.C.S.; **Managing Director:** P. C. Agrawal.

#### THE M. P. STATE MINING CORPORATION LTD.

Fourth Bridge Road, Napier Town, Jabalpur.

The Corporation is a Government of Madhya Pradesh undertaking, incorporated in January 1962, with an authorised capital of Rs. 50,00,000.

**Main objects:** To search for major and minor minerals and to undertake mining and to trade in minerals. The Corporation has so far undertaken development of six important minerals in different areas of the State for mining of dolomite, lime stone, bauxite, glass sand, fire clay and others.

**Chairman:** S. N. Mehta.

**Managing Director:** B. P. Tiwari.

#### THE MADRAS INDUSTRIAL INVESTMENT CORPORATION LIMITED

L. L. A. Buildings (Second Floor), 150-A, Mount Road, Madras-2.

Started functioning: September 1, 1949.

The Main objects: Financing of industries in the State of Madras with long and medium term loans, participating in equity and preference shares of companies, underwriting of capital issues, guaranteeing of loans etc.

**Authorised Capital:** Rs. 10,00,00,000.

**Paid-up capital:** Rs. 2,34,56,000.

Particulars as on June 30, 1965: Number and amount of applications for loans received 522; Rs. 43,40,34,450.

Number and amount of applications sanctioned (Cash, Joint and Guarantee loans): 287; Rs. 24,50,52,400.

Number of applications and total amount of cash, guarantee and joint loans advanced 230; Rs. 16,57,88,610.

Number of applications for loans with amount outstanding (Cash, Joint and Guarantee loans): 201; Rs. 11,85,02,899.

Total expenses for the year ended 30-6-65: Rs. 76,90,290.

Total income for the year ended 30-6-65: Rs. 80,40,971.

Net profit for the year ended 30-5-65 (subject to taxation): Rs. 3,50,681.

**T. S. Narayanaswami** (*Chairman*); **T. N. Lakshminarayanan, I.A.S.** (*Ex-Officio Director and Acting Chairman*); **D. V. Narasimhan, M.A., C.A.I.I.B.** (*Secretary*).

#### MADRAS STATE SMALL INDUSTRIES CORPORATION LTD.

Old Engineering College Building, Chepauk, Madras 6.

Gram: INDCOM

The Company was registered by the Government of Madras on 10th September, 1965, with the object of taking over the Government Industrial undertakings in the medium and small sectors and setting up new production and service units on behalf of the State Government.

This is a private limited company, with an authorised capital of Rs. 10 crores. The subscribed and paid up capital upto 31-3-1966 is Rs. 4 crores, the entire contribution being made by the State Government.



The Company has at present 66 undertakings, broadly grouped as follows:

|                                       |    |
|---------------------------------------|----|
| General Purpose Engineering Workshops | 11 |
| Tool Rooms                            | 9  |
| Wood Working Units                    | 8  |
| Leather and Footwear units            | 5  |
| Foundries                             | 4  |
| Cycle Assembly Units                  | 3  |
| Raw Material distribution centres     | 3  |
| Other special purpose units           | 23 |
|                                       | 66 |

*Chairman* : T. N. Lakshminarayanan.

*Managing Director* : T. R. Krishnaswami.

### THE MADRAS STATE WAREHOUSING CORPORATION

9/10, Moore Street, Madras-1.

Estd. : 2-5-1958. The State Government and the Central Warehousing Corporation are the only two shareholders having their capital on a 50 : 50 basis.

The authorised share capital of the Corporation is Rs. 2 crores.

The main functions are: (a) to acquire and build warehouses within the State; (b) to run warehouses in the State for storage of agricultural produce, seeds, manures, fertilisers and notified commodities and (c) to act as agent of the Central Warehousing Corporation or of the Government for the purposes of the purchase, sale, storage and distribution of agricultural produce, seeds etc.

The Corporation provides about 83,845 tonnes storage capacity in 27 of its warehouses of which ten are owned and constructed warehouses.

### THE MAHARASHTRA AGRO-INDUSTRIES DEVELOPMENT CORPORATION LIMITED

'AKASH-DEEP', 3rd Floor, French Bridge, Bombay-7 (WB).

Registered by Govt. of Maharashtra on 15th December 1965, under the Companies Act, 1956, as a Private Limited Company.

*Share Capital* : Its authorised capital consists of Rs. 2 crores.

*Objects* : To promote the supply of farm implements and machinery including equipment for food industries, dairy development, cattle development and thus help the process of modernisation of agriculture quickly, operating on as extensive a scale as possible.

*Chairman* : P. K. Savant, Minister for Agriculture, Govt. of Maharashtra; *Managing Director* : Dr. A. U. Shaikh, Secretary, Agriculture & Cooperation Department, Government of Maharashtra.

### MAHARASHTRA INDUSTRIAL DEVELOPMENT CORPORATION

(A Government of Maharashtra Undertaking)

Novelty Chambers, Grant Road, Bombay 7.

Estd. : Aug. 1962.

The functions of the Corporation are:—

to promote and assist in the rapid and orderly establishment, growth and development of industries;

to establish and manage industrial estates; to develop industrial areas selected by the State Government; and

to assist, financially, industries by loans to move their factories to industrial estates or areas.

The Corporation has so far undertaken development of 20 different areas and estates, including three functional estates, spread all over the State of Maharashtra. The Corporation has also undertaken major water supply schemes amounting to about Rs. six crores.

The Maharashtra Industrial Development Corporation has set up a separate division called the Maharashtra Investment Centre, which has its office on the 5th floor, Orient House, Mangalore Street, Ballard Estate, Bombay 1. The centre operates exclusively as a semi-official and non-profit making organisation, offering individual attention to specific industrial projects. Its

objects are:—to promote wider knowledge and understanding of industrial investment opportunities in Maharashtra; to guide Indian and foreign industrialists in industrial matters, to enable them to execute their projects speedily; to offer to investors Project Advisory Services; to survey industrial investment opportunities and carry out studies with respect to industries of importance to Maharashtra.

*Chairman* : G. D. Patil, (Deputy Minister, Industries, Planning and Electricity (Maharashtra State)).

*Member Secretary and Chief Executive Officer* : P. C. Nayak, I.A.S.

### MAHARASHTRA SMALL SCALE INDUSTRIES DEVELOPMENT CORPORATION LTD.

(A Govt. of Maharashtra Undertaking)

Bombay Life Building, 5th Floor, 45, Veer Nariman Road, Fort, Bombay 1.

The Corporation was registered on 19th Oct. 1962.

The objects of the Corporation are:—(i) Procurement of basic raw materials (which are in short supply) and arranging for their equitable distribution amongst the small scale industries units in the State; (ii) supply of machinery and equipment (particularly of indigenous origin) to the small scale industries on easy instalment basis; (iii) Helping the small scale industries in marketing their products of standard specifications.

The newly started Export Promotion Wing of this Corporation renders over-all assistance to the small scale manufacturers in the field of foreign trade.

*Chairman* : G. B. Newalkar; *Managing Director* : N. R. Rao.

### THE MAHARASHTRA STATE FARMING CORPORATION LTD.

Sachivalaya Annexe, Bombay-32.

A Government of Maharashtra Undertaking, started in March 1963.

*Authorised Capital* : Rs. 2 crores.

*Paid-up Capital* : Rs. 1 crore.

The Corporation has been formed for the cultivation and management of the surplus lands of the Joint Stock Sugar Companies in Maharashtra vesting in the Government under the provisions of the Maharashtra Agricultural Lands (Ceiling on Holdings) Act, 1961.

The total area of the land at present in the possession of the Corporation is 69,800 acres out of which crushable sugar-cane area is about 18,550 acres. The entire quantity of sugar-cane grown by the Corporation at each of the above estates is to be supplied to the sugar factory concerned at prices fixed by the Government of India.

The Corporation has its operational headquarters at 840, Budhwar Peth, Poona-2.

*Managing Directors* : S. P. Mohite (Administration); R. A. Zubairy (Plantation).

### MAHARASHTRA STATE FINANCIAL CORPORATION

United India Building, 1st Floor, Sir Pherozeshah Mehta Road, Bombay 1.

*Branch Offices* : National Indian Building, Mount Road Extension, Nagpur; Mohan Talkies, Sarafa, Aurangabad; Renuka Niwas, Station Road, Miraj; Ghanekar Building, Rua Jose Falco, Panjim, Goa.

Estd. 1953 and reconstituted in 1962.

The main object of the Corporation is to provide financial assistance to medium and small scale industrial concerns in the Maharashtra State and in the Union Territory of Goa, Daman and Diu for purchase of land, plant and machinery and other assets, for renovation and expansion of existing units and for the development of new ones.

The authorised capital of the Corporation has been increased from Rs. 1 crore to Rs. 1.50

crores, while the subscribed and paid up capital of the Corporation continue to be Rs. 1 crore.

During 1965-66, the Corporation under its own rules received 161 applications and the total loan applied for was Rs. 8,26,92,064. The Corporation sanctioned loans aggregating Rs. 1,84,86,600 to 67 concerns.

Under Agency-cum-Guarantee Arrangement, the Corporation received, for consideration during the year 1965-66, 252 applications for total loan applied for Rs. 1,39,69,000. The Corporation sanctioned loans aggregating Rs. 51,10,100 to 105 concerns.

The total loans disbursed by the Corporation upto 31st March, 1966 aggregated Rs. 13,12,18,387.

*Chairman* : B. D. Garware; *Managing Director* : P. S. Mokashi.

### MAHARASHTRA STATE WAREHOUSING CORPORATION

18, Bombay Road, Poona-3.

The Corporation has an authorised share capital of Rs. 2 crores. The present paid up share capital of the Corporation is Rs. 65 lakhs.

The Corporation has established warehouses at 53 centres spread all over the Maharashtra State. The maximum custom during the year 1964-65 was 5,82,768 bags of agricultural produce. The Corporation is authorised under the Warehousing Corporation's Act of 1962 to store other notified commodities also in its warehouses. Against warehouse receipts issued by the Corporation, the depositors can secure advances by pledging the same with scheduled banks, State Bank of India and Dist. Central Cooperative Banks.

Upto the end of the financial year 1964-65, the Corporation's working had resulted in a loss of Rs. 4,03,761.27.

*Chairman* : Nizamuddin Ahmed, I.A.S.; *Mg. Director* : M. Fariduddin.

### THE STATE INDUSTRIAL AND INVESTMENT CORPORATION OF MAHARASHTRA LIMITED

Room 106, Sachivalaya Annexe, Bombay 32. (A Government of Maharashtra Undertaking).

The Corporation was registered on 31-3-1966 as a Private Limited Company under the Companies' Act, 1956. The objective of the Company is to promote development of industries mainly in the under-developed areas of Maharashtra State by providing subscription to the equity capital, giving of long-term loans and under-writing of capital issues of private industrial units. The Corporation has an authorised capital of Rs. 5 crores.

*Chairman* : S. K. Wankhede, Minister (Finance); *Vice-Chairman* : S. B. Chavan, Minister (Irrigation and Power); *Managing Director* : V. Srinivasan, Dy. Secretary to Govt. of Maharashtra, Industries and Labour Department.

### THE MYSORE SMALL INDUSTRIES CORPORATION LIMITED

Administrative Office Building, Industrial Estate, Rajaaji Nagar, Bangalore 10.

The Corporation is set up to assist, finance and generally to promote the interests of the small scale industrialists in the State.

The Corporation activities are as under:

The construction, management and administration of industrial estates and industrial developments in the areas in the State; Operating raw material depots at industrial estates where controlled raw materials required by small scale industrialists are stocked for sale; Hire purchase of machinery for small scale industrialists; Organising exhibitions and display of the products of the small scale industries and also of components required by major industries.

*Managing Director* : L. N. Sampathkumar, I.A.S.



**MYSORE STATE FINANCIAL CORPORATION**

First Main Road, Gandhinagar, Bangalore 9.

Established in 1959 with an authorised capital of Rs. two crores.

During 1965-66, 70 applications and 10 applications for additional loans or in all 80 applications for financial assistance of Rs. 1,89,04,600 were received as against 44 fresh applications and 9 applications for a total assistance of Rs. 93,20,500 during the previous year. 109 applications for financial assistance of Rs. 2,43,38,100 including the pending applications of previous year were dealt with during the year of which 59 cases were disposed off by sanctioning loans to the extent of Rs. 1,48,84,000 which took the total sanction to Rs. 4,83,14,500.

The Corporation had made a profit of Rs. 9,47,862, a rise of 29 per cent over the last year's income which had stood at Rs. 7,33,907. As regards expenditure on establishment, its percentage to the gross earnings remained at 32 as during the previous year.

S. S. Melligeri, B.Com. (Chairman); C. M. Kempanna, B.Sc. (Hons.) (Managing Director).

**MYSORE STATE HANDICRAFTS DEVELOPMENT CORPORATION LTD.**

26-45, Mahatma Gandhi Road, Bangalore-1.

Incorporated on March 17, 1964. It is a Private Joint Stock Company the shares being owned entirely by the Government of Mysore. The subscribed capital is Rs. 5,00,000.

The Corporation aims at organising and developing all the emporia and provide increased marketing facilities for the artisans engaged in the manufacture of handicraft goods.

The Corporation also proposes to start some production centres.

Chairman : Smt. Kamala Reddy ; Vice-Chairman : Smt. Vimala Rangachar ; Mg. Director : A. Alikhan.

**MYSORE STATE INDUSTRIAL INVESTMENT AND DEVELOPMENT CORPORATION LTD.**

Post Office Road, Bangalore.

Established : 15th June, 1964.

Authorised Capital : Rs. 5 Crores.

**Aims and Objects of the Corporation :** The main objects of this Corporation, among others, are to promote, improve, establish and execute industries and industrial projects; to aid, make advances, assist and finance industrial undertakings and underwrite the stock, shares etc.

Managing Director : K. M. C. Reddy ; Secretary : M. V. Pandit.

**INDUSTRIAL DEVELOPMENT CORPORATION OF ORISSA**(A Govt. of Orissa Undertaking)  
Bhubaneswar.

The Corporation has been registered as a Public Limited Company with an authorised capital of Rs. 50 crores in March, 1962.

During these three years of its existence the Corporation has taken up a number of projects. These projects are intended to lay a firm base of the heavy and medium industries by utilisation of raw material resources and skills available in this State. At present the Corporation has two running industries—(1) Kalinga Iron Works and (2) Hirakud Industrial Works.

In addition to the above, the Corporation has taken up a number of major industrial projects like establishment of a Cement Factory, Rolling Mill, an Electrical Cable Industry, Ferro-Chrome Plant, a Mangalore Pattern making Tile Factory. At present, these are under erection and construction.

The Corporation has already promoted a subsidiary company viz., the East Coast Salt and Chemical Industries Ltd., and the first harvesting of industrial grade salt was done during the summer of 1966.

Chairman : R. P. Padhi, I.A.S. ; Managing Director : D. L. Purkayastha, I.A.S. ; Secretary : A. K. Biswal, O.A.S.

**ORISSA CONSTRUCTION CORPORATION LTD.**

(A Govt. of Orissa Undertaking)

Post Box No. 82, Bhubaneswar.

This Corporation was set up on 22nd May, 1962, with an authorised capital of Rs. one crore and the entire issued share capital has been fully subscribed by the State Government.

The Corporation has a big plan for expansion. It has already invested large amounts on machinery and equipment needed for major construction works.

Chairman : K. S. Ramachandran, I.A.S. ; Director-in-Charge : A. R. Rao ; Secretary : P. K. Paul.

**ORISSA STATE FINANCIAL CORPORATION**  
Killa Maidan, Cuttack 1.

The Orissa State Financial Corporation was established by the Orissa State Government on 14th March 1957 with the object of providing medium- and long-term credit to small-scale and medium sized industrial concerns in the State of Orissa, primarily for the purpose of purchase, renovation or expansion of plant and machinery and other fixed assets.

The Authorised Capital of the Corporation is Rs. 2 crores.

The Corporation has earned a net profit of Rs. 6.73 lakhs in the year 1965-66 as against Rs. 6.20 lakhs during the previous year.

Particulars as on 31st March 1966 :—

|                              | No. | Amount<br>Rs. |
|------------------------------|-----|---------------|
| Applications received        | 429 | 6,25,88,000   |
| Applications sanctioned      | 205 | 2,85,14,000   |
| Amount of effective sanction | 168 | 2,43,84,000   |
| Amount disbursed             | 155 | 2,12,96,000   |
| Amount recovered             | —   | 25,18,000     |

Chairman : K. S. Bawa, I.A.S., Secretary to Govt. of Orissa, Finance Department ; Managing Director : R. N. Sahoo, F.C.A.

**THE PUNJAB EXPORT CORPORATION LIMITED**

327, Sector 9-D, Post Box 20, Chandigarh, Punjab.

The Corporation was incorporated under the Companies Act, 1956 in June, 1963. It is a Punjab Government undertaking.

The authorised share capital of the Corporation is Rs. 50 lakhs.

The Corporation has been set up to serve as a channel for the outflow of goods from Punjab's medium and small-scale industries to the export markets. It organises and effects exports from India of all such goods and commodities as are manufactured and produced in Punjab and coordinates the activities of exporters with various export promotion councils. It arranges supply of scarce raw materials required for the manufacture of goods meant for export, as also finance to enable the manufacturers to process firm orders for export. In addition, the Corporation renders institutional service and guidance to manufacturers/exporters in Punjab.

The promotional efforts of the Corporation include assistance to industrialists in sponsoring them for study teams/delegations, organising participation of Punjab industry in exhibitions and trade fairs, developing new lines of export and help in solving problems of exporters by coordination with various agencies.

Mg. Director : L. R. Mago.

**PUNJAB FINANCIAL CORPORATION**

Head Office : 72/73, Sector 17-B, Bank Square, Chandigarh.

Sub-Office : Saraswati Bhawan, E-Block, Connaught Place, New Delhi.

Established 1st February, 1963. The Corporation is intended primarily to supply the requirements of medium and small industries in the State of Punjab and the Union Territories of Delhi and Himachal Pradesh.

Total funds available : Rs. 5.00 crores ; Total loans advanced upto March 31, 1966 : Rs. 8,78,74,191.00 ; Amount repaid upto 31st March 1966 : Rs. 2,51,12,910.00 ; Total amount of loans sanctioned upto March 31, 1966 : Rs. 14,80,97,000.00.

The State Government have appointed the Corporation as their Agent for routing a part of their annual assistance for State Aid to Industries. Under the revised arrangement the Corporation is to advance loans to Small Scale Industries ranging above Rs. 50,000 and upto Rs. 1.00 lakh. Up to the year ended 31st March 1966, the State Government placed at the disposal of the Corporation a sum of Rs. 64,50,000.00. Total amount of loan sanctioned upto March 31, 1966 : Rs. 84,31,000.00 ; Total amount of loans disbursed upto March 31, 1966 : Rs. 57,33,700.00.

Income (April 1, 1965 to March 31, 1966) : Rs. 55,26,000 ; Expenses : Rs. 32,88,391.00 ; Profit : Rs. 22,37,609.00.

Chairman, Board of Directors, Kuldip Singh Narag, I.A.S. ; Managing Director, S. B. Varma ; Secretary, M. S. Rana.

**THE PUNJAB STATE SMALL INDUSTRIES CORPORATION LTD.**

66, Sector 9-A, Chandigarh.

Set up 1962-63.

Its objects are to aid, counsel, assist, finance, protect and promote the interest of small industries in the state.

In brief the main functions of the Corporation comprise procurement, storage and distribution of essential raw materials viz. ferrous and non-ferrous metals, coal, molasses, yarn, dyes, chemicals etc.

The Corporation declared a dividend of 10 per cent during the 3rd year of its functioning and had the distinction of earning foreign exchange to the tune of Rs. 11,30,171 through exports. The financial results for 1964-65 are summed up as under :—

Paid-up capital Rs. 20,00,000 ; Turnover Rs. 2,05,75,600 ; Gross profit Rs. 9,25,274 ; Total expenses Rs. 2,73,785 ; Profits (subject to income-tax) Rs. 6,51,489.

Chairman : R. S. Talwar, I.A.S. ; Mg. Director : J. P. Gupta.

**RAJASTHAN FINANCIAL CORPORATION**

Surya Nivas, C-18, Bhagwandas Road, Post Box No. 63, Jaipur.

The Corporation has an authorised capital of Rs. 2 crores. The object of the Corporation is to provide financial assistance to medium and small-scale concerns in the State.

The Corporation sanctioned loans amounting to Rs. 5,36,71,000 to 187 industrial concerns by the end of March 1966, out of which loans aggregating Rs. 88,21,006 had been cancelled. Against the effective sanctioned loans for Rs. 4,48,49,994, a sum of Rs. 3,35,65,779 was disbursed by the Corporation till the end of March 1966.

Under the Rajasthan State-Aid to Industries (Loans) Rules, 1963, the Corporation sanctioned loans amounting to Rs. 8,78,400 to 54 industrial concerns by the end of March, 1966, out of which loans aggregating Rs. 99,950 had been cancelled. Against the effective sanctioned loans for Rs. 7,78,450 a sum of Rs. 6,65,450 was disbursed by the Corporation till the end of March 1966.

During 1965-66 the Corporation made a net profit of Rs. 8,29,269 as compared to Rs. 6,73,366 made during 1964-65, subject to taxation.

Chairman, Board of Directors : Ram Nath A. Podar, J.P. ; Managing Director : G. S. Purohit.

**RAJASTHAN STATE HOTELS CORPORATION LTD.**

Rajasthan State Hotel Premises, M. I. Road, Jaipur.

To adequately meet the growing needs and giving full importance to Tourism both International and National the State Government



thought fit to create a body, viz., the Rajasthan State Hotels Corporation. This body was handed over the existing Palaces/Circuit-houses of Jaipur, Jodhpur, Bikaner, Udaipur and Srisaerh (Alwar) to be run as hotels for the tourists' convenience.

The Corporation formally started functioning from the 1st of July 1965, and in the near future will also be taking over one of the Palaces at Chittor to be run as a Hotel and proposes to build a fully equipped Hotel at Kotah.

Its policy programme includes additions and alterations in the existing buildings so as to provide the maximum comfort at reasonable rates to the tourists. The main aim of the Corporation in its overall activities is to include all such activities conducive to tourists' convenience and interests.

*Chairman :* G. S. Mehta ; *Managing Director :* V. N. Kak.

#### TRIPURA SMALL INDUSTRIES CORPORATION LTD.

Agartala, Tripura.

The Tripura Small Industries Corporation Ltd. came into being on April 30, 1965. The authorised capital of the Company is Rs. 10 lakhs.

The principal functions of the Company are to aid, assist and advise the small industrial units through various means.

#### U. P. FINANCIAL CORPORATION

(See Late Particulars).

#### U.P. SMALL INDUSTRIES CORPORATION LIMITED

7/62, Tilak Nagar, Kanpur.

Established on June 13, 1958. It was formed to assist the development of small industries

in the State. Its present share capital is Rs. 47,50,000 which is entirely subscribed by the State Government.

It has so far enlisted 925 industrial units and helped them in securing contracts to the extent of about Rs. 45,00,000 upto Dec. 1965.

355 applications to the value of Rs. 84,58,049, have been received from District Industries Officers after scrutiny upto the end of March 1966. Orders to the extent of Rs. 8,31,004 have been placed and machinery to the value of Rs. 5,29,295 has been supplied to small industrial units under the scheme.

*Chairman :* H. C. Saxena, I.A.S. ; *Managing Director :* S. C. Goil, I.A.S. ; *Secretary :* J. P. Srivastava.

#### U. P. STATE INDUSTRIAL CORPORATION LIMITED

Building of the Directorate of Industries, 117/420, G. T. Road, Post Box No. 413, Kanpur.

The Corporation was established in March 1961, as a private limited company with an authorised capital of Rs. 5 crores. The issued and paid-up capital of the Corporation stands at Rs. 165 lakhs and has been contributed entirely by the U.P. Government. A further sum of Rs. 78 lakhs will be contributed towards the share capital by the U.P. Government during 1966-67.

*Objects :* To assist the process of rapid and extensive industrialisation of the State. The Corporation is an autonomous body functioning under the Company law and is at present engaged in the following activities :—

- (1) Acquisition and development of land in Ghaziabad, Hardwar, Bareilly, Kanpur, Lucknow, Gorakhpur, Varanasi and Mirzapur for offering to industrialists on lease ;
- (2) Underwriting of Share Capital of public limited companies ; and

- (3) Working of certain selected mineral deposits within the State of U.P. for supply to industrial concerns.

#### WEST BENGAL FINANCIAL CORPORATION

P-11, Mission Row Extension (5th Floor), Calcutta-1.

The Corporation was established as from 1st March 1964. The object of the Corporation is to provide financial assistance, chiefly by way of long and medium term loans, to industrial concerns in the State.

Authorised Capital Rs. 2 crores.

*Budget :* Gross income (1965-66) : Rs. 42,00,569 ;  
Expenditure : Rs. 28,07,557 ; Net Profit : Rs. 13,93,012.

#### WEST BENGAL SMALL INDUSTRIES CORPORATION LTD.

(A Govt. of West Bengal Undertaking)

45, Ganesh Chandra Avenue (2nd Floor), Calcutta-13.

The Corporation has been set up as a West Bengal Government Undertaking with a view to looking to the various problems facing the cottage and small scale industries of the State.

*Activities :* Procurement and distribution of scarce raw materials and marketing the finished products mostly consumer goods of the Cottage and Small Scale Industrial Units of the State through the Corporation's Sales Emporia and Depots.

The Corporation has formed a separate "export cell" the main function of which is to explore the export potentialities of the handicrafts and other cottage and small scale industry products of this State.

*Chairman :* J. C. Sen Gupta, I.A.S. ; *Managing Director :* S. Sen Gupta, I.A.S.

## ALCOHOL INDUSTRY

INDUSTRIAL alcohol is a very valuable material in the manufacture of acetone, acetic acid, ether, chloroform, ethyl acetate, polyethylene, styrene, polystyrene, etc. It is also necessary as a solvent in the manufacture of fine chemicals, medical preparations, toilets, etc. Since the last war, its importance has increased. It is now essential in the manufacture of ammunition and of artificial rubber.

In 1964 there were as many as 62 distilleries capable of producing over 17.71 million gallons of rectified spirit alcohol. The trend of production has been as follows :

|      |                  |                  | '000 litres |  |
|------|------------------|------------------|-------------|--|
| Year | Rectified spirit | Denatured spirit |             |  |
| 1960 | 41,176.8         | 20,391.6         |             |  |
| 1961 | 51,710.8         | 42,129.6         |             |  |
| 1962 | 61,615.2         | 49,206.0         |             |  |
| 1963 | 87,000.0         | 56,400.0         |             |  |
| 1964 | 152,400.0        | —                |             |  |
| 1965 | 182,281.8        | —                |             |  |

Consumption of power alcohol in 1960 was assessed at 49.05 million litres and of industrial alcohol at 40.50 million litres.

(The details about the progress and achievements during the three plans have been fully discussed in the Directory for the year 1965-66).

It is estimated that during the Third Plan, Rs. 4.0 crores has been invested for attaining

a capacity target of 324 million litres of alcohol by 1965-66. The imported component is likely to be about Rs. 40 lakhs.

The installed capacity and actual production in thousand bulk gallons of power alcohol are given below :

|      |                    |            | (thousand litres) |  |
|------|--------------------|------------|-------------------|--|
| Year | Installed capacity | Production |                   |  |
| 1960 | 74,766.0           | 49,327.2   |                   |  |
| 1961 | 74,766.0           | 53,667.6   |                   |  |
| 1962 | 74,772.0           | 50,216.4   |                   |  |
| 1963 | 75,972.0           | 25,320.0   |                   |  |
| 1964 | —                  | 1,464      |                   |  |
| 1965 | —                  | 772        |                   |  |

Imports of alcohol are banned, but small quantities are imported along with drugs and perfumed spirits or in the form of liquors. Exports of alcohol are confined to despatches of denatured spirit to Burma and Ceylon and small quantities of rum.

The Tariff Commission was asked to inquire into the current ceiling prices of alcohol. It has recommended that the present miscellaneous state levies should be replaced by a uniform excise levy.

Power alcohol has been exempted from licensing provisions from July, 1966.

The annual drink bill of India is reported to be about Rs. 146 crores. Of this, one third is spent

on illicit liquor. Delhi stands first in the consumption of foreign styled liquor, followed by Mysore.

The fuel requirements of the industry is estimated at 2,50,000 tons of coal per annum in the final year of the Plan. The additional fixed investment is estimated at Rs. 4 crores, its foreign exchange component being about Rs. 40 lakhs. The additional employment during the Third Plan is estimated at 5,000.

Tentative 1970-71 estimates of demand versus supply of traditional raw materials. (Alcohol from Molasses).

| (1) Alcohol Demand          | Alcohol requirement (tonnes per year) |
|-----------------------------|---------------------------------------|
| Polythylene                 | 24,000                                |
| S B R                       | 80,000                                |
| Acetic Acid                 | 40,000                                |
| Butanol                     | 13,000                                |
| Styrene (excluding SBR)     | 15,000                                |
| PVC/Ethylene Dichloride     | 10,000                                |
| Butanol/Acetic Acid/Zethyl. | 20,000                                |
| Hexacol                     | 4,000                                 |
| DDT                         | 2,06,000                              |
| Miscellaneous and Potable   | 1,50,000                              |
|                             | 3,56,000                              |



## COTTAGE INDUSTRIES

### VILLAGE AND SMALL INDUSTRIES

**THIRD Plan : Rs. 264 crores.**

According to the working definition adopted by the Government, small-scale industries include all industrial units with a capital investment not exceeding Rs. 5 lakhs irrespective of the number of persons employed. Financial assistance to small industries is given by the Government, State Financial Corporations and banking institutions including the State Bank of India. Recently, measures were taken to make this assistance more effective.

The data about employment are extremely meagre. It is, however, very roughly estimated that at least 24 million persons are gainfully employed in these industries classified as under:—

| Name of Industry                                         | Persons employed in lakhs. |
|----------------------------------------------------------|----------------------------|
| Textiles .. .. .                                         | 75                         |
| Leather .. .. .                                          | 24                         |
| Wood .. .. .                                             | 21                         |
| Metals .. .. .                                           | 42                         |
| Pottery, Ceramics, Tiles, Bricks, etc.                   | 20                         |
| Vegetable Oils, Chemical Products, etc. .. .. .          | 10                         |
| Food including Hand-pounding .. .. .                     | 20                         |
| Dress and Toilet .. .. .                                 | 11                         |
| Miscellaneous including jewellery and toy making .. .. . | 17                         |
| <b>TOTAL ..</b>                                          | <b>240</b>                 |
|                                                          | (Estimated)                |

### THE KHADI AND VILLAGE INDUSTRIES COMMISSION

Established in April 1957.

Members of the Commission: U. N. Dhebar (*Chairman*); K. Arunachalam (*Vice-Chairman*); Dhawaja Prasad Sahu; Somdutt Vedalankar; Akshay Kumar Karan (*Member-Secretary*).

### STATE KHADI AND VILLAGE INDUSTRIES BOARDS

Almost in every State a statutory State Khadi and Village Industries Board has been constituted by the State legislature concerned. The Khadi and Village Industries Commission places the funds at the disposal of the State Khadi and Village Industries Board which employs the same for the development of khadi and village industries in the State. A limited number of institutions are now directly financed by the Commission. In the States where there is no statutory board an advisory board constituted by the State Government concerned advises on the measures necessary for the implementation of the programme for khadi and village industries.

The following industries, as provided in the schedule of Industries included in the Act, come under the purview of the Commission: Khadi (traditional and Ambar), Processing of Cereals and Pulses, Village Oil, Village Leather, Cottage Match, Gur and Khandisari, Palm-Gur, Non-Edible Oils and Soap Manufacture, Handmade Paper, Bee-Keeping, Village Pottery, Fibre, Carpentry and Blacksmithy, manufacture and use of manure and Methane gas from cow-dung and other waste products, and lime manufacture. The following industries are also included in the schedule recently: Manufacture of Shellac, Fruit Processing and Fruit Preservation, Manufacture of House-hold Utensils in Aluminium, Collection of Forest Plants and Fruits for Medicinal Purposes, Bamboo and Cane Work, Manufacture of Gum Resins and Manufacture of Katha.

The Khadi and Village Industries Commission provides financial assistance in the shape of grants and loans for the development of khadi and village industries.

The assistance is given in accordance with and at rates and on terms sanctioned by the Government of India in respect of each industry to the following:

(a) a State Government; (b) a board established under any law for the time being in force for the development of khadi and village industries; (c) a society registered under the Societies Registration Act, 1860 (21 of 1860) or under any other law for the time being in force in any State; (d) a cooperative society registered under the Cooperative Societies Act, 1912 (2 of 1912) or under any other law for the time being in force in any State; (e) a gram or village *panchayat* established under any State law for the time being in force; (f) an authority set up under any law for the time being in force relating to *bhoodan* or *gramdan*; (g) a trust created for public purposes of a charitable or religious nature; (h) an individual or institution engaged in research in khadi and village industries, subject to the condition that a grant or subsidy to an individual should not exceed Rs. 5,000 in any one case; and to an institution it should not exceed Rs. 50,000 in any one case. The ceiling of Rs. 5,000 for an individual and of Rs. 50,000 for an institution may, however, be exceeded with the prior approval of the Government; (i) any other individual, authority or body in accordance with the approved pattern and within the ceilings communicated by the Commission to the Government.

**Note :** 'Individual' means an artisan or any other worker undertaking activities falling under the purview of the Commission and for which grants and subsidies are given.

### INSTITUTIONAL PROGRESS

By the end of 1964-65 there were 999 registered institutions and 18,610 cooperative societies for khadi and village industries.

### Production

The production of khadi (including silk, woollen and ambar) was of the value of Rs. 22.09 crores in 1963-64 and of Rs. 20.98 crores in 1964-65. Consequent on the introduction of weaving subsidy scheme there has been a change in the calculation of cost of cotton khadi. As a result of this, there is a seeming fall in the valuation of cotton khadi (in respect of both production and sales) despite a substantial increase in its quantum of production and sales. The quantity of production actually rose from 715.07 lakh sq. metres in 1963-64 to 806.26 lakh sq. metres in 1964-65.

The value of production of village industries articles in 1964-65 was Rs. 48.06 crores as against Rs. 43.48 crores in 1963-64.

The following table shows the comparative details of production of khadi and village industries in 1963-64 and 1964-65.

| Industry                                 | (Rs. Crores) |              |
|------------------------------------------|--------------|--------------|
|                                          | 1963-64      | 1964-65      |
| Khadi .. .. .                            | 22.09        | 20.98        |
| Processing of Cereals and Pulses .. .. . | 3.08         | 3.67         |
| Village Oil .. .. .                      | 17.93        | 20.07        |
| Village Leather .. .. .                  | 2.28         | 2.37         |
| Cottage Match .. .. .                    | 0.08         | 0.08         |
| Gur and Khandisari: .. .. .              | 9.53         | 11.20        |
| Palm Gur .. .. .                         | 7.43         | 6.02         |
| Non-edible oils and Soap .. .. .         | 0.65         | 0.73         |
| Handmade Paper .. .. .                   | 0.32         | 0.36         |
| Beekeeping .. .. .                       | 0.39         | 0.49         |
| Village Pottery .. .. .                  | 0.99         | 1.13         |
| Fibre .. .. .                            | 0.61         | 0.75         |
| Carpentry and Blacksmithy .. .. .        | 0.06         | 0.13         |
| Lime .. .. .                             | 0.06         | 0.11         |
| Methane Gas .. .. .                      | 0.07         | 0.05         |
| <b>Total ..</b>                          | <b>65.57</b> | <b>69.04</b> |

### Sales

Sales of different khadi and village industries products increased from Rs. 60.98 crores in 1963-64 (Khadi Rs. 22.58 crores and village industries Rs. 38.40 crores) to Rs. 64.89 crores in 1964-65 (Khadi Rs. 21.12 crores and village industries Rs. 43.79 crores).

### Training

In all 5,84,320 persons were trained during the past 12 years under the aegis of the Khadi and Village Industries Commission. Of these 5,69,835 persons were trained in khadi and 14,485 persons in village industries.

### Research

Liberal grants have been made to promote research. The Commission's Central Research Institute for Village Industries at Wardha which is known as Jammalal Bajaj Central Research Institute for Village Industries has been in the field for some time now. As a result of financial assistance by the Commission improved implements such as ambar belni, ambar charkha, dhunal modhia, improved ghanis and chakkis have been introduced opening out possibilities of raising the productivity and income of the persons employed.

### Traditional Khadi

The Commission disbursed Rs. 16.84 crores for the development of traditional khadi industry during 1964-65 as against Rs. 15.30 crores in 1963-64.

**Production :** Production in 1964-65 was 448.19 lakh sq. mtrs. valued at Rs. 8.73 crores while in 1963-64 the figures were 354.10 lakh sq. mtrs. and Rs. 8.47 crores respectively.

### AMBAR CHARKHA PROGRAMME

During 1956-57, the Commission introduced the ambar charkha to produce better quality yarn. Since then the two schemes have been in operation side by side.

**Production :** During the year 1964-65 production of ambar cloth was 236.38 lakh sq. mtrs. valued at Rs. 5.27 crores against 228.77 lakh sq. mtrs. valued at Rs. 5.75 crores in 1963-64. The total production for the nine year period being 1,664.79 lakh sq. mtrs.

The number of Ambar Vidyalayas for training instructors and carpenters was as follows: Andhra 7, Assam 1, Bihar 3, Bombay (Bilingual) 19, Delhi 3, Kerala 4, Madhya Pradesh 3, Madras 5, Mysore 6, Orissa 1, Punjab 9, Rajasthan 6, Uttar Pradesh 10, West Bengal 2, Total 79.

### Sales of Khadi

The retail sales of khadi amounted to Rs. 21.12 crores during 1964-65 as against Rs. 22.58 crores in the previous year. The decrease in the amount of sales during 1964-65 was due to a change in the method of valuation after the introduction of weaving subsidy scheme. In terms of the old valuation, the sales value corresponding to Rs. 21.12 crores would be Rs. 24.40 crores. The bulk of the sales were effected through bhandars and bhavans.

### Employment in Khadi

During 1964-65 both the programmes together provided employment to 16.80 lakh spinners (12.80 lakh traditional and 4.00 lakh ambar) 1.50 lakh weavers and 0.86 lakh other persons employed in ancillary activities. The corresponding figures for 1963-64 were 16.25 lakh spinners (12.30 lakh traditional and 3.95 lakh ambar) 1.50 lakh weavers and 0.85 lakh other persons.

Through the programmes for village industries, employment opportunities were provided for 7.02 lakh persons.



## HANDLOOMS

As an industry providing gainful employment to a large number of rural craftsmen and helping preserve their traditional art, handloom carries its own importance in the country's economy.

## Production

The production of cotton textiles showed rise during 1963 and 1964. It increased from 6,972 million metres in 1962 to 7,303 million metres in 1963 and to 7,726 million metres in 1964, a level falling short by only some 78 million metres of the target of 8,504 million metres for the Third Plan. The estimated production of handloom and powerloom cloth was 8,874 million metres in 1963, 3,065 million metres in 1964 and 2,784 million metres in 1965 (upto November 1965.)

## Handloom Co-operatives

Against 13.88 lakh looms in the co-operative fold as on 31st March 1964, there were 13.96 lakh looms as on 31st March 1965. This is nearly 50 per cent of the known size of the industry. Similarly the number of weavers' co-operative societies has increased from 9,870 in 1957-58 to over 12,131 with 12.87 lakh weaver members at present. Under the Reserve Bank of India Scheme of Handloom Finance, the credit limits sanctioned have risen from Rs. 180.19 lakhs in 1957-58 to Rs. 589.65 lakhs in 1964-65.

The Reserve Bank of India also provided accommodation to State Co-operative Banks on behalf of Apex Weavers' Co-operative Societies under Section 17(2)(a) or (4)(c) of the R.B.I. Act at the Bank rate for purchase and sale of yarn aggregating Rs. 291 lakhs in 1963-64 and Rs. 580 lakhs in 1964-65 as compared to only Rs. 238 lakhs in 1962-63, Rs. 173.90 lakhs in 1961-62 and Rs. 42.50 lakhs in 1960-61.

## Marketing

Marketing is the crux of the problem of the handloom industry. It has to face the stiff competition from the well organised and mechanised mill sector. It is rendered all the more difficult because the handloom sector depends on the latter for its principal raw material. The All India Handloom Board has taken several steps for aiding the marketing of handloom products. Assistance is given for the opening of sales depots by State Co-operatives and primary weavers' co-operatives, for running mobile vans and push carts, for opening of inter-State depots and for arranging retail sales in the interior places through a system of hawkers, for doing publicity and propaganda and payment of a rebate on sales. Assistance for these schemes is given in the shape of grants. This aid has brought into being 1,647 sales depots, 43 inter-State sales depots, 50 central depots and 31 mobile vans. Government have also provided a subsidy in the form of rebate at the rate of 5 paise in the rupee on retail sales and 3 paise in the rupee on wholesale sale of handwoven fabrics to mitigate to a certain extent the lag between the competitive capacity of the mill industry and the handloom industry.

Publicity and Propaganda measures like holding of fashion shows, participation in exhibitions, release of press advertisements, bringing out posters, brochures, pamphlets and folders etc., setting up of kiosks at airports; erection of hoardings, issue of souvenirs on cloth etc., screening of cinema slides, documentaries and observance of the annual Handloom Week have helped to focus the attention on the industry and to create handloom mindedness.

## Exports

The products of the Indian handloom industry have been famous in many parts of the world, since a long time past, for their attractiveness as well as their utility. There has, however, emerged severe competition in the matter of export of handloom cloth not only from the products of the mill industry in this country, but also in other countries such as China and

Japan, etc., which have made considerable strides in the direction of exports. In spite of unfavourable circumstances, there is still good scope for the export of handloom cloth particularly to the European and American continents where the beauty and texture and the vast variety of shades of such cloth compel attention even from fastidious buyers. These opportunities are being exploited in a systematic and tactful manner and the handloom industry is now geared towards the production of fabrics which will sell, thereby brightening the prospects of increasing the export of handloom cloth to these countries.

The pattern of exports of Indian handloom textiles during the last four years is as follows:

|                |                  |
|----------------|------------------|
| 1961-62.. .. . | Rs. 866.82 lakhs |
| 1962-63.. .. . | Rs. 1,021.01 "   |
| 1963-64.. .. . | Rs. 1,228.08 "   |
| 1964-65.. .. . | Rs. 1,395.27 "   |

Of the total exports of Rs. 14 crores during 1964-65, no less than Rs. 9½ Crores (or 68 per cent) is accounted for by cotton fabrics of standard type. Silk fabrics occupy the next place representing roughly 17 per cent of the total exports of handloom fabrics. There has been a phenomenal increase in the exports of silk fabrics during these years, from Rs. 68.14 lakhs in 1961-62 to Rs. 237.35 lakhs in 1964-65. There has also been a significant rise in the exports of 'Bleeding Madras' variety. The value of exports rose from Rs. 193 lakhs in 1963-64 to Rs. 633 lakhs in the year 1964-65. In other words, roughly 3/4ths of our present exports of cotton fabrics of standard type are accounted for by the single item 'Bleeding Madras'. Next in importance, Madras Handkerchiefs, a staple item largely consumed in West African countries, account for about 8 per cent of the value of our total exports of cotton fabrics of standard type.

The Government of India have set up a Handloom Export Promotion Council with headquarters at Madras. This Council looks after export promotion matters in respect of all types of handloom fabrics including cotton, silk, art silk, wool, mixed fabrics, readymade garments from handloom fabrics etc.

With a view to regulating and increasing the export of Etawah stripes and Tassar silks, these two additional items have been brought under the scheme of compulsory inspection and quality control. Government have introduced floor prices and compulsory inspection for the Etawah stripes, which is being manufactured in certain areas of U.P. and Kerala. With the introduction of compulsory inspection and laying down of specifications for the different exportable varieties of Tassar silks, it is expected that the exports of this fabric will increase to a considerable extent.

## Technical improvements and Research

To increase productivity of the handloom weavers, out moded tools are being replaced by efficient ones. Financial assistance is being given to Weavers' Co-operatives for introduction of improved looms, jacquards, dobbies etc. and for setting up dye houses, finishing and calendaring plants, pattern making factories etc. 494 dye houses of different sizes, 44 pattern making and 12 finishing plants were working during 1964-65. Of the 16 co-operative spinning mills proposed, 10 mills have started production of yarn of various counts.

As a measure of assistance to enable the handloom weaver to resort to newer and newer pattern of production, the All India Handloom Board started organising weavers' service centres from 1956 onwards. At present 7 Centres are functioning namely at Bombay, Madras, Delhi, Indore, Varanasi, Calcutta and Bangalore. A sub Centre is also functioning at Kancheepuram in the Madras State. A large number of designs produced by the centres has gone into production for the export markets where our ability to cater to the sophisticated and prosperous consumer has made us earn more foreign exchange.

The Service Centres conducted experiments and introduced a variety of new textures and patterns with cotton/jute, cotton/wool, wool/tassar, cotton/waste silk, cotton/silk, throwwater etc.

The two Indian Institutes of Handloom Technology at Salem and Varanasi continued to train candidates for the Diploma course in Higher Handloom Technology. The institutes have also introduced a short term course for training of weavers in improved methods of production.

## General

In addition to the main facets of progress indicated above, the socio-economic aspects of the industry have also been sought to be improved. The two distinct methods in the development are (i) the establishment of industrial co-operative factories of handloom weavers in certain States where weavers generally worked under the master weavers and were exploited by them and (ii) the provision of housing facilities for weavers' co-operative societies on a considerable scale thereby offering the weavers convenient and comfortable places for work. Under item (i), 58 industrial co-operatives with 5,300 members and 2,321 looms produce on an average 3.14 lakh metres of cloth per month. Under item (ii), of the 7,830 houses proposed for construction in the various States, 5,107 houses had been completed and 1,812 houses were under construction.

## VILLAGE OIL

India is the second largest producer of oilseeds in the world and leads all other countries in respect of acreage under oilseeds.

Mills and ghanis are the two sectors in the oil industry in the country. According to one estimate included in the Report of the Oilseeds Crushing Industry Inquiry Committee (1956), the percentage of major oilseeds crushed in ghanis and those crushed in power mills is as follows:

| Seed                | Ghanis<br>(per cent) | Mills<br>(per cent) |
|---------------------|----------------------|---------------------|
| Groundnut .. ..     | 20                   | 80                  |
| Sesamum .. ..       | 83                   | 17                  |
| Rape and Mustard .. | 37                   | 63                  |
| Linseed .. ..       | 30                   | 70                  |
| Castor-seed .. ..   | •                    | 100                 |

\* (a small quantity is also crushed in ghanis)

According to an estimate of the oilseeds crushing Industry Inquiry Committee there are over 8,201 oil mills in the country.

The Village Oil Industry i.e. ghanis brought under its fold provided employment to 52,513 persons during the year 1963-64—27,567 full-timers and 16,985 part-timers, apart from employment provided by ghanis not brought under their fold.

During 1964-65, the expenditure incurred by the Commission for the development of the industry amounted to Rs. 125.36 lakhs thus bringing the total to Rs. 1,206.42 lakhs of which Rs. 306.18 lakhs constitute grants and Rs. 900.24 lakhs loans. Of this total expenditure Rs. 131.00 lakhs only were expended during the First Five Year Plan period while the balance of Rs. 532.49 lakhs was disbursed during the Second Plan period and the remaining during the 1st four years of the Third Plan.

There were 5,825 agencies operating various schemes under the Commission's purview of which 5,258 were co-operative organisations including 12 district co-operative federations and 3 apex bodies at the State level. During the year the Commission was able to introduce 639 improved ghanis, thus bringing their total number to 21,446.



During 1964-65, the production of oil through the registered ghanis was 5.17 lakh quintals valued at Rs. 1,666.53 lakhs and 7.45 lakh quintals of oil cake valued at Rs. 340.64 lakhs. The industry provided employment to 23,747 full-timers, 11,474 part-timers and 1,333 casual timers during 1964-65.

Under the training programme the Commission trained 4,131 telis and 453 mistris upto March 1965.

### PROCESSING OF CEREALS AND PULSES

In pursuance of the recommendations of the Rice Milling Committee, Government of India decided, in the year 1957, that licensing of all power driven rice mills should be introduced and a census of all such mills should be taken. They have further decided that no new mill should be allowed to be set up and no expansion of the existing capacity of the mills be permitted unless the State Government concerned is satisfied that it is necessary to do so for the purpose of ensuring adequate supplies and that, in such cases, the hand pounding industry is not affected. To ensure this, an Act was passed in May 1958—The Rice Milling (Regulation) Act.

The Karve Committee recommended the imposition of an excise duty on the output of mills and the payment of a subsidy to hand-pounders to reduce the price differential between hand-processed and mill-processed rice. The production subsidy has been replaced by a management grant on a sliding scale for a period of five years.

During the year, the State Governments, at the instance of the Central Government, promulgated the Foodgrains Price Control Orders. Besides, measures were taken by the State Governments to fix the prices of paddy and rice, prohibit the movement of paddy and rice and for procurement and levy on rice. All these factors affected the industry adversely. The disbursement during the year was only Rs. 63.65 lakhs which is less than that of 1963-64, i.e. Rs. 124.07 lakhs. The total expenditure incurred by the end of 1964-65 was Rs. 757.11 lakhs of which Rs. 133.57 lakhs formed grants and Rs. 559.89 lakhs loans.

Out of 2,479 centres set up till the end of 1963-64, a total of 802 centres were closed down during the year for want of basic raw material i.e., paddy. To enable the artisans obtain higher production of better rice, the Commission has introduced 1,481 chakkis, 21 dhenkis and 37 winnowing fans. Under the Atta Chakki scheme the Commission introduced 3,312 chakkis with ball bearings and 41 bullock-driven chakkis. 407 ball bearing sets were also distributed.

Under the production programme, the achievement was 6.18 lakh quintals in 1964-65 compared with 7.02 lakh quintals in 1963-64. The industry provided employment to 46,802 people in 1964-65 out of whom 7,661 were full-time workers and the rest part-time workers. During the year, the Commission organised 5 regional vidyalayas and a total of 164 persons were trained in them in addition to the 95 persons trained in the Central Vidyalaya at Wanakbori (Gujarat).

### BEE-KEEPING INDUSTRY

With a view to organising and developing collection of honey on scientific lines the Commission distributes bee-hives on a subsidised basis, finances rearing and distribution of bee-colonies, collection and marketing of honey, organises co-operative societies and trains apiarists, fieldmen, farmers and others in the art of bee-keeping.

Rs. 19.02 lakhs were disbursed in 1964-65 thus bringing the total expenditure to Rs. 140.29 lakhs of which Rs. 121.87 lakhs formed grants, the remaining being loans. There were 96 institutions in the country responsible for the implementation of the programme.

Upto the end of 1964-65, 2,05,185 Bee-hives were distributed. Under the programme 10.19 lakh kgs. of honey was collected in 1964-65 as against 7.14 lakh kgs. collected in 1963-64 and

the whole of it was marketed. During the year 136 fieldmen were trained; thus, over the period 1,781 fieldmen and 64 apiarists received training. The total number of villages covered by the end of March 1965 was 13,805.

### HAND-MADE PAPER INDUSTRY

The per capita consumption of paper has been rapidly increasing with the spread of literacy. The expansion of the mill-made paper industry is limited due to several factors, viz. non-availability of raw materials in large quantities at one place, difficulties of importing heavy intricate machinery, pulp and chemicals, transport difficulties etc. The hand-made paper industry, as being developed by the Commission, aims at utilising easily available raw materials like fibres, old gunny bags, rags, straws, grasses, waste paper etc. The programme of development consists of assisting in the setting up of big, medium, small and school units.

During 1964-65 the Commission disbursed Rs. 16.54 lakhs for the development of hand-made paper industry, thus bringing the total disbursement to Rs. 217.61 lakhs of which Rs. 91.28 lakhs were grants and the remaining Rs. 126.33 lakhs loans.

The financial disbursement to various types of units depends upon the capacity to produce paper. Upto the end of 1963-64, the Commission had allotted 12 big, 102 medium and 115 small units. In addition to this, 23 Home Units and 13 Jail units also have been allotted. In 1964-65, the Commission allotted 24 units. Of these 2 units were established on the lines of those working in Japan for the manufacture of decorative papers from vegetable fibres.

The production of paper rose from 1,612 metric tons in 1963-64 to 1,788 metric tons in 1964-65. The industry provided employment to 4,637 persons in 1964-65 as against 4,667 persons in the previous year. In 1964-65, 192 persons were trained thus bringing the total number of persons trained so far to 1,539.

### NON-EDIBLE OILS AND SOAP

India possesses large quantities of a wide variety of non-edible oilseeds, e.g., neem, karanja, maroti, dapa, castor, undi, etc. The oils extracted from these seeds are highly valued as industrial oils. These resources in vegetable are largely wasted through non-utilisation. The Commission, therefore, formulated a scheme to exploit these resources for the creation of wealth.

During the year the Commission financed the programme to the tune of Rs. 44.05 lakhs thus bringing the total expenditure to Rs. 463.30 lakhs of which Rs. 119.13 lakhs were grants and Rs. 344.17 lakhs loans.

The financial assistance extended to three types of non-edible oils and soap production units i.e. "A", "B", and "C" units, depends upon their production capacity. With a view to informing and educating school children in the method of production of soap on cottage basis the Commission introduced "D" units and attached them to schools.

Since 1958-59 the Commission has been emphasising the possibility of improving production of non-edible oils. To intensify efforts in this direction Oil Producing Units have been organised. At the end of 1964-65, the Commission had allotted 685 soap production units in addition to 160 school units.

The production of non-edible oil during the year 1964-65 was 8.77 lakh kgs. valued at Rs. 18.41 lakhs. The activity in the production of soap also registered a considerable expansion; the value of soap produced in 1964-65 was Rs. 72.53 lakhs as against Rs. 57.88 lakhs in 1963-64, the quantities being 49.15 lakh kgs. and 35.03 lakh kgs. respectively. The industry provided employment to 1,551 full-time workers and 87,004 part-time workers in 1964-65.

### PALM-GUR

In India, there are four varieties of sugar-yielding Palms—Date, Palmyra, Coconut and Sago. While the total number of tappable

palms in the country, mostly Date and Palmyra, is estimated at over five crores, only about 60 lakh palms are being tapped for the manufacture of palm-gur.

The significance of the Palm-Gur Industry in India lies in the manufacture of gur and sugar from the sweet juice of palms, popularly known as *neera*, in providing seasonal employment on a large scale, and in its effects on subsidiary occupation as in the manufacture of products from palm leaf.

The Commission has established a Central Research-cum-Training Centre at Dahanu (Maharashtra). Research in the preservation of *neera*, better processing methods and improved implements is being carried on. A monthly journal "Tad-Gur Samachar" gives information about the industry and the results of research experiments.

For the development of the industry the Commission provided Rs. 122.98 lakhs during the year 1964-65, as against Rs. 126.40 lakhs during 1963-64. The total expenditure for the industry upto the end of 1964-65 amounted to Rs. 556.74 lakhs of which Rs. 237.87 lakhs formed grants and Rs. 318.87 lakhs loans.

The emphasis being on the organisation of cooperatives, their number has been showing steady progress from year to year. As against 3,326 cooperatives at the end of 1963-64 there were 3,477 in 1964-65, with a total membership of 3.41 lakhs. The cooperative societies of 11 States have formed their State level federations also.

During 1964-65, the total number of persons trained were 787. The production of palmgur during 1964-65 was 8.56 lakh quintals valued at Rs. 692 lakhs as against the production of 8.43 lakh quintals valued at Rs. 667 lakhs in the previous year. In addition to palmgur, palm sugar and other edible and non-edible articles from palm trees were also undertaken and the total value of these during 1964-65 was Rs. 26.06 lakhs. The total sale proceeds from the industry during the year was Rs. 805.49 lakhs. The industry provided employment to 3.04 lakh persons.

### GUR AND KHANDSARI

With a view to improving the quality of Gur, production of Khandsari and the efficiency of the farmers, the Commission has schemes to introduce improved equipment like crushers, centrifugals, pans, furnaces etc. The Commission also undertakes to train honorary workers and farmers in better methods of production with the help of improved equipment. The programme aims also at the organisation of co-operative societies to take up production and marketing of Gur and Khandsari and stocking and supplying of improved implements.

During 1964-65 the Commission financed the programme to the tune of Rs. 24.83 lakhs as against Rs. 48.84 lakhs in the previous year, bringing the total expenditure upto 1964-65 to Rs. 310.16 lakhs of which Rs. 131.53 lakhs were grants and Rs. 178.63 lakhs loans.

At the end of 1964-65, there were 1,086 Co-operative Societies and 159 registered institutions engaged in the industry as against 861 Co-operative Societies and 58 registered institutions in the previous year.

The production of Gur during the year was 17.51 lakh quintals as against 11.82 lakh quintals in 1963-64 and the industry provided employment to a total number of 74,342 persons in 1964-65 as against 35,495 persons in the previous year.

### VILLAGE LEATHER INDUSTRY

The processing of hides and skins and the manufacture of leather goods are traditional village industries.

The object of the development programme of the Commission for the industry is the planned recovery and full utilisation of the various by-products of carcasses of dead animals so as to



minimise waste and provide large-scale employment. There is a vast livestock population consisting of over 21.2 crores big animals and 9.52 crores sheep and goats.

The programme consists of the establishment of flaying centres, flaying platforms, village tanneries, glue manufacturing centres, bone ashing units, chrome tanning units, retanning units, bag tanned sole leather units, foot-ware units and leather goods units. The Commission is the first organisation in the country to take up chrome tanning in the villages. Three such units have already been set up and are working properly.

To assist the Commission there is an Advisory Committee consisting of representatives of this industry and trade.

During 1964-65, Rs. 26.67 lakhs were disbursed for the development of the industry thus bringing the total disbursement during the nine-year period (1956-65) to Rs. 390.02 lakhs of which Rs. 172.88 lakhs were grants and Rs. 217.54 lakhs loans.

The Commission has financed 9 training centres, 6 in tanning and 3 in carcass utilisation during the year.

During the year 82 and 103 persons were trained in the Arts of tanning and carcass utilisation respectively. So far, the Commission has trained 891 persons in the improved methods of tanning and 1,550 in flaying. As against the production of goods valued at Rs. 228.51 lakhs in 1963-64, the production in 1964-65 was valued at Rs. 236.97 lakhs. During 1964-65, 1,168 full-timers and 8,912 part-timers were employed in this industry.

#### COTTAGE MATCH INDUSTRY

The match industry in India is classified into A, B, C and D classes according to the size and production capacity of the manufacturing units.

The programme of the Commission consists of the promotion of the 'D' class, licensed to produce a maximum of 25 gross boxes per day and capable of employing about 40 persons each.

The development programme aims at the utilisation of the bamboo resources of the country for the manufacture of matches and the elimination of the use of matchwood and timber which are becoming scarcer and also denude the country of its forest wealth to the detriment of the nation.

The programme also provides for training, research and marketing schemes.

As in the previous year, during 1964-65 also the Commission wanted to concentrate mainly on consolidation work. It expended Rs. 3.88 lakhs during 1964-65 bringing the total expenditure for the development of this industry to Rs. 76.87 lakhs of which Rs. 19.82 lakhs were expended during the First Plan period.

As a result of the Commission's intensified effort to reorganise the scheme on modern lines, the production of cottage match boxes rose from 87,733 gross boxes in 1963-64 to 1.10 lakh gross boxes in 1964-65. During the year 43 persons were trained bringing the total to 1,081 over the period ending with 1964-65.

#### VILLAGE POTTERY INDUSTRY

The Development programme for the industry is made up of schemes for the promotion of production of pottery goods of various types, marketing, research, central and regional training, organisation and promotion of co-operative societies, supply of improved equipment and approved furnaces.

The key note of the Commission's programme for the industry during the year was consolidation of the work started already. The disbursements for the year 1964-65 were Rs. 29.00 lakhs, thus bringing the total expenditure to Rs. 240.83 lakhs of which Rs. 81.42 lakhs formed grants and Rs. 154.41 lakhs loans.

The production activity for the pottery industry in 1964-65 registered a considerable rise, the value of goods produced being Rs. 112.92 lakhs as against Rs. 93.37 lakhs in 1963-64. Under the training programme the Central Institute at Khanpur trained 36 personnel during 1964-65, thus bringing the total number trained so far to 1,651. The industry provided employment to 21,681 persons during the year.

#### FIBRE INDUSTRY

With a view to utilizing various kinds of fibres like sisal, hemp, san-hemp, etc., which grow in abundance in villages, but remain mostly unprocessed, the Commission implements a development programme under which improved Charkhas are distributed, artisans are trained and model production centres are organised.

In 1964-65 Rs. 10.90 lakhs were disbursed thus bringing the total assistance under this scheme to Rs. 101.18 lakhs. During the year 230 instructors were trained who, in turn, trained 9,548 artisans. The production of fibre articles during 1964-65 and 1963-64 were Rs. 74.91 lakhs and Rs. 61.01 lakhs respectively. The industry provided employment to 22,885 persons.

#### CARPENTRY AND BLACKSMITHY

The Commission has also been implementing development programme for the village carpentry and blacksmithy industry since 1957-58 and has disbursed so far Rs. 55.21 lakhs most of which was for the organization of training-cum-production centres. The value of production during 1964-65 was to the tune of Rs. 13.37 lakhs as against Rs. 5.33 lakhs in the previous year.

#### MANUFACTURE AND USE OF MANURE AND METHANE GAS FROM COW-DUNG AND OTHER WASTE PRODUCTS

The total number of gas plants financially and technically assisted so far stood at 748 at the end of 1964-65.

The Commission has assisted 210 persons during the year with blue prints and technical guidance for construction of gas plants. During the year 1964-65 the Commission disbursed Rs. 1.85 lakhs for building plants as against Rs. 3.00 lakh in 1963-64.

#### LIME MANUFACTURING INDUSTRY

To cover the programmes under the industry, 135 centres were allotted upto the end of 1964-65.

As against a disbursement of Rs. 6.36 lakhs in 1963-64, the Commission disbursed Rs. 2.32 lakhs in 1964-65 in the form of grants and loans. The production of lime during the year amounted to Rs. 10.85 lakhs and the industry provided employment to 2,888 persons.

#### INTEGRATED DEVELOPMENT PROGRAMME

The integrated development programme is the outcome of the *naya morh* or the oriented approach adopted by the Commission. It is implemented through organising the people in a block to survey the area, prepare an integrated plan for the development of the block for attaining regional self-sufficiency, primarily in khadi and village industries goods and incidentally also in other consumer goods.

By March 1965 within a period of four years since the introduction of this programme, the total number of *ekais* stood at 1,218. During the year 1964-65 it was decided that *ekais* in future should be developed only in blocks where they were already approved of and functioning successfully. The number of blocks in which *ekais* were approved at the end of 1964-65 was 363. The *ekais* approved covered a population of 49.72 lakhs in 4,152 villages and 2,031 panchayats.

The productions of khadi and village industries articles during the year under the programme were valued at Rs. 39.72 lakhs and Rs. 141.25 lakhs respectively. Employment was provided to 1.04 lakh of persons.

#### PROGRAMME FOR HILL AND BORDER AREAS

The Commission had by the end of 1964-65 spread a network of 77 centres for development in the border areas of almost all the border States.

#### WEAVING SUBSIDY SCHEME

The Khadi and Village Industries Commission introduced weaving subsidy scheme from 6th April 1964 under which the rebate on the sale price of khadi has been replaced by a system of providing facilities for free weaving of all handspun yarn.

The new scheme benefits the spinners who get khadi at the cost of cotton while the urban consumers continue to get khadi at the rate existed under the previous Scheme; the only difference is that the amount available as rebate on the old sale price would under the new scheme be deducted from the price at an earlier stage in the form of weaving subsidy.

#### KHADI AND VILLAGE INDUSTRIES IN FOURTH PLAN

The work done so far for the development of khadi and village industries will be turned to good account in the Fourth Five Year Plan by launching a massive programme of development in order that a large number of persons who are presently unemployed and underemployed get absorbed. Part-time and full-time employment to 44.75 lakh persons will as a result be created at the end of the Fourth Plan. Besides, the programme has the main object of ensuring an increase, through higher productivity, in the per capita income in the industries covered. Even in spinning on the traditional charkhas this is expected to be at least Rs. 85 per year, and in the case of the new model ambar charkha it would be Rs. 225, in some industries it may be as high as Rs. 1,000 and above.

#### Technical Improvement

The programmes for the development of various industries are based on certain assumptions of technical improvements effected in the tools and equipment. New equipment, tools and process have been developed and many others are in the process of experimentation. It is proposed to take advantage of all the available modern scientific knowledge and experience in improving progressively the productivity and income of artisans. A new and improved model of the ambar charkha is being devised which would enhance productivity and raise the level of income.

The production target for Khadi in the entire period of five years of the Fourth Plan is 72.48 crore metres valued at Rs. 226 crores; and for various village industries products it is worth Rs. 634 crores. In the Third Plan, the total values of production for khadi and village industries during the entire period of five year were Rs. 110 crores and Rs. 120 crores respectively.



## GLASS INDUSTRY

THE more commonly used raw materials for glass industry are : sand, borax, soda ash and salt cake, dolomite, lime or limestone, salt-petre and sulphur, manganese dioxide and colouring materials.

The industry comprises the manufacture of sheet glass, blown and pressedware and bangles. There are 105 units actually working now. The production of sheet glass and the laboratory glass has nearly doubled in the last 5 years while

the output of other glasswares has risen by 3 per cent. The total production capacity has reached 3 lakh tonnes per year in 1965-66.

The production of different types of glass and glassware from 1960 onwards is given below :

|                          | Units               | 1960  | 1961  | 1962  | 1963  | 1964  | 1965<br>(January-October) |
|--------------------------|---------------------|-------|-------|-------|-------|-------|---------------------------|
| Sheet glass .. .. .      | Thousand sq. meters | 7,524 | 6,780 | 8,724 | 9,840 | 9,623 | 6,776                     |
| Laboratory Glass .. .. . | Metric tonnes       | 4,872 | 3,576 | 3,948 | 4,440 | 4,464 | 3,508                     |
| Glass shells .. .. .     | Lakh pieces         | 461   | 623   | 682   | 744   | 535   | 694                       |
| Other Glassware .. .. .  | Thousand tonnes     | 171   | 177   | 186   | 190   | 198   | 164                       |
| Thermos Flasks .. .. .   | Thousand Pieces.    | 1,382 | 1,541 | 1,542 | 1,939 | 1,936 | 1,678                     |

A number of items have been produced for the first time in the country. There is a notable improvement in the quality of glassware produced. The incentives for exports have been

increased from 20 per cent to 70 per cent.

The pilot plant project to experiment with the production of optical glass undertaken in the Central Glass and Ceramic Research Institute,

Calcutta, has shown good results. The factory which will have a capacity of 300 tonnes per annum, is likely to go into production in the beginning of the Fourth Plan.

Imports and exports are as follows :

(Rupees in lakhs)

|                 | 1961   | 1962   | 1962-63 | 1963-64 | 1964-65 | 1965-66 |
|-----------------|--------|--------|---------|---------|---------|---------|
| Imports .. .. . | 130.63 | 136.94 | 148.58  | 158.35  | 122.96  | 125.16  |
| Exports .. .. . | 23.55  | 24.05  | 24.11   | 33.33   | 63.74   | 35.04   |

On balance of all considerations it was estimated that the requirements of glass and glassware in 1965-66 would be of the order of 440,000 tons inclusive of export requirements of about 15,000 tons. An item-wise break-up of this demand among different categories of glass and glassware is broadly visualised as follows :

|                                       | (tons)          |
|---------------------------------------|-----------------|
| Bottles and vials .. .. .             | 2,00,000        |
| Table and pressedware .. .. .         | 65,000          |
| Sheet glass, plate glass etc. .. .. . | 1,00,000        |
| Lampware .. .. .                      | 30,000          |
| Scientific glassware .. .. .          | 15,000          |
| Thermos flasks .. .. .                | 2,700           |
| Shells for electric lamps .. .. .     | 3,300           |
| Miscellaneous glassware .. .. .       | 24,000          |
| <b>TOTAL .. .. .</b>                  | <b>4,40,000</b> |

The Investment Corporation of India Ltd. has entered into an agreement with the famous Pfaudler Permutit Inc. of the United States for the formation of a jointly-owned company in India to manufacture Pfaudler glassed steel alloy process equipment, Ionac water and waste treatment equipment and chemicals. This will not only help other industries but also will go a long way to save considerable foreign exchange for the country.

The project of National Investments Ltd.—an ophthalmic glass factory at Durgapur—was expected to be completed by 1966. The production schedule includes glass pressings for bifocals, lenses, coloured glass pressing for goggles, lenses and prisms for cameras, microscopes and other optical instruments. Now, most of the requirements for optical glass are being met from the pilot plant of the Central Glass and Ceramic Research Institute, Calcutta. The number of varieties of optical glass has gone up to 24 now.

## VEGETABLE OIL INDUSTRY

INDIA is one of the most important producers of oilseeds in the world and is consequently a large producer of vegetable oils as well as an exporter of oils and oilseeds.

The following figures show the average production of different varieties of oilseeds in recent years along with their share in world production :—

|                          | Average Indian Production (lakh tons) | As percentage of world Production |
|--------------------------|---------------------------------------|-----------------------------------|
| Groundnut .. .. .        | 43.54                                 | 34                                |
| Castor seed .. .. .      | 0.98                                  | 15                                |
| Linseed .. .. .          | 4.10                                  | 13                                |
| Sesamum .. .. .          | 2.88                                  | 34                                |
| Rape and mustard .. .. . | 13.80                                 | 12                                |

The following table gives the actual production—in thousand metric tons—of oilseeds during the seasons 1960-61, 1961-62, 1962-63, 1963-64 and 1964-65.

|                              | 1960-61      | 1961-62      | 1962-63      | 1963-64      | 1964-65      |
|------------------------------|--------------|--------------|--------------|--------------|--------------|
| Groundnut .. .. .            | 4,462        | 4,685        | 4,821        | 5,215        | 5,176        |
| Castor seed .. .. .          | 90           | 101          | 101          | 102          | 101          |
| Linseed .. .. .              | 305          | 450          | 433          | 379          | 466          |
| Sesamum .. .. .              | 321          | 379          | 404          | 439          | 466          |
| Rapeseed and Mustard .. .. . | 1,356        | 1,337        | 1,294        | 903          | 1,375        |
| <b>Total .. .. .</b>         | <b>6,624</b> | <b>6,958</b> | <b>7,118</b> | <b>7,038</b> | <b>8,584</b> |



The All-India Second Estimate of Groundnut for 1965-66 has put the area under the groundnut crop at 6,458.6 thousand hectares.

According to the Directorate of Economics and Statistics, Union Ministry of Food and Agriculture, this shows an increase of 0.6 per cent as compared with the corresponding adjusted estimate of 6,422.6 thousand hectares for the year 1964-65.

The increase in the area under groundnut during the year 1965-66 has been mainly in Gujarat, Uttar Pradesh, Rajasthan and Punjab and is attributed to favourable climatic conditions at the sowing time. This increase in area has, however, been offset to some extent by a small decline reported from Mysore and Madhya Pradesh.

The actual production of oil from the five major oilseeds has been estimated as follows : ('000 Tons).

|            | Groundnut | Castor | Sesamum | Rape and Mustard | Linseed | Total |
|------------|-----------|--------|---------|------------------|---------|-------|
| 1956-57 .. | 954       | 39     | 138     | 293              | 123     | 1,547 |
| 1957-58 .. | 1,007     | 28     | 111     | 264              | 79      | 1,489 |
| 1958-59 .. | 1,092     | 36     | 160     | 293              | 142     | 1,723 |
| 1959-60 .. | 895       | 35     | 112     | 299              | 136     | 1,477 |
| 1960-61 .. | 989       | 32     | 128     | 394              | 129     | 1,672 |

In March 1956, there were 2,097 oil mills registered under the Factories Act. The total crushing capacity of the mills in the country was estimated at 56 lakh tons per annum in terms of oilseeds.

There were, besides, about four lakh village *ghanis* in the country with an annual crushing capacity of about seven lakh tons of oilseeds. Thus the total crushing capacity was estimated at 63 lakh tons in terms of oilseeds. The total output of oilseeds in recent years has been of the order of 65 to 70 lakh tons.

The capital invested in the organised industry is estimated at Rs. 24.4 crores and the number of workers at 43,580. The most important oilseeds consumed in large quantities for the production of oils are groundnut, linseed, rape and mustard, castor seed and sesamum seed. Small quantities of cottonseed mohwa, and copra are also crushed.

The Third Plan target for oilseeds was put at 9.8 million tons, as against the Second Plan target of 7.5 million tons and the actual output of 6.53 million tons in 1960-61.

#### IMPORTS AND EXPORTS

The following table shows the total value of imports and exports of oil of some varieties: (Value Rs. lakhs).

|                     | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 |
|---------------------|---------|---------|---------|---------|---------|
| <b>IMPORTS</b>      |         |         |         |         |         |
| Palm Oil .. ..      | 451     | 200     | 385     | 344     | 69      |
| Coconut Oil .. ..   | Nil     | 60      | 21      | 3       | —       |
| Other Sorts .. ..   | 78      | 44      | 13      | 13      | 21      |
| <b>EXPORTS</b>      |         |         |         |         |         |
| Groundnut Oil .. .. | 103     | 783     | 1,345   | 116     | 35      |
| Linseed Oil .. ..   | 8       | 13      | 9       | 10      | 6       |
| Castor Oil .. ..    | 400     | 429     | 480     | 348     | 190     |

On the basis of the minimum *per capita* consumption of fats in this country, the total consumption of fats of the entire population would work out at 7 million tons, as against the present estimated consumption of 1.2 million tons.

The consumption of edible oils and vanaspati was said to have gone up during the Second Plan. Assuming the higher consumption at 8.8 lb. the total requirements of vegetable oils and vanaspati for 400 million people had touched about 1.62 million tons by 1960-61.

The development programme for the vegetable oil industry in the Third Plan is indicated in the following table:

('000 Tons)

|                                         | 1960-61            |                      | Targets for 1965-66 * |              |
|-----------------------------------------|--------------------|----------------------|-----------------------|--------------|
|                                         | Estimated Capacity | Estimated Production | Capacity              | Production   |
| <b>Vegetable oils :</b>                 |                    |                      |                       |              |
| a) Solvent extraction of oilcakes .. .. | 550<br>(Cake)      | 25<br>(Oil)          | 2,000<br>(Cake)       | 169<br>(Oil) |
| b) Cottonseed oil .. ..                 | 180<br>(Seed)      | 15<br>(Oil)          | 850<br>(Seed)         | 100<br>(Oil) |

(\*) As envisaged.

#### VANASPATI

The Vanaspati Industry though a minor branch of the Vegetable Oil Industry is one of the most highly organised and efficient industries. Its history is interesting. It started on a small scale in 1930.

In 1959, there were 58 factories with an annual production capacity of about 446,220 tons. Out of these, one is the Government Hydrogenation Factory at Kozhikode having an installed capacity of 3,000 tons per annum. Besides, there are seven factories with an annual

The development of soap, paints and varnish industries has stimulated the consumption of non-edible oils. Castor oil consumption as a lubricant has also registered considerable expansion. By 1960-61, the total requirements of vegetable oils for all the industrial and miscellaneous purposes were estimated at 278,000 tons. Thus internal consumption requirements were of the order of only 1.9 million tons.

**Pine Oil:** The first pine oil factory in the country has been started at Hoshiarpur in the Punjab. It produces pine oil, dipentene and pine tar. This factory is claimed to have resulted in the saving of foreign exchange to the tune of Rs. 30 to 40 lakhs annually.

**Palmarosa Oil:** India ranks first among nations producing Palmarosa oil, and is the chief supplier of this important raw material for perfumery manufacture, earning foreign exchange worth Rs. 25 lakhs annually by way of its export alone.

To ensure quality control, Government have established a special laboratory at Bombay for AGMARK grading and have banned the export of ungraded Palmarosa oil.

#### COTTONSEED

Special efforts are being made to develop the cottonseed oil industry on modern lines. From eight units equipped with delinting and dehulling machines in 1955, the number has grown to 20 units in 1965 with an annual installed capacity of 3 lakh metric tons in terms of seeds. The production in 1964 was 25,000 metric tons in terms of extracted oil. Among the steps taken to increase the consumption of cottonseed oil by vanaspati factories is a reduction of excise duty. Export of cottonseed oil as well as decorticated cottonseed oilcake was licensed freely. The policy of not licensing new mills or expansion of existing oil mills has been continued. The services of a T. C. M. expert were made available to the crushing industry to advise the crushers on the production and grading of cottonseed linters.

In regard to solvent extraction of oilcakes, there are at present 32 units, with an annual capacity of 547,500 tons in terms of oilcakes.

Production of oil by solvent extraction of oilcakes during 1960 was 23,440 tons. The rise in output was due to the commencement of operations by three more units. Considerable foreign exchange is already being earned by this industry by export of deoiled meal to U.K. and other countries. Three more units were expected to go into production by the end of 1961-62. During the year 1960-61, licences for 100 units of a capacity of 20 lakh tons per annum in terms of oilcakes, had been issued.

rated capacity of 33,000 tons. It is the Government's policy not to permit any further expansion of the industry as the present capacity is adequate to meet all the requirements of 4 lakh tons.



The aggregate installed capacity of the industry was stepped up from 521 thousand tons in 1960 to 557 thousand tons in 1962. Production during these years rose from 337 thousand tons to 363 thousand tons and consumption from 337 thousand tons to 363 thousand tons.

#### Installed Capacity, Production and Consumption ('000 tonnes)

|      | Capacity | Production | Consumption |
|------|----------|------------|-------------|
| 1960 | 521      | 337        | 337         |
| 1961 | 560      | 340        | 337         |
| 1962 | 557      | 370        | 363         |
| 1963 | 467      | 320        | —           |
| 1964 | 576      | 360        | —           |
| 1965 | 630      | 429        | —           |

#### Exports of Hydrogenated Oil

|         | Quantity (Tonnes) | Value (Rs. lakhs) |
|---------|-------------------|-------------------|
| 1960-61 | 66                | 103               |
| 1961-62 | 33                | 56                |
| 1962-63 | 30                | 45                |
| 1963-64 | 41                | 62                |
| 1964-65 | —                 | 19                |

The net capital invested in the industry is about Rs. 22 crores. Besides 10,000 workers directly employed, the industry provides indirect employment for nearly 60,000 workers.

Edible oils constitute the chief raw material of the industry.

The table below summarises the progress of development in the Second and Third Plan

|                              | 1955-56 | 1960-61            | 1960-61 Estimated | 1965-66 Target |
|------------------------------|---------|--------------------|-------------------|----------------|
| Installed Capacity .. .. .   | 445,000 | 445,000            | 434,000           | 550,000        |
| Production .. .. .           | 276,000 | 330,000            | 350,000           | 500,000        |
| Internal Consumption .. .. . | 255,000 | 375,000 to 380,000 | —                 | —              |
| Exports .. .. .              | 15,000  | 20,000 to 25,000   | —                 | —              |

Exports of vegetable oils had made considerable headway recently. Shipments increased from Rs. 540 lakhs to Rs. 1,093 lakhs during the eleven months of 1962-63. From April 1962 to Feb. 1963 exports of oil cakes and meal went up by more than Rs. 13 crores—from Rs. 15.4 crores to Rs. 28.4 crores.

**Lemongrass Oil:** Lemongrass is cultivated in Kerala. India exports about Rs. 2 crore worth of lemongrass oil annually to countries like the U.K., West Germany, U.S.A., Switzerland, Japan and Italy. Lemongrass oil is used for the manufacture of synthetic vitamins 'A' and as a base for some perfumes for soap-making industry.

## WOOLLEN INDUSTRY

THE woollen industry is more or less scattered all over the country but the major concentrations are in Maharashtra and Punjab. The Punjab occupies a very prominent position in as much as 60 per cent. of the woollen spinning mills are working in the State. Maharashtra comes second with 25 per cent. of the total mills. The remaining are situated in the rest of India. Among the livestock products, wool ranks second only to hides and skins as an earner of foreign exchange.

The Third Plan target of production of wool was fixed around 35 million yards; the actual production hovered around 20 million yards, representing a shortfall of 43 per cent. against a likely installed capacity of 14 million metres in 1965-66.

The total capital investment in the industry is reckoned at about Rs. 25 crores. The organised sector of the industry employs about 20,000 workers.

The raw material used is wool tops (imported), shoddy wool (all of which is imported), wool waste, rags etc. (imported and indigenous) and raw wool (imported and Indian). In addition, the industry uses some quantities of man-made fibres.

It is estimated that the industry requires raw materials worth Rs. 20 crores to work its installed capacity on a two-shift basis. According to calculations made by a Working Group of the Government of India, the woollen industry should have got about Rs. 14.92 crores worth of imported raw materials per year up to the end of the Third Plan period. But the actual allocation was only Rs. 5 crores. This Working Group has put the target for yarn and cloth at 36.4 million kg. and 40.0 million meters, respectively, during the Fourth Plan period.

These targets represent a rise of 15.9 million kg. and 28.0 million meters, as compared to the estimated output of 20.5 million kg. of yarn and 12 million metres of cloth in 1965-66.

There are at present about 300 organised woollen units in India of which 36 are purely spinning unit, and 30 composite.

#### The production figures were as follows

| Year | Woollen worsted yarn (million Kgs.) | Woollen worsted fabrics (million metres) |
|------|-------------------------------------|------------------------------------------|
| 1960 | 12.70                               | 13.96                                    |
| 1961 | 14.76                               | 13.20                                    |
| 1962 | 18.01                               | 18.29                                    |
| 1963 | 22.73                               | 20.40                                    |
| 1964 | 20.90                               | 11.72                                    |
| 1965 | 17.84                               | 9.87                                     |

The region-wise distribution of spindles as on 31-3-1961 was as follows:

| State        | Woollen | Shoddy | Worsted |
|--------------|---------|--------|---------|
| Delhi        | —       | —      | 864     |
| Mysore       | 9,556   | —      | —       |
| Punjab       | 18,657  | 3,751  | 43,780  |
| U.P.         | 11,287  | —      | 9,472   |
| West Bengal  | 1,380   | —      | 6,472   |
| J. & Kashmir | 2,018   | —      | 1,576   |
| M. Pradesh   | 876     | —      | —       |
| Maharashtra  | 4,500   | 7,668  | 53,132  |
| Gujarat      | 5,280   | —      | 9,168   |
| Total        | 53,554  | 11,419 | 124,664 |

If all the schemes licensed are implemented, the position will be as follows: Woollen spindles: 54,169; worsted spindles: 1,45,680; and shoddy

spindles: 20,057. There are about 4,000 looms including both registered and unregistered. The wool combing capacity now stands at 16 million lbs.

The Government of India approved a scheme of Messrs. Duncan Bros., Calcutta for establishment of Wool Tops Combing Plant in collaboration with Messrs. Isaac Hobbs & Co. Ltd., Bradford for a productive capacity of million lbs. per annum. The installation of unit has already been completed.

The Woollen Textiles (Production and Distribution Control) Order, 1960, empowering the Textile Commissioner to regulate the production of all types of woollen yarn, and to fix the price of all types of such yarn and woollen fabrics manufactured therefrom had been promulgated during 1960. The Tariff Commission's recommendation that ex-mill and retail prices of wool manufactures be fixed was rejected by the Government recently on the ground that variations in woollen industry are not normal because of emergency. A panel for the development of carpets and druggets was constituted to examine the various problems of the carpet industry and also to suggest measures to be taken for the development of the industry during the Third Plan period.

There are about 900-1,000 hosiery units in the country of which nearly 500 units are concentrated in Ludhiana. It is estimated that about 10,000 machines of different types are installed in the sector. The capital investment in the sector is estimated at about Rs. 2.5 crores. A large number of the machines employed are hand made and locally fabricated. Industry concentrates its production to the whole of the domestic market.

The quantity of yarn consumed by the hosiery industry in the country is estimated at more than 5 million pounds.

#### EXPORTS

(Figures in million)

| Item                     | Unit       | 1963-64  |        | 1964-65  |        | 1965-66  |        |
|--------------------------|------------|----------|--------|----------|--------|----------|--------|
|                          |            | Quantity | Rs.    | Quantity | Rs.    | Quantity | Rs.    |
| Raw Wool                 | Kgs        | 12.04    | 63.63  | 11.14    | 76.56  | ..       | 64.67  |
| Woollen Worsted Fabrics  | Metres     | 0.73     | 14.67  | 1.07     | 7.27   | ..       | 17.40  |
| Woollen Blankets         | Kgs        | ..       | 3.47   | 0.08     | 0.06   | ..       | 0.44   |
| Woollen Shawls           | No.        | 0.04     | 3.56   | ..       | 0.47   | ..       | 0.86   |
| Carpets and Druggets     | Sq. metres | 1.61     | 52.56  | 1.20     | 34.29  | ..       | 43.51  |
| Hosiery                  | Kgs        | 0.13     | 6.91   | ..       | 3.23   | ..       | 13.72  |
| Total (including Others) | ..         | ..       | 150.08 | ..       | 145.91 | ..       | 155.36 |

.. Not available.



## FIVE-YEAR PLANS

Among the various measures envisaged for improvement of the industry in terms of both quantity of production and quality are the following: (1) a central sheep and wool institute at Malpura with a Plan outlay of Rs. 75 lakhs, (2) one wool research institute at Jammu, (3) wool processing plant at Virendra, and (4) two central sheep breeding farms, one at Kulu (Punjab) and the other at Kodak (Madras).

The estimated population of 40 million sheep in India produces about 70 million pounds of wool annually which forms only 1.3 per cent of the production. A wool combing plant is to be set up in Jammu and Kashmir.

The yield of wool varies from three-fourths of a pound to four pounds per sheep per year. The present average yield per sheep in India is estimated at 1.7 pounds per annum. Annually about 50 per cent of the clip, is exported. The mill industry concerned with the manufacture of superior cloth has to depend on the import of raw or semi-processed wool to the extent of 15 million pounds estimated to cost about Rs. 100 to Rs. 110 million in foreign exchange.

The latest position regarding installed capacity and production (on three shift basis) as also the production targets at the end of the Third Plan and the tentative targets for IV Plan are set out in the following table.

|                             | Installed capacity* | Production for the year 1964-65 | Target for III Plan | Tentative target for IV Plan |
|-----------------------------|---------------------|---------------------------------|---------------------|------------------------------|
| Raw wool (million lbs.)     | —                   | 74.00                           | 90.00               | 90.00                        |
| Wool tops (million lbs.)    | 38.60               | 25.60                           | 9.70                | 48.00                        |
| Woolen yarn (million lbs.)  | 8.43                | 11.85                           | 19.00               | 18.00                        |
| Worsted yarn (million lbs.) | 28.17               | 14.08                           | 28.00               | 40.00                        |
| Fabrics (million yards)     | 37.50               | 12.30                           | 35.00               | 41.00                        |

\* On double shift basis.

The woollen industry may not require installation of any additional spindles and looms at the Fourth Plan target on a two-shift basis. The programme of development tentatively

drawn up by the Planning Commission is in accordance with the recommendation made by the Development Council for Woollen textiles. The Council is of the view that the present

installed capacity of the industry is more than sufficient to produce the entire requirements of woollen worsted yarn and cloth, inclusive of export demand.

The report of the working group for rehabilitation and modernisation of the woollen industry, 1960, appointed by the N.I.D.C. has indicated that the industry would require a substantial amount of rehabilitation and modernisation during the Third Plan, costing about Rs. 11.25 crores of which the foreign exchange element would be about Rs. 9.25 crores.

The weaving sector of the industry, is working, on an average, a little over 1½ shifts and the spinning sector only about one shift. The existing installed capacity of the industry (calculated on the basis of two shifts and 300 working days) is estimated at 67 million lbs. of woollen worsted yarn and 48 million yards of cloth. The production targets for the Third Plan were 52 million lbs. of yarn and 35 million yards of cloth. The productive capacity of wool tops including synthetic tops was fixed substantially higher, at 31.5 million lbs. for the Third Plan.

The Government have approved of the setting up of a synthetic wool fibre project near the Barauni refinery.

Within the next two or three years about 50 per cent of the woollen industry will be modernized in terms of a programme finalized by the Union Commerce Ministry. Imports of machinery under various credit and barter agreements have already been made.

## FOREIGN TRADE OF WOOLLEN TEXTILES—MONTHLY AVERAGE

(Quantity in millions; value in Rs. lakhs)

| Period     | Exports                 |       |       |                  |           |       | Imports                 |       |      |  |
|------------|-------------------------|-------|-------|------------------|-----------|-------|-------------------------|-------|------|--|
|            | Woollen/Worsted Fabrics |       |       | Carpets and rugs |           |       | Woollen/Worsted Fabrics |       |      |  |
|            | Metres                  | Yards | Ra.   | Sq. metres       | Sq. Yards | Ra.   | Metres                  | Yards | Ra.  |  |
| 61 .. .. . | 0.027                   | 0.029 | 3.70  | 0.117            | 0.140     | 39.90 | 0.011                   | 0.012 | 1.51 |  |
| 62 .. .. . | 0.020                   | 0.022 | 1.44  | 0.096            | 0.114     | 32.98 | 0.009                   | 0.010 | 1.29 |  |
| 63 .. .. . | 0.036                   | 0.039 | 2.48  | 0.105            | 0.125     | 36.08 | 0.006                   | 0.006 | 0.79 |  |
| 64 .. .. . | 0.087                   | 0.095 | 12.22 | 0.131            | 0.157     | 43.80 | 0.001                   | 0.001 | 0.25 |  |
| 65 .. .. . | 0.061                   | 0.065 | 5.92  | 0.148            | 0.174     | 48.87 | 0.002                   | 0.002 | 0.38 |  |

## FAMILY PLANNING

Family planning as an official programme was launched in the First Five Year Plan, as part of Government of India's policy for population control and a sum of Rs. 1.45 million was spent.

The aims of the Family Planning Programme laid out by the Planning Commission in the First Five Year Plan are:—

1. Wide-spread education to create the necessary social background for a large Family Planning Programme; 2. Integration of Family Planning activities with the normal health services; 3. Provision of Family Planning facilities including facilities for sterilization through medical and health centres and facilities for distribution of contraceptives; 4. Development of training programmes in medical colleges, other teaching institutions; and 5. Utilization of the Family Planning campaign of local voluntary leadership to the largest extent possible.

During all these years a four-fold Family Planning Programme has been developed viz., Education, Service, Training and Research.

A sum of Rs. 257.93 million was provided for family planning work during the Third Plan against Rs. 21.55 million during the First Plan.

## Five Year Plan Expenditure

(Rs. in lakhs)

|                                       |       |        |        |        | Third Plan |         |         |         | Budget Provision |
|---------------------------------------|-------|--------|--------|--------|------------|---------|---------|---------|------------------|
|                                       |       |        |        |        | 1961-62    | 1962-63 | 1963-64 | 1964-65 | 1965-66          |
| Service .. ..                         | 7.99  | 55.54  | 23.28  | 45.86  | 68.58      | 51.78   | 82.07   |         |                  |
| Training .. ..                        | 0.40  | 15.34  | 5.22   | 7.53   | 7.66       | 21.25   | 27.17   |         |                  |
| Education .. ..                       | —     | —      | 4.33   | 9.37   | 20.12      | 31.41   | 45.93   |         |                  |
| Research .. ..                        | 3.99  | 22.86  | 10.20  | 10.46  | 13.63      | 13.33   | 19.28   |         |                  |
| Central Organisation..                | 2.13  | 6.62   | 3.46   | 3.08   | 3.41       | 7.23    | 3.18    |         |                  |
| Grant to State Govern-<br>ments .. .. | —     | 115.22 | 68.24  | 164.09 | 186.90     | 300.00  | 457.00  |         |                  |
| Total .. ..                           | 14.51 | 215.58 | 114.73 | 240.37 | 300.80     | 425.00  | 639.63  |         |                  |



**Services**

The number of Family Welfare Planning Centres has been increased from 147 at the end of the First Plan to 21,000 at the end of The Third Plan (Rural 19,000 and Urban 2,000).

**Sterilization**

High priority is also being given to voluntary sterilization schemes and sterilization facilities have been provided at medical institutions on an appreciable scale.

Upto March 1966,\* a total of 14,65,381 sterilization operations have been performed in the country through hospitals, dispensaries, mobile units and special sterilization camps. This does not include operations performed by private medical practitioners.

**Contraceptives:** Contraceptives are supplied free of cost to all couples without reference to their income in rural areas. In urban areas all contraceptives are distributed free to people with low income and at subsidised rate

to higher income. At present all types of contraceptives are being manufactured in India.

Contraceptives are tested by the Government of India before being allowed to be sold in India for public use.

On the recommendation of the Indian Council of Medical Research, intra-uterine contraceptive device—IUCD—(loop) was introduced since July 1965. It has gained popularity, because it is considered to be safe, effective, easily reversible and economical. Upto March 1966 a total of 0.8 million insertions has been made.

A public sector factory at Kanpur is manufacturing 30,000 loops a day, by which self sufficiency in respect of the above contraceptive has been achieved. For 1966-67 a target of six million IUCD insertions has been distributed among the States. Target of sterilization for the same period is 1.23 million.

The off-take of contraceptives in India since 1956 has increased considerably as detailed below from the reports received from a few principal dealers.

(No. in millions)

| Year       | Diaphragm | Jellies | Condoms | Foam Tablets |
|------------|-----------|---------|---------|--------------|
| 1956 .. .. | 0.025     | 0.078   | 0.062   | 0.246        |
| 1961 .. .. | 0.343     | 0.632   | 6.863   | 15.882       |
| 1962 .. .. | 0.481     | 0.571   | 7.807   | 7.628        |
| 1963 .. .. | 0.091     | 0.611   | 12.879  | 13.500       |
| 1964 .. .. | 0.301     | 0.259   | 7.033   | 4.875        |

This does not give the total consumption.

State-wise figures for sterilization operations and IUCD insertions upto March 1966 are given in the following table.

| State/Union Territory   | Sterilizations   | IUCD Insertions |
|-------------------------|------------------|-----------------|
| Andhra Pradesh ..       | 46,316           | 9,222           |
| Assam .. ..             | 24,684           | 27,705          |
| Bihar .. ..             | 19,594           | 15,588          |
| Gujarat .. ..           | 1,02,836         | 88,017          |
| J & K .. ..             | 8,591            | 3,051           |
| Kerala .. ..            | 1,14,950         | 35,717          |
| Madhya Pradesh ..       | 91,371           | 18,987          |
| Madras .. ..            | 2,80,543         | 3,491           |
| Maharashtra .. ..       | 2,58,429         | 1,29,887        |
| Mysore .. ..            | 69,038           | 75,900          |
| Orissa .. ..            | 67,480           | 6,004           |
| Punjab .. ..            | 99,009           | 1,32,263        |
| Rajasthan .. ..         | 43,589           | 13,663          |
| Uttar Pradesh .. ..     | 1,54,904         | 45,347          |
| West Bengal .. ..       | 46,988           | 1,64,387        |
| Nagaland .. ..          | 277              | —               |
| Delhi .. ..             | 14,689           | 20,113          |
| Himachal Pradesh ..     | 3,891            | 2,460           |
| Manipur .. ..           | 239              | 1,129           |
| Pondichery .. ..        | 308              | 38              |
| Tripura .. ..           | 274              | —               |
| Goa, Daman, Diu ..      | 1,390            | 50              |
| Dadra, N. Haveli ..     | —                | —               |
| Andamans .. ..          | 218              | —               |
| L.M.A. Isl. .. ..       | —                | —               |
| N.E.F.A. .. ..          | —                | —               |
| Ministry of Railways .. | 10,431           | 12,368          |
| Ministry of Defence ..  | 15,392           | 2,187           |
| <b>Total</b> .. ..      | <b>14,65,381</b> | <b>8,04,504</b> |

The Union Health Ministry has suggested to the State Governments that efforts should be made to introduce the I.U.C.D. in at least 50 per cent of the cases handled by maternity hospitals, post-natal clinics and other institutions as part of the crash programme of family planning.

† A provision of Rs. 50 million has been made for research during the VI Plan. done on a voluntary basis.

Audio-Visual equipment with projectors and mobile vans are being provided in each district for extensive educational activities.

Large number of orientation camps for education of village leaders and Panchayat members have been held. These camps have been associated with sterilisation camps and IUCD camps that persons educated and motivated during these camps could avail of the services and receive IUCD insertion or undergo sterilization operation.

As on March 31, 1966, 160 Hon. District Family Planning Education Leaders have been appointed in addition to Regional, Zonal and Institutional leaders.

**Research†**

Regular research is being conducted in demography, communication and medical and biological aspects of family planning in 9 demographic research centres, 9 communication action research centres and 8 biological and medical research centres. Some of them are: Demographic Training and Research Centre, Bombay, Demographic Research Centre, Indian Statistical Institute, Calcutta, Demographic Research Centre, Institute of Economic Growth, Delhi, Demographic Research Centre, Dharwar, Demographic Research Centre, Department of Statistics, University of Kerala, Trivandrum, Gokhale Institute of Politics and Economics, Poona and Demographic Research Centre, Indian Institute of Population Studies, Madras. Research in medical and biological aspects or reproduction is being conducted at a number of places including All India Institute of Medical Sciences, New Delhi, Central Drug Research Institute, Lucknow, Indian Cancer Research Centre, Bombay, Zoology Department of Delhi University and in various other universities and medical colleges. Communication Research is being undertaken at the Family Planning Institute, New Delhi, Demographic Research Centre, Bombay, University of Kerala, Rural Health Centre, Gandhigram, Indian Statistical Institute, Calcutta, Planning Research and Action Institute, Lucknow, Lady Harding Medical College, New Delhi, New Delhi Family Planning Association, New Delhi and All India Institute of Hygiene and Public Health, Calcutta.

**Fourth Plan:** A sum of Rs. 950 million has been provided in the Fourth Plan for implementation of the Family Planning Programme.

**Evaluation of Family Planning:** A Cabinet Committee with the Minister of Planning and Social Security as the Chairman has been formed to review periodically the progress in implementation of the family planning programme and to give necessary policy directives for the programme. The Secretary, Department of Family Planning, the Director General of Health Services and the Commissioner, Family Planning and advisers to this Committee.

A Standing Committee has also been formed in the Ministry of Health and Family Planning with the Union Health Minister as Chairman to review frequently and regularly the implementation of the family planning programme and to give necessary decisions on problems connected with implementation of the programme.

**Expert Committees:** There are 3 National Expert Committees viz. the Demographic Advisory Committee, the Communication and Action Research Advisory Committee and the Advisory Committee on Medical and Biological Aspects of Family Planning. These 3 Expert Committees consist of eminent experts in the related fields and give advice to the Ministry of Health and Family Planning about the various research schemes that are being undertaken in the country and that should be undertaken.

The Central Family Planning Board was reconstituted as the Central Family Planning Council with the Union Minister of Health as its chairman.

\* By Dec. 1966, about 1.6 million sterilization had been



## HANDICRAFTS

Also see articles on Cottage Industries and Small-Scale Industries).

About 12 lakh workers turn out over 250 crores of rupees worth handicrafts per year. Out of these goods worth about Rs. 30 crores are exported while the rest are absorbed in the home market.

The All-India Handicrafts Board studies the problems confronting the handicrafts industry and advises the government on the solution of these problems. The Board is also required to advise the government on grants and loans to be given to the state governments, private organisations and institutions for financing activities necessary for the development and improvement of handicrafts. It plans and formulates schemes for the development of handicrafts. The state governments are mainly responsible for the implementation of plans and schemes whereas the Board undertakes such developmental measures as are of national importance and of value to the over-all programme for development of handicrafts and common benefit to the States, e.g., organisation and participation in exhibitions and fairs of national importance, mobile exhibition covering several States, nation-wide publicity campaign, technological research and improvement, quality control, economic research and studies, design development on regional basis and specialised training. It also promotes the development of co-operatives and arranges credit.

For the Fourth Five Year Plan, the estimated expenditure for developmental schemes of handicrafts would be Rs. 36.55 crores of which Rs. 12.55 crores for Central programme and Rs. 24.00 for State Govt. programme.

Schemes to be undertaken during the next five years include market research, promotion of inter-state marketing, laying down standards and specifications, extension of training facilities in the management of emporia, salesmanship and display, introduction of improved techniques with particular emphasis on reducing cost of production and opening of organised production Centres.

Besides co-ordinated schemes for the expansion of exports in handicrafts, the Fourth Five Year Plan envisages orientation in production to meet the needs of customers in different income groups within the country and the promotion and development of rural crafts.

### Handicrafts and Handlooms Export Corporation of India Ltd.

(See under "All India Corporations").

The exports of handicrafts during the years 1961-62, 1962-63, 1963-64, 1964-65, 1965-66 have been Rs. 19.35, Rs. 21.53, Rs. 24.00, Rs. 25.36 and Rs. 27.79 crores respectively.

In order to strengthen and coordinate the measures taken for promotion of handicrafts, the Board has set up Regional Exporters Associations at Delhi, Bombay, Madras and Calcutta and craft Associations for Zari and Carpets. The targets of exports for the year 1970-71 has been fixed at Rs. 52.26 crores respectively.

A list of the major handicrafts is given below:—

**Textiles:** Hand-printing and traditional dyeing of textiles, brocades, himroo, carpets and druggets, rugs, gabbas and namdas, embroidery (cotton silk, wool and zari) lace and lace work including nakki and gota making, shawls; **Metalware:** Silver and goldware, bidri filigree, brass and copperware, bronze work; **Ceramics:** Pottery and earthenware; **Ivory:** Ivory carving; **Papier-mache:** Papier-mache articles; **Woodwork:** Wood-carving and inlay, lacquer work including nirmal work, decorative furniture; **Stone-work:** Stone-carving including marble work and alabaster; **Toys:** Dolls and toys other than mechanical toys; **Leather:** Leather goods (Artistic work); **Horn:** Artistic articles; **Bone:** Artistic articles; **Cane:** Bamboo, etc. Articles made of cane, bamboo, willow, straw and grass including mats and pith crafts; **Incense and perfumery;** **Flax and Fibre articles;** **Bangles & Beads:** Bangles and beads; **Musical Instruments;** **Conch-shell and semiprecious stones.**

**Miscellaneous:** Miscellaneous traditional art objects such as Orissa, Mysore and Tanjore paintings, and handicraft products specially made for ceremonies, articles of worship and theatrical requisites such as costumes, masks, puppets, etc.

Steps taken to develop handicrafts include the establishment of design centres to revive traditional designs and create new ones and training centres to better techniques. Some of these training centres are also production centres.

Mobile exhibitions are taken round the country and handicrafts weeks are held. A handicrafts museum has been established in New Delhi.

### Design Centres

The Board has four regional Design Development Centres at Delhi, Calcutta, Bangalore and Bombay to look after designing and development of the crafts in their region, survey requirements, provide training and maintain close collaboration with the State centres, marketing organisations, exporters etc. State design centres were established and are situated in Kashmir, U.P., Bihar, W. Bengal, Himachal Pradesh, Bhopal, Madras, Hyderabad, Orissa, Manipur, Tripura, Rajasthan, Punjab and Kerala.

During the III Five Year Plan over 4,000 original designs were evolved covering 12 crafts and nearly 1,500 parties were assisted.

### Development of Co-operatives

The Board encourages formation of handicraft co-operatives and provides financial, technical and marketing facilities to them.

The number of handicraft co-operatives increased from 1,000 in 1957-58 to nearly 8,000 in 1965-66. In addition 184 handicrafts emporia have also been set up to expand marketing activities.

The Board has also started a training programme for the co-operative organisers for which trainees from Government Departments and co-operative organisations are selected for training. Up to April 1966 eight such courses had been held and 150 persons trained.

Survey of associations of artisans, dealers and exporters has been completed by the Indian Co-operative Union on behalf of the Board.

### Credit Facilities

One of the main functions of the Board is to see that adequate credit facilities are made available to the handicrafts industries and trade at different stages of its production, storage, distribution and sales.

**Awards:** To bestow honour and encourage craftsmen, the Board has instituted National awards for Mastercraftsmen. In Jan. 1966, 25 persons received these awards from the President of India, and these awards carry a cash prize of Rs. 1,000 each, an inscribed brass plaque and a specially designed angavastram. These awards would be given every year during the "Republic Week" celebrations.

## IMPORT AND EXPORT TRADE

### FOREIGN TRADE OF INDIA

(Rs. in crores)

|                                      | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 |
|--------------------------------------|---------|---------|---------|---------|---------|
| Exports .. .. .                      | 660.8   | 685.5   | 789.3   | 813.2   | 805.6   |
| Imports .. .. .                      | 1,090.1 | 1,181.5 | 1,222.9 | 1,349.0 | 1,394.9 |
| Overall Balance of Trade .. .. .     | -429.8  | -446.0  | -433.6  | -535.8  | -589.3  |
| <i>Exports</i>                       |         |         |         |         |         |
| 1. Cashew kernel .. .. .             | 18.2    | 19.4    | 21.4    | 29.0    | 27.4    |
| 2. Spices .. .. .                    | 17.5    | 13.8    | 16.0    | 16.7    | 23.1    |
| 3. Sugar .. .. .                     | 15.3    | 17.9    | 27.1    | 21.4    | 11.9    |
| 4. Tea .. .. .                       | 121.4   | 128.8   | 123.4   | 124.7   | 114.8   |
| 5. Tobacco .. .. .                   | 14.1    | 18.0    | 22.5    | 25.7    | 21.6    |
| 6. Coffee .. .. .                    | 9.0     | 7.6     | 8.3     | 13.4    | 13.9    |
| 7. Oil cakes .. .. .                 | 17.3    | 31.8    | 35.4    | 38.5    | 34.6    |
| 8. Vegetable oils .. .. .            | 5.8     | 13.1    | 19.9    | 7.0     | 4.1     |
| 9. Hides & Skins (undressed) .. .. . | 8.2     | 10.7    | 10.1    | 9.1     | 10.0    |
| 10. Raw cotton and waste .. .. .     | 20.3    | 17.0    | 16.8    | 14.2    | 13.1    |



## FOREIGN TRADE OF INDIA—Contd.

(Rs. in crores)

|                               | 1961-62 | 1962-63 | 1963-64 | 1964-65 | 1965-66 |
|-------------------------------|---------|---------|---------|---------|---------|
| 11. Iron ore .. .. .          | 17.4    | 19.8    | 36.4    | 37.4    | 42.1    |
| 12. Manganese ore .. .. .     | 10.4    | 7.9     | 8.3     | 13.9    | 11.4    |
| 13. Leather .. .. .           | 25.4    | 22.6    | 26.2    | 27.2    | 28.2    |
| 14. Cotton fabrics .. .. .    | 48.3    | 46.2    | 54.3    | 64.2    | 63.3    |
| 15. Synthetic fabrics .. .. . | 7.4     | 8.3     | 10.4    | 6.6     | 1.3     |
| 16. Jute manufactures .. .. . | 140.5   | 152.1   | 153.5   | 167.2   | 181.6   |

## Imports

|                                               |       |       |       |       |       |
|-----------------------------------------------|-------|-------|-------|-------|-------|
| 1. Food beverages and tobacco .. .. .         | 148.8 | 181.1 | 215.5 | 396.5 | 399.4 |
| 2. Electrical Machinery and Equipment .. .. . | 65.9  | 64.8  | 84.8  | 91.2  | 87.1  |
| 3. Mineral oils .. .. .                       | 95.9  | 88.0  | 104.4 | 68.6  | 68.2  |
| 4. Cotton raw and waste .. .. .               | 62.7  | 56.9  | 48.8  | 58.1  | 46.2  |
| 5. Chemicals .. .. .                          | 89.8  | 100.5 | 95.9  | 94.5  | 104.8 |
| 6. Iron and steel .. .. .                     | 107.8 | 89.0  | 93.1  | 105.0 | 97.8  |
| 7. Non-ferrous metals .. .. .                 | 49.5  | 55.1  | 55.6  | 58.5  | 68.6  |
| 8. Art silk yarn and thread .. .. .           | 12.8  | 12.9  | 10.5  | 10.0  | 5.0   |
| 9. Machinery (other than electrical) .. .. .  | 237.0 | 250.6 | 281.1 | 313.4 | 332.4 |
| 10. Transport equipment .. .. .               | 64.6  | 72.1  | 71.1  | 73.5  | 69.9  |

General Indices of Exports and Imports  
(1958 = 100)

|                         | 1963-64 | 1964-65 | 1965-66 |
|-------------------------|---------|---------|---------|
| <b>Quantity Index :</b> |         |         |         |
| Exports .. .. .         | 126     | 135     | 124     |
| Imports .. .. .         | 135     | 146     | 154     |
| <b>Price Index :</b>    |         |         |         |
| Exports .. .. .         | 105     | 107     | 113     |
| Imports .. .. .         | 97      | 99      | 104     |

## BALANCE OF PAYMENTS

India's balance of payments position in 1965 has been described in the Report on Currency and Finance (1965-66) of the Reserve Bank of India as follows :

The detailed balance of payments data for the financial year as a whole are not yet available and hence the discussion on balance of payments that follows is confined to the trends during the calendar year 1965. During the year 1965, the reserves increased by Rs. 48.4 crores as compared to a decline of Rs. 52.1 crores in 1964. However, if borrowings from and repayments to the I.M.F. and the transfer of gold worth Rs. 16.0 crores to the monetary stock are excluded from the respective periods, the reserves would show a fall of Rs. 27.1 crores in 1965, which is very nearly the same as in 1964 (Rs. 28.3 crores). The recorded quarterly movement in reserves was broadly in conformity with the usual seasonal pattern, there being a net accretion during the first and last quarters and a net draft during the remaining two quarters.

Except for capital transactions pertaining to the banking and official sectors which were favourable, almost all the other major constituents had an adverse impact on the external payments position. Over the year, the deficit on current account widened by Rs. 166.7 crores to Rs. 599.9 crores due partly to an increase of Rs. 43.3 crores in the trade deficit and partly to the fact that invisible transactions (including official transfer payments) showed a net deficit

of Rs. 2.3 crores as compared with a net surplus of Rs. 137.1 crores in the preceding year (Table A). A part of this adverse impact was offset by the net inflow of Rs. 16.0 crores on account of the movement of non-monetary gold. In addition, unidentified transactions (covered by 'errors and omissions') also showed an improvement from a net outflow of Rs. 77.4 crores in the preceding year to a net inflow of Rs. 46.5 crores; a part of this improvement was of a statistical nature resulting from the revised procedure adopted for recording exports to which a reference is made later. Nevertheless, the overall deficit at Rs. 553.4 crores was higher than in 1964 by Rs. 42.8 crores. However, the net inflow from capital transactions the bulk of which comprised external assistance receipts, at Rs. 601.8 crores exceeded the overall deficit resulting in a net accretion of Rs. 48.4 crores to the reserves. In the preceding year, the overall deficit (Rs. 510.6 crores) had exceeded the net inflow of capital (Rs. 458.5 crores) from abroad necessitating a net draft of Rs. 52.1 crores on the reserves.

## Imports

Compared with the preceding year, the aggregate import bill at Rs. 1,396.3 crores was higher by Rs. 8.4 crores, but as between private and Government sectors, imports on private account declined by Rs. 12.0 crores to Rs. 610.0 crores, while those on Government account increased by Rs. 20.4 crores to Rs. 786.3 crores. The increase in Government imports and hence in the aggregate import bill would have been even higher (by about Rs. 28 crores) but for the statistical change introduced from April 1965 under which freight on P. L. 480 imports refunded by the U.S. authorities is excluded from the data on Government imports (*vide* footnote 1 to Table A). The entire increase in the aggregate import bill was financed out of the country's own resources, as there was a decline in aid-financed imports. The main items that registered a fall in imports on private account were mineral oils (Rs. 16.8 crores), machinery (Rs. 18.1 crores) and vehicles (Rs. 3.8 crores); the principal items which showed increases in imports on private account were vegetable oils (Rs. 11.6 crores), iron and steel (Rs. 3.1 crores), rayon textiles (Rs. 3.8 crores), dyes and colours (Rs. 2.1 crores) and other metals (Rs. 8.3 crores). On Government account, there was a fall in imports of food (Rs. 11.5 crores), capital equipment (Rs. 22.5 crores) and railway stores (Rs. 4.5 crores), but this was more than offset by the increase in other non-food imports (Rs. 62.1 crores).

## Exports

Exports at Rs. 782.7 crores were lower than in the preceding year by Rs. 34.9 crores. A part of this decline was purely statistical, attributable to the change in the procedure for booking exports introduced in the last quarter of the year. Exports, which were previously recorded as and when the consignments were approved for shipment irrespective of whether the actual shipment had taken place or not, are now being recorded under the new procedure on a post-shipment basis at the time when the documents are negotiated by the respective financial intermediaries. Consequently, although the new system records exports realistically from the statistical angle, there is, compared with the earlier practice, a considerable lag now in the recording of exports, which is reflected in the shortfalls in the absolute levels. The shortfalls in the absolute levels would also reflect the fact that some of the shipments which should have been recorded during this quarter on the new basis would have already been accounted for in the preceding quarter on the old basis. Exports recorded in the balance of payments statistics for 1965 are also not strictly comparable with those recorded by the D.G.C.I. & S. because, apart from differences in coverage and valuation between the two sets of data, the basis of recording of the D.G.C.I. & S. data was changed during the year from shipments approved during a month to actual shipments made. The data recorded on the new basis in the balance of payments statistics would also not be strictly comparable with the data compiled by the D.G.C.I. & S. as the date of negotiation of documents follows the date of actual shipment, though only with a short interval, thereby resulting in some lag in the former as compared to the latter.

The currently available data assembled on the new basis for the last quarter of 1965 are inadequate for want of commodity and country details, and hence the trends in the different commodities are assessed on the basis of the performance during the first three quarters of the year. During the first three quarters of the year, exports were lower by Rs. 7.1 crores. The major items that registered a fall were sugar (Rs. 8.4 crores), manganese ore (Rs. 5.7 crores), cotton yarn and manufactures (Rs. 9.1 crores), vegetable oils (Rs. 9.9 crores), oilseeds (Rs. 4.2 crores), coffee (Rs. 2.9 crores), tobacco (Rs. 2.0 crores) and iron ore (Rs. 2.1 crores). The shortfalls in these items were to a large extent offset by the improvement in the exports of jute yarn and manufactures and iron and steel.



The balance of payments for the calendar years 1964, 1965 and the four quarters of 1965 are shown in the table below :  
(Preliminary) (Crores of Rupees)

|                                                     | Jan.-March<br>1965 | April-June<br>1965 | July-Sept.<br>1965 | Oct.-Dec.<br>1965 | Jan.-Dec.<br>1965 | Jan.-Dec.<br>1964 |
|-----------------------------------------------------|--------------------|--------------------|--------------------|-------------------|-------------------|-------------------|
|                                                     | (1)                | (2)                | (3)                | (4)               | (5)               | (6)               |
| <b>A. Current Account</b>                           |                    |                    |                    |                   |                   |                   |
| Imports, c.i.f.                                     |                    |                    |                    |                   |                   |                   |
| (a) Private .. ..                                   | 156.7              | 164.4              | 165.4              | 123.5             | 610.0             | 622.0             |
| (b) Government <sup>1</sup> .. ..                   | 187.8              | 193.5              | 193.3              | 211.7             | 786.3             | 765.9             |
| Total imports (a + b) .. ..                         | 344.5              | 357.9              | 358.7              | 335.2             | 1,396.3           | 1,387.9           |
| Exports, f.o.b. <sup>2</sup> .. ..                  | 190.9              | 207.7              | 206.1              | 178.0             | 782.7             | 817.6             |
| Trade Balance .. ..                                 | - 153.6            | - 150.2            | - 152.6            | - 157.2           | - 613.6           | - 570.3           |
| Non-monetary gold movement (net) .. ..              | + 16.0             | —                  | —                  | —                 | + 16.0            | —                 |
| Official Transfer Payments (net) <sup>3</sup> .. .. | + 29.1             | + 2.8              | + 3.3              | + 0.1             | + 35.3            | + 118.0           |
| Other Invisibles (net) <sup>4</sup> .. ..           | - 1.9              | - 11.7             | - 11.4             | - 12.6            | - 37.6            | - 19.1            |
| Current Account (net) .. ..                         | - 110.4            | - 159.1            | - 160.7            | - 169.7           | - 599.9           | - 433.2           |
| <b>B. Errors and Omissions</b> .. ..                | + 8.3              | - 10.0             | - 8.0              | - 56.2            | - 46.5            | - 77.4            |
| <b>C. Capital Account</b>                           |                    |                    |                    |                   |                   |                   |
| Private Capital (net) .. ..                         | + 2.2              | + 7.8              | - 1.1              | - 1.2             | - 5.5             | + 4.2             |
| (a) Long-term <sup>5</sup> .. ..                    | + 3.2              | - 6.3              | - 2.2              | + 1.1             | - 4.2             | + 6.0             |
| (b) Short-term .. ..                                | - 1.0              | - 1.5              | + 1.1              | + 0.1             | - 1.3             | - 1.8             |
| Banking Capital (net) .. ..                         | + 0.9              | - 2.9              | + 11.5             | - 5.2             | + 4.3             | - 0.1             |
| Official Capital (net) .. ..                        | + 111.6            | + 177.4            | + 152.2            | + 161.8           | + 603.0           | + 454.4           |
| (a) Loans .. ..                                     | + 166.2            | + 142.5            | + 111.4            | + 139.7           | + 559.8           | + 548.7           |
| (b) IMF drawings .. ..                              | + 11.9             | + 23.8             | + 11.9             | + 11.9            | + 59.5            | - 23.8            |
| (c) Amortisation .. ..                              | - 31.4             | - 11.5             | - 22.1             | - 17.5            | - 82.5            | - 51.1            |
| (d) Miscellaneous .. ..                             | - 35.1             | + 22.6             | + 51.0             | + 27.7            | + 66.2            | - 19.4            |
| Capital Account (net) .. ..                         | + 114.7            | + 166.7            | + 162.6            | + 157.8           | + 601.8           | + 458.5           |
| <b>D. Movement in Reserves</b>                      |                    |                    |                    |                   |                   |                   |
| (A + B + C) .. ..                                   | + 12.6             | - 2.4              | - 0.1              | + 44.3            | + 49.4            | - 52.1            |
| (Increase +, Decrease -)                            |                    |                    |                    |                   |                   |                   |

1. Beginning with April-June 1965, the data on Government imports exclude freight on P.L. 480 imports initially borne by India but subsequently refunded by U.S. authorities.
2. Beginning with the quarter Oct.-Dec. 1965, the basis for the recording of the exports data was changed from shipments approved during a month to shipments in respect of which documents were negotiated during a month. Consequently, compared with the earlier practice there is a considerable lag in the recording of exports, which gets reflected in the shortfalls in the absolute levels.
3. Beginning with April-June, 1964, receipts and payments of pensions on Government account and contributions to international organisations are included.
4. Beginning with April-June 1965, the data on receipts exclude refund of freight on P.L. 480 imports initially borne by India but subsequently refunded.
5. Beginning with April-June 1964, drawings and repayments on account of IBRD loans and other foreign Government loans to private sector are included here. Prior to April 1964, these were included under official loans.

Source : B.B.I. Report on Currency and finance.

## DEVELOPMENTS IN TRADE POLICY

According to Currency and Finance Report (1965-66), India's trade policy was conditioned, as in the past few years, by the persistent pressure on the country's foreign exchange reserves. The main objectives of trade policy were, therefore, the maximisation of export earnings and the maintenance of imports at the barest minimum, consistent with the needs of development. Efforts to boost exports were pursued vigorously by the adoption of further measures such as tax concessions, liberal credit facilities, improved transport facilities, etc. to increase the competitive capacity of India's exports and also by generally developing an export consciousness in the country. On the import side, while the austere import policy pursued for some time past was continued, increasing attention was given to

rationalisation of imports and import substitution.

The policy of progressive relaxation of controls over exports was continued during the year. Thus, the controls over the exports of cord, rope, twine and thread made out of rayon and/or synthetic fibre or yarn and glycerine were removed during the year. It was, however, necessary to impose controls on the exports of certain commodities so as to conserve scarce supplies for domestic needs and to check the rise in internal prices. Thus, exports of copper and brass in the form of ingots, slabs, cakes, cast bars or scrap, zinc ores, mercury, cinchona bark and Dioscorea roots were banned while exports of de-oiled groundnut cake (extraction), ferro-manganese/ferro-manganese slag were brought under control. Export quotas were curtailed for nux vomica

seeds and raw goat skins. Exports of a few items like manganese ore, mill-scale scrap, ethyl alcohol and footwear (the uppers of which are wholly or partly of leather) were canalised through public sector agencies during the year in order to develop larger exports of these commodities. Barring some 30 items, exports of all items numbering over 10,000 are now freely allowed without any controls or licensing formalities.

Mention was made in the last year's Report of the tax-credit scheme for exports (announced in the Budget proposals for 1965-66) which was intended to compensate exporters for a variety of taxes for which relief from taxation on exports was not available and thus to make the exports more competitive in foreign markets. The details of the scheme were announced in July 1965 according to which tax credit ranging between 2



per cent. and 15 per cent. were granted against 22 items. In October 1965, the scheme was extended to cover 6 more commodities.

With a view to enabling the Indian manufacturers in the hinterland to participate more effectively in the export effort, more rail freight concessions were granted. As against a flat concession of 25 per cent., a graded basis allowing larger concession for long distance traffic was introduced. The Freight Investigation Bureau of the Ministry of Transport continued to work in close liaison with the Ministry of Commerce and secured ocean freight concessions for a number of commodities.

Export credit facilities were liberalised further during the year. The Industrial Development Bank of India removed in June 1965 the lower limit of Rs. 1 lakh of export contract under its scheme for refinancing of medium-term export credits, with a view to allowing small exporters to get refinance facilities at concessional rates. The Reserve Bank liberalised in November 1965 the Bill Market Scheme to make refinance available at the Bank Rate in respect of advances made by commercial banks to finance packing credit to exporters.

Quality Control and Preshipment Inspection were extended to several new industries and products, particularly chemicals, minerals and engineering goods, turmeric, tendu leaves, ginger, onions, garlic, table potatoes, pulses, frog-legs, coir mats and B Twill jute-bags. As a result, currently 80 per cent. of India's export goods have been fully brought under quality control and preshipment inspection. A comprehensive programme for bringing leather, leather cloth, rubber and rubber products, paints and allied products, glass and glassware, ceramics, agro-chemicals, soaps, chemicals, carpet backing cloth, coir yarn, gum karaya and kushrooms under quality control and preshipment inspection has been drawn up.

A new export promotion council viz., the 'Council for Handlooms' was set up at Madras during the year, bringing the total number of export promotion councils to 18. The Committee appointed to review the working of export promotion councils and also the progress made in developing exports of particular groups of commodities for which the respective councils were formed (*vide* the Report on Currency and Finance 1964-65, submitted its report in May 1965. The more important recommendations of the Committee related to the (i) creation of Commodity Boards for cashew, mica, shellac, spices and tobacco, (ii) representation of various interests in the councils, (iii) consumer oriented publicity, (iv) setting up a machinery for settlement of disputes, etc. Most of the recommendations have been accepted by the Government.

A new organisation called the Indian Council of Arbitration was set up to propagate and popularise the idea of arbitration in disputes arising in international trade and business circles and to disseminate information relating to arbitration.

During the year, the Board of Trade reviewed the trend of exports from time to time and held discussions on several aspects of export promotion including the progress of quality control and preshipment inspection measures, participation of States in export promotion and review of export assistance schemes. It also appointed several committees to examine various problems concerning the country's foreign trade, like the committee to examine collaboration agreements from the export angle, and another one on the rationalisation of imports and import substitution.

The Committee set up by the Government of India, to examine the manner in which a selective approach to export promotion can be evolved in order that competent and quality conscious exporters working in co-operation could specialise in particular commodities or with particular regions, submitted its report in May 1965. The Selectivity Committee recommended a three-

tier system involving (i) the grouping of registered exporters into suitable panels, (ii) the formation of export houses to be recognised by the Government on the basis of well-defined criteria and (iii) the recognition of consortia of exporters in a product or a group of products. The Committee also recommended the adoption of a selective approach for giving necessary encouragement to exporting units which have a genuine interest in the export trade and the capacity to undertake it. The Government have now revised the scheme for recognising export houses in the light of experience and taking into account the recommendations of the Selectivity Committee.

The Indian Institute of Foreign Trade organised seminars relating to export houses and exports of cotton textiles, rayon and synthetic textiles, chemicals and allied products and spices; completed commodity studies on costume jewellery, razor blades, readymade garments, tobacco manufactures, etc. and organised six training courses.

The Indian Council of Trade Fairs and Exhibitions expanded its work and assisted in the participation in international trade fairs held in Hungary, Poland, German Democratic Republic and New York World Fair 1964 (Second Session). Participation in the First Asian Trade Fair under the auspices of the ECAFE to be held at Bangkok in November/December 1966 and the Universal and International Exhibition to be held at Montreal in April-October 1967 is also contemplated.

During the year, activities of the State Trading Corporation (STC) showed an all-round improvement. The total volume of trade handled by the STC during 1965 amounted to Rs. 104.4 crores comprising Rs. 59.7 crores of direct and Rs. 44.7 crores of indirect trade as against a total turnover of about Rs. 75 crores in 1964. The Corporation took special interest in promoting exports of products of engineering and chemical industries. The Corporation also participated in a number of exhibitions/fairs in overseas countries as a part of its export promotion drive. In addition to the existing offices at Rotterdam and Prague, the Corporation established during the year a trading centre at Moscow and a bonded warehouse-cum-sales depot at Montreal to popularise Indian goods. With a view to arresting the downward trend in exports of certain commodities to specific destinations and to ensuring the import of essential commodities for economic development of the country, the Corporation entered into barter/parallel deals. Besides, the Corporation continued its buffer stock operations which were confined to tobacco, lemon-grass oil, jute and seedlac.

The activities of the Minerals and Metals Trading Corporation (MMTC) have considerably expanded during the year. During the year, exports of manganese ore, coal by sea and ferromanganese were canalised through this Corporation. Exports of iron ore by the MMTC of which the Corporation is the sole exporter, barring exporting interests in Goa, increased to 6.04 million tonnes valued at about Rs. 26 crores in 1965 compared to 4.95 million tonnes valued at about Rs. 22 crores during 1964. Exports of manganese ore by the Corporation amounted to 1.3 million tonnes valued at Rs. 9.7 crores in 1965. The Corporation also imported some scarce industrial raw materials like certain categories of steel and non-ferrous metals.

The import policy during the year continued to be restrictive due to the persistent pressure on the country's foreign exchange reserves. On account of the uncertainty regarding the availability of aid, the import policy announcement for 1965-66 was postponed by three months, and the issue of fresh licences against free foreign exchange resources during April-June 1965 was severely restricted. However, the essential needs of the economy such as foodgrains, fertilisers and petroleum were provided for. The import policy announced in July was made applicable only for the remaining nine months of the year. Imports of about 60 items, including, among

others, spare parts of oil crushing and refining machinery, petroleum and gas engines, motor vehicle parts, well-drilling equipment etc. all indigenously produced were completely banned and quotas for a few others reduced. For the actual users, issue of import licences to manufacturing units was to be increasingly based on merit. Licensing for the imports of specified items was to be decided on the basis of the recommendations of the sponsoring authorities out of the monetary ceilings allocated to these authorities for the purpose.

A notable feature of the import policy for 1965-66 was the procedural change introduced in July 1965 in respect of import entitlements under export incentive schemes. The entitlement licences were to be issued only on production of bank certificates evidencing the actual realisation of export proceeds while previously the entitlements were issued prior to the realisation of proceeds on production of an undertaking to repatriate the proceeds within six months.

With a view to regulating the flow of imports, the Reserve Bank issued a directive on June 29, 1965 calling upon all importers to deposit with banks authorised to deal in foreign exchange, prior to the shipment of goods, an amount equivalent to 25 per cent. of the c.i.f. value of all imports of Rs. 5,000 or over. The deposits were returnable after the final remittance in respect of the relevant shipment or the expiry of two months from the date of deposit, whichever was later. The stipulation applied to all shipments (with certain exceptions) effected on or after July 1, 1965 by private sector as well as public sector undertakings and covered all areas including rupee payment areas. The Scheme was, however, withdrawn on August 20, 1965 following the levy of increased import duties from that date. The import duty changes, besides raising additional revenue, were aimed at rationalising the tariff structure so as to suit the requirements of planned development and help import substitution.

With a view to providing for the import of certain essential raw materials and components that were in acute shortage, some of these were included under the list of items permitted against bank certificates, issued under the National Defence Remittance Scheme. The items permitted to be imported under the Scheme, as announced in October 1965, included among others, pharmaceutical raw materials, chemicals, non-ferrous metals and motor vehicle parts, specified capital goods etc. The list was expanded in February to cover some additional items like sulphur, wood pulp, and raw wool.

Among other developments in the field of import control policy, the more important ones related to (i) Government's acceptance of the recommendations of the study team (headed by Shri Mathur) appointed to examine the functions and working of the Directorate General of Technical Development and to recommend steps to avoid delays and administrative failures, (ii) extension of the validity of the Imports and Exports Control Act and (iii) the setting up of an Import Substitution Committee.

Some of the important recommendations of the Mathur Committee were: (i) Licensees should be allowed to place orders up to 75 per cent. of the value of licences even during the first half of the year provided the payments within the first half of the year against the licence did not exceed 50 per cent. of the total value of the licence. (ii) Licences up to Rs. 5,000 may be allowed to be utilised in one lot as at present. (iii) The import policy should provide for only two categories of items namely 'banned' and 'open' in the case of the small-scale industrial sectors, and the restricted category should be dispensed with. In the case of large-scale industrial sector, however, the restricted category would be continued but on a realistic and non-discriminatory basis. (iv) The need to obtain non-availability certificate from the Director General of Technical Development could be dispensed with.



The Import and Export Control Act, originally enacted in 1947, was extended for another five years up to March 1971.

Recognising the importance of systematic studies on the subject of import substitution and rationalisation of imports, a Committee was set up during the year with Dr. V. K. R. V. Rao as Chairman and including representatives of the Federation of Indian Chambers of Commerce and Industry and other interests to recommend how best such studies could be undertaken.

### TARIFF COMMISSION

In 1964-65, the Tariff Commission completed seven tariff inquiries and two price inquiries. The tariff inquiries related to the continuance of protection to the industries manufacturing (1) automobile sparking plugs, (2) power and distribution transformers, (3) electric motors, (4) non-ferrous metals, (5) sheet glass, (6) ball bearings and (7) safety matches. The Commission recommended the continuance of protection for three more years at the existing rates of duty for three of the industries (the power and distribution transformer industry, electric motors industry and the non-ferrous metals industry), at enhanced rates for two of them (sheet glass and ball bearings industries) and at reduced rates for one industry (automobile sparking plugs). The Commission also recommended the widening of the scope of protection granted to the sheet glass and ball bearings industries to cover newer items like figured and wired plate glass and roller bearings along with ball bearings of dimensions hitherto not covered. The safety match industry having become strongly established and the imports of matches having been completely banned the Commission recommended the withdrawal of protection of safety matches industry. The Commission also recommended the withdrawal of protection of integral h.p. motors and their component parts manufactured by the electric motors industry.

In the light of the progress made by the seven protected industries mentioned above as also the absence of any unhealthy competition from imports and having regard to the fact that under the Finance Act (No. 2) of 1965, duties were already enhanced either to the level recommended by the Commission or more, the Government decided to withdraw protection to all these industries after December 31, 1965. The prevailing rates of customs duties were, however, to be continued as revenue duties instead of protective duties.

The price inquiries completed during the year related to the fixing of fair selling price for safety matches, and prices for preserved fruits and vegetables. As regards safety matches, the Commission recommended application of a uniform sales tax in all States subject to a ceiling of 4 per cent. on the net value of matches to ensure a uniform selling price for matches. The Commission was also asked to examine whether there was a deliberate fragmentation of 'B' and 'C' class factories in order to avail of the lower slab excise rates and, if so, to suggest remedial measures and examine whether there was a slab in order to protect the small and medium factories. The Commission came to the conclusion that, since the existing slab rate acted as a disincentive for expansion of production, induced deliberate fragmentation and led to a mushroom growth of small scale units in class 'C', the present system of slab rates should be scrapped. The Commission suggested a revised schedule based on the cost of manufacture for the various classes and recommended the continuance of protection to small and medium sized units. The Government, while accepting the desirability of having a uniform selling price for matches, took the view that there were certain practical difficulties in ensuring uniform rates of sales tax and other local taxes and decided that it was not necessary to fix any ceiling ex-factory or wholesale prices. However, steps would be taken to keep prices under control, should there be any undue increase.

In respect of preserved fruits and vegetables, the Commission concluded that, since the prescription and enforcement of statutory prices were not feasible, the price indicators given in the Commission's report should be considered as fair wholesale selling prices to be observed on a voluntary basis as ceiling prices. If control in any other form was contemplated, the producers and sellers should be persuaded to publish their wholesale and retail prices so that the consumer would not be required to pay more than the list prices. In order to cover transport and distribution expenses the Commission recommended a margin of 20 per cent. over fair ex-factory selling prices for fixing the retail prices. Since the prices suggested were not statutory, there would be scope for negotiation between supply authorities and producers. The Commission which was asked to examine the necessity and justification for reviving the tinplate subsidy as a general scheme concluded that the revival of the tinplate subsidy was not justified. The Government accepted all the recommendations of the Commission for action to the extent possible.

### TRADE AGREEMENTS

During the year, fresh trade agreements were signed with Argentina, Sudan, Uganda and Tanzania. Agreements on technical, economic and scientific co-operation were also signed by India with the Governments of Uganda and Tanzania. Existing agreements with the U.S.S.R., Hungary, Greece, France, Democratic People's Republic of Viet Nam, Chile and Morocco were renewed. Further annual trade plans under the existing agreements were finalised and revised schedules drawn up with the U.A.R., Ceylon, Czechoslovakia, Rumania, Hungary, U.S.S.R., Jordan, Tunisia, Iran, Iraq and Yugoslavia. An important feature of the annual trade plans as well as of revised trade schedules was that they provided for a significant rise in the existing level of trade with these countries. Besides, more of India's manufactured goods, particularly engineering goods found a special place in the schedules, though traditional items continue to predominate in export commodities. As at the end of March 1966 as many as 31 (these are with (1) Afghanistan, (2) Austria, (3) Bulgaria, (4) Ceylon, (5) Chile, (6) Czechoslovakia, (7) East Germany (German Democratic Republic), (8) France, (9) Greece, (10) Hungary, (11) Iran, (12) Iraq, (13) Italy, (14) Japan, (15) Jordan, (16) South Korea, (17) Morocco, (18) Pakistan, (19) Poland, (20) Rumania, (21) Sweden, (22) Switzerland, (23) Sudan, (24) Tunisia, (25) Tanzania, (26) U.A.R., (27) U.S.S.R., (28) Uganda, (29) Viet Nam, North, (30) West Germany (Federal Republic of Germany), and (31) Yugoslavia, trade and payments agreements were in force with different countries.

Trade relations between India and the U.S.S.R. entered a new expansionary phase with the conclusion of a new five-year trade agreement with the U.S.S.R. which envisages doubling of the trade at Rs. 150 crores each way by the end of 1970 from the 1964 level of Rs. 75 crores each way. A special feature of the new agreement is that consistent with their policy of increasing purchases of manufactured goods from the developing countries, the U.S.S.R. agreed to import from India an increasing range of products of engineering goods and products of other industries such as linoleum and PVC cloth, paints and varnishes, plastic goods, steel and wooden furniture, leather goods, sports goods, etc. besides the traditional items. The agreement also provided for the import, from the U.S.S.R. of machinery and equipment, spare parts and components for maintaining the production programme of various projects set up with Soviet assistance. The Soviet Union has also agreed to supply to India in increasing quantities essential raw materials for maintaining industrial production and economic growth of the country such as non-ferrous metals, newsprint, sulphur, fertilisers, etc.

The Board of Trade and Development, a subsidiary of the United Nations Conference on Trade and Development (UNCTAD), to which reference

was made in the last year's Report, held two sessions in 1965 and a third one in January 1966. At its first session, the Board constituted its Bureau and adopted its programme of work. It also appointed four committees viz., Committee on Commodities, Committee on Manufactures, Committee on Shipping and Committee on Invisibles and Financing, and laid down their terms of reference. India is a member of all the four Committees.

During the year, the Board considered the reports of the Committees on Commodities and on Manufactures. On the recommendation of the former, a United Nations Sugar Conference was convened in Geneva in September 1965 to negotiate a new comprehensive International Sugar Agreement. But due to the sharp divergence of opinion among the sugar exporting countries on the one hand and the sugar importing countries on the other, the conference failed to take any decision on the Agreement. An important outcome of the conference was the setting up by the sugar exporting countries of a Study Group to examine the Australian suggestion for withholding five per cent. of the exportable stocks from the market in 1966 in a bid to rally depressed prices. The Group was also to study the question of financing of stocks, export quotas and output restrictions and report to the Sugar Council before the second session of the Conference. On the recommendation of the Committee on Manufactures, the Board set up a Group on Preferences to pursue the question of granting and extending preferences in favour of developing countries and to study the methodological aspects and the best ways of implementing a non-reciprocal system of preferences. India is a member of this Group.

A significant achievement of the UNCTAD during the year was the adoption of the Convention on Transit Trade of landlocked countries by the United Nations Conference of Plenipotentiaries held in New York in June/July 1965.

At the 23rd session of the Contracting Parties to the General Agreement on Tariffs and Trade (GATT) held at Geneva from March 24 to April 6, 1966, a waiver from the most favoured-nation rule (Article 1) was granted to Australia for its scheme of introducing preferential rates of duty on imports of manufactured and semi-manufactured products from less developed countries. The scheme is important not so much for the likely expansion in trade of developing countries—for this is expected to be small—but for the principle of putting the manufacturing industries of the developing countries in a better position to compete with major industrial countries. Approval was given to three new free trade areas viz.—U.K.-Ireland, Australia-New Zealand and British Guiana-Antigua-Barbados. The session also approved full membership of the GATT for Switzerland and Yugoslavia which were hitherto provisional members.

India played an active role at the 22nd annual meeting of the ECAFE held at New Delhi in March/April 1966. The demands of the developing nations which were put forward by the Indian delegate were: (i) grant of preferences on a non-reciprocal basis in favour of developing countries, (ii) removal of all quota and non-tariff barriers and (iii) introduction of a system of repayment of credits in kind i.e. by export of goods to the industrialised countries. The developed countries were, however, noncommittal on these issues. India, therefore, took the initiative in calling a preparatory meeting of the 77 developing countries to prepare concrete plans of action in different fields for consideration at the second UNCTAD to be held in 1967.

The Council of International Coffee Organisation at its session in December 1965 failed to agree on the claims by various countries, including India, for an upward revision of basic export quotas. Instead, it approved temporary concessions in the form of waivers to some of the member countries allowing for an expansion of quotas for the coffee year 1965-66; India's quota was increased by 3,000 tonnes to 23,371 tonnes.



## FOREIGN TRADE BY COUNTRIES &amp; ECONOMIC REGIONS

| Countries                                                   | April 1965 to March 1966 |                      |
|-------------------------------------------------------------|--------------------------|----------------------|
|                                                             | Exports                  | Imports              |
| AFRICA                                                      | (Rupees)                 | (Rupees)             |
| Algeria .. .. .                                             | 37,44,428                | ..                   |
| Basutoland .. .. .                                          | 658                      | 1,23,977             |
| Bechuanaland .. .. .                                        | 270                      | ..                   |
| Burundi .. .. .                                             | 1,88,466                 | ..                   |
| Cameroons .. .. .                                           | 5,58,640                 | ..                   |
| Canary Islands .. .. .                                      | 88,778                   | ..                   |
| Cape Verde Islands .. .. .                                  | 47                       | ..                   |
| Central African Republic .. .. .                            | 55,013                   | ..                   |
| Chad Republic .. .. .                                       | 222                      | ..                   |
| Comoro Islands .. .. .                                      | 24,914                   | ..                   |
| Congo .. .. .                                               | 2,34,674                 | 1,23,83,857          |
| Congo Republic .. .. .                                      | 1,75,296                 | 1,94,820             |
| Dahomey Republic .. .. .                                    | 50,259                   | ..                   |
| Ethiopia (incl. Eritrea) .. .. .                            | 1,16,39,657              | 3,793                |
| Gabon Republic .. .. .                                      | ..                       | ..                   |
| Gambia .. .. .                                              | 24,60,345                | 64,317               |
| Ghana .. .. .                                               | 1,12,42,816              | 23,54,431            |
| Guinea Republic .. .. .                                     | 75,362                   | ..                   |
| Ivory Coast Republic .. .. .                                | 9,05,898                 | ..                   |
| Kenya .. .. .                                               | 4,86,26,732              | 4,55,92,475          |
| Liberia .. .. .                                             | 8,64,907                 | ..                   |
| Libya .. .. .                                               | 61,99,869                | 6,52,212             |
| Malagasy Republic .. .. .                                   | 7,04,360                 | 1,12,052             |
| Malawi .. .. .                                              | 33,03,468                | 3,27,858             |
| Mali Republic .. .. .                                       | 42,456                   | ..                   |
| Mauritania .. .. .                                          | 22,907                   | ..                   |
| Mauritius and Dependencies .. .. .                          | 94,17,529                | 5,44,185             |
| Morocco .. .. .                                             | 20,78,105                | 11,38,056            |
| Niger Republic .. .. .                                      | 33,701                   | ..                   |
| Nigeria .. .. .                                             | 4,00,21,518              | 21,21,407            |
| Other East African Countries .. .. .                        | 76,35,871                | 8,95,16,392          |
| Other African Countries .. .. .                             | 1,25,369                 | 10,203               |
| Reunion .. .. .                                             | 21,736                   | ..                   |
| Rhodesia .. .. .                                            | 92,27,700                | 1,79,07,762          |
| Rwanda .. .. .                                              | 2,09,679                 | ..                   |
| Sao Thome et Principe .. .. .                               | 30                       | ..                   |
| Senegal Republic .. .. .                                    | 7,82,996                 | ..                   |
| Seychelles .. .. .                                          | 9,11,485                 | 71,66,772            |
| Sierra Leone .. .. .                                        | 46,10,881                | ..                   |
| Somalia .. .. .                                             | 25,90,838                | 39,974               |
| South Africa (1) .. .. .                                    | 72,783                   | 7,385                |
| South West Africa .. .. .                                   | 52,558                   | ..                   |
| Spanish Sahara (Reo de Ore, Saguia el Hamra) .. .. .        | 28                       | ..                   |
| St. Helena and Ascension .. .. .                            | 80                       | ..                   |
| Sudan .. .. .                                               | 8,16,55,917              | 5,74,04,700          |
| Swaziland .. .. .                                           | 2,50,495                 | 1,592                |
| Tanganyika .. .. .                                          | 4,34,86,493              | 6,23,91,509          |
| Tangier .. .. .                                             | 17,587                   | 11,57,314            |
| Togoland .. .. .                                            | 3,94,941                 | ..                   |
| Tunisia .. .. .                                             | 2,16,63,299              | 3,34,07,605          |
| Uganda .. .. .                                              | 1,02,93,971              | 1,24,07,580          |
| United Arab Republic .. .. .                                | 27,07,04,778             | 19,99,37,730         |
| Upper Volta Republic .. .. .                                | ..                       | ..                   |
| West Africa (Spanish) .. .. .                               | 24,64,001                | ..                   |
| Zambia .. .. .                                              | 65,82,084                | 21,15,056            |
| Zanzibar & Pemba .. .. .                                    | 26,21,728                | 93,42,334            |
| <b>TOTAL (African Countries) ..</b>                         | <b>60,91,38,623</b>      | <b>55,84,27,348</b>  |
| <b>NORTH AMERICA</b>                                        |                          |                      |
| Canada (Incl. New Found-land and Coast of Labrador) .. .. . | 20,31,16,115             | 30,51,48,545         |
| United States of America .. .. .                            | 146,98,78,991            | 525,34,22,418        |
| <b>Total (North America) ..</b>                             | <b>167,29,95,106</b>     | <b>555,85,70,963</b> |
| <b>LATIN AMERICA</b>                                        |                          |                      |
| Argentina (incl. the Atlantic Coast of Patagonia) .. .. .   | 4,17,86,186              | 27,51,210            |
| Bolivia .. .. .                                             | 16,57,396                | 25,76,180            |
| Brazil .. .. .                                              | 23,24,039                | 15,67,388            |
| Chile (incl. Pacific Coast of Patagonia) .. .. .            | 1,19,05,841              | 58,14,616            |
| Colombia .. .. .                                            | 2,70,549                 | 22,52,728            |
| Costa Rica .. .. .                                          | 4,09,215                 | ..                   |
| Cuba .. .. .                                                | 29,04,954                | ..                   |
| Dominican Republic .. .. .                                  | 46,08,034                | ..                   |
| Ecuador .. .. .                                             | 22,15,127                | ..                   |

## FOREIGN TRADE BY COUNTRIES &amp; ECONOMIC REGIONS

| Countries                                                                     | April 1965 to March 1966 |                      |
|-------------------------------------------------------------------------------|--------------------------|----------------------|
|                                                                               | Exports                  | Imports              |
|                                                                               | (Rupees)                 | (Rupees)             |
| Guatemala .. .. .                                                             | 10,510                   | ..                   |
| Haiti .. .. .                                                                 | 11,35,471                | ..                   |
| Honduras, British .. .. .                                                     | 23,29,752                | ..                   |
| Mexico .. .. .                                                                | 32,20,540                | 40,20,817            |
| Nicaragua .. .. .                                                             | 32,85,890                | ..                   |
| Panama Canal Zone .. .. .                                                     | 4,04,098                 | 829                  |
| Panama Republic .. .. .                                                       | 10,74,139                | ..                   |
| Paraguay .. .. .                                                              | 18,94,733                | 1,46,009             |
| Peru .. .. .                                                                  | 1,38,10,925              | 1,36,59,577          |
| Salvador .. .. .                                                              | 93,379                   | ..                   |
| Uruguay .. .. .                                                               | 85,87,939                | 6,73,898             |
| Venezuela .. .. .                                                             | 2,91,731                 | 44,538               |
| <b>TOTAL (Latin American countries) .. .. .</b>                               | <b>10,42,20,448</b>      | <b>3,35,07,290</b>   |
| <b>OTHER AMERICAN COUNTRIES</b>                                               |                          |                      |
| American Samoa (incl. Swains Islands) .. .. .                                 | 61,216                   | ..                   |
| Bahamas .. .. .                                                               | 1,05,435                 | 52                   |
| Barbados .. .. .                                                              | 6,61,958                 | 7                    |
| Bermuda .. .. .                                                               | 42,378                   | ..                   |
| French West Indies (Guadeloupe and Martinique) .. .. .                        | 14,791                   | ..                   |
| Guiana, British .. .. .                                                       | 35,43,019                | ..                   |
| Guiana, French .. .. .                                                        | 11,623                   | ..                   |
| Honduras .. .. .                                                              | 8,31,418                 | ..                   |
| Jamaica and Dependencies .. .. .                                              | 23,50,208                | 25,197               |
| Leeward Islands .. .. .                                                       | 71,992                   | 40                   |
| Netherlands Antilles .. .. .                                                  | 1,24,806                 | 10,399               |
| Puerto Rico .. .. .                                                           | 19,06,124                | 24,56,607            |
| St. Pierre Et. Miquelon .. .. .                                               | 16,650                   | ..                   |
| Surinam .. .. .                                                               | 4,85,911                 | ..                   |
| Trinidad and Tobago .. .. .                                                   | 36,22,915                | 21,027               |
| Virgin Islands of the United States .. .. .                                   | 1,01,035                 | ..                   |
| Windward Islands .. .. .                                                      | 22,19,028                | 1,216                |
| <b>TOTAL (Other American Countries) .. .. .</b>                               | <b>1,61,70,513</b>       | <b>25,14,545</b>     |
| <b>ECAFE COUNTRIES (incl. China)</b>                                          |                          |                      |
| Afghanistan .. .. .                                                           | 5,58,54,718              | 4,22,50,143          |
| Australia .. .. .                                                             | 17,48,45,119             | 2,41,32,455          |
| Burma .. .. .                                                                 | 3,57,66,355              | 9,37,81,238          |
| Cambodia .. .. .                                                              | 1,02,40,573              | 65,28,750            |
| Ceylon .. .. .                                                                | 12,82,41,138             | 4,01,70,100          |
| China (incl. Manchuria but excl. Hongkong and Macao) .. .. .                  | 287                      | 21,958               |
| Democratic Republic of Viet Nam .. .. .                                       | 16,985                   | 64,958               |
| Formosa .. .. .                                                               | 14,16,064                | 6,32,648             |
| Hongkong .. .. .                                                              | 5,67,16,223              | 37,47,115            |
| Indonesia .. .. .                                                             | 81,04,090                | 2,21,81,123          |
| Iran .. .. .                                                                  | 5,94,58,142              | 34,08,21,339         |
| Japan .. .. .                                                                 | 56,91,79,574             | 72,18,89,666         |
| Korea (North) .. .. .                                                         | ..                       | 3,77,181             |
| Korea (South) .. .. .                                                         | 30,76,870                | 6,90,414             |
| Laos .. .. .                                                                  | 3,02,675                 | 198                  |
| Malaysia .. .. .                                                              | 12,18,07,533             | 12,76,51,063         |
| Nepal .. .. .                                                                 | 19,63,71,050             | 7,48,51,230          |
| New Zealand .. .. .                                                           | 6,57,35,797              | 2,00,87,296          |
| Pakistan, (East) .. .. .                                                      | 3,31,93,474              | 4,79,22,842          |
| Pakistan, (West) .. .. .                                                      | 1,56,00,933              | 85,80,062            |
| Philippines .. .. .                                                           | 26,57,106                | 17,23,785            |
| South Viet Nam .. .. .                                                        | 2,86,84,985              | 10,853               |
| Thailand .. .. .                                                              | 1,57,60,428              | 28,89,91,479         |
| <b>TOTAL (ECAFE Countries) ..</b>                                             | <b>158,30,30,119</b>     | <b>215,42,95,896</b> |
| <b>OTHER ASIAN AND OCEANIAN COUNTRIES AND ANTARCTIC &amp; ARCTIC REGIONS.</b> |                          |                      |
| Aden (Incl. Protectorate) .. .. .                                             | 5,89,91,878              | 84,49,008            |
| Antarctic Region .. .. .                                                      | ..                       | ..                   |
| Arctic Region .. .. .                                                         | ..                       | ..                   |

(1) Trade limited to certain commodities as permitted by the Govt. of India.



FOREIGN TRADE BY COUNTRIES & ECONOMIC  
REGIONS—Contd.

| Countries                                                                     | April 1965 to March 1966 |               |
|-------------------------------------------------------------------------------|--------------------------|---------------|
|                                                                               | Exports                  | Imports       |
|                                                                               | (Rupees)                 | (Rupees)      |
| OTHER ASIAN AND OCEANIAN COUNTRIES AND ANTARCTIC & ARCTIC REGIONS—Contd.      |                          |               |
| Bahrain Islands .. .. .                                                       | 1,63,56,511              | 1,97,06,290   |
| Cook Islands .. .. .                                                          | 63,348                   | ..            |
| Cyprus .. .. .                                                                | 52,45,559                | 19,810        |
| Falkland Islands .. .. .                                                      | 20,082                   | ..            |
| Fiji Islands .. .. .                                                          | 67,57,411                | 2,09,915      |
| Fisheries .. .. .                                                             | 40                       | ..            |
| French Oceania (incl. <i>inter alia</i> Tahiti) .. .. .                       | 92,316                   | 14            |
| Gilbert & Ellice Islands .. .. .                                              | 4,606                    | 1,514         |
| Guam .. .. .                                                                  | 3,905                    | ..            |
| Iraq .. .. .                                                                  | 4,32,47,773              | 2,24,60,248   |
| Israel .. .. .                                                                | 6,96,293                 | 11,16,096     |
| Jordan .. .. .                                                                | 1,03,36,661              | 1,47,10,962   |
| Kuwait .. .. .                                                                | 4,66,90,456              | 3,83,607      |
| Lebanon .. .. .                                                               | 77,11,312                | 8,48,813      |
| Macao .. .. .                                                                 | 3,826                    | ..            |
| Maldives .. .. .                                                              | 6,80,624                 | 7,33,663      |
| Mongolian People's Republic .. .. .                                           | 270                      | ..            |
| Muscat & Oman .. .. .                                                         | 48,97,276                | 6,94,450      |
| Nauru .. .. .                                                                 | ..                       | ..            |
| New Caledonia (French) .. .. .                                                | 1,02,841                 | ..            |
| New Guinea .. .. .                                                            | 21,50,472                | ..            |
| New Hebrides .. .. .                                                          | 12,818                   | ..            |
| Niue Island (N.Z.) .. .. .                                                    | 25                       | ..            |
| Norfolk Island .. .. .                                                        | 822                      | ..            |
| Other Pacific Islands .. .. .                                                 | 35,929                   | ..            |
| Portuguese Timor .. .. .                                                      | 57,220                   | ..            |
| Qatar & Trucial Oman .. .. .                                                  | 2,69,09,927              | 2,18,518      |
| Saudi Arabia .. .. .                                                          | 3,93,84,698              | 8,66,03,234   |
| Solomon Islands (British) .. .. .                                             | 1,31,745                 | ..            |
| Syria .. .. .                                                                 | 1,16,20,235              | 24,27,828     |
| Territory of Papua .. .. .                                                    | 2,33,706                 | ..            |
| Tibet .. .. .                                                                 | ..                       | ..            |
| Tokelau Island .. .. .                                                        | 21,88,552                | ..            |
| Tonga .. .. .                                                                 | 80,581                   | ..            |
| Western Samoa (N.Z.) .. .. .                                                  | 2,13,211                 | ..            |
| Yemen .. .. .                                                                 | 75,879                   | 3,071         |
| TOTAL (other Asian Oceanian Countries and Antarctic & Arctic Regions) .. .. . | 28,69,98,808             | 15,88,87,650  |
| EAST EUROPEAN COUNTRIES                                                       |                          |               |
| Bulgaria .. .. .                                                              | 2,19,04,402              | 4,00,34,250   |
| Czechoslovakia .. .. .                                                        | 15,81,58,346             | 21,15,21,547  |
| German Democratic Republic .. .. .                                            | 13,71,81,432             | 13,03,93,223  |
| Hungary .. .. .                                                               | 6,90,85,086              | 7,59,74,431   |
| Poland .. .. .                                                                | 9,11,81,563              | 13,67,02,624  |
| Rumania .. .. .                                                               | 4,51,21,700              | 2,14,98,853   |
| Union of Soviet Socialist Republic .. .. .                                    | 92,87,30,896             | 82,52,61,089  |
| Yugoslavia .. .. .                                                            | 11,22,48,149             | 11,85,39,661  |
| TOTAL (East European Countries) .. .. .                                       | 156,36,11,074            | 155,99,26,678 |
| EUROPEAN COMMON MARKET COUNTRIES                                              |                          |               |
| Belgium .. .. .                                                               | 9,47,61,107              | 11,52,90,232  |
| France .. .. .                                                                | 11,03,80,692             | 17,62,45,359  |
| Federal Republic of Germany .. .. .                                           | 17,98,42,096             | 136,92,16,748 |
| Italy .. .. .                                                                 | 8,39,07,335              | 19,16,89,819  |
| Luxembourg .. .. .                                                            | 2,916                    | 2,51,572      |
| Netherlands .. .. .                                                           | 7,89,58,226              | 19,66,97,686  |
| TOTAL (E.C.M. Countries) .. .. .                                              | 54,78,52,372             | 204,93,91,366 |
| EUROPEAN FREE TRADE AREA COUNTRIES                                            |                          |               |
| Austria .. .. .                                                               | 36,62,028                | 3,14,57,660   |
| Denmark .. .. .                                                               | 2,61,43,650              | 2,40,18,862   |
| Norway .. .. .                                                                | 1,39,97,491              | 1,56,15,153   |

FOREIGN TRADE BY COUNTRIES & ECONOMIC  
REGIONS—Contd.

| Countries                                   | April 1965 to March 1966 |                 |
|---------------------------------------------|--------------------------|-----------------|
|                                             | Exports                  | Imports         |
|                                             | (Rupees)                 | (Rupees)        |
| Portugal (incl. Azores and Madeira) .. .. . | 20,15,431                | 23,79,808       |
| Sweden .. .. .                              | 1,70,42,515              | 10,63,12,561    |
| Switzerland .. .. .                         | 3,52,18,783              | 14,51,43,884    |
| United Kingdom .. .. .                      | 145,49,58,375            | 149,10,85,233   |
| TOTAL (E. F. T. Area Countries) .. .. .     | 155,39,38,273            | 181,60,08,161   |
| OTHER EUROPEAN COUNTRIES                    |                          |                 |
| Albania .. .. .                             | 823                      | ..              |
| Andorra .. .. .                             | ..                       | ..              |
| Channel Islands .. .. .                     | 24,959                   | ..              |
| Faeroe Islands .. .. .                      | 11,155                   | ..              |
| Finland .. .. .                             | 45,82,887                | 1,83,80,886     |
| Gibraltar .. .. .                           | 1,22,430                 | 2,053           |
| Greece (incl. Crete and Dodecanese) .. .. . | 90,62,855                | 1,21,631        |
| Greenland .. .. .                           | 3,108                    | ..              |
| Iceland .. .. .                             | 9,25,068                 | ..              |
| Irish Republic .. .. .                      | 4,30,49,932              | 3,84,915        |
| Liechtenstein .. .. .                       | 180                      | ..              |
| Malta & Gozo .. .. .                        | 21,23,060                | 1,10,098        |
| Spain .. .. .                               | 1,04,80,657              | 86,86,162       |
| Spitzbergen .. .. .                         | ..                       | ..              |
| Turkey .. .. .                              | 1,26,01,646              | 5,30,025        |
| TOTAL (Other European Countries) .. .. .    | 8,29,88,780              | 2,82,15,770     |
| GRAND TOTAL .. .. .                         | 805,55,97,709            | 1,394,04,80,002 |

## SUMMARY OF INDIA'S FOREIGN TRADE

| Sections, Divisions and Groups                                                                    | April 1965 to March 1966 |               |
|---------------------------------------------------------------------------------------------------|--------------------------|---------------|
|                                                                                                   | Exports                  | Imports       |
|                                                                                                   | (Rupees)                 | (Rupees)      |
| FOOD                                                                                              |                          |               |
| Live animals .. .. .                                                                              | 18,17,290                | 10,34,793     |
| Meat, fresh, chilled or frozen .. .. .                                                            | 39,40,788                | 2,923         |
| Meat, dried, salted, smoked or cooked, not canned .. .. .                                         | 23,783                   | 50,639        |
| Meat canned and meat preparations, canned and not canned .. .. .                                  | 2,21,023                 | 24,460        |
| Milk and cream .. .. .                                                                            | 78,002                   | 6,47,72,099   |
| Butter .. .. .                                                                                    | 74,070                   | 68,86,534     |
| Cheese and curd .. .. .                                                                           | 167                      | 2,94,008      |
| Eggs .. .. .                                                                                      | 460                      | 10,755        |
| Fish, fresh or simply preserved .. .. .                                                           | 5,61,41,147              | 17,58,830     |
| Fish and fish preparations, canned or not (incl. crustacea and molluscs) .. .. .                  | 97,73,343                | 39,609        |
| Wheat and meslin (incl. spelt), unmilled .. .. .                                                  | 28,750                   | 264,72,78,100 |
| Rice .. .. .                                                                                      | 26,12,549                | 37,71,00,000  |
| Barley, unmilled .. .. .                                                                          | 18,637                   | ..            |
| Maize (corn), unmilled .. .. .                                                                    | 14,923                   | ..            |
| Cereals, unmilled, other than wheat, rice, barley and maize .. .. .                               | 2,784                    | 6,15,00,000   |
| Meal and flour of wheat or of meslin .. .. .                                                      | 3,95,025                 | ..            |
| Meal and flour of cereal, except meal and flour of wheat or meslin .. .. .                        | 1,294                    | ..            |
| Cereal preparations including preparations from flour and starch of fruits and vegetables .. .. . | 30,40,393                | 2,98,533      |



## SUMMARY OF INDIA'S FOREIGN TRADE—Contd.

| Sections, Divisions and Groups                                                                                                                         | April 1965 to March 1966 |                      |
|--------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------|----------------------|
|                                                                                                                                                        | Exports                  | Imports              |
|                                                                                                                                                        | (Rupees)                 | (Rupees)             |
| <b>FOOD—Contd.</b>                                                                                                                                     |                          |                      |
| Pulses and flour thereof ..                                                                                                                            | 1,17,19,011              | 49,67,781            |
| Fruits and nuts, (not including oil nuts) fresh or dried ..                                                                                            | 29,23,59,197             | 17,47,91,846         |
| Dried fruits, including artificially dehydrated ..                                                                                                     | 15,66,608                | 5,01,43,049          |
| Fruits preserved and fruit preparations ..                                                                                                             | 49,58,370                | 41,431               |
| Vegetables, fresh, frozen or simply preserved (excl. dried leguminous vegetables) roots, tubers and other edible vegetable products, fresh or dried .. | 2,83,90,323              | 17,58,276            |
| Vegetables, roots and tubers, preserved or prepared, n.e.s. whether or not canned ..                                                                   | 59,99,972                | 3,20,989             |
| Sugar and honey ..                                                                                                                                     | 11,83,79,596             | 28,88,312            |
| Sugar confectionery and other sugar preparations (except chocolate confectionery) ..                                                                   | 8,22,312                 | 39,048               |
| Coffee ..                                                                                                                                              | 12,94,06,855             | ..                   |
| Cocoa ..                                                                                                                                               | 4,24,786                 | 13,25,189            |
| Chocolate and other food preparations containing cocoa or chocolate n.e.s. ..                                                                          | 8,70,317                 | 4,935                |
| Tea and mate ..                                                                                                                                        | 114,83,74,267            | 2,500                |
| Spices ..                                                                                                                                              | 23,08,92,593             | 59,80,940            |
| Feeding stuff for animals (not including unmilled cereals) ..                                                                                          | 35,96,77,185             | 35,30,433            |
| Margarine and shortenings ..                                                                                                                           | 14,00,782                | 14,01,962            |
| Food preparations, n.e.s. ..                                                                                                                           | ..                       | ..                   |
| <b>TOTAL OF FOOD ..</b>                                                                                                                                | <b>241,38,26,502</b>     | <b>340,82,47,974</b> |
| <b>BEVERAGES AND TOBACCO:</b>                                                                                                                          |                          |                      |
| Non-alcoholic beverages ..                                                                                                                             | 52,99,681                | 95,442               |
| Alcoholic beverages ..                                                                                                                                 | 69,388                   | 35,64,835            |
| Tobacco unmanufactured ..                                                                                                                              | 19,57,59,347             | 2,26,857             |
| Tobacco manufactured ..                                                                                                                                | 1,58,26,290              | 16,84,677            |
| <b>TOTAL OF BEVERAGES AND TOBACCO ..</b>                                                                                                               | <b>21,69,54,706</b>      | <b>55,71,811</b>     |
| <b>CRUDE MATERIALS, IN-EDIBLE, EXCEPT FUELS:</b>                                                                                                       |                          |                      |
| Hides, skins and fur skins, undressed ..                                                                                                               | 9,55,16,836              | 2,35,49,853          |
| Fur skins, undressed ..                                                                                                                                | 30,31,309                | 1,81,421             |
| Oilseeds, oilnuts and oil kernels ..                                                                                                                   | 23,32,038                | 7,28,26,762          |
| Crude rubber including synthetic and reclaimed ..                                                                                                      | 1,55,833                 | 4,89,60,829          |
| Fuelwood and charcoal ..                                                                                                                               | 45,800                   | 2,77,674             |
| Wood in the rough or roughly squared ..                                                                                                                | 1,88,75,628              | 93,60,775            |
| Wood shaped or simply worked ..                                                                                                                        | 1,07,647                 | 52,65,738            |
| Cork, raw and waste ..                                                                                                                                 | 47,506                   | 33,09,490            |
| Pulp and waste paper ..                                                                                                                                | 3,24,074                 | 5,88,04,009          |
| Silk ..                                                                                                                                                | 40,83,786                | 33,50,754            |
| Wool and other animal hair ..                                                                                                                          | 7,31,03,770              | 5,12,13,614          |
| Cotton ..                                                                                                                                              | 13,08,88,469             | 46,20,59,871         |
| Jute ..                                                                                                                                                | 3,08,29,877              | 5,59,89,406          |
| Vegetable fibres, except cotton and jute ..                                                                                                            | 61,93,387                | 17,01,97,162         |
| Synthetic and regenerated fibres (man-made fibres) ..                                                                                                  | 5,49,242                 | 2,07,67,134          |
| Waste materials from textile fabrics, including rags ..                                                                                                | 41,47,025                | 84,20,191            |
| Fertilizers, crude ..                                                                                                                                  | 1,426                    | 5,92,32,310          |
| Stone, sand and gravel ..                                                                                                                              | 30,32,729                | 10,50,458            |
| Sulphur and unroasted iron pyrites ..                                                                                                                  | ..                       | 6,80,64,601          |
| Natural abrasives (incl. industrial diamonds) ..                                                                                                       | 4,089                    | 55,74,179            |
| Other crude minerals ..                                                                                                                                | 14,39,04,216             | 4,10,49,608          |
| Iron ore and concentrates ..                                                                                                                           | 42,09,77,212             | ..                   |
| Iron and steel scrap ..                                                                                                                                | 5,49,95,196              | 47,82,806            |

## SUMMARY OF INDIA'S FOREIGN TRADE—Contd.

| Sections, Divisions and Groups                                                           | April 1965 to March 1966 |                      |
|------------------------------------------------------------------------------------------|--------------------------|----------------------|
|                                                                                          | Exports                  | Imports              |
|                                                                                          | (Rupees)                 | (Rupees)             |
| <b>Ores and concentrates of non-ferrous base metals ..</b>                               |                          |                      |
| Non-ferrous metal scrap ..                                                               | 11,78,39,055             | 50,47,113            |
| Silver and Platinum ores ..                                                              | 10,37,138                | 1,08,97,486          |
| Ores and concentrates of uranium and thorium ..                                          | 16,159                   | 1,765                |
| Crude animal materials, n.e.s. ..                                                        | 6,92,75,999              | 25,77,658            |
| Crude vegetable materials, n.e.s. ..                                                     | 16,77,81,311             | 2,27,35,168          |
| <b>TOTAL OF CRUDE MATERIALS, ETC. ..</b>                                                 | <b>134,90,96,756</b>     | <b>121,55,47,835</b> |
| <b>MINERAL FUELS, LUBRICANTS AND RELATED MATERIALS</b>                                   |                          |                      |
| Coal, coke and briquettes ..                                                             | 2,85,11,044              | 17,70,932            |
| Petroleum, crude and partly refined (excl. natural gasoline) ..                          | ..                       | 34,87,42,478         |
| Petroleum products ..                                                                    | 6,46,45,803              | 33,28,88,522         |
| Gas, natural and manufactured ..                                                         | 4,693                    | 60,781               |
| Electric Energy ..                                                                       | ..                       | 2,494                |
| <b>TOTAL OF FUELS, ETC. ..</b>                                                           | <b>9,31,61,540</b>       | <b>68,34,65,207</b>  |
| <b>ANIMAL AND VEGETABLE OILS AND FATS</b>                                                |                          |                      |
| Animal oils and fats ..                                                                  | 1,00,897                 | 5,83,63,167          |
| Fixed vegetable oils, soft ..                                                            | 19,88,802                | 8,07,46,015          |
| Other fixed vegetable oils ..                                                            | 3,88,65,887              | 75,57,222            |
| Animal and vegetable oils, and fats processed and waxes of animal or vegetable origin .. | 45,07,359                | 67,89,215            |
| <b>TOTAL OF ANIMAL AND VEGETABLE OILS AND FATS ..</b>                                    | <b>4,54,62,945</b>       | <b>15,34,55,619</b>  |
| <b>CHEMICALS</b>                                                                         |                          |                      |
| Organic chemicals ..                                                                     | 1,00,04,750              | 20,97,66,914         |
| Inorganic chemicals, elements, oxides and halogen salts ..                               | 29,48,519                | 9,93,25,944          |
| Other inorganic chemicals ..                                                             | 59,73,497                | 4,88,05,625          |
| Radioactive and associated materials ..                                                  | 37,26,900                | ..                   |
| Mineral tar and crude chemicals from coal, petroleum and natural gas ..                  | 55,07,861                | 23,06,362            |
| Dyeing and tanning extracts, and synthetic tanning materials ..                          | 12,28,185                | 1,70,10,433          |
| Pigments, paints, varnishes and related materials ..                                     | 72,21,240                | 1,12,47,672          |
| Synthetic organic dyestuffs, natural indigo and colour lakes ..                          | 35,49,038                | 3,75,25,471          |
| Medicinal and pharmaceutical products ..                                                 | 2,63,96,435              | 8,76,39,587          |
| Essential oils, perfumes and flavour materials ..                                        | 2,32,93,670              | 95,04,718            |
| Perfumery and cosmetics, dentifrices and other toilet preparations (except soaps) ..     | 68,95,641                | 1,34,856             |
| Soaps, cleansing and polishing preparations ..                                           | 59,50,962                | 8,44,404             |
| Fertilizers manufactured ..                                                              | 6,400                    | 38,89,94,472         |
| Explosives and pyrotechnic products ..                                                   | 79,176                   | 85,33,869            |
| Plastic materials, regenerated cellulose and artificial resins ..                        | 48,17,093                | 5,80,08,629          |
| Chemical materials and products ..                                                       | 70,50,079                | 6,88,23,388          |
| <b>TOTAL OF CHEMICALS ..</b>                                                             | <b>11,46,49,446</b>      | <b>104,84,72,344</b> |



## SUMMARY OF INDIA'S FOREIGN TRADE—Contd.

| Sections, Divisions and Groups                                                                          | April 1965 to March 1966 |              |
|---------------------------------------------------------------------------------------------------------|--------------------------|--------------|
|                                                                                                         | Exports                  | Imports      |
|                                                                                                         | (Rupees)                 | (Rupees)     |
| <b>MANUFACTURED GOODS CLASSIFIED CHIEFLY BY MATERIAL</b>                                                |                          |              |
| Leather .. .. .                                                                                         | 28,21,46,375             | 4,31,584     |
| Manufactures of leather or of artificial or reconstituted leather, n.e.s. .. .                          | 23,05,106                | 1,48,950     |
| Furs, skins tanned or dressed (incl. dyed) .. .                                                         | 1,02,028                 | 75,874       |
| Materials of rubber .. .                                                                                | 9,57,533                 | 25,62,413    |
| Articles of rubber, n.e.s. .. .                                                                         | 2,09,65,237              | 86,19,542    |
| Veneers, plywood, boards, improved or reconstituted wood and other wood, worked, n.e.s. .. .            | 3,09,374                 | 5,25,337     |
| Wood manufactures, n.e.s. .. .                                                                          | 6,16,092                 | 41,19,853    |
| Cork manufactures .. .                                                                                  | 55,574                   | 6,28,766     |
| Paper and paper-board .. .                                                                              | 55,60,002                | 13,12,76,989 |
| Articles made of paper pulp, of paper and paper-board .. .                                              | 64,72,986                | 25,23,900    |
| Textile yarn and thread .. .                                                                            | 15,06,59,994             | 5,91,84,981  |
| Textile fabric woven (not including narrow and special fabrics) other than cotton and jute fabrics .. . | 7,42,15,354              | 30,50,119    |
| Tulle, lace, embroidery, ribbons, trimmings and other small wares except of cotton and jute .. .        | 27,12,872                | 2,35,656     |
| Special textile fabrics and related products except of cotton and jute .. .                             | 23,19,335                | 1,37,17,205  |
| Made-up articles wholly or chiefly of textile materials, n.e.s. .. .                                    | 27,58,054                | 3,63,365     |
| Floor coverings, tapestries etc. other than cotton and jute .. .                                        | 8,28,86,384              | 4,38,805     |
| Cotton manufactures excluding yarn, thread and clothing .. .                                            | 63,29,00,866             | 29,06,066    |
| Jute manufactures excluding twist and yarn .. .                                                         | 181,63,22,895            | 1,93,75,573  |
| Lime, cement and fabricated building materials, except glass and clay materials .. .                    | 47,96,743                | 20,96,929    |
| Clay construction materials and refractory construction materials .. .                                  | 3,68,399                 | 87,45,186    |
| Mineral manufactures, n.e.s. .. .                                                                       | 92,91,998                | 2,46,83,378  |
| Glass .. .                                                                                              | 11,36,312                | 85,64,500    |
| Glassware .. .                                                                                          | 23,68,823                | 39,52,172    |
| Pottery .. .                                                                                            | 30,946                   | 2,17,806     |
| Pearls and precious and semi-precious stones, unworked or worked .. .                                   | 14,76,81,224             | 1,48,95,083  |
| <b>Iron &amp; Steel :</b>                                                                               |                          |              |
| Pig iron, spiegeleisen, sponge-iron, iron and steel powders and short and ferro-alloys .. .             | 4,28,71,980              | 2,92,87,098  |
| Ingots and other primary (incl. blanks for tubes and pipes) of iron and steel .. .                      | 10,15,554                | 3,38,18,070  |
| Iron and steel bars, rods, angles shapes and sections (incl. sheet piling) .. .                         | 4,63,76,711              | 21,20,64,983 |
| Universals, plates and sheets of iron or steel .. .                                                     | 7,12,989                 | 42,72,02,487 |
| Hoop and strip of iron or steel .. .                                                                    | 73,236                   | 6,04,75,450  |
| Rails and railway track construction material of iron or steel .. .                                     | 98,36,125                | 13,19,706    |
| Iron and steel wire (incl. wire rod) .. .                                                               | 2,11,471                 | 5,30,49,531  |
| Tubes, pipes and fittings of iron or steel .. .                                                         | 2,43,52,121              | 10,74,90,500 |
| Iron and steel castings and forgings, unworked, n.e.s. .. .                                             | 5,83,299                 | 5,29,49,925  |
| Silver, platinum and other metals of the platinum group .. .                                            | 1,911                    | 29,63,344    |
| Copper .. .                                                                                             | 48,95,293                | 33,32,24,814 |

## SUMMARY OF INDIA'S FOREIGN TRADE—Contd.

| Sections, Divisions and Groups                                                           | April 1965 to March 1966 |                      |
|------------------------------------------------------------------------------------------|--------------------------|----------------------|
|                                                                                          | Exports                  | Imports              |
|                                                                                          | (Rupees)                 | (Rupees)             |
| Nickel .. .. .                                                                           | 1,61,855                 | 1,86,16,735          |
| Aluminium .. .. .                                                                        | 32,04,740                | 6,28,82,586          |
| Lead .. .. .                                                                             | 16,301                   | 5,72,67,724          |
| Zinc .. .. .                                                                             | 92,492                   | 12,83,74,113         |
| Tin .. .. .                                                                              | 61,341                   | 7,16,86,833          |
| Uranium and thorium and their alloys .. .. .                                             | ..                       | ..                   |
| Miscellaneous non-ferrous base metals employed in metallurgy .. .. .                     | 6,07,182                 | 1,14,82,265          |
| Finished structural parts and structures .. .. .                                         | 4,78,481                 | 3,64,54,270          |
| Metal containers for storage and transport .. .. .                                       | 12,36,101                | 1,40,06,403          |
| Wire products (excluding electric) and fencing grills .. .                               | 10,12,840                | 2,59,42,615          |
| Nails, screws, nuts, bolts, rivets and similar articles of iron, steel or of copper .. . | 24,68,436                | 1,19,07,391          |
| Tools for use in the hand or in machines .. .. .                                         | 63,70,168                | 5,47,98,260          |
| Cutlery .. .. .                                                                          | 25,38,414                | 4,77,797             |
| Household equipment of base metals .. .. .                                               | 1,31,10,589              | 21,14,330            |
| Manufactures of metals, n.e.s. .. .                                                      | 1,76,84,102              | 3,58,85,574          |
| <b>TOTAL OF MANUFACTURED GOODS, ETC. .. .</b>                                            | <b>342,98,14,168</b>     | <b>215,86,32,836</b> |
| <b>MACHINERY AND TRANSPORT EQUIPMENT</b>                                                 |                          |                      |
| Power generating (except electric) machinery .. .. .                                     | 1,49,93,643              | 39,36,80,873         |
| Agricultural machinery and implements .. .. .                                            | 6,20,640                 | 9,99,01,935          |
| Office machines .. .. .                                                                  | 48,87,534                | 4,12,35,151          |
| Metal working machinery .. .                                                             | 24,26,761                | 43,17,30,120         |
| Textile and leather machinery .. .                                                       | 82,08,008                | 31,60,09,019         |
| Machines for special industries .. .                                                     | 40,56,563                | 30,03,74,005         |
| Machinery and appliances (other than electrical) and machine parts, n.e.s. .. .          | 1,24,37,589              | 174,14,96,051        |
| Electrical power machinery and switch gear .. .. .                                       | 32,99,034                | 47,07,91,548         |
| Equipment for distributing electricity .. .. .                                           | 42,14,197                | 8,09,01,432          |
| Telecommunication apparatus .. .                                                         | 24,81,862                | 10,89,15,000         |
| Domestic electric equipment .. .                                                         | 98,41,149                | 38,39,427            |
| Electric apparatus for medical purposes .. .. .                                          | 27,984                   | 1,17,53,820          |
| Other electrical machinery and apparatus .. .. .                                         | 1,21,56,635              | 18,90,82,288         |
| Railway vehicles .. .. .                                                                 | 1,41,959                 | 24,87,44,944         |
| Road motor vehicles .. .. .                                                              | 1,15,92,444              | 32,61,90,101         |
| Road vehicles other than motor vehicles .. .. .                                          | 1,22,95,993              | 83,77,618            |
| Aircraft .. .. .                                                                         | 8,80,469                 | 6,63,18,883          |
| Ships and Boats .. .. .                                                                  | 68,523                   | 4,93,34,151          |
| <b>TOTAL OF MACHINERY AND TRANSPORT ETC. .. .</b>                                        | <b>10,46,30,987</b>      | <b>489,46,77,766</b> |
| <b>MISCELLANEOUS MANUFACTURED ARTICLES</b>                                               |                          |                      |
| Sanitary, plumbing, heating and lighting fixtures and fittings .. .. .                   | 21,02,152                | 17,61,206            |
| Furniture .. .. .                                                                        | 27,23,748                | 11,15,577            |
| Travel goods, handbags and similar articles .. .. .                                      | 8,29,440                 | 1,78,314             |
| Clothing except fur clothing .. .                                                        | 6,38,32,280              | 2,97,270             |
| Fur clothing not including hats, caps or gloves and other articles made of fur skin .. . | 2,917                    | ..                   |
| Footwear .. .. .                                                                         | 5,24,57,616              | 10,455               |
| Scientific, medical, optical measuring and controlling instruments and apparatus .. .    | 17,10,532                | 8,77,01,358          |



## SUMMARY OF INDIA'S FOREIGN TRADE—Contd.

| Sections, Divisions and Groups                                                            | April 1965 to March 1966 |                     |
|-------------------------------------------------------------------------------------------|--------------------------|---------------------|
|                                                                                           | Exports                  | Imports             |
|                                                                                           | (Rupees)                 | (Rupees)            |
| <b>MISCELLANEOUS MANUFACTURED ARTICLES—Contd.</b>                                         |                          |                     |
| Photographic and cinematographic supplies ..                                              | 7,79,760                 | 4,56,14,578         |
| Developed cinematographic films ..                                                        | 1,63,93,776              | 20,66,811           |
| Watches and clocks ..                                                                     | 92,625                   | 37,72,509           |
| Musical instruments, sound recorders and reproducers and parts and accessories thereof .. | 27,63,376                | 23,89,016           |
| Printed matter ..                                                                         | 86,29,682                | 3,21,26,711         |
| Articles of artificial plastic materials, n.e.s. ..                                       | 39,70,896                | 18,17,599           |
| Perambulators, toys, games and sporting goods ..                                          | 28,80,613                | 11,06,822           |
| Office and stationary supplies ..                                                         | 12,32,107                | 8,46,195            |
| Works of art, collectors' pieces and antiques ..                                          | 3,56,97,818              | 4,76,643            |
| Jewellery and goldsmith & silversmiths' ware ..                                           | 1,23,08,326              | 11,25,850           |
| Manufactured articles, n.e.s. ..                                                          | 75,91,929                | 37,72,074           |
| <b>TOTAL OF MISCELLANEOUS MANUFACTURED ARTICLES ..</b>                                    | <b>21,59,99,582</b>      | <b>18,61,78,997</b> |

## SUMMARY OF INDIA'S FOREIGN TRADE—Contd.

| Sections, Divisions and Groups                                          | April 1965 to March 1966 |                        |
|-------------------------------------------------------------------------|--------------------------|------------------------|
|                                                                         | Exports                  | Imports                |
|                                                                         | (Rupees)                 | (Rupees)               |
| <b>MISCELLANEOUS TRANSACTIONS AND COMMODITIES, N.E.S.</b>               |                          |                        |
| Postal packages, not classified according to kind ..                    | 2,29,07,183              | 4,14,57,882            |
| Special transactions not classified according to kind ..                | 95,51,142                | 12,40,32,451           |
| Animals, n.e.s. (incl. zoo animals, dogs and cats) ..                   | 43,48,094                | 1,03,945               |
| Firearms of war and ammunition thereof ..                               | 4,57,315                 | ..                     |
| Coin (other than gold coin) not being legal tender ..                   | 83,750                   | ..                     |
| <b>TOTAL OF MISCELLANEOUS TRANSACTIONS &amp; COMMODITIES, N.E.S. ..</b> | <b>3,73,47,484</b>       | <b>16,55,94,278</b>    |
| <b>GRAND TOTAL ..</b>                                                   | <b>805,55,97,709</b>     | <b>1,394,04,89,002</b> |

## INDIANS OVERSEAS

THE number of Indians overseas is given below :

| Name of country     | Indian Citizens/<br>Persons of Indian<br>origin                 | Year of<br>estimate | Name of country                                                     | Indian Citizens/<br>Persons of Indian<br>origin | Year of<br>estimate |
|---------------------|-----------------------------------------------------------------|---------------------|---------------------------------------------------------------------|-------------------------------------------------|---------------------|
| <i>Commonwealth</i> |                                                                 |                     | <i>Commonwealth—Contd.</i>                                          |                                                 |                     |
| Aden ..             | 18,000                                                          | 1965                | Pakistan (Dacca) ..                                                 | 148                                             | 1964                |
| Afghanistan ..      | 20,361                                                          | 1965                | Rhodesia (Northern) ..                                              | 7,110                                           | 1962                |
| Algeria ..          | 191                                                             | 1965                | Rhodesia (Southern) ..                                              | 7,416                                           | 1964                |
| Argentina ..        | 214                                                             | 1965                | Sierra Leone ..                                                     | 250                                             | 1965                |
| Austria ..          | 130                                                             | 1965                | St. Lucia ..                                                        | 2,000                                           | 1964                |
| Australia ..        | 100                                                             | 1965                | St. Vincent ..                                                      | 2,000                                           | 1964                |
| Basutoland ..       | 900                                                             | 1963                | Tanzania ..                                                         | 88,000                                          | 1965                |
| Bolivia ..          | 2                                                               | 1965                | Trinidad and Tobago ..                                              | 3,01,946                                        | 1965                |
| Bulgaria ..         | 3                                                               | 1965                | Uganda ..                                                           | 63,130                                          | 1962                |
| British Guiana ..   | 2,89,790                                                        | 1963                | United Kingdom ..                                                   | 1,50,194                                        | 1965                |
| Brunei ..           | 2,000                                                           | 1960                | Zanzibar ..                                                         | 19,500                                          | 1963                |
| Canada ..           | 20,854                                                          | 1965                | <i>Foreign</i>                                                      |                                                 |                     |
| Ceylon ..           | 10,06,000                                                       | 1965                | Abu Dubai ..                                                        | 1,519                                           | 1963                |
| Dominica ..         | 3                                                               | 1964                | Afghanistan ..                                                      | 12,361                                          | 1964                |
| Fiji (Suva) ..      | 1,568                                                           | 1962                | Algiers ..                                                          | 148                                             | 1964                |
| Gibraltar ..        | 1,258                                                           | 1962                | Argentina ..                                                        | 189                                             | 1964                |
| Guiana ..           | 27,94,60                                                        | 1965                | Austria ..                                                          | 120                                             | 1964                |
| Ghana ..            | 1,295                                                           | 1965                | Bahrain ..                                                          | 5,000                                           | 1965                |
| Guinea ..           | 3                                                               | 1965                | Barbados ..                                                         | 500                                             | 1965                |
| Grenada ..          | 10,000                                                          | 1964                | Antigua, St. Lucia, St. Vincent,<br>Grenada, Mont Serrat, St. Kitts | 15,175                                          | 1965                |
| Hongkong ..         | 4,000                                                           | 1965                | Basra ..                                                            | 250                                             | 1964                |
| Jamaica ..          | 27,912                                                          | 1965                | Belgium ..                                                          | 230                                             | 1965                |
| Kenya ..            | (N.A. Out of 1,86,000 Asians, majority<br>are of Indian origin) |                     | Berlin (East) ..                                                    | 30                                              | 1963                |
| Malaysia ..         | 8,07,000                                                        | 1965                | Berlin (West) ..                                                    | 490                                             | 1964                |
| Malagasy ..         | 18,000                                                          | 1965                | Brazil ..                                                           | 50                                              | 1965                |
| Mali ..             | 8                                                               | 1965                | Burma ..                                                            | 3,00,000                                        | 1965                |
| Mauritius ..        | 4,92,837                                                        | 1965                | Cambodia ..                                                         | 125                                             | 1965                |
| Netherlands ..      | 125                                                             | 1965                | Cambodia (Phnom Penh) ..                                            | 200                                             | 1963                |
| Norway ..           | 27                                                              | 1965                | Canary Islands ..                                                   | 539                                             | 1963                |
| New Zealand ..      | 5,000                                                           | 1965                | Ceylon ..                                                           | 150                                             | 1963                |
| Nigeria ..          | 1,552                                                           | 1965                | Chile ..                                                            | 41                                              | 1964                |
| Nyasaland ..        | 9,630                                                           | 1962                | China ..                                                            | 121                                             | 1965                |



| Name of country                               | Indian Citizens/<br>Persons of Indian<br>origin | Year of<br>estimate | Name of country                      | Indian Citizens/<br>Persons of Indian<br>origin | Year of<br>estimate |
|-----------------------------------------------|-------------------------------------------------|---------------------|--------------------------------------|-------------------------------------------------|---------------------|
| <i>Foreign—Contd.</i>                         |                                                 |                     | <i>Foreign—Contd.</i>                |                                                 |                     |
| Colombia .. .. .                              | 9                                               | 1964                | Mexico .. .. .                       | 37                                              | 1965                |
| Congo .. .. .                                 | 2,016                                           | 1965                | Morocco .. .. .                      | 500                                             | 1965                |
| Costa Rica .. .. .                            | 15                                              | 1962                | Muscat .. .. .                       | 800                                             | 1965                |
| Cuba .. .. .                                  | 27                                              | 1965                | Nepal .. .. .                        | 1,680                                           | 1964                |
| Czechoslovakia .. .. .                        | 362                                             | 1965                | Nicaragua .. .. .                    | 2                                               | 1964                |
| Dakar (Senegal) .. .. .                       | 100                                             | 1964                | Norway .. .. .                       | 12                                              | 1964                |
| Denmark .. .. .                               | 101                                             | 1965                | Panama .. .. .                       | 919                                             | 1965                |
| Dominican Republic .. .. .                    | 2                                               | 1964                | Peru .. .. .                         | 2                                               | 1964                |
| Ecuador .. .. .                               | 1                                               | 1965                | Philippines .. .. .                  | 1,838                                           | 1965                |
| El Salvador .. .. .                           | 2                                               | 1964                | Poland .. .. .                       | 55                                              | 1965                |
| Ethiopia including Eritrea .. .. .            | 2,513                                           | 1965                | Qatar (Persian Gulf) .. .. .         | 1,400                                           | 1963                |
| Fernando Poo .. .. .                          | 20                                              | 1964                | Reunion Islands .. .. .              | 400                                             | 1963                |
| Finland .. .. .                               | 32                                              | 1965                | Rumania .. .. .                      | 4                                               | 1965                |
| France .. .. .                                | 265                                             | 1965                | Saudi Arabia .. .. .                 | 743                                             | 1965                |
| Germany (Federal Republic) .. .. .            | 600                                             | 1965                | Senegal .. .. .                      | 556                                             | 1965                |
| Guatemala .. .. .                             | 2                                               | 1965                | Singapore .. .. .                    | 1,33,700                                        | 1965                |
| Holland .. .. .                               | 124                                             | 1964                | Sharjah Dubai (Persian Gulf) .. .. . | 2,500                                           | 1963                |
| Honduras .. .. .                              | 20                                              | 1964                | Somalia .. .. .                      | 1,000                                           | 1965                |
| Hungary .. .. .                               | 35                                              | 1965                | South Africa .. .. .                 | 5,00,000                                        | 1963                |
| Indonesia (excluding Sumatra) .. .. .         | 25,000                                          | 1965                | Spain .. .. .                        | 1,503                                           | 1964                |
| Indonesia (Medan) (including Sumatra) .. .. . | 33,000                                          | 1965                | Spanish Morocco .. .. .              | 100                                             | 1963                |
| Indo-China .. .. .                            | 1,665                                           | 1965                | Sudan .. .. .                        | 3,544                                           | 1965                |
| Iran .. .. .                                  | 610                                             | 1965                | Surinam .. .. .                      | 1,01,680                                        | 1965                |
| Iraq .. .. .                                  | 1,500                                           | 1965                | Sweden .. .. .                       | 161                                             | 1964                |
| Ireland .. .. .                               | 223                                             | 1965                | Switzerland .. .. .                  | 265                                             | 1965                |
| Italy .. .. .                                 | 393                                             | 1965                | Syria .. .. .                        | 73                                              | 1965                |
| Ivory Coast .. .. .                           | 20                                              | 1964                | Thailand .. .. .                     | 15,000                                          | 1965                |
| Japan .. .. .                                 | 950                                             | 1964                | Tunis .. .. .                        | 50                                              | 1963                |
| Jordan .. .. .                                | 20                                              | 1963                | Turkey .. .. .                       | 51                                              | 1965                |
| Kuwait .. .. .                                | 15,000                                          | 1965                | U.A.R. .. .. .                       | 450                                             | 1965                |
| Laos .. .. .                                  | 620                                             | 1965                | United States of America .. .. .     | 37,284                                          | 1965                |
| Lebanon .. .. .                               | 267                                             | 1965                | U.S.S.R. .. .. .                     | 659                                             | 1965                |
| Liberia .. .. .                               | 100                                             | 1965                | Venezuela .. .. .                    | 12                                              | 1965                |
| Libya .. .. .                                 | 240                                             | 1965                | Vientiane .. .. .                    | 590                                             | 1964                |
| Madagascar .. .. .                            | 18,000                                          | 1964                | Viet Nam .. .. .                     | 2 families                                      | 1965                |
|                                               |                                                 |                     | Yugoslavia .. .. .                   | 103                                             | 1965                |
|                                               |                                                 |                     | Yemen .. .. .                        | 3                                               | 1965                |

## EMIGRATION

The following table shows the emigration figures for 1965-66. (April 1, 1965 to March 31, 1966).

| Country                           | Emigration |
|-----------------------------------|------------|
| Africa and Portuguese East Africa | 3          |
| Indonesia .. .. .                 | 6          |
| Malaysia .. .. .                  | 154        |
| Saudi Arabia .. .. .              | 358        |
| Burma .. .. .                     | 1          |
| Ceylon .. .. .                    | 10         |
| Fiji .. .. .                      | 1          |
| Guyana and West Africa .. .. .    | 3          |
| Others .. .. .                    | 2,623      |
| Total .. .. .                     | 3,165      |

## EMIGRATION LAWS

"Emigration" means the departure, by sea or by air, out of India, of Citizens of India, under an agreement to work for hire in any country beyond the limits of India, or if assisted to depart otherwise than by a relative with the intention of working for hire or engaging in agriculture.

Such emigration is governed by the Emigration Act, 1922 (7 of 1922) and the Rules made thereunder, as amended from time to time.

Emigration for the purpose of 'unskilled work' is prohibited, while emigration for the purpose of 'skilled work' is permissible on compliance with the prescribed formalities.

The functions under the Act are discharged by the Central Government through the Controller-General of Emigration and Additional Secretary

to the Government of India in the Ministry of External Affairs, New Delhi, with the assistance of the Protectors of Emigrants at the Ports and airports from which emigration is lawful.

Following are the ports and airports from which emigration is at present lawful. Each port and airport has a Protector of Emigrants.

1. Bombay port and airport (Public Relations Officer (Emi.), Regional Passport and Emigration Office, 148, Mahatma Gandhi Road, Bombay 1).
2. Okha (Port Officer).
3. Porbander (Port Officer).
4. Bedi (Port Officer).
5. Madras port and airport (Public Relations Officer (Emi.), Regional Passport and Emigration Office, 42, Nalamuthu Chetty Street, George Town, Madras).
6. Nagapattinam Port (Protector of Emigrants).
7. Tuticorin and Dhanushkodi under one Protector of Emigrants with headquarters at Mandapam Camp.
8. Calcutta port and airport (Superintendent (Emi.), Regional Passport and Emigration Office, 4, Brabourne Road, Calcutta).
9. Delhi airport (Public Relations Officer (Emi.), Regional Passport and Emigration Office, 1/2-E-7, Curzon Road, Barracks, New Delhi).

Brief notes on overseas Indians in some countries are given below :

Generally speaking fresh Indian immigration is either banned or is not permitted as a matter

of policy into South Africa, Northern and Southern Rhodesia, Nyasaland, Australia, New Zealand, Burma, Ceylon, most European and South American countries. There are some countries that admit Indians on a quota basis : Canada, U.S.A., the Philippines, Thailand and Indonesia.

## AUSTRALIA

An Indian already domiciled in Australia has full citizenship rights, including the right to introduce a spouse and minor unmarried children if they are not already there. Indian business men, *bona fide* tourists, sportsmen and entertainers may visit Australia and stay for periods not exceeding 12 months, and Indian students may be admitted with temporary residence status for education and specialised training.

Under policy revised by the Government in March, 1966, provision now exists whereby an Indian already admitted with temporary resident status (other than in a student or visitor capacity) but with the intention of indefinite stay will qualify to apply for resident status and citizenship after five years residence, in place of the fifteen years residence previously required.

Under the revised policy also, an application by an Indian who wishes to settle in Australia with his wife and children may now be considered under the provisions relating to the entry of well-qualified people. Such applications may be considered on the applicant's suitability for settlement, their ability to integrate rapidly, and their having qualifications which are in fact positively useful to Australia. After five years' stay on temporary permits, they will be able to apply for resident status and citizenship.



**BURMA**

The present population of Indians in Burma is estimated to be about 3 lakhs.

Indians in Burma were mainly agricultural, dock and casual labourers and petty traders. Some Indians were also formerly engaged in wholesale import business and also some were big landowners.

With the introduction of the Burmanisation policy, large numbers of Indians of all classes, are returning to India. During 1965 about 51,000 Indians returned from Burma to India, most of them on chartered vessels. Those Indians who leave are not allowed to repatriate their assets.

Under the Union of Burma Citizenship Act of 1955, an alien can become a Burmese citizen by naturalisation after fulfilling certain requirements of a minimum stay in that country.

**CANADA**

Under the modified Agreement entered into between India and Canada in 1957 the Canadian Government have agreed to increase the annual quota of immigrants from India from 150 to 300.

Applications from prospective immigrants to Canada from India should be addressed to The Canadian Immigration Attache, 7 Link Road, Jungpura Extension, P.O. Box 161, New Delhi-1.

Indian residents of Canada are largely comprised of labourers employed in lumbering and trucking. There are a few lumber mill owners, and some are working as clerks in various establishments. A good lumber can also be termed professionals, technicians and highly skilled workers. The majority of Indians are in British Columbia. A good many today go on to industrial centres like Montreal and Toronto. The Indian community is called the "East Indian Community".

Any person admitted to Canada as an immigrant might become a citizen of Canada after five years' continuous residence there. There is no legislation in Canada, federal or provincial which discriminates against any group of citizens on grounds of national origin, race, language or religion.

There are no disabilities on Indians in the matter of owning property, engaging in trade or profession, entering Government service or residence in any locality.

Indians can remit to India any amount earned in Canada.

Figures of Indians arriving in Canada; 1957: 324; 1958: 451; 1959: 716; 1960: 673; 1961: 744; 1962: 725; 1963: 846; 1964: 1,295; 1965: 1876.

**CEYLON**

There are about 11,46,000 persons of Indian origin in Ceylon. Out of this number, approximately 31,000 are Indian citizens, 1,40,000 are registered citizens of Ceylon and 9,75,000 are stateless persons. The large majority of these persons are employed in the tea and rubber estates in Ceylon. Merchants, petty shop keepers and employees in business establishments constitute the balance and are mainly concentrated in the urban areas.

There is no restriction on Indians acquiring property in Ceylon, but non-Ceylonese are not allotted Crown Land. Trade in certain commodities and with certain countries like Japan and Germany is exclusively reserved for Ceylonese enterprise. Certain rights like fishing rights and the ownership of industries like public transport (omnibuses) are restricted to Ceylonese. Government service is restricted to Ceylonese except that foreigners are appointed on a contract basis when no qualified or suitable Ceylonese is available. Consequently Indians who have not acquired Ceylon citizenship have severe handicaps. Indians are also denied certain privileges such as National Insurance and unemployment relief.

The rights of Indians to citizenship are governed by two Acts enacted in 1948.

An Agreement was entered into in January 1954 between the Government of India and the Government of Ceylon regarding the citizenship rights of persons of Indian origin in Ceylon.

The total number of applicants for Ceylon citizenship is estimated to be about 900,000.

Out of these, about 1,34,000 persons have till the end of Jan. 1965, been registered as Ceylon citizens. The applications of the rest have either been rejected or withdrawn.

At the end of 1954 the Government of Ceylon started implementing its policy of Ceylonization in the course of which a large number of persons holding Temporary Residence Permits of all nationalities had their periods of stay curtailed. In the result some Indians were faced with the prospect of leaving the country.

In April, 1955, the Government of Ceylon amended the Immigrants and Emigrants Act of 1948.

About 1,20,000 Indian nationals had left Ceylon either voluntarily or because of non-renewal of their visas upto the end of March, 1965 as a result of Ceylonisation programme of the Government of Ceylon.

The Prime Ministers of India and Ceylon met at Delhi in Oct. 1964 and reached an agreement regarding the future of the "stateless" persons of Indian origin resident in Ceylon, estimated at 9,75,000. According to the agreement, 3,00,000 persons will be granted Ceylonese citizenship. 5,25,000 persons will be granted Indian citizenship and repatriated to India.

A Joint Committee comprising official representatives of the Governments of Ceylon and India with headquarters at Colombo has been set up. Regular meetings are being held to formulate measures for the smooth implementation of Indo-Ceylon Agreement, 1964. Public Notices inviting applications for Indian citizenship are expected to be issued shortly.

A non-national leaving Ceylon can repatriate Rs. 1.5 lakhs in the case of those other than Indians and Rs. 75,000 for Indians.

**EAST AFRICA**

Indians came to East Africa long before the Europeans. They played an important role in Kenya's history as skilled labourers, lawyers, clerks, railway officials and contractors, thereby filling the middle sections of the civil service and bureaucracy. They also played a significant role in opening up the interior of Kenya through trade.

By protesting against the discriminatory policies of the white settlers the Indian community helped in rousing African political consciousness. They fought against racial discrimination, reservation of the Highlands for Europeans and franchise restrictions.

The Government of India has taken practical steps to promote industrial and technical collaboration and development of commerce and trade with East Africa. A loan of Rs. 25 million for buying railway equipment was offered. Indian industrialists have been encouraged to help in the development of East Africa by setting up industrial plants. Some (for instance, textiles) are already functioning. Others are under negotiation.

The present period in East Africa is one of transition in which people of Indian origin can play a notable part by thinking of the countries of their adoption as much as of themselves.

**ETHIOPIA**

Emigration to Ethiopia is neither restricted nor entirely free. Each case is judged on its merits, and there is no quota. Foreigners who wish to start new industries or go into farming are given special encouragement.

There are no constitutional, legal or any other disabilities specifically on Indian residents. Some Indians own landed property and have been living in Ethiopia for half a century, and are whole-heartedly accepted by the people.

Under the Civil Code of the Empire of Ethiopia, no foreigner may own immovable property situated in Ethiopia except in accordance with an Imperial Order.

Remittances from Ethiopia to India by Indians are restricted and regulated by rules according to which anybody who is for more than six years in Ethiopia can remit only family expenses for near relatives on the basis of affidavits from India. There is no restriction for grant of foreign exchange for importing goods.

There are nearly 3,500 Indian residents in Ethiopia. Most of them are business men from the Gujarat and Saurashtra regions of India. Almost all of them are well-to-do and are engaged in trade specially in the import of textiles. Indian traders have also taken to imports of diversified items and also exports of coffee etc. Besides, there are over 350 Indian teachers who have been recruited by the Ethiopian Government to further the cause of education. Some Indians are engaged also as Advisers to various Ministries. There are also a few Indians working as International Civil Servants in the Economic Commission for Africa whose headquarters are at Addis Ababa.

**Indo-Ethiopian Textiles Share Co.:**

Its production of cloth and yarn accounts for nearly half of the total production done in the country.

Birla Brothers, Calcutta have taken over the management of Baar Dar Textile Mills.

Local Indian residents in Ethiopia have been generously contributing from time to time for charitable purposes.

**FII**

The people of Indian descent numbered about 228,200 out of a total population of 456,200.

Generally Indians play an important part in the economic field, in the role of farmers, retail traders, land transport operators etc. They have also entered the professional ranks including Civil Service, law and medicine.

As a result of the stipulation made by the recent Constitutional Conference held in London Indians have been allotted only 12 seats in the Fiji Council. This has no relation to their numerical strength. Indians in Fiji have franchise both in respect of legislature and the local bodies.

There are no restrictions on the remittance of money from Fiji to the countries in the sterling area (except Canada). Money may not be sent outside the sterling area without a permit from the Controller of Foreign Exchange.

**GUYANA**

The bulk of the Indian settlers are sugar workers, cane farmers or rice growers and in recent years some have made good progress in professions and in business.

Entry is through a permit against a deposit of S.W.I. 2,000 issued for limited periods.

For remittance of money prior approval of the Government is necessary.

**INDONESIA**

Migration of foreigners into Indonesia is banned.

Under the law, there are no constitutional, legal or any other disabilities from which Indian residents, as such, suffer. They are not discriminated against and are treated on par with other foreign residents.

Remittance facilities which were previously available to foreigners are now very much restricted.

The economic condition of Indians here is fairly good. They mostly deal in textiles and sports goods, although a fair number of Indians in parts of Sumatra live off the land and run small dairies etc.



**MALAWI**

Malawi is a small land-locked country with an area of about 45,000 square miles and a population of about 3 million of which 12,500 are of Indian origin. India has its High Commission in Malawi at Blantyre.

**MALAYSIA & SINGAPORE**

The estimated total population of Indians and Pakistanis in these countries was 9,55,000 in 1961.

The labouring and non-labouring classes of Indians may be roughly estimated at 70 per cent and 30 per cent respectively of the entire Indian population, the former employed in rubber and in estates and the latter either employed in the clerical ranks of the various Govt. departments, mercantile firms and banks, rubber estates and oil palm plantations etc., or employed in business, trade and other professions like law and medicine.

The Indian trading community is composed of Chettis, Gujaratis (both Hindus and Muslims), Sindhis, South Indian Muslims (both from Tamil Nad and Malabar) and a few Sikhs.

Indians do not suffer from any special disabilities. They are eligible for citizenship if they fulfil the prescribed conditions.

**MAURITIUS**

People of Indian origin in Mauritius form about 67 per cent of the total population of 7,27,381 as on Oct. 31, 1964. This population is mainly composed of descendants of "Indented" labourers from Bihar, Madras, U.P., but there is a sprinkling of traders from Gujarat and Maharashtra. These people have been settled here for generations and are now known as "Indo-Mauritians". Between 35 to 40 per cent of the agricultural land in Mauritius is owned by these Indo-Mauritians. A large number of them are farm labourers in sugar plantation. The rest are engaged in commerce and trade or professions or Government service. Indo-Mauritians are coming into their own and on the whole their economic and social conditions compare favourably with people of Indian origin in other countries.

Immigration of foreigners for the purpose of settling down is not normally allowed. Only in exceptional circumstances when there is a dearth of skilled hands in a particular trade or profession, foreigners are allowed to enter and stay here for a specified period, subject to their obtaining an offer of employment from a Mauritian employer and Entry Permit from the Government of Mauritius.

**NEW ZEALAND**

Entry into New Zealand is controlled under a permit system, exemption being provided, only for New Zealand citizens. Broadly speaking, however, for persons of United Kingdom descent the procedures for entry are somewhat simplified. There is no quota system.

The applications from Indians for permanent entry have been approved at the rate of approximately 100 applications per annum over the past few years. Most of those approved have been submitted on behalf of wives and minor children of Indians already resident in New Zealand.

It is estimated that there are 5,000 Indians at present resident in New Zealand, mainly Gujaratis and Punjabis. The size of the community is, however, steadily increasing. The greater part of the Indian community is concentrated in the main urban centres, where for the most part they are engaged in small businesses such as grocery stores, importing houses or restaurants. Others, however, are employed in industry and in clerical work and the professions.

Indians enjoy the right to vote in Parliamentary and Municipal elections and do not suffer from any economic, political, legal or other disability.

Remittances made by all New Zealand residents (including Indians) from New Zealand are subject to exchange control. The maximum

amount normally approved for remittance to India for maintenance purposes in any one year is £250.

**PHILIPPINES**

Subject to compliance with prescribed requirements, Indian nationals are now admitted to the Philippines as immigrants under an annual quota not exceeding 50 for each calendar year.

**PORTUGUESE EAST AFRICA**

In Portuguese East Africa there is no colour bar as such.

Consequent on the liberation of Goa, Daman and Diu in December 1961, the Portuguese Govt. adopted a hostile attitude towards persons of Indian origin and about 2,200 Indian nationals resident in Mozambique were summarily interned, their property sealed and their bank accounts frozen. In accordance with an Agreement reached between the Governments of India and Portugal, these Indian nationals were subsequently released. The Portuguese authorities have not only adopted arbitrary methods to liquidate the assets of Indian nationals but have also made the repatriation of these assets dependent upon the availability of foreign exchange over a period of three years failing which these assets are to lapse to the State.

**REPUBLIC OF ZAMBIA**

Zambia has a total population of 3.5 million of which 2.4 million are indigenous Africans. There are 75,000 Europeans and about 7,000 people of Indian origin. India has an office of High Commissioner in Zambia at Lusaka.

**SAUDI ARABIA**

Entry visa regulations of the Govt. of Saudi Arabia are very strict and generally entry visas are issued only to those sponsored by a Saudi national or a foreign government.

No foreigner is permitted to have any business or trade of his own except under the Foreign Investment Regulation in which he may be permitted to hold a minority share, subject to other conditions. Every foreigner is required to have a Residence Permit and must obtain a work permit if he seeks employment, through his Saudi employer/sponsor.

There is no restriction on remittances sent from Saudi Arabia to any part of the world, except Israel. The financial position of Saudi Arabia is very stable and strong and there are almost no controls on import trade and foreign exchange.

Over 3,000 Indians reside in Saudi Arabia out of which about 500 are employed with the Arabian American Oil Company (ARAMCO) alone on contract basis in different capacities. Others are working in government departments and private firms. There is a systematic tendency to replace the foreigners by Saudi nationals. This applies to Indians as well.

It is very difficult for a foreigner to obtain Saudi nationality, which is granted, under the personal orders of the Minister of Interior, in exceptional cases.

**SOUTH AFRICA**

Persons of Indian origin in South Africa numbering about half a million are serving as traders, farmers, factory workers, and a small number of professionals, such as doctors, lawyers. Most of the present generation are born in South Africa and have been accepted as South African nationals.

Racial discrimination against Indians exists in South Africa in every walk of life and in the worst possible form. Persons of Indian origin are practically excluded from parliamentary and provincial franchise as well as from public services except in menial and subordinate posts.

The South African Government has abandoned its earlier policy of repatriation on which it had hitherto planned its faith as a solution to the Indian "problem". They have now created a Ministry of Indian Affairs. All matters pertaining to Indians are being dealt with by this Ministry.

The Group Areas Act which was originally enacted in 1950 has been amended several times since then. The chief sufferers under the Act continued to be the Indian property owners in Natal, Transvaal and the Cape Province.

Three "Tribal" University Colleges for Africans (Fort Hare, Turfloop and Ngeya), one for the Coloured people (Western Cape) and one for the Indians (Salisbury Island) were established early in 1961.

Under an Act passed in 1953, the South African Government banned the entry into South Africa of the wives and children of persons of Indian origin domiciled in South Africa. But certain specified categories of wives and children of persons of Indian origin were allowed to enter South Africa till 10th February 1956.

Practically all Indians domiciled in South Africa are South African citizens by law, but they are denied some of the most important rights of citizenship.

Indians are not eligible to a place in the Executive Council or Legislature, whether provincial or central.

There is no special limit to remittances by Indians to India.

South Africa has persistently refused to accept the numerous resolutions passed by the U.N. urging it to give up its policies of racial discrimination. As a result of pressure exerted by the Commonwealth of Nations, the Government of South Africa withdrew therefrom on May 31, 1961, rather than give up apartheid.

**SOUTHERN RHODESIA**

There are about 100 persons of Indian origin living in Rhodesia. S. Rhodesia, being under a white minority rebel regime at present, India has imposed a total economic boycott at considerable sacrifice to herself.

**SUDAN**

There are about 3,000 Indians in the Sudan. The Indian Community is mostly in trade of textiles, tea, jute goods, essential oils, gum arabic and dura. Almost all these traders come from Gujarat State and continue maintaining their ties with the motherland.

There are about seventy Indians working under the Government of Sudan on contract basis—a few of them are experts from the United Nations.

The Indian community in the Sudan on the whole is well off. Their relations with the people and the Government are quite good.

Further immigration into Sudan for business or private employment is not allowed. Remittances are governed by exchange control regulations.

**SURINAM**

Surinam is an autonomous part of the kingdom of the Netherlands which was formerly known as Dutch Guiana.

There are 93,000 Indians in a total population of 302,000. They form the second largest group.

The Indian community has made rapid economic progress, especially during the last 25-30 years. In medium-size enterprises they already have a strong economic position. Indians are mainly engaged in agriculture, business and trade. The majority of Indians are sugar estate workers or cane farmers. Hindi is widely spoken and understood.

Migration into Surinam is controlled. Entry permits are issued to technically trained personnel in the interest of national economy. There is no quota system and applications are considered on an *ad hoc* basis.

There are no constitutional, legal or any other disabilities on Indian immigrants.

**TANZANIA**

There are some 90,000 Indians living in Tanzania including about 5,000 Goans and about 85,000 Muslims. They are mostly engaged in wholesale and retail trade, manufacturing



industries, Public Services etc. After independence, however, scope for further employment in Government services has decreased due to Africanisation policy of the Government. Similarly due to encouragement of co-operative societies, marketing boards etc. further participation in wholesale and retail trade is also restricted. As entry to educational institutions is not easily available for non-citizens, Indians have to send their children to India for further education. As, however, Government encourages establishment of manufacturing industries, there are sufficient opportunities for foreign capital and technical know-how to take increased share in this sphere. East Africa including Tanzania is by and large a free competitive market and there is no exchange control operating at present. If the proposed East African Federation comes about bringing close political union between the three East African territories, there is good scope for Indians to start small scale and medium industries in a growing economy.

The position of Indians in Zanzibar is not very happy. Nationalisation of houses, farms, factories, export and import trade, restriction in sending savings out of the country, denial of educational facilities and various other restrictive practices have made the life of Indians very difficult and many have already left the islands for India during the past year.

#### THAILAND

The annual quota is 200 and the selection is made by the Government's Immigration Division in Bangkok. No discrimination against the Indian population prevails in Thailand. Remittances out of the country are controlled by the Bank of Thailand's rules and regulations.

#### UGANDA

At the time of 1959 Census, there were 63,130 persons of Indian origin, 5,973 Pakistanis and 2,830 Goans. In mid-1962, the total number of Asians in Uganda was 79,900. The persons of Indian origin are predominantly Hindu, but there is also a substantial and influential religious minority of Muslims; Sikhs and Parsees are also to be found. The majority of Indian settlers come from the Gujarat and Saurashtra. Gujarati is the language spoken by them, even by the Muslims. There are some settlers from the Punjab and Maharashtra also.

Apart from the Indian settlers who are mainly in business, there are Indians who are employed as teachers, doctors, nurses, engineers, etc.,

with the Uganda Government on contract or permanent terms. The Indian community in Uganda on the whole is fairly well-off.

Entry into Uganda is strictly regulated through entry passes and further immigration is not allowed. Temporary employment passes for a limited period are issued for skilled personnel to be brought from India for employment in the concerns owned by the people of Indian origin.

#### U.S.A.

The U.S.A. has fixed a quota of 100.

There are certain categories of aliens who are excludable under Section 212 of the Immigration and Nationality Act. These exclusions apply to both immigrants and non-immigrants, although there are exceptions and certain discretionary powers vested in the Attorney-General and the Secretary of State.

The following classes broadly among others are excluded: feeble-minded, insane, mentally defective, drug addicts, chronic alcoholics, those with dangerous contagious diseases like leprosy, or convicted for crimes involving moral turpitude, polygamists, anarchists, those who advocate or teach or are broadly associated with communism or those who attempt to overthrow by violence the government of the U.S.A.

Within each quota there are seven preference categories which may be stated briefly as follows: First preference — unmarried sons and daughters of U.S. citizens. Second preference — spouses and unmarried sons and daughters of aliens admitted to the United States for permanent residence. Third preference — professional or highly skilled persons. Fourth preference — married sons and daughters of U.S. citizens. Fifth preference — brothers and sisters of U.S. citizens. Sixth preference — skilled or unskilled workers in short supply in the U.S. Seventh preference — refugees.

Spouses, children and parents of American citizens are admitted on a non-quota basis. For the above preference categories, as well as for non-quota immigrants, petitions must be filed with and be approved by the Attorney-General of the U.S.

There are a variety of requirements which must be met before an immigration visa can be issued. No consideration can be given to third, sixth and non-preference applicants until they

obtain certification from the U.S. Department of Labor. The application can be made at a diplomatic or consular office of the United States. These offices are located in New Delhi, Bombay, Calcutta and Madras within India. It must be emphasized that under the Indian quota, the demands have been so high for preference visas that no numbers have been allocated to non-preference applicants for many years.

An immigrant, regardless of race, colour or creed, admitted into the United States as a permanent resident alien is eligible for American citizenship, if he fulfils the residence and other requirements laid down in the Immigration and Nationality Act of 1952, as amended.

There are no restrictions on the remittance of American funds abroad.

#### THE WEST INDIES

##### TRINIDAD AND TOBAGO:

*Capital:* Port of Spain.

The number of persons of Indian origin is the largest in Trinidad and Tobago. The total area of Trinidad and Tobago is 1,980 sq. miles and the population is 827,927 of which people of Indian descent number about 3,01,946.

The bulk of the people of Indian descent work on agricultural farms, industrial estates and in business houses. The majority of the departmental stores, petrol stations and taxi stands are owned by people of Indian descent.

Entry into the country is through permits, issued initially for limited periods against cash deposits. No visa is required for the Commonwealth citizens.

##### JAMAICA:

*Capital:* Kingston. The total area of Jamaica is 4,411 sq. miles and the population is 1,685,178 out of which Indians number over 30,000 who are mainly agriculturists.

Entry into the country is through work permits which are issued very sparingly.

**BARBADOS:** Its capital is Bridgetown. The total area is 166 sq. miles and its population is 232,100. There are a few Indians numbering about 400, majority of whom own dry goods stores. There are no restrictions for remittances to soft currency areas. Immigration is controlled through a system of work permits.

## PROHIBITION

**T**HE real impetus to the prohibition movement was given by the Indian National Congress which considered prohibition as one of the items of their programme. At the Karachi session when the Bill of Rights was passed, it laid down that even when the Congress would be called upon to frame the Constitution it would include total prohibition in the whole country except for medical purposes as one of the articles of the Constitution.

A Prohibition Enquiry Committee was appointed by the Planning Commission on December 16, 1954. The Committee recommended total prohibition in India from 1958.

In the middle of 1963, a study team on prohibition was appointed by the Planning Commission with Mr. Tek Chand as chairman. The report was placed in Parliament on May 6, 1964. It outlines a four-phased programme to accomplish complete prohibition by 1975-76 and recommends strict social, legal and penal measures to curb the drink evil.

The measures suggested to curb drinking appear fairly harsh. These include summary trial of those charged with prohibition offences which should also be declared non-bailable, a jail sentence for habitual offenders, shifting of the onus of proof to the accused, institution

of collective fines, externment, forfeiture of property and disqualification from elections and government service.

The law of evidence is sought to be suitably amended as also the provisions relating to civil damage.

Main suggestions of the team were given in the previous editions of the Directory.

#### PROHIBITION IN STATES

Some facts and figures about prohibition in some of the States for which details are available are given below. Figures within brackets indicate the date of introduction of prohibition.

**Andhra:** Prohibition has been introduced in the Andhra region comprising eleven districts namely Chittoor (1938), Cuddapah (1938), Kurnool (1946), Guntur (1947), Nellore (1947), Srikakulam (1948), Visakhapatnam (1948), East Godavari (1948), West Godavari (1948), Krishna (1948) and Banganapalli of Kurnool District (1948).

Prohibition is not being enforced in the Telangana area of the State.

**Assam:** The policy of the Assam Government has been to extend "dry laws" all over the State, in a phased manner.

Prohibition was first introduced in Barpeta subdivision, Kamrup District, on March 1, 1953, and extended to the northern portion of Gauhati subdivision from October 2, 1954. The entire Kamrup District was declared dry from January 26, 1956.

The entire Nowgong District was declared dry from April 1, 1960 and the entire Goalpara District from April 1, 1962.

Four more districts in the Plains region and all the four autonomous hill districts are yet to be covered by prohibition.

The budget allotment for enforcing prohibition was Rs. 2,47,945 during the year 1965-66 and Rs. 3,01,930 for the year 1966-67.

**Delhi:** Is committed to introduce prohibition gradually and with this aim and view, the following steps have been taken from time to time towards prohibition:—

- 1) Reduction in country liquor shops from two to one and the quota of country spirit has been gradually reduced being the strength of the spirit maintained at 50 degrees under proof;
- 2) Increase in the number of dry days to 187. On these days liquor and intoxicant vendis are closed;
- 3) Increase in the rates of duty and assessment fee;
- 4) Prohibition of import of



country spirit in any quantity within the radius of five miles inside Delhi border; 5) Enhancement of the punishment under the penal provisions of Excise Act and also prescribing a minimum sentence of imprisonment for the offence of illicit distillation; 6) Regulating the sale and possession of spirituous preparations by a licence and prescription; 7) Rationalisation of preventive staff and re-organization thereof on zonal basis.

The budget allotment for the enforcement of the above prohibitory measures and also for other expenses is Rs. 2,52,000 for the year 1966-67.

**Gujarat:** There is total prohibition throughout the State. Neera and palmgur centres with their allied industries have been started in several parts of the State so as to popularise neera as a nutritious drink and utilize the trees and the former tappers for productive and constructive purposes.

Tourist permits for consumption of foreign liquor are issued on presentation of tourist card. Liquor shops operate for such permit holders in selected cities like Ahmedabad, Surat, Rajkot and Baroda.

**Kerala:** At present prohibition is in force in Kozhikode (1947), Cannanore (1947), Palghat (1947), and Trivandrum Districts (1948 & 1949), Talappilly (1949), and part of Cranganore Taluka (1950) of Trichur District, Kottarakkara (1955) and Pathanapuram taluks of Quilon District (1950), Fort Cochin area of Ernakulam District (1947) and some enclaves of Alleppey District (1947).

Budget allotment for 1965-66: Rs. 5,27,000.

**Madhya Pradesh:** At present prohibition is in force in ten districts. Names of districts showing within brackets area under prohibition and date of enforcement respectively: Khandwa (whole district; 1946); Saugor (whole; 1938); Damoh (whole; 1938); Narsingpur (whole; 1938); Hoshangabad (whole; 1942 & 1946); Vidisha (whole excluding Sironj Sub-Divn.; 1948); Sironj (Sub-Divn.; 1957); Durg (Durg Tehsil; 1946); Bilaspur (Tehsil Janjgar; 1946); Raipur (Tehsil Raipur; Dhamtari area; Baloda Bazar area; Mahasamud area and Gariaband area; all 1949); Jabalpur (Katni town; 1946; Rest of Katni & Murwara Tehsil; 1953).

Madras was the first State to introduce prohibition in the whole country.

Prohibition in the composite State of Madras was introduced area-wise in three stages. Eight districts were made dry with effect from 1st October 1946, eight more in 1947 and in the last stage, prohibition was extended to the remaining nine districts from 2nd October 1948. Prohibition continues to be in force throughout the State.

**Maharashtra:** Total prohibition was introduced in 1950 in all districts of Western Maharashtra forming part of erstwhile Bombay State. In other regions of the State, namely Vidarbha and Marathwada, prohibition was introduced from 1957.

There is no separate budget allotment for the enforcement of prohibition.

Changes in the 14-year old prohibition policy of Maharashtra was announced by the Chief Minister on the 31st of December 1963. All the changes except the removal of the ban on the manufacture and sale of beverages with an alcoholic content up to 3.5 per cent and toddy of equal strength took effect from April 1, 1964. A liberalisation in the procedure for liquor permits has been introduced. Persons above the age of 40 are eligible for permits on straightforward declaration that they need alcoholic drinks for maintaining their health. A certificate to this effect from the applicant's medical adviser would suffice for this purpose. The rest will have to get permits under the existing system. While the maximum quota for persons above the age of 40 has been fixed at four units, it is three in the case of those between 30 and 40 years of age, and two units for those below 30. One unit would fetch one quart bottle of hard liquor (i.e. whisky, brandy, rum, gin) or four bottles of wine or 18 bottles of beer. The permit availability period will be two years in the case of those above 40 and one year for the rest.

**Mysore:** Prohibition made a beginning in Old Mysore in 1938, when it was introduced in Rural Welfare and Health Centres in the talukas of Ramanagaram and Channarayana in Bangalore District on an experimental basis. Further, as a measure of co-operation with the Madras Government, Molakalmuru taluka of Chitradurga District and Pavagada taluka of Tumkur District were declared dry in January 1947. In the middle of the same year, Ramanagaram and Channarayana in Bangalore District were declared completely dry.

Prohibition was formally introduced in five districts, out of the total of nine districts of Old Mysore, in 1948.

There was an enlargement of the dry zone in the State with the merger of Bellary District, Bijapur, Belgaum, North Kanara and Dharwar Districts of Bombay, South Kanara and Kollegal of Madras, and Coorg, which were already dry.

At present with the exception of Bangalore City and certain talukas of Bangalore District, Gulbarga and Raichur Districts, the entire State is dry. The prohibition zone covers about 81 per cent of the area and 75 per cent of the population of the State.

The Mysore Government decided in Nov. 1965, to liberalise the prohibition laws on the pattern followed more or less by the Maharashtra Government.

Permits on the basis of medical certificates will be issued to all persons over the age of 30 years. The fee fixed for getting permits would be Rs. 20 per year against the present fee of Rs. 100. An additional revenue of Rs. one crore is expected as a result of the liberalised prohibition policy.

**Orissa:** Prohibition is now in force in the districts of Puri, Cuttack, Balasore, Ganjam and Koraput excluding Kashipur P. S. area.

Status quo is at present maintained in the prohibition policy of the State.

**Rajasthan:** From 1956, drinks in hotels, restaurants, clubs, cinemas, bars, messes have been stopped. A few specified hotels serving foreign visitors and tourists have been allowed to serve foreign liquor to such persons in special rooms.

Following days are observed as dry days in the year: Republic Day; Harijan Day; Independence Day; Mahavir Jayanti; Budh Purnima; Guru Nanak birthday; Birthday of Prophet Mohammad; Krishna Janmashthmi; Mahatma Gandhi's birthday.

The printing and publications of advertisement commending the use of intoxicating liquors has been prohibited.

The former Abu area in Bombay which was integrated in Rajasthan in 1956, has been kept dry.

## GOVERNMENT INDUSTRIAL UNDERTAKINGS

IN the following pages we give short notes on Government industrial undertakings.

The total investment in 66 Govt. of India Undertakings in 1964-65 aggregated Rs. 2,037 crores. This figure was expected to go up to Rs. 2,400 crores by the end of 1965-66.

At Rs. 2,037 crores, the total investment showed an increase of Rs. 332 crores over the previous year's figures. The main increase in the Central Government contributions were in the following enterprises: Hindustan Steel (Rs. 81 crores), Oil and Natural Gas Commission (Rs. 44 crores), Heavy Engineering Corporation (Rs. 40 crores), Bharat Heavy Electricals (Rs. 23 crores), Indian Oil Corporation (Rs. 22 crores), National Coal Development Corporation (Rs. 18 crores), The Neyveli Lignite Corporation (Rs. 16 crores), Food Corporation (Rs. 15 crores).

Of the running concerns, Hindustan Steel is in a class by itself by virtue of the investment of Rs. 885 crores in it being about 43 per cent.

After providing for depreciation, amounting to Rs. 21 crores (Rs. 19 crores in 1963-64), the gross profit for the year was Rs. 34 crores against Rs. 28 crores in the previous year.

The number of persons employed by the 66 undertakings as at the end of 1964-65 was 4.1 lakhs (3.9 lakhs previous year). The total salaries and wages for the year amounted to nearly Rs. 120 crores.

A committee on the Public Undertakings, which include 10 members of the Lok Sabha and five of the Rajya Sabha has been constituted and started functioning from May 1, 1964.

The functions of the Committee is to examine reports and accounts of public undertakings, which are established by the Central Acts or the Government companies. It will examine, in the context of autonomy and efficiency of the Undertakings, whether their affairs are being managed in accordance with sound business principles and prudent commercial practices.

### ASHOKA HOTELS LIMITED

50-B, Chanakyapuri, New Delhi.

India's only 5-star de luxe hotel. It is fully airconditioned and has private swimming pool, refrigerator, telephone and bath for every room.

When started: October 30, 1956. Total cost: Rs. 2.81 crores. Expenditure as on March 31, 1966: Rs. 85.21 lakhs. Income as on March 31, 1966: Rs. 108.48 lakhs. Net profit Rs. 23.27 lakhs; No. of rooms 345; No. of beds 448. The highest and lowest charge per day: Rs. 300 to Rs. 60. Total No. of persons who stayed from April 1965 to March 1966: 1,29,025.

The average daily occupancy during 1965-66 has been 353 persons as against 403 during 1964-65. The Hotel's loan liability is Rs. 27 lakhs.

Chairman: S. Ratnam, Managing Director: N. P. Dube; Manager: George Verghese.

### ATOMIC REACTORS

(Trombay, Bombay 71)

(See under "Research")

### BHARAT EARTH MOVERS LTD.

Hindustan Aircraft Post, Bangalore-17.

Bharat Earth Movers Limited was registered as a company in the public sector, under the Ministry of Defence, Department of Defence Production on May 11, 1964 with an authorised capital of Rs. 7.5 crores.

The company has been formed in technical collaboration with Messrs. Le Tourneau-Westinghouse Company of U.S.A. for the indigenous manufacture of various types of heavy earth moving equipment for India's border roads, river valleys, irrigation and mining projects.

The railcoach division turns out its installed capacity of 25 broad gauge integral rail coaches per month.

In its Earth Movers Division, the company will manufacture heavy motorised scrapers, rear dumps, rubber tyred tractors, crawler tractor drawn scrapers, haulpaks, motor graders and cranes.

The BEM assigned with the task of manufacturing rail coaches and heavy earth moving equipment in its second year of operation, produced 276 broad-gauge integral rail coaches and 46 heavy earth moving equipment of different types. Net profit 1965-66: Rs. 31.77 lakhs.



The company has the sole distribution rights in India, Nepal and Bhutan, of the complete range of Earth Moving Equipment manufactured by Messrs. Le Tourneau Westinghouse Company, U.S.A.

*Chairman:* M. M. Philip, I.C.S. (Retired); *Managing Director:* Brig. P. R. Kumar.

#### BHARAT ELECTRONICS LTD.

Jalahalli P.O., Bangalore-13  
(Under the Ministry of Defence)

Bharat Electronics Limited was registered as a company with an authorised capital of Rs. 10 crores in April 1954 with the object of making the country self-sufficient in electronic equipment including Radar. Actual production started in 1956 in a small way with two items in the production line RU 536 — a General Purpose Communication Receiver and ET402 — Medium Power Transmitter. Since then production has been progressively diversified and expanded and the total number of electronic equipment including Measuring and Test Instruments produced or under production is now of the order of about seventy.

Various types of AF, MF, HF and VHF equipment are now in the production line of the factory.

The total foreign exchange saved by the Company is nearly Rs. 17.83 crores upto 1965-66. The present strength of the employees is 5,500. The production rose from Rs. 707.97 lakhs in 1964-65 to an estimated Rs. 972 lakhs during 1965-66.

*New Projects:* Plans are afoot for establishing the indigenous manufacture of some types of transmitting tubes under the Licensing agreement concluded by BEL with Nippon Electric Co., Japan.

Proposals are also being finalised for establishing the indigenous manufacture in BEL of X-ray tubes, Magnetrons, Silicon Transistors, TV Picture Tubes and studio equipment.

In addition production of instruments such as L.C.R. Bridges, transistorised frequency counters, Electrocardiographs are being finalised.

*Chairman:* Dr. S. Bhagavantam (Scientific Adviser, Ministry of Defence); *Managing Director:* B. V. Baliga.

#### BHARAT HEAVY ELECTRICALS LTD.

(A Govt. of India Undertaking)

*Regd. Office:* 5, Parliament Street, New Delhi-1.

Authorised capital: Rs. 50 crores. The company has under it the following four units:— (1) Ranipur Unit, Hardwar (U.P.); (2) Ramachandrapuram Unit, Hyderabad (A.P.); (3) Tiruverumbur Unit, Tiruchirappalli (Madras); and (4) Switchgear Unit, Hyderabad.

The Tiruverumbur Unit and Ramachandrapuram Unit of the company have started production and were inaugurated on May 1, 1965 and December 11, 1965 respectively. In the Ranipur Unit also, assembly of motors has already started from the end of 1965.

The Ranipur Unit is designed to produce 1.5 million kW of steam turbines and turbo-alternators, 1.2 million kW of hydro turbines and generators of sizes upto 6,600 mm runner diameter and 0.5 million kW of medium and large sized AC and DC motors.

The Ramachandrapuram Unit is designed to manufacture steam turbines, turbo-alternators and certain powerstation auxiliaries like condensate pumps, feed water pumps and circulating water pumps. The output capacity planned is about 800 MW, comprising mainly of unit sizes of 55 MW and 100 MW.

Tiruverumbur Unit will manufacture high pressure boilers complete with mills, high pressure fittings and valves. The output in the first stage of development will be sufficient to match a power generating capacity of 750 MW. It is proposed to further enlarge the scope of this Plant in the Fourth Plan period upto a production equivalent of 2,000 MW of generating capacity.

The Switchgear Unit is designed to manufacture air blast circuit breakers of 132 kW, 220 kV and 400 kV sizes in collaboration with Messrs. ASEA of Sweden and was expected to go into production by the last quarter of 1966.

*Chairman:* D. C. Baijal; *Secretary:* P. P. Khanna.

#### BOKARO STEEL LTD.

Main Administrative Bldg.,  
Bokaro Steel City.

The Union Government is setting up another steel plant in the public sector at Bokaro.

A public sector company known as Bokaro Steel Ltd. for setting up the Bokaro steel plant was registered at New Delhi on January 29, 1964. This company will have a share capital of Rs. 100 crores.

An agreement was signed on 25th January, 1965 between the Government of India and the Government of the USSR for co-operation in the construction of an integrated iron and steel works at Bokaro.

The agreement envisages that Bokaro, as Bhilai, will be Indian built, with such assistance of Soviet specialists as the Indian organisations may require for the construction, erection and commissioning of the plant. It also envisages that the Soviet organisations will assist in the training of Indian specialists and workers both in the U.S.S.R. and in India.

The Government of the U.S.S.R. are extending a credit upto 190 million roubles (Rs. 100.5 crores) for the purpose of meeting the foreign exchange cost of the plant. It bears an interest of 2.5 per cent and is repayable in twelve years.

The Project Report which was submitted by the Soviet organisations and accepted by the Govt. of India, incorporates latest developments of the Soviet and world practice in iron and steel technology, comprehensive mechanisation and automation of the technological processes and transport systems. The iron and steel works at Bokaro will have a capacity of 1.7 million tonnes at the first stage with a provision for continuous development upto 5.5 million tonnes. The first stage is to be completed by the end of 1970.

A contract was signed on 3rd May 1966 between Bokaro Steel Limited and Messrs. Tjashpromexport of USSR for the supply of equipment and materials from USSR for stage I for the plant. Stage I will have a production capacity of 1.7 million tonnes of ingot steel and 880,000 tonnes of foundry iron for sale. The main products will be hot-rolled light plates, hot-rolled coiled strips, hot-rolled sheets, cold-rolled coiled strips and cold-rolled sheets.

A separate contract was also signed on 3rd May 1966 for the designing work to be done by the USSR agency.

On an assessment of the indigenous capacity to manufacture the various items that go into the construction of the steel plant, it has been found that 63.7 per cent of the requirements of equipment for the 1st stage development can be met from the Indian sources. The figures for the steel structurals and refractories are as high as 89 per cent and 96 per cent respectively.

The work at the project site has been started. Detailed investigations aimed at the collection of data required for the preparation of working drawings and preparatory works such as site levelling in plant area, construction yard, provision of rail, road, water and power facilities construction of township etc. are in progress as per schedule.

*Chairman:* N. N. Wanchoo; *Managing Director:* K. M. George; *Secretary:* P. K. Basu.

#### CHITTARANJAN LOCOMOTIVE WORKS

(See under Late Particulars)

#### ENGINEERS INDIA PRIVATE LIMITED

C/o Ministry of Petroleum & Chemicals

Allahabad Bank Building,  
17-Parliament Street, New Delhi.

The Government of India and the Bechtel International Corporation of San Francisco, U.S.A. have jointly formed an engineering company known as Engineers India (Private) Limited.

The company will provide technical and other services in the development of petroleum, petrochemical and other industrial programmes in the public and private sectors.

The company will employ engineers from India and the U.S.A.

#### THE FERTILIZERS AND CHEMICALS, TRAVANCORE LTD.

Alwaye, Kerala State, South India.

The Fertilisers And Chemicals Travancore Limited, popularly known as FACT, started production in 1947. It was the first unit to manufacture ammonium sulphate on a commercially large scale in India. In addition to ammonium sulphate, the Company has a variety of other products like ammonium phosphate, superphosphate, ammonium chloride, sulphuric acid, anhydrous ammonia and liquid sulphur dioxide.

The second stage expansion which was completed in 1962, inaugurated for the first time in India the new Oil Gasification complex, for naphtha based ammonia production in the country. The Third State Expansion which has just been completed has added another Oil Gasification plant and a Tonnage Oxygen Plant to increase ammonia production to 220 tonnes a day.

The Company's factory at the Udyogamandal now has an annual production capacity of 70,000 tonnes of Nitrogen and 35,000 tonnes of  $P_2O_5$  in the following end products and intermediate products:

|                              | (Tonnes) |
|------------------------------|----------|
| Ammonium Sulphate .. ..      | 200,000  |
| Ammonium Phosphate .. ..     | 135,000  |
| Ammonium Chloride .. ..      | 25,000   |
| Superphosphate .. ..         | 44,000   |
| Sulphuric Acid .. ..         | 250,000  |
| Fertiliser Mixtures (NPK) .. | 350,000  |

The company has now entered into a collaboration arrangement with a leading design and engineering organisation in the U.K. for development and utilisation of know-how in certain specialised fields of fertilizer technology. FACT has developed the process to manufacture ammonium sulphate from byproduct gypsum and the first ICMA award was given to FACT in 1965.

The new expansion activity of the company will be in the form of setting up another Rs. 300 million fertilizer factory at Cochin with an annual production capacity of 330,000 tonnes of Urea.

Simultaneously a Rs. 40 million fourth stage expansion programme has also been undertaken in the Udyogamandal unit to raise ammonia production by a further 120 tonnes a day. At the end of this programme which is expected to be completed by 1969, the factory will be producing 180,000 tonnes of ammonium phosphate 20 : 20 grade as against the present capacity of 35,000 tonnes of 16 : 20 grade.

The company has built a compact distribution organisation in Kerala with more than 2,000 selling points. A similar distribution system is also being developed in the neighbouring States of Madras, Mysore and Andhra Pradesh.

**FERTILIZER CORPORATION OF INDIA LTD.**  
F-43, South Extension Area, Part I, Ring Road,  
New Delhi-3.

(Under the Ministry of Petroleum and Chemicals)

The Fertiliser Corporation of India was formed on January 1, 1961.



The constituent units of the Corporation now are the three operating fertilizer factories at Sindri in Bihar, Nangal in Punjab and Trombay in Maharashtra and two projects under implementation at Namrup in Assam and Gorakhpur in Uttar Pradesh. Another project which the Government of India has approved and entrusted to the Corporation for implementation is the Durgapur Fertilizer Project in West Bengal.

The Corporation has an authorised capital of Rs. 75 crores and issued and paid up capital of Rs. 49,45,14,000.

The Third Five-Year Plan had envisaged an installed capacity of one million tons of nitrogen and 4 lakh tons of phosphate to be achieved at the end of the Third Plan period. These targets are proposed to be raised to three million tons of nitrogen, one million tons of phosphate and 700,000 tons of potash by the end of the Fourth Plan.

With the completion of all its projects which are under construction or have now been entrusted to it for implementation, the Fertilizer Corporation in another three years will have developed an overall production capacity of 547,000 tonnes of nitrogen and 45,000 tonnes of phosphate per year.

The Corporation's operating factories have so far produced over 63 lakh tonnes of fertilizers valued at over Rs. 188 crores.

#### Sindri Unit

Sindri unit produces three types of nitrogenous fertilizers, Ammonium Sulphate, Ammonium Sulphate-Nitrate and Urea. Ammonium Sulphate contains 21 per cent nitrogen, while Ammonium Sulphate-Nitrate 28 per cent and Urea 46 per cent.

The total cost on the Sindri Factory, including the expansion plants, has been Rs. 45 crores.

The main group of plants for the production of ammonium sulphate are the Coke Oven Plant, the Gas Plant, the Ammonia Synthesis Plant and the Sulphate Plant.

The Coke Oven Plant has been designed to produce 600 tons of coke per day and various by-products of industrial importance.

The Gas Plant produces a gas mixture which is suitable for ammonia synthesis after necessary purification and can produce 33 million cft. of raw gas per day.

The Ammonia Synthesis Plant, is designed to produce 270 tons of ammonia per day.

The factory also has a power plant with a capacity of 80,000 kW. to provide it with electricity and process steam.

#### Expansion Plants

The Expansion Plants to produce two new types of fertilizer, utilising the coke oven gases, consist of a Gas Reformation Plant, Double Salt Plant and Urea Plant.

Sindri since its inception produced 43,08,093 tonnes of ammonium sulphate, 3,26,452 tonnes of double salt and 1,02,836 tonnes of urea till the end of March, 1966. This has saved the country about Rs. 146 crores in foreign exchange.

#### Nangal Unit

The second largest fertilizer factory in the public sector was built at Nangal and was successfully commissioned on February 22, 1961.

The factory has been designed to produce annually 3,88,000 tons of calcium ammonium nitrate, a nitrogenous fertilizer containing 20.5 per cent nitrogen. It has been located close to the world's highest dam, because the main raw materials for the production of fertilizer are electric power drawn from the Bhakra Hydro-electric Station and water from the Sutlej river. The full requirement of electric power for the Factory is of the order of 1,64,000 kW and 40 million gallons of water per day.

The Nangal factory has cost over Rs. 31 crores.

The following are the plants :—

**Electrolysis Plant :** In this plant, 25,000 cubic metres of hydrogen are generated every hour by the electrolysis of water.

**Ammonia Plant :** The guaranteed capacity of the plant is 307.2 tons of ammonia a day in three streams.

**Nitric Acid Plant :** The daily production capacity guaranteed is 554 tons of 100 per cent nitric acid or over 1,045 tons of 53 per cent nitric acid.

**Heavy Water Plant :** The designed capacity of the Heavy Water Plant is 14,000 kg. of heavy water annually.

Till the end of March, 1966 the Nangal Fertilizer Factory produced 15,69,467 tonnes of calcium ammonium nitrate. This has saved the country about Rs. 42 crores in foreign exchange.

#### Trombay Unit

The Trombay Fertilizer Project, which is estimated to cost about Rs. 34 crores, is designed to produce 90,000 tons of nitrogen and 45,000 tons of phosphate per year in the form of 3,30,000 tons of nitrophosphate, a complex fertilizer containing both nitrogen and phosphate in the ratio of 12.9 : 12.9 and 99,000 tons of urea.

The Trombay Fertilizer Factory went into production on 6th November, 1965. This is the largest factory so far built in India with an overall capacity of 135,000 tons of nutrients per year.

Plants attached to the above unit are :— Ammonia plant, Urea plant, Sulphuric acid plant, Nitric acid plant, Nitrophosphate plant and Methanol plant. The Methanol plant has a capacity of 30,000 tonnes of methanol per year.

#### Namrup (Assam)

The Namrup Project, which is estimated to cost about Rs. 20 crores, is designed to produce 45,000 tonnes of nitrogen per year in the form of 1,00,000 tonnes of ammonium sulphate and 55,000 tonnes of urea. The factory is expected to go into production by the middle of 1967.

#### Gorakhpur (U. P.)

The Gorakhpur Plant is designed to produce 80,000 tonnes of nitrogen per year exclusively in the form of 1,73,920 tonnes of urea and is estimated to cost about Rs. 27½ crores. The factory is expected to go into production during the second half of 1967.

#### Durgapur (U. P.)

The fertilizer factory at Durgapur, which is estimated to cost a little over Rs. 38 crores, will be the biggest of all fertilizer production units so far built in the country. Its production capacity will be 135,000 tonnes of nitrogen per year in the form of urea.

The factory is expected to go into production during 1968-69.

#### Internal Resources.

It may be stated that since the inception of the Corporation's oldest unit at Sindri, the total internal resources generated by way of revenue surpluses and contributions to the depreciation reserve amounted to Rs. 49.94 crores upto 31st March, 1965.

Chairman & Managing Director: Satish Chandra, I.C.S.

#### GARDEN REACH WORKSHOPS LTD.

43/44, Garden Reach, Calcutta 24.

It is a Limited Company owned by the Government of India.

The Workshops cover an area of 64 acres with a river frontage of half a mile. It offers slipway and dry dock facilities for craft up to 2,000 tons and building berths for vessels up to 1,200 tons launching weight. The Workshops are situated

very close to the Calcutta Port and are fully equipped to undertake all types of marine repairs for all sea-going vessels as well as inland water transport and harbour craft.

The Garden Reach Workshops Limited, which is a vital unit in the Ship-building and Ship-repairing Industry, has also become an important industrial unit in the field of general engineering, especially in connection with the manufacture of Electric Overhead Travelling Cranes, Deepwell Turbine Pumps, Mine Haulages and other Mine Machinery, Air Compressors and Diesel Road Rollers. It has extensive fabrication facilities for all types of structural work and possesses machine shops equipped with latest type of machines. The workshops are currently planning production of M.A.N. Diesel Engines of various ranges, especially those required for sea-going vessels.

The workshops now employ approximately 5,700 men and has a well organised training scheme for apprentices. The Company increased its production volume by 25 per cent during 1965-66 during which year it made a profit of Rs. 35.80 lakhs.

#### HEAVY ELECTRICALS (INDIA) LTD.

(A Government of India Undertaking)

(Piplani, Bhopal)

(Under the Ministry of Industry)

The Company's authorised, issued and paid-up Capital is Rs. 50 crores.

The production of switchgear started in the latter half of 1960 followed by that of transformers and capacitors. Subsequently, the manufacture of electric traction equipment and industrial motors was taken up. The factory commenced in 1965 the manufacture of generating plant—water and steam turbines sets—for exploiting the coal resources and hydropotential in the country. Lately the manufacture of rectifiers has also been taken up.

The factory was originally planned for an annual output of Rs. 12.5 crores to be achieved by 1968. Subsequently, it was decided to raise the production capacity of the factory to about Rs. 40 crores at the optimum level. The total strength of employees at optimum level is expected to be nearly 20,000.

**Ancillary Services :** The factory has its own blue water gas plant, boiler plant, power house, oxygen and acetylene plants and electroplating shop.

An Ancillary Industrial Estate has come up in the vicinity of the factory. Industries located in the Industrial Estate are also working as ancillaries to HEIL. In all 10 such ancillaries have been established so far. These units will produce components required for sophisticated and complicated heavy electrical equipment being manufactured in the factory.

**Production Programme :** The factory has turned out equipment worth Rs. 24 crores during the period from July 1, 1960 to March 31, 1966. The 1965-66 output was worth Rs. eight crores approximately. In 1966-67 the output worth Rs. 14 crores is expected.

**Township :** The township has a population of about 50,000.

Chairman and Managing Director : K. C. Lall;  
Secretary : R. C. Gupta.

#### HEAVY ENGINEERING CORPORATION LTD.

Administrative Building, Plant Plaza Road,  
P.O. Dhurwa, Ranchi.

Heavy Engineering Corporation Limited, a fully owned Government of India Undertaking, was incorporated in Bihar on 31st Dec., 1958 with Headquarters at Ranchi for developing the manufacture of heavy capital equipment in India. The Corporation is now engaged in establishing the following projects :—

1. Heavy Machine Building Plant at Ranchi in collaboration with U.S.S.R.; 2. Foundry Forge Plant and 3. Heavy Machine Tools Plant at Ranchi in collaboration with Czechoslovakia.



At full capacity, the plants will provide employment to a total of approximately 16,000 staff, engineers and workers.

**Heavy Machine Building Plant, Ranchi:** The plant has a production capacity of 80,000 tonnes of machinery items and 25,000 tonnes of structural steel items per year. Adequate provision has also been made for further expansion of the capacity to 1,65,000 tonnes of finished machinery items.

The plant is primarily meant to produce equipment and machinery for Iron and Steel Industry. It also possess adequate facilities and capacity to meet the requirements of machinery and equipment for other major industries like mineral, oil (oil drilling rigs), coal mining, chemical, fertilizer, cement etc., as well as for the manufacture of general engineering items like heavy cranes, excavators, crushing and grinding equipment, etc.

The plant has a programme for producing over 19,500 tonnes of plant and equipment during 1966-67 as against 10,000 tonnes produced during 1965-66. Apart from the order for 46,000 tonnes already in hand substantial quantity of plant and equipment for the Bokaro Steel Plant will also be supplied. The plant has on its rolls over 5,000 workers and staff.

**Foundry Forge Plant:** This plant with a capital outlay of Rs. 100 crores has been set up at Ranchi in collaboration with Czechoslovakia and will have the following production per year from its main production shops: Grey Iron Foundry (shaped castings) 33,345 tonnes; Steel Foundry (shaped castings) 40,182 tonnes; Non-Ferrous Foundry (castings) 700 tonnes; Forgings 50,000 tonnes; Grey Iron Steel and Forged Rolls 21,310 tonnes.

The plant has in addition, its own well-equipped pattern shop, fettling shop, battery of gas producers, Acetylene and Oxygen plants besides the power and gas services. The plant will also be equipped with a 6,000-ton press which will be the biggest so far in India.

This plant is mainly meant to supply all types of grey iron and steel castings and forgings—ranging from a few kilograms to as heavy as 100-ton piece weight—to meet the requirements of Heavy Machine Building and Heavy Machine Tools Plants. Provision has also been made for some surplus capacity to meet the demand of heavy castings and forgings from various other industries both in the private and public sectors. A fully equipped central laboratory is also being set up for quality control of its products. The Plant is expected to go into full production by 1968 when it will employ about 8,000 persons.

**Heavy Machine Tools Plant, Ranchi:** This plant will have an annual production capacity of 10,000 tons of certain diverse items of heavy machine tools. Adequate provision has been made for increasing the capacity of the plant to 20,000 tons per year or to any other intermediary stage, if considered necessary. When in full production, the plant will manufacture approximately 273 complete machine tools. The average weight of each machine will be 25/30 tons while the maximum weight of an individual machine is expected to be approximately 180 tons—the maximum weight of a single component being 50 tons.

The plant has gone into production of items like Radial Drilling Machines, Central Lathes, etc. At full production the plant will have over 2,000 staff and workers on its rolls.

**Training Programme:** A comprehensive programme of training has been worked out. Over 323 Indian engineers and technicians have received training from 6-18 months in U.S.S.R. and Czechoslovakia. Experts from USSR and Czechoslovakia, experienced in design and technology, are also being drawn for training of engineers and technicians. At Ranchi, the Corporation has set up a Central Training Institute, complete with workshop facilities, including foundry and smithy shop to provide training to workmen.

**Chairman:** T. R. Gupta.

## HEAVY VEHICLES FACTORY

Avadi, Madras 54.

The Rs. 16 crore Heavy Vehicles Factory is being geared up to manufacture tracked vehicles and other major heavy engineering equipment required for military as well as civilian purposes.

The first phase of construction work both in the factory and residential areas is almost complete and the work on the second phase is due to commence very shortly.

The first 'Vijayanta' medium tank produced in this factory rolled out on 29th Dec., 1965 on schedule, thus setting new dimensions in defence production. Production in all the shops has been well established. The ultimate employment potential of this factory is of the order of 3,000. This factory is also expected to give fillip to the ancillary industries in the Madras area.

## HINDUSTAN AERONAUTICS LTD.

(Bangalore Division)

(Hindustan Aircraft P.O., Bangalore 17, Mysore)

**Tel. & Cable address:** "Aircraft", Bangalore.

Hindustan Aeronautics Ltd., was formed on Oct. 1, 1964, implementing the decision of the Government of India to amalgamate Hindustan Aircraft Ltd., and Aeronautics India Ltd.—a Company formed to undertake the MIG manufacturing projects at Koraput, Nasik and Hyderabad and had also taken over the management of the Aircraft Manufacturing Depot, Kanpur. On amalgamation, the Hindustan Aircraft Ltd., became the Bangalore Division of Hindustan Aeronautics Ltd. The Railcoach Division, which formed part of the Hindustan Aircraft Ltd. was separated from Jan., 1965 and the work of railcoach manufacture entrusted to Bharat Earth Movers Ltd., a separate Company set up under the Ministry of Defence.

**TH-2:** In 1947-48, "All-Metal Basic Trainer Aircraft" the HT-2, was designed and developed by HAL. A number of these aircraft have since been manufactured.

**Vampire:** In March 1950, the Government of India entered into a licence agreement with the De Havilland Aircraft Co. of U.K. for the manufacture of Vampire Jet Aircraft in HAL. Production of this aircraft against orders received has been completed.

**Gnat:** The Government of India entered into an agreement in Sept. 1956 with Folland Aircraft Ltd., U.K., for the manufacture of the Gnat, under Licence, at HAL. HAL is now manufacturing the aircraft from raw materials.

**HF-24:** The Government approved in 1956 the appointment of a team of German engineers to assist HAL in the design and development of a supersonic fighter aircraft known as the HF-24. The first proto-type of the HF-24 MK.I aircraft powered by two Orpheus 703 engines made its successful flight in June 1961 and the second prototype in Oct. 1962. An initial batch of aircrafts has already been delivered to the Indian Air Force.

**Pushpak:** HAL undertook and completed the development of an ultra-light aircraft, the Pushpak, in the middle of 1958. This is an ultra-light two seater aircraft suitable for flying clubs. About 110 Pushpak aircraft have been produced so far.

**Krishak:** This is a light four seater aircraft. The first prototype made its successful first flight in Nov. 1959 and the second in Nov. 1960. Series production of this aircraft has commenced.

**Basic Jet Trainer HJT-16:** The aircraft is powered by a Viper II, turbo-jet engine. It is a single engined aircraft, fully aerobatic, with two side by side seats for basic pilot training.

**Helicopters:** The Government of India have entrusted to HAL, the manufacture of "Alouette" helicopters, under licence from Sud-Aviation of France. First phase of production has commenced.

**Artouste:** The Government of India have entrusted to HAL, the manufacture of the Artouste turbo-jet engine for the 'Alouette'

helicopters under licence from Turbomeca of France. First phase of production has commenced.

**HJE-2500:** The HJE-2500 is a turbo-jet engine designed and developed by HAL for the Basic Jet Trainer aircraft. The first prototype of the HAL is nearing completion.

**Other Development Work:** Other development work includes the design of a Pneumatic Starter for the starting of turbo-jet engines of 5,000/10,000 lbs. thrust range and installation of the Orpheus 701 engines as an auxiliary jet pack for the Fairchild Packet aircraft for high altitude flying.

**Staff Strength:** The personnel strength of the company excluding the personnel of the Railcoach Division rose from 19,952 on 31st March 1964 to 21,081 on 31st March 1965.

**Chairman:** S. S. Khara, I.C.S., **Managing Director:** Air Marshal P. C. Lal, **General Manager:** P. M. Reddy.

## HINDUSTAN ANTIBIOTICS LIMITED

(Pimpri, Poona-18)

(Under the Ministry of Petroleum and Chemicals)

Hindustan Antibiotics Limited is situated on a 200 acre land at Pimpri, 9 miles from Poona. The company was registered in 1954 with an authorised capital of Rs. 4 crores of which as of date the subscribed capital is Rs. 2.47 crores. The factory came into being as a result of the tripartite agreement between the Government of India, the World Health Organization, and the UNICEF. The factory went into production in August 1955. This 9 million Mega Unit Plant has progressively increased its production capacity to 53.29 mmu in 1964-65 as a result of technical developments. A further Rs. 25 lakhs expansion of the Penicillin Plant approved by the Government of India, will raise the Plant's capacity to 84 mmu.

The sterile finished bulk penicillin in Million Mega Units produced in the factory over the past 5 years are 40.24, 45.53, 50.17, 51.54 and 53.29 mmu. The Streptomycin Plant of the company with a rated capacity of 40 tons per annum was established with the technical collaboration of Messrs. Merck & Company Inc. U.S.A. This plant produces salts of Streptomycin. Expansion of the plant to double the production was completed.

A plant for production of 1.5 tons of broad spectrum antibiotics of the Tetracyclines group at a cost of Rs. 10 lakhs is now fully engaged on production of Chlorotetracycline.

Another important development is the discovery of antifungal antibiotics like Hamycin, and Dermostatin by the company's research laboratories.

All these schemes on completion will enable the company to produce antibiotics worth Rs. 6 crores a year.

The company has a complement of about 2,000 employees, about 50 per cent of whom are housed in the Company's residential estate having all modern amenities.

**Managing Director:** C. A. Subrahmanyam; **Works Manager:** B. V. Raman; **Fin. Adviser & Chief Accounts Officer:** M. Ram. sw. mv; **Chief Engineer:** G. C. Upadhyay; **Public Relations Officer:** C. B. Bhatu.

## HINDUSTAN CABLES LTD.

P.O. Hindustan Cables, Burdwan Dist.

(See Late Particulars).

## HINDUSTAN HOUSING FACTORY LIMITED

(Jangpura, New Delhi 14)

The Hindustan Housing Factory Ltd. is now under the control of the Ministry of Works and Housing.



The authorised share capital of the company is Rs. 75.00 lakhs of which paid-up capital is Rs. 48.99 lakhs. The Government have advanced to the company interest bearing loan aggregating Rs. 40,75,000.

Production during 1965-66 was worth Rs. 1.52 crores.

Main products of the Hindustan Housing Factory are as under :—

Prefabricated components for multistoreyed buildings; Prestressed concrete transmission line poles; Prestressed concrete street light poles; P.C.C. Beams for industrial sheds with sheeted roofs; P.C. assembled trusses for industrial sheds; P.C. Beams for composite constructions; Roofing and flooring components with prestressed concrete beams; Precast R.C.C. cladding panels; Precast prestressed units for fencing posts; R.C.C. door and window frames; Hollow blocks for roofing; Hollow blocks for walling; Overhead concrete tanks for residential uses, Large panels for large panel house construction; Precast concrete flooring slabs; Prestressed concrete railway sleepers; R.C.C. railway sleepers; Precast vibrated pipes for drains; Precast vibrated Porous Pipes; Reinforced foam concrete panels; Foam concrete blocks for cold storage and air-conditioned buildings; Foam concrete blocks for multistoreyed buildings; Machine-made doors and window frames and shutters; Flush doors; Seasoning and chemical treatment of timber.

*Chairman* : Major General Harkirat Singh; *Managing Director*, J. Dural Raj; *Secretary*, G. S. Ahuja.

#### HINDUSTAN INSECTICIDES LIMITED

Regd. Office : C-255, Defence Colony, New Delhi-3.

Incorporated in 1954 at New Delhi.

The authorised capital of the Company is Rs. 1.30 crores. The paid up capital at present is Rs. 12,547,000. Net profit for 1965-66 was Rs. 11.03 lakhs.

The Company operates two DDT manufacturing plants in the country — one situated at New Delhi and the other at Alwaye in Kerala State. Delhi factory was the first one to be set up with the aid of the United Nations Agencies. Present annual rated capacity of each of the two factories at Delhi and Alwaye is approximately 1,400 tonnes.

Both these factories are provided with formulating units capable of converting DDT into water-dispersible powder.

A number of bye-products — Hydrochloric Acid, Sulphuric Acid, Ortho DCB, Para D.C.B., Ethyl Chloride are being manufactured and successfully marketed. Plans are well in hand for the export of Chloral Hydrate. Till recently most of the requirements of Ethyl Chloride in the country was imported; but the manufacture of this chemical now would mean a very useful import substitution.

Training facilities have been provided in both the factories. Amenities like Bonus, Canteen, Dispensary, Housing etc. exist in the factories.

The Company has undertaken in 1966 a large expansion programme by which the Delhi Unit would double its capacity from 1,400 tonnes of Technical DDT per year to 2,800 tonnes. At Alwaye, a new plant for the manufacture of 3,000 tonnes of B.H.C. per year, would be set up. B.H.C. would be used as pesticide in agriculture. Total investment on these two projects, which would be completed by Nov. 67, would be approximately Rs. 1.50 crores. Staff: 658 persons.

Production of Technical D.D.T. and Formulated D.D.T. respectively during 1965 and 1966 was 2,633 and 3,668 metric tons.

*Chairman* : K. P. Madhavan Nair; *Managing Director* : Mohd. Fazal.

#### HINDUSTAN MACHINE TOOLS LIMITED

(H.M.T.P.O., Bangalore 31).

This is a limited company under the Ministry of Industry, registered in Mysore on February 7, 1953 and located in Jalahalli, Bangalore.

The authorised share capital of the company is Rs. 12 crores.

Commencing its production with one type of machine viz. High Precision Lathe (H.22) in 1956, the factory has been able to progressively diversify the production and turn out a wide range of machine tools like Milling Machines, Radial Drilling Machines, General Purpose Lathes, Turret Lathes, Grinding Machines, Special Purpose Machines, all Electric Heavy Duty Programme Controlled Milling Machines, Gear Shapers and Gear Hobbing Machines.

Recently the Company signed technical collaboration agreements with a U.S. firm for the manufacture of automatic lathes and with French and German firms for the manufacture of single-spindle automatics, copying lathes and multi-spindle lathes.

The Company employs 11,742 skilled and semi-skilled workers.

Since starting its commercial production in 1956, till the end of March 1966, the factory turned out 11,860 machines valued at Rs. 52.2 crores. During 1965-66, production came to 2,048 machines valued at Rs. 11 crores. The Bangalore factories accounted for a total production of 1,512 machines as against 2,070 machines during 1964-65. New additions to HMT's production line were gear shapers, gear hobbors and the E2 type Electrically controlled milling machine.

205 all-Electric Milling Machines were turned out by the factory's plant at Pinjore in the Punjab. Production of these machines has been introduced for the first time in India.

The fourth plant at Kalamassery in Kerala accounted for an output of 331 lathes.

The fifth unit at Hyderabad was commissioned on December 27, 1965.

During 1965-66, HMT had orders for supply of 3,382 machines against which it could despatch 1,864 machines. During 1964-65, it despatched 2,258 machines against order for 2,469 machines.

The HMT declared a net profit of Rs. 3.78 crores during 1964-65, representing a return of 39 per cent over its share capital of about Rs. 8 crores. Profits during 1963-64 came to Rs. 3 crores, representing a return of 37.5 per cent over the company's share capital. The HMT further declared a dividend of 10 per cent for the fifth consecutive year.

HMT has its own training centres where training is offered in the following trades : (1) Highly skilled operators, fitters, turners, millers, grinders, and (2) Reconditioning of machine tools and preventive maintenance.

#### Future Plans

The demand figures for the Fourth Plan had been worked out tentatively and according to these estimates machine tool requirements towards the end of the Fourth Plan i.e. by 1970-71, were placed at Rs. 131 crores per annum. To meet at least 50 per cent of this demand and be able to export some portion of its production, HMT has offered to the Government to establish five more factories during the Fourth Plan period at the rate of one factory per year and the capital expenditure for all these additional Units is planned to be met entirely by the Company from its own internal resources.

#### Watch Project

Construction of the Watch Factory on the site adjoining the Machine Tool Factories in Jalahalli near Bangalore commenced during 1961, and was completed in October 1962 in collaboration with Messrs. Citizen Watch Co., Japan. After erection of the plant and machinery, manufacture of watches with 54 per cent indigenous content commenced during April 1963.

The HMT Watch Factory turned out 1,96,110 watches during 1965-66.

The HMT Watch Factory has now a network of 13 Sales-cum-Service Centres all over the country. Besides, watches are being sold and after-sales service arranged at its factories in Bangalore, Pinjore, in the Punjab, Kalamassary in Kerala and Hyderabad in Andhra Pradesh.

*Chairman* : K. B. Mathur.

*Managing Director* : S. M. Patil.

#### HINDUSTAN ORGANIC CHEMICALS LTD.

P.O. Rasayani, Dist. Kolaba, Maharashtra.

(A Govt. of India Undertaking)

This is a Government of India Undertaking under the administrative control of the Ministry of Petroleum and Chemicals.

The Company was incorporated in Dec. 1960, with the authorised capital of Rs. 12 crores for manufacture of about 40 organic chemicals and intermediates required for the Dyestuff, Drugs and Plastic Industries.

But, early in 1965, the programme was revised and a product-programme has been selected for development in two phases so that the project becomes economically viable. The revised scheme would require an investment of Rs. 20 crores for the first stage to be completed by mid 1968 and of further Rs. 19 crores for the 2nd phase, to be taken up subsequently.

The Company has done considerable work on its factory site at Rasayani, about 56 miles from Bombay. The new production programme includes besides a large number of organic derivatives, Benzene, Toluene and Naphthalene, several inorganics such as Caustic Soda, Chlorine, Sulphuric and Nitric acids, etc.

*Managing Director* : Dr. G. S. Kasbekar.

*Secretary* : P. J. Kishinchandani.

#### HINDUSTAN PHOTO FILMS MFG. CO. LTD.

Indu Nagar, Ootacamund.

The raw film factory, located on the outskirts of the hill station of Ootacamund in South India, is a public sector project for the manufacture of a large variety of photographic sensitized materials in collaboration with the French firm, Bauchet & Co.

When the factory goes into full production, it is expected to turn out annually 5.80 million sq. m. of photographic film and photographic paper, the sale value of which would be nearly Rs. 9.25 crores per year. As an adjunct to this project, a Silver Sludge Recovery, Silver Refining and Silver Nitrate Plant, as also a plant for the manufacture of organic chemicals, which constitute important raw materials for the project, are also being set up.

The total cost of the Project excluding the Township is estimated at Rs. 9.35 crores and the cost of the Township at Rs. 1.69 crores. The Project will be manned and operated by Indian personnel, many of whom have already received training in France in the factory of the collaborators. Expected to start production by the end of 1966.

*Managing Director* : M. A. S. Rajan.

#### HINDUSTAN SALTS LTD.

Badnor House, Bhagwan Das Road, P. Box No. 146, Jaipur.

(Under the Ministry of Industry)

The Company was registered on 12th April, 1958 at Jaipur. The salt source at Khara-goda (Gujarat) and the salt mines at Mandi (Himachal Pradesh) are under the administrative control of the Company.

The authorised capital of the Company is Rs. 2 crores and the total subscribed and paid-up capital is Rs. 1,78,81,000 divided into 17,881 shares of Rs. 1,000 each which are held by the Government of India.

Production during the fiscal year ending 30th September, 1965, are as follows :—

Common Salt 1,69,441 M. Tonnes; Rock and Pan Salt 2,477 M. Tonnes.

*Chairman* : Maj. Genl. M. S. Himatsinghi; *Managing Director* : Vacant; *Secretary* : B. B. Mookerjee.



**HINDUSTAN SHIPYARD LIMITED**  
(Visakhapatnam 5, Andhra Pradesh)  
(Under the Ministry of Transport)

Foundation stone for the shipyard was laid at Visakhapatnam in 1941 and the first ship "JALA USHA" was launched in March 1948. The Government of India took over the management in 1952 under the banner of "HINDUSTAN SHIPYARD LIMITED". The authorised capital of this Company is Rs. 10 crores, while the issued and paid-up capital is Rs. 6,02,85,000.

The shipyard has four building berths with a capacity of 15,000 DWT each, besides a fifth berth for the construction of minor craft. A master plan of development worth Rs. 2 crores had already been implemented after nationali-

sation. At present, work on Dry Dock Project is fast going ahead which will facilitate undertaking large-scale repair works. This is expected to be completed by 1968. Construction of a Wet Basin is also an item of future development programme, which will improve the fitting-out accommodation besides providing supplementary facilities for ship-repairing activity.

Hindustan Shipyards has so far built 42 ships of different sizes and types aggregating more than 3,00,000 DWT. This represents about 2,30,000 GRT of ships roughly equivalent to about 15 per cent of the Indian tonnage. Efforts are now being made to build six ships a year from 1967-68 onwards.

A full-fledged Training School in the shipyard imparts training to recruits in various trades.

Uptil now, a total number of 377 apprentices have been trained in all trades, apart from 26 inplant trainees. There are about 5,600 employees in the Shipyards.

A provision of Rs. 2.44 crores had been made for further development of the shipyard in the Third Plan out of which the first phase at a cost of about Rs. 78 lakhs had already been sanctioned.

A full-fledged training school has been started in which recruits get intensive training for 4 years in batches of 100 each.

It is now decided that the second shipyard would be located in Cochin.

Chairman: Dr. Nagendra Singh, I.C.S.; Managing Director: H. C. Bant; Secretary: P. S. Prakasa Rao.

The following table gives details of the ships built at the shipyard:

|     | Name of ship                         |    |    |    |    |    |    |    |    | Date of laying keel | Date of launching | Date of completion and sailing | To whom sold                            |
|-----|--------------------------------------|----|----|----|----|----|----|----|----|---------------------|-------------------|--------------------------------|-----------------------------------------|
| 1.  | "Jala Usha" (8,000 DWT)              | .. | .. | .. | .. | .. | .. | .. | .. | 22-6-46             | 14-3-48           | 15-10-48                       | Scindia S. N. Co. Ltd.                  |
| 2.  | "Jala Prabha"                        | .. | .. | .. | .. | .. | .. | .. | .. | 22-8-46             | 20-11-48          | 31-3-49                        | "                                       |
| 3.  | "Kutubtari" (245 DWT)                | .. | .. | .. | .. | .. | .. | .. | .. | 23-5-47             | 18-12-48          | 19-5-49                        | "                                       |
| 4.  | "Jalaprakash" (8,000 DWT)            | .. | .. | .. | .. | .. | .. | .. | .. | 27-5-48             | 8-8-49            | 14-12-49                       | "                                       |
| 5.  | "Jalapankhi"                         | .. | .. | .. | .. | .. | .. | .. | .. | 7-1-49              | 6-12-49           | 31-3-50                        | "                                       |
| 6.  | "Jalapadma"                          | .. | .. | .. | .. | .. | .. | .. | .. | 26-1-50             | 14-9-50           | 14-1-51                        | "                                       |
| 7.  | "Jalapalaka"                         | .. | .. | .. | .. | .. | .. | .. | .. | 26-1-50             | 27-12-50          | 29-3-51                        | "                                       |
| 8.  | "Bharatmitra"                        | .. | .. | .. | .. | .. | .. | .. | .. | 28-9-50             | 26-3-51           | 28-6-51                        | Bharat Line Ltd.                        |
| 9.  | "Jagrani"                            | .. | .. | .. | .. | .. | .. | .. | .. | 9-5-51              | 15-12-51          | 4-6-52                         | Great Eastern Shipping.                 |
| 10. | "Jalaprataap"                        | .. | .. | .. | .. | .. | .. | .. | .. | 9-5-51              | 27-2-52           | 31-7-52                        | Scindia S.N. Co. Ltd.                   |
| 11. | "Jalapushpa"                         | .. | .. | .. | .. | .. | .. | .. | .. | 26-12-51            | 9-7-52            | 30-9-52                        | "                                       |
| 12. | "Bharatratna"                        | .. | .. | .. | .. | .. | .. | .. | .. | 22-7-52             | 26-8-53           | 21-6-54                        | Bharat Line Ltd.                        |
| 13. | "Jalaputra"                          | .. | .. | .. | .. | .. | .. | .. | .. | 22-7-52             | 9-11-53           | 12-8-54                        | Scindia S. N. Co. Ltd.                  |
| 14. | "Jalavihar" (7,000 DWT)              | .. | .. | .. | .. | .. | .. | .. | .. | 1-8-53              | 16-8-54           | 14-6-55                        | "                                       |
| 15. | "Jalavijaya"                         | .. | .. | .. | .. | .. | .. | .. | .. | 30-9-53             | 26-3-55           | 17-12-55                       | "                                       |
| 16. | "Jalavishnu"                         | .. | .. | .. | .. | .. | .. | .. | .. | 16-12-53            | 2-11-55           | 16-5-56                        | "                                       |
| 17. | "State of Kutch (8,000 DWT)          | .. | .. | .. | .. | .. | .. | .. | .. | 2-9-54              | 29-3-56           | 1-11-56                        | Shipping Corporation of India.          |
| 18. | "Adyar" (Kost Nozzle Tug) 242 DWT    | .. | .. | .. | .. | .. | .. | .. | .. | 27-9-54             | 31-12-55          | 5-9-57                         | Madras Port Trust.                      |
| 19. | "Andamans" (4,000 DWT)               | .. | .. | .. | .. | .. | .. | .. | .. | 10-8-55             | 25-7-56           | 4-12-57                        | Govt. of India Home Ministry.           |
| 20. | "State of Orissa" (8,000 DWT)        | .. | .. | .. | .. | .. | .. | .. | .. | 8-12-55             | 16-2-57           | 31-12-57                       | Shipping Corporation of India.          |
| 21. | "Vidyut" (M.L.)                      | .. | .. | .. | .. | .. | .. | .. | .. | 19-10-53            | 18-8-54           | 18-3-58                        | Madras Central Excise.                  |
| 22. | "Jalavikram" (7,000 DWT)             | .. | .. | .. | .. | .. | .. | .. | .. | 16-4-56             | 29-7-57           | 26-3-58                        | Scindia S. N. Co. Ltd.                  |
| 23. | "Jalaveera"                          | .. | .. | .. | .. | .. | .. | .. | .. | 4-8-56              | 22-11-57          | 4-7-58                         | "                                       |
| 24. | "Rajkumar" (6,000 DWT)               | .. | .. | .. | .. | .. | .. | .. | .. | 31-8-57             | 5-7-58            | 10-6-59                        | Great Eastern Shipping Corporation Ltd. |
| 25. | "Indian Industry"                    | .. | .. | .. | .. | .. | .. | .. | .. | 7-12-57             | 11-12-58          | 27-10-59                       | India Steamship Co.                     |
| 26. | "Dhruvak" (500 DWT)                  | .. | .. | .. | .. | .. | .. | .. | .. | 27-1-56             | 16-7-58           | 16-11-59                       | Indian Navy.                            |
| 27. | "Jayalakshmi" (5,000 DWT)            | .. | .. | .. | .. | .. | .. | .. | .. | 22-8-57             | 22-4-59           | 27-1-60                        | New Dholera Steamship Co. Ltd.          |
| 28. | "State of Uttar Pradesh" (9,500 DWT) | .. | .. | .. | .. | .. | .. | .. | .. | 3-10-58             | 31-12-59          | 5-1-61                         | Shipping Corp. of India.                |
| 29. | "R.S.V. Haldia" (360 DWT)            | .. | .. | .. | .. | .. | .. | .. | .. | 16-11-56            | 11-6-60           | 25-3-61                        | Calcutta Port Commr.                    |
| 30. | "State of Rajasthan" (9,500 DWT)     | .. | .. | .. | .. | .. | .. | .. | .. | 22-1-59             | 29-4-60           | 18-5-61                        | Shipping Corp. of India.                |
| 31. | "Vishva Nidhi" (9,500 DWT)           | .. | .. | .. | .. | .. | .. | .. | .. | 11-5-59             | 6-9-60            | 2-10-61                        | "                                       |
| 32. | "State of Punjab" (12,300 DWT)       | .. | .. | .. | .. | .. | .. | .. | .. | 2-12-59             | 16-4-61           | 6-4-62                         | "                                       |
| 33. | "Vishvashanti" (12,300 DWT)          | .. | .. | .. | .. | .. | .. | .. | .. | 29-1-60             | 25-9-61           | 14-9-62                        | "                                       |
| 34. | "Vishva Prem" (12,300 DWT)           | .. | .. | .. | .. | .. | .. | .. | .. | 27-5-60             | 20-12-61          | 7-1-63                         | "                                       |
| 35. | "Vishva Maya" (12,300 DWT)           | .. | .. | .. | .. | .. | .. | .. | .. | 22-9-60             | 6-4-62            | 21-4-63                        | "                                       |
| 36. | "Vishva Mangal" (12,300 DWT)         | .. | .. | .. | .. | .. | .. | .. | .. | 5-5-61              | 17-8-62           | 7-9-63                         | "                                       |
| 37. | "Jalakala"                           | .. | .. | .. | .. | .. | .. | .. | .. | 12-10-61            | 29-3-63           | 12-11-64                       | Scindia S. N. Co. Ltd.                  |
| 38. | I.N.S. "Darshak"                     | .. | .. | .. | .. | .. | .. | .. | .. | 14-10-57            | 2-11-59           | 28-12-64                       | Indian Navy.                            |
| 39. | "State of Madhya Pradesh"            | .. | .. | .. | .. | .. | .. | .. | .. | 8-1-62              | 15-10-63          | 4-5-65                         | Shipping Corporation of India.          |



**HINDUSTAN STEEL LIMITED**

P. O. Hinoo, Ranchi.

(Under the Ministry of Steel and Mines)

Hindustan Steel (Private) Limited was incorporated on 19th January, 1954 and in March 1959 this was renamed Hindustan Steel Ltd.

**Finance**

The company has now an authorised capital of Rs. 6,000 million, out of which the subscribed capital upto 31st March, 1966 is Rs. 5,280 million. The company has drawn from the Central Government a total loan of Rs. 4,321 million.

The net surplus of earnings before depreciation and interest in 1965-66 is Rs. 617.8 million, about Rs. 28.03 million higher than 1964-65. The stock in trade is valued at Rs. 291.5

million. So far, HSL, has shown a cash surplus of Rs. 1,315 million which has been utilised for expansion and for provision of working capital. After providing Rs. 417.74 million for depreciation and Rs. 183 million for interest, Hindustan Steel has made a net profit of Rs. 16.66 million during the year.

The sales during the current year have improved by Rs. 340 million—from Rs. 2,048 million in 1964-65 to Rs. 2,388 million in 1965-66.

Though there has been an increase of sales, the market conditions deteriorated during this year with the result that sales could not match with production and stocks of finished and semi-finished products increased by Rs. 85 million.

**Production**

During the year under review, production of the important items is given below.

**Production 1965-66**

|                   |    |    |    |    | In tonnes |           |             |
|-------------------|----|----|----|----|-----------|-----------|-------------|
|                   |    |    |    |    | Bhilai    | Rourkela  | HSL (Total) |
| <b>Production</b> |    |    |    |    |           |           |             |
| Pig Iron          | .. | .. | .. | .. | 1,632,000 | 1,054,000 | 2,686,000   |
| Ingots Steel      | .. | .. | .. | .. | 1,371,000 | 1,065,000 | 2,436,000   |
| Saleable Steel    | .. | .. | .. | .. | 1,028,000 | 782,000   | 1,810,000   |
| Nitro-Calcium     | .. | .. | .. | .. | —         | 158,800   | 158,800     |

**Training**

The following table indicates the number of engineers and operatives who were sent abroad for training and have since returned upto 31st March 1966.

| Countries    | Engineers |          | Operatives |          |
|--------------|-----------|----------|------------|----------|
|              | Sent      | Returned | Sent       | Returned |
| UK           | ..        | ..       | ..         | ..       |
| USA          | ..        | ..       | ..         | ..       |
| USSR         | ..        | ..       | ..         | ..       |
| West Germany | ..        | ..       | ..         | ..       |
| Australia    | ..        | ..       | ..         | ..       |
| Canada       | ..        | ..       | ..         | ..       |
| France       | ..        | ..       | ..         | ..       |
| Japan        | ..        | ..       | ..         | ..       |
| Total        | ..        | ..       | ..         | ..       |

About 1,000 Executives have been trained so far (March 1966) in the training institute at Ranchi in the various courses.

The total number of graduate engineers, senior and junior operatives and artisans trained so far (March 1966) in the Technical Training Institutes of Rourkela, Bhilai and Durgapur is 80,465.

**Central Engineering and Design Bureau**

The Central Engineering and Design Bureau of HSL had prepared detailed Project Reports for the expansion of Rourkela Steel Plant from its initial one million tonne capacity to 1.8 million tonne capacity and for Durgapur Steel Plant from its initial one million tonne capacity to 1.6 million tonne capacity. It has also made a detailed Project Report of Durgapur Steel Plant for expansion to 3.4 million tonnes during the Fourth Plan and is preparing the Rourkela Expansion Report for raising the Plant to 2.5 million tonnes annual capacity. Besides, the

Central Engineering and Design Bureau acts as consultant to the Government of India. At present the strength of the CEDB is 192 engineers, including 15 foreign experts, 18 graduate engineers and 90 design assistants.

**Bokaro Steel Project**

Bokaro Steel's Project is now functioning separately as a new company—Bokaro Steel Limited. (For more details see under Bokaro Steel Ltd.)

**Rourkela Steel Plant**

Hindustan Steel's first Steel Plant, Rourkela, set up with financial and technical help of West Germany is in Orissa. The present annual capacity of the Rourkela Steel Plant is one million tonnes of steel ingots capable of being turned into about 720,000 tons of finished plates, sheets, strips and tin plates. Its special feature is that it is the only plant now producing steel by L.D. process in India.

The plant consists of 3 Coke Oven Batteries of 70 ovens each, a By-product Plant and 3 Blast Furnaces each producing 1,000 tons of pig iron a day. The Steel Melting Shop consists of 4 Open Hearth Furnaces (of 80 tons capacity each) and 3 L.D. Converters (of 40 tons capacity each) which will produce 250,000 tons and 750,000 tons of ingot steel respectively.

A contract for Iron Ore Beneficiation Plant at Barsua has been entered with the Japanese firm Sumitomo Machinery Company Limited. The limestone from Purnapani quarries is being supplemented from Satna and other sources. Fully mechanised operation of the Purnapani quarries has started. A scheme for mechanisation of Gatinagar Dolomite quarry is under consideration.

Saleable products: Heavy Plates 200,000 tonnes; Medium Plates & Wide Strips 300,000 tonnes; Sheets and Strips 170,000 tonnes; Tin Plates 50,000 tonnes. In addition to different flat products, ERW Pipes, certified by American Petroleum Institute (API), ranging from diameter 8½" to 20" are produced by the pipe plant.

The By-product Plant will deal with 130 tons of tar per day and produce benzol, creosote, naphthalene and other products. The By-product Plant being extended under the expansion programme will handle 35,000 Ncbm per hour of gas to accommodate any further expansion of the Coke Oven Batteries.

In addition to by-products like benzol, toluene, xylene, solvent naphtha, creosote oil, wash oil, anthracene oil, naphthalene, crude anthracene, crude phenol etc. are also produced.

A Sintering Plant to utilise iron ore fines, coke breeze, limestone chips etc. and designed to produce 5,000 tons of sinter on an average per day has been added to Rourkela during the one million tonne stage. The second pig iron casting machine forming part of the expansion programme has already been commissioned in 1964. The new units under the Third Plan expansion are nearing completion serially and it is expected that all the units will go into production before the end of 1967.

After the expansion programme the output of finished products is expected to increase from 720,000 tons to 1,240,000 tons.

**Bhilai Steel Plant**

The Bhilai Steel Plant was set up with the help of U.S.S.R. The plant is designed to produce one million tons of ingot steel to be rolled into 770,000 tonnes of heavy and medium structural—steel and 300,000 tonnes of pig iron.

The Bhilai Steelworks comprise: 3 Coke Oven Batteries with 65 ovens each; 3 Blast Furnaces; 6 Open Hearth Furnaces (250 tons capacity each) for steel making and 4 Rolling Mills, consisting of a Blooming Mill, Continuous Billet Mill, Rail and Structural Mill and a Merchant Mill.

The entire requirements of iron ore and limestone are being met from the plant's own captive mines at Rajhara and Nandini. Dolomite, manganese and quartzite are also being obtained from the plant's captive mines at Hirri, Balaghat and Balod. Bhilai is drawing its requirement of coal from Kargali/Bokaro & Jharia Coal Fields.

Saleable production in tonnes: Rails (Standard gauge) 100,000; Rails (Narrow gauge) 10,000; Heavy Structural 284,000; Crossing Sleepers 90,000; Squares and flats 136,000 and Billets 150,000. It also produces 300,000 tonnes of pig iron for sale.

About 60,000 tonnes of various by-products like coal tar, ammonium sulphate, benzol, toluene, are being recovered annually by treatment of the coke oven gas.

**Expansion:** The capacity of the plant is being expanded to 2.5 million tonnes under the Third Five Year Plan, with the technical and financial assistance of the U.S.S.R. The expansion



is expected to be completed by 1967. Already, as part of the expansion programme two coke oven batteries, one blast furnace and four open hearth furnaces, each of 500 tonnes capacity, have been commissioned. Modification to Rail and Structural Mill and Merchant Mill are also complete.

After the present expansion, Bhilai Steel Plant will produce: Rails (standard gauge) 500,000 tonnes, Rails (narrow gauge) 20,000 tonnes, Heavy Structural 386,000 tonnes, Crossing Sleepers 82,000 tonnes, Rounds, Squares and Flats 261,000 tonnes, Billets 315,000 tonnes, and Wire Rod Mill products 400,000 tonnes. There will be 317,000 tonnes of pig iron for sale.

**Durgapur Steel Plant:** The steel plant at Durgapur in West Bengal is the third one in the public sector set up with the financial and technical help of the United Kingdom. This will produce one million tonnes of ingot steel to be rolled into about 800,000 tonnes of light and medium sections and bars, in addition to 350,000 tonnes of pig iron for internal sale and export.

The supply of iron ore is being drawn from Bolani Ore Mines. Coal is being obtained from Jharia and Boraker Fields and Limestone from Birmittapur. The plant has its own washery to wash the Jharia coal.

The Plant has the following units: 3 coke oven batteries, 3 blast furnaces, 8 open hearth furnaces, 2 blooming mills, one continuous billet mill, one 24" section mill, one continuous merchant mill, one sleeper plant and one wheel and axle plant.

**Saleable Products in Tonnes:** Forged Blooms 100,000; Merchant Sections 240,000; Sleepers 60,000; Light & Medium sections 200,000; Wheels & Axles 50,000; Billets for sale 150,000.

In addition, it produces 350,000 tonnes of foundry grade pig iron.

**Saleable Products in Tonnes:** Forged blooms and billets 70,000, Merchant sections 240,000; Sleepers 60,000; Billets 350,000; Light and medium sections 200,000; Wheels & Axles sets for Railways 93,000; Skelps 250,000; Fish Plates 11,000 and Pig iron for sale 300,000.

The various by-products include ammonium sulphate, benzole, toluene, xylene, solvent naphtha, naphthalene, road tar, wood preserving creosote.

Heads of agreement were finalised for the Fourth Plan expansion of Durgapur Steel Plant from 1.6 million tons to 3.4 million tons. This expansion will be in flat products and the agreement was signed between HSL and a British Consortium of four companies under the name British Steel-Works Equipment Ltd.

#### Alloy Steels Project

The fourth steel unit of the company—Alloy Steels Project at Durgapur is under construction with Japanese and Canadian technical assistance.

The plant will have an initial capacity of 100,000 tonnes of ingots capable of expansion to 300,000 tonnes of ingots per annum. The initial 100,000 tonnes of ingots will produce 60,000 tonnes of finished steel which would save the country nearly Rs. 20 crores worth of foreign exchange. Nearly 35 per cent of the production will consist of stainless steel. The project is being erected at a cost of Rs. 73 crores.

The product-mix of this plant would be as follows in tonnes: High Speed Steel 2,250; Carbon Tool Steel 9,500; Alloy Tool & Die Steel 3,600; Constructional 26,650; Stainless Steel 18,000.

#### Coal Washeries

The company has installed four coal washeries at Dugda, Bhojudih and Patherdih. Dugda is about 30 miles and Patherdih is about 10 miles from Dhanbad, in Bihar. Bhojudih in West Bengal, is about 20 miles from Dhanbad. Dugda I Washery with a capacity of 2.4 million tonnes of raw coal per annum was completed in the year 1962. Bhojudih Washery with a capacity of

1.2 million tonnes, has been in operation since 1962 and has been expanded to 2 million tonnes capacity in 1963. The construction of Patherdih Coal Washery has been completed. Dugda Washery is again being expanded by installation of another unit Dugda II, with a capacity of 2.4 million tonnes. It was expected to be commissioned in 1966. These coal washeries supply washed coal to Bhilai and Rourkela Steel plants and TISCO and IISCO Steel plants.

**Sales:** Sales of steel products have registered a considerable increase during the year 1965-66. During the year HSL, after having met the local demands, has exported steel and other products worth about Rs. 22.65 millions and efforts are being made to meet Rs. 300 million export target for HSL, fixed for the Fourth Plan. During the first year alone HSL aims at an export target of Rs. 90 million.

As part of the export promotion drive, HSL has opened an Export Promotion Division at the Central Sales Office at Calcutta. Recently HSL started shipment of 10,000 tonnes of H.R. Coils to the United States. During the recent months HSL has exported nearly 50,000 tonnes of pig iron to Japan and 10,000 tonnes to Italy.

The Sales Organisation of HSL is being expanded to provide better facilities to steel consumers in the country. The Central Sales Office is located in Calcutta and its Branch Offices are at Madras, Bombay, Delhi, Kanpur, Bangalore, Cochin, Hyderabad and Ahmedabad. To facilitate an uniform supply of steel and pig iron, HSL has opened Stockyards at Madras, Hyderabad, Cochin, Bangalore, Bombay and Ahmedabad.

HSL has two branch offices abroad one in the U.K., (Appollo House, 56, New Bond Street, London W.1) and another at West Germany (Linde-Mannstrasse 4, Dusseldorf, West Germany).

#### THE HINDUSTAN TELEPRINTERS LTD.

Guindy, Madras-32.

This is a private limited company under the Department of Communications registered in Madras on 14th December, 1960 and is located in Guindy, Madras.

The authorised capital of the company is Rs. 3 crores.

The Company has been set up for the manufacture of teleprinters and ancillary equipment in collaboration with Ing. C. Olivetti & C., S.p.A., of Italy, one of the leading manufacturers of teleprinters in the world. The factory now manufactures tape and page models of teleprinters, printing reperforator attachment, transmitter attachment and independent automatic tape transmitter. It produced 2,502 unit machines in the year 1965-66.

**Managing Director:** C. A. Cornelius.

#### HINDUSTAN ZINC LIMITED

(Under the Ministry of Mines and Metals)

11/221, Hospital Road, Udaipur (Rajasthan).

The Hindustan Zinc Ltd. was registered on the 10th January, 1966 at Jaipur. The authorised capital of the Company is Rs. 10 crores.

The units administered by this Company are: (i) the Zawar Mines, the only zinc mine in India and the oldest zinc mine in the world. At present the mine production is about 500 tonnes of ore containing both lead and zinc. The ore is processed in a ball mill to produce 5,000 M.T. of lead concentrates and 10,000 tonnes of zinc concentrates annually. (ii) Tundoo Lead Smelter near Katrasgarh, Dhanbad with a capacity to produce 800 M.T. of pig lead per month. The lead concentrates from Zawar Mines are smelted here to produce pig lead of 99.99 per cent purity. A little quantity of silver is recovered as by-product. (iii) An electrolytic Zinc Smelter, at present under erection at Debari. This Smelter had been designed by a French firm Messrs. Penarroya of Paris. The Zinc Smelter has been designed to produce 18,000 tonnes of zinc metal, about 29,000 tonnes of sulphuric acid to be converted into 80,000 tonnes of single super-

phosphate fertilizer and 70 to 75 tonnes of cadmium to be recovered as by-product annually.

**Chairman:** N. C. Shrivastava, I.C.S.; **Managing Director:** Nagendra Bahadur, I.A.S.; **Secretary:** A. K. Sen Gupta.

#### INDIA GOVERNMENT SILVER REFINERY (Ministry of Finance, Dept. of Economic Affairs) 47, Strand Road, Calcutta 7.

This refinery has been installed for the extraction of silver and copper from the Q.A coins minted during the World War II. Nickel Sulphate and Nickel Silver (an alloy of Cu, Ni, and Zn) are obtained as by-products.

This Silver Refinery has been engaged for the design, layout etc., of a Silver Refinery now under construction by the Hindusthan Photo Films Ltd., at Ootacamund.

The capital outlay on the Silver Refinery is about Rs. 1.44 crores.

The total number of persons employed is 481. Some of the departments of the Refinery work in three shifts round the clock.

**General Manager:** S. P. Banerjee.

#### INDIA TOURISM DEVELOPMENT CORPORATION

New Delhi

The Corporation started functioning from 1st October 1966 under the chairmanship of Mr. Naval H. Tata.

The Corporation is born out of the merger of three corporations—India Tourism Corporation, India Tourism Transport Undertaking and the Hotel Corporation of India.

It will take over all the commercial activities of the Department of Tourism, which these three corporations were carrying on since 1965.

The new corporation has an authorised capital of Rs. 5 crores. It will construct and run hotels, tourist bungalows, and guest houses, in co-ordination with the private sector, at places of tourist interest where the existing facilities are not adequate.

Duty-free shops will be opened by the corporation at Santa Cruz, Palam, Dum Dum, and Meenambakkam airports.

These shops will sell imported articles such as photographic goods, cosmetics and tobacco products against payments in foreign exchange for the convenience of foreign tourists.

#### Transport Facilities

In places of tourist interest, the corporation will arrange transport facilities for tourists. It will import luxury coaches and cars and may either sell them to private operators or operate them itself. Other modes of transport like aircraft, helicopters and launches may also be operated by it for tourists.

The corporation will produce and display publicity material for the promotion of tourism. This will include folders, booklets, guides, slides and films for the tourists and the travel agents in India and abroad.

Among the other commercial functions the corporation will take over from the Department of Tourism is the responsibility of providing entertainment for the tourists.

It will take over the Son-et-Lumiere spectacle at the Red Fort and organise some similar shows at Golconda Fort, Amber Fort and Madurai. It will also provide entertainment for tourists by way of cultural shows.

#### THE INDIAN DRUGS AND PHARMACEUTICALS LTD.

(A Government of India Undertaking)

National Insurance Buildings,

5, Parliament Street, New Delhi.

(Under the Ministry of Petroleum and Chemicals)

The Indian Drugs and Pharmaceuticals Ltd. was incorporated in April, 1961 for the establishment and management of Drugs and



**Surgical Instruments Plants in the public sector.** It has three plants under its control.

The projects have been set up with the help of the Govt. of U.S.S.R.

The authorised capital of the company is Rs. 21.50 crores. When in full production, the following three plants are expected to provide employment to over 6,000 workers of skilled and semi-skilled categories.

The location and a brief description of the production programme of each project is given below:—

1. **Antibiotics Project at Rishikesh (Uttar Pradesh):** Estimated to cost Rs. 23.32 crores. An annual production of 300 tonnes of antibiotics as penicillin, streptomycin, dihydrostreptomycin, nistatin, tetracycline, chlorotetracycline and oxytetracycline is expected from this project on completion. The pilot plant was commissioned in Nov. 1965, and the main plant was to be commissioned by the end of 1966.

2. **Synthetic Drugs Project at Hyderabad:** Estimated to cost Rs. 21.46 crores. The proposed annual production programme includes 825 tonnes of synthetic drugs such as sulphadimidine, sulphaguanidine, sulphanilamide, sodium etc. etc., and 4,560 tons of intermediate chemicals required for the production of finished drugs. The pilot plant was commissioned in Oct. 1965 and the main plant was to be commissioned by the end of 1966.

3. **Surgical Instruments Plant at Madras:** The total annual output of Surgical instruments would be about 2.5 million pieces of 168 types of surgical instruments. Estimated to cost Rs. 5.1 crores. An expansion scheme to double the capacity is already in hand.

**Chairman & Managing Director:** R. R. Bahl, I.C.S.

#### INDIAN OIL CORPORATION LIMITED

**Regd. Office:** Clarke Road, Bombay-34.

The Indian Oil Corporation came into existence on Sept. 1, 1964 with the merger of the Indian Oil Company Ltd. and the Indian Refineries Ltd. The Corporation now comprises three divisions viz. Marketing Division, Refineries Division and the Pipelines Division. The Pipelines Division of the Corporation came into existence with effect from March 11, 1965; prior to this it was a part of the Refineries Division.

Indian Oil Corporation, Refineries Division, Link House, Bahadur Shah Zafar Marg, New Delhi came into existence on Sept. 1, 1964, when it took over the entire business of the erstwhile Indian Refineries Ltd. which was incorporated on Aug. 22, 1958 in New Delhi. The Company is responsible for the construction and management of the three Government owned Refineries at Gauhati in Assam, Barauni in Bihar and Koyali in Gujarat.

Indian Oil Corporation, Pipelines Division, Link House, Bahadur Shah Zafar Marg, New Delhi, is responsible for the construction of Gauhati-Siliguri Pipelines and Haldia-Barauni-Kanpur Pipelines.

**Chairman:** N. N. Kashyap, I.C.S.

#### INDIAN RARE EARTHS LIMITED

Pil Court, 111, Queen's Road,  
Bombay 1.

This factory is now entirely owned by the Government of India.

The subscribed capital is Rs. one crore.

The factory at Alwaye in Kerala started production in July 1952. The Plant now processes 3,000 tons of Monazite per annum. The main products are Cerium Compounds, viz., Mixed Rare Earths Chloride, Mixed Rare Earths Carbonate and Crude Cerium Hydroxide, Cerium Oxide, Rare Earths Fluoride and Cerium Naphthenate are also manufactured in small quantities. Trisodium Phosphate is obtained as a by-product.

The Company also operates the Thorium Plant of the Government of India at Bombay where Thorium Compounds are manufactured from raw material obtained at the Alwaye Plant.

The Company earned foreign exchange worth Rs. 48.22 lakhs during 1965-66 by the sale of rare earths chloride abroad.

**Minerals Division (Beach Rd., Quilon, Kerala):** The Company has taken over the assets of Travancore Minerals Ltd., Quilon, which went into liquidation on 27th January 1965.

**Uranium Ore Mill:** A uranium Mill with a capacity to treat 1,000 tonnes of uranium ore per day is being set up at Jadugoda in Bihar.

**Managing Director,** G. Rajagopal Menon.

**Manager, Alwaye Establishment,** K. V. N. Nayar; **Chief Accounts Officer,** N. D. Hansotia; **Chief Executive Officer,** P. Muralidharan; **Chief Administrative Officer (Minerals Divn.),** S. Ganapathy; **Works Manager,** C. M. Mani.

#### INDIAN TELEPHONE INDUSTRIES LIMITED

(Under the administration and jurisdiction of Dept. of Communications, Govt. of India).

(Dooravani Nagar, Bangalore 16, Mysore State)  
Railway Station: Krishnarajapuram  
(Southern Railway)

**Regional Offices, Sales & Service:** "Advent", 62/63, 12-A, Foreshore Road, Bombay 1; 22; Chittaranjan Avenue, United India Life Assurance Bldg., Calcutta 13; 12-B, Netaji Subhash Marg, Daryaganj, Delhi 6; Agarchand Mansions, No. 35, Mount Road, Madras 2.

**Shipping and Clearing Office:** III Floor, 32/33, Linghi Chetty Street, Madras-1.

Established in 1948 at Bangalore as a Departmental Concern. Subsequently, converted into a Private Limited Company in 1950 for achieving flexibility in management.

**S. Lall (Chairman); U. Shankar (Managing Director); G. U. Menon (General Manager); D. V. M' Rao (Secretary).**

**CAPITAL:** Authorised: Rs. 5,00,00,000, paid-up as on 31-3-66: Rs. 4,60,86,400. (Government of India holding 77.84 per cent of the shares, Government of Mysore holding 6.78 per cent, Automatic Telephone & Electric Co. of England 3.75 per cent and the balance of 11.63 per cent by the International Standard Electric Corporation of U.S.A.).

The factory manufactures all kinds of telecommunication equipment, all kinds of telephones, transmission equipment, testing equipment, automatic road signalling equipment, etc.

#### Production (1965-66).

The factory has produced during 1965-66 amongst others, 2,01,019 telephones of various kinds and 1,44,905 Exchange Lines, which include main automatic exchanges, small automatic exchanges, private automatic branch exchanges, etc. On the transmission side, equipment worth Rs. 305.50 lakhs were produced during 1965-66.

The factory is actively engaged itself in locating indigenous sources for substitution of imported materials and components and special Department has been created for this project.

The sales of equipment made in Indian Telephone Industries Ltd. during 1965-66 exceeded Rs. 12 crores.

A suggestion scheme was introduced in the I.T.I. for encouraging initiative and new ideas among workers. As many as 82 valuable suggestions were accepted during 1965-66 and a sum of Rs. 2,290 was granted as rewards to the employees.

#### INSTRUMENTATION LTD.

(Ministry of Industry & Supply)

Annexe, Circuit House

Kota (Rajasthan)

Instrumentation Limited is a private company, registered in Jaipur (Rajasthan) on March 21, 1964 with its headquarters at Kota. The authorised capital of the company is Rs. 7 crores. The company is responsible for the establishment of Precision Instruments Plant at Kota and Mechanical Instruments Plant at Palghat. The Kota plant will manufacture electro-magnetic and electronic instruments whereas the Palghat plant is being designed for the production of mechanical, hydraulic and pneumatic instruments. Both these plants are being put up with the technical and financial assistance extended by the Soviet Union.

The projects are in a preliminary stage of implementation.

**Chairman:** Major General M. S. Himatsinhji; **General Manager:** A. R. Ravi Varma.

#### INTEGRAL COACH FACTORY

Perambur, Madras.

(Under the Ministry of Railways)

The Integral Coach Factory at Perambur, a suburb of Madras, is one of the largest Coach Building Units in the world.

Construction started in the latter half of 1952 and took about three years to be completed. The first coach was turned out on October 2, 1955.

The type of coaches manufactured in the factory, known as Integral coaches is of a modern light weight design incorporating anti-telescopic properties in the event of an accident.

Upto end of March 1966, 4,808 shells have been manufactured out of which 2,876 have been furnished in the factory itself.

During the year 1965-66, 645 coaches have been produced in the factory.

The Factory which was set up for the production of only Third Class Coaches has also manufactured Third Class-cum-Luggage and Brake-vans, Third Class Sleeper Coaches, First Class Coaches, Electrical Multiple Units, both Broad Gauge and Metre Gauge, Parcel Vans, Ward Cars, Dining Cars and Tourist Cars. A Prototype Twin Diesel Railcar was also manufactured and handed over to Southern Railway. Future programme includes manufacture of A.C. Express.

**Furnishing:** A separate furnishing unit, is now furnishing all the shells that are being turned out from the Shell Division.

**Cost of the Coach:** With increased outturn and improvement in the skill and technical know-how of the staff, the cost of production of coaches has been systematically reduced. The latest cost of production of a third class shell is only about Rs. 70,000 as against Rs. 1,86,000 in 1955. This cost is very much lower than its ex-works price at Switzerland of Rs. 107,000.

When ICF took up manufacture of Integral Coaches in 1956-57, the value of imported components was in the neighbourhood of Rs. 20,000 per Coach. During the last 7-8 years, this has been progressively brought down to Rs. 2,800 only per Coach.

The total number of employees on the rolls is 10,300 (March, 1966).

The factory is now fully equipped to take orders for exports.

**General Manager:** I. Hydari.

#### JANPATH HOTELS LIMITED

New Delhi.

The Hotel Janpath is fully air-conditioned and has 222 rooms, a large dining hall, a lounge each on the ground floor and on the first floor and provides facilities of a conference room and a small shopping arcade.

To fulfil the long felt need to cater to the requirements of persons in the middle income group, Government set up two more hotels in the Capital, Lodhi Hotel and Hotel Ranjit, as the constituent units of the Company.



**KOLAR GOLD MINING UNDERTAKINGS**

(Government of India)

Kolar Gold Fields, Oorgaum P.O., Mysore State

Established : 1880. Formerly a British company, the mines were nationalised by the Government of Mysore in 1956. They were taken over by the Government of India on 1st Dec. 1962; and are under the administrative control of the Department of Economic Affairs, Ministry of Finance, Government of India. The mines working at present are : Mysore/Champion Reef Amalgamated Mine and Nundydroog Mine.

Capital Investment (fixed): Rs. 305.32 lakhs as on 31-3-1965.

No. of workmen : about 13,400.

The gold production during 1965-66 was 30,24,162 grammes. As from 1-12-1962, being the date of take over by the Central Government, the gold is valued at IMF rate of Rs. 53.58 per 10 grammes. On this basis, the value of gold produced (38,46,104 grammes) for 1964-65 was Rs. 207.21 lakhs.

The proposed development schemes of the undertakings during the Fourth Plan period will involve an outlay of Rs. 230 lakhs.

Managing Director : M. H. Parthasarathy, I.A.S. Secretary, K. S. Nair.

**MACHINE-TOOL PROTOTYPE****FACTORY, AMBERNATH**

(Under the Ministry of Defence)

The Machine-tool Prototype Factory at Ambernath near Bombay was set up in 1953 by the Ministry of Defence, Government of India, under the Director-General, Ordnance

Factories. It was a pioneer project to design and develop ordnance weapons as well as machine tools.

Since its inception the factory has established production of several types of precision machine tools of its own design, and supplied these to various Government establishments and industry. The planning for bulk production of truck and tractor components for Shaktiman was undertaken in 1958. This is now the main production activity of the factory.

To overcome the shortage of skilled artisans necessary for the production of armaments, a Training School has been attached to M.P.F. since its inception. The school helps to meet the requirements of other ordnance factories also.

**MAZAGON DOCK LIMITED**

Mazagon, Bombay 10.

(Under the Ministry of Defence)

On 14th May 1960, one of the biggest British Marine and Industrial ventures in this country became a National Undertaking when Mazagon Dock Ltd. was acquired by the Central Government. Situated at Bombay in the State of Maharashtra, the Mazagon Dock is Western India's leading Ship-Repairing and Ship-Building concern. Its history can be traced to 18th century when the first dry dock was completed at Mazagon.

Mazagon Dock is fully equipped to carry out all types of major repairs to Passenger Ships, Tankers and Cargo Ships and maintains around the clock, 7 days-a-week repair service.

Mazagon Dock Limited has three dry docks—Ritchie, Mogul and Mazagon.

| Name of Dock    | Extreme Length | Length on Keel Blocks | Breadth at Altars | Depth of water at S.M.H.W. |
|-----------------|----------------|-----------------------|-------------------|----------------------------|
| RITCHIE .. .. . | 495'           | 468'                  | 66'               | 18'                        |
| MOGUL .. .. .   | 426'           | 406'-9"               | 59'-9"            | 16'                        |
| MAZAGON .. .. . | 152'           | 126'-3"               | 34'               | 9'                         |

Mazagon Dock Limited employs about 4,000 workers. The Supervisory Staffs number about 115.

Besides repairs, Mazagon Dock also builds ships. It has six building berths—four open and two covered. During 1965-66, Mazagon Dock delivered one launch for Port Blair, a steam tug, a fishing trawler, a ferry boat and 700 assault boats for the army.

During the first half of 1966 Mazagon Dock produced also a 400 tonne ore carrier barge, a bucket dredger and a tug.

Mazagon Dock has launched a scheme to convert the Kasara Basin in its North Yard into an impounded wet basin to provide alongside berths for ships. These berths can be used for repairing ships, as also for fitting out new ones.

Although repairing and building of ships are the major activities of Mazagon Dock, it also undertakes steel fabrication work, ferrous and non-ferrous foundry work, steel forgings, and automobile work, all types of timber construction and general engineering work.

The Mazagon Dock has been the first organization to build Burshane gas tanks of ten ton capacity. The Company also manufactures both horizontal and vertical MAZDOCK Crude Oil Cold Starting Engines with horse power ranging between six and twenty.

Managing Director : Rear-Admiral B. A. Samson.

**NAHAN FOUNDRY LTD.**

(Nahan, Sirmur District, Himachal Pradesh).

This was started in 1875 and has been continuously expanded.

The authorised capital is Rs. one crore and the paid-up capital Rs. 40 lakhs. The number of persons employed is about 600 at Nahan and about 150 in the agencies.

Production consists of improved type o cane crushers, bullock as well as power driven, mono-block pumps, improved types of ploughs, corn-sheller machines; harrows; and other miscellaneous items. The Foundry undertakes quality casting work for P & T. D. G. S. & D., Public Health and Railways. It also manufactures electric motors from  $\frac{1}{2}$  H.P. to 20 H.P. of ISI certification mark.

Casting during 1964-65 was 2,587 tonnes. During the year 402 electric motors of various sizes were also manufactured.

It is managed as a private limited company (which took over on Jan. 1, 1953) with the President and his nominees holding all the shares. General Manager, S. K. Caroli.

**NATIONAL INSTRUMENTS LTD.**

(1/1, Raja Subodh Mullick Road, Jadavpur, Calcutta 32).

Total investment Rs. 208.96 lakhs. Value of production and repair for 1965-66 : Rs. 96.95 lakhs. Number of persons employed 1,282.

Sales and miscellaneous income were Rs. 94.66 lakhs in 1965-66. The profit of the company for 1965-66 was Rs. 5.2 lakhs, after charging depreciation but before income tax.

This is a Government of India Undertaking under the Ministry of Industry manufacturing

and repairing scientific, surveying, mathematical, measuring and medical diagnostic instruments and appliances.

The principal products of the Undertaking are surveying instruments such as Theodolites and Levels of sorts, Prismatic Compasses etc., drawing office equipments such as Drafting Machines, Pantographs etc., measuring instruments such as Profile Projectors, Pressure and Vacuum Gauges, Thermometers, Hydrometers and a host of other items. Productions of Clinical Thermometer, Microscope and Optic Theodolite have been established in collaboration with some Japanese and Hungarian firms respectively.

The Ophthalmic Glass Project now under construction at Durgapur is expected to be completed by 1967. When in full production, this unit will produce 300 tons of Ophthalmic Glass and 10 million Ophthalmic lenses per annum.

Besides its own training scheme, the Company has provided training facilities under the Apprenticeship Act.

The development programme of this company is fashioned to serve as a nucleus in future for the manufacture of scientific and precision instruments, which are at present imported.

The following instruments are under development : Sphygmomanometer ; Thickness measuring gauge of various range ; Pressure gauges of various range and type ; Microscopes of various models and magnification.

Managing Director, N. Majumder, B.Sc. (Cal.), M.Sc. (Tech.) (Manch.), A.M.C.T. (Manch.).

Dy. General Manager : K. S. Rajagopalan.

**NEYVELI LIGNITE CORPORATION LTD.**

(Ministry of Mines &amp; Metals, Government of India)

Neyveli 1, South Arcot Dist.

This is a Rs. 141 crore project.

The Integrated Project now envisages the mining of 5.5 million tonnes of lignite per annum to be utilised for :

- production of 4,00,000 kW of power in a thermal power station using lignite as fuel;
- production of 1,52,000 tonnes of urea with a nitrogen content of 70,000 tonnes per annum; and
- manufacture of 7,68,000 tonnes of raw lignite briquettes per annum to be processed in a low temperature carbonising plant to yield 380,000 tonnes of carbonised briquettes per annum for use as domestic and industrial fuel, 1,29,000 tonnes of char fines, 37,000 tonnes of tar, 20,100 tonnes of middle oil, 4,800 tonnes of kerosene, 300 tonnes of light oil, 1,340 tonnes of carboric acid, 1,400 tonnes of polyvalent phenols, 580 tonnes of ortho-cresol, 1,340 tonnes of Meta and para-cresol and 585 tonnes of xyleneols; and
- production of 6,000 tonnes of washed white clay.

In the initial stages annual production was estimated at 3.5 million tonnes. The present target is 6.3 million tonnes per year.

During 1965-66, the quantity of lignite raised was 5.6 million tonnes.

**Thermal Power Station Scheme**

This is one of the schemes financed from the rouble credit offered by the U.S.S.R. The estimated cost of the scheme is Rs. 29 crores. The power station now has five units of 50,000 kW each under the first stage of development.

The Power Station is being expanded from 2,50,000 kW to 4,00,000 kW by adding in the first phase of expansion a 50,000 kW unit and a 1,00,000 kW unit to the existing station.

Upto the end of March, 1966 this power station has generated 4,360 million kW hours of power of which 3,436 million kW hours have been pumped into the Madras State Electricity Grid.



**Fertilizer Scheme**

With the collaboration of Messrs. Pintsch Bamag and Messrs. Linde of West Germany and Messrs. Ansaldo of Italy, the Fertilizer Scheme has commenced production of urea from March 66. It was expected to start full production by August 1966.

The Urea plant at Neyveli is the biggest of its kind in the world and the first to gasify lignite to produce urea—a chemical fertiliser with 46 per cent nitrogen content.

**Briquetting and Carbonising**

This plant erected by a consortium of West German firms, Buckau Wolf, Lurgi and Siemens went into commercial production in August 1965.

*Chairman:* K. N. Subbaraman; *Dy. Genl. Managers:* Ram Chander, (Establishment); R. Rama Chandran Pillai (Technical and Works); *Chief Account Officer:* S. H. Bhat.

**OPTICAL GLASS**

Central Glass and Ceramic Research Institute, Calcutta 32.

It went into production in Aug. 1960 and the major types of optical glass required in the country have already been produced and are on regular sale to consumers. The Ministry of Defence, who are the principal consumers, have undertaken inspection of optical glass produced and one of their units is located in the premises of the plant.

The country has been relieved of its dependence on imports for a vitally strategic material and it has been achieved without the association of any foreign manufacturing firm.

**PYRITES AND CHEMICALS DEVELOPMENT CO., LTD.**

Established on March 22, 1960. Registered Office: Canal Road, Dehri-on-Sone, Bihar.

Branch Offices: Amjhore, P.O. Banjarl, Dist. Shahabad, Bihar; K D Flats, Sindri, Dhanbad Dist.

Authorised Capital: Rs. 5 crores.

*Objects:* Raising, assembling and transporting of pyrites ore in such areas in India and elsewhere as the company may from time to time determine for sale or use and the manufacture of sulphur, sulphuric acid or other products requiring such ores.

*Activities:* (I) Exploitation and Mining Programme of pyrites ore.

**Reserves**

The Amjhore pyrites occurs as a sedimentary bed within the Bigalgarh Shales of Vindhyan Formations. The deposit is a bed of almost pure massive iron pyrites. The sulphur content in the raw ore is 33 per cent to 42 per cent. The total reserves and grade of ore (proved and probable) in about 123 square of pyrites bearing ground area, are estimated to be 384 million tonnes.

**Mining Programme**

Nowhere in India a thin bed like the one at Amjhore has ever been mined. A mining programme for an annual production of 2-4 lakh tons of pyrites from Amjhore mines has been planned and development work is in hand.

**Sulphuric Acid**

The Company is setting up a 400 tonnes per day capacity pyrites based sulphuric acid plant at Sindri to meet the requirement of the Fertilizer Corporation of India, Sindri Unit, Bihar State Superphosphate Factory, Sindri, and other potential consumers in that area. An agreement for the supply, erection and commissioning of the Acid Plant at Sindri on turn-key basis has already been executed.

**Sulphur**

A process known as Outokumpu Process has been found technically and economically feasible for the extraction of elemental sulphur from Amjhore pyrites. A detailed Project Report for the same is under preparation.

*Chairman:* J. N. Talukdar, I.C.S. (Retd.).

**RAJASTHAN ATOMIC POWER PROJECT**

(See under "Research")

**TARAPUR ATOMIC POWER STATION**

(See under "Research")

**WASHERIES**

The requirement of coal by the steel plants as charged to the coke ovens by the end of the Third Plan was of the order of 11.30 million tonnes. Out of this, about 6.50 million tonnes were required in terms of washed coal and the balance of 4.80 million tonnes partly in the shape of superior grades of Jharia raw coals and partly by blendable coals. The washed coal requirement of 6.50 million tonnes is equivalent to about 9.90 million tonnes of raw coal.

The washeries in which the above quantities of coal were washed are Jamadoba and West Bokaro belonging to the Tatas with a capacity to wash 1.4 and 0.45 million tonnes of raw coal respectively; the Lodna washery which supplies clean coal to the Indian Iron & Steel Company with an input capacity of 0.40 million tonnes of raw coal, the Durgapur washery which is an integral part of the Durgapur steel plant, with an input capacity of 1.5 million tonnes of raw coal; three Hindustan Steel Limited Washeries at Dugda, Bhojudih, and Pathardih with an input capacity of 2.40, 2.00 and 2.00 million tonnes respectively and the Kargali washery of the National Coal Development Corporation which can handle about 2 million tonnes of raw coal at present.

**STATE-OWNED OR STATE-AIDED****ANDHRA PRADESH****THE ANDHRA PAPER MILLS**

(Rajahmundry).

The capital investment is Rs. 29 lakhs and production capacity is 10 tons a day. A scheme to increase the present production capacity of the Mills from 10 to 60 tons of paper is under way. The production of the mills is now confined mostly to unbleached, kraft papers and it is proposed to produce white writing/printing papers and wrapping paper, after implementation of the expansion scheme. An agreement has also been entered into with Messrs. Empacel, Paris for the supply of plant and machineries under the French Credit on deferred payment terms.

**GOVERNMENT CERAMIC FACTORY**

(Gudur, Nellore Dist.).

The Government Ceramic Factory, Gudur, has been producing sanitaryware and crockery-ware only, till 1959. Production of high and low tension electrical insulators has also been commenced as an additional line of production to meet the requirements of the Government Electricity Department and the public from 1960.

There was a modest profit of Rs. 16,858 during 1964-65. The production was 5.66 lakhs kgs. valued at Rs. 8.34 lakhs. During the year 1965-66 the production is expected to increase to 6 lakhs kgs. valued at Rs. 9 lakhs.

**HYDERABAD TANNERIES LTD.**

(Hyderabad).

Andhra Pradesh is India's largest single producer of hides, producing about 2 mil. cow hides, 1.3 mil. buffalo hides, 2.3 mil. sheep-skins and 1.6 mil. goat-skins, accounting for  $\frac{1}{4}$  of India's production.

While the value of raw hide is about Rs. 5 crores, the value of finished leather is of the order of Rs. 8.7 crores. The State Government has ordered registration of two Apex societies for development of leather in Hyderabad and Vijayawada.

A sum of Rs. 21.02 lakhs has been provided for development of leather industries during 1965-66.

**NIZAM SUGAR FACTORY**

The Nizam Sugar Factory, a Govt. company with a paid-up capital of Rs. 146 lakhs, is the largest single sugar producing unit in the country. During the season 1964-65 the factory crushed 6,25,634 tonnes of cane producing 56,249.6 tonnes of sugar. The average yield was 27.09 tonnes during the year 1964-65 as compared 34.42 tonnes in 1963-64. The net profit of the Company during 1964-65 was Rs. 39 lakhs as against 56.38 lakhs during 1963-64.

**PRAGA TOOLS LIMITED**

6-6-8/32, Kavadiguda Road, Secunderabad 3.

The authorised capital exceeds Rs. 150 lakhs and the shares are held by the Government of India and the State Government in the order 52 per cent and 32 per cent respectively; the balance by the members of the public. The administrative control of the Company vests with the Ministry of Defence.

The company has registered substantial overall progress by rationalisation of production, economy in expenditure, and harmony in labour relations. The trading results for the year 1965-66 showed a net profit of Rs. 9.32 lakhs.

The Company produces machine tools and allied accessories, precision tools, forgings for auto and diesel spares and rail-road components.

*Managing Director,* A. M. Kelkar.

**SINGARENI COLLIERIES**

Coal is mined in the State by the Singareni Collieries Co. Ltd. from the coal fields at Kothagudem, Yellandu and Tandur.

Production of Coal during 1964-65 was 36.51 lakh tonnes as compared with the production of 34.7 lakh tonnes in 1963-64. The Company earned a gross profit of Rs. 2.08 crores during the year 1964-65 as against Rs. 2.05 crores in 1963-64. With the establishment of the Thermal Power Plant at Kothagudem the demand for coal is expected to increase.

**ASSAM****ASEB METER WORKS**

Short Round Road, Shillong.

A Rs. 60 lakhs factory, an Assam State Electricity Board enterprise, for the manufacture of single phase house service KWH meters and polyphase meters went into production in Jan. 1962.

The factory has produced 50,000 single phase meters upto 1965. It is expected that complete independent manufacture of all the components of the meters would be possible by the middle of 1967 with a target capacity of 1,20,000 single phase meters and 18,000 poly-phase meters.

**ASSAM GAS COMPANY LTD.**

(A Government of Assam Undertaking)

Shillong (Assam).

Authorised capital: Rs. 2 crores; paid-up capital: Rs. 51,88,900.

*Aims and objects:* Utilization of natural gas from the oil fields of Messrs. Oil India Limited at Naharkatiya and Moran in the district of



Lakhimpur, as feed stock for petrochemical industries and as industrial and domestic fuels.

**Present activity:** Construction of a 14" diameter pipeline was completed to supply 18 million cubic feet of gas per day to the Thermal Power Station of Assam State Electricity Board at Namrup for generation of 69 MW of electric power and 8 million cubic feet of gas per day to the fertilizer factory of the Fertilizer Corporation of India for the manufacture of 1,00,000 tons of ammonium sulphate and 55,000 tons of urea.

**Future programme:** Setting up Petrochemical Industries and construction of a gas pipeline net work in the Lakhimpur district for distribution of gas to tea gardens, industrial units and for domestic use, if feasible.

## BIHAR

### BIHAR STATE INSULATOR FACTORY (Near Ranchi).

The factory has started production and is manufacturing transmission line insulators upto 132 kV and Bushings and Post insulators upto 33 kV, besides L.T. Pin, Shackle, Guy and Telephone insulators. When in full production it will save foreign exchange to the extent of Rs. 35 lakhs annually as high tension insulators are being mostly imported at present.

It is planned to double this factory and also undertake manufacture of quality malleable hardwares for the insulators by the middle of Fourth Plan. The factory will eventually provide employment to nearly 800 people when the extension stage is completed.

### BIHAR STATE SUPERPHOSPHATE FACTORY

P.O. Sindri Institute, Dist. Dhanbad  
(Bihar).

The factory went into production in April 1958.

Present capacity of production: Single superphosphate — 18,000 tons per annum.

Installed capacity of plants: (i) 240 tons superphosphate per day; (ii) 25 tons of 100 per cent sulphuric acid per day. Total investment: Rs. 65 lakhs. No. of workers employed: About 180.

At present the factory produces between 20,000 and 25,000 tons of superphosphate a year. The production is expected to reach a target of 72,000 tons shortly.

**Works Manager:** S. K. Mishra.

## GUJARAT

### THE BHAVNAGAR PUBLIC DAIRY LTD.

Bhavnagar (Gujarat).

This State Government Undertaking was commissioned in 1957. It draws supplies of milk from producers co-operative societies within 30 miles radius. Apart from bottled milk, the dairy also manufactures practically all major by-products including ice-cream, on a small scale.

It handles about 5,000 litres of milk per day processed through a 220 gallons per hour pasteurising plant.

**Manager:** H. C. Mehta.

## JAMMU & KASHMIR

### COUNCIL OF SCIENTIFIC AND INDUSTRIAL RESEARCH

#### DRUG RESEARCH LABORATORIES

Raj Bagh, Srinagar.

The laboratory was started in 1956. Total investment is Rs. 6-30 lakhs and the number of persons employed is 60. The present production and the sales effected are valued at Rs. five lakhs and Rs. six lakhs respectively.

**Manager:** O. N. Channa.

### DRUG RESEARCH LABORATORIES

(Factories & Farms)

(CSIR)

(Jammu, Srinagar).

Belladonna concentrated extracts, Belladonna consumer goods, i.e., Belladonna plaster etc. Dissogenin, Menthol and Dementholised oil. Pyrethrum Oleoresin and cedarwood oil.

### GOVERNMENT SILK WEAVING FACTORY

(Raj Bagh, Srinagar).

It is the largest powerloom factory for the production of pure silk fabrics in India. The factory was started in 1938-39 with 33 looms and 1,872 spindles. It is now equipped with 124 looms and an up-to-date Throwing Plant of 6,000 spindles equipped for dyeing and printing by blocks.

Total investment: Rs. 34.27 lakhs. The factory provides employment on an average for 600 workers per day. No raw silk is produced in the factory. It produces only fabrics on an average 3-75 lakh metres per year.

### GOVERNMENT WOOLLEN MILLS

(Srinagar, Kashmir).

The mill was started in 1934-35 and purchased by the Govt. from a private firm in 1950. The total investment is Rs. 38.50 lakhs. The number of persons employed is 600. The average monthly production on the basis of 1962-63 working is — cloth 2,31,000 yards and yarn 4,54,000 lbs.

## KERALA

### COCHIN REFINERIES LTD.

P. Bag 501, Ernakulam-6.

Incorporated as a public limited company on Sept. 6, 1963.

**Capital:** Authorised Rs. 15 crores; Paid-up Rs. 7 crores.

The company has been established under an agreement entered into by the Government of India with Messrs. Phillips Petroleum Company of the State of Delaware, U.S.A. and Messrs. Duncan Brothers & Co. Ltd., Calcutta with the main object of constructing a complete modern petroleum refinery near Cochin in South India, with a design capacity to refine initially 50,000 barrels of crude oil each stream day and with an excess built in capacity upto 70,000 barrels a day.

The company has entered into a refinery construction contract with Messrs. Phillips Petroleum International Corporation, Panama and a technical service agreement with Messrs. Phillips Petroleum Company of Delaware, U.S.A. The refinery is expected to go on stream by Jan. 1966.

**N. N. Kashyap (Chairman); John W. Loy (Managing Director).**

### GOVERNMENT OIL FACTORY

(Kozhikode).

The Government Oil Factory was established in 1940 with a view to meeting the growing demands of the Defence Forces in India for Vitamin 'A & D' products. Regular production was started in 1943. The factory now produces various vitamin products such as Seagold blended shark liver oil, Adamin liquid high potency Vitamin Oil, adamin capsules, Stayfit liquid, Stayfit capsules and Veterinary Vitamin oil such as Univax and Trivax, etc. using up-to-date equipment and testing apparatus.

The capital investment as on 31st March 1965 was Rs. 4.2 lakhs and annual turnover Rs. 10.5 lakhs.

Net profit in 1964-65 amounted to Rs. 1.25 lakhs.

### KERALA GOVERNMENT CERAMICS

Kundara.

The Kerala Ceramics Ltd., Kundara consists of three working units.

**Unit I**, the New Porcelain Factory produces porcelain crockery, and low tension electric insulators. **Unit II**, the old Factory which is now being reorganised for the production of stoneware pipes and refractories. **Unit III**, China Clay Mines producing refined china clay.

Authorised capital of the Company is Rs. One crore. The Company employs about 100 employees.

Very recently the Company has entered into a long term agreement with labour whereby wages and work-load have been revised.

All the three units are having expansion schemes for substantial increase in production and foreign collaboration is sought for modernising and development of mines and mining operations. The management labour relation is cordial.

### THE KERALA PREMO PIPE FACTORY LIMITED

Chavara (P.O.), Qullon District.

**Registered Office:** Kaudiar, Trivandrum 9.

This factory is a Kerala Government undertaking registered as a Joint Stock Concern in 1961. The capital outlay is Rs. 50 lakhs. This factory prestressed high and low pressure concrete pipes and R.C.C. spun pipes are manufactured for water supply, drainage and irrigation. This factory is the only one of its kind in India. High pressure pipes can be designed and manufactured for any test pressure. The production capacity of the factory at present is 20 nos. prestressed concrete pipes and 300 nos. R.C.C. spun pipes per day.

Another section for the manufacture of mosaic tiles and prestressed transmission poles is under consideration.

**Managing Director:** K. R. Warriar.

### KERALA SOAPS AND OILS LTD.

(Soap Institute Division)

Calicut-11.

Regular operation in this institute began in the year 1923. The institute manufactures several varieties of toilet soaps including the Kerala Sandalwood, Willingdon, Vep, Rose soaps etc. as also Wash-well and other varieties of bar soaps. The work of training of students in soap making is also undertaken.

The capacity of the factory is about 45 tons per annum. But it is now being increased to 700 tons.

Turnover in 1964-65 was Rs. 17,00,000.

It is also proposed to deal with cosmetic line and to erect Mazzoni Plant in order to increase the production of soaps.

**General Manager:** U. S. Kini.

### PALLATHRA BRICKS & TILES LTD.

P.O. Thirunallore, Shertallay.

**Authorised Capital:** Rs. 1,00,00,000; **Issue Capital** Rs. 11,00,000; **Date of commencement** November 15, 1958.

The first factory of the company has been completed and it was commissioned on May 11, 1963.

The object of the Company is to produce and distribute sand lime bricks, a new architectural brick of high strength and finish. The designed capacity of the factory is 44,000 bricks per working day of 16 hours.

The total employment potential is 300 workmen.

Provision for six more units to be started in the following centres viz. Kozhikode, Cannanore, Trichur, Punnappra near Alleppey, Quilon, Kottayam (with laterite roadways in Kerala) involving a total cost of Rs. 99 lakhs is proposed to be made in the very near future.



**TRACO CABLE COMPANY**

Irimpanam, Ernakulam.

The Traco Cable Company Limited, Ernakulam, was incorporated in February, 1960 as a public limited company at Ernakulam. One of the main objects of the company is to carry on business as manufacturers and dealers in all kinds of wires and cables.

The Authorized Capital is Rs. 1,00,00,000.

The company has secured technical collaboration of Kelcey Engineering Ltd., North Vancouver, Canada.

The factory is located at Irimpanam, Ernakulam District, about 10 miles from the Cochin. The present licensed capacity is 36 million yards. It proposes to manufacture both copper and aluminium wires and cables using the best insulating materials and adopting the best techniques.

The company is manufacturing P.V.C. insulated P.V.C. or rubber sheathed steel wire and P.V.C. sheathed cables upto 50 sq. cm. in addition to ordinary P.V.C. cables both single and multicore. The company hopes to export a major portion of its products.

The Company has successfully completed one year of production.

**TRAVANCORE PLYWOOD INDUSTRIES LTD.**

Punalur.

This is now a joint stock company in the public sector. The installed capacity of the company in single shift is to produce 3-5 lakhs square metre plywood panels and 75,000 sets of utensils for the chest per annum.

Annual turnover is Rs. 14,00,000 and the average annual net profit earned by the Company for 1965-66 is Rs. 2-5 lakhs.

The main raw materials required are softwood and synthetic resin. Timber is supplied by the State Forest Department and resin is brought from indigenous sources.

The Company employs about 170 personnel in all.

Chairman: K. B. Warriar, I.A.S., General Manager & Secretary: T. J. Abraham.

**TRIVANDRUM RUBBER WORKS**

(Chackal, Trivandrum 7).

(A Kerala State Undertaking).

Trivandrum Rubber Works Ltd. is a Kerala Government owned company under which the former Travancore Rubber Works, Kerala Government Cycle Rim Factory and Kerala Rubber Works are now working as units. The Company came into being with an authorised capital of Rs. 75 lakhs on 24-2-1964. At present there are 10 employees working in the three units of the company.

The main products of the company are Rubber products such as Cycle Tyres and Cycle Tubes, hoses of all kinds, Latex goods, foams cushions etc., Cycle Rims and Cycles under the name Kerala Cycles. The Company is now exporting Cycle Rims to East African and other African countries.

Under the Fourth Five Year Plan a scheme for the modernisation and expansion of cycle tyre and cycle tube production is under implementation.

**TRIVANDRUM SPINNING MILLS LTD.**

Balaramapuram.

This first Public Sector Mill in Kerala was inaugurated in March 1962. The Mill is now owned and managed by a Government Company formed for this purpose. The installed capacity is 18,000 spindles. An expansion programme to install an additional 7,200 spindles is in progress. The Mill at present spins 20's and 40's.

**TRIVANDRUM TITANIUM PRODUCTS LTD.**

Kochu Veli, Trivandrum-7 (Kerala)

A public limited company in which the Government of Kerala holds majority interest.

The factory is the only unit in India producing Titanium Dioxide pigments, an important intermediate for paint and many other consumer products. Started regular production in 1951 with a production capacity of 5 tonnes but the production has since been stepped up to 18 M. tons per day.

Total capital investment: About Rs. two crores; annual turnover Rs. 180 lakhs; employment potential: over 600 persons. Schemes for further expansion are in progress (June 1966).

Managing Director: T. Madhava Menon, I.A.S.

**MADHYA PRADESH****MADHYA PRADESH LAGHU UDYOG NIGAM LIMITED**

Shahnaz Manzil, Sultania Road, Bhopal.

Started functioning from 1st February 1962 with an authorised capital of Rs. 20 lakhs and paid-up capital of Rs. 3 lakhs with the main object of promoting the interest of the small-scale industries and helping their speedy development in the State.

The Nigam has taken up the following activities:—(1) Running of 8 Production Units, (2) Marketing of Small Scale Industries Products, (3) Supply of machines on Hire Purchase, (4) Construction of Industrial sheds and development of Industrial areas, (5) Procurement and distribution of Raw Materials through eight depots at Indore, Gwalior, Bhopal, Satna, Jabalpur, Bilaspur, Bhilai and Bhand, and (6) Sale of Handloom and Handicrafts and SSI Products through 20 Emporia & Export Marketing.

Chairman: Devi Sahai, I.A.S., Managing Director: S. R. Bahadur.

**THE NATIONAL NEWSPRINT AND PAPER MILLS LIMITED**

(Nepanagar, Nimar Dist., Madhya Pradesh).

The mills are situated on the main Bombay-Itanagar-Delhi line about 27 miles from Khandwa and 17 miles from Burhanpur.

The Company is a limited concern with a share capital of Rs. five crores. Of the shares 51 per cent are held by the Union Government and 34 per cent by the Madhya Pradesh Government. The balance shares are held by shareholders from the public numbering about 17,000.

Newsprint production started from cent per cent indigenous raw materials from 29th December 1955. The rated capacity of the plant is 30,000 tons yearly which was attained in Dec. 1962. The production during 1964-65 was 29,250 tonnes as against 30,078 tonnes in 1963-64. The total revenue from sales during 1964-65 was Rs. 307-82 lakhs. The Project has cost about six crores of rupees. The company made a net profit of Rs. 34-54 lakhs during 1964-65.

There are 1,445 workers working on monthly salary. When the expansion programmes are completed at a cost of Rs. eight crores, production would be raised to 75,000 tons a year.

Chairman, Board of Directors: Sir A. Ramaswami Mudaliar. Managing Director: P. S. Kothari, Deputy General Manager and Secretary: P. L. Singhania.

**MADRAS****WOOL PROCESSING CENTRE**

Vinnamangalam, Minnur Post (Madras).

The Wool Processing Centre, a joint venture of the Governments of Madras and Mysore is processing tannery wool/hairs, bristles to meet the requirements of drugget, carpet and felt manufacturers of India and abroad. The production capacity is 750 tonnes per year.

The unit has been functioning since 1960 and is controlled by the Director of Industries & Commerce, Madras.

Officer-in-charge: K. A. Joseph.

**MAHARASHTRA****MANGANESE ORE (INDIA) LTD.**

3, Mount Road Extension, Nagpur.

The Manganese Ore India Ltd. started its operation of manganese mines in Nagpur, Bhandara and Balaghat districts from July 1, 1962.

Authorised capital: Rs. six crores (March 1965); subscribed capital: Rs. 2,15,45,100 (March 1965). The Government of India together with the State Governments of Maharashtra and Madhya Pradesh hold 51 per cent of the issued capital and 49 per cent of the shares have been allotted to the Central Provinces Manganese Ore Co. Ltd.

The total number of workers employed by the Company at different mines is 16,116.

The output and sales of manganese ore during 1964-65 were 3,28,599 and 2,68,330 tonnes respectively.

Managing Director: A. Chaudhuri.

**MYSORE****THE GOVERNMENT CENTRAL INDUSTRIAL WORKSHOP**

(Mysore Road, Bangalore 26).

Established: 1897.

Capital invested as on March 31, 1965: Rs. 46-18 lakhs.

No. of persons employed: 350.

Annual outturn: Rs. 22-18 lakhs.

The Workshop is engaged in General Engineering works such as manufacture of Trusses, Purlins, Ferrous and non-Ferrous castings, constructions of Machinery including concrete mixers of all types, wheel barrows, Hand carts, Tar rollers, Soap pan rollers & Pan mixers, Line Materials such as 11 K.V. pins, 33 K.V. pins, D.C. pins, Tongue pins, Ball pins etc.

In addition to the above, manufacture and repairs of Road Rollers undertaken.

**GOVERNMENT ELECTRIC FACTORY**

(Mysore Road, Bangalore).

Established: 1939.

Capital invested: 150 lakhs.

No. of persons employed: 1,000.

Annual outturn: Rs. 100 lakhs.

Main products: Transformers in sizes upto 3,000 kv A and voltages upto 33 kv to an aggregate of 2,00,000 kv A per annum.

**GOVERNMENT PORCELAIN FACTORY**

(Science Institute, Bangalore).

Established: 1932.

No. of persons employed: 1,200.

Annual outturn: Rs. 120 lakhs.

The present production capacity is 3,600 tons and steps are in progress to expand it to 5,000 tons. The factory is working in collaboration with Messrs. NGK Insulators Ltd., of Japan. The production of the GPF is produced and tested by the same rigorous methods and guaranteed for the same performance as NGK Insulators of the corresponding categories. The present range of products is upto 132 kv according to the collaboration agreement of 1954. A fresh agreement is under negotiation to expand the range of products upto 220 kv which is expected to meet all the requirements of the country till the end of the Fourth Plan period, with rare exceptions of short lengths of 380 or 400 kv lines for which imported insulators would be more economical than setting up expensive machinery on a permanent basis at such an early stage.



### GOVERNMENT SANDALWOOD OIL FACTORIES IN MYSORE

Factories at (1) Mysore, (2) Shimoga (Mysore State)

Established : Mysore 1917 and Shimoga 1944.

Capital : Rs. 33,50,000 (1964-65).

Number of persons employed : 380.

Production : 1964-65 : Qty-Kgs. 1,00,727 Kgs. of Sandalwood oil valued at Rs. 1,26,86,441.

The scheme to equip the Sandalwood Oil Factory, Mysore with new boiler is being implemented.

### GOVERNMENT SOAP FACTORY

Post Box No. 1031, Bangalore-12.

Established : 1918.

Capital invested : Rs. 1 crore.

No. of persons employed : 294.

Annual outturn : Rs. 1.46 crores.

The factory produces 2,200 tons of soap per annum. Recently Government of India has enhanced the licenced capacity from 1,500 tons to 6,000 tons per year. The factory also produces high class toilet soaps, washing soaps and C.P. Glycerine. Mysore Sandal Soap is their popular brand.

### THE HUTTI GOLD MINES CO. LTD.

Hutti P.O. (Via Raichur-Deccan).

Production was commenced in 1948 and the current production is at the rate of 10,000 tons of ore treated with a recovery of 77,000 grammes of gold per month.

Production at the expanded rate is scheduled to commence early in 1968, when 3,10,000 tons of ore will be treated per annum for a recovery of about 1,930 kg. of gold.

### MAHABOOB SHAHI GULBARGA MILLS CO. LTD.

Gulbarga (Mysore State).

The authorised share capital at present is Rs. 1.25 crores and subscribed capital is Rs. 71.2 lakhs. The mill became a Government company in 1962, as a result of the Government acquiring 51 per cent of the share capital.

The company employs a labour force of about 3,000. Its installed capacity is 35,140 spindles and 606 looms with dyeing, bleaching and finishing sections. The mill produces coarse and medium cloth.

Managing Director : C. S. Seshadri, I.A.S.; Secretary : B. Lakshmana Rao.

### THE MYSORE CHROME TANNING CO. LTD.

Mysore Road, Bangalore-26.

More than 52 per cent of the company's share capital is held by the Government of Mysore.

The company manufactures all kinds of chrome upper leathers, B.T. sole leathers, besides manufacturing leather goods such as ammunition boots for police and defence departments, air travel bags, document cases, suit cases, ladies hand bags, industrial leathers, washers for hydro-electric, turbines, safety belts and straps for hot line workers etc.

Managing Director : J. C. Lynn, I.A.S.; Secretary : S. Krishnappa, B.Com., B.L.

### THE MYSORE IRON AND STEEL LIMITED (Bhadravati, Shimoga Dist., Mysore State).

This Mysore State Government Project is now a Corporation on the lines of a Private Limited Company.

The Company produces pig iron, cast iron pipes, plate sleepers, general foundry castings, merchant steel sections, steel castings, portland cement, slag cement, ferro-silicon and ferro-manganese. The total sales during the year 1965-66 amount to about Rs. 11.04 crores.

The present annual output of several products is (in tonnes) : Pig Iron 85,000 ; Mild Steels Sections 30,000 ; Baling hoops and thin rods 11,000 ; Cast Iron Pipes 26,500 ; Ferro-Silicon 20,000 ; Cast Iron Plate Sleepers 15,000 ; Cast Iron Castings 5,000 ; Steel Castings 2,000.

The Company has a well equipped Structural Shop for fabrication of steel structures, the annual capacity being more than 2,500 tonnes.

**Expansion Schemes :** Expansion of the existing Steel Plant by installing L.D. Steel converters and additional Rolling Mills to step up the production of Mild Steel to one lakh tons per annum is completed. The scheme for conversion of the Common Steel Expansion into an Alloy and Special steel Plant with a capacity of 77,000 tons of finished Special Steels at a cost of Rs. 10.71 crores in collaboration with Messrs. Bohler & Company of Austria in respect of know-how, patent rights etc. is now under implementation. Annual capacity of pig iron will be increased from 80,000 tons to 2,00,000 tons by installing additional electric furnaces.

Total No. of employees : 9,643

Chairman : K. Mallappa, B.A., B.L., Minister for Industries and Commerce, Government of Mysore. Vice-Chairman and Managing Director : M. D. Shivananjappa, I.A.S. Secretary : K. Marulappa, M.A.

### MYSORE GOVERNMENT SILK WEAVING FACTORY

Mananthody Road, Mysore-4.

Established : 1932.

Capital invested : Rs. 24.88 lakhs, as at the end of March 1965.

Number of persons employed : 268.

Annual outturn : Rs. 22 lakhs.

The factory is engaged in the manufacture of high grade 100 per cent re-reeled pure silk fabrics such as Crepe-de-chine, Georgette, Satins, Sarees, Kerchieves, ties and other ladies wear.

New varieties such as Tom-tom, Fireplay, Navrang, Champion, Rainbow, Taffetta fabrics, Scarves, Raw Silk fabrics, Batic printed sarees, Reversible sarees etc., are also manufactured.

The factory is being modernised with the installation of 30 Tsudakoma Looms, High speed sectional warping machines cone winder HBD Type etc., being imported from Japan.

### MYSORE IMPLEMENTS FACTORY

(Hassan).

Established : 1939.

Capital invested : Rs. 42 lakhs.

No. of persons employed : 290.

Annual outturn : Rs. 40 lakhs.

The factory has been mechanised for mass production of agricultural, estate and horticultural implements and tools like munties, pick axes, sledge hammers, shovels, crowbars, sheet metalware, light structural, etc. to meet the increasing demand from several Govt. departments and private consumers. A network of agencies are functioning throughout the country. The factory shall be further mechanised and expanded during the IV Five Year Plan period with a Capital Cost of Rs. 30 lakhs.

General Manager : S. K. Kempaiah.

### NGEF LTD.

Byappanahalli, Bangalore-1.

The Government concern, New Government Electric Factory has been converted into a Public limited company, by name NGEF Ltd. The authorised capital of the company is Rs. 5 crores and the proposed issued capital would be Rs. 4 crores. The Mysore Government would subscribe 80 per cent of the said issued capital.

**Main products :** Manufacture of transformers in sizes upto 20,000 kVA and voltages upto 132 kV to an aggregate of 600,000 kVA per

annum, per single shift. (ii) Motors : Upto 1,500 HP for voltage rating upto 6.6 kV. The aggregate output will be 4,00,000 H.P. per annum, per single shift. (iii) Switchgear : Motor starters, switches, circuit breakers upto 11 kV, switchboards, distribution boards, H.R.C. fuses etc., of the value of about Rs. 85,00,000 per annum, per single shift.

### RADIO & ELECTRICALS MFG. CO. LTD. Mysore Road, Bangalore-18.

The name of Radio & Electricals Mfg. Co. Ltd. (popularly known as Remco) was adopted in 1949. The present authorised capital is Rs. 2 crores and subscribed capital is Rs. 79,86,290. Sixty two per cent of the paid-up capital is held by the Government of Mysore and the remaining 38 per cent by the public.

The company's business operations began with the sale of imported radio receivers and was followed by manufacturing activities for the production of radio receivers, electronic components, plastic insulated wires and cables, electricity meters and water meters. Among the components produced in Remco are (1) all metal parts (2) mains transformers (3) audio transformers (4) I. F. transformers (5) coils (6) wave change switches (7) paper capacitors and (8) electrolytic capacitors. The production of band switches in technical collaboration with A. B. Metal Products Ltd., U.K. commenced in May 1958. Production of loudspeakers in technical collaboration with Tokyo Shibaura Electric Co., Ltd., Tokyo, Japan, commenced in June 1966. The principal electronic equipment manufactured in Remco are (1) domestic radio receivers (2) community receivers and (3) inter-communication sets. Besides these, a large variety of test equipment utilising electronic circuits have also been designed and built by Remco mostly for its own use. The production of transistorised radio receivers has been started recently (April 1965).

The manufacture of Polyvinyl chloride covered wires and cables for use in low tension circuits was commenced in 1948. The production of single phase electricity meters was commenced in 1952 in technical collaboration with Tokyo Shibaura Electric Co. Ltd., Japan. The production of electricity meters has registered a rapid rise from 200 meters per day in 1952 to 1,000 meters per day at present. The company has been sanctioned a capacity of 2,00,000 single-phase electricity meters and 48,000 polyphase electricity meters per annum. The company is also producing polyphase electricity meters.

Remco commenced manufacture of multi-jet inferential type water meters in technical collaboration with Messrs. Aquametro Water Meter Works Ltd., Switzerland in 1956.

### TUNGABHADRA STEEL PRODUCTS LTD. Tungabhadra Dam P.O. (Bellary Dist., Mysore)

This company was founded on April 1, 1960 with an authorised capital of Rs. 2 crores and a subscribed capital of Rs. 50 lakhs. The entire subscribed capital is contributed in equal shares by the Governments of Andhra Pradesh and Mysore.

**Production :** Steel structures including gates, hoists and transmission towers 4,000 tons per annum ; penstocks 3,000 tons ; grey iron castings 500 tons ; cranes worth Rs. 18 to 24 lakhs per annum.

A galvanising plant with a capacity of 3,000 tons per annum is under installation and will be commissioned shortly (April 1966). The company has its own design branch, grey iron foundry, rubber seal section, X-ray and photographic section.

It has entered into a collaboration agreement with Messrs. Est. Neyrpic, Grenoble, France for the designing and fabrication of hydraulic gates. It has plans for securing the collaboration of some other foreign firms and expanding its lines of production.



The Board of Directors of the company comprises eight members, four of whom are nominated by the Govt. of Mysore and four by Andhra Pradesh.

*Chairman*: A. Krishnaswamy; *Managing Director*: I. P. Mallappa; *Secretary*: B. R. Shanthkumar.

## ORISSA

### CUTTACK IRON & STEEL PRODUCTS LTD.

Industrial Estate, Cuttack-3 (Orissa)

The company is a pilot project of the Government of Orissa. The shareholders of the company comprise the Governor of Orissa (holding major shares) and a private entrepreneur.

The company manufactures fabricated steel goods. It undertakes all types of fabrication work. Its products can be divided into three categories: (1) Heavy Goods (trusses, transmission towers, band cranes etc.), (2) Semi-Heavy Goods (window grill, steel window, W.I. gate, collapsible gate, garage gate, electric cross-arms, wheel barrow, scraper, drums etc.) (3) Light Goods (novelty goods like table tray, flower stand, garden chair and other types of furniture and office equipment like file tray, file rack, etc.).

*Managing Director*: A. K. Bhuyan.

### ORISSA BOARD MILLS LTD.

P.O. Jagatpur (Dist. Cuttack, Orissa).

(Regd. Office: Meria Bazar, Cuttack-1).

This is a pilot project company of the Government of Orissa. The mills are equipped with cylinder-mould machine and a jet ventilated dryer imported from West Germany. It produces monolithic quality straw boards and mill boards from 16 oz. to 48 oz.

*Managing Director*: S. Raut Roy.

### ROURKELA FABRICATIONS LTD.

Industrial Area, Rourkela-4.

Authorised capital: Rs. 5 lakhs. The factory was established in 1959 for the manufacture of quality steel window, angle roof trusses, purlins, all steel screw gear shutters, falling shutters and for any type of structural heavy, medium and light.

Turn-over for 1965-66: Rs. 9.0 lakhs.

*Managing Director*: Babubhai Patel; *Secretary-Residential Engineer*: A. N. Patel, B.E., A.M.I.E.

## UTTAR PRADESH

### GOVERNMENT CEMENT FACTORY

Churk, Mirzapur, U.P.

The Government Cement Factory was established at Churk in Mirzapur District at an initial cost of Rs. 4.68 crores. The factory went into production in September 1954. Its installed capacity is 700 tons per day.

The expansion of the project at an expenditure of Rs. 2.98 crores has been completed and the expanded plant went into production from January 1963. The rated capacity of the expanded plant is now 1,400 tonnes per day as against the initial capacity of 700 tonnes per day. Production during 1965-66 was 4,25,066 tonnes of cement.

In the factory, 1,829 persons are working and 1,455 persons are working in the quarries of the factory.

### GOVERNMENT PRECISION INSTRUMENTS FACTORY

Lucknow, P. Box 153, U.P.

The factory was established in 1950 at Lucknow for the manufacture of water meters, microscopes and other precision instruments. Its present production includes watermeters of 15 mm, 20 mm and 25 mm sizes, microscopes research, scholar and bullet comparison and pressure gauges of 4" and 6" dial size with range of 0-100 lbs/in<sup>2</sup>, 0-200 lbs/in<sup>2</sup> and 0-600 lbs/in<sup>2</sup> respectively.

The Research-cum-design centre established in the premises of G.P.I.F. for carrying out research and experimentation in the manufacture of precision and scientific instruments has already started functioning.

The work for the establishment of a separate factory for the manufacture of optical and meteorological instruments is in progress.

### THE INDIAN TURPENTINE & ROSIN CO. LTD.

P.O. Clutterbuckganj, Bareilly (U.P.)

Authorised capital: Rs. 12,00,000; subscribed capital: Rs. 9,00,000.

The Government have handed over their Turpentine and Rosin Factory in Clutterbuckganj in U.P. to this company. From crude resin, the company manufactures turpentine and rosin of international repute conforming to I.S.I. Certification marks. The gum of pine trees, the main raw material, is being obtained from the Kumaon and Tehri forests of U.P.

*General Manager*: Kuber Nath, A.I.F.C.

## WEST BENGAL

### THE KALYANI SPINNING MILLS LTD.

P.O. Kalyani, Dist. Nadia (West Bengal).

Authorised capital: Rs. 250 lakhs; paid-up capital: Rs. 158.21 lakhs. The Government of West Bengal originally paid a sum of Rs. 70.39 lakhs as loan (interest bearing) out of which the Company already repaid a sum of Rs. 32.65 lakhs till 31st March '66.

The mill has an installed capacity of 50,160 spindles.

The annual production capacity of the existing Kalyani Unit is approximately 24,00,000 lbs. manufacturing fine and superfine counts both in Hank and Cones.

The present employment potential of the mill is 1,564.

During 1964-65, the mill has earned a net profit of Rs. 19,25,889.

*Chairman*: K. N. Mookerjee; *Managing Director*: R. R. Chatterjee.

### THE DURGAPUR PROJECTS LTD.

(A Government of West Bengal Undertaking)

Registered Office: 10, Middleton Row, Calcutta-16.

Factory: P.O. Durgapur-2, Burdwan, Coke Oven Plant.

Products: Coke, Benzene (Industrial Toluol), Motor Benzol, Light Solvent Naptha and Lux Mas.

Tar Products: Carbolic oil, Solvent oil, Naphalene oil, Crude Naphalene, Wash oil (Not saleable), Anthracene oil, Timber Pickling oil, Sodium Phenolate, Pitch (Not saleable), Processed Tar, Road Tar (No. 3 & 4) and Resin (Production stopped for the present).

## BHOODAN

THE position of the Bhoodan Yagna Movement upto 31st March 1966] is shown in the table below.

Since Gramdan (the whole cultivable land in the village to be donated to the Gram Sabha) proved to be an advanced stage of Bhoodan, the Sarva Seva Sangh, by its resolution, gave a call to the country to concentrate on Gramdan. At the same time new items of Sarvodaya Patra and Shanti Sena have been added to consolidate the Gramdan Movement. Due to the above programmes the work of distribution of land was slackened.

The headquarters of the movement are at Sarva Seva Sangh, Rajghat, Varanasi—(U.P.).

| STATE                     | Land collection<br>(in acres) | Land distribution<br>(in acres) | No. of Gramdans | No. of Shanti<br>Kendra | No. of Shanti<br>Saluiks |
|---------------------------|-------------------------------|---------------------------------|-----------------|-------------------------|--------------------------|
| Assam .. .. .             | 11,935                        | 265                             | 1,098           | 80                      | 373                      |
| Andhra Pradesh .. .. .    | 2,42,952                      | 1,03,308                        | 1,084           | 1                       | 172                      |
| Bihar .. .. .             | 21,32,787                     | 3,11,037                        | 5,812           | 350                     | 4,428                    |
| Bengal .. .. .            | 12,918                        | 3,856                           | 582             | 14                      | 241                      |
| Delhi .. .. .             | 300                           | 180                             | —               | —                       | 195                      |
| Gujarat .. .. .           | 1,03,242                      | 52,080                          | 314             | 7                       | 96                       |
| Himachal Pradesh .. .. .  | 5,240                         | 2,531                           | 17              | 12                      | 7                        |
| Jammu and Kashmir .. .. . | 211                           | 5                               | —               | —                       | —                        |
| Kerala .. .. .            | 26,293                        | 5,774                           | 409             | 19                      | 66                       |
| Maharashtra .. .. .       | 1,50,802                      | 1,07,111                        | 1,670           | 300                     | 1,873                    |
| Mysore .. .. .            | 20,086                        | 3,181                           | 58              | 12                      | 170                      |
| Madhya Pradesh .. .. .    | 4,05,402                      | 1,56,506                        | 1,062           | 41                      | 544                      |
| Punjab .. .. .            | 14,739                        | 3,601                           | 6               | 17                      | 403                      |
| Rajasthan .. .. .         | 4,29,428                      | 92,734                          | 834             | 84                      | 635                      |
| Tamilnad .. .. .          | 80,433                        | 21,519                          | 956             | 45                      | 60                       |
| Utkal .. .. .             | 1,73,872                      | 1,03,416                        | 4,720           | 36                      | 215                      |
| Uttar Pradesh .. .. .     | 4,34,351                      | 1,84,274                        | 257             | 167                     | 2,391                    |
| NEFA .. .. .              | —                             | —                               | —               | 5                       | —                        |
| Nagaland .. .. .          | —                             | —                               | —               | 2                       | —                        |
| <b>TOTAL .. .. .</b>      | <b>42,44,991</b>              | <b>11,51,378</b>                | <b>18,870</b>   | <b>1,192</b>            | <b>11,869</b>            |



## BROADCASTING

### EXPANSION OF MEDIUM WAVE

FOR the 4th Plan, AIR have an ambitious project for expansion on medium wave with high power transmitters. Already two 1,000 kW medium wave transmitters, one for the Calcutta region and the other for Saurashtra are ordered and they are expected to be erected in 1967. Additional transmitters planned are: Two of 250 kW each, short wave, at Agra/Delhi for augmenting External Services. Medium wave, 100 kW each, transmitters to be erected at Dibrugarh, Jorhat, Darjeeling, Jaisalmer, Gorakhpur, Garhwal, and Ranchi. At Trichur, there will be two such transmitters. Jammu, Imphal and Kohima will have 50 kW transmitters each, and 20 kW transmitters are proposed at Dehra Dun, Jodhpur, Jeypore, Jagdalpur, Allahabad, Varanasi, Cuddappah, while Leh, Mercara (Coorg) and Dangs will have each a 10 kW transmitter.

The Monitoring station at present in Simla is proposed to be shifted to Delhi. Additional building at Head Quarters Delhi, for News Services and External Services are proposed to be constructed. Studio facilities at many stations will be augmented and preparation for introducing TV in Bombay, Madras and Calcutta will be made during the Plan.

### CHANDA COMMITTEE'S REPORT

The most important suggestion is to make AIR an autonomous Corporation on the lines of the BBC. Advertisements may be accepted on the Vividh Bharati Channel and the External Services are to be charged to Government of India. TV to be kept a separate unit from AIR. Low powered transmitters to be erected for small cultural units. Listener Research to be undertaken on a more systematic manner. The Government of India have circulated the Report amongst its Ministries for their reaction.

The strength of All India Radio by the beginning of 1965 was: 33 principal radio stations; 14 auxiliary centres; 23 Vividh Bharati stations; and total transmitters, 103.

### BUDGET

For 1966-67, the estimates of expenditure on revenue account were Rs. 669.33 lakhs and those on capital account Rs. 187.80 lakhs.

### TELEVISION

Confined mainly to the area round about the capital, Delhi, the new more powerful transmitter (5 kW in place of 500 Watts) has expanded the radial coverage.

TV sets in Delhi now number a little over 700. The service is now for an hour daily of entertainment and education and it was made possible with assistance from West Germany. There are 184 tele-clubs with an active membership of about 20,000 viewers. Of these 126 are located in schools. More than 240 schools are equipped with TV sets. The TV programme includes items in Hindi and English, for women, children and youth, light entertainment, dances and dance-appreciation, two plays a week and a feature film edited to 90 mts. once a month.

Total budget provision for the Television Centre for 1965-66 is a little over Rs. 12.48 lakhs.

The licence fee for a domestic television set is Rs. 30 per annum. This covers sound-cum-vision sets. The commercial licence fee is Rs. 120 per annum, and for a school set Rs. 10 per annum. These licences were issued only in the Delhi Postal Circle.

AIR stations transmit for about five to ten hours a day.

Four regional stations, Bombay, Calcutta, Delhi and Madras have a non-stop broadcasting service from 6 a.m. to midnight; the service begins with *Vande Mataram* and ends with *Jana gana mana*. Additional news bulletins in English and Hindi, with local announcements are introduced in between.

This is generally split up into three transmissions, morning, afternoon and evening. There is an additional transmission for schools.

There is a Staff Training School in Delhi, where on an average 180 persons from the staff of All-India Radio, programmes and administrative sides, are trained every year. From 1958, the training facility has been extended to the engineering and technical staff with the opening of a similar training school for them.

**Programme Publicity:** All India Radio has only 8 journals (in 8 languages) for its regular internal publicity programmes. *Akashvani*, the English journal is a weekly, while the rest are fortnightly in Assamese, Bengali, Gujarati, Hindi, Tamil, Telugu and Urdu.

*Akashvani* (English), *Awaz* (Urdu), *Sarang* (Hindi), *Betar Jagat* (Bengali), *Vani* (Telugu), *Vanoli* (Tamil), *Nabhovani* (Gujarati) and *Radio Goa* (English) are for home services.

For the External Services, *India Calling*, with two versions, the Eastern and the Western, is supplemented by Arabic, Burmese, Chinese and Persian editions.

**Listener Research.**—The primary purpose of Listener Research is to determine the listening habits and programme preferences of radio listeners by ascertaining from time to time their reactions to items broadcast.

### PROGRAMMES

**Women's Programmes.**—Programmes for women in English (from important regional centres) and in Indian languages from all stations are broadcast at least twice a week. In the rural programmes too, there is a day devoted to rural women folk. Live messages from defence personnel in forward areas are broadcast in women's programme for wider circulation. Talks, dialogues, stories and songs form the composition of the programme and the topics generally are of feminine interest: child care, family planning, health hints. Group listenings are encouraged. By the end of 1964, there were about 1,500 Women's Listening Groups in India.

**Children's Programmes.**—Wherever possible the children are divided into two or three age groups. The programme is conducted or compered by an elderly character known to the children. Another elderly person usually a woman is used to assist the comper.

**School Broadcasts.**—The school broadcasts are meant to supplement the regular curriculum of the school.

**Rural Broadcasts.**—While the provision of programme is the Central responsibility, the supply of listening sets to the rural population is the responsibility of State Governments.

Supplementary or spare time occupations are suggested, and information is given on items like improved seed, new implements, sowing, crop and cattle pests and their remedies, and market rates of current agricultural produce.

Weather bulletins during the monsoon are a regular feature of the composite programme.

### BROADCAST RECEIVER LICENCES AS ON DECEMBER 31, 1964 (by Postal Circles)

| Postal Circle | Domestic Receiver Sets | Community | School  |
|---------------|------------------------|-----------|---------|
| Andhra ..     | 2,43,132               | 8,404     | 2,335   |
| Assam ..      | 56,925                 | 1,819     | 331     |
| Bihar ..      | 1,63,699               | 791       | 4,044   |
| Bombay ..     | 5,93,749               | 10,662    | 1,437   |
| Central ..    | 2,70,086               | 3,668     | 1,316   |
| Delhi ..      | 2,46,545               | 29        | 143     |
| Gujarat ..    | 3,28,761               | 3,234     | 1,730   |
| Kerala ..     | 1,03,854               | 2,693     | 1,153   |
| Madras ..     | 4,21,193               | 13,436    | 2,630   |
| Mysore ..     | 2,28,180               | 4,689     | 846     |
| Orissa ..     | 50,588                 | 2,631     | 1,323   |
| Punjab ..     | 3,21,476               | 5,595     | 2,182   |
| Rajasthan ..  | 1,27,834               | 2,727     | 1,904   |
| U.P. ..       | 3,58,491               | 11,982    | 3,688   |
| W. Bengal ..  | 5,73,193               | 1,868     | 1,753   |
| Total ..      | 40,87,506*             | 74,023*   | 26,820* |

The number of radio licences of all types at the end of 1964 was 43,15,242 as against 37,36,688 at the end of 1963. It is estimated that by the end of 1965, the licences would have crossed the 5-million mark. The total number of TV receivers in Delhi was a little over 700.

The total number of radio sets supplied to the various States and Union Territories numbered 82,442 at the end of 1963 and 3,427 more radio sets were expected to be supplied by the end of 1963-64. Including the radio receivers supplied under the other subsidy schemes, there are now nearly 1,60,000 community listening centres all over the country.

The Union Government distributed nearly 9,400 community listening sets for the different States and the Union Territories.

**Wire Broadcasting:** Started in May 1958, to enable low-income groups in Delhi to listen to the A.I.R. broadcasts, the Wire Broadcasting Service covers the Lodi Colony, Kasturba Nagar, Aliganj, Karbala and Thyagaraja Nagar localities of Delhi. The total programme coverage is about 290 hours per month in three daily transmissions. There are at present 1,426 subscribers.

### TRIBAL LANGUAGES & DIALECTS

All India Radio now broadcasts programmes regularly in 82 tribal languages, from Gauhati, Shillong, Kurseong, Kohima, Imphal, Simla, Cuttack, Calcutta, Indore, Ranchi, Hyderabad and Vijayawada. For rural programmes, 11 languages and 48 dialects are used. For news services, 20 Indian and foreign languages are used.

**National Programmes.**—The Saturday National Programmes of music lasting 90 minutes have been quite popular. It is generally so planned that Northern and Southern (Karnatic) music alternate every Saturday. Arrangements are being made to have this item originate at other places. At present most of the Saturday concerts originate from Delhi and all stations relay them.

**Talks.**—Important topics of a national character are dealt with by an accepted authority in a nation-wide broadcast on Sundays and Wednesdays at 8-30 p.m. Since its inception in 1953, this programme has featured 527 talks and discussions.

**Plays, Operas.**—On alternate Thursdays, a national programme of plays or operas is arranged in such a way that all stations have the same item, in their respective languages, prepared from one single script.

**Development Projects, Factories.**—In order to make the country plan-minded, a feature on some of the bigger national projects is arranged once a month, and it is put out on the air simultaneously from all the stations.

**Prasar Geet & Sugam Sangit.**—In order to provide all stations with standardised light and popular music, All-India Radio organised its own units in different regions for the production of songs.

**Transcription Service.**—During 1963-64, 7,844 recordings were supplied comprising 5,099 items of music including about 800 patriotic songs in all languages, 1,176 talks and 1,569 plays and features.

**Vividh Bharati.**—This all-entertainment programme, broadcast on short-wave 100 kW transmitters, from Madras and Bombay simultaneously, was introduced in October 1957. The programme is also broadcast on medium wave from 21 centres on special transmitters provided:—Bangalore, Bombay, Calcutta, Cuttack, Delhi, Hyderabad, Indore, Jaipur, Kanpur, Lucknow, Madras, Nagpur, Patna, Rajkot, Trichy, Vijayawada, Bhopal, Dharwar, Poona, Srinagar and Chandigarh.

\*These figures are inflated to the extent of renewals for 1965 which were possible since the beginning of Nov. 1964.



The duration of this recorded variety programme, mostly of music extends to 11½ hours on week days and 12½ hours on Sundays and principal festival days.

Some of the news bulletins and commentaries in Hindi are being included in the Vividh Bharati; but that is perhaps a temporary arrangement to meet the emergency. At the close of 1965, there were 26 medium-wave centres carrying the Vividh Bharati service.

**Urdu Majlis:**—Half an hour's programme daily has been introduced for Urdu speaking audiences. The item originates in Delhi and is relayed by stations interested in it. Allahabad, Lucknow, Jammu/Srinagar, Jullundur, Hyderabad and Patna are other stations which have a regular Urdu programme in their schedules.

**Competitions.**—In its ceaseless effort to find new talent, All-India Radio holds many competitions every year. They are for music, light and classical, vocal and instrumental, northern and southern (Karnatak) styles.

**Radio Sangeet Sammelan** has indeed become a regular annual feature of All-India Radio. It consists of a series of concerts before invited audiences arranged in Delhi, Bombay and Madras, and the programme is relayed by all stations.

A side-light of the Sammelan is the music competition meant to discover latent talent among younger artistes. Musicians vocal and instrumental between the ages 16 and 21 are invited to participate. The preliminary screening takes place at the respective stations within whose jurisdiction they come, and the final tests are held for Northern music at Delhi and for Karnatic music at Madras.

**Programme Libraries.**—At the headquarters of All-India Radio, New Delhi three important libraries have been built: (i) Recordings on tape and disc; (ii) Scripts of important programmes from all stations; and (iii) Tape recordings of entertainment programme items contributed by all stations of AIR.

### NEWS SERVICES DIVISION

During 1964-65 the News Services Division broadcast a total of 132 bulletins in 29 Indian and foreign languages round the clock.

Two special news bulletins in English and other languages were added, one in the early morning and the other late at night before closing down. Besides the actual news, there were many topical talks and comments that were put out regularly to boost up the morale of the public. Two overseas correspondents will soon be appointed for covering news from (i) Africa and East Asia and (ii) West Asia. More news bulletins are to be introduced.

In addition to the bulletins originating from Delhi, regional news are now broadcast in 16 languages from all State capitals, Kohima being the latest addition.

**Patriotic Songs:** In addition to the existing stock of national songs, All India Radio broadcast over one thousand new patriotic songs, composed by well-known poets in all the languages of the country and rendered by popular artistes.

**Dictionaries of Music & Folk-music:** Technical and descriptive terms of both the Karnatak and North Indian music will be explained in a compilation undertaken by All India Radio.

**Radio News Reels:** Twice a week, radio news reels of 10 mts. duration, prepared by the News Service Division are broadcast from Delhi for an all-India consumption, and once a week in Hindi. On special occasions, such as receptions to visiting dignitaries, or of our leaders visiting other countries, extra "editions" of the radio news reels are broadcast. English, Hindi and other languages are used for these "newspapers of the air."

**Regional News.**—All capitals of States, now devote ten minutes a day for covering regional news in languages other than English. The timings however are late in the afternoon.

A few minutes are set apart at each station for local announcements. This period accommodates news of purely local interest.

**External Services:**—For 22 hours and 30 minutes every day, the External Services of All India Radio broadcast programmes in 17 different languages for many parts of the world. The languages used are: Arabic, Burmese, Cantonese, English, French, Indonesian, Kuoyu, Nepali, Persian, Portuguese, Pushtu, Swahili and Tibetan. Among the Indian languages are: Hindi, Tamil, Gujarati and Konkani. Broadcasts in Sinhalese, Malay and Thai will be introduced shortly.

These broadcasts serve two purposes: they help Indians staying in different parts of the world to keep in touch with India; and to others, they help appreciate our art, culture, thought and general way of living. On the political front, the Indian viewpoint is best represented without any room for mis-interpretation.

Five more high power transmitters for external services were to be set up during the 3rd Plan.

### AIR STATIONS

Medium-Wave Stations as on May 8, 1966.

|                       | Wavelengths<br>m. | Frequencies<br>kc/s.<br>per second |
|-----------------------|-------------------|------------------------------------|
| Ahmedabad-Baroda-A .. | 352.9             | 850                                |
| Ahmedabad-B ..        | 214.3             | 1,400                              |
| Ajmer ..              | 500.0             | 600                                |
| Allahabad-A ..        | 315.8             | 950                                |
| Allahabad-B* ..       | 211.3             | 1,420                              |
| Bangalore-A ..        | 491.8             | 610                                |
| Bangalore-B* ..       | 365.9             | 820                                |
| Bhadravathi ..        | 375.0             | 800                                |
| Bhopal-A ..           | 197.4             | 1,520                              |
| Bhopal-B* ..          | 250.0             | 1,200                              |
| Bhub ..               | 232               | 1,290                              |
| Bikaner ..            | 225.6             | 1,330                              |
| Bombay-A ..           | 288.5             | 1,040                              |
| Bombay-B ..           | 545.5             | 550                                |
| Bombay-C* ..          | 243.9             | 1,230                              |
| Calcutta-A ..         | 590               | 508.5                              |
| Calcutta-B ..         | 265.5             | 1,130                              |
| Calcutta-C* ..        | 194.8             | 1,540                              |
| Calicut-A ..          | 441.2             | 680                                |
| Calicut-B* ..         | 275.2             | 1,090                              |
| Chandigarh* ..        | 245.9             | 1,220                              |
| Cuddappah ..          | 333.3             | 900                                |
| Cuttack-A ..          | 310.9             | 965                                |
| Cuttack-B* ..         | 222.2             | 1,350                              |
| Delhi-A ..            | 370.4             | 810                                |
| Delhi-B ..            | 280.4             | 1,070                              |
| Delhi-C* ..           | 219.0             | 1,370                              |
| Delhi-D ..            | 191.1             | 1,570                              |
| Dharwar-A ..          | 220.6             | 1,360                              |
| Dharwar-B* ..         | 258.6             | 1,160                              |
| Gauhati-A ..          | 411.0             | 730                                |
| Gauhati-B ..          | ..                | ..                                 |
| Gauhati-C. (S.W.) ..  | ..                | ..                                 |
| Goa ..                | 340.9             | 880                                |
| Gwalior ..            | 215.8             | 1,390                              |
| Hyderabad-A ..        | 405.4             | 740                                |
| Hyderabad-B ..        | ..                | ..                                 |
| Hyderabad-C* ..       | 245.9             | 1,220                              |
| Imphal ..             | 215.8             | 1,390                              |
| Indore-A ..           | 461.5             | 650                                |
| Indore-B* ..          | 188.7             | 1,590                              |
| Jabalpur ..           | 254.2             | 1,180                              |
| Jaipur-A ..           | 202.7             | 1,480                              |
| Jaipur-B* ..          | 236.2             | 1,270                              |
| Jaipur-C. (S.W.) ..   | ..                | ..                                 |
| Jammu ..              | 303.0             | 990                                |
| Jeypore ..            | 205.5             | 1,460                              |
| Jodhpur* ..           | 366.9             | 820                                |
| Jullunder ..          | 422.5             | 710                                |
| Kanpur* ..            | 208.3             | 1,440                              |
| Kohima ..             | 201.3             | 1,490                              |
| Kurseong ..           | ..                | ..                                 |
| Lucknow-A ..          | 394.7             | 760                                |
| Lucknow-B ..          | ..                | ..                                 |
| Lucknow-C* ..         | 227.3             | 1,320                              |
| Madras-A ..           | 416.7             | 720                                |
| Madras-B* ..          | 211.3             | 1,420                              |
| Madras-C ..           | 193.5             | 1,550                              |
| Nagpur-A ..           | 447.8             | 670                                |
| Nagpur-B* ..          | 300.0             | 1,000                              |
| Pasighat (NEFA) ..    | 283.02            | 1,060                              |
| Patna-A ..            | 483.9             | 620                                |
| Patna-B* ..           | 200.0             | 1,500                              |
| Poona-A ..            | 384.6             | 780                                |
| Poona-B* ..           | 309.3             | 970                                |
| Port Blair ..         | 208.3             | 1,440                              |

Wavelengths Frequencies  
m. kc/s.  
per second

|                  |       |       |
|------------------|-------|-------|
| Raipur ..        | 306.1 | 980   |
| Rajkot-A ..      | 329.7 | 910   |
| Rajkot-B* ..     | 211.3 | 1,420 |
| Rampur ..        | 294.1 | 1,020 |
| Ranchi ..        | 535.7 | 560   |
| Sambalpur ..     | 348.8 | 860   |
| Sangli ..        | 240.0 | 1,250 |
| Shillong ..      | 250   | 1,200 |
| Siliguri ..      | 192.3 | 1,560 |
| Simla ..         | ..    | ..    |
| Srinagar-A ..    | 267.9 | 1,120 |
| Srinagar-B ..    | 201.3 | 1,490 |
| Tiruchi-A ..     | 319.1 | 940   |
| Tiruchi-B* ..    | 202.7 | 1,480 |
| Tirunelveli ..   | 250.0 | 1,200 |
| Trichur ..       | 517.2 | 580   |
| Trivandrum-A ..  | 454.5 | 660   |
| Trivandrum-B* .. | 263.1 | 1,140 |
| Varanasi ..      | 241.9 | 1,240 |
| Vijayawada-A ..  | 357.1 | 840   |
| Vijayawada-B* .. | 200.0 | 1,500 |
| Visakhapatnam .. | 322.6 | 930   |

Medium wave length remains unchanged throughout the year; its coverage after sun-set gets considerably extended.

### HAMS—AMATEUR BROADCASTERS

For a wider penetration of broadcasting technique, HAMS or amateur broadcasters, with a small transmitter, are useful to pave the road for and help build an unofficial second line of technical experts. By 1962, there were just 300 Hams in India. About 100 were added to the number during 1963 and there are only 400 Hams. Even with this small number, the Hams are well organised.

### BROADCAST LICENCES & PRODUCTION OF RECEIVING SETS

Broadcast receiver licences are issued at all head and sub-post offices at a fee of fifteen rupees per year, and cover the use of receiving sets throughout India.

Broadcast Receiver Licences are issued to Municipalities or other public bodies for the reproduction of broadcast programmes in public places by the Postmaster-General of the State.

A licence issued for this purpose covers the use of one wireless receiver only.

A separate Broadcast Receiver Licence is, however, necessary in the case of clubs, institutions, messes, etc., for reproducing broadcast programmes at dances, concerts, bazaars, etc., to which the public are admitted.

Licence Books of the size of Post Office Savings Account Bank pass-books are now issued at concessional rates for three years or more. Separate books are given for each receiving set. Specially issued stamps of the value of the fee, are affixed on the book and cancelled by the licence issuing authority.

### INDIAN INSTITUTE OF MASS COMMUNICATION

Indian Institute of Mass Communication, (Ministry of Information and Broadcasting) August 17, 1965, is the first institution of its kind in India. It is registered as an autonomous body and it will ultimately form part of the Nehru University, Delhi. With a wider scope than that of schools of journalism, the institution offers practical training to information personnel in the use of different media of mass communication.

The training programme is limited to members of the Central Information Service and information personnel of States. Some places, in each training course, will be offered to candidates under the Colombo Plan and the Special Commonwealth Assistance Programme.

The first pilot course, (August 1965—February 1966) is followed by basic course of 15 month duration (March 1966) with 56 trainees.

The establishment of the Institute is in consonance with the recommendation of the team of

\* These are Vividh Bharati Relaying stations. † Transmission on short wave (also); the Changing wavelengths according to part of the day and season may be ascertained from Programme journals.



experts, sponsored by the Ford Foundation, (in India in 1963), led by Dr. Wilbur Schramm. It had suggested that an Institute for advanced study in mass communication be established in India with responsibilities for consultation, training, research and development.

The Government of India has received assistance in setting up the Institute from UNESCO and the Asia Foundation.

Director : L. R. Nair.

## LICENCES & PRODUCTION OF SETS 1955-64

Domestic receiver licences as on 31st December and Total Yearly production of receiving sets (organised sector only)\* Units.

1955 : 9,47,353 ; 2,01,204 ; 1956 : 10,75,909 ; 1,50,600 ; 1957 : 12,30,814 ; 1,90,692 ; 1958 : 14,27,421 ; 1,98,108 ; 1959 : 17,18,182 ; 2,13,864 ; 1960 : 19,79,820 ; 2,68,320 ; 1961 : 24,20,681 ; 3,26,340 ; 1962 : 28,69,739 ; 3,43,284 ; 1963 :

35,35,942 ; 4,19,460 ; 1964 : 42,13,934 (provisional).

\* This sector consists of 20 registered factories.

## FOURTH PLAN

The Ministry of Information and Broadcasting has drawn up a Rs. 39-crore scheme for the expansion of broadcasting during the Fourth Plan. This includes the setting up of 26 new stations and 21 Plan and 17 farm broadcasting cells.

# HOUSING

WORKING on the basis of the data collected in the 1961 Census and further population projections and taking into account possible new constructions and depreciation of existing houses, it has been estimated that the total shortage of urban housing in the country, by the beginning of the Fourth Plan (April 1966) was of the order of 1.14 crore dwelling units. In addition, nearly 6.27 crore houses in the rural areas are either kacha or substandard and require to be rebuilt.

The Third Plan roughly envisaged an investment of about Rs. 1,550 crores in housing—Rs. 1,125 crores in the private sector and Rs. 425 crores in the public sector. The latter figure includes Government funds to the extent of Rs. 122 crores and loan funds provided by the L. I. C. to the extent of Rs. 60 crores earmarked for the various social housing schemes administered by the Union Ministry of Works, Housing and Urban Development. The remaining investment of Rs. 303 crores in the public sector was intended for such additional housing programmes, as housing provided by the Central and State Governments, public undertakings and local bodies, for their own employees, for the labour employed in coal and mica mines, and those for the backward classes, etc. In the case of social housing schemes administered by the Housing Ministry for which alone figures are available the provisional figure of actual spending is expected to be Rs. 147.75 crores (Governmental investment being Rs. 87.75 crores as against the Plan figure of Rs. 122 crores). The outlay for housing in the Fourth Plan is likely to be of the order of Rs. 2,250 crores. This figure assumes a private investment on housing of Rs. 1,450 crores, Governmental and institutional finance of Rs. 357 crores for the social housing schemes and about Rs. 443 crores for the housing programmes for the employees of Government and semi-Government institutions at the Centre and the States. About 57 lakh houses are expected to be built during the Plan period.

The details of progress, under individual Housing Schemes administered by the Ministry of Works, Housing and Urban Development are indicated below.

## SUBSIDISED INDUSTRIAL HOUSING SCHEME

The Subsidised Industrial Housing Scheme contemplates grant of financial assistance by the Government of India to the State Governments and through them to other approved agencies, such as Statutory Housing Boards, Local Bodies, Industrial Employers and registered Co-operative Societies of industrial workers, for construction of houses for industrial workers, covered by Section 2(1) of the Factories Act, 1948, and mine workers (other than those engaged in coal and mica mines) falling within the meaning of Section 2(h) of the Mines Act, 1952. The benefits of financial assistance under the Scheme are available to workers, whose income does not exceed Rs. 350 per mensem. The Scheme is administered through the respective State Governments, within whose territorial jurisdiction the construction is contemplated.

Under the Scheme, the Government of India provides the entire cost of houses to be constructed for industrial workers by the State Governments, Statutory Housing Boards and Municipal Bodies (50 per cent as outright subsidy and the remaining 50 per cent by way of loan) subject to the maximum of the prescribed ceiling costs for various types of houses. Assistance is also given to employers and co-operatives of industrial workers in the form of 25 per cent subsidy and loans up to 50 per cent (employers) or 65 per cent (co-operatives) of the estimated cost of houses restricted to the prescribed ceiling.

The following four types of accommodation can be provided under the Scheme, depending upon various factors, such as the rent-paying capacity of the workers, the cost and availability of land and local considerations etc. :— (a) Open developed plots; (b) Skeletal houses; (c) Pucca houses; (d) Hostel and dormitory buildings.

The ceiling costs and rents prescribed under the scheme for various types of dwelling units are as follows : (1) For places outside Bombay and Calcutta and their industrial areas : Rs. 1,600 to Rs. 7,000 ; Rs. 5.50 to Rs. 26.50. (2) For places in Bombay and Calcutta and their industrial areas : Rs. 2,400 to Rs. 9,200 ; Rs. 9.50 to Rs. 41.00.

The ceiling costs and the rents indicated above can, however, be increased, in view of certain specified special considerations.

Since the introduction of the Scheme in Sept. 1952, upto the end of March 1966, a total sum of Rs. 65.10 crores has been sanctioned for the construction of 1,81,673 houses, out of which 1,54,933 houses (1,22,464 in the States' sector, 27,788 in the employers' sector and 4,681 in the co-operative sector) had been completed till then. A sum of Rs. 56.80 crores has been released to the different construction agencies.

The State-wise break-up of houses sanctioned and built is given in the table below :

| State                 | Houses sanctioned | Houses built    |
|-----------------------|-------------------|-----------------|
| Andhra Pradesh ..     | 5,213             | 4,943           |
| Assam .. ..           | 417               | 303             |
| Bihar .. ..           | 14,551            | 14,052          |
| Gujarat .. ..         | 25,909            | 20,254          |
| Jammu & Kashmir ..    | —                 | —               |
| Kerala .. ..          | 1,030             | 1,030           |
| Madhya Pradesh ..     | 11,729            | 10,271          |
| Madras .. ..          | 6,679             | 5,674           |
| Maharashtra .. ..     | 38,737            | 51,086          |
| Mysore .. ..          | 10,977            | 10,665          |
| Orissa .. ..          | 3,483             | 2,922           |
| Punjab .. ..          | 6,014             | 4,976           |
| Rajasthan .. ..       | 4,414             | 3,723           |
| Uttar Pradesh .. ..   | 32,632            | 28,632          |
| West Bengal .. ..     | 16,621            | 13,230          |
| <b>Total .. ..</b>    | <b>1,78,406</b>   | <b>1,51,766</b> |
| Delhi .. ..           | 3,267             | 3,167           |
| <b>Grand Total ..</b> | <b>1,81,673</b>   | <b>1,54,933</b> |

State Governments can utilise funds upto 10 per cent of their total allocation under the scheme as loans for the construction of schools, dispensaries, welfare centres, shops, etc. in industrial housing colonies in order to provide basic amenities in these colonies.

## PLANTATION LABOUR HOUSING SCHEME

Since the beginning of the Scheme in April 1956, the States have so far sanctioned projects for the construction of 1,825 houses at a cost of Rs. 40.64 lakhs out of which 1,000 houses have been completed. On the recommendation of a working group on Plantation Labour Housing set up by the Union Ministry of Labour and Employment, the Scheme has now been amended to provide for 25 per cent subsidy on the cost of each house to the planters. The State Governments have also been asked to constitute a Pool Guarantee Fund to indemnify themselves against bad debts that might arise as a result of relaxation of security provisions. The Fund is to be raised by charging an additional interest of  $\frac{1}{4}$  per cent per annum. The losses, if any, in excess of the assets of the Fund would be shared equally by the Government of India, the State Government and the Commodity Board concerned.

## LOW INCOME GROUP HOUSING SCHEME

This Scheme envisages the grant of long-term loans for construction of new houses for persons having an annual income not exceeding Rs. 6,000. The eligibility of persons and institutions for loan under the above scheme were defined in the previous editions of the Directory.

The State Governments have been authorised to utilise amounts not exceeding one-third of the allocations under the Scheme for the construction of houses for the economically weaker sections of the community. The Central Government will give a capital subsidy of 25 per cent of the cost of the houses. These houses will be given on rent to persons with an annual income not exceeding Rs. 3,000 in Bombay, Calcutta and Delhi, Rs. 2,400 in other capital towns of States and Rs. 2,100 elsewhere.

Since the introduction of the Scheme a sum of Rs. 75.95 crores had been advanced as loan to the various States (including Rs. 5.81 crores advanced to third parties in the Union Territories upto March 31, 1966. Another sum of about Rs. 3.58 crores has been provided in the budget for 1966-67 for State Governments and Union Territories. Out of a total of 1,39,894 houses sanctioned upto the end of March 1966, construction work was completed on about 1,00,340 houses.

## SLUM CLEARANCE/IMPROVEMENT SCHEME

Since the inception of the Scheme in May, 1956, upto March 31, 1966, Central assistance totalling Rs. 26.05 crores was given to all the State Governments and in the Union Territories of Delhi and Tripura. In physical terms, so far construction of 94,900 dwelling units costing Rs. 34.84 crores has been sanctioned out of which 52,984 units have been completed. The budget provision for the Scheme during 1966-67 is Rs. 4.38 crores.



**JHUGGI & JHOPRI REMOVAL SCHEME**

The Scheme aims at providing alternative accommodation on rental basis to unauthorised matters on Government and public lands in Delhi, numbering about 50,000 families, whose occupation dates from before July 31, 1960. On 31st March 1966, projects have been formulated for the laying of 42,287 plots (28,619 of 25 sq. yds. and 13,668 of 80 sq. yds.) and construction of 5,000 tenements. Out of these, 2,891 plots (19,088 of 25 sq. yds. and 3,803 of 80 sq. yds.) have already been laid. The work of construction of 3,875 tenements are at various stages of construction. Approximately 9,000 families have so far been allotted plots of land.

**VILLAGE HOUSING PROJECTS SCHEME**

The Village Housing Projects Scheme introduced in Oct. 1957, envisages the establishment of housing projects in about 5,000 selected villages all over the country. Financial assistance is given in the form of loans not exceeding Rs. 3,000 or 50 per cent of the cost of construction of the house, whichever is less. Loan assistance is also granted to villagers for improving their existing houses. The Scheme is based on the principle of aided self help, and necessary technical guidance to the beneficiaries is given by the Rural Housing Cells set up in the States.

According to the reports received so far (Dec. 1965), all the 5,000 villages allotted to States and Union Territories for development had been selected, survey had been conducted in about 3,500 villages and layout plans drawn up for 3,000 villages. About 57,923 houses have been sanctioned for construction, out of which about 28,362 houses have been completed.

**L.I.C. FUNDS FOR HOUSING**

From the financial year 1958-59, for the first time, L.I.C. funds were harnessed in a systematic manner for financing the Middle Income Group Housing Scheme and the Rental Housing Scheme for State Government Employees. From 1962-63, L.I.C. funds are also being availed of by States for Land Acquisition and Development Scheme, and for meeting expenditure over and above their Plan provision, on three other schemes, namely Low Income Group Housing Scheme, Plantation Labour Housing Scheme and Village Housing Projects Scheme.

During the period from 1958-59 to 1965-66, L.I.C. funds to the extent of Rs. 77.14 crores have been made available to State Governments through the Union Ministry of Works Housing and Urban Development. The allocation from L.I.C. fund for the year 1966-67 is Rs. 10 crores.

The fund will be distributed to the States as indicated below: Andhra Rs. 60 lakhs, Assam Rs. 20 lakhs, Bihar Rs. 60 lakhs, Gujarat

Rs. 60 lakhs, Jammu and Kashmir Rs. 10 lakhs, Kerala Rs. 50 lakhs, Madhya Pradesh Rs. 60 lakhs, Madras Rs. 100 lakhs, Maharashtra Rs. 150 lakhs, Mysore Rs. 100 lakhs, Orissa Rs. 60 lakhs, the Punjab Rs. 60 lakhs, Rajasthan Rs. 60 lakhs, U. P. Rs. 50 lakhs and West Bengal Rs. 100 lakhs.

**MIDDLE INCOME GROUP HOUSING SCHEME**

Under the Middle Income Group Housing Scheme, introduced in February, 1959, the Life Insurance Corporation advances loans to the State Governments to the extent authorized by the Central Government. The State Governments in turn, advance loans to individuals, within the income range of Rs. 6,001-15,000 per annum, or their co-operatives, for the construction of houses for their bonafide residential purposes.

The amount of loan is restricted to 80 per cent of the cost of the house subject to a maximum of Rs. 20,000. The Scheme also permits an advance out of the house building loan for completing the purchase of a developed plot of land if 50 per cent of the cost of the plot, which amount should not be less than 25 per cent of the approved loan, has already been paid from the individual's resources.

The floor area of house constructed under this scheme should not be less than 400 sq. ft. and the cost (exclusive of land) should not exceed Rs. 30,000. One-half of the allocation under the Scheme can be utilised by the State Government for construction of houses for allotment on rent. The total funds released during the Third Plan amount to Rs. 20.31 crores. According to the reports received so far (Dec. 1965), the various State Governments had sanctioned about 19,352 houses for construction, out of which 12,465 had been completed.

**RENTAL HOUSING SCHEME**

The scheme came into force in February, 1959. It envisages the grant of loan assistance to State Governments for the construction of houses for allotment to their employees on a rental basis.

The scheme is in operation in all the States except Jammu & Kashmir, Nagaland and Uttar Pradesh. The total amount of funds made available to State Governments for the Scheme during the Third Plan is Rs. 8.29 crores. According to the reports received so far (Dec. 1965), the State Governments have sanctioned projects for construction of 19,246 houses, out of which 11,419 had been completed.

**HOUSE BUILDING ADVANCES TO CENTRAL GOVERNMENT EMPLOYEES**

House building advances are made to Central Government employees for the construction of

houses, enlargement of existing accommodation and for the purchase of ready-built houses from Government, semi-Government or autonomous institutions like the improvement trusts. The maximum amount of advance admissible is 36 months' pay of the Government employee subject to a maximum of Rs. 25,000 in the case of construction or purchase of ready-built houses, and a maximum of Rs. 10,000 in the case of extension of existing accommodation. Low-paid employees can, however, be granted advance up to Rs. 4,800 irrespective of their pay.

From April 1958, when the Scheme was revived, applications for advances involving the grant of loan to the extent of Rs. 5.92 crores have been approved up to March 31, 1966.

**LAND ACQUISITION AND DEVELOPMENT SCHEME**

High land prices and general scarcity of developed plots have been responsible, in a large measure, for the slow progress in housing and slum clearance. A Land Acquisition and Development Scheme was introduced in October, 1959, to assist the State Governments to arrange bulk acquisition and development of land in large and growing towns and to make available to public, developed plots at reasonable rates. The Scheme would also help in the stabilisation of land prices, rationalisation of urban development and promotion of self-sufficient composite colonies, giving due consideration to factors like provision of essential services, shopping centres, schools, and transport and other community facilities.

During the Third Plan a total amount of Rs. 23.17 crores was allocated to the various State Governments under the above scheme. Of this, the actual withdrawal was Rs. 22.86 crores. From 1959 the State Governments are reported to have sanctioned projects for acquiring and developing 23,736 acres at a cost of Rs. 47.01 crores, out of which 12,794 acres have been actually acquired and about 7,960 acres developed.

**HOUSES FOR POLICEMEN**

The scheme was introduced in 1956 to help the States in providing better housing facilities to their police personnel.

The police housing loans advanced to State Governments are repayable in 20 equal instalments, and the interest charged is 5½ per cent per annum.

The Centre has advanced so far nearly Rs. 27.29 crores to the States for building houses for the policemen.

In 1966-67 budget also, Rs. 3 crores had been set apart for this purpose.

**PUBLIC HEALTH**

**MATTERS** connected with health fall largely in the State field.

The Centre is, however, directly responsible even for State subjects in the Union Territories of Delhi, Andaman and Nicobar Islands and Minicoy and Amindivi Islands.

The Central Health Service Rules, 1963 came into force with effect from 15th May 1963. The Service will cover all medical and public health posts under the Central Government and the Union Territories other than those under the Ministries of Railways and Defence.

**CENSUS**

Hospitals and Dispensaries 14,000 (March 1966); Beds 240,100 (1966); Primary Health Centres 3,352 (March 1963); Medical Colleges 86

(1966); Annual admission 10,620; Dental Colleges 13; Annual admission 500; Doctors 86,000 (March 1966); Vaidas 150,000 (1961); Compounders 20,801 (1961); Vaccinators, 5,872 (1961); Dentists 3,802 (1961); Nurses 45,293 (March 1964); Auxiliary Nurses/Midwives 28,000 (March 1966); Health visitors 4,350 (March 1964); Nurse dais/Dais 15,200 (Sept. 1962); Sanitary Inspectors 11,000 (March 1962); Pharmacists 65,000 (1962); Malaria Units 391 (March 1963); Filariasis units 47 (March 1962); T.B. clinics 263 (March 1963); T.B. Training Centres 13 (March 1963); T.B. Beds 27,800 (March 1963); B.C.G. Teams 174 (March 1963); T.B. tested by the teams 34 million (March 1963); B.C.G. vaccinated 13 million (March 1963); Leprosy Centres 137 (March 1963); V.D. Headquarters Clinics 5 (March 1963); V.D. District Clinics 91 (March 1963).

**VITAL STATISTICS**

The registered All-India birth rates, death rates and infant mortality rates are given below:

|         | Birth rate. | Death rate. | Infant Mortality rate. |
|---------|-------------|-------------|------------------------|
| 1960 .. | 22.8        | 10.0        | 87                     |
| 1961 .. | 23.1        | 10.1        | 83                     |
| 1962 .. | 22.9        | 9.7         | 81                     |
| 1963 .. | 22.6        | 9.0         | 78                     |



The infant and maternal death rates in some of the Indian cities are given below :

| Name of the City | Infant mortality rate per thousand live births. |      | Maternal mortality rate per 1,000 live and still berths. |      |
|------------------|-------------------------------------------------|------|----------------------------------------------------------|------|
|                  | 1963                                            | 1964 | 1963                                                     | 1964 |
| Ahmedabad        | 101                                             | 100  | 0.7                                                      | 0.2  |
| Bangalore..      | 67                                              | N.A. | 0.7                                                      | N.A. |
| Bombay ..        | 81                                              | 86   | 1.1                                                      | 0.9  |
| Calcutta ..      | 127                                             | 110  | 0.6                                                      | N.A. |
| Delhi ..         | 67                                              | N.A. | 0.3                                                      | N.A. |
| Hyderabad        | 50                                              | 55   | 0.5                                                      | 0.7  |
| Lucknow ..       | 77                                              | N.A. | 1.3                                                      | N.A. |
| Madras ..        | 103                                             | 106  | 1.9                                                      | 1.8  |
| Nagpur ..        | 97                                              | 99   | 4.7                                                      | 3.8  |

## TROPICAL DISEASES

The following table gives the number of deaths and death rates (number of deaths for every million of the population) from different diseases recorded in the country for 1962 and 1961.

|                             | 1962*     |          | 1961*     |          |
|-----------------------------|-----------|----------|-----------|----------|
|                             | Total     | Rate     | Total     | Rate     |
| Cholera .. ..               | 11,404    | 28.29    | 26,947    | 66.78    |
| Dysentery & Diarrhoea .. .. | 1,79,714  | 445.87   | 2,19,654  | 544.36   |
| Fevers .. ..                | 13,64,252 | 3,775.96 | 14,68,809 | 3,640.11 |
| Malaria .. ..               | §         | §        | §         | §        |
| Plague .. ..                | 200       | 0.49     | 131       | 0.32     |
| Respiratory disease .. ..   | 3,12,144  | 849.38   | 342,391   | 848.54   |
| Smallpox .. ..              | 35,173    | 87.26    | 38,180    | 94.62    |
| Tuberculosis .. ..          | §         | §        | §         | §        |
| Other Causes .. ..          | 15,92,957 | 3,941.91 | 15,98,101 | 3,960.54 |
| Total .. ..                 | 35,50,315 | 8,785.53 | 37,42,962 | 9,276.09 |

\* Excluding Manipur and Tripura.

§ Not available.

Death rates from certain causes recorded in the various States of India (Number of deaths for every million of population) for 1961 and 1962.

| States/Territories        | Year | Cholera | Smallpox | Plague | Fever    | Dysentery and Diarrhoea | Respiratory | All other causes | Total     |
|---------------------------|------|---------|----------|--------|----------|-------------------------|-------------|------------------|-----------|
| Andhra Pradesh .. ..      | 1961 | 19.09   | 69.88    | 0.03   | 2,520.22 | 371.51                  | 549.03      | 3,949.71         | 7,027.23  |
|                           | 1962 | 78.77   | 72.58    | ..     | 2,569.14 | 412.49                  | 547.10      | 4,047.50         | 7,869.26  |
| Assam .. ..               | 1961 | 2.73    | 11.93    | ..     | 1,608.07 | 237.03                  | 286.53      | 830.36           | 3,036.81  |
|                           | 1962 | 0.96    | 10.67    | ..     | 1,540.79 | 276.16                  | 316.80      | 840.23           | 3,078.70  |
| Bihar .. ..               | 1961 | 188.09  | 17.34    | 1.93   | 3,409.22 | 109.88                  | 108.43      | 971.52           | 4,887.35  |
|                           | 1962 | 15.75   | 18.07    | 2.10   | 2,740.25 | 70.10                   | 88.84       | 887.88           | 3,879.40  |
| Gujarat .. ..             | 1961 | 2.02    | 292.93   | ..     | 4,640.77 | 263.69                  | 1,558.01    | 3,926.59         | 10,912.82 |
|                           | 1962 | 0.75    | 270.40   | ..     | 4,104.34 | 209.54                  | 920.08      | 4,730.06         | 10,453.39 |
| Jammu and Kashmir .. ..   | 1961 | 81.25   | 43.99    | ..     | 2,924.62 | 2,201.73                | 1,708.60    | 3,119.64         | 10,079.85 |
|                           | 1962 | 4.41    | 32.52    | ..     | 1,480.70 | 108.05                  | 504.68      | 3,487.87         | 570.14    |
| Kerala .. ..              | 1961 | ..      | 27.54    | ..     | 725.99   | 499.68                  | 300.52      | 5,026.01         | 7,249.75  |
|                           | 1962 | ..      | 30.29    | ..     | 587.91   | 306.58                  | 661.35      | 4,010.29         | 6,336.68  |
| Madhya Pradesh .. ..      | 1961 | 19.01   | 162.50   | ..     | 4,353.12 | 450.59                  | 619.41      | 3,060.84         | 8,665.49  |
|                           | 1962 | 1.82    | 117.75   | ..     | 3,618.12 | 429.97                  | 503.48      | 3,991.19         | 8,663.06  |
| Madras .. ..              | 1961 | 0.88    | 101.53   | 0.16   | 2,060.79 | 14,106.42               | 1,207.33    | 9,054.55         | 14,034.00 |
|                           | 1962 | 2.86    | 110.53   | 0.39   | 1,825.88 | 872.95                  | 1,109.20    | 8,411.98         | 12,522.99 |
| Maharashtra .. ..         | 1961 | 63.75   | 95.59    | ..     | 3,757.58 | 1,023.64                | 1,941.37    | 6,371.70         | 13,469.43 |
|                           | 1962 | 16.69   | 52.05    | ..     | 4,395.86 | 1,015.13                | 2,252.39    | 6,902.29         | 14,910.36 |
| Mysore .. ..              | 1961 | 68.04   | 135.49   | 2.10   | 3,699.87 | 842.33                  | 1,242.77    | 5,575.96         | 11,777.87 |
|                           | 1962 | 161.26  | 122.17   | 5.62   | 3,458.50 | 788.41                  | 1,219.63    | 6,919.91         | 12,385.59 |
| Orissa .. ..              | 1961 | 52.99   | 32.91    | ..     | 7,700.30 | 844.48                  | 430.81      | 3,883.92         | 13,149.59 |
|                           | 1962 | 7.87    | 30.78    | ..     | 6,781.16 | 740.54                  | 455.04      | 3,215.01         | 11,501.79 |
| Punjab .. ..              | 1961 | ..      | 26.57    | ..     | 6,951.75 | 304.42                  | 1,432.70    | 2,476.12         | 11,328.94 |
|                           | 1962 | ..      | 27.56    | ..     | 7,095.09 | 309.20                  | 1,449.37    | 2,235.33         | 11,228.21 |
| Rajasthan .. ..           | 1961 | 3.54    | 289.50   | ..     | 2,254.15 | 513.96                  | 1,217.39    | 2,956.88         | 7,463.76  |
|                           | 1962 | 6.73    | 131.77   | ..     | 1,950.94 | 517.13                  | 861.13      | 3,108.68         | 6,757.29  |
| Uttar Pradesh .. ..       | 1961 | 125.60  | 142.90   | ..     | 5,322.52 | 414.52                  | 860.78      | 1,837.61         | 8,794.36  |
|                           | 1962 | 13.12   | 156.08   | ..     | 5,035.95 | 378.19                  | 756.48      | 1,575.90         | 7,988.49  |
| West Bengal .. ..         | 1961 | 78.89   | 7.00     | ..     | ..       | 261.96                  | ..          | 6,349.89         | 6,697.25  |
|                           | 1962 | 69.30   | 21.00    | ..     | ..       | 259.77                  | ..          | 6,097.60         | 6,671.19  |
| Andaman & Nicobar Islands | 1961 | ..      | ..       | ..     | 646.15   | 478.92                  | 969.23      | 3,153.84         | 5,246.15  |
|                           | 1962 | ..      | ..       | ..     | 104.47   | 477.60                  | 805.05      | 4,065.70         | 6,089.35  |
| Delhi .. ..               | 1961 | ..      | 76.75    | ..     | 1,257.69 | 313.68                  | 1,603.26    | 5,001.85         | 8,233.24  |
|                           | 1962 | ..      | 32.02    | ..     | 1,607.67 | 323.40                  | 1,783.08    | 4,801.19         | 8,798.02  |
| Himachal Pradesh .. ..    | 1961 | 0.73    | 16.14    | ..     | 4,123.20 | 952.31                  | 443.87      | 3,867.57         | 8,903.88  |
|                           | 1962 | ..      | 1.42     | ..     | 3,545.19 | 827.88                  | 656.42      | 2,286.22         | 7,438.31  |
| Manipur .. ..             | 1961 | ..      | ..       | ..     | ..       | ..                      | ..          | ..               | ..        |
|                           | 1962 | ..      | ..       | ..     | ..       | ..                      | ..          | ..               | ..        |
| Pondicherry .. ..         | 1961 | ..      | 2,356.76 | ..     | 2,751.35 | 2,748.04                | 994.59      | 16,491.89        | 25,343.24 |
|                           | 1962 | 15.82   | 976.06   | ..     | 2,139.84 | 2,305.61                | 1,086.85    | 15,556.70        | 22,081.70 |
| Tripura .. ..             | 1961 | ..      | ..       | ..     | ..       | ..                      | ..          | ..               | ..        |
|                           | 1962 | ..      | ..       | ..     | ..       | ..                      | ..          | ..               | ..        |

\* Information not available.



## NATIONAL INSTITUTE OF COMMUNICABLE DISEASES

The National Institute of Communicable Diseases was inaugurated on July 30, 1963.

The objectives and functions of the new Institute are to advise State Governments on all matters pertaining to communicable diseases and initiate investigations in these diseases. It will also assist State organisations in carrying out investigations taken up by them.

The Institute will undertake research into all basic facts underlying the prevalence and spread of communicable diseases and their prevention and study of aetiological agents, vectors, mechanism of infection, including endemic and epidemic phenomena, and any zoonotic reservoirs. Another aspect of the Institute's work will involve clinical investigations in communicable diseases, including treatment and study of early diagnostic technique, relapse problems and effects of new drugs. The Institute will publish the results of its findings and bring out guides and bulletins for the use of the medical profession.

Arrangements will be made at the Institute for training research workers and teaching and training personnel in epidemiology, medical zoology and control of communicable diseases. One course of training in epidemiology (duration five months) attended by 14 medical officers was conducted in 1964. Another course (duration 3 months) commenced at the Institute with 22 candidates in April 1965.

The Institute has been recognised by ten universities for the purpose of post-graduate research degrees of Ph.D. & D.Sc. (PH).

The Institute has been entrusted with the work of evaluating the National Smallpox Eradication Programmes in the country.

**Veneral Diseases & Other Allied Treponemal Diseases:** Among communicable diseases, veneral diseases will easily rank the third major problem, next only to malaria and tuberculosis. Their prevalence is relatively higher in the larger cities, ports, industrial areas and in some of the sub-Himalayan tracts. The common veneral diseases prevalent and of public health importance are six, namely, Syphilis, Gonorrhoea, Chancroid, Granuloma, Inguinale, and Lymphogranuloma Venerum. With the increasing shift of population from rural to urban areas as a result of rapid industrialisation of the country, veneral diseases are likely to assume even greater importance in the future.

The first major step taken towards control of these diseases was the establishment of a W.H.O. V.D. Demonstration Team in Himachal Pradesh in 1949.

With the ultimate object of having a V.D. Clinic at the headquarters of each State, at the headquarters of every district and at important cities and industrial townships, a beginning was made by the inclusion of a scheme for control of Veneral Diseases in the Second Five Year Plan for the establishment of 8 State Headquarter Clinics and 75 district headquarter clinics. V.D. Training facilities were also made available at the Institute of Venereology, Madras, and at the V.D. Training & Demonstration Centre, New Delhi.

During the Third Plan upto the end of March, 1965, two State Headquarter Clinics and 30 district clinics had been established. Further requests for establishment of 8 more V.D. Clinics during 1965-66 had also been received.

Social voluntary agencies such as the Association for Moral and Social Hygiene in India and the Delhi Maternity Hospital were given financial assistance to establish V.D. Clinics as a result of which 4 and 1 V.D. Clinics respectively were established by them.

According to reports received the number of patients treated in these clinics during the year 1964 was 4,30,916.

**Yaws:** Yaws is prevalent in some areas of Andhra Pradesh, Maharashtra, Madhya Pradesh and Orissa. While the work in Andhra Pradesh

has been completed, it is expected that these teams would cover the entire area in Madhya Pradesh and Orissa shortly.

**Cancer:** The number of persons who die of cancer annually is believed to be in the neighbourhood of 2 lakhs.

The Cancer Committee appointed by the Ministry of Health, Govt. of India on June 3, 1965, under the chairmanship of the Director-General of Health Services, made certain recommendations for setting up regional cancer hospitals at Ahmedabad, Bombay, Calcutta and Madras. The recommendations are under the consideration of the Govt. of India.

There are 40 general hospitals in the country where facilities for cancer treatment are available in the form of surgical, radium or cobalt 60 units.

The location of Cobalt-Therapy Centres are as follows: Three in the Punjab (Amritsar, Gurdaspur, Patiala), four in U.P. (Agra, Lucknow, Allahabad), four in Madras (Madras and Madurai), three in Maharashtra (Bombay, Nagpur), three in Gujarat (Ahmedabad, Bhavnagar, Jamnagar), four in Mysore (Bangalore, Mysore, Mangalore), three in Kerala (Trivandrum, Ernakulam and Kozhikode), two in Assam (Dibrugarh and Shillong), four in Rajasthan (Jaipur, Bikaner, Jodhpur, Ajmer), one in Orissa (Cuttack), one in Bihar (Patna), four in West Bengal (all in Calcutta), two in Delhi and two in Andhra Pradesh (Visakhapatnam, Hyderabad).

Research is conducted at the Cancer Research Centre, Bombay, Tata Memorial Hospital, Bombay, Chittaranjan Cancer Institute, Calcutta and the Cancer Institute, Madras.

### Cobalt '60' Unit

The Govt. of Canada have donated through the Colombo Plan Capital Aid Programme 10 Cobalt '60' Therapy Units. The following are the names of the recipient institutions: Tata Memorial Hospital, Bombay (two units); Chittaranjan Cancer Hospital, Calcutta; Christian Medical College and Hospital, Vellore; Christian Medical College and Hospital, Ludhiana; Cancer Institute, Madras (two units); Medical College, Trivandrum; Medical College, Patna; Radium Institute and Cancer Hospital, Hyderabad; S.C.B. Medical College and Hospital, Cuttack; J.K. Institute of Radiology and Cancer Research, Kanpur; Medical College Hospital, Calcutta; Sawai Man Singh Hospital, Jaipur; All India Institute of Medical Science, New Delhi; P.B.S. Medical Hospital, Bikaner; Medical College, Bangalore; Institute of Post-graduate Medical Education and Research, Chandigarh; Medical College, Pondicherry.

### Medical Radiology

The following medical institutions impart training in medical radiology.

Institute of Medical Sciences, Osmania Medical College, Hyderabad; Darbhanga Medical College, Laherisara; Medical College, Baroda; B.J. Medical College, Ahmedabad; Medical College, Trivandrum; G.R. Medical College, Gwalior; Barnard Institute of Radiology, Madras; Christian Medical College, Vellore; Madras Medical College, Madras; Madurai Medical College, Madurai; Stanley Medical College, Madras; Grant Medical College, Bombay; Topiwala National Medical College, Bombay; Armed Forces Medical College, Poona; S.C.B. Medical College, Cuttack; Institute of Post-graduate Medical Education and Research, Chandigarh; S.M.S. Medical College, Jaipur; King George Medical College, Lucknow; Sarojini Naidu Medical College, Agra; Ganesh Shankar Vidyarthi Memorial Medical College, Kanpur; Maulana Azad Medical College, New Delhi; Lady Harding Medical College, New Delhi; All India Institute of Medical Sciences, New Delhi; Safdarjang Hospital, New Delhi.

### PUBLIC HEALTH AGENCIES

A Central Council of Health exists with the Union Health Minister as chairman and State Health Ministers as members.

**Executive Committee:** Chairman: Union Health Minister; Vice-Chairman: Union Dy. Health Minister; Members: Health Ministers for W. Bengal; Gujarat; Madras; Mysore; Assam; Punjab.

The body in charge of research is the Indian Council of Medical Research.

**Medical Store Depots:** There are six main medical depots — one each at Bombay, Calcutta, Hyderabad, Karnal, Madras and Gauhati. The depot at Gauhati started functioning in the month of September 1965. The depots at Bombay and Madras have pharmaceutical factories attached to them.

**List of Medical Research Institutes/Laboratories in India:** Indian Council of Medical Research, Medical Enclave, New Delhi; Indian Cancer Research Centre, Bombay; Central Research Institute, Kasauli (Himachal Pradesh); All India Institute of Hygiene and Public Health, Calcutta; School of Tropical Medicine, Calcutta; Malaria Institute of India (Central Institute for Communicable Diseases), Delhi; Central Drugs Laboratory, Government of India, 3, Kyd Street, Calcutta; Haffkine Institute, Bombay; Nutrition Research Laboratories, Tarnaka, Hyderabad-7 (Dn.); Pasteur Institute of Southern India, Coonoor; K. E. VII Memorial Pasteur Institute, Shillong; Government Vaccine Institute, Namkum (Ranchi); Regional Research Laboratory, Jammu, Tawi; B. C. G. Laboratory, Gulindy, Madras-15; Vaccine Institute, Public Health Institute, Mysore, Bangalore; Leprosy Research Centre, Madras; King Institute, Gulindy, Madras; Virus Research Centre (B. J. Medical College, Old Building), Poona; Vallabhbhai Patel Chest Institute, University of Delhi, Delhi; Pasteur Institute, School of Tropical Medicine, Calcutta-12; Cancer Institute, Madras; All India Institute of Mental Health, Bangalore; Central Drug Research Institute, Lucknow; Chittaranjan Cancer Research Centre, Calcutta; Radium Research and Cancer Hospital, Hyderabad (Andhra Pradesh); Institute of Post Graduate Medical Education and Research, Calcutta; Central Leprosy Teaching and Research Institute, Tirumani; National Chemical Laboratory, Poona; All India Institute of Medical Sciences, New Delhi; National Institute of Experimental Medicine and Biochemistry, Calcutta-13; Central Food Technological Research Institute, Mysore-2; Institute of Child Health, Calcutta; National Medical Institute, Calcutta; Institute of Ophthalmology, Aligarh; Pasteur Institute, Patna; Bose Institute, Calcutta; Institute of Venereology, Madras; Institute of Obstetrics and Gynaecology, Madras; Barnard Institute, Madras.

### CONTROL OF DISEASES

Steps are being taken to control a number of diseases that are rampant.

#### Malaria

The National Malaria Eradication Programme, which was launched in April, 1958, entered into the ninth year of its operation during 1966-67 with 393.25 units functioning all over the country, each unit covering a population of about 1.2 million. Out of 80.26 unit areas in the attack phase during 1965-66, about 35 unit areas are expected to be ready for withdrawal of spray operations and entry into consolidation phase during 1966-67, while out of 170.36 unit areas in consolidation phase about 57 unit areas are expected to enter the maintenance phase during 1966-67.

As to the over-all picture regarding the prevalence of the disease, it could be mentioned that there has been a reduction by about 99.5 per cent in the proportional rate of malaria as compared to the figures of 1953-54. The estimated expenditure on National Malaria Eradication Programme during IV Plan is Rs. 22.50 crores.

The WHO and U.S.A.I.D. are assisting the programme in India.



### Filaria

National Filaria Control Programme was launched as a large scale pilot project with the assistance of U.S.A.I.D. towards the end of 1955. A total provision of Rs. 236.61 lakhs has been made for the programme in the 3rd Plan under the States.

Under the Programme, 18 Survey Units and 47 Control Units were established.

Anti-larval measures are in operation. Wherever these measures have been adequately applied, the mosquito densities have been considerably reduced and consequently the transmission of the infection has been reduced.

A Committee was appointed in 1960 to evaluate the National Filaria Control Programme. Its recommendations still remain to be implemented due to paucity of funds.

A pilot project for the control of *B. Malayi* infection in Kerala is being established.

### Leprosy

It is estimated that there are about 2.5 million leprosy patients in India, the incidence in some places being as high as 40 per thousand. About 20 per cent of the estimated cases are in the infective type.

In India the problem of leprosy is massive in two States and is high in six States. The estimation of cases in these States has been done on the basis of available epidemiological data. In between Andhra Pradesh and Madras, it has been estimated that there are nearly half the total number of cases of leprosy in India.

The names of the States with population in millions and estimated number of cases in lakhs respectively are as follows:—

Madras 33.6-6.4; Andhra Pradesh 36.0-5.2; Bihar 46.5-2.8; Maharashtra 37.2-2.2; Mysore 17.2 (Population of endemic zones only)—1.4; Orissa 16.6-1.9; U.P. 29.2 (Population of endemic zones only)—1.4; West Bengal 35.0-2.4; Remaining States N.A.—1.3; Total of estimated no. of cases in lakhs 25.0.

Apart from clinical improvement, sulphone therapy brings about a gradual reduction in the number of leprosy bacilli in the near skin, and promotes healing of ulcers in nose and elsewhere. It also reduces in effective discharge from patients.

The Leprosy Control Programme of the Government of India continued to function satisfactorily during the Third Plan period. As on March 31, 1966, there were 179 leprosy control units functioning in the country.

At the end of the Third Plan 774 S.E.T. Centres (Survey Education and Treatment Centre) attached to Hospital, Primary Health Centre, dispensaries, etc. were functioning in the country.

During the III Plan period the Government of India decided to give cent per cent grant to suitable Voluntary Organisations for undertaking survey and domiciliary work in leprosy control. Sanction was accorded to 38 Institutions out of which 30 were working in March 1966.

Upto March, 1966 the consolidated work done by 179 Control Centres, 774 S.E.T. Centres and 30 Voluntary Agencies is as follows:—

Population covered 55.2 million; persons examined 27.0 million; cases detected 2,51,345; recorded cases 5,07,740 (inside project area 3,59,408 and outside project area 2,08,332); cases registered for treatment 5,21,946; healthy contacts registered 12,50,158; healthy contacts examined 2,27,099.

The Central Leprosy Teaching and Research Institute, Chingleput undertakes research in the various problems concerning leprosy and promotes field studies for the application of the results of the research to control the spread of leprosy. It also functions as a centre for offering technical advice and guidance for the promotion of anti-leprosy work on sound lines. This Institute makes available its services for the investigation of special problems in all parts of the country.

During the Third Plan, 10 Leprosy Training Centres have been established one each in Andhra Pradesh, Kerala, Madhya Pradesh, Madras, Maharashtra, Bihar, Orissa, Uttar Pradesh, West Bengal and Mysore for the training of Para-Medical workers. West Bengal is expected to start one shortly.

The physical targets for the Third Plan were to establish 50 Leprosy Control Units, 786 S.E.T. Centres and 10 Training Centres for Para-Medical workers and the achievements upto March 1966 were 45 Leprosy Control Units, 580 S.E.T. Centres and 10 training centres.

The WHO and the UNICEF are assisting the Government of India and the State Governments in the National Leprosy Control Programme in the shape of personnel, fellowships, transport, equipment, drugs, teaching aids and stipends for trainees.

Private bodies like the Mission to Lepers, an international society, Hind Kusht Nivaran Sangh (Indian Leprosy Association) and Gandhi Memorial Leprosy Foundation have been taking active part in controlling leprosy.

It is proposed to cover an additional 140 million population during the IV Plan. The entire endemic population of Madras and Andhra Pradesh and the population of high endemic zones of Bihar, Maharashtra, Mysore, Uttar Pradesh, Orissa and West Bengal will be covered. The estimated expenditure works out to be about Rs. 12 crores.

### Tuberculosis

The national tuberculosis survey conducted by the Indian Council of Medical Research, came to the following conclusions:—

1. The morbidity of T.B. varies from 13 to 25 per thousand persons in different areas;
2. The prevalence of T.B. in villages, small towns and cities is not so markedly different as originally expected;
3. The morbidity rates are lower for females than for males;
4. The prevalence of T.B. among the persons of the age group of 45 years and above is considerably higher than for the age group of 5 to 34 years; and
5. Bacteriologically positive cases varied from 2 to 8 per thousand persons in different areas.

Upto the end of Dec. 1965, 232.9 million persons had been tuberculin tested of whom about 88.5 million were vaccinated with BCG and thus given protection against tuberculosis.

In Dec. 1965 the number of BCG teams each containing one team leader and six BCG technicians rose to 183.

With a view to covering the younger group of population more thoroughly house to house vaccination has been started and vaccination of the new born through maternity hospitals and maternity centres has been started.

**T.B. Demonstration and Training Centres:** There is a Training and Demonstration Centre in each of the States in the country except in Assam and Madhya Pradesh, where action for the establishment of such centres is being taken.

**National Tuberculosis Institute:** This Institute runs regular courses of three months' duration to train teams each consisting of doctors, health visitors, laboratory technicians and X-ray technicians, statistical clerk and a BCG team leader. Upto December, 1965 a total of 12 regular courses were conducted in which 162 teams comprising of doctors and other para-medical personnel were trained. The Institute is also undertaking several operational research programmes in respect of the National TB Programme, Longitudinal and Baseline Surveys, Sociological surveys, studies on BCG vaccination and tuberculin test etc.

**T. B. Clinics:** As on Dec. 31, 1965 there were 426 T.B. Clinics in the country, out of which 146 are equipped with miniature X-ray and laboratory facilities.

**University Training Centres:** There are about six University Training Centres in the country which train doctors for Diploma in Tuberculosis (T.D.D.). Attached to the Delhi University is the 'Patel Chest Institute' for teaching and research in T.B. and other diseases of the chest.

**T.B. Beds:** There are about 151 TB hospitals and sanatoria in the country apart from an equal number of TB wards. The total number of beds in the country is about 34,550 of which about 12,500 are being run by voluntary organisations.

**Research in Tuberculosis:** Apart from the National TB Institute and the New Delhi TB Centre, the Tuberculosis Chemotherapy Research Unit, Madras and the Tuberculosis Research Unit, Madanapalle were conducting several research schemes regarding Chemotherapy of tuberculosis, epidemiology, casefinding, B.C.G. evaluation etc. in the year 1965.

**After-care and Rehabilitation Work Centres:** There are ten After-care and Rehabilitation Colonies in the country for giving vocational training to ex-tuberculosis patients.

During the Third Plan period 81 clinics, 8 T.B. demonstration centres and over 1,500 T.B. beds have been established.

### Goitre

Endemic goitre associated with cretinism, deaf-mutism and various other grades of physical and mental deterioration is prevalent in the northern parts of Kashmir, Punjab, Himachal Pradesh, Bihar, Uttar Pradesh, West Bengal, Assam, N.E.F.A. and Manipur. According to the latest available data, approximately 40 million people inhabit this goitrous belt of the country and at least 9 million of them suffer from goitre.

The incidence of goitre with the names of States already surveyed and the figures in percentage are as follows:—

Himachal Pradesh 20.9 to 39.9; Uttar Pradesh 26.3 to 37.0; Bihar 20.3 to 41.7; Punjab 40.3 to 52.3; Naga Hills 26.1 to 50.2; Jammu and Kashmir 31; West Bengal 30.0 to 33.0.

At present there is one iodised plant supplied by UNICEF functioning at Sambhar Lake. A spray type iodisation plant had been received from the UNICEF in 1964 and has been installed in Calcutta. At the end of 1965, 9 more spray type plants were expected to be received from the UNICEF. All these plants would process two lakh tons of iodised salt per year.

A provision of Rs. 30 lakhs has been made during the Fourth Plan to process two lakh tons of salt.

**Smallpox:** 152 Units of the National Smallpox Eradication Programme launched in 1962, performed 51,101,471 primary vaccinations and 347,178,929 revaccinations upto the end of Dec. 1965. During 1965, 31,535 cases with 8,670 deaths were reported as against 40,265 cases and 11,837 deaths in 1964.

To meet the requirements of the vaccine, the Government of the USSR have gifted 650 million doses of vaccine. This will meet the requirements of the country upto March, 1967.

Shelf driers and automatic filling and sealing machines have been denoted by the UNICEF for indigenous manufacture and these have been installed at the four Vaccine producing Centres located at Madras, Belgaum, Hyderabad, and Patwadangar.

The Plan allocation for this programme is Rs. 10.5 crores. The expenditure on the programme has been reimbursed by the U.S.A.I.D. under P.L. 480, and for this purpose a total sum of Rs. 10.29 crores has already been made available.

**Cholera:** The incidence of cholera is of a considerable magnitude in the States of West Bengal, Bihar, Uttar Pradesh, Orissa, Andhra Pradesh, Madhya Pradesh, Gujarat, Maharashtra, Madras and Mysore. For some years the incidence is low in the Punjab, Assam and Kerala and is not a major public health problem in Rajasthan and Jammu and Kashmir. The incidence is more marked in most States in the second half of the year in contrast to smallpox which is prevalent in the first half of the year.

The Indian Council of Medical Research has established a Cholera Research Centre in the Central Food Laboratory building at 8, Kyd



## PUBLIC HEALTH

Street, Calcutta, to carry out continuous research on various aspects of the problem of cholera with a view to developing ultimately practical measures for the control and prevention of the disease.

Researches on immunochemical, genetic and other aspects of cholera are also being conducted at various institutions under the auspices of the Council.

## Maternity

Maternity and Child Welfare are very important components of health service. 15 States and two Union Territories have established posts of Assistant Directors of Health Services to direct Maternity & Child Welfare Services. The Union Government has an officer in the Directorate General of Health Services who advises States and Union Territories on Maternity and Child Welfare activities.

Non-official bodies engaged in welfare work are the Indian Council for Child Welfare, New Delhi; The Kasturba Gandhi Memorial Trust; The Central Social Welfare Board; and the Indian Red Cross Society.

In the rural areas maternity and child welfare services are incorporated as a function of the primary health centres. Up to Dec. 31, 1965, 4,795 primary health centres and 13,072 sub-centres—attached to the Primary Health Centres—have been established.

With a view to improving maternity and paediatric services the Govt. of India included in the IIInd Five Year Plan, projects relating to the training of dais, auxiliary nurse—midwives and health visitors for assistance to establishment of paediatric centres in medical colleges. The scheme for training of dais has been continued in the Third Five Year Plan. The achievement by the end of the Third Plan is estimated to be 12,000 dais.

In Urban areas M.C.W. services are available at M.C.H. Centres established by voluntary organisations, local bodies and State Govts. By the end of Third Five Year Plan, 45,077 maternity beds and 8,393 Paediatric beds were available in major hospitals situated in most cities and towns.

During the Fourth Plan, a provision of Rs. 4.35 crores has been made to train 2,50,000 dais.

At the end of December 1965, 4,554 candidates qualified as health visitors and 1,000 were under training. 2,000 health visitors are to be trained in the Fourth Plan period.

## Defectives

It is estimated that the total number of blind is about 2,000,000 and the deaf about 700,000 (1961).

There is a Training Centre for the Adult Blind at Dehra Dun to impart training in engineering and non-engineering trades. There is also a common Braille code for Indian languages known as Bharati Braille. The Central Braille Printing Press at Dehra Dun has already published several Braille books in English, Hindi and other regional languages. At Dehra Dun the Govt. of India have also established a Model School for Blind Children.

There are in all 109 institutions for the blind and 68 for the deaf and 22 for the mentally handicapped. 19 institutions cater for the orthopaedically handicapped children.

The Government of India give scholarships to blind and deaf persons between the age of 16 and 30 in order to help them to undertake higher academic education, or, professional, vocational or technical training in normal institutions of learning. Scholarships are also awarded to orthopaedically handicapped children and adults who fall in the age-group of 12-30.

The number of scholarships awarded upto 1962-63 was 1,278. During 1963-64, 517 scholarships were awarded.

There are special employment exchanges for the physically handicapped at Bombay, Delhi, Madras, Hyderabad, Bangalore, Calcutta, Ahmedabad and Chandigarh and the total number of placements made by these exchanges since their inception upto 31st Dec. 1964 is 1,500.

A training centre for the adult deaf has been set up at Hyderabad during 1962-63 to provide facilities for training in engineering and non-engineering occupations.

There are also Centres at Bombay, Delhi and Narendrapur (W. Bengal) for the Training of Teachers of the Blind on regional basis.

## Mental Disease

The number of mentally ill persons in India who need institutional treatment is estimated at 1.5 million, and of psycho-neurotics about 3 million. The number of hospital beds is a little less than 15,000. Qualified psychiatrists number about 175, and those practising but formally unqualified about 1,000.

There are at present 27 institutions for mentally retarded and handicapped.

Major centres are in: Chandigarh (1); Dehra Dun (1); New Delhi (4); Bombay (9); Trivandrum (1); Bangalore (1); Hyderabad (1).

At present there are 32 mental hospitals with accommodation for about 20,000 patients.

The Mysore Government Mental Hospital at Bangalore and the Hospital for Mental Diseases at Ranchi are the ones which are best equipped.

The following is a list of mental hospitals in India:

Mental Hospital, Tezpur; Hospital for Mental Diseases, Ranchi; Ranchi Manasika Arogya-shala (Ranchi); N. M. Mental Hospital, Thana (Bombay); Mental Hospital, Ratnagiri (Maharashtra); Central Mental Hospital, Yeravda; Mental Hospital, Ahmedabad; Mental Hospital, Dharwar; Mental Hospital, Baroda; Mental Hospital, Nagpur; Government Mental Hospital, Madras; Government Mental Hospital, Waltair; Government Mental Hospital, Kozhikode; Punjab Mental Hospital, Amritsar; Mental Hospital, Agra; Mental Hospital, Bareilly; Mental Hospital, Banaras; Mental Hospital, Mankunda, Calcutta; Lambini Park Mental Hospital, P.O. Tiljala, 24 Parganas; Bangiyannmad Ashram, 29-A, Vivekananda Road, Dum Dum; Mental Observation Ward, Bhawani-pur, Calcutta; Mental Hospital, Jalna; Mental Hospital, Srinagar; Mental Hospital, Lashkar; Mental Hospital, Bonganga, Indore; Mental Hospital, Bangalore; Mental Hospital, Jaipur; Mental Hospital, Jodhpur; Mental Hospital, Udaipur; Mental Hospital, Bhavnagar; Mental Hospital, Trivandrum; Mental Hospital, Trichur.

The All-India Institute of Mental Health, Bangalore conducts the various post-graduate courses in Diploma in Psychological Medicine (D.P.M.) and Diploma in Medical and Social Psychology (D.M. & S.P.). The M.D. in Psychiatry will be started in the near future. The University of Bangalore to which the institute is affiliated and the Governing Body of the institute have approved of the introduction of this course. A post-graduate Diploma in Psychiatric Social Work (M.P.S.W.) has also been approved for introduction at this institute.

Post-certificate course in Psychiatric Nursing is also conducted at the institute. The diploma awarded by the institute is recognised by the Government of India and the Indian Nursing Council.

## PUBLIC HEALTH MEASURES

There were 4,500 primary health centres functioning in the country on March 31, 1965.

The aim was to have one primary health centre in each of the 5,200 blocks by the end of the Third Plan period.

Total number of primary health centres as on March 31, 1965 (Statewise): Andhra Pradesh 302; Assam 77; Bihar 582; Gujarat 267; Jammu and Kashmir 47; Kerala 146; Madhya Pradesh 374; Madras 144; Maharashtra 414; Mysore 419; Orissa 206; Punjab 220; Rajasthan 187; Uttar Pradesh 733; West Bengal 193; Delhi 8; Himachal Pradesh 41; Manipur 10; Tripura 16; Pondicherry 9; Laccadive, Minicoy and Amin-divi Islands 7; NEFA 96.

## Water Supply and Sanitation

The National Water Supply and Sanitation Programme initiated by the Ministry of Health in August 1954 was continued during the Third Five Year Plan period with a provision of Rs. 88.95 crores and Rs. 16.33 crores for water supply and sanitation schemes under the urban and rural phases of the Programme.

**National Water Supply and Sanitation Programme (Urban):** Most of the 402 water supply schemes and 103 sewerage schemes have been completed. In addition, 369 water supply schemes and 106 sewerage schemes, estimated to cost Rs. 62.33 crores and Rs. 25.93 crores respectively, had been approved during the Third Plan upto June, 1965. A budget provision of Rs. 15 crores was made for 1965-66.

**National Water Supply and Sanitation Programme (Rural):** The 349 rural water supply and sanitation schemes have been mostly completed. During the Third Plan period, 753 schemes estimated to cost Rs. 13.32 crores had been approved upto March, 1965. A budget provision of Rs. 1.50 crores had been made for 1965-66 for the execution of the schemes.

## DRUGS\*

The control over imported drugs is exercised by the Central Government through its offices at the ports of Bombay, Calcutta, Cochin and Madras.

Manufacture by units employing capital exceeding Rs. 10 lakhs is regulated by the Directorate-General of Technical Development, Central Government. Manufacture by units with capital less than Rs. 10 lakhs is regulated by the respective State Directorates of Industries. Condition, manufacture, standard of drugs, etc. in both cases, are governed by the Drugs Act and Rules 1940, enforced by the respective State Governments through their Drug Central Administration.

The Drugs and Cosmetics Act has been amended empowering the Central Government to assist State Governments in exercising control over the quality of drugs and cosmetics manufactured in the country. Ayurvedic and Unani medicines have been brought under the purview of the Drugs and Cosmetics Act. Rules for the control of Homoeopathic medicines under the Drugs and Cosmetics Rules have been published and have been brought into force.

The Government of India have set up two Pharmacopoeia Committees—one for Ayurvedic and the other for Unani for laying down standards of single drugs and compound preparations of these systems.

## AUXILIARY WORKERS

In order to meet extreme shortage of doctors in the country as a whole and particularly in the rural areas it was proposed to introduce a new type of Auxiliary Medical and Public Health Worker. For this purpose the Government of India have approved the establishment of training centres at the following institutions:—Public Health Institute, Patna (Bihar), Medical College, Visakhapatnam (Andhra), S.M.S. Medical College, Jaipur (Rajasthan).

\* The Drugs and Equipment Standard Committee, constituted by the Centre, has recommended the setting up of an "intelligence-cum-legal authority" in each State for tracking down sub-standard and spurious drugs.



## NURSING

At the end of the year 1964 there were 45,293 registered nurses, 52,440 registered midwives, 2,498 registered health visitors and 8,213 auxiliary nurse-midwives. The total number of qualified health visitors in India on 31st Dec. 1964 was about 4,350. Separate figures for urban and rural areas are not available.

The number of training institutions for nursing personnel and of students under training at the end of 1964 were as follows (The figure in brackets shows the number of students):—

Nurses 234 (16,694); Midwives 220 (2,983); Health Visitors 18 (1,110); Auxiliary Nurse Midwives 273 (8,952).

During Third Plan period an amount of Rs. 74,54,065 for training of Nurses and Rs. 1,14,69,500 for training of Auxiliary Nurse Midwives respectively was spent.

## FIVE-YEAR PLANS

The Health Programmes in the Third Five Year Plan involved a total outlay of about Rs. 341.80 crores (Rs. 296.80 crores being in the States and the rest at the Centre). The following table shows under broad headings the progress

The table given below shows the facilities which existed at the end of the Second Plan and facilities expected at the end of the Third Plan for training of health and medical personnel.

| Category                             | 1960-61      |        |         | 1965-66      |        |         |
|--------------------------------------|--------------|--------|---------|--------------|--------|---------|
|                                      | Institutions | Intake | Outturn | Institutions | Intake | Outturn |
| Doctors .. .. .                      | 57           | 5,800  | 3,200   | 87           | 10,625 | 5,000   |
| Nurses .. .. .                       | 250          | 4,000  | 2,800   | 234          | 6,687  | 5,000   |
| Auxiliary Nurse-Midwives/Midwives .. | 420          | 5,200  | 4,000   | 273          | 8,500  | 4,000   |
| Health Visitors ..                   | 30           | 650    | 375     | 18           | 455    | 270     |
| Sanitary Inspectors ..               | 20           | 2,250  | 2,250   | 34           | 2,477  | 2,277   |
| Pharmacists .. ..                    | 10           | 550    | 480     | 21           | 1,100  | 1,000   |

**Doctors, Nurses, etc.:**—The achievement at the end of the Second Plan and the target at the end of the Third Plan respectively were: Nurses 27,000; 45,000; Doctors 70,000; 86,000; Auxiliary Nurses/Midwives 19,900; 36,000; Health Visitors 1,500; 4,200; Nurse/Dais 11,500; 25,000; Sanitary Inspectors 6,000; 18,000; Pharmacists 42,000; 48,000.

**Hospitals & Dispensaries:**—The number of hospitals and dispensaries has increased from 12,600 in 1960-61 to 14,600 in 1965-66 and of beds from 1,85,600 to 2,40,100. A basic type of health organisation providing an integrated preventive and curative service has been established and 4,920 Primary Health Centres are functioning in the country.

## The Countess of Dufferin's Fund

The Fund which is now a Govt. of India body grants scholarship to Lady Post-graduate and Under-graduate Medical students and B.Sc. (Nursing) and Public Health Nursing students studying in Medical and Nursing Colleges respectively in India.

During the year 1965, 12 Post-graduate, 75 Under-graduate, 8 B.Sc. (Nursing) and 2 P.H. Nursing Scholarships have been awarded.

## President's Silver Medal

In 1965, 17 medals have been awarded to women candidates who stood first in M.B.B.S. examination and one medal for B.Sc. Nursing Course.

## President's Gold Medal

From the year 1965, the President of India has been pleased to award two Gold Medals—one each to the best lady student of the Lady Hardinge Medical College, New Delhi and of the Jawahar Lal Institute of Postgraduate

of expenditure during the Third Five Year Plan:—

| Programme                                          | (Rs. in Crores)   |                    |
|----------------------------------------------------|-------------------|--------------------|
|                                                    | Third Plan Outlay | Actual expenditure |
| Water Supply and Sanitation                        | 105.30            | 104.47             |
| Primary Health Centres, Hospitals and Dispensaries | 61.70             | 49.49              |
| Control of Communicable Diseases .. .. .           | 70.50             | 97.11              |
| Medical Education, Training and Research .. ..     | 56.30             | 66.82              |
| I.S.M. .. .. .                                     | 9.80              | 5.07               |
| Family Planning .. ..                              | 27.00             | 22.80              |
| Other Schemes .. ..                                | 11.00             | 7.37               |
| <b>TOTAL .. .. .</b>                               | <b>341.60</b>     | <b>353.13</b>      |

A sum of Rs. 3.5 crores was provided for research programmes under the Council for the 3rd Plan. The tentative Fourth Plan outlay for medical research is Rs. 10 crores.

Medical Education and Research and Dhanyantari Medical College, Pondicherry for showing maximum kindness, consideration and courtesy to the patients and their relatives during the period of the Student's internship and house surgency.

## National School Health Council

The Council set up in 1963 has been reconstituted in April 1966. The functions of the Council are mentioned below:—

(i) To assist in the formulation of National School health policies and to review the same periodically; (ii) To encourage and assist the States in the establishment of school health services and school meal programmes and to co-ordinate them; (iii) To initiate and guide studies, research and training on problems connected with school health administration and services; (iv) To assist in the formulation of standards for school health services and to lay down minimum uniform procedures; (v) To advise the Central Government in the allocation of grants and other resources to the States for School Health Programme; (vi) To take steps to enlist the active participation of the people in the implementation of the programme; and to consider the problems raised by the State Advisory Committee, Ministries or individual members.

The student health programme has been included in the Fourth Plan as a Centrally-aided scheme and a provision of Rs. 36.99 crores has been proposed.

## DENTAL EDUCATION

Dental Education in the country is making rapid progress. There are now 18 Dental Institutions all affiliated to Universities training students for the degree in dental surgery, viz.: B.D.S. (Bachelor of Dental Surgery) having

facilities for over 500 admissions per year. Two more dental colleges (one in Mysore and another in Maharashtra) are expected to start functioning shortly.

Facilities for Dental Mechanics training are available at Lucknow, Madras, Hyderabad, Trivandrum, Bombay for civilians and at the various centres of the Armed Forces for Army personnel; while Dental Hygienists training is available for civilians at Madras, Hyderabad, Trivandrum, Bombay and at the Armed Forces Medical College, Poona for Army personnel.

In addition to the two Post-graduate centres at the Government Dental College, Bombay-1 and the Nair Hospital Dental College, Bombay-8, where Post-graduate courses in seven specialities were established in 1959, Post-graduate Departments have now been established under advance action for the 4th Plan at the following dental institutions:—(1) Dental College & Hospital, Lucknow; (2) Dental College, Bangalore; (3) Dental College, Amritsar; (4) Dental Wing, Madras Medical College, Madras and (5) Dental College, Trivandrum.

Considerable progress has been made in the field of Dental Research during the last few years. The Indian Council of Medical Research and the Government of India have sanctioned at Lucknow Dental College and Hospital a Research Project under PL 480 Grant in (i) Prophylaxis Procedures on the Control of Periodontal Diseases for Rs. 7,62,377 for three years, and (ii) another Research Project under PL 480 Grant for Rs. 6,54,580 for five years on Sodium Fluoride Intake and Dental Caries. There is already a permanent Research Unit in Periodontology at Lucknow sanctioned by the I.C.M.R. for five years for about Rs. 5,00,000. The Dental College at Ahmedabad has also been sanctioned a Research Project in 'Oral Cancer' by the I.C.M.R. under PL 480 Grant for Rs. 10,74,799 for six years. A PL 480 Grant Research Project on 'Oral Calculus' is already in operation at Madras for Rs. 4,01,290 for five years. During the current year the I.C.M.R. has approved Research Grants for Rs. 3,05,165 for 20 old and new research schemes. One important work is at Lucknow on "Sodium Fluoride Tooth Pastes and Luride Phosphate Solution" to arrest Dental Caries in children.

There are at present roughly 200 Dental Clinics, mostly at District Hospitals, and during the next five years, more and more such clinics are expected to be opened at District and Tehsil Hospitals of which some are to be mobile clinics. Besides this, a sizeable number of School Dental Clinics are expected to be opened in various parts of the country. Each School Dental Clinic shall be designed to look after 3,000 school-going children between the age of 5-16 years.

The total number of registered dentists in the country as on 1st April 1965 was 4,791 excluding those who could not renew their registration at the close of the year.

## MEDICAL EDUCATION

The admission capacity of the medical colleges as in December 1965 was about 10,620. At the end of 1965-66 there were 86 medical colleges in the country.

Below we give a list of medical colleges in India:

**Andhra Pradesh:** Andhra Medical College, Visakhapatnam; Guntur Medical College, Guntur; Kurnool Medical College, Kurnool; Osmania Medical College, Hyderabad-Dn.; Gandhi Medical College, Hyderabad-Dn.; Rangaraya Medical College, Kakinada; Kakatiya Medical College, Warangal; S. V. Medical College, Tirupati, Dist. Chittoor.

**Assam:** Assam Medical College, Dibrugarh; Gauhati Medical College, Gauhati; Medical College, Silchar.

**Bihar:** Prince of Wales Medical College, Patna; Darbhanga Medical College, Laheria-sarai; Rajendra Medical College, Ranchi; Medical College, Damodar Road, Jamshedpur.



**Gujarat :** B. J. Medical College, Ahmedabad; Medical College, Baroda; M. P. Shah Medical College, Jamnagar; Municipal Medical College, Ahmedabad; Govt. Medical College, Surat.

**Jammu & Kashmir :** Medical College, Srinagar.

**Kerala :** Medical College, Trivandrum; Medical College, Calicut; Medical College, Kottayam; T.D. Medical College, Alleppey.

**Madhya Pradesh :** Medical College, Jabalpur; M. G. M. Medical College Indore; G. R. Medical College, Gwalior; Gandhi Medical College, Bhopal; Medical College, Rewa; Medical College, Raipur.

**Madras :** Medical College, Madras; Stanley Medical College, Madras; Kilpauk Medical College, Kilpauk, Madras-10; Christian Medical College, Vellore; Madurai Medical College, Madurai; Thanjavur Medical College, Thanjavur; Medical College, Chingleput; Tirunelveli Medical College, Tirunelveli.

**Maharashtra :** Grant Medical College, Bombay; Seth G. S. Medical College, Parel, Bombay; Topiwala National Medical College, Bombay; B. J. Medical College, Poona; Medical College, Nagpur; Govt. Medical College, Aurangabad; Armed Forces Medical College, Poona; Medical College, Miraj; Medical College, Sholapur; Medical College, Slon, Bombay.

**Mysore :** Kasturba Medical College, Manipal; Medical College, Mysore; Bangalore Medical College, Bangalore; Medical College, Bellary; Karnatak Medical College, Hubli; St. John's Medical College, Bangalore; Medical College, Belgaum; Medical College, Gulbarga; Mysore Medical College, Mysore; Medical College, Bellary.

**Orissa :** S. C. B. Medical College, Cuttack; Medical College, Burla (Sambalpur); Medical College, Berhampur (Cuttack).

**Punjab :** Medical College, Amritsar; Christian Medical College, Ludhiana; Government Medical College, Patiala; Medical College, Rohtak; Dayanand Medical College, Ludhiana.

**Rajasthan :** S. M. S. Medical College, Jaipur; S. P. Medical College, Bikaner; B. N. T. Medical College, Udaipur; Medical College, Jodhpur; Medical College, Ajmer.

**Uttar Pradesh :** K. G. Medical College, Lucknow; S. N. Medical College, Agra; G. S. V. M. Medical College, Kanpur; College of Medical Sciences, Banaras Hindu University, Varanasi; Motilal Nehru Medical College, Allahabad; Medical College, Muslim University, Aligarh.

**West Bengal :** Medical College, Calcutta; B. G. Kar Medical College, Belgachia Road,

Calcutta-4; Nilratan Sircar Medical College, Calcutta; Calcutta National Medical Institute, 32, Gorachand Road, Calcutta; Bankura Tamraloni Medical College, Bankura; B. S. Medical College, Bankura.

**Delhi :** Lady Hardinge Medical College (for women), New Delhi; All India Institute of Medical Sciences, New Delhi; Maulana Azad Medical College, New Delhi.

**Goa :** Medical College, Panjim, Goa.

**Pondicherry :** Medical College, Pondicherry.

**Pharmacy :** Thirty-two institutions in the country provide course of study in Pharmacy. In addition to the above 20 more institutions are intending to start courses for diploma and degree in pharmacy in the near future. The names of States and the course offered respectively are shown within brackets :

J.V.D. College of Science and Technology, Waltair (Andhra Pradesh; B. Pharm.); Kamala Nehru Girls' Polytechnic, Hyderabad (Andhra Pradesh; Dip. Pharm.); Rangaraya Medical College, Kakinada (Andhra Pradesh; Dip. Pharm.); Govt. Polytechnic for Girls, Kakinada (Andhra Pradesh; Dip. Pharm.); Assam Medical College, Dibrugarh (Assam; Dip. Pharm.); L. M. College of Pharmacy, University Campus, Ahmedabad (Gujarat; Dip. Pharm.; B. Pharm.; M. Pharm.; Ph.D.); Pharmacy School, Gulzar Bagh, Patna (Bihar; Dip. Pharm.); Department of Chemical Technology, Bombay University, Bombay (Maharashtra; B. Pharm.); Bombay College of Pharmacy, 213-219, Frere Road, Bombay-1 (Maharashtra; Dip. Pharm.); Armed Forces Medical College, Poona (Maharashtra; Dip. Pharm.); Poona College of Pharmacy, Poona (Maharashtra; Dip. Pharm.); Nagpur University, Nagpur (Maharashtra; B. Pharm.); Madras Medical College, Madras (Madras; Dip. Pharm.; B. Pharm.); Madurai Medical College, Madurai (Madras; Dip. Pharm.; B. Pharm.); Christian Medical College, Vellore (S. India) (Madras; Dip. Pharm.); Govt. College of Pharmacy, Bangalore (Mysore; Dip. Pharm.; B. Pharm.); The Kasturba Medical College, Manipal (Mysore; Dip. Pharm.); S.C.B. Medical College, Cuttack (Orissa; Dip. Pharm.); Department of Pharmacology, Medical College, Burla, Sambalpur (Orissa; Dip. Pharm.); Medical College, Amritsar (Punjab; Dip. Pharm. and Dressers' Course); Govt. Medical College, Patiala (Punjab; Dip. Pharm.); Department of Pharmacy, Punjab University, Chandigarh-3 (Punjab; B. Pharm.; M. Pharm.; Ph.D.); Govt. Polytechnic for Women, Chandigarh (Punjab; Dip. Pharm.); S. M. S. College, Jaipur (Rajasthan; M. Pharm.; Pharmacology); Department of Pharmacy, Saugar University, Saugar (Madhya Pradesh; B. Pharm.; M. Pharm.; Ph.D.); Birla Institute

of Technology and Science, Pilani (Rajasthan; B. Pharm.; M. Pharm.); College of Technology, Banaras Hindu University, Varanasi-5 (Uttar Pradesh; B. Pharm.; M. Pharm., Ph.D.); G.S.V.M. Medical College, Kanpur (Uttar Pradesh; Dip. Pharm.); Pharmacy Training Centre, Jalpaiguri (West Bengal; Dip. Pharm.); Kashmir Gate Polytechnic (Delhi; Dip. Pharm.); Govt. College of Pharmacy, Panjim (Goa; Dip. Pharm., B. Pharm.).

In addition to this the following institutions also intend to start Diploma course in Pharmacy shortly in accordance with the Education Regulations of the Pharmacy Council of India :— Andhra Univ., Waltair; Guntur Medical College, Guntur; Kakatiya Medical College, Warangal; Rangarsya Medical College, Kakinada; Mahila Seva Samaj, Nagpur; Grant Medical College, Bombay; G. B. Pant Polytechnic, Okhla, New Delhi; Women's Polytechnic, New Delhi; Govt. Girls' Polytechnic, Lucknow; V. M. Hospital, Agartala (Tripura); Osmania Medical College, Hyderabad; Assam Medical College, Dibrugarh; Govt. Medical College, Calicut; Kurnool Medical College, Kurnool.

### Pharmacy Council

During 1964-65 the Pharmacy Council of India continued its efforts towards the (a) complete enforcement of Pharmacy Act, 1948; (b) furtherance of training facilities for Diploma in Pharmacy course; (c) revision of the Education Regulations; (d) educating public about the profession and prospects in Pharmacy.

**Enforcement of the Pharmacy Act, 1948 :** The Pharmacy Act 1948 is enforced throughout the country except for the State of Jammu and Kashmir. The State Pharmacy Councils have been formed in the States of Andhra Pradesh, Assam, Bihar, Maharashtra, Madras, Orissa, Punjab, Uttar Pradesh, West Bengal, Bhopal, Kerala, Mysore, Pharmacist Registration Tribunal, Gujarat and the Union Territory of Delhi. The State Pharmacy of West Bengal is also functioning for the Union Territory of Tripura. The Manipur Administration is contemplating the formation of a joint State Council with the Assam Pharmacy Council.

The Registration Tribunals have been set up in the States of Mysore and Kerala.

**Approval of the Practical Training Institutions :** After completion of the regular course, the student pharmacists are required to undergo a practical training for 750 hours in recognised Institutions/Hospital/Pharmacy/Dispensary.

**Registration of Pharmacists :** The registration of pharmacists is the responsibility of the State Pharmacy Council. There are 73,000 registered pharmacists upto 31st December, 1964.

## EDUCATION

**SINCE** August 16, 1947 Education at the Centre has been constituted into a separate Ministry of Education. The State Governments are fully autonomous in regard to educational matters except in respect of educational development programmes for which they receive grants-in-aid from the Central Government after they are approved by the Central Government. The expenditure on education was Rs. 600 crores in 1965.

The Ministry is also responsible for the four Central Universities of Aligarh, Banaras, Delhi and Visva Bharati and some Institutions of higher learning. The Ministry is also responsible for cultural relations with foreign countries and UNESCO.

The Education Commission which was set up in Oct. 1964 to survey the entire field of educational development and to have a comprehensive review of the country's educational system, submitted its report on 29th June 1966. The report is being examined by the Ministry of Education.

Some of the other educational bodies associated with the Ministry are :

All-India Council for Elementary Education, All-India Council for Secondary Education, National Council for Women's Education and the University Grants Commission.

For secondary education, there is a division in the Ministry itself, and a subordinate office called Directorate of Extension Programmes for Secondary Education which performs advisory as well as executive functions. The National Council of Educational Research and Training which has been set up as an autonomous organization also performs advisory and executive functions. Education in the Union Territories is also one of the responsibilities of this division.

The Government of India is responsible for education in Union Territories. In case of Territories which have their own Legislatures, some of the powers are enjoyed by the respective Governments.

The authority of Government in controlling the system of public instruction is in part shared with and in part delegated to Universities and Boards of Secondary and Intermediate Education as regards secondary education, and to local bodies as regards elementary education in some States.

The control over higher education is exercised through the University Grants Commission.

In 1965 there were 62 universities, nine deemed to be universities and 15 Boards of Secondary Education.

Scientific Research, Technical Education and Cultural activities also come within the purview of the Ministry of Education.

Institutions under private management are controlled by Government and by local bodies by "recognition" and by the payment of grants-in-aid, with the assistance of the inspecting staff employed by Government and by local bodies.



During 1962-63, the expenditure on education in the States was highest in Maharashtra, followed by Uttar Pradesh, Madras and West Bengal. Among the Union Territories Delhi topped the list.

The average annual cost per capita (of population) was Rs 12 in 1965 as against Rs. 3.2 in 1950-51. In 1965 the expenditure on education was Rs. 600 crores.

It is found that 4,623 foreign students were studying in Indian Univs. and Colleges on March 31, 1963. Of these, 789 were in receipt of Govt. of India scholarships.

### NATIONAL FITNESS CORPS

The National Fitness Corps is a comprehensive youth programme adopted on a national scale combining activities designed to develop the total personality of Indian youth.

On the basis of the recommendations of an expert committee set up by the Union Ministry of Education under the Chairmanship of Shri H. N. Kunzru it was decided to integrate the old schemes of Physical Education, National Discipline Scheme and A.C.C. into the unified scheme of National Fitness Corps.

The broad aspects of the integrated scheme are :—

(1) *Objects* : (a) to make youth physically strong and resilient by developing in them physical efficiency, toughness, endurance, courage, discipline and patriotic fervour; (b) to develop among students a sense of appreciation for the democratic values of life and love for their country, its past history and future destiny.

(2) *Programme consists of* : (i) Exercise Tables (ii) Drill and Marching; (iii) Lezium; (iv) Track and Field Events; (v) Games and Relays; (vi) Gymnastics for boys/Folk Dances for girls; (vii) Simple Combats, Wrestling, Judo; (viii) Hiking and Cross-country; (ix) Instruction and Practice in Tests; (x) Field Craft (for boys)/Home Nursing (for girls); (xi) Information on Indian Constitution and Democratic set-up, Practical Projects and Community singing.

### School Curriculum

The programme of National Fitness Corps is a compulsory subject for all children of the age group 9-16 plus in Middle, High and Higher

Secondary Schools. There is a compulsory or core group of activities which every child must do as part of the N.F.C. activities, while there are also a few optional items meant for children having a special flair for them.

### Teacher Training

Two Central Training Institutes of the National Fitness Corps, situated at Sariska near Alwar in Rajasthan and Barwaha near Indore in Madhya Pradesh each offer a nine-month vigorous training schedule to a batch of about 400 fresh trainees. Matriculates take the Certificate Course in Physical Education and degree holders the Diploma Course in Physical Education. The selection of trainees is done on an all India basis through the State Education Departments. The age limits for admission are 17 to 25 years. Candidates admitted to the courses receive an all inclusive stipend of Rs. 85 p.m. each from the Union Government.

### Reorientation

The trained physical education teachers and ex-A.C.C. teachers are reoriented to the N.F.C. programme in six-weeks courses conducted at *ad-hoc* and permanent centres run by the National Fitness Corps located at Choki in Gujarat and Habra near Calcutta. Reorientation is also given to ex-National Discipline Scheme Instructors in such aspects of the N.F.C. programme which were not covered by them.

The teachers deputed to the reorientation centres are paid travelling allowances and a stipend of Rs. 60 p.m. each in addition to their pay and allowances that they get from their schools. On successful completion of training they are employed as whole-time teachers in implementing the N.F.C. syllabus.

The number of Physical Education Teachers, ex-National Discipline Scheme Instructors and ex-A.C.C. teachers reoriented to the N.F.C. Programme, so far, is about 16,000.

Third Plan allocation for the National Fitness Corps Programme was Rs. 8-10 crores.

### PRIMARY EDUCATION

Primary Education in India has made considerable progress since the attainment of Independence. Under Article 45 of the Constitution,

the State is required to provide free and compulsory education for all children up to the age of 14 years. In 1947, only about 35 per cent of the children in the age-group 6-11 were in schools. The percentage rose to 62 at the end of the Second Plan and 79.8 (estimated) at the end of the Third Plan. The percentage is expected to rise to 91.2 in the Fourth Plan. The total enrolment in this age-group has increased from about 141 lakhs in 1947-48 to 350 lakhs in 1960-61. It is estimated that by the end of the Third Five Year Plan, the total enrolment in classes I-V would be 523.69 lakhs or 79.8 per cent of the population of the corresponding age-group. Of these, the number of girls will be 188.35 lakhs.

The increase of enrolment in the age-group 11-14 has also been equally satisfactory. In 1946-47 only 12 per cent of children in this age-group were at school. At the end of the Third Five Year Plan it was about 31.8 (estimated) with about 108.38 lakh children at school. It is expected that the percentage will rise further to 43.4 during the Fourth Five Year Plan.

The proportion of trained teachers in primary schools has increased from 58.8 per cent in 1950-51 to 64.3 per cent in 1961-62. As against 3,16,124 trained primary school teachers in 1951, the number has gone upto 5,11,246 in 1961-62. During the Third Five Year Plan, there will be 70.2 per cent trained teachers in primary schools.

The outlay on primary education alone will be Rs. 209 crores during the Third Plan. The number of primary schools is likely to increase from about 210,000 in 1950-51 to 415,000 in 1965-66.

During the Third Five Year Plan, intensive efforts have been made, particularly in the backward States, to organise annual enrolment drives and increase the enrolment of children. Special attention will be paid to increasing the enrolment of girls and a number of programmes have been drawn up for this purpose.

**Basic Education** : The objective of this scheme is to develop the entire personality of the child by imparting instruction in a correlated manner through a useful and productive craft. A good deal of progress has already been made in this sector and a fair percentage of schools has already been converted to the basic pattern.

## SECONDARY EDUCATION

No. of secondary schools in 1964-65 : 24,740.

At the beginning of the Third Plan 11.7 per cent of the boys and girls in the age group of 14-17 were going to schools. This percentage was expected to increase to 17.6 at the end of the Third Plan.

No. of multi-purpose schools upto July 1965 : 3,907.

No. of Higher Secondary Schools in 1964-65 : 6,100 (including 1,216 Intermediate Colleges of U.P. called Higher Secondary Schools).

Third Plan allotment for reorganization of secondary education : Rs. 88 crores.

Under the Third Five Year Plan the Centre bears 50 per cent of the cost of the conversion of high schools into higher secondary schools and 75 per cent of the cost for improvement of science teaching in secondary schools, 100 per cent for teacher training and 50 per cent for improvements in emoluments of teachers. In addition, there are centrally sponsored schemes for setting up State Bureaux of Educational and Vocational Guidance, State Education Evaluation Units, strengthening of selected multi-purpose schools and improvement of secondary education.

The accepted pattern of education comprises eight years of elementary (Basic) education; three years of secondary education with diversified courses to give it a vocational bias and make it a terminal point for entry into trade

or profession; and three years of university education leading to the first degree. Some of the States have adopted a pattern of seven years of elementary (Basic) education followed by four years of secondary education.

At the secondary stage, a child in a multi-purpose school should in addition to the core curriculum which would include languages, social studies, general science and one compulsory craft, opt for one of the following diversified courses to be provided in reorganized multi-purpose schools :—humanities, science, technical, commerce, agriculture, fine arts or home science.

Except science, humanities and commerce, the groups are relatively new to secondary schools. Multi-purpose schools are schools in which these have been introduced.

### Strengthening of Multi-purpose Schools

Multi-purpose schools have grown rapidly. The schemes to consolidate and improve their working are provided in the State sector of the Third Plan. The Ministry is helping the State Governments to develop a few selected schools to a high level of effectiveness so that they may serve as models for future plans. A scheme in this regard had been finalised and was being implemented from 1963-64.

The three-language formula now generally accepted is as follows :—

(1) Regional language and mother tongue when the latter is different from the regional

languages; (2) Hindi or in Hindi-speaking areas another modern Indian language; and (3) English or any other modern European language.

### Examination Reform

The Reform envisages to bring about a parallel improvement both in teaching techniques as well as in the examination procedures by emphasising the close relationship between them and which each of these aspects of education has with the objectives of teaching. To accomplish this, the Examination and Evaluation Unit operates as a department of the National Council of Educational Research and Training, New Delhi.

During the past eight years of its existence, the Examination and Evaluation Unit has worked extensively with the State Boards of Secondary Education, the Teachers Training Colleges and Secondary School teachers in several conferences, seminars, workshops, training courses and working groups for the purposes of orientation and training as well as the production of evaluation material.

The Examination and Evaluation Unit has launched upon an accelerated programme of examination reforms during the Fourth Five-Year Plan embracing all the stages of education viz., elementary, secondary, teacher-training and university. The programmes of examination reforms at the elementary and the university



stages will be undertaken in collaboration with the State Institutes of Education and the U.G.C. respectively from 1967 onwards. Examination reform will also be undertaken at the Teacher Education Stage, both elementary and secondary from 1967 onwards. Preliminary studies with respect to the examinations at these stages have already been completed.

### Crash Programme

A centrally sponsored scheme known as "Crash Programme" was formulated in Sept., 1964 with the object of strengthening science laboratories, school libraries and science teaching in secondary schools. Central assistance is given at 100 per cent basis for all these programmes to the State Government through whom the scheme is being implemented.

### Educational and Vocational Guidance

The Central Bureau of Educational and Vocational Guidance was set up by the Ministry of Education, Government of India in Oct. 1954 to foster the Guidance Movement in the country and to provide leadership at the national level to help develop it along right lines. The Central Bureau of Educational and Vocational Guidance is now functioning under the National Council of Educational Research and Training. The various activities of the Central Bureau include promoting awareness of the nature of guidance services and the need for them, offering Consultative and field guidance, undertaking research, preparation of guidance tools and occupational information materials. To meet the needs of the nation during the present emergency, the Central Bureau has brought out a number of publications giving detailed information about the defence services and held short term training courses for Delhi school teachers to help in the dissemination of occupational information about the defence services in the schools. The Central Bureau has also conducted a number of seminars and workshops for the in-service education of guidance personnel.

To develop the guidance movement and to give a uniform direction to the guidance services in the schools, a centrally sponsored scheme has been drawn up in the Fourth Five Year Plan. It aims at: establishing bureaus in other States; and providing guidance services in 120 multi-purpose schools as a preliminary stage in extending such services in future.

The Third Plan provision for the implementation of this scheme was Rs. 30 lakhs.

### Science

The Secondary Education Commission made two recommendations with regard to the provision of science: 1. That every secondary school should provide general science as a core subject. 2. That elective science should be provided in as many secondary schools as possible to encourage students with a special talent in the subject to pursue further study.

To strengthen science education in schools, a Department of Science Education has been created. This Department is working in the following directions:—

#### (i) Curricular Development:—

Based on the syllabus of general science for elementary schools, classes I–VIII, guide-books for classes VI–VIII, indicating the activities for teachers and pupils have been prepared. Similar guide books for classes I–V, are under preparation.

#### (ii) Text-books:—

Three expert panels of scientists, professors and teachers have been set up to prepare model text-books for elective sciences (Biology, Physics and Chemistry). The books were expected to be ready in 1964.

A series of text-books for classes VI–VIII based on the new draft syllabus are also under preparation.

Forty-nine Summer Institutes in elective sciences for teachers are proposed to be held

during the summer of 1965-66, against sixteen Summer Institutes during the previous year.

### Higher Secondary Pattern

Below we describe the position in regard to the reorganisation of secondary education in the various States.

Nine States and two Union Territories (Assam, Jammu & Kashmir, Madhya Pradesh, Maharashtra, Mysore, Orissa, Punjab, Rajasthan, West Bengal, Delhi and Tripura) have already introduced the revised pattern of Secondary Education. However, Andhra Pradesh and Kerala States have decided to hold over the implementation of the higher secondary pattern of education.

At the end of the Third Plan it was expected that 6,735 Secondary Schools would have been converted to the new pattern.

### Text Books

All the State Governments except Gujarat have introduced the programme of nationalisation of text books upto different stages of education.

**Midday Feeding:** The States of Andhra Pradesh, Gujarat, Kerala, Madhya Pradesh, Madras, Maharashtra, Mysore, Orissa, Punjab, U. P. and West Bengal have adopted the scheme of midday feeding of children in schools.

The Governments of Madhya Pradesh and Uttar Pradesh were expected to implement this scheme from 1965-66.

**UNESCO Aid for Technical Education:** UNESCO had approved assistance to the extent of \$ 1,871,200 for the period 1967-68 for technical education and scientific research programmes in India.

**Assistance to Blind and Dumb Students:** During 1960-61, about Rs. 1,27,000 had been distributed by way of scholarships for the blind, deaf and dumb. Over Rs. 2½ lakhs had been spent on the Training Centre for the Adult Blind at Dehra Dun and about Rs. 97,000 on the Model School for Blind Children in the same city.

### UNIVERSITY GRANTS COMMISSION

(Bahadur Shah Zafar Marg, New Delhi)

The University Grants Commission was set up in December 1953.

For composition of the Commission see under Ministry of Education, "Government of India Personnel".

**Grants paid:** The statement given below shows the grants paid to the Universities during 1964-65:

**Central Universities:** Maintenance grants (in Rs.): Aligarh Muslim University, 73,00,000; Banaras Hindu University, 96,00,000; Delhi University 1,45,64,000\*; Visva Bharati University 31,00,000; Gujarat Vidyapith, 50,000; Gurukul Kangri Vishwavidyalaya, 80,000; Indian Institute of Science, Bangalore, 56,02,000; Kashi Vidyapith, 1,75,000; Total: 4,10,91,000.

The Grants paid† to the universities for development schemes during 1964-65: Rs. 6,94,33,999.

The grants paid towards Engineering and Technological education in universities during the year 1964-65: Rs. 1,06,04,840.

The development grants paid to colleges during 1964-65: Rs. 1,52,86,845.

The grants paid during 1964-65 for the implementation of the Three-Year Degree Course scheme in Universities and their colleges: Rs. 77,38,198.

The grants paid to affiliated colleges for the development of Post-Graduate studies in Science subjects during 1964-65: Rs. 29,12,083.

The grants paid to the Universities towards the revision of salary scales of college and university teachers during 1964-65: Rs. 39,06,338.

The total grants paid under Plan and Non-Plan Projects during 1964-65: Rs. 14,10,80,869.

### Committee on Area Studies

The commission has appointed a standing committee to advise it regarding the development of area studies.

### Fellowships & Scholarships

Senior and Junior research fellowships in science subjects and the humanities (including social sciences) are being provided to enable deserving scholars to pursue advanced study and research.

During 1964-65, 36 senior fellowships and 82 junior fellowships were awarded for advanced study and research in the humanities and social sciences. Grants amounting to Rs. 8.93 lakhs were paid to the universities concerned during the year for these fellowships.

For research in science subjects, 36 senior fellowships and 106 junior fellowships were awarded in 1964-65. An amount of Rs. 6.99 lakhs was paid to the universities concerned for this purpose. A junior research fellowship is of the value of Rs. 300 p.m. and a senior fellowship of Rs. 500 p.m.

During 1964-65, the Commission awarded 29 fellowships each of the value of Rs. 400 p.m. for advanced study and research in engineering and technology. Each fellowship, junior or senior, carries a grant of Rs. 1,000 per annum for contingent expenditure relating to the research undertaken. A further sum of Rs. 1,000 per annum is available with each fellowship to enable the scholars concerned to publish their research work and meet the necessary expenditure on field work. The normal tenure of a fellowship is two years which may be extended by one year in special cases.

**Scholarships:** Scholarships each of the value of Rs. 200 per month are provided every year for promoting advanced study and research in humanities and science subjects. During 1964-65, 265 research scholarships were allocated to 42 universities. The Commission paid Rs. 3.59 lakhs to the universities for scholarships in science and Rs. 6.71 lakhs for those in the humanities and social sciences.

### Three Year Degree Course

For implementing the three year degree course scheme an expenditure of Rs. 23.65 crores in 41 universities and 733 colleges had been approved. The Commission's share of this expenditure is estimated to be Rs. 12.02 crores.

### Revision of Salary Scales of Teachers

Over 4,000 university teachers in 42 universities have received the benefit of the enhanced scales of pay upto 1964-65.

So far about 15,000 teachers working in 494 colleges affiliated to 24 universities have received the benefit of the above-mentioned scales of pay.

### Agricultural Education

Besides Indian Agricultural Research Institute, New Delhi, seven agricultural universities are at present functioning in the country. These are the U.P. Agricultural University, Pantnagar; Punjab Agricultural University, Ludhiana; Udaipur University, Udaipur; Orissa University of Agriculture and Technology, Bhubaneswar; Andhra Pradesh Agricultural University, Rajendranagar, Hyderabad; University of Agricultural Science, Hebbal, Bangalore; Jawaharlal Nehru Krishi Vishwavidyalaya, Jabalpur.

In 1964-65, 48 agricultural colleges were functioning in the country. Facilities for education in agriculture at the degree level were also available in 18 multi-faculty colleges.

Funds for higher education in agriculture are placed at the disposal of the Central Ministry and State Departments of Agriculture.

### BASIC FACTS & FIGURES

During 1964-65, the total number of universities that were functioning in the country was 62. The total enrolment in the universities and colleges including Intermediate classes was

\* Including maintenance grants paid to constituent/affiliated colleges of Delhi University.

† Which has since become a multi-faculty university.

‡ Exclusive of grants paid for Engineering and Technological education, revision of scales of pay of teachers and introduction of three-year degree course.



15.28 lakhs as against 13.85 lakhs during 1963-64. In 1964-65, the number of affiliated and university colleges in the country was 2,360 as against 2,111 in 1963-64 (These figures do not include Intermediate colleges under the Board of Intermediate Education, U.P.). During 1964-65, 197 new Arts, Science and Commerce colleges were established and the number of women's colleges rose from 254 in 1963-64 to 278 in 1964-65. There were 290 colleges affiliated to various universities which provided facilities for postgraduate courses in arts, science, commerce, education and law in 1964-65.

#### Engineering and Technological Education †

Against a provision of Rs. 6.50 crores for the Third Plan made for the development of engineering and technological education in the universities and the institutions maintained by them, the Commission has sanctioned development grants amounting to Rs. 3.29 crores. In addition to the grants mentioned above, there was a spill-over of about Rs. 3.35 crores in respect of the schemes approved during the Second Plan but carried over to the next Plan period. The total commitment amounts to Rs. 6.63 crores.

#### RURAL HIGHER EDUCATION

On the recommendation of the Rural Higher Education Committee, a National Council for Rural Higher Education was established in 1956 to advise Govt. on all matters relating to the development of rural higher education.

Under the scheme, 14 Rural Institutes are at present functioning in different parts of the country. These are Gandhi Gram Rural Institute† Gandhigram, Madurai; Ramakrishna Mission Vidyalaya Rural Institute†, Coimbatore; Lok Bharati Rural Institute, Sanosara; Rural Institute, Amravati; Karmaveer Hire Rural Institute, Gargoti; Vidya Bhavan Rural Institute, Udaipur; Balwant Vidyapeeth Rural Institute,† Bichpuri, Agra; Rural Institute, Jamia Millia, New Delhi; Rural Institute of Higher Studies, Birouli, Bihar; Kasturba Rural Institute, Rajpura, Punjab; Rural Institute, Wardha; Rural Institute at Hanumanamatti, Mysore State; Kasturba Rural Institute, Indore, and Rural Institute, Thavanoor.

The courses, as approved by the Council and adopted by the Rural Institutes, are:

(i) a three-year Diploma Course in Rural Services; (ii) a three-year Diploma Course in Civil and Rural Engineering; (iii) a two-year Certificate Course in Agricultural Science; (iv) a one-year Sanitary Inspectors' Course; (v) a one-year Advanced Course for Sanitary Inspectors; (vi) a two-year Post-Diploma Course in Rural Sociology and Community Development; (vii) a two-year Post-Diploma Course in Rural Economics and Cooperation; (viii) a three-year Diploma Course in Rural Services (Education) and (ix) a one-year Preparatory Course to initiate matriculates into the three-year Diploma Course in Rural Services.

#### CENTRAL SCHOOLS

The Central Schools Scheme has been implemented by the Government of India in pursuance of the recommendation of the Second Pay Commission to provide educational facilities to the children of transferable Central Government employees. Under this scheme, 100 higher secondary schools have been established, with a common syllabus, with a common medium of instruction Hindi/English and preparing students for a common examination viz. the all-India higher secondary examination of the Central Board of Secondary Education, New Delhi. These schools are being developed as quality schools, at a moderate cost to the parent. The children of the following categories of personnel liable to transfer are eligible for admission in the following order of priority: Central Government employees including Defence personnel; All-India Services; employees of autonomous and semi-autonomous bodies fully financed by the Central Government; floating and local population.

At the beginning of the School Year 1966-67, about 45,000 children were studying in these schools.

The entire expenditure on the schools is borne by the Ministry of Education, through grants. No tuition fee is charged in classes I to VIII. Tuition fee at the rate of Rs. 6, Rs. 7 and Rs. 8 per month is charged in classes IX, X and XI respectively. Scheduled Caste/Tribe students are exempted from payment of tuition fee.

The schools are located at the following places:

**Andhra Pradesh:** Secunderabad (2 schools), Golconda, Vishakhapatnam, Tirupathi; **Assam:** Ganhati, Jorhat, Shillong; **Bihar:** Dinapore Cantt, Patna, Jawahar Nagar, Ranchi; **Gujarat:** Jamnagar, Ahmedabad, Baroda, Rajkot, Surat; **Jammu and Kashmir:** Udhampur; **Kerala:** Cochin, Trivandrum, Ernakulam, Kozhikode; **Madhya Pradesh:** Amla, Saugor, Pachmarhi, Bhopal, Indore, Gwalior, Jabalpur; **Madras:** Avadi (2 schools), Madras (2 schools), Tambaram, Coimbatore, Madurai, Tiruchi; **Maharashtra:**

Ahmednagar, Bombay (3 schools), Dehu Road, Kirkee, Khadakvasla, Lonavla, Nasik Road, Camp, Ambarnath, Devlali, Nagpur, Poon (2 schools), Pulgaon Camp; **Mysore:** Bangalore (5 schools), Hubli, Mangalore; **Orissa:** Puri; **Sambalpur:** **Punjab:** Ambala (2 schools), Ferozepur, Jullundur, Simla, Adampur, Halwa; **Chandigarh:** **Rajasthan:** Bikaner, Jaipur, Jodhpur, Kotah, Udaipur, Alwar; **Uttar Pradesh:** Agra (2 schools), Bareilly (2 schools), Dehra Dun (2 schools), Jhansi Cantt., Kanpur (2 schools), Ranikhet, Lansdowne, Lucknow Cantt., Manaur; **Meerut** (3 schools), Roorkee, Babina Cantt., Fatehgarh, Mathura, Varanasi; **West Bengal:** Barrackpore, Panagarh; **Delhi:** Delhi Cantt., New Delhi; **Manipur:** Imphal.

#### FOREIGN ASSISTANCE

Statement of foreign assistance in the form of services of foreign experts at Indian Institutions, training facilities for Indian trainees abroad and equipment obtained under various foreign aid programme till Dec. 1963.

| Programme                 | Foreign Experts | Fellowships abroad | Equipment (Rs. in lakhs) |
|---------------------------|-----------------|--------------------|--------------------------|
| T.C.M. (U.S.A.) .. .. .   | 86              | 298                | 50.43                    |
| Colombo Plan .. .. .      | 22              | 38                 | 15.52*                   |
| UNESCO/UNTAA .. .. .      | 88              | 43                 | 102.50@                  |
| Indo-French .. .. .       | 3               | 2                  | —                        |
| Indo-West Germany .. .. . | 14              | 23                 | 57.32                    |
| Indo-U.S.S.R. .. .. .     | 16              | —                  | 5.73                     |
| Total .. .. .             | 229             | 404                | 249.50                   |

\* Includes equipment worth Rs. 1.80 lakhs received from Federation of British Industries.  
@ Includes assistance obtained by the Indian Institute of Technology, Bombay.  
N. B.—These figures relate to aid received for expansion of technical education.

About 40 million (Canadian) dollars from the Counterpart Fund of the Colombo Plan could be utilised by India for its educational advancement.

Canada had already contributed 10 million dollars for the setting up of Engineering Colleges in India under the Colombo Plan.

#### Central Training Institute

The Institute was inaugurated in March 1963.

Technical assistance was made available to the Institute through a cooperative programme between the United States Agency for International Development and the Government of India.

The U.S.A.I.D. have provided the services of a team of seven Technical Advisers, equipment and technical books worth \$356,000 and training facilities to sixteen technical officers of the Institute in U.S.A. for a period of six months each.

This Training Institute will be one of the most modern craft-instructor training institutes in the country. Latest techniques in teaching is employed at the Institute, including audio-visual aids such as films, film-strips, tape recordings, charts and models of all kinds.

The Institute provides a training capacity for 392 craft instructors. The main objectives of the Institute are to provide instruction in various trades and in the art of teaching these trades; to train the instructors required for the craft-training institutions; and to provide refresher courses to enable trade-instructors to keep abreast of the latest industrial techniques and advances in teaching their respective trades.

Training is offered in 15 trades and the duration of the course in each trade is 9 months which will be raised to 12 months w.e.f. 1st August 1966. The Institute operates all the year round.

#### LOAN SCHOLARSHIPS

Besides giving financial assistance to needy and meritorious students for completing their education, this scheme will encourage students to enter the teaching profession.

The loan will be written off at the rate of ten per cent every year, if the holder of a loan-scholarship takes to teaching at the end of his studies.

A meritorious student whose parent's income does not exceed Rs. 600 per month will be eligible for a loan-scholarship. The maximum limit of loans will vary from Rs. 720 to Rs. 1,500 per annum, according to the course of study and it will be raised by Rs. 250 in the case of students of engineering and other similar technical and professional courses. Candidates in full time employment are not eligible.

**Scope:** The loan scholarships are available for studies in India only. These will be given for all recognised full time courses of education and training after the Matriculation or School Leaving Stage on the basis of the results of any examination conducted by a Board of Education or a University or a recognised Education Authority.

The Scheme was started in 1963-64 and 66,900 awards were made during the Third Plan. During 1966-67 18,500 loan scholarships will be offered.

**Repayment Date:** The repayment of a loan will be by monthly instalments commencing one year after the loanee secures employment or after 3 years of the termination of the scholarship whichever is earlier. No interest will be payable on the loans so long as the monthly instalments are paid on the due dates. Interests will be chargeable for default.

The loan will be given without any security or surety, except in the case of minors. Each recipient will be issued a loan scholarship book wherein all amounts given to him and repaid by him will be entered.

† The University Grants Commission has recommended to the Central Govt. that these institutes are to be deemed as Universities under Sec. 3 of the U.G.C. Act for a period of three years in the first instance. ‡ During 1965-66, there were 133 institutions in the country conducting courses in engineering and technology for the first year degree.



The Union Ministry of Education will advance loans to the State Governments for paying loans on the basis of total population of each State.

The procedure for applying for loans has been simplified so that a selected candidate is enabled to obtain loan-scholarship immediately on joining institution, as full-time student.

### FOREIGN-TRAINED TECHNICIANS AND TECHNICAL PERSONNEL

Among the scientific and technical personnel who have been abroad after Jan. 1, 1957 for studies, training or employment 11,215 are registered in the Indians Abroad Section of the Directorate of Scientific and Technical Personnel, formerly National Register by March 1966. Of these 5,475 had already reported for return.

The broad distribution of the registrants abroad as on March 1, 1966 by country and category is shown below :

| Country                    | Science | Engg. | Technology | Medicine | Total  |
|----------------------------|---------|-------|------------|----------|--------|
| U.S.A. .. .. .             | 1,844   | 1,518 | 262        | 360      | 3,984  |
| Canada .. .. .             | 336     | 140   | 23         | 76       | 575    |
| U.K. .. .. .               | 572     | 1,888 | 305        | 1,356    | 4,121  |
| Germany .. .. .            | 208     | 887   | 168        | 30       | 1,293  |
| Other European countries   | 205     | 307   | 63         | 34       | 609    |
| Australia & New Zealand .. | 49      | 38    | 25         | 10       | 122    |
| American countries .. .. . | 65      | 47    | 13         | 17       | 142    |
| India & Ceylon .. .. .     | 30      | 54    | 10         | 15       | 109    |
| Other countries .. .. .    | 104     | 121   | 23         | 12       | 260    |
| Total .. .. .              | 3,413   | 5,060 | 892        | 1,910    | 11,215 |

In addition, 555 persons in the field of Business Administration and Accountancy and 83 persons in various Social Sciences have been registered by March 1, 1966 who have been abroad for studies or training.

### SOCIAL EDUCATION

The new concept of social education is embodied in a five point programme; literacy, education in health and hygiene, training for trade, profession or calling, citizenship, and healthy recreation.

The programme of Social Education is put through literacy classes, Community Centres, Youth Clubs, including Gram Raksha Dal, Farmers' Clubs and Mahila Samities and libraries which are an essential agency of mass education.

The number of State, Central and District Libraries has steadily increased. There are now 10 State Central and 205 District Libraries in the country.

Radio listening and Discussion Groups, demonstrations and excursions have been effectively used. Besides radio, visual aids and printed literature have served as means of imparting education to the masses.

The Ministry of Community Development, Panchayat Raj and Co-operation conducts a number of Social Education Organisers Training Centres under their scheme. So far (July 1965), 12 District Social Education Officers, 125 Adult Literacy Instructors of Indo-Tibetan Border Force under the Ministry of Home Affairs and Educational Officers of the Central Board for Workers' Education under the Ministry of Labour and Employment have been trained at the National Educational Fundamental Centre.

To encourage production of suitable literature for neo-literates and the new reading public, the Ministry has organized a number of schemes, including the award of prizes to authors, and bulk purchase of good books and holding Sahitya Shivirs (literary workshops) in different parts of the country.

The position in each field is briefly indicated below :

Registration and return of Indians Abroad as on March 1, 1966.

| Subjects                  | Returned | Abroad |
|---------------------------|----------|--------|
| Scientists .. .. .        | 1,730    | 3,413  |
| Engineers .. .. .         | 2,330    | 5,000  |
| Technologists .. .. .     | 473      | 892    |
| Medical Personnel .. .. . | 942      | 1,910  |
| Total .. .. .             | 5,475    | 11,215 |

The Ministry has also a programme of publishing literature for social education workers and neo-literates. The Workers' Social Education Institute established at Indore in 1960 as a pilot project of social education for industrial workers continues to function.

The Central Government assists Voluntary Educational Organisations for development of their activities in the field of Social Education. A provision of Rs. 26 lakhs had been made for the Third Five Year Plan period including Mysore Vidyapeeth Programme assisted by the Ford Foundation. Out of this, 55 institutions have been assisted so far (March 1966) to the extent of Rs. 14.67 lakhs.

### VIJNAN MANDIRS

The Vijnan Mandir scheme was launched in 1953 by the Council of Scientific and Industrial Research, to make the rural people science conscious and to make them familiar with the scientific principles involved in the day-to-day problems arising in agriculture and village sanitation.

Upto the end of Third Plan period 52 Vijnan Mandirs have been set up.

A Vijnan Mandir consists of a scientific wing, a library and a museum.

The scientific wing has a laboratory for analysis of soil, water and food and gives demonstrations about common insects and pests, health and hygiene, common diseases and general scientific principles.

The library contains books on science in simple language.

The Museum displays specimens regarding the structure of the human body, the local flora, fauna, minerals, shells, corals, archaeological relics as also improved models of utensils, ploughs, domestic implements etc.

To foster interest competitions are organized—such as essay writing, modelling, etc., and prizes are awarded.

The Vijnan Mandirs are now under the administrative control of the State Governments.

Below we give a State-wise list of Vijnan Mandirs :

**Andhra Pradesh :** Amadalavalasa (Distt. Srikakulam); Rajahmundry (Distt. East Godavari); Vicarabad (Distt. Hyderabad); Kodur (Distt. Cuddappah).

**Assam :** Dimoria (Distt. Kamrup); Hallakandi (Distt. Cachar).

**Bihar :** Haveli-Kharagpur (Distt. Monghyr); Ormanjhi (Distt. Ranchi); Vaishali (Distt. Muzaffarpur); Pusa (Distt. Darbhanga).

**Delhi :** Najafgarh.

**Gujarat :** Shapur (Distt. Junagadh); Valod (Distt. Surat).

**Himachal Pradesh :** Sundarnagar-2 (Bhojpur), (Distt. Mandi).

**Jammu and Kashmir :** Ranbir Singh Pura (Distt. Jammu Tawi).

**Kerala :** Chengannur (Distt. Alleppey); Ramavaramapuram, Pudur (Distt. Palghat); Tirur (Distt. Kozhikode).

**Madhya Pradesh :** Nowgong (Distt. Chattarpur); Sehore (Distt. Sehore).

**Madras :** Ariyagoundampatti (Distt. Salem); Shri Ramakrishna Mission Vidyalaya, Perianaickenpalayam (Distt. Coimbatore); S. V. Nagam (Distt. North Arcot); T. Kallupatti (Distt. Madurai); Korukathi (Distt. Thanjavur); Valavanur (Distt. South Arcot).

**Maharashtra :** Amravati (Shivajinagar) (Distt. Amravati).

**Mysore :** Devaraya Samudram (Distt. Kolar); Mayasandra (Distt. Tumkur); Moodbidri (Distt. South Kanara); Konanur (Distt. Hassan); Shraikoppa (Distt. Shimoga); Ilkal (Bijapur Distt.); Hansbhavi (Bijapur Distt.); Basavakalyan (Bidar Distt.).

**Orissa :** Angul (Distt. Dhenkanal); Bhadrak (Distt. Balasore); Hinjlicut (Distt. Ganjam).

**Punjab :** NQokheri (Distt. Karnal).

**Rajasthan :** Dabok (Distt. Udaipur); Pilsangan (Distt. Ajmer); Sardarshahr (Distt. Churu); Sumervur (Distt. Pali).

**Uttar Pradesh :** Masauli (Distt. Barabanki); Bachhrawan (Distt. Rae Bareilly); Ratsand (Distt. Ballia); Pitauna (Distt. Farukhabad).

**West Bengal :** Barsul (Distt. Burdwan); Ergoda (Distt. Midnapur); Haroa (Distt. 24-Parganas); Itachuna (Distt. Hooghly); Jhillimili (Distt. Bankura).

### FREE AND COMPULSORY EDUCATION

In accordance with the Directive Principle of State policy contained in Article 45 of the Constitution, the State (this expression includes the Government of India, the State Governments and the local bodies) has to endeavour to provide for free and compulsory education to all children until they complete the age of 14 years. The progress so far achieved in this sector is indicated below :—

**Free Elementary Education :** During the last 16 years, considerable progress has been made in reaching the target set before the country by the Constitution. Primary education (classes I-IV in some States and I-V in others) is now free throughout the country. Middle school education is also free in a large number of States such as Andhra Pradesh, Jammu & Kashmir, Kerala, Madhya Pradesh, Maharashtra, Mysore and Punjab. In Gujarat, fee is charged in High Schools corresponding classes V to X. In those States where it is not wholly free as yet, steps have been taken to provide very liberal concessions in fees. Education at primary and middle stages is free for girls and students coming from Scheduled Castes and Scheduled Tribes.

**Compulsory Primary Education :—**Progress in compulsory education is usually measured by the ratio which the enrolment in Classes I to VIII



bears to the total number of children in the age-group 6-14. The ultimate goal is to reach an enrolment in classes I-V which would be about 120 per cent of the population of children in 6-11 age-group (because a number of children below 6 or above 11 will also attend these classes). Similarly, the target for enrolment in classes VI-VIII is about 90 per cent of the children in the

age-group 11-14 because, although a few children of 11 or 14 will attend these classes, a large number of children in the age-group 11-14 will be attending classes I-V. On this basis, the progress made at the end of the Second Plan as well as that which was proposed to be achieved at the end of the Third Plan (revised targets) is given below:—

Classes I-V                      Classes VI-VIII

| Name of the State               | Enrolment at the end of 1960-61 | Targets for 1965-66 | Enrolment at the end of 1960-61 | Targets for 1965-66 |
|---------------------------------|---------------------------------|---------------------|---------------------------------|---------------------|
| Andhra Pradesh .. .. .          | 68.3%                           | 76.1                | 16.8%                           | 25.09               |
| Assam .. .. .                   | 67.7%                           | 76.8                | 25.8%                           | 31.1                |
| Bihar .. .. .                   | 50.7%                           | 59.8                | 17.1%                           | 20.3                |
| Gujarat .. .. .                 | 72.1%                           | 88.2                | 26.3%                           | 35.7                |
| Jammu and Kashmir .. .. .       | 46.6%                           | 72.8                | 24.6%                           | 36.4                |
| Kerala .. .. .                  | 98.8%                           | 117.0               | 58.3%                           | 71.0                |
| Madhya Pradesh .. .. .          | 49.2%                           | 58.9                | 15.5%                           | 21.14               |
| Madras .. .. .                  | 85.5%                           | 121.2               | 31.6%                           | 54.9                |
| Maharashtra .. .. .             | 77.3%                           | 89.3                | 27.8%                           | 40.5                |
| Mysore .. .. .                  | 73.8%                           | 93.9                | 22.5%                           | 28.1                |
| Orissa .. .. .                  | 63.7%                           | 76.7                | 9.1%                            | 23.2                |
| Punjab .. .. .                  | 50.8%                           | 78.7                | 29.4%                           | 35.5                |
| Rajasthan .. .. .               | 40.9%                           | 54.0                | 14.5%                           | 21.0                |
| Uttar Pradesh .. .. .           | 44.7%                           | 79.2                | 16.6%                           | 25.3                |
| West Bengal .. .. .             | 64.9%                           | 74.7                | 21.7%                           | 30.3                |
| Nagaland .. .. .                | —                               | 107.6               | —                               | 39.2                |
| Delhi .. .. .                   | 83.4%                           | 95.8                | 61.5%                           | 78.2                |
| Himachal Pradesh .. .. .        | 50.9%                           | 76.7                | 22.7%                           | 34.6                |
| Pondicherry .. .. .             | 45.2%                           | 96.2                | 31.6%                           | 43.6                |
| A. & N. Islands .. .. .         | —                               | 102.8               | —                               | 41.7                |
| L. & M. A. Islands .. .. .      | —                               | 111.1               | —                               | 52.6                |
| Manipur .. .. .                 | —                               | 63.5                | —                               | 39.1                |
| N.E.F.A. .. .. .                | —                               | 33.1                | —                               | 9.5                 |
| Tripura .. .. .                 | —                               | 75.5                | —                               | 33.6                |
| Goa Daman & Diu .. .. .         | —                               | 106.4               | —                               | 37.6                |
| Dadra & Nagar Haveli .. .. .    | —                               | 38.5                | —                               | 49.6                |
| Other Union Territories .. .. . | 78.6%                           | —                   | 28.4%                           | —                   |
| All India .. .. .               | 62.4%                           | 79.8                | 22.6%                           | 31.8                |

As against the target enrolment of 22.5 lakh additional children in classes I to V in 1961-62, the actual additional enrolment was 39.92 lakhs. The Third Plan target of 152.2 lakhs additional enrolment has been revised to 173.69 lakhs in classes I to V.

#### WOMEN'S EDUCATION

The percentage of literacy according to the 1961 census is 12.9 for women as against 34.4 for men.

In 1961 total enrolment of girls at all stages was 1,66,44,758 or 45 for every 100 boys. During the same period the number of women teachers was 3,26,433. Out of these 1,39,094 were in

primary schools, 94,264 in middle schools, 71,284 in High/Higher Secondary schools, 8,928 in universities and colleges and the remaining in other types of schools.

In accordance with the recommendations of the National Committee on Women's Education the Government set up the National Council for Women's Education in 1959. Since then, 20 State Councils for Women's Education have also been set up in all the States (except Nagaland) and Union Territories of Delhi, Himachal Pradesh, Manipur, Tripura and Pondicherry.

It has been estimated that resources to the extent of Rs. 175 crores including Rs. 12 crores for special programmes were available for girls' education during the Third Plan. On this Rs. 112 crores were for the education at Elementary stage. The estimated achievement in the enrolment upto the Third Plan will be 56.2 per cent of girls as against 99.6 per cent for boys at the primary stage, 16.7 per cent as against 47.1 at the middle stage, and 7.8 per cent as against 27.3 at the secondary stage. In absolute numbers according to revised estimates, this would mean enrolling additionally 85.4 lakhs of girls out of a total of 230.80 lakhs of children upto the secondary stage.

The percentage increase for boys at the Primary stage is 18.2 as against 14.3 for girls, at the middle stage it would be 11.2 for the boys as against 4.6 for girls, and at the secondary stage it would be 8.8 for boys as against 3.4 for girls. While in terms of enrolment the progress has been remarkable, there have been shortfalls with reference to the targets set at Primary and Middle stages. At the secondary stage however, the targets will be exceeded.

With a view to educating public opinion and organising propaganda for the spread of women's education, it is proposed to hold 22 seminars every year in all the States (except Nagaland) and the Union Territories of Delhi, Tripura, Himachal Pradesh and Manipur. During 1965-66 however, only 4 seminars were proposed to be held in various States and Union Territories.

Keeping in view the long term objectives of providing education for girls, it is proposed that 52.4 per cent at Primary, 29.1 per cent at Middle and 13.0 per cent at Secondary stages should be in school at the end of the Fourth Plan.

As a preparatory step for the preparation of women teachers for the Fourth Plan, a sum of Rs. 26.10 lakhs was allocated to States and Union Territories during 1965-66 under the Advance Action Programmes for the construction of girls' hostels and women teachers' quarters.

To encourage girls' education, a provision of Rs. 32.20 crores has been proposed under States Sector in the Fourth Plan for the special schemes relating to girls' education. The amounts spent by the State Governments will be reimbursed to them on a pattern of Central assistance to be determined. The schemes are: Construction of quarters for women teachers; village allowances for women teacher, appointment of school mothers, construction of hostels for girls, construction of sanitary blocks for girls, etc.

Also the National Council for Women's Education at the Central level and the State Councils for Women's Education at State level, which were set up to advise the governments on matters relating to the education of girls and women, will continue during the Fourth Plan. 100 per cent Central assistance will be continued to be given to the States for organizing seminars on girls' education. A publicity programme consisting of production of two films on Women's Education has been taken up.

#### Plan and Education

The total outlay for General Education in the Third Five Year Plan is Rs. 408 crores. This is nearly double the anticipated expenditure during the Second Plan. The distribution of the outlays during the First, Second and Third Plan is given in the following table:

(Rs. in Crores)

| Group                             | First Plan (Actual Expenditure) | Second Plan (Estimated Expenditure) | Third Plan Outlay |
|-----------------------------------|---------------------------------|-------------------------------------|-------------------|
| Elementary Education .. .. .      | 85                              | 87                                  | 209               |
| Secondary Education .. .. .       | 20                              | 48                                  | 88                |
| University Education .. .. .      | 14                              | 45                                  | 82                |
| Other Educational Schemes .. .. . | 14                              | 24                                  | 29                |
| <b>Total</b> .. .. .              | <b>133</b>                      | <b>204</b>                          | <b>408</b>        |



The achievements under the First Plan and Second Plan and targets aimed at under the Third Plan are indicated below :

| Activity                                                                         | 1950-51  | 1955-56  | 1960-61  | 1965-66<br>(Targets) |
|----------------------------------------------------------------------------------|----------|----------|----------|----------------------|
| Number of Pupils in Classes I to V (in lakhs)                                    | 192      | 252      | 350      | 515                  |
| Percentage thereof to Total Population of the Age Group 6-11                     | 42.6     | 52.9     | 62.4     | 78.5                 |
| Number of Pupils in Classes VI to VIII (in lakhs)                                | 31       | 43       | 67       | 110                  |
| Percentage thereof to Total Population of the Age Group 11-14                    | 12.7     | 16.5     | 22.5     | 32.4                 |
| Number of Pupils in Classes IX to XI (in lakhs)                                  | 12       | 19       | 29       | 54                   |
| Percentage thereof to Total Population of the Age Group 14-17                    | 5.3      | 7.8      | 10.6     | 17.6                 |
| Number of Pupils at the University Stage (Arts, Science and Commerce) (in lakhs) | 4        | 6        | 9        | 12                   |
| Percentage thereof to Total Population in the Age Group 17-23                    | 0.9      | 1.5      | 1.8      | 1.9                  |
| Percentage of Students Reading Science at University Stage                       | 38.1     | 33.0     | 34.1     | 42.5                 |
| Number of Primary/Junior Basic Schools                                           | 2,09,671 | 2,78,135 | 3,30,399 | 4,08,930             |
| Number of Middle/Senior Basic Schools                                            | 13,596   | 21,730   | 49,663   | 55,765               |
| Number of High/Higher Secondary Schools                                          | 7,288    | 10,838   | 17,257   | 22,156               |
| Number of Multipurpose Schools                                                   | ..       | 255      | 2,115    | 2,446                |
| Number of Training Schools                                                       | 782      | 930      | 1,138    | 1,424                |
| Number of Training Colleges                                                      | 53       | 107      | 478      | 312                  |
| Number of Arts, Science and Commerce Colleges                                    | 542      | 772      | 1,122    | 1,400                |
| Number of Universities                                                           | 27       | 32       | 45       | 62                   |
| Percentage of Trained Teachers—                                                  | ..       | ..       | ..       | ..                   |
| Primary                                                                          | 58.8     | 61.2     | 64.1     | 73.9                 |
| Middle Schools                                                                   | 53.3     | 58.5     | 66.5     | 63.4                 |
| High/Higher Secondary Schools                                                    | 53.8     | 59.7     | 64.1     | 66.2                 |

**Primary School Education:** In the field of primary education, the number of schools in 1946-47 was 1,34,967 as against 3,51,530 in 1961-62. By the end of 1965-66, it is expected to touch four lakhs, which would include 25,000 schools for girls.

**Enrolment:** Enrolment in primary/junior basic schools in 1946-47 was 1,00,47,375 as against 295 lakhs in 1961-62. It is expected to reach 406 lakhs including 136 lakhs girls in 1965-66.

**Teachers:** In 1946-47, the primary/junior basic schools had 3,20,097 teachers as against 7,94,775 in 1961-62. It is estimated to have 10,50,000 teachers including two lakh female teachers in 1965-66.

**Expenditure:** In 1946-47, expenditure on primary education was Rs. 15.26 crores as against Rs. 82.36 crores in 1961-62. In 1965-66, it is expected to be round about Rs. 122 crores which would include 11 crores for girls' education.

**Middle School Education:** The number of middle schools was 8,294 in 1946-47 as against 55,915 in 1961-62. In 1965-66, it is estimated to have 78,000 such schools, which will include 8,000 schools for girls.

**Enrolment:** In middle/senior basic schools, the total number of enrolment in 1946-47 was about 11 lakhs as against 121 lakhs in 1961-62. It is estimated to touch 160 lakhs including 55 lakhs for girls in 1965-66.

**Teachers:** The total number of teachers in middle schools was 48,224 in 1946-47 as against 3.82 lakhs in 1961-62. It is expected to be about 5,20,000 in 1965-66 including 1,40,000 female teachers.

**Expenditure:** In 1946-47, the expenditure on middle school education amounted to Rs. 3.01 crores as against Rs. 48.84 crores in 1961-62. It is expected to be round about Rs. 71.75 crores including Rs. 8.70 crores for females in 1965-66.

**Higher Secondary Education:** The number of institutions at this level in 1946-47 was 3,659 as against 19,306 in 1961-62. It is estimated to touch 26,000 including 4,000 for girls in 1965-66.

**Enrolment:** In high/higher secondary schools, the enrolment was 15.71 lakhs in 1946-47 as against 84.30 lakhs in 1961-62. It is estimated to be 110 lakhs, including 30 lakh girls in 1965-66.

**Teachers:** In 1946-47, there were 64,806 teachers in all high/higher secondary schools as against 3,30,570 in 1961-62. The total number of teachers in these institutions was likely to reach 4,40,000 including 95,000 females in 1965-66.

**Expenditure:** The total expenditure on high/higher secondary education was Rs. 8.92 crores in 1946-47 as against Rs. 79.12 crores in 1961-62. In 1965-66, it was expected to be Rs. 118 crores, including Rs. 24 crores for girls.

**Arts and Science Colleges:** In 1946-47, there were 420 arts and science colleges as against 1,138 in 1961-62. In 1965-66, the number of these colleges is estimated to touch 1,500 including 200 colleges of girls.

**Enrolment:** In 1946-47, enrolment in these colleges was 1.59 lakhs as against 7.25 lakhs in 1961-62. The total enrolment is estimated to touch 10 lakhs, including 1.8 lakh girls during 1965-66.

**Teachers:** The number of teachers was 15,312 in 1950-51 as against 39,068 in 1961-62. It is estimated to have 50,000 teachers including 8,000 women in all the arts and science colleges in 1965-66.

**Expenditure:** In 1950-51, the total expenditure on arts and science education was Rs. 7.17 crores as against Rs. 23.38 crores in 1961-62. It is estimated to touch Rs. 33 crores, including Rs. 4 crores on girls' education in 1965-66.

**Professional Educations:** In 1946-47, the number of professional colleges was 118 as against 961 in 1961-62. It is estimated to have 1,350 professional colleges including 150 colleges for girls in 1965-66.

**Enrolment:** The total enrolment in professional colleges was 41,693 in 1946-47 as against 2,25,574 in 1961-62. It is estimated to be three lakhs including 52,000 girls in 1965-66.

**Teachers:** The total number of teachers in professional colleges was 20,418 in 1961-62. It is estimated to be about 27,300 including 2,750 women teachers during 1965-66.

**Expenditure:** The expenditure on professional colleges amounted to Rs. 1.61 crores in 1946-47 as against Rs. 18.65 crores in 1961-62 while the estimates in 1965-66 were Rs. 35 crores.

### EDUCATION OF THE HANDICAPPED

The Government of India has been making special efforts to promote services for the education, training and rehabilitation of the handicapped. Some of the activities that have been undertaken are : Model school for blind children ; Training centre for the adult blind ; Sheltered workshop ; National library for the blind ; Training centre for the blind and deaf ; school for the mentally deficient children ; central rehabilitation centre for the orthopaedically handicapped ; Training of teachers of the handicapped ; Training in crafts ; Awards of fellowships to teachers of the handicapped ; Special employment exchanges ; scheme of assistance to voluntary organisations for the handicapped ; and scholarships for the handicapped.

### NATIONAL SCHOLARSHIP SCHEME

This scheme was initiated in 1961-62 as a Third Plan scheme and 2,650 awards were made every year during the Third Plan. The scheme is being continued during the Fourth Plan with 4,000 awards a year. 2,800 awards being made on the basis of school Leaving Examination and 1,200 on the results of First degree examination.

The awards made on the results of the school Leaving Examinations will terminate on the completion of the first degree examination and those made on the results of first degree examination will terminate on the completion of the next degree or diploma.

The rate of scholarship for inter/P.U.C. or first year of 3 years course is Rs. 50 per month ; for B.A./B.Sc. etc. and second and third year of 3 years course Rs. 75 per month and for professional courses Rs. 100 per month ; for M.A./M.Sc. studies also the rate is Rs. 100 per month. Those who stay in the hostel are paid Rs. 10 in addition.

**Means Test :** Rates of scholarship are subject to a means test which prescribes that full rate will be paid if the income of the parents is upto Rs. 500 per month ; at half the rate if the income is between Rs. 500 to 1,000 per month. If the income is above Rs. 1,000 per month no scholarship is paid but a certificate of merit is issued.

### SCHOLARSHIPS FOR TEACHERS' CHILDREN

A scheme on the pattern of National Scholarships was introduced from 1961-62 for the meritorious children of primary and secondary school teachers. The number of scholarships was 500 every year during the Third Plan. The Scheme is being continued during the Fourth Plan and 750 awards will be made every year. The child of a teacher, who secures at least 60 per cent marks in the school-leaving or pre-university examination is eligible to apply against the quota of a State/Territory. The rates under the scheme are the same as under the National Scholarships Scheme except that the additional allowance of Rs. 10 per month to resident scholar is not payable under this scheme.

### NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

With a view to promoting advanced study and research in educational problems and providing training for educational personnel the Govt. of India set up with effect from Sept. 1, 1961 a National Council of Educational Research and Training, an autonomous body recognised under the Societies Registration Act (Act XXI of 1960), with the Union Minister of Education as Ex-Officio President.

The main objectives of the Council are : (i) Promoting, organising and fostering research in all branches of education ; (ii) Organising pre-service and in-service training at an advanced level ; (iii) Organising extension services in the



training institutions in the country in association with the State Governments and other authorities concerned and in other ways disseminating improved techniques and practices in the educational institutions in the country; (iv) Establishing institutes for research and training, particularly for the teaching of vocational and scientific subjects in schools and such other subjects as are required for the development of multi-purpose education; (v) Acting as a clearing house for ideas and information on educational research and training; (vi) Undertaking publication of such books, periodicals and other literature as may be necessary for the furtherance of its objectives; and (vii) Rendering advisory and consultative services.

The Council set up a Central Committee on Educational Literature with the following objectives: (a) To prepare and publish or assist in the preparation and publication of books, supplementary educational material for use in educational institutions, in languages in use in such institutions; (c) To promote and conduct research in the production of text books and other educational literature; (d) To commission writers, illustrators and other experts for preparing specific books; (e) To prepare and bring out book lists, arrange exhibitions and organise effective dissemination of improved techniques to text books production; (f) On behalf of the National Council of Educational Research and Training, to advise the Government of India, the State Governments and other educational organisations and institutions on matters relating to the production of text books and educational literature and to collaborate with them in the furtherance of the objects for which the Committee is set up.

The Committee has in turn set up subject panels/Educational Boards for the preparation of model text books for various subjects. The field in which the panels and Boards work are: Agriculture, Chemistry, Commerce, General Science, Geography, Hindi, History, Maths, Physics, Sanskrit, Social Studies and Technology (for secondary schools), Technology (for technical and vocational schools).

### SCIENCE TALENT SEARCH SCHEME

In order to identify and nurture talented students in science and enable them to use their potentialities to the maximum and help them develop into future scientists, the Science Talent Search Scheme was launched in 1963. In the first year, the scheme was confined to Delhi territory, but since 1964 it has been extended to the country as a whole, except the States of Kerala and Jammu and Kashmir. The examinations are therefore held at District centres in order to select the candidates for the award of scholarships and certificates of merit.

During 1965-66, 325 students were selected for the award of scholarship and another 190 for the award of certificate of merit.

The Science Talent Search Scheme has helped not only in spotting talented students, but more vitally in encouraging various schools to train their boys to take this examination. In this way, the scheme serves to improve science teaching in secondary schools.

The Central Science Workshop has been established with UNESCO assistance.

One of the main functions of the National Council is to promote research by training research workers in different fields of education. For this purpose the Council has instituted a scheme of awarding research fellowships—Junior fellowships of the value of Rs. 300.00 p.m. and senior fellowships of Rs. 500.00 p.m. The Junior Fellowships will be awarded for research at the post-Master's Degree and Senior Fellowships at post-doctoral stage. During 1966-67 it is proposed to award 15 Senior Fellowships and 60 Junior Fellowships.

The National Council of Educational Research and Training has undertaken to conduct various short-term and in-service training courses for research workers, educators and educational Administrators.

The training programmes of the Council are as follows:—

Course in Early Childhood Education; Course in Educational and Vocational Guidance; Course in Research Methodology; Course in Evaluation; Course for Paper Setters and Examiners; Course in Introduction to Programmed Learning; Course for Principals and Heads of Training Institutions; Course for Inspectors of Secondary Education; Course in Laboratory Crafts for Science Teachers; Course in Audio-Visual Education; Course for Craft Teachers; Course for District officers in charge of Social Education.

### BASIC EDUCATION

Basic Education has been adopted as national pattern for elementary stage of education. As a result of this all elementary schools are to be ultimately brought under basic system. About 20 per cent schools have already been converted to basic pattern. The rest are being gradually brought under this system through a programme of 'Orientation'.

### TRAINING COLLEGES

The Government of India also proposed setting up four regional teachers' training colleges as a Central Scheme in the Third Plan. The output of these training colleges would be 200 trained teachers per college a year. The Extension Service centres would be attached to another 25 training colleges in the Third Plan.

### CATERING COLLEGE

The Union Government has started one Catering College at Delhi. There is an Institute of Catering Technology and Applied Nutrition at Bombay. Two colleges one each at Calcutta and Madras started functioning from December 1963. All the four Institutes of Catering Technology and Applied Nutrition, included in the Third Plan, have commenced courses. Arrangements are nearing completion for the establishment of food polytechnics in Uttar Pradesh and Kerala.

### DEVELOPMENT OF HINDI, SANSKRIT AND MODERN INDIAN LANGUAGES

**HINDI:** The programme for the propagation of Hindi includes grant of financial assistance to voluntary Hindi organisations, appointment of Hindi teachers in primary, middle and higher secondary schools in non-Hindi speaking States, establishment of Hindi teachers' training colleges in non-Hindi speaking States, maintenance of an institute of research and training of Hindi teachers, free supply of Hindi books to school and college libraries particularly in non-Hindi speaking areas, award of scholarships for Post-matric Studies in non-Hindi speaking States and award of prizes to Hindi writers and poets belonging to non-Hindi speaking areas. The programme of enrichment and development of Hindi includes schemes of preparation, translation and publication of standard books of university level in Hindi through official and voluntary agencies as well as universities and learned societies, preparation, and translation of books in Hindi with the assistance of private publishing concerns and preparation and publication of encyclopaedias, dictionaries and translation of official literature and evolution of scientific and technical terminology in Hindi.

**SANSKRIT:** Various schemes for propagation and development of Sanskrit are being continued. They include financial assistance to voluntary Sanskrit organisations, gurukulas and Sanskrit pandits in indigent circumstances; maintenance of Kendriya Sanskrit Vidyapeetha; reprinting of important out of print Sanskrit books; scholarships to the products of Sanskrit pathashalas and Sanskrit students in high/higher secondary schools. This is in addition to what is being done by the State Govts. in this regard.

**MODERN INDIAN LANGUAGES:** A separate programme is implemented for the development of modern Indian languages (other than Hindi) under which grants are given to various

State Governments, voluntary organisations, institutions for bringing out suitable publications e.g. encyclopaedias, bilingual dictionaries, books of knowledge and books bringing out similarities among different languages.

The Fourth Five Year Plan envisages an outlay of Rs. 12 crores in the Central Sector, for schemes relating to Development of Hindi, Sanskrit and Modern Indian Languages. In addition to the existing programmes several new schemes are proposed to be undertaken.

**Financial provisions for the propagation and Development of Hindi during 1965-66:** Appointment of Hindi teachers Rs. 15 lakhs; Hindi Teachers' Training Colleges Rs. 10 lakhs; Kendriya Hindi Shikshan Mandirs Rs. 6.50 lakhs; Grants to Voluntary Hindi Organisations Rs. 12 lakhs; Free gift of Hindi books to Non-Hindi Speaking States Rs. 2 lakhs; Hindi Encyclopaedia Rs. 2 lakhs; Prizes on Hindi Books Rs. 0.20 lakhs; Commission Schemes Rs. 27.90 lakhs; Directorate Schemes Rs. 14.49 lakhs; Total Rs. 90.13 lakhs.

Provision for Development of Sanskrit for 1965-66: Rs. 27.17 lakhs; Provision for Modern Indian Languages for 1965-66: Rs. 10 lakhs.

### CENTRAL BOARD OF SECONDARY EDUCATION

17-B, Indraprastha Marg, New Delhi 1.

The Central Board of Secondary Education has been constituted with a purpose to bring in some uniformity in the pattern of Secondary Education and also to meet the educational needs of the students whose parents have to move from one State to another from time to time.

The Board conducts All-India Higher Secondary, Higher Secondary (3-year Course), Higher Secondary Multipurpose and Higher Secondary (1-year Course) Examinations.

Any educational institution situated in or outside India can get itself affiliated to the Board. All the Higher Secondary schools of Delhi, Central Schools run by Central Schools Organization, Govt. of India, Ministry of Education, Military schools, run by Ministry of Defence, Demonstration Multipurpose Higher Secondary schools attached to the Regional Colleges of Education, National Council of Educational Research & Training are affiliated to this Board. The Union Territory of Manipur has decided to follow the courses and syllabi of the Board. The schools in Andaman & Nicobar and Laccadive Islands as well as the Govt. Higher Secondary School of Panjim, Goa and the Tibetan refugee school, Mussoorie run by the Tibetan Society, Ministry of Education, Govt. of India are also affiliated to the Board besides the Indian School in Teheran (Iran). The Board has under consideration a proposal to introduce correspondence courses at the higher secondary stage for the benefit of such students as are unable to join any institution.

### UNIVERSITY EDUCATION

Position on 31st December 1963:—

No. of Universities: 55.

No. of Institutions deemed to be Universities: 7. Arts, Science & Commerce colleges 1,418. Total no. of students (excluding Intermediate Board of Education in U.P.): 11,84,697. No. of professional colleges: 693.

Figures as on March 31, 1963:

No. of Colleges 1,938 (university colleges 133; affiliated colleges 1,805). These figures do not include colleges under Intermediate Boards. Number of Arts, Science and Commerce colleges 1,283 (university colleges 73; affiliated colleges 1,210).

The total number of Women's colleges that came up in 1962-63 was 24 thus raising the total of such colleges to 235.

Total enrolment of students in the universities and colleges rose to 12,72,666 which showed an increase of 10.5 per cent (i.e. 1,17,266 over the enrolment for 1961-62. Out of 12,72,666 about



2.23 lakhs were women students. Total number of teachers in the universities and colleges: 66,370 including tutors and demonstrators but exclusive of teachers in intermediate colleges.

The Third Plan allotment, for development of University Education, to be placed at the disposal of Univ. Grants Commission, was Rs. 37 crores. This is exclusive of the allocation for Engineering and Technology at the Universities.

The policy in regard to university education is largely the one recommended by the Indian University Education Commission which made a report in 1949. (This report is summarized in a previous edition.)

There is now a University Grants Commission. (See also the note below.) Its duty is to take such steps as it thinks fit for the promotion and co-ordination of university education and for the determination and maintenance of the standards of teaching, examination and research.

The U.G.C. continued its grant giving activities during 1963-64 and grants were released not only for development schemes in the various fields under Humanities, Science and Technology, but also assistance was given to universities and colleges towards the implementation of minor projects like establishment of Students Aid Fund, Hobby Workshop, construction of Health Centres, Non-resident student centres, purchase of library books, etc.

**Admissions:** The U.G.C. has suggested to the universities that for the present, as a first step, the minimum age of 16 might be prescribed for admission to the first degree course in arts, science and commerce. A majority of the universities have accepted the suggestion.

### Universities

There are in all 62 universities in India. The University Grants Commission has appointed a committee to prepare a broad outline plan for the new Universities to be established during the Third Plan period, taking into account the requirements of the country and the resources available for the purpose.

The Central Universities are four: Aligarh, Banaras, Visva Bharati and Delhi.

It may be mentioned here that for purposes of employment under the Central Government the degrees and diplomas of various institutions besides the universities mentioned below are recognized.

Among the institutions are: Gurukul Vishwa Vidyalya, Hardwar; Jamia Millia Islamia, Delhi; Kaashi Vidyapith, Varanasi; Gujarat Vidyapith (degrees awarded during 1920-22); Tilak Maharashtra Vidyapith, Poona (degrees awarded prior to 1932); Tata Institute of Social Sciences, Bombay; National Council of Rural Higher Education; and Qanuni Vidyapith, Lahore (degrees awarded upto 1927).

The names of the Universities with the names of Vice-Chancellors are given below:—

**Agra University.**—Dr. Ranjan.  
**Aligarh University.**—Dr. Nawab (Mirza Ali Yar Khan) Ali Yavar Jung Bahadur, B.A. (Hons.), (Oxford.), Padma Bhushan.  
**Allahabad University.**—R. K. Nehru.  
**Andhra University.** (Waltair).—Dr. K. R. Srinivasa Iyengar.  
**Andhra Pradesh Agricultural University** (Hyderabad): O. Pulla Reddy, I.C.S. (Rtd.).  
**Annamalai University** (Annamalainagar).—Prof. S. P. Adinarayanan (Acting).  
**Banaras Hindu University.**—Dr. Triguna Sen.  
**Bangalore University.**—Prof. V. K. Gokak.  
**Bhagalpur University.**—Dr. B. N. Singh.  
**Bihar University** (Muzaffarpur).—B. M. K. Sinha.  
**Bombay University.**—Dr. P. B. Gajendragadkar, M.A., LL.B.  
**Burdwan University.**—Dr. D. M. Sen.  
**Calcutta University.**—Dr. Bidhubhusan Mallik.  
**Delhi University.**—Dr. C. D. Deshmukh.  
**Dibrugarh University** (Dibrugarh).—Dr. B. B. Seth.  
**Gauhati University.**—Dr. M. N. Goswami.  
**Gorakhpur University.**—Prof. Madan Mohan.

**Gujarat University** (Ahmedabad).—Lalbhai Ratanji Desai, B.A., B.T., T.D. (Lond.).

**Indira Kala Sangeet Vishwavidyalaya** (Khairagarh).—P. N. Chinchore, M.A.M. Mus.

**Indore University.**—H. S. Kamath.

**Jabalpur University** (Jabalpur).—Dhirendra Verma.

**Jadavpur University** (Calcutta 32).—Prof. Hem Chandra Guha.

**Jammu & Kashmir University** (Srinagar).—T. M. Advani, M.A., LL.B.

**Jawaharlal Nehru Krishi Vishwavidyalaya**, Jabalpur.—Dr. J. S. Patel.

**Jiwaji University, Gwalior.**—S. S. Bhandarkar.

**Jodhpur University.**—Dr. M. L. Roonwal.

**Kalyani University.**—Dr. S. N. Das Gupta.

**Kameshwar Singh Darbhanga Sanskrit Vishwavidyalaya** (Darbhanga).—Mahamahopadhyaya S. V. Sohoni.

**Kanpur University**, Kanpur.—Acharya Jugal K. Shore.

**Karnatak University** (Dharwar).—D. C. Pavate, M.A. (Cantab.).

**Kerala University** (Trivandrum).—V. Narayana Pillai.

**Kurukshetra University** (Kurukshetra).—Deep Chand Varma.

**Lucknow University.**—Dr. A. V. Rao.

**Madras University.**—Lt.-Col. Diwan Bahadur Sir A. Lakshmanaswami Mudaliar, B.A., M.D., LL.D., D.Sc., B.C.L. (Oxon.), D.Litt., F.R.C.O.G., F.A.C.S.

**Madurai University.**—T. P. Meenakshi Sundaram.

**Magadh University.**—Zawar Hussain.

**Maharaja Sayajirao Univ. of Baroda.**—Dr. C. S. Patel, B.A., M.Sc. (Bom.), Ph.D. (Leeds.).

**Marathwada University** (Aurangabad).—Dr. N. R. Tawde, B.A. (Hons.), B.Sc. (Bom.), M.Sc. (Bom.), Ph.D. (Lond.), F. Inst. P., F.N.I., F.A.Sc.

**Meerut University.**—Dr. R. K. Singh.

**Mysore University.**—Dr. K. L. Shrimall, M.A., Ph.D.

**Nagpur University.**—Dr. V. B. Kolte.

**North Bengal University** (Siliguri).—Prof. A. C. Roy.

**Orissa University of Agriculture and Technology** (Bhubaneswar).—K. Ramiah.

**Osmania University** (Hyderabad).—Dr. D. S. Reddi, M.A. (Oxon.).

**Punjab University** (Chandigarh).—Suraj Bhan, M.A. (Pb.), M.A. (Lond.).

**Patna University.**—Dr. K. K. Datta.

**Poona University.**—Prof. D. R. Gadgil.

**Punjab Agricultural University** (Ludhiana).—P. N. Thapar.

**Punjab University** (Patiala).—Klripal Singh Narang.

**Rabindra Bharati** (Calcutta).—H. Banerji.

**Rajasthan University** (Jaipur).—Prof. M. V. Mathur.

**Ranchi University.**—A. F. Markham.

**Ravishanker University**, Raipur.—Dr. B. R. Saxena.

**Roorkee University.**—M. R. Chopra.

**Sardar Vallabhbhai Vidyapeeth** (Vallabh Vidyanagar, Kaira Dist., Gujarat).—I. J. Patel, M.A., B.T.

**Saugar University.**—Dr. M. P. Sharma.

**Saurashtra University**, Ahmedabad.—D. R. Mankad.

**S. N. D. T. Women's University** (Bombay).—Dr. (Smt.) Premilla V. Thackersey, D.Litt. (Banaras).

**Shivaji University** (Kolhapur).—Dr. A. G. Pawar.

**South Gujarat University**, Ahmedabad.—C. C. Shah.

**Sri Venkateswara University** (Tirupati, Andhra).—Dr. V. C. Vaman Rao, M.A., Ph.D. (Dublin).

**U. P. Agricultural University** (Pant Nagar).—D. P. Singh.

**Udaipur University** (Udaipur).—Dr. G. S. Mahajan, B.A. (Bom.), M.A. (Cantab.), Ph.D. (Cantab.).

**University of Agricultural Science, Hebbal, Bangalore.**—Dr. K. C. Nalk.

**Utkal University** (Bhubaneswar).—Dr. Soda Siva Misra.

**Varnaseya Sanskrit Vishwavidyalaya** (Varanasi).—Prof. Surendra Nath Shastri.

**Vikram University** (Ujjain).—N. D. Vajpeyi.

**Visva Bharati University** (Santiniketan).—Dr. K. Bhattacharya.

Names of institutions deemed to be universities:

**Birla Institute of Technology and Science, Pilani.**—Director: Prof. V. Lakshmi Narayanan.

**Gujarat Vidyapith** (Ahmedabad): Vice-Chancellor: Thakorbhai Desai.

**Gurukul Kangri Vishwavidyalaya** (Hardwar): Vice-Chancellor: Col. Satyavrata Sidhantankar.

**Indian Agricultural Research Institute** (New Delhi): Director: Dr. M. S. Swaminathan.

**Indian Institute of Science** (Bangalore): Director: Dr. S. Dhawan.

**Indian School of International Studies** (New Delhi): Director: Dr. M. S. Rajan.

**Jamia Millia Islamia** (New Delhi): Vice-Chancellor: Prof. M. Mujeeb.

**Kashi Vidyapith** (Varanasi): Vice-Chancellor: Birbal Singh.

**Tata Institute of Social Sciences** (Bombay): Vice-Chancellor: Dr. M. S. Gore.

The following are some of the major Schemes, being implemented during the Third Plan period out of assistance from the University Grants Commission.

(1) Institution of permanent Chairs or Lecturerships named after Dr. Rabindra Nath Tagore in selected Universities; (2) Setting up of Film Clubs in Universities; (3) Schemes for teaching languages of other regions; (4) Research in Social Tensions; (5) Research in Social Welfare; (6) Collection, preservation and utilisation of manuscripts in university libraries; (7) Scheme for publication of approved research or learned research works; (8) Extension work by University teachers; (9) Establishment of Priority Presses in Universities; (10) Construction of staff clubs-cum-guest houses; (11) Development of Museology in Indian Universities; (12) Development of Department of Archaeology in selected universities; (13) Development of Linguistic Studies in Universities; (14) Establishment of Advance Centre of Studies; (15) Organisation of Summer Institutes and Seminars; (16) Establishment and improvement of Central Workshops in Universities; (17) Development of Post-graduate Education in Science subjects in selected affiliated Colleges; (18) Scheme for setting up Industrial Estates in selected universities; (19) Construction of Gandhi Bhawans in selected universities; (20) Scheme for scholarships for study of regional languages; (21) Grants to affiliated Colleges for:—(a) Non-Resident Students' Centres (Maximum Rs. 35,000); (b) Hobby Workshops (Maximum Rs. 20,000); (c) Construction of Hostels (50: 50); (d) Extension of Libraries, including purchase of books (2/3: 1/3); (e) Extension of Laboratories and purchase of equipment after taking into account the assistance that may have been given or may be given under the Three-Year Degree Course Scheme (2/3: 1/3); (f) Construction of staff quarters (50: 50); and Revision of salary scales of teachers in Universities and affiliated colleges.

Under a programme jointly sponsored by the Gandhi Smarak Nidhi and University Grants Commission, Gandhi Bhawans are to be set up in universities to promote and facilitate the study of Gandhiji's ideals and his way of life. Initially, construction of Gandhi Bhawans is to be undertaken in nine universities including Delhi, Kerala, Allahabad, Andhra, Karnatak, Mysore, Punjab, Nagpur and Rajasthan.



The total cost of the building at Delhi University, which has been designed by Stein, Chatterjee and Polk, architects, is estimated at Rs. 1,60,000 which will be shared between the Gandhi Smarak Nidhi and University Grants Commission.

The main object in establishing these Bhawans is to provide within the university campus a suitable place to keep Gandhian literature; to hold study classes and discussions on the life, ideals and work of Mahatma Gandhi; to arrange for lectures on these topics and to encourage students to undertake such items of constructive work as can be done inside or close to the campus, which will reflect the ideas and methods of work indicated by Mahatma Gandhi.

The University Grants Commission has selected 39 colleges from 17 universities, which fulfil the prescribed conditions, for introducing the scheme of hobby workshops.

The universities are: Agra, Andhra, Bombay, Calcutta, Delhi, Gauhati, Gorakhpur, Gujarat, Kerala, Madras, Mysore, Nagpur, Punjab, Poona, Rajasthan, Saugar and S. V. Vidyapeeth.

So far, assistance has been given for the establishment of 13 workshops in universities and 68 in colleges. During 1962-63, the U.G.C. paid

Rs. 1,82,840 to colleges and Rs. 29,767 to universities for the establishment of hobby workshops.

#### Medium of Regional Languages in Universities

The progress made so far (Aug. 1962) in respect of imparting education through the medium of the regional languages in the universities:

Out of 58 universities, 34 provided facilities for teaching through the medium of Hindi or regional languages. Students of these universities were allowed to answer question papers in Hindi or in the regional languages.

Four universities—Agra, Banaras, Jabalpur and Vikram—offered courses in Hindi up to M.A. and M.Com. standards. Seventeen universities—Aligarh, Allahabad, Bhagalpur, Bihar-Delhi, Gorakhpur, Indra Kala Sangeet, Kurukshetra, Lucknow, Magadh, Osmania, Patna, Punjab, Rajasthan, Ranchi, Varanaseya Sanskrit Vishwavidyalaya and Saugar—provided facilities for examinations in Hindi up to the degree level.

Thirteen other universities—Bombay, Burdwan, Calcutta, Gujarat, Kalyani, Madras, Marathwada, M. S. University of Baroda, Nagpur, Poona, Sardar Vallabhbhai Vidyapith, S.N.D.T. and Visvabharati—permitted the use of

regional languages for instructions up to the degree level.

Twelve universities—Andhra, Annamalai, Gauhati, Jadavpur, Jammu and Kashmir, Karnatak, Kerala, Mysore, Roorkee, Sri Venkateswara, U.P. Agricultural and Utkal—continue to provide teaching examination through the medium of English.

Information on the medium of instruction was still awaited from 12 universities—Agricultural University, Ludhiana, Punjabi University, Patiala, Jodhpur University, Jodhpur, Rajasthan Agricultural University, Udaipur, Rabindra Bharati, Calcutta, North Bengal University, Siliguri, K. S. Darbhanga Sanskrit University, Indian Institute of Science, Bangalore, India Agricultural Research Institute, New Delhi, Indian School of International Studies, New Delhi, Gurukula Kangri Vishwavidyalaya, Haridwar and Jamia Millia Islamia, New Delhi.

Thirteen universities had adopted Hindi as the medium of instruction in different courses, the names of which are Banaras, Bhagalpur, Bihar, Indra Kala Sangeet Vishwavidyalaya, Jabalpur, Jodhpur, Lucknow, Magadh, Patna, Ranchi, Sardar Vallabhbhai Vidyapeeth, Saugar and Vikram.

## POPULATION

**Note:**—Unless otherwise stated the following article is based on the 1961 census which is the latest.

Preparations for the 1961 Census began in July 1958. There were six stages in the census operations beginning with the checking of the boundaries of States and Union Territories and their constituents and ending with the actual census count which ended at sunrise on March 1, 1961. The count started on the morning of February 10, 1961.

India constitutes only 2.4 per cent of land of world surface but accounts about 15 per cent of the world's population. India's population is larger than the combined population of Africa and South America.

The 1961 census covered the whole country except portions of Jammu & Kashmir currently under the occupation of Pakistan and China. The 1951 census did not cover Jammu and Kashmir, N.E.F.A. and Nagaland.

The census closed on the evening of March 5 and the first results began to flow in on 6th March.

About a million persons were employed as census agency—both enumeration and supervisory—in about 800,000 blocks.

The population of India has registered an unprecedented increase of 21.5 per cent from 359 million in 1951 to 439 million in 1961 according to the 1961 census figures.

The increase is in excess of the upper limit of all the recent projections and is eight million more than the projected population of 431 million in 1961 on which the Third Plan is based.

The number of cities with a population of more than a million has gone up from five to six or seven, the number and the order of precedence varying with the definition adopted.

#### URBAN DENSITY

Greater Bombay ranks first with 4.15 million and Calcutta second with 2.93 million, Delhi (including New Delhi, Shahdara and the Cantonment) third with 2.34 million, Madras fourth with 1.73 million, Hyderabad fifth with 1.25 million, and Ahmedabad sixth with 1.15 million.

If, however, the population of Calcutta (including 34 contiguous urban townships in a compact area of 164 sq. miles) is aggregated, "Greater Calcutta" ranks first with 5.55 million inhabitants. Similarly, "Metropolitan Bangalore" has a population of 1.21 million.

The density of population for the country works out to 370 per square mile as against 812 in 1951.

The highest urban density is to be found in Calcutta city (75,038). This compares with

22,293 per square mile in Greater Bombay and 55,208 in Madras.

The City-Sadar-Paharganj area of Delhi, however, has a density of 143,185 persons per sq. mile and the Karolbagh-Patel Nagar area of Delhi a density of 74,195. According to the final census reports these two areas "can be counted in the forefront of the world's highest density areas."

The highest increase in urban population during the last ten years has been recorded in Assam (116.69 per cent). Orissa comes next with 87.02 per cent, followed by Bihar, 49.08 per cent. Madhya Pradesh showed an increase of 47.76 per cent while Kerala 42.44 per cent.

India's population is estimated at 498.9 million in the middle of 1966.

#### SEX RATIO

The sex ratio—the number of females per 1,000 males—is now 941 as compared with 946 in 1951. There has been a steady decline in this ratio since 1901.

Another odd feature is that the sex ratio is above unity in distinct bands of territory, especially, along the coast. The State-wise sex ratio is also appreciably lower north of latitude 22 degrees.

Literacy has registered a small increase from 16.6 per cent in 1951 to 23.7 per cent in 1961.

The test for literacy is satisfied if a person can both read and write with understanding.

#### LITERACY RATE

The literacy rate is highest in Delhi, Kerala, the Andamans, Gujarat, Madras and Maharashtra in that order and lowest in Kashmir, Himachal Pradesh, Rajasthan, Madhya Pradesh, Uttar Pradesh, and Bihar in that order.

Female literacy continues to be far below male literacy, but again, oddly enough, the coastal belt generally exhibits a higher rate of female literacy than other areas.

Of the enumerated population (of 439 million), 82.16 per cent is rural and 17.84 per cent urban. This compares with 82.62 per cent and 17.38 per cent in 1951.

The growing rate of literacy is being outpaced by illiteracy.

This is because of the unchecked increase in population.

Literacy increased from 17 per cent in 1951 to 24 per cent in 1961, the last census year.

The number of illiterates also increased from 298 million to 334 million.

#### INCREASE IN RATE OF SURVIVAL

The answer to the high population increase over the last four decades is not far to seek. In 1881 the Census Actuary computed a birth rate of 50.5 for Bombay, 47.9 for Bengal and 50.8 for Central Provinces and effective death rates of 42.5, 39.9 and 42.8 for the general population. He estimated expectation of life at birth at 23.67 for males and 25.58 for females (24.63 for general). In 1891, the rates did not show any marked change, the overall figures for India being a birth rate of 48.8 and a death rate of 39.6, expectation of life at birth for males being 24.59 and for females 25.54. In 1911 the birth rate for combined provinces was still estimated at 51.3 and the death rate at 43.1 while the expectation of life at birth had decreased to 22.59 for males and 23.31 for females from 23.63 and 23.96 respectively in 1901. In 1921, as a result of minor epidemics culminating in the great influenza epidemic of 1918, the birth and death rates stood very close to each other at 49.2 and 48.6. These rates diminished to 46.4, 45.2 and 39.9 for birth, 36.3, 31.2 and 27.4 for deaths in 1931, 1941 and 1951 respectively. The expectation of life at birth in 1931 was estimated at 26.91 for males and 26.56 for females; for 1951 the corresponding figures were 32.45 and 31.66. While close estimates of birth and death rates for the decade 1951-61, must await detailed age tabulations there are reasons to assume that the birth rate will be around 18 or still lower, for there is little doubt that the rate of natural increase has been steadily accelerating from year to year. Although the current infant mortality rate is still quite high the expectation of life at birth in 1961 would be a little more than 45. In other words, over the last decade, the expectation of life must have increased by more than a year every year.

#### GROWTH OF POPULATION FROM 1901-1961

| Years | Persons     | Percentage (Approx.) |
|-------|-------------|----------------------|
| 1901  | 236,281,245 | ..                   |
| 1911  | 252,122,410 | + 5.73               |
| 1921  | 251,352,261 | - 0.31               |
| 1931  | 279,015,498 | + 11.01              |
| 1941  | 318,701,012 | + 14.22              |
| 1951  | 361,129,622 | + 13.31              |
| 1961  | 439,235,082 | + 21.50              |

+ denotes increase; — denotes decrease.



## POPULATION, AREA, DENSITY, SEX RATIO BY STATE

| States/Union Territories                 | Area in Sq. miles | Population         |                    |                    | Variation 1951-61 | Percentage increase 1951-61 | Females per 1,000 males 1961 | Females per 1,000 males 1951 | Population per Sq. mile 1961 | Population per Sq. mile 1951 |
|------------------------------------------|-------------------|--------------------|--------------------|--------------------|-------------------|-----------------------------|------------------------------|------------------------------|------------------------------|------------------------------|
|                                          |                   | Persons            | Males              | Females            |                   |                             |                              |                              |                              |                              |
| <b>INDIA</b>                             | <b>1,178,995</b>  | <b>439,235,082</b> | <b>226,293,620</b> | <b>212,941,462</b> | <b>77,641,652</b> | <b>21.50</b>                | <b>941</b>                   | <b>946</b>                   | <b>370</b>                   | <b>312</b>                   |
| <i>States</i>                            |                   |                    |                    |                    |                   |                             |                              |                              |                              |                              |
| Andhra Pradesh ..                        | 106,286           | 35,983,447         | 18,161,671         | 17,821,776         | 4,868,188         | 15.65                       | 981                          | 986                          | 339                          | 293                          |
| Assam ..                                 | 47,091            | 11,872,772         | 6,328,129          | 5,544,643          | 3,042,040         | 34.45                       | 876                          | 877                          | 252                          | 188                          |
| Bihar ..                                 | 67,196            | 46,455,810         | 23,301,449         | 23,154,161         | 7,671,832         | 19.18                       | 994                          | 990                          | 691                          | 577                          |
| Gujarat ..                               | 72,245            | 20,633,350         | 10,633,902         | 9,999,448          | 4,370,693         | 26.88                       | 940                          | 952                          | 286                          | 225                          |
| Jammu & Kashmir ..                       | ..                | 3,560,976          | 1,896,633          | 1,664,343          | 307,124           | 9.44                        | 878                          | 873                          | ..                           | ..                           |
| Kerala ..                                | 15,002            | 16,903,715         | 8,361,927          | 8,541,788          | 3,354,597         | 24.76                       | 1,022                        | 1,028                        | 1,127                        | 903                          |
| Madhya Pradesh ..                        | 171,217           | 32,372,408         | 16,578,204         | 15,794,204         | 6,300,771         | 24.17                       | 953                          | 967                          | 189                          | 152                          |
| Madras ..                                | 50,331            | 33,686,953         | 16,910,978         | 16,775,975         | 3,567,906         | 11.85                       | 992                          | 1,007                        | 669                          | 598                          |
| Maharashtra ..                           | 118,717           | 39,553,718         | 20,428,882         | 19,124,836         | 7,551,154         | 23.60                       | 936                          | 941                          | 333                          | 270                          |
| Mysore ..                                | 74,210            | 23,586,772         | 12,040,923         | 11,545,849         | 4,184,816         | 21.57                       | 959                          | 966                          | 318                          | 261                          |
| Orissa ..                                | 60,164            | 17,548,846         | 8,770,586          | 8,778,260          | 2,902,900         | 19.82                       | 1,001                        | 1,022                        | 292                          | 243                          |
| Punjab ..                                | 47,205            | 20,306,812         | 10,891,576         | 9,415,236          | 4,171,922         | 25.86                       | 864                          | 858                          | 430                          | 342                          |
| Rajasthan ..                             | 132,152           | 20,155,602         | 10,564,082         | 9,591,520          | 4,184,828         | 26.20                       | 908                          | 921                          | 153                          | 121                          |
| Uttar Pradesh ..                         | 113,654           | 73,746,401         | 38,634,201         | 35,112,200         | 10,530,659        | 16.66                       | 909                          | 910                          | 649                          | 556                          |
| West Bengal ..                           | 33,829            | 34,926,279         | 18,599,144         | 16,327,135         | 86,023,893        | 32.79                       | 878                          | 865                          | 1,032                        | 778                          |
| <i>Union Territories and other areas</i> |                   |                    |                    |                    |                   |                             |                              |                              |                              |                              |
| Andaman & Nicobar Islands ..             | 3,215             | 63,548             | 39,304             | 24,244             | 32,577            | 105.19                      | 617                          | 625                          | 20                           | 10                           |
| Delhi ..                                 | 573               | 2,658,612          | 1,489,378          | 1,169,234          | 914,540           | 52.44                       | 785                          | 768                          | 4,640                        | 3,044                        |
| Himachal Pradesh ..                      | 10,885            | 1,351,144          | 702,697            | 648,447            | 241,678           | 21.78                       | 923                          | 915                          | 124                          | 102                          |
| Laccadive, Minicoy & Amindivi Islands .. | 11                | 24,108             | 11,935             | 12,173             | 3,073             | 14.61                       | 1,020                        | 1,042                        | 2,192                        | 1,912                        |
| Manipur ..                               | 8,628             | 780,037            | 387,058            | 392,979            | 202,402           | 35.04                       | 1,015                        | 1,036                        | 90                           | 67                           |
| Tripura ..                               | 4,036             | 1,142,005          | 591,237            | 550,768            | 502,976           | 78.71                       | 932                          | 904                          | 283                          | 158                          |
| Dadra & Nagar Haveli ..                  | 189               | 57,963             | 29,524             | 28,439             | 16,613            | 39.56                       | 963                          | 946                          | 307                          | 220                          |
| Goa, Daman & Diu ..                      | 1,426             | 626,978            | 302,953            | 324,025            | — 10,613          | — 1.66                      | 1,070                        | 1,115                        | 440                          | 447                          |
| NEFA ..                                  | 31,438            | 336,553            | 177,680            | 158,878            | ..                | ..                          | 894                          | ..                           | 11                           | ..                           |
| Nagaland ..                              | 6,366             | 369,200            | 191,027            | 178,173            | 28,975            | 14.07                       | 933                          | 999                          | 58                           | 48                           |
| Pondicherry ..                           | 185               | 369,079            | 163,347            | 185,732            | 51,826            | 16.34                       | 1,013                        | 1,030                        | 1,995                        | 1,716                        |

## STATE-WISE SCHEDULE CASTES AND SCHEDULE TRIBES (1961)\*

| State/Territory                | Schedule Castes (Rural & Urban) |            |            | Schedule Tribes (Rural & Urban) |            |            | Urban           |                 |
|--------------------------------|---------------------------------|------------|------------|---------------------------------|------------|------------|-----------------|-----------------|
|                                | Persons                         | Males      | Females    | Persons                         | Males      | Females    | Schedule Castes | Schedule Tribes |
| Andhra Pradesh ..              | 4,973,616                       | 2,512,325  | 2,461,291  | 1,324,368                       | 670,368    | 654,000    | 552,088         | 57,081          |
| Assam ..                       | 732,756                         | 389,271    | 343,485    | 2,068,364                       | 1,057,076  | 1,011,288  | 60,670          | 68,033          |
| Bihar ..                       | 6,536,875                       | 3,218,935  | 3,317,940  | 4,204,770                       | 2,087,944  | 2,116,776  | 362,221         | 109,945         |
| Gujarat ..                     | 1,367,255                       | 693,436    | 673,819    | 2,754,446                       | 1,398,478  | 1,355,968  | 334,182         | 137,950         |
| Jammu & Kashmir ..             | 268,530                         | 134,765    | 133,765    | ..                              | ..         | ..         | 20,895          | ..              |
| Kerala ..                      | 1,422,057                       | 705,709    | 716,348    | 207,996                         | 103,995    | 104,001    | 123,211         | 8,159           |
| Madhya Pradesh ..              | 4,253,024                       | 2,155,875  | 2,097,149  | 6,678,410                       | 3,334,363  | 3,344,047  | 455,294         | 75,085          |
| Madras ..                      | 6,072,536                       | 3,047,613  | 3,024,923  | 252,646                         | 129,578    | 123,068    | 925,923         | 14,328          |
| Maharashtra ..                 | 2,226,914                       | 1,135,191  | 1,091,723  | 2,397,159                       | 1,211,605  | 1,185,554  | 485,453         | 89,910          |
| Mysore ..                      | 3,117,232                       | 1,586,547  | 1,530,685  | 192,096                         | 98,337     | 93,759     | 508,487         | 9,935           |
| Orissa ..                      | 2,763,858                       | 1,371,410  | 1,392,448  | 4,223,757                       | 2,094,753  | 2,129,004  | 126,026         | 87,551          |
| Punjab ..                      | 4,139,106                       | 2,208,473  | 1,930,633  | 14,132                          | 6,964      | 7,168      | 480,398         | ..              |
| Rajasthan ..                   | 3,359,640                       | 1,747,476  | 1,612,164  | 2,309,447                       | 1,198,886  | 1,110,561  | 413,045         | 47,240          |
| Uttar Pradesh ..               | 15,417,245                      | 7,944,364  | 7,472,881  | ..                              | ..         | ..         | 1,079,775       | ..              |
| West Bengal ..                 | 6,950,726                       | 3,629,182  | 3,321,544  | 2,063,883                       | 1,047,287  | 1,016,596  | 676,569         | 47,771          |
| Andaman and Nicobar Islands .. | ..                              | ..         | ..         | 14,122                          | 7,318      | 6,804      | ..              | ..              |
| Delhi ..                       | 341,555                         | 189,470    | 152,085    | ..                              | ..         | ..         | 272,243         | ..              |
| Himachal Pradesh ..            | 369,916                         | 191,429    | 178,487    | 108,194                         | 54,719     | 53,475     | 12,142          | 350             |
| L. M. & A. Islands ..          | ..                              | ..         | ..         | 23,391                          | 11,466     | 11,925     | ..              | ..              |
| Manipur ..                     | 13,376                          | 6,886      | 6,490      | 249,049                         | 123,162    | 125,887    | 158             | 4,146           |
| Tripura ..                     | 119,725                         | 62,069     | 55,656     | 360,070                         | 184,174    | 175,896    | 6,748           | 3,698           |
| Dadra & Nagar Haveli ..        | 1,184                           | 498        | 686        | 51,261                          | 26,002     | 25,259     | ..              | ..              |
| NEFA ..                        | ..                              | ..         | ..         | 5,042                           | 3,363      | 1,679      | ..              | ..              |
| Nagaland ..                    | 126                             | 80         | 46         | 343,697                         | 171,233    | 172,464    | 95              | 9,863           |
| Pondicherry ..                 | 56,861                          | 28,804     | 28,057     | ..                              | ..         | ..         | 3,725           | ..              |
| All India ..                   | 64,511,513                      | 32,963,779 | 31,547,534 | 29,883,470                      | 15,040,707 | 14,842,763 | 6,899,848       | 773,552         |

\* Excludes Goa, Daman and Diu.

**Rural and Urban Population:** The first figure shows rural population and the second urban. **States:** Andhra Pradesh 29,708,939; 593,315; Kerala 14,349,574; 2,554,141; Madhya Pradesh 27,745,174; 4,627,234; Madras 4,088,595; Rajasthan 16,874,124; 3,281,478; 6,274,508; Assam 10,959,744; 913,028; Bihar 15,316,726; 2,496,425; 8,990,528; Maharashtra 28,391,157; 5,316,624; Jammu & Kashmir 2,967,661; 11,162,561; Mysore 18,320,279; 5,266,493; Orissa 16,439,196; 1,109,650; Punjab 16,218,217; 1,109,650; Pondicherry 369,079; 163,347; 185,732; 51,826; 16.34; 1,013; 1,030; 1,995; 1,716.



Uttar Pradesh 64,266,506; 9,479,895; West Bengal 26,385,437; 8,540,842.

**Territories:**—Andaman and Nicobar Islands 49,473; 14,075; Delhi 299,204; 2,359,408; Himachal Pradesh 1,287,216; 63,928; Laccadive, Minicoy and Amindivi Islands 24,108; —; Manipur 712,320; 67,717; Tripura 1,039,008; 102,997; Dadra and Nagar Haveli 57,963; —;

Goa, Daman & Diu —; —; N.E.F.A. 336,558; —; Nagaland 350,043; 19,157; Pondicherry 280,082; 88,997; Sikkim 155,341; 6,848.

#### TOWNS — STATE WISE

**States:** Andhra Pradesh 223; Assam 60; Bihar 153; Gujarat 181; Jammu & Kashmir 43; Kerala 92; Madhya Pradesh 219; Madras 338; Maharashtra 265; Mysore 230; Orissa 62;

Punjab 187; Rajathan; Uttar Pradesh 64; West Bengal 184.

**Union territories and other areas:** Andaman Nicobar Islands 1; Delhi 3; Himachal Pradesh 13; Laccadive, Minicoy & Amindivi Islands N.A.; Manipur 1; Tripura 6; Dadra and Nagar Haveli N.A.; Goa, Daman & Diu —; N.E.F.A.; Nagaland 3; Pondicherry 5.

#### Cities with a population of over one million each in 1961

Andhra Pradesh: Hyderabad 1,251,119; Gujarat: Ahmedabad 1,149,918; Madras: Madras 1,729,141; Maharashtra: Greater Bombay 4,152,056; Mysore: Bangalore 1,206,961; West Bengal: Calcutta 2,927,289.

#### SNOW-BOUND AREAS

List of snow-bound areas in the States and their provisional population in 1961. Under each State the population of such areas in districts with the population of tahsils or sub-divisions in such areas of the districts is given:—

**Punjab State:** 178,694 (males 92,541; females 86,153): (i) Lahaul and Spiti District 20,478 (Males 11,538; females 8,940): (a) Spiti 5,324 (males 2,873; females 2,451); (b) Lahaul 15,154 (males 8,665; females 6,489); (ii) Kangra District 158,216 (males 81,003; females 77,213): (a) Kulu Sub-division 152,766 (males 78,431; females 74,335); (b) Bara Banghal Area 5,450 (males 2,572; females 2,878).

**Himachal Pradesh Territory:** 395,333 (males 206,967; females 188,366): (i) Chamba District 51,393 (males 27,655; females 23,738): (a) Pangti Sub-tahsil 11,644 (males 6,116; females 5,528); (b) Bharmur Sub-tahsil 25,582 (males 14,086; females 11,496); (c) Lylh Kanungo Circle of Chamba Tahsil 14,167 (males 7,453; females 6,714); (ii) Kinnaur District 40,640 (males 20,489; females 20,151): (a) Nichar Sub-division 12,062 (males 6,373; females 5,689); (b) Pooh Sub-division 13,012 (males 6,248; females 6,764); (c) Kalpa Sub-division 15,566 (males 7,868; females 7,698); (iii) Mahasu District 238,963 (males 126,143; females 112,820): (a) Rampur Tahsil 43,757 (males 22,519; females 21,238); (b) Chopal Tahsil 40,384 (males 22,603; females 17,781); (c) Theog Tahsil 41,014 (males 21,899; females 19,115); (d) Rohru Tahsil 51,805 (males 26,218; females 25,587); (e) Jubbil Tahsil 17,636 (males 9,413; females 8,223); (f) Kumarsain Sub-tahsil 23,822 (males 12,437; females 11,385);

(g) Kot-Khai Sub-tahsil 20,545 (males 11,054; females 9,491); (iv) Mandi District 64,337 (males 32,680; females 31,657): (a) Pargana Chohar of Tahsil Jogindernagar 7,438 (males 3,637; females 3,801); (b) Parganas Uttarsal Badar and Snor of Tahsil Mandi Sadar 14,416 (males 7,501; females 6,915); (c) Parganas Maidangarh Dhangyara and Sraji of Tahsil Chachiot 42,483 (males 21,542; females 20,941).

**Uttar Pradesh State:** Pithoragarh District (Villages of Sipu, Marcha, Tejang, Khimling, Go, Filam, Dantu, Yangsung, Baun, Saun, Dugtu, Dugtu, Baling, Nagling, Chal, Sela, Kuti, Navi, Rung, Kang, Napal Chyon, Gunji, Garbyang and Bundi of Dharchula Sub-division) 6,011 (males 3,150; females 2,861).

**Jammu & Kashmir State:** 300,657 (males 157,278; females 143,379): (i) Kathua District: Basohli Tahsil 16,418 (males 8,792; females 7,626); (ii) Poonch District 43,776 (males 23,050; females 20,726): (a) Haveli Tahsil 19,211 (males 10,078; females 9,133); (b) Mendhar Tahsil 6,607 (males 3,452; females 3,155); (c) Rajouri Tahsil 17,958 (males 9,520; females 8,438); (iii) Baramulla District 29,018 (males 15,783; females 13,235): (a) Karnah Tahsil 18,237 (males 9,929; females 8,308); (b) Handwara Tahsil 2,299 (males 1,244; females 1,055); (c) Sopore Tahsil 8,482 (males 4,610; females 3,872); (iv) Ladakh District 86,927 (males 43,695; females 43,232): (a) Leh Tahsil 42,486 (males 21,086; females 21,400); (b) Kargil Tahsil 44,441 (males 22,609; females 21,832); (v) Udhampur District: Reasi Tahsil 86,927 (males 43,695; females 43,232); (vi) Doda

District 99,661 (males 52,988; females 46,673): (a) Ramaban Tahsil 36,579 (males 19,201; females 17,378); (b) Doda Tahsil 20,848 (males 11,282; females 9,566); (c) Kishtwar Tahsil 14,963 (males 7,955; females 7,008); (d) Bhaderwah 27,271 (males 14,550; females 12,721); (vii) Anantnag District: Anantnag Tahsil 50 (males 275; females 228).

List of Agency areas in Andhra Pradesh State and their population in 1961; Andhra Pradesh 530,803 (males 268,685; females 262,118): (i) Srikakulam 71,349 (males 36,337; females 35,012): (a) Parvatipuram 43,544 (males 22,321; females 21,223); (b) Salur 7,721 (males 3,941; females 3,779); (c) Palakonda 20,084 (males 10,074; females 10,010); (ii) Visakhapatnam 196,356 (males 100,514; females 95,842): (a) Narasapatnam (Agency) 4,073 (males 2,049; females 2,024); (b) Chintapal (Agency) 44,039 (males 22,885; females 21,154); (c) Chodavaram (Agency) 8,07 (males 4,127; females 3,945); (d) S. Kot (Agency) 8,072 (males 4,005; females 4,067); (e) Paderu (Agency) 132,100 (males 67,448; females 64,652); (iii) East Godavari 120,14 (males 60,224; females 59,917): (a) Pratipad Taluk 7,953 (males 4,045; females 3,908); (b) Rampachodavaram Taluk 48,618 (males 24,156; females 24,462); (c) Yellavaram Taluk 63,570 (males 32,023; females 31,547); (iv) West Godavari: Polavaram 46,271 (males 23,072; females 23,199); (v) Khammam 96,686 (males 48,538; females 48,148): (a) Bhadrachalam Taluk 55,707 (males 27,89; females 27,816); (b) Nugur Taluk 40,979 (males 20,647; females 20,332).

#### CITIES OF POPULATION 100,000 AND OVER IN EACH STATE FOR 1961

| States and Cities                       | Population | Variation 1951-61 | Females per 1,000 males | States and Cities              | Population | Variation 1951-61 | Females per 1,000 males |
|-----------------------------------------|------------|-------------------|-------------------------|--------------------------------|------------|-------------------|-------------------------|
| <b>Andhra Pradesh:</b>                  |            |                   |                         | <b>Gujarat:</b>                |            |                   |                         |
| Vijayawada .. .. .                      | 230,397    | 69,199            | 947                     | Ahmedabad .. .. .              | 1,206,001  | 328,672           | 804                     |
| Guntur .. .. .                          | 187,122    | 61,867            | 979                     | Baroda .. .. .                 | 298,398    | 86,991            | 857                     |
| Visakhapatnam .. .. .                   | 182,004    | 73,962            | 920                     | Surat .. .. .                  | 288,026    | 64,844            | 916                     |
| Warangal .. .. .                        | 156,106    | 22,976            | 929                     | Rajkot .. .. .                 | 194,145    | 62,076            | 927                     |
| Rajahmundry .. .. .                     | 130,002    | 24,726            | 985                     | Bhavnagar .. .. .              | 176,473    | 38,522            | 910                     |
| Kakinada .. .. .                        | 122,865    | 22,913            | 971                     | Jamnagar .. .. .               | 148,572    | 44,153            | 914                     |
| Eluru .. .. .                           | 108,321    | 21,108            | 1,004                   | <b>Jammu &amp; Kashmir:</b>    |            |                   |                         |
| Nellore .. .. .                         | 106,776    | 25,296            | 932                     | Srinagar .. .. .               | 295,084    | ..                | 863                     |
| Bandar (Masulipatam) .. .. .            | 101,417    | 23,464            | 947                     | Jammu .. .. .                  | 102,738    | ..                | 784                     |
| Kurnool .. .. .                         | 100,815    | 40,593            | 938                     | <b>Kerala:</b>                 |            |                   |                         |
| <b>Assam:</b>                           |            |                   |                         | <b>Cochin-Ernakulam-Alwaye</b> |            |                   |                         |
| Shillong .. .. .                        | 102,398    | 43,886            | 763                     | Town Group .. .. .             | 313,030    | 119,542           | 932                     |
| Gauhati .. .. .                         | 100,707    | 57,092            | 497                     | Trivandrum .. .. .             | 302,214    | 104,621           | 968                     |
| <b>Bihar:</b>                           |            |                   |                         | Calicut Town Group .. .. .     | 248,548    | 89,824            | 965                     |
| Patna .. .. .                           | 364,594    | 81,115            | 769                     | Alleppey .. .. .               | 138,834    | 22,556            | 945                     |
| Jamshedpur .. .. .                      | 328,044    | 109,882           | 784                     | <b>Madhya Pradesh:</b>         |            |                   |                         |
| Dhanbad-Jaria-Sindri Town Group .. .. . | 200,618    | 127,016           | 635                     | Indore .. .. .                 | 394,941    | 84,082            | 851                     |
| Gaya .. .. .                            | 151,105    | 17,405            | 834                     | Jabalpur .. .. .               | 367,014    | 110,016           | 809                     |
| Monghyr - Jamalpur Town Group .. .. .   | 146,807    | 28,287            | 875                     | Gwalior .. .. .                | 300,587    | 59,010            | 853                     |
| Bhagalpur .. .. .                       | 143,850    | 29,320            | 817                     | Bhopal .. .. .                 | 222,949    | 120,615           | 771                     |
| Ranchi .. .. .                          | 140,253    | 33,404            | 792                     | Ujjain .. .. .                 | 144,161    | 14,344            | 872                     |
| Muzaffarpur .. .. .                     | 109,048    | 35,454            | 695                     | Raipur .. .. .                 | 139,792    | 49,988            | 890                     |
| Darbhanga .. .. .                       | 103,016    | 18,200            | 870                     | Durg Town Group .. .. .        | 133,230    | 112,981           | 594                     |
|                                         |            |                   |                         | Bagar .. .. .                  | 104,670    | 24,608            | 859                     |



| States and Cities                | Population | Variation<br>1951-61 | Females<br>per<br>1,000 males | States and Cities                 | Population | Variation<br>1951-61 | Females<br>per<br>1,000 males |
|----------------------------------|------------|----------------------|-------------------------------|-----------------------------------|------------|----------------------|-------------------------------|
| <b>Madras :</b>                  |            |                      |                               | <b>Rajasthan :</b>                |            |                      |                               |
| Madras .. .. .                   | 1,729,141  | 313,085              | 901                           | Jaipur .. .. .                    | 403,444    | 112,314              | 856                           |
| Madurai .. .. .                  | 424,810    | 63,029               | 952                           | Ajmer .. .. .                     | 231,240    | 34,607               | 887                           |
| Coimbatore .. .. .               | 286,305    | 88,550               | 885                           | Jodhpur .. .. .                   | 224,760    | 44,043               | 847                           |
| Tiruchirapalli .. .. .           | 249,862    | 30,941               | 945                           | Bikaner .. .. .                   | 150,634    | 33,521               | 884                           |
| Salem .. .. .                    | 249,145    | 46,810               | 957                           | Kota .. .. .                      | 120,345    | 55,238               | 826                           |
| Palayamcottai Town Group .. .. . | 190,048    | 29,119               | 1,016                         | Udaipur .. .. .                   | 111,139    | 21,518               | 844                           |
| Tuticorin Town Group .. .. .     | 127,356    | 28,490               | 966                           | <b>Uttar Pradesh :</b>            |            |                      |                               |
| Vellore Town Group .. .. .       | 122,761    | 16,737               | 978                           | Kanpur Town Group .. .. .         | 971,062    | 265,679              | 739                           |
| Kurichi Town Group .. .. .       | 119,380    | 52,212               | 954                           | Lucknow Town Group .. .. .        | 655,673    | 158,812              | 789                           |
| Thanjavur .. .. .                | 111,099    | 10,419               | 979                           | Agra Town Group .. .. .           | 508,680    | 133,015              | 824                           |
| Nagercoil .. .. .                | 106,207    | 26,923               | 990                           | Varanasi Town Group .. .. .       | 489,864    | 134,085              | 812                           |
| <b>Maharashtra :</b>             |            |                      |                               | Allahabad Town Group .. .. .      | 430,730    | 98,435               | 778                           |
| Greater Bombay .. .. .           | 4,152,056  | 1,157,612            | 663                           | Meerut Town Group .. .. .         | 283,997    | 50,814               | 802                           |
| Poona Town Group .. .. .         | 737,426    | 137,075              | 870                           | Bareilly Town Group .. .. .       | 272,828    | 64,745               | 841                           |
| Nagpur Town Group .. .. .        | 690,302    | 205,038              | 886                           | Moradabad Town Group .. .. .      | 191,828    | 29,974               | 845                           |
| Sholapur .. .. .                 | 337,583    | 60,496               | 902                           | Saharanpur .. .. .                | 185,213    | 36,778               | 821                           |
| Nasik Town Group .. .. .         | 215,576    | 58,688               | 833                           | Aligarh .. .. .                   | 185,020    | 43,402               | 825                           |
| Kalyan Town Group .. .. .        | 194,334    | 54,573               | 869                           | Gorakhpur .. .. .                 | 180,255    | 47,819               | 757                           |
| Kolhapur Town Group .. .. .      | 193,186    | 56,351               | 884                           | Jhansi Town Group .. .. .         | 169,712    | 42,347               | 840                           |
| Amravati .. .. .                 | 137,875    | 35,069               | 852                           | Dehra Dun Town Group .. .. .      | 156,341    | 12,125               | 804                           |
| Sangli Town Group .. .. .        | 127,183    | 36,672               | 906                           | Rampur .. .. .                    | 135,407    | 1,130                | 850                           |
| Malegaon .. .. .                 | 121,408    | 66,386               | 893                           | Mathura Town Group .. .. .        | 125,258    | 19,485               | 814                           |
| Ahmednagar .. .. .               | 119,020    | 13,745               | 886                           | Shahjahanpur Town Group .. .. .   | 117,702    | 12,867               | 868                           |
| Akola .. .. .                    | 115,760    | 26,154               | 854                           | Mirzapur-cum-Vindhyachal .. .. .  | 100,097    | 13,569               | 893                           |
| Thana Town Group .. .. .         | 109,215    | 41,456               | 774                           | <b>West Bengal :</b>              |            |                      |                               |
| <b>Mysore :</b>                  |            |                      |                               | Calcutta .. .. .                  | 2,927,289  | 228,795              | 612                           |
| Bangalore Town Group .. .. .     | 1,206,961  | 420,618              | 874                           | Howrah .. .. .                    | 512,598    | 78,968               | 630                           |
| Mysore .. .. .                   | 253,865    | 9,542                | 904                           | South Suburban Town Group .. .. . | 341,712    | 128,497              | 740                           |
| Hubli-Dharwar Town Group .. .. . | 171,326    | 41,717               | 911                           | Asansol Town Group .. .. .        | 188,689    | 73,925               | 660                           |
| Mangalore Town Group .. .. .     | 170,253    | 53,170               | 982                           | Bhatpara .. .. .                  | 147,253    | 12,714               | 585                           |
| Kolar Gold Fields .. .. .        | 146,811    | — 12,273             | 984                           | Kharagpur .. .. .                 | 147,253    | 17,617               | 810                           |
| Belgaum Town Group .. .. .       | 146,790    | 26,458               | 879                           | Bally .. .. .                     | 130,896    | 67,758               | 553                           |
| <b>Orissa :</b>                  |            |                      |                               | Kamarhati .. .. .                 | 125,457    | 48,206               | 648                           |
| Cuttack .. .. .                  | 146,308    | 43,803               | 722                           | South Dum-Dum .. .. .             | 111,284    | 49,893               | 778                           |
| <b>Punjab :</b>                  |            |                      |                               | Burdwan .. .. .                   | 108,224    | 32,848               | 789                           |
| Amritsar Town Group .. .. .      | 398,047    | 61,933               | 789                           | Baranagar .. .. .                 | 107,837    | 30,711               | 762                           |
| Jullundur Town Group .. .. .     | 265,030    | 63,040               | 791                           | <b>Delhi :</b>                    |            |                      |                               |
| Ludhiana .. .. .                 | 244,032    | 90,237               | 820                           | Delhi .. .. .                     | 2,061,758  | 941,888              | 788                           |
| Ambala Town Group .. .. .        | 181,747    | 29,725               | 772                           | New Delhi .. .. .                 | 261,545    | — 14,769             | 727                           |
| Patiala .. .. .                  | 125,234    | 27,365               | 798                           |                                   |            |                      |                               |

## TOWNS

## Andhra Pradesh

50,000—1,00,000 (8)

Nizamabad 79,093; Tenali 78,525; Vizianagaram 76,808; Adoni 69,951; Kothagudem 69,728; Vijayapuri 55,300; Anantapur 52,280; Proddatur 50,616.

20,000—50,000 (51)

Cuddapah 49,027; Guntakal 48,083; Chittoor 47,876; Anakapalle 46,402; Chirala 45,410; Gudivada 44,801; Bhimavaram 43,821; Nandyal 42,927; Khammam 35,888; Tirupati 35,845; Ongole 35,804; Mahbubnagar 35,588; Srikantham 35,071; Bapatla 33,668; Hindupur 32,445; Samalkot 31,924; Karimnagar 31,554; Bodhan 30,929; Kagaznagar 30,604; Narsapur 30,064; Narasaraopet 29,744; Malkapuram 29,186; Billampalle 29,101; Palacole 28,481; Pithapuram 27,910; Tadepalligudem 27,086; Kalahasti 26,460; Salur 26,111; Gudur 25,618; Bobbili 25,592; Parvatipuram 25,281; Tanuku 24,657; Madanapalle 24,386; Nalgonda 24,383; Kadiri 24,307; Peddapuram 24,302; Amalapuram 24,063; Rayadurg 23,779; Tadipatri 23,129; Ponnur-Nidubrolu 22,872; Narasipatnam 22,768; Chilakaluripet 22,666; Tuni 22,452; Mangalagiri 22,182; Repalle 21,941; Yemmiganur 21,051; Adilabad 20,970; Jagtial 20,941; Kavali 20,544; Narayanpet 20,504; Dharmavaram 20,405.

## Assam

50,000—1,00,000 (1)

Dibrugarh 58,480.

20,000—50,000 (11)

Silchar 41,062; Nowgong 38,600; Digboi Town Group 35,028; Pandu 31,173; Karimganj 28,883; Tinsukia 28,468; Dhubri 28,355; Jorhat 24,953; Tezpur 24,159; Lumding 23,186; Barpeta 22,207.

## Bihar

50,000—1,00,000 (6)

Chapra-Revelganj Town Group 88,264; Bihar 78,581; Arrah 76,766; Dinapur Town Group 70,766; Barauni-Teghra Town Group 69,562; Katihar 59,344.

20,000—50,000 (30)

Kumardhubi Town Group 42,722; Hazaribagh 40,958; Purnea 40,602; Bettiah 39,990; Dehri 38,092; Sasaram 37,782; Girdih 36,881; Mokameh 35,743; Dinapur Nizamat 35,159; Hajipur 34,044; Motihari 32,620; Jaridih Bazar 31,605; Sabibganj 31,409; Chakradharpur 30,906; Madhubani 28,229; Siwan 27,370; Begusarai 27,346; Kishanganj 27,002; Samastipur 25,726; Daltonganj 25,270; Jugsalai 24,528; Jamui 24,213; Teghra 23,573; Jehanabad 23,209; Buxar 23,068; Chaibasa 22,019; Jhumri-Tilaiya 21,777; Barahiya 20,502; Chakradharpur 20,260; Ramgarh Cantonment 20,041.

## Gujarat

50,000—1,00,000 (10)

Nadiad 78,952; Porbandar 75,081; Junagadh 74,298; Broach 73,639; Veraval Town Group 60,857; Navsari 53,600; Godhra 52,167; Patan 51,953; Cambay 51,291; Morvi 50,192.

20,000—50,000 (42)

Dhoraji 48,951; Surendranagar 48,602; Gondal 45,069; Anand 40,458; Bhuj 40,180; Viramgam 38,955; Bulsar 37,586; Dohad 35,483; Petlad 35,239; Amreli 34,699; Sidhpur 33,850; Mahuva 32,732; Mehsana 32,577; Dhrangadhra 32,197; Kalol 31,940; Jetpur 31,186; Savarkundla 31,051; Dabhoi 30,841; Palanpur 29,139; Upleta 27,613; Dholka 27,476; Wadhwan 27,104; Kapadvanj 27,053; Mandvi 26,609; Gandhidham 26,514; Botad 26,168; Visnagar 25,982; Bilimora 24,941; Borsad 24,704; Palitana 24,581; Kadi 23,661; Anjar

23,301; Wankaner 22,509; Limbdi 21,801; Rajpipla 21,426; Umreh 21,244; Mangrol 21,089; Unjha 20,371; Ankleshwar 20,287; Khambhaliya 20,064.

## Jammu &amp; Kashmir

50,000—1,00,000 (Nil)

20,000—50,000 (1)

Anantnag 21,087.

## Kerala

50,000—1,00,000 (4)

Quilon 91,018; Palghat 77,620; Trichur 73,038; Kottayam 52,685.

20,000—50,000 (25)

Cannanore Town Group 48,960; Tellicherry 44,763; Kayamkulam 44,571; Badagara 43,908; Changanacherry 42,376; Kilikilloor 32,273; Shertall 31,155; Chowghat 28,903; Kasargod 27,636; Chittoor-Thathamangalam 26,457; Thiruvalla 24,242; Azhikode 24,212; Feroke 24,124; Kanhangad 23,621; Ponnani 22,977; Muvattupuzha 22,900; Katakampally 22,488; Irinjalakuda 22,335; Chengannur 22,277; Attinjal 22,051; Nileshwar 20,956; Kundara 20,945; Parur 20,852; Haripad 20,378; Neyyattinkara 20,268.

## Madhya Pradesh

50,000—1,00,000 (4)

Ratlam 87,472; Bilaspur 86,706; Burhampur 82,090; Khandwa 65,505; Murwara Town Group 60,472.

20,000—50,000 (30)

Mhow Cantonment 48,032; Damoh 46,656; Rajnandgaon 44,078; Rewa 43,065; Mandasaur 41,876; Satna 38,046; Chhindwara 37,244; Raigarh 36,933; Neemuch 36,287; Dewas 34,577; Itarsi 36,611; Dhamtari 31,552; Jaora 31,140; Guna 31,031; Khargone 30,652; Seoni 30,274; Datia 29,420; Shivpuri 28,681; Sehore 28,489;



Morena 28,337; Dhar 28,325; Bhind 28,208; Vidisha 27,718; Bina 27,476; Rajhara-Jharandalli 23,346; Harda 22,276; Shahdol 22,196; Chhatarpur 22,146; Tikamgarh 20,469; Jagdalpur 20,412.

### Madras

50,000—1,00,000 (22)

Kumbakonam Town Group 96,746; Dindigul 92,947; Kancheepuram 92,714; Valparai 80,023; Tiruppur 79,773; Cuddalore 79,168; Kallidai-kurichi Town Group 75,657; Erode 73,762; Rajapalayam 71,203; Mount Alandur Town Group 63,702; Nagapattinam Town Group 61,305; Tirupparan-Kundram Town Group 57,748; Palni Town Group 56,909; Aruppukotai Town Group 55,977; Virudhunagar 54,827; Pollachi 54,369; Coonoor Town Group 52,992; Mayooram 51,363; Karur 50,564; Pudukkottai 50,488; Gudiyatham 50,384; Ootacamund 50,140.

20,000—50,000 (60)

Ranipet Town Group 48,003; Vaniambadi Town Group 47,918; Golden Rock (Ponmalai-patti) Town Group 47,070; Srivilliputtur 46,816; Tiruvannamalai 46,441; Bodinayakanur 44,914; Karakkudi 43,698; Villupuram 43,496; Srirangam 41,949; Kadayanallur 41,249; Chidambaram 40,694; Ambur 39,455; Tiruvattiyur Town Group 37,764; Mettupalayam 36,496; Periyakulam 36,335; Paramakudi Town Group 34,521; Tenkasi 34,403; Tindivanam 34,342; Tambaram Town Group 34,329; Mannargudi 33,558; Kovilpatti 33,305; Cumbum 32,517; Arni 31,351; Tirupattur 30,799; Sivakasi 30,690; Arkonam 30,658; Puliyaugudi 30,648; Tiruvuru 30,137; Attur 29,018; Udumalpet 28,345; Kayalpattinam Town Group 28,336; Dharmapuri 28,031; Mettur 27,698; Gobichettipalayam 27,004; Ramanathapuram 26,890; Dharapuram 26,490; Chingleput 25,977; Udangudi Town Group 25,946; Anamalai Town Group 25,587; Devakottai 25,524; Uthamapalayam Town Group 25,427; Komarapalayam 24,757; Pattukottai 24,726; Gudalur 24,635; Allinagaram 24,606; Edappadi 24,366; Sankaranayinar Koil 24,089; Rasipuram 23,871; Krishnagiri 23,827; Erode 22,766; Tiruchendur Town Group 22,752; Bhavani 22,713; Nellikuppam 22,168; Tiruchengode 21,386; Nelliyalam Town Group 20,877; Kotagiri Town Group 20,737; Chinnamanur 20,586; Shencottah 20,528; Seithur Town Group 20,403; Lalgudi Town Group 20,009.

### Maharashtra

50,000—1,00,000 (11)

Dhulia 98,893; Aurangabad Town Group 97,701; Nanded 81,087; Jalgaon 80,351; Bhusawal Town Group 79,121; Jalna 67,158; Gondia 56,320; Achalpur Town Group 54,028; Chanda 51,484; Ichalkaranji 50,978; Barsi 50,389.

20,000—50,000 (44)

Wardha 49,113; Satara 48,709; Bhiwandi 47,630; Amalner 46,963; Yeotmal 45,587; Pandharpur 45,421; Khamgaon 44,432; Nandurbar 41,055; Latur 40,913; Dehu Town Group 40,902; Hinganghat 36,890; Parbhani 36,795; Ambarnath 34,509; Chalisgaon 34,280; Karad 33,772; Bhir 33,066; Manmad 31,551; Akot 31,459; Ratnagiri 31,091; Malkapur 29,687; Bassein Town Group 28,238; Pulgaon 28,063; Bhandara 27,710; Dhond 27,168; Washim 26,494; Chopda 26,460; Karanja 26,440; Tum-sar 24,910; Badnera 23,840; Hingoli 23,407; Shrirampur 22,802; Umer 22,682; Anjangaon 21,931; Dharangaon 21,771; Sangamner 21,729; Lonavala 21,713; Shegaon 21,674; Arvi 21,478; Akalkot 21,278; Baramati 21,118; Yeola 21,039; Shirpur 20,846; Uran-Islampur 20,817; Ballarpur 20,351.

### Mysore State

50,000—1,00,000 (9)

Gulbarga 97,069; Bellary 85,673; Bijapur 78,854; Davangere 78,124; Gadag-Betgeri 76,614; Bhadravati Town Group 65,776; Shimoga 63,764; Raichur 63,329; Hospet 53,242.

20,000—50,000 (30)

Kargal 49,878; Tumkur 47,277; Bagalkot 39,934; Mandya Town Group 33,347; Chitradurga 33,336; Kolar 32,587; Bidar 32,420; Hassan 32,172; Ranibennur 31,804; Chikmagalur 30,253; Naipani 29,374; Rabkavi Banhatti 28,871; Doddaballapur 27,361; Channapatna 26,467; Yadgir 25,764; Udipi 24,610; Chamarajanagar Ramasamudram 24,430; Gule-gud 24,292; Ilkal 24,222; Jamkhandi 24,017; Karwar 23,906; Chikballapur 23,025; Harihar 22,820; Kollegal 22,663; Gokak 21,854; Sirsi 21,240; Haveri 21,043; Konnur 20,795; Shahbad 20,454; Sagar 20,414.

### Orissa

50,000—1,00,000 (3)

Rourkela 90,287; Berhampur 76,931; Puri 60,815.

20,000—50,000 (8)

Sambalpur 38,915; Bhubaneswar 38,211; Balasore 33,931; Jeypore 25,291; Bhadrak 25,235; Parlakimedi 22,708; Birmitrapur 20,301; Bariyada 20,301.

### Punjab

50,000—1,00,000 (9)

Chandigarh Town Group 99,262; Ferozepur 97,932; Rohtak 88,193; Jagadhri Town Group 84,337; Karnal 72,109; Panipat 67,026; Hissar 60,222; Bhiwani 58,194; Pathankot 54,810; Bhatinda 52,253; Batala 51,300; Hoshiarpur 50,739; Faridabad 50,709.

20,000—50,000 (31)

Moga 47,779; Abohar 46,863; Sonapat 45,882; Simla 42,597; Nangal Town Group 42,359; Malerkotla 39,543; Phagwara 37,929; Gurgaon 37,868; Rewari 36,994; Kaithal 34,890; Hansi 33,712; Sirsa 33,363; Kot Kapura 32,021; Fazilka 32,015; Muktsar 30,765; Nabha 30,603; Jagraon 29,617; Kapurthala 29,334; Sangrur 28,344; Rajpura 27,925; Palwal 27,863; Gurdaspur 27,665; Faridkot 26,735; Khanna 24,416; Jind 24,216; Narnaul 23,959; Mansa 22,473; Sunam 21,408; Barnala 21,354; Tarn Taran 20,961; Malout 20,774.

### Rajasthan

50,000—1,00,000 (4)

Alwar 72,707; Ganganagar 63,854; Beawar 53,931; Sikar 50,636.

20,000—50,000 (22)

Bharatpur 49,776; Bhilwara 43,499; Tonk 43,413; Churu 41,727; Pali 33,303; Sardarshahar 32,072; Sujargarh 30,761; Barmer 27,600; Dholpur 27,412; Fatehpur 27,039; Ratan-garh 26,631; Bundi 26,478; Kishangarh 25,244; Jhunjhunu 24,962; Nawalgarh 24,911; Nagaur 24,296; Nasirabad 24,148; Ladnu 23,825; Karauli 23,696; Baran 22,764; Gangapur 22,591; Sawai Madhopur 20,952; Hindaun 20,237.

### Uttar Pradesh

50,000—1,00,000 (16)

Firozabad 98,611; Farrukhabad-cum-Fatehgarh Town Group 94,591; Faizabad Town Group 88,296; Muzaffarnagar 87,622; Ghaziabad 70,438; Etawah 69,681; Amroha 68,965; Sambhal 68,940; Hathras 64,045; Jaunpur 61,851; Hardwar Town Group 59,960; Budaun

58,770; Pilibhit 57,527; Bahraich 56,038; Hapur 55,248; Sitapur 53,884.

20,000—50,000 (51)

Maunath Bhanjan 48,785; Chandausi 48,557; Roorkee Town Group 45,801; Bulandshahr 44,163; Gonda 43,496; Khurja 41,491; Basti 38,403; Ballia 38,216; Haidwani-cum-Kath Godam 38,032; Banda 37,744; Kasganj 37,659; Ghazipur 37,147; Hardoi 36,725; Bara Banki Town Group 34,334; Najibabad 34,310; Bijnor; 33,821; Mainpuri 33,610; Tanda 32,687; Azamgarh 32,391; Lakhimpur 32,285; Bairampur 31,776; Nagina 30,427; Deoband 29,980; Rae Bareilly 29,940; Unnao 29,780; Orai 29,587; Deoria 28,407; Shahabad 28,399; Fatehpur 28,323; Kairana 26,454; Samli 26,397; Sikandra-bad 26,290; Sultanpur 26,081; Lalitpur 25,220; Vrindaban 25,138; Mahoba 24,878; Etah 24,719; Kannauj 24,646; Modinagar 24,266; Kashipur 24,258; Tilhar 23,936; Konch 23,708; Shikohabad 23,458; Sahaswan 23,293; Baraut 22,818; Chandpur 22,017; Bela 21,397; Kiratpur 21,127; Mughalsarai Town Group 21,086; Mawana 20,677; Bhadohi 20,302; Mau Ranipur 20,224.

### West Bengal

50,000—1,00,000 (23)

Panihati 93,749; Serampur 91,521; Hooghly-Chinsurah 83,104; Titagarh 76,429; Nabadwip 72,861; Krishnagar 70,440; Kanchrapara 68,966; Chandernagore 67,105; Uluberia Town Group 66,299; Siliguri 65,471; Ashoknagar Town Group 64,716; Barrackpur 63,778; Kasbah Town Group 62,935; Bankura 62,833; Berhampur 62,317; Barasat-Nabapally Town Group 61,621; Midnapur 59,532; Naihati 58,457; North Barrackpur 56,683; Ranaghat Town Group 55,100; Basirhat 53,943; Halisahar 51,423; Santipur 51,190.

20,000—50,000 (46)

Jalpaiguri 48,738; Purulia 48,134; Sankrail Town Group 47,174; English-bazar 45,900; Bansberia 45,463; Baidyabati 44,312; Champ-dani 42,129; Cooch Behar 41,922; Durgapur Steel Project Area Town Group 41,696; Bangaon 41,082; Batanagar Town Group 40,656; Darjeeling 40,651; Budge Budge 39,824; Rishra 38,535; North Dum Dum 38,140; Bhadreswar 35,489; Chakdah 35,089; Kult 34,280; Raiganj 32,290; Kotrung 31,031; Vishnupur 30,958; Domjur Town Group 30,843; Raniganj 30,113; Konnagar 29,443; Garulia 29,041; Chitranjan 28,957; Alipur Duar 28,927; Khardah 28,362; Balurghat 26,999; Kalimpong 25,105; Rajpur 24,812; Jangipur 24,201; Jaganj Azimganj 23,675; Baduria 23,573; Bolpur 23,355; Suri 22,841; Kalna 22,603; Kalyani-Kataganj and Gokulpur Town Group 22,317; Contai 22,094; Uttarpara 21,132; Ghatal 21,062; New Barrackpur Colony 20,871; Katwa 20,621; Jagacha Town Group 20,094; Dum Dum 20,041; Main-guri Town Group 20,014.

### Manipur

50,000—1,00,000 (1)

Imphal 67,717.

20,000—50,000 (Nil).

### Tripura

50,000—1,00,000 (1)

Agartala 54,878.

20,000—50,000 (Nil).

### Pondicherry

50,000—1,00,000 (Nil).

20,000—50,000 (2)

Pondicherry 40,421; Karaikal 22,252.

In Andaman and Nicobar Islands, Himachal Pradesh and Nagaland towns have population of only less than 20,000.

### LITERACY (1961)

State-wise figures for literacy per 1,000 population with figures for males and females in brackets respectively are :—

States : Andhra Pradesh 212 (302; 120); Assam 274 (373; 160); Bihar 184 (298; 69); Gujarat 305 (411; 191); Jammu & Kashmir 110 (170; 43); Kerala 468 (550; 389); Madhya Pradesh 171 (270; 67); Madras 314 (445; 182); Maharashtra 298 (420; 168); Mysore

254 (361; 142); Orissa 217 (347; 86); Punjab 242 (330; 141); Rajasthan 152 (237; 53); Uttar Pradesh 176 (273; 70); West Bengal 293 (401; 170).

Union territories and other areas : Andaman 336 (424; 194); Delhi 527 (608; 425); Himachal

Pradesh 171 (272; 62); Laccadive 233 (358; 110); Manipur 304 (451; 159); Tripura 202 (296; 102); Dadra and Nagar Haveli 95 (147; 41); Goa, Daman & Diu\* N.A.; NEFA 52 (123; 15); Nagaland 179 (240; 113); Pondicherry 374 (504; 246).

\* Figures are not available.



## Talukas, Area and Population

District-wise names of Tehsils with area in square miles and population respectively in the following States are as follows :

**Andhra Pradesh:** Adilabad Dist: Adilabad: 580; 1,17,346; Asifabad: 834; 1,19,811; Boath: 554; 69,906; Chinoor: 689; 95,744; Khanapur: 513; 55,613; Lakshattipet: 734; 1,13,391; Mudhol: 413; 1,00,581; Nirmal: 566; 1,37,307; Sirpur: 856; 1,34,707; Utnoor: 726; 55,095.

**Anantapur Dist:** Anantapur: 926; 2,20,888; Dharmavaram: 736; 1,38,519; Gooty: 896; 1,59,916; Hindupur: 430; 1,82,997; Kadiri: 1,157; 2,47,299; Kalyandurg: 821; 1,41,276; Madakasira: 417; 1,35,972; Penukonda: 682; 1,41,533; Rayadurg: 682; 1,42,934; Tadapatri: 841; 1,54,222; Uravakonda: 472; 98,667.

**Chittoor Dist:** Bangarupalem: 212; 1,11,439; Chandragiri: 543; 1,99,677; Chittoor: 778; 2,29,090; Kalahasti: 615; 1,65,575; Kuppam: 304; 97,022; Madanapalle: 836; 2,27,814; Palmaner: 720; 1,11,204; Punganur: 648; 1,68,277; Puttur: 564; 2,46,520; Satyavedu: 300; 1,42,398; Vayalpad: 802; 2,14,157.

**Cuddapah Dist:** Badvel: 757; 1,24,601; Cuddapah: 510; 1,79,184; Jammalamadugu: 613; 1,41,872; Kamalapuram: 303; 83,440; Prodattur: 430; 1,77,777; Pulivendla: 569; 1,22,958; Rajampet: 1,038; 2,06,844; Rayachoti: 1,103; 2,20,582; Siddavatham: 606; 84,882.

**East Godavari Dist:** Amalapuram: 353; 3,56,005; Kakinada: 384; 4,02,705; Kothapeta: —; 1,65,755; Peddapuram: 602; 1,93,665; Pithapuram: 138; 1,67,550; Prattipadu: 602; 1,37,234; Rajahmundry: 378; 3,83,502; Ramachandrapuram: 289; 3,78,349; Rampachodavaram: 710; 48,618; Razoli: —; 1,82,288; Tuni: 183; 1,29,980; Yellavaram: 850; 63,570.

**Guntur Dist:** Bapatla: 670; 4,87,213; Guntur: 541; 5,78,913; Narasaraopet: 716; 3,21,909; Ongoli: 820; 3,88,832; Palnad: 1,041; 2,28,002; Repalle: 297; 2,35,105; Sattenapalli: 718; 2,44,660; Tenali: 324; 4,00,538; Vinukonda: 644; 1,24,825.

**Hyderabad Dist:** Chevella: 202; 1,00,620; Hyderabad East: 269; 1,05,028; Hyderabad West: 277; 13,03,344; Ibrahimpatnam: 525; 1,21,645; Medchal: 307; 92,269; Pargi: 290; 1,07,177; Tandur: 371; 98,535; Vikarabad: 506; 1,34,983.

**Karimnagar Dist:** Huzurabad: 560; 2,68,171; Jagtial: 678; 2,39,106; Karimnagar: 720; 3,35,652; Manthani: 835; 98,371; Metpalli: 863; 1,43,627; Sirsilla: 722; 2,57,490; Sultana-abad: 707; 2,78,000.

**Khammam Dist:** Bhadrachalam: 911; 90,852; Burgampahad: 755; 84,337; Khammam: 645; 2,75,102; Kothagudem: 947; 1,75,806; Madhira: 716; 2,13,529; Nugur: 593; 40,979; Yellandu: 1,167; 1,76,620.

**Krishna Dist:** Bandar: 343; 2,67,420; Divi: 465; 2,40,630; Gannavaram: 295; 2,19,694; Gudivada: 230; 2,24,977; Kalkalur: 286; 1,53,361; Nandigama: 679; 1,68,194; Nuzvid: 335; 1,27,761; Tiruvur: 430; 1,50,405; Vijaya-wada: 436; 4,58,806.

**Kurnool Dist:** Adoni: 765; 2,62,834; Alla-gadda: 613; 1,21,561; Alur: 613; 1,34,238; Atmakur: 267; 84,791; Banganapalli: 310; 55,458; Dhoni: 836; 1,56,216; Giddalur: 1,056; 1,80,972; Kolluntla: 518; 1,04,951; Markapur: 1,265; 1,57,004; Nandikotkur: 369; 90,066; Nandyal: 678; 1,50,699; Pattikonda: 747; 1,49,649.

**Mahbubnagar Dist:** Achampet: 1,126; 84,204; Alampur: 435; 96,710; Atmakur: 447; 1,02,079; Gadwal: 518; 1,18,638; Kalwakurthi: 785; 1,75,428; Kodangal: 461; 1,44,135; Kollapur: 661; 1,20,293; Mahbubnagar: 460; 1,79,712; Makhtal: 532; 1,35,828; Nagarkurnool: 561; 1,51,622; Shadnagar: 459; 1,43,789; Wanparti: 536; 1,38,251.

**Medak Dist:** Adol: 470; 1,68,086; Galwel: 386; 1,46,072; Medak: 520; 1,68,639; Narayan-khed: 384; 96,355; Narsapur: 426; 1,16,469;

## Area, Population and Literacy of States and Districts in each State

| States/Districts                       | Area in Sq. miles | Total Population |             |             | Literacy   |            |
|----------------------------------------|-------------------|------------------|-------------|-------------|------------|------------|
|                                        |                   | Total            | Males       | Females     | Males      | Females    |
| INDIA ..                               | 1,178,995         | 439,235,082      | 226,293,620 | 212,941,462 | 77,828,163 | 27,505,118 |
| Andhra Pradesh ..                      | 106,286           | 35,983,447       | 18,161,671  | 17,821,776  | 5,482,333  | 2,144,194  |
| Srikakulam ..                          | 3,901             | 2,340,877        | 1,149,447   | 1,191,431   | 283,893    | 83,831     |
| Visakhapatnam ..                       | 5,200             | 2,290,759        | 1,142,647   | 1,148,112   | 286,025    | 106,946    |
| East Godavari ..                       | 4,181             | 2,608,375        | 1,305,003   | 1,303,372   | 435,878    | 242,343    |
| West Godavari ..                       | 2,980             | 1,978,257        | 993,020     | 985,237     | 378,492    | 230,071    |
| Krishna ..                             | 3,378             | 2,076,956        | 1,058,323   | 1,018,633   | 410,675    | 236,381    |
| Guntur ..                              | 5,801             | 3,009,900        | 1,522,865   | 1,487,035   | 568,616    | 263,843    |
| Nellore ..                             | 7,974             | 2,033,679        | 1,018,457   | 1,015,222   | 306,172    | 123,573    |
| Chittoor ..                            | 5,855             | 1,914,639        | 978,453     | 936,186     | 308,968    | 91,912     |
| Cuddapah ..                            | 5,924             | 1,342,015        | 685,597     | 656,418     | 230,571    | 61,383     |
| Anantapur ..                           | 7,385             | 1,767,464        | 908,254     | 859,210     | 287,676    | 76,580     |
| Kurnool ..                             | 9,277             | 1,908,740        | 964,554     | 944,186     | 317,719    | 90,879     |
| Mahbubnagar ..                         | 7,119             | 1,590,686        | 794,041     | 796,645     | 170,774    | 43,298     |
| Hyderabad ..                           | 2,988             | 2,062,995        | 1,056,578   | 1,006,417   | 484,760    | 238,240    |
| Medak ..                               | 3,711             | 1,227,361        | 614,852     | 612,509     | 143,342    | 29,042     |
| Nizamabad ..                           | 3,105             | 1,022,013        | 509,183     | 512,830     | 116,998    | 29,403     |
| Adilabad ..                            | 6,306             | 1,009,292        | 509,550     | 499,742     | 95,571     | 22,716     |
| Karimnagar ..                          | 4,582             | 1,621,515        | 812,491     | 809,024     | 171,958    | 37,140     |
| Warangal ..                            | 4,988             | 1,545,435        | 790,739     | 754,696     | 187,535    | 50,009     |
| Khammam ..                             | 6,147             | 1,057,542        | 539,994     | 517,548     | 118,995    | 42,079     |
| Nalgonda ..                            | 5,483             | 1,574,946        | 807,623     | 767,323     | 177,715    | 44,525     |
| Assam ..                               | 47,091            | 11,872,772       | 6,328,129   | 5,544,643   | 2,361,724  | 886,331    |
| Goalpara ..                            | 4,007             | 1,543,892        | 812,723     | 731,169     | 246,495    | 78,677     |
| Kamrup ..                              | 3,804             | 2,062,572        | 1,109,608   | 952,964     | 435,171    | 129,136    |
| Darrang ..                             | 3,369             | 1,289,670        | 694,927     | 594,743     | 220,195    | 75,268     |
| Lakhimpur ..                           | 4,926             | 1,563,842        | 853,879     | 709,963     | 331,860    | 116,322    |
| Nowgong ..                             | 2,167             | 1,210,761        | 645,690     | 565,071     | 235,128    | 94,897     |
| Sibsagar ..                            | 3,453             | 1,508,390        | 808,935     | 699,455     | 364,315    | 153,307    |
| Cachar ..                              | 2,688             | 1,378,476        | 722,487     | 655,989     | 290,629    | 103,679    |
| Garo Hills ..                          | 3,119             | 307,228          | 156,740     | 150,488     | 40,554     | 20,780     |
| United Khasi and Jaintia Hills ..      | 5,546             | 462,152          | 240,548     | 221,604     | 87,835     | 57,928     |
| United Mikir and North Cachar Hills .. | 5,878             | 279,726          | 150,127     | 129,599     | 38,799     | 9,983      |
| Mizo Hills ..                          | 8,134             | 266,063          | 132,465     | 133,598     | 70,743     | 46,354     |
| Bihar ..                               | 67,196            | 46,455,610       | 23,301,449  | 23,154,161  | 6,950,967  | 1,596,878  |
| Patna ..                               | 2,164             | 2,949,746        | 1,522,687   | 1,427,059   | 662,562    | 185,020    |
| Gaya ..                                | 4,766             | 3,647,892        | 1,814,674   | 1,833,218   | 571,583    | 127,646    |
| Shahabad ..                            | 4,408             | 3,218,017        | 1,616,732   | 1,601,285   | 583,017    | 117,748    |
| Saran ..                               | 2,669             | 3,584,918        | 1,677,779   | 1,907,139   | 544,737    | 109,342    |
| Champaran ..                           | 3,553             | 3,006,211        | 1,519,803   | 1,486,408   | 327,653    | 68,077     |
| Muzaffarpur ..                         | 3,018             | 4,118,398        | 2,011,539   | 2,106,859   | 569,657    | 137,399    |
| Darbhanga ..                           | 3,945             | 4,413,027        | 2,142,880   | 2,270,147   | 607,878    | 131,583    |
| Monghyr ..                             | 3,975             | 3,387,082        | 1,702,709   | 1,684,373   | 517,993    | 125,036    |
| Bhagalpur ..                           | 2,183             | 1,711,136        | 877,029     | 834,107     | 272,677    | 74,843     |
| Saharsa ..                             | 2,093             | 1,723,566        | 886,440     | 837,126     | 206,935    | 34,475     |
| Purnea ..                              | 4,259             | 3,089,128        | 1,607,276   | 1,481,852   | 410,158    | 87,987     |
| Santal Parganas ..                     | 5,470             | 2,675,203        | 1,351,149   | 1,324,054   | 325,175    | 66,032     |
| Palamau ..                             | 4,925             | 1,187,789        | 598,600     | 589,189     | 136,976    | 24,251     |
| Hazaribagh ..                          | 7,016             | 2,396,411        | 1,203,503   | 1,192,908   | 293,149    | 53,658     |
| Ranchi ..                              | 7,047             | 2,138,565        | 1,076,251   | 1,062,314   | 313,973    | 95,271     |
| Dhanbad ..                             | 1,114             | 1,158,610        | 646,597     | 512,013     | 240,563    | 54,713     |
| Singhbhum ..                           | 5,191             | 2,049,911        | 1,045,801   | 1,004,110   | 366,281    | 103,797    |
| Gujarat ..                             | 72,245            | 20,633,350       | 10,633,902  | 9,999,448   | 4,373,373  | 1,909,883  |
| Jamnagar ..                            | 3,944             | 828,419          | 424,300     | 404,119     | 154,352    | 65,617     |
| Rajkot ..                              | 4,588             | 1,208,519        | 615,661     | 592,858     | 261,966    | 121,613    |
| Surendranagar ..                       | 4,006             | 6,663,206        | 341,301     | 319,005     | 115,448    | 47,178     |
| Bhavnagar ..                           | 4,652             | 1,119,435        | 577,729     | 541,706     | 221,457    | 85,585     |
| Amreli ..                              | 1,545             | 667,823          | 340,623     | 327,200     | 132,136    | 60,940     |
| Junagadh ..                            | 4,186             | 1,245,643        | 638,296     | 607,347     | 226,187    | 77,939     |
| Kutch ..                               | 17,060            | 696,440          | 341,224     | 355,216     | 114,056    | 60,032     |
| Banaskantha ..                         | 4,037             | 996,144          | 511,951     | 484,193     | 104,695    | 22,092     |
| Sabarkantha ..                         | 2,843             | 918,587          | 470,224     | 448,363     | 170,226    | 50,497     |
| Mehsana ..                             | 4,324             | 1,689,963        | 858,056     | 831,907     | 391,088    | 182,777    |
| Ahmedabad ..                           | 3,461             | 2,210,199        | 1,188,269   | 1,021,930   | 626,280    | 29,365     |
| Kaira ..                               | 2,621             | 1,977,540        | 1,039,720   | 937,820     | 503,735    | 213,268    |
| Panch Mahals ..                        | 3,486             | 1,468,946        | 758,561     | 710,385     | 220,022    | 62,511     |
| Baroda ..                              | 2,961             | 1,527,326        | 801,026     | 726,300     | 367,596    | 170,184    |
| Broach ..                              | 2,986             | 891,969          | 458,125     | 433,844     | 212,535    | 93,021     |
| Surat* ..                              | 4,856             | 2,451,624        | 1,231,418   | 1,220,206   | 546,259    | 295,972    |
| Dangs ..                               | 689               | 71,567           | 37,418      | 34,149      | 5,335      | 1,292      |

\* Now split into two districts—Surat and Bharuch.



Sangareddy: 474; 1,55,230; Siddipet: 619; 2,22,974; Zahirabad: 520; 1,52,640.

**Nalgonda Dist:** Bhongir: 614; 2,13,590; Devarkonda: 1,041; 2,00,921; Huzurnagar: 532; 1,98,846; Miryalguda: 751; 2,22,413; Nalgonda: 954; 2,94,846; Ramannapet: 684; 1,94,906; Suryapet: 803; 2,50,085.

**Nellore Dist:** Atmakur: 639; 1,45,694; Darsi: 591; 1,25,935; Gudur: 463; 1,41,160; Kandukur: 801; 2,32,909; Kanigiri: 1,000; 1,70,869; Kavali: 548; 1,56,841; Kovvur: 385; 2,13,984; Nellore: 504; 3,03,108; Podili: 564; 1,04,441; Rapur: 594; 1,05,163; Sullurpet: 573; 1,13,109; Udayagiri: 871; 1,25,468; Venkata-giri: 427; 95,284.

**Nizamabad Dist:** Armoor: 748; 2,21,387; Banswada: 560; 1,03,849; Bodhan: 291; 1,56,896; Kamareddy: 483; 1,56,187; Nizama-bad: 506; 2,26,788; Yellareddy: 438; 82,677.

**Srikakulam Dist:** Bobbili: 391; 2,86,305; Cheepurapalli: 462; 3,18,946; Ichapuram: 87; 87,304; Narasannapet: 200; 1,66,136; Pala-konda: 494; 3,24,723; Parvatipuram: 590; 2,18,680; Pathapatnam: 463; 2,26,667; Salur: 491; 1,64,072; Sompeta: 212; 1,41,557; Srikakulam: 227; 2,17,995; Tekkali: 272; 1,89,906.

**Vishakhapatnam Dist:** Anakapalli: 304; 2,44,498; Bheemunipatnam: 337; 2,43,691; Chintapalli: 961; 44,039; Chodavaram: 739; 2,98,540; Narsipatnam: 516; 2,41,348; Paderu: 1,32,100; Srungavarapukota: 708; 2,07,445; Visakhapatnam: 196; 3,05,972; Vizianagaram: 359; 3,11,460; Yelamanchili: 347; 2,59,883.

**Warangal Dist:** Jangaon: 872; 3,19,153; Mahbubabad: 799; 2,74,217; Mulug: 1,347; 93,405; Narsampet: 745; 1,47,178; Parkal: 556; 1,72,231; Warrangal: 786; 5,39,566.

**West Godavari Dist:** Bhimavaram: 292; 2,76,758; Chintalapudi: 418; 1,21,840; Eluru: 510; 3,12,666; Kovvur: 391; 2,47,175; Narasa-pur: 279; 3,37,006; Polavaram: 551; 1,18,479; Tadepalligudem: 360; 2,49,998; Tanuku: 214; 3,14,512.

**Assam†:** Cachar Dist: Hailakandi: 512; Karimganj: 709; Silchar: 1,459.

**Darrang Dist:** Mangaldai: 1,272; Tezpur: 1,534.

**Goalpara Dist:** Dhubri: 1,054; Goalpara: 1,098; Kokrajhar: 1,827.

**Kamrup Dist:** Barpeta: 1,254; Gauhati: 2,590.

**Lakhimpur Dist:** Dibrugarh: 2,808; North Lakhimpur: 1,345.

**Mizo Dist:** Aijal: 4,861; Lungleh: 3,282.

**Sibsagar Dist:** Golaghat: 1,363; Jorhat: 1,094; Sibsaagar: 1,019.

**United Khasi—Jaintia Hills Dist:** Jowai: 1,513; Shillong: 4,041.

**United Mikir and North Cachar Hills Dist:** Mikir Hills: 3,995; North Cachar: 1,888.

**Bihar@:** Bhagalpur Dist: Banka: 1,194; 6,88,776; Sadar: 929; 10,26,352.

**Champaran Dist:** Bettiah: 1,997; 13,28,680; Sadar: 1,528; 16,81,161.

**Darbhanga Dist:** Madhubani: 1,504; 16,02,906; Sadar: 880; 12,50,101; Samastipur: 1,126; 15,69,356.

**Dhanbad Dist:** Baghmara: —; 4,16,759; Sadar: —; 7,41,604.

**Gaya Dist:** Aurangabad: 1,270; 8,28,949; Jahanabad: 607; 6,83,172; Nawada: 951; 7,41,644; Sadar: 1,911; 13,93,503.

**Hazaribagh Dist:** Chatra: 1,544; 3,21,986; Giridih: 2,046; 8,54,454; Sadar: 3,404; 12,17,877.

**Monghyr Dist:** Begusarai: 715; 9,54,727; Jamal: 1,303; 6,37,632; Khagaria: 757; 7,05,312; Sadar: 1,168; 10,87,226.

**Muzaffarpur Dist:** Hajipur: 786; 11,31,799; Sadar: 1,222; 14,97,335; Sitamarhi: 1,007; 13,87,186.

# Area, Population and Literacy of States and Districts in each State—Contd.

| States/Districts            | Area in sq. miles | Total Population |            |            | Literacy  |            |
|-----------------------------|-------------------|------------------|------------|------------|-----------|------------|
|                             |                   | Total            | Males      | Females    | Males     | Females    |
| <b>Jammu &amp; Kashmir*</b> | 86,023            | 3,560,976        | 1,896,633  | 1,664,343  | 3,218,27  | 70,934     |
| Anantnag .. ..              | —                 | 654,368          | 351,932    | 302,436    | 48,166    | 4,422      |
| Srinagar .. ..              | —                 | 640,411          | 346,434    | 293,977    | 71,852    | 21,540     |
| Baramulla .. ..             | —                 | 604,659          | 324,672    | 279,987    | 43,541    | 4,457      |
| Ladakh .. ..                | —                 | 88,651           | 44,972     | 43,679     | 6,911     | 458        |
| Doda .. ..                  | —                 | 268,403          | 141,133    | 127,270    | 20,568    | 2,423      |
| Udhampur .. ..              | —                 | 254,061          | 132,936    | 121,125    | 18,400    | 4,270      |
| Jammu .. ..                 | —                 | 516,932          | 274,107    | 242,825    | 70,457    | 25,674     |
| Kathua .. ..                | —                 | 207,430          | 108,899    | 98,531     | 19,432    | 4,458      |
| Poonch-Rajouri ..           | —                 | 326,061          | 171,548    | 154,513    | 22,500    | 3,232      |
| <b>Kerala</b>               | 15,002            | 16,903,715       | 8,361,927  | 8,541,788  | 4,596,205 | 3,322,955  |
| Cannanore .. ..             | 2,744             | 1,780,294        | 874,667    | 905,627    | 454,489   | 280,540    |
| Kozhikode .. ..             | 2,042             | 2,617,189        | 1,300,974  | 1,316,215  | 665,386   | 397,909    |
| Palghat .. ..               | 1,982             | 1,776,566        | 851,746    | 924,820    | 358,850   | 246,128    |
| Trichur .. ..               | 1,149             | 1,639,862        | 784,736    | 855,126    | 433,028   | 361,754    |
| Ernakulam .. ..             | 1,270             | 1,859,913        | 931,248    | 928,665    | 538,075   | 402,151    |
| Kottayam .. ..              | 2,326             | 1,732,880        | 882,580    | 850,300    | 550,809   | 429,404    |
| Alleppey .. ..              | 698               | 1,811,252        | 893,435    | 917,817    | 568,953   | 459,977    |
| Quilon .. ..                | 1,944             | 1,941,228        | 972,657    | 968,571    | 562,044   | 418,416    |
| Trivandrum .. ..            | 847               | 1,744,531        | 869,884    | 874,647    | 463,631   | 326,607    |
| <b>Madhya Pradesh</b>       | 171,217           | 32,372,408       | 16,578,204 | 15,794,204 | 4,481,454 | 1,063,4008 |
| Morena .. ..                | 4,489             | 783,348          | 426,061    | 357,287    | 101,069   | 15,457     |
| Bhind .. ..                 | 1,723             | 641,169          | 346,797    | 294,372    | 96,505    | 15,112     |
| Gwalior .. ..               | 2,002             | 657,876          | 353,813    | 304,063    | 137,989   | 45,347     |
| Datia .. ..                 | 782               | 200,467          | 105,640    | 94,827     | 25,786    | 4,050      |
| Shivpur .. ..               | 3,986             | 557,954          | 295,543    | 262,411    | 56,245    | 8,277      |
| Guna .. ..                  | 4,271             | 595,825          | 313,814    | 282,011    | 69,130    | 13,115     |
| Tikamgarh .. ..             | 1,944             | 455,662          | 239,035    | 216,627    | 38,037    | 6,030      |
| Chhatarpur .. ..            | 3,381             | 587,373          | 310,653    | 276,720    | 56,271    | 9,661      |
| Panna .. ..                 | 2,716             | 331,257          | 170,942    | 160,315    | 30,966    | 5,068      |
| Satna .. ..                 | 2,823             | 694,370          | 353,430    | 340,940    | 92,945    | 15,292     |
| Rewa .. ..                  | 2,509             | 772,602          | 388,887    | 383,715    | 101,130   | 13,868     |
| Shahdoi .. ..               | 5,412             | 829,649          | 424,042    | 405,607    | 41,802    | 11,560     |
| Sidhi .. ..                 | 4,060             | 580,129          | 293,507    | 286,622    | 139,307   | 3,290      |
| Mandsaur .. ..              | 3,966             | 752,085          | 390,731    | 361,354    | 79,351    | 29,489     |
| Ratlam .. ..                | 1,727             | 483,521          | 249,047    | 234,474    | 119,518   | 24,080     |
| Ujjain .. ..                | 2,360             | 661,720          | 344,515    | 317,205    | 23,806    | 35,282     |
| Jhabua .. ..                | 2,615             | 514,384          | 262,695    | 251,689    | 70,232    | 7,310      |
| Dhar .. ..                  | 3,150             | 643,774          | 328,177    | 315,597    | 2,02455   | 16,375     |
| Indore .. ..                | 1,479             | 753,594          | 400,470    | 353,124    | 65,100    | 85,660     |
| Dewas .. ..                 | 2,706             | 446,901          | 230,761    | 216,140    | 123,837   | 12,304     |
| West Nimar .. ..            | 5,206             | 990,464          | 505,919    | 484,545    | 129,330   | 27,965     |
| East Nimar .. ..            | 4,132             | 685,150          | 353,378    | 331,772    | 63,191    | 38,709     |
| Shajapur .. ..              | 2,388             | 526,135          | 270,777    | 255,358    | 44,117    | 11,134     |
| Rajgarh .. ..               | 2,383             | 516,871          | 269,666    | 247,205    | 54,877    | 7,499      |
| Vidisha .. ..               | 2,839             | 489,213          | 258,840    | 230,373    | 122,545   | 11,225     |
| Sehore .. ..                | 3,600             | 754,684          | 404,785    | 349,899    | 46,133    | 39,538     |
| Raisen .. ..                | 3,272             | 411,426          | 215,709    | 195,717    | 111,395   | 8,834      |
| Hoshangabad ..              | 3,869             | 618,293          | 319,760    | 298,533    | 75,778    | 30,199     |
| Betul .. ..                 | 3,884             | 566,412          | 281,055    | 279,357    | 126,628   | 16,950     |
| Sagar .. ..                 | 3,961             | 796,547          | 414,834    | 381,713    | 64,545    | 36,789     |
| Damoh .. ..                 | 2,827             | 433,343          | 223,067    | 210,276    | 271,714   | 16,329     |
| Jabalpur .. ..              | 3,918             | 1,273,825        | 662,045    | 611,780    | ..        | 91,942     |
| Narsimhapur ..              | 1,979             | 412,406          | 211,238    | 201,168    | 68,749    | 20,115     |
| Mandla .. ..                | 5,127             | 684,503          | 341,294    | 343,209    | 79,923    | 17,190     |
| Chhindwara ..               | 4,565             | 785,535          | 396,672    | 388,863    | 102,909   | 25,110     |
| Seoni .. ..                 | 3,376             | 523,741          | 261,060    | 262,681    | 71,290    | 18,023     |
| Balaghat .. ..              | 3,573             | 806,702          | 401,447    | 405,255    | 137,504   | 28,985     |
| Surguja .. ..               | 8,626             | 1,036,738        | 530,166    | 506,572    | 81,590    | 13,276     |
| Bilaspur .. ..              | 7,615             | 2,021,793        | 998,738    | 1,023,055  | 304,740   | 63,788     |
| Raigarh .. ..               | 5,064             | 1,041,226        | 517,958    | 523,268    | 128,831   | 25,827     |
| Durg .. ..                  | 7,576             | 1,885,236        | 946,154    | 939,082    | 277,618   | 58,861     |
| Raipur .. ..                | 8,214             | 2,002,004        | 982,679    | 1,019,325  | 304,433   | 65,821     |
| Bastar .. ..                | 15,124            | 1,167,501        | 582,403    | 585,098    | 68,066    | 12,582     |
| <b>Madras</b>               | 50,331            | 33,680,953       | 16,910,978 | 16,775,975 | 7,532,323 | 3,048,293  |
| Madras Corporation          | 49                | 1,729,141        | 909,701    | 819,440    | 633,203   | 395,123    |
| Chingleput .. ..            | 3,031             | 2,196,412        | 1,201,951  | 1,075,821  | 450,533   | 162,001    |
| North Arcot .. ..           | 4,942             | 3,146,326        | 1,581,826  | 1,564,500  | 587,133   | 190,696    |
| South Arcot .. ..           | 4,204             | 3,047,973        | 1,535,928  | 1,512,045  | 622,886   | 191,293    |
| Salem .. ..                 | 7,028             | 3,804,108        | 1,923,885  | 1,880,223  | 568,613   | 187,906    |
| Coimbatore .. ..            | 6,018             | 3,557,471        | 1,809,591  | 1,747,880  | 783,113   | 291,116    |
| Nilgiris .. ..              | 984               | 409,308          | 213,833    | 195,475    | 103,211   | 42,843     |
| Madurai .. ..               | 4,910             | 3,211,227        | 1,607,229  | 1,603,998  | 773,408   | 298,467    |
| Tiruchirappalli ..          | 5,414             | 3,190,078        | 1,588,240  | 1,601,049  | 709,822   | 245,105    |

† Names of district-wise sub-divisions and their area in square miles are given.  
population of sub-divisions are given.

\* The area of the districts is not available.

@ Tehsil population is not available, instead the area and



## Area, Population and Literacy of States and Districts in each State—Contd.

**Palamau Dist:** Garhwal: —; 3,59,063; Jatehar: 1,671; 2,44,753; Sadar: —; 5,84,098.

**Patna Dist:** Barh: 572; 6,06,550; Bihar: 782; 7,83,039; Dinapur: 437; 6,13,436; Patna City: 10; 1,89,080; Patna Sadar: 295; 5,55,509.

**Purnea Dist:** Araria: 991; 7,80,481; Kishanganj: 1,332; 4,60,589; Sadar: 2,562; 9,39,832.

**Ranchi Dist:** Gumla: 2,056; 4,82,947; Khunti: 1,545; 4,39,405; Sadar: 2,069; 5,96,391; Simdega: 1,247; 3,14,437.

**Saharsa Dist:** —; 6,41,925; Sadar: —; 4,17,973; Supaul: 987; 6,62,651.

**Santhal Parganas Dist:** Deoghar: 951; 4,82,110; Dumka: 1,474; 6,11,683; Godda: 854; 4,96,943; Jamtara: 696; 3,24,506; Pakur: 699; 3,44,587; Rajmahal: 846; 4,14,425.

**Saran Dist:** Gopalganj: 786; 9,26,005; Sadar: 1,043; 14,47,934; Siwan: 849; 12,11,592.

**Shahabad Dist:** Bhabua: 1,237; 5,32,100; Buxar: 683; 6,47,296; Sadar: 920; 10,24,131; Sasaram: 1,483; 10,18,949.

**Singhbhum Dist:** Dhalbhum: 1,167; 8,76,511; Sadar: 2,718; 7,65,090; Seraikella: 590; 4,10,896.

**Gujarat: Ahmedabad Dist:** Ahmedabad City: 108; 12,60,819; Daskroi: 327; 1,76,787; Dehgam: 334; 1,71,627; Dholka: 610; 1,75,310; Sanand: 294; 1,00,749; Viramgam: 651; 1,91,515.

**Amreli Dist:** Amreli: 297; 1,09,939; Babra: 163; 56,873; Dhari: 403; 81,528; Jafrabad: 127; 35,749; Khambha: 159; 28,054; Kodinar: 203; 76,078; Kunkavav: 255; 92,177; Lathi: 231; 68,630; Lillya: 153; 41,801; Rajula: 314; 77,558.

**Banaskantha Dist:** Danta: 342; 52,176; Deesa: 621; 1,40,861; Deodar: 323; 87,340; Dhanera: 433; 89,250; Kankrej: 304; 93,791; Palanpur: 531; 1,76,947; Radhanpur: 269; 51,965; Santhalpur: 393; 44,315; Tharad: 421; 83,723; Wadgam: 215; 90,173; Wav: 493; 85,439.

**Bhavnagar Dist:** Bhavnagar: 307; 2,31,938; Botad: 259; 77,578; Gadhada: 315; 71,883; Gogha: 225; 50,696; Gadiadhar: 65; 56,381; Kundla: 402; 1,29,671; Mahuva: 328; 1,48,405; Palitana: 183; 89,420; Sihor: 214; 74,049; Talaja: 324; 1,03,599; Umrala: 160; 44,207; Vallabhipur: 222; 40,919.

**Baroda Dist:** Baroda: 263; 4,61,094; Chhota Udepur: 434; 1,45,016; Dabhol: 249; 1,19,778; Jabugam: 319; 1,10,893; Karjan: 232; 87,527; Naswadi: 212; 56,909; Padra: 209; 1,39,169; Sankheda: 254; 1,15,391; Savli: 315; 1,31,396; Sinor: 114; 47,050; Waghodia: 186; 75,662.

**Broach Dist:** Amod: 180; 56,680; Ankleshwar: 160; 77,843; Broach: 253; 1,80,574; Dediapada: 392; 45,084; Hanot: 154; 38,695; Janbuser: 386; 1,14,490; Jhagadia: 314; 97,932; Nandod: 437; 1,21,399; Sagbara: 128; 41,522; Vagra: 348; 53,111; Valla: 185; 64,451.

**Jamnagar Dist:** Bhanvad: 259; 58,574; Dhrol: 157; 35,315; Jam-Jodhpur: 333; 77,580; Jamnagar: 446; 2,54,763; Jodia: 328; 61,496; Kalawad: 441; 72,961; Kalyanpur: 546; 69,050; Khambhalli: 57; 81,925; Lalpur: 444; 53,076; Okhamandal: 273; 59,985.

**Junagadh Dist:** Bhesan: 162; 36,717; Juna-gadh: 182; 1,45,150; Keshod: 226; 73,236; Kutiyana: 239; 52,843; Malla: 216; 65,748; Manavadar: 201; 89,468; Mangrol: 227; 78,820; Mendarda: 65; 33,133; Patan-Veraval: 261; 1,43,854; Porbandar: 395; 1,70,876; Ranavav: 206; 44,903; Talala: 185; 49,594; Una: 354; 1,28,739; Venthell: 170; 62,668; Visavadar: 269; 65,337.

**Kaira Dist:** Anand: 260; 3,11,295; Balasnor: 201; 1,03,230; Borsad: 232; 2,54,672; Cambay: 399; 1,72,165; Kapadwanj: 380; 2,18,663; Matar: 223; 1,01,312; Mehmedabad: 193; 1,37,863; Nadlad: 241; 2,98,603; Petlad: 183; 2,22,209; Thasra: 252; 1,53,685.

**Kutch Dist:** Abdasa: 940; 65,108; Anjar: 482; 1,06,158; Bhachan: 641; 65,199; Bhuj: 240; 1,19,828; Khadir: 118; 3,124; Khavda:

| States/Districts    | Area in<br>sq. miles | Total Population |            |            | Literacy  |           |
|---------------------|----------------------|------------------|------------|------------|-----------|-----------|
|                     |                      | Total            | Males      | Females    | Males     | Females   |
| Madras—Contd.       |                      |                  |            |            |           |           |
| Tanjavur ..         | 3,740                | 3,245,927        | 1,610,241  | 1,635,686  | 783,783   | 305,072   |
| Ramanathapuram ..   | 4,849                | 2,421,788        | 1,175,769  | 1,246,019  | 568,347   | 209,212   |
| Tirunneveli ..      | 4,419                | 2,730,279        | 1,330,220  | 1,400,059  | 664,923   | 328,396   |
| Kanya Kumari ..     | 643                  | 996,915          | 503,735    | 180,493    | 283,294   | 200,883   |
| Maharashtra ..      | 118,717              | 39,533,718       | 20,428,882 | 19,214,836 | 8,588,657 | 3,204,413 |
| Greater Bombay ..   | 186                  | 4,152,056        | 2,496,176  | 1,665,880  | 1,624,958 | 808,246   |
| Thana ..            | 3,658                | 1,652,678        | 861,117    | 791,561    | 353,853   | 150,852   |
| Kolaba ..           | 2,716                | 1,058,855        | 514,534    | 544,321    | 187,138   | 72,943    |
| Ratnagiri ..        | 5,025                | 1,827,203        | 816,804    | 1,010,399  | 344,332   | 176,206   |
| Nasik ..            | 6,020                | 1,855,246        | 953,531    | 901,715    | 375,266   | 123,640   |
| Dhulia ..           | 5,022                | 1,351,236        | 686,942    | 664,294    | 257,120   | 82,673    |
| Jalgaon ..          | 4,573                | 1,765,047        | 902,001    | 863,046    | 444,864   | 155,480   |
| Ahmednagar ..       | 6,586                | 1,775,969        | 905,313    | 870,656    | 356,299   | 113,430   |
| Poona ..            | 6,033                | 2,666,880        | 1,268,710  | 1,198,170  | 585,911   | 260,489   |
| Satara ..           | 4,041                | 1,430,105        | 698,555    | 731,550    | 331,164   | 154,765   |
| Sangli ..           | 3,299                | 1,230,716        | 628,754    | 601,962    | 263,344   | 82,135    |
| Sholapur ..         | 5,809                | 1,860,119        | 960,655    | 899,464    | 354,396   | 113,363   |
| Kolhapur ..         | 3,141                | 1,596,493        | 811,693    | 784,800    | 325,408   | 94,488    |
| Aurangabad ..       | 6,314                | 1,532,341        | 781,635    | 750,706    | 223,930   | 50,045    |
| Parbhani ..         | 4,584                | 1,206,236        | 611,787    | 494,449    | 154,618   | 30,830    |
| Bhir ..             | 4,268                | 1,001,466        | 508,827    | 492,693    | 125,170   | 25,969    |
| Nanded ..           | 4,800                | 1,079,647        | 547,974    | 531,700    | 136,052   | 27,488    |
| Osmanabad ..        | 5,504                | 1,477,656        | 758,235    | 719,421    | 208,685   | 43,329    |
| Buldhana ..         | 3,751                | 1,059,698        | 541,026    | 518,672    | 222,652   | 63,398    |
| Akola ..            | 4,995                | 1,189,354        | 613,832    | 575,522    | 275,046   | 96,037    |
| Amravati ..         | 4,723                | 1,232,780        | 637,861    | 594,919    | 292,861   | 122,377   |
| Yeotmal ..          | 5,246                | 1,098,470        | 557,010    | 541,460    | 196,839   | 61,043    |
| Wardha ..           | 2,429                | 634,277          | 322,894    | 311,383    | 140,253   | 52,861    |
| Nagpur ..           | 3,842                | 1,512,807        | 784,161    | 728,646    | 376,843   | 154,900   |
| Bhandara ..         | 3,582                | 1,268,286        | 635,174    | 633,112    | 253,422   | 51,864    |
| Chanda ..           | 9,200                | 1,238,070        | 623,681    | 614,389    | 178,233   | 35,602    |
| Mysore ..           | 74,210               | 23,586,772       | 12,040,923 | 11,545,849 | 4,352,428 | 1,638,157 |
| Bangalore ..        | 3,081                | 2,504,462        | 1,306,230  | 1,198,232  | 581,931   | 278,670   |
| Tumkur ..           | 4,096                | 1,367,402        | 699,191    | 668,221    | 237,598   | 71,994    |
| Chitradurga ..      | 4,185                | 1,094,284        | 563,988    | 530,206    | 207,791   | 66,787    |
| Kolar ..            | 3,188                | 1,290,144        | 655,645    | 634,499    | 202,808   | 71,900    |
| Bellary ..          | 3,825                | 915,261          | 466,923    | 448,338    | 150,165   | 41,223    |
| Mysore ..           | 4,617                | 1,671,399        | 856,921    | 814,478    | 252,792   | 103,208   |
| South Kanara ..     | 3,249                | 1,563,837        | 751,229    | 812,608    | 310,890   | 104,957   |
| Coorg ..            | 1,587                | 322,829          | 173,338    | 149,491    | 75,378    | 41,696    |
| Hassan ..           | 2,638                | 895,847          | 455,055    | 440,792    | 161,685   | 56,350    |
| Shimoga ..          | 4,066                | 1,017,368        | 536,103    | 481,265    | 205,489   | 79,886    |
| Chikmagalur ..      | 2,787                | 597,305          | 313,795    | 283,510    | 118,081   | 46,356    |
| Mandya ..           | 1,924                | 899,210          | 457,143    | 442,067    | 120,912   | 34,739    |
| Belgaum ..          | 5,163                | 1,983,811        | 1,016,564  | 967,247    | 385,260   | 131,077   |
| Bijapur ..          | 6,594                | 1,660,178        | 840,180    | 819,998    | 319,622   | 86,270    |
| North Kanara ..     | 3,965                | 689,549          | 354,344    | 335,205    | 153,744   | 76,839    |
| Dharwar ..          | 5,303                | 1,960,362        | 999,904    | 950,558    | 474,197   | 176,306   |
| Gulbarga ..         | 6,332                | 1,399,457        | 703,447    | 696,010    | 169,902   | 36,189    |
| Bidar ..            | 2,119                | 663,172          | 330,480    | 326,692    | 80,826    | 15,252    |
| Raichur ..          | 5,491                | 1,100,895        | 554,543    | 546,352    | 143,957   | 28,458    |
| Orissa ..           | 60,164               | 17,548,846       | 8,770,586  | 8,778,260  | 3,042,004 | 759,241   |
| Kalahandi ..        | 5,099                | 1,009,054        | 499,646    | 510,008    | 97,784    | 13,838    |
| Koraput ..          | 9,864                | 1,498,271        | 753,398    | 744,873    | 102,325   | 22,115    |
| Sambalpur ..        | 6,763                | 1,508,686        | 756,163    | 752,523    | 281,153   | 64,819    |
| Bolangir ..         | 3,439                | 1,068,686        | 534,219    | 534,467    | 133,255   | 22,651    |
| Baundi-Khondmals .. | 4,284                | 514,427          | 255,685    | 258,742    | 79,090    | 11,025    |
| Ganjam ..           | 4,824                | 1,872,530        | 899,329    | 973,201    | 319,165   | 80,048    |
| Sundargarh ..       | 3,751                | 758,617          | 396,214    | 362,403    | 120,487   | 29,059    |
| Dhenkanal ..        | 4,177                | 1,028,935        | 516,843    | 512,092    | 200,909   | 40,423    |
| Puri ..             | 3,999                | 1,865,439        | 930,663    | 934,776    | 426,113   | 124,071   |
| Keonjhar ..         | 3,206                | 743,315          | 375,090    | 368,225    | 109,699   | 21,559    |
| Cuttack ..          | 4,236                | 3,060,320        | 1,531,244  | 1,529,080  | 699,090   | 213,461   |
| Mayurbhanj ..       | 4,022                | 1,204,043        | 604,756    | 599,287    | 143,545   | 27,134    |
| Balasore ..         | 2,500                | 1,415,923        | 717,340    | 698,583    | 328,489   | 89,038    |
| Punjab ..           | 47,205               | 20,306,812       | 10,891,576 | 9,415,236  | 3,591,177 | 1,326,219 |
| Hissar ..           | 5,380                | 1,540,508        | 827,658    | 712,850    | 215,103   | 52,878    |
| Rohtak ..           | 2,330                | 1,420,391        | 751,225    | 669,166    | 243,192   | 59,751    |
| Gurgaon ..          | 2,367                | 1,240,706        | 659,432    | 581,274    | 205,510   | 48,685    |
| Karnal ..           | 3,062                | 490,430          | 804,769    | 685,661    | 206,871   | 66,127    |
| Ambala ..           | 2,134                | 1,373,477        | 758,127    | 615,360    | 291,984   | 120,129   |
| Simla ..            | 254                  | 112,653          | 65,078     | 47,575     | 35,933    | 13,205    |
| Kangra ..           | 4,904                | 1,062,518        | 534,816    | 527,702    | 189,766   | 59,644    |
| Lahaul & Spiti ..   | 4,714                | 20,453           | 11,519     | 8,934      | 3,247     | 332       |



224; 7,706; Lakhpat: 1,485; 18,393; Mandvi: 560; 1,01,533; Mundra: 396; 54,396; Nakhtrana: 708; 69,867; Rapar: 1,027; 84,392.

**Mehsana Dist.**: Chanasma: 341; 1,39,737; Harij: 158; 44,028; Kadi: 320; 1,46,934; Kalol: 262; 1,83,551; Kheralu: 369; 1,62,111; Mehnsana: 291; 1,86,682; Patan: 405; 2,05,835; Sami: 522; 71,102; Sidhpur: 257; 1,84,759; Vijapur: 362; 2,35,030; Visnagar: 175; 1,25,661.

**Panch Mahals Dist.**: Baria: 420; 1,74,712; Dohad: 335; 1,88,714; Godhra: 381; 2,15,531; Halol: 246; 1,00,216; Jambughoda: 37; 1,66,222; Jhalod: 178; 1,20,978; Kalol: 382; 99,677; Limkheda: 409; 1,26,634; Lunawada: 360; 1,45,805; Santrampur: 525; 1,88,606; Shahera: 226; 89,990.

**Rajkot Dist.**: Dhoraji: 200; 91,785; Gondal: 441; 1,40,288; Kondarna: 222; 40,873; Jasdan: 465; 99,905; Jetpur: 235; 92,016; Kotda-Sangani: 151; 30,785; Lodhika: 109; 22,095; Maliya: 267; 47,904; Morvi: 609; 1,62,053; Padadhari: 231; 36,470; Rajkot: 344; 2,61,465; Upleta: 279; 1,04,236; Wankaner: 432; 78,859.

**Sabarkantha Dist.**: Bayad: 264; 1,07,632; Bhiloda: 187; 90,784; Himatnagar: 298; 1,09,345; Idar: 422; 1,54,024; Khedbrahma: 143; 74,405; Malpur: 132; 38,215; Meghraj: 138; 50,275; Modasa: 410; 1,18,565; Prantij: 301; 1,44,541; Vijayanagar: 153; 30,023.

**Surat Dist.**: Bansda: 234; 92,530; Bardoli: 157; 89,958; Bulsar: 202; 1,69,668; Chikhli: 238; 1,39,987; Chorasi: 221; 4,52,283; Dharampur: 575; 1,45,430; Gandevi: 125; 1,29,819; Kamrej: 147; 62,700; Mahuva: 138; 65,539; Mandvi: 277; 93,453; Mangrol: 294; 95,302; Navsari: 283; 2,25,640; Nizar: —; 58,222; Olpad: 265; 79,425; Palsana: 58; 41,803; Pardi: 162; 1,30,866; Songadh: 299; 76,863; Uchhal: —; 31,543; Umbergaon: —; 95,836; Valod: 78; 42,837; Vyara: 317; 1,19,046.

**Surendranagar**: Chotila: 157; 55,814; Dasada: 363; 89,733; Dharangadhra: 399; 85,850; Halvad: 585; 52,860; Lakhtar: 274; 41,356; Limbdi: 663; 1,25,178; Muli: 317; 44,176; Sayla: 291; 41,203; Wadhwan: 281; 1,26,138.

Number of towns having a population of less than 2,000: 1; 2,000 to 5,000: 8; 5,000 to 10,000: 63; 10,000 to 20,000: 52; 20,000 to 50,000: 42; 50,000 to 1,00,000: 9; 1,00,000 and above: 6; Total: 181.

**Jammu and Kashmir: Anantnag Dist.**: Anantnag: 1,034; Khas: 743; Kulgam: 588; Pulwama: 449.

**Astore Dist.**: 1,632.

**Gilgit Agency**: Chilas: 2,800; Ghizar: 1,500; Hunza: 3,900; Ishkuman: 1,600; Kuh: 480; Nagar: 1,600; Punial: 1,600; Yasin: 1,200.

**Baramulla Dist.**: Baramulla: 590; Sri Pratapsinghpura: 488; Uttarmachipura: 2,239.

**Jammu Dist.**: Akhnur: 317; Jammu: 346; Samba: 327; Sri Ranbirsinghpura: 157.

**Kathua Dist.**: Basohli: 614; Jesmergarh: 185; Kathua: 224.

**Ladakh Dist.**: Kargil: 7,392; Ladakh: 29,848; Skardu: 8,522.

**Mirpur Dist.**: Bhimbar: 698; Kotli: 574; Mirpur: 355.

**Doda Dist.**: Karnah: 1,342; Muzaffarabad: 546; Uri: 520.

**Poonch-Rajouri Dist.**: Bagh: 321; Haveli: 479; Mendhar: 479; Sadhutti: 348.

**Reasi Dist.**: Rampur Rajouri: 806; Reasi: 988.

**Srinagar Dist.**: Not available.

**Udhampur Dist.**: Bhadrawah: 553; Kishtwar: 3,021; Ramban: 588; Ramnagar: 525; Udhampur: 383.

**Kerala: Alleppey Dist.**: Ambalapuzha: 68; 2,70,000; Chengannur: 78; 1,98,700; Karthigapally: 74; 2,84,400; Kuttanad:

### Area, Population and Literacy of States and Districts in each State—Contd.

| States/Districts  | Area in<br>sq. miles | Total Population |            |            | Literacy   |           |
|-------------------|----------------------|------------------|------------|------------|------------|-----------|
|                   |                      | Total            | Males      | Females    | Males      | Females   |
| Punjab—Contd.     |                      |                  |            |            |            |           |
| Hoshiarpur ..     | 2,210                | 1,233,493        | 649,343    | 584,150    | 256,060    | 99,623    |
| Jullundur ..      | 1,335                | 1,227,367        | 655,493    | 571,874    | 277,066    | 135,944   |
| Ludhiana ..       | 1,324                | 1,022,519        | 551,304    | 471,215    | 242,238    | 129,012   |
| Ferozepur ..      | 3,882                | 1,619,116        | 876,373    | 742,743    | 266,501    | 98,687    |
| Amritsar ..       | 1,978                | 1,534,916        | 827,821    | 707,095    | 304,729    | 151,411   |
| Gurdaspur ..      | 1,360                | 987,994          | 530,107    | 457,887    | 178,186    | 71,355    |
| Kapurthala ..     | 630                  | 343,778          | 182,299    | 161,479    | 68,475     | 32,444    |
| Bhatinda ..       | 2,706                | 1,055,177        | 574,549    | 480,628    | 153,964    | 45,698    |
| Sangrur ..        | 3,031                | 1,424,688        | 774,470    | 650,218    | 181,252    | 53,623    |
| Patiala ..        | 2,261                | 1,048,778        | 573,243    | 475,535    | 184,488    | 75,731    |
| Mahendragarb ..   | 1,343                | 547,850          | 283,950    | 263,900    | 86,702     | 11,932    |
| Rajasthan ..      | 132,152              | 20,155,602       | 10,564,082 | 9,591,520  | 2,504,983  | 560,585   |
| Ganganagar ..     | 8,000                | 1,037,423        | 563,231    | 474,192    | 143,039    | 31,502    |
| Bikaner ..        | 10,561               | 444,515          | 232,699    | 211,816    | 76,461     | 26,427    |
| Churu ..          | 6,410                | 659,011          | 340,048    | 318,963    | 93,426     | 26,150    |
| Jhunjhunu ..      | 2,233                | 719,650          | 370,457    | 349,193    | 115,418    | 19,257    |
| Alwar ..          | 3,241                | 1,090,026        | 576,234    | 513,792    | 141,228    | 25,015    |
| Bharatpur ..      | 3,127                | 1,149,883        | 624,090    | 525,793    | 151,745    | 23,172    |
| Sawai Madhopur .. | 4,070                | 943,574          | 504,351    | 439,043    | 106,203    | 13,396    |
| Jaipur ..         | 5,393                | 1,901,756        | 1,006,134  | 895,622    | 276,527    | 74,751    |
| Sikar ..          | 3,027                | 820,286          | 417,763    | 402,523    | 109,860    | 18,996    |
| Ajmer ..          | 3,283                | 976,547          | 510,446    | 466,101    | 183,692    | 63,405    |
| Tonk ..           | 2,765                | 497,729          | 260,589    | 237,140    | 47,449     | 9,173     |
| Jaisalmer ..      | 14,847               | 140,338          | 77,871     | 62,467     | 10,156     | 1,227     |
| Jodhpur ..        | 8,772                | 885,663          | 469,147    | 416,516    | 126,432    | 38,014    |
| Nagaur ..         | 6,884                | 934,948          | 480,586    | 654,362    | 101,602    | 22,343    |
| Pali ..           | 4,792                | 805,682          | 414,615    | 391,067    | 90,718     | 19,232    |
| Barmer ..         | 10,170               | 649,794          | 347,811    | 301,983    | 43,571     | 4,905     |
| Jalore ..         | 4,916                | 547,072          | 285,081    | 261,991    | 38,683     | 4,815     |
| Sirohi ..         | 1,979                | 352,303          | 180,853    | 171,450    | 38,419     | 10,654    |
| Bilwara ..        | 4,034                | 865,797          | 454,235    | 411,544    | 82,734     | 14,626    |
| Udaipur ..        | 6,812                | 1,464,276        | 755,351    | 708,925    | 162,302    | 36,775    |
| Chittorgarh ..    | 4,033                | 710,132          | 367,012    | 343,120    | 76,642     | 13,066    |
| Dungarpur ..      | 1,460                | 406,944          | 204,342    | 202,602    | 35,363     | 7,110     |
| Banswara ..       | 1,946                | 475,245          | 241,102    | 234,143    | 33,810     | 7,972     |
| Bundi ..          | 2,148                | 338,010          | 178,193    | 159,817    | 33,793     | 6,265     |
| Kota ..           | 4,704                | 848,389          | 447,181    | 401,208    | 103,285    | 31,344    |
| Jhalawar ..       | 2,405                | 490,609          | 254,462    | 236,147    | 55,605     | 10,990    |
| Uttar Pradesh ..  | 113,654              | 73,746,401       | 38,634,201 | 35,112,200 | 10,546,795 | 2,466,388 |
| Uttar Kashi ..    | 3,018                | 122,836          | 62,534     | 60,302     | 17,962     | 1,179     |
| Chamoli ..        | 3,525                | 253,137          | 120,092    | 133,045    | 49,766     | 5,410     |
| Pithoragarh ..    | 2,788                | 263,579          | 128,292    | 135,287    | 53,605     | 7,945     |
| Tehri Garhwal ..  | 1,745                | 347,736          | 157,909    | 189,827    | 51,817     | 3,795     |
| Garhwal ..        | 2,106                | 482,327          | 222,892    | 259,435    | 96,681     | 15,860    |
| Almora ..         | 2,713                | 633,407          | 304,459    | 328,948    | 117,085    | 18,339    |
| Naini Tal ..      | 2,635                | 574,320          | 334,197    | 240,123    | 122,706    | 34,485    |
| Bijnor ..         | 1,866                | 1,190,987        | 634,468    | 556,519    | 165,788    | 44,677    |
| Moradabad ..      | 2,289                | 1,973,530        | 1,058,394  | 915,136    | 209,246    | 61,235    |
| Budaun ..         | 1,998                | 1,411,657        | 768,583    | 643,074    | 109,250    | 26,760    |
| Rampur ..         | 895                  | 701,537          | 374,945    | 326,592    | 67,206     | 17,495    |
| Bareilly ..       | 1,591                | 1,478,490        | 806,220    | 672,270    | 170,139    | 53,960    |
| Pilibhit ..       | 1,352                | 616,225          | 334,599    | 281,626    | 66,783     | 15,815    |
| Shahjahanpur ..   | 1,762                | 1,130,256        | 618,900    | 511,356    | 119,859    | 29,815    |
| Dehra Dun ..      | 1,201                | 429,014          | 242,987    | 186,027    | 116,289    | 49,945    |
| Saharanpur ..     | 2,132                | 1,615,478        | 885,109    | 730,369    | 249,127    | 74,622    |
| Muzaffarnagar ..  | 1,683                | 1,444,921        | 785,031    | 659,890    | 195,116    | 45,885    |
| Meerut ..         | 2,322                | 2,712,960        | 1,472,006  | 1,240,954  | 484,629    | 124,085   |
| Bulandshahr ..    | 1,887                | 1,737,397        | 924,150    | 813,247    | 255,721    | 46,770    |
| Aligarh ..        | 1,941                | 1,765,275        | 948,568    | 816,707    | 282,958    | 66,715    |
| Mathura ..        | 1,467                | 1,071,279        | 582,894    | 488,385    | 191,420    | 38,660    |
| Agra ..           | 1,861                | 1,862,142        | 1,012,056  | 850,086    | 345,040    | 102,215   |
| Etah ..           | 1,715                | 1,299,674        | 698,924    | 602,750    | 175,392    | 39,945    |
| Mainpuri ..       | 1,680                | 1,180,894        | 634,951    | 545,948    | 187,827    | 45,835    |
| Farrukhabad ..    | 1,645                | 1,295,071        | 704,387    | 590,684    | 215,474    | 61,645    |
| Etawah ..         | 1,669                | 1,182,202        | 639,974    | 542,228    | 216,706    | 54,435    |
| Kanpur ..         | 2,357                | 2,381,353        | 1,314,673  | 1,066,680  | 546,643    | 203,135   |
| Fatehpur ..       | 1,625                | 1,072,940        | 560,474    | 512,466    | 151,949    | 26,915    |
| Allahabad ..      | 2,801                | 2,438,376        | 1,263,981  | 1,174,395  | 384,877    | 92,015    |
| Jhansi ..         | 3,885                | 1,087,479        | 573,703    | 513,776    | 174,933    | 42,645    |
| Jalaun ..         | 1,764                | 663,168          | 351,704    | 311,464    | 123,138    | 26,015    |
| Hamirpur ..       | 2,775                | 794,449          | 419,217    | 381,532    | 109,836    | 19,145    |
| Banda ..          | 2,950                | 953,731          | 500,573    | 453,158    | 126,276    | 15,475    |
| Kheri ..          | 2,972                | 1,258,433        | 679,011    | 579,422    | 127,465    | 23,575    |
| Sitapur ..        | 2,236                | 1,608,067        | 865,242    | 742,815    | 181,201    | 31,885    |
| Hardoi ..         | 2,320                | 1,573,171        | 847,161    | 726,010    | 201,432    | 41,335    |
| Unnao ..          | 1,774                | 1,226,923        | 648,560    | 578,363    | 152,542    | 33,185    |
| Lucknow ..        | 977                  | 1,338,882        | 728,214    | 610,668    | 284,900    | 119,395   |

\* Now split into two districts Surat (Talukas: Olpad, Chorasi, Mangrol, Kamrej, Mandvi, Bardoli, Songadh, Vyara, Mahuva, Mahals: Palsana, Valod, Uchhal, Nizar) and Bulsar (Talukas: Navsari, Chikhli, Bansda, Dharampur, Pardi, Umbergaon, Mahal: Gandevi). † Tehsil population is not available. Only area of each Tehsil is given.



17; 1,69,200; Mavellkara: 111; 2,70,500; Shertalai: 123; 3,11,600; Thiruvalla: 133; 3,05,100.

**Cannanore Dist:** Cannanore: 181; 3,91,400; Hosdrug: 372; 2,41,000; Kasaragod: 183; 2,71,000; Tellicherry: 594; 4,75,500; North Wynad: 276; 90,200; Taliparamba: 509; 3,10,700.

**Ernakulam Dist:** Alwaye: 151; 2,26,600; Cochin: 53; 3,13,900; Kanayannur: 125; 3,79,300; Kunnathunad: 162; 2,29,300; Muvattupuzha: 255; 3,01,400; Parur: 74; 2,21,000; Thodupuzha: 362; 1,87,000.

**Kottayam Dist:** Changanacherry: 102; 2,24,000; Devicolum: 380; 1,23,200; Kanjirappally: 134; 1,48,800; Kottayam: 211; 4,21,700; Meenachil: 279; 3,09,800; Peermade: 328; 1,32,700; Udumbanchola: 413; 1,55,400; Vaikom: 131; 2,14,900.

**Kozhikode Dist:** Badagara: 214; 3,19,800; Ernad: 863; 5,23,600; Kozhikode: 373; 6,59,900; Quilandy: 292; 3,65,600; South Wynad: 387; 1,85,000; Tirur: 220; 5,65,300.

**Palghat Dist:** Alathur: 219; 2,41,500; Chittoor: 389; 2,72,200; Ottapalam: 257; 3,24,300; Palghat: 205; 2,95,700; Perinthalmanna: 609; 3,39,100; Ponnani: 162; 3,02,600.

**Quilon Dist:** Karunagapally: 88; 2,65,000; Kottarakkara: 212; 3,31,200; Kunnathur: 150; 2,37,900; Pathanamthitta: 926; 3,33,000; Pathanapuram: 473; 2,42,300; Quilon: 147; 5,20,500.

**Trichur Dist:** Chowghat: 98; 3,01,100; Cranganore: 29; 90,200; Mukundapuram: 487; 4,67,800; Talapally: 258; 3,18,900; Trichur: 246; 5,56,200.

**Trivandrum Dist:** Chirayinkil: 147; 3,70,100; Nedumangad: 228; 3,44,700; Neyyatinkara: 219; 4,56,900; Trivandrum: 121; 5,66,400.

**Madhya Pradesh: Balaghat Dist:** Balhar: 1,556; 1,52,092; Balaghat: 1,085; 2,84,782; Waraseoni: 916; 3,69,746.

**Bastar Dist:** Bhanupratappur: 489; 58,793; Bijapur: 3,299; 93,103; Dantewara: 1,036; 1,34,204; Jagdalpur: 1,935; 3,42,916; Kanker: 941; 1,51,473; Kondagaon: 1,921; 1,87,233; Konta: 1,986; 1,08,749; Narayanpur: 2,885; 91,339.

**Betul Dist:** Betul: 1,598; Bhamalsdehl: 1,340; 1,36,969; Multai: 972; 2,29,890.

**Bhind Dist:** Bhind: 537; 2,30,910; Gohad: 386; 1,17,533; Lahar: 418; 1,60,746; Mehgaon: 367; 1,32,037.

**Bilaspur Dist:** Bilaspur: 2,208; 6,66,063; Janjgir: 833; 3,91,646; Katghora: 2,553; 3,33,452; Mungell: 1,452; 3,23,109; Sakli: 485; 3,07,802.

**Chhatarpur Dist:** Bijawar: 1,378; 1,62,161; Chhatarpur: 1,316; 2,98,025; Laundi: 695; 1,27,425.

**Chhindwara Dist:** Amarwara: 1,483; 1,72,705; Chhindwara: 1,981; 4,06,850; Saunsar: 1,114; 2,07,041.

**Damoh Dist:** Damoh: 1,248; 2,91,385; Hatta: 774; 1,47,664.

**Datta Dist:** Datta: 428;—; Seondha: 357; 84,068.

**Dewas Dist:** Bagli: 551; 83,431; Dewas: 393; 1,21,675; Kannod: 522; 72,268; Khatagaon: 413; 57,945; Sonakatch: 497; 1,11,771.

**Dhar Dist:** Badnawar: 425; 76,466; Dhar: 748; 1,41,986; Kukshi: 664; 1,46,157; Manawa: 844; 1,94,085; Sardarp: 489; 84,907.

**Durg Dist:** Bemetara: 1,101; 3,17,039; Durg: 1,161; 5,20,343; Kawardha: 1,056; 1,72,571; Khairagarh: 1,265; 2,25,470; Rajnandgaon: 813; 2,69,011; Sanjari: 2,104; 3,81,472.

**Goona Dist:** Ashoknagar: 918; 1,51,538; Chachanra: 457; 83,431; Goona: 1,209; 1,27,694; Mungaoli: 887; 1,26,363; Raghogarh: 766; 1,04,517.

## Area, Population and Literacy of States and Districts in each State—Contd.

| States/Districts                        | Area in<br>sq. miles | Total Population |            |            | Literacy  |           |
|-----------------------------------------|----------------------|------------------|------------|------------|-----------|-----------|
|                                         |                      | Total            | Males      | Females    | Males     | Females   |
| Uttar Pradesh—Contd.                    |                      |                  |            |            |           |           |
| Rae Bareilly ..                         | 1,758                | 1,314,949        | 669,113    | 645,836    | 148,890   | 24,487    |
| Bahraich ..                             | 2,620                | 1,499,929        | 790,492    | 709,437    | 156,761   | 19,284    |
| Gonda ..                                | 2,820                | 2,073,237        | 1,072,818  | 1,000,419  | 210,920   | 32,548    |
| Bara Banki ..                           | 1,714                | 1,414,547        | 746,738    | 667,809    | 146,120   | 24,162    |
| Faizabad ..                             | 1,705                | 1,633,359        | 824,004    | 809,355    | 194,652   | 39,076    |
| Sultanpur ..                            | 1,713                | 1,412,984        | 700,661    | 712,323    | 158,932   | 24,111    |
| Pratapgarh ..                           | 1,458                | 1,252,196        | 607,165    | 645,031    | 150,777   | 20,404    |
| Basti ..                                | 2,821                | 2,627,061        | 1,348,124  | 1,278,937  | 266,768   | 39,977    |
| Gorakhpur ..                            | 2,439                | 2,565,182        | 1,297,297  | 1,267,885  | 339,162   | 64,203    |
| Deoria ..                               | 2,087                | 2,375,075        | 1,186,527  | 1,188,548  | 289,389   | 46,000    |
| Azamgarh ..                             | 2,222                | 2,408,052        | 1,185,008  | 1,223,044  | 313,253   | 78,739    |
| Jaunpur ..                              | 1,543                | 1,727,264        | 838,028    | 889,236    | 250,725   | 46,558    |
| Ballia ..                               | 1,183                | 1,335,863        | 656,347    | 679,516    | 205,591   | 53,165    |
| Ghazipur ..                             | 1,306                | 1,321,578        | 654,246    | 667,332    | 189,255   | 48,300    |
| Varanasi ..                             | 1,965                | 2,362,179        | 1,211,588  | 1,150,591  | 446,281   | 110,859   |
| Mirzapur ..                             | 4,369                | 1,249,653        | 644,311    | 605,342    | 178,535   | 33,121    |
| West Bengal ..                          | 33,829               | 34,926,279       | 18,599,144 | 16,327,135 | 7,454,006 | 2,771,658 |
| Darjeeling ..                           | 1,160                | 624,640          | 335,036    | 289,604    | 134,516   | 44,776    |
| Jalpaiguri ..                           | 2,407                | 1,359,292        | 733,339    | 625,953    | 198,519   | 62,682    |
| Cooch-Behar ..                          | 1,289                | 1,019,806        | 530,694    | 480,112    | 169,684   | 44,486    |
| West Dinajpur ..                        | 2,052                | 1,323,797        | 694,372    | 629,425    | 180,238   | 45,589    |
| Malda ..                                | 1,436                | 1,221,923        | 621,990    | 599,933    | 133,533   | 35,010    |
| Murshidabad ..                          | 2,056                | 2,290,010        | 1,160,283  | 1,129,727  | 272,605   | 94,396    |
| Nadia ..                                | 1,514                | 1,713,824        | 879,430    | 833,894    | 314,703   | 152,093   |
| 24-Parganas ..                          | 5,285                | 6,280,915        | 3,366,805  | 2,914,110  | 1,476,757 | 563,240   |
| Calcutta ..                             | 40                   | 2,927,289        | 1,815,791  | 1,111,498  | 1,154,018 | 581,443   |
| Howrah ..                               | 575                  | 2,038,477        | 1,127,392  | 911,085    | 545,811   | 206,517   |
| Hooghly ..                              | 1,216                | 2,231,418        | 1,179,267  | 1,052,151  | 543,809   | 229,483   |
| Burdwan ..                              | 2,716                | 3,082,846        | 1,658,976  | 1,423,870  | 653,474   | 258,361   |
| Birbhum ..                              | 1,757                | 3,446,158        | 732,922    | 713,236    | 237,655   | 81,792    |
| Bankura ..                              | 2,653                | 1,664,513        | 840,423    | 824,090    | 304,019   | 80,172    |
| Midnapur ..                             | 5,258                | 4,341,855        | 2,240,073  | 2,117,782  | 926,489   | 257,815   |
| Purulia ..                              | 2,415                | 1,360,016        | 689,351    | 670,665    | 208,176   | 33,808    |
| Union Territories and other areas :     |                      |                  |            |            |           |           |
| Andaman & Nicobar Islands               | 3,215                | 63,548           | 39,304     | 24,244     | 16,675    | 4,697     |
| Delhi ..                                | 573                  | 2,658,612        | 1,489,378  | 1,169,234  | 904,801   | 497,497   |
| Himachal Pradesh ..                     | 10,885               | 1,351,144        | 702,697    | 648,447    | 191,139   | 40,525    |
| 1. Chamba ..                            | ..                   | 210,579          | 110,700    | 99,879     | 19,482    | 4,066     |
| 2. Mandi ..                             | ..                   | 384,259          | 192,687    | 191,572    | 57,600    | 13,017    |
| 3. Bilaspur ..                          | ..                   | 158,806          | 81,363     | 77,443     | 25,798    | 5,101     |
| 4. Mahasu ..                            | ..                   | 358,969          | 189,046    | 169,923    | 57,540    | 11,882    |
| 5. Sirmur ..                            | ..                   | 197,551          | 108,093    | 89,458     | 25,216    | 5,672     |
| 6. Kinnaur ..                           | ..                   | 40,980           | 20,808     | 20,172     | 5,508     | 787       |
| Laccadive, Minicoy and Amindivi Islands | 11                   | 24,108           | 11,935     | 12,173     | 4,273     | 1,337     |
| Manipur ..                              | 8,628                | 780,037          | 387,058    | 392,979    | 174,656   | 62,620    |
| Tripura ..                              | 4,036                | 1,142,005        | 591,237    | 550,768    | 175,060   | 50,128    |
| Dadra and Nagar Haveli                  | 189                  | 57,963           | 29,524     | 28,439     | 4,342     | 1,153     |
| Goa, Daman & Diu                        | 1,426                | 626,978          | 302,953    | 324,025    | ..        | ..        |
| N.E.F.A. ..                             | 31,438               | 336,558          | 177,680    | 158,878    | 21,879    | 2,381     |
| Nagaland ..                             | 6,866                | 369,200          | 191,027    | 168,173    | 45,917    | 20,200    |
| 1. Kohima ..                            | ..                   | 108,924          | 57,704     | 51,220     | 17,239    | 5,538     |
| 2. Mokokchung ..                        | ..                   | 126,001          | 64,366     | 61,635     | 23,870    | 13,462    |
| 3. Tuensang ..                          | ..                   | 134,275          | 68,957     | 65,318     | 4,808     | 1,200     |
| Pondicherry ..                          | 185                  | 369,079          | 183,347    | 185,732    | 92,384    | 45,765    |



**Gwalior (Gird) Dist:** Bhandar: 253; 63,639; Gird: 1,038; 4,24,789; Pichhore: 724; 1,69,698.

**Hoshangabad Dist:** Harda: 1,127; Hoshangabad: 776; 1,95,858; Seoni Malwa: 521; 73,935; Dhohagpur: 1,289; 1,71,637.

**Indore Dist:** Depalpur: 395; 84,591; Indore: 370; 4,80,281; Mhow: 310; 1,18,459; Sawyer: 294; 70,444.

**Jabalpur Dist:** Jabalpur: 999; 5,44,202; Murwara: 1,057; 3,13,129; Patan: 542; 1,34,525; Sihora: 1,181; 2,82,641.

**Jhabua Dist:** Alirajpur: 869; 1,30,231; Jhabua: 557; 1,29,966; Jobat: 424; 98,877; Petlawad: 369; 66,223; Thandla: 404; 89,801.

**Mandla Dist:** Dindori: 1,601; 1,79,978; Mandla: 2,109; 3,19,957; Niwas: 1,410; 1,84,540.

**Mandsaur Dist:** Bhanpura: 401; 58,494; Garoth: 439; 89,206; Jawad: 606; —; Malharagarh: 311; 74,688; Manasa: 586; 99,988; Mandsaur: 489; —; Neemuch: 320; 98,427; Sitamau: 492; 98,835.

**Morena Dist:** Ambah: 409; 1,70,046; Jaura: 615; 1,41,533; Morena: 412; 1,52,489; Sabalgarh: 501; 1,20,040; Sheopur: 1,457; 1,26,196; Vijaypur: 1,117; 66,868.

**Narsimhapur Dist:** Gadarwara: 909; 2,04,928; Narsimhapur: 1,069; 2,07,459.

**Nimar (East) Dist:** Burhanpur: 1,138; 2,38,380; Harsud: 1,218; 1,34,090; Khandwa: 1,871; 3,11,022.

**Nimar (West) Dist:** Barwaha: 482; 1,11,233; Barwani: 605; 1,05,332; Bhikangaon: 624; 1,09,110; Kasrawad: 408; 82,381; Khargone: 1,411; 2,08,698; Maheshwar: 319; 73,244; Rajpur: 520; 1,42,113; Sendhwa: 764; 1,59,041.

**Panna Dist:** Ajaigarh: 264; 56,274; Panna: 1,219; 1,43,743; Pawai: 1,306; 1,31,366.

**Raigarh Dist:** Gharghoda: 519; 1,36,875; Jashpur: 1,766; 3,06,310; Raigarh: 495; 2,36,993; Sarangarh: 384; 1,85,024; Udaipur: 677; 1,77,198.

**Raipur Dist:** Baloda Bazar: 1,780; 4,99,031; Bindranawagarh: 1,877; 2,22,190; Dhamatari: 1,591; 3,30,128; Mahasamund: 1,922; 4,56,489; Raipur: 1,115; 4,95,608.

**Raisen Dist:** Baraily: 520; 96,675; Begumganj: 351; 52,180; Ghairatganj: 361; 37,955; Goharganj: 672; 57,605; Raisen: 526; 59,480; Silwani: 499; 47,597; Udaipura: 322; 64,443.

**Rajgarh Dist:** Biaora: 440; 94,018; Khilchipur: 625; 1,39,246; Narsingarh: 517; 1,17,357; Rajgarh: 423; 79,954; Sarangpur: 349; 87,262.

**Ratlam Dist:** Alot: 366; 83,773; Jaora: 525; 1,42,259; Ratlam: 613; 1,85,471; Sailana: 474; 72,503.

**Rewa Dist:** Huzur: 707; 2,28,352; Mauganj: 694; 2,08,743; Sirmour: 526; 1,87,917; Teonthar: 586; 1,47,401.

**Sagar Dist:** Banda: 762; 1,13,710; Khurai: 985; 1,95,114; Rehli: 1,357; 1,86,389; Sagar: 1,170; 3,01,842.

**Satna Dist:** Amar Patan: 390; 1,42,117; Maihar: 413; 1,09,138; Nagod: 665; 1,35,972; Raghurajnagar: 1,272; 3,07,730.

**Sehore Dist:** Ashta: 555; 1,08,413; Berasia: 548; 80,612; Budhni: 415; 50,893; Huzur: 517; 2,93,521; Ichhawar: 429; 46,171; Nasrullahganj: 610; 51,145; Sehore: 607; 1,24,262.

**Seoni Dist:** Lakhandon: 1,460; 1,93,043; Seoni: 1,756; 3,30,976.

**Shahdol Dist:** Bandhogarh: 1,403; 1,68,812; Beohari: 1,051; 1,39,919; Pushpragarh: 684; 82,930; Sohagpur: 2,281; 4,38,505.

**Shajapur Dist:** Agar: 565; 1,08,735; Shajapur: 698; 1,71,805; Shujalpur: 637; 1,49,057; Susner: 495; 96,614.

**Shivpuri Dist:** Karera: 784; 1,33,941; Kolaras: 857; 1,09,958; Pichhore: 890;

1,47,286; Pohri: 612; 73,781; Shivpuri: 760; 93,367.

**Sidhi Dist:** Deosar: 1,479; 1,41,722; Gopadbanas: 1,839; 3,33,261; Singrauli: 754; 1,05,742.

**Surguja Dist:** Ambikapur: 1,855; 3,43,287; Baikunthpur: 493; 84,261; Bharatpur: 906; 29,565; Manendragarh: 742; 1,17,739; Pal: 1,352; 1,14,457; Samri: 632; 75,424; Surajpur: 2,085; 2,71,936.

**Tikamgarh Dist:** Jatara: 776; 1,60,226; Niwari: 403; 1,24,736; Tikamgarh: 769; 1,71,157.

**Ujjain Dist:** Barnagar: 472; 1,02,934; Khachrand: 494; 1,26,642; Mahidpur: 437; 88,597; Tarana: 393; 95,487; Ujjain: 538; 2,49,190.

**Vidisha Dist:** Basoda: 912; 1,59,508; Kurwai: 341; 62,696; Lateri: 365; 39,525; Sirong: 485; 83,073; Vidisha: 721; 1,45,398.

**Madras: Chingleput Dist:** Ponneri: 626; 2,30,704; Tiruvellur: 523; 2,70,324; Tiruttani: —; 2,13,833; Sriperumbudur: 306; 2,35,687; Saidapet: 227; 3,92,468; Chingleput: 436; 2,46,827; Kancheepuram: 412; 3,21,816; Madurantakam: 531; 2,82,062.

**Coimbatore Dist:** Bhavani: 572; 2,52,241; Gobi: 1,129; 4,01,944; Erode: 599; 5,11,381; Dharapuram: 554; 3,22,073; Palladam: 585; 3,89,481; Avanashi: 493; 2,94,933; Coimbatore: 493; 7,28,868; Pollachi: 709; 4,19,510; Udampalpet: 555; 2,20,970.

**Kanyakumari Dist:** Vilavancode: 167; 3,17,213; Kalkulam: 229; 3,40,513; Thovala: 142; 62,267; Agastheeswaram: 107; 2,76,859.

**Madurai Dist:** Dindigul: 894; 5,97,256; Palani: 625; 2,88,832; Kodaikanal: 361; 50,695; Periakulam: 1,106; 6,54,565; Nilakottai: 410; 2,90,845; Melur: 484; 2,42,354; Madurai: 268; 6,69,935; Tirumangalam: 721; 4,10,884.

**Nilgiris Dist:** Gudalore: 280; 66,061; Ootacamund: 462; 1,69,611; Coonoor: 240; 1,73,768.

**North Arcot Dist:** Arkonam: 319; 2,53,380; Wallajapet: 395; 3,61,724; Gudiyatham: 481; 3,84,412; Tirupattur: 589; 4,07,217; Vellore: 432; 4,07,872; Arni: 176; 1,69,620; Cheyyar: 2,09,845; Wandiwash: 340; 2,21,174; Polur: 568; 2,45,483; Chengam: 518; 2,22,476; Tiruvannamalai: 375; 2,58,780.

**Ramanathapuram Dist:** Tirupathur: 567; 3,13,498; Sivaganga: 657; 2,66,333; Tiruvadanai: 548; 2,17,540; Paramakudi: 440; 2,27,487; Ramanathapuram: 334; 1,92,279; Madukulathur: 647; 2,33,731; Arappukottai: 615; 2,69,244; Sathur: 580; 3,53,915; Srivilliputhur: 437; 3,48,916.

**Salem Dist:** Hosur: 1,168; 3,49,240; Krishnagiri: 688; 4,16,824; Harur: 915; 2,15,457; Dharmapuri: 946; 3,75,033; Omalur: 557; 4,24,817; Yercaud: 148; 23,721; Salem: 377; 6,16,518; Sankari: 287; 2,42,312; Tiruchangode: 603; 2,46,345; Rasipuram: 316; 2,00,746; Athr: 651; 2,95,236; Namakkal: 682; 4,20,100.

**South Arcot Dist:** Gingee: 410; 2,54,273; Tindivanam: 561; 3,52,347; Villupuram: 352; 3,56,334; Tirukoilur: 584; 3,98,135; Kallakurichi: 873; 3,82,821; Vriddhachalam: 576; 3,53,224; Cuddalore: 448; 5,11,336; Chidambaram: 404; 4,32,650.

**Thanjavur Dist:** Sirkali: 171; 1,85,808; Mayuram: 282; 3,64,151; Kumbakonam: 212; 3,68,017; Nannilam: 201; 2,66,926; Papanasam: 228; 2,33,088; Thanjavur: 421; 3,63,261; Orathanad: 348; 1,94,308; Mannargudi: 301; 2,73,998; Nagapattinam: 240; 2,78,950; Tiruthurapoondi: 496; 2,74,845; Pattukottai: 698; 2,90,656; Aranthangi: 398; 1,55,952.

**Tiruchirapalli Dist:** Perambalur: 678; 2,86,610; Udayarpalayam: 749; 4,57,666; Lalgudi: 373; 2,66,030; Musiri: 675; 3,69,504;

Kulithalai: 913; 4,39,340; Karur: 610; 3,45,457; Tiruchirapalli: 328; 5,02,500; Kola-thur: 465; 1,69,267; Alangudi: 347; 1,90,401; Tirumayam: 367; 1,62,824.

**Tirunelveli Dist:** Sankaranayanar Koll: 635; 3,35,002; Koilpatti: 1,086; 4,12,678; Srivalkuntam: 362; 3,30,803; Tirunelveli: 325; 3,38,077; Thenkasi: 493; 3,35,497; Senkotte: 70; 66,466; Ambasamudram: 498; 2,93,340; Nanguneri: 705; 3,25,378; Tiruchendur: 323; 2,92,256.

**Maharashtra: Ahmednagar Dist:** Ahmednagar: 585; 2,44,717; Akola: 575; 1,17,771; Jamkhed: 337; 73,036; Karjat: 560; 98,883; Kopergaon: 403; 1,97,369; Newasa: 480; 1,16,649; Parne: 690; 1,30,969; Pathardi: 425; 1,09,888; Rahuri: 419; 1,16,585; Sangamner: 625; 1,64,567; Sheogaon: 436; 1,04,125; Shrigonda: 618; 1,17,719; Shirampur: 319; 1,78,788.

**Akola Dist:** Akola: 739; 2,86,972; Akot: 550; 1,92,481; Balapur: 530; 1,48,155; Mangrulpir: 616; 1,36,493; Murthapur: 610; 1,74,096; Washim: 1,046; 2,47,477.

**Amravati Dist:** Achalapur: 490; 2,09,166; Amravati: 833; 3,82,372; Chandur: 694; 1,96,846; Daryapur: 505; 1,74,092; Melghat: 1,546; 72,522; Morsi: 623; 1,96,624.

**Aurangabad:** Ambad: 874; 1,89,273; Aurangabad: 666; 2,21,930; Bhokardan: 490; 1,20,516; Gangapur: 511; 1,11,679; Jafferabad: 312; 58,908; Jalna: 771; 2,25,709; Kannad: —; 1,26,947; Khuldabad: 175; 42,777; Paithan: 567; 1,22,912; Sillod: —; 1,42,594; Seogaon: —; 33,368; Vaijapur: 623; 1,34,844.

**Bhandara Dist:** Bhandara: 967; 3,94,017; Gondia: 1,105; 4,95,016; Sakoli: 1,561; 3,59,486.

**Bhir Dist:** Ashti: 581; 1,07,739; Bhir: 582; 1,59,859; Georai: 618; 1,35,611; Kaij: 692; 1,64,058; Manjlegaon: 595; 1,43,865; Momina-bad: 639; 1,99,138; Patoda: 510; 90,835.

**Buldana Dist:** Chikhali: 924; 2,58,802; Jalgaon: 474; 1,15,908; Khamgaon: 710; 2,11,730; Malkapur: 651; 2,39,942; Mehkar: 1,007; 2,36,009.

**Chanda Dist:** Brahmapuri: 897; 2,26,832; Chanda: 1,174; 2,96,832; Gadchiroli: 2,870; 2,78,805; Rajura: 776; 89,521; Sironcha: 3,089; 1,08,098; Warora: 1,282; 2,38,613.

**Dhulia Dist:** Akhalkuwa: 672; 57,356; Akrani: 232; 34,639; Dhulia: 751; 2,98,702; Nandurbar: 507; 1,52,952; Nawapur: 422; 1,05,741; Sakri: 926; 1,85,408; Shahada: 447; 1,55,473; Shirpur: 756; 1,23,755; Sindkheda: 494; 1,72,357; Taloda: 198; 63,700.

**Greater Bombay Dist:** Andheri: 66; —; Bombay City: 26; —; Borivli: 98; —.

**Jalgaon Dist:** Amalner: 325; 1,62,869; Bhadgaon: 197; 65,472; Bhusaval: 329; 1,89,677; Chalisgaon: 460; 1,67,897; Chopda: 368; 1,28,695; Edlabad: 250; 62,840; Erandol: 369; 1,50,934; Jalgaon: 320; 1,91,482; Jamner: 521; 1,52,221; Pachora: 309; 1,25,788; Parola: 292; 87,599; Raver: 361; 1,41,491; Yawal: 368; 1,38,496.

**Kolaba Dist:** Alibag: 196; 1,24,304; Karjat: 242; 87,070; Khalapur: 157; 53,385; Mahad: 271; 1,15,906; Mangaon: 363; 1,24,455; Mhasla: 134; 38,916; Murud: 133; 44,472; Panvel: 215; 1,15,516; Pen: 200; 83,192; Poladpur: 188; 38,749; Roha: 272; 79,700; Shrivardhan: 104; 54,899; Sudhagad: 162; 41,869; Uran: 75; 56,459.

**Kolhapur Dist:** Ajra: 205; 68,285; Bhavda: 261; 59,069; Bhudargad: 253; 78,641; Chandgad: 394; 93,448; Gandhingaj: 192; 1,27,644; Hatkanangali: 235; 2,26,516; Kagai: 212; 1,28,852; Karvir: 262; 3,47,299; Panhala: 218; 1,14,050; Radhanagari: 345; 1,02,948; Shahuwadi: 407; 1,00,518; Shirol: 204; 1,51,130.

**Nagpur Dist:** Katol: 614; 1,67,277; Nagpur: 811; 8,26,465; Ramtek: 897; 1,75,275; Saoner: 543; 1,49,450; Umrer: 969; 1,02,920.

**Nanded Dist:** Biloli: —; 1,76,022; Bhoker: 399; 88,101; Deglur: —; 90,040; Hadgaon:



301; 1,37,718; Kandhar: 629; 1,72,427; Kinawat: —; 1,17,879; Mukhed: 338; 1,01,532; Nanded: 395; 1,96,394.

**Nasik Dist:** Baglan: 629; 1,53,517; Chandor: 370; 96,936; Dindori: 496; 1,12,121; Igatpuri: 377; 1,13,226; Kalwan: 431; 99,629; Malegaon: 754; 3,13,497; Nandgaon: 431; 1,21,258; Nasik: 525; 3,26,158; Niphad: 417; 1,55,031; Peint: 342; 68,427; Sinnar: 517; 1,33,063; Sargana: 316; 58,197; Yeola: 409; 1,03,336.

**Osmanabad Dist:** Ahmedpur: 609; 1,65,267; Bhoom: 339; 72,858; Kalam: 474; 1,26,844; Latour: 420; 1,42,988; Nilanga: 536; 1,62,798; Omerga: 576; 1,62,452; Osmanabad: 445; 1,39,749; Owasa: 463; 1,22,792; Parenda: 406; 88,266; Tuljapur: 605; 1,18,530; Udgir: 632; 1,72,540.

**Parbhani Dist:** Basmath: 482; 1,40,171; Gangakhed: 630; 1,64,940; Hingoli: 730; 1,59,504; Jintur: 669; 1,40,835; Kalamnuri: 583; 1,27,493; Parbhani: 547; 1,76,022; Partur: 588; 1,33,852; Pathri: 618; 1,63,551.

**Poona Dist:** Ambegaon: 402; 1,18,844; Baramati: 540; 1,73,883; Bhore: 325; 95,387; Dhond: 516; 1,23,454; Haveli: 515; 2,48,618; Indapur: 586; 1,53,814; Junnar: 533; 1,71,813; Khed: 539; 1,57,205; Maval: 414; 1,16,093; Mulshi: 353; 80,240; Poona City: 68; 7,21,134; Purandhar: 426; 1,26,532; Sirur: 611; 1,32,381; Vele: 196; 40,081.

**Ratnagiri Dist:** Chiplun: 434; 1,70,527; Dapoli: 327; 1,34,773; Deogad: 284; 1,01,206; Guhagar: 242; 91,486; Kankavli: 299; 1,11,506; Khed: 386; 1,37,010; Kudal: 317; 1,14,369; Lanja: 283; 82,236; Malvan: 256; 1,27,634; Mandangad: 160; 50,522; Rajapur: 496; 1,52,418; Ratnagiri: 358; 1,68,003; Sangameshwar: 499; 1,56,952; Sawantwadi: 516; 1,39,011; Vengurla: 127; 86,640.

**Sangli Dist:** Jath: 874; 1,38,861; Khanapur: 846; 2,23,310; Miraj: 611; 3,72,839; Shirala: 246; 89,827; Tasgaon: 446; 2,02,462; Walwa: 300; 2,02,341.

**Satara Dist:** Jaoli: 345; 80,062; Karad: 406; 2,51,221; Khandala: 203; 63,156; Khatav: 509; 1,55,715; Koregaon: 365; 1,38,574; Mahabaleshwar: 87; 24,359; Man: 556; 99,448; Patan: 514; 1,80,416; Phaltan: 456; 1,40,014; Satara: 353; 1,90,363; Wai: 229; 1,03,692.

**Sholapur Dist:** Akkalkot: 537; 1,74,680; Barsi: 623; 2,20,876; Karmala: 622; 1,28,688; Madha: 597; 1,56,091; Maisiras: 588; 1,65,879; Mangalwedha: 441; 89,071; Mohol: 550; 1,22,963; North Sholapur: 284; 4,05,735; Pandharpur: 498; 1,53,978; Sangola: 610; 1,28,036; South Sholapur: 462; 1,12,525.

**Thana Dist:** Bassein: 203; 1,66,007; Bhlvandi: 264; 1,65,064; Dahanu: 372; 1,58,979; Jawhar: 310; 82,417; Kalyan: 279; 3,59,236; Mokhada: 242; 47,150; Murbad: 347; 84,373; Palghar: 422; 1,78,276; Shahpur: 635; 1,13,145; Talasari: —; 43,068; Thana: 84; 1,85,368; Wada: 284; 70,204.

**Wardha Dist:** Arvi: 890; 1,76,537; Hingnagar: 729; 1,67,067; Wardha: 815; 2,87,763.

**Yavatmal Dist:** Darwaha: 1,078; 2,54,913; Kelapur: 1,086; 1,96,712; Pusad: 1,286; 2,65,099; Wani: 862; 1,73,300; Yavatmal: 908; 2,07,947.

Number of towns having a population of below 5,000: 16; 5,000 to 10,000: 72; 10,000 to 20,000: 89; 20,000 to 50,000: 45; 50,000 to 1,00,000: 14; over 1,00,000: 12.

**Mysore: Belgaum Dist:** Athani: 744; 2,26,945; Belgaum: 394; 3,43,429; Chikodi: 479; 3,15,290; Gokak: 596; 2,14,902; Hukeri: 382; 1,95,659; Khanapur: 675; 1,28,196; Paragad: 611; 1,50,667; Raibagh: 372; 1,15,730; Ramdurg: 470; 1,09,329; Sampgaon: 435; 1,79,097.

**Bellary Dist:** Bellary: 652; 2,03,269; Hada-galli: 587; 1,10,562; Harpanahalli: 611; 1,28,776; Hospet: 384; 1,54,259; Kudligi: 703;

1,33,374; Mallapuram: —; 28,456; Sandur: 481; 67,762; Siruguppa: 403; 87,426.

**Bidar Dist:** Bhalki: 589; 1,75,550; Bidar: 420; 1,73,234; Humnabad: 592; 1,90,201; Santpur: 456; 1,17,605.

**Bijapur Dist:** Badami: 527; 1,56,243; Bagalkot: 352; 1,20,835; Bagwadi: 764; 1,64,126; Bijapur: 1,028; 2,47,315; Bilgi: 327; 68,175; Hungund: 512; 1,60,196; Indi: 854; 1,76,021; Jamkhandi: 450; 1,68,621; Mudde-bihal: 570; 1,34,641; Mudhol: 349; 99,455; Sindgi: 830; 1,62,825.

**Chikmagalur Dist:** Chikmagalur: 644; 1,41,931; Kadur: 554; 1,51,734; Koppa: 335; 62,811; Mudigere: 365; 74,021; Narasimha-rajapura: 314; 33,376; Sringeri: 45; 14,745; Tarikere: 466; 33,117,229.

**Chitradurga Dist:** Challakere: 854; 1,52,151; Chitradurga: 477; 1,71,192; Davangere: 366; 1,87,948; Harihar: 184; 82,286; Hiriyur: 647; 1,31,220; Holakere: 419; 1,14,079; Hosadurga: 517; 1,11,022; Jagalur: 377; 82,830; Molakal-muru: 295; 61,400.

**Coorg:** Mercara: 566; 79,159; Somwarpet: 386; 1,09,199; Virajpet: 638; 1,33,158.

**Dharwar Dist:** Byadgi: 168; 70,643; Dharwar: 430; 1,92,534; Gadag: 418; 1,72,774; Hangal: 299; 1,17,346; Haveri: 402; 1,49,972; Hirekerur: 310; 1,24,484; Hubli: 290; 2,50,765; Kalghatgi: 259; 67,923; Kundgol: 235; 82,089; Mundargi: 336; 60,055; Nargund: 176; 42,547; Navalund: 418; 96,453; Ranebennur: 362; 1,48,299; Ron: 476; 1,50,229; Shiggaon: 544; 1,24,250; Shirhatti: 367; 1,00,171.

**Gulbarga Dist:** Afzalpur: 514; 89,343; Aland: 678; 1,60,391; Chincholi: 609; 1,07,782; Chitapur: 691; 1,73,699; Gulbarga: 664; 2,28,967; Jevargi: 746; 1,09,390; Seram: 365; 90,460; Shahpur: 627; 1,33,920; Shorapur: 711; 1,37,206; Yadgir: 666; 1,60,687.

**Hassan Dist:** Alur: 164; 48,425; Arkalgud: 265; 1,06,487; Arsikere: 479; 1,67,702; Belur: 310; 1,02,204; Chennarayana: 404; 1,40,607; Hassan: 357; 1,61,178; Hole Narsipur: 232; 89,165; Manjarabad: 407; 77,611.

**Kolar Dist:** Bagepalli: 361; 84,107; Bangarpet: 237; 1,09,472; Chikballapur: 249; 91,958; Chintamani: 313; 1,26,263; Gauribidnur: 339; 1,48,740; Gudlunda: 87; 27,042; Kolar: 305; 1,54,677; Kolar Gold Fields City: 30; 1,46,200; Malur: 249; 1,01,598; Mulbagal: 316; 1,12,710; Siddaghatta: 265; 90,135; Sririvasapur: 312; 98,322.

**Mandya Dist:** Krishnarajpet: 352; 1,28,963; Maddur: 238; 1,51,029; Malavalli: 307; 1,56,710; Mandya: 277; 1,83,299; Nagaman-gala: 402; 1,11,253; Pandavapura: 214; 87,418; Srirangapatna: 143; 79,881.

**Mysore Dist:** Chamaraajpet: 479; 1,92,966; Gundlupet: 355; 1,17,475; Heggadevankote: 706; 98,112; Hunsur: 342; 1,01,102; Kollegal: 1,070; 1,78,255; Krishnarajpet: 231; 1,32,300; Mysore City: 14; 2,53,624; Mysore: 303; 1,14,029; Nanjangud: 372; 1,89,404; Periapatna: 333; 94,841; T. Narsipur: 223; 1,52,977; Yelandur: 104; 44,889.

**North Kanara Dist:** Ankola: 348; 57,030; Bhatkal: 129; 58,389; Haliyal: 315; 82,533; Honavar: 278; 90,060; Karwar: 284; 91,379; Kumta: 235; 87,697; Mundgod: 257; 26,815; Sirsi: 556; 88,648; Siddapur: 333; 61,556; Supa: 732; 34,384; Yellapur: 508; 30,901.

**Raichur Dist:** Deodurg: 595; 1,03,542; Gangavati: 514; 1,12,141; Koppal: 542; 1,30,369; Kushtagi: 536; 1,05,740; Lingsugur: 739; 1,34,983; Manvi: 749; 1,19,500; Raichur: 688; 1,72,772; Sindhnoor: 628; 96,962; Yel-lurga: 545; 1,16,461.

**Shimoga Dist:** Bhadravati: 257; 1,30,810; Chennagiri: 458; 1,45,590; Honnali: 338; 1,07,475; Hosanagar: 639; 59,354; Sagar: 749; 1,55,141; Shikaripur: 342; 1,01,378; Shimoga:

409; 1,35,182; Sorab: 412; 92,837; Thirthahalli: 483; 86,961.

**South Kanara Dist:** Bantwal: —; 1,79,136; Belthangady: —; 1,06,454; Coondapur: 600; 1,95,173; Karkal: 629; 1,81,702; Mangalore: 228; 3,92,227; Puttur: 357; 3,25,958.

**Tumkur Dist:** Chiknaikanahalli: 413; 1,15,954; Gubbi: 466; 1,47,150; Koratgere: 256; 89,386; Kunigal: 383; 1,55,392; Madhu-giri: 422; 1,53,824; Pavagada: 523; 1,17,138; Sira: 584; 1,53,983; Tiptur: 303; 1,14,646; Tumkur: 403; 2,17,654; Turuvekere: 305; 1,01,595.

**Orissa\*:** District-wise names of Sub-Divisions with area in square miles and population respectively are as follows:

**Balasore Dist:** Bhadrak: 1,076; 5,79,232; Nilgiri: 263; 97,227; Sadar: 1,168; 7,39,353.

**Bolangir Dist:** Bolangir: 868; 3,05,887; Patangarh: 727; 1,87,155; Sonepur: 882; 2,75,458; Titagarh: 935; 3,01,516.

**Cuttack Dist:** Athgarh: 556; 2,48,854; Jaipur: 1,115; 7,63,230; Kendrapara: 977; 6,50,905; Sadar: 1,562; 14,01,485.

**Dhenkanal Dist:** Angul: 902; 2,31,030; Athmalic: 711; 1,00,407; Hindol: 312; 84,940; Kamakhyanagar: 865; 2,16,971; Pal-Lahara: 450; 52,511; Sadar: 598; 2,27,890; Talcher: 388; 1,16,833.

**Ganjam Dist:** Berhanpur: 908; 5,05,497; Chattrapur: 827; 5,52,173; Ghumsur: 1,691; 5,28,272; Parlakimedi: 1,299; 2,87,713.

**Kalahandi Dist:** Dharamgarh: 2,177; 3,54,555; Nawapara: 1,312; 2,67,320; Sadar: 1,568; 3,87,615.

**Keonjhar Dist:** Anandapur: 539; 1,99,481; Champaul: 612; 1,88,088; Sadar: 2,065; 3,58,324.

**Koraput Dist:** Koraput Sadar: 2,100; 3,06,033; Nowrangpur: 5,572; 8,51,547; Rayaghadra: 2,203; 3,40,639.

**Mayurbhanj Dist:** Bamanghaty: 737; 2,97,556; Kaptipada: 418; 1,80,311; Panchpir: 761; 2,20,988; Sadar: 2,105; 5,10,242.

**Phulbani Dist:** Balliguda: 2,173; 2,27,806; Bandh: 1,330; 1,90,329; Khondmals: 779; 96,227.

**Puri Dist:** Bhubaneswar: 225; 2,57,190; Khurda: 802; 3,78,931; Navagarh: 1,551; 4,81,584; Sadar: 1,472; 7,48,129.

**Sambalpur Dist:** Bargarh: 2,252; 6,92,594; Deogarh: 1,044; 1,20,245; Kuchinda: 944; 1,32,819; Rairakhol: 833; 52,438; Sadar: 1,692; 5,10,625.

**Sundargarh Dist:** Bonal: 1,296; 1,39,301; Panposh: 711; 2,68,486; Sundargarh: 1,781; 3,51,653.

**Punjab: Ambala District:** Ambala: 399; 3,65,796; Kharer: 415; 3,32,615; Jagadhri: 489; 3,02,011; Naraingarh: 422; 1,53,952; Rupar: 286; 1,55,458; Nalagarh: 272; 62,361.

**Amritsar District:** Amritsar: 545; 8,18,239; Tarn Taran: 594; 3,52,831; Ajnala: 418; 1,78,169; Patti: 415; 1,98,002.

**Bhatinda District:** Bhatinda: 1,253; 4,92,434; Faridkot: 562; 2,42,107; Mansa: 864; 3,21,492.

**Ferozepore District:** Ferozepore: 686; 3,08,025; Zira: 494; 1,81,426; Moga: 647; 3,62,629; Muktsar: 1,028; 3,90,968; Fazilka: 1,053; 3,77,341.

**Gurdaspur District:** Gurdaspur: 497; 3,64,155; Batala: 477; 3,68,528; Pathankot: 366; 2,51,469.

**Gurgaon District:** Gurgaon: 412; 2,12,320; Ferozepur Jhirka: 312; 1,41,831; Nuh: 401;

\* Area and population of Tehsils are not available.



1,81,754; Palwal: 382; 2,14,566; Rewari: 554; 3,07,943; Ballabhgarh: 287; 1,79,714.

**Hissar District:** Hissar: 1,019; 3,48,956; Hansi: 803; 3,24,745; Bhiwani: 976; 2,64,056; Fatehabad: 919; 2,37,645; Sirsa: 1,639; 2,70,485.

**Hoshiarpur District:** Hoshiarpur: 572; 2,99,261; Dasuya: 500; 2,83,202; Garhshankar: 509; 2,87,043; Una: 686; 3,59,967.

**Jullundur District:** Jullundur: 389; 5,65,422; Nawanshahr: 299; 2,44,082; Phillaur: 283; 2,31,998; Nakodar: 363; 1,82,932.

**Kangra District:** Kangra: 422; 1,71,787; Dera Gopipur: 495; 1,69,791; Nurpur: 519; 1,18,739; Hamirpur: 588; 2,50,472; Palampur: 2,539; 1,93,512; Kulu: —; 1,52,766.

**Kapurthala District:** Kapurthala: 525; 2,33,011; Phagwara: 118; 1,10,764.

**Karnal District:** Karnal: 861; 4,40,123; Kaithal: 1,210; 4,99,131; Thanesar: 554; 2,69,000; Panipat: 461; 2,81,425.

**Ludhiana District:** Ludhiana: 566; 5,62,180; Jagraon: 419; 2,42,548; Samrala: 344; 2,16,462.

**Mohendragarh District:** Mohendragarh: 401; 1,51,750; Narnaul: 367; 1,95,105; Dadri: 572; 2,00,309.

**Patiala District:** Patiala: 734; 3,97,089; Nabha: 240; 1,20,984; Rajpura: 427; 2,34,306; Sirhind: 522; 2,95,058.

**Rohtak District:** Rohtak: 317; 3,95,110; Jhajjar: 813; 4,08,939; Gohana: 553; 2,89,174; Sonapat: 448; 3,23,692.

**Sangrur District:** Sangrur: 889; 3,97,965; Jind: 471; 2,32,842; Narwana: 575; 2,31,984; Barnala: 580; 2,55,054; Malerkotla: 516; 3,07,416.

**Simla District:** Simla: 9; 42,467; Kandaghat: 214; 68,789.

**Rajasthan†: Ajmer:** Ajmer: 914; 382; Beawar: 612; 177; Kekri: 894; 134; Arain: 215; 25; Kishangarh: 245; 52; Rupnagar: 204; 27; Sarwar: 239; 29.

**Alwar:** Alwar: 705; 180; Bansur: 256; 62; Behror: 282; 108; Lachhmangarh: 450; 146; Rajgarh: 384; 105; Thanagazi: 347; 57; Kishangarh: 288; 78; Mandawar: 223; 69; Tijara: 264; 57.

**Banswara:** Banswara: 440; 83; Gandhi: 271; 67; Ghatole: 498; 71; Bagidora: 328; 70; Kushalgarh: 409; 66.

**Barmer:** Pachpadra: 1,300; 28; Siwana: 760; 61; Barmer: 4,309; 214; Chohtan: 1,532; 90; Shiv: 2,448; 41.

**Bharatpur:** Bayana: 310; 72; Rupbas: 213; 64; Weir: 237; 74; Bharatpur: 368; 140; Nadbai: 173; 55; Deeg: 193; 63; Kaman: 284; 84; Nagar: 181; 55; Bari: 395; 61; Basari: 385; 63; Gird (Dholpur): 231; 131; Rajakhara: 151; 45.

**Bhilwara:** Banera: 282; 50; Bhilwara: 359; 106; Mandal: 475; 79; Raipur: 210; 40; Sahara: 228; 52; Asind: 431; 83; Hurda: 254; 40; Kotri: 368; 60; Mandargarh: 610; 75; Jahazpur: 427; 74; Shahpura: 404; 66.

**Bikaner:** Bikaner: 3,912; 192; Lunkaransar: 3,143; 40; Magra: 1,344; 35; Nokha: 1,320; 71.

**Bundi:** Bundi: 316; 62; Patan: 457; 72; Talera: 509; 40; Hindoli: 452; 51; Nainwa: 439; 56.

**Chittorgarh:** Begun: 381; 45; Bhainsrorgarh: 634; 28; Chittorgarh: 326; 61; Gangral: 279; 47; Rashmi: 187; 38; Kapasin: 200; 46; Barisadri: 214; 43; Bhadesar: 236; 47; Chhotiandri: 268; 40; Dungla: 230; 42; Nimbahera: 293; 50; Achanara: 226; 31; Pratargarh: 671; 69.

**Churu:** Churu: 683; 83; Rajgarh: 1,000; 87; Taranagar: 781; 44; Dungargarh: 463; 52; Ratangarh: 896; 76; Sardarshahar: 1,860; 77; Sujargarh: 1,070; 104.

**Dungarpur:** Aspur: 288; 63; Dungarpur: 689; 145; Sagwara: 483; 100.

**Ganganagar:** Ganganagar: 539; 133; Sadulgarh: 1,154; 104; Suratgarh: 1,480; 44; Karanpur: 317; 68; Padampur: 324; 58; Bhadra: 669; 66; Nohar: 1,678; 84; Anupgarh: 1,300; 28; Raisinghnagar: 510; 45.

**Jatpur:** Amber: 402; 130; Jamwa Ramgarh: 548; 108; Baswa: 246; 92; Dausa: 343; 95; Lalsot: 325; 85; Sikrai: 216; 66; Bassi: 266; 72; Chaksu: 362; 60; Jaipur: 192; 325; Sangarner: 306; 70; Bairath: 451; 102; Kotputli: 287; 94; Dudu: 496; 55; Phagi: 441; 50; Phulera: 573; 118.

**Jaisalmer:** Fatehgarh: 1,692; 16; Jaisalmer: 3,620; 22; Ramgarh: 2,800; 11; Sam: 4,100; 13; Nachna: 1,350; 9; Pokran: 2,500; 40.

**Jalore:** Jaswantpura: 1,360; 150; Sanchoe: 1,219; 85; Ahore: 802; 83; Jalore: 750; 106.

**Jhalawar:** Aklera: 239; 41; Bakani: 216; 38; Khanpur: 329; 58; Manoharthana: 223; 42; Dag: 251; 35; Gangdhar: 185; 32; Jhalrapatan: 270; 54; Pachpahar: 177; 33; Pirawa: 399; 71.

**Jhunjhunu:** Chirawa: 483; 128; Jhunjhunu: 633; 141; Khetri: 605; 139; Udaipurvati: 601; 181.

**Jodhpur:** Bilara: 1,112; 127; Jodhpur: 1,606; 278; Shergarh: 1,700; 83; Osian: 1,461; 93; Phalodi: 3,127; 91.

**Kota:** Anta: 207; 32; Baran: 239; 59; Kishanganj: 594; 36; Mangrol: 174; 33; Shahbad: 592; 34; Atru: 330; 47; Chabra: 310; 41; Chhipabarod: 327; 46; Chechat: 159; 21; Kanwas: 270; 25; Ramganjmandi: 134; 28; Sangod: 197; 35; Barod: 160; 24; Digod: 189; 26; Itawa: 148; 21; Ladpura: 558; 119; Pipalda: 294; 43.

**Nagaur:** Deedwana: 649; 88; Ladnu: 487; 66; Degana: 809; 83; Merta: 808; 92; Jayal: 896; 62; Nagaur: 1,712; 141; Nawa: 560; 97; Parbatsar: 865; 135.

**Pali:** Balli: 834; 154; Desuri: 710; 110; Jaitaran: 519; 69; Raipur: 414; 65; Pali: 1,024; 95; Kharchi: 600; 93; Sojat: 572; 75.

**Sawai:** Bamanwas: 267; 49; Gangapur: 258; 73; Nadoti: 240; 44; Hindaun: 236; 91; Mahwa: 186; 63; Toda Bhim: 208; 76; Karanli: 690; 105; Sapotra: 501; 56; Borli: 418; 68; Khandar: 416; 38; Sawai Madhopur: 637; 102.

**Sikar:** Fatehpur: 413; 88; Lachhmangarh: 460; 92; Danta Ramgarh: 513; 104; Neem-ka-Thana: 560; 100; Sikar: 615; 147; Sri Madhopur: 472; 146.

**Sirohi:** Abu Road: 304; 53; Pindwara: 434; 62; Reodhar: 473; 58; Sheoganj: 345; 50; Sirohi: 453; 67.

**Tonk:** Duni: 470; 63; Malpura: 655; 64; Toda Raisingh: 315; 50; Aligarh: 358; 52; Niwal: 398; 58; Tonk: 575; 114.

**Udaipur:** Bhim: 229; 55; Deogarh: 262; 37; Kotra: 704; 44; Phalasia: 579; 44; Amet: 194; 40; Kumbhalgarh: 348; 60; Railmagra: 219; 49; Rajsamand: 229; 62; Kherwada: 414; 69; Salumber: 395; 70; Sarada: 397; 69; Girwa: 665; 187; Gogunda: 346; 53; Nathdwara: 359; 95; Bhopalsagar: 158; 32; Lasodia: 562; Mavli: 299; 80; Vallabhagar: 418; 90.

**Uttar Pradesh: Agra District:** Agra: 291; 6,03,700; Bah: 838; 1,74,335; Etmadpur: 278; 2,44,420; Fatehbad: 241; 1,65,469; Firozabad: 208; 2,64,515; Kheragarh: 808; 1,68,522; Kiraoli: 263; 1,78,999.

**Aligarh District:** Atrauli: 351; 3,04,020; Hathras: 291; 3,13,397; Iglas: 214; 1,61,509; Khair: 402; 2,78,160; Koll: 355; 4,49,541; Sikandra Rao: 337; 2,59,575.

**Allahabad District:** Chall: 303; 6,77,644; Handia: 298; 2,86,912; Karchhana: 521; 2,91,217; Manjhanpur: 274; 1,89,489; Meja: 658; 2,51,397; Phulpur: 292; 2,73,039; Sirathu: 233; 1,83,734; Soraon: 264; 2,78,139.

**Almora District:** Almora: 4,136\*; 6,50,804\*; Champawat: 600; 80,304.

**Azamgarh District:** Azamgarh: 313; 3,93,960; Ghosi: 364; 4,14,644; Lalgaon: 384; 3,52,546; Mohammadabad: 358; 4,42,060; Phulpur: 444; 4,47,907; Sagri: 350; 3,50,367.

**Bahraich District:** Baraich: 931; 5,83,158; Kaisarganj: 664; 4,58,141; Nanpara: 1,022; 4,56,580.

**Ballia District:** Ballia: 446; 5,11,698; Bansdih: 374; 3,89,830; Basra: 422; 4,25,289.

**Banda District:** Baberu: 610; 2,24,967; Banda: 614; 2,28,049; Karwi: 822; 2,16,976; Mau: 317; 90,908; Naraini: 523; 1,93,743.

**Bara Banki District:** Fatehpur: 493; 3,67,992; Haidarganj: 290; 2,49,878; Nawabganj: 360; 3,48,355; Ramsanehighat: 584; 4,45,658.

**Bareilly District:** Aonla: 317; 2,69,074; Baheri: 369; 2,49,215; Bareilly: 440; 6,36,750; Faridpur: 244; 1,67,620; Nawabganj: 221; 1,58,652.

**Basti District:** Bansi: 471; 3,77,575; Basti: 458; 4,97,533; Domariaganj: 499; 4,20,235; Harraiya: 485; 4,01,581; Khalilabad: 457; 5,38,499; Nangarh: 449; 3,86,514.

**Bijnor District:** Bijnor: 486; 3,24,125; Dhampur: 458; 4,01,143; Nagina: 457; 2,17,715; Najibabad: 438; 2,42,998.

**Budaun District:** Bisauli: 360; 2,91,124; Budaun: 454; 3,68,870; Dataganj: 410; 2,72,277; Gunnaur: 359; 20,85,545; Sahaswan: 422; 2,69,413.

**Bulandshahr District:** Anupshahr: 456; 4,39,408; Bulandshahr: 476; 5,34,837; Khurja: 459; 3,83,353; Sikandrabad: 521; 3,78,238.

**Chamoli District:** Chamoli: —; 71,990; Joshimath: —; 15,325; Karan Prayag: —; 1,07,590; Ukhimath: —; 57,813.

**Dehra Dun District:** Chakrata: 447; 66,782; Dehra Dun: 752; 3,63,404.

**Deoria District:** Deoria: 493; 6,13,869; Hata: 546; 5,61,562; Padrauna: 559; 5,99,866; Salempur: 495; 5,96,771.

**Etah District:** Aliganj: 517; 3,50,950; Etah: 482; 3,60,719; Jalesar: 227; 1,60,346; Kasganj: 487; 4,28,184.

**Etawah District:** Auraiya: 415; 2,97,688; Bharthana: 417; 2,83,715; Bidhuna: 429; 2,66,834; Etawah: 427; 3,34,751.

**Faizabad District:** Akbarpur: 536; 4,93,431; Bikapur: 460; 3,76,217; Faizabad: 355; 4,02,675; Tanda: 350; 3,57,953.

**Farrukhabad District:** Chhibramau: 418; 4,48,604; Farrukhabad: 483; 4,48,604; Kaimganj: 364; 3,52,431; Kannauj: 393; 2,87,315.

**Fatehpur District:** Fatehpur: 642; 4,21,037; Khaga: 485; 3,24,469; Bindki: —; 3,32,054.

**Garhwal District:** Lansdowne: 1,056; 3,03,319; Pauri: 961; 1,75,881.

**Ghazipur District:** Ghazipur: 261; 2,90,581; Mohammadabad: 312; 3,25,377; Saidpur: 428; 4,25,324; Zamania: 297; 2,69,429.

**Gonda District:** Gonda: 619; 5,43,713; Tarabganj: 663; 4,80,782; Utrula: 1,560; 5,13,751; Balrampur: —; 5,39,448.

**Gorakhpur District:** Bangaon: 531; 5,98,605; Gorakhpur: 655; 9,57,510; Maharajganj: 682; 9,57,510; Pharendra: 569; 4,29,144.

**Hamirpur District:** Charkhari: 159; 1,39,288; Hamirpur: 416; 1,31,064; Mohoba: 354; 1,64,826; Maudaha: 604; 1,74,542; Bath: 648; 1,84,755.

**Hardoi District:** Bilgram: 588; 3,71,615; Hardoi: 632; 4,62,736; Sandila: 555; 3,81,271; Shahabad: 539; 3,62,245.

\* Also includes Ranikhet Tehsil.

† Figures are in thousands.



**Jalaun District:** Jalaun: 514; 2,46,372; Kalpi: 487; 1,45,579; Konch: 401; 1,53,087; Orai: 358; 1,16,439.

**Jaunpur District:** Jaunpur: 288; 3,98,420; Kerakat: 246; 2,98,123; Machhlisahr: 353; 3,25,861; Marlahu: 320; 3,48,322; Shahganj: 353; 3,57,292.

**Jhansi District:** Garautha: 594; 1,33,367; Jhansi: 482; 3,02,628; Lalitpur: 1,059; 2,21,471; Mehroni: 887; 1,50,238; Mau-Ranpur: 424; 1,45,700; Moth: 446; 1,32,815.

**Kanpur District:** Akbarpur: 368; 2,28,053; Bhognipur: 380; 2,24,579; Bilhaur: 387; 2,55,161; Derapur: 403; 2,50,316; Ghatampur: 423; 2,54,695; Kanpur: 418; 11,49,635.

**Kheri District:** Lakhimpur: 1,053; 5,09,989; Mohamdi: 663; 3,62,027; Nighasan: 1,251; 3,91,215.

**Lucknow District:** Lucknow: 387; 9,07,852; Malhabad: 327; 2,48,034; Mohanlalganj: 275; 1,99,608.

**Mainpuri District:** Bhongaon: 457; 3,29,833; Jasrana: 317; 1,99,166; Karhal: 218; 1,38,497; Mainpuri: 388; 2,55,201; Shikohabad: 294; 2,52,292.

**Mathura District:** Chhata: 407; 2,11,097; Mat: 331; 2,34,499; Mathura: 410; 3,77,166; Sadabad: 308; 2,52,810.

**Meerut District:** Baghat: 400; 4,89,658; Ghaziabad: 445; 5,31,715; Hapur: 407; 4,28,766; Mowana: 421; 3,20,069; Meerut: 286; 5,84,779; Sardhana: 341; 3,62,160.

**Mirzapur District:** Ohunar: 562; 3,07,308; Dudhi: 988; 1,56,397; Mirzapur: 1,186; 5,09,897; Robertganj: 1,633; 2,73,864.

**Moradabad District:** Amroha: 383; 3,44,571; Bilari: 333; 3,50,500; Hasanpur: 569; 2,84,971; Moradabad: 300; 4,34,566; Sambhal: 475; 4,03,180; Thakurdwara: 240; 1,53,347.

**Muzaffarnagar District:** Budhana: 288; 3,01,463; Jansath: 440; 3,29,693; Kalraha: 438; 3,80,563; Muzaffarnagar: 464; 4,32,897.

**Nainital District:** Bhabar: 1,279; 1,45,545; Kashipur: 181; 88,820; Nainital: 433; 1,13,933; Tarai: 885; 2,26,069.

**Pilibhit District:** Bilaspur: 365; 2,35,280; Pilibhit: 465; 2,65,128; Puranpur: 512; 1,17,812.

**Pithoragarh District:** Dharchula: —; 32,590; Didihat: —; 96,620; Munsiari: —; 30,519; Pithoragarh: —; 1,02,664.

**Pratapgarh:** Kunda: 537; 4,42,520; Patti: 457; 3,80,339; Pratapgarh: 437; 4,28,543.

**Rae Bareilly District:** Dalmau: 472; 3,77,621; Maharajganj: 464; 3,18,461; Rae Bareilly: 375; 2,92,260; Salon: 444; 3,28,411.

**Rampur District:** Bilaspur: 204; 76,061; Milak: 167; 1,11,667; Rampur: 180; 2,66,370; Sahabad: 167; 1,08,902; Suar: 213; 1,41,546.

**Saharanpur District:** Deoband: 386; 5,35,706; Nakur: 429; 2,79,634; Boorkee: 706; 4,78,459; Saharanpur: 626; 5,35,706.

**Shahjahanpur District:** Jalalabad: 363; 2,33,533; Powayan: 591; 2,51,973; Shahjahanpur: 395; 3,56,277; Tilhar: 413; 2,91,816.

**Silapuri District:** Biswan: 572; 3,71,416; Mirlikh: 596; 4,02,914; Sidhauri: 554; 3,85,237; Sitapur: 511; 4,56,311.

**Sultanpur District:** Amethi: 366; 2,64,227; Kadipur: 447; 3,61,795; Musafirkhana: 397; 3,24,442; Sultanpur: 508; 4,62,588.

**Tehri-Garhwal District:** Deo Prayag: —; 92,521; Pratapnagar: —; 1,01,928; Tehri: —; 92,521.

**Unnao District:** Hasanganj: 440; 3,06,996; Purwa: 551; 3,68,709; Safipur: 409; 2,77,065; Unnao: 402; 2,74,278.

**Uttar Kashi District:** Bhatwari: —; 21,446; Dunda: —; 43,075; Puraula: —; 28,225; Rajgarhi: —; 29,631.

**Varanasi District:** Bhadohi: 417; 4,63,185; Chakia: 474; 1,42,385; Chandauli: 510; 5,19,637; Varanasi: 596; 12,36,597.

**West Bengal\*:** District-wise names of Sub-Divisions with area in square miles respectively are as follows:

**Bankura Dist:** Sadar: 1,933; —; Vishnupur: 714; —.

**Birbhum Dist:** Rampurhat: 606; —; Sadar: 1,137; —.

**Burdwan Dist:** Asansol: 624; —; Kalna: 385; —; Katwa: 409; —; Sadar: 1,287; —.

**Cooch Behar Dist:** Dinhata: 272; —; Mathabhanga: 343; —; Mekliganj: 199; —; Sadar: 285; —; Tufanganj: 224; —.

**Darjeeling Dist:** Kalimpong: 408; —; Kurseong: 164; —; Sadar: 361; —; Siliguri: 266; —.

**Hooghly Dist:** Arambag: 413; —; Chandernagore: 388; —; Sadar: 446; —; Serampur: 160; —.

Names of districts showing within brackets the names of talukas and their area in square miles respectively under each district:

**Bankura Dist.** (Sadar, 1,933; Vishnupur, 714); **Birbhum Dist.** (Rampurhat, 606; Sadar, 1,137); **Burdwan Dist.** (Asansol, 624; Kalna, 385; Katwa, 409; Sadar, 1,287); **Calcutta Dist.** (Calcutta Municipal Area, 28 Acres); **Cooch Behar Dist.** (Dinhata, 272; Mathabhanga, 343; Mekliganj, 199; Sadar, 285; Tufanganj, 224); **Darjeeling Dist.** (Kalimpong, 408; Kurseong, 164; Sadar, 361; Siliguri, 266); **Hooghly Dist.** (Arambag, 413; Chandernagore, 388; Sadar, 446; Serampur, 160); **Howrah Dist.** (Sadar, 174; Uluberia, 386); **Jalpaiguri Dist.** (Alipur Duars, 1,079; Sadar, 1,296); **Malda Dist.** (Sadar, 1,296); **Midnapur Dist.** (Contai, 912; Ghatal, 369; Jhargram, 1,186; Sadar, 2,038; Tamluk, 749); **Murshidabad Dist.** (Jangipur, 437; Kandi, 454; Lalbagh, 522; Sadar, 659); **Nadia Dist.** (Ranaghat, 540; Sadar, 969); **Purulia Dist.** (2,408); **24 Parganas Dist.** (Bangaon, 320; Barasat, 384; Barrackpur, 119; Basirhat, 818; Diamond Harbour, 1,262; Sadar, 1,107); **West Dinajpur Dist.** (Balurghat, 580; Islampur, 759; Raiganj, 865).

**Himachal Pradesh:** **Bilaspur Dist:** Bilaspur Sadar: 215; 79,043; Ghumarwin: 236; 79,501.

**Chamba Dist:** Chamba: 791; 69,034; Bhattiyat: 250; 48,089; Churah: 669; 56,118; Bharmour: 638; 5,582; Pangl: 787; 11,644.

**Kinnaur Dist:** Nichar, Kalpa, Pooh Sub-Divisions: 2,500; 40,640.

**Maharash Dist:** Rampur: 853; 43,757; Jubbal: 105; 17,636; Arki: 156; 38,688; Chopal: 375; 40,384; Rohru: 580; 51,805; Kumbharsain: 134; 23,822; Solan: 108; 34,938; Kusumpti: 151; 27,098; Theog: 163; 41,014; Suni: 93; 18,750; Kotkhal: 69; 20,545.

**Mandi Dist:** Mandi Sadar: 202; 92,924; Joginder Nagar: 445; 68,412; Sarkaghat: 202; 84,360; Chachlot: 351; 57,518; Sunder Nagar: 168; 42,415; Karsog: 252; 37,978.

**Sirmur Dist:** Nahan: 214; 32,519; Paonta: 231; 61,336; Renuka: 380; 63,642; Pachhad: 316; 40,087.

**Manipur\*:** Names of Districts with Sub-Divisions with area in square miles and population respectively within brackets of the latter are as follows:

**Manipur Plains District** (Bishenpur: 196; 79,031; Imphal West (including Imphal town): 292; 2,99,863; Jiribam: 264; 18,143; Hills District (Mao: 982; 70,102; Tamenglong: 1,772; 36,554; Tengnongpa: 1,352; 27,651; Thonbal: 200; 1,35,133; Ukhrul: 1,832; 48,475; Churachandpur: 1,738; 63,276).

**Pondicherry\*:** Area and population by Communes: Pondicherry: 113.4 sq. miles; 2,58,590; Karaikal: 57.6 sq. miles; 88,986; Mahe: 3.2 sq. miles; 19,478; Yanam: 6.7 sq. miles; 7,029.

**Estimated population:** 1966: 4,14,335; 1971: 4,67,612; 1976: 5,26,959.

**Tripura\*:** Names of the Sub-Divisions with area in square miles and population respectively are as follows:

Amarpur: 1,365; 56,289; Belonia: 1,020; 76,133; Dharmanagar: 662; 1,14,370; Kailashahar: 1,202; 1,04,247; Kamalpur: 622; 61,737; Khowal: 1,393; 1,29,935; Sabroom: 616; 43,361; Sadar: 1,559; 3,65,827; Sonamura: 531; 77,932; Udulpur: 637; 90,119.

The average birth rate, on the basis of incomplete data, was estimated to be about 34 per 1,000 in 1941-50, and apart from fluctuations usual for such a high figure, has not registered any serious decline during the last few years.

The estimated death rate shows a steady decline from 42.6 per 1,000 in 1901 to 27.4 in 1951 and 21.6 in 1961. Infant mortality has dropped from 232 in 1901 to 98 in 1960.

The expectation of life at birth has increased from 23 years in 1931 to 42 in 1961.

#### Registered Foreigners in India

As many as 59,744 registered foreigners were reported to be resident in India on December 1, 1962, as against 61,705 in 1961.

The principal nationalities were: Tibetan—14,988; Chinese—10,627; Iranian—4,501; American—4,421; Afghan—3,648; German—2,930; Burmese—1,623; Russian—1,581; French—1,047; Italian—1,044; Japanese—937.

These figures do not include children below the age of 16 years and nationals of Commonwealth countries.

Consequent on the expiry of the Sino-Indian Agreement, exemptions from the provisions of the Indian Passport Rules, 1950, and the Foreigners (Protected Areas) Order, 1958, allowed to certain categories of Tibetans have been withdrawn.

The number of visas granted to foreigners during 1962 totalled 63,529.

#### WORKING CLASS—SCH. CASTES & SCH. TRIBES.

Statewise population of Scheduled Castes & Scheduled Tribes Workers (male and female) respectively is:—

**Sch. Castes:** Andhra Pradesh 2,512,325; 2,461,291; Assam 389,271; 343,485; Bihar 3,218,935; 3,317,940; Gujarat 693,436; 673,819; Jammu & Kashmir 134,765; 133,756; Kerala 705,709; 716,348; Madhya Pradesh 2,155,875; 2,097,875; Madras 8,047,613; 3,024,923; Maharashtra 1,135,191; 1,091,723; Mysore 1,586,547; 1,530,685; Orissa 1,371,410; 1,392,448; Punjab 2,208,473; 1,930,633; Rajasthan 1,747,476; 1,612,164; Uttar Pradesh 7,944,364; 7,472,881; West Bengal 3,629,182; 3,321,544.

Andaman & Nicobar Islands (Nil); Delhi 189,470; 152,085; Himachal Pradesh 191,429; 178,487; L. M. and A. Islands (Nil); Manipur 6,886; 6,490; Tripura 62,069; 57,656; Dadra and Nagar Haveli 498; 686; Goa, Daman & Diu (Nil); NEFA (Nil); Nagaland 80; 46; Pondicherry 28,804; 28,057. Total 32,963,789; 31,547,534.

**Scheduled Tribes:** Andhra Pradesh 670,368; 654,000; Assam 1,057,076; 1,011,288; Bihar 2,087,994; 2,116,776; Gujarat 1,398,478; 1,355,968; Jammu & Kashmir (Nil); Kerala 103,995; 104,001; Madhya Pradesh 3,334,363; 3,344,047; Madras 129,578; 123,068; Maharashtra 1,211,605; 1,185,554; Mysore 98,337; 93,759; Orissa 2,094,763; 2,129,004; Punjab 6,964; 7,168; Rajasthan 1,198,886; 1,110,561; Uttar Pradesh (Nil); West Bengal 1,047,287; 1,016,596.

Andaman & Nicobar Islands 7,318; 6,804; Delhi (Nil); Himachal Pradesh 54,719; 53,475; L. M. & A. Islands 11,466; 11,925; Manipur 123,162; 125,887; Tripura 184,174; 175,896; Dadra & Nagar Haveli 26,002; 25,259; Goa, Daman & Diu (Nil); NEFA (Nil); Nagaland 171,233; 172,464; Pondicherry (Nil).

\* Tehsil area and population are not available.



## WORKING CLASS UNDER DIFFERENT CATEGORIES, 1961†

| States/Territory                      | Sex | Total workers | Cultivators | Agricultural labourers | In Mining, Quarrying, Livestock, Forestry, Fishing, Hunting & Plantations, Orchards & allied Industries | At Household Industry | Manufacturing other than Household Industry | In construction | In Trade Commerce | In Transport, Storage and Communications | In Other services | Non-workers |
|---------------------------------------|-----|---------------|-------------|------------------------|---------------------------------------------------------------------------------------------------------|-----------------------|---------------------------------------------|-----------------|-------------------|------------------------------------------|-------------------|-------------|
| Andhra Pradesh                        | M   | 11,299,400    | 4,654,264   | 2,454,741              | 466,002                                                                                                 | 1,149,287             | 387,729                                     | 174,167         | 590,817           | 233,813                                  | 1,188,580         | 6,862,271   |
| Assam                                 | F   | 7,363,642     | 2,832,555   | 2,881,753              | 94,956                                                                                                  | 605,867               | 87,946                                      | 46,083          | 207,330           | 4,147                                    | 543,005           | 10,458,134  |
| Bihar                                 | M   | 3,423,454     | 2,189,874   | 1,584,179              | 291,163                                                                                                 | 28,293                | 91,328                                      | 32,212          | 174,845           | 74,637                                   | 376,925           | 2,904,675   |
| Bihar                                 | F   | 1,713,957     | 1,133,626   | 29,237                 | 229,937                                                                                                 | 282,060               | 12,308                                      | 1,626           | 9,862             | 975                                      | 47,326            | 3,830,686   |
| Gujarat                               | M   | 12,955,406    | 6,926,057   | 2,574,239              | 541,511                                                                                                 | 602,958               | 385,396                                     | 90,333          | 448,487           | 227,763                                  | 1,149,665         | 10,346,040  |
| Gujarat                               | F   | 6,279,156     | 3,435,914   | 1,844,236              | 110,672                                                                                                 | 454,942               | 40,500                                      | 9,009           | 74,462            | 2,780                                    | 306,641           | 16,875,005  |
| Gujarat                               | M   | 5,685,776     | 2,816,996   | 679,267                | 76,290                                                                                                  | 343,163               | 600,109                                     | 73,492          | 381,287           | 155,867                                  | 659,305           | 4,948,126   |
| Jammu & Kashmir                       | P   | 2,788,812     | 1,702,064   | 572,733                | 28,560                                                                                                  | 212,443               | 36,050                                      | 16,551          | 29,869            | 3,194                                    | 187,348           | 7,210,636   |
| Jammu & Kashmir                       | M   | 1,096,940     | 798,444     | 16,764                 | 18,247                                                                                                  | 43,040                | 31,298                                      | 8,470           | 33,065            | 12,491                                   | 135,121           | 799,693     |
| Kerala                                | F   | 426,681       | 354,959     | 1,653                  | 7,232                                                                                                   | 52,588                | 2,155                                       | 264             | 555               | 739                                      | 6,536             | 1,237,602   |
| Kerala                                | M   | 3,947,038     | 904,502     | 516,914                | 398,622                                                                                                 | 188,654               | 392,950                                     | 67,664          | 298,218           | 144,913                                  | 1,034,601         | 4,414,889   |
| Madhya Pradesh                        | F   | 1,683,295     | 273,601     | 461,482                | 88,737                                                                                                  | 299,908               | 136,522                                     | 3,038           | 23,715            | 7,600                                    | 388,692           | 6,858,493   |
| Madhya Pradesh                        | M   | 9,981,224     | 5,932,754   | 1,397,278              | 383,803                                                                                                 | 528,795               | 302,703                                     | 141,983         | 350,141           | 153,673                                  | 790,094           | 6,596,980   |
| Madras                                | F   | 6,947,953     | 4,678,754   | 1,417,922              | 108,484                                                                                                 | 312,000               | 34,142                                      | 30,275          | 53,496            | 4,247                                    | 308,033           | 8,846,251   |
| Madras                                | M   | 10,103,326    | 4,230,028   | 1,445,041              | 330,606                                                                                                 | 681,052               | 750,585                                     | 175,937         | 680,894           | 248,599                                  | 1,580,584         | 11,527,680  |
| Maharashtra                           | F   | 6,248,296     | 2,227,805   | 1,383,333              | 104,892                                                                                                 | 525,760               | 97,717                                      | 29,390          | 97,407            | 5,002                                    | 776,989           | 8,766,018   |
| Maharashtra                           | M   | 11,662,264    | 4,744,781   | 2,112,617              | 346,798                                                                                                 | 560,014               | 1,191,921                                   | 197,445         | 770,659           | 425,464                                  | 1,312,565         | 11,838,619  |
| Mysore                                | F   | 7,286,217     | 3,992,294   | 2,397,385              | 62,593                                                                                                  | 272,155               | 112,414                                     | 38,171          | 85,391            | 21,348                                   | 304,466           | 5,011,321   |
| Mysore                                | M   | 7,029,602     | 3,750,685   | 886,072                | 243,595                                                                                                 | 451,206               | 359,351                                     | 153,479         | 327,869           | 105,077                                  | 752,268           | 7,849,105   |
| Orissa                                | F   | 3,696,744     | 2,055,979   | 875,038                | 92,481                                                                                                  | 257,504               | 62,529                                      | 36,459          | 63,151            | 1,241                                    | 252,362           | 3,445,220   |
| Orissa                                | M   | 5,328,366     | 3,167,884   | 805,009                | 95,978                                                                                                  | 285,734               | 72,998                                      | 29,117          | 111,622           | 49,098                                   | 693,682           | 8,445,097   |
| Punjab                                | F   | 5,764,363     | 2,989,353   | 483,013                | 60,407                                                                                                  | 420,558               | 13,199                                      | 1,741           | 35,840            | 2,618                                    | 332,286           | 5,127,213   |
| Punjab                                | M   | 1,336,783     | 1,007,378   | 60,782                 | 5,743                                                                                                   | 120,291               | 15,148                                      | 5,071           | 4,808             | 861                                      | 116,701           | 8,078,453   |
| Rajasthan                             | F   | 6,141,506     | 4,205,067   | 230,193                | 122,737                                                                                                 | 397,504               | 151,194                                     | 96,908          | 274,232           | 116,975                                  | 546,706           | 4,422,576   |
| Rajasthan                             | M   | 3,442,334     | 2,850,012   | 163,438                | 48,344                                                                                                  | 200,678               | 20,841                                      | 12,254          | 13,925            | 934                                      | 131,908           | 6,149,186   |
| Uttar Pradesh                         | F   | 22,480,360    | 14,302,062  | 2,035,588              | 147,427                                                                                                 | 1,319,180             | 771,059                                     | 209,914         | 996,260           | 396,530                                  | 2,302,340         | 16,153,841  |
| Uttar Pradesh                         | M   | 6,369,781     | 4,126,314   | 1,225,590              | 24,030                                                                                                  | 492,566               | 29,776                                      | 4,005           | 66,622            | 2,735                                    | 407,741           | 28,742,419  |
| West Bengal                           | F   | 10,040,239    | 3,891,551   | 1,446,721              | 439,010                                                                                                 | 299,904               | 1,243,617                                   | 146,625         | 836,365           | 386,873                                  | 1,349,573         | 8,554,905   |
| West Bengal                           | M   | 1,539,956     | 567,228     | 324,987                | 138,871                                                                                                 | 187,407               | 75,543                                      | 4,665           | 35,839            | 5,352                                    | 200,064           | 14,787,179  |
| Andaman & Nicobar Islands             | M   | 26,648        | 5,228       | 337                    | 6,986                                                                                                   | 2,047                 | 1,145                                       | 5,426           | 1,065             | 403                                      | 4,011             | 12,656      |
| Delhi                                 | F   | 4,548         | 1,227       | 11                     | 307                                                                                                     | 2,612                 | 59                                          | 16              | 30                | 284                                      | 284               | 19,698      |
| Delhi                                 | M   | 778,282       | 34,603      | 5,101                  | 6,918                                                                                                   | 13,194                | 163,353                                     | 32,605          | 144,579           | 48,673                                   | 329,256           | 711,096     |
| Himachal Pradesh                      | F   | 76,169        | 20,855      | 2,224                  | 1,748                                                                                                   | 3,516                 | 6,971                                       | 2,755           | 2,148             | 896                                      | 35,056            | 1,093,065   |
| Himachal Pradesh                      | M   | 443,449       | 334,266     | 7,555                  | 8,251                                                                                                   | 27,686                | 6,105                                       | 13,202          | 7,006             | 2,889                                    | 36,489            | 250,248     |
| Laccadive, Minicoy & Amindivi Islands | F   | 362,038       | 336,323     | 3,777                  | 646                                                                                                     | 17,163                | 630                                         | 508             | 171               | 31                                       | 2,789             | 286,409     |
| Laccadive, Minicoy & Amindivi Islands | M   | 6,158         | 135         | ..                     | 579                                                                                                     | 4,120                 | 343                                         | 224             | 109               | 147                                      | 501               | 5,777       |
| Manipur                               | F   | 183,127       | 141,182     | ..                     | 4                                                                                                       | 6,185                 | 31                                          | 10              | 3                 | 2                                        | 52                | 5,882       |
| Manipur                               | M   | 174,793       | 92,996      | 1,186                  | 574                                                                                                     | 7,291                 | 848                                         | 2,003           | 5,328             | 3,014                                    | 21,701            | 203,931     |
| Tripura                               | F   | 322,043       | 199,308     | 998                    | 231                                                                                                     | 71,875                | 258                                         | 233             | 6,561             | 19                                       | 1,622             | 218,186     |
| Tripura                               | M   | 115,186       | 81,573      | 29,307                 | 7,773                                                                                                   | 7,011                 | 9,039                                       | 3,998           | 17,957            | 4,770                                    | 42,890            | 269,194     |
| Dadra & Nagar Haveli                  | F   | 18,317        | 12,771      | 3,605                  | 4,420                                                                                                   | 18,142                | 1,800                                       | 102             | 564               | 9                                        | 4,071             | 445,582     |
| Dadra & Nagar Haveli                  | M   | 16,477        | 13,027      | 2,413                  | 1,477                                                                                                   | 436                   | 83                                          | 229             | 198               | 111                                      | 599               | 11,207      |
| NEFA                                  | F   | 24,766        | 96          | 2,536                  | 518                                                                                                     | 172                   | ..                                          | 79              | 28                | ..                                       | 115               | 11,062      |
| NEFA                                  | M   | 1,398         | 57          | 10                     | 342                                                                                                     | 15                    | ..                                          | 1,712           | 407               | 869                                      | 21,315            | 6,814       |
| Nagaland                              | F   | 115,554       | 91,702      | ..                     | ..                                                                                                      | 461                   | 17                                          | 1               | ..                | ..                                       | 862               | 6,727       |
| Nagaland                              | M   | 103,756       | 101,781     | 1,214                  | 492                                                                                                     | ..                    | 597                                         | 373             | 1,173             | 721                                      | 19,210            | 75,473      |
| Pondicherry                           | F   | 101,096       | 17,962      | 21,386                 | 25                                                                                                      | 32                    | 22                                          | 2               | 64                | 3                                        | 540               | 74,417      |
| Pondicherry                           | M   | 37,275        | 4,092       | 17,421                 | 7,299                                                                                                   | 4,244                 | 15,300                                      | 3,463           | 10,127            | 3,264                                    | 18,050            | 82,252      |
| Total (1961)                          | M   | 129,015,653   | 66,408,765  | 17,311,474             | 4,003,058                                                                                               | 7,365,650             | 7,168,431                                   | 1,812,936       | 6,824,799         | 2,938,441                                | 15,184,021        | 148,457     |
| Total (1961)                          | F   | 59,401,709    | 33,103,198  | 14,170,831             | 1,187,241                                                                                               | 4,665,437             | 788,599                                     | 242,619         | 815,246           | 64,749                                   | 4,363,789         | 96,827,914  |
| Total (1961)                          | M   | 99,082,627    | 51,424,129  | 14,816,966             | 2,785,489                                                                                               | ..                    | 9,747,997                                   | 1,176,649       | 6,157,202         | 2,013,778                                | 10,980,417        | 153,064,975 |
| Total (1961)                          | F   | 40,438,553    | 18,367,873  | 12,693,671             | 1,366,751                                                                                               | ..                    | 2,806,449                                   | 291,307         | 1,152,547         | 122,668                                  | 8,647,287         | 84,247,911  |

\* Includes household industries.

† Excludes Goa, Daman and Diu.

M: Males. F: Females.



## POPULATION ACCORDING TO RELIGION

| State/Territories   | Buddhists      |           | Christians |           | Hindus      |             | Jains   |         | Muslims    |            | Sikhs     |           | Others  |         |
|---------------------|----------------|-----------|------------|-----------|-------------|-------------|---------|---------|------------|------------|-----------|-----------|---------|---------|
|                     | Males          | Females   | Males      | Females   | Males       | Females     | Males   | Females | Males      | Females    | Males     | Females   | Males   | Females |
| Andhra Pradesh..    | 2,781          | 3,106     | 579,779    | 569,632   | 13,607,235  | 13,447,431  | 926     | 614     | 754,350    | 741,973    | 534       | 390       | 107     | 81      |
| Assam ..            | 486            | 3,380     | 137,524    | 141,794   | 2,444,715   | 2,314,048   | 3,871   | 3,601   | 624,412    | 594,286    | 4,544     | 3,095     | 407     | 745     |
| Bihar ..            | 19,075         | 15,654    | 358,937    | 352,712   | 3,807,046   | 3,357,976   | 2,365   | 1,752   | 1,393,427  | 1,253,237  | 3,040     | 1,626     | 194,185 | 193,112 |
| ..                  | 991            | 793       | 26,034     | 26,870    | 434,353     | 284,946     | 3,610   | 1,741   | 69,004     | 44,841     | 3,251     | 1,769     | 7,211   | 7,614   |
| ..                  | 424            | 285       | 220,729    | 224,274   | 18,067,465  | 18,184,770  | 3,505   | 3,118   | 2,484,998  | 2,610,099  | 4,900     | 2,731     | 359,171 | 375,521 |
| ..                  | 1,444          | 732       | 29,848     | 27,344    | 1,726,967   | 1,367,848   | 6,161   | 4,814   | 3,655,206  | 3,255,028  | 20,893    | 16,089    | 10,838  | 10,308  |
| Gujarat ..          | 869            | 560       | 25,511     | 23,825    | 7,291,165   | 6,956,600   | 79,628  | 91,259  | 4,299,533  | 4,109,987  | 1,040     | 632       | 2,476   | 2,641   |
| Jam & m u           | 1,035          | 721       | 22,571     | 19,121    | 2,184,670   | 1,923,026   | 121,252 | 117,615 | 4,632,251  | 4,413,322  | 4,641     | 3,333     | 6,260   | 7,196   |
| Kashmir             | 22,886         | 22,972    | 617        | 557       | 426,715     | 389,858     | 401     | 4       | 1,104,304  | 957,897    | 20,014    | 21,427    | 9       | ..      |
| Kerala ..           | 1,192          | 1,310     | 764        | 764       | 105,770     | 90,850      | 865     | 157     | 1,228,640  | 1,272,234  | 12,251    | 9,377     | 1       | 2       |
| ..                  | 20             | 17        | 1,545,783  | 1,538,317 | 4,308,121   | 4,458,286   | 715     | 663     | 1,228,640  | 1,272,234  | 189       | 122       | 700     | 767     |
| ..                  | 178            | 13        | 252,316    | 250,949   | 707,325     | 753,836     | 834     | 755     | 261,349    | 265,416    | 405       | 106       | 352     | 307     |
| Madhya Pradesh      | 47,959         | 47,181    | 63,846     | 65,381    | 13,586,090  | 13,190,848  | 53,390  | 49,683  | 317,681    | 292,017    | 11,444    | 8,311     | 4,628   | 6,715   |
| ..                  | 9,279          | 8,946     | 31,958     | 27,129    | 1,973,968   | 1,674,892   | 77,279  | 67,573  | 373,399    | 334,520    | 26,086    | 19,874    | 1,197   | 1,132   |
| Madras ..           | 112            | 79        | 588,827    | 600,584   | 11,409,029  | 11,403,373  | 5,962   | 6,238   | 315,661    | 344,304    | 606       | 178       | 11,389  | 10,083  |
| ..                  | 390            | 206       | 284,272    | 285,271   | 3,816,983   | 3,607,730   | 9,544   | 6,406   | 456,004    | 444,445    | 1,107     | 676       | 7,102   | 6,202   |
| ..                  | 1,092,963      | 1,115,900 | 74,578     | 73,427    | 12,270,030  | 12,197,123  | 101,106 | 94,281  | 687,669    | 676,085    | 2,625     | 1,547     | 1,963   | 1,860   |
| Maharashtra         | 307,844        | 272,794   | 219,868    | 192,721   | 4,509,242   | 3,554,506   | 159,536 | 130,749 | 923,805    | 746,773    | 32,343    | 21,102    | 45,310  | 45,968  |
| ..                  | 4,019          | 3,790     | 123,472    | 118,154   | 8,426,702   | 8,204,162   | 65,059  | 59,788  | 667,959    | 646,385    | 374       | 332       | 75      | 8       |
| Mysore ..           | 1,010          | 951       | 124,054    | 121,907   | 2,073,414   | 1,878,575   | 26,879  | 22,644  | 525,933    | 488,099    | 1,737     | 844       | 240     | 210     |
| ..                  | 170            | 65        | 82,544     | 89,016    | 8,006,392   | 8,122,479   | 447     | 395     | 65,105     | 60,627     | 1,161     | 375       | 739     | 641     |
| Orissa ..           | 115            | 104       | 16,530     | 12,887    | 552,083     | 442,240     | 808     | 645     | 42,099     | 38,488     | 2,293     | 1,231     | 90      | 67      |
| ..                  | 6,250          | 5,840     | 62,375     | 55,610    | 6,201,840   | 4,612,452   | 6,021   | 6,682   | 189,137    | 158,932    | 3,172,130 | 2,742,162 | 531     | 255     |
| Punjab ..           | 2,171          | 596       | 17,911     | 13,938    | 1,719,450   | 1,397,303   | 19,479  | 17,572  | 28,493     | 16,762     | 4,066,716 | 3,888,121 | 82      | 11      |
| ..                  | 133            | 28        | 3,171      | 2,979     | 8,149,856   | 7,439,635   | 119,556 | 119,102 | 418,008    | 378,447    | 130,112   | 113,000   | 44      | 53      |
| Rajasthan           | 232            | 366       | 8,536      | 8,178     | 1,356,956   | 1,186,240   | 87,115  | 83,644  | 272,094    | 246,064    | 17,896    | 13,190    | 370     | 594     |
| ..                  | 3,373          | 2,804     | 22,260     | 20,033    | 29,107,866  | 26,878,529  | 29,867  | 27,756  | 4,153,384  | 3,869,952  | 84,526    | 66,063    | 69      | 23      |
| Uttar Pradesh       | 3,061          | 3,053     | 31,147     | 28,201    | 3,627,674   | 2,823,244   | 33,720  | 30,766  | 1,460,644  | 1,304,109  | 75,743    | 57,405    | 267     | 261     |
| ..                  | 41,411         | 41,774    | 63,445     | 58,885    | 10,395,381  | 9,740,387   | 2,244   | 1,257   | 3,056,151  | 2,943,562  | 2,830     | 1,327     | 17,582  | 19,201  |
| West Bengal         | 16,240         | 12,828    | 45,578     | 36,622    | 4,277,033   | 3,110,557   | 14,921  | 8,518   | 643,190    | 342,384    | 21,128    | 8,899     | 2,010   | 934     |
| ..                  | 674            | 510       | 10,364     | 6,244     | 15,222      | 8,967       | 2       | ..      | 2,276      | 1,705      | 56        | 24        | 1,764   | 1,665   |
| A. N. Islands       | 302            | 221       | 561        | 504       | 6,799       | 2,793       | 1       | ..      | 1,879      | 1,538      | 89        | 72        | 15      | 1       |
| ..                  | 66             | 20        | 213        | 163       | 156,993     | 133,344     | 94      | 91      | 3,347      | 2,525      | 1,327     | 1,069     | 2       | ..      |
| Delhi ..            | 2,909          | 2,471     | 14,840     | 14,043    | 1,098,131   | 846,189     | 15,472  | 13,938  | 87,077     | 62,494     | 108,786   | 92,734    | 161     | 153     |
| ..                  | 3,483          | 2,737     | 127        | 74        | 646,387     | 606,476     | 15      | 3       | 12,740     | 9,825      | 2,937     | 2,338     | 41      | 33      |
| Himachal Pradesh    | 64             | 24        | 273        | 118       | 33,059      | 24,097      | 44      | 33      | 1,772      | 1,282      | 1,755     | 1,407     | ..      | ..      |
| ..                  | ..             | ..        | 45         | 11        | 206         | 57          | ..      | ..      | 11,684     | 12,105     | ..        | ..        | ..      | ..      |
| L., M. & A. Islands | ..             | ..        | ..         | ..        | ..          | ..          | ..      | ..      | ..         | ..         | ..        | ..        | ..      | ..      |
| Manipur ..          | 92             | 212       | 74,402     | 75,444    | 207,860     | 211,225     | 171     | 191     | 24,233     | 23,703     | 54        | 25        | 46,125  | 48,583  |
| ..                  | 10             | 11        | 1,368      | 669       | 30,839      | 31,188      | 244     | 172     | 392        | 260        | 236       | 208       | 1,032   | 1,088   |
| Tripura ..          | 17,479         | 16,171    | 5,032      | 4,965     | 401,130     | 372,849     | 29      | 21      | 112,889    | 108,410    | 20        | 11        | 1       | 1       |
| ..                  | 46             | 20        | 28         | 14        | 40,895      | 44,124      | 88      | 57      | 4,580      | 4,114      | 10        | 8         | 1       | 3       |
| Dadra & Nagar       | 1              | 1         | 426        | 373       | 28,761      | 27,815      | 68      | 52      | 250        | 193        | ..        | ..        | 18      | 5       |
| Haveli              | ..             | ..        | ..         | ..        | ..          | ..          | ..      | ..      | ..         | ..         | ..        | ..        | ..      | ..      |
| Goa, Daman and      | 152            | 9         | 85,087     | 106,801   | 163,338     | 168,080     | 11      | 9       | 3,751      | 3,498      | ..        | ..        | 101     | 66      |
| Diu                 | 17             | 11        | 16,967     | 18,224    | 29,393      | 28,567      | 27      | 21      | 3,436      | 3,481      | ..        | ..        | 254     | 263     |
| ..                  | 6              | 6         | 8,834      | 9,335     | 126,248     | 124,610     | ..      | ..      | 4,831      | 6,101      | ..        | ..        | 70      | 41      |
| Pondicherry         | 6              | 7         | 7,165      | 8,612     | 30,295      | 30,070      | 42      | 34      | 5,727      | 6,811      | 12        | 2         | 111     | 103     |
| NEFA ..             | Not available. | ..        | ..         | ..        | ..          | ..          | ..      | ..      | ..         | ..         | ..        | ..        | ..      | ..      |
| ..                  | 17             | 12        | 92,198     | 94,915    | 17,164      | 9,349       | 6       | ..      | 166        | 125        | 115       | 4         | 69,595  | 66,377  |
| Nagaland            | 10             | 3         | 4,805      | 3,670     | 5,477       | 2,637       | 161     | 96      | 481        | 119        | 84        | 52        | 748     | 764     |
| ..                  | 1,287,499      | 1,301,621 | 4,093,411  | 4,093,196 | 155,875,110 | 150,291,881 | 471,602 | 461,963 | 17,446,863 | 16,795,098 | 3,440,102 | 2,963,698 | 711,310 | 727,665 |
| All-India ..        | 352,319        | 308,788   | 1,299,538  | 1,239,615 | 32,854,503  | 27,481,384  | 581,949 | 511,753 | 6,814,962  | 6,882,434  | 801,776   | 639,594   | 84,060  | 83,929  |

Note: R = Rural. U = Urban.

The percentage of religionwise population to the total population in the country and the percentage increase during 1951-61 in brackets are : Buddhists 0.74 (16.71) ; Christians 2.44 (27.33) ; Hindus 83.51 (20.29) ; Jains 0.46 (27.17) ; Muslims 10.69 (25.61) ; Sikhs 1.79 (25.13) ; others 0.37 (—13.07).



# RESEARCH

**R**ESearch in pure science is carried out mainly in the universities, scientific surveys of the Government, and in some research institutes such as the Tata Institute of Fundamental Research. The Council of Scientific & Industrial Research (C.S.I.R.) and the Department of Atomic Energy provide facilities for fundamental or basic research in their laboratories and institutes, and also sponsor such research in universities and research institutions all over the country.

Research in applied science and for industrial development is done mainly under the auspices of the C.S.I.R., the Co-operative Industrial Research Associations, institutes functioning under various Ministries and the laboratories attached to a few industrial concerns.

The Shri Ram Institute for Industrial Research, Delhi, undertakes, on a 'non-profit' basis, researches on projects sponsored by industrial concerns, groups of companies, individuals and Government agencies.

Research in engineering subjects is undertaken in some of the C.S.I.R. laboratories and institutes, the Indian Institute of Science, Bangalore, Central and State Hydraulic Engineering Research Stations, higher technological institutions, like the Indian Institute of Technology, Kharagpur, and in a few engineering colleges, such as the College of Engineering and Technology, Jadavpur.

The Council of Scientific & Industrial Research, also sponsors engineering research in various institutions through its research committees.

Agricultural research is looked after by the Indian Council of Agricultural Research, New Delhi, The Indian Agricultural Research Institute, New Delhi, and the various Central Committees for agricultural commodities like the Indian Central Cotton Committee, Indian Central Jute Committee, etc. and the research institutes functioning under the Ministry of Food and Agriculture. (See article on Agriculture.)

The Indian Veterinary Research Institute, Izatnagar (U.P.) is concerned with veterinary diseases. The National Dairy Research Institute at Karnal in the Punjab works on dairy research.

Research in forestry and forest products is undertaken by the Forest Research Institute and Colleges at Dehra Dun.

Medical research is carried out under the auspices of the Indian Council of Medical Research, institutes functioning under the Ministry of Health, and the Council of Scientific and Industrial Research.

Research in the humanities—literature, language, the arts, etc.—is done at individual institutions scattered throughout the country.

Research in social problems such as social tensions, social welfare and labour welfare is conducted as part of their work at many universities.

About 275 research journals (English) are published in India. These cover a wide range of subjects, grouped as follows: General science, 31; Engineering, including civil, electrical, telecommunication and aeronautical, 31; Chemistry, including biochemistry, chemical technology, plastics, paint, oils and fats, soap, and food, 21; Agriculture, including forestry, 25; and Medical sciences, 64.

The Third Plan outlays for the development in Scientific and Technological Research under different categories were as follows (Rs. crores):—Council of Scientific and Industrial Research (incl. field experiments) and Ministry of Scientific Research and Cultural Affairs 35.00; Department of Atomic Energy 35.00; Agricultural Research 26.40; Medical Research 3.50; Research under other Central Ministries (other than Defence) 30.89. Total 180.00.

## SCIENTIFIC SOCIETIES

*Role of Scientific Societies:* The part played by scientific societies has varied with social factors involved in their formation, the stage of development of science and the problems engendered by it and the particular objective set by a specific group of scientists. Broadly, the role of scientific societies has been:

(i) Bringing together of scientists specialized in the same area of knowledge; (ii) Affording them an opportunity for inter-communication of ideas within a discipline or between various disciplines through conferences, special discussions and publication of journals; (iii) Serving as a platform for discussing general problems of science, such as organization, education, problems of manpower; (iv) Acting as a forum for crystallization of ideas regarding the relation of science to society and as a centre for disseminating and popularizing science; (v) Recognizing contributions to science of its members by conferring distinctions on them.

## PHYSICAL SCIENCE SOCIETIES

*Indian Mathematical Society:* Hansraj College, Delhi-6; *Indian Geographical Society:* University Centenary Buildings, Madras-5; *Institution of Chemists (India):* Chemical Department, Medical College, Calcutta-12; *The Indian Physical Society:* 2 and 3, Raja Subhod Mallik Road, Jadavpur, Calcutta-32; *Calcutta Statistical Association:* Calcutta University, Asutosh Building, Calcutta-12; *National Geographical Society of India:* Department of Geography, B.H.U., Varanasi-5; *Hyderabad Science Society:* 12-2-460, Malkapur, Asifnagar, Hyderabad-6 (A.P.); *Deccan Section of the Royal Institute of Chemistry:* Indian Institute of Science, Bangalore; *Indian Society of Agricultural Statistics:* Library Avenue, P.B. No. 310, New Delhi-12; *Bharat Ganita Parishad:* Department of Mathematics, Lucknow University, Lucknow; *Geographical Society of India:* C/o Geography Department, Calcutta University, 35, Ballyganj, Circular Road, Calcutta-19; *The Electrochemical Society of India:* Department of Inorganic & Physical Chemistry, Indian Institute of Science, Bangalore-12; *The Indian Society of Theoretical and Applied Mechanics:* Indian Institute of Technology, Kharagpur; *Indian Meteorological Society:* Meteorological Office, Lodi Road, New Delhi-3; *Geological Society of India:* Race Course Road, Bangalore-1; *Indian Interplanetary Society:* 9, Hastings Street, Calcutta-1.

## MEDICAL SCIENCE SOCIETIES

*Ahmedabad Medical Society:* (Branch of Indian Medical Association) Opp. H. K. Arts College, Ashram Road, Ahmedabad-9; *Bombay Sanitary Association:* Public Health Department, Municipal Offices Building, Bombay-1; *Association of Medical Women in India:* New Hospital for Women, New Queen's Road, Bombay-4; *Mysore Medical Association:* Fort, Bangalore-2; *No. of Branches:* 28; *All India Ophthalmological Society:* Bombay Mutual Building, Sir P. Mehta Road, Bombay-1; *Gujarat Research Society:* Samsodhan Sadan, South Avenue, Khar, Bombay-52; *Indian Psychoanalytical Society:* 14, Parsibagan Lane, Calcutta-9; *Association of Surgeons of India:* Madras; *Madras Psychology Society:* Department of Psychology, Madras-5; *All India Dental Association:* India House, Cumballa Hill, Bombay-26; *Society for the Study of Industrial Medicine:* 243, Khetwadi Main Road, Bombay-4; *Indian Society of Anaesthetists:* K. E. M. Corner, Indore (GPO), M.P.; *Cardiological Society of India:* 67, Dharamtala Street, Calcutta-13; *Federation of Obstetric & Gynaecological Societies of India:* Purandare Griha, Chowpatty Sea Face, Bombay-7; *The National Society of India for Malaria & Other Mosquito Borne Diseases:* 22, Alipore Road, Delhi-6; *Neurological Society of India:* (Temporary address) C/o Dr. Anil D.

Desai, 534, Sandhurst Bridge, Bombay 7; *Indian Cancer Society:* Hospital Avenue, Parel, Bombay-12; *The Indian Association of Physio-Therapists:* Patel Chambers, 5th Floor, French Bridge, Bombay-7; *Indian Public Health Association:* 110, Chittaranjan Avenue, Calcutta-12; *Indian Association of Leprologists:* Govt. Leprosy Subsidiary Centre, Attur (Salem district), Madras State; *Indian Society of Haematology:* Secretary's Office: 28, Lady Hardinge Road, New Delhi; *The Indian Association of the Chest Diseases:* C/o The Patel Chest Institute, University Campus, Delhi-6; *Indian Academy of Dentistry:* Govt. Dental College Hospital, Bombay-1; *The Anatomical Society of India:* Department of Anatomy, B. J. Medical College, Poona; *Indian Academy of Medical Sciences:* I.C.M.R. Building, Ansari Nagar, New Delhi-16; *Indian Association of Dermatologists and Venereologists:* (Western India Branch), Queen's Road, Bombay-4.

## BIOLOGICAL SCIENCE SOCIETIES

*The Royal Agri-Horticultural Society of India:* 1, Alipore Road, Alipore, Calcutta-27; *Indian Botanical Society:* School of Plant Morphology, Meerut College, Meerut; *The Indian Veterinary Association:* 7, First Street, Vidyodaya East, T. Nagar, Madras-17; *The Bengal Natural History Society:* Natural History Museum, Darjeeling; *Bombay Natural History Society:* 91, Walkeshwar Road; Bombay-6 W.B.; *Indian Society of Soil Science:* Indian Agricultural Research Institute, New Delhi-12; *Botanical Society of Bengal:* 35, Ballygunge Circular Road, Calcutta-19; *The Physiological Society of India:* 50/2, Dharamtolla Street, Calcutta-13; *The Entomological Society of India:* Indian Agricultural Research Institute, New Delhi-12; *The Palaeobotanical Society:* Lucknow; *Maharashtra Association for the Cultivation of Science:* Servants of India Society Building, Poona-4; *Ethnographic and Folk Culture Society:* Department of Anthropology, University of Lucknow, Lucknow; *Indian Phytopathological Society:* Indian Agricultural Research Institute, New Delhi-12; *Palaeontological Society of India:* Lucknow; *The Bombay Aquarium Society:* Taraporewala Aquarium, Bombay-2; *International Society of Plant Morphologists:* Department of Botany, University of Delhi, Delhi-6; *The Bombay Biological Association:* 92, Waterfield Cross Road, Bandra, Bombay-50; *Mycological Society:* Department of Botany, University College of Science, 35, Ballygunge Circular Road, Calcutta-19; *International Society of Tropical Ecology:* Department of Botany, B.H.U., Varanasi-5; *Society of Biological Chemists, India:* Indian Institute of Science, Bangalore-12; *Indian Society for Plant Physiology:* Division of Botany, Indian Agricultural Research Institute, New Delhi-12; *Association of Microbiologists of India:* P-27, Prinsep Street, Calcutta-13; *Marine Biological Association of India:* Mandapam Camp, Madras State; *The Zoological Society:* 35, Ballygunge Circular Road, Calcutta-19; *Society of Indian Foresters:* F. R. I., Dehra Dun, U.P.; *Zootomical Society of India:* G/14, Beyond Ladies Colony, Banaras Hindu University, Varanasi-5; *Bihar Academy of Agricultural Science:* P. O. Sabour, Bhagalpur; *Indian Society of Genetics & Plant Breeding:* Division of Botany, Indian Agricultural Research Institute, New Delhi-12.

## ENGINEERING AND TECHNOLOGICAL SOCIETIES

*Indian Engineering Association:* 6, Netaji Subhash Road, Calcutta-1; *The Bombay Textile & Engineering Association:* 343, Satar Building, Grant Road, Bombay-7; *Mining, Geological & Metallurgical Institute of India:* 29, Chowringhee Road, Calcutta-16; *The Mechanical Engineers' Association (India):* Janmahoomi Chambers, 29, Fort Street, Ballard Estate, Fort, Bombay-1; *The Institution of Engineers (India):* 8, Gokhale

\* This has been included in this group for want of a separate grouping for this discipline.



Road, Calcutta-20; *The Association of Engineers*: 24, Netaji Subhash Road, Calcutta-1; *Electrical Engineering Society*: Indian Institute of Science, Bangalore-12; *The Sugar Technologists' Association of India*: P.O. Kalyanpur, Kanpur; *Indian Ceramic Society*: C/o Banaras Hindu University, Varanasi-5; *The Indian Institute of Architects*: Prospect Chambers Annexe, Dr. Dadabhai Naoroji Road, Bombay; *The Geological, Mining & Metallurgical Society of India*: Geology Department, Presidency College, Calcutta-12; *The Oil Technologists' Association of India*: Nawabganj, Kanpur; *Indian Society of Engineers*: 12-B, Netaji Subhash Road, Calcutta-1; *The Indian Institute of Metals*: 31, Chowringhee Road, Calcutta-16; *The Textile Association*: "Santosh", 72-A, Shivaji Park, Bombay-28; *Gujarat Institute of Civil Engineers & Architects*: Law College Road, Ahmedabad-6; *The Aeronautical Society of India*: 13/B, Indraprastha Estate, New Delhi-1; *Institution of Surveyors*: Kashmir House, King George's Avenue, New Delhi; *Quality Control Association*: 4, Richmond Road, Bangalore-25; *Indian Institute of Chemical Engineers*: Jadavpur University Campus, Calcutta-32; *The Institution of Telecommunication Engineers*: F/12, South Extension Part II, Ring Road, New Delhi; *Indian Society of Rayon Technologists*: 144, Dharavi Road, Bombay-17; *Indian Leather Technologists' Association*: Mercantile Buildings, Lal Bazar, Calcutta-1; *Essential Oil Association of India*: H. B. Technological Institute, Kanpur; *Institute of Consulting Engineers*: Central Office, 9, Hastings Street, Calcutta-1; *International Commission on Irrigation and Drainage*: Golf Links, New Delhi-3; *The Society of Power Engineers*: 'Clermont', Simla-4; *The Chemical Engineering Association*: Indian Institute of Science, Bangalore-12.

#### GENERAL SOCIETIES

*Asiatic Society*: 1, Park Street, Calcutta-16; *Indian Association for the Cultivation of Science*: Jadavpur, Calcutta-32; *Indian Science Congress Association*: 64, Dilkhusa Street, Calcutta-17; *Vijnana Parishad*: Muir College Compound, Thorahill Road, Allahabad-2; *The National Academy of Sciences*: 5, Lalpatral Road, Allahabad-2; *National Institute of Sciences of India*: Mathura Road, New Delhi-1.

*Indian Science News Association*: 92, Acharya Prafulla Chandra Road, Calcutta-9; *The Current Science Association*: Bangalore; *Science Club*: 1110, S. N. Banerjee Road, Calcutta-13; *Bangiya Bijnan Parishad*: 294/2/1, Acharya Prafulla Chandra Road, Calcutta-9; *Assam Science Society*: Department of Mathematics & Statistics, Gauhati University, Assam; *Kamarupa Anusandhan Samiti*: Assam Research Society, Gauhati; *The Institute of Information Scientists*: C.S.I.R. Building, Rafi Marg, New Delhi-1; *All India Science Teachers' Association*: 33, Probyn Road, Delhi-6; *The Rajasthan Academy of Sciences*: Pilani (Rajasthan).

#### OTHER RESEARCH SOCIETIES

**Physical Science**: Association of Applied Physicists, 92, Acharya P. C. Ray Road, Calcutta-9; Calcutta Mathematical Society, 92, Acharya P. C. Ray Road, Calcutta-9; Indian Chemical Society, 92, Acharya P. C. Ray Road, Calcutta-9; Bombay Geographical Association, Parle College Mablon, Bombay-57; Association of Indian Geographers, P.B. No. 644, New Delhi.

**Medical Science**: Association of Pediatricians of India, Back-Bay View, New Queen's Road, Bombay-4; Association of Physicians of India, "Dream Lands", New Queen's Road, Bombay-4; Helminthological Society of India, School of Tropical Medicine, Calcutta-12; Indian Medical Association, Shri Niwas, S. V. Patel Road, Bombay-4; Society of Experimental Medical Science (India), P-27, Prinsep Street, Calcutta-13; Tropical Diet Research Society, 1/6, Fakir Chakravarti Lane, Calcutta-6; Indian Society of Gastroenterology, D/3, Ansari Nagar, New Delhi-16; Association of Otolaryngologists of India, Lampert's Hospital, Marshal's Road, Egmore, Madras-8; The Indian Radiological

Association, 148, Big Street, Madras; Madras Medical Association, Madras Medical College, Madras; Bombay Veterinary Medical Association, Rani Nagar, H. No. A-7/1, Nagpur.

**Biological Science**: Horticultural Society of India, Indian Agricultural Research Institute, Pusa Road, New Delhi-12; Indian Dairy Science Association, Hosur Road, Bangalore-1; Indian Ecological Society, I.A.R.I., Pusa Road, New Delhi-12; Indian Society of Agronomy, I.A.R.I., Pusa Road, New Delhi-12; South India Horticultural Association, Lawley Road, P.O. Colmbatore; Zoological Society of India, Zoological Survey of India, Calcutta.

**Engineering & Technological**: Engineering Association of Northern India, G.T. Road, Batala (Gurdaspur), Punjab; Indian Metallurgical Association, 20, Strand Road, Calcutta-1; Indian Pharmaceutical Association, Bharati Bhavan, 3rd Floor, 213-219, Frere Road, Fort, Bombay-1; Institute of Industrial Engineers, Hindustan Lever Ltd., Bombay; Society for Corrosion and Coating Technology, Govt. Test House, Alipore, Calcutta; Society of Electronics Engineers, Electronics Research and Development Establishment, P.O. Box No. 108, Bangalore-1; Institution of Electrical Engineers, 1, Forbes Street, Fort, Bombay-1; Technological Association, Dept. of Chemical Technology, Matunga Road, Bombay-19; Indian Roads Congress, Jamnagar House, Mansingh Road, New Delhi; Mineralogical Society of India, A.C. College Building, Guindy, Madras-25; Indian National Society of Soil Mechanics and Foundation Engineers, New Delhi.

**General**: Indian Academy of Sciences, Hebbal P.O., Bangalore.

#### COUNCIL OF SCIENTIFIC & INDUSTRIAL RESEARCH

Scientific research under state auspices in India is carried out mainly through the Council of Scientific and Industrial Research and the various National Laboratories/Institutes set up under its control and in the universities and research institutes aided by the Council.

The Council has a liberal system of grants-in-aid through which scientists in other technical institutions, industrial laboratories and universities are supported to pursue fundamental and applied research and develop their own specialised fields of research. It also grants fellowships to qualified persons who wish to pursue science as career.

The Research Survey and Planning Organization of the Council undertakes investigations in the problems of planning, organisation and management of scientific research and conducts operational research studies on research problems. The International Scientific Collaboration Bureau constituted recently proposes to carry out regular assessment studies on scientific and technological developments in various developing countries.

The Directorate of Research Coordination and Industrial Liaison coordinates research programmes of the CSIR Laboratories and Institutes and also with other scientific and research organisations; maintains contact with user government departments including Defence with a view to identifying their problems and ensuring their follow up with the laboratories; organises Cooperative Research Associations; assists the laboratories in filing of patents and maintaining of patents records and takes steps to stimulate proper utilisation of results of research.

The Central Design and Engineering Organisation at the CSIR Headquarters undertakes process design, complete industrial plan design and project engineering work for processes evolved at the National Laboratories.

#### National Research Development Corporation (See under All India Corporations).

#### NATIONAL LABORATORIES

There are 37 National Laboratories/Institutes/Units and three museums functioning under the

Council of Scientific and Industrial Research. There are a number of regional foundry stations, drug farms and factories and other regional centres functioning under the various laboratories and institutes.

The names of the Laboratories/Institutes and Units with their locations (in *italics*), at various centres in the country and the functions entrusted to them are as follows:—

**National Physical Laboratory, New Delhi**:—Research in problems relating to Physics, both fundamental and applied. Maintenance of Standards Testing facilities are also available.

**National Chemical Laboratory, Poona**:—Fundamental and applied research covering the whole field of chemistry for which other specialised institutes have not been set up. The National Collection of Type Cultures is housed in the Laboratory.

**Central Fuel Research Institute, Jealgora (Bihar)**:—Fundamental and applied research on fuels—solid, liquid and gaseous. Physical and Chemical surveys of Indian coals are conducted through seven coal survey stations under the Institute. It maintains seven coal survey stations.

**Central Glass and Ceramic Research Institute, Jadavpur**:—Research on different aspects of glass and ceramics, pottery, porcelain, refractories and enamels; development of processes for manufacture of glass and ceramic articles; standardisation of raw materials used in the ceramic industry. It also maintains a glass, ceramic and mineral field research unit at Regional Research Laboratory, Jammu-Tawi.

**Central Food Technological Research Institute, Mysore**:—Food processing and conservation of food, food engineering and all aspects of fruit technology. Regional Fruit and Vegetable Preservation Stations at Trichur, Nagpur, Bombay, Lucknow, Mangalore, Simla, Jammu-Tawi and Cudappah have been recently established.

**National Metallurgical Laboratory, Jamshedpur**:—Fundamental & applied metallurgical research. It maintains four regional foundry research stations; located at Punjab, Howrah, Madras and West Bengal.

**Central Drug Research Institute, Lucknow**:—All aspects of drug research including evaluation & standardisation of crude drugs, discovery of substitutes for pharmacopoeial drugs and plants, pharmaceutical and synthetic chemicals, biochemistry and biophysics, infection, immunisation, pharmacology, chemotherapy & experimental medicine.

**Central Road Research Institute, New Delhi**:—Research on road materials, testing of road materials and road surfaces.

**Central Electro-Chemical Research Institute, Karaikudi (Madras)**:—Research on different aspects of electro-chemistry, including electro-metallurgy, electro-deposition and allied problems. The Institute has two testing centres at Madras and Ramanathapuram.

**Central Leather Research Institute, Madras**:—Fundamental and applied aspects of leather technology. The Institute has five extension centres at Calcutta, Rajkot, Jullundur, Kanpur and Bombay.

**Central Building Research Institute, Roorkes**:—Engineering and structural aspects of building and human comforts in relation to buildings.

**Central Electronics Engineering Research Institute, Pilani (Rajasthan)**:—Design and construction of electronic equipment and components and test equipment.

**National Botanic Gardens, Lucknow**:—Collection & large-scale cultivation of economic and medicinal plants of industrial importance.

**Central Salt & Marine Chemical Research Institute, Bhavnagar**:—Investigation of production of pure salts, reduction in cost of production; economic utilisation of by-products of salt manufactures, development of new methods and technique for the recovery, production & utilization of various marine & allied chemicals.



**Central Mining Research Station, Dhanbad :—** Research in methods of mining, safety in mines and mine machinery.

**Regional Research Laboratory, Hyderabad :—** Research in problems relating to the industries and raw materials of the region.

**Indian Institute of Experimental Medicine, Calcutta :—** Research in various aspects of biochemistry as applied to medicine, Bacteriology, etc.

**Birla Industrial & Technological Museum, Calcutta :—** A museum to depict scientific and technological advancement.

**Regional Research Laboratory, Jammu-Tawi (Jammu & Kashmir) :—** Research in problems relating to the industries and raw materials of the region & research specially directed to medicinal plants of the Himalayas (Kashmir Region).

**Central Mechanical Engineering Research Institute, Durgapur (W. Bengal) :—** Research in Mechanical Engineering in all its aspects. It maintains mechanical Engineering Research and Development Centres at Ludhiana, Poona and Madras.

**Central Public Health Engineering Research Institute, Nagpur :—** Research in all aspects of public health engineering and co-ordination of work of all interested agencies in this field in the country. A number of Field Centres and Units at various places have also been established by the Institute. The field centres are located at Sewage Farm Road, Ahmedabad and Dr. Annie Besant Road, Worli, Bombay.

**National Aeronautical Laboratory, Bangalore :—** Scientific investigations of the problems of flight with a view to their practical application to the design, construction and operation of aircraft in India.

**Regional Research Laboratory, Jorhat :—** Research problems relating to more efficient utilisation and better conservation of important national resources of Assam and surrounding areas with a view to aiding the industrial development of the region.

**Regional Research Laboratory, Bhubaneswar :—** Identification and exploration of problems of the region, bringing projects of potential local application to the attention of local industries and providing assistance to associated local industries in the testing of their products and quality control.

**Central Indian Medicinal Plants Organisation, 4, Sapru Marg, Lucknow :—** Co-ordination of activities in the development of cultivation and utilisation of medicinal plants and to develop the vegetable drug resources of the country. It has two zonal centres located at Bangalore and Haldwani (U.P.), and maintains four drug farms and factories in Jammu and Kashmir.

**Central Scientific Instruments Organisation, Chandigarh :—** Promotion and development of indigenous manufacture of scientific instruments for teaching, research and industry. Its service centres are located in New Delhi and Madras.

**Indian Institute of Petroleum, Dehra Dun :—** Research in petroleum refining and processing of natural gas, petro-chemicals, etc., and providing facilities for the training of personnel for oil and petroleum industries.

**National Geophysical Research Institute, Hyderabad :—** Gravitational, magnetic, electrical and seismic surveys for understanding the crustal structure of India and also study and improvement of methods and techniques of exploration.

**National Institute of Oceanography, New Delhi :—** Research on various aspects of physical biological, geological and chemical oceanography including prospecting for petroleum and minerals in sea bed. The Institute maintains Indian Biological Centre, Indian Ocean Physics Oceanographic Centre at Ennakulam. The International Biological Programme also functions at I.O.P.O. Centre, Ennakulam.

**National Biological Laboratory (in planning), Palampur (Kangra Valley), Punjab :—** Both fundamental and applied research in modern aspects of biological sciences.

**Structural Engineering Research Centre, Roorkee :—** Research in specialised design and development work in structural problems connected with buildings, bridges and other structures.

**Industrial Toxicological Research Centre, Lucknow :—** To study the harmful effects of industrial toxins on skin, blood, gastro-intestinal tract, central nervous system, bones, etc.

**Viveśvaraya Industrial & Technological Museum, Bangalore :—** A museum to depict scientific & technological advancement.

**Central Design and Engineering Organisation :—** Undertakes preparation of feasibility and project reports, process design and development of industrial equipment, complete industrial plant design and project engineering, primarily based on the processes developed at the National Laboratories. Similar services are also provided wherever the process know-how is available. Assistance is provided for both private and public sector industries.

**Research Survey and Planning Organisation :—** The R.S.P.O. carries out investigations in the problems of planning, organisation and management of scientific research; studies the socio-economic problems of science and scientific research; conducts studies in the current trends of research in India in various disciplines; indicates the broad areas and gaps that may exist in scientific research in India on the basis of such studies and suggests remedial measures. It also studies research financing in India and suggests how and where emphasis should be given.

The Organisation conducts operational research studies on research problems and train scientists from CSIR laboratories, other institutions and neighbouring developing countries in this field.

**Research Coordination and Industrial Liaison :—** The Directorate of Research Coordination and Industrial Liaison has been set up at the Headquarters to (i) coordinate research programmes of the CSIR Laboratories and Institutes among themselves and also with other scientific and research organisations; (ii) promote exploitation of indigenous know-how developed in the National Laboratories; (iii) maintain close contacts with user Government Departments including Defence with a view to identifying their problems and ensuring their follow up with the laboratories; (iv) organise Co-operative Research Associations; (v) assist the laboratories in filing of patents and maintenance of patent records; (vi) disseminate scientific and technical information and (vii) take other steps to stimulate proper utilisation of results of research. It participates in the working of the Licensing and Foreign Agreements Committee of the Ministry of Industry.

**Scientific and Technical Personnel :—** The National Register Unit of the Council acts as a manpower research organisation and a clearing house of information regarding availability and utilisation of Indian scientific and technical personnel in India and abroad. The unit helps evolve scientific personnel policy, recruitment, assessment of use and wastage of manpower and manpower planning.

The Council operates a scientific pool scheme to provide employment assistance and temporary placement to highly qualified scientists and technologists, particularly those returning from abroad, until they secure suitable employment.

A major publication of the Directorate is the Dictionary of Indian Raw Materials and Industrial Products published under the title "Wealth of India";

A monthly science journal entitled "Science Reporter" is brought out from 1964.

**Documentation :—** The Indian National Scientific Documentation Centre (INSDOC), New Delhi, established with technical assistance from UNESCO, provides a complete range of documentation services to individuals and institutions all over the country.

**Sponsored Research :—** Through a liberal system of grants-in-aid, scientists in other technical institutes, industrial laboratories and universities are enabled to pursue fundamental and applied research and develop their own special fields. There are, at present, more than 720 such schemes in progress at more than 100 centres. Apart from the practical results achieved, the schemes provide opportunities of training for young research workers and develop centres of independent research. Junior and senior fellowships tenable in the universities as well as in national laboratories are also being awarded to talented young persons, besides financial aid to retired scientists. At present more than 1,450 such fellowships are tenable at universities, laboratories, and other research organisations.

**Co-operative Research Associations :—** Co-operative research associations in different industrial fields are being assisted in their capital and recurring expenditure and by way of technical advice, preparation of plans and procurement of experts and materials. Ten such associations now functioning are catering to the textiles, rubber, silk, art silk and paint, plywood, wool, tea and cement industries. Similar associations are in the process of being formed for foundry, automobile, radio and electronic industries.

**Liaison & Extension Services :—** Active Industrial Liaison & Information Units have been set up in most of the National Laboratories to make direct contact with the industry, trade associations and users of research to identify the problems of industry and formulate them into research projects for the laboratories.

The unit at the Headquarters, Research Co-ordination, Industrial Liaison and Extension Services Unit supplements the efforts of Laboratory in research utilisation by maintaining day to day contact with various government agencies responsible for research development and planning such as Planning Commission, Department of Technical Development, Ministry of Industry, etc. This unit also maintains a system of research intelligence so that information on research in all institutes, is available at hand in the Central Office. The extension service provided by this unit includes dissemination of information on processes developed in the laboratories which might be of interest to rural and suburban development.

## NUCLEAR RESEARCH AND ATOMIC ENERGY

Pioneering work in this field was done by the Tata Institute of Fundamental Research, Bombay, established in 1945.

This Institute has since been recognised as the National Centre for advanced study and fundamental research in nuclear physics and mathematics and consists of a school of physics and a school of mathematics with a staff of 300.

The Institute is the largest centre for cosmic ray research in India and has made notable contributions to the theory of elementary particles. Its nuclear emulsion group for the study of elementary particles is probably the second largest in the world. The Institute also houses, as a national facility, an advanced and modern computer CDC 3600-160A. It also has a 1 MeV Cascade Generator. A high resolution radiotelescope for solar studies has been installed at Kalyan, near Bombay.

During the years preceding the establishment of the Atomic Energy Commission, the Institute was instrumental in setting up a group of scientists for advanced studies and research in nuclear physics who later joined the Atomic Energy Commission for implementation of some of the early projects of the Commission when it was set up in 1948.

Two other important institutions conducting research in nuclear physics are the Saha Institute of Nuclear Physics, Calcutta and the Physical Research Laboratory, Ahmedabad.

Considerable fundamental research in nuclear science and cosmic rays is also being conducted at various universities and research institutions all over India with financial assistance from the Department of Atomic Energy.



During 1965-66 a sum of Rs. 10.5 lakhs was sanctioned as assistance.

The development and control of atomic energy in India is regulated by the Atomic Energy Act (Act No. 33 of 1962) and the Department of Atomic Energy handles all business of the Government of India relating to atomic energy and functions of the Central Government under the Act.

The Atomic Energy Commission which assumed authority on June 23, 1958, is responsible for (a) formulating the policy of the Department of Atomic Energy, (b) preparing the budget of the Department for each financial year and getting it approved by the Government, and (c) implementing Government's policy in all matters concerning atomic energy.

The Commission's programme envisages that India should be able to produce for the maximum extent possible all the basic materials required for the production of atomic energy, promote its use in agriculture, biology, industry, research and medicine, prepare a long-range plan for the generation of electric power and set up power stations.

The scientific and technical work of the Department is carried out by the Atomic Minerals Division and the Atomic Energy Establishment at Trombay near Bombay.

Some of the more important functions of the Atomic Minerals Division are: (a) geological survey for and development of atomic minerals, (b) geographical survey, (c) geochemical survey, (d) mineral technology, (e) drilling, (f) mining, (g) stockpiling, (h) conservation of minerals and (i) technical assistance and training.

#### Trombay Establishment

The Atomic Energy Establishment, Trombay, is India's principal centre for research and development in the field of atomic energy. Located about 15 miles from Bombay, the establishment employs over 8,000 persons of whom 4,800 are scientific and technical personnel, about 1,600 administrative and the rest general maintenance and auxiliary staff. The Establishment is by far the largest scientific centre in the country.

The work of the Establishment is organised under six major groups, viz. Physics, Engineering, Electronics, Metallurgy, Biology and Administration. Each group is under the charge of a Director and comprises two or more divisions. There is also a directorate of Radiation Protection.

To ensure a steady supply of trained scientific and technical personnel, the Establishment started a training school in 1957 where, every year about 150 graduates and engineers are recruited and given intensive training for one year. Later they are assessed and absorbed in the Trombay Establishment, The Tata Institute of Fundamental Research and other projects of the Deptt. of Atomic Energy.

**Research Facilities:** The research facilities available in the Trombay Establishment are such that advanced research, both fundamental and applied, in several scientific fields can be undertaken. Besides the reactors mentioned elsewhere, the following principal facilities exist: (1) A 5.5 MeV Van de Graaff accelerator, (2) Mass spectrometers, (3) A 200 kv electron diffraction camera fabricated in the Establishment, (4) A slow chopper built in the Establishment, (5) A mechanical monochromator built in the Establishment, (6) Crystal spectrometers and a double crystal spectrometer, (7) Spectrometers including double beam and vacuum grating ones, (8) Plasma Torch built at Trombay, (9) Cloud chambers, (10) Magnetometers, (11) Various types of electronic instruments, (12) A multi-arm spectrometer built at Trombay, (13) Electronic magnetic isotope separator, (14) Experimental Electrolyser to produce very pure hydrogen, (15) Various instruments used in chemical analysis such as fluorimeters, polarimeters, spectro-photometers, calorimeters etc., (16) Freeze drying units for units for blood plasma etc., etc.

The use of laser communication was successfully developed in the Electronics Division and

demonstrated for the first time in 1965 in the country.

A Seismic Station was set up near Bangalore to detect underground nuclear explosions.

A Gamma Garden went into trial operations in August 1965 at Trombay for carrying out investigations and studies on induction of mutations in plants.

The Radiation Medicine Centre is now adopting most of the recognized methods for the diagnosis and treatment of diseases with the aid of radioisotopes.

**Production Facilities:** (1) Uranium Metal Plant, (2) Fuel Element Fabrication Plant, (3) Radioisotope Production Facilities, (4) Heavy Water Pilot Plant, (5) Heavy Water Reconciliation Plant, (6) Plutonium Plant, (7) Electronic Instruments, (8) Vacuum equipment, mass spectrometers etc., etc.

A Uranium Mill at Jaduguda was expected to go on stream later in 1966. It is capable of treating 1,000 tonnes of uranium ore per day.

Planning is under way for establishing a uranium oxide plant, ceramic fuel fabrication plant and zirconium plant to meet the requirements of future power reactors.

**Industrial Operations:** With the object of exploiting fully the indigenous raw materials for the speedy and successful implementation of its programme, the Commission has already set up a number of plants, while others are in the process of being set up. They are:

**Rare Earth Plant:** This plant which was set up in 1952 at Alwaye is now owned by the Govt. of India. Its capacity for processing 1,800 tons of monazite has been increased to 3,000 tons annually. It produces rare earths (chiefly cerium) compounds and a cake containing thorium and uranium. Trisodium phosphate obtained as a by-product, has a good market. The rare earths compounds (mixed rare earths chloride, carbonate and hydroxide) are sold in the world market. Small amounts of naphthenate, fluoride and oxide of cerium are also produced.

A plant, for the manufacture of rare earths fluoride (Cerium Fluoride) has been designed and erected by the Company at Alwaye. The plant has gone into production since June 1965.

This plant would be able to meet the country's entire requirement of rare earths fluoride for the manufacture of arc carbons.

**Thorium Plant:** This plant, built entirely by Indian scientists and engineers, for processing the thorium concentrates from the Rare-Earths Plant at Alwaye, went into production at Trombay in September 1955. Its capacity was increased six fold in 1958. The plant is one of the largest in the world for the production of thorium nitrate. Besides supplying virtually the entire requirements of the gas mantle industry in India, it also supplies markets in Europe and America, Hong Kong, Pakistan, Iran, U.A.R., etc. It also produces nuclear grade thorium oxide which is being used by Canada-India Reactor for the production of Uranium-233.

**Minerals Division:** The Company has taken over the assets of Travancore Minerals Ltd., Quilon, which has gone into liquidation on 27th January 1965. The Company has taken over the operation of the mineral sand industry which was being run by Travancore Minerals Ltd.

**Uranium Ore Mill:** A uranium mill with a capacity to treat 1,000 tonnes of uranium ore per day is being set up at Jaduguda in Bihar. The process to be employed has been developed in the Atomic Energy Establishment Laboratories at Trombay. The mill was expected to go into operation by the middle of 1966.

**Mineral Sand Industry:** Travancore Minerals Ltd., a public sector undertaking which was incorporated in October 1956 and the shares of which were held by the Government of India and the Governments of Kerala and Madras, went into voluntary liquidation in January 1965.

Indian Rare Earths Ltd., a wholly Central Government undertaking at present engaged mainly in the production of rare earths chloride and trisodium phosphate, has however taken over the lands, buildings, plants and equipment originally belonging to Travancore Minerals Ltd. Indian Rare Earths Ltd. is currently operating two plants in Manavalakurichi (on the West Coast of Madras State) for the separation of ilmenite, monazite, rutile and zircon.

F.X.P. Minerals, presently functioning in Chavara, Quilon which is managed by the Kerala Government, produces rutile and some ilmenite.

**Uranium Metal Plant:** This plant, designed and built entirely by the Establishment's personnel, was commissioned in January 1959. It has an annual capacity of about 30 tonnes of nuclear grade Uranium. A process for the production of ceramic grade uranium dioxide has been successfully developed on the basis of which design of a 250 tonnes uranium oxide plant has been completed.

**Heavy Water Reconciliation Plant:** The plant designed entirely by Indian engineers for the reconciliation of down-graded heavy water has been operating continuously since early part of 1962.

A small scale electrolyser assembly for reconciliation of down-graded heavy water has also been developed and designed by Indian engineers and has been taken into operation.

A pilot plant for producing enriched Boron-10 used in neutron counters has been designed, fabricated and installed at Trombay. The plant has been operating continuously since the middle of 1964.

**Heavy Water Plant:** The first Heavy Water Plant in Asia designed to produce 15 tonnes of heavy water annually in conjunction with the Fertilizer Corporation of India's Nangal Unit went into operation and has started producing nuclear grade heavy water since December 1962. This plant has been operating continuously without any break.

#### ATOMIC MINERALS

The Atomic Minerals Division of the Department of Atomic Energy has been engaged in country-wide exploration, prospecting and development of atomic minerals, particularly those of uranium, thorium, beryllium, columbium-tantalum, lithium, etc. Surface investigations are carried out by radiometric and other geophysical methods, and in some selected areas by emanometric, geochemical and geobotanical techniques; sub-surface investigations by bore-hole drilling, geophysical logging of boreholes, and underground development of deposits. Field operations are supported by investigations in the physics, petrology, chemical, geochemical and mineral technology laboratories.

As a result of the investigations carried out, several uranium occurrences of variable grade, size and importance have been located in different parts of the country, the major deposits being those at Jaduguda, Narwapahar and Bhatin in the Singhbhum Copper Belt of Bihar. Favourable indications of uranium recently located in the Himalayan region in Kulu, Rampur-Bushahr and Garhwal, are currently under investigations.

The coastal tracts of India, together with several island areas, particularly those of Ranchi (Bihar) and Purulia (West Bengal) are sources of large amounts of monazite and provide India with the largest thorium deposits in the world. Indian monazite contains 8 to 10 per cent ThO<sub>2</sub> and upto 0.3 per cent U<sub>2</sub>O<sub>3</sub>. Total reserves of monazite are estimated at some 5 million tons with ThO<sub>2</sub> content of 0.45 million tons and U<sub>2</sub>O<sub>3</sub> content of 15,000 tons.

Ilmenite which is associated with monazite, forms reserves of about 100-150 million tons, of which 65-32 million tons are measured reserves, the rest accounting for indicated and inferred reserves. Reserves of zircon, which is also found in association with monazite-bearing



sands, are estimated at about 10 million tons, of which 3.34 million tons constitute measured reserves and the rest indicated and inferred reserves.

Intensive prospecting has also led to the location of several new occurrences of beryllium, columbium-tantalum and lithium minerals, in addition to those already known in the mica belts of Bihar, Rajasthan, Madhya Pradesh and Andhra Pradesh, besides smaller ones in Madras and Mysore.

The Division also helps private parties including universities and institutions interested in prospecting and mining atomic minerals by providing technical advice, loan of G.M. counters, analysing samples free of charge and by extending such other help as would promote and widen the field of exploration.

### NUCLEAR REACTORS

**Apsara:** The first nuclear research reactor in Asia, outside the USSR, attained criticality on August 4, 1956. It is an enriched uranium light water moderated and cooled pool type reactor and was designed and built entirely by Indian scientists and engineers. The fuel elements have been hired from the United Kingdom Atomic Energy Authority under a bilateral agreement. The reactor is designed for a maximum power level of 1 MW.

A number of experimental facilities have been provided in the reactor which has proved to be extremely useful for fundamental and applied research in basic sciences and engineering, radioisotope production and training of personnel.

The first fuel charge was removed from the reactor in December, 1964 since it had attained its maximum burn-up. Maintenance of various reactor components as well as improvements in cooling and control systems, were carried out in the first quarter of 1965. The reactor was started up with the second charge of fuel elements—also hired from United Kingdom—in June 1965.

The standard element of second fuel charge contains 140 gms. of U-235 (80 per cent enriched uranium). For normal operation the reactor core contains about 25 fuel elements.

**Cirus:** (formerly known as CIR) is India's second research reactor, built as a joint Indo-Canadian project under the Colombo Plan. Work on this project was taken up in February 1956 and the reactor attained criticality on July 10, 1960. The total cost of the project is approximately Rs. 10 crores, being shared in roughly equal proportions by the two countries.

Cirus is a natural uranium heavy water moderated and light water cooled high flux research reactor with a thermal power of 40,000 KW. It is operated round the clock and is one of the most powerful reactors in the world. The reactor is used for basic and applied research in physics, chemistry, biology, metallurgy and reactor technology, for the production of large quantities of high activity radioisotopes as well as plutonium-239 and uranium-233 and for the training of personnel for future reactor programmes.

The standard fuel rod contains about 55 kg. of natural uranium. For normal operation the reactor core contains about 185 fuel rods and 20 tonnes of heavy water.

**Zerlina:** Is India's third research reactor. It is a zero energy reactor for lattice investigations and new assembly studies. Designed and built by Indian scientists and engineers, the reactor attained criticality on January 14, 1961 with a natural uranium—heavy water loading. The reactor is operated on a two shift basis upto a maximum power of 100 W and is being extensively used for physics studies of uranium—heavy water lattices.

The standard fuel rod contains about 45 kg. of natural uranium. The standard core contains 80 fuel rods and about 8 tonnes of heavy water.

The natural uranium fuel elements for CIRUS and ZERLINA are fabricated in Trombay.

While the initial heavy water required for the start-up of these reactors was obtained from the United States under a bilateral agreement, additional heavy water required for day-to-day operation is supplied from the Nangal heavy water plant.

### Directorate of Radiation Protection

Under the Atomic Energy Act of 1962, the responsibility for country-wide radiation safety vests in the Department of Atomic Energy. The Directorate of Radiation Protection has been set up to discharge this responsibility.

A country-wide film badge service is being conducted by the Directorate for persons working with radiation sources. In addition, mobile teams of scientists have visited more than three hundred medical, industrial and other institutions on invitation, assessed the adequacy of radiation safety measures and made appropriate recommendations. Nearly two hundred X-ray and tele-therapy installations and radioisotope laboratories have also been planned on request. It is expected that the film badge service, radiological protection surveys and prior approval of plans for radiation installations will be made compulsory in the near future.

The Directorate conducts (i) a one year post-graduate course in radiological physics; and (ii) four short-term courses every year on the industrial, medical and other applications of radiation and the associated safety aspects. It does research and development in fields such as hospital physics, radiation dosimetry and instrumentation, radiation applications and radiation bio-physics. It is also responsible for the formulation and promulgation, under the Atomic Energy Act, of various rules and regulations relating to radiation safety.

### Fuel Element Fabrication Facility

This Facility, the first of its kind in Asia outside USSR and one of the half-a-dozen in the world, was designed and built entirely by Indian engineers and metallurgists. It went into operation in June 1959. The entire charge of fuel elements used for CIRUS and for ZERLINA was fabricated here. The present capacity of this plant is about 30 to 40 tonnes to fuel elements per year.

It has been decided to set up an industrial plant for the fabrication of fuel elements for power reactors. The plant will be set up outside Trombay, but a good deal of development work has been carried out in the existing facility at Trombay for the fabrication of power reactor fuel elements, which consist of sintered uranium oxide pellets clad in the zircaloy.

### Central Workshops

A manufacturing facility for the production of specialised equipment and apparatus required for the country's nuclear research and development programme has been set up at Trombay at an approximate cost of Rs. 2.3 crores. The value of routine work-load on these shops is expected to be over Rs. 50 lakhs a year excluding work-load on major projects and large scale fabrication of prototype equipment and experimental set ups. The workshops have already started fabrication equipment for the Rajasthan Atomic Power Project. Similar fabrication will be undertaken for other projects in the near future, resulting in savings in cost and foreign exchange. The workshops when in full operation will also expedite development work.

### Graphite Shop

This is a facility set up for the purpose of machining graphite of grades of nuclear purity. This shop has undertaken during the course of the last few years the machining of over 300 tons of graphite required for the three reactors viz., the Apsara, the CIRUS and the ZERLINA besides numerous other works such as graphite moulds, crucibles and other components required by the various Divisions of the Trombay Establishment for their research and development work.

### Radiochemistry Laboratory

This laboratory was commissioned in 1957 to train chemists in the handling of highly radioactive substances. It is equipped with the most modern facilities for handling plutonium and other higher radioactive elements. Here, the chemistry of actinide elements is studied. Research on various aspects of the fission of heavy elements is being carried out using radiochemical techniques. Fission product isotopes are being supplied to various customers. A large number of scientists from the establishment as well as outside institutions including those from outside India have been trained in radiochemical techniques.

### Isotope Laboratory

This Laboratory which was set up at its present site at Trombay in 1960, is responsible for the production and processing of radioisotopes like iodine-131, phosphorus-32, chromium-51, iron-59 etc. The laboratory has also facilities for the production of radiopharmaceuticals required for diagnostic purposes in nuclear medicine, and for the production of organic compounds labelled with carbon-14 and tritium. Facilities have been provided for the fabrication of multicurie sealed radiation sources of cobalt-60 and iridium-192 required for industrial use and also for development work connected with the applications of radioisotopes to industrial problems such as gamma radiography, siltation studies, etc.

### Plutonium Plant

The irradiated fuel contains a small amount of plutonium, a valuable nuclear material along with a large quantity of radioactive fission products. Investigations have been conducted on the separation of plutonium from the irradiated fuel. A plant has been built at Trombay for treating primarily the natural uranium fuel rods irradiated in the Canada-India Reactor for recovering plutonium from them. The plant was commissioned for trial operation in April 1964 and highly irradiated fuel was fed to the plant in August 1964. The plant was formally inaugurated by the Prime Minister on January 22, 1965.

An auxiliary plant, has been built that will reduce considerable quantity of the radioactive waste resulting from the plutonium Plant to a small bulk so that it can be stored in underground tanks.

All parts of the Plutonium Plant complex are in continuous operation at present.

### Electronic Instruments and Components

The Electronics Group of Trombay Establishment have designed, developed and fabricated a variety of nuclear and industrial instruments which include Geiger Counters, Radiation Survey Meters, Contamination Monitors, High and Low Voltage Units, Scalers, Single Channel Analysers, Pulse Amplifiers, PH Meters, Electronic Multimeters, Oscilloscopes, Strain Gauge Amplifiers, Magnetic amplifiers, Servo Amplifiers, Moisture Gauges, Density Gauges, Analog computer, Medical Spectrometers and Counting Systems. These instruments are being fabricated for use in the Trombay Establishment, Universities and Colleges and Medical Institutions using radiation sources and also for use of the Tarapur Atomic Power Station.

In addition to the above instruments, the Group have also produced High Stability Film Resistors which have been type approved by the Defence authorities in India. Regular batch production of Semi-conductor devices including Germanium Power Transistors, Zener Diodes, Silicon Rectifiers and Thermo Electric Coolers, has been undertaken.

### Tarapur Atomic Power Station

The work on India's first atomic power station at Tarapur on the west coast of India, is now in full swing and the 380 MWE station is expected to be on full power operation by the end of "October" 1968. The cost of power from this station will be cheaper than that of thermal



power in this region. The station will consist of two reactors of the boiling water type, and is being built by the General Electric Company of the U.S.A. under a turn-key contract. On the basis of specifications provided by the Tarapur Atomic Power Project of the Department of Atomic Energy, which is supervising the design and construction and has the over all responsibility for the project.

#### Rajasthan Atomic Power Project

Work on the first unit (200 MW) of Rajasthan Atomic Power Project has commenced and the construction of temporary facilities like offices, workshop, stores, power supply, temporary colony etc. has been completed. Orders for major equipment have been placed and contract for main civil works has been awarded and excavation is in progress.

The Planning Commission have approved expansion of the Station by installation of a similar second unit.

The first unit of the station is expected to be in commercial operation by 1969.

#### SPACE RESEARCH

The Thumba Equatorial Rocket Launching Station (TERLS) has been established near Trivandrum, Kerala, by the Indian National Committee for Space Research (INCOSPAR) of the Department of Atomic Energy. The rocket launching facility became operational on Nov. 21, 1963 when the first Nike-Apache Rocket carrying a Sodium Vapour Payload was fired.

Since then, 42 experimental rockets have been fired. The scientific programme at TERLS is conducted on the basis of bilateral collaborative agreements between India and France, the USA and the USSR. The objective of the programme is to provide better understanding of problems of Equatorial Aeronomy including meteorology, particularly in the region up to 170 km.

The 20th session of the United Nations General Assembly has accorded sponsorship for the continuing operation of the Thumba International Equatorial Sounding Rocket Launching Facility by its resolution 2130 (XX) of December 21, 1965.

There is a Satellite Telemetry Station in operation, since 1961, at the Physical Research Laboratory, Ahmedabad. Currently, it is monitoring X-ray data from NRL Solar Radiation Satellite. It is also participating in a world-wide programme of ionospheric studies with S-66 ionospheric beacon satellites.

An Experimental Satellite Communications Earth Station is being set up with UN assistance at Ahmedabad. It is expected that the Station will be operational during January-March 1967. The Centre will provide facilities for research and training in communications via satellites using particularly the ATS satellites planned by NASA.

#### RESEARCH IN HUMANITIES

Research in the humanities—literature, language, arts, etc.—is engaging the attention of individual institutions scattered throughout the country.

Anjuman-i-Islam Urdu Research Institute, D. Naoroji Road, Bombay 1; Anthropological Society of Bombay, C/o K. R. Cama Oriental Research Institute, 136, Apollo Street, Bombay; Bangiya Sahitya Parishad, 243-1, Upper Circular Road, Calcutta; Bhandarkar Oriental Research Institute, Poona; Bharatiya Itihasa Samshodhaka Mandal, Sadashiv Peth, Poona; Bharatiya Vidya Bhawan, Chowpatty, Bombay; B. J. Institute of Learning and Research, Bhadra, Ahmedabad; B. M. Institute of Child Development, Pharmacy College, Navrangpura, Ahmedabad; Bureau of Psychology, Allahabad; D. A. Memorial Institute, C/o Bharatiya Itihasa Samshodhaka Mandal, Poona; Deccan College of Post-Graduate and Research Institute, Poona; Department of Anthropology, Indian Museum, 27, Chowringhee Road, Calcutta; Department of Archaeology, Ministry of Education, New

Delhi; Department of Historical and Antiquarian Studies, Gauhati; Dharmakosha Mandal (Vedic Research Institute), C/o Prajna Pathshala, Wal, District Satara; Ganganath Jha Research Institute, Allahabad; Gokhale Institute of Politics and Economics, Poona; Gujarat Research Society, Bombay; Hindi Vidya Pith, Deoghar, Bihar; Indian Institute of Education, 11, Horniman Circle, Bombay; Indian Institute of Philosophy, Amalner, Dt. Jalgaon, Maharashtra; Kannada Research Institute, Dharwar; Karnatak Research Society, Dharwar; K. P. Jayaswal Research Institute, Patna; K. R. Cama Oriental Institute, 136, Apollo Street, Bombay; Kuppaswami Sastri Research Institute, Mylapore, Madras; Mandir Vidya Pith, Bhagalpur, Bihar; Marathi Samshodhan Mandal, Mumbai Marathi Granth-sangrahalaya, Thakurdwar, Bombay; Mithila Institute of Post-Graduate Studies and Research in Sanskrit Learning, Darbhanga, Bihar; Nalanda Pali Institute, P.O. Nalanda, Patna; National Archives of India, Ministry of Education, New Delhi; Oriental Research Institute, Mysore; Rajasthan Vishva Vidya Peeth, Udaipur; Rajwade Samshodhan Mandal, Dhulia, Maharashtra; Scindia Research Institute, Ujjain; Shri G. K. Institute of Rural Education, Gargoti, Kolhapur District; Sheth Bholabhai Jeshingbhai Institute of Learning and Research, Bhadra, Ahmedabad; Shri Farbes Gujarati Sabha, Bombay; Tata Institute of Social Sciences, Chembur, Bombay; The Asiatic Society, 1, Park Street, Calcutta; Vachan Mantapa (Kannada Research Institute), Belgaum; Venkateswara Research Institute, Tirupati; Validika Samshodhana Mandal, Tilak Memorial, Poona; Valshali Prakrit Institute, Muzaffarpur; Vishveshwaranand Vedic Research Institute, Hoshiarpur, Punjab.

#### Satellite Communication Station

The Government of India in the Department of Atomic Energy in collaboration with the United Nations is in the process of setting up an Experimental Satellite Communication Earth Station at Ahmedabad in the area known as Jodhpur Tekra for the purpose of research and training in communications via satellites.

With the rapid plans for the industrialisation of India, it is essential that the communication system between distant countries and continents be modernised to meet the growing demands. Hence, in order to achieve a better system of communication, it has been found that space communication via satellites offers the most favourable means. It is also observed that before establishing a commercial station in India, it is necessary to train our engineers and scientists in the field of space technology and science and also to provide a centre for research in this field. With this objective in view, the Government of India in collaboration with the United Nations Special Fund authority have appointed a team of Indian and Foreign experts to design, instal and operate a complete Experimental Satellite Communication Earth Station at the above mentioned site.

A suitable piece of land has already been acquired and the work of building construction is pushing ahead. The special Electronics apparatus is has been ordered from abroad; all the Telephone & Telegraph Multiplex Equipment are being supplied from the Bangalore Factory of Indian Telephone Industries.

It is expected that the Station will be in operation during the first half of 1967.

#### OTHER RESEARCH BODIES

There is a whole host of research organizations (besides the ones mentioned above) engaged in scientific research of one sort or another.

The Geological Survey of India in Calcutta maps out the mineral resources of the country. The Indian Bureau of Mines and the Mineral Information Bureau at Delhi help in the prospecting and working of minerals.

The Oil and Natural Gas Commission is responsible for the prospecting and exploitation of mineral oil resources.

A Central Institute of Petroleum is being set up at Dehra Dun.

Cartographic work is in progress under the National Atlas Organization in Calcutta.

The Survey of India with its headquarters at Dehra Dun is engaged in large-scale mapping of river basins and in the preparation of topographical maps.

The Botanical and Zoological Surveys both in Calcutta conduct systematic surveys of the animal and plant resources of the country.

The Meteorological Departments of the Government of India at Delhi and Poona are concerned with meteorological, climatological, hydro-meteorological and snow surveys.

The Department of Anthropology in Calcutta is concerned with ethnographic surveys and a variety of other studies in anthropology.

The Indian Association for the Cultivation of Science in Calcutta is engaged in physical and chemical research, both in its theoretical and applied aspects.

Research in radio physics and electronics is in progress at the Indian Institute of Radio Physics and Electronics in Calcutta, while research in cosmic rays and theoretical physics is carried on at the Physics Research Laboratory in Ahmedabad.

The Bose Research Institute in Calcutta conducts research in physics, chemistry, zoology and plant breeding.

The Birbal Sahani Institute at Lucknow carries on research in plant fossils.

The Institute of Mathematical Sciences at Madras carries on research in mathematics, applied mathematics, theoretical physics.

#### ENGINEERING RESEARCH

The Indian Standards Institution at New Delhi lays down specifications for materials, tools and products.

Among engineering institutions providing facilities for research the following may be mentioned:

All India Institute of Hygiene and Public Health, Calcutta: Sanitary engineering.

Central Building Research Institute, Roorkee (U.P.): Building engineering, prestressed concrete engineering, etc.

Central Electronics Engineering Research Institute, Pilani (Rajasthan): Electronics and telecommunication engineering.

Central Mechanical Engineering Research Institute, Durgapur (W. Bengal): Mechanical engineering.

Central Public Health Engineering Research Institute, Nagpur: Public Health and sanitary engineering.

Central Road Research Institute, New Delhi: Road engineering.

Concrete Research Laboratory, Chepauk, Madras: Structural engineering.

Indian Institute of Science, Bangalore: Aeronautical engineering, internal combustion engines, and power, hydraulic and electrical communication engineering.

National Aeronautical Laboratory, Bangalore: Aeronautical engineering.

Indian School of Mines and Applied Geology, Dhanbad: Mining engineering.

M. S. University, Baroda: Civil, mechanical and telecommunication engineering.

P.S.G. & Sons Charities College, Coimbatore: Civil, mechanical and electrical engineering.

Government College of Technology, Coimbatore: Heat engineering, hydraulic engineering, soil mechanics.

Indian Institute of Technology, Kharagpur: Mechanical engineering.



Madras Institute of Technology, Madras: Aeronautical and automobile engineering and soil mechanics.

University College of Science and Technology, University of Calcutta: Heat and illumination engineering.

A number of Ministries and Departments of the Government of India have development and research sections in engineering.

The Indian Agricultural Research Institute, New Delhi has a Division of Agricultural Engineering which is concerned with agricultural equipment.

The Ministry of Communications has a Research and Development Directorate which sees to the specifications, certification and manufacture of aircraft and aircraft material.

The Ministry has a Telecommunications Research Centre in Delhi.

The Technological Development Wing of the Ministry of Industries offers advice on engineering equipment in general and more especially on machine tools and internal combustion engines.

The Central Board of Irrigation and Power conducts eleven research stations the chief of which are in Poona, Amritsar and Poondi (Madras State). The one at Khadakvasla near Poona is the most important. It conducts research in hydraulic engineering, soil mechanics, concrete materials and navigation.

The All India Radio has a research unit of its own in New Delhi.

The Railway Board has centres in Lucknow, Lonavla and Chittaranjan to investigate problems connected with railways.

Research projects connected with roads, bridges, ports, harbours are taken up for investigation by the Roads Organization under the Ministry of Transport.

It may be added that two Power Engineering Research Organizations in Bangalore and Bhopal, are being set up with the assistance of the U.N. Special Project Fund with UNESCO acting as the executive agency.

### MEDICAL RESEARCH

Medical Research is conducted chiefly under the auspices of the Indian Council of Medical Research, New Delhi. The Council also grants research fellowships. There is a Scientific Advisory Board which deals with technical questions and publishes reports of research carried on under the auspices of the Council.

The Council spent about Rs. 1.6 crores in the year 1965-66. In 1966-67 the expenditure is expected to Rs. 1.5 Crores.

The more prominent research institutions in medicine are:

School of Tropical Medicine, Calcutta: Diseases peculiar to tropical climate.

All India Institute of Hygiene and Public Health, Calcutta: Preventive and social medicine.

Indian Cancer Research Centre, Bombay: Cancer.

Vallabhbhai Patel Chest Institute, Delhi: Tuberculosis and diseases of chest.

Central Leprosy Teaching and Research Institute, Tirumani (Chingleput): Leprosy.

Haffkine Institute, Bombay: Plague, malaria, virus diseases, nutrition. It also manufactures vaccines and sera.

Central Research Institute, Kasauli: Microbiology, biochemistry, serology.

Pasteur Institute, Coonoor: Rabies, influenza, tropical eosinophilia, anti-venom serum, serological reactions.

King Institute of Preventive Medicine, Guindy, Madras: Vaccines, specially against smallpox and therapeutic sera.

Bengal Immunity Research Institute, Calcutta (Private): Prevention, control and cure of disease, and anti-malarial drugs.

Central Drug Research Laboratory, Calcutta: Biological and chemical assays of drugs. It also gives technical advice to drug manufacturing firms.

Drug Research Laboratory, Jammu: Research in medicinal plants. Has two farms. Promotes standardization of indigenous drugs.

Virus Research Centre, Poona: Virus-caused diseases.

Central Drug Research Institute, Lucknow: Work on drugs.

National Institute of Communicable Diseases, Delhi: Malaria.

Cholera Research Centre, Calcutta: To study various aspects of Cholera.

Nutrition Research Laboratories, Hyderabad: Nutrition and allied subjects.

Tuberculosis Chemotherapy Centre, Madras: Research on Tuberculosis.

The Indian Council of Medical Research initiates research in a large number of specific problems at medical colleges and hospitals in the country including the institutions mentioned above.

## ROADS

IT is estimated that India in 1914 had 1273,000 Km. of roads. Against this, the length in April 1966 was 598,700 miles made up of 177,300 miles of metalled roads, and 421,400 miles unmetalled roads. Included in this, however, are roads constructed in Community Development and N.E.S. Blocks, amounting to about 200,000 miles which are generally mere tracks and are often not properly maintained.

### ROAD FUND

Up to the end of March 1964 total receipts in the Central Road Fund since its inception were about Rs. 84.90 crores and those in the Central Road Fund Reserve since its inception were about Rs. 13.46 crores.

At present the annual revenue accruing to the Fund amounts to roughly Rs. 4 crores. For the first 15 years after its inauguration, the Central Road Fund was the main source of revenue for the construction of new roads or the improvement and modernisation of existing ones. However at present this fund represents hardly 2 per cent of the total tax revenue from motor transport, 5 per cent of the total expenditure on original road works provided for in the 3rd Five Year Plan and 4 per cent of the gross expenditure on roads inclusive of the maintenance cost of the road system.

On the administrative side roads except for the small mileage of National Highways described later are a State subject and may be divided into two main classes, State Roads under the Public Works Department and Local Roads in charge of local bodies.

At the beginning of the First Five Year Plan, India had 248,512 miles of roads, of which 97,567 miles were metalled and the remaining 150,945 miles unmetalled.

At the beginning of the Five Year Plan, the lengths remaining to be constructed, were

40,970 km. of metalled roads and 91,792 km. unmetalled roads, making a total of 132,762 km. in all.

### Extra-Municipal Road Length, Km.

| Year ending March | Surfaced Roads | Unmetalled Roads | Total   |
|-------------------|----------------|------------------|---------|
| 1957 ..           | 191,470        | 324,084          | 515,554 |
| 1958 ..           | 201,889        | 370,001          | 571,890 |
| 1959 ..           | 210,517        | 408,401          | 618,918 |
| 1960 ..           | 220,426        | 444,025          | 665,351 |
| 1961 ..           | 235,790        | 473,330          | 709,120 |
| 1962 ..           | 244,552        | 473,508          | 718,060 |
| 1963 ..           | 251,961        | 504,250          | 756,211 |

### 1st, 2nd & 3rd FIVE YEAR PLANS

The progress of road development during the past three Plan periods has been as follows:

| 31st March          | Surfaced | Miles Unsurfaced | Total   |
|---------------------|----------|------------------|---------|
| 1951 ..             | 97,567   | 150,945          | 248,512 |
| 1956 ..             | 113,725  | 195,931          | 309,656 |
| 1961 ..             | 146,513  | 294,113          | 440,626 |
| 1966 .. (Estimated) | 177,300  | 421,400          | 598,700 |

Although the table shows that over 350,000 miles of roads have been constructed, about 80 per cent of the construction represents unmetalled substandard roads principally in community development blocks which do not deserve to be called roads.

The financial allocations for road development during these 15 years have totalled a sum of Rs. 839.27 crores, distributed among the three Plan periods as under.

|                                | Rs. Crores |
|--------------------------------|------------|
| First Plan .. .. .             | 134.47     |
| Second Plan .. .. .            | 245.80     |
| Third Plan (Estimated) .. .. . | 459.00     |
| Total .. .. .                  | 839.27     |

The road mileage in the country compares very poorly with that of other countries in relation to the area of the land and its population. Seventy per cent of India's mileage is unmetalled and unsuited for all-weather traffic.

### NATIONAL HIGHWAYS

National Highways include the following roads:—1. The Grand Trunk Road from Calcutta to Amritsar via Banaras, Kanpur, Agra and Delhi; 2. The Agra-Bombay Road; 3. The Bombay-Bangalore-Madras Road; 4. The Madras-Calcutta Road; 5. The Calcutta-Nagpur-Bombay Road; 6. The Banaras-Nagpur-Hyderabad-Bangalore-Cape Comorin Road; 7. The Delhi-Ahmedabad-Bombay Road; 8. The Road from Ahmedabad to Kandla with a branch Road to Porbandar; 9. The Hindustan-Tibet Road from Ambala to Tibet border via Simla; 10. The Delhi-Lucknow-Gorakhpur-Muzaffarpur Road with a branch Road to Nepal border; 11. The Assam Access Road; 12. The A-sam Trunk Road on the South Bank of the Brahmaputra; 13. The Road branching off from the Assam Trunk Road towards the Burma border through the State of Manipur.

In 1961 three additional Roads were classed as National Highways. They are Jabalpur-Bhopal-Bilari Road, Agra-Jaipur-Bikaner Road and Sholapur-Chitradurg Road. Consequently the



length of the National Highway system has now increased to 14,880 miles.

Owing to the general inadequacy of the funds allotted for road development the deficiencies in the National Highway System have not been set right during the 19 years since independence. In April 1966 there were still 400 Km. of missing links on this road system. Fifty major bridges are still to be built and 19,200 Km. of these highways still lack dual carriageways.

Some of the important works completed on national highways so far are the Barakar and Poon bridges and the rail-road bridge over the Ganga near Mokameh in Bihar, the Kathjuri and Kuskhali bridges in Orissa, the Mahi bridge in Bombay, the Pennar and Champavati bridges in Andhra Pradesh, Pugalur and Palar bridges in Madras, Beyne and Ghagger bridges in the Punjab, Gheesh and Leesh bridges in West Bengal, Bygool, Bhakra and Betwa bridges in U.P., the Chambal bridge near Dholpur in Madhya Pradesh and the bridge over the Ganga at Garhmukteshwar in U.P.

Among the important projects in progress are the construction of National Highway No. 28 from Daisingsarai to Barauni and Pipra to Kasia (Salemgarh) in Bihar, construction and improvement of roads in the Dandakaranya area in Madhya Pradesh, improvement of National Highway No. 2 from Mathura to Agra District border in U.P. and construction of the following bridges costing over Rs. one crore each: (a) across Gowthami branch of the river Godavari in Andhra; (b) across Kosi river at Kurda in Bihar; (c) across Beas river near Mirthal on Jullundur-Pathankot road; (d) across Sutlej river on mile 99 of Grand Trunk Road; and (e) over the Ganga river at Allahabad.

The west coast road, though under construction mainly at the cost of the Central Government, has not yet been declared a National Highway. Passing through the States of Maharashtra, Mysore, Goa and Kerala this 763 mile road from Panvel in Maharashtra to Chalissery in Kerala is expected to be completed during the Fourth Plan. Against the total estimated cost of Rs. 23.15 crores, an expenditure of roughly Rs. 13.36 crores was incurred upto April 1966.

The National Highways are distributed over the length and breadth of the country on a fairly uniform basis. The actual National Highway mileages in the various States in 1961 were as follows:—

States: Andhra 1,351, Assam 723, Bihar 935, Gujarat 579, Maharashtra 1,431, Jammu & Kashmir 338, Kerala 250, Madhya Pradesh 1,669, Madras 1,033, Mysore 820, Orissa 852, Punjab

Statement showing how the allotments in the scheme are made—for Highways, District Roads and Village Roads.

|                            | Mileage                 |                              | Cost in Rs. crores (improvement and new construction) |
|----------------------------|-------------------------|------------------------------|-------------------------------------------------------|
|                            | As expected on 1-4-1964 | Targets proposed in the Plan |                                                       |
| National Highways          | 14,880                  | 32,000                       | 980                                                   |
| State Highways             | 35,000                  | 70,000                       | 1,580                                                 |
| Major District Roads       | 95,200                  | 1,50,000                     | 1,360                                                 |
| Other District Roads       | 78,300                  | 1,80,000                     | 650                                                   |
| Village Roads (Classified) | 1,86,520                | 2,25,000                     | 630                                                   |
| Total                      | 4,09,900                | 6,57,000                     | 5,200                                                 |

A sum of Rs. 459 crores had been spent for the development of roads in the country during the 3rd Plan period out of Rs. 590 crores suggested by the Chief Engineers. Consequently India's progress towards an adequate road system for the country is slow.

### INTERNATIONAL HIGHWAYS

A major development which took shape during the Third Plan period is the linking up of

879, Rajasthan 620, Uttar Pradesh 1,402, West Bengal 742.

Union Territories: Delhi 50, Himachal Pradesh 151, Manipur 132, NHTA 69, Sikkim 30. Total mileage excluding missing links 14,065.

### EXPRESS HIGHWAYS

Four express highways designed for fast motor traffic form part of the current road schemes. Two of these are at the northern outskirts of Bombay City known as the Western and Eastern Express Highways. A portion of the former leading to the Bombay airport was thrown open to traffic in 1963. While the latter, leading from Bombay to Thana was opened to light traffic early in 1964. Work on the remaining two express highways, which are comparatively longer, being roughly 100 miles each, is in progress. They connect Calcutta to Durgapur in West Bengal and Sukinda mines to Paradip port in Orissa. These express highways as well as the new roads in the coal areas are expected to give a fillip to the use of heavy vehicles and truck-trailer combinations for the transport of coal and mineral ores.

### NEW ROAD PLAN

After the completion of the Nagpur Roads Plan of 1943, a new assessment of India's needs for the next 20 years was undertaken by the Chief Engineers at the instance of the Government of India and a new Road Plan prepared for execution during the 20-year period from 1961 to 1981.

The broad outline of the plan is to raise the mileage of roads from 4.10 lakhs in 1961 to 6.57 lakhs by 1981 with provision for two lane carriage-ways on National Highways. The Plan aims at increasing the intensity of roads from 0.32 to 0.52 per square mile of territory. When the plan is completed the average distance from a village in an agricultural area to a metalled road will be reduced from five to three miles and the distance to an unmetalled road will be reduced from two to 1½ miles.

There is also a provision to have 1,000 miles of Expressways with limited access and also grade separation at most of the crossings.

The cost of this scheme is estimated at Rs. 5,200 crores and it is recommended should be split up between four 5-year periods as under:—

|                    |                |
|--------------------|----------------|
| 1961-62 to 1965-66 | Rs. 590 crores |
| 1966-67 to 1970-71 | Rs. 1,075 "    |
| 1971-72 to 1975-76 | Rs. 1,545 "    |
| 1976-77 to 1980-81 | Rs. 2,000 "    |

a part of the main international system by linking India with Lahore in Pakistan and Mandalay in Burma the main arterial highway through India is the Amritsar-Delhi-Agra-Calcutta-Golaghat-Imphal road. Next in importance are two routes, Agra via Gwalior, Hyderabad and Bangalore to Danushkodi and Barhi to Kathmandu. Highways of the second category in India will include roads such as Agra-Bombay, Delhi-Multan, Bangalore-Madras, Golaghat-Ledo etc.

While in most cases the national highways satisfy the minimum standards of international roads, a few sections will have to be constructed or up-graded. Besides the geometrical and structural requirements, there are certain other facilities which have to be provided along these international roads. These include the provision of service stations and petrol filling stations, hotels, rest-houses, telephone booths, first aid posts etc. and water tanks in dry areas.

Through the international highways in Turkey, the Asian highway will link up with the European highways on the west, while on the east the highway will extend to Rangoon, Bangkok, Saigon and Singapore. Road travel between Asian and European countries will thus lose its hazards in due course.

### BORDER ROADS

A "Border Roads Development Board" was formed in March 1960 to accelerate the economic development of the North and North Eastern border areas. Its programme includes improvement of certain existing roads and tracks and construction of new ones. While all road agencies like the State P.W.D. and the Central P.W.D. cooperate with the Board, work is being carried out directly by the Board in the most forward areas and especially at high altitudes and in difficult terrain. The Board has taken over overall responsibility for the maintenance and improvement of the Pathankot Jammu-Srinagar-Uri National Highway.

Owing to the national emergency some special roads might also be constructed for defence purposes.

LENGTH OF EXTRA-MUNICIPAL ROADS MAINTAINED BY P. W. D. AND LOCAL BODIES AND ROADS CONSTRUCTED IN C. D. & N. E. S. BLOCKS IN INDIA AS ON 31st MARCH 1963.

| State/Union Territory | (In kilometres) |                   |         |
|-----------------------|-----------------|-------------------|---------|
|                       | Surfaced Roads  | Un-surfaced Roads | Total   |
| Andhra Pradesh        | 27,299          | 34,629            | 61,928  |
| Assam                 | 3,805           | 29,730            | 33,535  |
| Bihar                 | 11,145          | 42,129            | 53,274  |
| Gujarat               | 13,140          | 14,864            | 28,004  |
| Jammu and Kashmir     | 2,486           | 9,538             | 12,024  |
| Kerala                | 8,062           | 12,076            | 20,128  |
| Madhya Pradesh        | 24,352          | 27,558            | 51,910  |
| Madras                | 33,815          | 22,297            | 56,112  |
| Maharashtra           | 25,637          | 30,708            | 56,345  |
| Mysore                | 28,719          | 39,952            | 68,671  |
| Nagaland              | 103             | 2,741*            | 2,844   |
| Orissa                | 8,171           | 30,333            | 38,504  |
| Punjab                | 11,422          | 26,742            | 38,164  |
| Rajasthan             | 15,366          | 25,060            | 40,426  |
| Uttar Pradesh         | 22,087          | 87,556            | 109,643 |
| West Bengal           | 13,581          | 51,551            | 65,132  |
| Union Territories**   | 2,781           | 16,777            | 19,558  |
| Total                 | 251,961         | 504,250           | 756,211 |

\* Data in respect of unsurfaced roads constructed by C.D. & N.E.S. Blocks are not available.

\*\* Includes 63 kilometres of national highway length in Sikkim as on 31st March 1961.

our national highways with the international highways as proposed by the ECAFE. These international roads have to be of certain minimum standards which have been laid down after discussion among experts of the countries concerned.

These highways are divided into two categories, the first consisting of main arterial routes joining the capitals of the countries and the second consisting of other routes joining main cities, ports etc. with the arterial network. Constituting



## REVENUE FROM MOTOR TRANSPORT

In 1965-66 the expenditure on roads is estimated at Rs. 143.59 crores made up of Rs. 90 crores on road construction or improvements and Rs. 53.59 crores on road maintenance. The Governments at the Centre and in the States realized in the year an amount of Rs. 331.85 crores from motor transport, as under :—

|                                                                             | Revenue,<br>1965-66<br>(Rs. in Crores) |
|-----------------------------------------------------------------------------|----------------------------------------|
| <b>Central Revenues.</b>                                                    |                                        |
| Motor Spirit and Diesel<br>Oil Duties                                       | 229.10                                 |
| Tyre Excise and Import<br>Duties                                            |                                        |
| Vehicle Parts Imports<br>Duties                                             |                                        |
| <b>State Revenue.</b>                                                       |                                        |
| Vehicle Taxes and Petrol<br>Sales Taxes, Passenger<br>and Goods Taxes, etc. | 102.75                                 |
|                                                                             | 331.85                                 |

## MOTOR VEHICLES

The number of motor vehicles in use in India in March 1964 was 899,675. In terms of the population of the country, this represents about 160 vehicles per lakh of inhabitants.

The 899,675 vehicles operating in India in March 1964 were distributed among the various States as in the table shown on this page. The growth of motor vehicles in India in the past nine years is about 140 per cent, the total number having increased from 3.76 lakhs in March 1955 to 8.99 lakhs in March 1964.

## MOTOR VEHICLES IN INDIA AS ON 31st MARCH 1964.

| State                                       |       | Motor<br>cycles     | Auto<br>Rickshaws | Jeeps  | Private<br>cars     | Taxis  |        |                    |
|---------------------------------------------|-------|---------------------|-------------------|--------|---------------------|--------|--------|--------------------|
|                                             |       |                     |                   |        |                     | Petrol | Diesel | Total              |
| Andhra Pradesh                              | ..    | 11,618              | 72                | 4,326  | 20,687              | 1,150  | 74     | 1,233              |
| Assam                                       | .. .. | 1,295               | 47                | 2,177  | 7,123               | ..     | ..     | 339                |
| Bihar                                       | .. .. | 6,326               | ..                | ..     | 14,120 <sup>a</sup> | ..     | ..     | 1,013              |
| Gujarat (31-12-1963)                        | ..    | 12,381              | 1,950             | ..     | 19,174              | ..     | ..     | 1,060              |
| Maharashtra                                 | .. .. | 22,205 <sup>1</sup> | 994               | 4,588  | 56,845              | ..     | ..     | 8,006              |
| Kerala                                      | .. .. | 3,877               | 175               | ..     | 19,366 <sup>a</sup> | ..     | ..     | 3,619              |
| Madhya Pradesh                              | ..    | 7,182               | ..                | 3,902  | 10,528              | ..     | ..     | 692                |
| Madras                                      | .. .. | 11,881              | 669               | 1,943  | 29,296              | 3,085  | 25     | 3,110              |
| Mysore                                      | .. .. | 11,974 <sup>1</sup> | 1,213             | 2,713  | 19,310              | 978    | 22     | 1,000              |
| Orissa†                                     | .. .. | 1,794               | ..                | 2,473  | 3,170               | ..     | ..     | 139                |
| Punjab† (30-6-1963)                         | ..    | 9,365               | 567               | 1,170  | 6,953               | ..     | ..     | 302                |
| Rajasthan                                   | .. .. | 5,299 <sup>a</sup>  | ..                | ..     | 13,492 <sup>a</sup> | ..     | ..     | 339                |
| Uttar Pradesh                               | .. .. | 11,577              | 25                | 3,277  | 13,362              | ..     | ..     | 425                |
| West Bengal                                 | .. .. | 14,043 <sup>1</sup> | 177               | ..     | 70,448 <sup>a</sup> | ..     | ..     | 7,300 <sup>7</sup> |
| Jammu and Kashmir††                         |       | 871                 | 16                | 354    | 1,226               | ..     | ..     | 186                |
| Delhi                                       | .. .. | 22,700              | 4,710             | ..     | 22,548 <sup>a</sup> | ..     | ..     | 1,976              |
| Tripura†                                    | .. .. | 80                  | ..                | 410    | 162                 | ..     | ..     | 61                 |
| Himachal Pradesh†                           | ..    | 21                  | 1                 | 228    | 62                  | ..     | ..     | 86                 |
| Manipur† (31-3-1965)                        | ..    | 142                 | ..                | 511    | 134                 | ..     | ..     | ..                 |
| Andaman and Nicobar<br>Islands† (31-3-1965) | ..    | 75                  | ..                | 66     | 30                  | ..     | ..     | 24                 |
| Goa† (31-3-1962)                            | ..    | 1,070               | ..                | ..     | 2,721               | ..     | ..     | 579                |
| <b>Total</b>                                | ..    | 155,776             | 10,616            | 31,567 | 327,337             | ..     | ..     | 81,489             |

## MOTOR VEHICLES IN INDIA AS ON 31st MARCH 1964—(Contd.)

| State                                       | Buses  |        |                    | Goods Vehicles |        |                     | Miscellaneous |        |                    | Grand<br>Total |
|---------------------------------------------|--------|--------|--------------------|----------------|--------|---------------------|---------------|--------|--------------------|----------------|
|                                             | Petrol | Diesel | Total              | Petrol         | Diesel | Total               | Petrol        | Diesel | Total              |                |
| Andhra Pradesh                              | 274    | 5,565  | 5,839              | 2,139          | 12,183 | 14,322              | 2,652         | 2,450  | 5,102              | 63,199         |
| Assam                                       | 1,393  | 188    | 1,581              | 5,922          | 2,423  | 8,345               | 779           | 2,339  | 5,231 <sup>d</sup> | 26,138         |
| Bihar                                       |        |        | 2,418              |                |        | 11,582              |               |        | 1,268              | 36,736         |
| Gujarat (31-12-1963)                        | 132    | 2,574  | 2,706              | 4,444          | 9,877  | 14,321              | 220           | 3,745  | 6,463 <sup>e</sup> | 58,055         |
| Maharashtra                                 | 1,431  | 5,278  | 6,762 <sup>a</sup> | 20,129         | 16,697 | 36,891 <sup>b</sup> | 825           | 4,405  | 5,230              | 141,571        |
| Kerala                                      |        |        | 4,392              |                |        | 8,173               |               |        | 841 <sup>a</sup>   | 40,443         |
| Madhya Pradesh                              | 1,156  | 2,916  | 4,072              | 5,043          | 8,572  | 13,615              |               |        | 5,206 <sup>a</sup> | 45,197         |
| Madras                                      | 365    | 5,753  | 6,118              | 1,806          | 11,547 | 13,364 <sup>c</sup> | 945           | 543    | 1,631 <sup>f</sup> | 68,012         |
| Mysore                                      | 2,229  | 3,500  | 5,729              | 3,671          | 11,232 | 14,903              | 2,400         | 994    | 4,289 <sup>g</sup> | 61,131         |
| Orissa†                                     |        |        | 950                |                |        | 6,120               |               |        | 853                | 15,499         |
| Punjab† (30-6-1963)                         |        |        | 2,609              |                |        | 7,423               |               |        | 2,731              | 31,120         |
| Rajasthan                                   |        |        | 5,584              |                |        | 10,973              |               |        | 6,007              | 41,694         |
| Uttar Pradesh                               | 1,538  | 6,099  | 7,637              | 4,099          | 14,101 | 18,200              | 1,859         | 683    | 2,542              | 57,045         |
| West Bengal                                 |        |        | 5,558 <sup>a</sup> |                |        | 33,192 <sup>a</sup> |               |        | 3,343 <sup>a</sup> | 134,061        |
| Jammu and Kashmir††                         |        |        | 830                |                |        | 3,131               |               |        | 69                 | 6,683          |
| Delhi                                       |        |        | 1,501              |                |        | 5,410               |               |        |                    | 58,845         |
| Tripura†                                    |        |        | 201                |                |        | 719                 |               |        | 189                | 1,822          |
| Himachal Pradesh†                           |        |        | 672                |                |        | 548                 |               |        | 87                 | 1,705          |
| Manipur† (31-3-1965)                        |        |        | 161                |                |        | 614                 |               |        | 140                | 1,702          |
| Andaman and Nicobar Islands†<br>(31-3-1965) |        |        | 16                 |                |        | 159                 |               |        | 88                 | 458            |
| Goa† (31-3-1962)                            |        |        | 563                |                |        | 3,676               |               |        |                    | 8,609          |
| Total                                       | 8,518  | 31,875 | 65,899             | 47,253         | 86,632 | 225,581             | 9,680         | 15,159 | 51,310             | 8,99,675       |

<sup>1</sup> Of these, scooters and scooterettes are 8,727 in Maharashtra, 3,184 in Mysore and 4,756 in West Bengal. <sup>a</sup> Includes jeeps. <sup>b</sup> Includes auto rickshaws. <sup>c</sup> Includes 508 tractor-trailers. <sup>d</sup> Made up of 2,005 buses of S.T.C. and 3,553 buses of private operators. <sup>e</sup> Made up of 12,568 private carriers, 17,562 public carriers and 3,062 vans. <sup>f</sup> Includes 1,856 contract carriages. <sup>g</sup> Includes 1,001 tractors. <sup>h</sup> This includes tractors 2,461, trailers 1,929. <sup>i</sup> Figures from Indian Institute of Road Transport. <sup>j</sup> Estimated. <sup>k</sup> Includes 53 buses other than petrol and diesel. <sup>l</sup> Includes 65 goods vehicles other than petrol and diesel. <sup>m</sup> Includes 11 goods vehicles other than petrol and diesel. <sup>n</sup> Includes 2,113 miscellaneous vehicles other than petrol and diesel. <sup>o</sup> Includes 2,498 miscellaneous vehicles other than petrol and diesel. <sup>p</sup> Includes 143 miscellaneous vehicles other than petrol and diesel. <sup>q</sup> Includes 895 miscellaneous vehicles other than petrol and diesel.



**NATIONALISED TRANSPORT**

Nationalised bus services covered in 1961 almost the major parts of Gujarat, Maharashtra, Orissa, Delhi, Manipur and Himachal Pradesh.

No nationalisation has taken place in Tripura but in the remaining parts of the country the

extent to which services have been nationalised varies from one State to another, some having started only experimental nationalisation while in some others more than 90 per cent of the bus services are under State ownership as is shown in the following table:

**PRIVATE AND NATIONALISED BUSES AT BEGINNING OF THIRD PLAN, 1ST APRIL 1961**

| Name of State/Union Territory       | Number of buses in public sector | Number of buses in private sector | Total         | Percentage of 2 to 4 |
|-------------------------------------|----------------------------------|-----------------------------------|---------------|----------------------|
| Andhra Pradesh .. .. .              | 1,302                            | 3,151                             | 4,453         | 28.33                |
| Assam .. .. .                       | 444                              | 730                               | 1,180         | 37.60                |
| Bihar .. .. .                       | 613                              | 1,869                             | 1,982         | 31.00                |
| Maharashtra .. .. .                 | 3,623                            | 3,065                             | 6,688         | 57.20                |
| Gujarat .. .. .                     | 3,190                            | 359                               | 3,549         | 90.00                |
| Kerala .. .. .                      | 559                              | 2,640                             | 3,199         | 17.50                |
| Madhya Pradesh .. .. .              | 673                              | 2,415                             | 3,088         | 21.70                |
| Madras .. .. .                      | 692                              | 4,487                             | 5,179         | 13.40                |
| Mysore .. .. .                      | 1,657                            | 2,358                             | 4,015         | 41.25                |
| Orissa .. .. .                      | 886                              | 403                               | 789           | 49.00                |
| Punjab .. .. .                      | 722                              | 2,208                             | 2,930         | 24.60                |
| Rajasthan .. .. .                   | 177                              | 3,314                             | 3,491         | 5.10                 |
| Uttar Pradesh .. .. .               | 2,984                            | 4,528                             | 7,512         | 39.70                |
| West Bengal .. .. .                 | 730                              | 3,270                             | 4,000         | 18.25                |
| Delhi .. .. .                       | 668                              | 74                                | 742           | 90.40                |
| Jammu and Kashmir .. .. .           | 143                              | 497                               | 640           | 22.30                |
| Himachal Pradesh .. .. .            | 261                              | Nil                               | 261           | 100.00               |
| Manipur .. .. .                     | 115                              | 3                                 | 118           | 97.40                |
| Andaman and Nicobar Islands .. .. . | 5                                | 5                                 | 10            | 50.00                |
| Tripura .. .. .                     | ..                               | 369                               | 369           | —                    |
| <b>Total .. .. .</b>                | <b>17,982</b>                    | <b>36,213</b>                     | <b>54,195</b> | <b>33.20</b>         |

Freight transport is operated by certain State Transport organisations such as those in Assam, Maharashtra, Uttar Pradesh, Jammu & Kashmir and Himachal Pradesh. While these freight lorries as a rule operate on charter basis or on scheduled parcel services without monopoly, the State Transport in Assam has a monopoly of the truck traffic on 68 miles of roads and the entire goods traffic in Himachal Pradesh is a State monopoly. The number of goods lorries operated by nationalised concerns is however not more than two per cent of the total goods vehicles in India.

Expansion of nationalisation during the Third Plan 1961/66 was confined as in the Second Plan to passenger services. The Third Plan envisaged the addition of 5,000 vehicles so as to increase the nationalised fleet of buses to 23,000 by March 1966.

**TRANSPORT BODIES**

The department in the Central Government which deals with the overall direction of the roads plan and co-ordination of State planning is the Roads Wing under the Ministry of Transport.

The Roads Wing gives technical advice and arranges for the allocation of Central Road Fund reserves among the States.

An Inter-State Transport Commission has been set up to develop, co-ordinate and regulate operation of motor vehicles in areas or routes common to two or more States.

For proper and planned development of transport as a whole and to ensure co-ordination between the various modes of transport on the one hand and the Central and State transport policies on the other, Government of India in 1958 set up three transport bodies. They are the *Transport Development Council*, the *Road and Inland Water Transport Advisory Committee*, and the *Central Transport Co-ordination Committee*.

The Transport Development Council is a high-level body to advise the Government of India on all matters of policy relating to roads, road transport as well as inland water transport. The Council will also advise on problems relating to co-ordination between different forms of transport that may be referred to it by the Government of India.

The Road and Inland Water Transport Advisory Committee has been set up to discuss problems relating to roads, road transport and inland water transport and to make recommendations to the Transport Development Council for final decisions.

The Central Transport Co-ordination Committee has been constituted in the place of the Standing Committee of the Central Board of Transport and deals with the day-to-day transport problems confronting the different ministries of the Government of India.

The Government of India has also prepared a pilot scheme for setting up transport co-operative societies. To begin with, two such societies have been set up one each in Delhi and Kerala. Other States in which such societies are to be formed are West Bengal, Orissa and Madras.

The objective of the scheme is twofold; to bring more vehicles on the road; and to find employment for the educated unemployed.

The co-operative societies will be under the control of the State Government. Financial assistance by way of loans will be granted to the societies by the Government of India. The cost of training of the members of the co-operative societies would also be borne by the Central Government.

The membership of the co-operative societies will be restricted to workers, like drivers, mechanics, booking clerks, depot managers, etc.

On the basis of five persons to man one vehicle, each co-operative society will have 50 members. Each member will be required to contribute Rs. 1,000 towards the capital of the society.

**Road Transport Reorganisation Committee**

The Government of India in 1958 appointed a Road Transport Reorganisation Committee to recommend changes in the machinery of transport administration in the States so that road transport might be developed to meet the demands created by the country's plans of economic development.

The recommendations were given in the 1960-61 Directory.

The Government appointed another committee to study and recommend on the problem of transport policy and co-ordination. The report, which was released in Feb. 1966, envisages transport co-ordination through regulation of investments in the different modes. Regional transport surveys are now in progress to assess the quantum of transport which each mode of transport will be called upon to carry at the end of each Five Year Plan.

In 1965 the Government of India appointed two additional enquiry committees. One known as the Study Group on viable units is expected to recommend the steps to be taken to encourage the formation of large and efficient operating units. The other body known as the Road Transport Taxation Enquiry Committee is investigating the complaint that the incidence of present taxation constitutes a disincentive to the growth of road transport.

**SHIPPING COMPANIES AND AIRWAYS****SHIPPING COMPANIES****AMERICAN EXPORT ISBRANDTSEN LINES INC., NEW YORK**

*Agents:—*Lionel Edwards Ltd., 41, Nicol Road, B. Estate, Bombay; Pierce Leslie & Co., Ltd., Beach Road, Alleppey; Peirce Leslie & Co., Ltd., Ballard Road, Cochin; Pierce Leslie (C) & Co., Ltd., Bunder Road, Mangalore; Peirce Leslie & Co., Ltd., Kozhikode; Peirce Leslie & Co., Ltd., Quilon; The Bombay Co. (Private) Ltd., 139, Broadway, Madras; Lionel Edwards Ltd., India Steamship House, 21, Old Court

House Street, Calcutta; Lionel Edwards Ltd., New Delhi; Lionel Edwards Ltd., Visakhapatnam; American Export Isbrandtsen Lines Inc., India Steamship House, 21, Old Court House Street, Calcutta.

India Service fortnightly sailings between New York and other U.S. North Atlantic Ports via Egypt, Lebanon and the Suez Canal and Ports in the Gulf of Suez, Red Sea, Gulf of Aden, Pakistan, India, Ceylon and Burma. Calls at other ports may be made. Also Round the world Service fortnightly New York to New York via

Mediterranean, Pakistan, India, Singapore, Saigon, Hongkong, Japan, San Francisco and Los Angeles.

**AMERICAN PRESIDENT LINES LIMITED**

601, California Street, San Francisco, California, U.S.A.

Fortnightly sailings from Cochin, Mangalore, Bombay, Karachi via the Mediterranean to United States.



**General Agents :—**

**BOMBAY**—Forbes Forbes Campbell & Co., Ltd., Home Street, Fort.

**CALCUTTA**—McLeod & Co. Ltd., 3, Netaji Subhas Road.

**MADRAS**—South Indian Export Co. Ltd., Post Box No. 37, McLean Street.

**COCHIN**—Madura Co. Private Ltd., P.O. Box No. 6.

**MANGALORE**—Canara Shipping Corporation, P.O. Box 23.

**APEEJAY LINES**

**Owners :** Surrendra Overseas Ltd., 15, Bra-bourne Road, Calcutta.

**Branches :**

**Bombay :** Steelcrete House, 3 Dinshaw Wachha Road, Bombay 1.

**New Delhi :** Jeevan Vihar, Parliament Street.

**Madras :** 312 Thambu Chetty Street, Madras 1.

The Company Owns seven ships Apj "Sushma", Apj "Akasi", Apj "Anjli", Apj "Rita", Apj "Aruna", Apj "Karuna", Apj "Ambika."

At present their vessels are on the tramp trade and overseas trade with emphasis on overseas trade. Their future plans are to run regular lines.

**BROCKLEBANKS' CUNARD SERVICES**

Thos. & Jno. Brocklebank Ltd., Cunard Building, P.O. Box No. 26, Liverpool 3.

**Agents :**

**Turner Morrison & Co., Ltd.,** 6, Lyons Range, Calcutta 1.

**Ripley & Co., Ltd.,** P.O. Box No. 39, Visakhapatnam.

Service to Aden, Port Sudan, Port Said, Charleston, Savannah, New Orleans, Houston and Galveston.

**CHOWGULE STEAMSHIPS LTD.**

**Registered Office :** Mormugao Harbour (Goa).

**Bombay Office :** 'India House' opp.: G.P.O., Bombay-1.

**Number of Vessels :** 6 (2 Bulk Carriers. Total.

DWT: 71,137.33. 1 Liberty Ship—10892.

DWT; 3 Passenger-cum-cargo ships).

**Passenger-cum-Cargo Service :** From Bombay to Goa.

**Cargo Service :** On Indian coast and overseas.

**CITY LINE LTD.**

75, Bothwell Street, Glasgow C. 2, Scotland.

**Agents :**

**Best & Co., Private Ltd.,** Madras, P.O. Box 63.

**Gladstone Lyall & Co., Ltd.,** Vishakapatnam.

**Gladstone Lyall & Co. Ltd.,** 4, Fairlie Place, Calcutta 1.

**Killick, Nixon & Co., Ltd.,** Post Box 109, Home Street, Bombay.

**Killick Nixon & Co. Ltd.,** Mormugao Harbour, Goa.

**Aspinwall & Co., Ltd.,** Fort Cochin, Malabar Coast, South India.

Important trading ports are London, Dundee, Avonmouth, Hull, Dunkirk, Boulogne.

**DEMPO STEAMSHIPS LIMITED**

**Regd. Office :** Campal, Panjim, Goa.

**Admn. Office :** Moti Mahal, J. Tata Road, Bombay 1.

**Service :** International Bulk Carrier operations.

**No. of Ships :** 2 Bulk Carriers. Total DWT: 70,000.

**ELLERMAN & BUCKNALL STEAMSHIP CO. LTD.**

12/20, Camomile Street, London, E.C.3.

**General Agents :—**

**BOMBAY**—Forbes Forbes Campbell & Co., Ltd., Home Street, Fort.

**CALCUTTA**—Gladstone Lyall & Co., Ltd., 4, Fairlie Place.

**MADRAS**—Best & Co. Private Ltd., Post Box No. 63.

**COCHIN**—Aspinwall & Co. Private Ltd., P.O. Box No. 2.

Trading Ports are Montreal, Halifax, St. John N.B., etc.

**BRITISH INDIA STEAM NAVIGATION CO., LTD.**

For all information with regard to the Company's services, application should be made to Mackinnon, Mackenzie & Co. Private Ltd., Bombay 1.

**Agents in Madras :—**Binny & Co. Ltd., 7, Armenian St., Madras 1.

**BOMBAY STEAM NAVIGATION CO. (1953) LTD.**

**Regd. Office :** Scindia House, Dougall Road, Ballard Estate, Bombay.

**Administrative Office :** 7, Kumpta St., B. Estate, Bombay 1.

**London Agents :** Scindia Steamships (London) Ltd., Kempson House, Gamomile Street, London, E.C. 3.

**Passenger Services :**

Bombay, Rewas, Dharamtar, Dabhol, Ratnagiri, Vijaydurg, Malvan, Panjim.

**ELLERMAN'S CITY AND HALL LINES**

From Glasgow and Liverpool to Calcutta and back to London.

From Glasgow and Liverpool to Bombay, Kathiawar Ports, Karachi and Malabar Coast Ports and back to London, Liverpool and Glasgow.

**Agents :**

**BOMBAY :** Killick, Nixon & Co. Ltd.

**CALCUTTA :** Gladstone Lyall & Co., Ltd.

**MADRAS :** Best & Co. Private Ltd.,

**MORMUGAO :** Killick, Nixon & Co., Ltd.

**HARRISON LINE****BROCKLEBANK LINE****L. SMIT & CO'S INTERNATIONALE****SLEEPDIET, ROTTERDAM****HINODE KISEN CO. LTD., TOKYO**

**Agents :** Killick, Nixon & Co. Ltd., Home Street, Fort, Bombay.

**EVEREST ORIENT LINE**

**Calcutta Agents :** Everett Steamship Corporation, G.P.O. Box 25, Calcutta.

Bay of Bengal, Straits, Hongkong, Japan and vice versa.

**JOHNSON LINE**

**Bombay Agents :** Everett Steamship Corporation, Post Box 523, Bombay.

Japan, India, Pakistan, Persian Gulf and vice versa.

**AMERICAN MAIL LINE**

1010, Washington Bldg., Seattle, Washington.

**Bombay Agents :** Everett Steamship Corporation, P.O. Box 523, Bombay 1.

**Calcutta Agents :** Everett Steamship Corporation, G.P.O. Box 25, Calcutta 1.

**Service :** U.S.A. West Coast Ports to Indian East & West Coast Ports, vice versa.

**WATERMAN STEAMSHIP CORPORATION**

19, Rector Street, New York, N.Y. 1000

**Bombay Agents :** Everett Steamship Corporation, P.O. Box 523, Bombay 1.

**Calcutta Agents :** Everett Steamship Corporation, G.P.O. Box 25, Calcutta 1.

**Service :** U.S.A. East Coast Ports to India.

**THE GREAT EASTERN SHIPPING CO. LTD.**

**Registered Office :—**Mercantile Bank Building, 60, Mahatma Gandhi Road, Bombay 1.

**Branch Office :** 16/18, Strand Road, Calcutta  
**Delhi Office :** A. H. Bhiwandiwalla & Co. (Bombay) Private Ltd., 100, Golf Link Area, New Delhi.

**Operations :** Owns and operates a fleet of 1 ships including two Bulk Carriers of 38,500 d.w.t. each and a Tanker. Operates liner service on the Indian Coast and from West Coast U.S.A. West Coast Canada to Pakistan and India. Also Tramp Shipping all over the world. The annual Freight Earnings are over Rs. 6 Crores.

**Agents :** At all important ports in India, Pakistan, Ceylon, Burma and Overseas Ports.

**HANSA LINE****Agents :**

**Calcutta :** Hansa Line, Ilaco House, Ground Floor, 1-3, Brabourne Road, P. O. Box 2698

**Bombay :** Shaw Wallace & Co., Ltd., 3, Witte Road, P.B. 203, Bombay 1.

**Madras :** Shaw Wallace & Co., Ltd., 8-9, Thambu Chetty Street, P.O. Box 14, Madras 1.

Fortnightly sailings from North Continental Ports to India, Pakistan, Ceylon and Burma. Regular monthly sailing from Calcutta to Persian Gulf Ports.

**HARSHA TANKERS & SHIPPING AGENCY**

4th Floor, "Mirabelle," 33A, New Marine Line, Bombay 1.

Steamship Agents & Operators of Tankers & Bulk Carriers.

Represented at Kandla, Goa, Cochin, Tuticorin, Madras, Visakhapatnam & Calcutta.

Operators & Disponent shipowners.

**INDIA STEAMSHIP COMPANY, LTD.**

**Head Office :** India Steamship Co., Ltd., India Steamship House, 21, Old Court House Street, Calcutta 1.

**Branch Offices :** Contractor Building, 41, Nicol Road, Bombay 1; Godavari Street, Visakhapatnam 1; 'Suryabagh', Commercial Road, Kakinada.

**Agents :** (a) The Bombay Co. (Private) Ltd., Fort Cochin, Cochin; (b) Ananthakrishna & Co., 16, First Line Beach, Madras 1; (c) Bombay Co. Pvt. Ltd., Beach Road, Tuticorin.; **Saurashtra Agents :** J. M. Baxi & Co.

**Service to :** (a) From Bombay to the U.K./Continent; (b) From Calcutta: (1) Calcutta U.K./Continent; (2) Calcutta/South America; (c) Indo-Soviet Service, i.e., from Calcutta and Bombay to Black Sea Ports.

**JAVA BENGAL LINE**

Branch Office of N. V. Stoomvaart Maatschappij "Nederland".

5 & 7, Netaji Subhas Road, Calcutta 1. P.O. Box 71.

In all ports on East and West Coast except Calcutta: Volkart (Bombay) P. Ltd. represent their Lines.

The following lines are represented by them in India, with vessels calling at Indian ports:

**Nedlloyd Line :** Sailings between India, East Pakistan, Philippines and USA/Canadian West Coast Ports.



**Nedlloyd Latin America & Caribbean Service :** Sailings from Calcutta and East Pakistan Ports to West Coast of South America and Caribbean Ports via Straits, Hongkong and Japan.

**Nedlloyd Line/Gulf of Mexico Express :** Sailings from Calcutta and East Pakistan to ports in the Gulf of Mexico via Panama Canal.

**Nedlloyd Line/India Pakistan Express :** Sailings from U.S.A. East Coast to Indian East and West Coast ports via Suez Canal.

**Holland-Bengal-Burma Line and Holland-Bombay-Karachi Line :** Sailings between Indian East and West Coast ports respectively via Red Sea and Port Said to North Continental ports accepting through cargo for Mediterranean and Scandinavian ports.

**K.P.M. Lines :** Sailings from Calcutta to Rangoon, Penang, Port Swettenham, Singapore, Bangkok, Pnom Penh (Saigon, Hong kong optional) *vice versa*.

**L. Smit & Co.'s International Tug Service,** Ocean going tugs stationed all over the world.

#### JAYANTI SHIPPING COMPANY LTD.

**Registered Office :** Rehem Mansion No. 1, 42, Colaba Causeway, Bombay 1.

**Managing Agents :** The Shipping Corporation of India Ltd., Steelcrete House, 4th Floor, Dinshaw Wacha Road, Bombay-1.

**Chairman of Board of Control :** Dr. Nagendra Singh. I.C.S.

**Chairman & Managing Director of Managing Agents :** C. P. Srivastava I.A.S.

**Agents :** Throughout the world.

#### JAYANTI FLEET

**Tankers (in DWT) :** Adi Jayanti 33,015, Vikram Jayanti 54,816.

**Cargo Ships (in DWT) :** Gargi Jayanti 10,521, Nanak Jayanti 10, 902, Parvati Jayanti 10,501, Ashoka Jayanti 10,030, Gandhi Jayanti 10,929, Krishna Jayanti 11,050, Laxmi Jayanti 10,986, Rama Jayanti 10,986.

**Bulk Carriers (in DWT) :** Bharata Jayanti 33,254, Gotama Jayanti 33,287 Akbar Jayanti 33,204, Chandragupta Jayanti 33,297, Shah-jehan Jayanti 33,271, Kanishka Jayanti 33,338, Devaraya Jayanti 33,284, Samudragupta Jayanti 33,257.

**Combined Oil/Ore Carriers (in DWT) :** Bhaskar Jayanti 20,578, Lilavati Jayanti 20,584, Chanakya Jayanti 20,606.

**Total (DWT) :** 501,756.

#### LLOYD TRIESTINO

Bazargate Street, Fort, Bombay. P.B. No. 1080.

**De Luxe Passenger Service** from Bombay to Naples/Genoa & Venice/Trieste as well as to Djakarta, Singapore and Hong Kong.

**Fast Cargo-cum-Passenger Service** with monthly Sailing from Cochin to Naples and Genoa.

**Cargo Service** from East and West Coasts of India to Mediterranean Ports.

**Cargo Service** by fast passenger Vessels from Bombay to Italy and also to the Far East.

#### THE MALABAR STEAMSHIP COMPANY LTD.

Darabsha House, Ballard Road, Bombay 1.

**Branches :** Calicut, Cochin, Alleppey and Calcutta.

From Bombay to Calicut-Cochin-Tuticorin and Colombo as per demand. From Bombay to Saurashtra Ports. From Calcutta to Rangoon. From Calcutta to Madras-Tuticorin-Cochin and also touch Colombo according to demand. From Indian Ports to Overseas.

#### MAERSK LINE

**Agents :** Volkart (India) Ltd., Shipping Dept., Graham Road, Ballard Estate, Bombay 1.

Japan/India/Pakistan/Persian Gulf and *vice versa*.

#### HOEGH LINES

Volkart (India) Limited, Shipping Dept., Graham Road, Ballard Estate, Bombay 1.

From U.S. Gulf and Atlantic Ports to West Coast of India and *vice versa*.

#### NEDLLOYD & HOEGH LINES

**Agents :** Volkart (India) Ltd., Shipping Department, Graham Road, Ballard Estate, Bombay 1.

From India to Ceylon, Malayan Union, Philippines and West Coast of U.S.A. and Canada, and *vice versa*.

#### MESSAGERIES MARITIMES

12, Bd. de la Madeleine, Paris 9 (France)

##### Agents :

ALLEPPEY : C. J. Revel, C/o V. O. Vakkan & Sons, P.O. Box 9, Alleppey.

BOMBAY : Volkart (India) Ltd., 19, Graham Road, Ballard Estate, P.O. Box No. 199, Bombay 1.

CALCUTTA : Cruickshank & Co. Ltd., 4/5, Bankshall Street, P.O. Box No. 548, Calcutta 1.

CALICUT : C. J. Revel.

COCHIN : C. J. Revel, 6/75, Calvethy, Cochin 1.

COCANADA (Kakinada) : Gordon Woodroffe & Co. (Madras) Ltd.

MADRAS : C. J. Revel, 6/20, North Beach Road, Madras-1.

PONDICHERY : C. J. Revel, 24, Cours Chabrol.

TELLICHERRY : C. J. Revel, P.B. No. 6, Tellicherry.

VISAKHAPATNAM : C. J. Revel, C/o N. Selvaradjalou Chetty & Co. (India) 15/15 Main Road.

##### Services :

Passenger Service from Bombay to Djibouti, Port-Said and Marseilles (westbound) also to Colombo, Singapore, Bangkok, Manila, Hong Kong, Kobe and Yokohama (eastbound).

Cargo Service from East and West Coast India to Mediterranean and North Continental Ports.

Cargo Service from Cochin to Australia and New Caledonia.

#### UNITED NETHERLANDS NAVIGATION CO.

**Agents :** Volkart (India) Limited, Shipping Dept. Graham Road, Ballard Estate, Bombay 1.

Sailings from India to North Continental ports via Red Sea and Port Said, accepting through cargo for Mediterranean and Scandinavian ports and *vice versa*.

#### MITSUMI O. S. K. LINE

Mitsui O.S.K. Lines Ltd.

##### Agents :

BOMBAY : Orient Ship Agency Private Ltd., Marshall's Bldg., Ballard Road, Bombay 1.

CALCUTTA : F. W. Heijgers & Company (P) Ltd., No. 1, India Exchange Place, Calcutta 1.

COCHIN : Sorabji & Co. Pvt. Ltd., Ahura House, Jew Town, P.O. Box No. 42, Mattancherry, Cochin 2.

MADRAS, KAKINADA AND VISAKHAPATNAM : International Clearing and Shipping Agency, 312/13, Linghi Chetty St., Madras.

TUTICORIN : A. & F. Harvey Ltd., Tuticorin.

#### JAPAN/INDIA/PAKISTAN LINE

Regular monthly sailings serving : Japanese main ports—Hongkong—Singapore—Port Swettenham—Penang—Colombo—West and East Coast of India—Karachi, Kuwait—Iraq and Iran and *vice versa*.

#### JAPAN/BENGAL LINE

Regular sailings serving : Japanese main ports—Hongkong—Singapore—Port Swettenham—Penang—Ports at the Bay of Bengal and *vice versa*.

#### WESTBOUND ROUND-THE-WORLD SERVICE

Regular monthly sailings serving : Japanese main ports—Philippines—Singapore—Penang—Bombay—Port Sudan—Casablanca—Ports in U.S.A. (Atlantic Coast, Gulf). Also West African Ports with transshipment at Casablanca.

#### THE MOGUL LINE LTD.

16, Bank Street, Bombay 1.

**Pilgrim Booking Office :** Nos. 4 & 5, Mahomed Haji Saboo Siddick Musafirkhana, Carnac Road, Bombay 1.

Regular Passenger-cum-Cargo service from Bombay to Aden and Red Sea ports & regular Indian coastal service for transport of coal, salt, cement etc. A special Pilgrim Service is arranged between Bombay and Jeddah during Haj season every year.

#### NEW INDIA MARITIME AGENCIES PVT. LTD.

21, Sunkurama Chetty Street, Madras 1.

Steamer Agents and ships operators.

**Branches :** Bombay—Cochin—Calicut—Alleppey—Tuticorin—Kakinada—Visakhapatnam—Calcutta.

**General Agents :** United Yugoslav around the world Service (East-bound) etc.

#### N. Y. K. LINE

Nippon Yusen Kaisha, Tokyo.

**Agents :** Indian Maritime Enterprises Pvt. Ltd., Darabshaw House, Ballard Road, Bombay 1.

The Bombay Co. Private Ltd., P.O. Box 109, Broadway, Madras-1.

James Finlay & Co. Ltd., 2, Netaji Subhas Chandra Road, Calcutta.

(i) Japan/India/Pakistan/Persian Gulf. (ii) Japan/Calcutta.

#### ORIENT MID-EAST GREAT LAKES SERVICES

**Agents :** Indian Maritime Enterprises Pvt. Ltd., Darabshaw House, Ballard Road, Bombay 1.

India/Montreal & Great Lakes Ports of Canada & U.S.A.

#### ORIENT MID-EAST LINES, NEW YORK

**Agents :** Indian Maritime Enterprises Pvt. Ltd., Darabshaw House, Ballard Road, Fort, Bombay.

U.S.A. & Canada—India.

#### PAKISTAN SHIPPING LINE LTD.

**Agents :** Indian Maritime Enterprises Pvt. Ltd., Darabshaw House, Ballard Road, Bombay 1.

India and Pakistan/U.K. Continent.

#### PENT OCEAN STEAMSHIPS P. LTD.

Fort House, 221, Dr. D. Naoroji Road, Bombay 1.

#### POLISH OCEAN LINES

24, 10 Lutego, Gdynia (Poland).

India Line—India/Pakistan/Burma/Ceylon.

**Bombay Branch :** The Polish Ocean Lines, Bharat Insurance Bldg., 15/A, Horniman Circle, Fort, Bombay 1.

**Agents :** Khemka & Co. (Agencies) Private Ltd., 202/A, Veer Nariman Road, Churchgate Reclamation, Bombay 1.

International Clearing and Shipping Agency, 20/B, Second Line Beach, Madras.

Khemka & Co (Agencies) Pr. Ltd., 31/32, India Exchange Place Extn., Calcutta 1.

#### RATNAKAR SHIPPING COMPANY LTD.

16, Strand Road, Calcutta 1.

**Managing Agents :** Messrs. Birla Gwalior Pvt. Ltd., 15, India Exchange Place, Calcutta 1.



**Agents in India: (Controlling Agents—West Coast)**—Shaw Wallace & Co. Ltd., Wallace House, 3, Wittet Road, Bombay 1.

**Controlling Agents—(East Coast)**—Shaw Wallace & Co. Ltd., 8/9, Thambu Chetty Street, Madras 1.

**General Agents abroad:** Harris & Dixon Ltd., 81, Gracechurch Street, London, E.C. 3. No. of Ships: Five; Total G.R.T.: 28202.

**Services:** Overseas tramp cargo service and Indian Coastal cargo service.

### ROYAL INTEROCEAN LINES

Interocean House, 191, Java Road, Hongkong.

#### Agents:

**BOMBAY:** Forbes Forbes Campbell & Co., Ltd., Home Street, Fort.

**ALLEPPEY:** Darragh, Small & Co. Ltd., Alleppey, P.O. Box No. 50.

**COCHIN:** Darragh, Small & Co. (India) Ltd., Willingdon Island, P.O. Box No. 22.

Monthly sailings from Bombay, Alleppey and Cochin via Colombo, Malaysia and Indonesia to Australia.

### SCINDIA STEAM NAVIGATION CO., LTD.

Scindia House, Dougall Road, Ballard Estate, Bombay.

**Coastal Services:** Cargo Services: India, Pakistan, Burma, Ceylon.

**Cargo-cum-Passenger Services:** Bombay—Kutch Karachi; Bombay—Saurashtra; Bombay—Mormugao—Mangalore Ports—Cochin.

**Passenger Service:** Bombay—Konkan Ports.

**Overseas Services:** Regular services: (a) India-Pakistan/U.K. Continent; (b) India/West Africa via Casablanca; (c) India/Levant Ports/U.S.S.R. (Black Sea Ports); (d) India/U.S.A.; (e) India/Great Lakes/Eastern Canada; (f) India/U.A.R.

### THE SHIPPING CORPORATION OF INDIA LTD.

(A Government of India Undertaking.)

**Registered Office:** "Steelcrete House", 4th Floor, Dinshaw Wachha Road, Bombay 1.

**Branch Offices:** CALCUTTA: Nilhat House, 11, R. N. Mukherjee Road, Calcutta 1.; Mombasa: Renmar House, Kilindini Road, Mombasa.

**Chairman & Managing Director:** C. P. Srivatsava, I.A.S.

**Number of Vessels:** 41 including four tankers and three passenger-cum-cargo vessels.

**Total G.R.T.:** 3.60 lakhs.

**Services:** Passenger-cum-Cargo Services from India to (1) East Africa, (2) Malaysia & Singapore, (3) Ceylon and (4) Calcutta-Madras to Andaman & Nicobar Islands.

**Cargo Services:** From India to U.S.A.; U.K. Continent; Poland; U.S.S.R.; U.A.R.; Australia; Japan.

**Tanker Services** on coastal and overseas Trades:—Colliers on Indian Coast.

### SOUTH EAST ASIA SHIPPING COMPANY PVT. LTD.

Himalaya House, Dr. Dadabhai Naoroji Road, Bombay 1.

Agents at all Principal ports in India.

Steamers ply on the Coasts of India between Kandla and Calcutta and the main ports of call are Bhavnagar, Bedi, Okha, Kandla, Sikka, Veraval, Navlakhi, Cuddalore O.T., Alleppey, Cochin, Calicut, Ponani, Badgara, Mangalore, Bombay, Goa, Madras, Masulipatnam, Kakinada, Visakhapatnam, Calcutta and Rangoon.

### SOUTH INDIA SHIPPING CORPORATION LTD. 'Dhun Building', 175/1, Mount Road, Madras-2.

Operates 3 bulk carriers (Two of 38,965 DWT and one of 42,530 DWT). Two other bulk carriers of 42,530 DWT each, were expected to be delivered before the end of 1966.

### UNITED LINER AGENCIES OF INDIA (PRIVATE) LTD.

Post Box No. 1281, Wavell House, Ballard Estate, Bombay 1.

Agents for the East Asiatic Co., Ltd., Copenhagen, Wilhelmsen Lines, Oslo and the Swedish East Asia Co., Ltd., Gothenburg. Maintains Joint Service providing weekly sailings from Scandinavia and the Continent bringing cargo destined for ports in India, Pakistan, Burma and Ceylon.

### YUGOSLAV LINE ("JUGOLINIJA")

Jugoslavenska Linijska Plovidba, Rijeka, Yugoslavia.

#### Agents:

**BOMBAY:** The Oceanic Shipping Agency Pvt. Ltd., Darabshaw House, Ballard Road, Bombay-1.

**CALCUTTA:** The Oceanic Shipping Agency Pvt. Ltd., 13, Brabourne Road, Calcutta 1.

**MADRAS:** Southern Shipping Corporation Pvt. Ltd., 8, Second Line Beach, Madras 1.

### THE MERCHANT STEAM NAVIGATION CO. (PRIVATE) LTD. & THE AFRICANA CO. P. LTD.

289-93, Narsi Natha Street, Bombay 9.

Has branches at Calicut, Alleppey, Tellicherry & Badagara.

#### Agents:

**MALABAR PORTS:** Bhanjee Jevath Khona, Bazar Road, Cochin; Gordhandas Khimji, Cannanore; Ramdas Vassanji, Ponnani; The Canara Shipping Corporation Ltd., Port Road, Mangalore; V. V. Danushkodi Nadar & Sons, Post Box No. 2, Tuticorin.

**SAURASHTRA PORTS:** Pestonjee Bhicajee, Kandla, Veraval, Okha, Navlakhi; Darabshaw B. Cursetji's Sons, Bhavnagar; Prabhulal L. Pandya & Co., Outside Bedi Gate, Jamnagar; Shri Digvijaya Cement Co., Ltd., Sika Port.

**GOA:** Mehta & Co. Ltd., Vasco-da-Gama.

From Bombay to Calicut, Cochin and Tuticorin and at the same time touching other minor ports also and *vice versa*.

From Bombay to Saurashtra Ports and *vice versa*.

Also touch Colombo & Karachi according to demand.

### ISTHMIAN LINES, INC.

90, Broad Street, New York 10004, N.Y., U.S.A.

#### Agents:

A. V. Thomas & Co., Ltd., Beach Road, Alleppey; Chotalal Premji & Co., P. B. 85, Bedi Bunder; Mackinnon Mackenzie & Co., Private Ltd., Post Box 122, Bombay; The Angus Co., Ltd., 3, Clive Row, Post Box 53, Calcutta; A. V. Thomas & Co., Ltd., Kozhikode; A. V. Thomas & Co. Ltd., Ballard Road, P.B. 30, Cochin; Hargovind & Co., Cutch Mandvi; Binny & Co. Ltd., Post Box 66, Madras; Peirce Leslie & Co., Ltd., Post Box 9, Mangalore; Agencia Geral Pvt. Limitada, Vasco Da Gama, Mormugao, Goa; Chotalal Premji & Co., Morvi (Kathiawar), Navlakhi; Parry & Co., Ltd., Nagapattinam; Chotalal Premji & Co., Port Okha; A. V. Thomas & Co., Ltd., Quilon, Kerala; James Finlay & Co., Ltd., Vishakhapatnam.

The names of the main trading ports in India, Pakistan and Ceylon:

**India:** Alleppey, Bedi Bunder, Bombay, Calcutta, Kozhikode, Cochin, Cutch Mandvi, Madras, Mangalore, Mormugao, Navlakhi, Nagapattinam, Port Okha, Quilon, Tuticorin, Vishakhapatnam.

### CANADIAN PACIFIC RAILWAY CO.'S STEAMSHIP LINES

Montreal, Quebec State, Canada.

**European Head Office:** Trafalgar Square, London W.C. 2.

**Agents:** Mackinnon Mackenzie & Co., Private Ltd. Calcutta and Bombay.

**Services:** U.K. to Quebec and Montreal (Summer); U.K. to Saint John N. B. and Halifax N. S. (Winter).

### P & O—ORIENT LINES

Beaufort House, Gravel Lane, London, E.1.

#### Agents:

Mackinnon Mackenzie & Co., Private Ltd., Calcutta and Bombay.

Binny & Co. Ltd., 7, Armenian Street, Madras 1.

**Service:** U.K.-Gibraltar, Marseilles, Genoa, Malta, Naples, Port Said, Aden, Bombay; Colombo, Straits, China and Japan; Freemantle, Adelaide, Melbourne, Sydney and Brisbane; Le Harve, Lisbon, Trinidad, Panama, Honolulu, Auckland, Vancouver, San Francisco and Los Angeles to Karachi, Bombay, Madras and Calcutta (joint cargo service with B.I.S.N. Co. Ltd.).

### WAVERLEY UNITED SHIPPING AGENCIES

51, "Advent," 12A, Foreshore Road, Backbay Reclamation, Bombay 1.

Agents for Constellation Line, Maritime Overseas Corp., New York, etc.

## AIRWAYS COMPANIES

### AEROFLOT

**Head Office:** Metropole Hotel, Pl. Sverdlova, 2/4, Moscow.

**Representation of Aeroflot in India:** 139/48 Malcha Marg, Chanakyapuri, New Delhi.

**Flights to & from India:** Moscow-Delhi (TU-114 on every Tuesday); Delhi-Moscow (TU-114 on every Wednesday).

### AIR-CEYLON LTD.

Connemara Annexe, Mount Road, Madras 2.

The Company operates Services on the following routes:—

SINGAPORE — COLOMBO — KARACHI — ROME — LONDON and *vice versa* (Weekly).

COLOMBO — MADRAS — and *vice versa* (Thursdays, Fridays and Sundays).

COLOMBO — JAFFNA — TIRUCHIRAPALLI and *vice versa* (Mondays, Tuesdays, Thursdays, Fridays & Sundays).

COLOMBO — TIRUCHIRAPALLI and *vice versa* (Wednesdays & Saturdays).

### AIR-FRANCE

**Regional Head Office:** 17, Parliament Street, New Delhi.

**Bombay:** Stadium House, Vir Nariman Road, Churchgate.

**Calcutta:** 41, Chowringhee Road; **New Delhi:** Scindia House, Janpath; **Cochin:** C. J. Revel, 6/5 Calvethy.; **Madras:** Messageries Maritimes, Spencer's Buildings, 153, Mount Road; **Pondicherry:** Messageries Maritimes, 24, Cours Chabrol; **Ahmedabad:** A. D. Amin & Co., Dudhia Bldg., Gandhi Road.



NEW YORK — LONDON — PARIS —  
ROME — ATHENS — TEL AVIV — TEHE-  
RAN — KARACHI — NEW DELHI — CAL-  
CUTTA — BANGKOK — PNOMPENH —  
SAIGON — HONG KONG — MANILA —  
TOKYO.

#### AIR-INDIA

New India Assurance Building, Mahatma Gandhi Road, Fort, Bombay; Commercial Headquarters, Bank of India Building, Mahatma Gandhi Road, Fort, Bombay 1; Other Departments: Santa Cruz Airport, Bombay 29.

Information/Booking: New India Assurance Building, Mahatma Gandhi Road, Fort, Bombay 1.

#### Route Network:

Bombay — London — New York with alternate stopovers at Bahrain — Beirut — Cairo — Rome — Zurich — Geneva — Prague — Frankfurt — Paris.

Bombay — Bahrain — Kuwait.

Bombay — Delhi — Moscow — London.

Bombay — Aden — Nairobi.

Bombay — Calcutta/Delhi — Bangkok — Hong Kong — Tokyo.

Bombay — Madras — Singapore — Perth — Sydney — Nandi.

Bombay — Madras — Singapore — Jakarta.

Unduplicated Route Kilometres as on 31st March 1966: 53,000.

Aircraft: Five Boeing 707-420 Intercontinental Jets and two Boeing 707-320B Intercontinental Jets.

#### ALITALIA

Italian Airlines, Churchgate, Bombay 1.

Douglas Super DC-8 JET—FIRST/ECO-NOMY CLASS

SERVICES OPERATED FOUR TIMES WEEKLY VIA BOMBAY

2 Flights: ROME — KARACHI — BOMBAY — BANGKOK — HONG KONG — TOKYO AND RETURN.

2 Flights: ROME — TEHERAN — BOMBAY — BANGKOK — SINGAPORE — SYDNEY AND RETURN.

From Rome convenient connections are available by Caravelle Jet to the principal cities in Europe, N. Africa and the Middle East; and by Super DC-8 Jet to N. America, West Africa and S. Africa, S. America and Central America.

#### ARIANA AFGHAN AIRLINES

Offices:—(1) F-15, Connaught Place — New Delhi. (2) Raja Travel and General Agencies, Ritz Hotel — Amritsar.

The Company operates on the following routes: New Delhi—Kabul (Thursdays and I.A.C. on Saturdays) AT NO EXTRA COST EN ROUTE TO EUROPE.

Amritsar—Kabul (Mondays & Thursdays) AT NO EXTRA COST EN ROUTE TO EUROPE.

Kabul—Tehran—Damascus—Beirut (Tuesdays and Fridays).

Kabul—Karachi (Tuesdays).

Kabul—Peshawar (Mondays, Tuesdays, Thursdays, Fridays & Saturdays).

Aircraft: DC-6Bs—Convair-440.

#### BRAATHENS, SOUTH AMERICAN & FAR EAST AIR TRANSPORT A/S.

General Agents: Tidemand & Co. (India) Pvt. Ltd., India House, Fort Street, Bombay 1.

#### BRITISH OVERSEAS AIRWAYS CORPORATION

Office: 202-B, Vir Nariman Road, Churchgate, Bombay 1; Hamilton Bldg., 1A, Connaught Place, New Delhi 1; 41, Chowringhee Road, Calcutta 16; C/o Air India, 151, Mount Road,

Madras 2; C/o Air India, Mahatma Gandhi Road, Ernakulam.

#### Via BOMBAY

(a) LONDON — KUWAIT — BOMBAY — KUALA LUMPUR — SINGAPORE.

(b) LONDON — FRANKFURT — TEL AVIV — BOMBAY — BANGKOK — HONGKONG — TOKYO.

(c) LONDON — CAIRO — BAGHDAD — BAHRAIN — BOMBAY.

(d) LONDON — ZURICH — TEL AVIV — BOMBAY — COLOMBO — SINGAPORE — DARWIN — SYDNEY — AUCKLAND — NANDI.

(e) LONDON — BEIRUT — BOMBAY — COLOMBO — KUALA LUMPUR — SINGAPORE.

(f) LONDON — KUWAIT — BAHRAIN — BOMBAY.

(g) LONDON — BEIRUT — DUBAI — BOMBAY.

#### Via NEW DELHI

(a) LONDON — ZURICH — BEIRUT — DELHI — BANGKOK — SINGAPORE — DARWIN — SYDNEY.

(b) LONDON — ZURICH — ROME — DELHI — RANGOON — KUALA LUMPUR — SINGAPORE — PERTH — SYDNEY.

(c) LONDON — TEL AVIV — TEHERAN — DELHI.

(d) LONDON — ROME — DELHI — RANGOON — HONG KONG.

(e) LONDON — CAIRO — BAHRAIN — DELHI.

(f) LONDON — FRANKFURT — BEIRUT — DELHI — HONG KONG — TOKYO.

(g) LONDON — FRANKFURT — ROME — DELHI — BANGKOK — HONG KONG — TOKYO.

(h) LONDON — CAIRO — TEHERAN — DELHI.

(i) LONDON — ZURICH — ROME — DELHI — RANGOON — SINGAPORE — PERTH — SYDNEY — AUCKLAND — NANDI.

#### Via CALCUTTA

(a) LONDON — FRANKFURT — ROME — TEHERAN — CALCUTTA — HONG KONG — TOKYO.

(b) LONDON — FRANKFURT — ROME — KARACHI — CALCUTTA — HONG KONG — TOKYO.

(c) LONDON — FRANKFURT — TEHERAN — CALCUTTA — BANGKOK — HONG KONG — TOKYO.

(d) LONDON — TEHERAN — KARACHI — CALCUTTA.

(e) LONDON — ZURICH — BEIRUT — KARACHI — CALCUTTA — SINGAPORE — DARWIN — BRISBANE — SYDNEY.

#### CESKOSLOVENSKE AEROLINE

(Czechoslovak Airlines)

Head Office: Praha 1, Revoluční 1.

Bombay Office: 3-B, Stadium House, Vir Nariman Road, Bombay 1; New Delhi Office: 137-B, Golf Links, New Delhi.

Routes: Prague — Cairo — Bahrain — Bombay — Rangoon — Phnom Penh — Rangoon — Bombay — Bahrain — Cairo — Athens — Prague.

Also: Prague — Belgrade — Beirut — Bahrain — Bombay — Rangoon — Phnom Penh — Djakarta and vice versa.

General Sales Agents in India: Air-India.

#### EAST AFRICAN AIRWAYS

87, Mahatma Gandhi Road, Fort, Bombay 1.

General Sales Agents in India: Air-India;

Three services a week from India to East Africa:—

1. Bombay — Karachi — Aden — Nairobi.

2. Bombay — Karachi — Addis Ababa — Nairobi.

3. Bombay — Karachi — Aden — Nairobi — Daressalaam.

Convenient onward connections to Malawi, Zambia and South Africa at Nairobi.

Operates 9 services a week to the U.K. via European countries from Nairobi.

#### INDIAN AIRLINES CORPORATION

Airlines House, 113, Gurdwara Rakab Ganj Road, New Delhi.

Booking and reservation offices in all important cities.

Indian Airlines are general sales agents for the following International Airlines:

Airline: (1) Air Canada; (2) Air Ceylon; (3) Air-India; (4) British Overseas Airways Corporation; (5) Iranian National Airlines Corp.; (6) Iraqi Airways; (7) Trans Mediterranean Airways.

Territory: India, District of Tiruchirappalli and Maharashtra State, Afghanistan, Nepal, India (excluding the cities of Bombay, Calcutta, Delhi and Madras). States of Jammu & Kashmir, Himachal Pradesh, Punjab, Rajasthan & Uttar Pradesh, India, respectively.

The following Airline is the general sales agent of Indian Airlines.

Airline: Union of Burma Airways.

Territory: Burma.

#### IRAN AIR

Ambassador Hotel, Churchgate, Bombay 1.

The only airline operating Boeing 727 in India. Two weekly flights to Teheran via Karachi and then on to Beirut, Rome, Paris and London. Operating five weekly flights ex Teheran for Europe and London. Offers convenient connections for Ziarat Pilgrims on the Sector — Teheran/Baghdad.

#### JAPAN AIRLINES CO., LTD.

Regional Office for India: 72, Janpath, New Delhi 1.

District Office: 35A, Chowringhee Road, Calcutta-16.

District Sales Office: 32, Rampart Row, Fort, Bombay-1.

The Company operates the following lines through India:—

Tokyo — Hongkong — Bangkok — New Delhi — Teheran — Cairo — Rome — Paris — London and vice versa.

Tokyo — Hongkong — Bangkok — New Delhi — Teheran — Cairo — Rome — Frankfurt — London & vice versa.

Tokyo — Hongkong — Bangkok — Calcutta — Karachi — Cairo — Rome — Frankfurt — London and vice versa.

#### K. L. M. ROYAL DUTCH AIRLINES

1, Middleton Street, Calcutta; C-9-A, Connaught Place, New Delhi; Taj Mahal Hotel, Strand Road, Bombay.

1. CALCUTTA — KARACHI — KUWAIT — CAIRO — ATHENS — ZURICH — AMSTERDAM (Westbound — Saturdays).

2. NEW DELHI — KARACHI — KUWAIT — BEIRUT — ATHENS — FRANKFURT — AMSTERDAM (Westbound — Tuesdays).

3. CALCUTTA — BANGKOK — MANILA — TOKYO (Eastbound — Mondays).



4. NEW DELHI — BANGKOK — MANILA — TOKYO (Eastbound—Fridays).

MIDDLE EAST AIRLINES AIR LIBAN associations d'AIR FRANCE

Bombay Office : 2B, Jamshedji Tata Road, Churchgate, Bombay 1.

New Delhi Office : 54, Janpath, New Delhi.

M. E. A. routes : Bombay, Karachi, Beirut and onwards to Middle East, West Africa, Europe and U.K.

PAKISTAN INTERNATIONAL AIRLINES CORPN.

Head Office : PIA House, Karachi Airport, Karachi, Pakistan.

Offices in India : Raop Jiwan Mansion, 1 Block, Radial Road, No. 6, Connaught Circus, New Delhi ; 36, Chowringhee Road, Calcutta.

PAN AMERICAN WORLD AIRWAYS SYSTEM

Taj Mahal Hotel, Bombay.  
42, Chowringhee Road, Calcutta.  
Imperial Hotel, New Delhi.

DAILY EASTBOUND AND WESTBOUND ROUND-THE-WORLD SERVICE

WORLD'S MOST EXPERIENCED AIRLINE

QANTAS EMPIRE AIRWAYS

B.O.A.C. Air Booking Centre, 202-B, Vir Nariman Road, Churchgate, Bombay 1.

Quantas operates Boeing 707 services from Sydney to London via Calcutta and New Delhi.

Connecting services are available for onward journeys from London to New York, Bermuda, Bahamas, Mexico City, Vancouver, San Francisco, Honolulu, Nandi, New Zealand and Sydney with other services through Tokyo, Hong Kong and the Philippines.

ROYAL NEPAL AIRLINES CORPORATION

R.N.A.C. Sundhara, Kathmandu.

Offices in India :

Patna : Hasan Manzil, Frazer Road, Patna 1.  
New Delhi : Indra Palace, Block—H, Connaught Circus, New Delhi 1 ; Calcutta : 3, Chowringhee Road, Calcutta.

The Corporation operates the following lines in India :

New Delhi : Kathmandu (Direct) on Sun ; Tue ; Thu ; Sat at 1240 by F-27 aircraft.

Calcutta : Kathmandu (Direct) on Sun ; Mon ; Wed ; Sat at 0700 ; 1140 ; 0700 ; 0700 respectively by F-27 aircraft.

Calcutta : Kathmandu, via Biratnagar on every Monday (only freight service) at 0700 and Thurs (Passenger cum Freight service) at 0700 by DC-3 aircraft.

Patna : Kathmandu (Direct) on Mon ; Tue ; Thu ; Sat at 1040 by DC-3 aircraft.

SCANDINAVIAN AIRLINES SYSTEM

18, Park Street, Calcutta 16.

The company operates the following routes :

Tokyo to Copenhagen via Manila, Bangkok, Calcutta, Karachi, Teheran, Rome, Zurich, Frankfurt.

From Copenhagen convenient to the principal cities of Europe, Africa, East, North and South America.

SWISSAIR

Bombay : Manek Mahal, 90, 1 Road, Calcutta : 18, Park Street, A. Janpath, Madras : Connemara Ann

LONDON — NEW YORK — GENEVA — ATHENS — CAIRO — KARACHI — BOMBAY — B — HONGKONG — MANILA — T

From ZURICH and GENEVA connections to the principal cities of AFRICA and NORTH and SOUTH

THAI AIRWAYS INTERNATIONAL SWISSAIR

C/o General Agents

Scandinavian Airlines System, 18, Park Street, Calcutta 1

The Company operates the following with Caravelle Jets :

From Calcutta to Rangoon, Bangkok, Lumpur, Singapore, Djakarta, Saigon, Manila, Taipei, Tokyo.

TRANS WORLD AIRLINE

Booking & Administrative Offices : Hotel, Bombay.

T.W.A. Routes : Bombay — Dacca — Rome — Paris — New York.

Starstream Service to the U.S.A.

BANKING

During 1965, the number of the scheduled banks, which account for most of the banking business in India remained unchanged at 76. What is more significant, however, is the fact that the programme of branch expansion went forward with unabated vigour. At the end of 1965, the total number of the branch offices of scheduled banks reached a new peak of 5,935, in addition, the non-scheduled banks had 233 branches. All told, 372 new bank branches were opened in the country in 1965. The number of new bank branches opened was exactly the same in the previous year. It works out roughly to one branch a day. The branch expansion programme occupies an important place in India's drive to build up a widely ramified institutional machinery to mobilise resources from the traditional, household sector particularly in the semi-urban and rural areas and canalise the same to the modern business sector. The nationalised State Bank of India, which is by far the largest single commercial bank in the country, plays a leading role in this programme. Of the 372 newly opened bank branches in 1965, the State Bank of India alone accounted for 127.

The present position as regards the expansion of bank branches will be evident from the fact that at present India has one branch per 79 thousand persons.

Aggregate deposits of the scheduled banks rose from Rs. 2,524 crores at the end of 1964 to Rs. 2,837 crores at the end of 1965, marking a rise of 14 per cent. over the year. At the end of 1965, the demand deposits accounted for 47 per cent of the aggregate deposit and the time deposits 53 per cent.

At the end of 1965, the share of demand deposits in the total money supply was still low (very low compared with the British level) at 33.4 per cent, compared with 31.9 per cent at the end of 1964. Another important indicator of the degree of bankisation of the Indian economy is the percentage of aggregate deposits of

the banks to the national income at current prices. This percentage was 14.4 at the end of 1965 compared with 12.6 at the end of the previous year. Both these indicators testify to a slow but steady bankisation of the Indian economy.

The total outstanding advances at the close of 1965 amounted to Rs. 2,101.8 crores. This can be divided into two categories, viz.: Secured advances and Unsecured advances. Secured advances were made to the extent of Rs. 1,817.1 crores or 86.5 per cent of the total advances, while unsecured advances amounted to Rs. 284.7 crores or 13.5 per cent. The secured advances can again be classified into two groups which are (1) Seasonal Advances and (2) Non-seasonal Advances. The outstanding seasonal advances at the end of the year under review amounted to Rs. 333.6 crores, the most important items against which advances were made being cotton and kapas (Rs. 104.9 crores), sugar (Rs. 54.5 crores) and tea (Rs. 44.4 crores). The outstanding non-seasonal advances amounted to Rs. 1,483.5 crores, the major items here being, iron, steel and engineering goods (Rs. 321.9 crores) and cotton textiles (Rs. 185.3 crores).

Item-wise data under all these categories are given in Table 1.

TABLE 1: BANK CREDIT AS ON DECEMBER 31, 1965 : SECURITYWISE CLASSIFICATION

| Security                   | Amount<br>Rs. crores |
|----------------------------|----------------------|
| <b>Seasonal Advances :</b> | <b>333.6</b>         |
| 1. Paddy and Rice .. ..    | 16.0                 |
| 2. Wheat .. ..             | 15.5                 |
| 3. Other Foodgrains .. ..  | 13.1                 |
| 4. Sugar .. ..             | 54.5                 |
| 5. Groundnut .. ..         | 14.5                 |
| 6. Cotton & Kapas .. ..    | 104.9                |
| 7. Raw Jute .. ..          | 25.4                 |
| 8. Tea .. ..               | 44.4                 |

Security

Non-Seasonal Advances :

|                                                  |    |
|--------------------------------------------------|----|
| 1. Cotton Textiles .. ..                         | .. |
| 2. Jute Textiles .. ..                           | .. |
| 3. Iron, Steel and Engineering Goods .. ..       | .. |
| 4. Shares of Joint Stock Companies .. ..         | .. |
| 5. Debentures of Joint Stock Companies .. ..     | .. |
| 6. Government and Other Trustee Securities .. .. | .. |
| 7. Gold and Silver Bullion and Ornaments .. ..   | .. |
| 8. Assets of Industrial Concerns .. ..           | .. |
| I. Total Secured Advances .. ..                  | .. |
| II. Total Unsecured Advances .. ..               | .. |
| Total (I + II) .. ..                             | .. |

The deposit resources of the total at the end of 1965 are presented. Of the total scheduled bank Rs. 2,837.3 crores, the State Bank alone had deposits of Rs. 735.1 crores per cent of the total. The top ten had a share of 77.4 per cent of the total.

A centre-wise study of the pattern of the deposits at the end of that nearly 50 per cent of the deposits were concentrated in the four cities Calcutta, Delhi and Madras (Viz. 61 per cent of the total credit also in 4 major cities.



TABLE 2: DEPOSIT RESOURCES OF TOP BANKS AT THE END OF 1965

| Name of Bank                   | Total deposits (Rs. crores) |
|--------------------------------|-----------------------------|
| Central Bank .. .. .           | 735.1                       |
| State Bank .. .. .             | 316.4                       |
| State National Bank .. .. .    | 240.5                       |
| Bank of India .. .. .          | 240.4                       |
| Bank of Baroda .. .. .         | 186.0                       |
| United Commercial Bank .. .. . | 146.4                       |
| United Bank .. .. .            | 102.8                       |
| Co-operative Bank .. .. .      | 99.0                        |
| Chhabad Bank .. .. .           | 84.1                        |
| Co-operative Bank .. .. .      | 81.6                        |
| Others .. .. .                 | 655.0                       |
| <b>Total .. .. .</b>           | <b>2,887.3</b>              |

TABLE 4: OWNERSHIP PATTERN OF DEPOSITS OF 75 SCHEDULED BANKS AS ON MARCH 31, 1965

|                                                | Accounts (in thousands) | Amounts (Rs. crores) | Percentage   |
|------------------------------------------------|-------------------------|----------------------|--------------|
| Business .. .. .                               | 817                     | 791.7                | 29.0         |
| (a) Industry .. .. .                           | 90                      | 243.6                | 8.9          |
| (b) Trading .. .. .                            | 678                     | 299.5                | 11.0         |
| (c) Financial .. .. .                          | 32                      | 226.5                | 8.3          |
| (d) Others .. .. .                             | 17                      | 21.4                 | 0.8          |
| Personal .. .. .                               | 9,066                   | 1,398.5              | 51.2         |
| Professional .. .. .                           | 95                      | 36.4                 | 1.3          |
| Government and Quasi-Government bodies .. .. . | 32                      | 195.0                | 7.1          |
| Others .. .. .                                 | 223                     | 310.3                | 11.4         |
| <b>Grand Total .. .. .</b>                     | <b>10,233</b>           | <b>2,731.2</b>       | <b>100.0</b> |

the sector-wise distribution of bank advances at the end of March 1965 brings out the progressive rise in the dominance of industrial advances which accounted for 61.5 per cent of

TABLE 3: DEPOSITS AND BANK CREDIT OF COMMERCIAL BANKS IN BOMBAY, CALCUTTA, DELHI AND MADRAS AS ON DECEMBER 31, 1964

| Name of city              | Deposits        | Bank credit     |
|---------------------------|-----------------|-----------------|
| 1. Bombay .. .. .         | 572.12          | 539.71          |
| 2. Calcutta .. .. .       | 360.68          | 419.28          |
| (including Dum Dum)       |                 |                 |
| 3. Delhi .. .. .          | 280.72          | 74.76           |
| 4. Madras .. .. .         | 75.28           | 107.53          |
| <b>Sub-total (1 to 4)</b> | <b>1,288.80</b> | <b>1,141.28</b> |
| <b>Others .. .. .</b>     | <b>1,449.83</b> | <b>739.08</b>   |
| <b>Total .. .. .</b>      | <b>2,738.63</b> | <b>1,880.36</b> |

Personal deposits accounted for the largest share of total deposits as at the end of March 1965 and in fact improved their position to 51.2 per cent as compared to 49.2 per cent a year ago. The share of business deposits also rose over the year, though fractionally from 28.5 per cent to 29.0 per cent. The share of deposits held by Government and Quasi-government bodies declined over the year from 8.6 per cent to 7.1 per cent. Table 4 gives the position as at the end of March, 1965.

industries as regards their share to the total advances as at the end of March, 1964 were maintained in 1965 also.

TABLE 5: ADVANCES OF 75 SCHEDULED BANKS ACCORDING TO PURPOSE AS AT THE END OF MARCH, 1965

|                      | Amount Rs. crores | Percentage   |
|----------------------|-------------------|--------------|
| Industry .. .. .     | 1,287.32          | 61.5         |
| Commerce .. .. .     | 536.78            | 25.6         |
| Financial .. .. .    | 94.23             | 4.5          |
| Agriculture .. .. .  | 3.95              | 0.2          |
| Personal .. .. .     | 109.22            | 5.2          |
| Professional .. .. . | 13.19             | 0.6          |
| Others .. .. .       | 50.05             | 2.4          |
| <b>Total .. .. .</b> | <b>2,094.74</b>   | <b>100.0</b> |

In 1965 the percentage of cash in hand and balances with the Reserve Bank to aggregate deposits was marked up by 0.8 to 7.2 and that of total bank credit to aggregate deposits by 1.1 to 72.9 while that of investment in government securities to aggregate deposits declined by 1.7 to 28.6 (Table 6).

TABLE 6: PRINCIPAL ASSETS AND LIABILITIES OF 76 SCHEDULED BANKS AS ON DEC. 31, 1965.

|                                                            | (Rs. crores) |
|------------------------------------------------------------|--------------|
| 1. Demand Deposits (excluding inter-bank deposits) .. .. . | 1,367.2      |
| 2. Time Deposits (excluding inter-bank deposits) .. .. .   | 1,520.1      |
| 3. Aggregate deposits .. .. .                              | 2,887.3      |
| 4. Borrowings from R.B.I. .. .. .                          | 19.4         |
| 5. Cash in hand and balances with R.B.I. .. .. .           | 208.7        |
| 6. Percentage of (5) to (3) .. .. .                        | 7.2          |
| 7. Total Bank credit .. .. .                               | 2,104.8      |
| 8. Percentage of 7 to 3 .. .. .                            | 72.9         |
| 9. Investments in Government Securities .. .. .            | 826.2        |
| 10. Other Investments .. .. .                              | 167.8        |
| 11. Percentage of 9 to 3 .. .. .                           | 28.6         |

## INSURANCE

### PUBLIC AND PRIVATE INSURANCE SECTORS

On Sept. 1, 1956, when the L.I.C. of India was established, life insurance business in India was transacted by this Corporation and, in a restricted sphere, by the Posts & Telegraphs Department of the Govt of India and by the State Governments of Andhra Pradesh, Jammu & Kashmir, Kerala, Madhya Pradesh, Mysore, Rajasthan and Uttar Pradesh who carry on compulsory life insurance of their employees only. Marine & Miscellaneous classes of insurance business are transacted both by the Indian insurance companies and by foreign insurance companies operating in India. In addition, the State and certain State Governments are also transacting such business. The Government of West Bengal and Maharashtra insure all types of property in their commercial and industrial undertakings. Kerala State is transacting fire motor insurance business and Mysore State transacts life insurance business only.

In addition to the L.I.C., the Central Government has established two other Corporations in the insurance sphere—Employees' State Insurance Corporation and Export Credit and Insurance Corporation. The former conducts

compulsory health insurance of workers and their families in specified industrial concerns. The latter covers marine and commercial risks for exporters in India, other than those risks normally covered by private insurers in India.

#### LIFE INSURANCE

The Life Insurance Corporation of India did a new total business of about Rs. 798 crores sum assured under 15.61 lakh policies during the 12 months ended 31st March, 1966. Of this, foreign business was Rs. 8.50 crores sum assured. During the previous period of 12 months ended 31st March 1965, the total business secured was about Rs. 701 crores under 14,35,601 policies, of which foreign business was Rs. 11.05 crores.

The Corporation has a network of offices all over the country to procure new business and for servicing the existing business. There are 5 Zonal Offices, one each in Bombay, Madras, Kanpur, Calcutta and Delhi. There are 86 Divisional Offices, and 714 Branch, Sub-offices and

Development Centres i.e., 755 offices in all as against 532 in 1961 and 249 offices as on 1st September 1956 the date on which the Corporation was established. The Central Office of the Corporation is in Bombay. The Corporation is now having its offices in 283 districts out of 318 districts of various States in India and in 5 out of ten Union Territories in India, including one in Goa.

The Corporation also transacts business in the following foreign countries with 2 Divisional Offices and 12 Branch Offices: Aden, Fiji, Hong Kong, Malaysia, Singapore, Kenya, Mauritius, Tanzania, Uganda and the United Kingdom.

#### 1964-65 REPORT

At the end of the 12 months accounting period ended 31st March, 1965, the total business in the books of the Corporation including bonuses, stood at Rs. 3,886 crores under 108.62 lakh policies. Of this, Rs. 3,774 crores under 106.70 lakh policies represented life insurance business in India.



The following table gives the life assurance business in force at the end of each of the last seven accounting periods :—

| Business in force as at | In India                |                                      | Outside India           |                                      | Total                   |                                      |
|-------------------------|-------------------------|--------------------------------------|-------------------------|--------------------------------------|-------------------------|--------------------------------------|
|                         | No. of policies (lakhs) | Sum assured and bonuses (Rs. crores) | No. of policies (lakhs) | Sum assured and bonuses (Rs. crores) | No. of policies (lakhs) | Sum assured and bonuses (Rs. crores) |
| 31-12-1958..            | 59.74                   | 1,584                                | 2.60                    | 98                                   | 62.34                   | 1,682                                |
| 31-12-1959..            | 66.73                   | 1,855                                | 2.56                    | 103                                  | 69.29                   | 1,958                                |
| 31-12-1960..            | 74.56                   | 2,176                                | 2.57                    | 109                                  | 77.13                   | 2,285                                |
| 31-12-1961..            | 83.36                   | 2,623                                | 2.41                    | 114                                  | 85.77                   | 2,737                                |
| 31-3-1963 ..            | 92.61                   | 3,054                                | 2.26                    | 114                                  | 94.87                   | 3,168                                |
| 31-3-1964 ..            | 101.19                  | 3,458                                | 2.09                    | 113                                  | 103.28                  | 3,571                                |
| 31-3-1965 ..            | 106.70                  | 3,774                                | 1.92                    | 112                                  | 108.62                  | 3,886                                |

These figures show that India has a per capita insurance of Rs. 79—an increase of about 50 in 12 years.

During the accounting period the Corporation completed a new business of Rs. 701.08 crores sum assured under 14,44,352 policies. Business completed in the previous accounting period amounted to Rs. 702.76 crores under 16,46,291 policies.

About 36.2 per cent of the total number of

#### New Business :

| Year                    | In India        |                           | Outside India   |                           |
|-------------------------|-----------------|---------------------------|-----------------|---------------------------|
|                         | No. of policies | Sum Assured Crores of Rs. | No. of policies | Sum Assured Crores of Rs. |
| 1960..                  | 12,49,821       | 487.84                    | 7,736           | 9.70                      |
| 1961..                  | 14,61,808       | 598.79                    | 8,056           | 10.03                     |
| 1-1-1962 to 31-3-1963 } | 17,58,046       | 734.72                    | 9,498           | 11.24                     |
| 1963-64 ..              | 16,37,759       | 692.55                    | 8,532           | 10.21                     |
| 1964-65 ..              | 14,35,601       | 690.03                    | 8,751           | 11.05                     |
| 1965-66 ..              | 15,61,000*      | 798.00*                   | ..              | ..                        |

A marked variation is noticeable in the size of the average policy sold in the different Zones by the Corporation. The figures are given below (Rs.):

Northern Zone (Delhi): 5,580; Central Zone (Kanpur): 4,891; Western Zone (Bombay): 5,283; Eastern Zone (Calcutta): 4,558; Southern Zone (Madras): 4,269; In India: 4,807; Foreign: 12,627; All business: 4,854 as against 4,269 in the period 1-4-1963 to 31-3-1964.

#### ACCOUNTS

The Life Fund stood at Rs. 901.61 crores on 31st March, 1965, registering an increase of about Rs. 93.25 crores over the life fund of Rs. 808.36 crores as on 31st March 1964. During this period, the Corporation's income from all sources totalled about Rs. 205 crores, made up of Rs. 162 crores from premiums (excluding consideration for annuities amounting to about Rs. 69 lakhs) and about Rs. 43 crores from returns on its invested funds and from miscellaneous sources.

The interest income of Rs. 38 crores represents earnings of 4.90% on the mean life fund after deducting income-tax. The rate per cent of interest from 1959 is given below :

1959: 4.08; 1960: 3.55; 1961: 4.58; In 15 months of 1962-63: 4.08; 1963-64: 4.07; 1964-65: 4.90. The gross rate of interest earned on the mean life fund during the year was 5.27 per cent per annum as against 5.11 per cent per annum for the previous year.

On the outgo side Rs. 59 crores represented claims and other benefits to the policy-holders, Rs. 50 crores expenses of management, Rs. 7 crores transferred to Reserve for Investments and

policies in India assuring about 28.7 per cent of the total new sums assured in India, were issued in rural areas as defined in the 1961 Census. About 41.1 per cent of the policies or 21.0 per cent of the new sums assured in India were issued under the non-medical schemes. In addition to the total new business stated above, the Corporation issued 804 Deferred Annuities and 100 Immediate Annuities with a total annual payment of Rs. 18.97 lakhs and Rs. 1.82 lakhs respectively.

the balance of nearly Rs. 93 crores addition to the Life Fund. On the claims side, nearly Rs. 12 crores represented claims by death and nearly Rs. 40 crores by maturity, annuities, surrender and bonuses in cash etc., accounting for the balance.

Over-all expenses ratio: 1958: 29.2; 1959: 28.7; 1960: 28.4; 1961: 28.0; 1962-63: 29.3; 1963-64: 27.5; 1964-65: 27.6.

The renewal expense ratio in terms of Rule 25(b) of Insurance Rules 1939 was 14.09% as against 12.46% for the previous year ended 31st March 1964.

#### INVESTMENTS

The total investments pertaining to life business as at 31st March 1965 amounted to Rs. 839.96 crores of which Rs. 17.95 crores were out of India. The break-up of Indian investments is as follows:

|                                                                             |                   |
|-----------------------------------------------------------------------------|-------------------|
| Indian and State Government and other approved securities .. .. .           | Rs. 526.12 crores |
| Debentures and shares of Joint stock companies in India .. .. .             | 159.23 "          |
| Loans to Housing Schemes —State Governments and Cooperative Finance .. .. . | 74.11 "           |
| Mortgages of Properties .. .. .                                             | 11.28 "           |
| House Property .. .. .                                                      | 30.75 "           |
| Due from State Governments for controlled business taken over .. .. .       | 4.63 "            |
| Other Loans etc. .. .. .                                                    | 15.14 "           |
| Share in Initial Capital of Unit Trust of India .. .. .                     | 0.75 "            |
|                                                                             | Rs. 822.01 crores |

On 31st March 1965, the Corporation held stock exchange securities aggregating nearly Rs. 702 crores, of which about Rs. 685 crores were in India and the balance outside India.

A broad classification of investments in India shows that 75.4% was invested in the public sector, and 19.4% in the private sector and 5.2% in the co-operative sector. Besides the loans issued by the Central and State Governments, investments in the public sector include loans, bonds, shares or debentures of municipalities, Improvement Trusts, Port Trusts, Land Mortgage Banks, State Financial Corporations and Statutory Corporations. Investments in the private sector take the form of debentures, preference shares and ordinary shares of industrial and commercial undertakings.

Debentures, preference and ordinary shares of joint stock companies held by the Corporation may be classified as under according to the character of the industries (Rs. lakhs):

Aluminium: 4,15.68; Banks: 6,05.46; Cement: 7,99.78; Coal: 3,64.37; Cotton Textiles: 18,24.12; Dyes, Chemicals and Pharmaceuticals: 4,45.18; Electricity: 11,49.16; Electrical Goods: 7,45.90; Engineering: 24,11.83; Food, Drinks and Tobacco: 1,49.18; Insurance: 233.06; Investment Trusts: 1,66.23; Iron and Steel: 10,59.02; Jute: 5,77.90; Managing Agents: 174.76; Matches: 79.62; Mining: 68.34; Mineral Oil: 14,79.20; Paper and Board: 5,77.10; Plantations: 257.88; Railways: 66.06; Rubber Products: 3,25.09; Shipping and Transport: 76.03; Sugar and Breweries: 5,88.97; Textiles (Other than Cotton): 5,33.61; Vegetable Oils: 92.20; Cooperative Housing Societies: 23.54; Miscellaneous: 6,34.02. Total: Rs. 159,23.29 lakhs.

#### Underwriting New Capital Issues

During the accounting year ended 31st March, 1965, the L.I.C. underwrote 84 new issues to the extent of Rs. 17,54.00 lakhs, comprising Debentures of Rs. 13,36.00 lakhs, Preference Shares Rs. 226.00 lakhs and Ordinary Shares Rs. 192.00 lakhs. Of these, 49 issues were placed in the market during the period, in addition to 21 issues placed in the previous year with allotments of Rs. 1,625.16 lakhs against Rs. 1,651.50 lakhs underwritten and Rs. 1,638.18 lakhs applied for.

#### PERSONNEL

On its formation, the Corporation took over about 21,000 employees, of whom 16,000 were in the clerical and supervisory cadre and 5,000 subordinate staff. On 31st March, 1965, there were 50,774 employees of whom 2,827 were officers, 8,720 Development Officers, 32,439 supervisory and clerical staff and 6,788 subordinate staff. The total monthly salary bill in March, 1965 was Rs. 174.87 lakhs.

Out of over 1.70 lakh agents on the books on 31st March 1965, about 1.46 lakhs were active.

The average production per active agent during the accounting period was Rs. 47,191 as against Rs. 48,359 during the previous year.

Permanent training centres are maintained at the headquarters of the five Zones to train development personnel on the professional aspect of sales and servicing. Other training centres at selected Divisional Headquarters are also in operation including an Officer's training centre at Nagpur.

#### VALUATION & BONUS

Five biennial valuations were made till March 1965. The fifth valuation was made as at 31st March 1965. The total surplus shown was Rs. 62.90 crores. Out of this Rs. 59.80 crores were allocated to the participating policies and Rs. 3.10 crores to the Central Government as its share. In respect of the policies issued by the L.I.C. itself, the rate of reversionary bonus allotted was Rs. 20.00 per thousand sum assured per annum for whole life policies and Rs. 16.00 for endowment assurance policies. The corresponding rates of bonus at the previous valuation were Rs. 17.50 per thousand sum assured per

\* Including outside India.



annum and Rs. 14.00 per thousand sum assured per annum respectively. The policies issued by the erstwhile insurers were allotted bonuses at different rates as per the scheme of differential bonuses approved by the Government.

### GENERAL INSURANCE

As at 31st December 1965 there were 136 (as against 137 in 1964) companies registered under the Insurance Act, 1938 to transact one or more classes of general insurance business of which 72 were Indian and 64 non-Indian. One non-Indian insurer ceased to operate in 1965. The number of Indian insurers excludes the Life Insurance Corporation of India (which is registered for Life and Miscellaneous insurance business) but includes its three (since amalgamated into one on 1st January 1961) subsidiaries which conduct general insurance business. It also includes 11 insurers registered for Country Craft (marine) insurance business only with 6 non-tariff offices and three doing only reinsurance business, one of which is a subsidiary of the L.I.C.

Of the 64 non-Indian offices, 40 have their head-offices in the U.K.

Since nationalisation of life insurance, 31 Indian and 38 non-Indian companies had closed down their general insurance business.

Early in 1964, the Life Insurance Corporation of India, which was so far conducting life insurance business in India on a monopoly basis and Capital Redemption insurance business, registered itself for conducting general insurance business also as a non-Tariff. From 1st April, 1964 it started writing, Fire, Marine and Miscellaneous insurance and reinsurance business. During the year ended 31st March, 1965, it secured business bringing a total gross premium income of Rs. 43 lakhs, the shares of Fire, Marine and Miscellaneous Departments being 37%, 20% and 43% respectively. During the year ended 31st March 1966, the L.I.C. secured a gross direct premium of Rs. 2.57 crores. The breakdown thereof is Rs. 95.63 lakhs under Fire, Rs. 93.79 lakhs under Marine and Rs. 67.62 lakhs under Miscellaneous insurance classes. The total net premium amounted to Rs. 1.82 crores. The net claims were Rs. 6.33 lakhs, Rs. 11.74 lakhs and Rs. 14.38 lakhs in Fire, Marine & Miscellaneous insurance respectively. The net underwriting profits were Rs. 9.04 lakhs.

The total income and outgo in respect of the general insurance business of Indian insurers

excluding the Life Insurance Corporation of India) during 1964 is analysed below :

| Particulars                                                                   | Rs. lakhs |
|-------------------------------------------------------------------------------|-----------|
| <b>Income</b>                                                                 |           |
| Premiums less reinsurances :                                                  |           |
| In India ..                                                                   | 33.89     |
| Outside India ..                                                              | 18.13     |
| Net interest, dividends and rents                                             | 1.22      |
| Other income .. ..                                                            | 11        |
| Total .. ..                                                                   | 53.35     |
| <b>Outgo</b>                                                                  |           |
| Claims less reinsurances ..                                                   | 26.62     |
| Net commission .. ..                                                          | 7.19      |
| Expenses of management ..                                                     | 11.15     |
| Miscellaneous outgo .. ..                                                     | 22        |
| Total .. ..                                                                   | 45.18     |
| Profits transferred to Profit and Loss Account .. ..                          | 4.98      |
| Actual increase in Reserves for unexpired risks and Additional Reserves .. .. | 3.19      |
| Excess of Income over Outgo ..                                                | 8.17      |

The percentage of the net premium income of Indian Insurers (including L.I.C. of India) and of Non-Indian Insurers, spent by way of claims expenses, etc., during the year 1964 is shown in the following table :—

| Ratio to Net Premium Income of                    | Fire            |                     | Marine          |                     | Miscellaneous   |                     |
|---------------------------------------------------|-----------------|---------------------|-----------------|---------------------|-----------------|---------------------|
|                                                   | Indian Insurers | Non-Indian Insurers | Indian Insurers | Non-Indian Insurers | Indian Insurers | Non-Indian Insurers |
| Net Claims .. ..                                  | 43.1            | 33.3                | 68.6            | 57.2                | 51.0            | 42.8                |
| Expenses of Management including commission .. .. | 40.2            | 45.2                | 25.3            | 34.1                | 35.1            | 42.5                |
| Increase in Reserves* .. ..                       | 4.2             | 1.4                 | 4.4             | 4.1                 | 5.1             | 3.7                 |
| Miscellaneous outgo .. ..                         | 1.6             | 1.2                 | 4.1             | 0.8                 | 2.0             | 0.4                 |
| Balance .. ..                                     | 14.1            | 18.9                | 5.8             | 3.8                 | 10.8            | 11.4                |
| <b>TOTAL .. ..</b>                                | <b>100.0</b>    | <b>100.0</b>        | <b>100.0</b>    | <b>100.0</b>        | <b>100.0</b>    | <b>100.0</b>        |

\* Increase in Reserve is obtained by taking 40 per cent in the case of Fire and Miscellaneous and 50 per cent in the case of Marine insurance business of the increase in Net premium income during the year 1964 over that of the preceding year.

The following tables present a comparative study of the insurance business in India and outside India of Indian insurers (including L.I.C. of India) and of the business in India of non-Indian insurers.

(Premiums in lakhs of rupees)

| Year                           | Fire Premiums |       | Marine Premiums |      | Miscellaneous Premiums |       | Total |       |
|--------------------------------|---------------|-------|-----------------|------|------------------------|-------|-------|-------|
|                                |               |       |                 |      |                        |       |       |       |
|                                | Gross         | Net   | Gross           | Net  | Gross                  | Net   | Gross | Net   |
| <b>I. INDIAN INSURERS</b>      |               |       |                 |      |                        |       |       |       |
| <i>Business in India</i>       |               |       |                 |      |                        |       |       |       |
| 1962 .. ..                     | 11.70         | 8.51  | 7.16            | 4.52 | 16.18                  | 13.51 | 35.04 | 26.54 |
| 1963 .. ..                     | 12.46         | 9.20  | 8.03            | 5.38 | 17.77                  | 15.36 | 38.26 | 30.00 |
| 1964 .. ..                     | 14.67         | 10.41 | 9.53            | 6.02 | 20.67                  | 18.20 | 44.87 | 34.63 |
| <i>Business outside India</i>  |               |       |                 |      |                        |       |       |       |
| 1962 .. ..                     | 2.52          | 8.14  | 2.12            | 3.11 | 5.55                   | 6.22  | 10.19 | 17.47 |
| 1963 .. ..                     | 2.08          | 7.66  | 1.89            | 2.78 | 6.10                   | 6.36  | 10.07 | 16.80 |
| 1964 .. ..                     | 1.78          | 8.48  | 1.74            | 2.93 | 6.34                   | 6.73  | 9.86  | 18.14 |
| <b>II. NON-INDIAN INSURERS</b> |               |       |                 |      |                        |       |       |       |
| <i>Business in India</i>       |               |       |                 |      |                        |       |       |       |
| 1962 .. ..                     | 5.79          | 3.74  | 3.18            | 2.15 | 3.83                   | 3.17  | 12.80 | 9.06  |
| 1963 .. ..                     | 6.36          | 4.10  | 3.53            | 2.43 | 4.43                   | 3.68  | 14.32 | 10.11 |
| 1964 .. ..                     | 7.06          | 4.24  | 3.81            | 2.64 | 5.02                   | 3.95  | 15.89 | 10.83 |



## ASSETS

The total assets of the general insurance business of Indian insurers (excluding L.I.C. of India) amounted to Rs. 1,01,62 lakhs on 31st December 1964 (as against Rs. 90,22 lakhs on 31st Dec. 1963 and were invested as shown below.

The total assets in India in respect of the general insurance business of the non-Indian insurers amounted to Rs. 17,80 lakhs on 31st December 1964 as against Rs. 15,56 lakhs on 31st December 1963 and were invested as shown below. The figures are in lakhs of Rupees.

|                                                                                                                  | Indian insurers |                | Non-Indian   |              |
|------------------------------------------------------------------------------------------------------------------|-----------------|----------------|--------------|--------------|
|                                                                                                                  | 1963            | 1964           | 1963         | 1964         |
| Central Govt. Securities .. ..                                                                                   | 5,85            | 5,88           | 2,02         | 1,97         |
| State Govt. Securities .. ..                                                                                     | 2,08            | 2,07           | 5            | 7            |
| Br. & Foreign Govt. Securities ..                                                                                | 1,83            | 1,76           | —            | —            |
| Municipal, Port & Improvement Trust Securities .. ..                                                             | 26              | 24             | 34           | 33           |
| Debentures of Indian Companies ..                                                                                | 5,63            | 6,41           | 83           | 88           |
| Preference Shares of Indian Companies .. ..                                                                      | 5,22            | 6,06           | 49           | 54           |
| Ordinary Shares of Indian Companies                                                                              | 22,43           | 25,86          | 1,93         | 2,40         |
| Land & House Property .. ..                                                                                      | 2,35            | 2,78           | 68           | 73           |
| Deposit, Cash & Stamps .. ..                                                                                     | 16,24           | 18,48          | 5,81         | 6,52         |
| Loans on mortgage of Property ..                                                                                 | 1,15            | 1,56           | 9            | 29           |
| Loans on Stocks & Shares .. ..                                                                                   | 30              | 27             | —            | —            |
| Other Loans .. ..                                                                                                | 17              | 8              | 20           | 35           |
| Agents' Balances, Outstanding premiums, Amounts due from other insurers and Accrued & outstanding interest .. .. | 20,61           | 22,74          | 1,66         | 1,84         |
| Miscellaneous .. ..                                                                                              | 6,10            | 7,43           | 1,46         | 1,88         |
| <b>Total .. ..</b>                                                                                               | <b>90,22</b>    | <b>1,01,62</b> | <b>15,56</b> | <b>17,80</b> |

The following table gives the index numbers years 1958 to 1964. Comparison of these figures of general insurance business in India (including that of L.I.C.) and the general index numbers of industrial production (base year 1956) for the will indicate the potentiality for progress of general insurance business in India and the actual progress made by this business.

|                                                        | 1958  | 1959  | 1960  | 1961  | 1962  | 1963  | 1964* |
|--------------------------------------------------------|-------|-------|-------|-------|-------|-------|-------|
| Index no. of general insurance business in India .. .. | 105.4 | 113.6 | 129.0 | 144.3 | 160.5 | 175.1 | 180.8 |
| General Index no. of industrial production .. ..       | 107.7 | 116.9 | 130.1 | 138.3 | 150.6 | 162.7 | 174.8 |

\* Including that of L.I.C.

## REINSURANCE

To minimise the drain on account of reinsurance transactions abroad, the Insurance Act, 1938 was amended, early in 1961, by inserting Part IVA Reinsurance, Sections 101A and 101B. Section 101A provides that every insurance company operating in India must reinsure a certain percentage of its business (not exceeding 30%) with Indian reinsurance companies approved in this behalf by the Central Government.

By various notifications, the Central Government announced the names of the two approved Indian reinsurance companies and the various percentages of the sum assured on each policy to be reinsured by every insurer with each of the two Indian reinsurers. The two approved reinsurers are: India Reinsurance Corporation Ltd., and Indian Guarantee & General Insurance Co. Ltd., both having their registered offices in Bombay.

The drain on account of reinsurance transactions abroad in respect of the Indian business of non-Indian insurers and total business of the Indian insurers during the years 1962, 1963 and 1964 has been estimated at Rs. 206 lakhs, Rs. 175 lakhs and Rs. 264 lakhs respectively, as follows:—

(In lakhs of rupees)

|                                                                                   | Year | Fire | Marine | Miscellaneous | Total |
|-----------------------------------------------------------------------------------|------|------|--------|---------------|-------|
| 1. Profit in respect of gross direct business in India of all insurers .. ..      | 1962 | 560  | 48     | 272           | 880   |
|                                                                                   | 1963 | 455  | 101    | 330           | 886   |
|                                                                                   | 1964 | 471  | 136    | 500           | 1,107 |
| 2. Profit in respect of total net business of Indian insurers .. ..               | 1962 | 270  | 2      | 118           | 390   |
|                                                                                   | 1963 | 253  | 39     | 125           | 417   |
|                                                                                   | 1964 | 267  | 51     | 269           | 587   |
| 3. Profit in respect of net business in India of Non-Indian insurers .. ..        | 1962 | 107  | 24     | 35            | 166   |
|                                                                                   | 1963 | 90   | 20     | 34            | 144   |
|                                                                                   | 1964 | 81   | 10     | 45            | 136   |
| 4. Profit in respect of gross direct business outside India of Indian insurers .. | 1962 | —5   | —18    | —95           | —118  |
|                                                                                   | 1963 | 13   | —20    | —143          | —150  |
|                                                                                   | 1964 | 6    | —27    | —99           | —120  |
| 5. Drain on account of reinsurers abroad—[(1) + (4) — (2) — (3)] .. ..            | 1962 | 178  | 4      | 24            | 206   |
|                                                                                   | 1963 | 125  | 22     | 28            | 175   |
|                                                                                   | 1964 | 129  | 48     | 87            | 264   |

Note: Unexpired risk reserves have been taken at 40% of the premium income for Fire and Miscellaneous and 50% of the premium income for Marine insurance business.

To reduce this exchange drain, insurers in the Indian market have taken a number of steps, like increasing their net retentions, obtaining higher commission and profit commission terms and increased reciprocity. Unfortunately, the foreign markets with which Indian insurers had built up a large relationship have been showing bad results over the past number of years.

In April, 1965, the Reserve Bank of India added a new provision to their Exchange Control Regulations, namely "Insurance Companies

may enter into reinsurance arrangements with insurers outside India, provided the required reinsurance facilities are not available in India", with a view to eliminating to the extent possible the foreign exchange drain arising as a result of reinsurances placed abroad.



## REFUGEES AND REHABILITATION

**M**IGRATION to India of members of the minority community in Pakistan (East and West) which began in 1946 continued unabated till 1956.

**Influx from East Pakistan:** The influx of minority community from East Pakistan to West Bengal, Assam and Tripura respectively from Jan. 1, 1964 to Feb. 18, 1966 were 5,01,101; 1,85,305 and 1,15,392.

Another influx of displaced families from East Pakistan commenced again in Jan. 1964 due to serious communal disturbances and continued till Dec. 1964.

During 1965, consequent on the organised infiltration by armed Pakistani agents into Jammu & Kashmir and subsequent hostilities with Pakistan, the State Govt. (Jammu & Kashmir) was faced with the problem of arranging shelter and offer relief for about 2,50,000 persons displaced in Jammu & Kashmir.

Another responsibility, placed on the shoulders of the Rehabilitation Ministry in 1965 was the work relating to repatriates from Burma, Mozambique and Ceylon. About 1,35,700 repatriates have come from Burma and 2,300 from Mozambique.

Displaced persons from West Pakistan 47.40 lakhs; from East Pakistan 50.11 lakhs (including the latest migration of 1964-65); total 97.51 lakhs.

The table below shows particulars of the expenditure incurred till the end of 1965-66 on displaced personnel:—

(In crores of rupees)

| Displaced persons from                                                      |               | West Pakistan | East Pakistan |
|-----------------------------------------------------------------------------|---------------|---------------|---------------|
| Grants .. .. .                                                              | 97.47         | 107.43        |               |
| Dandakaranya Scheme ..                                                      | ..            | 34.01         |               |
| Rehabilitation Reclamation Scheme ..                                        | ..            | 2.35          |               |
| Rehabilitation Industries Corpn. ..                                         | ..            | 1.15          |               |
| Loans .. .. .                                                               | 26.53         | 47.33         |               |
| Housing .. .. .                                                             | 64.95         | 45.72         |               |
| Establishment ..                                                            | 3.23          | 1.55          |               |
| Loans paid by Rehabilitation Finance Administration upto 31st December 1960 | 7.28          | 3.94          |               |
| Miscellaneous .. ..                                                         | 0.01          | 0.73          |               |
| Relief measures in J. & K. on account of conflict with Pakistan .. ..       | ..            | 1.25          |               |
| Expenditure on repatriates from Burma and Ceylon .. ..                      | ..            | 0.97          |               |
| <b>TOTAL .. ..</b>                                                          | <b>199.47</b> | <b>246.43</b> |               |

The total expenditure to the end of the financial year 1965-66 is Rs. 445.90 crores. This does not include expenditure on payment of compensation out of the compensation pool to displaced persons from West Pakistan nor the ex-gratia payments to migrants from the Pakistan held area of Jammu and Kashmir.

### REHABILITATION

During 1965-66, besides attending to the task of looking after the large numbers of migrants still living in relief camps, the formulation and implementation of schemes for rehabilitation of new migrants attracted the major efforts of the Government of India. As a result of the appeal made by the Prime Minister to treat the new migration as a national problem, offers were

received from twelve Chief Ministers for the resettlement of 75,853 families. As the bulk of new migrants were agriculturists, State Governments were requested to make available as much land as possible and so far the Department of Rehabilitation has received offers of land to the extent of 1,93,000 acres. This would suffice for about 18,000 families.

During the year 1965-66, various patterns and policies for giving rehabilitation assistance were finalised. Rehabilitation schemes, which had already been sanctioned, covered 38,199 families at a cost of Rs. 13.35 crores. About 12,000 families had actually been provided permanent rehabilitation benefits till January 31, 1966. Rehabilitation schemes covering 13,243 families and involving an expenditure of Rs. 4.87 crores were being examined and would be finalised shortly.

### Resettlement on Land

The screening conducted in various relief camps has revealed that on an average 70 per cent of the migrant families are agriculturists.

Under the schemes drawn up for the benefit of displaced agriculturist families, financial assistance will be given for construction of houses, purchase of agricultural implements, seeds, fertilizers, manures etc. Apart from the cost of the homestead plot, which may be about Rs. 200 per family, the ceiling of financial assistance in the case of families resettled on individual holding and group farms are about Rs. 3,455 and Rs. 3,265 per family respectively.

Families resettled under the group farming scheme will be given adequate technical guidance while actual cultivation will be left to the initiative of the farmers in each group. Irrigation facilities will also be provided where possible, states the annual report.

### Rehabilitation Reclamation Organisation

To effect a speedy and effective resettlement on land, the Government of India have set up the Rehabilitation Reclamation Organisation to reclaim forest land in Dandakaranya and in other States.

It was expected to reclaim about 25,000 acres of land before June, 1966. It is proposed to strengthen its fleet of tractors by adding one or two fully mechanised units by the end of the next financial year.

### Non-Agricultural Occupations

During 1965-66, a loan of Rs. 7 lakhs was sanctioned to State Governments for the settlement of 810 families in non-agricultural occupations.

According to a programme drawn up by the Department of Rehabilitation, it is proposed to settle 2,500 new migrant families and another 1,800 during 1966-67 in non-agricultural occupations in various States at a total estimated cost of Rs. 68 lakhs and Rs. 60 lakhs respectively. Out of these amounts, Rs. 19 lakhs will be treated as grants to the migrants.

### INDUSTRIES

Thirty-one schemes for providing employment to 2,497 migrants in small industries including agro-industries were sanctioned up to January 31, 1966 at an estimated cost of Rs. 47.85 lakhs.

A spinning mill is being set up by the Rehabilitation Industries Corporation at Jagdalpur at an estimated cost of Rs. 1.80 crores for providing employment to about 1,000 migrants from East Pakistan. A number of handloom and powerloom units will also be set up around the spinning mill.

### EMPLOYMENT

Out of 30,695 migrants who have been registered at the Employment exchanges, 1,428 migrants have so far been provided with jobs.

To coordinate the work relating to the registration and employment of new migrants from East Pakistan, a special cell has been created in the Directorate General of Employment and Training.

A special employment exchange has also been opened at Mana and Special Employment Officers have been appointed at Calcutta and Shillong.

### TECHNICAL TRAINING

Up to 1965-66, eleven schemes were sanctioned at an estimated cost of Rs. 22.85 lakhs for providing vocational and technical training to 1,388 new migrants.

Proposals have been received from State Governments involving an expenditure of Rs. 28.01 lakhs. In all 16 training schemes have been received which will benefit 1,734 migrants. These are under consideration.

**Education:** The Government of India accepted the responsibility for providing funds to the extent of Rs. 405.43 lakhs for education of old migrants from East Pakistan.

Two primary schools for the education of 150 children of migrant families at a cost of Rs. 9,200 have been provided in rehabilitation colonies in Uttar Pradesh. Education in polytechnics has also been provided to 11 migrant students in Madhya Pradesh for a period of two and a half years at a cost of Rs. 18,150.

The scheme for providing freeships, book grants and stipends to the migrant student is being finalised.

**Medical Facilities:** Suitable medical facilities in the new rehabilitation colonies are being set up in different States for the new migrants from East Pakistan. A sum of Rs. one lakh has been sanctioned for providing 10 additional beds in the Children's ward of the V.M. Hospital, Agartala for the treatment of undernourished children of the new migrants from East Pakistan.

### DANDAKARANYA PROJECT

Over 12,000 families have been moved into the Dandakaranya project area. About 10,240 families have been moved to village sites. Over 900 families are in transit camps awaiting to be shifted to villages. New villages numbering 185 have been opened. The number of houses constructed stood at 5,792 and those under construction stood at 2,080, according to the report.

Over 2 lakh acres of land have been released by the State Governments of Madhya Pradesh and Orissa of which about 1,25,000 acres are suitable for cultivation. To make the land more productive and for soil and water conservation, a scheme of level terracing and bunding has been introduced.

Considerable progress has been made in various other fields. Ninety bridges and 720 culverts have been completed. Umerkote dam costing Rs. 1 crore has been completed. Pakhanjore tank costing about Rs. 8 lakhs has also been completed. It is expected to serve about 1,300 acres of land. Preliminary work in respect of Malkangiri dam is in progress. It will cost Rs. 2.02 crores. Twenty-three schemes of minor irrigation projects are under execution and 8 are under investigation. Over 800 tube-wells, 126 tanks and 193 masonry wells have been completed. Five hospitals, 11 primary health centres and dispensaries and 5 mobile medical units have been established. Malaria has been completely eradicated from settlement zones.

### SPECIAL AREA DEVELOPMENT PROGRAMME

A preliminary land survey of some areas in Phulbani and Ganjam districts of Orissa has been carried out. It is expected that sizeable stretches of land would be available here for reclamation.



The Government of Maharashtra have forwarded an outline report indicating schemes which could be taken up as a part of the accelerated resource development plan of Chanda District. This report is being examined by technical experts.

The development programme of Andaman and Nicobar islands envisages the doubling of the present population by the end of the Fourth Plan and its further increase by one lakh during the Fifth Plan period. Avenues of employment would be created for persons who would be brought from the main land for the implementation of the programme and settlement. About 400 Sakharis and their families have been moved to the islands.

### REPATRIATES

The total number of Indians who returned from Burma from June, 1963 to March 5, 1966 was 1,35,636. Transit camps have been set up for the repatriates in Madras, Andhra Pradesh, Orissa and West Bengal to provide temporary shelter. The number of camps set up was 13.

The total number of repatriates who have been given assistance for rehabilitation in different States is 11,833. About 8,600 persons were given business loans. Over 3,000 persons were given employment and the rest assisted in other ways.

Under the Indo-Ceylon Agreement of 1964, 5,25,000 persons of Indian origin in Ceylon will be given Indian citizenship and repatriated to India. The repatriation was expected to commence in June, 1966 and would be spread over a period of 15 years. The Governments of Andhra Pradesh, Mysore, Orissa, Maharashtra, Madhya Pradesh, Uttar Pradesh, Punjab and Assam have been requested to accept a quota of repatriates for settlement and to formulate suitable schemes for their rehabilitation.

The number of Indian citizens who have returned from the Portuguese territories in Africa, mainly Mozambique, is about 2,300. Most of them have been settled in Gujarat.

### DPs IN JAMMU AND KASHMIR

Out of 2,50,000 persons displaced from different areas due to Pakistani aggression, about 1,40,000 persons had to be initially accommodated in camps and given free rations. Facilities of water supply, medical care and education were provided.

To expedite the programme of rehabilitation, suitable administrative arrangements are being worked out. The scales of rehabilitation facilities have also been laid down.

So far Rs. 140 lakhs have been spent on relief and resettlement of these families. Of these, over Rs. 103 lakhs have been spent on providing relief facilities including cash doles and rations. For resettlement, about Rs. 38 lakhs have been spent. In addition, considerable expenditure was incurred on supply of tents, coats, blankets, lanterns, medicines, utensils etc.

After the cease-fire, and following the Tashkent Declaration, about 1,50,000 persons (about 3,000 families) belonging to Poonch, Rajouri and Riasi areas have gone back to their villages.

A plan for the return of the families to their original places of settlement has been tentatively drawn up by the State Govt., by which it is expected that about 2,500 people will move back to their villages daily.

It is estimated that the cost of rehabilitation of about 21,000 families who would be moving to their original places of settlement in Chhamb and Jaurian area, would be of the order of Rs. 8 crores.

### Payment of Compensation :

Out of 5,06,648 applications for payment of compensation and rehabilitation grant filed upto Jan. 31, 1966, 4,95,092 have been finally settled by the payment of a total amount of Rs. 187.56 crores. In addition, statements of account issued in respect of 10,695 cases, involving a further liability of Rs. 1.29 crores await utilisation by claimants as on Jan. 31, 1966.

**Disposal of Properties :** Out of a total number of 2.87 lakh evacuee properties and 1.41 lakh Government properties, 2.81 lakh evacuee properties and 1.36 lakh Government properties have already been disposed of. The balance 0.11 lakh properties is awaiting disposal.

**Rural Claimants :** Under the quasi permanent scheme in Punjab 4.77 lakh displaced families were allotted land. The work of transferring permanent rights to the allottees was taken up in 1955. Upto Sept. 1965 permanent rights have been conferred on 2,81,316 allottees over an area of 20,16,107 standard acres. 1,97,627 rural houses also have been transferred in permanent ownership to the allottees. Thus the major part of the work was completed. The remaining work in the Punjab\* has been transferred to the State Govt. for disposal.

Outside Punjab\* 58,000 displaced agriculturists were settled on about 5.63 lakh acres of evacuee as well as Govt. owned land. About 20,000 persons who are settled in Alwar and Bharatpur districts of Rajasthan are being transferred land in their occupation by the State Government. The remaining allottees held verified claim for agricultural land and their allotments are being regularised by adjusting the cost of land against the compensation due on their land claims. Upto Jan. 31, 1966 22,193 claimants were allotted 79,648 standard acres, 1,55,934 ordinary acres of land outside Punjab State\* and groves worth Rs. 36 lakhs.

**Assistance to Migrants from Pak-held areas of Jammu and Kashmir :** For the purpose of relief and rehabilitation, the migrants from Pak-held areas of Jammu & Kashmir State are treated at par with the non-claimant displaced

persons from Pakistan. They were not paid any compensation for the properties left behind in view of legal and Constitutional position in respect of lands in Pakistan-held areas of the Jammu and Kashmir State. However, these migrants had suffered greatly and their general conditions justify special rehabilitation assistance. The Government of India, therefore, decided to give them rehabilitation assistance in the form of *ex gratia* payment as below :—  
(1) Rs. 1,000 to families settled on agricultural land in Jammu and Kashmir; (2) Rs. 3,500 to families having a monthly income of Rs. 300 settled elsewhere than on land in Jammu and Kashmir State. So far, as on Jan. 1, 1966, the number of applications received and finalised was 31,790 and 22,939 respectively leaving a balance of 8,851 pending. A sum of Rs. 3.34 crores had been paid on account of *ex gratia* grant upto the end of Dec. 1965.

In deserving cases, the families who have gone back to their original villages, rehabilitation facilities were given amounting to Rs. 500 per family for reconstruction of houses completely destroyed and Rs. 300 for repair of houses damaged as a result of the hostilities with Pakistan. Trade loan upto Rs. 2,000 was also given in deserving cases.

The families who would be returning to their original places of settlement in the Chhamb-Jaurian area would be provided with the following resettlement facilities : (a) Free transport to suitable points near their villages; and (b) tented accommodation till their damaged houses are reconstructed.

Assistance in the shape of grant and loan for reconstruction of houses are as follows :—

|                     | Rural area (Ceiling) |           | Urban area (Ceiling) |           |
|---------------------|----------------------|-----------|----------------------|-----------|
|                     | Grant                | Loan      | Grant                | Loan      |
| Kucha House .. .. . | Rs. 1,000            | Rs. 2,000 | Rs. 2,000            | Rs. 3,000 |
| Pucca House .. .. . | Rs. 2,000            | Rs. 3,000 | Rs. 3,000            | Rs. 6,000 |

The loan is repayable in 20 years at 5 per cent interest.

Trade loans upto Rs. 1,000 in rural areas and Rs. 5,000 in urban areas would also be given to petty trader families. A grant of Rs. 500 is also allowed for construction of shops to non-agriculturist trader families.

### CLAIMS

The Implementation Committee set up under the Indo-Pakistan Movable Property Agreement did not meet during the year (1965-66). The work relating to restoration of personal and household effects, seized jewellery, firearms, and buried treasures has been completed.

Transfer of lockers/safe deposits and jewellery in Gold Loan Accounts has been effected in most of the cases. Jewellery in six Gold Loan Accounts and surplus cash sale proceeds of jewellery sold in Pakistan amounting to Rs. 1.30 lakhs have not yet been received from Pakistan. No progress has been made in the matter of payment of compensation for properties both movable and immovable of 17 non-evacuee Joint Stock Companies, and for the movable assets of 159 evacuee Joint Stock Companies.

The following statement shows the position of claims of Displaced Govt. servants on account of their pension, G.P.F., leave salary etc. and contractors for services rendered, supplies made upto March 1, 1966.

|                                                                                  | Claims received sent to Pakistan |                                 | Claims settled by Pakistan |                                | Balance |                                |
|----------------------------------------------------------------------------------|----------------------------------|---------------------------------|----------------------------|--------------------------------|---------|--------------------------------|
|                                                                                  | No.                              | Amount (Rs. Lakhs)              | No.                        | Amount (Rs. Lakhs)             | No.     | Amount (Rs. Lakhs)             |
| Claims for pension, pay, G.P.F. leave salary, S. Deposits, Insurance Policy etc. | 24,923                           | 34.40 (R.P.A.)<br>104.21 (N.R.) | 14,606                     | 19.87 (R.P.A.)<br>69.83 (N.R.) | 10,317  | 14.58 (R.P.A.)<br>34.38 (N.R.) |
|                                                                                  | 12,275                           | 1415.11 (N.R.)                  | 7,857                      | 468.93 (N.R.)                  | 4,418   | 946.18 (N.R.)                  |

**Court Deposits :** India has referred 1,973 claims of the value of Rs. 180.80 lakhs to the Govt. of Pakistan, out of which 669 claims of the value of Rs. 36.94 lakhs (claimed value Rs. 76.35 lakhs) have been admitted by Pakistan Government. They have rejected 796 claims of the value of Rs. 52.79 lakhs. 509 claims of the

value of Rs. 31.67 lakhs are still pending with them.

So far 618 deposits of the value of Rs. 22.14 lakhs, 3,078 cash deposits of the value of Rs. 18.24 lakhs and 800 more deposits of the value of Rs. 9.55 lakhs are yet to be received.



## Summary of Budget Allocation

A statement showing the budget estimate and revised estimate for 1965-66 and the budget estimate for 1966-67 is given below :—

(In thousands of Rs.)

| Heads                                                                              | B.E.<br>1965-66 | R.E.<br>1965-66 | B.E.<br>1966-67 |
|------------------------------------------------------------------------------------|-----------------|-----------------|-----------------|
| Establishment (Secretariat and Pay & Account Offices) .. .. .                      | 38.64           | 39.80           | 39.76           |
| Expenditure on Displaced Persons .. .. .                                           | 1117.85         | 1117.46         | 1218.08         |
| Grants to States and Union Territories* .. .. .                                    | 575.06          | 757.20          | 691.08          |
| Loans and Advances* .. .. .                                                        | 475.43          | 552.10          | 754.36          |
| Dandakaranya Development Scheme .. .. .                                            | 571.86          | 431.21          | 420.00          |
| Rehabilitation Reclamation Scheme .. .. .                                          | 256.18          | 170.49          | 220.70          |
| Special Areas Development Programme .. .. .                                        | 10.00           | 30.00           | 165.00          |
| Investment in Rehabilitation Corporation .. .. .                                   | 50.00           | 30.00           | 80.00           |
| Purchase of Foodgrains .. .. .                                                     | ..              | 37.56           | 40.00           |
| Public Works† .. .. .                                                              | 28.70           | 46.22           | 22.84           |
| Payment of Compensation & Rehabilitation Grants to D.P.S. from W. Pakistan .. .. . | 125.20          | 115.20          | 100.10          |
| Payment to Migrants from Pakistan held areas of Jammu & Kashmir .. .. .            | 90.00           | 50.00           | 75.00           |
| <b>Total .. .. .</b>                                                               | <b>3338.92</b>  | <b>3377.24</b>  | <b>3826.92</b>  |

\* Provision made in the Demands for Grants of the Ministry of Finance.

† Provision made in the Demands for Grants of the Ministry of Works and Housing.

## U. S. AID TO INDIA

**U. S.** economic assistance to India consists of both grants and loans. The total commitments of the U.S. under various agreements with the Government of India now stand at \$7,271.5 million (Rs. 5,453.63 crores).

*U.S. Aid from the inception of the Economic Assistance Programme to India in June 1951 through September 15, 1966.* The first figure is in million dollars and the figure in brackets the rupee equivalent at current rate of exchange in crores: 1. U.S. Agency for International Development Mission's Technical Cooperation Programme: (a) Development grants (not repayable) 390.4 (292.80); (b) Loans (repayable in rupees or dollars) 154.2 (115.65); 2. U.S. Agency for International Development: Development loans (repayable in dollars) 1,762.0 (1,321.50); 3. U.S. Development Loan Fund credits (repayable in rupees) 509.2 (381.90); 4. Public Law 480, Title I (grants and loans repayable in rupees) 3,597.1 (—\*); 5. Public Law 480, Title II (grants; not repayable) 23.8 (17.85); 6. Public Law 480, Title III (agricultural commodities donated through voluntary agencies; not repayable) 237.9 (178.42); 7. Emergency Flood & Famine Relief grants (not repayable) 5.5 (4.13); 8. Export-Import Bank loans (repayable in dollars) 401.7 (301.26); 9. Wheat Loan of 1951 (repayable in dollars) 189.7 (142.28); Total 7,271.5 (5,453.63).

*Breakdown:* The figures within brackets indicate the percentage of the total aid: 1. Grants (not repayable) 1,445.8 (19.9); 2. Loans (repayable in dollars) 2,358.4 (32.4); 3. Local currency repayments (This includes loans repayable in rupees or dollars; the Cooley Fund for loans to private enterprises; and amounts under PL-480, Title I, agreements reserved for U.S. Government uses) 3,472.3 (47.7); Total 7,271.5 (100.0).

## DOLLAR-RUPEE CONVERSIONS

For the sake of uniformity and simplicity all dollar figures included in this Fact Sheet are shown with conversions in Indian currency at the current rate of Rs. 7.50 to the dollar. Prior

to June 5, 1966 the rate of exchange was: \$1 = Rs. 4.76.

In regard to loans repayable in dollars, this Fact Sheet lists the equivalent of the entire loan amount in Indian currency at the current rate of exchange. However, in many cases a part of the loan has already been repaid at the old rate.

Loans repayable in rupees fall in two categories. In the first category are loans extended by the former U.S. Development Loan Fund (U.S.D.L.F.), and under the U.S.A.I.D. Mission's Technical Cooperation Programme. The loans provided foreign exchange in dollars, and the loan agreements included clauses providing that repayment would be based on the official rate of exchange at the time repayment was made. Thus devaluation had the effect of changing the outstanding balance in terms of rupees, though not in dollars.

In the second category are loans to the Government of India and to private enterprises from P.L. 480 funds. These loans are intended for purchasing supplies and services available in India. Devaluation does not affect the repayment terms. The borrower's liability is limited to the amount of rupees specified in the loan agreement.

It will be noted that only 32.4 per cent of total American aid to India involves foreign exchange repayments. The greater part of this amount bears exceptionally low rates of interest and is repayable over a long period (40 years).

Nearly a quarter of the total aid represents grants. The remainder (47.7 per cent) represents loans repayable in rupees. Those repayments do not involve the utilization of India's foreign exchange earnings or the export of goods from this country.

## EMERGENCY WHEAT LOAN

In 1951 the U.S. Congress enacted legislation for a loan of \$189.7 million (Rs. 142.28 crores) to India to finance the purchase of 2 million tons of wheat to meet an acute food shortage. The loan is repayable in dollars and carries an interest rate of 2½ per cent. Repayment was scheduled to

commence on June 30, 1957. However, in view of India's serious foreign exchange difficulties, the U.S. Government has postponed the 18 semi-annual instalments of interest and principal due from December 31, 1959 and re-scheduled them to fall due from December 1986 to 1995, without additional interest payments.

American assistance to India is at present extended through the following three agencies.

## U.S. AGENCY FOR INTERNATIONAL DEVELOPMENT (U.S.A.I.D.)

This new Agency was created on November 3, 1961 to bring American economic assistance under a unified administration. It is in charge of activities previously administered by the International Cooperation Administration, which was represented in India by the Technical Cooperation Mission (TCM), the Development Loan Fund, the Food for Peace Programme (Public Law 480) in its relation with other countries, and other staff and related functions.

U.S.A.I.D. gives both developmental loans and grants. Grants have been made to the Malaria Eradication Programme, Small-pox eradication, higher education, National Productivity Council, craftsmen training, dairy development, community development, crop production and a number of other projects. U.S.A.I.D. and its predecessor, TCM have also aided India by making available American experts to work on specific technical and economic problems in the Indian development programme, by giving advanced training to Indian participants both in India and abroad, and by the provision of supplies and equipment. The names of the principal divisions of U.S.A.I.D. (Agriculture, Industry, Health, Education, Labour and Management) indicate the comprehensive scope of its activities. Developmental grants total \$390.4 million (Rs. 292.80 crores). These, of course, do not involve repayment.

The 42 developmental loans given by U.S.A.I.D. since its establishment in November 1961 total \$1,762.0 million (Rs. 1,321.50 crores). These loans are repayable in dollars, but in order to

\* The Government of India deposits in the account of the United States Government with the Reserve Bank of India rupees equivalent to dollars made available by the U.S. to purchase agricultural commodities. These rupee deposits are made at the rate of exchange prevailing at the time of dollar disbursements. Most of the commodities included in the P.L. 480 agreements had been purchased by India before the rupee was devalued and the deposits were made at the previous (lower) rate of exchange. It is estimated that P.L. 480 deposits under existing agreements will total Rs. 1,828.6 crores, which is much less than the equivalent of \$3,597.1 million at the new rate of exchange.



avoid an excessive foreign exchange debt servicing burden to India, the terms of the loans are set at a long period, taking into account such factors as other foreign debt and the foreign exchange earnings of the country. Repayment is scheduled over 40 years, with a 10-year grace period: that is, no payments of principal during the first ten years.

The 22 loans authorized through 1963 are free of interest and carry a credit fee of three quarters of one per cent per annum. The foreign aid legislation enacted by the U. S. Congress

for the fiscal year 1964 effected a slight change in the terms of these loans: instead of a credit fee they become subject to payments of interest at three quarters of one per cent during the first ten years and at two per cent during the remaining thirty years. Ten loans were authorized in India under these terms. The legislation that was passed for the fiscal year 1965 established a minimum interest rate during the first ten years of development loans of one per cent per annum and of 2½ per cent thereafter. So far, ten loans have been authorised in India under the new terms.

Details of the developmental loans given by the U.S.A.I.D. are as follows:

| Date of Agreement or Announcement | Project                                                                                         | Dollars (Millions) | Rupee Equivalent at the current rate of exchange (Crores) |
|-----------------------------------|-------------------------------------------------------------------------------------------------|--------------------|-----------------------------------------------------------|
| 1. Feb. 28, '62                   | Dhuvaran Thermal Power Station, Gujarat (Cambay)                                                | 33.6               | 25.20                                                     |
| 2. Feb. 28, '62                   | Premier Automobiles, Ltd., Bombay, Maharashtra (second loan)                                    | 3.0                | 2.25                                                      |
| 3. Mar. 30, '62                   | Industrial Finance Corporation (second loan)                                                    | 20.0               | 15.00                                                     |
| 4. April 11, '62                  | Pamba-Kakki (Sabarigiri) Hydroelectric Project, Kerala                                          | 20.2               | 15.15                                                     |
| 5. June 21, '62                   | General Non-Project Loan for maintenance imports (first loan)                                   | 200.0              | 150.00                                                    |
| 6. June 21, '62                   | Bandel Thermal Power Project, West Bengal                                                       | 38.0               | 28.50                                                     |
| 7. June 21, '62                   | Hindustan Steel Ltd., for Patherdih Coal Washery, Bihar                                         | 4.2                | 3.15                                                      |
| 8. June 21, '62                   | Fourth Railway Loan                                                                             | 43.0               | 32.25                                                     |
| 9. June 28, '62                   | Delhi Cloth Mills Ltd., for their rayon tyre cord plant at Kotah, Rajasthan                     | 9.8                | 7.35                                                      |
| 10. July 27, '62                  | Napeo Bevel Gear of India Ltd. (precision gear-plant), Faridabad, Punjab                        | 2.3                | 1.73                                                      |
| 11. Oct. 12, '62                  | Trombay Power Plant (Tatas), Maharashtra                                                        | 17.9               | 13.43                                                     |
| 12. Nov. 2, '62                   | Ramagundam Thermal Power Project, Andhra Pradesh                                                | 8.4                | 6.30                                                      |
| 13. Dec. 7, '62                   | Hindustan Motors Ltd., Calcutta (first loan)                                                    | 15.8               | 11.85                                                     |
| 14. Dec. 7, '62                   | Tata Engineering & Locomotive Co. Ltd., Jamshedpur, Bihar (first loan)                          | 13.7               | 10.28                                                     |
| 15. Feb. 25, '63                  | General Non-Project loan for maintenance imports (second loan)                                  | 240.0              | 180.00                                                    |
| 16. Mar. 8, '63                   | Indraprastha (Delhi "C") Thermal Power Station                                                  | 16.0               | 12.00                                                     |
| 17. Mar. 8, '63                   | Satpura Thermal Power Station, Madhya Pradesh                                                   | 25.1               | 18.83                                                     |
| 18. Mar. 25, '63                  | Chandrapura Thermal Power Project, Bihar (Second loan)                                          | 16.0               | 12.00                                                     |
| 19. April 21, '63                 | Fifth Railway Loan                                                                              | 15.9               | 11.93                                                     |
| 20. May 21, '63                   | Central Ropeways "F", Jharia, Bihar                                                             | 7.7                | 5.78                                                      |
| 21. May 21, '63                   | Dugda Coal Washery Expansion, Bihar                                                             | 5.1                | 3.83                                                      |
| 22. July 1, '63                   | Tarapur Nuclear Power Station, Maharashtra                                                      | 80.0               | 60.00                                                     |
| 23. Feb. 6, '64                   | National Engineering Industries, Ltd., Jaipur, Rajasthan                                        | 4.3                | 3.23                                                      |
| 24. Feb. 24, '64                  | General Non-Project loan for maintenance imports (third loan)                                   | 225.0              | 168.75                                                    |
| 25. June 19, '64                  | Trombay Fertilizer Plant, Maharashtra (second loan)                                             | 7.8                | 5.85                                                      |
| 26. July 7, '64                   | Hindustan Motors, Ltd., Calcutta, West Bengal (second loan for expanding automobile production) | 23.0               | 17.25                                                     |
| 27. July 7, '64                   | Hindustan Motors, Ltd., Calcutta, West Bengal (for production of power shovels)                 | 3.0                | 2.25                                                      |
| 28. July 7, '64                   | Tata Engineering and Locomotive Co. Ltd., Jamshedpur, Bihar (second loan)                       | 11.8               | 8.85                                                      |
| 29. Aug. 6, '64                   | General non-project loan for Maintenance Imports (fourth loan)                                  | 50.0               | 37.50                                                     |
| 30. Aug. 6, '64                   | Sixth Railway Loan                                                                              | 7.2                | 5.40                                                      |
| 31. Aug. 6, '64                   | Sharavathi Hydro-Electric Power Project, Mysore (third loan)                                    | 3.1                | 2.33                                                      |
| 32. Aug. 6, '64                   | U.S. Consulting Services                                                                        | 2.0                | 1.50                                                      |
| 33. Jan. 13, '65                  | Industrial Finance Corporation (third loan)                                                     | 10.0               | 7.50                                                      |
| 34. June 17, '65                  | Seventh Railway Loan                                                                            | 8.8                | 2.85                                                      |
| 35. June 17, '65                  | General Non-project Loan for Maintenance Imports (fifth Loan)                                   | 190.0              | 142.50                                                    |
| 36. Jan. 4, '66                   | Fertilizer loan                                                                                 | 50.0               | 37.50                                                     |
| 37. May 13, '66                   | General Non-project Loan for Maintenance Imports (sixth loan)                                   | 100.0              | 75.00                                                     |
| 38. May 25, '66                   | "Operation Hardrock" (survey for non-ferrous metal deposits)                                    | 3.5                | 2.63                                                      |
| 39. June 1, '66                   | Durgapur thermal power station, West Bengal (second loan)                                       | 16.5               | 12.38                                                     |
| 40. June 1, '66                   | Dhuvaran thermal power station, Gujarat (second loan)                                           | 32.3               | 24.23                                                     |
| 41. June 16, '66                  | Beas Dam, Punjab                                                                                | 33.0*              | 24.75                                                     |
| 42. July 8, '66                   | General Non-project Loan for Maintenance Imports (seventh loan)                                 | 150.0              | 112.50                                                    |
| Total                             |                                                                                                 | 1,762.0            | 1,321.50                                                  |

\* This loan is repayable in rupees.

## U.S. PUBLIC LAW 480

(Food for Peace Programme)

India has been the largest recipient of U.S. agricultural commodities under Title I, P.L. 480. The first Title I agreement was signed with India on August 29, 1956. Since then eight additional agreements and 25 supplemental agreements have been signed. The last supplemental agreement was signed on May 27, 1966. The market value of the commodities (including some ocean transportation costs) in all these agreements and amendments totals \$3,597.1 million.

The Government of India pays for these commodities in rupees.

## GRANTS FROM U.S. PUBLIC LAW 480 SALE PROCEEDS

The nine agreements between the United States and India under U.S. Public Law 480 provide for the grant of approximately Rs. 377.35 crores from the sale proceeds of agricultural commodities to the Indian Government for development projects.

Agreements have been concluded for grants to be made to the following projects:

|                                                                                                                                                                                                  | Crores Rs. |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------|
| 1. River Valley Development (Chambal, Hirakud, Damodar Valley, Mahi Right Bank Canal, Kakrapar, Nagarjunasagar, Kosi, Bhadra, Tungabhadra, Mahanadi Delta Irrigation, Kundah and Koyna Projects) | 5.94       |
| 2. Malaria Eradication                                                                                                                                                                           | 78.24      |
| 3. Indian Institute of Technology, Kanpur                                                                                                                                                        | 4.81       |
| 4. U.P. Agricultural University, Pant Nagar                                                                                                                                                      | 2.16       |
| 5. All India Institute of Medical Sciences, New Delhi                                                                                                                                            | 2.90       |
| 6. Indian Investment Centre                                                                                                                                                                      | 0.55       |
| 7. Dairy Development                                                                                                                                                                             | 3.60       |
| 8. Soil and Water Conservation                                                                                                                                                                   | 11.21      |
| 9. National Highways                                                                                                                                                                             | 20.00      |
| 10. Exploration of Groundwater Resources                                                                                                                                                         | 0.80       |
| 11. Craftsmen Training                                                                                                                                                                           | 43.19      |
| 12. Modern Storage of Food Grains                                                                                                                                                                | 13.13      |
| 13. Higher Technical Education (Regional Engineering Colleges)                                                                                                                                   | 16.01      |
| 14. Elementary Education                                                                                                                                                                         | 77.71      |
| 15. Smallpox Eradication                                                                                                                                                                         | 10.29      |
| 16. Primary Health Centres                                                                                                                                                                       | 13.40      |
| 17. Medical Educator Training                                                                                                                                                                    | 7.40       |
| 18. National Productivity Council                                                                                                                                                                | 0.07       |
| 19. Agricultural Refinance Corporation                                                                                                                                                           | 5.00       |
| 20. Technical Education Institutes                                                                                                                                                               | 0.12       |
| Total                                                                                                                                                                                            | 316.53     |

## Loans to the Indian Government from U.S. P.L. 480 Sale Proceeds

The nine agreements between the United States and India under U.S. Public Law 480 provide for approximately Rs. 1,072.07 crores from the sale proceeds of agricultural commodities to be given in loans to the Indian Government for economic development projects.



Agreements have been concluded for loans to the following projects:

|                                                                                                                                                                                                     | Crores<br>Rs. |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| 1. The Industrial Development Bank of India ..                                                                                                                                                      | 80.20         |
| 2. River Valley Development (Chambal, Hirakud, Damodar Valley, Mahi Right Bank Canal, Kakrapar, Nagarjunasagar, Kosi, Bhadra, Tungabhadra, Mahanadi Delta Irrigation, Kundah and Koyna projects) .. | 232.23        |
| 3. Sharavathi Hydroelectric Project, Mysore ..                                                                                                                                                      | 34.45         |
| 4. Industrial Credit and Investment Corporation of India ..                                                                                                                                         | 25.00         |
| 5. Industrial Finance Corporation ..                                                                                                                                                                | 20.00         |
| 6. Chandrapura Thermal Power Project, Bihar ..                                                                                                                                                      | 20.50         |
| 7. Barauni Thermal Power Project, Bihar ..                                                                                                                                                          | 1.31          |
| 8. Durgapur Thermal Power Project, West Bengal ..                                                                                                                                                   | 3.43          |
| 9. Kanpur Thermal Power Project ..                                                                                                                                                                  | 0.95          |
| 10. Barapani Hydroelectric Power Project, Assam ..                                                                                                                                                  | 6.40          |
| 11. Trombay Fertilizer Plant, Maharashtra ..                                                                                                                                                        | 13.43         |
| 12. Rihand Valley Hydro-Electric Project ..                                                                                                                                                         | 8.92          |
| 13. Cambay Thermal Power Station ..                                                                                                                                                                 | 12.72         |
| 14. Amarkantak (Amlai) Thermal Power Project, M.P. ..                                                                                                                                               | 6.67          |
| 15. Bandel Thermal Power Project ..                                                                                                                                                                 | 8.40          |
| 16. Talcher Thermal Power Project, Orissa ..                                                                                                                                                        | 8.54          |
| 17. Pamba-Kakki (Sabarigiri) Hydroelectric Power Project, Kerala ..                                                                                                                                 | 18.40         |
| 18. Satpura Thermal Power Project, Madhya Pradesh ..                                                                                                                                                | 15.30         |
| 19. Indraprastha (Delhi "C") Thermal Power Project ..                                                                                                                                               | 8.30          |
| 20. Ramagundam Thermal Power Project ..                                                                                                                                                             | 3.70          |
| Total of loan agreements ..                                                                                                                                                                         | 528.85        |

Public Law 480, which is playing a significant role in ensuring the availability of agricultural commodities to India at reasonable prices at a time of intense economic development, has four titles (chapters).

#### P. L. 480 Title I

Title I provides for the sale of agricultural commodities in return for payment in the currency of the recipient nation. Under this Title the United States has entered into nine agreements with India for the supply of large quantities of wheat, rice, coarse grains, cotton, dried milk powder, tobacco, and other agricultural commodities. The total value of the commodities covered by these agreements is \$3,597.1 million.

India pays for these supplies in rupees. The Government of India deposits in the account of the United States Government with the Reserve Bank of India rupees equivalent to the dollars paid to U.S. suppliers of agricultural commodities. These rupee deposits are made at the rate of exchange prevailing at the time of dollar disbursements. Most of the commodities included in the P.L. 480 agreements had been purchased by India before the rupee was devalued and deposits were made at the previous (lower) rate of exchange. Devaluation will not affect these prior deposits. They will not be revised upwards. Rupees paid into the U.S. Government account after devaluation are, of course, calculated at the current rate of exchange.

It is estimated that P.L. 480 deposits made or to be made under existing agreements will total Rs. 1,828.57 crores, which is much less than the equivalent of \$3,597.1 million at the new rate of exchange.

Each of the nine P.L. 480 agreements specifies the manner in which the rupee deposits should be utilized. Taking all the agreements together, 21.9 per cent of the sales proceeds is reserved for grants to the Government of India for develop-

ment projects; and 57.5 per cent for loans for the same purpose. Another 6.8 per cent is designated for loans to private enterprises under the Cooley Amendment (see page 4). The remaining 13.8 per cent is reserved for U.S. Government uses.

It is estimated that the allocations of P.L. 480 sales proceeds will be as follows:

Grants to the Government of India: Rs. 377.35 crores;

Loans to the Government of India: Rs. 1,072.07 crores;

Loans to private enterprises under the Cooley Amendment: Rs. 124.56 crores;

U.S. Government Uses: Rs. 254.60 crores.

#### P.L. 480 Title II

Title II of Public Law 480 enables the U.S. President to furnish emergency assistance to foreign countries in meeting famine or other urgent or extraordinary relief requirements. Under this title India has received agricultural commodities worth \$23.8 million (Rs. 17.85 crores).

#### P.L. 480 Title III

Under Title III of Public Law 480, \$237.9 million (Rs. 178.42 crores) worth of dried milk, wheat, rice, corn, cottonseed oil, and other such commodities has been distributed in India through voluntary agencies. Some 80 lakh school children receive free lunches through programmes assisted under this title.

#### P.L. 480 Title IV

Title IV provides for long-term credits to friendly nations for purchase of agricultural commodities during periods of economic development. Repayment in dollars could be spread over twenty years. No transactions have taken place between India and the United States under this title.

#### COOLEY FUND

The Cooley Amendment to U.S. Public Law 480 (named after Congressman Harold D. Cooley, Chairman of the Committee on Agriculture of the U.S. House of Representatives) provides that up to 25 per cent of the local currency proceeds from the sale of American agricultural commodities shall be made available to U.S.A.I.D. for lending in the private sector to two categories of borrowers:

1. American firms or their subsidiaries operating in the host countries (India) or indigenous (Indian) firms having an affiliation with an American firm;
2. Indigenous firms of the host countries with no American affiliation but which are facilitating the disposal of American agricultural products, e.g. local private warehouses storing grain or flour mills processing the grain, etc.

The nine agreements between India and the United States under Public Law 480 provide for approximately Rs. 124.56 crores to be allocated to the Cooley Fund.

The following loans have been extended from the Cooley Fund (in Rs. crores): 1. Otis Elevator of India Ltd., Bombay (elevators) 0.2; 2. Good-year Tyre & Rubber Co. of India Ltd., Ballabgarh, Punjab\* (rubber products) 3.75; 3. Mysore Cements Ltd. (M/s. Sarangapani Mudaliar/Kaiser), Ammasandra, Mysore (cement) 1.375; 4. Hindustan Aluminium, Ltd. (M/s. Birla/Kaiser) Renukoot, U.P. (aluminium) 5.0; 5. Synthetics and Chemicals, Ltd. (M/s. Kilachand/Firestone), Bareilly, U.P. (synthetic rubber) 0.5; 6. Ex-Cell-O (India) Pte. Ltd. (M/s. Amerind Engineering Co./Ex-Cell-O Co. Detroit, Mich.), Bombay (machine tool parts) 0.2; 7. Premier Tyres Ltd. (Joint enterprise with Dayton Rubber Co.), Kalamasseri, Kerala (rubber tyres) 0.3; 8. Seshasayee Paper & Board Ltd., Erode, Madras (M/s. Seshasayee/Parsons and Whitemore) (bagasse pulp and paper mill) 2.0; 9. Cyanamid India Ltd., Bombay, Maharashtra (American Cyanamid Co. of New York) (antibiotics) 0.25; 10. Gabriel

India Private Ltd., Mulund, Bombay, Maharashtra (shock absorbers) 0.19; 11. Madras Rubber Factory Ltd., Madras (Mansfield Rubber Co. of Ohio) (rubber tyres) 0.75; 12. East India Hotels Ltd. (Intercontinental Hotel Corporation), New Delhi (construction of hotel in New Delhi) 0.76; 13. Wyeth Laboratories, Pte. Ltd. (American Home Products Corporation), Bombay, Maharashtra (steroid compounds and hormones) 0.17; 14. Victor Gasket India (Pte.) Ltd., Mulund, Bombay, Maharashtra (Victor Mfg. & Gasket Co., Chicago) (gaskets) 0.075; 15. Union Carbide (India) Ltd., Calcutta, West Bengal (chemicals and plastics) 2.16; 16. McNally-Bird Engineering Co. Ltd., Kumardhubi, Bihar (manufacture of coal washeries and allied equipment) 1.0; 17. Harig-Malik Manufacturing Co. Pte. Ltd., Faridabad, Punjab\* (Haring Manufacturing Corporation, Chicago) (tools, dies, gauges, etc.) 0.0285; 18. Precision Bearings India Ltd., Baroda (Norma-Hoffman Bearings Corporation, Stanford, Conn.) (ball and cylindrical bearings) 0.45; 19. Wyman-Gordon Ltd., Bombay, Maharashtra (Wyman-Gordon Co., Worcester) (precision forgings) 0.25; 20. Arbor Acres Farm India Pte. Ltd., Talegaon, Maharashtra (Arbor Acres Farm Inc., Glastonbury, Connecticut) (poultry breeding) 0.25; 21. Mandya Paper Mills, Ltd., Belagula, Mysore (Parsons and Whitemore, New York) (paper mill) 1.5; 22. Kirloskar-Cummins, Ltd., Poona, Maharashtra (Cummins Engine Co., Columbus, Indiana) (engines) 1.25; 23. Napco Bevel Gear of India, Ltd., Faridabad, Punjab\* (Napco Industries Inc., Minneapolis, Minnesota) (gears, joints and allied parts) 0.8; 24. Coromandel Fertilizers, Ltd., Visakhapatnam, Andhra (California Chemical Company, and International Minerals & Chemicals Corporation) (fertilizers) 10.76; 25. Elpro International Ltd., Bombay (General Electric Co., New York) (lightning arresters, X-ray equipment and magnets) 0.4; 26. Frick India, Ltd., New Delhi (Frick Co., Waynesboro, Pennsylvania) (refrigeration equipment) 0.25; 27. Bharat Steel Tubes, Ltd., Ganaur, Punjab\* (Abbey Etna Machine Co., Perrysburg, Ohio) (steel tubes) 0.25; 28. I.A. & I.C. Pte. Ltd., Bombay, Maharashtra (Lapic Inc.) (sulphur grinding) 0.05; 29. Everest Refrigerants, Ltd., Bombay, Maharashtra (Technical Enterprises Inc., New York) (refrigerant gases and aerosol dispensers) 0.6; 30. Borosil Glass Works, Ltd., Andheri, Maharashtra (Corning Glass Works, New York) (glassware) 0.71; 31. Synbiotics Ltd., Ahmedabad, Gujarat (Olin Mathieson International, New York) (antibiotics and fine chemicals) 1.34; 32. Graphite India Ltd., Calcutta, West Bengal (Great Lakes Carbon Corporation, New York) (graphite electrodes, anodes and carbon products) 0.60; 33. Chemicals and Plastics India Ltd., Mettur, Madras (B.F. Goodrich Chemical Co., Cleveland, Ohio) (polyvinyl chloride plastics) 0.326; 34. Indabrat Ltd., Bombay (Wheelabrator Corporation, Mishawaka, Indiana) (air blast and shot blast equipment and dust collectors) 0.143; 35. American Universal Electric (India) Ltd., Faridabad, Punjab\* (Universal Electric Company, Owosso, Michigan) (fractional-horsepower electric motors) 0.21; 36. Shama Forge Co. Ltd., Bhopal, Madhya Pradesh (Kropp Forge Co., Chicago, Illinois) (steel forgings) 0.48; 37. Sylvania & Laxman Ltd., New Delhi (Sylvania International, New York) (fluorescent tubes and Mercury vapour lamps) 0.5; 38. Rockwell India Ltd., Udhna, Gujarat (Rockwell Manufacturing Co., Pittsburgh, Pennsylvania) (power tools) 0.160; 39. Renuagar Power Co. Ltd., Renukoot, Uttar Pradesh (Kaiser Aluminium & Chemical Corporation, Oakland, California) (thermal power station) 4.5; 40. United Carbon India Ltd., Bombay (United Carbon Co., Ashland, Kentucky) (carbon black) 1.41; 41. Herdilia Chemicals Ltd., Thana, Maharashtra (Hercules Power Co. Inc., Wilmington, Delaware) (heavy organic chemicals) 2.65; 42. Semiconductors Ltd., Bombay (Raytheon Co. Inc., Lexington, Massachusetts) (transistors and diodes) 0.135; 43. Raymon Engineering Works Ltd., Calcutta (World Investments Inc., Wichita, Kansas) (spiral welded pipes) 2.14; 44. Indoil Chemicals Ltd., Bombay (Rohm & Haas Co. Inc., Philadelphia) (Fungicides and plasticizers) 0.3; 45. Richardson Hindustan Ltd., Bombay (Richardson Marrell Inc., New York) (pharmaceuticals)



0-625; 46. Tractor Engineers Ltd., Bombay (Caterpillar Overseas Inc., Peoria, Illinois) (spare parts for tractors) 0-6; 47. Corn Products India Private Ltd., Bombay (Corn Products Co., New York) (starch, glucose, dehydrated food) 0-24. Total 58-69.

### THE EXPORT-IMPORT BANK

The bank has authorized 22 loans to India totalling \$401.7 million (Rs. 301.26 crores). The Bank extends loans and guarantees for the primary purpose of promoting the export and import trade of the United States. Loans given by it are repayable in dollars. In determining the rate of interest to be charged on loans, the Bank takes into consideration the maturity of the loans and the extent of credit risk to be assumed by the Bank as affected by such guarantees as may be offered, as well as prevailing United States commercial and government rates. For instance, the First Line of Credit of \$150 million to the Government of India authorized in 1958 carries an interest rate of 5½ per cent. The principal is repayable in 20 semi-annual instalments beginning in January 1964.

Loans in Rs. crores given by the U.S. Export-Import Bank to India. Loans are repayable in dollars: 1. Sundatta Foods and Fibres, Ltd., Bombay 0-05; 2. National Rayon Corp., Kalyan 1-35; 3. First Line of Credit to Government of India 112-50; 4. Hindustan Aluminium Ltd., Renukoot, Uttar Pradesh 10-24; 5. Air India (first loan) 3-06; 6. Second Line of Credit to GOI 37-50; 7. Orient Paper Mills, Ltd., Amlal, M.P. 13-88; 8. Air India (second loan) 5-20; 9. East India Hotels Ltd., New Delhi 0-54; 10. Third line of credit to GOI 18-75; 11. Union Carbide India Ltd., Calcutta 5-74; 12. Hindustan Aluminium Ltd., Renukoot, U.P. 3-75; 13. Varanasi Diesel Locomotive Factory (Indian Railways), U.P. (first loan) 14-25; 14. Bharat Forge Co. Ltd., Poona 2-93; 15. Coromandel Fertilizers, Ltd., Visakhapatnam, Andhra 20-25; 16. Mysore Acetate Chem. Co. Ltd. Mandya, Mysore 1-58; 17. Chemicals Plastics (India) Ltd., Mettur, Madras and Bombay 2-36; 18. Fourth line of Credit to Govt. of India 18-75; 19. Hindustan Aluminium Ltd., Renukoot, U.P. (third loan) 8-25; 20. Central Pulp Mills Ltd., Fort Songhad, Gujarat 5-12; 21. Varanasi Diesel Locomotive factory (Indian Railways), U.P. (second loan) 12-75; 22. Herdilia Chemicals Ltd., Thana, Maharashtra 2-51; Total\* 301-26.

### U. S. ASSISTANCE FOR POWER DEVELOPMENT IN INDIA

India has received substantial assistance from the United States for power development. The U.S. has extended foreign exchange assistance totalling \$510.1 million (Rs. 382.58 crores). In addition Rs. 330.49 crores in rupees derived from the sale of U.S. agricultural commodities supplied to India has been extended in loans and grants for power development.

### INDIAN-AMERICAN TECHNICAL ASSISTANCE

The position is as on June 30, 1966. Figures are in thousands of dollars:

#### Project and Title:—

**Food and Agriculture:**—Acquisition and distribution of Fertilizers 17,310; Acquisition and distribution of Iron and Steel for Agricultural purposes 19,739; Plant Protection and Locust Control 584(a); Soil Fertility and Fertilizer use 1,029; Expansion and Modernization of Marine and Inland Fisheries 2,902; Ground Water Irrigation 18,284; Agricultural Extension 3,030; Ground Water Exploration 4,092; Agricultural Machinery Utilization 208; Agricultural Universities Development 16,935; Foodgrains Storage 1,664; Engineering Services in Water Resources and Power Development 43; Animal Husbandry 976; Agricultural Information, Production and Training 371; Agricultural Economic Research 289; Crop Production 1,567; Farmers' Organization 275; Dairy Development 994; Cooperative Marketing and Warehousing of Agricultural Produce 20; Calcutta Milk

Scheme 518; Cooperative Membership Education 93; Soil and Water Conservation 972; Agricultural Extension 8; River Valley Development 7,187; Water Resources Survey and Minor Irrigation Works 477; Forest Research 356; Provision of Engineering Services to the Damodar Valley Corporation 95; Augmenting Fertilizer Supply 3,800; Production, Processing and Marketing of Citrus Fruit 17; Assistance to Ministry of Food and Agriculture 33; Fertilizer 7,862; Fertilizer 5,262(b); Agriculture Programme Direction & Development 162; Agricultural Production Incentives 17; Agricultural Production Promotion 50; Agricultural Inputs Development 55; Total Agriculture and Natural Resources 117,274.

**Industry and Mining:** Forest Research 189; Construction Equipment Operators 489; Rihand Valley Development 6,009; Assistance to Industrial Research & Technical Services Organization 3,012; Hot Lines Maintenance 394; Water and Power Development 1,076; National Productivity Council 3,379; Delhi Thermal Plant 3,981; Geological Survey of India 537; Oil and Gas Commission 106; Assistance to Lime Industry 1; Assistance to Coal Industry 149; Assistance to C.S.I.R. 19; Steel Training 1,207; Assistance to Phosphorous Industry 13; Orissa Iron Ore 18,348; River Valley Development 730; Mineral Development 1,149; Building Material Development 34; Exploratory Lignite Excavation & Development 606; Augmenting Steel Supply 41,054; Improvement of Rajasthan Power Facilities 1,046; Survey of the Expansion of the Sindri Fertilizer Plant 17; Provision of Industrial Technical Services 2,056; Mineral Survey Development 103; Flood Control 315(c); Industrial Programme Adviser 154; Technical Assistance to Irrigation Research Institute 92; Steel Casting Foundry 1; Steel Standards 142; Tele-Communication Development 47; Marketing Conference & Study Tour 5; Machine Tool Industry Development 18; Natural Resources Programme Development 10; Steel Industry 17; Bokaro Steel Plant 686; Non-Metallic Minerals and Productions 47; Tubewell Casing 1,954; Cement Manufacturing Equipment 6,231; Rural Electrification 2,945; Power Generation and Distribution 175; Construction Equipment Training and Utilization 577; Total 99,120.

**Transportation:** Aviation Ground Facilities 2,875; Highways and Bridges 52; Indian Airlines 3; Railway Rehabilitation and Development 74,501; Highway Transportation 27; Total 77,458.

**Labour:** Trade Union Development 113; Labour Ministry Training 346; Bombay Central Training Institute for Craftsmen & Instructors 1,303; Industrial Safety 29; Establishment of a Central Labour Institute 83; Construction Equipment Operators 425; Study of the Effects of Thermal Environment Conditions 63; Trades Training 661; Foreman Training 37; Labour Programme Development 47; Total 3,107.

**Health and Sanitation:** Water Supply and Sanitation 6,450; Medical Educator Training 1,776; Nursing College Development 1,235;

Public Health Education 388; Official Health Agencies 177; Insect-Borne Disease Control 181; Malaria Eradication 62,542; Malaria Control 27,690; Health Instruction Training Centres 27; Assistance to Medical College & Allied Institutions 1,056; Control of Filariasis 2,425; Venereal Disease Control 6; Health Programme Development 81; Sc. Equipment Repair Training 12; Communicable Disease Control 185; Total 104,181.

**Education:** Technical Education Institutes 4,514; Home Science Education & Research 1,045; Multipurpose Secondary Education 3,571; Rural Institute 222; National Institute of Basic Education 29; National Professional Education Centre 391; Indian Institute of Technology, Kanpur 10,580; Teachers Training in Engineering Education 2,250; National Institute of Education 2,152; Assistance to Teachers Training in Audio-Visual Education 160; Educational Adviser 58; Foundry Training 171; Educational Programme Direction and Development 189; Assistance to Educational Administration 60; School Building Improvement 62; Assistance to Training in Adult Education 51; Assistance to Central Institute of Education 14; Delhi Regional Secondary School 777; Higher Education (Summer Science Institutes) 2,657; Social Welfare Education 583; Total 29,536.

**Public Administration:** Indian Statistical Institute 128; Government Operations 620; Procurement of Consultation Services 2; Economic Planning 37; Improved Operating Statistics and Reports 22; Training in Public Administration 55; Public Services Programme Development 42; Invest. Promotion & Study Tour 9; Top Management Control of Economic Enterprises 995; Total 1,910.

**Community Development, Social Welfare and Housing:** Community Development Programme 13,509; Building Material Development 165; Demonstration of Improved Methods of Low Cost Housing Construction 47; Total 13,721.

**General and Miscellaneous:** Nuclear Engineering 1,016; Small Industries Development 807; Nuclear Research 662; Life Insurance Corporation 3; Banking and Investment 74; Mass Communication Training 272; Procurement of Consultation Services 11; Procurement Services 160; Participant Training 34; Indian Investment Centre 557; Electrical Apparatus and Clay Products 575(b); Total 4,171.

Wheat 52,172.

Cotton 15,490.

Technicians, Programme Direction and Technical Support Activity 26,393(d).

Grand Total 534,644.

(a) Includes \$28,500 from Regional Allotment.

(b) Triangular Trade Activities.

(c) Includes U.S. FY 1955 Allotment of \$109,000 for Flood Control.

(d) Tech. Support activity \$16,886, and Cost Element not distributed by Projects \$9,507.

### U. S. TECHNICIANS

U.S. Technicians assigned to India by field of activity as of June 30, 1966 are given in the table below:

U.S. Fiscal Year ending June 30.

| Field of Activity                                       | 1952/57    | 1958       | 1959       | 1960       | 1961       | 1962       | 1963       | 1964       | 1965       | 1966       |
|---------------------------------------------------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|------------|
| Agriculture and Natural Resources .. ..                 | 272        | 76         | 53         | 59         | 58         | 45         | 50         | 49         | 42         | 48         |
| Industry and Mining .. ..                               | 228        | 40         | 27         | 30         | 36         | 41         | 34         | 28         | 21         | 10         |
| Transportation .. ..                                    | 15         | 1          | 1          | —          | —          | —          | —          | —          | —          | —          |
| Labour .. ..                                            | 7          | 2          | —          | 1          | 2          | 1          | 8          | 9          | 8          | 8          |
| Health and Sanitation .. ..                             | 62         | 18         | 24         | 26         | 19         | 26         | 21         | 10         | 15         | 11         |
| Education .. ..                                         | 90         | 9          | 11         | 27         | 21         | 30         | 50         | 53         | 62         | 37         |
| Public Administration .. ..                             | 14         | 1          | 2          | 4          | 1          | 1          | 1          | 7          | 8          | 9          |
| Community Development, Social Welfare and Housing .. .. | 60         | 6          | 9          | 4          | 2          | —          | —          | —          | —          | —          |
| General and Miscellaneous .. ..                         | 48         | 12         | 13         | 16         | 20         | 16         | 26         | 27         | 35         | 37         |
| <b>TOTAL .. ..</b>                                      | <b>796</b> | <b>165</b> | <b>140</b> | <b>167</b> | <b>159</b> | <b>160</b> | <b>190</b> | <b>190</b> | <b>191</b> | <b>155</b> |
| Grand Total from 1952-66 : 2,313.                       |            |            |            |            |            |            |            |            |            |            |

\* In October 1966 a loan of \$4.7 million extended earlier to Indian Rayon Corporation Ltd. was cancelled.



## INDIAN-AMERICAN PARTICIPANT TRAINING PROGRAMME

Nominations processed during U.S. fiscal year as of June 30, 1966:—

| Field of Activity                                         | Fiscal Years |            |            |            |            |            |            |            |            |              |
|-----------------------------------------------------------|--------------|------------|------------|------------|------------|------------|------------|------------|------------|--------------|
|                                                           | 1951/58      | 1959       | 1960       | 1961       | 1962       | 1963       | 1964       | 1965       | 1966       | TOTAL        |
| Agriculture and Natural Resources ..                      | 423          | 142        | 121        | 127        | 110        | 104        | 115        | 155        | 139        | 1,436        |
| Industry and Mining .. .. .                               | 198          | 246        | 385        | 201        | 106        | 86         | 85         | 19         | —          | 1,326        |
| Transportation .. .. .                                    | 51           | 10         | 16         | 5          | —          | —          | —          | —          | —          | 82           |
| Labour .. .. .                                            | 57           | 2          | 8          | 11         | 30         | 19         | 18         | 18         | 31         | 194          |
| Health .. .. .                                            | 134          | 39         | 64         | 46         | 34         | 45         | 29         | 36         | 3          | 430          |
| Education .. .. .                                         | 202          | 168        | 72         | 56         | 137        | 20         | 32         | —          | 6          | 693          |
| Public Administration .. .. .                             | 9            | —          | 2          | 4          | 4          | 36         | 41         | 56         | 39         | 191          |
| Community Development, Social Welfare and Housing .. .. . | 20           | 3          | —          | —          | —          | —          | —          | —          | —          | 23           |
| General and Miscellaneous .. .. .                         | 44           | 36         | 33         | 21         | 22         | 33         | 16         | 9          | 27         | 214          |
| <b>TOTAL Since 1951 .. .. .</b>                           | <b>1,138</b> | <b>646</b> | <b>701</b> | <b>471</b> | <b>437</b> | <b>343</b> | <b>336</b> | <b>293</b> | <b>245</b> | <b>4,616</b> |
| Under Contract Arrangements ..                            | (265)        | (95)       | (70)       | (109)      | (201)      | (76)       | (82)       | (56)       | (68)       |              |

Of the total, 4,195 have returned to India and are now working in their particular fields, 201 are in training in the United States and 220 are preparing to depart.

## CEMENT INDUSTRY

THE cement industry in India occupies a position of basic and strategic importance in the economy.

The following figures show that *per capita* consumption of cement in India is far lower than that in some countries.

*Per capita* consumption (kg.): Switzerland 386; U.S.A. 272; Japan 226; U.K. 206; Italy 191; India 18.

During the First Plan period, production of cement increased from 2.69 million tonnes to 4.60 million tonnes. During the Second Plan period, it rose from 4.60 million tonnes to about 7.8 million tonnes and by the end of the Third Plan it was expected to be over 10 million tonnes. The capacity and the production by the end of the Third Plan were expected to lag behind the targets by 3.5 million tonnes and 2.0 million tonnes respectively. The Fourth Plan target in cement is 25 million tonnes. The present installed capacity is 12 million tonnes and production is over 10 million tonnes. The current demand is estimated to be about 13.0 million tonnes as against an output of 10.5 million tonnes. There is, therefore, a shortfall of 2.5 million tonnes.

The trend of capacity and actual production in the past five years is indicated below.

(in Thousand metric tons)

|               | 1961  | 1962  | 1963   | 1964   | 1965   |
|---------------|-------|-------|--------|--------|--------|
| Capacity      | 9,474 | 9,728 | 10,285 | 10,768 | 11,340 |
| Production .. | 8,245 | 8,586 | 9,355  | 9,690  | 10,578 |

**Slag cement** :—The initial growth of the cement industry in India was helped by the plentiful supply of raw materials. The principal raw materials required for the manufacture of portland cement are limestone, clay, gypsum and coal. Coal is used both as fuel and as raw material. As the reserve of good quality limestone is rather limited in the country and as the demands of other industries have increased in recent times attempts have been made to utilize new kinds of raw materials such as blast-furnace slag and pozzolanic materials. Blast-furnace slag available from the iron and steel plants has, however, to be suitably granulated according to actual requirements. It has been estimated that the foreign exchange needed for slag cement plant and machinery is less than that for portland cement equipment.

## DIFFERENT TYPES OF CEMENT

(1) **Ordinary Portland Cement** : Conforms to IS-269-1958 for ordinary portland cement.

(2) **Low Heat Portland Cement** : Conforms to IS 269-1958 for low heat cement.

(3) **Rapid Hardening Portland Cement** : This is specially useful for meeting the demands for speed in modern construction. It has the property of rapidly developing a high strength at any early stage, resulting in considerable reduction of construction period. Manufacturers of this type are the Sone Valley Portland Cement Co. and A.C.C.

(4) **White Cement** : Widely used for tiles, terrazzo, artistic decorations and for extension and interior finishes in all types of buildings, this cement is as good as any portland cement and has the same toughness to withstand weathering and wearing. Being pure white this cement can be coloured to any desirable shade by mixing it with pigments. Manufacturers are A.C.C. (at Porbander and Kymore) and Travancore Cements at Kottayam.

(5) **Oilwell Cement** : Oilwells are drilled to a depth of 1,000 to 5,000 metres or more. The ambient temperatures at such great depths are very high and ordinary cement grout (when used to cement the sides of the wells) will harden before it is pumped to those depths. Oilwell cement grout remains fluid for enough time under such conditions to allow placement. Once it is placed it develops full strength in a very short time and remains stable. The Shahabad factory of the ACC manufactures this type of cement.

(6) **Hydrophobic Cement** :—This type has an aversion for water and it can, therefore, be stored for comparatively long periods under humid conditions. It can also be transported, even when it is raining, without being spoiled. The protective water repellent coating is destroyed by the abrasion of the sand and aggregates when the cement is mixed with these in the presence of water. This type is now manufactured at Shahabad and Khalari factories of the A.C.C.

(7) **Pozzolana Portland Cement** : This type of cement has not so far been manufactured on a commercial scale in India. Messrs. Saurashtra Cement and Chemical Industries Ltd. have recently been licensed by the Government to manufacture this type to a rated capacity of 1.20 lakh tonnes per annum.

The controls on the distribution of asbestos cement sheet had been lifted with effect from June 1, 1966. The Central government has decided to implement on a "most urgent" basis the heavy vessel and plates project. The unit would be located at Visakhapatnam. The project would have a capacity of about 2.30 lakh tonnes per year, and will be implemented with Czech collaboration.

The production of asbestos cement sheets and pipes has doubled during the past four years. The annual production is of the order of 4.50 lakh tonnes and is to be increased to 7.50 lakh tonnes during the Fourth Plan. Actual production of these products during 1961, 1962, 1963, 1964 and 1965 were placed at 213.6, 234.0, 308.4, 316.0 and 420.8 million tonnes respectively.

The Union Government has set up a State-owned public limited company called the Cement Corporation of India with a view to bolstering up the development of the cement industry.

(For details see under "All India Corporations.")

There are already two State Governments viz., U.P. and Mysore who are in the field of cement manufacture. Large quantities of blast-furnace slag are lying unutilised in the steel plants in the public sector. About six to seven lakh tons of slag are produced per million tons of ingot steel and the expansion of public sector steel production from six million tons in 1966 to 13 million tons by 1971 is going to mean a very sizable slag by-product.

## DECONTROL &amp; PRICE

The most serious limiting factor for growth of the cement industry in the past has been the paucity of investment resources—internal and external. Low profitability of this industry, not only reduced the quantum of reinvestible surplus but also reduced the level of dividends, thus discouraging fresh inflow of capital. The decision of the government to decontrol the industry both in respect of price and distribution with effect from January 1, 1966 opens a new chapter in the history of the government policy to this industry. According to this, the industry will have its own agency for distribution. STC will be out of the picture. The Government's cement requirement will be reserved and there will be two sets of prices—one for the public sector and the other for private sector consumers.

The government granted an increase of Rs. 16 per tonne in the price to be charged to the public



and Rs. 10 per tonne in the price to be paid by the government. The f.o.r. destination price of cement for public was increased to Rs. 172.62 per tonne for April 1, 1966 as against Rs. 171.12 per tonne. The revision was necessitated by a revision in packing charges of cement and the railway freight increase under the railway budget in 1966-67.

### CACO

In the place of STC, the Cement manufacturers have set up a new organisation called "Cement Allocation And Co-ordinating Organisation" at Bombay with four regional offices at Bombay, Calcutta, Delhi and Madras. This organisation is now looking after the entire distribution of cement throughout the country and will meet the government demands as well as the public. The President and Vice-president of this organisation are Mr. G. D. Somani and Mr. Jitendra Kumar R. Birla respectively.

The government's requirements as at present of nearly 50 per cent of production will be supplied to the government departments—Central and State and about 10 per cent will be required for industries on the list of the development wing of the Ministry of Industry who are getting their allocation from the Ministry. Another ten

per cent will be earmarked for municipalities, housing boards, co-operative societies etc. The remaining balance of 30 per cent will be distributed to agriculturists, minor house repairs and new house constructions by the stockists directly.

Further under the agreement, the cement manufacturers have agreed that higher amounts available to them by price increase will not be utilised for increasing dividends for a period of one year, after which date, the matter will be reviewed. The additional resources are to be utilised mainly for expanding the capacity for production of cement.

### EXPANSION

The Third Plan contained large scale programmes for these projects which means that the demand for cement would rise markedly in the coming years. The aggregate requirements in the last year of the Third Plan, that is, 1965-66, were expected to be of the order of 13.50 million tons. The capacity target to be achieved by 1965-66 was 15.00 million tons.

The total new capacity expected to be commissioned during 1966-67 in the public and private sectors is 20.5 lakh tonnes through

installation of additional plants, two in public and eight in private sectors. The places where the new units or substantial expansions are being provided are Bargarh (Orissa) and Cherrapunji (Assam) both in the public sector, and Jamul, Porbander, Kymore, Madukkarai, Chittorgarh, Karur, Sikka, and Banjari all in the private sector. The Industrial Development Corporation of Orissa Ltd. is putting up a cement factory at Bargarh with an annual capacity of 3.96 lakh tonnes. Most of the plant and machinery have already been received and they are now being erected. The Rs. 260-lakh Assam Cement Factory at Cherrapunji in the United Khasi and Jaintia hills district will go into stream shortly. This factory was set with Yugoslav collaboration and will produce 250 tonnes of cement per day in the first stage. This is the first cement factory in the Assam State so far. A bigger one is being planned under the public sector in the United Mikir and North Cachar Hills district. The ACC of Bombay has taken upon itself the responsibility of setting up nearly 50 per cent of additional capacity for cement during the Fourth Plan period.

In 1965-66 India imported cement products worth Rs. 20.97 lakhs against Rs. 12.40 lakhs in 1964-65.

## HIDES, SKINS AND LEATHER

Indian hides and skins occupy a unique position in the international leather market. In the export trade of leather, India's share is larger than that of any other country in the world. This may be ascribed to the fact that India has a comparatively more developed tanning industry than other countries. It is estimated that India possesses about 82 millions of goats and 40.2 millions of sheep. India produces about 25 million pieces of raw hides. India produces about 41

million pieces of raw goat skins and 20.0 million pieces of raw sheep skins.

The bulk of the production is carried on in small towns and villages.

The tanning industry comprises four sections, viz., 1. organised tanneries producing finished vegetable tanned buffalo leather and chrome tanned upper leather; 2. tanneries producing vegetable tanned leather known to the trade as

E. I. kips and E. I. tanned skins; 3. small-scale chrome tanneries producing chrome tanned upper leather; and 4. village tanneries producing vegetable tanned cow and buffalo leather and vegetable tanned leather from goat and sheep skins.

There are altogether 50 units producing hides, skins and leather—chrome tanned hides (12), vegetable tanned buffalo and cow hides (32) and leather cloth (6).

The annual installed capacity and production of each of these items is as follows:

| Year       | Chrome Tanned Hides  |            | Vegetable Tanned Buffalo and Cow Hides |            | Leather Cloth             |            |
|------------|----------------------|------------|----------------------------------------|------------|---------------------------|------------|
|            | Capacity (Thousands) | Production | Capacity (Thousands)                   | Production | Capacity (Thousand yards) | Production |
| 1958 .. .. | 1,580.4              | 678.0      | 3,856.8                                | 2,067.6    | 8,700.0                   | 4,243.2    |
| 1959 .. .. | 1,580.4              | 650.4      | 4,422.0                                | 2,467.2    | 8,700.0                   | 5,420.4    |
| 1960 .. .. | 1,550.4              | 794.4      | 4,422.0                                | 2,691.6    | 8,262.0*                  | 5,846.4*   |
| 1961 .. .. | 1,550.4              | 786.0      | 4,422.0                                | 2,704.8    | 8,262.0*                  | 7,010.4*   |
| 1962 .. .. | 1,550.4              | 812.4      | 4,422.0                                | 3,015.6    | 8,262.0*                  | 6,658.8*   |
| 1963 .. .. | 1,580.4              | 1,086.0    | 4,678.8                                | 3,345.6    | 8,262.0*                  | 6,895.2*   |
| 1964 .. .. | 1,580.4              | 915.8      | 4,678.8                                | 3,344.4    | 8,262.0*                  | 8,990.4*   |
| 1965 .. .. | 1,580.4              | 868.6      | 4,678.8                                | 3,433.8    | 9,551.0*                  | 9,133.2*   |

\* Thousand Metres.

According to the Annual Survey of Industries 1962, the total productive capital in tanneries and leather finishing plants was about Rs. 4

crores and total employment came to 8,148. The gross ex-factory value of output was Rs. 14.12 crores.

The trend of the value of imports and export of hides and skins, furskins dressed and undressed and leather since 1960 is given below:

(Rs. lakhs)

|                         | Hides and skins (except furskins) undressed |         | Furskins undressed |         | Furs dressed or tanned and dyed |         | Leather |          | Manufactures of leather |         |
|-------------------------|---------------------------------------------|---------|--------------------|---------|---------------------------------|---------|---------|----------|-------------------------|---------|
|                         | Imports                                     | Exports | Imports            | Exports | Imports                         | Exports | Imports | Exports  | Imports                 | Exports |
| 1960 .. ..              | 255.8                                       | 1,013.3 | 2.4                | 52.4    | —                               | —       | 3.7     | 2,563.4  | 26.2                    | 13.3    |
| 1961 .. ..              | 218.7                                       | 808.5   | 0.2                | 48.3    | —                               | —       | 8.4     | 2,597.1  | 19.7                    | 11.9    |
| 1962 .. ..              | 248.3                                       | 1,003.2 | 0.8                | 35.9    | —                               | —       | 4.1     | 2,259.7  | 2.0                     | 15.3    |
| 1962-63 ..              | 276.3                                       | 1,094.4 | 0.7                | 16.8    | —                               | —       | 5.4     | 2,257.8  | 5.1                     | 17.4    |
| 1963-64 (April to Dec.) | 250.8                                       | 744.3   | 0.7                | 35.8    | —                               | —       | 2.4     | 1,947.8  | 0.8                     | 13.8    |
| 1964-65 ..              | 312.3                                       | 907.2   | 1.4                | 6.4     | —                               | —       | 5.5     | 2,723.0  | 1.9                     | 18.9    |
| 1965-66 ..              | 235.5                                       | 865.1*  | 1.8                | 26.5*   | 0.8                             | 1.0*    | 4.3     | 2,530.3* | 1.5                     | 20.9*   |

\* April to Feb.



The main problems about raw material relate to the supply of hides and skins and wattle bark. Supplies of hides have to be arranged from Pakistan. The indigenously available *Karada* bark is stated to be a potential substitute for wattle bark.

For the development of indigenous tanning industry and for increasing exports of tanned skins, the Government of India decided from June 15, 1959, to regulate export of raw goat skins on quota basis through established shippers.

India imports about 15,000 tons of wattle extract and bark per year. By the end of the Second Plan the total area under wattle cultivation had reached about 27,000 acres. During the Third Plan period more area had been extended under wattle plantations in the States of Madras, Kerala and Assam.

It is estimated that in the year 1966 of the Third Plan, the additional requirements of tanned hides and skins in the country will be 2.5 million pieces and 1.9 million pieces respectively, the demand in 1965-66 estimated at about 22 million hides and 30 million skins. To achieve this the industry will require following quantities of principal raw materials.

Raw hides 22 million pieces; Raw skins 30 million pieces; Lime 30,000—35,000 tons; Wattle bark and Wattle extract 35,000 tons; Other barks 35,000 tons; Myrobalans 30,000—35,000 tons.

A number of schemes had been launched by the Centre and States for the development of the tanning and leather industries during the Second Five-Year Plan and in the Third Five-Year Plan. Some more centres have been opened for hide flaying, curing, and carcass utilisation. Some of these provided for setting up production-cum-training centres, re-tanning and finishing centres, organization of Co-operative societies of tanners and leather workers. A beginning has been made by the Co-operative Mutual Insurance Company, Bombay, to insure milch animals and draught cattle in the States of Maharashtra and Gujarat. A Development Council for Leather, Leather Goods and Pickers industries was constituted in January 1960.

### FOOTWEAR INDUSTRY

The larger units manufacturing leather and leather goods employ about 10,000 persons and the total investment is more than Rs. 10 crores. The small-scale industry employs about 7,63,000 persons.

The principal use of leather is for the production of footwear. The leading towns manu-

facturing footwear are Agra, Kanpur, Bombay and Calcutta.

At the end of the Second Five Year Plan period, there were 12 units with an annual capacity of seven million pairs of Western type of footwear.

The Statewise distribution of these units and their annual installed capacity is indicated below :

| State                | Number of units | Annual capacity ('000 pairs) |
|----------------------|-----------------|------------------------------|
| Uttar Pradesh .. ..  | 5               | 2,127                        |
| West Bengal .. ..    | 1               | 4,524                        |
| Bihar .. ..          | 1               | •                            |
| Maharashtra .. ..    | 1               | 300                          |
| Madhya Pradesh .. .. | 1               | 36                           |
| Madras .. ..         | 1               | 15                           |
| Punjab .. ..         | 1               | 8.4                          |
| Mysore .. ..         | 1               | 1.2                          |
| <b>TOTAL .. ..</b>   | <b>12</b>       | <b>7,011.6</b>               |

The capacity for the Indian type of footwear which are hand-made fluctuates with demand and data are not available for Statewise figures.

The output by the large-scale factories of all types of footwear made of leather since 1961 is shown as follows :

|            | Western type (Million pairs) | Indigenous type (Million pairs) |
|------------|------------------------------|---------------------------------|
| 1961 .. .. | 6.22                         | 4.41                            |
| 1962 .. .. | 6.51                         | 5.29                            |
| 1963 .. .. | 8.29                         | 5.19                            |
| 1964 .. .. | 7.88                         | 6.15                            |
| 1965 .. .. | 9.04                         | 6.91                            |

Reliable production statistics for small and cottage units which are responsible for manufacturing over 90 per cent of the total output are not available.

In view of the increased production and requirements, it was estimated, that, by 1965-66, more than 150 million pairs of footwear would be required.

Our import of leather footwear is insignificant. Our exports on the other hand are sizable as is shown below :

|              | Quantity ('000 pairs) | Value (Rs. lakhs) |
|--------------|-----------------------|-------------------|
| 1960 .. ..   | 1,447                 | 217               |
| 1961 .. ..   | 1,090                 | 150               |
| 1962 .. ..   | 1,738                 | 168               |
| 1963-64.. .. | 3,935                 | 264               |
| 1964-65.. .. | 1,780                 | 205               |

In 1964-65 India exported leather footwear valued at Rs. 2.1 crores. The total export including all kinds i.e. rubber, leather and of textile material amounted to Rs. 4.3 crores, during 1964-65. The export of all kinds of footwear during 1965-66 (April—Feb.) amounted to Rs. 4.29 crores.

Although the budget of 1965-66 removed an excise duty of 10 per cent *ad valorem* on the footwear industry, the imposition of a 10 per cent duty on hides and skins industry will affect both industries, in its exports.

### ESTIMATED REQUIREMENTS

In view of the fact that the leather footwear industry can be organised on a labour intensive basis and a substantial expansion in employment opportunities, an all time target has been set for the Fourth Plan. The production of footwear in 1960-61 was of the order of 102.0 million pairs. That in 1965-66 was expected to exceed 150.0 million pairs. In view of this growth, the production target for leather footwear for the Fourth Plan has been tentatively fixed at 200 million pairs including, between 10 to 12 million pairs for export, which means an increase of 43 per cent over the Third Plan target of 140 million pairs, which can be readily seen from the following table showing the target that was set for the Third Plan :

|                                            | Production 1960-61 | 1965-66 |
|--------------------------------------------|--------------------|---------|
| Tanned hides and skins (million pieces) .. | 47.6               | 52.0    |
| Leather footwear (million pairs) .. ..     | 102.0              | 140.0   |

\*Although equipped to manufacture Western type footwear, this factory is at present manufacturing Indian type only.

## MISCELLANEOUS INDUSTRIES

**Diesel Engines :** At the end of the Second Plan there were 23 units engaged in the manufacture of diesel engines with a licensed capacity of 47,680 engines per annum. Towards the end of 1965 there were 29 units in production of

stationary type of diesel engines and 2 units for vehicular types. The position of diesel engine manufacturing industry from 1962 onwards is shown below :

| Year       | Diesel Engines (Vehicular Types) |            | Diesel Engines (Stationary Types) |            |
|------------|----------------------------------|------------|-----------------------------------|------------|
|            | Installed capacity               | Production | Installed capacity                | Production |
| 1962 .. .. | 9,000                            | 8,364      | 41,292                            | 42,648     |
| 1963 .. .. | 9,000                            | 8,832      | 43,692                            | 55,692     |
| 1964 .. .. | 9,000                            | 8,208      | 70,164                            | 69,172     |
| 1965 .. .. | 9,000                            | 8,821      | 70,230                            | 82,242     |

Estimated capacity and production of diesel engines.

| Year          | Capacity | Production |
|---------------|----------|------------|
| 1960-61 .. .. | 48       | 43         |
| 1965-66 .. .. | 72       | 66         |
| 1970-71 .. .. | 140      | 110        |
| 1975-76 .. .. | 150      | 140        |

Against the Third Plan target of 72,000 engines in capacity and 66,000 engines in production by 1965-66, the actual capacity and production in 1965-66 stood at 1,00,000 and 85,000 respectively, thus exceeding the targets of capacity and production by 38.8 per cent and 28.8 per cent respectively. The Fourth Plan targets are placed at an annual capacity of 2,00,000 and an equal production.



The exports of all types of diesel engines amounted Rs. 114.5 lakhs in 1965-66, compared to Rs. 111.0 lakhs in 1964-65 and Rs. 59 lakhs in 1963-64.

**Machine Tools:** The number of units licensed for the manufacture of machine tools in the country at the beginning of August, 1966 were 65. The target for the Machine Tool Industry at the end of the Third Plan (1965-66) was set at Rs. 30 crores. The actual output of the industry is estimated at only Rs. 25.1 crores. The Ministry of Industry places the estimated figure of the total requirements of machine tools

during the Fourth Plan period at Rs. 449 crores. In order to meet an estimated demand of Rs. 120 crores in 1970-71 the Fourth Plan capacity target is proposed to be fixed at Rs. 131 crores for 1970-71 which is expected to yield an actual output of about Rs. 119 crores. The average annual growth rate during the Third Plan period is estimated to be not greater than 7 per cent against the target of 11 per cent.

In spite of the increase in indigenous production the imports of machine tools show an up trend which is evident from the table below:

#### Production and Imports of Machine Tools

| Year            | Value of imports<br>Rs. crores | Indigenous production of<br>graded machine tools |                     | Percentage of<br>indigenous<br>production to<br>imports |
|-----------------|--------------------------------|--------------------------------------------------|---------------------|---------------------------------------------------------|
|                 |                                | No.                                              | Value<br>Rs. crores |                                                         |
| 1960            | 20.94                          | 5,980                                            | 5.86                | 28.0                                                    |
| 1961            | 24.22                          | 6,785                                            | 7.33                | 30.3                                                    |
| 1962            | 26.05                          | 8,768                                            | 10.40               | 39.9                                                    |
| 1963            | 31.51                          | 11,640                                           | 15.37               | 48.8                                                    |
| 1964            | 46.55                          | N.A.                                             | 23.34               | 50.1                                                    |
| 1965 (1st half) | 22.14                          | N.A.                                             | 14.16               | 64.0                                                    |

India has made a good start in exporting machine tools. In 11 months of 1965 India exported hand machine tools valued at \$128,000. The annual export value in Rs. lakhs of Indian machine tools has been as follows in the recent past: 1962: 10.65; 1963: 9.90; 1964: 12.30.

In this industry public sector plays a prominent role. About 50 per cent of the output of machine tools in India comes from the State-owned Hindustan Machine Tools.

**Bicycles:** In 1960-61 India had a capacity to manufacture 11,20,000 bicycles per year and the production during this period was 10,50,000 bicycles. The Third Plan aimed at achieving a capacity of 22,00,000 bicycles per year during 1965-66 and a production of 16,00,000 bicycles. The Fourth Plan envisages an annual capacity of

35,00,000 bicycles by the end of 1970-71 and an annual production of 33,00,000 bicycles.

In December 1965 there were 20 units in the organised sector to manufacture complete bicycles.

The installed capacity and production during the last five years are given below:

|      |                       |            | (Numbers) |  |
|------|-----------------------|------------|-----------|--|
| Year | Installed<br>capacity | Production |           |  |
| 1961 | 12,17,496             | 10,48,944  |           |  |
| 1962 | 14,43,996             | 11,14,916  |           |  |
| 1963 | 14,43,996             | 11,84,364  |           |  |
| 1964 | 16,78,992             | 14,07,624  |           |  |
| 1965 | 16,78,992             | 15,23,419  |           |  |

#### PRODUCTION DATA

|      |    |    |    |    |    |    |    |    |    | (Numbers)                                    |            |                               |            |                                        |            |
|------|----|----|----|----|----|----|----|----|----|----------------------------------------------|------------|-------------------------------|------------|----------------------------------------|------------|
| Year |    |    |    |    |    |    |    |    |    | Looms (Calico, semi-automatic and automatic) |            | Complete Ring Spinning Frames |            | Carding Engines (Revolving flat cards) |            |
|      |    |    |    |    |    |    |    |    |    | Capacity                                     | Production | Capacity                      | Production | Capacity                               | Production |
| 1961 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 10,560                                       | 7,596      | 2,040                         | 1,404      | 2,640                                  | 1,320      |
| 1962 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 10,560                                       | 5,856      | 2,040                         | 1,572      | 2,400                                  | 1,500      |
| 1963 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 10,560                                       | 4,372      | 2,040                         | 1,980      | 2,400                                  | 1,596      |
| 1964 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 13,224                                       | 4,272      | 3,756                         | 2,136      | 3,756                                  | 1,944      |
| 1965 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 11,752                                       | 3,176      | 2,545                         | 2,290      | 1,695                                  | 1,808      |

The number of units in December 1965 producing these varieties were as follows:

(1) Looms: 16 units; (2) Complete Ring Spinning Frames: 9 units; and (3) Carding engines: 5 Units.

Indigenous production of high speed carding engines and super high speed drawing frames was expected to commence during 1966.

**Sewing Machines:** At the end of 1965 there were eight units manufacturing sewing machines with an annual capacity of 441,996 machines. Production in 1965 amounted to 425,032 machines compared with 255,324 in 1964, an increase in production of 66 per cent over 1964.

#### Production and Capacity of Sewing Machine Industry, 1961-65

| Year  | Capacity | Production |
|-------|----------|------------|
| 1961* | 1,33,704 | 3,07,404   |
| 1962  | 3,36,996 | 3,42,972   |
| 1963  | 3,82,792 | 3,45,900   |
| 1964  | 4,44,996 | 2,55,324   |
| 1965  | 4,41,996 | 4,25,032   |

\* The actual production for 1961 was much in

excess of the installed capacity because, while the installed capacity was calculated for a single shift working, one of the units was working more than one shift.

#### Estimated Capacity and Production

|         |          |            | ('000 Nos.) |  |
|---------|----------|------------|-------------|--|
| Year    | Capacity | Production |             |  |
| 1960-61 | 267      | 297        |             |  |
| 1965-66 | 600      | 600        |             |  |
| 1970-71 | 1,200    | 1,100      |             |  |
| 1975-76 | 2,000    | 1,800      |             |  |

The industry can practically meet all internal requirements. It is one industry where all the components are indigenously produced.

A standing Liaison Committee has been formed by the Development Council for the bicycle industry to assist export promotion.

Provision has been made to enable manufacturers of bicycles to obtain a 133 per cent replacement quota of iron and steel used in producing the bicycles exported.

Indian cycles have been successfully introduced, on a commercial scale in some foreign countries.

The value of bicycles exported during the last four years has been given below:

| Year                     | 1962-63 | 1963-64 | 1964-65 | 1965-66 |
|--------------------------|---------|---------|---------|---------|
| Value in lakhs of rupees | 10.2    | 51.2    | 30.9    | 43.1    |

The principal importing countries were Kenya, Morocco, Nigeria, Tanzania, Afghanistan, Iran, Malaysia and Iraq.

Apart from bicycles, an overseas market on a small-scale has also been built up for Indian tricycles.

An "Export Pool Scheme" has been introduced to facilitate sales abroad at a price lower than the domestic price. The Scheme is being operated by the Cycle Manufacturers' Association of India.

**Textile Machinery:** At present the industry has a capacity to manufacture machinery worth Rs. 40.0 crores per annum against the Third Plan target of Rs. 22.0 crores in 1965-66. The actual production figure of Rs. 28.0 crores also stands higher than the target. The increase in production in 1965-66 over that in 1960-61 works out at 169.2 per cent. The target of Fourth Plan is to achieve a capacity of Rs. 60.0 crores, thus aiming at raising the present production level by 96.4 per cent.

During 1965-66 the industry exported machines worth Rs. 22.4 lakhs besides machinery parts worth Rs. 6.2 lakhs. The corresponding figures for 1964-65 were Rs. 36.16 lakhs and 5.32 lakhs respectively.

The countries to which Indian sewing machines were exported include British Guiana, Afghanistan, Thailand, Ceylon, Malaysia, Singapore, U.S.A., U.K., Germany, France, Kenya, Jordan, Madagascar, Tanzania, Sudan, Pakistan, Uganda, Iraq, Sierra Leone, Rhodesia, Saudi Arabia, Zanzibar, Mauritius, Burma, Nepal and Viet Nam.

**Electric Fans:** From a modest beginning in 1930 the fan industry made rapid progress in the decade after the war. The production in 1965 was 54.2 per cent higher than that in 1958.



## PRODUCTION OF ELECTRIC FANS IN INDIA

| Year         | 1958 | 1959 | 1960 | 1961  | 1962    | 1963    | 1964    | 1965  |
|--------------|------|------|------|-------|---------|---------|---------|-------|
| Nos. ('000s) | 636  | 726  | 999  | 1,074 | 1,141.2 | 1,143.6 | 1,142.4 | 1,390 |

There are 28 units in this industry which employ over 8,000 workers and produces goods worth about Rs. 17 crores. The exports went up from Rs. 25 lakhs in 1958 to Rs. 114 lakhs in 1965, recording a rise of 356 per cent.

## EXPORT OF ELECTRIC FANS FROM INDIA

| Year                 | 1958 | 1959 | 1960 | 1961 | 1962 | 1963 | 1964 | 1965 |
|----------------------|------|------|------|------|------|------|------|------|
| Value (Rs. in lakhs) | 25   | 38   | 85   | 78   | 81   | 89   | 68   | 114  |

Today the fan industry has a capacity to exceed the Third Plan target of 2.5 million fans per annum. The industry has now introduced several new manufacturing techniques; super-synthetic winding wires have replaced silk and cotton covered wires, reducing the slot area and the overall size of the fans.

By 1970-71, it is expected that the industry will have a capacity to produce 35 lakh fans

per year.

**Electric Motors:** At the end of the Second Five Year Plan there were 27 units engaged in the manufacture of electric motors with an annual capacity of 11,29,040 h.p. The Third Plan proposed to raise the capacity to 3.0 million h.p. on double shift basis, in order to achieve the production level of 2.5 million h.p. by 1965-66.

## Estimates of Production and Capacity

(in thousand kW)

|            | Below 150 kW |            | Above 150 kW |            |
|------------|--------------|------------|--------------|------------|
|            | Capacity     | Production | Capacity     | Production |
| 1960-61 .. | 840          | 540        | —            | —          |
| 1965-66 .. | 2,240        | 1,865      | 250          | 200        |
| 1970-71 .. | 3,000        | 6,000      | 2,000        | 1,500      |
| 1975-76 .. | 12,000       | 10,000     | 3,000        | 2,500      |

In the public sector, two heavy electrical projects have been undertaken, one in Hyderabad with Czechoslovak collaboration and the other in Uttar Pradesh with Russian collaboration. These projects are intended to manufacture A.C. industrial motors of 200 h.p. and above.

Both the capacity and production of electric motors have for obvious reasons showed a marked increase.

| Year               | Capacity h.p. | Production h.p. |
|--------------------|---------------|-----------------|
| 1961 ..            | 6,02,400      | 8,29,200        |
| 1962 ..            | 11,36,400     | 9,86,400        |
| 1963 ..            | 11,36,400     | 11,82,000       |
| 1964 ..            | 11,36,400     | 13,17,600       |
| 1965 (Jan.-May) .. | 5,63,500      | 6,86,300        |

**Electric Cables and Wires:** The electric cable and wire industry made a rapid progress during the Plan period. The general index and the index for electric cable and wire with 1956 as base were respectively 73.5 and 31.4 in 1961. While the former index rose only to 174.7, the latter one rose to 320.5 in 1964.

The country is more or less self-reliant in most types of electric wires. The following table gives the no. of units, installed capacity and production of some major items in 1964 and 1965.

| Item                                             | Accounting unit | 1964         |                    |                   | 1965         |                    |                      | Percentage of estimated production to capacity in 1965 |
|--------------------------------------------------|-----------------|--------------|--------------------|-------------------|--------------|--------------------|----------------------|--------------------------------------------------------|
|                                                  |                 | No. of units | Installed capacity | Actual production | No. of units | Installed capacity | Estimated production |                                                        |
| (1) Cables and Wires (VIR and PVC cables) ..     | Kilometres      | 26           | 3,02,160           | 3,37,789          | 31           | 6,53,796           | 4,10,000             | 62.7                                                   |
| (2) A.C.S.R. and All Aluminium Conductors ..     | Tonnes          | 17           | 61,300             | 46,459            | 20           | 73,457             | 45,000               | 61.3                                                   |
| (3) Winding Wires                                |                 |              |                    |                   |              |                    |                      |                                                        |
| (a) Enamelled Wires ..                           | "               | 14           | 7,550              | 8,948             | 16           | 8,925              | 10,500               | 117.6                                                  |
| (b) Paper and Cotton covered wires and strips .. | "               | —            | 3,753              | —                 | —            | 4,439              | —                    | —                                                      |
| (4) Paper insulated power cables ..              | Kilometres      | 5            | 3,960              | 2,638             | 5            | 6,376              | 4,650                | 72.9                                                   |

**Electric Lamps:** There are about 18 units in the organised sector with an installed annual capacity of 58.8 million nos. of G.L.S. lamps, four units for fluorescent tubes with an annual capacity of 4.5 million tubes and 10 units in the miniature lamps industry with a capacity of 28.8 million nos. per annum. The Third Plan aimed at achieving a capacity of 76 million nos. a year in 1965-66 in G.L.S. and other lamps against the actual achievement of 70 million nos. a year. The Fourth Plan target for the same is placed at 185 million nos. a year in 1970-71. The Third Plan target was, that the industry should have a capacity to manufacture seven million fluorescent lamps per year against the actual achievement of 4.5 million lamps. The Fourth Plan aims at raising this capacity to 20 million lamps a year in 1970-71.

Production of incandescent filament electric lamps in million nos. was, 1960: 41.4; 1961: 46.9; 1962: 58.5; 1963: 70.3; 1964: 70.1; 1965: 71.3.

## Exports of Electric Lamps from India

| Year                                              | 1962 | 1963 | 1964 | 1965 |
|---------------------------------------------------|------|------|------|------|
| G.L.S. and other lamps in lakhs of Rs. ..         | 3.99 | 5.38 | 1.93 | 1.14 |
| Fluorescent tubes and fittings in lakhs of Rs. .. | 4.80 | 4.05 | 7.54 | 5.24 |

**Electric Transformers:** There were 20 units with an annual rated capacity of 21,37,000 K.V.A. at the end of 1965, against the Third Plan target of 4.0 million K.V.A. During 1964 the capacity was 19,99,200 K.V.A. while production was 33,08,400 K.V.A. The Fourth Plan aims at achieving a capacity of 5.5 million K.V.

in electric transformers of 33 K.V. and below and an actual production of 5.0 million K.V.

## PRODUCTION OF ELECTRIC TRANSFORMERS

| Year                            | 1961 | 1962 | 1963 | 1964 | 1965 |
|---------------------------------|------|------|------|------|------|
| Production in million K.V.A. .. | 1.8  | 2.3  | 2.6  | 3.3  | 4.3  |

During the financial year 1965-66 India exported electric transformers worth Rs. 76,000 and parts and accessories worth Rs. 3,000. During the same period India imported electric transformers worth Rs. 64.8 millions and parts and accessories worth Rs. 25.4 millions.

**Soap:** The organised sector contains some 61 units with an installed capacity of 2,36,662



metric tonnes per annum, though all of these are not in actual production, while the cottage sector contains over 3,000 units, scattered throughout the country. There is a concentration of these small factories in those areas where oil-seeds are available in plenty. For example, the Punjab, U.P. and Gujarat have each an annual production of over 40,000 tons of soap while Andhra State produces just 8,000 to 10,000 tons a year. The following table gives the production in lakh m. tonnes in the organised sector from the year 1961: 1961: 1.5; 1962: 1.5; 1963: 1.6; 1964: 1.7; 1965: 1.6.

With total soap production in 1958 at about 3,90,000 tonnes the amount of oil consumed was about 1,90,000 tons. Among oils groundnut oil, coconut oil and palm oil are the most important. Enough groundnut oil is produced in India to meet the demand; but it is necessary to import palm oil and some part of coconut oil (which is of course used for many other products besides soap). It is estimated that the tonnage of oil required for soap alone will grow by 40 per cent every five years and that after twenty years the total annual requirements of oil and fat for all products will have to be increased from about 1.8 million tons to 6.3 million tons.

The item-wise data on the exports of soap from India are shown in the table below:

| (in Rs. lakhs).                |         |         |                   |
|--------------------------------|---------|---------|-------------------|
| Item                           | 1963-64 | 1964-65 | 1965<br>Apr.-Dec. |
| Household and Laundry Soaps .. | 14.5    | 10.4    | 10.6              |
| Toilet Soaps ..                | 24.9    | 26.2    | 14.2              |
| Medicated Soaps ..             | 1.1     | 1.1     | 1.2               |
| Shaving Soaps and others ..    | 0.2     | 0.7     | 5.2               |
| Synthetic Detergents ..        | —       | —       | 7.4               |
| Total ..                       | 40.7    | 38.4    | 38.6              |

From the table it is clear that while toilet soaps had the greatest share (67 per cent) in the total exports in 1964-65 this group has evinced a downward trend during the year 1965-66. The fall in the exports of household and laundry soaps is attributable to the sudden drop in the intake by Afghanistan and Malaysia.

With the establishment of soap industry units in developing countries, exports of soaps are facing stiff competition abroad.

**Agricultural Tractors:** The production of agricultural tractors during 1965 was 6,318 against 3,172 during 1964, — an increase of over 90 per cent. In view of the high priority attached to increased agricultural production, it was planned to step up production of agricultural tractors to 11,000 during 1966.

In order to meet the demand for tractors in the lower range (below 20 h.p.), for which adequate capacity has not yet been developed, Government decided to establish a public sector project for the manufacture of tractors in this range. For this purpose, an agreement for the preparation of a Detailed Project Report for the manufacture of 20 H.P. tractor was signed during the year.

The production of steel discs — an important component of tractor driven implements — commenced for the first time in the country during 1965.

The Fourth Plan envisages to achieve a capacity of 40,000 tractors per annum and a production of 35,000 tractors per annum in 1970-71. This amounts to an increase of 525 per cent over that in 1965-66.

## NON-FERROUS INDUSTRY\*

(See also under 'Mines and Minerals'.)

### COPPER

**THOUGH** there are many copper fields in India, extraction of copper ores is at present confined to only one area viz. Mosabani area in the Singhbhum district, Bihar, which is operated by Messrs. Indian Copper Corporation. Copper pyrites is the principal ore of copper and it is a double sulphide of copper and iron. More and more deposits of copper are being located and important among such areas are: Almora and Garhwal in U.P., Singhbhum and Baragunda in Bihar; Khetri and Daribo in Rajasthan; Sikkim; Manipur; NEFA; and Jammu and Kashmir. Detailed work in the Khetri-Daribo area of Rajasthan and Rangpo area of Sikkim has established substantial workable reserves of copper ore — about 28 million tons with an average copper content of 0.8 per cent metal in Khetri and about 0.35 million tons averaging about 6.24 per cent of combined copper lead and zinc in Rangpo. The deposits in Daribo are found to be rich in copper content but the extent of the reserves is yet to be fully proved.

The Khetri copper project in the public sector is now estimated to cost Rs. 80 crores with the addition of fertiliser plant and gold and silver refinery. The foreign exchange component of the project, according to pre-devaluation rates, is about Rs. nine crores. French credit has been obtained for the project.

The project expected to be completed by the end of 1966, would produce 21,000 tonnes of electrolytic copper. It also envisages production of 600 tons of sulphuric acid per day and production of triple superphosphate by using sulphuric acid and 16,000 ounces of gold and 64,000 ounces of silver per year. With the setting up of copper smelter, the country would be able to save foreign exchange worth Rs. 10 to 11 crores.

Indian units process only fire-refined copper. Electrolytic copper is produced in India only to a small extent. Domestic production meets only a small part of the country's requirements of this metal. A large tonnages of copper, copper alloys and other manufactures have to be imported.

Per capita consumption figures in lb. for refined copper for India and some of the developed countries are given below:

U.S.A. 18.8; U.K. 25.7; Japan 10.4; India 0.34.

A scheme for developing the copper mines in Andhra Pradesh with American collaboration is being worked out. This will be the third mine

proposed to be developed during the Fourth Plan. Work on the Khetri project has already been taken in hand with French collaboration. Negotiations are expected to commence shortly with the Soviet Union for collaboration arrangements to develop the Rakha mines in Bihar.

Installed capacity and production of copper and allied products:

(metric tons)

| Year    | Virgin Metal       |            | Pipes and Tubes    |            | Sheets and Circles |            |
|---------|--------------------|------------|--------------------|------------|--------------------|------------|
|         | Installed capacity | Production | Installed capacity | Production | Installed capacity | Production |
| 1961 .. | 7,320.0            | 8,745.6    | 4,020.0            | 348.0      | 54,000             | 4,308      |
| 1962 .. | 9,000.0            | 9,781.2    | 4,020.0            | 303.6      | 54,000             | 3,523      |
| 1963 .. | 9,960.0            | 9,592.8    | 4,920.0            | 598.8      | 48,000             | 3,168      |
| 1964 .. | 9,960.0            | 9,454.8    | 4,920.0            | 619.2      | 54,000             | 2,064      |
| 1965 .. | 9,960.9            | 9,380.2    | 4,920.0            | 589.8      | 54,000             | 1,626      |

Import of Copper and Copper Alloys

| Year       | Copper and alloys refined or unwrought |                   | Copper and alloys worked |                   | Total                |                   |
|------------|----------------------------------------|-------------------|--------------------------|-------------------|----------------------|-------------------|
|            | Quantity (lakh kgs.)                   | Value (Rs. lakhs) | Quantity (lakh kgs.)     | Value (Rs. lakhs) | Quantity (lakh kgs.) | Value (Rs. lakhs) |
| 1961-62 .. | 650.86                                 | 2,030.58          | 61.63                    | 296.40            | 712.49               | 2,326.98          |
| 1962-63 .. | 697.40                                 | 2,223.24          | 55.23                    | 300.67            | 752.63               | 2,523.91          |
| 1963-64 .. | 694.18                                 | 2,381.44          | 50.37                    | 222.70            | 744.55               | 2,604.23          |
| 1964-65 .. | 527.15                                 | 2,106.11          | 56.46                    | 334.95            | 583.61               | 2,441.10          |
| 1965-66 .. | 433.6                                  | 2,376.8           | 151.1                    | 955.5             | 584.7                | 3,332.3           |

It was anticipated that the Indian Copper Corporation would increase its production to 11,000 tonnes by 1966.

The Development Council for non-ferrous metals had estimated the demand for copper by 1965-66 at 170,000 tons per year, without taking into account the substitution possibilities by aluminium. Estimating these possibilities as equivalent to about 20,000 tons of copper, the Council estimated the demand for copper inclusive of the copper element of brass in 1965-66 as follows (Figures in tons):

Commercial copper sheets and circles (hot

rolled) 4,000; Copper sheet (cold rolled) 1,500 Industrial copper strips (cold rolled) in cut length and coils 2,500; Electrolytic copper wire rods for cables, wires and strips 75,000; Copper rods and sections (extruded) 2,000; Copper pipes and tubes (extruded) 2,500; Total 87,500. Commercial brass sheets/circles (hot rolled) 35,000; Brass sheets (cold rolled) 4,000; Industrial brass strips in cut lengths or coils (cold rolled) 8,000; Brass rods and sections (extruded) 10,000; Brass pipes and tubes (extruded) 6,000; Brass/copper wires (non-electrical) 3,500; Copper base alloys and castings 80,000; Total 96,500; Copper equivalent 62,700. Total 1,50,200.

\* Protection to non-ferrous industries has been withdrawn from Dec. 31, 1965.



**Import Duty.**—The Government of India has announced the imposition of 27·5 per cent post-devaluation import duty on copper. Excise duty on copper sheets and circles, etc. has been put at Rs. 1,500 per tonne.

**LEAD**  
Lead ores are known to occur at a number of places in India. The only large deposits now being worked are those of Zawar which is about 17 miles from Udaipur city, where lead is found

in association with zinc. These mines are worked by Metal Corporation of India.

The present mining capacity is 500 tons run-off mine ore per day.

#### Production Figures of Metal Corporation

| Year    | Ore raised   | Ore dressed in Mill | Lead Concentrates | Zinc Concentrates | Lead Ingots |
|---------|--------------|---------------------|-------------------|-------------------|-------------|
| 1961-62 | 146,949 M.T. | 147,402 M.T.        | 5,216 M.T.        | 8,860 M.T.        | 3,177 M.T.  |
| 1962-63 | 157,869 M.T. | 158,813 M.T.        | 7,358 M.T.        | 11,031 M.T.       | 3,771 kg.   |
| 1963-64 | 153,869 M.T. | 152,590 M.T.        | 5,147 M.T.        | 9,900 M.T.        | 3,754 kg.   |
| 1964-65 | 162,550 M.T. | 159,635 M.T.        | 6,296 M.T.        | 10,880 M.T.       | 6,055 kg.   |

The outlook for the lead industry has considerably improved in the last few years. The current annual production of lead from the only smelter of Messrs. Metal Corporation of India at Tundoo, Bihar, is of the order of 4,000 tons against the installed capacity of 6,000 tons per annum.

Installed capacity and production :

(Metric tons)

| Year | Virgin Metal       |            | Lead Pipes and Tubes |            | Lead Sheets        |            |
|------|--------------------|------------|----------------------|------------|--------------------|------------|
|      | Installed capacity | Production | Installed capacity   | Production | Installed capacity | Production |
| 1961 | 6,096·0            | 3,664·8    | 4,872·0              | 534·0      | 2,316              | 504        |
| 1962 | 6,096·0            | 2,848·8    | 4,872·0              | 752·4      | 2,316              | 720        |
| 1963 | 6,096·0            | 3,536·4    | 4,800·0              | 639·6      | 3,000              | 720        |
| 1964 | 6,096·0            | 3,624·0    | 4,800·0              | 584·8      | 3,000              | 696        |
| 1965 | 6,096·0            | 2,917·0    | 4,800·0              | 485·0      | 3,000              | 300        |

Import of lead :

| Year    | Lead and alloys unwrought |                   | Lead and alloys worked |                   | Total                |                   |
|---------|---------------------------|-------------------|------------------------|-------------------|----------------------|-------------------|
|         | Quantity (lakh kgs.)      | Value (Rs. lakhs) | Quantity (lakh kgs.)   | Value (Rs. lakhs) | Quantity (lakh kgs.) | Value (Rs. lakhs) |
| 1961-62 | 285·15                    | 252·06            | 3·60                   | 6·83              | 288·75               | 258·89            |
| 1962-63 | 339·70                    | 266·55            | 0·97                   | 2·18              | 340·67               | 268·73            |
| 1963-64 | 370·52                    | 333·18            | 1·69                   | 2·08              | 372·21               | 335·26            |
| 1964-65 | 337·79                    | 457·01            | 3·22                   | 4·87              | 341·01               | 461·88            |
| 1965-66 | 347·00                    | 562·80            | 5·07                   | 9·85              | 352·07               | 572·65            |

**Third Plan :** The demand for lead was expected to rise to 60,000 to 65,000 tons by 1965-66, with the break-up as given below: Non-ferrous and alloys 12,000; Electric industries 30,000 to 35,000; Chemicals (Paints) 12,500; Heavy mechanical engineering and light mechanical engineering 2,500; Small-scale industries 2,000; Miscellaneous 1,000; Total 60,000 to 65,000.

#### ANTIMONY

Antimony ore deposits are situated at the Shigree Glacier in Lahaul, Kangra district, Punjab and in the region of Nagpur in Maharashtra State. For antimony, there is only one smelter at Bombay, working on imported ores with a capacity of 1,000 tons.

Statistics regarding installed capacity and production in tonnes during the period 1956 to

1965 are shown below: 1956 : 710·4 ; 599·8 ; 1957 : 710·4 ; 510·0 ; 1958 : 710·4 ; 535·2 ; 1959 : 710·4 ; 674·4 ; 1960 : 912·0 ; 810·0 ; 1961 : 912·0 ; 620·4 ; 1962 : 900·0 ; 661·2 ; 1963 : 900 ; 909·6 ; 1964 : 912·0 ; 840·0 ; 1965 : 912·0 ; 848·0.

#### ZINC

Deposits of zinc, at present, are known to occur at only two places in India in Zawar Mines in Udaipur and in Riasin District in Kashmir State. Due to the nonavailability of smelting facilities, the Metal Corporation of India is exporting about 7,000 to 8,000 tons of zinc concentrates every year to Japan for smelting on a toll basis. The Metal Corporation has established an electrolytic Zinc Refinery near Udaipur—the construction of which is complete.

This has been projected to produce 18,000 tonnes of zinc, 28,000 tonnes of sulphuric acid, 75 tonnes of Cadmium, 11,000 tonnes of virgin piglead and 540,000 ozs. of silver. Comneco-Finani is establishing a Zinc Refinery at Alwaye which is to produce 12,000 tonnes of metallic zinc.

The Development Council for Non-ferrous Metals estimated the requirements of zinc to increase upto 185,000 tons by 1965-66.

Installed capacity and production of zinc sheets and strips in metric tons during 1956 to 1965 are as follows: 1956 : 3,754·8 ; 92·4 ; 1957 : 5,925·6 ; 956·4 ; 1958 : 5,925·6 ; 2,113·2 ; 1959 : 5,925·6 ; 2,876·4 ; 1960 : 4,800·0 ; 3,270·0 ; 1961 : 4,800·0 ; 3,774·0 ; 1962 : 4,800·0 ; 3,525·6 ; 1963 : 4,800·0 ; 3,882·0 ; 1964 : 4,800·0 ; 4,647·6 ; 1965 : 4,800·0 ; 4,404·6.

#### Imports

| Year    | Zinc and zinc alloys unwrought |                   | Zinc alloys worked   |                   | Total                |                   |
|---------|--------------------------------|-------------------|----------------------|-------------------|----------------------|-------------------|
|         | Quantity (lakh kgs.)           | Value (Rs. lakhs) | Quantity (lakh kgs.) | Value (Rs. lakhs) | Quantity (lakh kgs.) | Value (Rs. lakhs) |
| 1961-62 | 669·2                          | 722·9             | 9·8                  | 16·2              | 679·0                | 739·1             |
| 1962-63 | 875·4                          | 885·1             | 13·1                 | 17·0              | 888·5                | 902·1             |
| 1963-64 | 842·1                          | 967·9             | 11·6                 | 17·6              | 853·7                | 985·5             |
| 1964-65 | 700·6                          | 1,106·3           | 11·3                 | 22·7              | 711·8                | 1,129·0           |
| 1965-66 | 767·0                          | 1,226·5           | 35·1                 | 57·2              | 802·1                | 1,283·7           |



## TIN

Tin ores are in Hazaribagh, Ranchi and Gaya districts of Bihar. At present there is no indigenous production in the primary metal. So India has to depend on imports. A substantial part comes from Malaysia. Statistics of imports of tin during recent years are given below.

**Imports of Tin:** The quantity in lakh kgs. and the value in Rs. lakhs respectively during 1961-62 to 1965-66:

| Year    | Tin and alloys unwrought |                   | Tin and alloys worked |                   | Total                |                   |
|---------|--------------------------|-------------------|-----------------------|-------------------|----------------------|-------------------|
|         | Quantity (Lakh kgs.)     | Value (Rs. lakhs) | Quantity (Lakh kgs.)  | Value (Rs. lakhs) | Quantity (Lakh kgs.) | Value (Rs. lakhs) |
| 1961-62 | 49.5                     | 570.5             | 0.4                   | 5.8               | 49.9                 | 576.3             |
| 1962-63 | 42.8                     | 507.9             | 0.2                   | 2.5               | 43.0                 | 510.4             |
| 1963-64 | 50.5                     | 618.7             | 1.7                   | 21.1              | 52.2                 | 639.8             |
| 1964-65 | 48.8                     | 771.8             | 1.8                   | 18.6              | 50.1                 | 790.4             |
| 1965-66 | 38.4                     | 711.2             | 1.2                   | 5.7               | 39.6                 | 750.9             |

## NICKEL

| Year    | Nickel & Alloys unwrought |                   | Nickel and Alloys    |                   | Total                |                   |
|---------|---------------------------|-------------------|----------------------|-------------------|----------------------|-------------------|
|         | Quantity (Lakh kgs.)      | Value (Rs. lakhs) | Quantity (Lakh kgs.) | Value (Rs. lakhs) | Quantity (Lakh kgs.) | Value (Rs. lakhs) |
| 1960-61 | 11.2                      | 113.5             | 3.6                  | 28.5              | 14.8                 | 142.0             |
| 1961-62 | 13.8                      | 123.6             | 3.9                  | 28.3              | 17.7                 | 151.9             |
| 1962-63 | 13.7                      | 126.5             | 2.1                  | 17.7              | 15.8                 | 144.2             |
| 1963-64 | 17.3                      | 151.2             | 2.7                  | 26.4              | 20.0                 | 177.6             |
| 1964-65 | 13.3                      | 117.9             | 4.1                  | 35.8              | 17.4                 | 153.7             |
| 1965-66 | 11.4                      | 99.4              | 8.8                  | 87.7              | 20.2                 | 186.1             |

India has no proven deposits of nickel ores so far. It is likely that with further geographical exploration nickel ores might be found.

## ALUMINIUM

Aluminium is the only non-ferrous metal which India can produce in large quantities because of extensive deposits of bauxite and adequate supplies of bulk power. At present, considerable attention has been paid for augmenting the production of aluminium in order to arrest the rising trend in the import of this non-

ferrous metal involving considerable foreign exchange.

Even though it is known that India possesses bauxite, the basic raw material for aluminium to the extent of 250 million tons, accurate detailed information regarding the extent and quality of the individual deposit has not yet been collected; only reserves of 25 million tons are stated to have been proved to be suitable for the manufacture of aluminium.

Except bauxite and coal, most of the other raw materials are available only partly or not

at all from indigenous sources. Caustic soda and soda are not produced in sufficient quantities, cryolite, aluminium fluoride, carbon black and filter cloth have to be imported and the possibilities of producing cryolite in this country are being explored.

In India production of aluminium is 68,000 tonnes. The capacity of production of aluminium during 1966-67 will be 113,000 tonnes. The Fourth Plan target has been set around 300,000 to 400,000 tonnes. It is expected that self-sufficiency will be reached by 1969-70.

## Aluminium — Installed Capacity and Production

| Year | Virgin Metal       |            | Aluminium Sheets and Circles |            | Aluminium Foils    |            | Aluminium Wire Rods (ACSR) |            | Aluminium Rods and Sections (extruded) |            |
|------|--------------------|------------|------------------------------|------------|--------------------|------------|----------------------------|------------|----------------------------------------|------------|
|      | Installed Capacity | Production | Installed Capacity           | Production | Installed Capacity | Production | Installed Capacity         | Production | Installed Capacity                     | Production |
| 1961 | 22,116             | 18,382     | 21,600                       | 16,930     | 3,000              | 3,216      | 13,056                     | 8,292      | 3,756                                  | 1,584      |
| 1962 | 53,340             | 35,212     | 22,200                       | 16,294     | 4,200              | 3,444      | 13,056                     | 11,352     | 3,756                                  | 3,060      |
| 1963 | 53,340             | 53,386     | 22,200                       | 22,244     | 3,000              | 3,444      | 13,056                     | 17,988     | 3,756                                  | 3,936      |
| 1964 | 53,340             | 54,539     | 22,200                       | 22,501     | 3,000              | 2,544      | 20,400                     | 20,256     | 3,756                                  | 3,240      |
| 1965 | 53,340             | 59,229     | 26,675                       | 24,050     | 3,000              | 2,868      | 28,416                     | 24,408     | 4,506                                  | 4,599      |

## Imports

| Year    | Aluminium and Alloys unwrought |                   | Aluminium and Alloys worked |                   | Total                |                   |
|---------|--------------------------------|-------------------|-----------------------------|-------------------|----------------------|-------------------|
|         | Quantity (Lakh kgs.)           | Value (Rs. lakhs) | Quantity (Lakh kgs.)        | Value (Rs. lakhs) | Quantity (Lakh kgs.) | Value (Rs. lakhs) |
| 1961-62 | 80.9                           | 212.8             | 174.7                       | 580.1             | 255.6                | 792.9             |
| 1962-63 | 151.8                          | 357.2             | 236.8                       | 693.1             | 388.1                | 1,050.3           |
| 1963-64 | 39.4                           | 86.4              | 207.4                       | 550.9             | 246.8                | 637.3             |
| 1964-65 | 35.4                           | 97.4              | 194.1                       | 626.6             | 229.5                | 724.0             |
| 1965-66 | 36.6                           | 98.4              | 161.6                       | 530.4             | 198.2                | 628.8             |

**Investment:** An investment of the order of Rs. 12 crores is estimated to have been made in the aluminium industry during the Second Plan

period against Rs. 22 crores, anticipated at the time of formulating the programmes of development in 1956.

The investment in the aluminium industry under the Third Plan is estimated at about Rs. 65 crores.



Schemes Under Implementation

The progress made by some of the aluminium companies is shown in the table below :

| Producer                               | Location of plant           | Capacity                   |           |
|----------------------------------------|-----------------------------|----------------------------|-----------|
|                                        |                             | 1966<br>(Tonnes per annum) | 1970-71   |
| Aluminium Corporation of India Ltd.    | Jaykanagar<br>(West Bengal) | 8,000                      | 13,000    |
| Indian Aluminium Co., Ltd.             | Hirakud<br>(Orissa)         | 20,000                     | 40,000    |
|                                        | Alupuram<br>(Kerala)        | 15,000                     | 16,000    |
|                                        | Sharavathi<br>(Mysore)      | —                          | 30,000    |
| Hindustan Aluminium Corpn. Ltd.        | Renukoot<br>(U.P.)          | 48,000                     | 1,20,000* |
| Madras Aluminium Co., Ltd.             | Mettur<br>(Madras)          | 10,000                     | 20,000    |
| Smelter in Kerala or Gujarat           |                             | —                          | 25/50,000 |
| National Industrial Development Corpn. | Koyna                       | —                          | 25,000    |

\* According to information available the capacity at Renukoot will be of the order of 75,000 tonnes, while the balance capacity will be established during the Plan period in Bihar.

Note : Figures upto 1959 are in tons and from 1960 onwards are in metric tons.

BRASS

The position with regard to the production of brass pipes and tubes, and brass sheets and circles respectively from 1956 to 1965 is as follows: Figures in tonnes: 1956: 0.84; 13,800; 1957: 0.72; 18,072; 1958: 0.72; 20,724; 1959: 0.84; 21,300; 1960: 0.36; 26,988; 1961: 106.8; 24,612; 1962: 181.2; 23,748; 1963: 352.8; 22,644; 1964: 642.0; 20.328; 1965: 1,016.1; 12,828.

The quantity imported during 1965-66 and the value of brass were 8.0 lakh Kgs. and Rs. 60.8 lakhs respectively.

The position regarding the value in Rs. crores of imports of non-ferrous base metals during 1963-64, 1964-65 and 1965-66 respectively is as shown below: 55.06; 58.30 and 67.55.

PETROLEUM INDUSTRY

PETROLEUM is a mixture of hydrocarbons which may be in liquid, solid or gaseous forms. Very frequently these three forms are found together but in completely different proportions in different localities. In addition to hydrocarbons, petroleum is usually contaminated with small quantities of compounds containing sulphur, nitrogen or other elements.

Because of the varying proportions of hydrocarbons, crude oils from different sources differ widely in their characteristics. Thus, from some crude oils sufficient lubricating oils and waxes may be obtained while others may yield insignificant quantities of wax but huge quantities of asphaltic bitumen.

Crude oil may be divided, very broadly, into three classes :—

(1) Paraffin Base Crudes: They usually give substantial yields of paraffin wax and lubricating oils, e.g. Assam Crudes. (2) Asphaltic Base Crude: This type of crude contains little or no paraffin but asphaltic matter in large proportions, e.g. crudes from Venezuela. (3) Mixed Base Crudes: Contain both paraffin wax and asphaltic matter in quantity, e.g. Indonesian crude.

Crude oil is processed in a unit called a refinery for obtaining various products. There are hundreds of products manufactured from crude oil. In fact, today, there is hardly an industry which does not use some kind of petroleum product. To list here a few products :—

Kerosene is used as an illuminant and a cooking fuel. Motor Spirit and Aviation Spirit are used as fuel by automobiles and aircraft respectively. High Speed Diesel Oil is used by trucks, buses and tractors. Furnace Oil is used in miscellaneous industrial units including power generation. Mineral Turpentine is used as base in paints and varnishes. Wax is used for manufacturing candles. Lubricants are used for lubricating machines. Bitumen is used in road-making, insulation purposes. Chemicals produced from petroleum sources and generally known as petrochemicals are used for industrial and agricultural purposes.

The demand for petroleum products in India has been steadily growing with the years. Between the years 1948 and 1965, the total inland demand has increased from 2.24 million tons to 12.1 million metric tons, representing an annual average growth rate of about 10 per cent. By 1966, it was expected that demand will be about 13 million metric tons.

Individual petroleum products have been showing a rise in consumption over the years. Most marked increases have been registered in the consumption of products like high speed diesel oil and furnace oil.

With the growth in India's economy and rapid industrialisation, set in motion by the three Five-Year Plans, oil consumption has steadily grown but compared with other countries the per capita consumption is still very low. The per capita consumption of some countries including India are given below: U.S.A. 3.379 K.L.; Australia 1.65 K.L.; Ceylon 0.122 K.L.; Burma 0.038 K.L.; India 0.03 K.L.

India's production of crude oil of about 3.5 million tonnes was expected to rise to about six million tonnes per year by 1966 end. In order to bridge the gap between indigenous availability and the demand, India has to import crude oil and petroleum products from various countries.

During 1965 the refining capacity in the country was 10.5 million tonnes. This was expected to rise to about 14.5 million tonnes by 1966 end. A little over a third of this capacity will be based on indigenous crude. By the end of the 4th Plan period, refining capacity is expected to be about 23 million tonnes per annum.

OIL EXPLORATION AND PRODUCTION

At present oil exploration in India is conducted by three agencies: The Assam Oil Company, The Oil India Ltd., and the Oil and Natural Gas Commission.

The oil bearing regions in India extend over Punjab,\* Ganga Valley, Assam, West Bengal, Gujarat, Kutch, Rajasthan and the off-shore areas along the eastern and western coasts and have been estimated at 1,040,000 sq. kilometers. The Assam Oil Company and the Oil India Ltd. operate within the areas allotted to them in Assam State while the Oil and Natural Gas Commission is responsible for exploration over the remaining parts of the country including off-shore areas. Technical training institutes in prospecting, drilling, exploration etc. are being run by the oil and Natural Gas Commission at Bareilly, Cambay and Sibsagar. In addition, the Commission has a Research and Training

Institute at Dehra Dun. The activities of the three agencies are briefly described below:

**Assam Oil Company:** The Assam Oil Company was formed as a result of the merger of the Assam Railway and Trading Co. and the Assam Oil Syndicate. Details of the above two Companies were given in the 1965-66 Directory. A refinery was built at Digboi with a capacity of 17,000,20,000 gallons a day.

Assam Oil Company has drilled nearly 1,000 wells so far out of which nearly 600 are in operation now. The present rate of production of Assam Oil Company is of the order of 0.4 million tonnes.

**Oil India Ltd.:** Oil India Ltd., a partnership between the Government of India and the Burmah Oil Company, was registered on February 18, 1959, in Shillong, as a Rupee Company.

The headquarters of the Company is at Dullajan.

Oil India has an authorised capital of Rs. 50 crores, divided into 500,000 shares of Rs. 1,000 each. In terms of an agreement signed in 1961, the Govt. of India and the Burmah Oil Company became equal partners in Oil India Ltd.

Oil India Ltd. has drilled upto Aug. 1966, 234 wells out of which 187 were oil or gas producing.

Oil India Ltd. propose to drill 23 wells during 1966-67. This Company has already discovered crude oil reserves capable of sustaining an annual production of three million tons. This quantity of oil is committed for supply to the Government owned refineries at Gauhati, Barauni and the AOC refinery.

\* Composite State.



## OIL AND NATURAL GAS COMMISSION

The Oil and Natural Gas Commission was formed in May 1956 and functioned as a Government department till 1959 when it was converted into a statutory organisation. The Oil and Natural Gas Commission, of which the Minister for Petroleum & Chemicals is chairman, has its Hqs. in Debra Dun. About 12,620 persons are employed on its staff. The Commission has three Directorates—Geology, Geophysics and Engineering.

Geological and geophysical surveys are carried out by the Commission in various parts of the country—Jammu & Kashmir, Punjab\* and U.P. foot-hills and plains, Bihar, Assam, West Bengal, Gujarat, Saurashtra, Kutch, Rajasthan, Cauvery basin in Madras and Godavari basin in Andhra Pradesh and coastal regions of Kerala and Andaman & Nicobar islands.

On the basis of the results of these Geological and Geophysical surveys, drilling is in progress in Gujarat, U.P., Punjab, Assam, Bihar, Rajasthan and Madras. Drilling will shortly be taken up in West Bengal and in the Gulf of Cambay.

Oil and/or gas has been found in Cambay, Ankleshwar and Kalol areas of Gujarat and Rudrasagar and Lakwa areas of Assam. In Gujarat, commercial reserves of oil have been proved. The current rate of production from Gujarat fields is 6,600 tonnes per day. Up to Aug. 1966, a total of 375 wells have been drilled in Gujarat and it is estimated that these fields are capable of producing four million tonnes of crude per annum. Based on these reserves, a refinery at Koyali (Gujarat) has been constructed and is at present operating at a throughput of one million tonnes. Oil has been discovered in two structures in Assam at Kakwa and Rudrasagar. Trial production from Rudrasagar Fields has commenced. So far 40 wells have been drilled in Assam.

The Commission have entered into an agreement with the National Iranian Oil Company for exploration and production of oil in certain off-shore areas in the Persian Gulf in collaboration with AGIP of Italy and Phillips of U.S.A. Drilling is still in progress.

## REFINERIES

The Digboi Refinery of the Assam Oil Company was commissioned in 1899, and it was the only refinery in India till 1954. A new gasoline plant and a new luboil distillation unit were added to the refinery in 1954. In 1964, the refinery produced a total of 4,35,450 tonnes of petroleum products. Its annual throughput is 0.45 million tonnes of Crude.

O. N. G. is expected to produce about 3 million tons by 1966 and 10 million by 1971.

As a result of agreements between the Government of India on the one hand and Burmah-Shell, ESSO and Caltex on the other, three new refineries were set up in mid-fifties. The refineries by Burmah-Shell and ESSO are located at Trombay near Bombay while the Caltex refinery is at Vishakapatnam. The capacities of these refineries are: Burmah-Shell 3.75 million tonnes; ESSO 2.50 million tonnes; Caltex 1.05 million tonnes.

## PUBLIC SECTOR REFINERIES

The first public sector refinery at Gauhati was commissioned in January 1962. The capacity of this refinery is 0.75 million tonnes.

The total cost of the Gauhati refinery is estimated at Rs. 17.70 crores. The Rumanian Government have agreed in principle to provide the necessary technical and financial assistance for expansion of the refinery from its present capacity of .75 million tonnes per annum to 1.1/1.25 million tonnes per annum. The proposal is under examination.

The second public sector refinery at Barauni in Bihar was commissioned in the second half of 1964. The initial capacity of the refinery will be two million tonnes but the capacity will be ultimately expanded to three million tonnes in the beginning of the Fourth Plan period. The first stage of one million tonnes was commissioned in July 1964 and the second stage of

another million tonnes and the luboil plant was expected to be commissioned during 1966.

The cost of Design and Technical Assistance as well as plant and equipment for Barauni refinery is being met out of Soviet credit. An amount of Rs. 16.48 crores has so far been utilised from this credit. The total cost of the refinery is estimated at Rs. 46.90 crores with a foreign exchange component of Rs. 18.96 crores.

The third public sector refinery has been constructed at Koyali near Baroda in Gujarat and was commissioned in October 1965. Its initial capacity will also be two million tonnes to be ultimately expanded to three million tonnes.

The Gujarat refinery is estimated to cost Rs. 30.21 crores for the initial capacity of 2 million tonnes per annum. The expansion of the refinery by another million tonne will cost a further Rs. 2.91 crores. The foreign exchange component of the initial stage expenditure will be Rs. 8.78 crores and the same of the cost of expansion will be Rs. .9746 crores. Soviet credit amounting to Rs. 8 crores has so far been allocated for the project. The balance of the foreign exchange requirement will also be found from the Soviet credit and any savings out of the same earmarked for Barauni refinery. The initial stage expenditure was expected to be incurred during the Third Plan while the expenditure on expansion will be incurred during the Fourth Plan.

**Cochin Refinery.**—This is a participatory refinery project in the public sector, the principal collaborators with the Government being Messrs. Phillips International, U.S.A. It was commissioned on 23rd Sept. 1966.

The cost of the project is estimated at Rs. 29.81 crores, and the foreign exchange component is Rs. 19.65 crores.

The Refinery has been designed to produce annually 2.5 million tons of petroleum products.

The Refinery will have a crude oil storage of 1 lakh tons. It will provide employment to about 1,000 persons.

**Indian Oil Corporation Ltd.**†—A Government owned and Government managed private limited company—Indian Refineries Ltd. was incorporated on August 20, 1958 to control and manage the first two public sector refineries, namely the Gauhati and Barauni refineries. This Company has with effect from 1st September 1964 been merged with the public sector marketing company the Indian Oil Company Ltd. to form what is now known as the Indian Oil Corporation Ltd. A separate division of the Corporation called the Refineries Division is looking after the above public sector refineries. With effect from April 1, 1965, the ownership of the Gujarat Refinery has also been transferred to the Indian Oil Corporation Ltd. (Refineries Division) from the Oil and Natural Gas Commission.

In order to meet the additional demands for petroleum products during the Fourth Plan period, it has been decided to increase the refining capacity to about 23 million tonnes by the end of the Fourth Plan by erecting three more refineries, the first at Madras, the second at Haldia near Calcutta and the third at a suitable location in North-Western India. The construction of the Madras Refinery will be a participatory project with Messrs. National Iranian Oil Company and the American International Oil Co. whose collaboration for the Refinery has been approved. Regarding Haldia Refinery, tenders have been invited from foreign parties and a suitable collaborator was expected to be selected before the end of 1966.

**Gauhati Product Pipeline.**—This pipeline which is designed for the transport of petroleum products from Gauhati Refinery, was completed and commissioned in November, 1964. The total cost of the pipeline is estimated at Rs. 7.75 crores with a foreign exchange component of Rs. 1.81 crores. The foreign exchange cost has been met out of ENI credit from Italy.

**Barauni Refinery Pipeline.**—The 674-kilometre long oil pipe line linking it with Kanpur has been completed on Sept. 26, 1966. This helps products from the Barauni refinery to areas of

consumption. The cost of the pipeline is estimated at Rs. 27.41 crores with a foreign exchange component of Rs. 10.21 crores. The foreign exchange cost will be met out of ENI credit from Italy. The Barauni-Kanpur sector of the pipeline has already been completed. The Barauni-Haldia sector was expected to be completed by 1966 end.

The construction of pipelines is being looked after by a separate division of the Indian Oil Corporation Ltd. The authorised share capital of the Indian Oil Corporation Ltd. is Rs. 75 crores and that of Oil India Ltd. Rs. 50 crores.

**Gujarat Pipeline System.**—The following pipelines for the transportation of crude oil, gas and products have been constructed: Cambay-Dhuvaran Gas Line; Ankleshwar-Uttaran Gas Line; Ankleshwar-Baroda Gas Line; Ankleshwar-Koyali Crude Line; and Koyali-Ahmedabad Product Pipeline.

The total cost of Gujarat Pipeline system is estimated at Rs. 6.732 crores with a foreign exchange cost of Rs. 1.965 crores. The foreign exchange cost was met out of ENI credit from Italy.

## DISTRIBUTION

Distribution is that stage of the petroleum industry when refined products leave the refinery on their way to the customer. Inland distribution is a very big undertaking in this country. About 11 million tonnes of petroleum products have been distributed during 1964.

At present the major oil distributing companies are: Burmah-Shell, Esso, Caltex and the Government owned Indian Oil Corporation, which apart from distributing the products obtained from its refineries, imports products from rupee payment sources. With the establishment of additional refineries, the Corporation will be handling increasing quantities of petroleum products.

## Prices

In August 1960, the Government appointed the Oil Price Inquiry Committee under the chairmanship of Mr. K. R. Damle "to examine the principles and elements according to which the selling prices of various petroleum products in India should be determined after April 1, 1961", and *inter alia* to examine and report on specific aspects of petroleum pricing. The Committee submitted its Report in July, 1961. The Government announced its decisions on the Report late in September, 1961 and implemented them with effect from October 1, 1961.

The private oil companies have reduced the price of crude oil twice by 2 cents and 4 cents per barrel during Dec. 1964 and July 1965 respectively. This led to a saving on foreign exchange of about 2 crores.

The Union Government appointed on May 13, 1964 a working group headed by Mr. J. N. Taluqdar, to re-examine the pricing principles. This Committee submitted its report to the Government in Aug. 1965 and the Government have enforced the prices recommended by them in respect of a number of products w.e.f. 1-2-1966. Import duties were imposed on crude for the first time; but these were later withdrawn to keep up the prices after devaluation.

## MISCELLANEOUS

A joint committee of the Government and representatives of the private oil industry known as Oil Advisory Committee has been set up by the Government of India to study problems of supply, distribution and future demand of P.O.I. products in relation to indigenous production and refining capacity. In this way, a machinery has been set up for close and continuous consultation between the private and public sectors on matters of common interest. Representatives from the Government and oil industry are associated with the working of this Committee.

An institution known as the Indian Institute of Petroleum has also been set up under the control of the Council of Scientific and Industrial Research to do research and give training in petroleum technology.

\* Composite State. † The turnover of the corporation had doubled during 1965-66 to Rs. 170 crores and the net profit was Rupees one crore.



**BURMAH-SHELL REFINERIES LTD.**

Burmah-Shell Refineries Ltd. was incorporated in India on 3rd November 1952, for the purpose of constructing and operating a petroleum oil refinery on a 450-acre plot of land in south-west Trombay—near Bombay.

The Refinery commenced operations on January 30, 1955.

The crude oil intake of the Refinery is about four million tons per annum; the crude oil comes from the Persian Gulf area and from Ankleshwar in Gujarat.

The Refinery manufactures motor spirit, kerosene, high speed diesel oil, light diesel oil, fuel oil, bitumen, liquefied petroleum gas and special boiling point solvents.

The total cost of the Refinery was about Rs. 26 crores, and the total number of employees in the Refinery including all categories is about 1,550.

Residential quarters for key operating staff have been provided at a short distance from the refinery, and in addition, Burmah-Shell Refineries Ltd. have paid Rs. 40 lakhs to the Bombay Government for the provision of houses for Refinery labour employees and their families in the Chembur-Ghatkopar area.

Burmah-Shell Refineries Ltd. have also provided a 10-acre recreation ground for their staff and labour employees.

**CALTEX OIL REFINING (INDIA) LTD.**

The Caltex Oil Refinery, a product of India's Second Five Year Plan, is located at Visakhapatnam. Its products include petrol, kerosene, diesel oil and fuel oils from the Refinery's flexible two-stage crude oil distillation unit, the fluid catalytic cracking unit with gas recovery facilities, the polymer plant, the propane decarboxylation unit and treating and blending plants.

The Visakhapatnam Refinery is one of the most modern and efficient refineries. It occupies an

area as large as 515 acres, and this relaxed setting makes for beauty and work comfort, besides providing room for expansion.

**ESSO REFINERY**

The Refinery, which is situated on Trombay Island, near Bombay, cost about Rs. 17.5 crores. Construction was started in December 1952 and production started in July 1954. The refinery is capable of running 60,000 barrels of crude oil per stream day nearly 3 million tons a year of crude oil.

Initially the Refinery was designed to process 25,000 B/CD of crude from the Middle East. Besides stepping up refining capacity, new products such as bitumen, jute batching oil, solvents and liquefied petroleum gas were introduced to meet the growing needs of the country and save foreign exchange. The Esso Bombay Refinery earned foreign exchange of over Rs. 57 crores during the first decade of its operations.

**PLASTICS INDUSTRY**

PLASTICS can be classified into two groups, thermosetting and thermoplastic. The thermosets soften only once under heat and do not soften again on subsequent heating. Thermoplastics soften when heat is applied and harden on cooling. They can be reshaped again and again. There is also a close relationship between the chemical industry and the plastic industry. The chemical industry supplies the plastic industry with raw materials necessary for the manufacture of synthetic resins.

The U.S.A. produces the largest quantity of plastics followed by Germany, Japan, U.K. and the U.S.S.R.

The following table shows the total installed capacity and output of important plastic goods in 1963, 1964 and 1965:

|                                             | 1963               |            | 1964               |            | 1965               |            |
|---------------------------------------------|--------------------|------------|--------------------|------------|--------------------|------------|
|                                             | Installed capacity | Production | Installed capacity | Production | Installed capacity | Production |
| P. F. Moulding Powder                       | 4,512.0            | 3,087.6    | 4,512.0            | 3,225.6    | 4,512.0            | 3,354.0    |
| Polystyrene Moulding Powder                 | 5,443.2            | 5,515.2    | 5,443.2            | 5,114.2    | 5,443.2            | 5,646.1    |
| Phenolic Laminate                           | 1,478.4            | 1,657.2    | 1,621.2            | 1,708.8    | 2,277.5            | 2,312.6    |
| Polythene Films and layflat tubings         | 3,324.0            | 1,744.8    | 4,468.8            | 2,292.4    | 4,468.8            | 2,808.0    |
| P. V. C. (Flexible) sheetings (unsupported) | 3,758.4            | 1,956.0    | 3,758.4            | 2,067.6    | 4,556.0            | 3,706.1    |
| U. F. Moulding Powder                       | 1,078.8            | 1,030.8    | 1,080.0            | 1,220.4    | 1,080.0            | 1,215.6    |
| Linoleum                                    | 852.0              | 681.6      | 900.0              | 835.2      | 1,050.7            | 764.1      |
| Leather Cloth                               | 8,262.0            | 6,895.2    | 8,262.0            | 8,990.4    | 9,551.0            | 9,133.2    |

The machine capacity of the industry at present is estimated as under:—

Compression moulding: 35,000 tons; injection moulding: 1,200 ounces; extrusion: 200 inches and surface coating: 10 units.

The articles now manufactured cover a wide range of household consumer and utility items, electrical accessories, telephone equipment, gramophone records, insulated wires, combs, toys, tooth brushes, spectacle-frames, hand-bags, leather cloth, packaging materials, films, industrial items and accessories for automobile engineering, radio and air-conditioning industries. Production of mechanised toys has been an important achievement in recent years.

The per capita consumption of plastics in India, although very low compared with other advanced countries, is increasing every year. The

The Indian plastics industry is centred mostly in the Bombay, Amritsar, Bangalore, Delhi, Kanpur and Madras areas, and today there are more than 200 well organised units and at least about 10 times as many smaller units in the small-scale and cottage industries sectors. Similarly, the production of plastics raw materials also has gone up by leaps and bounds.

During the Third Plan period, the plastics industry was expected to expand more than six-fold. While the Third Plan had fixed a target production of 74,000 tonnes for plastics raw materials, the actual production in 1965 amounted to about 40,000 tonnes only. The Fourth Plan is likely to fix a target of nearly 3.5 lakh tonnes during 1970-71.

A large part of the raw material is imported. Phenol formaldehyde moulding powder, phenol and formaldehyde and alkyd resin are manufactured in the country out of imported basic materials.

The first moulding powder to be manufactured in India was Phenol Formaldehyde moulding powder. This industry, is however, dependent largely upon imports of phenol, cresol and formaldehyde. In 1960-61, four units were engaged in the manufacture of P.F. moulding powder. Of these four units, three are located in Maharashtra, and one in Gujarat. The three concerns located in Maharashtra are, Industrial Plastics Corporation, Plastic Products of India and Indian Plastics. The requirement of formaldehyde by the plastic industry by 1965-66 was estimated at about 30,000 tonnes per annum.

P.V.C.: Two more factories are being set up, one in Bombay and the other at Mettur for production of this raw material. The capacity of the Bombay unit will be 20,000 tonnes and the other 6,000 tonnes per annum. The companies concerned are National Organic Chemical Industries and Chemical and Plastics India.

H.D. Polyethylene: Messrs. Polyolefine Industries Ltd., Bombay in collaboration with Farbwerke Hoechst, Germany are erecting a factory near Bombay for production of 20,000 tonnes and this plant is expected to start commercial production by the middle of 1967. They would also produce 8,000 tonnes of Vinyl acetate and 12,000 tonnes of polyvinylacetate.

Union Carbide was expected to install a naphtha cracker involving a capital outlay of Rs. 9.5 crores. They will produce 9 million kilogrammes of polyethylene per annum. This plant was scheduled to be completed in the year 1966.

Polystyrene: In addition to the plant of Messrs. Polychem of Bombay, one more factory was set up at Visakhapatnam for the production of this raw material. This plant of Messrs. Hindustan Polymers is making good progress and is expected to go on stream by the end of 1966. The licensed capacity of this plant is 10,000 tonnes per annum.

**FOURTH PLAN PROGRAMME**

The production target was placed at 74,000 tonnes for the Third Plan, which however could reach the level of 40,000 tonnes only. In view of this fall in production, the target of production during the Fourth Plan is placed at about 3.5 lakh tonnes. Against this target of production, during the Fourth Plan, the following table

following table will give an idea of the consumption of plastic materials in some of the selected countries in 1962 and India's position compared with these industries:

| Country      | Per capita Consumption Kg. |
|--------------|----------------------------|
| U.K.         | 12                         |
| U.S.A.       | 15                         |
| West Germany | 18                         |
| Italy        | 8                          |
| France       | 9.5                        |
| Japan        | 7.8                        |
| India*       | 0.8                        |
| Netherlands  | 11.5                       |

\* Figures are for 1963.



gives an idea of the capacities expected to be established by the end of the Fourth Plan :

| Plastic materials                             | Tentative target for 1970-71 (Tonnes) |
|-----------------------------------------------|---------------------------------------|
| Polyethylene .. .. .                          | 1,00,000                              |
| Polypropylene .. .. .                         | 10,000                                |
| P. V.C. .. .. .                               | 1,00,000                              |
| Polystyrene .. .. .                           | 35,000                                |
| Acrylics (MMA) .. .. .                        | 6,000                                 |
| Vinyl acetate .. .. .                         | 23,000                                |
| Polyurethane .. .. .                          | 5,000                                 |
| Polyesters .. .. .                            | 25,000                                |
| Nylon (other than for fibres) .. .. .         | 2,000                                 |
| Cellulose acetate .. .. .                     | 15,000                                |
| P. F. moulding Powder .. .. .                 | 12,000                                |
| Phenolic resins (including laminates) .. .. . | 6,000                                 |
| U.F. moulding Powder .. .. .                  | 8,000                                 |
| Other Urea resins .. .. .                     | 20,000                                |
| Others .. .. .                                | 7,000                                 |
| <b>Total .. .. .</b>                          | <b>3,74,000</b>                       |

It has been estimated that 350 presses of different sizes for compression moulding and lamination can handle 11,000 tons of thermosets. 350 extruders would convert 22,000 tons of thermoplastics into extruded products, besides compounding 16,000 tons for injection moulding by 800 machines of varying capacities. The value of 1,500 machines and presses inclusive of replacements required for the period of the Plan together with auxiliary equipment such as predryers, preformers, tumbling barrels, scrap grinders, haul off for extruders, mould temperature controllers and other miscellaneous equipment for vacuum forming, vacuum metallising, hot stamping, embossing and printing rollers, heat welding machines, automatic blow moulding equipment, lamination presses, rotational casting machines, etc. would be around Rs. 10 crores. (before devaluation). The miscellaneous equipment will cater to foaming, blowing, coating, calendering, casting and fabrication of 11,000 tons of thermoplastic materials.

It was expected that during the Third Plan (by 1966), the requirements of moulds for compression and injection moulding would

increase from 800-1,000 in the beginning of the plan to 3500-4000 by 1966. It was also expected that by 1966, 2,500-3,000 dies for extrusion will also be required for the same period. The total value of moulds and dies may be put at about Rs. 8 crores.

The supply of plastics raw materials in the country through domestic production will increase substantially during the next Plan period. According to Planning Commission's working group on petro-chemical industries, polyethylene supply will increase to one lakh tons in 1970-71. In case of PVC, supply will reach the level of one lakh tons by the end of Fourth Plan, and that of Vinyl Chloride for PVC to one lakh tons.

The machinery requirements of the industry are being paid particular attention in the Fourth Plan. It is proposed to set up initially plastics machinery manufacture for an off take of about 15,000 tonnes of thermosets, 40,000 tonnes of thermo-plastics for injection, 100,000 tonnes of thermoplastics for extrusion.

The main problem facing the plastic industry is the inflated cost structure which owes mainly to the steep excise duties and high raw material prices. The present rate of excise duty of twenty-four per cent *ad valorem* plus twenty per cent surcharge on basic duty is very high. Imports, however, are still quite large, although, since 1957, a restrictive policy has been pursued. The following table shows imports of raw materials of plastics industry :

|                                      | (Rs. lakhs) |         |         |
|--------------------------------------|-------------|---------|---------|
| Material                             | 1963-64     | 1964-65 | 1965-66 |
| P. F. Moulding Powder ..             | 6.89        | 6.63    | 3.24    |
| U. F. Moulding Powder ..             | 0.51        | 0.36    | 1.01    |
| Cellulose Acetate Moulding Powder .. | 17.16       | 7.96    | 3.15    |
| Polystyrene Moulding Powder ..       | 3.22        | 4.72    | 4.18    |
| Vinyl Resins ..                      | 30.47       | 35.93   | 25.84   |

The country is now an exporter of plastics goods. The following is the yearly exports of plastics from India :

| Year          | Rs. crores |
|---------------|------------|
| 1961-62 .. .. | 0.83       |
| 1962-63 .. .. | 1.05       |
| 1963-64 .. .. | 2.64       |
| 1964-65 .. .. | 3.19       |
| 1965-66 .. .. | 2.70       |

As can be seen from the above figures, there is a fall in exports during 1965-66 to the extent of nearly Rs. 48 lakhs.

Itemwise, the fall in exports is estimated as under: Polyline Jute Rs. 16 lakhs, Bangles Rs. 16 lakhs, Fountain Pens Rs. 6 lakhs, Linoleum Rs. 6 lakhs.

In order to encourage exports, an Export Promotion Council was set up in 1955. The Government also allows rebate of import duty at specified rates on raw materials used in the manufacture of plastics goods intended for export. At present the concession is given on urea formaldehyde, cellulose acetate/cellulose acetate butyrate and polystyrene moulding powders.

The leading item of export is leather cloth. The major importers of leather cloth from India are South Viet Nam, Britain, Kuwait, Ceylon and Thailand.

Ceylon leads other countries in import of Indian plastics goods. The other importing countries include Burma, Kuwait, Kenya, Saudi Arabia, Tanzania, Mauritius and Mozambique.

The following is the yearly import of synthetic plastics materials to India (Latest available) :

| Year          | Rs. lakhs |
|---------------|-----------|
| 1960-61 .. .. | 571       |
| 1961-62 .. .. | 777       |
| 1962-63 .. .. | 648       |
| 1963-64 .. .. | 471       |
| 1964-65 .. .. | 381       |

## RAYON INDUSTRY

### RAYON, SYNTHETIC FIBRES, AND CELLULOSE FILM

#### Rayon Filament

There were three units at the beginning of the Second Plan in the country, manufacturing rayon filament with an annual capacity of 22.3 million lbs. Subsequently, three new units with a combined capacity of nearly 21.6 million lbs. had commenced production. There are now nine large scale units engaged in production of viscose filament rayon in India, one in acetate filament and three in staple fibre.

The staple fibre factory of Gwalior Rayons started production in 1954 with a capacity of 5,400 tons per year. The production capacity has now increased to 36,000 tons per year. The South India Viscose has a capacity of 4,000 tons per year.

A Rs. 6 crore nylon plant with a production capacity of 5 tons a day is to be set up at Modinagar, U.P.

The consumption of rayon filament on the basis of production plus imports from 1961 to 1965

\* Data are inclusive of saleable waste.

is estimated as under :—

|         | (Million lb.) |         |              |
|---------|---------------|---------|--------------|
| Year    | Production    | Imports | Availability |
| 1961 .. | 51.7          | 42.9    | 94.6         |
| 1962 .. | 60.9          | 38.1    | 99.0         |
| 1963 .. | 73.1          | 27.0    | 100.1        |
| 1964 .. | 81.9          | 25.3    | 107.2        |
| 1965 .. | 82.1          | 12.7    | 94.8         |

#### Staple Fibre

At the start of the Second Plan, Messrs. Gwalior Rayon Silk Manufacturing (Weaving) Company was the only factory producing staple fibre. Its plant at Nagda had a capacity of 16 million lbs. per annum at that time. Since then it has expanded its capacity to 48 million lbs. per annum thereby exceeding the target capacity of 32 million lbs.

† includes 20 million lbs. of tyre cord.

The production of staple fibre\* during 1961 to 1965 is given below :

| Year       | Installed capacity | Production |
|------------|--------------------|------------|
| 1961 .. .. | 25.2               | 26.0       |
| 1962 .. .. | 26.0               | 32.4       |
| 1963 .. .. | 26.0               | 32.2       |
| 1964 .. .. | 26.0               | 37.4       |
| 1965 .. .. | 26.0               | 34.3       |

#### Art Silk Fabrics

The production of art silk fabrics during the Third Five Year Plan period viz. 1961 to 1964 is given below :

(Production of Art Silk fabrics including synthetics).

| Year       | Production |
|------------|------------|
| 1961 .. .. | 570.0      |
| 1962 .. .. | 600.0      |
| 1963 .. .. | 648.0      |
| 1964 .. .. | 832.8      |



The per capita consumption could be reckoned at about 1.8 yards in 1965-66. The requirements of art silk fabrics by 1965-66 could be placed at about 864 million yards. While estimating the overall requirements of art silk cloth, account has to be taken of exports. Export of art silk fabrics is, at present estimated to be of the order of 25-30 million yards. But with continuing efforts it might be possible to export about 50 million yards by 1965-66.

On the above basis, the total requirements of art silk fabrics by 1965-66 may be reckoned at about 915 million yards. On the assumption that (1) consumption of rayon filament and staple fibre will be in the ratio of 60 : 40 and (2) that one lb. of yarn will produce 5 yards of cloth, the total requirements of weaving industry for filament yarn and staple fibre by 1965-66 would be of the order of 110 million lbs. and 75 million lbs. respectively.

In addition to the weaving industry, rayon filament is required for tyre cord and other miscellaneous industries and purposes such as knitting and hosiery industries, gas mantles, fishing nets etc. The demand for rayon tyre cord from the automobile industry was provisionally estimated at 20 million lbs. by the end of the Third Plan period. In order to meet this demand, the Government gave licence to establish a tyre cord plant at Kalyan. This plant was established by Century Rayon in collaboration with Alge-

mene Kunstzijde Unie N. V. of Holland and Venenigte-Glanstoff Fabriken, A.G. of West Germany.

#### Pattern of Consumption :

In terms of different types of filament and staple fibre the requirements by 1965-66, based on the above target were estimated as follows :

| (Million lbs.)  |               |              |
|-----------------|---------------|--------------|
| Nature of fibre | Filament yarn | Staple fibre |
| Viscose ..      | 96.0†         | 64.0         |
| Acetate ..      | 24.0          | 8.0          |
| Cuprammonium    | 10.0          | ..           |
| Synthetics ..   | 10.0          | 3.0          |
| <b>Total ..</b> | <b>140.0</b>  | <b>75.0</b>  |

† Includes 20 million lbs. of tyre cord.

According to the revised estimates, the requirements of filament and staple fibre in 1965-66 were placed at 204 million lbs. (including 20 million lbs. for tyre cord) and 141 million lbs. respectively.

The overall position regarding licensing of additional capacity in relation to anticipated requirements is indicated in the following statement :

| Name of the fibre                |                | (Million lbs.)                    |                                                                                  |                                                        |
|----------------------------------|----------------|-----------------------------------|----------------------------------------------------------------------------------|--------------------------------------------------------|
|                                  |                | Estimated requirements by 1965-66 | Total capacity expected on the basis of licences issued under the Industries Act | Total capacity expected on the basis of C.G. clearance |
| <b>I. Rayon filament</b>         |                |                                   |                                                                                  |                                                        |
| Viscose .. .. .                  | .. .. .        | 96.0                              | 100.0                                                                            | 84.0                                                   |
| Acetate .. .. .                  | .. .. .        | 24.0                              | 10.0                                                                             | 4.0                                                    |
| Cuprammonium .. .. .             | .. .. .        | 10.0                              | 13.0                                                                             | 5.0                                                    |
| Synthetics .. .. .               | .. .. .        | 10.0                              | 3.4                                                                              | 7.1                                                    |
| <b>Total .. .. .</b>             | <b>.. .. .</b> | <b>140.0</b>                      | <b>146.0</b>                                                                     | <b>100.7</b>                                           |
| <b>II. Staple fibre</b>          |                |                                   |                                                                                  |                                                        |
| Viscose .. .. .                  | .. .. .        | 64.0                              | 56.0                                                                             | 56.0                                                   |
| Acetate .. .. .                  | .. .. .        | 8.0                               | 1.0                                                                              | ..                                                     |
| Synthetics .. .. .               | .. .. .        | 3.0                               | ..                                                                               | ..                                                     |
| <b>Total .. .. .</b>             | <b>.. .. .</b> | <b>75.0</b>                       | <b>57.0</b>                                                                      | <b>56.0</b>                                            |
| <b>Total of I and II .. .. .</b> | <b>.. .. .</b> | <b>215.0</b>                      | <b>203.0</b>                                                                     | <b>156.7</b>                                           |

The schemes so far licensed or recommended for licence under Industries Act will increase the overall capacity for rayon filament, staple fibre and synthetics to about 203 million lb. as against the target of 215 million lb. envisaged for the Third Plan.

**Requirements of Raw Materials :** The chief raw materials for the viscose process of filament and staple fibre, are rayon grade pulp, caustic soda and sulphur. The requirements of these raw materials for the production of 96 million lb. of viscose filament, 64 million lb. of staple fibre and 32 million lb. of acetate filament and acetate staple fibre are estimated as follows :

|                                                 |                     |
|-------------------------------------------------|---------------------|
| Rayon grade pulp .. ..                          | 82,000 tons         |
| Caustic Soda .. ..                              | 80,000 "            |
| Sulphur (including carbon disulphide) .. ..     | 60,000 "            |
| Alcohol .. ..                                   | 6.4 million gallons |
| Cotton linters (for acetate process only) .. .. | 13,000 tons         |

In addition, small quantities of copper sulphate, ammonia, sodium hydroxide, cotton linters and sulphuric acid will be required for the manufacture of cuprammonium and phenol and ammonia for the manufacture of caprolactum.

The entire requirements of rayon grade pulp are at present met by imports. A number of schemes for the manufacture of rayon grade pulp with a total annual capacity of about 270,000 tons have, however, been licensed or recommended for licence under the Industries Act.

#### CELLULOSE FILM

The first unit for the production of cellulose film was set up by Messrs. Travancore Rayon Ltd. with an annual capacity of 400 tons in 1960. Licences have been granted to two more units, details of which are given below :

1. Messrs. Kesoram Cotton Mills have been licensed to set up a cellulose film unit at Hooghly with a capacity of 1,800 tons per annum. The foreign exchange for the import of plant and

equipment for this project has been cleared by the capital goods committee.

2. Messrs. National Rayon secured licence for a capacity of 1,800 tons per annum.

On the basis of schemes so far licensed under the Industries Act, the total capacity for cellulose film is expected to increase from 3,600 tons to 7,200 tons per annum. Of this, the total capacity expected to materialise on the basis of capital goods clearance is 5,400 tons.

It was expected that by 1965-66 the total demand for cellulose film would go upto about 10,000 tons per annum.

#### Requirements of Raw Materials :

The requirements of raw materials for a production target of 5,400 tons of cellulose film are estimated to be as follows :

|                        |            |
|------------------------|------------|
| Rayon grade pulp .. .. | 6,200 tons |
| Caustic Soda .. ..     | 5,400 tons |
| Sulphur .. ..          | 4,500 tons |

The table given below summarises the development of rayon, staple fibre and cellulose film industry envisaged during the Third Plan :

| Particulars                                                 | 1960-61 | 1965-66  |
|-------------------------------------------------------------|---------|----------|
| <b>ANNUAL CAPACITY :</b>                                    |         |          |
| 1. Rayon filament (million lb.) ..                          | 52.3    | 140.0    |
| 2. Staple fibre (million lb.) ..                            | 48.0    | 75.0     |
| 3. Cellulose film (tons)                                    | 3,600   | 5,400    |
| 4. Rayon grade pulp (tons) .. ..                            | ..      | 1,00,000 |
| <b>PRODUCTION :</b>                                         |         |          |
| 1. Rayon filament (million lb.) ..                          | 47.0    | 140.00   |
| 2. Staple fibre (million (estimated) lb.) .. .. (estimated) | 48.0    | 75.0     |
| 3. Cellulose film (tons)                                    | 2,084   | 5,400    |
| 4. Rayon grade pulp (estimated) (tons) .. ..                | ..      | 90,000   |
| <b>EXPORTS :</b>                                            |         |          |
| 1. Art Silk Cloth (million yds.) .. (estimated)             | 30.0    | 50.0     |

**Rayon Fabrics Export :** Exports of silk and synthetic fibre which rose to a peak of 90.5 million metres (Rs. 10.35 crores) during 1963 declined to 64.06 million metres (Rs. 7.94 crores) in 1964. The figures for 1964 are provisional.

The principal buyers were Malaysia, Ceylon, Hongkong, Aden and Afghanistan. 1. Malaysia Rs. 101.68 lakhs (90.86 lakh metres); 2. Ceylon Rs. 77.43 lakhs (75.70 lakhs metres); 3. Hongkong Rs. 60.17 lakhs (57.64 lakh metres); 4. Aden Rs. 39.83 lakhs (47.22 lakh metres); 5. Afghanistan Rs. 38.97 lakhs (28.91 lakh metres).

Spokesmen of the industry are confident of attaining the export target of Rs. 15 crores for the current year provided adequate assistance is offered. It is, however, felt that exports will be considerably affected because the absence of incentive import licences will tend to drive out many out of the trade.

#### FOURTH PLAN TARGETS

In India, rayon is still the predominant sector of the industry, while the development of the synthetic fibres (non-cellulosics) has yet to receive adequate attention. This lacuna is expected to be removed to some extent during the Fourth Plan. The tentative targets for the production



of synthetic fibres for the Fourth Plan are given in the following table :

|      |                                                       |    |    |    | (In million kg.)                                      |                                             |
|------|-------------------------------------------------------|----|----|----|-------------------------------------------------------|---------------------------------------------|
| Item |                                                       |    |    |    | Additional capacity to be licensed during Fourth Plan | Fibres to be available for textile purposes |
| 1.   | Nylon Filament and staple                             | .. | .. | .. | 8.5                                                   | 12.0                                        |
| 2.   | Polyester                                             | .. | .. | .. | 15.5                                                  | 10.0                                        |
| 3.   | Polyacrylonitrile                                     | .. | .. | .. | 20.5                                                  | 10.0                                        |
| 4.   | Polypropylene and polyvinyl alcohol                   | .. | .. | .. | 20.0                                                  | 5.0                                         |
| 5.   | Nylon tyre yarn, fishing net yarn and industrial yarn | .. | .. | .. | 12.0                                                  | 13.0                                        |

The basic raw material for the production of polyester fibre is DMT, which is proposed to be manufactured by a new plant to be set up as part of the petro-chemical complex in Gujarat. A

second DMT plant is also expected to be set up during the Fourth Plan period.

Side by side with the development of synthetic fibres, expansion of capacity of milliners is also proposed during the Fourth Plan period. The annual capacity of Viscose Staple fibre is proposed to be increased from 60 million kg. to 90 million kg.

#### WORLD PRODUCTION

According to the *Textile Almanac*, the U.S. remained the World's largest producer of rayon and acetate in 1965, the output increasing by 6% per cent. over that in 1964. The production in Japan, the second largest producer, increased from 1,061 million lbs in 1964 to 1,071 million lbs in 1965. Russia produced the third largest volume of rayon and acetate with 737 million lbs.

## RUBBER INDUSTRY

INDIA produced 45,616 metric tonnes of raw rubber during 1964-65 as against 37,487 metric tonnes in 1963-64.

Rubber production in India during March 1965 totalled 2,414 tonnes, according to the latest statistics of the Rubber Board. About 5,911 tonnes were consumed by manufacturers during the period. Stocks with estates and dealers during the same period were 6,566 m. tonnes.

Manufacturers held 7,523 tonnes in addition to 5,059 tonnes of synthetic rubber and 1,408 tonnes of reclaimed rubber. Imports of natural

rubber amounted to 1,201 tonnes during March 1965. Exports were nil.

Of an area of about 383,813 acres under rubber cultivation at the end of 1964-65, 361,147 acres are located in the State of Kerala. Other rubber growing areas are the districts of Kanya Kumari, Coimbatore, Salem, Nilgiris and Madurai in Madras State and Coorg and Chickmagalur in Mysore State, and Andamans and Tripura.

The total number of rubber estates registered up to the end of 1964-65 was 71,852.

synthetic 10,723); 1963-64: 73,114 (natural 61,155; synthetic 11,959); 1964-65: 85,711 (natural 61,057; synthetic 15,235).

Imports of rubber in metric tons were: 1960-61: 31,222 (natural 23,125; synthetic 8,097); 1961-62: 32,649 (natural 22,528; synthetic 10,121); 1962-63: 33,657 (natural 23,800; synthetic 10,297); 1963-64: 35,067 (natural 26,275; synthetic 8,812); 1964-65: 84,816.

The estimated production of natural rubber during the last year of the Third Five Year Plan period is as follows (in metric tonnes): 1965-66: 41,453. The estimated demand for different types of rubber during 1964-65 & 1965-66 is as given below:

The following are other details:—

| Year    | Planted area in acres | Tappable Area (worked out on the basis of year of planting) in acres | Production (Metric Tonnes) | Average yield per acre in kgs. |
|---------|-----------------------|----------------------------------------------------------------------|----------------------------|--------------------------------|
| 1957-58 | 281,998               | 175,500                                                              | 24,534                     | 140                            |
| 1958-59 | 286,567               | 173,600                                                              | 24,169                     | 139                            |
| 1959-60 | 305,452               | 172,500                                                              | 24,173                     | 140                            |
| 1960-61 | 321,002               | 173,600                                                              | 25,697                     | 148                            |
| 1961-62 | 348,121               | 183,600                                                              | 27,446                     | 149                            |
| 1962-63 | 361,142               | 207,700                                                              | 32,239                     | 155                            |
| 1963-64 | 377,938               | 236,000                                                              | 37,487                     | 156                            |
| 1964-65 | 383,813               | 263,000                                                              | 45,616                     | 170                            |

#### STATEWISE DISTRIBUTION OF THE PLANTED AREA AT THE END OF 1964-65 (Area in acres)

| STATES               | Holdings      |                | Estates      |                |
|----------------------|---------------|----------------|--------------|----------------|
|                      | No. of units  | Area           | No. of units | Area           |
| Kerala .. .. .       | 70,345        | 231,062        | 572          | 130,085        |
| Madras .. .. .       | 854           | 5,942          | 42           | 11,906         |
| Mysore .. .. .       | 25            | 392            | 11           | 3,945          |
| Andamans .. .. .     | Nil           | Nil            | 1            | 422            |
| Tripura .. .. .      | 1             | 20             | Nil          | Nil            |
| Maharashtra .. .. .  | 1             | 39             | Nil          | Nil            |
| <b>TOTAL</b> .. .. . | <b>71,226</b> | <b>237,455</b> | <b>626</b>   | <b>146,353</b> |

Areas upto and including 50 acres are classified as *Small Holdings* — (small growers).

Areas above 50 acres are classified as *Estates* — (large growers).

With effect from December 10, 1963, the Government of India fixed for all classes of business minimum prices, exclusive of sales tax, for the various grades and qualities of rubber and latex of different concentrations, excluding the cost of container.

The quantities actually consumed during the last few years in metric tonnes were:

1960-61: 55,545 (natural 48,148; synthetic 7,397); 1961-62: 58,596 (natural 48,410; synthetic 10,186); 1962-63: 64,276 (natural 53,553;

The production of natural rubber at the end of the Third plan was 50,000 tonnes as against an estimate of 45,000 tonnes.

At present about 16 per cent of the demand is met by synthetic rubber.

The total value of rubber plantation in the country is estimated at over Rs. 50 crores. The rubber plantation and manufacturing industries offer direct employment to about 1,35,000 workers and means of livelihood for over four lakh people according to a modest estimate.

#### SYNTHETIC RUBBER

Man-made rubber or synthetic rubber (polymer) is manufactured by polymerisation which is said to be the chemical union of two or more molecules (monomers) resulting in the formation of a new compound, a large molecule — polymer of the same empirical formula but of greater molecular weight. Natural rubber consists mainly of a polymer of isoprene. The most commonly used monomers for the manufacture of synthetic rubber are divinyl, isoprene and isobutene, which are commonly obtained from refinery products.

Different varieties of synthetic rubber are:

**Styrene Butadiene Rubber (SBR):** This is the most common type of synthetic rubber that can replace natural rubber in virtue of its high abrasion resistance. It is, therefore, widely used in tyre treads, belting, hose, covering footwear, etc. Styrene (mobile liquid) and Butadiene (gas) are the organic chemicals needed as intermediaries for the production of SBR. At Bavelly, U.P., commercial ethyl alcohol made from molasses is used as the base.



**Butyl Rubber:** Isoprene and isobutylene are the intermediaries for the production of butyl rubber. This is chemically inert and is used for diaphragms, gaskets and steam hose linings.

**Neoprene:** This is similar to natural rubber and is one of the first synthetic rubbers. Chloroprene is used for its manufacture. It has very high tensile strength; it is flame proof and resistant to oil solvents. It is, therefore, extensively used in adhesives, insulations and fuel hoses, etc.

**Cis-Polyisoprene:** Waste gas from a petrochemical industry is used as a base for the manufacture of this type of synthetic rubber. The proposed synthetic rubber plant in Gujarat sponsored by the ONGC will manufacture this variety.

The other varieties are:

(Cis-Polybutadiene, Polysulphide Rubber Thiokol), and Nitrite Rubber.

The Synthetic rubber plant at Bareilly (U.P.) is the first of its kind in Asia commissioned in 1964. Its annual capacity is 30,000 tonnes

having a capital investment of Rs. 20 crores. Foreign exchange to the tune of Rs. 8 crores is expected to be conserved yearly by the country through this plant. It employs about 1200 persons. About 116 thousand tonnes of synthetic rubber was produced during 1964-65.

According to the planning group of the petrochemical industry, 120,000 tonnes capacity of synthetic rubber would need be established by 1970-71 — end of the Fourth Plan. A \$25 million project is proposed to be set up near Bombay with an annual capacity of 25,000 tonnes. Another project by Mafatlal Group through NOCI (National Organic Chemical Industry Ltd.) with an equivalent capacity is also to be set up with foreign collaborations. Two more complexes are envisaged at Barauni and Haldia.

**Rubber Goods:** India has a modern manufacturing industry. Production of rubber goods has increased more than three times in the last 15 years.

The raw materials used in the manufacture of rubber goods are chiefly titanium dioxide, carbon black and zinc oxide. Different products constituting "rubber goods" are: rubber foot-

wears, toys, tyres, tubes, hoses (radiators, vacuum brakes, etc.), fan belts, ebonite, water proof fabrics — mackintosh, latex foam sponges and other rubber components of railway fittings, etc. Of this, the manufacture of tyres and tubes accounts for more than 70 per cent of the total consumption of rubber and bulk of capital investment followed by foot-wear with about 15 per cent annual consumption. In fact, the progress of rubber manufacturing industry in any country is based on the performance of its automobile tyre and tube industry. There are at present eight such units and four more are to be set up. The total capital investment in the automobile tyre industry is nearly Rs. 25 crores. Government of India has controlled the prices for tyres and tubes.

Rubber foot-wear industry is the second largest among rubber goods industries. There are about 19 well-organised units producing 60 million pairs in addition to many small units throughout the country. In 1963-64 rubber footwear worth Rs. 4.5 lakhs were exported. A Rubber Development Wing at New Delhi has been set up to give assistance to this potential industry.

The progress of the manufacturing industry is given below:—

| Product                                                       | 1960     | 1961     | 1962    | 1963     | 1964     |
|---------------------------------------------------------------|----------|----------|---------|----------|----------|
| Footwear (Lakh pairs) .. .. .                                 | 440.4    | 451.2    | 498     | 465.6    | 470.4    |
| Dipped Rubber goods, Toys, Balloons, etc. (Lakh Doz.) .. .. . | 324.0    | 255.6    | 3,076.8 | 2,740.4  | 3,075.7  |
| <b>Tyres:</b>                                                 |          |          |         |          |          |
| Automobile (000) .. .. .                                      | 1,362.0  | 1,562.4  | 1,710   | 1,926    | 2,090.4  |
| Cycle (000) .. .. .                                           | 10,830.0 | 11,346.0 | 11,940  | 14,186.4 | 16,156.8 |
| Tractor (No.) .. .. .                                         | 49,476   | 43,456   | 56,556  | 43,212   | 74,544   |
| Aero (No.) .. .. .                                            | 2,664    | 2,652    | 8,064   | 15,660   | 14,052   |
| Cab (000 meters) .. .. .                                      | 61.2     | 39.6     | 49.2    | 60       | 48       |
| <b>Tubes:</b>                                                 |          |          |         |          |          |
| Automobile (000) .. .. .                                      | 1,281.6  | 1,484.4  | 1,644   | 2,029    | 2,208    |
| Cycle (000) .. .. .                                           | 12,675.6 | 12,848.4 | 11,562  | 13,342.8 | 15,194.4 |
| Tractor (No.) .. .. .                                         | 50,712   | 53,724   | 52,752  | 63,156   | 75,180   |
| Aero (No.) .. .. .                                            | 1,080    | 2,418    | 2,940   | 3,696    | 4,608    |
| <b>Hoses:</b>                                                 |          |          |         |          |          |
| Radiator (000) .. .. .                                        | 248.4    | 249.6    | 205.2   | 207.6    | 276.0    |
| Vacuum Brake (000) .. .. .                                    | 845.6    | 724.8    | 1,114   | 1,020    | 1,220.4  |
| Other Types (000 meters) .. .. .                              | 3,592.8  | 4,632    | 5,050.8 | 5,390.4  | 6,584.4  |
| Fan Belt (000s.) .. .. .                                      | 1,087.2  | 1,076.4  | 1,084   | 1,216.8  | 1,328.4  |
| Ebonite (kgms.) .. .. .                                       | 133.2    | 166.8    | 124.8   | 141.6    | 132.0    |
| Waterproof fabrics (000 meters) .. .. .                       | 3,694.8  | 4,731.6  | 4,166.4 | 6,466.8  | 4,627.2  |
| Latex foam sponge (kgms) .. .. .                              | 1,261.2  | 1,516.8  | 1,683.6 | 1,420.8  | 1,056.0  |

The programme of development for the rubber goods industry envisaged under the Plans period is summarised below:—

(In million Nos.)

|                          | 1955-56    | 1960-61            | Targets for 1965-66            |
|--------------------------|------------|--------------------|--------------------------------|
|                          | Production | Installed Capacity | Production Capacity Production |
| Automobile tyres .. .. . | 0.92       | 1.61               | 1.49 3.70 3.0                  |
| Bicycle tyres .. .. .    | 5.80       | 15.12              | 11.15 38.6 30.9                |

### IMPORTS

Considerable quantities are being imported to meet the increased domestic demand of the manufacturing industry.

(Rs. lakhs)

| Imports                                                | 1960-61  | 1961-62  | 1962-63  | 1963-64 | 1964-65 |
|--------------------------------------------------------|----------|----------|----------|---------|---------|
| 1. Crude rubber, includingthetic and reclaimed .. .. . | 1,078.22 | 1,010.37 | 1,023.22 | 975.04  | 542.89  |
| 2. Rubber fabricated materials .. .. .                 | 22.59    | 15.72    | 21.4     | 23.10   | 22.39   |
| 3. Rubber manufactured articles .. .. .                | 302.85   | 333.09   | 154.13   | 174.93  | 116.75  |

**Import duty:** An initial duty of 5 per cent 22 per cent in April 1963. With the regulatory cent. But the excise duties on tyres, tubes, was introduced in May 1957. But this was import duty of 10 per cent introduced in Feb. footwear and cycle parts have been totally increased to 10 per cent in March 1961 and 1965, the present duty comes to 32 per removed.



## SHIPPING INDUSTRY

SHIPPING is an integral and essential part of our economy, helping towards greater self-reliance in regard to the transport of our exports and imports, and saving and earning for the country a large amount of foreign exchange.

In 1962, the Indian Shipping crossed the milestone of a million gross registered tons.

Indian ships are in a position to carry the entire dry cargo and about 20 per cent of the wet cargo moving on the coast. In spite of the significant expansion that has taken place, Indian tonnage is not yet in a position to carry more than 12 per cent to 15 per cent of the country's foreign trade. This is because the volume of the country's international trade has also registered a steep increase with the growing industrial development and the expansion of the country's export trade. Nevertheless, Indian ships earn about Rs. 50 crores in foreign exchange every year. The quantity of cargo carried and the freight and passenger earnings of Indian

ships have been steadily increasing as will be seen from the table below:

| Year    |    |    |    |    |    |    |    |    |    | Cargo carried in overseas trade including adjacent trade | Earnings in the overseas trade including adjacent trade |
|---------|----|----|----|----|----|----|----|----|----|----------------------------------------------------------|---------------------------------------------------------|
|         |    |    |    |    |    |    |    |    |    | (lakhs of tons)                                          | (Rs. in crores)                                         |
| 1960-61 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 30.78                                                    | 21.48                                                   |
| 1961-62 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 34.21                                                    | 31.66                                                   |
| 1962-63 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 35.38                                                    | 34.29                                                   |
| 1963-64 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 58.73                                                    | 43.13                                                   |
| 1964-65 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 67.36*                                                   | 51.87                                                   |

\* Figures in deadweight tons.

During the Third Plan period 11 bulk carriers G.R.T. were acquired. Eleven more bulk aggregating about 2.41 lakh G.R.T. and 4 carriers of about 2.34 lakh G.R.T. are under overseas tankers aggregating 1.05 lakh construction.

### ANALYSIS OF TONNAGE AS ON MARCH 31, 1966 (Ships of 150 g.r.t. and above)

| Coastal Trade       |    |    |    |    |    |    |    |    |    |    |    | No. of ships | G.R.T.    | D.W.T.    |
|---------------------|----|----|----|----|----|----|----|----|----|----|----|--------------|-----------|-----------|
| COASTAL TRADE:      |    |    |    |    |    |    |    |    |    |    |    |              |           |           |
| Dry Cargo           | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 80           | 266,912   | 411,445   |
| Cargo-cum-passenger | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 4            | 15,672    | 11,752    |
| Passenger           | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 10           | 11,601    | 5,734     |
| Tankers             | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 3            | 25,410    | 37,308    |
| OVERSEAS TRADE:     |    |    |    |    |    |    |    |    |    |    |    |              |           |           |
| Dry cargo           | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 114          | 1,072,263 | 1,564,346 |
| Tankers             | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 4            | 105,608   | 166,909   |
| Cargo-cum-passenger | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 6            | 43,000    | 46,372    |
| TOTAL               | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | .. | 221          | 15,40,476 | 22,43,866 |

### Agewise Analysis of Indian Tonnage (1st January 1964)

| Age of vessels                                        | Overseas       |          | Coastal        |         | Total          |                      |
|-------------------------------------------------------|----------------|----------|----------------|---------|----------------|----------------------|
|                                                       | No. of vessels | g.r.t.   | No. of vessels | g.r.t.  | No. of vessels | g.r.t.               |
| Under 10 years (built in 1954 or later)               | 76             | 676,773* | 11             | 42,777  | 87             | 719,552<br>(58.3%)   |
| Between 10 and 14 years (built between 1949 and 1953) | 11             | 73,230   | 31             | 107,478 | 42             | 180,708<br>(14.7%)   |
| Between 15 and 19 years (built between 1944 and 1948) | 11             | 91,268   | 31             | 137,427 | 42             | 218,695<br>(17.7%)   |
| 20 years and over (built in 1943 or earlier)          | 1              | 5,876    | 31             | 107,258 | 32             | 113,134<br>(9.2%)    |
| Small Companies†                                      | —              | —        | 5              | 1,764   | 5              | 1,167<br>(0.1%)      |
|                                                       | 99             | 837,147  | 109            | 396,706 | 208            | 1,233,853<br>(100 %) |

A significant step taken during the Second Plan period was the establishment of a non-lapsing shipping development fund for grant of loans to shipping companies for the acquisition of tonnage.

Another significant step taken in the field of shipping was the establishment of a Shipping Co-ordination Committee in the Department of Transport. The Committee is intended to bring

about better liaison between various Ministries of the Government of India and other Government organisations which have cargoes requiring transport, on the one hand, and the Indian shipping companies, on the other, so as to ensure the maximum utilisation of the available Indian tonnage.

The Government of India has agreed to permit

the acquisition of second-hand tonnage on deferred payment terms which involve not more than 20 per cent down payment, with the balance of the price spread over a period of 5 years. The Government has also agreed to consider orders for building new ships provided the payment of price is spread over a period of 7 years after delivery, with a small initial cash payment.

\* As much as 80.8 per cent. of the Indian tonnage operating in the overseas trades is under 10 years of age.

† Owning total tonnage not exceeding 1,000 g.r.t. and plying in short coastal range. Source: Indian Shipping.



## PROGRESS OF INDIAN TONNAGE

**Note :—**While the fleet tonnage figures are as on the dates mentioned in column 1 of the Table, the tonnage of coastal cargo carried (column 5)† is for the year ending on those dates and the tonnage of the total overseas and coastal cargoes (column 6) is for the twelve months ended 31st March of the year mentioned in column 1.

| (1)                                             | FLEET             |          |                   |         |                                      |           | TRADE                                                                             |                                                               |
|-------------------------------------------------|-------------------|----------|-------------------|---------|--------------------------------------|-----------|-----------------------------------------------------------------------------------|---------------------------------------------------------------|
|                                                 | (2)<br>Coastal    |          | (3)<br>Overseas   |         | (4)<br>Total Coastal<br>and Overseas |           | (5)<br>Coastal                                                                    | (6)<br>Total overseas<br>and coastal                          |
| As on                                           | No. of<br>vessels | G.R.T.   | No. of<br>vessels | G.R.T.  | No. of<br>vessels                    | G.R.T.    | Cargo carried by<br>Members of<br>Indian Coastal<br>Conference<br>(Shipping tons) | Cargo handled<br>at the major<br>ports of India<br>(Dw. tons) |
| 1st April 1951 (I Plan<br>beginning) .. ..      | 71                | 205,699  | 23                | 166,679 | 94                                   | 372,378*  | ..                                                                                | ..                                                            |
| 31st December, 1951 ..                          | 79                | 217,202  | 24                | 173,505 | 103                                  | 390,707*  | 2,410,749                                                                         | 18,806,000                                                    |
| " " 1952 ..                                     | 83                | 255,119  | 23                | 168,383 | 111                                  | 423,502*  | 2,584,572                                                                         | 22,223,429                                                    |
| " " 1953 ..                                     | 93                | 257,217  | 25                | 178,083 | 123                                  | 435,300   | 2,802,321                                                                         | 21,498,827                                                    |
| " " 1954 ..                                     | 101               | 286,066  | 25                | 179,198 | 126                                  | 465,264   | 2,848,433                                                                         | 20,049,220                                                    |
| " " 1955 ..                                     | 92                | 220,960  | 33                | 255,347 | 125                                  | 478,307*  | 2,660,508                                                                         | 20,401,715                                                    |
| Planned target at end of<br>Plan .. ..          | ..                | 315,000  | ..                | 285,000 | ..                                   | 600,000   | ..                                                                                | ..                                                            |
| 1st April 1956 (II Plan<br>beginning) .. ..     | 90                | 239,927  | 36                | 239,953 | 126                                  | 479,880   | ..                                                                                | ..                                                            |
| 1st December, 1956 ..                           | 85                | 246,724  | 39                | 270,615 | 124                                  | 517,339   | 2,543,232                                                                         | 24,103,677                                                    |
| " " 1957 ..                                     | 85                | 267,252  | 46                | 309,277 | 131                                  | 576,529   | 2,525,753                                                                         | 27,314,271                                                    |
| " " 1958 ..                                     | 85                | 267,252  | 46                | 309,277 | 131                                  | 576,529   | 2,525,753                                                                         | 27,314,271                                                    |
| " " 1959 ..                                     | 95                | 306,869  | 64                | 437,320 | 159                                  | 744,189   | 2,492,566                                                                         | 28,744,701                                                    |
| " " 1960 ..                                     | 93                | 315,397  | 74                | 528,619 | 172                                  | 844,016   | 2,660,992                                                                         | 31,012,045                                                    |
| Planned target at end of<br>II Plan .. ..       | ..                | 436,200‡ | ..                | 465,505 | ..                                   | 901,705   | ..                                                                                | ..                                                            |
| 1st April 1961 (III Plan<br>beginning) .. ..    | 97                | 313,694  | 75                | 544,139 | 172                                  | 857,833   | ..                                                                                | ..                                                            |
| 31st December, 1961 ..                          | 104               | 361,705  | 70                | 539,315 | 174                                  | 901,020   | 2,407,899                                                                         | 33,690,000‡                                                   |
| " " 1962 ..                                     | 107               | 394,939  | 80                | 629,303 | 187                                  | 1,024,242 | 3,539,451‡                                                                        | 33,920,000‡                                                   |
| " " 1963 ..                                     | 109               | 396,706  | 99                | 837,174 | 208                                  | 1,233,853 | ..                                                                                | 42,710,000‡                                                   |
| Planned target at end of<br>III Plan .. ..      | ..                | 324,500  | ..                | 761,400 | ..                                   | 1,085,900 | ..                                                                                | ..                                                            |
| Revised Planned target<br>at end of III Plan .. | ..                | ..       | ..                | ..      | ..                                   | 1,300,000 | ..                                                                                | ..                                                            |

\* In respect of these figures, there has been a slight discrepancy amounting to a few thousand tonnes when compared with figures of licensed tonnage published in the earlier issues of this journal because of one or two ships having been acquired but not licensed on the dates indicated.

† The Planning Commission appears to have taken the figure at the end of the year (31-12-1951) as the tonnage at the beginning of the Plan.

‡ Metric tonnes. § Including 23,000 tons of tankers and salvage tug of 1,000 tons.

Source : Indian Shipping.

## SHIPPING ACT

The Merchant Shipping Act 1958 provides for the establishment of a National Shipping Board and a Shipping Development Fund. It also provides for the safety and the efficiency of the merchant marine and the welfare of seamen and passengers.

There is a National Welfare Board for Seafarers to advise Government on welfare problems.

An important provision is about the definition of an Indian ship.

## Shipping Board

The National Shipping Board mentioned in the Act was set up on 1st March 1959.

Immediately after the 1st Board was set up, it appointed a Committee under the chairmanship of Mr. A. Ramaswami Mudaliar to formulate the shipping target for the Third Five-Year Plan. The present Chairman of the Board is Mr. Raghunath Singh, M.P.

## MERCHANT NAVY TRAINING

The Government of India have set up six training establishments for the training of

merchant navy officers and ratings. The Training Ship 'Dufferin' which provides pre-sea training course of two years for navigating cadets was set up in 1927. The annual out-put of this Training Ship is 80. Efforts are being made to replace the existing training ship by a new one when the annual intake is proposed to be increased from 80 to 125. The Directorate of Marine Engineering Training was set up in 1948 to provide a four years' course for engineering cadets. The present intake is 100 cadets per annum. But efforts are being made to increase it to 150. The Nautical and Engineering College provides post-sea instructional courses for both navigating and engineering cadets and apprentices who are preparing for Ministry of Transport certificate of Competency Examinations. There is no limitation as to the intake of this institution. The Training Ship 'Bhadra', 'Mekhala' and 'Nau Lakshmi' are ratings training establishments. The first two were started in 1950 while the third one was commissioned in 1955. These institutions provide a three months' course for deck, engine and saloon ratings. The combined monthly intake of these institutions is 113 at the moment. The annual expenditure on the running of all the six establishments is Rs. 36 lakhs approximately. Since the

inception of these institutions, 28,737 candidates have been trained upto the end of 1965.

In 1959, the Government of India set up the Merchant Navy Training Board for advising the Government on all matters pertaining to the training of Merchant Navy Personnel. The Board is reconstituted every two years.

The Third National Maritime Day was celebrated on the 5th April 1966, in the usual manner, in almost all the maritime States of India. The theme of this year's celebration was "The role of ship-building, ship-repairing and ancillary industries in the country's economy".

## FIVE-YEAR PLANS

The First Plan had fixed a target of 600,000 G.R.T., which was reached during the Plan period. A financial allocation of Rs. 26.3 crores had been made in the Plan.

The Second Plan envisaged a target of 900,000 G.R.T., with a financial provision of Rs. 45 crores (inclusive of the carryover of Rs. 8 crores from the First Plan). The target was fulfilled during the Plan period. The financial provision was increased to about Rs. 52.7 crores.



A target of 10.8 lakhs G.R.T. was initially fixed for the Third Plan period with a financial allocation of Rs. 51 crores. The target was raised to 12.5 lakh G.R.T. and again to 13.25 lakh G.R.T. and these targets have also been reached. During the Third Plan period a beginning was made in the building up of a fleet of bulk carriers and overseas tankers.

Indications are that the long-term target will have to be in the region of 4 to 5 million G.R.T. to be achieved during the Fourth and the Fifth Plans.

### Sailing Vessels

The Sailing Vessels Committee emphasised that if the industry were to survive, the owners of sailing vessels should be encouraged to mechanise their vessels. Government have, therefore, approved a scheme for the grant of loans for this purpose. Under the scheme, loans are being granted for mechanisation of sailing vessels of 100 tons and over upto a maximum of 75 per cent of the cost of auxiliary machinery, provided the vessels in question are considered seaworthy and suitable for installation of machinery.

The Government of India has signed an agreement with the Mitsubishi Heavy Industries, Japan in June 1964 for the construction of India's Second Shipyard at Cochin. The shipyard will be built as a part of India's Third Five Year Plan and will comprise among other things a dock of 80,000 deadweight tons and a ship of 15,000 deadweight tons.

### SHIP-BUILDING

(See 'Hindustan Shipyard', 'Maragon Dock Ltd.' and 'Garden Reach Workshop Ltd.' under Government Industrial Undertakings.)

## SMALL-SCALE INDUSTRIES

INDIAN industry is made up primarily of small-scale rather than large-scale units. It is reckoned that there are about two crore persons engaged in small-scale and cottage industries.

The small-scale industry is primarily the responsibility of the State Government and not of the Centre. But the Centre supplements the efforts of the State Governments.

Small-scale industries include all industrial units with a capital investment of not more than Rs. 7.5 lakhs irrespective of the number of persons employed. Capital investment now means investment only in plant and machinery, irrespective of the number of people employed and excluding investment on lands and buildings.

Under the State Aid to Industries Act/Rules State Governments are empowered to provide finance in the form of loans, guarantees for loans raised from banks, subscription to shares and debentures, etc. Although loans under the Act are generally for medium and long-term needs, advances are made for short-term requirements also.

In most of the States, loans up to Rs. 1,000 are being advanced on personal bonds, up to Rs. 5,000 against one or more personal sureties and above Rs. 5,000 at 75 per cent of the security (land, building, machinery, equipment, stocks and other assets including those created out of the loans) offered. These loans are repayable in easy equal instalments spread over 10 years. No loan to any single party can normally exceed Rs. one lakh and to an industrial co-operative Rs. two lakhs without the prior concurrence of the Central Government.

The rate of interest on loans advanced under State Aid to Industries Act would be governed by the capital investment of small scale industries—it would be 3 per cent to industrial undertakings with capital investment upto Rs. 2 lakhs, 4½ per cent to undertakings with capital investment of Rs. 2 to 4 lakhs and 6 per cent to undertakings with capital investment of more than Rs. 4 lakhs. This does not, however, apply to industrial co-operatives in the small scale sector which will continue to receive loans at 2½ per cent.

New industries as well as industries which need revival or development in the cottage and small-scale sectors are eligible for grant of loans. Preference would be given to small scale units in the light of their capital investment i.e. units with smaller capital investment would be given preference over others.

While much is not yet known about the role of commercial banks in this process, the State Bank of India under its liberalised scheme made significant progress. Another landmark had been the initiation from 1st July 1960 of the Credit Guarantee Scheme by the Reserve Bank of India. Loans are also guaranteed to small industries by the National Small Industries Corporation and the State Financial Corporations. The N.S.I.C. has been extending financial assistance through its scheme under which it supplies machines on hire-purchase basis.

Small-scale industries are distinct from village industries and handicrafts. Generally speaking village industries are of traditional nature catering primarily to local markets.

Small-scale industries can and do produce a large variety of consumer goods:—bicycles, agricultural implements, sewing machines, domestic electrical appliances, builders' hardware, cutlery and domestic hardware, furniture, wood work, footwear and other leather products, ceramics, glassware, sports goods, hand tools, surgical and drawing and surveying instruments, mechanical toys, matches, chemicals, paints and varnishes, polishes, etc.

Small-scale industries can really be classified into four main groups:—manufacturing industries, feeder industries to large industries, servicing industries, and ancillaries to large industries.

Manufacturing industries include complete articles or products manufactured for sale directly to consumers (consumer items) and in some cases used as spare parts.

Feeder industries are a kind of general engineering shops which specialise in certain types of products and services such as castings, forging tools and dies, electroplating and galvanizing, welding and other services for large scale industries. They do not have a regular line of work but take job orders from time to time depending upon the need of the large industry.

Servicing industries mostly cover light repair shops which are necessary to maintain mechanical equipment owned by the community. They cater to such works as auto repairs, repair of cycles and radios, photographic studios, repair of pumps, motors and other kinds of light machinery used in industry, agriculture, etc.

Ancillaries to large scale units include parts and components for several light engineering products such as cycles, sewing machines, electric motors, radios, clocks, automobiles, diesel engines, textile and other machinery and machine tools.

### REVIEW

The Small-scale Industries Board which helps the Government in formulating various policies and programmes relating to the development of small-scale industries was reconstituted with effect from July 1961.

Reviewing the growth of small-scale industries during the last 10 years, Shri Dasappa said that there were in June 1964, over 57,000 small scale units registered with the various State Directorates of Industries. The number of on-register small scale factories which availed of facilities from Central Small Industries Organisation have been estimated at about 2 to 2.5 lakhs. Even the limited data available on the production and employment potential of this sector show that in 1962, about 30 per cent of total output in the industrial sector and 26 per cent of the value added by manufacture, were contributed by the small scale sector. They provided employment to about 1.4 million workers.

Apart from the Central and State assistance to the small-scale industries, the State Bank of India and the State Financial Corporations have been advancing long and medium term loans. During the Second Plan period (1956-61), the

total credit both long-term and short-term provided to small-scale industries by various institutional agencies and State Governments amounted to Rs. 70 crores. Under the Credit Guarantee Scheme, the Reserve Bank of India issued till the end of 1963, 19,419 guarantee certificates amounting to Rs. 78.66 crores. Directors of Industries of the State Governments continued to render special assistance to the industries by arranging procurement of raw materials such as steel, tin plates and non-ferrous metals.

During the first four years of the Third Plan the State Governments advanced Rs. 21.73 crore to small units. The State Financial Corporations sanctioned loans to the extent of Rs. 17.81 crore to 1,718 units up to end of Sept. 1963 out of their own funds out of which Rs. 6.88 crores were actually advanced. Under the agency arrangements, the State Financial Corporations Punjab\*, Maharashtra, Kerala, Andhra Pradesh, Assam, U.P., Rajasthan and Gujarat sanctioned loans to the extent of Rs. 4.94 crores to 3.3 applicants out of which Rs. 3.56 crores have been actually advanced upto Sept. 30, 1963.

The State Bank of India sanctioned Rs. 41 crores by the end of 1963.

The intensive campaign which aims at the development of small-scale industries in underdeveloped areas in various districts of States was launched in the States of Andhra, U.P., Pradesh, Madhya Pradesh, Mysore, Punjab and West Bengal during 1961-62, bringing a total number of such districts to 42.

There are now 16 small Industries Service Institutes, 6 Branch Institutes and 65 Extension Centres, including Production Centres. They give valuable assistance to the small-scale units by giving technical advice and demonstration, preparing drawings for various types of improved tools and small machines and giving training in the handling of modern tools and equipment. The various training programmes initiated by the Small Industries Service Institutes include training of block level extension officers, even classes in business management for the benefit of Government Officers and small-scale industrialists. Forty-seven mobile workshops fitted with modern machine tools attached to the S.I.S. have been touring rural areas with a view to imparting technical knowledge.

There were 180 Industrial Estates with 8.5 factory premises functioning in 1965.

To encourage the spirit of inventiveness amongst industrial workers, artisans and technicians, the Inventions Promotion Board has been giving financial incentives in the form of grant and prizes. Prizes worth Rs. 18,500 were distributed among thirteen inventors during 1963-64. (See article 'Awards and Prizes' for more details.)

The responsibility for the development of khadi and village industries, which help relieving unemployment and under-employment in rural areas, has been vested in the Khadi and Village Industries Commission. (For details of the progress achieved in village industries see article 'Cottage Industries' in this book.)

The development of the coir industry, which is entirely in the small-scale sector, is

\* Composite State.



responsibility of the Coir Board. A sum of Rs. 50 crores had been allotted for its development during the Third Plan.

An outlay of Rs. 114.83 crores was provided in the Third Plan for the development programme of small-scale industries and industrial estates compared to Rs. 55.57 crores in the Second Plan. The break-up of the Plan allocation under major heads is as follows (in Rs. crores): Government schemes: 62.62; Industrial estate: 30.21; Central Government schemes: 22.00.

According to the Fourth Plan (draft) the estimated expenditure during the Third Plan for the development of village and small scale industries amounted to Rs. 219.56 crores, while the Fourth Plan provides for an outlay of Rs. 379 crores.

### DEVELOPMENT AGENCIES

The nature of assistance available and the organisations responsible for rendering such assistance are given below:—

- (i) Technical know-how; (ii) Industries Information service; (iii) model schemes and industrial designs; and (iv) market research: Central Small Industries Organisation (Small Industries Service Institutes and Extension Centres); (v) Common facilities (Small Industries Service Institutes, extension centres and State Institutes).
- Training: both technical and managerial (Small Industries Service Institutes, State Government Directorates of Industries, Directorate of Training and Employment (Industrial Training Institute)).
- Finance: (a) For cash loans:—(i) Long term (State Govts. under State Aid to Industries etc., State Financial Corporations); (ii) Short term (State Bank of India, cooperative banks, scheduled banks under the Guarantee Scheme of the Reserve Bank of India); (b) For machinery and hire purchase (National Small Industries Corporation, New Delhi and its branches).
- Marketing Services (Specially Govt. Purchase Scheme) (National Small Industries Corporation and its branches).
- Factory accommodation in industrial estates (State Govts. Directorates of Industries, National Small Industries Corporation (for accommodation at Okhla and Naini industrial estates only)).
- Raw material and power supply (State Directorates of Industries).

The agencies mainly concerned with the development of small-scale industries in the country are thus the State Directorates of Industries, Small Scale Industries Organisation under the Development Commissioner, Small Industries Service Institutes functioning in the States as well as in New Delhi and the National Small Industries Corporation, with four branches one each at Bombay, Calcutta, Delhi and Madras.

### INDUSTRIES AND LOCATION

The Office of the Development Commissioner of Small-Scale Industries, New Delhi, carried out a survey in certain areas relating to location of industry and production. The findings of this survey which show what industries were located in the area surveyed and what the production was in that area are given in the 1959-60 edition of the Directory.

### EXPORTS

The following items of small industries' products have been selected by the National Small Industries Corporation for promoting their sales in overseas markets:—Leather footwear and leather goods; Cotton and Woollen hosiery; Sports goods; Builders' hardware, locks and fasteners; Tinned fruits, chutneys and pickles; Paints and varnishes; Glass beads.

National Small Industries Corporation and the State Trading Corporation also assist in import and distribution of some articles like copper, zinc, copper and brass scrap, cycle and sewing machine parts, knitting needles.

## NATIONAL SMALL INDUSTRIES CORPORATION LTD.

(See article 'All India Corporations').

### SERVICE INSTITUTES

The Institutes give broad outlines of the potentialities of different small-scale industries. They supply information on the number of existing units, their production and installed capacities as well as the present consumption, future demands and export possibilities for their products.

Information about the working capital required for a new unit, suppliers of machinery and raw materials and markets for the sale of products, is also made available by the Institutes.

There are 22 Small Industries Service Institutes including six branch institutes in the country.

They are located in New Delhi, Bombay, Calcutta, Madras, Agra, Jaipur, Ludhiana, Bangalore, Indore, Rajkot, Patna, Cuttack, Gauhati, Srinagar, Kanpur, Allahabad, Hubli, Hyderabad, Trichur, Ahmedabad and Goa.

There are also 65 Extension Centres to provide specialized technical assistance to particular industries.

### INDUSTRIAL ESTATES

Another feature of the industrial policy is the establishment of industrial estates. This was initiated in 1955.

The main object is decentralization. Government seeks to remove small industrial units from crowded urban areas and thus reduce the pressure on the latter, and secondly it seeks to provide small units with factory space and common facilities for efficient working.

The State Governments acquire and develop land, construct roads, put up factory buildings, arrange for supply of water and electricity and also set up common service workshops. The factory buildings in the States are then let out at concessional rents, outright sale or hire-purchase basis to small entrepreneurs.

The Government of India advance to the States the entire cost of the estates as loans. Grants are also given for specific purposes, such as planning and designing of these estates. The loans will carry interest at 4½ per cent.

These industrial estates provide better accommodation for small industries with facilities of power, water, etc. They bring industries together and facilitate the establishment of common servicing centres, introduction of modern techniques, collective purchase of raw materials and sale of finished products. They stimulate the co-operative spirit among them.

Industrial estates are of two kinds—large estates near big cities and urban areas and small ones in community development blocks.

The larger estates cost roughly from Rs. 20 to 30 lakhs, the smaller ones from Rs. 2 to 3 lakhs.

Only two—the one at Naini and the other at Okhla—are under the National Small Scale Industries Corporation. The rest are under the States.

During 1960, the Government took decision to establish several new types of Industrial Estates namely Industrial Estates by private agencies, Ancillary Industrial Estates, Functional Industrial Estates, University Industrial Estates and smaller Industrial Estates.

Apart from the government sponsored industrial estates a number of estates are being set up by Cooperative Societies and Joint Stock Companies of industrialists. In Maharashtra and Gujarat 20 such estates were functioning at the end of March 1964.

A State-wise list of Industrial estates approved by this organisation is given below:

### Industrial Estates Approved (as on 31st March 1964)

Andhra Pradesh: Sanatnagar; Vijayawada; Samal Kot; Visakhapatnam; Nandyal;

Warangal; Karim Nagar; Mehboob Nagar; Nellore; Mirnal; Prodlattur; Masulipatnam; Amadalavalasa; Khammam; Suriyapat; Jangaon; Hyderabad; Kisanagar; Sadalpalli.

Assam: Gauhati; Dhekiajute; Nalbari; Tinsukhia; Silchar.

Bihar: Patna; Biharsharif; Darbhanga; Muzaffarpur, Purulia; Daltanganj; Kailash; Jazidih; Kishanganj; Ranchi; Lakhmasal; Ramnagar; Thalya; Baroon, Murlijan; Adityapur; Bhagalpur.

Gujarat: Rajkot; Ahmedabad; Baroda; Udhna; Gandhidham; Bhavnagar; Somat; Godhra; Mehsana; Navsari; Baroda; Mehmedabad; Junagadh; Amreli.

Jammu and Kashmir: Gandhinagar; Srinagar; Anantnag; Gandarbal; Bandipura; Baramulla; Sopore; Shopian; Kangan; Kathua; Sonawari; Udhampur; Bijnor; Pulwama; Tral; Pattan; B. S. Para; Akhnoor; Samha; Hiranagar; Ramnagar; Poonch; Reasi; Rajauri.

Kerala: Pappanamcode; Ettumanoor; Kollakadava; Olavakkod; Ollur; Veli & Kozhikode; Palayad.

Madhya Pradesh: Indore; Gwalior; Bhopal; Jabalpur; Burhanpur; Sagar; Raipur; Ujjain; Satna; Ratlam; Durg; Kathi; Bilaspur.

Madras: Guindy; Madurai; Trichy; Erode; Virudhunagar; Marthandam; Pettai; Tanjore; Katpadi; Salem.

Maharashtra: Kolhapur; Hadapsar; Karad; Nagpur; Amravati; Kurla; Sangli; Ichalkaranji; Nanded; Lonavla; Parvati; Jalgaon; Bapat Road; Parli; Malegaon; Goregaon; Miraj; Ahmadnagar; Kopergaon; Chanda; Sholapur; Nasik; Shivajinagar; Dhule; Jalna; Satara; Hingoti; Aurangabad; Ratnagiri.

Mysore: Mysore; Bangalore; Hubli; Harihar; Gulbarga; Mangalore; Belgaum; Ramnagar; Bijapur; Dandeli; Jamkhavali; Channarayana; Bangalore HMT; Shiralkappa; Mercara.

Orissa: Cuttack; Jharsuguda; Boudkela; Berhampur; Kendrapara; Baripada; Dhenkanal.

Punjab: Ludhiana; Sonapat; Malerkotla; Nibokheri; Batala; Bhatinda; Patiala; Kangra; Naraul; Industrial Colony (Hoshiarpur); Noida; Kaithal; Mohindergarh; Bahhanpura; Hariana; Pinjore; Una; Fatehgarh; Kanthunagar; Dudhike; Fatehabad; Sunam; Rai; Raigarh Sadhwan; Dera Gopipur; Gargan; Hissar; Ferozepur; Rajpura.

Rajasthan: Jaipur; Bhilwara; Makhapura; Kotah; Jodhpur; Udaipur; Sumerpur; Bharatpur; Sriganganagar; Bikaner; Alwar; Dholpur; Gangapur; Pali.

Uttar Pradesh: Kanpur; Agra; Naini; Deoband; Loni; Varansi; Aligarh; Joya; Jhansi; Farrukhabad; Bhojpur; Lalai Khera; Bharnich; Lalitpur; Khairabad; Sitapur; Muzaffarnagar (Harjan); Muzaffarnagar (General); Deoria; Mirzapur; Khalilabad; Gorakhpur; Firoz; Etah; Varanasi; Lucknow; Meerut; Gutter-buck-Ganj; Roorkee; Dehra Dun; Unnao; Azamgarh; Moradabad; Saharanpur; Kherja; Agra; Chauharpur; Rudrapur; Gazi; Bada; Saharanpur; Mahoba; Raipur; Khalhat; Salempur; Ghose; Aurajya; Panchpur; Nagina; Chandrawal; Ganga Khera; Atrauli; Shyam Mandi; Gobardhan; Jaunpur; Barabanki; Faizabad; Rampur; Shahjahanpur; Lakhimpur; Firozabad; Mathura; Mathpuri; Hathras.

West Bengal: Baraipur; Kalyani; Saktigarh; Howrah; Singuri; Baraipur (No. 2).

Delhi: Okhla; Badli.

Himachal Pradesh: Solan.

Manipur: Tekyal.

Pondicherry: Thattanchavadi.

Tripura: Arundbutinagar Korikal; Udaipur; Kumarghat.



## TEA INDUSTRY

FOR the last 60 years, Indian tea production and export had been the largest in the world. Tea ranks as the largest item in India's export trade. The present export amounts to 197 thousand tonnes, accounting for roughly two-thirds of the production, and the foreign exchange earned totals Rs. 114.8 crores. (April '65 to March '66).

The State Governments also derive considerable revenue from the agricultural income tax on tea grown within their jurisdiction as well as from the sales tax, carriage tax, octroi, etc. on the commodity.

The industry as a whole gives employment to a labour force of almost one million. The average daily number of labour employed (fields and factories) during 1962 and 1961 total 816,262 and 822,834 respectively.

Unlike China, which consumes all its tea, India exports a substantial portion of tea production in the country. India meets nearly 38 per cent of the world demand for tea (1964). The share of tea in total export earnings in India ranges from 15 to 20 per cent. Britain, being traditionally the world's greatest tea-drinking nation, has been India's major purchaser of tea. In 1963, India produced 346 million kg. of tea and exported 224 million kg., earning Rs. 132.4 crores. This was the highest export production performance in the last five years.

There are about 9,835 tea estates with a total area of 337,874 hectares (834,887 acres). Assam accounts for the highest acreage—410,806 acres, followed by West Bengal 209,615 acres, Kerala 98,736 acres, and Madras 81,615 acres, the rest being covered by Tripura, Punjab\* (Kangra), Uttar Pradesh, Mysore, Bihar and Himachal Pradesh (Mandi) in order of magnitude.

There are over 700 joint stock companies engaged in the tea industry. The total paid-up capital in the industry as a whole is about Rs. 74 crores; the number of Indian companies is about 40 with a paid-up capital of about Rs. 25 crores (latest available).

The revised targets of production and export of tea for the Third Plan were 376.5 million kg. for production and 240.4 million kg. for export. The corresponding targets for the Fourth Plan are 453.6 million kg. for production and 294.8 to 303.9 million kg. for export. The actual performance of the Third Plan, however, falls quite short of the expectations. This is particularly so in the case of exports.

The total business of leaf and dust teas done at Calcutta markets during 1965-66 (up to end of February) was 19 lakh packages and 10 lakh packages respectively, against 21 lakhs and 10 lakhs for 1964-65. The average price of Rs. 5.52 per kg. of leaf tea was higher by 50 paise and that of dust tea higher by 44 paise at Rs. 5.13.

Tea is the only product subject to sales tax and excise duty on exports. In 1963-64, the export duty was abolished altogether. But with the devaluation, the export duty is again levied at Rs. 2 per kg. The fixation of this duty is believed to have been arrived at to mop up the equal amount of extra earning in terms of rupees.

Excise duty on tea is now levied at different rates for different zones. There are four zones at present—Zone I, II, IIIA and IIIB. These zones have been demarcated on the basis of the average price which teas from those areas fetch at the internal and export auctions in Calcutta and Cochin. In 1963-64 the rebate of excise duty on the exported quantity was discontinued and a 20 per cent surcharge on the excise duty was imposed on tea.

An export promotion drive for tea has been launched by the Indian Tea Board through the establishment of Tea Councils and frequent participation in international trade exhibitions. At present, Tea Councils set up in collaboration with local tea interests, are functioning in U.S.A., Canada, West Germany, Ireland and Netherlands.

Increased tea production in India, Ceylon, Iran and Pakistan is expected to push 1966 world tea production to a record 933 million kg. (2,056 million lb.) amounting to an increase of 3.6 per cent over the previous year, according to the U.S. Agricultural Department Survey. World tea consumption, however, continues to decline against rising output and ultimately lower prices. The per capita consumption of tea fell from a 1956-58 level of 9.97 lb. a year to 9.71 lb. for 1960-61.

### WORLD TEA OUTPUT

(Million kg.)

|                            |    | 1964  | 1965  |
|----------------------------|----|-------|-------|
| North India                | .. | 287.6 | 271.9 |
| South India                | .. | 79.0  | 88.4  |
| TOTAL INDIA                | .. | 366.6 | 360.3 |
| Pakistan                   | .. | 28.6  | 27.0  |
| Ceylon                     | .. | 199.3 | 209.7 |
| Indonesia                  | .. | 7.2   | 6.3   |
| Malawi                     | .. | 10.7  | 9.6   |
| Kenya, Uganda and Tanzania | .. | 29.8  | 29.6  |
| Portuguese East Africa     | .. | 9.0   | 9.6   |
| China                      | .. | n.a.  | n.a.  |
| Japan                      | .. | 83.3  | n.a.  |
| Argentina                  | .. | 11.0  | n.a.  |

Despite the fact that Indian tea yield has been the highest in the world, India would not be able to face the competition given by Ceylon during the recent years since the rate of increase in cost is greater than the rate of yield in India. According to the Reserve Bank study, the profitability of the tea industry has come down considerably. It appears, therefore, that the tea industry will not be able to derive full benefit of devaluation.

### ESTIMATE OF INTERNAL CONSUMPTION OF TEA IN INDIA

(in tonnes)

| Year    |    |    | Opening<br>Stock | Production<br>during<br>the year | Export<br>during<br>the year | Closing<br>stock | Estimated<br>consumption<br>cols. (2 + 3) -<br>cols. (4 + 5) |
|---------|----|----|------------------|----------------------------------|------------------------------|------------------|--------------------------------------------------------------|
| 1960-61 | .. | .. | 60,559           | 322,429                          | 196,473                      | 59,709           | 126,806                                                      |
| 1961-62 | .. | .. | 59,709           | 355,493                          | 205,329                      | 70,231           | 139,642                                                      |
| 1962-63 | .. | .. | 70,231           | 344,551                          | 220,800                      | 58,268           | 135,714                                                      |
| 1963-64 | .. | .. | 58,268           | 344,705                          | 209,328                      | 52,978           | 140,667                                                      |

SOURCE: Tea Board Statistics (1964).

### EXPORTS

The following table shows the quantity and the value of tea exported from India:

| Year       | Quantity of tea<br>exported in<br>thousand tonnes | Value of tea<br>exported in<br>Rs. crores |
|------------|---------------------------------------------------|-------------------------------------------|
| 1937-38 .. | 156                                               | —                                         |
| 1947-48 .. | 176                                               | —                                         |
| 1960 ..    | 193                                               | 120                                       |
| 1961 ..    | 206                                               | 124                                       |
| 1962 ..    | 214                                               | 125                                       |
| 1963 ..    | 224                                               | 132                                       |
| 1964 ..    | 211                                               | 125                                       |
| 1964-65 .. | 218                                               | 128                                       |
| 1965-66 .. | 197                                               | 115                                       |

SOURCE: Tea Statistics 1964. Figures for 1965-66 from the Official Monthly Export Statistics, March 1966.

### GROWTH

The following table shows the growth of the industry:—

| Year |    | Production in<br>thousand<br>tonnes | Area<br>under tea<br>in thousand<br>hectares | Yield<br>(in kg.)<br>per<br>hectare |
|------|----|-------------------------------------|----------------------------------------------|-------------------------------------|
| 1938 | .. | 205                                 | 337                                          | 608                                 |
| 1948 | .. | 262                                 | 311                                          | 843                                 |
| 1955 | .. | 308                                 | 321                                          | 960                                 |
| 1956 | .. | 309                                 | 323                                          | 955                                 |
| 1957 | .. | 311                                 | 325                                          | 955                                 |
| 1958 | .. | 325                                 | 326                                          | 996                                 |
| 1959 | .. | 326                                 | 331                                          | 986                                 |
| 1960 | .. | 321                                 | 331                                          | 969                                 |
| 1961 | .. | 354                                 | 333                                          | 1,066                               |
| 1962 | .. | 347                                 | 334                                          | 1,038                               |
| 1963 | .. | 346                                 | 330                                          | 1,049                               |
| 1964 | .. | 371                                 | n.a.                                         | —                                   |

SOURCE: J. Thomas & Company Pvt. Ltd. (1965).



The following table gives the number of estates, area and production of tea in India by States during 1963 & 1964 :

| States                  | No. of estates |       | Area in hectares |         | Production in tonnes |         |
|-------------------------|----------------|-------|------------------|---------|----------------------|---------|
|                         | 1963           | 1964  | 1963             | 1964    | 1963                 | 1964    |
| Assam .. .. .           | 746            | 747   | 163,874          | 166,251 | 169,663              | 195,532 |
| West Bengal .. .. .     | 299            | 297   | 83,615           | 84,830  | 83,456               | 89,541  |
| Bihar .. .. .           | 3              | 3     | 534              | 534     | 60                   | 57      |
| Tripura .. .. .         | 55             | 55    | 5,125            | 5,288   | 2,477                | 2,916   |
| M.P. .. .. .            | 33             | 33    | 2,070            | 2,012   | 660                  | 726     |
| Punjab (Kangra) .. .. . | 1,159          | 1,159 | 3,763            | 3,763   | 1,045                | 1,070   |
| H.P. (Mandi) .. .. .    | 226            | 226   | 420              | 420     | 84                   | 106     |
| Total N. India .. .. .  | 2,521          | 2,520 | 259,402          | 263,098 | 257,445              | 239,948 |
| Madras .. .. .          | 5,128          | 5,170 | 32,932           | 33,029  | 44,721               | 41,755  |
| Mysore .. .. .          | 14             | 14    | 1,781            | 1,789   | 2,159                | 1,817   |
| Kerala .. .. .          | 2,111          | 2,131 | 39,921           | 39,921  | 40,879               | 38,597  |
| Total S. India .. .. .  | 7,253          | 7,315 | 74,634           | 74,776  | 88,968               | 82,169  |
| Total India .. .. .     | 9,774          | 9,835 | 334,036          | 337,876 | 346,413              | 372,117 |

SOURCES : Tea Board Statistics (1964)

J. Thomas & Company Pvt. Ltd. (1965)

QUANTITY AND VALUE OF TEA EXPORTED FROM INDIA TO DIFFERENT COUNTRIES OF THE WORLD DURING 1962, 1963 AND 1964 :

| Countries of destination | 1962              |                   | 1963              |                   | 1964              |                   |
|--------------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
|                          | Quantity (tonnes) | Value (Rs. lakhs) | Quantity (tonnes) | Value (Rs. lakhs) | Quantity (tonnes) | Value (Rs. lakhs) |
| U.K. .. .. .             | 119,862           | 7,000             | 135,590           | 8,126             | 119,658           | 7,206             |
| Germany Western .. .. .  | 1,713             | 138               | 1,419             | 114               | 2,045             | 164               |
| Irish Republic .. .. .   | 7,243             | 444               | 7,287             | 461               | 5,021             | 314               |
| Netherlands .. .. .      | 2,937             | 164               | 3,084             | 181               | 3,112             | 191               |
| U.S.S.R. .. .. .         | 12,414            | 960               | 16,583            | 1,105             | 21,130            | 1,370             |
| Afghanistan .. .. .      | 4,546             | 210               | 4,192             | 200               | 4,821             | 246               |
| Bahrain Island .. .. .   | 420               | 18                | 260               | 15                | 299               | 17                |
| Iraq .. .. .             | 2,767             | 133               | 2,705             | 134               | 1,968             | 102               |
| Iran .. .. .             | 4,506             | 348               | 3,290             | 268               | 2,264             | 200               |
| Kuwait .. .. .           | 882               | 46                | 772               | 42                | 623               | 34                |
| Arabia .. .. .           | 102               | 8                 | 60                | 5                 | 64                | 6                 |
| Turkey .. .. .           | 1,807             | 105               | 1,177             | 67                | 43                | 2                 |
| U.A.R. .. .. .           | 18,541            | 912               | 17,083            | 867               | 15,944            | 802               |
| Sudan .. .. .            | 5,316             | 225               | 3,644             | 171               | 3,666             | 169               |
| Canada .. .. .           | 6,321             | 365               | 5,342             | 318               | 5,703             | 341               |
| U.S.A. .. .. .           | 11,458            | 653               | 10,087            | 580               | 9,380             | 527               |
| Chile .. .. .            | 463               | 25                | 134               | 8                 | 97                | 5                 |
| Australia .. .. .        | 5,254             | 243               | 3,023             | 178               | 5,362             | 274               |
| New Zealand .. .. .      | 553               | 30                | 409               | 23                | 378               | 21                |
| Other Countries .. .. .  | 6,895             | 405               | 5,801             | 374               | 8,945             | 499               |
| TOTAL .. .. .            | 214,000           | 12,492            | 223,542           | 13,237            | 210,523           | 12,490            |

SOURCE : Tea Board Statistics (1964).



gives an idea of the capacities expected to be established by the end of the Fourth Plan :

| Plastic materials                             | Tentative target for 1970-71 (Tonnes) |
|-----------------------------------------------|---------------------------------------|
| Polyethylene .. .. .                          | 1,00,000                              |
| Polypropylene .. .. .                         | 10,000                                |
| P. V. C. .. .. .                              | 1,00,000                              |
| Polystyrene .. .. .                           | 35,000                                |
| Acrylics (MMA) .. .. .                        | 6,000                                 |
| Vinyl acetate .. .. .                         | 23,000                                |
| Polyurethane .. .. .                          | 5,000                                 |
| Polyesters .. .. .                            | 25,000                                |
| Nylon (other than for fibres) .. .. .         | 2,000                                 |
| Cellulose acetate .. .. .                     | 15,000                                |
| P. F. moulding Powder .. .. .                 | 12,000                                |
| Phenolic resins (including laminates) .. .. . | 6,000                                 |
| U.F. moulding Powder .. .. .                  | 8,000                                 |
| Other Urea resins .. .. .                     | 20,000                                |
| Others .. .. .                                | 7,000                                 |
| <b>Total .. .. .</b>                          | <b>3,74,000</b>                       |

It has been estimated that 350 presses of different sizes for compression moulding and lamination can handle 11,000 tons of thermosets. 350 extruders would convert 22,000 tons of thermoplastics into extruded products, besides compounding 16,000 tons for injection moulding by 800 machines of varying capacities. The value of 1,500 machines and presses inclusive of replacements required for the period of the Plan together with auxiliary equipment such as predryers, preformers, tumbling barrels, scrap grinders, haul off for extruders, mould temperature controllers and other miscellaneous equipment for vacuum forming, vacuum metallising, hot stamping, embossing and printing rollers, heat welding machines, automatic blow moulding equipment, lamination presses, rotational casting machines, etc. would be around Rs. 10 crores. (before devaluation). The miscellaneous equipment will cater to foaming, blowing, coating, calendering, casting and fabrication of 11,000 tons of thermoplastic materials.

It was expected that during the Third Plan (by 1966), the requirements of moulds for compression and injection moulding would

increase from 800-1,000 in the beginning of the plan to 3500-4000 by 1966. It was also expected that by 1966, 2,500-3,000 dies for extrusion will also be required for the same period. The total value of moulds and dies may be put at about Rs. 8 crores.

The supply of plastics raw materials in the country through domestic production will increase substantially during the next Plan period. According to Planning Commission's working group on petro-chemical industries, polyethylene supply will increase to one lakh tons in 1970-71. In case of PVC, supply will reach the level of one lakh tons by the end of Fourth Plan, and that of Vinyl Chloride for PVC to one lakh tons.

The machinery requirements of the industry are being paid particular attention in the Fourth Plan. It is proposed to set up initially plastics machinery manufacture for an off take of about 15,000 tonnes of thermosets, 40,000 tonnes of thermo-plastics for injection, 100,000 tonnes of thermoplastics for extrusion.

The main problem facing the plastic industry is the inflated cost structure which owes mainly to the steep excise duties and high raw material prices. The present rate of excise duty of twenty-four per cent *ad valorem* plus twenty per cent surcharge on basic duty is very high. Imports, however, are still quite large, although, since 1957, a restrictive policy has been pursued. The following table shows imports of raw materials of plastics industry :

| Material                             | (Rs. lakhs) |         |         |
|--------------------------------------|-------------|---------|---------|
|                                      | 1963-64     | 1964-65 | 1965-66 |
| P. F. Moulding Powder ..             | 6.89        | 6.63    | 3.24    |
| U. F. Moulding Powder ..             | 0.51        | 0.36    | 1.01    |
| Cellulose Acetate Moulding Powder .. | 17.16       | 7.96    | 3.15    |
| Polystyrene Moulding Powder ..       | 3.22        | 4.72    | 4.18    |
| Vinyl Resins ..                      | 30.47       | 35.93   | 25.84   |

The country is now an exporter of plastics goods. The following is the yearly exports of plastics from India :

| Year          | Rs. crores |
|---------------|------------|
| 1961-62 .. .. | 0.83       |
| 1962-63 .. .. | 1.05       |
| 1963-64 .. .. | 2.64       |
| 1964-65 .. .. | 3.19       |
| 1965-66 .. .. | 2.70       |

As can be seen from the above figures, there is a fall in exports during 1965-66 to the extent of nearly Rs. 48 lakhs.

Itemwise, the fall in exports is estimated as under: Polyline Jute Rs. 16 lakhs, Bangles Rs. 16 lakhs, Fountain Pens Rs. 6 lakhs, Linoleum Rs. 6 lakhs.

In order to encourage exports, an Export Promotion Council was set up in 1955. The Government also allows rebate of import duty at specified rates on raw materials used in the manufacture of plastics goods intended for export. At present the concession is given on urea formaldehyde, cellulose acetate/cellulose acetate butyrate and polystyrene moulding powders.

The leading item of export is leather cloth. The major importers of leather cloth from India are South Viet Nam, Britain, Kuwait, Ceylon and Thailand.

Ceylon leads other countries in import of Indian plastics goods. The other importing countries include Burma, Kuwait, Kenya, Saudi Arabia, Tanzania, Mauritius and Mozambique.

The following is the yearly import of synthetic plastics materials to India (Latest available) :

| Year          | Rs. lakhs |
|---------------|-----------|
| 1960-61 .. .. | 571       |
| 1961-62 .. .. | 777       |
| 1962-63 .. .. | 648       |
| 1963-64 .. .. | 471       |
| 1964-65 .. .. | 381       |

## RAYON, SYNTHETIC FIBRES, AND CELLULOSE FILM

### Rayon Filament

There were three units at the beginning of the Second Plan in the country, manufacturing rayon filament with an annual capacity of 22.3 million lbs. Subsequently, three new units with a combined capacity of nearly 21.6 million lbs. had commenced production. There are now nine large scale units engaged in production of viscose filament rayon in India, one in acetate filament and three in staple fibre.

The staple fibre factory of Gwalior Rayons started production in 1954 with a capacity of 5,400 tons per year. The production capacity has now increased to 36,000 tons per year. The South India Viscose has a capacity of 4,000 tons per year.

A Rs. 6 crore nylon plant with a production capacity of 5 tons a day is to be set up at Modinagar, U.P.

The consumption of rayon filament on the basis of production plus imports from 1961 to 1965

is estimated as under :—

| (Million lb.) |            |         |              |
|---------------|------------|---------|--------------|
| Year          | Production | Imports | Availability |
| 1961 ..       | 51.7       | 42.9    | 94.6         |
| 1962 ..       | 60.9       | 38.1    | 99.0         |
| 1963 ..       | 73.1       | 27.0    | 100.1        |
| 1964 ..       | 81.9       | 25.3    | 107.2        |
| 1965 ..       | 82.1       | 12.7    | 94.8         |

### Staple Fibre

At the start of the Second Plan, Messrs. Gwalior Rayon Silk Manufacturing (Weaving) Company was the only factory producing staple fibre. Its plant at Nagda had a capacity of 16 million lbs. per annum at that time. Since then it has expanded its capacity to 48 million lbs. per annum thereby exceeding the target capacity of 32 million lbs.

† Includes 20 million lbs. of tyre cord.

The production of staple fibre\* during 1961 to 1965 is given below :

| Year       | Installed capacity | Production |
|------------|--------------------|------------|
| 1961 .. .. | 25.2               | 26.0       |
| 1962 .. .. | 26.0               | 32.4       |
| 1963 .. .. | 26.0               | 32.2       |
| 1964 .. .. | 26.0               | 37.4       |
| 1965 .. .. | 26.0               | 34.3       |

### Art Silk Fabrics

The production of art silk fabrics during the Third Five Year Plan period viz. 1961 to 1964 is given below :

(Production of Art Silk fabrics including synthetics).

| Year       | Production |
|------------|------------|
| 1961 .. .. | 570.0      |
| 1962 .. .. | 600.0      |
| 1963 .. .. | 648.0      |
| 1964 .. .. | 832.8      |

\* Data are inclusive of saleable waste.



## 3. HIGH &amp; HIGHER SECONDARY SCHOOLS

| States/Territories      | Number of Institutions for |       | Enrolment of |           | Expenditure in Rs. on |                   | Teachers |        |
|-------------------------|----------------------------|-------|--------------|-----------|-----------------------|-------------------|----------|--------|
|                         | Boys                       | Girls | Boys         | Girls     | Schools for Boys      | Schools for Girls | Male     | Female |
| Andhra Pradesh* ..      | 1,476                      | 178   | 2,01,974     | 42,381    | 5,89,70,912           | 85,28,709         | 26,602   | 5,424  |
| Assam ..                | 772                        | 109   | 1,37,659     | 44,491    | 2,49,27,853           | 36,67,313         | 11,022   | 1,517  |
| Bihar ..                | 1,740                      | 119   | 3,83,335     | 30,520    | 4,01,33,702           | 39,26,726         | 20,358   | 1,314  |
| Gujarat ..              | 1,241                      | 123   | 1,84,552     | 64,403    | 5,69,96,019           | 79,77,341         | 16,084   | 3,230  |
| Jammu and Kashmir ..    | 303                        | 62    | 24,853       | 6,208     | 80,85,987             | 22,05,828         | 3,884    | 1,146  |
| Kerala ..               | 857                        | 161   | 3,06,068     | 2,83,679  | 4,47,39,599           | 85,87,094         | 20,969   | 12,509 |
| Madhya Pradesh ..       | 966                        | 182   | 1,74,713     | 31,384    | 4,61,87,864           | 99,24,753         | 15,959   | 3,748  |
| Madras ..               | 1,596                      | 316   | 2,91,702     | 1,10,860  | 7,64,46,438           | 1,66,32,783       | 30,879   | 10,712 |
| Maharashtra ..          | 2,782                      | 270   | 5,85,518     | 1,87,593  | 12,09,24,795          | 1,97,78,974       | 34,249   | 11,522 |
| Mysore ..               | 1,059                      | 165   | 2,64,382     | 86,061    | 3,22,00,258           | 60,00,548         | 11,263   | 2,705  |
| Orissa ..               | 694                        | 65    | 1,01,089     | 12,016    | 1,56,78,373           | 15,21,608         | 6,636    | 620    |
| Punjab ..               | 1,201                      | 363   | 1,72,184     | 48,226    | 4,71,10,617           | 1,50,67,259       | 20,837   | 8,735  |
| Rajasthan ..            | 592                        | 87    | 98,967       | 11,765    | 3,15,85,940           | 45,02,078         | 10,964   | 1,466  |
| Uttar Pradesh ..        | 1,737                      | 356   | 3,94,965     | 51,974    | 10,69,64,704          | 2,32,14,517       | 37,257   | 8,190  |
| West Bengal ..          | 1,927                      | 577   | 2,21,204     | 76,818    | 9,36,53,916           | 2,70,99,778       | 32,391   | 9,312  |
| Goa, Daman & Diu ..     | 73                         | 11    | 3,989        | 2,097     | 25,88,154             | 4,30,674          | 534      | 536    |
| Nagaland ..             | 22                         | —     | 2,604        | 746       | 9,83,965              | —                 | 249      | 50     |
| A. & N. Islands † ..    | 2                          | 1     | 238          | 110       | 3,10,498              | 96,628            | 56       | 7      |
| Dadra & Nagar Haveli .. | 2                          | —     | 204          | 63        | 40,800                | —                 | 14       | —      |
| Delhi ..                | 226                        | 133   | 53,720       | 32,056    | 2,73,39,733           | 1,69,50,533       | 5,980    | 4,651  |
| Himachal Pradesh ..     | 108                        | 10    | 7,463        | 1,920     | 43,18,009             | 5,58,616          | 1,736    | 470    |
| L. M. & A. Islands ‡ .. | 2                          | —     | 148          | 6         | 1,47,135              | —                 | 42       | —      |
| Manipur ..              | 105                        | 17    | 17,594       | 5,876     | 23,62,097             | 4,12,778          | 1,342    | 106    |
| N. E. F. A. ..          | 7                          | —     | 1,245        | 851       | 3,11,806              | —                 | 102      | 20     |
| Pondicherry ..          | 28                         | 9     | 3,402        | 1,181     | 9,76,874              | 4,08,753          | 463      | 246    |
| Tripura ..              | 39                         | 10    | 5,896        | 2,344     | 22,99,799             | 6,11,070          | 894      | 242    |
| India Total ..          | 19,557                     | 3,324 | 36,39,681    | 10,85,329 | 84,62,85,757          | 17,81,04,361      | 3,10,788 | 88,479 |

Note: In this table number of students on roll is related to General Education (School Standard).

† Andaman and Nicobar Islands. ‡ Laccadive, Minicoy and Amindivi Islands. \* Figures for 1961-62.

## 4. MIDDLE SCHOOLS

| States/Territories      | No. of Institutions for |       | Enrolment of |           | Expenditure in Rs. on |             | Teachers |          |
|-------------------------|-------------------------|-------|--------------|-----------|-----------------------|-------------|----------|----------|
|                         | Boys                    | Girls | Boys         | Girls     | Boys                  | Girls       | Male     | Female   |
| Andhra Pradesh* ..      | 1,624                   | 128   | 3,89,227     | 1,21,572  | 1,74,11,164           | 21,00,392   | 11,294   | 3,412    |
| Assam ..                | 2,168                   | 188   | 1,95,770     | 84,069    | 1,41,82,833           | 14,24,847   | 10,209   | 1,445    |
| Bihar ..                | 5,328                   | 454   | 5,53,436     | 84,632    | 3,22,93,428           | 30,45,347   | 29,326   | 3,057    |
| Gujarat ..              | 6,794                   | 706   | 3,45,247     | 1,51,904  | 4,34,32,562           | 81,59,971   | 33,055   | 15,048   |
| Jammu & Kashmir ..      | 293                     | 191   | 57,516       | 23,441    | 44,15,577             | 10,37,640   | 3,520    | 684      |
| Kerala ..               | 2,276                   | 13    | 5,41,512     | 4,27,412  | 5,03,08,741           | 2,44,104    | 19,245   | 15,255   |
| Madhya Pradesh ..       | 3,214                   | 500   | 3,70,806     | 85,933    | 3,54,33,123           | 54,55,940   | 24,402   | 4,147    |
| Madras ..               | 6,235                   | 7     | 6,48,206     | 2,88,233  | 7,02,30,712           | 1,74,763    | 31,765   | 23,574   |
| Maharashtra ..          | 10,790                  | 731   | 9,16,386     | 3,80,749  | 11,08,32,448          | 96,95,343   | 59,389   | 20,340   |
| Mysore ..               | 8,042                   | 716   | 4,46,826     | 1,95,754  | 5,18,96,801           | 73,36,953   | 36,766   | 10,725   |
| Orissa ..               | 2,218                   | 224   | 1,28,313     | 24,768    | 1,18,45,454           | 11,01,312   | 8,072    | 659      |
| Punjab ..               | 1,210                   | 388   | 3,88,252     | 1,31,865  | 1,72,38,822           | 54,61,394   | 10,027   | 4,908    |
| Rajasthan ..            | 1,499                   | 245   | 2,41,625     | 41,028    | 2,22,84,797           | 35,78,567   | 12,714   | 3,109    |
| Uttar Pradesh ..        | 4,258                   | 924   | 9,97,372     | 1,81,518  | 2,99,85,617           | 69,13,837   | 23,279   | 5,039    |
| W. Bengal ..            | 2,064                   | 427   | 7,24,048     | 3,14,914  | 1,57,55,773           | 35,15,635   | 10,047   | 2,422    |
| Goa, Daman & Diu ..     | 52                      | 6     | 8,386        | 4,687     | 3,11,404              | 56,244      | 183      | 186      |
| Nagaland ..             | 89                      | —     | 9,302        | 4,362     | 17,92,603             | —           | 586      | 55       |
| A. & N. Islands † ..    | 8                       | —     | 720          | 388       | 1,86,722              | —           | 52       | 13       |
| Dadra & Nagar Haveli .. | 14                      | —     | 467          | 167       | —                     | —           | 57       | 20       |
| Delhi ..                | 197                     | 150   | 89,649       | 62,329    | 72,03,749             | 51,65,606   | 2,653    | 2,342    |
| Himachal Pradesh ..     | 222                     | 11    | 24,240       | 5,157     | 23,63,346             | 1,28,493    | 1,677    | 891      |
| L. M. & A. Islands ‡ .. | 7                       | 4     | 859          | 167       | 2,23,654              | 64,510      | 91       | 88       |
| Manipur ..              | 301                     | 13    | 29,809       | 14,384    | 15,76,654             | 77,362      | 1,324    | 56       |
| N. E. F. A. ..          | 25                      | —     | 1,897        | 371       | 3,79,646              | —           | 127      | 11       |
| Pondicherry ..          | 44                      | 21    | 6,582        | 3,046     | 8,97,585              | 2,70,763    | 889      | 190      |
| Tripura ..              | 133                     | 3     | 15,922       | 7,893     | 15,46,700             | 29,918      | 717      | 186      |
| All India ..            | 59,605                  | 6,050 | 71,32,374    | 26,40,143 | 54,40,29,915          | 6,50,38,942 | 3,32,916 | 1,17,401 |

Note: Enrolment figures relate to General Education Standard.  
\* Figures for 1961-62. † Andaman & Nicobar Islands.

‡ Laccadive, Minicoy & Amindivi Islands.



## 5. UNIVERSITY EDUCATION

| States/Territories   | Number of Universities |       | Number of Arts and Science Colleges |       | Number of Technical, and Professional Colleges |       | Colleges for Special Education |       |
|----------------------|------------------------|-------|-------------------------------------|-------|------------------------------------------------|-------|--------------------------------|-------|
|                      | Boys                   | Girls | Boys                                | Girls | Boys                                           | Girls | Boys                           | Girls |
| Andhra Pradesh*      | 3                      | ..    | 60                                  | 12    | 34                                             | 1     | 25                             | 3     |
| Assam                | 1                      | ..    | 52                                  | 8     | 14                                             | ..    | 1                              | ..    |
| Bihar ..             | 6                      | ..    | 105                                 | 14    | 34                                             | 1     | 29                             | ..    |
| Gujarat              | 3                      | ..    | 61                                  | 9     | 54                                             | 3     | 7                              | 1     |
| Jammu and Kashmir    | 1                      | ..    | 13                                  | 3     | 7                                              | ..    | 5                              | 6     |
| Kerala               | 1                      | ..    | 39                                  | 10    | 32                                             | 2     | 7                              | ..    |
| Madhya Pradesh       | 4                      | ..    | 93                                  | 14    | 157                                            | 22    | 34                             | 3     |
| Madras               | 2                      | ..    | 48                                  | 20    | 109                                            | 61    | 20                             | ..    |
| Maharashtra          | 5                      | 1     | 127                                 | 10    | 247                                            | 10    | 13                             | 4     |
| Mysore               | 3                      | ..    | 60                                  | 5     | 103                                            | 18    | 7                              | 1     |
| Orissa               | 2                      | ..    | 41                                  | 6     | 25                                             | 2     | 6                              | ..    |
| Punjab               | 4                      | ..    | 81                                  | 19    | 42                                             | 5     | 3                              | 2     |
| Rajasthan            | 3                      | ..    | 48                                  | 10    | 25                                             | 2     | 46                             | ..    |
| Uttar Pradesh        | 9                      | ..    | 129                                 | 30    | 43                                             | 10    | 10                             | ..    |
| West Bengal ..       | 7                      | ..    | 110                                 | 35    | 57                                             | 5     | 14                             | 9     |
| Goa, Daman & Diu ..  | ..                     | ..    | 3                                   | ..    | 2                                              | 1     | 2                              | ..    |
| Nagaland             | ..                     | ..    | 2                                   | ..    | ..                                             | ..    | ..                             | ..    |
| A. & N. Islands †    | ..                     | ..    | ..                                  | ..    | ..                                             | ..    | ..                             | ..    |
| Dadra & Nagar Haveli | ..                     | ..    | ..                                  | ..    | ..                                             | ..    | ..                             | ..    |
| Delhi ..             | 1                      | ..    | 20                                  | 5     | 9                                              | 2     | 3                              | 1     |
| Himachal Pradesh     | ..                     | ..    | 6                                   | ..    | 2                                              | ..    | 3                              | ..    |
| L. M. & A. Islands ‡ | ..                     | ..    | ..                                  | ..    | ..                                             | ..    | ..                             | ..    |
| Manipur              | ..                     | ..    | 8                                   | ..    | 2                                              | ..    | 27                             | ..    |
| N.E.F.A.             | ..                     | ..    | ..                                  | ..    | ..                                             | ..    | ..                             | ..    |
| Pondicherry          | ..                     | ..    | 4                                   | ..    | 3                                              | ..    | ..                             | ..    |
| Tripura              | ..                     | ..    | 2                                   | ..    | 5                                              | ..    | ..                             | 1     |
| India Total..        | 55                     | 1     | 1,112                               | 210   | 1,006                                          | 145   | 262                            | 31    |

\* Figures for 1962-63.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.

## 6. UNIVERSITY EDUCATION (ENROLMENT)

| States/Territories   | Universities |        | Research Institutions |       | Arts and Science Colleges |          | Professional and Technical Colleges |        | Special Education Colleges |        |
|----------------------|--------------|--------|-----------------------|-------|---------------------------|----------|-------------------------------------|--------|----------------------------|--------|
|                      | Boys         | Girls  | Boys                  | Girls | Boys                      | Girls    | Boys                                | Girls  | Boys                       | Girls  |
| Andhra Pradesh*      | 3,649        | 304    | ..                    | ..    | 40,878                    | 7,573    | 12,081                              | 1,700  | 1,052                      | 267    |
| Assam                | 1,370        | 272    | ..                    | ..    | 29,445                    | 6,198    | 4,490                               | 201    | 25                         | ..     |
| Bihar                | 5,504        | 760    | 187                   | 3     | 81,734                    | 7,310    | 17,724                              | 690    | 1,744                      | 76     |
| Gujarat              | 726          | 155    | 224                   | 87    | 34,807                    | 11,812   | 21,218                              | 1,819  | 772                        | 783    |
| Jammu and Kashmir    | ..           | ..     | ..                    | ..    | 5,214                     | 2,463    | 1,845                               | 297    | 463                        | 731    |
| Kerala               | 277          | 120    | ..                    | ..    | 36,795                    | 19,863   | 8,476                               | 2,164  | 267                        | 201    |
| Madhya Pradesh       | 2,860        | 314    | ..                    | ..    | 45,282                    | 6,620    | 25,983                              | 3,111  | 1,770                      | 2,840  |
| Madras               | 3,939        | 338    | ..                    | ..    | 41,717                    | 13,007   | 27,948                              | 11,100 | 1,419                      | 349    |
| Maharashtra          | 3,013        | 785    | 263                   | 109   | 79,008                    | 26,669   | 37,983                              | 7,541  | 1,577                      | 1,445  |
| Mysore               | 1,970        | 257    | 89                    | 1     | 36,680                    | 9,790    | 23,128                              | 2,874  | 2,399                      | 1,118  |
| Orissa               | 446          | 73     | ..                    | ..    | 16,470                    | 2,201    | 5,162                               | 522    | 246                        | 209    |
| Punjab               | 1,989        | 770    | ..                    | ..    | 34,708                    | 11,936   | 9,786                               | 3,548  | 322                        | 453    |
| Rajasthan            | 6,045        | 849    | ..                    | ..    | 20,595                    | 4,858    | 6,497                               | 611    | 5,467                      | 494    |
| Uttar Pradesh        | 31,586       | 5,199  | 339                   | ..    | 64,352                    | 14,000   | 7,949                               | 1,381  | 1,233                      | 721    |
| West Bengal          | 12,860       | 4,110  | 501                   | 58    | 85,276                    | 35,665   | 22,412                              | 1,610  | 1,361                      | 3,794  |
| Goa, Daman & Diu     | ..           | ..     | ..                    | ..    | 926                       | 390      | 168                                 | 62     | 144                        | ..     |
| Nagaland             | ..           | ..     | ..                    | ..    | 161                       | 8        | ..                                  | ..     | ..                         | ..     |
| A. & N. Islands†     | ..           | ..     | ..                    | ..    | ..                        | ..       | ..                                  | ..     | ..                         | ..     |
| Dadra & Nagar Haveli | ..           | ..     | ..                    | ..    | ..                        | ..       | ..                                  | ..     | ..                         | ..     |
| Delhi                | 1,952        | 455    | 1,444                 | 15    | 13,225                    | 8,120    | 4,262                               | 1,175  | 146                        | 505    |
| Himachal Pradesh     | ..           | ..     | ..                    | ..    | 925                       | 255      | 114                                 | 29     | 96                         | 35     |
| L. M. & A. Islands‡  | ..           | ..     | ..                    | ..    | ..                        | ..       | ..                                  | ..     | ..                         | ..     |
| Manipur              | ..           | ..     | ..                    | ..    | 3,858                     | 517      | 144                                 | 11     | 221                        | 103    |
| N.E.F.A.             | ..           | ..     | ..                    | ..    | ..                        | ..       | ..                                  | ..     | ..                         | ..     |
| Pondicherry          | ..           | ..     | ..                    | ..    | 1,008                     | 375      | 391                                 | 155    | ..                         | ..     |
| Tripura              | ..           | ..     | ..                    | ..    | 1,386                     | 441      | 383                                 | 89     | 22                         | 38     |
| India Total          | 73,186       | 14,761 | 3,047                 | 273   | 6,74,395                  | 1,90,071 | 2,38,144                            | 40,690 | 20,746                     | 14,161 |

\* Figures for 1962-63.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.



## 7. UNIVERSITY EDUCATION (DIRECT EXPENDITURE)

(In Rs.)

| States/Territories   | Universities | Boards of<br>Secondary and/<br>or Intermediate<br>Education | Research<br>Institutions | Arts and Science<br>Colleges | Colleges for<br>Professional and<br>Technical<br>Education | Colleges for<br>Special<br>Education |
|----------------------|--------------|-------------------------------------------------------------|--------------------------|------------------------------|------------------------------------------------------------|--------------------------------------|
| Andhra Pradesh*      | 1,51,39,542  | 12,68,068                                                   | ..                       | 1,91,78,074                  | 1,34,76,717                                                | 7,51,880                             |
| Assam                | 38,05,483    | 2,30,903                                                    | ..                       | 82,28,781                    | 45,81,719                                                  | 10,685                               |
| Bihar                | 1,06,50,592  | ..                                                          | 3,01,485                 | 2,11,40,064                  | 1,32,61,556                                                | 5,72,669                             |
| Gujarat              | 1,77,80,605  | 19,02,340                                                   | 35,22,257                | 1,56,80,600                  | 1,17,29,012                                                | 8,04,045                             |
| Jammu and Kashmir    | ..           | ..                                                          | ..                       | 30,05,716                    | 22,56,913                                                  | 2,46,436                             |
| Kerala               | 82,67,355    | ..                                                          | ..                       | 1,66,17,863                  | 85,06,050                                                  | 1,14,943                             |
| Madhya Pradesh       | 69,72,937    | 45,98,124                                                   | ..                       | 1,95,39,259                  | 2,77,49,713                                                | 13,82,269                            |
| Madras               | 1,11,93,162  | 29,10,829                                                   | ..                       | 1,90,53,504                  | 2,39,47,486                                                | 9,13,144                             |
| Maharashtra          | 2,08,17,734  | 48,42,099                                                   | 25,51,044                | 3,84,73,609                  | 3,41,44,118                                                | 13,46,483                            |
| Mysore               | 68,03,269    | ..                                                          | 7,29,514                 | 1,26,47,307                  | 1,64,92,482                                                | 5,56,316                             |
| Orissa               | ..           | ..                                                          | ..                       | 64,17,587                    | 49,63,020                                                  | 2,50,777                             |
| Punjab               | 1,83,70,475  | ..                                                          | ..                       | 1,75,57,228                  | 1,11,67,899                                                | 2,16,504                             |
| Rajasthan            | 93,71,415    | 18,25,602                                                   | ..                       | 1,30,15,723                  | 80,40,072                                                  | 13,25,718                            |
| Uttar Pradesh        | 5,94,36,349  | 99,91,975                                                   | 26,49,301                | 2,66,14,558                  | 1,32,58,254                                                | 9,78,206                             |
| West Bengal          | 2,46,10,153  | 69,56,025                                                   | 34,70,464                | 3,23,56,813                  | 2,61,62,761                                                | 10,14,916                            |
| Goa, Daman & Diu     | ..           | ..                                                          | ..                       | 8,11,669                     | 5,54,548                                                   | 52,292                               |
| Nagaland             | ..           | ..                                                          | ..                       | 97,255                       | ..                                                         | ..                                   |
| A & N. Islands†      | ..           | ..                                                          | ..                       | ..                           | ..                                                         | ..                                   |
| Dadra & Nagar Haveli | ..           | ..                                                          | ..                       | ..                           | ..                                                         | ..                                   |
| Delhi                | 75,27,040    | ..                                                          | 13,02,566                | 1,35,07,528                  | 2,23,96,279                                                | 9,53,245                             |
| Himachal Pradesh     | ..           | ..                                                          | ..                       | 8,17,274                     | 1,81,189                                                   | 1,28,656                             |
| L., M. & A. Islands‡ | ..           | ..                                                          | ..                       | ..                           | ..                                                         | ..                                   |
| Manipur              | ..           | ..                                                          | ..                       | 7,77,336                     | 51,554                                                     | 77,319                               |
| N.E.F.A.             | ..           | ..                                                          | ..                       | ..                           | ..                                                         | ..                                   |
| Pondicherry          | ..           | ..                                                          | ..                       | 11,07,603                    | 15,25,937                                                  | ..                                   |
| Tripura              | ..           | ..                                                          | ..                       | 7,25,976                     | 3,86,477                                                   | 15,650                               |
| India Total          | 22,02,46,111 | 3,45,25,965                                                 | 1,45,86,631              | 28,78,71,126                 | 24,43,38,701                                               | 1,17,12,153                          |

\* Relates to 1962-63.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.

## 8. TECHNICAL AND VOCATIONAL EDUCATION (SCHOOLS)

| States/Territories   | Number of Schools<br>for |       | Enrolment of |          | Expenditure in Rs. on<br>Institutions for |             | Number of<br>Teachers |       |
|----------------------|--------------------------|-------|--------------|----------|-------------------------------------------|-------------|-----------------------|-------|
|                      | Boys                     | Girls | Boys         | Girls    | Boys                                      | Girls       | Men                   | Women |
| Andhra Pradesh*      | 166                      | 66    | 25,830       | 6,642    | 98,72,409                                 | 10,86,326   | 2,097                 | 347   |
| Assam                | 74                       | 21    | 9,119        | 1,223    | 30,44,174                                 | 1,99,190    | 630                   | 48    |
| Bihar                | 173                      | 51    | 29,925       | 4,365    | 92,17,009                                 | 12,90,610   | 1,964                 | 261   |
| Gujarat              | 237                      | 153   | 26,838       | 9,697    | 88,77,595                                 | 18,92,846   | 2,373                 | 542   |
| Jammu & Kashmir      | 19                       | 2     | 1,700        | 254      | 19,78,129                                 | 1,70,770    | 208                   | 29    |
| Kerala               | 168                      | 55    | 18,215       | 8,476    | 51,90,616                                 | 5,19,777    | 219                   | 336   |
| Madhya Pradesh       | 63                       | 18    | 9,307        | 1,005    | 62,94,197                                 | 2,14,794    | 740                   | 48    |
| Madras               | 542                      | 34    | 38,285       | 15,246   | 31,69,750                                 | 3,59,080    | 1,461                 | 207   |
| Maharashtra          | 458                      | 234   | 51,580       | 20,485   | 2,32,33,229                               | 48,68,004   | 4,736                 | 1,233 |
| Mysore               | 282                      | 16    | 84,929       | 7,237    | 83,56,346                                 | 3,29,925    | 1,737                 | 127   |
| Orissa               | 113                      | 16    | 10,404       | 716      | 35,59,927                                 | 1,73,395    | 734                   | 38    |
| Punjab               | 38                       | 29    | 15,589       | 11,136   | 37,09,020                                 | 10,36,219   | 787                   | 169   |
| Rajasthan            | 83                       | 25    | 11,609       | 2,918    | 63,99,927                                 | 6,54,349    | 964                   | 131   |
| Uttar Pradesh        | 263                      | 86    | 37,260       | 7,035    | 1,63,02,438                               | 18,83,407   | 3,484                 | 604   |
| West Bengal          | 239                      | 119   | 35,281       | 10,144   | 1,25,91,696                               | 11,63,165   | 2,522                 | 444   |
| Goa, Daman & Diu     | 13                       | 3     | 921          | 621      | 3,55,271                                  | 4,850       | 65                    | 29    |
| Nagaland             | 3                        | ..    | 121          | ..       | 83,393                                    | ..          | 15                    | ..    |
| A & N. Islands†      | 1                        | ..    | 18           | 5        | 38,500                                    | ..          | 7                     | ..    |
| Dadra & Nagar Haveli | ..                       | ..    | ..           | ..       | ..                                        | ..          | ..                    | ..    |
| Delhi                | 15                       | 3     | 7,335        | 2,248    | 47,68,868                                 | 3,54,110    | 510                   | 51    |
| Himachal Pradesh     | 7                        | ..    | 788          | 107      | 7,22,982                                  | ..          | 94                    | 7     |
| L., M. & A. Islands‡ | ..                       | ..    | ..           | ..       | ..                                        | ..          | ..                    | ..    |
| Manipur              | 30                       | 2     | 1,399        | 570      | 4,55,333                                  | 36,262      | 189                   | 17    |
| N.E.F.A.             | 1                        | ..    | 22           | ..       | 87,270                                    | ..          | 8                     | 2     |
| Pondicherry          | 2                        | 1     | 310          | 141      | 2,01,922                                  | ..          | 42                    | 6     |
| Tripura              | 6                        | 1     | 643          | 155      | 4,69,401                                  | 5,565       | 60                    | 3     |
| India Total          | 2,996                    | 975   | 3,67,724     | 1,10,413 | 12,89,74,408                              | 1,62,42,644 | 26,622                | 4,679 |

\* Figures for 1962-63.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.



## 9. PROFESSIONAL AND TECHNICAL EDUCATION

| Type                             | COLLEGES               |           |        | SCHOOLS                |           |          |
|----------------------------------|------------------------|-----------|--------|------------------------|-----------|----------|
|                                  | Number of Institutions | Enrolment |        | Number of Institutions | Enrolment |          |
|                                  |                        | Boys      | Girls  |                        | Boys      | Girls    |
| Agriculture .. .. .              | 45                     | 24,144    | 181    | 118                    | 9,689     | 247      |
| Applied Arts and Architecture .. | 5                      | ..        | ..     | ..                     | ..        | ..       |
| Commerce .. .. .                 | 57                     | 1,06,677  | 1,554  | 917                    | 71,676    | 19,079   |
| Engineering .. .. .              | 88                     | 61,755    | 428    | 266†                   | 92,467†   | 1,507†   |
| Forestry .. .. .                 | 1                      | 215       | ..     | 8                      | 503       | ..       |
| Law .. .. .                      | 58                     | 28,614    | 1,180  | ..                     | ..        | ..       |
| Medicine .. .. .                 | 164                    | 47,201    | 12,853 | 190                    | 4,687     | 9,936    |
| Physical Education .. .. .       | 18                     | 844       | 203    | 45                     | 3,747     | 591      |
| Teachers' Training ‡             | 694                    | 42,163    | 22,050 | 1,141@                 | 1,06,644@ | 47,730@  |
| Technology .. .. .               | 12                     | 8,398     | 270    | 1,252*                 | 72,919*   | 29,646*  |
| Veterinary Science .. .. .       | 19                     | 5,280     | 31     | 8                      | 755       | ..       |
| Others .. .. .                   | 10                     | 2,032     | 951    | 26                     | 4,637     | 1,677    |
| India Total .. .. .              | 1,151                  | 3,27,323  | 39,701 | 3,971                  | 3,67,724  | 1,10,413 |

\* Includes technical, industrial, arts and crafts.

† Includes polytechnic.

‡ Includes post-graduates and under-graduates under basic and non-basic categories.

@ Includes nursery.

## 10. TECHNICAL AND PROFESSIONAL EDUCATION (COLLEGIATE)

| States/Territories           | Number of Colleges for |       | Enrolment of |        | Expenditure in Rs. on Institutions for |             |
|------------------------------|------------------------|-------|--------------|--------|----------------------------------------|-------------|
|                              | Boys                   | Girls | Boys         | Girls  | Boys                                   | Girls       |
| Andhra Pradesh *.. .. .      | 34                     | 1     | 18,273       | 1,862  | 1,34,29,342                            | 47,375      |
| Assam .. .. .                | 14                     | ..    | 5,911        | 244    | 45,81,719                              | ..          |
| Bihar .. .. .                | 34                     | 1     | 20,207       | 704    | 1,32,03,869                            | 57,687      |
| Gujarat .. .. .              | 54                     | 3     | 22,209       | 1,885  | 1,16,84,912                            | 44,100      |
| Jammu & Kashmir .. .. .      | 7                      | ..    | 2,051        | 337    | 22,56,913                              | ..          |
| Kerala .. .. .               | 32                     | 2     | 10,337       | 1,988  | 83,70,981                              | 1,35,069    |
| Madhya Pradesh .. .. .       | 157                    | 22    | 30,812       | 3,140  | 2,59,53,036                            | 17,96,677   |
| Madras .. .. .               | 109                    | 61    | 25,231       | 7,312  | 2,19,21,936                            | 20,25,550   |
| Maharashtra .. .. .          | 247                    | 10    | 49,557       | 8,124  | 3,38,31,344                            | 3,12,774    |
| Mysore .. .. .               | 103                    | 18    | 25,375       | 2,648  | 1,59,78,623                            | 5,13,809    |
| Orissa .. .. .               | 25                     | 2     | 5,739        | 522    | 49,16,071                              | 51,949      |
| Punjab .. .. .               | 42                     | 5     | 10,655       | 2,900  | 1,09,44,013                            | 2,23,886    |
| Rajasthan .. .. .            | 25                     | 2     | 13,690       | 603    | 79,66,341                              | 73,731      |
| Uttar Pradesh .. .. .        | 43                     | 10    | 36,841       | 3,167  | 1,26,85,192                            | 5,73,062    |
| West Bengal .. .. .          | 57                     | 5     | 41,064       | 2,322  | 2,58,32,697                            | 3,30,064    |
| Goa, Daman & Diu .. .. .     | 2                      | 1     | 312          | 56     | 5,32,759                               | 21,784      |
| Nagaland .. .. .             | ..                     | ..    | ..           | ..     | ..                                     | ..          |
| A. & N. Islands †            | ..                     | ..    | ..           | ..     | ..                                     | ..          |
| Dadra & Nagar Haveli .. .. . | ..                     | ..    | ..           | ..     | ..                                     | ..          |
| Delhi .. .. .                | 9                      | 2     | 7,856        | 1,987  | 1,69,31,213                            | 54,65,066   |
| Himachal Pradesh .. .. .     | 2                      | ..    | 114          | 20     | 1,81,180                               | ..          |
| L. M. & A. Islands ‡         | ..                     | ..    | ..           | ..     | ..                                     | ..          |
| Manipur .. .. .              | 2                      | ..    | 315          | 27     | 51,554                                 | ..          |
| N.E.F.A. .. .. .             | ..                     | ..    | ..           | ..     | ..                                     | ..          |
| Pondicherry .. .. .          | 3                      | ..    | 391          | 155    | 15,25,937                              | ..          |
| Tripura .. .. .              | 5                      | ..    | 548          | 90     | 3,86,477                               | ..          |
| India Total .. .. .          | 1,006                  | 145   | 3,27,323     | 39,701 | 23,31,66,118                           | 1,16,72,583 |

\* Figures are for 1962-63.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.



## 11. TEACHER TRAINING INSTITUTIONS AND NURSERIES

| States/Territories      | Colleges |       |           |       | Schools |       |           |       | Nursery @ |
|-------------------------|----------|-------|-----------|-------|---------|-------|-----------|-------|-----------|
|                         | Basic    |       | Non-basic |       | Basic   |       | Non-basic |       |           |
|                         | Men      | Women | Men       | Women | Men     | Women | Men       | Women |           |
| Andhra Pradesh* .. ..   | ..       | ..    | 6         | 1     | 74      | 17    | 22        | 24    | 1         |
| Assam .. .. .           | 1        | ..    | 2         | ..    | 23      | 2     | 10        | 3     | 1         |
| Bihar .. .. .           | 5        | ..    | 1         | 1     | 80      | 21    | 12        | 9     | —         |
| Gujarat .. .. .         | 2        | ..    | 8         | 2     | 45      | 25    | 4         | ..    | 6         |
| Jammu & Kashmir .. ..   | ..       | ..    | 2         | ..    | 10      | 2     | ..        | ..    | —         |
| Kerala .. .. .          | ..       | ..    | 17        | 2     | 88      | 17    | ..        | ..    | 3         |
| Madhya Pradesh .. ..    | 99       | 21    | ..        | ..    | ..      | ..    | ..        | ..    | —         |
| Madras .. .. .          | 13       | 6     | 75        | 55    | 1       | 4     | ..        | 3     | 4         |
| Maharashtra .. .. .     | 3        | ..    | 168       | 8     | 100     | 37    | 33        | 3     | 12        |
| Mysore .. .. .          | 30       | 11    | 28        | 7     | 5       | ..    | 4         | 2     | —         |
| Orissa .. .. .          | 7        | ..    | 9         | 2     | ..      | ..    | 74        | 6     | —         |
| Punjab .. .. .          | 10       | 3     | 9         | 2     | 15      | 6     | ..        | ..    | —         |
| Rajasthan .. .. .       | 7        | 1     | ..        | ..    | 45      | 12    | ..        | 7     | —         |
| Uttar Pradesh .. .. .   | 4        | ..    | 7         | 9     | 148     | 33    | ..        | ..    | —         |
| West Bengal .. .. .     | 6        | 2     | 8         | 3     | 31      | 2     | 29        | 10    | —         |
| Goa, Daman & Diu .. ..  | ..       | ..    | ..        | 1     | ..      | ..    | 1         | 1     | —         |
| Nagaland .. .. .        | ..       | ..    | ..        | ..    | 2       | ..    | ..        | ..    | —         |
| A. & N. Islands† .. ..  | ..       | ..    | ..        | ..    | 1       | ..    | ..        | ..    | —         |
| Dadra & Nagar Haveli .. | ..       | ..    | ..        | ..    | 1       | ..    | ..        | ..    | —         |
| Delhi .. .. .           | ..       | ..    | 1         | ..    | 1       | ..    | ..        | ..    | —         |
| Himachal Pradesh .. ..  | 1        | ..    | ..        | ..    | 4       | ..    | ..        | ..    | —         |
| L. M. & A. Islands ‡ .. | ..       | ..    | ..        | ..    | ..      | ..    | ..        | ..    | —         |
| Manipur .. .. .         | 1        | ..    | ..        | ..    | 4       | ..    | 1         | ..    | —         |
| N.E.F.A. .. .. .        | ..       | ..    | ..        | ..    | 1       | ..    | ..        | ..    | —         |
| Pondicherry .. .. .     | 1        | ..    | 1         | ..    | ..      | ..    | ..        | ..    | —         |
| Tripura .. .. .         | 3        | ..    | 2         | ..    | ..      | ..    | ..        | ..    | —         |
| India .. .. .           | 250      | 81    | 287       | 56    | 678     | 178   | 190       | 68    | 24        |

\* Figures for 1962-63.  
and female.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.

@ Including both male

## 12. TEACHER TRAINING INSTITUTIONS (ENROLMENT)

| States/Territories           | Colleges |       |           |        | Schools |        |           |       | Nursery @ |
|------------------------------|----------|-------|-----------|--------|---------|--------|-----------|-------|-----------|
|                              | Basic    |       | Non-basic |        | Basic   |        | Non-basic |       |           |
|                              | Men      | Women | Men       | Women  | Men     | Women  | Men       | Women |           |
| Andhra Pradesh* .. .. .      | —        | —     | 1,065     | 363    | 10,745  | 2,793  | 1,680     | 2,247 | 144       |
| Assam .. .. .                | 26       | —     | 234       | 97     | 2,209   | 234    | 631       | 133   | 26        |
| Bihar .. .. .                | 646      | 62    | 160       | 116    | 15,465  | 2,918  | 427       | 439   | —         |
| Gujarat .. .. .              | 54       | 21    | 851       | 554    | 7,057   | 3,360  | 106       | 10    | 565       |
| Jammu & Kashmir .. .. .      | 250      | 162   | —         | —      | 497     | 254    | —         | —     | —         |
| Kerala .. .. .               | —        | —     | 1,262     | 1,135  | 5,045   | 6,002  | —         | —     | 105       |
| Madhya Pradesh .. .. .       | 9,715    | 2,342 | —         | 22     | —       | —      | —         | —     | 90        |
| Madras .. .. .               | 6,530    | 4,212 | 2,129     | 1,603  | 6,218   | 3,481  | 1,037     | 1,216 | 326       |
| Maharashtra .. .. .          | 93       | 6     | 4,578     | 4,423  | 13,784  | 5,475  | 959       | 508   | 602       |
| Mysore .. .. .               | 2,202    | 632   | 2,249     | 875    | 1,003   | 336    | 515       | 95    | 141       |
| Orissa .. .. .               | 341      | 8     | 832       | 157    | —       | —      | 6,474     | 363   | —         |
| Punjab .. .. .               | 887      | 1,354 | 1,034     | 860    | 8,811   | 9,621  | —         | —     | 103       |
| Rajasthan .. .. .            | 809      | 176   | —         | —      | 5,542   | 2,133  | —         | —     | —         |
| Uttar Pradesh .. .. .        | 250      | 33    | 3,457     | 1,937  | 14,470  | 2,537  | —         | —     | —         |
| West Bengal .. .. .          | 369      | 183   | 1,335     | 874    | 2,290   | 570    | 653       | 542   | —         |
| Goa, Daman & Diu .. .. .     | —        | —     | —         | 13     | —       | —      | 10        | 47    | —         |
| Nagaland .. .. .             | —        | —     | —         | —      | 65      | —      | —         | —     | —         |
| A. & N. Islands † .. .. .    | —        | —     | —         | —      | 18      | 5      | —         | —     | —         |
| Dadra & Nagar Haveli .. .. . | —        | —     | —         | —      | —       | —      | —         | —     | —         |
| Delhi .. .. .                | —        | —     | 76        | 69     | 154     | 220    | 38        | 17    | —         |
| Himachal Pradesh .. .. .     | 64       | 29    | —         | —      | 245     | 99     | —         | —     | —         |
| L. M. & A. Islands ‡ .. .. . | —        | —     | —         | —      | —       | —      | —         | —     | —         |
| Manipur .. .. .              | 70       | 11    | 30        | 5      | 311     | 40     | 38        | 2     | —         |
| N.E.F.A. .. .. .             | —        | —     | —         | —      | 22      | —      | —         | —     | —         |
| Pondicherry .. .. .          | 55       | 25    | 103       | 51     | —       | —      | —         | —     | —         |
| Tripura .. .. .              | 273      | 43    | 110       | 46     | —       | —      | —         | —     | —         |
| India .. .. .                | 22,684   | 9,299 | 10,479    | 12,751 | 93,951  | 40,084 | 12,618    | 5,619 | 4,129     |

\* Figures for 1962-63.  
and female.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.

@ Including both male



## 13. COLLEGES FOR SPECIAL EDUCATION

| States/Territories   | Music, Dancing and<br>other Fine Arts |           | Oriental Studies       |           | Sociology              |            | Others                 |            |
|----------------------|---------------------------------------|-----------|------------------------|-----------|------------------------|------------|------------------------|------------|
|                      | No. of<br>Institutions                | Enrolment | No. of<br>Institutions | Enrolment | No. of<br>Institutions | Enrolments | No. of<br>Institutions | Enrolments |
| Andhra Pradesh*      | 2                                     | 304       | 25                     | 943       | —                      | —          | 1                      | 321        |
| Assam                | —                                     | —         | 1                      | 25        | —                      | —          | —                      | —          |
| Bihar                | 1                                     | 87        | 27                     | 3,654     | —                      | —          | 1                      | 179        |
| Gujarat              | 3                                     | 614       | 2                      | 74        | 1                      | 68         | 2                      | 694        |
| Jammu & Kashmir      | —                                     | —         | 11                     | 319       | —                      | —          | —                      | —          |
| Kerala               | —                                     | —         | 7                      | 468       | —                      | 39         | —                      | 82         |
| Madhya Pradesh       | 26                                    | 1,583     | 9                      | 248       | —                      | —          | 2                      | 1,595      |
| Madras               | 2                                     | 307       | 15                     | 1,195     | 1                      | 426        | 2                      | 613        |
| Maharashtra          | 3                                     | 1,202     | 5                      | 99        | 2                      | 42         | 7                      | 1,212      |
| Mysore               | —                                     | —         | 6                      | 196       | —                      | —          | 2                      | 833        |
| Orissa               | 2                                     | 288       | 4                      | 167       | —                      | —          | —                      | —          |
| Punjab               | —                                     | —         | 4                      | 174       | —                      | —          | 1                      | 296        |
| Rajasthan            | 1                                     | 72        | 43                     | 344       | 1                      | 30         | 1                      | 323        |
| Uttar Pradesh        | 5                                     | 590       | 3                      | 1,653     | 1                      | 275        | 1                      | 259        |
| West Bengal          | 21                                    | 2,575     | 1                      | 350       | 1                      | —          | —                      | 786        |
| Goa, Daman & Diu     | —                                     | —         | —                      | —         | —                      | —          | 2                      | —          |
| Nagaland             | —                                     | —         | —                      | —         | —                      | —          | —                      | —          |
| A. & N. Islands†     | —                                     | —         | —                      | —         | —                      | —          | —                      | —          |
| Dadra & Nagar Haveli | —                                     | —         | —                      | —         | —                      | —          | —                      | —          |
| Delhi                | —                                     | 48        | 1                      | 339       | 1                      | —          | 2                      | —          |
| Himachal Pradesh     | 1                                     | 56        | 2                      | 75        | —                      | —          | —                      | —          |
| L. M. & A. Islands‡  | —                                     | —         | —                      | —         | —                      | —          | —                      | —          |
| Manipur              | 1                                     | 4         | 1                      | 9         | —                      | —          | 25                     | —          |
| N.E.F.A.             | —                                     | —         | —                      | —         | —                      | —          | —                      | —          |
| Pondicherry          | —                                     | —         | —                      | —         | —                      | —          | —                      | —          |
| Tripura              | 1                                     | 60        | —                      | —         | —                      | —          | —                      | —          |
| Total                | 69                                    | 7,790     | 167                    | 10,332    | 8                      | 880        | 49                     | 7,194      |

\* Figures for 1992-63.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.

## 14. SCHOOLS FOR SPECIAL EDUCATION

| States/Territories   | Music, Dancing & other Fine Arts |       |           |        | Oriental Studies     |       |           |        | For Social Work      |       |           |       |
|----------------------|----------------------------------|-------|-----------|--------|----------------------|-------|-----------|--------|----------------------|-------|-----------|-------|
|                      | No. of<br>Institutes             |       | Enrolment |        | No. of<br>Institutes |       | Enrolment |        | No. of<br>Institutes |       | Enrolment |       |
|                      | Boys                             | Girls | Boys      | Girls  | Boys                 | Girls | Boys      | Girls  | Boys                 | Girls | Boys      | Girls |
| Andhra Pradesh*      | 8                                | 8     | 385       | 1,007  | 58                   | 8     | 5,430     | 2,783  | 9                    | ..    | 1,184     | 99    |
| Assam                | 11                               | 6     | 81        | 84     | 116                  | ..    | 3,241     | 243    | ..                   | ..    | ..        | ..    |
| Bihar                | 3                                | ..    | 170       | 92     | 689                  | 2     | 34,415    | 6,218  | 4                    | ..    | 418       | ..    |
| Gujarat              | 15                               | 2     | 833       | 904    | 26                   | ..    | 940       | 62     | ..                   | 1     | ..        | 19    |
| Jammu & Kashmir      | ..                               | ..    | ..        | ..     | ..                   | ..    | 87        | 134    | ..                   | ..    | ..        | ..    |
| Kerala               | 8                                | 1     | 232       | 260    | ..                   | ..    | ..        | ..     | ..                   | ..    | ..        | ..    |
| Madhya Pradesh       | 2                                | ..    | 631       | 766    | 101                  | ..    | 3,565     | 898    | 1                    | ..    | 8         | ..    |
| Madras               | 2                                | 1     | 86        | 92     | 14                   | 1     | 486       | 164    | 1                    | 1     | 187       | 40    |
| Maharashtra          | 38                               | 4     | 738       | 1,159  | 38                   | ..    | 2,269     | 1,195  | 1                    | ..    | 57        | 14    |
| Mysore               | 22                               | 3     | 1,061     | 1,162  | 240                  | ..    | 11,832    | 4,067  | 7                    | ..    | 205       | ..    |
| Orissa               | 12                               | 9     | 382       | 514    | 139                  | 1     | 3,023     | 190    | 4                    | 1     | 305       | 19    |
| Punjab               | ..                               | ..    | ..        | ..     | ..                   | ..    | 55        | 3      | 1                    | ..    | 23        | ..    |
| Rajasthan            | 5                                | 1     | 264       | 295    | 73                   | ..    | 11,117    | 2,056  | 1                    | ..    | 113       | 6     |
| Uttar Pradesh        | 3                                | 7     | 241       | 842    | 988                  | 10    | 54,819    | 4,640  | ..                   | ..    | ..        | ..    |
| West Bengal          | 14                               | 13    | 554       | 3,266  | 1,006                | 5     | 19,044    | 2,858  | 5                    | ..    | 110       | 28    |
| Goa, Daman & Diu     | 2                                | ..    | 52        | 71     | ..                   | ..    | ..        | ..     | ..                   | ..    | ..        | ..    |
| Nagaland             | ..                               | ..    | ..        | ..     | ..                   | ..    | ..        | ..     | ..                   | ..    | ..        | ..    |
| A. & N. Islands†     | ..                               | ..    | ..        | ..     | ..                   | ..    | ..        | ..     | ..                   | ..    | ..        | ..    |
| Dadra & Nagar Haveli | ..                               | ..    | ..        | ..     | ..                   | ..    | ..        | ..     | ..                   | ..    | ..        | ..    |
| Delhi                | ..                               | ..    | ..        | ..     | ..                   | ..    | ..        | ..     | 1                    | 1     | ..        | ..    |
| Himachal Pradesh     | ..                               | ..    | ..        | ..     | ..                   | ..    | ..        | ..     | ..                   | ..    | ..        | ..    |
| L. M. & A. Islands‡  | ..                               | ..    | ..        | ..     | ..                   | ..    | ..        | ..     | ..                   | ..    | ..        | ..    |
| Manipur              | 1                                | ..    | 89        | 58     | 4                    | ..    | 93        | 2      | ..                   | ..    | ..        | ..    |
| N.E.F.A.             | ..                               | ..    | ..        | ..     | ..                   | ..    | ..        | ..     | ..                   | ..    | ..        | ..    |
| Pondicherry          | ..                               | ..    | ..        | ..     | ..                   | ..    | ..        | ..     | ..                   | ..    | ..        | ..    |
| Tripura              | 2                                | ..    | 6         | 15     | 23                   | ..    | 167       | 41     | ..                   | ..    | 107       | ..    |
| All India            | 148                              | 55    | 5,755     | 10,587 | 3,515                | 27    | 1,50,588  | 25,054 | 53                   | 4     | 2,726     | 224   |

\* Figures for 1962-1963.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.



## 15. SCHOOLS FOR SPECIAL EDUCATION—Contd.

| States/Territories   | Schools for the Handicapped |       |           |       | Social (Adult) Education |        |           |          | Others              |       |           |       |
|----------------------|-----------------------------|-------|-----------|-------|--------------------------|--------|-----------|----------|---------------------|-------|-----------|-------|
|                      | No. of Institutions         |       | Enrolment |       | No. of Institutions      |        | Enrolment |          | No. of Institutions |       | Enrolment |       |
|                      | Boys                        | Girls | Boys      | Girls | Boys                     | Girls  | Boys      | Girls    | Boys                | Girls | Boys      | Girls |
| Andhra Pradesh*      | 10                          | ..    | 420       | 116   | 1,317                    | 32     | 37,839    | 2,716    | ..                  | 2     | 558       | 86    |
| Assam                | 2                           | ..    | 57        | 29    | 563                      | 86     | 16,995    | 5,474    | 6                   | ..    | 180       | 2     |
| Bihar ..             | 12                          | ..    | 324       | 48    | 3,689                    | 682    | 1,25,402  | 21,250   | 2                   | ..    | 275       | ..    |
| Gujarat              | —                           | 1     | 799       | 190   | 773                      | 453    | 20,831    | 10,439   | 4                   | 1     | 1,140     | 56    |
| Jammu & Kashmir      | 2                           | ..    | 36        | ..    | ..                       | ..     | ..        | ..       | ..                  | ..    | ..        | ..    |
| Kerala               | 7                           | ..    | 310       | 86    | ..                       | ..     | ..        | ..       | 3                   | ..    | 730       | 220   |
| Madhya Pradesh       | 5                           | ..    | 199       | 50    | 1,157                    | 166    | 21,922    | 3,189    | 6                   | 2     | 335       | 385   |
| Madras               | 19                          | ..    | 703       | 404   | 318                      | ..     | 6,548     | 1,490    | 15                  | 6     | 3,965     | 961   |
| Maharashtra          | 32                          | 2     | 1,965     | 451   | 95,020                   | 83,100 | 4,33,151  | 4,87,088 | 15                  | 13    | 2,126     | 1,408 |
| Mysore               | 4                           | ..    | 246       | 53    | 4,255                    | 69     | 60,693    | 5,959    | 4                   | ..    | 714       | 115   |
| Orissa ..            | 1                           | ..    | 64        | 3     | 4,056                    | 873    | 69,077    | 25,299   | ..                  | ..    | 80        | ..    |
| Punjab               | 9                           | ..    | 372       | 47    | 113                      | 992    | 8,226     | 16,108   | 2                   | ..    | 215       | ..    |
| Rajasthan            | 3                           | ..    | 143       | 9     | 8,332                    | 149    | 1,19,051  | 3,552    | ..                  | ..    | ..        | ..    |
| Uttar Pradesh        | 24                          | 1     | 797       | 236   | 330                      | 81     | 10,738    | 2,479    | 3                   | ..    | 685       | 445   |
| West Bengal          | 11                          | ..    | 379       | 196   | 3,487                    | 964    | 1,53,805  | 34,616   | 11                  | ..    | 1,258     | 313   |
| Goa, Daman & Diu     | ..                          | ..    | ..        | ..    | ..                       | ..     | ..        | ..       | ..                  | ..    | ..        | ..    |
| Nagaland             | ..                          | ..    | ..        | ..    | 4                        | ..     | 47        | 100      | ..                  | ..    | ..        | ..    |
| A. & N. Islands †    | ..                          | ..    | ..        | ..    | 22                       | ..     | 392       | 6        | ..                  | ..    | ..        | ..    |
| Dadra & Nagar Haveli | ..                          | ..    | ..        | ..    | 5                        | ..     | 127       | 8        | ..                  | ..    | ..        | ..    |
| Delhi                | 8                           | 1     | ..        | ..    | ..                       | ..     | ..        | ..       | 2                   | 4     | ..        | ..    |
| Himachal Pradesh     | ..                          | ..    | ..        | ..    | 419                      | ..     | 7,185     | 5,034    | ..                  | ..    | ..        | ..    |
| L. M. & A. Islands ‡ | ..                          | ..    | ..        | ..    | 16                       | 5      | 779       | 116      | ..                  | ..    | ..        | ..    |
| Manipur              | ..                          | ..    | ..        | ..    | 211                      | 27     | 3,217     | 1,639    | 228                 | ..    | ..        | ..    |
| N.E.F.A.             | ..                          | ..    | ..        | ..    | ..                       | ..     | ..        | ..       | ..                  | ..    | ..        | ..    |
| Pondicherry          | 1                           | ..    | 6         | 2     | 43                       | 31     | 1,246     | 844      | ..                  | 1     | ..        | ..    |
| Tripura              | ..                          | ..    | ..        | ..    | 312                      | 192    | 10,645    | 4,859    | 19                  | ..    | 442       | 177   |
| All India            | 150                         | 5     | 6,820     | 1,930 | 1,24,442                 | 87,902 | 11,07,968 | 6,32,315 | 321                 | 29    | 12,703    | 3,168 |

\* Figures for 1962-63.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.

## 16. BASIC SCHOOLS

| States/Territories   | Post Basic          |           |                      | Basic (Middle)      |           |                      | Basic (Primary)     |           |                      |              |
|----------------------|---------------------|-----------|----------------------|---------------------|-----------|----------------------|---------------------|-----------|----------------------|--------------|
|                      | No. of Institutions | Enrolment | Expenditure (in Rs.) | No. of Institutions | Enrolment | Expenditure (in Rs.) | No. of Institutions | Enrolment | Expenditure (in Rs.) |              |
| Andhra Pradesh*      | ..                  | 2         | 145                  | 38,912              | 358       | 90,937               | 39,02,571           | 2,673     | 3,48,659             | 96,19,524    |
| Assam                | ..                  | ..        | ..                   | ..                  | 235       | 43,136               | 22,69,366           | 2,728     | 2,58,750             | 79,03,063    |
| Bihar ..             | ..                  | 5         | 907                  | 62,573              | 862       | 1,77,463             | 79,93,189           | 2,789     | 2,14,381             | 88,07,253    |
| Gujarat              | ..                  | ..        | ..                   | ..                  | 3,714     | 10,54,887            | 5,54,79,595         | 1,577     | 1,61,861             | 61,51,673    |
| Jammu & Kashmir      | ..                  | ..        | ..                   | ..                  | ..        | ..                   | ..                  | 1,842     | 70,606               | 23,34,250    |
| Kerala               | ..                  | 3         | 452                  | 65,162              | 80        | 32,736               | 16,29,113           | 375       | 88,404               | 32,16,464    |
| Madhya Pradesh       | ..                  | ..        | ..                   | ..                  | 463       | 1,10,045             | 58,65,370           | 2,420     | 2,19,382             | 93,22,241    |
| Madras               | ..                  | 3         | 187                  | 74,016              | 1,192     | 3,99,613             | 1,48,11,750         | 3,283     | 4,98,878             | 1,58,50,422  |
| Maharashtra          | ..                  | ..        | ..                   | ..                  | 3,040     | 9,94,943             | 3,51,88,665         | 1,894     | 2,11,582             | 78,36,690    |
| Mysore               | ..                  | ..        | ..                   | ..                  | 1,369     | 3,73,297             | 1,24,37,059         | 1,925     | 2,53,519             | 84,21,141    |
| Orissa ..            | ..                  | 2         | 94                   | 25,837              | 25        | 5,674                | 3,32,353            | 358       | 33,159               | 11,74,019    |
| Punjab               | ..                  | 2         | 2,689                | 2,21,936            | 72        | 28,089               | 13,22,525           | 1,787     | 2,78,389             | 80,42,811    |
| Rajasthan            | ..                  | ..        | ..                   | ..                  | 55        | 15,037               | 12,60,083           | 1,905     | 2,06,648             | 74,78,797    |
| Uttar Pradesh        | ..                  | ..        | ..                   | ..                  | 5,182     | 7,62,298             | 3,68,99,454         | 52,555    | 58,04,526            | 11,69,79,176 |
| West Bengal ..       | ..                  | ..        | ..                   | ..                  | 303       | 25,437               | 25,24,713           | 1,804     | 2,37,683             | 85,97,780    |
| Goa, Daman & Diu     | ..                  | ..        | ..                   | ..                  | ..        | ..                   | ..                  | ..        | ..                   | ..           |
| Nagaland             | ..                  | ..        | ..                   | ..                  | ..        | ..                   | ..                  | ..        | ..                   | ..           |
| A. & N. Islands †    | ..                  | ..        | ..                   | ..                  | ..        | ..                   | ..                  | 58        | 4,243                | 3,86,711     |
| Dadra & Nagar Havell | ..                  | ..        | ..                   | ..                  | 14        | 2,517                | ..                  | 58        | 2,980                | 2,37,400     |
| Delhi ..             | ..                  | ..        | ..                   | ..                  | ..        | ..                   | ..                  | 894       | 2,23,988             | 1,67,93,715  |
| Himachal Pradesh     | ..                  | ..        | ..                   | ..                  | 4         | 694                  | 70,710              | 1,397     | 65,314               | 44,59,917    |
| L. M. & A. Islands ‡ | ..                  | ..        | ..                   | ..                  | 11        | 2,367                | 2,88,164            | 15        | 2,017                | 1,55,080     |
| Manipur              | ..                  | ..        | ..                   | ..                  | 1         | 108                  | 6,809               | 282       | 20,583               | 11,88,595    |
| N.E.F.A.             | ..                  | ..        | ..                   | ..                  | ..        | ..                   | ..                  | 169       | 7,164                | 6,50,642     |
| Pondicherry          | ..                  | ..        | ..                   | ..                  | 3         | 564                  | 28,407              | 23        | 2,634                | 1,07,445     |
| Tripura              | ..                  | ..        | ..                   | ..                  | 102       | 8,901                | 11,77,414           | 600       | 63,877               | 30,12,077    |
| Total India          | ..                  | 17        | 4,474                | 4,88,436            | 17,085    | 41,28,748            | 16,89,40,477        | 83,414    | 92,74,227            | 24,37,26,886 |

\* Figures for 1962-63.

† Andaman &amp; Nicobar Islands.

‡ Laccadive, Minicoy &amp; Amindivi Islands.



## EXPENDITURE

The following particulars give the expenditure by source for boys & girls respectively in Rs. : Govt. Funds 3,00,65,99,709; 29,78,18,826; District Boards Funds 14,08,63,611, 75,88,963; Municipal Boards Funds 11,47,16,337, 2,76,72,208; Fees 70,09,92,815, 10,01,11,898; Endowments etc. 8,26,99,958, 1,73,63,210; Other Sources 24,71,75,080, 2,97,55,574.

## Direct Expenditure by Types of Institutions

Universities 21,91,03,690, 11,42,421; Boards of Secondary and/or Intermediate Educa-

tion 3,45,25,965, —; Research Institutions 1,45,86,631, —; Arts and Science Colleges 25,39,03,904, 3,39,67,222; Colleges for Professional and Technical Education 23,31,66,118, 1,16,72,583; Colleges for Special Education 94,89,715, 22,22,438; Post-Basic School 4,07,455, 80,981; Higher Secondary Schools 33,43,15,396, 8,27,63,942; High Schools 51,20,70,361, 9,53,40,419; Middle Schools (Basic) 15,06,51,405, 1,82,89,072; Middle Schools (Non-basic) 39,33,78,510, 4,67,49,870; Primary Schools (Basic) 21,69,61,693, 2,67,65,193; Primary Schools (Non-basic) 71,22,64,728, 4,64,85,720; Pre-primary Schools 75,97,509,

16,22,630; Vocational and Tech. Schools 12,89,74,408, 1,62,42,644; Special Education Schools 2,81,50,665, 30,24,828. Total (Direct) 3,24,94,18,153, 38,63,69,963.

## Indirect Expenditure

Directions and Inspections 10,47,00,459, 40,27,368; Buildings 47,72,53,163, 3,81,07,690; Scholarships 24,89,23,862, 3,49,42,537; Hostels 4,39,23,090, 92,99,796; Other Miscellaneous Items 16,87,98,783, 75,03,325. Total (Indirect) 1,04,35,99,357, 9,39,40,716; Expenditure (Grand Total) 4,29,30,47,510, 48,03,10,673.

## 17. STUDENTS BY AGE-GROUPS

| States/Territories   | Age-group 6-11 |             | Age-group 11-14 |             | Age-group 14-17 |             |
|----------------------|----------------|-------------|-----------------|-------------|-----------------|-------------|
|                      | Students       | Percentage* | Students        | Percentage* | Students        | Percentage* |
| Andhra †             | 35,18,360      | 86.1        | 5,10,799        | 21.4        | 2,44,355        | 11.0        |
| Assam                | 13,88,153      | 74.7        | 2,79,839        | 29.5        | 1,82,150        | 21.5        |
| Bihar                | 37,56,347      | 54.5        | 6,38,068        | 18.0        | 4,13,855        | 13.8        |
| Gujarat              | 25,88,018      | 82.4        | 4,97,151        | 30.8        | 2,48,955        | 17.1        |
| Jammu & Kashmir      | 2,70,048       | 58.4        | 80,957          | 32.3        | 31,066          | 13.2        |
| Kerala               | 22,88,393      | 96.4        | 9,68,927        | 75.7        | 5,39,747        | 45.7        |
| Madhya Pradesh       | 26,97,382      | 57.5        | 4,50,737        | 19.7        | 2,06,597        | 10.1        |
| Madras               | 42,58,475      | 100.0       | 9,36,429        | 41.3        | 4,02,562        | 18.7        |
| Maharashtra          | 46,45,074      | 83.5        | 10,23,884       | 34.8        | 5,04,350        | 18.9        |
| Mysore               | 29,31,531      | 89.5        | 5,89,512        | 34.6        | 1,46,344        | 9.2         |
| Orissa               | 16,44,023      | 68.8        | 1,92,228        | 15.1        | 73,964          | 6.3         |
| Punjab               | 21,77,592      | 70.8        | 5,20,117        | 31.8        | 2,20,410        | 14.9        |
| Rajasthan            | 14,45,485      | 47.9        | 2,82,658        | 18.0        | 1,10,732        | 7.8         |
| Uttar Pradesh        | 59,76,230      | 59.0        | 11,78,890       | 23.3        | 4,46,939        | 9.1         |
| West Bengal          | 36,07,802      | 72.0        | 7,15,773        | 27.8        | 2,98,022        | 12.6        |
| Goa, Daman & Diu     | 75,912         | 88.3        | 13,073          | 28.4        | 6,086           | 12.7        |
| Nagaland             | 50,086         | 98.0        | 9,270           | 32.0        | 3,350           | 12.5        |
| A. & N. Islands      | 7,300          | 99.9        | 1,108           | 27.7        | 348             | 8.7         |
| Dadra & Nagar Haveli | 5,112          | 63.9        | 491             | 12.3        | 161             | 4.0         |
| Delhi                | 3,67,854       | 93.1        | 1,51,978        | 71.0        | 85,784          | 42.5        |
| Himachal Pradesh     | 1,27,431       | 64.1        | 29,397          | 31.3        | 9,083           | 10.5        |
| L. M. & A. Islands   | 4,213          | 100.0       | 598             | 30.0        | 154             | 77.0        |
| Manipur              | 1,45,474       | 100.0       | 30,523          | 48.4        | 23,470          | 42.7        |
| N.E.F.A.             | 7,704          | 16.4        | 2,268           | 9.1         | 1,596           | 6.9         |
| Pondicherry          | 41,087         | 89.1        | 9,628           | 41.6        | 4,583           | 22.7        |
| Tripura              | 1,15,369       | 65.6        | 23,225          | 27.7        | 8,240           | 11.8        |
| India Total          | 4,29,39,353    | 69.4        | 97,72,517       | 30.2        | 47,25,010       | 16.0        |

\* Percentage of enrolment in classes to the population of corresponding age-groups.

† Figures for 1962-63.



## AWARDS AND PRIZES

**I**NCLUDING the 1966 awards, the number of persons who have received Bharat Ratna is 14, Padma Vibhushan 30, Padma Bhushan 207 and Padma Shri 252.

The highest award Bharat Ratna is given for exceptional work for the advancement of art, literature and science and in recognition of public service of the highest order

The 14 persons who have received Bharat Ratna are: Mr. Jawaharlal Nehru (1954), Mr. C. Rajagopalachari (1954), Dr. S. Radhakrishnan (1954), Dr. C. V. Raman (1954), Dr. Bhagwan Das (1955), Mr. M. Visvesvaraya (1955), Pandit Govind Ballabh Pant (1957), Dr. D. K. Karve (1958), Dr. B. C. Roy (1961), Mr. Purushottam Das Tandon (1961), Dr. Rajendra Prasad (1962), Dr. Zakir Hussain (1963), Dr. P. V. Kane (1963) and Mr. Lal Bahadur Shastri (Posthumously) 1966.

### 1966 AWARDS

The President made 43 awards on the 15th Republic Day (Jan. 26, 1966). They are one Padma Vibhushan, 14 Padma Bhushan, 30 Padma Shri.

Dr. Valerian Cardinal Gracias, Archbishop of Bombay, has been awarded the Padma Vibhushan, the second highest national award. He is the only person to get the award.

The following are the recipients of the awards:

**Padma Vibhushan:** Dr. Valerian Cardinal Gracias, Archbishop of Bombay.

**Padma Bhushan:** Mr. Babubhai Maneklal Chinal, industrialist, Bombay, Mr. Bhabani Charan Mukharji, former chairman and managing director of the Fertilizer Corporation of India, Mr. Haribhau Upadhyaya, writer and social worker, Rajasthan, Mr. Homi Nusserwanji Sethna, director of the engineering group of the Atomic Energy Establishment, Trombay, Dr. Bhai Jodh Singh, former Vice-Chancellor of Punjabi University, Patiala, Mr. Kizhakke Potte Kesava Menon, editor, *Mathrubhumi*, Kozhikode, Mr. Mannathu Padmanabhan, social worker, Kerala, Dr. Puliyur Krishnaswamy Duraiswami, orthopaedic surgeon, Safdarjung Hospital, New Delhi, Mr. Shankar Pillai, editor, *Shankar's Weekly*, New Delhi, Mr. Tiruvarur Swaminathier Ramaswami Aiyar, chairman, Myslapore Academy, Madras, Mr. Varghese Kurien, general manager of Kaira District Co-operative Milk Producers Union Ltd., Anand Gujarat, Dr. Vikram Ambalal Sarabhai, Chairman, Atomic Energy Commission, Mr. Vinayak Sitaram Sarwate, social worker, Indore, Mr. Zubin Mehta, orchestra director.

**Padma Shri:** Mrs. Bhanumati Ramakrishna, cinema artiste, Madras, Swami Bichitrananda Das, social worker, Orissa, Mr. B. Sivamurthy Sastry, Kannada scholar, Mysore, Dr. Dharmendra, director, Central Leprosy Teaching and Research Institute, Chingleput, Madras, Mr. Ebrahim Alkazi, director, National School of Drama, New Delhi, Dr. Ernest Joachim Joseph Borges, cancer surgeon, Maharashtra, Mr. Eswara Iyer Krishna Iyer, musician, actor and dancer, Madras, Mr. Harishankar Sharma, Hindi writer and poet, Uttar Pradesh, Mr. Inderjit Singh Tuli, Punjabi poet, Mr. Jagdish Prasad, engineer-in-chief, Public Works Department, Uttar Pradesh, Dr. (Miss) Jerusha Jhirad, gynaecologist and social worker, Bombay, Mr. Kishan Lal, Hockey player, Mr. Kuldip Singh Virk, deputy commissioner, Ferozepore, Mr. Kundan Lal Berry, divisional superintendent, Northern Railway, Ferozepore.

Mr. Maqbool Fida Husain, painter, New Delhi, Mohammad Din Jagir, Jammu and Kashmir, Sardar Mohan Singh, senior vice-president, New Delhi Municipal Committee, Prof. Nirmal Kumar Bose, scholar, West Bengal, Mr. Poddar Ramavtar Arun, Hindi poet, Bihar, Mr. Purushottam Laxman Deshpande, dramatist,

Maharashtra, Mr. Rajeshwar Nath Zutshi, principal, Daly College, Indore, Mr. Ramprasad Ramchand Khandelwal, industrialist and philanthropist, Maharashtra, Dr. Robert Brocklesby Davis, psychiatrist, Bihar, Mr. Sangabasappa Mallangouda Patil, managing director of Hindustan Machine Tools Ltd., Bangalore, Dr. Satish Dhawan, director, Indian Institute of Science, Bangalore, Mr. Sayyid Ahmadullah Qadri, Urdu writer and member of Legislative Council, Andhra Pradesh, Mr. Surinder Singh Bedi, deputy commissioner, Amritsar, Mr. Stanislaus Joseph Coelho, collector and district magistrate, Kutch, Mrs. Sumitra Chara Ram, promoter of art and music, Delhi and Mr. Villupuram Chinaiya Ganesan, cinema actor, Madras.

The awards were instituted in 1954 and are awarded on the Republic Day.

### LITERATURE

The Sahitya Akademi Awards for 1965 for outstanding books published in the Indian languages during the previous three years. The awards were given for the following books in the languages shown against each:

Books are eligible for prizes in 16 languages viz., the fourteen major languages enumerated in the Constitution of India and Sindhi and English (as written by Indian authors).

There are two prizes for Sanskrit, one for creative writing in Sanskrit, the other for scholarly research or exposition relating to Sanskrit, written in any language. To be eligible for award a book must have been originally published during the three years preceding the year in which the Award is announced.

**English:** *The Tribal World of Verrier Elwin* (autobiography) by (late) Verrier Elwin.

**Bengali:** *Smriti Satta Bhabishyat* (Poems) by Bishnu Dey.

| Name of the Book      | Author                              | Reader and Prize       | Amount  |
|-----------------------|-------------------------------------|------------------------|---------|
| Sanskrit Vihara ..    | Prof. P. N. Virkar and P. S. Joshi. | Reader I, 1st Prize.   | Rs. 700 |
| Bodhanavali ..        | K. L. V. Shastri.                   | Reader I, 2nd Prize.   | Rs. 600 |
| Sanskrit Swadhyaya .. | Gajanana Shastri Gaitonde.          | Reader I, 3rd Prize.   | Rs. 500 |
| Bodhanavali ..        | K. L. V. Shastri.                   | Reader II, 1st Prize.  | Rs. 800 |
| Sanskrit Swadhyaya .. | Gajanana Shastri Gaitonde.          | Reader II, 2nd Prize.  | Rs. 700 |
| Bodhanavali ..        | K. L. V. Shastri.                   | Reader III, 1st Prize. | Rs. 900 |
| Sanskrit Swadhyaya .. | Gajanana Shastri Gaitonde.          | Reader III, 2nd Prize. | Rs. 800 |

**Research Scholarships:** The Govt. of India awarded 17 Research scholarships of Rs. 100-00 each tenable for 2 years during 1960-61, for the products of Traditional Sanskrit Pathshalas. These scholarships have been awarded to 17 persons during the year 1961-62 and to 29 in 1963-64.

In 1963-64 the rate of the scholarship was raised to Rs. 150 per month. During the years 1961-65 and 1965-66, scholarships were awarded to 22 and 24 persons respectively. 41 scholars have been selected for the award of scholarships of Rs. 200 per month (revised from April 1966) during 1966-67.

### Books for Neo-Literates

Under the prize scheme for books for Neo-literates about 40 prizes are awarded annually to the authors of selected books/manuscripts in the principal Indian languages.

Under the eleven prize competitions held up to 1964, authors of 417 books/manuscripts were awarded a prize of Rs. 500 each in Hindi and other Indian languages.

Thirty-one books have been selected for an award of Rs. 500 each under the Twelfth Prize

**Gujarati:** *Jeevan Vyavastha* (Essays) by Kaka (D. B.) Kalelkar.

**Hindi:** *Rasa Siddhanta* (treatise on poetics) by Dr. Nagendra.

**Kannada:** *Ranga Binnapa* (Philosophical reflections) by S. V. Ranganna.

**Malayalam:** *Muthassi* (poems) by Smt. N. Balamani Amma.

**Marathi:** *Vyakti Ani Valli* (Sketches) by P. L. Deshpande.

**Oriya:** *Uttarayana* (poems) by Balkunthath Patnaik.

**Punjabi:** *Ik Chhit Chanandi* (short stories) by Kartar Singh Duggal.

**Tamil:** *Sri Ramanujar* (biography) by P. Sri Acharya.

**Telugu:** *Misra Manjari* (poems) by Rayaprolu Subbarao.

**Urdu:** *Ek Chadar Maili-Si* (Novelette) by Rajinder Singh Bedi.

The awards are given in the form of a cheque for Rs. 5,000 and an attractive copper tablet in which the name of the author, the name of the book, the year of the award and the facsimile signature of the President of the Akademi, Dr. Radhakrishnan are inscribed. The awards for 1965 were given on Feb. 20, 1966.

### Hindi

**Hindi:** Twelve prizes of Rs. 1,500 each have been announced on fictions in Hindi written by persons belonging to non-Hindi speaking States.

**Sanskrit:** To encourage the production of Sanskrit literature a Prize Scheme for production of graded Readers for VI, VII & VIII classes was formulated by the Govt. Under this scheme, the following readers, noted in the table below, have been selected and prizes shown against each have been awarded:—

Competition held in 1965. They include nine books and two manuscripts in Hindi, four in Bengali, three in Gujarati, two each in Malayalam, Marathi, Punjabi and Tamil and one each in Assamese, Kannada, Oriya, Telugu and Urdu.

### UNESCO Prize Competition for Books

The Government of India, in cooperation with UNESCO, held the first biennial Competition for Books for New Reading Public in 1959. Six books (4 in Hindi and 2 in Bengali) won the prize. In the Second Competition held in 1961, 7 books (4 in Hindi and 3 in Tamil) were awarded the prizes. In the third competition seven prizes of the value of Rs. 1,900 approximately (US \$400 each) each in three Indian languages, that is, four in Hindi, two in Bengali and one in Urdu, were awarded to the best books.

Seventeen books have been selected on the basis of the results of the fourth UNESCO competition for the new reading public. Their authors will receive Rs. 1,000 each.

The books are: "Simantar Matl Aru Manuh" (Assamese) by Prof. Lila Gogoi; "Sakur Arar Nedekha Kahini" (Assamese)—Dr. Kanak Chandra Mahanta; "Bharat Amar" (Bengali)—



Amar Nath Roy; "Virat Darshan" (Gujarati) by Manubehn Gandhi; "Swami Vivekanandani Vato" (Gujarati)—Narajanbohn Kalarathi; "Anuyug Ka Naya Savera" (Hindi)—Dr. Arun Rashmi; "Hridaya Ki Bhasha" (Hindi)—R. K. Vyas; "Soron Ka Sant" (Hindi)—Ram Krishana Sharma; "Deep Jo Jalte Hi Rahenge" (Hindi)—Vyahit Hirdaya; "Vinoba Ki Bodh Kathayen" (Hindi)—Ram Kumar Gupta; "Grama Sevak Ramachandra" (Kannada)—B. Malla Raj Urs; "Keralathilae Africa" (Malayalam)—K. Panoor; "Draupadichi Thali" (Marathi)—Shankar Inamdar; "Bharat De Pahelwan" (Punjabi)—Balbir Singh Kanwal; "Mittal Pappa" (Tamil)—Kalvi Gopala-krishnan; "Sankellu Threnchukonnam" (Telugu)—S. L. Narasimha Rao; and "Chand Ki Taraf Pehla Qadam" (Urdu)—Mohd Ishaq Siddiqi.

In all 37 books have been awarded in the four competitions.

16 prizes of Rs. 946 each will be awarded to the authors of selected books in the modern Indian languages during the Fifth UNESCO Competition in the year 1967.

1,500 copies of the prize-winning books are purchased by this Ministry for distribution in Social Education Centres, N.E.S./C.D. Blocks, Libraries etc.

#### Children's Books

With a view to encouraging the production of good books for children, the Ministry of Education has been holding a National Prize Competition for Children's books in all the modern Indian Languages since 1954. The prize competition scheme was decentralised with effect from 1962. Under the revised arrangement the competition in regional languages is being conducted by the respective State Governments. The competition in Hindi, Sindhi and Urdu languages is continued to be organised directly by the Ministry of Education, Govt. of India. The Ministry awarded 15 prizes of Rs. 1000 each in the XI Competition held in 1965-66 to the authors of the following publications:—

**Assamese:** *Akasar Katha* by Shri Haren Kabita.

**Bengali:** *Jnan Bijnaner Galpa* by Shri Amar Nath Roy.

**Gujarati:** *Virat Darshan* by Shri Manuben Gandhi.

**Hindi:** *Bachchon Ke Liye Chumbak* by Sh. Ramhi Singh; *Duniya-Ke-Sat Mahan Aschayon Ki Kahani* by Shri Jitendra Kumar Mittal.

**Kannada:** *Thuppa Rotti-Ge, Ge, Ge* by Sh. Siddayya Puranik.

**Malayalam:** *Vimanam* by Sh. O. P. Nam-budiripad.

**Marathi:** *De Tali Ga Ghe Tali* by Sh. G. D. Mudgalkar.

**Oriya:** *Nai Bahila* by Sh. Durga Prasad Patnaik.

**Punjabi:** *Annmulli Dat* by Sh. S. S. Amole.

**Sindhi:** *Hikro Hyo Raja* by Sh. Lachman Bhatia.

**Tamil:** *Pulavar Magan* by Sh. Puvannan Chathiram Muthu; *Engal Thottam* by Sh. A. K. Paramthaman.

**Telegu:** *Balala Bommalu Nehruji* by Sh. B. Satyanarayana Moorthy.

**Urdu:** *Bachchon Ki Duniya* by Sh. Trilok Chand Mahrum.

#### INTERNATIONAL CHILDREN'S COMPETITION 1964

Four hundred and eleven prizes shared by 60 countries were awarded — 375 for paintings and 36 for literary entries, in the Shankar's International Children's Competition.

Over 117,000 entries were received from children of 88 countries, of these 115,000 were paintings and the rest were literary entries.

The President's Gold Medal for the best painting was awarded to an 11-year-old Russian girl, Ira Zaron, for her painting entitled "Duet."

The Vice-President's Gold Medal for the best literary entry was awarded to a 15-year-old British boy, Steven M. Gray, for his poem entitled "The Poacher is Hunted."

The 24 Jawaharlal Nehru Memorial Awards, for the best painting and best literary entry in each age group, were given away this year to children from the following countries: India four prizes, Japan and U.S.A. 2 prizes each, Australia, Belgium, Ceylon, Czechoslovakia, West Germany, Hungary, Ireland, Jamaica, South Korea, Malaysia, Norway, Poland, Spain, U.S.S.R., North Viet-Nam and Yugoslavia, one prize each.

The President's Gold Medal for the best painting has so far been won by children belonging to 9 different countries.

The Vice-President's Gold Medal for the best literary entry has so far been won by children belonging to 8 different countries.

Jawaharlal Nehru had been contributing 24 prizes every year from 1950 to 1962. As a tribute to his memory, 24 Nehru Awards were instituted in 1964 to be awarded every year for the best painting and best literary entries in each age group.

A large number of award-winning paintings were sent for exhibition in different countries.

#### TEACHERS

The Government of India announced on Sept. 5, 1966 the names of 99 teachers—51 primary, 39 secondary and nine Sanskrit Pathasala teachers who have been selected for the 1966-67 National Awards.

Each recipient of the Award will receive a Certificate of Merit and Rs. 500 cash.

Since inception 709 teachers — 374 primary, 326 secondary and 9 Sanskrit teachers have received the National Award till 1966-67.

#### ART

Below we give the Lalit Kala Akademi Awards in 1966. The work of the following artists were selected for the award of cash prizes of Rs. 1,000 each.

Prokash Karmakar 'The Passion Gropes' (Oil); J. Sultan Ali 'Kondapalli' (Drawing); Ambadas 'Hot Wind Blows inside me' (Oil); D. K. Das Gupta 'Kaza Village' (Oil); Bal Chhabda 'Love thy neighbour as thyself' The Lord did say that, not the neighbour (Oil); Surya Prakash 'Opus' 41 (Oil); Ram Singh Bawa 'Distressed' (Oil); M. K. Bardhan 'Agony & Ecstasy' (Oil); K. S. Kulkarni 'Attrition' (Oil) and P. V. Janakiram 'The Woman' (Copper & Brass).

**Craftsmen's National Award** of Rs. 1,000, a specially designed shawl and a brass plaque. The following are the names of the award winners and the crafts respectively.

Khalifa Maqbool Hussain (lacquered brassware); Boothalinga Achari (Temple Chariot Carving); Mohammed Jamdani (Weaving); U. N. Devanna (Puppetry); Bhagat Bhim Sen (Ivory); Qadir Lala (Carpet Weaving); Mir Shaukat Ali (Wood Inlay); Shambu Nath Karmakar (Dhokra Metal Works); Syed Gesudarez Hussain; Rasik Ch. Dey; Gauranga Das (Cane and Bamboo Works); Bokhraj Sakya (Metal Work); Swaran Lal Misra, Ibetombi Devi (Embroidery); T. N. Padmanabhan Achari (Wood Carving); Mr. & Mrs. Sukhraj, Ram Parshad (Jewellery); Pannalal (Jewellery); Hareshwar Doko (Bell Metal); Demon Malhore (Bell Metal); Y. D. Satghare (Metal Work); Shamboonath Sutradhar (Wood Work); Kamalakanta Karmakar (Wood and Brasswork); Sankal Chand Jaichandbhai Patel (Brocade Weaving).

The Committee withheld the Gold Plaque of the Akademi, as no work was adjudged of outstanding merit.

**Skill Competition:** In the All-India Skills Competition of the industrial training institutes in the trades of fitter, machinist and turner, winners Inder Raj, Delhi (fitter), R. Tulsidas,

Madurai (machinist) and Taquir Ahmed, Cawnpur (turner) were awarded prizes. Delhi, adjudged as the best State was awarded a shield.

#### MUSIC, DANCE, DRAMA

The Sangeet Natak Akademi Awards\* are given below. The winners are selected by the General Council of the Akademi.

The Awards presented by the President consist of a shawl and sanad to Fellows and sanad and gold medal to Awardees.

Below is the list of Fellows and Awardees honoured for 1964-65 on 24th December, 1965 by Smt. Indira Gandhi, Chairman of the Akademi.

**Fellows:** Dr. D. G. Vyas, Dilip Kumar Roy, Prof. G. H. Ranade (since died), Thakur Jaideva Singh and Vinayakrao Patwardhan.

#### AWARDS

**Music:** Hindustani (Vocal)—Smt. Hirabai Barodekar; Hindustani Instrumental—Pt. Sakharam (Pakhawaj); Karnatak (Vocal)—Smt. T. Brinda; Karnatak Instrumental—T. R. Mahalingam (Flute).

**Dance:** Kathakali—Guru Gopinath; Manipuri—Guru Bipin Sinha; Teacher of classical dance—Chokalingam Pillai.

**Drama:** Play-writing—Upendra Nath Ashka; Acting: (Malayalam)—Aravindaksha Menon; (Sanskrit)—Krishnachandra Bhatvadekar; (Gujarati)—Moolji Khushal Nayak.

The following categories have been approved by the General Council of the Akademi for Award in 1965-66:

**Music:** Hindustani Vocal and Instrumental, Karnatak Vocal and Instrumental; **Dance Group 1:** Kathak and Bharatanatyam; **Dance Group 2:** Other dance forms—Orissi, Ojapalli/Sattriya; **Dance Group 3:** Teacher for classical Dance.

**Drama:** Direction/Production—Acting in regional languages; Hindi, Assamese and Oriya.

Prizes for outstanding plays published in Indian languages (for the first time during Jan. 1963 to Dec. 31, 1965) in two categories: (1) Plays in General; (2) Plays for Children.

**Languages:** Kannada, Oriya and Punjabi.

**AIR Awards for Patriotic Songs:** Out of 12,500 entries, 219 were in Hindi and 161 in Urdu. The first prize in Hindi has gone to Mrs. Sarojini Sinha. Mrs. Pushpa Avasthi, Mr. Chandra Dev Singh and Mr. Amar Bahadur Singh won the second, third and fourth prizes.

#### STATE AWARDS FOR FILMS—1965

"Chemmeen", a feature film in Malayalam has been adjudged as the best feature film of 1965 by the Central Committee of State Awards for Films and has won the President's Gold Medal. Its producer will get a cash prize of Rs. 20,000 and the director Rs. 5,000.

The All-India Certificate of Merit for the second best feature film goes to "Athithi" (Bengali) with a cash prize of Rs. 10,000 to its producer and Rs. 2,500 to its director.

For the third prize in this category, "Chhoti Chhoti Baten" (Hindi) has been selected by the Committee and will get the All-India Certificate of Merit.

The All India Certificate of Merit for the best story writer, has been awarded to Mr. Motilal Rajwanshi (Posthumously) author of the story of the films "Chhoti Chhoti Baten" and "Shaheed".

The film *Shaheed* has been awarded a cash prize of Rs. 20,000 for its national theme.

The Government invited entries of the feature films for the Cash Prizes of Rs. 25,000 and Rs. 20,000 respectively for the films aimed at promoting family planning and national unity and emotional integration. While no entry was received for the former, none of the three films entered for the latter was considered to be suitable for the award by the Central Committee

\* The Sangeet Natak Akademi has selected the following scholars for the Akademi fellowships and artistes for the Akademi awards in the fields of music, dance and drama for 1966-67: **Fellowships:** Jaya Chamaraja Wadiyar, E. Krishna Iyer, Somnath Mitra and Dr. Asutosh Battacharya; **Awards (Music):** Shikoor Khan (Hindustani instrumental), Mrs. Siddheshwari Devi (Hindustani vocal), P. S. Veerabswamy Pillai (Carnatic instrumental) and R. Srikrishna Iyengar (Carnatic vocal); **Dance:** Mrs. Swarnasaraswathi (Bharata Natyam), Kelucharan Mohapatra (Odissi) and V. B. Ramaiyya Pillai, teacher in classical dance (Bharata Natyam); **Drama:** Utpal Dutt (direction).



Among the children's films, the Central Committee did not find any film to be of a standard for the Prime Minister's gold medal. The film "the Adventure of a Sugar Doll" produced by the Children's Film Society has been selected for an All-India Certificate of Merit with a cash prize of Rs. 10,000 to its producer and Rs. 2,500 for its director. The Society's Film "As You Like It" was also to get an All-India Certificate of Merit.

**Documentary Films:** No documentary was found suitable for the President's Gold Medal.

The All-India Merit Certificate has been awarded to "Cloven Horizon" (English) with a cash prize of Rs. 2,000 to its producer Mr. Kanthi Lal Rathod and Rs. 500 to its director. The documentary "Across India" produced by the Films Division was recommended by the Committee for the All-India Certificate of Merit.

#### Regional Awards

The following feature films were recommended for regional awards.

**Hindi:** (1) "Shaheed" — President's Silver Medal; (2) "Oonche Log" — Certificate of Merit; (3) "Guide" — Certificate of Merit.

**Marathi:** (1) "Sadhi Manasa" — President's Silver Medal; (2) "Nirmon" (Konkani) — Certificate of Merit; (3) "Yuge Yuge Mi Wat Pahili" — Certificate of Merit.

**Gujarati:** (1) "Masumbi-no-Rang" — Certificate of Merit.

**Punjabi:** (1) "Sassi Punnu" — Certificate of Merit.

**Bengali:** (1) "Akash Kusum" — President's Silver Medal; (2) "Suvarna Rekha" — Certificate of Merit; (3) "Raja Rammohan" — Certificate of Merit.

**Malayalam:** (1) "Kavyamela" — President's Silver Medal; (2) "Oadayilinnu" — Certificate of Merit; (3) "Murappennu" — Certificate of Merit.

**Tamil:** (1) "Kuzhandaiyum Deivamum" — President's Silver Medal; (2) "Thiruvilayadal" — Certificate of Merit.

**Telugu:** "Antastulu" — President's Silver Medal; (2) "Palantiyuddhamu" — Certificate of Merit; (3) "Manushulu Mamathalu" — Certificate of Merit.

#### Filmfare Awards for 1965

**Best Picture:** "Himalay Ki Godmein".  
**Best Director:** Yash Chopra (Waqt).  
**Best Actor:** Sunil Dutt (Khandaan).  
**Best Actress:** Meena Kumari (Kaaajal).  
**Best Supporting Actor:** Raj Kumar (Waqt).  
**Best Supporting Actress:** Padmini (Kaaajal).  
**Best Story Writer:** Akhtar Mirza (Waqt).  
**Best Music Director:** Ravi (Khandaan).  
**Best Dialogue Writer:** Akhtar-ul-Imam (Waqt).  
**Best Lyricist:** Rajendra Krishna (Khandaan).  
**Best Playback Singer:** Lata Mangeshkar (Khandaan).  
**Best Colour Cinematograph:** Dharam Chopra (Waqt).  
**Best Black and White Cinematographer:** Ramchandra (Yaadein).  
**Best Sound Recordist:** Essa M. Suratwala (Yaadein).  
**Best Editing:** Pratap Dave (Himalay Ki Godmein).  
**Best Art Director (Colour):** S. S. Samel (Gumnam).  
**Best Art Direction (Black & White):** M. S. Sathyu (Haqeeqat).

#### Regional Languages

"Filmfare" Awards, which have been extended to Best Pictures in the regional languages produced in 1965, have been awarded to "Atithi" in Bengali, "Lakshmi Aali Gara", in Marathi, "Thiruvilayadal" in Tamil and "Anthastulu" in Telugu.

#### SERVICE OFFICERS

The awards won by officers and men of the defence forces in 1966 are given below:

#### GALLANTRY AWARDS

The President has approved 360 awards for gallantry and distinguished services on the occasion of the Independence Day. The awards are—one Vishishta Seva Medal Cl. I; five Mahavir Chakra, five Ashoka Chakra Cl. II, six Vishisht Seva Medal Class II, one Bar to Vir Chakra, 67 Vir Chakra, five Ashoka Chakra Cl. III, one Bar to Sena Medal, 222 Sena Medal, 10 Vayu Sena Medal & 37 Vishisht Seva Medal Cl. III. Most of the recipients are members of the armed forces. Among the civilians, four students of the Delhi University were awarded Ashoka Chakra Class II for chasing and catching a robber, and three civilian motor drivers were awarded Ashoka Chakra Class III who carried ammunition and supplies to troops in the front line.

#### Param Vir Chakra

Company Quarter-Master Havildar Abdul Hamid (Posthumous).

The following are the names of recipients of Vishishta Seva Medal Class I, Maha Vir Chakra, Ashoka Chakra Class II, Vishisht Seva Medal Class II and Bar to Vir Chakra respectively.

**Vishisht Seva Medal Class I:** Brig. Bhumi Chand Chauhan.

**Maha Vir Chakra:** Maj. Genl. Mohindar Singh; Lt.-Col. Sampuran Singh; Captain Kapil Singh Thapa (P); Lt.-Col. Sant Singh.

**Ashoka Chakra Class I:** Lt.-Col. A. B. Tarapore (P).

**Ashoka Chakra Class II:** Sqn. Ldr. V. B. Sawardekar; Preet Pal Singh; Kirpal Singh Dhingra; Satish Sood; Arun Khanna.

**Vishisht Seva Medal Class II:** Capt. Sunil Rajindra; Lt.Col. Jogindar Singh Khurana; Lt.-Col. Hardeo Singh; Lt.-Col. (Miss) Stella Dominica Picardo; Lt.-Col. Keith Shortlands; Maj. Hans Raj Luthra.

**Bar to Vir Chakra:** Lt.-Col. Satish Chandra Joshi (P).

**Vayu Seva Medal Recipients:** Squadron Leader J. A. R. Balraj; Squadron Leader K. M. Poonappa; Flt. Lt. H. S. Bedi; Flt. Lt. W. M. Sondhi; Flt. Lt. S. V. Phatak and V. K. Sharma (Signaller).

**Police Medals:** The President's Police Medal for meritorious services has been given to 90 police officers on Independence Day.

#### JEEVAN RAKSHA AWARDS

The President approved Jeevan Raksha Awards to the following 17 persons for conspicuous courage and promptitude in saving human lives.

**Jeevan Raksha Padak Class I:** Kumari Felisita Soreng; Shiv Kumar; K. Rajagopalan.

**Jeevan Raksha Padak Class II:** N. K. Shukla; late I. D. Agasar; D. H. Victor, M. H. Raghavindra Rao; P. A. K. Shettigar; K. G. A. Rangaswamy; P. C. Nappan; K. V. Doraiswamy; and N. M. Govindan.

**Jeevan Raksha Padak Class III:** M. K. Krishnan; B. Peethambaran; D. D. Mali; and Havildar Clerk, Gian Singh.

#### CHILDREN

The Indian Council for Child Welfare selected two girls for national awards for 1965 for outstanding courage.

Miss Felisita of Bhubaneswar showed great courage when her boat, while crossing the Mandira lake, capsized on February 20. Seeing two boys struggling for life, with complete disregard for her own safety, she swam upto them and brought them to safety on a tree-trunk brought from 70-80 yards away.

Kumari Mariamma of Alleppy saved the life of an eight-year-old girl who had fallen into a tank. Jumping into the tank in the presence of

a group of people who stood too petrified for action, on Aug. 17, 1965.

The details of the prizes for 1964 were given in the 1965-66 edition of the Directory.

#### Gram Sevaks/Sevikas

The 1964-65 prize for the best Gram Sevak at the National level has been won by Shri Chhabhi Nath Tiwari of Kashi Vidyapith Block in the Varanasi District of Uttar Pradesh. Among Union Territories the State level prize has been won by Shri Roshan Lal Singhmar of Paonta Block, District Sirmur, Himachal Pradesh.

These awards relate to the seventh all-India competition for Gram Sevaks organised by the Ministry of Community Development and Co-operation. Prizes are given to Gram Sevaks for outstanding work at the national, State and district level. The 1963-64 prize at the national level was won by Shri Bhagwan Singh of Chirai-gaon Block in the Varanasi District, U.P.

In the third all-India competition among the Gram Sevikas, organised by the Ministry of Community Development and Co-operation during 1964-65, the national level prize was won by Kumari Munni Shukla, Kasmanda Block, Sitapur District, U.P. and State level prize from among Union Territories by Kumari Sulochana of Pondicherry Block, Pondicherry.

The prizes for the best Gram Sevaks/Sevikas were awarded in the shape of National Savings Certificates and also Certificate of Merit.

The items of work for which the competitions are organised relate to agriculture, production, animal husbandry, co-operation and panchayats etc. in the case of gram sevaks, and agriculture, animal husbandry, environmental sanitation, nutrition, and home improvement, etc. in the case of Gram Sevikas.

#### CULTURAL SCHOLARSHIPS

The following 25 persons were selected by the Union Ministry of Education for the award of scholarships under the "Scheme of Scholarships to Young Artists in Different Cultural Fields" during the year 1965-66:—

**Hindustani Music (Vocal):** Smt. Swapna Das Gupta; Kumari Samarpi Basu; Kumari Bharati Chakravarti; Smt. Minati Sen.

**Hindustani Music (Instrumental):** Sri Samarasadhan Mukherjee (Khole); Sri Kamalapati Singh (Pankhraj); Sri Debi Prasad Chatterji (Sitar).

**Karnatak Music (Vocal):** Smt. Rukmini Ramani.

**Karnatak Music (Instrumental):** Sri Purna Chandra Rao Pulipaka (Violin); Kumari Santha R. (Veena).

**Rabindra Sangeet:** Kumari Mekhala Pal; Kumari Malabika Banerjee.

**Folk Song:** Smt. Manasi Bagchi; Kumari Dhira Sen.

**Western Music:** Sri Clarence Barlow.

**Bharat Natyam (Dance):** Kumari B. K. Vasantha Lakshmi.

**Kathakali Dance:** Sri M. V. Vasudevan Pisharody; Sri V. Gopalau Nair; Venu G.

**Kuchipudi Dance:** Kumari Annapurna Lanka.

**Manipuri Dance:** Sri Jatindra Singha.

**Kathak Dance:** Sri Hare Krishna Chintamani Behare.

**Drama:** Smt. C. H. Sarojini Devi; Shri Gopal Shridhar Nikte.

**Painting:** Sri Kaushik Chakravartty; Kumari Lakshmi Dutt.

#### BHATNAGAR AWARDS

Ten scientists were presented the grant of the Shanti Swarup Bhatnagar Memorial Award for 1963 and 1964 for their contributions to scientific research.

The scientists are: Dr. R. Ramanna (Physics) AEE, Trombay; Dr. B. D. Tilak, Director, National Chemical Laboratory, Poona; Prof. J. Ganguli, Professor, Biochemistry, I.I.S., Bangalore Dr. Brahm Prakash,



Director (Metallurgy), AEE, Trombay; Dr. S. H. Zaidi, Director, Indian Technology Research Centre, Lucknow; Dr. B. K. Anand, Professor (Physiology), All-India Institute of Medical Science, New Delhi; Dr. D. A. Verma, Director, National Physical Laboratory, New Delhi; Dr. Sukh Dev, National Chemical Laboratory, Poona; Dr. D. S. Athwal, Deptt. of Plant Breeding, Agr. Univ., Punjab; Dr. B. R. Nijhawan, Director, National Metallurgical Laboratory, Jamshedpur.

The awards carry a cash prize of Rs. 10,000 each.

**Watumull Awards** : (\$1000 and a Commemorative Medal): Names of winners: P. S. Sharma, (Biochemistry) Indian Institute of Science; Dr. Lakshmi Narain Mathur (Dentistry), Banaras Hindu University; N. K. Dutta (Medicine), Haffkine Institute, Bombay; S. K. Joshi (Physics), Allahabad University.

### SHRAM VIR NATIONAL AWARDS

The Union Ministry of Labour and Employment has instituted a scheme to be known as the Shram Vir National Awards Scheme.

The scheme will be open to only such undertakings where suggestion schemes already exist. It will apply to factories, mines, plantations and docks.

First prize of Rs. 2,000 each went to M. K. Sankaran (Dalmia Cement), J. P. Estibeiro (Central India Spg. & Wvg.); K. N. Asari (Aluminium Industries); Ramchandra Bhakat and Moni Mohan Majumdar (Tisco).

For the lowest frequency of accidents Rs. 2,500 in cash and a cup each went to Alkali and Chemical Corporation, Hindustan Lever, Metal Box, Cordite Factory, Sen Raleigh, Addisons Paints and Chemicals, New Jehangir Vakil Mills, Durgapur Steel Plant, Mining and Allied Machinery Corporation, Azam Jahi Mills, Fertilizer Corporation, National Carbon of Union Carbide, Agrico Deptt. (TISCO) and Sundaram Industries.

For the lowest frequency of accidents a prize of Rs. 2,500 and a trophy each went to Loyal Textile Mills, Indian Explosives, Mining and Allied Machinery Corporation, National Carbon Co., Integral Coach Factory, State Transport Central Workshop, Hindustan Steel, Sen Raleigh and Associated Cement Co.

For the longest accident-free period a prize of Rs. 2,500 and a cup each went to Loyal Textile Mills, Alkali and Chemicals Corporation, Caltex Oil Refining, Hindustan Electric, Sen Raleigh and Associated Cement Co.

### SCHOLARSHIP IN HUMANITIES & SCIENCE

The University Grants Commission has selected 91 teachers in Humanities including Social Sciences for awards under the scheme of financial assistance to teachers for research work during 1964-65.

The scheme has been instituted by the Commission with a view to encouraging teachers to undertake research work.

The following is a list of subjects and the number of teachers awarded scholarships under each subject during 1964-65:—Archaeology 2; Commerce 1; Economics 4; English 4; Geography 4; Urdu 2; Hindi 16; History 17; Linguistics 1; Music 1; Law 3; Philosophy 5; Political Science 6; Psychology 3; Sanskrit 2; Sociology 8; Bengali 1; Oriya 2; Malayalam 2; Telugu 1; Tamil 1; Kannada 2; Education 1. Fine Arts 1:—and Marathi 1.

An amount of Rs. 69,400 has been shared by 92 teachers.

### INTERNATIONAL HUMAN FAMILY SOCIETY AWARD

Acharya Vinoba Bhave has been awarded the International Human Family Society prize for his dedication to the promotion of human relations.

The cash award of 5,000 dollars (Rs. 37,500) was made by the society on October 25 at a community dinner.

### Scholar Awards

The President awarded Certificates of Honour to eight scholars, six in Sanskrit, one each in Arabic and Persian. They are: P. M. Modi; Dr. V. V. Mirashi; K. S. Sastri; V. R. Srinivasa Tatachariar; Vishva Bandhu Sastri; K. Chattopadhyaya; M. A. M. Daryabadi (Arabic) and Qazi Sajjad Hussain (Persian).

### PRINTING AND DESIGNING

The Eleventh State Awards, in 26 Categories for excellence in printing and designing of books and other publications for 1965 were given.

These Awards are being organised every year by the Directorate of Advertising and Visual Publicity, Ministry of Information and Broadcasting.

Following is the full list of the recipients of the Awards in the order of first, second prizes and certificate of merit respectively.

**CHILDREN'S BOOKS**: *Mahagiri* (English); *Colour by Number Book* (English); *Khelar Sathi* (Bengali).

**ART BOOKS**: *Early Cola Bronzes*; *The Bhagavata Purana in Kangra Paintings*; *The Village — The People*.

**BOOKS (ENGLISH & OTHER FOREIGN LANGUAGES)**: *The Elephant and the Lotus*; *Plastic Surgery in the Tropics*; *An Introduction to Heat Engines & Rati Rahasya*.

**BOOKS (INDIAN LANGUAGES)**: *Kannada Sahityadalli Hasya* (Kannada); *Lok Natak* (Punjabi); *Anupragvilas* (Hindi) & *Eka Koliyane* (Marathi).

**DAILY NEWSPAPERS (English)**: (First prize not awarded); *Hindustan Standard*, *Patriot*; *Free Press Journal*.

**DAILY NEWSPAPERS (Indian Languages)**: *Navamani* (Tamil); *Maharashtra Times* (Marathi); *Loksatia* (Marathi).

**DISPLAY ADVERTISEMENT LAYOUTS**: *Viva the Pata*; *A Dazzling Display of Colours & Designs, Lifting Loads With Love*; *Wagons available easily, So that's where you have been hiding your money*, *The Moving Needle*.

**ART MAGAZINES**: *Lalit Kala*; (Second Prize not awarded); *Lalit Kala Contemporary*.

**PERIODICALS OTHER THAN ANNUALS (English)**: *Span*; *Pradeep*; *International Studies*.

**PERIODICALS OTHER THAN ANNUALS (Indian Languages)**: (First & Second prizes were not awarded); *Kamgar Vaibhav* (Marathi), *Visra Bharati Patrika* (Bengali).

**POSTERS**: *Eke Ange Eto Roop, Air-India — Frankfurt*; *Visit Madras (Monkey Family Mamallapuram)*; *Modella Terymod Suitings, Technical Books, USA An Exhibit*.

**FOLDERS (Offset Photogravure)**: (First Prize was not awarded); *Natabee*; *Aerophy*.

**FOLDERS (Letterpress)**: *Here are the top performance features of Joy Diamond Core Drills*; *All about Remington — the typewriter of the '60s*; *Rovimix*.

**CALENDARS (Offset/Photogravure)**: *Indian Airlines Corporation Calendar 1966*; *Air India Calendar 1966*; *Guest Keen Williams Ltd. Calendar, 1966*; *Straw Products Ltd. Calendar 1966*.

**CALENDARS (Letterpress)**: *India Pistons Ltd. Calendar 1966*; *Tata Iron & Steel Co. Ltd. Calendar 1966*, *Bombay Dyeing & Mfg. Co. Ltd. Calendar 1966*; *Selprint Calendar 1966*.

**DIARIES**: *India 1966*; *Tea Board, India Diary 1966*, *Alvin Coredrills Pvt. Ltd. Diary 1966*; *Week to an Opening Pocket Diary 1966*.

**DEVANAGARI TYPE FACES**: (First Prize was not awarded); *Shuvra*, 12 pt; *Chitra*, 12pt.

**PUBLICITY BOOKLETS, ANNUALS & SOUVENIRS (Offset)**: *Air-India — 12th Annual Report 1964-65*; *Ethicon in the Service of Surgery, The Century Spinning and Mfg. Co. Ltd. Annual Report and Accounts 1964*; *Dunlop K. 71 Scooter Tyre*.

**PUBLICITY BOOKLETS, ANNUALS AND SOUVENIRS (Letterpress)**: *Seeing is believing*; *Kondapalli Toys*; *Wonder World of Communication*.

**LABELS**: First & Second Prizes were not awarded; *Obero International Soap Wrapper*, *Bliss Lipstick Label*.

**BEST BOUND BOOKS**: *The Indian Year Book in Education*; *International Relations and World Politics since 1919*; *Presidency College Magazine*, *The Village — The People*.

**PACKAGING**: *Mauktik Box*; *Indian Tea Container*; *Hima Dehydrated Bhindi Packet*; *Premium Talc Powder Tin*.

**POINT OF SALES (Counter & Display Material)**: *Philips Radio Showcard (Family Illustration)*; *Bata — Exclusive Show Card*; *Philips for Lights Showcard*.

**GREETING CARDS**: *Flower Girl*; *Milk Maids*; *Rendezvous*; *Golden Fish*.

**PICTURE POSTCARDS**: (First and Second prizes were not awarded); *Telenkheri Gardens*.

**DIRECT MAIL**: *Rubraplex Elizir*; *Travellers in the East* (nine pictures); *Swastik Elastic Rubber Bands*, *Bajaj Bedside Lamp*.

### JNANPITH AWARD

Mahakavi G. Sankara Kurup has won the Bharatiya Jnanpith Award of Rs. 1 lakh for his book *Odakkuzhal*, an anthology of selected poems considered to be the most outstanding piece of the era in Malayalam literature.

This is the highest Indian literary award, instituted by the Bharatiya Jnanpith, of which, Mrs. Rama Jain is the President. The award was presented to Mr. Kurup by Dr. Sampurnanand, Governor of Rajasthan on November 19, 1966 at New Delhi.

The Bharatiya Jnanpith was established in 1944 at Varanasi by Mr. Shanti Prasad Jain in memory of his mother, Mrs. Murti Devi, who was a highly religious and spiritual woman.

### BASIC AND CULTURAL LITERATURE

The Basic and Cultural Literature Competition hitherto conducted by the Ministry of Education on behalf of the Ministry of Community Development and Cooperation is being operated by the Ministry of Community Development & Cooperation (now reconstituted as Ministry of Food, Agriculture, Community Development and Cooperation) since the Fourth Competition in 1965 as Basic Literature Competition on subjects having a bearing on Community Development, Panchayati Raj and Cooperation.

During the Fourth Competition referred to above, held in 1965, ten prizes of Rs. 1000 each have been awarded to the authors of the following 10 books/manuscripts for production in regional languages under the Basic Literature Scheme.

**Tamil**: *Panchayathu Rajyam* by Smt. Seethalakshmi.

**Urdu**: *Panchayati Raj* by Sri S. Ibrahim Fikri.

**Kannada**: *Nyaya Panchayatigalu* by Sri B. G. Mutalik Desai.

**Hindi**: *Kalyankari Rajya Aur Sahakari Samaj* by Sri Narinder Kumar.

**Kannada**: *Sewa Sahakaru Sangha* by Sri D. Krishna Iyengar.

**Hindi**: *Uphokta Sahkar* by Shri B. S. Prabhakar.

**Kannada**: *Raitharu Belesida Sahakaru* by Shri K. Sachidanandaya.

**Hindi**: *Samudayik Vikas* by Shri S. K. Vij.

**Hindi**: *Dalit Varga Ka Utthan* by Smt. Veena Verma.

**Urdu**: *Hamare Qabaili Bhai* by Smt. Kishwar Zaidi.

### SPORTS

The Government of India have made selections for the "Arjuna Awards" to the Sportsmen of the year 1965, on the basis of outstanding contribution made to enhance the glory of the game during the year. These awards were instituted in 1961.



The Sportsmen who were awarded Arjuna Awards for 1965 were: K. L. Panwell (Athletics); Dinesh Khanna (Badminton); V. L. Manjrekar (Cricket); Arun Lal Ghosh (Football); Kumari Elvera Britto (Hockey — Women); Balbir Singh (Weight Lifting); Udham Singh (Hockey — Men).

#### SUR-SINGAR SAMSAID'S FILM AWARD

Sur-Singar Samsad's award for 1965 for the best classical film song went to "Man Re Tu" from the film "Chitrlekha".

The following were the recipients of the awards for 1965:

Saraswati Award: A. K. Nadiadwala, Producer of "Chitrlekha".

Swami Haridas Award: Roshan, music director of "Chitrlekha".

Mian Tansen Award: Mohammed Rafi, Singer.

The Dr. Brahaspati award for the largest number of classical songs in a film went to "Chitrlekha".

#### KALINGA AWARD

Dr. E. Rabinowitch, editor and one of the founders of the Bulletin of Atomic Scientists has been selected for award of the 14th International Kalinga Prize for 1965 for the popularisation of science.

The selection of the recipient was made as usual by an international jury appointed by UNESCO.

The \$2,800 Kalinga Prize is a personal donation by Mr. Bijoyanand Patnaik, an industrialist and a director of the Kalinga Foundation.

#### MISCELLANEOUS AWARDS

Birbal Sahni Award: Dr. M. S. Swami Nathan was awarded Birbal Sahni Medal for 1965 on Jan. 5, 1966.

Horniman Journalist Award: Winner: B. G. Verghese.

Gokhale Centenary Teachers' Award: Winner: H. T. Nanawaty, Modern School, Bombay.

U. S. Trophy: Flying Officer Bertrand J. Vaz of the I.A.F. has won an academic award trophy for standing first in ground subjects at COTS and a commendation card for scoring the highest points in glide bombing during his course at the Combat Crew Training School, Nellis Air Base, Nevada, U.S.A.

Wallace Clark Award: Dr. K. S. Basu, director of the Jamnalal Bajaj Institution of Management Studies, University of Bombay, has won the 1966 Wallace Clark award for "distinguished contributions to scientific management in the international field".

#### KRISHI PANDIT AWARD

In the first All-India paddy crop competition, conducted by the Government of India for the Kharif season 1964-65, a Maharashtra farmer, Sri A. K. Nirgudkar, having obtained the

largest yield 3,664.955 kgs. per acre, was declared the first prize winner. Sri D. A. Naik, also from Maharashtra stood second with 3,345.124 kgs. per acre, followed by Sri J. N. Saheb of Andhra Pradesh who won the third prize with 2,125.427 kgs. yield per acre.

#### NEHRU PRIZE

The Government of India has instituted, to honour the memory of the late Prime Minister Jawaharlal Nehru, an international award named "Nehru Prize for International Understanding".

It is an international award open to citizens and institutions of all countries. The prize will be awarded every year to a person or an institution who has contributed most during the preceding year to the ideals of world peace and international understanding. The prize consists of Rs. one lakh and a medal. The award winner is to be invited to India to receive the prize and will also be asked to deliver a lecture following the formal presentation of the prize.

The first Jawaharlal Nehru award for international understanding for 1965 has been given to the U.N. Secretary-General U Thant, in recognition of his outstanding contribution to the promotion of peace and amity in the world.

#### Awards for Inventions (1965-66)

Following the decision of the Inventions Promotion Board to institute prize competitions twice a year as an incentive to inventive talent in the country, the following awards were given:

A cash prize of Rs. 5,000 to Dr. Harsh Vardhan (Delhi) for "High Speed Tracing Camera" with writing speed 2mm/micro-sec. and suitable for study of explosives, exploding wires, flash bulbs, fluorescent tubes, photographic emulsions, gas and spark discharge phenomena etc.

Rs. 3,000 to K. D. Shinde (Maharashtra) for a Dribbling Machine named "Maharashtra Token Yantra". A very useful aid for sowing seeds in rows which is essential for increased production. In addition to sowing, it also places the fertilizer over the seeds sown and thus avoids wastage of fertilizers.

Rs. 2,000 to Imtiaz Ahmed (Allahabad) for "Rope Making Machine". This machine is a simple adaptation of Japanese rope making machines.

Rs. 2,000 to P. G. Bhide (Maharashtra) for "Improvements relating to Coin Box". The coin box delivers required amount of coins in Indian currency if push buttons corresponding to the digits of the amount in question are pressed.

Rs. 1,000 to R. S. Pillai (Madras) for "Gram Frying Machine". A completely self-contained unit complete with elevator, oil fired furnace, vibratory feeder, blancher, bucket elevator and air separator for separating the husk and the gram.

Rs. 1,000 to Dr. C. C. John (Kerala) for "A composition for the inhibition of marine borer

attached on submerged Timber Structures". A chemical composition, based on copper silicate, iron oxide and cupric oxide to be used as a protective coating on submerged timber structures such as jetty piles, quays, anchor posts etc. in harbours against all kinds of marine borers.

Rs. 1,000 to Dr. G. S. Sekhon (Punjab) for "A respirator and an apparatus in combination therewith for Artificial Respiration during experimental chest surgery".

Rs. 1,000 to G. P. Sharma (Gujarat) for "Adoption of diehead on centre lathe for cutting screw threads quickly".

Rs. 5,000 to J. J. Mistry (Maharashtra) for "An Electrically operated (Three way) Geyser Valve". The invention relates to a simple 3 position mechanical valve attached to a geyser operated by utilizing water as a conductor.

Rs. 500 to J. N. Singh (West Bengal) for "Improved Cock or water tap of Polythene". The polythene tap is for water taps which can be used for cold water services in ordinary households as also for handling corrosive liquids.

Rs. 500 to Brig. Pritampal Singh (Maharashtra) for "Three-in-one digging tool" for entrenching purposes.

Rs. 500 to N. K. Patel (Maharashtra) for "Improvements to Pressure Stove". The stove makes use of a separate fuel tank fixed at a height to burn fuel with gravity pressure.

Rs. 500 to Shri Inder Kishan (Punjab) for "Electric Revolving Mechanism for table fan and table lamp etc."

Awards for 1966-67 for inventive talents totalling Rs. 24,000 by the Inventions Promotion Board have been awarded on August 15, 1966. The following are the particulars. Dr. K. V. Rao, Prof. S. G. Doas and Abdul Washeed of Karalkudi, Madras (Rs. 5,000 collectively) for developing of porous carbon electrodes; T. A. Davis of Calcutta (Rs. 2,000) for electronic detector of pests and insects in palm trees; William Walker of Calcutta (Rs. 2,000) for improvement relating to photographic developers; S. S. Jain (Rs. 2,000) for his device "S. Designer". G. T. Gadre and N. N. Udawadia of Bhavnagar (Rs. 2,000 collectively) for the preparation of potassium schoemite fertiliser from mixed salt; K. S. Seshadri, G. D. Bhat and J. R. Sanghavi of Bhavnagar (Rs. 2,000 collectively) for the production of potash alum from sea bittern. Mammen of Hyderabad (Rs. 1,000) for inventing of a splash-less tank and aeration equipment for live fish transport; Dr. T. Radhakrishnan of Ahmedabad (Rs. 1,000) for his fibre fineness tester; A. V. Rao, I. C. Mody and H. N. Shah of Bhavnagar (Rs. 1,000 collectively) for the invention of sodium alginate from special types of Indian sea weeds; R. K. Mishra of Ahmedabad (Rs. 500) for his automatic fire alarm and extinguisher; K. K. Gupta of Bombay (Rs. 500) for his smash preventing motion; G. Parameswaran of Mysore for his electric kit which is useful for the education of children.

## BULLION

The following table gives details about the trend of silver production from 1961 to 1965:—

(In millions of ounces)

| Countries                                          | 1961  | 1962  | 1963  | 1964  | 1965  |
|----------------------------------------------------|-------|-------|-------|-------|-------|
| United States of America .. .. .                   | 34.9  | 36.3  | 35.0  | 37.0  | 38.5  |
| Mexico .. .. .                                     | 40.3  | 41.2  | 42.8  | 41.9  | 40.0  |
| Canada .. .. .                                     | 31.4  | 30.7  | 20.9  | 31.1  | 31.0  |
| Peru .. .. .                                       | 34.2  | 32.9  | 36.8  | 37.0  | 37.0  |
| Bolivia .. .. .                                    | 3.9   | 3.8   | 4.9   | 4.8   | 5.0   |
| Other South and Central American Countries .. .. . | 8.6   | 8.7   | 10.1  | 9.2   | 10.0  |
| Total Western Hemisphere .. .. .                   | 153.3 | 153.6 | 159.5 | 161.0 | 161.5 |
| Outside the Western Hemisphere .. .. .             | 50.0  | 55.0  | 56.0  | 57.0  | 60.0  |
| World Production .. .. .                           | 203.3 | 208.6 | 215.5 | 218.0 | 221.5 |



The recent trend of silver consumption (partial data) is given in the following table :—  
(In millions of ounces)

|                              | 1961         | 1962         | 1963         | 1964         | 1965         |
|------------------------------|--------------|--------------|--------------|--------------|--------------|
| <b>INDUSTRIAL USES</b>       |              |              |              |              |              |
| United States .. .. .        | 105.0        | 110.0        | 110.0        | 123.0        | 140.0        |
| W. Germany .. .. .           | 43.5         | 41.8         | 40.5         | 46.3         | 54.6         |
| United Kingdom .. .. .       | 20.0         | 20.0         | 20.0         | 23.0         | 25.0         |
| Canada .. .. .               | 4.5          | 4.6          | 4.6          | 4.8          | 5.3          |
| Japan .. .. .                | 19.1         | 19.6         | 20.0         | 20.0         | 25.0         |
| France .. .. .               | 14.0         | 13.5         | 13.9         | 14.8         | 14.0         |
| Italy .. .. .                | 20.0         | 22.0         | 25.0         | 30.0         | 35.0         |
| Mexico .. .. .               | 3.4          | 3.3          | 3.2          | 4.0          | 4.7          |
| Other Countries .. .. .      | 10.0         | 13.0         | 20.0         | 25.0         | 30.0         |
| <b>Total</b> .. .. .         | <b>239.5</b> | <b>247.8</b> | <b>257.2</b> | <b>290.9</b> | <b>338.6</b> |
| <b>COINAGE</b>               |              |              |              |              |              |
| United States* .. .. .       | 55.9         | 77.4         | 111.5        | 203.4        | 320.3        |
| France .. .. .               | 23.8         | 13.7         | 12.2         | 10.5         | 7.0          |
| Italy .. .. .                | 5.6          | 3.5          | 0.5          | 1.0          | 3.0          |
| Canada .. .. .               | 6.2          | 10.9         | 13.0         | 13.9         | 23.9         |
| Japan .. .. .                | 1.4          | 1.4          | 4.2          | 16.3         | 0.5          |
| Other Countries .. .. .      | 44.2         | 20.7         | 25.0         | 20.0         | 20.0         |
| <b>Total Coinage</b> .. .. . | <b>81.2</b>  | <b>50.2</b>  | <b>54.9</b>  | <b>61.5</b>  | <b>54.4</b>  |

Note : The consumption estimates are by Handy and Harman.

\* Coinage for consumption purpose are obtained entirely from Treasury stocks and have never been part of market demand.

**World Gold Production**  
(In Millions of US Dollars at 35 US Dollars per Fine Ounce)

|                              | 1963          | 1964          | 1965        |
|------------------------------|---------------|---------------|-------------|
| United States .. .. .        | 51.4          | 51.4          | ..          |
| Canada .. .. .               | 139.0         | 133.0         | 125.0       |
| <b>Africa</b> .. .. .        | <b>1028.5</b> | <b>1084.8</b> | <b>..</b>   |
| South Africa .. .. .         | 960.6         | 1018.9        | 1069.4      |
| Ghana .. .. .                | 32.2          | 30.3          | 26.4        |
| Rhodesia .. .. .             | 19.8          | 20.1          | ..          |
| Congo Dem. Rep. .. .. .      | 7.9           | 7.8           | ..          |
| <b>Latin America</b> .. .. . | <b>42.1</b>   | <b>41.9</b>   | <b>7.6</b>  |
| Mexico .. .. .               | 8.3           | 7.4           | ..          |
| Nicaragua .. .. .            | 7.1           | 6.9           | 5.6         |
| Colombia .. .. .             | 11.4          | 12.8          | 11.2        |
| Peru .. .. .                 | 3.5           | 3.0           | ..          |
| <b>Asia</b> .. .. .          | <b>38.1</b>   | <b>40.1</b>   | <b>..</b>   |
| Japan .. .. .                | 15.1          | 16.1          | 18.1        |
| Philippines .. .. .          | 13.2          | 14.9          | 15.2        |
| India .. .. .                | 4.8           | 5.2           | 4.6         |
| Europe .. .. .               | 15.3          | 15.4          | ..          |
| Oceania .. .. .              | 41.7          | 39.4          | ..          |
| Australia .. .. .            | 35.8          | 33.7          | 33.7        |
| <b>World Total</b> .. .. .   | <b>1356</b>   | <b>1406</b>   | <b>1440</b> |

(SOURCE : International Financial Statistics).

**Assaying and Refining of Gold and Silver**

Some relevant statistical data are given below :—

| Year            | Melting and Assaying |        | Refining |        |
|-----------------|----------------------|--------|----------|--------|
|                 | Gold                 | Silver | Gold     | Silver |
| 1963-64 .. .. . | 88,97(b)             | 20,11  | 46,68    | ..     |
| 1964-65 .. .. . | 1,66(b)              | 11,33  | 68,41(d) | ..     |
| 1965-66 .. .. . | 138,56(b)(c)         | 2,41   | 57,04(d) | ..     |

(b) Including gold received against 7 per cent Gold Bonds, 1977 and National Defence Fund.

(c) Including gold received against 7 per cent Gold Bonds, 1980 and National Defence Gold Bonds, 1980 and gold received from Alipore Mint.

(d) Including confiscated gold received from Customs and Central Excise Department and State Governments.

(SOURCE : Report on Currency and Finance 1965-66).

**Prices of Gold and Silver—Bombay (a)**

| Year/Month      | Gold (b)<br>(Rs. per 10 grams) |        |            | Silver<br>(Rs. per kilogram) |        |            |
|-----------------|--------------------------------|--------|------------|------------------------------|--------|------------|
|                 | Highest                        | Lowest | Average(c) | Highest                      | Lowest | Average(c) |
| 1963-64 .. .. . | 118.00                         | 97.00  | 111.98     | 269.00                       | 222.50 | 240.32     |
|                 | 69.75                          | 58.00  | 61.85      |                              |        |            |
| 1964-65 .. .. . | 72.75                          | 63.25  | 68.84      | 281.50                       | 244.00 | 261.17     |
| 1965-66 .. .. . | 85.00                          | 70.50  | 77.78      | 406.00                       | 281.00 | 314.62     |

(a) Including nominal quotations also. (b) Relating to 14 carat, quoted from August 28, 1963.

(c) Average of closing quotations for working days.

(SOURCE : Report on Currency and Finance 1965-66).

**India :**

During the last two years consumption of silver in India has been increasing, and during 1965 amounted to approximately 16,000,000 ounces, which is an increase of 4,000,000 ounces over the relatively high figure established in 1964. Imports into India continue to be subject to strict government control, and most of the silver needed to satisfy the demand was obtained from melting down of old coins and jewellery, as well as from such amounts as may have been smuggled in or were already on hand. Prices rose almost steadily during the year from Rs. 265 per kilogram at the opening to Rs. 321.6 at the year end. These prices are equivalent to \$ 1.71 and \$ 2.10 per troy ounce respectively.

—(Reproduced from The Silver Market in 1965 by Handy and Harman).

The following table gives the average silver quotations in New York and London from 1961 to 1965 :

|              | New York<br>Average | London<br>Average<br>(spot) |
|--------------|---------------------|-----------------------------|
|              | Cents               | Pence                       |
| 1961 .. .. . | 92.45               | 80.22                       |
| 1962 .. .. . | 108.52              | 91.51                       |
| 1963 .. .. . | 127.91              | 110.13                      |
| 1964 .. .. . | 129.30              | 111.92                      |
| 1965 .. .. . | 129.30              | 111.58                      |

**GOLD AND SILVER**

The domestic output of gold which had increased by 314 kgs. to 4,619 kgs. in 1964, declined to 4,062 kgs. in 1965 (provisional). Silver production, however, increased from 4,735 kgs. in 1964 to 5,235 kgs. in 1965 (provisional).

The ban on forward trading in both gold and silver continued during the year and the spot prices in the Bombay bullion market showed a continuation of the bullish tendency noticed in 1964-65. In fact, both gold and silver rose more steeply than in the preceding year and touched new peaks. Apart from the persistent inflationary trends in the economy, a virtual inelastic supply, paucity of floating stocks and the usual demand from the goldsmiths and industrial users, the demand from the holders of unaccounted incomes and a decline in supply owing to greater vigilance by the customs authorities contributed to the rise in bullion prices.

The price of 14-carat gold moved up from Rs. 71.75 per 10 grams at end-March 1965 to Rs. 77.00 by May 4, 1965, reflecting the seasonal demand being superimposed on the demand for conversion of unaccounted incomes into the 7 per cent. Gold Bonds, 1980. After receding to Rs. 70.50 on May 22, it again forged ahead to a peak of Rs. 83.50 by June 25. Later, there was a two-way movement in prices on alternating reports of seizures of smuggled gold and larger arrivals of contraband gold and by October 9, the price was at Rs. 72.75. Thereafter, however, the bullish trend re-emerged following the demand for the purpose of subscription to the National Defence Gold Bonds, 1980, announced by the Government on October 19, 1965 and due to the rising trend in silver prices and a new peak of Rs. 85.00 was reached on February 9, 1966. At the closing level of Rs. 83.75 on March 30, there was a net rise of Rs. 12.00 over the year on top of a rise of Rs. 8.50 in 1964-65.

The rise in silver was more steep, induced partly by the paucity of stocks and speculative activities. From Rs. 280.50 per kg. on March 31, 1965, the price rose to Rs. 308.00 on May 11, at the height of seasonal demand and, after receding to Rs. 290.50 by July 7, moved erratically until the first week of November but, thereafter, climbed up steadily to Rs. 406.00 on February 3, 1966. There was a small decline in March but even at Rs. 366.00 as at end of March 1966, there was a spectacular increase of Rs. 85.50 over the year as compared to only Rs. 20.50 during the preceding year.



## CAPITAL MARKET

**T**HE Government of India has so far (up to Oct. 1966) recognised eight stock exchanges, namely, The Stock Exchange, Bombay, The Ahmedabad Share and Stock Brokers' Association, Ahmedabad, The Calcutta Stock Exchange Association Ltd., Calcutta, The Madras Stock Exchange Ltd., Madras, The Delhi Stock Exchange Association Ltd., New Delhi, The Hyderabad Stock Exchange, The Share Brokers' Association, Indore and The Bangalore Stock Exchange. The recognition for the last two mentioned has been granted for five years in the first instance. The general principles regarding grant of recognition to a stock exchange as laid down in Section 4(1) of the Securities Contracts (Regulation) Act, 1956, has been followed. The Act does not envisage amalgamation, as such, of stock exchanges either before or after recognition is granted under section 4 thereof. Nevertheless, to avoid undue hardship to members of the exchanges which have not been recognised, the Government has prescribed certain terms and conditions on which active members of the unrecognised exchanges can seek admission to the recognised exchange.

Section 13 of the Securities Contracts (Regulation) Act, 1956, has been made applicable to the Greater Bombay area in Maharashtra State with effect from 15th October 1957. The effect of the application of section 13 to the Greater Bombay area is that every contract in this area which is entered into after 15th October 1957, otherwise than between members of the recognised Stock Exchange or through or with such member, is illegal.

### SECURITIES ACT

The Securities Contracts (Regulation) Act, 1956, is the first All-India legislation seeking to control transactions on securities and to regulate stock exchange practices. Prior to this Act, there was no legislation for the purpose except in the old State of Bombay.

Broadly speaking, the Act applies to transactions other than spot delivery contracts. But power has been taken in the Act to regulate spot delivery contracts also, if the Government regards it as desirable in the interest of trade or in the public interest.

As regards contracts other than those for spot delivery, the regulation takes the form of either controlling the activities of stock exchanges in those areas or States where stock exchanges operate, or through a system of licensing of persons who deal in stocks and shares. In those areas where the stock exchanges operate and to which Section 13 of the Act will be applied, every contract which is entered into otherwise than between members of a recognised stock exchange in such State or area or through or with such members is illegal.

The Act permits only those stock exchanges to function which are recognised by the Central Government. For this purpose, each stock exchange is required to make an application in the prescribed manner to the Central Government, who will grant recognition if the Government is satisfied in regard to certain conditions. Every recognised stock exchange is required to furnish to the Central Government such periodical returns relating to its affairs as may be prescribed.

Subject to the previous approval of the Central Government, any recognised stock exchange may make bye-laws for the regulation and control of contracts. But the Government has the power to make or amend these bye-laws.

Important provisions relating to the listing of securities on a stock exchange are also contained in the Act. In regard to the licensing of dealers and brokers in securities, there are no detailed provisions.

So also no direct provisions are contained in the Act to restrict the prevalence of blank transfers, but there is a provision to discourage blank transfers indirectly.

The Securities Contracts (Regulation) Amendment Bill was passed by the Lok Sabha on 17th November 1959. As a result of the amendments, the contracts made by foreign financial investors involving options, which, by their very nature, are not of a speculative character have been exempted from some of the provisions of the Act. Convertible bonds and share warrants contracted by foreign financial investment corporations are exempted from the purview of section 20 of the Act. Further, the incorporated stock exchanges are empowered to make rules restricting voting rights to members only restricting the right to appoint proxies and introducing the principle of one member-one vote, and override the Companies Act in this respect.

The Government of India has established a Stock Exchange Directorate which functions under the Department of Economic Affairs of the Union Ministry of Finance, with headquarters in Bombay and branch offices at Calcutta and Delhi. The Directorate is composed of expert officials. It maintains close contact with Stock Exchanges and keeps a careful watch over the activities of operators.

### THE GILT-EDGED MARKET

The gilt-edged market, which had evinced a generally easy tone during 1964-65 in the context of a dear money policy, continued to rule weak during 1965-66. Apart from declines in gilt-edged values resulting from the process of adjustment to the new pattern of higher interest rates, the market was also affected by the unusual stringency in the money market during the greater part of the year. The Reserve Bank's open market operations (excluding purchases from the State Bank of India on account of P.L. 480 funds) resulted in smaller net sales amounting to only Rs. 18.8 crores as compared to net sales of Rs. 98.6 crores during 1964-65 and Rs. 44.7 crores during 1963-64.

The easy tendency in gilt-edged became more pronounced following the announcement by the Central Government in June of their borrowing programme for the year consisting of two cash-conversion loans, viz. the  $4\frac{1}{2}$  per cent Loan 1971 and the  $5\frac{1}{2}$  per cent Loan 1990, with yields of 4.60 per cent and 5.50 per cent, respectively, which were higher than those on existing issues of comparable maturity viz., 4.41 and 4.82 per cent. There was a further downward tilt in gilt-edged values following the announcement in August by State Governments of their borrowing programme, the new  $5\frac{1}{2}$  per cent loans 1977 issued by them giving yields ranging between 5.50 and 5.62 per cent as compared to yields ranging between 5.14 and 5.75 per cent on existing loans of comparable maturity.

The Reserve Bank's All-India Index of Government and Semi-Government Securities (base: 1961-62 = 100) showed a steady decline from 97.1 at end-March, 1965 to 93.6 by end-March, 1966, falling by 3.6 per cent over the year as against a decline of 1.8 per cent during 1964-65. Regionwise, Bombay witnessed a fall of 3.1 per cent, Calcutta 3.4 per cent and Madras 4.5 per cent as against 2.7 per cent, 2.1 per cent and 0.9 per cent, respectively, during 1964-65.

Loanwise, the decline was more marked in the medium and long-dated loans. The 8 per cent Conversion Loan 1986 or later showed a decline over the year, of Rs. 4.00 to Rs. 53.75 on March 31, 1966. The long-dated 4 per cent Loan 1981 fell by Rs. 8.75 to Rs. 85.25 and the  $4\frac{1}{2}$  per cent Loan 1986 by Rs. 1.00 to Rs. 98.00. In the medium-dated section, the 4 per cent Loan 1979 declined by Rs. 8.85 to Rs. 86.15 and the  $3\frac{1}{2}$  per cent Loan 1974 by Rs. 2.30 to Rs. 89.70. Among the short-dateds, the decline

in prices ranged from 5 p. in the case of the  $3\frac{1}{2}$  per cent Loan 1966 (which fell to Rs. 99.70) to 70 p. in the case of 4 per cent Loan 1970 (which fell to Rs. 97.85). As for the new loans floated during the year, the  $5\frac{1}{2}$  per cent Loan 1990 moved up by 10 p. to Rs. 100.10 while the  $4\frac{1}{2}$  per cent loan 1971 eased by 5 p. to Rs. 99.45.

The declines in State Loans were sharper. In the medium-dated section where the declines were more marked, the  $4\frac{1}{2}$  per cent Loan 1974 of Assam State fell by Rs. 11.75 over the year ended March 31, 1966 and the  $4\frac{1}{2}$  per cent Loan 1972 of Madhya Pradesh by Rs. 5.25. Among short-dateds, the declines ranged between 15 p in the case of  $4\frac{1}{2}$  per cent Loan 1970 of Madhya Pradesh and Rs. 4.90 in the case of the same issue of Maharashtra. The new  $5\frac{1}{2}$  per cent Loans 1977 were quoted at a discount over their issue prices, the discount ranging from Rs. 2.50 in the Maharashtra issue to Rs. 8.80 in the Madras and Andhra issues.

Reflecting mainly the slump in gilt-edged prices the yields rose substantially. Among the short-dated Central Government loans, the rise in the yield ranged from 0.22 point in the case of the 4 per cent Loan 1969 to 0.85 point in the case of the  $3\frac{1}{2}$  per cent Loan 1967. In the medium-dated section, the yield on the  $3\frac{1}{2}$  per cent Loan 1974 rose by 0.47 point to 5.30 per cent whereas the yield in  $2\frac{1}{2}$  per cent Loan 1976 recorded a rise of 1.19 points to 6.00 per cent. The increase in yields among long-dateds ranged from 0.09 point in the case of the  $4\frac{1}{2}$  per cent Loan 1986 to 0.87 point in the case of the 4 per cent Loan 1981. In the State list, among short-dated issues, the yields on the  $4\frac{1}{2}$  per cent Loan 1970 of Madhya Pradesh and Maharashtra rose by 0.12 and 1.43 points to 4.86 per cent and 6.14 per cent respectively. In the medium-dated section, the yields on the  $4\frac{1}{2}$  per cent Loan 1972 of Madhya Pradesh rose by 1.05 points to 5.70 per cent and on the  $4\frac{1}{2}$  per cent Loan 1974 of Assam by 1.94 points to 6.80 per cent.

### SHARE MARKET

**Equities:** In the industrial securities market, the bearish trend noticed since mid-May, 1962 generally continued during the greater part of 1965-66 and, despite a modest recovery in the closing quarter, equities recorded widespread losses over the year.

The downtrend in share prices which was touched off by a rise in the Bank rate from 5 to 6 per cent effective February 17, 1965 and the imposition on the same date, of a regulatory customs duty of 10 per cent on all imports with a few exceptions continued till the end of May. During this period the sentiment of the market was adversely affected also by (i) border troubles with Pakistan, (ii) the postponement till the end of June, 1965 of the announcement of the new import policy for the half year April-September, 1965 and (iii) apprehensions of likely drastic cuts in imports. The Reserve Bank's All-India Index of Variable Dividend Industrial Securities (base: 1961-62 = 100), which had closed at 81.6 at end-March, 1965, receded to 79.4 by end-May.

During June, there was a temporary revival in share prices attributed to technical considerations as also to encouraging corporate news, reported sizeable purchases by the Life Insurance Corporation and the Government's decision contained in the Bonus Ordinance which made bonus payable retrospectively from 1964 instead of from 1962 as recommended by the Bonus Commission. The index of share prices recovered partially to 80.9 by the close of June. From June-end, however, there was a decline equities touching a new low by the middle of December. The main factors responsible for this downtrend were (i) the continued deterioration in the foreign exchange situation, (ii) issue of a notification by the Reserve Bank on June 29 requiring every importer to deposit with an authorised dealer 25 per cent of the value of each shipment prior



to the despatch of goods to India, (iii) the announcement on June 30 of the new import policy envisaging further curbs on imports, (iv) the recommendations in July of the Wage Board for the Iron and Steel Industry for a substantial increase in minimum wages, (v) the reported decision of the Committee of the National Development Council that both the Centre and the States should introduce supplementary budgets during the current financial year to raise additional resources to finance plan expenditure, (vi) the Indo-Pak Armed conflict, (vii) the presentation on August 19 of the supplementary Central budget with proposals for additional taxation expected to yield Rs. 100 crores during the rest of the financial year and (viii) temporary suspension of foreign aid. Against the background of these bearish factors, the reported sizeable investments in industrial securities by the Life Insurance Corporation and intermittent purchases by the Unit Trust of India did not have much effect. The index of share prices receded continuously during this period from 80.9 at end-June to a low of 71.5 in the week ended December 18, 1965.

From Mid-December, however, a revival in market sentiment was discernible, which was partly technical and partly attributed to (i) the news of the grant of rupee loans from counterpart funds to the Industrial Credit and Investment Corporation of India and the Industrial Development Bank of India totalling Rs. 35 crores, (ii) improved prospects of larger food imports and (iii) the signing of the Tashkent Declaration of January 10, 1966. There was some uneasiness in the latter half of January following the sudden demise of Mr. Lal Bahadur Shastri, but market sentiment was aided by the policy statement of the new Prime Minister towards the close of January that private enterprise would continue to receive encouragement and assistance from the Government. The market was also favourably influenced by the U.S. Vice-President's announcement on February 17, of a \$100 million aid to India for import of essential raw materials for industries. The Union budget proposals for 1966-67 contained some new imposts calculated to bring in net additional receipts of Rs. 92 crores to the Centre but it also contained some fiscal reliefs and incentives, particularly (i) the abolition of the

national capital gains tax on bonus shares issued to individual investors and of the 12.5 per cent bonus issue tax payable by companies and (ii) the exemption of the 7.5 per cent dividend tax on the equity distribution by companies upto 10 per cent of paid-up equity capital. Equities reacted bullishly, sentiment being aided by expectations of a spate of bonus issues and renewed optimism regarding foreign aid. The index of share prices recovered from 71.5 in mid-December to 74.1 in the week ended February 26, 1966 and further to 75.9 in the week ended March 26, 1966. But over the year 1965-66 as a whole, the index showed a decline of 7.0 per cent as compared to a decline of 5.9 per cent during 1964-65 and a rise of 4.6 per cent during 1963-64.

Regionwise, the largest decline was recorded by the Calcutta market (9.5 per cent) followed by Bombay (5.9 per cent), Madras (4.8 per cent), Delhi (4.1 per cent) and Ahmedabad (1.5 per cent).

In line with the general trend, most of the sub-groups showed losses over the year notable among them being jute textiles which declined by 23.9 per cent. Despite the creditable performance of the jute industry, both in production and exports, the industry was faced with narrowing margins of profits. Howrah and Birla Jute declined from Rs. 14.50 and Rs. 33.19, respectively at end-March 1965 to Rs. 13.75 and Rs. 24.62 by the close of March, 1966. Coal group fell by 14.1 per cent as the industry continued to be faced with rising costs of production. Burrakur Coal and Bengal closed lower at Rs. 14.00 and Rs. 177.00, respectively, as compared to the preceding year's closing levels of Rs. 15.12 and Rs. 225.00. The shares of the cotton textile industry, which was faced with the problem of reduced off-take and stocks accumulation, fell by 11.9 per cent. In Bombay, Kohinoor and Standard lost Rs. 63.50 and Rs. 37.00, respectively, over the year to close at Rs. 250.50 and Rs. 394.00. Sugar group showed a decline of 9.2 per cent; despite record production, the sugar industry was confronted with reduced profit margins. A few sub-groups, however, showed rises over the year. Iron and steel, and cement shares, improved by 3.2 per cent each. In the former, besides the satisfactory working results of the main producers, sentiment

was also helped by the agreement reached between the Government and the Indian Iron and Steel Company about the repayment of loan while Government's decision on decontrol of cement helped the sentiment in the latter. Among steel shares, Tata Steel firmed up from Rs. 143.00 to Rs. 159.75 by June-end in view of the satisfactory working results of the company, and, after reacting to Rs. 133.00 following the declaration of dividend of Rs. 12.00 which fell short of market's expectations, recovered to close at Rs. 142.25. Indian Iron showed a net rise of Rs. 1.20 to Rs. 25.58. In the plantation group, rubber shares rose by 7.0 per cent in view of the bright prospects for the industry and better corporate outlook. The cash section continued to be weak generally despite selective support. Colour Chem fell by Rs. 32.50 to Rs. 235.00, Bombay Oxygen by Rs. 18.00 to Rs. 35.00 and Indian Rayon by Rs. 7.00 to Rs. 37.00. Anil Hardboard and Ceat Tyres, however, gained Rs. 5.00 and Rs. 4.00, respectively, at Rs. 130.00 and Rs. 81.00.

As regards fixed-interest-yielding industrial securities, the easiness noticed in these in the latter part of 1964-65 became more pronounced during 1965-66. The all-India index for preference shares (base: 1961-62 = 100) declined continuously from 100.4 at the close of March, 1965 to 90.9 at the close of March, 1966 — a fall of 9.5 per cent as compared to a fall of 0.7 per cent in 1964-65 and a rise of 1.6 per cent in 1963-64. The index for debentures also moved down from 95.0 at the end of 1964-65 to 93.1 by the close of 1965-66, showing a net decline of 2.00 per cent as compared to a net decline of 0.6 per cent during 1964-65 and of 0.3 per cent during 1963-64.

During the year, there was a further leveraging up of yields on industrial securities reflecting the dear money conditions. Thus, the average yield on variable dividend industrial securities rose from 6.05 per cent to 6.64 per cent that on preference shares from 6.72 per cent to 7.40 per cent and that on debentures from 5.78 per cent to 6.39 per cent.

From December 1946, the Reserve Bank of India started constructing indices of security prices. These indices (all-India) reveal the following trend:—

| Average of Weeks    | Government & Semi-Government Securities | Industrial Securities |                   | Banks | Insurance | Investment Trusts | Electricity Generation and Supply | Shipping and other Transport | Tea Plantations | Cotton Textiles | Jute Mills | Coal  | Mining | Iron and Steel | Sugar and Breweries | Chemicals | Paper | Cement |
|---------------------|-----------------------------------------|-----------------------|-------------------|-------|-----------|-------------------|-----------------------------------|------------------------------|-----------------|-----------------|------------|-------|--------|----------------|---------------------|-----------|-------|--------|
|                     |                                         | Fixed Dividend        | Variable Dividend |       |           |                   |                                   |                              |                 |                 |            |       |        |                |                     |           |       |        |
| Base : 1952-53 =100 |                                         |                       |                   |       |           |                   |                                   |                              |                 |                 |            |       |        |                |                     |           |       |        |
| 1959-60 .. .. .     | 101.2                                   | 92.2                  | 155.3             | 191.8 | 136.7     | 99.3              | 89.9                              | 124.7                        | 160.1           | 129.2           | 96.6       | 113.7 | 171.5  | 161.0          | 178.6               | 166.8     | 208.9 | 136.0  |
| 1960-61 .. .. .     | 101.0                                   | 87.2                  | 171.7             | 195.3 | 139.1     | 91.4              | 82.0                              | 107.5                        | 162.8           | 151.1           | 90.3       | 120.2 | 181.5  | 159.5          | 186.8               | 208.0     | 223.0 | 143.5  |
| 1961-62 .. .. .     | 100.9                                   | 83.2                  | 183.7             | 234.7 | 151.2     | 90.7              | 84.2                              | 96.0                         | 160.8           | 180.1           | 90.9       | 123.4 | 187.3  | 164.0          | 157.6               | 212.2     | 211.2 | 149.0  |
| 1962-63 .. .. .     | 100.1                                   | 81.3                  | 179.5             | 230.5 | 164.1     | 89.5              | 85.9                              | 90.3                         | 145.7           | 179.8           | 100.5      | 120.4 | 181.4  | 150.8          | 135.3               | 186.0     | 215.5 | 155.2  |
| 1963-64 .. .. .     | 99.4                                    | 81.6                  | 167.1             | 208.1 | 157.0     | 84.4              | 86.0                              | 91.5                         | 136.6           | 167.2           | 97.0       | 107.2 | 167.8  | 153.0          | 128.3               | 177.4     | 196.6 | 144.2  |
| Base : 1961-62 =100 |                                         |                       |                   |       |           |                   |                                   |                              |                 |                 |            |       |        |                |                     |           |       |        |
| 1964-65 .. .. .     | 98.2                                    | 101.5                 | 86.1              | 96.8  | 107.0     | 88.3              | 110.0                             | 108.5                        | 84.7            | 81.8            | 90.5       | 80.2  | 64.1   | 99.4           | 86.9                | 69.9      | 87.5  | 92.0   |
| 1965-66 .. .. .     | 94.6                                    | 94.4                  | 76.7              | 96.4  | 116.3     | 80.2              | 107.6                             | 95.8                         | 79.5            | 69.8            | 70.6       | 71.4  | 49.6   | 95.9           | 80.0                | 59.2      | 74.8  | 85.6   |

## CAPITAL ISSUES

New issue activity remained subdued during 1965-66 with entrepreneurs continuing to experience difficulty in raising the necessary resources. The magnitude of total capital issues (through prospectus and rights) was lower in 1965 than in 1964 due to a substantial decline in the amount issued for raising risk capital viz. ordinary shares. On the other hand, the trend in favour of fixed-income yielding securities viz., preference shares and debentures

continued during the year. There was a marked fall in both the number and amount of ordinary capital issues as compared with the previous year, while those for both preference shares and debentures showed increases indicative of the continued investor preference for securities offering safety of capital and a fixed return. Preference shares and debentures issued during the year offered higher rates of return also. The rate of dividend offered on preference issues

generally ranged between 9.3 to 9.5 per cent though there were instances of even 10 per cent having been offered. In the case of debentures also, there was a general trend to increase the rate of interest from 7 per cent to 7½-7¾ per cent and one issue was placed on the market at even 8 per cent. As between 'initial' and 'further' issues of capital, 'initial' issues, i.e. issues by new companies, suffered a sharp setback as reflected in a decline in both the number and



magnitude of such issues during the year. As regards capital issues made through prospectus, although the net amount offered to the public was appreciably higher in 1965 than in 1964, there was a substantial decline in the amount of foreign participation. During the first quarter of 1966, new issue activity continued to remain subdued though towards the close there were some indications of a change in the investment climate following better prospects of an early resumption of foreign aid and the announcement of certain fiscal concessions in the 1966-67 Budget.

The public response to the issues continued to be poor, a few selected issues only being fully subscribed. In view of the uncertainty of raising capital successfully, entrepreneurs were particularly anxious to have their issues underwritten; Consequently, there was a spurt in underwriting activity, almost the entire amount offered to the public having been underwritten. As a result of poor public response, a large part of the underwritten amount had to be taken up by the underwriters themselves. The term-lending financial institutions (as also the LIC and the UTI) provided the bulk of the underwriting assistance. The financial institutions also made available larger loan finance to the private sector of industry.

Consents for the issue of capital, which indicate broadly the investment intentions of the private sector, showed a marked decline in 1965, total consents (including bonus and miscellaneous issues) for non-Government companies (total consents given to Government companies during 1965 amounted to Rs. 109.3 crores as against Rs. 167.5 crores in 1964, their share declining from 42.7 per cent to 39.6 per cent) being Rs. 166.5 crores during 1965 as against Rs. 224.8 crores in 1964. Consents for the issue of shares (other than bonus) and debentures, which had shown a continuous decline since 1963, fell further from Rs. 138.9 crores in 1964 to Rs. 86.3 crores in 1965. This fall of Rs. 52.6 crores was mainly accounted for by a greater decline (Rs. 39.4 crores) in the consents for 'further' issues relatively to the decline (Rs. 13.3 crores) in 'initial' issues. Securitywise, the total con-

sents for ordinary shares were almost halved from Rs. 101.8 crores in 1964 to Rs. 53.4 crores in 1965, with their percentage to total declining from 73.2 to 61.8. There was a marginal increase in the consents for the issue of preference shares to Rs. 11.9 crores but those for the issue of debentures were somewhat lower at Rs. 21.0 crores in 1965 as compared with Rs. 25.4 crores in 1964. As a proportion to total consents, however, both preference share and debenture issues showed significant increases, the former from 8.5 per cent to 13.8 per cent and the latter from 18.3 per cent to 24.4 per cent. As regards foreign participation, the number of consents involving foreign participation declined from 90 in 1964 to 72 in 1965; the amount involved in such consents was also lower at Rs. 93.0 crores as compared to Rs. 102.5 crores in 1964. The proportion of consents involving foreign participation was, however, higher at 55.9 per cent of total consents in 1965 as against 45.6 per cent in 1964. There was no significant change in the amount of consents for bonus issues; such consents, which had declined sharply from Rs. 10.8 crores in 1963 to Rs. 4.1 crores in 1964, increased only marginally to Rs. 4.9 crores in 1965. In the first quarter of 1966, however, available data indicate a marked rise in such consents following the removal, in the 1966-67 Budget, of the 12.5 per cent tax on bonus issues and of the capital gains tax on notional gains arising from the issue of bonus shares.

As regards capital actually raised against consents and under the Exemption Order, the total amount raised by non-Government companies through shares (other than bonus) and debentures in 1965 amounted to Rs. 98.7 crores — a level which was higher than that in 1964 (Rs. 94.1 crores) and that in 1963 (Rs. 94.2 crores) but lower than that in 1962 (Rs. 108.3 crores). The rise during 1965 was wholly on account of debentures and preference shares, while the amount raised through equity capital was substantially lower. Thus, while the capital raised through debentures increased from Rs. 11.1 crores in 1964 to Rs. 21.1 crores in 1965 and that through preference shares more

than doubled from Rs. 4.8 crores to Rs. 9.8 crores, there was a marked decline in the amount of equity capital from Rs. 78.2 crores to Rs. 67.8 crores.

During the year, the Government took further measures calculated to improve the climate for investment and to revive the capital market.

Selective tax concessions to companies in specified basic and priority industries as well as the introduction of a scheme of tax-credit certificates as incentives to encourage equity investments in new industrial enterprises, higher production, exports, growth and expansion of specified industries existed last year. In the Supplementary Budget presented to Parliament in August, 1965, the development rebate in respect of new plant and machinery installed after March 31, 1965, by specified industries was enhanced from 25 per cent to 35 per cent. In order to encourage the expansion of selected industries, the Government relaxed the industrial licensing procedures relating to expansion and diversification of production as well as for the establishment of new units. (In May, 1966 the Government decided to exempt 11 industries from the licensing provisions of the Industries (Development and Regulation Act, 1951). The 1966-67 Budget also provided for further fiscal reliefs with a view to making the economic climate more favourable to investors. In addition to the abolition of bonus tax, referred to earlier, the company sur-tax was reduced from 40 per cent to 35 per cent while companies were also given exemption from the 7.5 per cent dividend tax in respect of their distribution upto 10 per cent of paid-up equity capital. Three more industries, viz. tea plantations, newsprint and printing machinery were also included in the list of priority industries entitled for special tax concessions. Apart from these measures, the resources of the specialised financial institutions, viz., the IDBI, the IFC and the ICICI were further augmented through the grant of loans from the Government so as to enable these institutions to meet the growing requirements of funds by industries.

### Control of Capital Issue

(Non-Government companies only)

(Rupees in Crores)

| Y E A R |       | C O N S E N T S           |             |                          |             |                          |             |                              |             |                                    |             |                            |             |
|---------|-------|---------------------------|-------------|--------------------------|-------------|--------------------------|-------------|------------------------------|-------------|------------------------------------|-------------|----------------------------|-------------|
|         |       | A P P L I C A T I O N S * |             | T o t a l                |             | I n i t i a l            |             | F u r t h e r<br>O t h e r s |             | F u r t h e r<br>D e b e n t u r e |             | F u r t h e r<br>B o n u s |             |
|         |       | No. of<br>Com-<br>panies  | A m o u n t | No. of<br>Com-<br>panies | A m o u n t | No. of<br>Com-<br>panies | A m o u n t | No. of<br>Com-<br>panies     | A m o u n t | No. of<br>Com-<br>panies           | A m o u n t | No. of<br>Com-<br>panies   | A m o u n t |
| 1958    | .. .. | 281                       | 96.93       | 259                      | 89.45       | 33                       | 18.50       | 120                          | 31.46       | 21                                 | 16.30       | 47                         | 9.88        |
| 1959    | .. .. | 264                       | 152.60      | 242                      | 149.58      | 47                       | 49.00       | 103                          | 53.27       | 13                                 | 9.90        | 20                         | 2.88        |
| 1960    | .. .. | 290                       | 151.06      | 277                      | 150.13      | 85                       | 50.22       | 126                          | 44.06       | 18                                 | 10.60       | 19                         | 0.77        |
| 1961    | .. .. | 351                       | 202.00      | 335                      | 185.06      | 110                      | 56.43       | 106                          | 55.03       | 16                                 | 21.24       | 69                         | 10.34       |
| 1962    | .. .. | 410                       | 227.39      | 397                      | 219.45      | 115                      | 66.00       | 138                          | 53.14       | 16                                 | 43.30       | 95                         | 13.51       |
| 1963    | .. .. | 377                       | 251.38      | 344                      | 237.57      | 110                      | 85.00       | 110                          | 41.08       | 16                                 | 15.39       | 55                         | 10.75       |
| 1964    | .. .. | 221                       | 228.02      | 201                      | 224.80      | 52                       | 54.71       | 62                           | 58.85       | 21                                 | 25.37       | 30                         | 4.08        |
| 1965    | .. .. | 166                       | 167.79      | 154                      | 166.50      | 43                       | 41.42       | 40                           | 23.83       | 18                                 | 21.02       | 24                         | 4.93        |

### PUBLIC COMPANIES

The main features of the Company Act are :

- (1) Equity shares with differential rights regarding voting, dividend, participation in capital on dissolution, are prohibited.
- (2) It puts restrictions on inter-company loans and investments.
- (3) There is a ceiling on overall managerial remuneration.
- (4) Most decisions of the management and even of the Shareholders of a Company require

the approval of the Government before they are put into effect.

(5) The appointment of a managing agent or an associate as a selling or buying agent outside India requires approval by a special resolution.

#### New Company Registrations in 1965-66

There were 1,341 new companies registered in the country during 1965-66 against 1,365 in 1964-65.

The total authorised capital of all the newly-registered companies of 1965-66 amounted to

Rs. 275 crores against Rs. 280 crores during the previous year.

In the second important industrial group, commerce, trade and finance, 404 companies were registered with an aggregate authorised capital of Rs. 22 crores. The number of companies registered in the "Services of all kinds" came to 125, and the authorised capital amounted to Rs. 6 crores, and in the transport and communication group, the number of newly-registered companies stood at 35 with an authorised capital of Rs. 9 crores.

\* Figures relate only to applications disposed of during the period and not to applications actually received during the period.



## Statewise Registrations

| States                             | 1963-64    |              |              | 1964-65    |              |              | 1965-66    |              |              |
|------------------------------------|------------|--------------|--------------|------------|--------------|--------------|------------|--------------|--------------|
|                                    | Public     | Private      | Total        | Public     | Private      | Total        | Public     | Private      | Total        |
| Andhra Pradesh .. .. .             | 5          | 22           | 27           | 11         | 52           | 63           | 3          | 45           | 48           |
| Assam, Manipur & Tripura .. .. .   | 2          | 15           | 17           | 2          | 19           | 21           | —          | 20           | 20           |
| Bihar .. .. .                      | —          | 21           | 21           | 3          | 16           | 19           | 6          | 11           | 17           |
| Gujarat .. .. .                    | 5          | 57           | 62           | 5          | 40           | 45           | 7          | 58           | 65           |
| Maharashtra .. .. .                | 27         | 216          | 243          | 31         | 235          | 266          | 23         | 261          | 284          |
| Kerala .. .. .                     | 12         | 30           | 42           | 3          | 30           | 33           | 2          | 25           | 27           |
| Madhya Pradesh .. .. .             | 2          | 23           | 25           | 2          | 14           | 16           | 5          | 8            | 13           |
| Madras & Pondicherry .. .. .       | 33         | 125          | 158          | 29         | 119          | 148          | 20         | 77           | 97           |
| Mysore .. .. .                     | 8          | 23           | 31           | 10         | 24           | 34           | 10         | 37           | 47           |
| Orissa .. .. .                     | 2          | 16           | 18           | —          | 11           | 11           | —          | 5            | 5            |
| Punjab* & Himachal Pradesh .. .. . | 6          | 44           | 50           | 1          | 50           | 51           | 3          | 43           | 46           |
| Rajasthan .. .. .                  | 3          | 7            | 10           | 7          | 14           | 21           | 1          | 13           | 14           |
| Uttar Pradesh .. .. .              | 3          | 49           | 52           | 6          | 50           | 56           | 8          | 49           | 57           |
| West Bengal .. .. .                | 34         | 204          | 238          | 52         | 306          | 358          | 29         | 336          | 365          |
| Delhi .. .. .                      | 12         | 211          | 223          | 14         | 192          | 206          | 13         | 191          | 204          |
| Goa .. .. .                        | 1          | 9            | 10           | 4          | 13           | 17           | 2          | 30           | 32           |
| <b>TOTAL .. .. .</b>               | <b>155</b> | <b>1,072</b> | <b>1,227</b> | <b>180</b> | <b>1,185</b> | <b>1,365</b> | <b>132</b> | <b>1,209</b> | <b>1,341</b> |

## FINANCE CORPORATIONS

Under the Industrial Finance Corporation Act, a Corporation was established on July 1, 1948 to provide medium and long-term finance to public limited companies and co-operative societies registered in India, including the acceding States, and engaged in the manufacture or processing of goods or in mining or in the generation or distribution of electricity or any other form of power. Individuals, partnership firms or private limited companies are thus excluded from the purview of the Corporation's operations. With the setting up of a number of State Financial Corporations, it was agreed that applicants for loans upto Rs. 10 lakhs or 10 per cent of the paid-up capital

of the State Financial Corporation of the State in which they are situated, if that was lower than Rs. 10 lakhs, should be advised to apply not to the Industrial Finance Corporation but to the State Financial Corporation concerned.

An Act to provide for the establishment of State Financial Corporations was passed in October 1951. The Act enables the State Governments to establish a Financial Corporation for the State under a name to be specified by notification; and the State Government concerned, the Reserve Bank, scheduled banks, insurance companies, investment trusts, co-operative banks and other financial institutions will be entitled to subscribe to the share capital.

Parties other than these can also be shareholders; but their aggregate holding will not exceed one-fourth of the total capital. The shares allocated will not be transferable except to the State Government, the Reserve Bank or any other recognised financial institution.

Fifteen States have established State Financial Corporations—Punjab, Madras, Maharashtra, West Bengal, Kerala, U.P., Rajasthan, Assam, Bihar, Madhya Pradesh, Andhra, Orissa, Mysore, Jammu and Kashmir and Gujarat.

Besides the State Financial Corporations, there are other State Corporations and All India Corporations. For details see under the articles "State Corporations" and "All India Corporations".

## INDUSTRIAL STRUCTURE AND POLICY

FOR particulars about industrial structure one is dependent on the data compiled under the collection of Statistics Act, 1953. The latest available data are for 1962. A general review of the Annual Survey of Industries, has recently been published by the Government. The survey has classified the industries into 63 groups and 209 subgroups.

The coverage of the survey extends to the entire factories sector, factories being those registered as such under the Factories Act, 1948. The Collection of Statistics Act, 1953, does not apply to Jammu and Kashmir but factories in that State are covered on a voluntary basis. Factories employing 50 or more workers with the aid of power, or 100 or more workers without the aid of power are completely enumerated.

The remaining factories, namely, employing 10 to 49 workers with the aid of power or 20 to 99 workers without the aid of power, are covered on the basis of probability sample.

Table below shows certain important characteristics in respect of India as a whole for the years 1962 and 1963 and also the percentage increase/decrease of these characteristics in 1963 over 1962.

|                                                                          | 1962  | 1963   | Percentage increase over 1962 |
|--------------------------------------------------------------------------|-------|--------|-------------------------------|
| 1. Number of factories .. .. .                                           | 9,784 | 10,556 | 7.89                          |
| 2. Number of factories reporting .. .. .                                 | 9,541 | 10,128 | 6.15                          |
| 3. Productive capital (Rs. crores) .. .. .                               | 3,531 | 4,028  | 14.07                         |
| 4. Employment ('000) .. .. .                                             | 3,263 | 3,365  | 2.97                          |
| 5. Salaries, wages and benefits, total (Rs. crores) .. .. .              | 628   | 643    | 2.39                          |
| 6. Ex-factory value of output (Rs. crores) .. .. .                       | 4,176 | 4,663  | 11.66                         |
| 7. Value at factory of input including depreciation (Rs. crores) .. .. . | 3,060 | 3,391  | 10.82                         |
| 8. Value added by manufacture (Rs. crores) .. .. .                       | 1,116 | 1,272  | 13.98                         |

With the bringing together for the first time, the results of the census and sample sectors of the Annual Sample Survey for the years 1959 and 1960, the total picture of the position of the factory sector in the manufacturing industry was made available by the Central Statistical Organisation. The latest combined data pertain to the

year 1962. Productive capital employed in 1962 increased by 38 per cent over the previous year, as against the increase in the working force by only 7.5 per cent. Value of gross output recorded an increase of 12.6 per cent, while value added by manufacturing industry increased by 9.4 per cent.

All the 44,211 factories in India in 1962 employed over Rs. 3,767 crores of productive capital and about 4 million persons. The value of their gross output was over Rs. 5,091 crores and the value added by manufacture was Rs. 1,280 crores.



## INDUSTRIAL POLICY

Table below shows the comparative picture of the two sectors :

| Items                                      | Census Sector |       | Sample Sector |        | Total Factory Sector |        | Percentage increase over 1961 |
|--------------------------------------------|---------------|-------|---------------|--------|----------------------|--------|-------------------------------|
|                                            | 1961          | 1962  | 1961          | 1962   | 1961                 | 1962   |                               |
| 1. No. of factories (registered)           | 9,161         | 9,784 | 33,648        | 34,427 | 42,809               | 44,211 | 3.3                           |
| 2. Productive Capital (Rs. crores)         | 2,874         | 3,438 | 359           | 329    | 2,733                | 3,767  | 37.8                          |
| 3. Persons employed ('000)                 | 3,050         | 3,268 | 679           | 742    | 3,729                | 4,010  | 7.5                           |
| 4. Ex-factory value of output (Rs. crores) | 3,693         | 4,176 | 830           | 915    | 4,523                | 5,091  | 12.6                          |
| 5. Value added (Rs. crores)                | 987           | 1,115 | 184           | 165    | 1,171                | 1,280  | 9.4                           |

The 1948 Industrial Policy Resolution, of which the text is given in the 1959 Directory, was reviewed and a new Industrial Policy Resolution was placed before Parliament by the Prime Minister on 30th April 1956.

This is now the accepted industrial policy of the Government.

The major part of Government's policy is concretised in the Five Year Plans, the first of which started in 1951 as also in a series of industrial undertakings collectively known as the public sector. These are dealt within the article entitled "Government Industrial Undertakings".

The aggregate investment outlay and the combined share of industries and minerals under the 2nd, 3rd and 4th Five-Year Plans are given below :

(In crores of Rs.)

| Sector  |    |    |    |    |    |    | Second Plan      |                         | Third Plan       |                         | Fourth Plan      |                         |
|---------|----|----|----|----|----|----|------------------|-------------------------|------------------|-------------------------|------------------|-------------------------|
|         |    |    |    |    |    |    | Aggregate outlay | Industries and Minerals | Aggregate outlay | Industries and Minerals | Aggregate outlay | Industries and Minerals |
| Public  | .. | .. | .. | .. | .. | .. | 3,650            | 870                     | 6,300            | 1,520                   | 16,000           | 4,306                   |
| Private | .. | .. | .. | .. | .. | .. | 3,100            | 675                     | 4,100            | 1,050                   | 7,750            | 2,670                   |
| Total   | .. | .. | .. | .. | .. | .. | 6,750            | 1,545                   | 10,400           | 2,570                   | 23,750           | 6,976                   |

## THREE CATEGORIES

A summary of the text of the Industrial policy resolution placed before Parliament by the Prime Minister on 30th April 1956 has been given in the previous editions of the Directory.

## INDUSTRIES DEVELOPMENT &amp; REGULATION ACT

The provisions of the Industries Development and Regulation Act have been detailed in the previous issue of the Directory. Recently, certain industries have been delicensed.

In May, 1966, the Govt. of India delicensed the following 11 industries; in July, 1966 two more industries were added to the list, thus, bringing the total of delicensed industries to 13. It will no longer be necessary for entrepreneurs intending to set up units in any of the 13 industries to apply for an industrial licence but these industries still continue to be listed under the Act.

(1) Iron and steel castings and forgings. (2) Iron and steel structurals. (3) Electric motors (not exceeding 10 horse power). (4) Pulp-wood: pulp—mechanical, chemical including dissolving pulp. (5) Power alcohol. (6) Solvent extracted oils. (7) Glue and gelatin. (8) Glass—other than hollow-ware. (9) Ceramic: fire bricks. (10) Cement and gypsum products: portland cement, insulating boards, gypsum boards, wall boards and the like. (11) Timber products: plywood. (12) Paper and newsprint. (13) Handtools.

In early September 1966, the Govt. declared its intention to delicense textile industry soon.

## STATE AID

State aid is given in a number of ways. The various financial corporations give financial assistance.

The National Industrial Development Corporation grants loans for the modernization of plant, especially in the textile, jute and also the machine tool industry.

The Industrial Finance Corporation affords financial assistance in the form of advances and long-term loans to industrial concerns.

The State Financial Corporations assist medium and small-scale industries that fall outside the scope of the all-India Corporations.

The Refinance Corporation finances medium-scale industries.

(There are factual notes on the National Industrial Development Corporation, the Refinance Corporation, the State Financial Corporations and the Industrial Finance Corporation in the Chapter on 'Corporations'.)

The Industrial Development Bank provides risk capital and technical expertise.

Technical assistance is arranged through the Point Four Programme, the Colombo Plan and the U.N. Technical Assistance schemes.

Tariff is regulated to foster indigenous industry. Tax concessions are made (see below under 'Foreign Capital'). Foreign exchange is granted under a system of priorities, especially to facilitate the import of essential raw material and basic intermediates.

## MANAGING AGENCY SYSTEM

In January, 1965, the Govt. of India appointed the Managing Agency Inquiry Committee under the Chairmanship of Dr. I. G. Patel, Chief Economic Adviser, Ministry of Finance to enquire into the steps to be taken for the speedy dissolution of the managing agency system, particularly in the five established industries of cement, cotton textiles, paper, sugar and jute textiles. The Committee submitted their report in early May, 1966 recommending the discontinuance of the managing agency system in general on social and economic grounds, and in particular of that in the sugar, cotton textiles and cement industries. It favoured the continuance of the system in jute and paper industries.

On 5th September, 1966 Govt. announced its decision in Parliament to end the managing agency system in all the five industries in question; the industries would be given three years to change over. It was also announced that steps would be taken to ensure that the flow of finances to these five industries remained uninterrupted even after the abolition of the managing agency system.

In order progressively to reduce the number of managing agencies, the Govt. has also decided to review the question of continuance of the system in other established industries also.

According to the latest figures available as on April 1, 1966 there were 869 companies managed by managing agents, against 5,055 in 1959. Cotton textiles, cement, sugar, paper and jute textiles accounted for 302 companies leaving a balance of 567 managed companies in other industries.

Out of the 13,084 companies registered from 1956-57 to 1965-66, only 99 applied for approval of appointment of managing agents of which 77 were approved by the Company Law Board.

Government does not approve of overseas firms trying to come in on the managing agency system. Nor does it approve of cases in which a firm of managing agents expands its scope from a single enterprise to a number of new manufacturing plants.

The Government of India has decided that the remuneration of Managing Agents and Secretaries and Treasurers should ordinarily be fixed according to a sliding scale of commission on the net profits of managed companies. Under the Companies Act, 1956, the Government have to satisfy that the conditions of the agreement to be entered into between the managed company and the Managing Agents or Secretaries



and Treasurers are fair and reasonable. While considering applications in this behalf, therefore, the Government have to determine what would be a fair and reasonable remuneration and tenure within the maxima permissible under the Act, in the circumstances of each case. This matter was given very careful consideration and the Government fixed the remuneration and tenure for Managing Agents or Secretaries and Treasurers. The scale of commission fixed is as follows:

**Managing Agents:** 10 per cent on the first Rs. 10 lakhs or fraction thereof, 9 per cent on the next Rs. 10 lakhs or fraction thereof, 8 per cent on the next Rs. 10 lakhs or fraction thereof, 7 per cent on the next Rs. 10 lakhs or fraction thereof, 6 per cent on the next Rs. 10 lakhs or fraction thereof, 5½ per cent on the next Rs. 25 lakhs or fraction thereof, 5 per cent on the next Rs. 25 lakhs or fraction thereof and 4 per cent on any sum over one crore of rupees.

**Secretaries and Treasurers:** 7½ per cent on the first Rs. 10 lakhs or fraction thereof, 6½ per cent on the next Rs. 10 lakhs or fraction thereof, 6 per cent on the next Rs. 10 lakhs or fraction thereof, 5½ per cent on the next Rs. 10 lakhs or fraction thereof, 4½ per cent on the next Rs. 10 lakhs or fraction thereof, 4 per cent on the next Rs. 25 lakhs or fraction thereof, 3½ per cent on the next Rs. 25 lakhs or fraction thereof and 3 per cent on any sum over one crore of rupees.

The Government have also decided that the term of office should ordinarily be 10 years when a company appoints Managing Agents or Secretaries and Treasurers for the first time, and five years on reappointment or successive appointments.

#### INDIAN INVESTMENT CENTRE

(See under "Associations" of Delhi State for details).

#### Taxation Policy

The following are some of the important tax incentives allowed by the Government:

Profits of a new industrial undertaking are exempt from tax up to six per cent of the capital employed for a period of five years. Dividends out of such profits are also exempt from tax. A development rebate equal to 20 per cent of the cost of the plant and machinery is allowed as a deduction from the taxable income in the year of installation. This rate is being put at 25 per cent in the case of Schedule V Industries of I. T. Act.

A higher rate of development rebate is being allowed in the case of Shipping and Coal industry i.e., 40 per cent and 35 per cent of the value of machinery installed after March 31, 1965.

Dividends received by a company, Indian or foreign, from an Indian company formed after 31st March 1952 and engaged in specified

industries are exempt from super tax. Dividends received from Indian companies not engaged in specified industries but formed and registered after 1st April 1959, are taxable at a lower rate of super tax than the other income of the investing company, the percentage being 40. Interest on loans from approved foreign institutions on terms previously approved by the Government is exempt from tax. In computing business profits capital expenditure incurred on scientific research related to the business is allowed to be spread over five years and charged to the revenue in addition to the current expenditure which is allowed in full.

Royalties received from an Indian concern by a foreign company (which does not declare dividends in India) in pursuance of an agreement made with it on or after 1st April 1961, which has been approved by the Government are charged to super tax at a concessional rate of 50 per cent.

Technicians of foreign nationality taking up employment in India are exempt from tax on their remuneration for 365 days and where contracts are approved by the Government for 36 months. If the technician continues to remain in employment in India after the said period of 36 months and the employer pays tax on the technician's income chargeable under the head 'salaries' for a period not exceeding 24 months following the expiry of the said 36 months, such tax shall not be treated as income of the technician.

The value of periodical home leave passages provided to employees of foreign nationality is excluded from their taxable income.

Agreements for the avoidance of double taxation exist with a number of countries, e.g. Pakistan, Ceylon, Sweden, Norway, Japan, the Federal Republic of Germany and Denmark. These agreements ensure that the benefit of tax concessions is actually retained by the foreign investor as far as possible.

Arrangements for double taxation relief are in force with the Governments of some countries e.g., Kenya, Tanzania, Uganda and Zanzibar.

**Exchange Control:** All transactions involving foreign exchange are controlled by the authorities. The general policy adopted in respect of foreign investments is briefly described below, though variations in individual cases on merit are permissible.

**Entry of Foreign Investment:** The inflow of foreign investments into India is encouraged. It is regulated so as to channel them into fields consistent with the national economic policy. Thus, foreign investment is encouraged in the field of manufacturing and in industries for which adequate capacity does not already exist in the country, but is not permitted, for instance, in purely trading or financial enterprises.

The usual forms of foreign financial participation in India are equity capital and long-term loans. Technical collaboration against payment of fees or royalties on reasonable terms is also permitted.

Repatriation of investments from sterling area countries is allowed freely.

The income earned by non-resident investors on their investments in India is allowed to be remitted freely to their country.

Persons of foreign domicile resident in India, are, in general, offered liberal remittance facilities for meeting all their current expenses including maintenance of their families abroad and for transfer of assets to their country at the time of retirement.

**Currency Convertibility Agreement with U.S.A.:** Under the agreement signed in 1957 by India and U.S.A. based on the U.S. Investment Guarantee Programme, U.S. private investors, on payment of a small premium, can obtain guarantee from their Government for the re-convertibility into U.S. dollars of the proceeds from the sale of their investments in India and/or earnings from investments in projects approved by the Government of India. In 1959, this agreement was extended so as to provide for the payment of adequate compensation to U.S. investors in the event of expropriation of their assets in India.

#### COMPANY LAW

The Companies Act, 1956 (Act No. 1 of 1956) *inter alia* recognises two forms of companies viz., public company and private company. A private company which is a subsidiary of a public company is for many practical purposes treated as a public company.

For the incorporation of a company, documents such as (i) Memorandum of Association and (ii) Articles of Association have to be presented for registration to the Registrar of Companies along with proposed agreements, if any, regarding the management and a declaration that all requirements under the Act have been duly complied with. In the case of a public company, a list of persons who have agreed to become directors together with their consent letters should also be filed.

On the issue of the Certificate of Registration, a private company can forthwith commence its business but a public company is further required to undergo certain formalities and to obtain a Certificate for commencement of business (Sec. 149).

A public company or a private company which is a subsidiary of a public company can issue only two kinds of share capital viz. (i) equity and (ii) preference (Sec. 86).

A summary of the provisions under the various Sections of the Act is given in the previous issues of the Directory.

## MINES AND MINERALS

INDIA produced during 1965 minerals valued at Rs. 2,330 million\* as against Rs. 2,089 million\* (excluding mineral oil and atomic energy minerals) in the previous year showing an increase of 12 per cent. The year 1965 was generally characterised by higher output of all important minerals in contrast to the year 1964 when the mining industry witnessed a minor recession. The increased requirements of mineral raw materials for the expanding domestic industries and the slight upward trend in prices particularly of coal and non-metallic minerals brought about an expansion both in quantity and value of output in most spheres of the mining industry during 1965.

Coal and Lignite constituted the leading group and accounted for Rs. 1,755 million or 75 per cent of the total value of mineral production during 1965. The share of metallic minerals in the total value was Rs. 803 million or 13 per

cent, the ferrous and non-ferrous groups accounted for 9.3 per cent and 3.7 per cent respectively. Non-metallic minerals valued at Rs. 272 million contributed the remaining 12 per cent of the total value of mineral production in 1965.

In terms of value next to coal and lignite were iron ore (Rs. 136 million), limestone (Rs. 123 million), manganese ore (Rs. 78 million), salt (Rs. 73 million), gold (Rs. 42 million), copper ore (Rs. 25 million) and mica (Rs. 23 million).

Bihar continued to be the leading State and produced minerals valued at Rs. 882 million which was about 38 per cent of the total value\* of mineral production in India during 1965. West Bengal and Madhya Pradesh followed with their shares of 21.3 per cent and 13.8 per cent respectively. Andhra Pradesh and Orissa continued to occupy the fourth and fifth positions while Madras moved up to the sixth position

during 1965 compared to the eighth position held during 1964 and this lead was taken on account of the increased mining of lignite.

All the States showed an increase in the value of mineral production during 1965, except Mysore, Gujarat, Kerala and Jammu and Kashmir. The fall in the case of Gujarat was accounted for by salt, the value of which declined despite increase in the total output, while in case of Mysore the lower value was recorded due to fall in the production of gold which was reported both from the Kolar Gold Mining Undertakings and the Hutti Gold Mines, because of milling lesser tonnage of ore in the former case and because of labour strike in the latter case. The decline in the value in Jammu and Kashmir was chiefly due to the fall in the output of Coal. The fall in the mineral production value in Kerala was accounted for by lower output of rutile.

\* Excluding (a) petroleum, (b) minor minerals and (c) minerals declared as prescribed substances under the Atomic Energy Act, 1948 and also the value of mineral production from Goa.



The reserves are ample in respect of basic minerals for industries—coal and iron but the country is deficient in a number of minerals of copper, lead and zinc, tin, nickel, cobalt and in sulphur. Attention was paid in finding out new deposits of minerals.

The total foreign exchange spent for imports of ores, minerals, metals and alloys during 1965 was Rs. 2,023 million as against Rs. 1,783 million during 1964. Out of this the share of metals and alloys was Rs. 1,820 million during 1965 as against Rs. 1,618 million during 1964.

The foreign exchange earned by the exports of ores and minerals and metals and alloys from India (including Goa) was valued at Rs. 1,011 million as against Rs. 980 million during the previous year. Out of this the share of ores and minerals was Rs. 810 million during 1965 which was almost static compared to the preceding year.

The cumulative value during the first quarter of 1966 at Rs. 615 million was also higher by 9 per cent compared with the corresponding period of the previous year.

### COAL

The most important coal fields are Raniganj in West Bengal and Jharia and Bokaro in Bihar. The West Bengal and Bihar fields contribute major share of the total output. The best coking coal comes from Giridih, Jharia and Raniganj. Other States in which coal is found are Madhya Pradesh, Orissa, Andhra Pradesh, Madras, Maharashtra, Assam, Rajasthan and Kashmir.

Indian coal falls mainly into two classes namely, high grade steam and low grade steam.

The Metallurgical Coal Conservation Committee placed the reserves of coking coal at 329.6 million tons in respect of selected grade, 395.7 million tons of grade I quality and 49.1 million tons of grade II quality. With storing, washing and blending the Committee thought that a reserve of 2,000 million tons of good quality coking coal could be obtained. The Geological Survey of India has estimated the total reserve of coal in India as 31,888 million tonnes down to 800 metres depth.

The following table gives the details of output:—

| Year       | Production<br>(million metric<br>tons) |
|------------|----------------------------------------|
| 1961 .. .. | 56.07                                  |
| 1962 .. .. | 61.37                                  |
| 1963 .. .. | 65.96                                  |
| 1964 .. .. | 62.44                                  |
| 1965 .. .. | 67.16                                  |

Value of production of coal during 1965 was Rs. 170 crores.

The target production of coal (excluding Jammu and Kashmir) was fixed on fiscal year-wise basis and the target during the year 1964-65 was 76.84 million tonnes of which 58.23 million tonnes was set for collieries in the private sector and 18.11 million tonnes for the public sector. As against this the production of coal (excluding J & K) during the year 1964-65 was recorded at 62.78 million tonnes comprising 50.87 million tonnes from the private sector and 11.91 million tonnes from the public sector.

India exported 9,024 tonnes of coke in 1964 valued at Rs. 880,000 to Burma, Pakistan and Nepal as against no exports in 1963. However, during 1965 the exports were only 4,920 tonnes valued at Rs. 493,000.

Because of the paucity of coal deposits in South India, high priority has been given to the development of the multipurpose 'South Arcot Lignite Project' at Neyveli. This project is planned to increase the mine output to 5.5 million tonnes per annum. During 1965, 2.30 million tonnes of lignite was mined in Neyveli.

During the year 1964 altogether 9 washeries were in operation and 3 more were proposed to be set up and all the 12 washeries put together will have rated capacity of 22 million tonnes per annum.

During the three months ending March, 1966, the output of lignite which totalled 704,000 tonnes showed a significant increase of 64 per cent over the level recorded in the corresponding period of 1965.

### IRON ORE

India possesses about one-fourth of the total world reserves of iron ore and is the biggest single country possessing such a large quantity of iron ore deposits as 21,000 million tons.

The production of iron ore in 1965 was 16.90 million tonnes (excluding Goa) showing an increase by 10 per cent over the previous year. The production from Goa during 1965 was 6.49 million tonnes as against 6.05 million tonnes during 1964.

During 1965 despatches of iron ore for consumption in the iron and steel plants totalled 11.71 mln. tonnes against 10.92 mln. tonnes in 1964.

The quantity of iron exported in 1965 was 11.26 million tonnes valued at Rs. 395.1 million as compared with 10.5 million tonnes valued at Rs. 371.6 million in 1964.

Japan continued to be the largest importer and received a total of 7,003,523 tonnes of ore during 1964 compared to 6,116,042 tonnes during 1963.

The output of iron-ore was 5.2 million tonnes in the first quarter of 1966.

During 1965, Orissa, Bihar, Mysore and Madhya Pradesh accounted for 38%, 25%, 17%, and 16%, while Andhra Pradesh, Maharashtra, Madras and Rajasthan jointly accounted for the remaining 4% of the all India output.

### Production

The following is the trend of production:

| Year       | Qty. in<br>'000 metric<br>tonnes. | Value<br>Rs. '000. |
|------------|-----------------------------------|--------------------|
| 1961 .. .. | 12,309                            | 89,211             |
| 1962 .. .. | 13,509                            | 1,02,129           |
| 1963 .. .. | 14,995                            | 1,13,789           |
| 1964 .. .. | 15,311                            | 1,09,434           |
| 1965 .. .. | 16,901                            | 1,35,888           |

The production of iron ore in Goa during 1964 and 1965 was 6.05 and 6.49 million tonnes respectively.

The export trade of iron ore during 1961 to 1965 is indicated below:

| Year       | Qty. in<br>'000 metric<br>tons. | Value in<br>Rs. '000. |
|------------|---------------------------------|-----------------------|
| 1961 .. .. | 3,466                           | 1,79,379              |
| 1962 .. .. | 3,390                           | 2,317,83              |
| 1963 .. .. | 9,379                           | 3,60,510              |
| 1964 .. .. | 10,482                          | 3,71,574              |
| 1965 .. .. | 11,264                          | 3,95,078              |

### MANGANESE ORE

Extensive deposits of manganese ore occur in Madhya Pradesh, Orissa, Andhra Pradesh, Maharashtra, Mysore, Bihar, and Rajasthan.

The total reserves of manganese ore in the country according to the latest estimate, are now placed at over 182.8 million tons of which 48 million tons are of high grade. It is estimated that the deposits in the main belt of Nagpur and Bhandara in Maharashtra and Balaghat and Chhindwara in Madhya Pradesh alone contain

reserves of the order of 80 million tons upto a depth of 500 ft. A major part of the output is exported at present.

The following is the trend of output and exports of manganese ore in '000 metric tons (including Goa):

| Year       | Production | Exports |
|------------|------------|---------|
| 1961 .. .. | 1,230      | 1,123   |
| 1962 .. .. | 1,225      | 903     |
| 1963 .. .. | 1,100      | 946     |
| 1964 .. .. | 1,304      | 1,598   |
| 1965 .. .. | 1,504      | 1,147   |

The production of manganese ore in 1965 in Goa was 101,000 tonnes of which 78,000 tonnes were of ferruginous grade.

The export of manganese ore has been decontrolled from Oct. 1962. The export of manganese dioxide/peroxide has also been decontrolled since April 23, 1964.

To conserve high grade ore Government is encouraging the setting up of beneficiation plant to improve low grade manganese ore and promote export. A heavy media separation plant for beneficiating low grade ore was set up by the then Central Province Manganese Ore Co. Ltd. at Dongri Buzurg in Bhandara District in 1954.

There is only one ferro-manganese plant under public sector at Bhadravati in Mysore.

In the private sector six ferro-manganese plants located respectively at Joda and Rayagada in Orissa, Garividi in Andhra, Dandell in Mysore, Tumsar and Kanhan in Maharashtra have gone into production. During the year 1965 all these plants produced a total of 149,331 tonnes of ferro-manganese.

During the first quarter ending March 31, 1966 production of manganese ore was 429,000 tonnes which is 26 per cent more than last year for the same period.

### MICA

Mica is treated as a strategic mineral and India accounts for a big slice of the world trade in it.

The principal mica deposits are concentrated in Bihar, Rajasthan and Andhra Pradesh.

During 1965 Bihar, Rajasthan and Andhra Pradesh accounted for 48%, 27% and 24%; and the remaining one per cent by Madras, Madhya Pradesh and West Bengal put together of the total mica production in India. Most of the production from Rajasthan is sent to Bihar to be split and marketed. The greater portion of the Andhra output is of green variety.

The export of mica on consignment basis has been banned since Feb. 1964. The export of mica scrap and waste is allowed subject to floor price of Rs. 200 per tonne with effect from April 1, 1966.

The production and export figures of Mica are given below:—

| Year       | Production <sup>1</sup><br>(metric tons) | Export <sup>2</sup><br>(metric tons) |
|------------|------------------------------------------|--------------------------------------|
| 1961 .. .. | 28,347                                   | 26,493                               |
| 1962 .. .. | 28,481                                   | 31,188                               |
| 1963 .. .. | 25,322                                   | 34,075                               |
| 1964 .. .. | 21,698                                   | 29,891                               |
| 1965 .. .. | 22,985                                   | 37,531                               |

<sup>1</sup> Crude Mica. <sup>2</sup> All varieties.

### CHROMITE

Chromite is an important strategic mineral of which India has moderate supplies.

The chief deposits are in the Singhbhum district of Bihar, Mysore and Hassan districts of Mysore State, Ratnagiri and Bhandara districts of Maharashtra, the Krishna district of Andhra Pradesh, the Salem district of Madras, and Cuttack and Keonjhar districts of Orissa.



The following table gives details regarding production and export of chromite ore :—

| '000 metric tons |        |         |
|------------------|--------|---------|
| Year             | Output | Exports |
| 1961 .. ..       | 48     | 41      |
| 1962 .. ..       | 66     | 16      |
| 1963 .. ..       | 65     | 10      |
| 1964 .. ..       | 33     | 31      |
| 1965 .. ..       | 60     | 38      |

### MAGNESITE

Large deposits of magnesite used in the manufacture of magnesium salts, metallic magnesium and refractory bricks are known to occur in Salem (Madras), Hassan, Coorg and Mysore (Mysore), Almora (U.P.), small deposits are known in Durgapur (Rajasthan) and Singhbhum (Bihar).

Of these, the chief producing centres are Salem, and Mysore districts.

Major part of the output is used in the manufacture of refractory bricks for steel works and a considerable quantity is exported.

The output and export of magnesite from 1961 to 1965 are given below :—

| Year       | Output<br>(Metric tons) | Exports<br>(Metric tons) |
|------------|-------------------------|--------------------------|
| 1961 .. .. | 2,09,744                | 31,932                   |
| 1962 .. .. | 2,12,888                | 32,062                   |
| 1963 .. .. | 2,34,566                | 33,349                   |
| 1964 .. .. | 2,07,732                | 36,151                   |
| 1965 .. .. | 2,38,706                | 53,099                   |

### GYPSUM

Gypsum deposits are found in several parts of India. The better known gypsum bearing regions are in Rajasthan (Jodhpur, Bikaner, Nagaur and Jaisalmer), in Madras (Tiruchirappalli and Coimbatore districts) and the Jammu & Kashmir.

The total reserves are estimated at 1,006 million tonnes. Rajasthan accounts for more than 90 per cent of the Indian reserves.

Smaller deposits also occur in Tehri-Garhwal (U.P.) and in Himachal Pradesh.

The production of gypsum during 1961 to 1965 is given below :—

| Year       | Output<br>('000 Metric Tons) |
|------------|------------------------------|
| 1961 .. .. | 866                          |
| 1962 .. .. | 1,122                        |
| 1963 .. .. | 1,190                        |
| 1964 .. .. | 880                          |
| 1965 .. .. | 1,148                        |

### LEAD-ZINC ORE

During 1965, 5,500 tonnes of lead concentrates and 9,600 tonnes of zinc concentrates were produced from Zawar mines in Udaipur district of Rajasthan. Zawar is the only area producing lead and zinc ores.

The production of refined lead during 1965 was 2,905 tonnes as against 3,624 tonnes in 1964 from the Tundoo smelter.

It is proposed to increase its present installed capacity of 6,000 tonnes of pig lead per annum to 8,128 tonnes (8,000 tons).

The Planning Group for Non-Ferrous Metals has suggested that steps may be taken to set up two more lead smelters based on the imported concentrates to provide about 70,000 tonnes of metal per year so that at least 50 per cent of the requirements of the country may be met by the end of the Fourth Plan.

The exports of zinc concentrates on toll basis to Japan have been cut down from 9,598 tonnes during 1964 to 2,706 tonnes during 1965 to meet the requirements of Zinc smelter at Debari in Rajasthan. This smelter is in its final stages of construction having an annual capacity of 18,288 tonnes (18,000 tons) of Zinc and 29,464 tonnes of sulphuric acid to be recovered per annum and converted in turn into 76,200 to 81,280 tonnes per annum of superphosphate. Besides, 76 tonnes of cadmium metal per annum will also be recovered.

### SULPHUR

Native sulphur in deposits of large size is unknown in India.

The mineral pyrites is another source of sulphur. It is found in Amjor (Bihar), Ingaldhal, Kaiga (Mysore), Taradevi (Simla), Lashtial (Kashmir) and Polur (Madras) of which Amjor and Ingaldhal deposits are of economic importance.

The Indian Bureau of Mines have estimated 391 million metric tons of pyrites in area covering 48 sq. miles at Amjor assaying 40 per cent sulphur. The Pyrites and Chemical Development Company Ltd., has been set up under the aegis of NIDC to exploit pyrites for production of sulphuric acid and other related products.

The P.C.D.C. has initiated action on setting up a sulphuric acid plant at Sindri with a capacity of 400 tonnes per day based on Amjor pyrites.

As there is no production of sulphur in India, the country's requirements are met from imports, for which the recent figures are given below :—

| Year       | Quantity<br>(tonnes) |
|------------|----------------------|
| 1961 .. .. | 191,433              |
| 1962 .. .. | 248,031              |
| 1963 .. .. | 261,018              |
| 1964 .. .. | 241,161              |
| 1965 .. .. | 283,248              |

Pyrites to the tune of 2.03 million tons assaying 20 to 30 per cent sulphur have been estimated to be available at Ingaldhal, Mysore State.

Substantial quantities of pyrites are associated with the gold deposits of Wynad in the Nilgiris District of Madras.

Copper pyrites deposits are also a source of sulphur. Some of the Indian coal e.g. Assam coal and Rewa coal are high in sulphur.

### COPPER

In India at present Indian Copper Corporation Ltd., is the sole producer of Copper ore and metal at Ghatsila, Bihar.

The production of refined copper was 9,360 tonnes in 1965 and 9,475 tonnes in 1964. This

meets hardly 10 per cent of the copper requirements of the country.

Extensive investigations are being carried out throughout the country to locate promising copper bearing areas. The more important of these are Khetri, Madhan-Kudhan, Kolihan, Akwall, Dariba and few other sections of the Khetri Copper belt in Rajasthan; Bakha, Roam-Sideshwar, Ramchandrapahar and few other areas in Bihar; and in Agnigundala and Bellapalli in Guntur Distt. and Mailaram in Khammam district in Andhra Pradesh.

National Mineral Development Corporation Ltd., (NMDC) has submitted the project report of the Khetri Copper Project for installing a flash smelter to a production level of 21,000 tonnes of electrolytic copper per annum and sulphuric acid as a by-product and opening of a mine with foreign collaboration.

The recent figures of import of the copper metal are given below :—

| Year       | Quantity<br>(Tonnes) | Value in<br>Rs. '000 |
|------------|----------------------|----------------------|
| 1961 .. .. | 62,316               | 195,753              |
| 1962 .. .. | 71,790               | 238,028              |
| 1963 .. .. | 74,008               | 253,867              |
| 1964 .. .. | 67,471               | 241,342              |
| 1965 .. .. | 60,127               | 334,313              |

### SALT

The production of salt in the country after Independence has increased from 2.78 million metric tonnes in 1951 to 4.70 million metric tonnes in 1965.

During 1965 India produced 47.0 lakh metric tonnes of salt of which Gujarat alone produced 57 per cent. Next in order of importance are Madras 17 per cent, Rajasthan 10 per cent, Maharashtra 9 per cent, Andhra Pradesh 6 per cent and the rest one per cent was produced by Orissa, Mysore, West Bengal, Himachal Pradesh and Kerala put together.

India is not only self sufficient in regard to salt for domestic requirements but has also a sizeable quantity of this available for exports. The exports of salt during 1965 were 3.31 lakh tonnes as against 3.58 lakh tonnes in the preceding year.

The average number of labourers employed per day in the salt industry in 1965 was 34,928 as against 36,204 in 1964.

The Govt. of Rajasthan have installed a plant for the recovery of Sodium Sulphate from sub-soil brine available at Didwana. Its present capacity is to produce 20 tonnes of Sodium Sulphate and 60 tonnes of salt per day.

Gypsum is being collected in appreciable quantities in many maritime salt works on the West Coast.

The following quantities of important by-products were recovered during 1964 and 1965.

(Figures in Tonnes)

| Year       | Gypsum | Magnesium<br>Sulphate | Magnesium<br>Chloride | Sodium<br>Sulphate |
|------------|--------|-----------------------|-----------------------|--------------------|
| 1964 .. .. | 35,102 | 28                    | 6,717                 | 1,299              |
| 1965 .. .. | 56,274 | 60                    | 7,339                 | 669                |

Production (March 1966): Production of some other minerals during the first quarter of 1966 is as follows: Gold 940 kg.; Silver 455 kg.; Ilmenite 6,445 tonnes; Rutile 325 tonnes; Apatite 1,935 tonnes; Asbestos 1,488 tonnes; Ball clay 1,230 tonnes; Crude emerald 30,000 carats; Gypsum 351,000 tonnes; Kyanite 18,309 tonnes; Limestone 5,10 lakh tonnes; Magnesite 54,000 tonnes; Mica (Crude) 5,792 tonnes;

Ochre 11,729 tonnes; Pyrophyllite 2,738 tonnes; Quartz 81,000 tonnes; Salt 9,87,000 tonnes; Sillimanite 3,274 tonnes; Steatite 46,000 tonnes; Vermiculite 176 tonnes.

### RARE METALS

What is believed to be probably the world's biggest deposits of radioactive minerals was located "somewhere in North-East India"



by the Indian Atomic Energy Department early in 1957.

Investigations carried out showed that the deposit had over 3.3 million tons of ore containing 300,000 tons of thorium of concentration of about 10 per cent and 10,000 tons of uranium of concentration of 0.3 to 0.4 per cent.

The deposits also contain about 80 million tons of ilmenite. The production of ilmenite during

the half year ending June 1959 was 143,000 metric tons according to the Indian Bureau of Mines. Ilmenite is recovered from the beach sands of Kerala State contributing nearly 93 per cent of the total production and the Manavalakuruchi area in Madras State. It is mainly exported to U.S.A. and U.K.

The deposit is, therefore, considered more important than the famous beach deposits

of Kerala, hitherto regarded as one of the world's richest deposits.

India's total reserves of uranium are reckoned at 30,000 tons and of thorium at 500,000 tons.

Uranium mines are being developed in Bihar and Rajasthan. It is hoped enough would be found to feed the first power station which would need 100 to 150 tons of fuel a year.

## IMPORT OF METALS AND ALLOYS INTO INDIA†

(Value in Rs. '000)

| Metals                                           | Unit of Quantity | 1964      |                | 1965     |                |
|--------------------------------------------------|------------------|-----------|----------------|----------|----------------|
|                                                  |                  | Quantity  | Value Rs. '000 | Quantity | Value Rs. '000 |
| FERROUS METALS/ALLOYS                            |                  |           |                |          |                |
| Ferro-alloys .. .. .                             | Tonnes           | 2,471     | 5,994          | 2,704    | 7,891          |
| Pig-iron and Sponge Iron .. .. .                 | "                | 68,461    | 22,713         | 84,471   | 26,173         |
| Iron and Steel materials .. .. .                 | "                | 10,54,369 | 10,09,010      | 9,42,463 | 1,026,260      |
| <i>Total value of ferrous metals</i> .. .. .     |                  |           | 10,37,717      |          | 1,060,324      |
| NON-FERROUS METALS/ALLOYS                        |                  |           |                |          |                |
| Aluminium .. .. .                                | "                | 22,751    | 68,485         | 24,281   | 74,353         |
| Antimony .. .. .                                 | "                | 60        | 282            | 35       | 180            |
| Brass and Bronze .. .. .                         | "                | 2,528     | 15,043         | 3,142    | 23,288         |
| Copper .. .. .                                   | "                | 67,471    | 2,41,342       | 60,127   | 3,34,313       |
| Lead .. .. .                                     | "                | 34,322    | 40,693         | 37,950   | 63,156         |
| Nickel .. .. .                                   | "                | 2,467     | 18,884         | 3,225    | 24,693         |
| Platinum .. .. .                                 | Kilograms        | 362       | 3,789          | 219      | 2,442          |
| Silver .. .. .                                   | "                | 1,435     | 350            | 1,252    | 221            |
| Tin .. .. .                                      | Tonnes           | 5,124     | 76,290         | 4,732    | 76,601         |
| Zinc .. .. .                                     | "                | 67,179    | 1,00,432       | 92,146   | 1,48,151       |
| Miscellaneous Non-Ferrous Metals .. .. .         | —                | —         | 14,753         | —        | 12,530         |
| <i>Total value of non-ferrous metals</i> .. .. . |                  |           | 5,80,348       |          | 759,928        |
| TOTAL VALUE OF ALL METALS .. .. .                |                  |           | 16,18,065      |          | 1,820,252      |

Source: Monthly statistics of the Foreign Trade of India published by the Director-General, Commercial Intelligence and Statistics.

## EXPORTS OF METALS AND ALLOYS FROM INDIA††

(Value in Rs. '000)

| Metal/Alloy                               | Unit of<br>quantity | 1964     |          | 1965     |         |
|-------------------------------------------|---------------------|----------|----------|----------|---------|
|                                           |                     | Quantity | Value    | Quantity | Value   |
| <i>Ferrous Metals</i>                     |                     |          |          |          |         |
| Ferro-silicon .. .. .                     | Tonnes              | 616      | 426      | 5,263    | 3,467   |
| Ferro-alloys (Ferro-manganese) .. .. .    | "                   | 91,210   | 65,524   | 58,569   | 38,236  |
| Pig iron and sponge iron .. .. .          | "                   | —        | —        | 5        | 5       |
| Iron and steel materials .. .. .          | "                   | 4,69,589 | 84,575   | 665,358  | 142,813 |
| Total value of ferrous metals.. .. .      | "                   |          | 1,50,525 |          | 184,520 |
| <i>Non-ferrous metals(a)</i>              |                     |          |          |          |         |
| Aluminium(b) .. .. .                      | "                   | 3,103    | 9,680    | 1,616    | 6,887   |
| Brass and bronze .. .. .                  | "                   | 1,149    | 3,354    | 1,159    | 5,103   |
| Copper .. .. .                            | "                   | 776      | 2,723    | 379      | 1,723   |
| Lead .. .. .                              | "                   | 275      | 295      | 176      | 209     |
| Nickel .. .. .                            | "                   | 1        | 14       | 252      | 176     |
| Tin .. .. .                               | "                   | 35       | 97       | 95       | 397     |
| Zinc .. .. .                              | "                   | 3,656    | 1,761    | 442      | 249     |
| Misc. non-ferrous metals .. .. .          | "                   |          | 1,672    | —        | 865     |
| Total value of non-ferrous metals .. .. . |                     |          | 19,596   |          | 15,609  |
| TOTAL VALUE OF ALL METALS .. .. .         |                     |          | 1,70,121 |          | 200,129 |

† Includes import into Goa.

†† Includes export from Goa.

(a) Mostly comprising manufactures and scrap.

(b) Mostly aluminium ingots for fabrication.



## QUANTITY AND VALUE OF MINERALS PRODUCED IN INDIA, 1964 AND 1965\*

(Excluding Goa)

| Minerals                                        | Unit of Quantity | 1964     |                  | 1965     |                  |
|-------------------------------------------------|------------------|----------|------------------|----------|------------------|
|                                                 |                  | Quantity | Value (Rs. '000) | Quantity | Value (Rs. '000) |
| Coal (a) .. .. .                                | '000 tonnes      | 62,440   | 15,09,501        | 67,161   | 1,698,672        |
| Lignite (a) .. .. .                             | Tonnes           | 1,569    | 36,428           | 2,300    | 56,049           |
| <i>Total coal &amp; Lignite</i> .. .. .         | "                |          | 15,45,929        |          | 1,754,721        |
| <b>METALLIC MINERALS.</b>                       |                  |          |                  |          |                  |
| <i>Ferrous</i>                                  |                  |          |                  |          |                  |
| Chromite .. .. .                                | Tonnes           | 34,969   | 2,077            | 59,672   | 3,716            |
| Iron Ore .. .. .                                | '000 tonnes      | 15,311   | 1,15,324         | 16,901   | 135,888          |
| Manganese Ore .. .. .                           | "                | 1,309    | 72,497           | 1,504    | 77,864           |
| Wolfram .. .. .                                 | Kilograms        | 7,570    | 40               | 3,918    | 31               |
| <i>Total Ferrous</i> .. .. .                    |                  |          | 18,938           |          | 217,499          |
| <i>Non-ferrous</i>                              |                  |          |                  |          |                  |
| Bauxite .. .. .                                 | '000 Tonnes      | 592      | 6,219            | 706      | 7,137            |
| Copper ore .. .. .                              | '000 tonnes      | 473      | 24,121           | 468      | 24,671           |
| Diaspore .. .. .                                | Tonnes           | 685      | 84               | 284@     | 45@              |
| Gold .. .. .                                    | Kilograms        | 4,619    | 56,367           | 4,062    | 42,435           |
| Ilmenite .. .. .                                | Tonnes           | 12,041   | 336              | 30,057@@ | 647@@            |
| Lead (Concentrates) .. .. .                     | "                | 6,130    | 3,985            | 5,496    | 3,573            |
| Rutile .. .. .                                  | "                | 1,871    | 1,841            | 1,317    | 1,296            |
| Silver (b) .. .. .                              | Kilograms        | 4,735    | 1,190            | 5,235    | 1,468            |
| Zinc (Concentrates) .. .. .                     | Tonnes           | 10,744   | 4,660            | 9,641    | 4,181            |
| <i>Total Non-ferrous</i> .. .. .                |                  |          | 98,803           |          | 85,453           |
| <i>Total metallic minerals</i> .. .. .          |                  |          | 2,88,741         |          | 302,952          |
| <b>NON-METALLIC MINERALS.</b>                   |                  |          |                  |          |                  |
| Apatite .. .. .                                 | Tonnes           | 4,049    | 143              | 4,050    | 166              |
| Asbestos .. .. .                                | "                | 3,366    | 259              | 4,526    | 396              |
| Ball Clay .. .. .                               | "                | 9,597    | 105              | 8,117    | 83               |
| Barytes .. .. .                                 | "                | 46,959   | 933              | 45,914   | 880              |
| Calcite .. .. .                                 | "                | 13,905   | 134              | 20,331   | 206              |
| Chinaclay (nonsaleable crude) .. .. .           | '000 tonnes      | 303      | N.A.             | 308      | N.A.             |
| Chinaclay (saleable crude) .. .. .              | "                | 132      | 989              | 190      | 1,595            |
| Chinaclay (processed) .. .. .                   | "                | 84       | 5,314            | 89       | 5,596            |
| Pyrophyllite .. .. .                            | Tonnes           | 6,071    | 101              | 10,707   | 159              |
| Corundum .. .. .                                | "                | 540      | 803              | 481      | 271              |
| Diamonds .. .. .                                | Carats           | 2,260    | 1,218            | 4,466    | 2,471*           |
| Dolomite .. .. .                                | '000 Tonnes      | 52       | 6,658            | 958      | 10,901           |
| Emerald (c) crude .. .. .                       | '000 carats      | 53       | —                | 65       | N.A.             |
| Emeralds (dressed) .. .. .                      | '000 carats      | —        | —                | —        | —                |
| Feldspar .. .. .                                | Tonnes           | 24,382   | 249              | 24,211   | 236              |
| Fire Clay .. .. .                               | '000 tonnes      | 421      | 3,407            | 425      | 3,478            |
| Fluorspar** .. .. .                             | Tonnes           | 389      | 96               | 172      | 86               |
| Garnet (excluding gem variety) .. .. .          | Tonnes           | 295      | 20               | 221      | 12               |
| Garnet (gem variety) .. .. .                    | Kgs.             | 2,554    | 10               | 3,093    | 18               |
| Gypsum .. .. .                                  | '000 tonnes      | 882      | 6,860            | 1,148    | 8,483            |
| Kyanite .. .. .                                 | Tonnes           | 34,163   | 6,286            | 37,447   | 5,119            |
| Limestone .. .. .                               | '000 tonnes      | 17,017   | 1,00,331         | 19,855   | 123,400          |
| Magnesite .. .. .                               | Tonnes           | 208      | 4,096            | 239      | 4,558            |
| Mica (Crude) .. .. .                            | "                | 22,806   | 22,545           | 22,985   | 22,803           |
| Ochre .. .. .                                   | "                | 33,941   | 807              | 29,312   | 734              |
| Quartz & Silica .. .. .                         | "                | 248      | 2,125            | 287      | 2,287            |
| Salt (d) .. .. .                                | '000 tonnes      | 4,647    | 86,023           | 4,703    | 73,420           |
| Sillimanite .. .. .                             | Tonnes           | 12,362   | 942              | 11,276   | 885              |
| Steatite*** .. .. .                             | '000 Tonnes      | 134      | 3,865            | 149      | 3,967            |
| Vermiculite .. .. .                             | Tonnes           | 429      | 13               | 731      | 25               |
| <i>Total value non-metallic minerals (c) ..</i> |                  |          | 2,58,867         |          | 2,72,230         |
| <i>Total value</i> .. .. .                      |                  |          | 20,88,537        |          | 23,29,903        |

\* Value figures have been revised on the basis of the revised value furnished by the N.M.D.C. Ltd., which is under reference.

\*\* A quantity of 100 tonnes during 1965 of acid grade fluorite was also reported from Gujarat.

\*\*\* Excluding pyrophyllite.

④ Figures relate to January-October, 1965.

@ @ Inclusive of 257 tonnes of brown ilmenite.

(a) Coal and lignite figures are inclusive of those for Jammu and Kashmir.

(b) Value of metal given in the absence of value of ore.

(c) Value of crude emerald is not available as emeralds are auctioned in processed form only.

(d) Includes the production of rock salt.



## EXPORTS OF ORES AND MINERALS FROM INDIA

| Ore/Minerals                                            | Unit of Quantity | 1964      |                  | 1965      |                  |
|---------------------------------------------------------|------------------|-----------|------------------|-----------|------------------|
|                                                         |                  | Quantity  | Value (Rs. '000) | Quantity  | Value (Rs. '000) |
| Abrasives .. .. .                                       | Tonnes           | 4         | 9                | —         | 4                |
| Aluminium Ore .. .. .                                   | "                | 94,423    | 3,086            | 9         | 68               |
| Arsenic sulphides (orpiments etc. natural)              | "                | —         | —                | 1         | 8                |
| Asbestos (raw) .. .. .                                  | "                | 3         | 11               | 9         | 28               |
| Asphalt (natural) .. .. .                               | "                | —         | —                | 245       | —                |
| Barytes (excluding Barium oxide) .. .. .                | "                | 7,975     | 503              | 4,868     | 383              |
| Bauxite .. .. .                                         | "                | 94,423    | 3,086            | 62,832    | 1,801            |
| Bentonite .. .. .                                       | "                | —         | —                | 596       | 86               |
| Bort .. .. .                                            | "                | 67        | 7                | —         | —                |
| Chromite .. .. .                                        | "                | 31,066    | 3,754            | 33,362    | 4,433            |
| Chalk (Crude) .. .. .                                   | "                | 45        | 12               | 44        | 8                |
| Copper ore & concentrates .. .. .                       | "                | —         | —                | ..        | 6                |
| <b>Clays:</b>                                           |                  |           |                  |           |                  |
| Ball Clay .. .. .                                       | "                | —         | —                | 1         | —                |
| Earth Clay .. .. .                                      | "                | 3         | —                | 28        | 6                |
| Fire Clay .. .. .                                       | "                | 280       | 40               | 284       | 28               |
| China Clay .. .. .                                      | "                | 548       | 131              | 360       | 90               |
| Coal .. .. .                                            | '000 tonnes      | 1,245     | 39,223           | 925       | 35,141           |
| Briquettes of coal, Coke & Lignite .. .. .              | Tonnes           | —         | —                | —         | —                |
| Coke .. .. .                                            | "                | 9,024     | 860              | 4,920     | 493              |
| Diamond (gem variety) (a) .. .. .                       | "                | —         | —                | N.A.      | 41,311           |
| Diamond (natural) .. .. .                               | "                | —         | 25,635(b)        | —         | —                |
| Diamond (Industrial crude) .. .. .                      | "                | N.A.      | 5                | —         | —                |
| Diatomaceous earth .. .. .                              | Tonnes           | —         | —                | —         | —                |
| Earth colours (ochre etc.) .. .. .                      | "                | —         | —                | 290       | 56               |
| Emeralds .. .. .                                        | "                | —         | —                | —         | —                |
| Feldspar (crude) .. .. .                                | Tonnes           | 5,276     | 357              | 5,359     | 392              |
| Feldspar (natural gem variety) .. .. .                  | "                | N.A.      | 19               | —         | —                |
| Fuller's earth .. .. .                                  | Tonnes           | —         | —                | 113       | 43               |
| Graphite (plumbago) .. .. .                             | "                | 12        | 10               | 12        | 12               |
| Gravel (including crushed stone) .. .. .                | "                | 43,634    | 1,935            | 13,651    | 543              |
| Gypsum .. .. .                                          | "                | 5         | —                | 1         | —                |
| Ilmenite .. .. .                                        | "                | 26,521    | 1,090            | 15,095    | 559              |
| Titanium minerals (other than ilmenite) .. .. .         | "                | —         | —                | —         | —                |
| Iron ore* .. .. .                                       | '000 tonnes      | 10,482    | 3,71,574         | 11,264    | 3,95,078         |
| Kyanite .. .. .                                         | Tonnes           | 28,818    | 6,806            | 31,144    | 7,490            |
| Lime .. .. .                                            | "                | 160       | 152              | 1,818     | 193              |
| Limestone (excluding building limestone) .. .. .        | "                | 1,12,840  | 1,123            | 76,585    | 731              |
| Manganese ore (1st grade) .. .. .                       | "                | 3,71,918  | 49,318           | 2,43,092  | 28,167           |
| Manganese ore (2nd grade) .. .. .                       | "                | 6,81,279  | 65,045           | 4,24,644  | 44,352           |
| Manganese ore (ferruginous) .. .. .                     | "                | 5,15,720  | 21,018           | 4,58,056  | 18,746           |
| Manganese ore (Peroxide) .. .. .                        | "                | 1,841     | 490              | 2,977     | 468              |
| Manganese ore (others) .. .. .                          | "                | 27,327    | 2,007            | 18,648    | 2,136            |
| Total manganese ore* .. .. .                            | "                | 15,98,085 | 1,37,878         | 1,147,417 | 93,869           |
| Magnesite (calcined) .. .. .                            | Tonnes           | 35,789    | 7,209            | 42,377    | 8,436            |
| Magnesite (not calcined) .. .. .                        | "                | 362       | 69               | 10,722    | 1,821            |
| Total magnesite .. .. .                                 | "                | 36,151    | 7,278            | 53,099    | 10,257           |
| Magnesium ore and concentrates .. .. .                  | "                | —         | —                | —         | —                |
| Marble .. .. .                                          | "                | 176       | 85               | 32        | 46               |
| Mica (blocks) .. .. .                                   | "                | 1,934     | 33,948           | 1,442     | 33,586           |
| Mica (splittings) .. .. .                               | "                | 8,790     | 54,243           | 9,426     | 62,833           |
| Mica (condenser films) .. .. .                          | "                | 90        | 6,616            | 80        | 7,575            |
| Mica (others) .. .. .                                   | "                | 19,077    | 3,434            | 26,583    | 6,097            |
| Total Mica .. .. .                                      | "                | 29,891    | 98,291           | 37,531    | 1,10,091         |
| Nickel ore & concentrates .. .. .                       | "                | —         | —                | —         | 4                |
| Ochre (yellow) .. .. .                                  | "                | 416       | 71               | —         | —                |
| Precious and semi-precious stones (a) .. .. .           | "                | N.A.      | 89,878(b)        | N.A.      | 90,018           |
| Red Oxide of Persian Gulf .. .. .                       | Tonnes           | 593       | 61               | 401       | 73               |
| Sand (excluding metal bearing sand) .. .. .             | "                | —         | —                | 8         | —                |
| Sand (including ground quartz) .. .. .                  | "                | 306       | 23               | ..        | —                |
| Salt .. .. .                                            | "                | 2,27,340  | 5,187            | 2,66,894  | 6,076            |
| Saltpetre (c) .. .. .                                   | "                | 4         | 6                | 1         | 1                |
| Sillimanite .. .. .                                     | "                | 8,772     | 3,776            | 5,786     | 2,537            |
| Steatite (blocks and powder) .. .. .                    | "                | 11,960    | 2,443            | 10,543    | 2,324            |
| Stone (building & monumental) .. .. .                   | "                | —         | —                | 6,006     | 2,448            |
| Building stone (d) .. .. .                              | "                | 4,244     | 2,604            | —         | —                |
| Tungsten ore .. .. .                                    | "                | —         | —                | 1,500     | 73               |
| Zinc ore & concentrates .. .. .                         | "                | 9,598     | 4,768            | 2,706     | 1,177            |
| Others .. .. .                                          | "                | —         | 1,517            | 1,517     | 2,706            |
| Total value .. .. .                                     | "                | —         | 8,09,644         | —         | 8,10,741         |
| Abrasives (sized grain powder of all materials) .. .. . | Tonnes           | 2,855     | 4,478            | 3,093     | 4,890            |
| Aluminium ores .. .. .                                  | "                | —         | —                | —         | —                |
| Antimony ore .. .. .                                    | "                | 1,344     | 2,592            | 1,702     | 4,846            |
| Apatite (rock phosphates) .. .. .                       | "                | 4,49,407  | 38,750           | 4,94,746  | 48,889           |
| Other mineral phosphates .. .. .                        | "                | —         | —                | 8         | 4                |
| Arsenic sulphides (orpiment etc. natural) .. .. .       | "                | —         | —                | 35        | 30               |
| Asbestos (raw) .. .. .                                  | "                | 35,710    | 36,885           | 37,816    | 38,686           |
| Asbestos (others) .. .. .                               | "                | 77        | 51               | 580       | 589              |
| Total Asbestos .. .. .                                  | "                | 35,787    | 36,936           | 38,396    | 39,275           |

\* Including exports from Goa.

(a) Excluding pearls and synthetic stones.

(b) Including exports of precious stones and diamond natural by post parcel from April, 1964 onwards.

(c) Pertains to sodium and potassium nitrates.

(d) The quantity exported during 1964 was mostly of worked building stone.



## IMPORT OF ORES AND MINERALS INTO INDIA\*

| Mineral                                                    | Unit of Quantity | 1964     |                  | 1965     |                  |
|------------------------------------------------------------|------------------|----------|------------------|----------|------------------|
|                                                            |                  | Quantity | Value (Rs. '000) | Quantity | Value (Rs. '000) |
| Asphalt† (natural) .. .. .                                 | Tonnes           | 536      | 329              | 696      | 484              |
| Barytes (calcined) .. .. .                                 | "                | —        | —                | —        | —                |
| Barytes (not calcined) .. .. .                             | "                | 3        | 2                | 52       | 8                |
| Total Barytes .. .. .                                      | "                | 3        | 2                | 52       | 8                |
| Bentonite .. .. .                                          | "                | 919      | 321              | 58       | 38               |
| Borax .. .. .                                              | "                | 8,822    | 4,781            | 9,130    | 5,509            |
| Bort .. .. .                                               | "                | N.A.     | 32               | —        | —                |
| Chalk (crude) .. .. .                                      | Tonnes           | 1,880    | 357              | 828      | 165              |
| Chromite .. .. .                                           | "                | —        | —                | 600      | 5                |
| Clays Ball clay .. .. .                                    | "                | 5,086    | 998              | 4,395    | 1,034            |
| China clay .. .. .                                         | "                | 5,781    | 1,247            | 4,464    | 1,085            |
| Fire clay .. .. .                                          | "                | 19       | 27               | 389      | 110              |
| Earth clay .. .. .                                         | "                | 167      | 104              | 311      | 188              |
| Coal .. .. .                                               | "                | 1,813    | 821              | 2,490    | 994              |
| Coke .. .. .                                               | "                | 429      | 138              | 588      | 207              |
| Briquettes (of coke, coal and lignite) .. .. .             | "                | —        | —                | —        | —                |
| Copper ore & concentrates .. .. .                          | "                | —        | —                | —        | —                |
| Cryolite .. .. .                                           | "                | 1,916    | 2,058            | 3,969    | 5,011            |
| Diatomaceous Earth .. .. .                                 | "                | 1,536    | 1,180            | 362      | 270              |
| Diamonds (industrial crude) .. .. .                        | —                | N.A.     | 2,550            | N.A.     | 1,868            |
| Diamonds (natural) .. .. .                                 | —                | N.A.     | 227              | N.A.     | 1,355            |
| Earth colours (ochre etc.) .. .. .                         | "                | —        | —                | 60       | 61               |
| Emeralds .. .. .                                           | "                | N.A.     | 6,229            | N.A.     | 9,363            |
| Feldspar (crude) .. .. .                                   | Tonnes           | —        | —                | 5        | 2                |
| Feldspar (natural) .. .. .                                 | —                | —        | —                | —        | —                |
| Flints .. .. .                                             | Tonnes           | 304      | 83               | —        | —                |
| Fuller's Earth .. .. .                                     | "                | 368      | 241              | 136      | 105              |
| Fluorspar .. .. .                                          | "                | 2,144    | 558              | 5,004    | 1,155            |
| Gravel (including crushed stone and flint) .. .. .         | "                | 24       | 9                | 198      | 67               |
| Graphite (plumbago) .. .. .                                | "                | 2,016    | 1,241            | 2,490    | 1,947            |
| Gypsum .. .. .                                             | "                | 84,533   | 2,907            | 39,143   | 1,664            |
| Iron ore .. .. .                                           | "                | 77       | 27               | 108      | 35               |
| Lead ore and concentrates .. .. .                          | "                | —        | 1                | 19       | 37               |
| Lime .. .. .                                               | "                | —        | —                | 55       | 40               |
| Limestone (excluding building stone) .. .. .               | "                | 12       | 5                | 59       | 24               |
| Magnesite (calcined) .. .. .                               | "                | —        | —                | —        | —                |
| Magnesite (not calcined) .. .. .                           | "                | —        | —                | 235      | 240              |
| Manganese ore (first grade) .. .. .                        | "                | 7,838    | 3,703            | 597      | 546              |
| Manganese ore (ferruginous) .. .. .                        | "                | —        | —                | —        | —                |
| Manganese peroxide ore .. .. .                             | "                | —        | —                | 462      | 325              |
| Manganese ore (others) .. .. .                             | "                | —        | —                | 5        | 3                |
| Total Manganese ore .. .. .                                | "                | 7,838    | 3,703            | 1,064    | 874              |
| Marble (unworked) .. .. .                                  | "                | 12       | 23               | 4        | 3                |
| Marble (worked) .. .. .                                    | "                | —        | —                | —        | —                |
| Total Marble .. .. .                                       | "                | 12       | 23               | 4        | 3                |
| Mica (blocks) .. .. .                                      | "                | —        | —                | —        | —                |
| Mica (splittings) .. .. .                                  | "                | —        | —                | —        | —                |
| Mica condenser films* .. .. .                              | "                | —        | —                | —        | —                |
| Mica (others) .. .. .                                      | "                | —        | —                | —        | —                |
| Total Mica .. .. .                                         | "                | —        | —                | —        | —                |
| Monazite .. .. .                                           | "                | —        | —                | —        | —                |
| Nickel ore & concentrates (including nickel matte) .. .. . | "                | —        | —                | 16       | 98               |
| Orpiment .. .. .                                           | "                | 1        | 2                | —        | —                |
| Umber & Sienna .. .. .                                     | "                | 12       | 6                | —        | —                |
| Precious and semi-precious stones (a) .. .. .              | —                | N.A.     | 878              | N.A.     | 787              |
| Potash Salts .. .. .                                       | Tonnes           | —        | —                | —        | —                |
| Pumice stone .. .. .                                       | "                | 12       | 10               | —        | —                |
| Realgar .. .. .                                            | "                | —        | —                | —        | —                |
| Red Oxide (Persian Gulf) .. .. .                           | "                | 1,083    | 948              | 2,033    | 978              |
| Rutile .. .. .                                             | "                | 341      | 170              | —        | —                |
| Sand (including quartz) .. .. .                            | "                | 61       | 31               | 126      | 66               |
| Salt .. .. .                                               | "                | 2,251    | 94               | 1,473    | 49               |
| Sillimanite .. .. .                                        | "                | 1        | 1                | —        | —                |
| Silver ore .. .. .                                         | "                | —        | —                | —        | —                |
| Steatite (block and powder) .. .. .                        | "                | 9        | 17               | —        | —                |
| Stone (building and monumental)‡ .. .. .                   | "                | —        | —                | 204      | 129              |
| Sodium Nitrate .. .. .                                     | "                | 7,664    | 1,046            | 13,324   | 3,476            |
| Sodium Nitrite .. .. .                                     | "                | 1,339    | 693              | 3,600    | 1,882            |
| Sulphur .. .. .                                            | "                | 2,41,161 | 45,228           | 2,83,248 | 61,631           |
| Tin ore and concentrates .. .. .                           | "                | —        | —                | —        | —                |
| Titanium minerals other than limenite (rutile) .. .. .     | "                | —        | —                | 755      | 407              |
| Tripoli earths .. .. .                                     | "                | 45       | 26               | 101      | 66               |
| Tungsten ore .. .. .                                       | "                | 230      | 887              | 100      | 858              |
| Others .. .. .                                             | "                | —        | 1,324            | —        | 841              |
| Total Value .. .. .                                        |                  |          | 1,65,216         |          | 2,03,150         |

\* Includes imports into Goa.

† Excluding asphalt (others) eg. manufactures.

(a) Excluding pearls and synthetic stones.

SOURCE: Indian Bureau of Mines, Nagpur.

‡ Includes the imports of alabaster.



## FOREIGN EXCHANGE CONTROLS

**T**HE par value is Indian Rupees 7-50 = US\$1. All transactions in foreign exchange must be conducted through authorised dealers, whose dealings with the general public must be effected as follows: in sterling, at rates fixed by the Foreign Exchange Dealers' Association; in other currencies, at rates based on the fixed rates for sterling and the London market rates for sterling against the other currency concerned. Authorised dealers are permitted to cover their requirements of foreign currencies in the London market, and to cover their permitted transactions in certain currencies against sterling, rupees, or any one of these currencies, either spot or forward for periods not exceeding six months, with authorised banks in any country outside the Bilateral Account group.

### ADMINISTRATION OF CONTROL

Exchange control is administered by the Reserve Bank of India, in accordance with the general policy laid down by the Indian Government in consultation with the Reserve Bank. Much of the routine work of exchange control is delegated to certain commercial banks, which act as authorised dealers permitted to buy and sell foreign exchange for specified purposes under regulations laid down by the Reserve Bank.

### PRESCRIPTION OF CURRENCY

India is a member of the Sterling Area, and has an exchange control system similar to that of the United Kingdom but adapted to suit local requirements. For prescription of currency purposes, countries are divided into three groups: Sterling Area countries, Bilateral Account countries, and the Convertible Account group (all other countries).

Payments to and from Sterling Area countries may be made in sterling or any Sterling Area currency, except Indian rupees, through the account of a resident of any Sterling Area country except India, or in Indian rupees through the account of a bank in any Sterling Area country except India. Payments to and from Bilateral Account countries must be settled in Indian rupees through the appropriate clearing account. Payments to countries in the Convertible Account group may be made in rupees or sterling to the credit of the account of a resident of any country in this group or in any listed currency. The currencies listed for this purpose are those of Austria, Belgian Monetary Area, Canada, Denmark and the Faroe Islands, Federal Republic of Germany, French Franc Area, French Somali Coast, Iraq, Italy, Japan, Netherlands Monetary Area, Norway, Panama, Philippines, Portuguese Monetary Area, Sweden, Switzerland and Liechtenstein, United Arab Republic, and United States and territories under U.S. sovereignty. Receipts from the Convertible Account group may be obtained in any listed currency, in rupees from the account of a bank in any country in this group, or in sterling from an External Account in the United Kingdom.

### NON-RESIDENT ACCOUNTS

The accounts of residents of Bhutan and Nepal are treated as resident accounts. Accounts related to all other foreign countries are treated as non-resident accounts. The treatment of these accounts distinguishes between those of banks and of others.

The accounts of banks are classified in three groups corresponding to the division of countries for prescription of currency purposes, i.e., Sterling Area Accounts, Bilateral Accounts, and Convertible Accounts. These accounts may be credited with payments for imports, interest and dividends, and other authorised payments, with authorised transfers from the non-resident accounts of private firms or persons in the same country as the account holder, with proceeds of sales of the currency of the country or monetary area of the account holder, and with

proceeds of sales of sterling from the appropriate non-resident sterling account in the United Kingdom. They may be debited for payments for exports, and for other payments not exceeding Rs. 20,000, to residents of India. These accounts may also be debited for remittances exceeding Rs. 20,000 made by Indian nationals resident in the Sterling Area for credit to their accounts in India or for payment to Indian nationals resident in India. Transfers may be made from Convertible Accounts to other Convertible Accounts or to Sterling Area Accounts, and between Sterling Area Accounts. All other entries on Sterling Area Accounts, Bilateral Accounts, and Convertible Accounts require the prior approval of the Reserve Bank.

Non-resident accounts of private individuals or firms may be credited, without prior approval, for payment of dividends and interest on securities and proceeds of small cheques up to certain limits. They may be debited for such items as payments for insurance premiums, income taxes, and remittances to relatives, subject to a limit of Rs. 1,000 for each transaction. All other credits and debits require the prior approval of the Reserve Bank. Transfers normally are not permitted from non-resident accounts of individuals or firms to non-resident accounts of banks belonging to the same country or monetary area, unless the amounts originally credited to such accounts could have been transferred abroad.

There are also blocked accounts, to which are credited capital proceeds that are due to non-residents and may not be remitted abroad. Balances on blocked accounts may be placed on fixed deposit or invested in approved Indian rupee securities; the income derived from such investments may normally be remitted to the owner's country, with the approval of the Reserve Bank.

Practically all imports require individual licences. Individual licences may be issued *ad hoc*, or on the basis of quotas allocated to established importers in accordance with their imports in a base period and to actual users on the basis of their current requirements. Licences may be used to import from any country except South Africa. At the beginning of each financial year an announcement on import control policy is made in the form of a Red Book, which gives in detail the policy for established importers and actual users. Licensing is in most cases on an annual basis, subject to the condition that only the first half of the annual licence can be used in the first six months of the licensing year and the second half of the licence will, subject to such change as may be decided upon, be endorsed for use in the second six months. In other cases, licences are issued for the first six months and a supplementary licence is issued later for the second six months. There are special procedures applicable to imports of capital goods, of heavy electrical plant, and of goods imported to fulfil government contracts and for irrigation projects. In licensing imports of a capital nature, their essentiality, their potential for earning or saving foreign exchange, and the availability of medium-term or long-term credits for financing such imports are taken into account.

Where a valid import licence is held, the required exchange is released by an authorised bank on presentation of the exchange control copy of the licence. Licence holders may make payments by opening letters of credit or by remitting against sight drafts. Advance remittances before shipping documents can be submitted are not normally allowed; but in special cases, e.g., imports of machinery and capital goods, where deposits have to be made with overseas manufacturers, the Reserve Bank grants special authorisation for advance payment for a part of the value of the import.

### PAYMENTS FOR INVISIBLES

In general, payments abroad for invisibles require approval. Except for travel, insurance, and a few other items, foreign exchange is granted freely for such payments, especially for expenses incidental to trade transactions and transfers of recurring contractual obligations.

Premiums on insurance policies issued in foreign currency to residents may be paid in rupees or in the currency in which the policy is issued; but Indian residents are prohibited from taking out life insurance policies in foreign currencies.

There are no restrictions on the remittance of profits, dividends, and interest to non-resident beneficiaries, provided that all current tax and other liabilities in India have been cleared.

### EXPORTS AND EXPORT PROCEEDS

Export licensing is now not necessary in respect of most items. For items subject to export licence, the procedure varies according to the type of exporter, of which there are three categories: established shippers, newcomers, and producers (e.g., manufacturers, mine owners, and growers). All applicants for export licences must submit income tax verification certificates. There are three open general licences, which permit exports of certain commodities without the need for an individual export licence. Exports of some commodities are subject to quota limitations and those of a few items are not normally permitted. Exports to South Africa are prohibited.

Exchange control is exercised over the proceeds of exports to countries other than Bhutan and Nepal. An exporter must declare that the full export proceeds will be received and dealt with in accordance with the prescription of currency regulations.

Foreign exchange holdings, including the proceeds of exports, in most currencies must be offered for sale against rupees to an authorised dealer, unless the holder has been authorised by the Reserve Bank to retain them, or in the case of sterling, he held a sterling account prior to July 8, 1947, or he is not domiciled in India and the funds do not represent the proceeds of an export.

### CAPITAL

The inward movement of capital is practically free, except when it is to form part of an investment requiring the prior approval of the Indian Government. Foreign investments once admitted are eligible for the same treatment as Indian enterprises receive. Repatriation of capital owned by persons residing in Sterling Area countries other than Pakistan, and by residents of Denmark, Norway, or Sweden, is authorised freely. Capital invested in approved projects after January 1, 1950 by residents of other countries, including capital appreciation on the original investment, may be repatriated at any time. The proceeds from liquidated foreign investments not eligible for repatriation are blocked (see section on Non-resident Accounts, above).

### DEVELOPMENTS IN EXCHANGE CONTROL

The main developments during the year in the sphere of exchange control were (1) the liberalisation (a) of the restrictions on travel abroad for business purposes, (b) of the releases of foreign exchange for educational purposes and (c) of the conditions for borrowings abroad by authorised dealers in India and (2) the introduction during the latter half of the year of National Defence Remittance Scheme, with import entitlement benefits primarily with a view to encouraging the flow of foreign exchange into the country through normal banking channels.

The scheme of issuing blanket permits for release of exchange to recognised export houses



set up for exploring new markets for non-traditional goods and whose average exports per annum were not less than Rs. 20 lakhs—which was introduced in July 1963 as an export promotion measure was extended in August 1965 to exporters of jute and tea whose annual average exports were not less than Rs. one crore and to exporters of other traditional items whose annual average exports exceeded Rs. 50 lakhs.

Beginning with August 1965, besides graduates with an Honours or Masters degree in Mathematics, B. Com. graduates with actuarial science were also permitted to remit fees for correspondence courses in actuarial science or for taking up examinations held in India by the Institute of Actuaries, London. This relaxation was extended in January 1966 to all candidates admitted for the permitted examinations. Beginning with February 1966, foreign exchange facilities were granted to a limited number of students for taking up specialised courses in selected branches of forestry provided they secured 60 per cent marks in the Diploma course in Forestry conducted by the Indian Forest College, Dehra Dun. From March 1966 onwards, foreign exchange facilities were also granted to candidates securing 60 per cent marks in their last medical examination and to M.B.B.S. degree holders having three years' experience for any regular graduate or post-graduate course at a medical college or institution abroad without insisting on the course being a specialised one.

A reference was made in the last Report to the imposition in October 1964 of a ceiling of Rs. 20 lakhs on short-term borrowings abroad by authorised dealers. On a review of this question in September 1965, authorised dealers were advised that loans and overdrafts from overseas branches or correspondents in excess of the limit would be permitted provided such borrowings were for financing their normal business operations in

India by purchasing rupee funds from the Reserve Bank. However, such borrowings could be repaid only when (a) the authorised dealer concerned had no outstanding borrowings either from the Reserve Bank or other banks in India and (b) the local inter-bank call money rate was less than the Treasury Bill rate for the week. The latter stipulation was withdrawn later. Prior approval of the Reserve Bank was required for each remittance in repayment of such loans and overdrafts.

With a view to encouraging the flow of foreign exchange into the country through the medium of authorised dealers, the Government of India introduced in October 1965 the National Defence Remittance Scheme. Under the scheme, Indian nationals receiving remittances from abroad in convertible currencies by way of gifts, remittances for family maintenance and transfer of capital without repatriation obligations were eligible for import licences of the value of 60 per cent of the rupee equivalent of the remittance received. The import licence was issued either to the recipient of the remittance or a party designated by him. The beneficiaries of such remittances would not be liable to income-tax thereon, nor would they be questioned by the income-tax authorities about the source of such funds. With effect from December 11, 1965, the benefits of the scheme were extended to all non-residents irrespective of nationality but subject to the condition that the proceeds of the remittance were credited to a "National Defence Remittance Scheme—'Special Account'" opened in their name with an authorised dealer in India. Although non-residents were not entitled to import licences, they are permitted to transfer the bank certificates issued by the authorised dealers in respect of the remittances, to any person, firm or company resident in India. In January 1966, the benefits under the scheme were again extended to Indian companies holding

foreign securities with the approval of the Reserve Bank and wishing to liquidate these holdings and repatriate the proceeds to India. Initially, the benefits under the scheme were to apply to inward remittances upto January 31, 1966, but this date was later extended twice first upto February 28, 1966 and then upto May 31, 1966.

Other important developments during the year were the following: (i) Following the outbreak of the Indo-Pakistan conflict all foreign exchange transactions with Pakistan were suspended in September 1965 and authorised dealers were instructed not to (a) operate on the non-resident accounts of Pakistani nationals, firms etc. without the prior approval of the Reserve Bank or (b) undertake any financing operations on behalf of Pakistani nationals, firms etc. (ii) Under advice from the Bank of England, following the removal of Rhodesia from the list of Scheduled Territories, all sterling accounts of residents of Rhodesia were designated as External Accounts with immediate effect in November 1965 and the authorised dealers were instructed accordingly. Later, in December 1965, import/export of all goods, whether directly or indirectly, into/from India from/to Rhodesia were banned by the Government of India. Further all applications for remittances to Rhodesia were to be referred to the Reserve Bank for prior approval. (iii) In December 1965, the Foreign Exchange Regulation Act (vii of 1947), together with all the rules and notifications issued thereunder, was extended to the Union Territories of Dadra and Nagar Haveli and (iv) With the introduction of the new Currency "Bahrain Dinar" in Bahrain, the Indian Currency circulating there was withdrawn. The facility for converting into sterling or otherwise the Indian coins circulating in the rest of Persian Gulf area was abolished in January 1966.

## MONEY SUPPLY

UNDER the impact of larger disbursements by Government, money supply with the public increased substantially in 1965-66 by Rs. 450 crores or by 11.0 per cent (to Rs. 4,530 crores) as compared to Rs. 328 crores or 8.7 per cent. in 1964-65. Although the largest increase (Rs. 450 crores) during the Third Plan was recorded in 1965-66, the highest rate of increase (13.4 per cent) was registered in 1963-64. Unlike 1964-65 when currency and deposit money contributed equally to the increase in money supply, the rise this year was predominantly in currency in circulation, which increased by Rs. 265 crores while deposit money increased by Rs. 185 crores.

As in the previous year, net bank credit to Government was the most important factor. The rise under this head (Rs. 488 crores) in fact exceeded the actual increase in money supply of Rs. 450 crores. The larger rise this year was due to higher Reserve Bank credit to Government—Rs. 371 crores as against Rs. 128 crores last year—mainly due to the sharp rise of Rs. 137 crores in loans and advances to State Governments as compared to Rs. 3 crores last year. The pace of expansion in net bank credit to the private sector during the year was slow as in the preceding year (net bank credit to private sector having increased by Rs. 80 crores in 1965-66, by Rs. 53 crores in 1964-65 and by Rs. 178 crores in 1963-64), reflecting the impact of the restrictive credit policy adopted by the monetary authorities as well as larger accretions to time deposits. The banks' advances and holdings of private securities which represent gross bank credit had shown a larger expansion (Rs. 288 crores) than last year (Rs. 247 crores); but there was, side by side, a larger increase in time deposits after adjusting for P.L. 480 and P.L. 665 deposits (Rs. 208 crores this year compared to Rs. 194 crores last year), with the result that the net rise in bank credit was of the order of Rs. 80 crores. Variations

in net foreign exchange assets exercised a contractionary influence on money supply (Rs. 24 crores) as in the previous year (Rs. 19 crores). Other factors representing mainly the net non-monetary liabilities of the Reserve Bank and the rest of the banking system exerted a contractionary influence of the order of Rs. 19 crores and Rs. 87 crores, respectively.

The contraction in money supply during the slack season of 1965 was of the order of Rs. 43 crores which compares with Rs. 33 crores in the previous slack season. The 1965-66 busy season, however, witnessed a phenomenal expansion (Rs. 480 crores) as compared to the previous season (Rs. 389 crores). During the 1965 slack season, net bank credit to the private sector contracted by Rs. 158 crores while net bank

credit to Government rose by Rs. 110 crores; in the busy season of 1965-66, net bank credit to the private sector had risen by Rs. 168 crores and to the Government by Rs. 411 crores.

For the Third Plan as a whole, the expansion in money supply worked out to Rs. 1,661 crores as compared to Rs. 704 crores in II Plan. Of the total monetary expansion, currency with the public rose by Rs. 936 crores and deposit money by Rs. 725 crores. Net Bank credit to the Government\* was the predominant influence on monetary expansion (Rs. 1,563 crores) in the Third Plan period, followed by net bank credit to the private sector (Rs. 398 crores); net foreign exchange assets, on the other hand, exerted a contractionary effect to the extent of Rs. 107 crores.

### VARIATION IN MONEY SUPPLY

(Crores of Rupees)

| Item                                                                       | 1963-64<br>(1) | 1964-65<br>(2) | 1965-66<br>(3) |
|----------------------------------------------------------------------------|----------------|----------------|----------------|
| 1. Currency with Public .. .. .                                            | + 226          | + 163          | + 265          |
| 2. Deposit Money .. .. .                                                   | + 210          | + 165          | + 185          |
| 3. Money Supply .. .. .                                                    | + 442          | + 328          | + 450          |
| <i>Factors Affecting Money Supply</i>                                      |                |                |                |
| A. Net Bank Credit to Government Sector*                                   | + 281          | + 268          | + 488          |
| B. Net Bank Credit to Private Sector*                                      | + 178          | + 53           | + 80           |
| C. Net Foreign Exchange Assets .. .. .                                     | + 35           | - 19           | - 24           |
| D. Government's Net Currency Liabilities .. .. .                           | + 20           | + 19           | + 12           |
| E. Net Non-Monetary Liabilities of the Banking System (Increase —) .. .. . | - 72           | + 7            | - 106          |

\* Adjusted for P.L. 480 and P.L. 665 deposits with banks in India other than the Reserve Bank of India.



## NATIONAL INCOME

ACCORDING to preliminary estimates, national income of India (at 1948-49 prices) for the year 1964-65 showed a rise of 7.7 per cent over the previous year. At constant (1948-49) prices, the preliminary estimate of national income, that is, net national output at factor cost, for 1964-65 is placed at Rs. 15,050 crores compared with Rs. 13,970 crores (revised) for 1963-64. At constant prices, the national income rose by about 70 per cent between 1950-51 and 1964-65.

The *per capita* national income (at constant prices) recorded a rise of 5.3 per cent from Rs. 301.1 in 1963-64 to Rs. 317.0 in 1964-65.

At current prices, the national income rose from Rs. 17,210 crores in 1963-64 to Rs. 20,010 in 1964-65, a rise of Rs. 2,800 crores. This increase was brought about largely by the agricultural sector, accounting for Rs. 2,100 crores. In the non-agricultural sector, mining, manufacturing

and small enterprises showed a rise of Rs. 270 crores; other services (comprising professions, Government services, domestic services and house property) of Rs. 300 crores, and commerce, transport and communications of Rs. 150 crores—an aggregate rise of Rs. 720 crores.

*Per capita* income at current prices rose from Rs. 370.9 in 1963-64 to Rs. 421.5 in 1964-65 the rise being due almost entirely to the rise in price.

The Table below indicates the trend of national income and per capita income since 1950-51 :

| Year                                                              | National Income                |                     |                                             | Per Capita Income        |                   |                                             |
|-------------------------------------------------------------------|--------------------------------|---------------------|---------------------------------------------|--------------------------|-------------------|---------------------------------------------|
|                                                                   | At current prices<br>Rs. abjas | At 1948-49 prices   |                                             | At current prices<br>Rs. | At 1948-49 prices |                                             |
|                                                                   |                                | Amount<br>Rs. abjas | Per cent<br>variation from<br>previous year |                          | Amount<br>Rs.     | Per cent<br>variation from<br>previous year |
| 1950-51 .. .. .                                                   | 95.3                           | 88.5                | —                                           | 266.5                    | 247.5             | —                                           |
| <i>First Plan</i>                                                 |                                |                     |                                             |                          |                   |                                             |
| 1951-52 .. .. .                                                   | 99.7                           | 91.0                | 2.8                                         | 274.2                    | 250.3             | 1.1                                         |
| 1952-53 .. .. .                                                   | 98.2                           | 94.6                | 4.0                                         | 265.4                    | 255.7             | 2.2                                         |
| 1953-54 .. .. .                                                   | 104.8                          | 100.3               | 6.0                                         | 278.1                    | 266.2             | 4.1                                         |
| 1954-55 .. .. .                                                   | 96.1                           | 102.8               | 2.5                                         | 250.3                    | 267.8             | 0.6                                         |
| 1955-56 .. .. .                                                   | 99.8                           | 104.8               | 1.9                                         | 255.0                    | 267.8             | 0.0                                         |
| Rise during First Plan                                            |                                |                     | 18.4                                        |                          |                   | 8.2                                         |
| Actual Target .. .. .                                             |                                |                     | 11.0                                        |                          |                   | 4.2                                         |
| <i>Second Plan</i>                                                |                                |                     |                                             |                          |                   |                                             |
| 1956-57 .. .. .                                                   | 113.1                          | 110.0               | 5.0                                         | 283.3                    | 275.6             | 2.9                                         |
| 1957-58 .. .. .                                                   | 113.9                          | 108.9               | — 1.0                                       | 279.6                    | 267.3             | — 3.0                                       |
| 1958-59 .. .. .                                                   | 126.0                          | 116.6               | 7.0                                         | 303.0                    | 280.1             | 4.8                                         |
| 1959-60 .. .. .                                                   | 129.5                          | 118.6               | 1.8                                         | 304.8                    | 279.2             | — 0.3                                       |
| 1960-61 .. .. .                                                   | 141.4                          | 127.3               | 7.3                                         | 325.7                    | 293.2             | 5.0                                         |
| Rise during Second Plan                                           |                                |                     | 21.5                                        |                          |                   | 9.5                                         |
| Actual Target .. .. .                                             |                                |                     | 25.0                                        |                          |                   | 18.0                                        |
| <i>Third Plan</i>                                                 |                                |                     |                                             |                          |                   |                                             |
| 1961-62 .. .. .                                                   | 148.0                          | 130.6               | 2.6                                         | 333.6                    | 294.3             | 0.4                                         |
| 1962-63 .. .. .                                                   | 154.0                          | 133.1               | 1.9                                         | 339.4                    | 293.4             | — 0.3                                       |
| 1963-64 .. .. .                                                   | 172.1                          | 139.7               | 5.0                                         | 370.9                    | 301.1             | 2.6                                         |
| 1964-65 .. .. .                                                   | 200.1†                         | 150.5†              | 7.7                                         | 421.5†                   | 317.0†            | 5.3                                         |
| 1965-66 .. .. .                                                   | N.A.                           | 144.9*              | — 3.7*                                      | N.A.                     | 298.3*            | — 5.9*                                      |
| Rise during Third Plan                                            |                                |                     | 13.8                                        |                          |                   | 1.7                                         |
| Actual Target .. .. .                                             |                                |                     | 30.0                                        |                          |                   | 17.0                                        |
| Rise during three plans i.e., since 1950-51                       |                                |                     | 63.7                                        |                          |                   | 20.5                                        |
| Compound Annual Growth Rate per cent : 1950-51 to 1965-66 .. .. . |                                |                     | 3.3                                         |                          |                   | 1.3                                         |

† Provisional

\* C.S.O.'s Quick Estimate

### STRUCTURE OF NATIONAL INCOME\*

The following Table indicates the structure of national income by industrial origin during the years 1950-51 and 1964-65 :

|                                                                  | 1950-51  |                     | 1964-65  |                     |
|------------------------------------------------------------------|----------|---------------------|----------|---------------------|
|                                                                  | Rs. Abja | Percentage to total | Rs. Abja | Percentage to total |
|                                                                  |          |                     |          |                     |
|                                                                  | (1)      | (2)                 | (3)      | (4)                 |
| <b>AGRICULTURE</b>                                               |          |                     |          |                     |
| 1. Agriculture, animal husbandry & ancillary activities .. .. .  | 47.8     | 50.2                | 100.0    | 50.0                |
| 2. Forestry .. .. .                                              | 0.7      | 0.7                 | 1.5      | 0.7                 |
| 3. Fishery .. .. .                                               | 0.4      | 0.4                 | 1.2      | 0.6                 |
| 4. Total of agriculture .. .. .                                  | 48.9     | 51.3                | 102.7    | 51.3                |
| <b>MINING, MANUFACTURING AND SMALL ENTERPRISES</b>               |          |                     |          |                     |
| 5. Mining .. .. .                                                | 0.7      | 0.7                 | 2.2      | 1.1                 |
| 6. Factory establishments .. .. .                                | 5.5      | 5.8                 | 20.7     | 10.3                |
| 7. Small enterprises .. .. .                                     | 9.1      | 9.6                 | 13.1     | 6.6                 |
| 8. Total mining, manufacturing and small enterprises .. .. .     | 15.3     | 16.1                | 36.0     | 18.0                |
| <b>COMMERCE, TRANSPORT &amp; COMMUNICATIONS</b>                  |          |                     |          |                     |
| 9. Communications (post, telegraph and telephone) .. .. .        | 0.4      | 0.4                 | 1.1      | 0.6                 |
| 10. Railways .. .. .                                             | 1.8      | 1.9                 | 5.2      | 2.6                 |
| 11. Organised banking and insurance .. .. .                      | 0.7      | 0.7                 | 2.8      | 1.4                 |
| 12. Other commerce and transport .. .. .                         | 14.0     | 14.7                | 20.5     | 10.2                |
| 13. Total of commerce, transport and communications .. .. .      | 16.9     | 17.7                | 29.6     | 14.8                |
| <b>OTHER SERVICES</b>                                            |          |                     |          |                     |
| 14. Professions and liberal arts .. .. .                         | 4.7      | 4.9                 | 9.6      | 4.8                 |
| 15. Government services (administration) .. .. .                 | 4.3      | 4.5                 | 14.8     | 7.4                 |
| 16. Domestic service .. .. .                                     | 1.3      | 1.4                 | 2.5      | 1.2                 |
| 17. House property .. .. .                                       | 4.1      | 4.3                 | 6.0      | 3.0                 |
| 18. Total of other services .. .. .                              | 14.4     | 15.1                | 32.9     | 16.4                |
| 19. Net domestic product at factor cost .. .. .                  | 95.5     | 100.2               | 201.2    | 100.5               |
| 20. Net earned income from abroad .. .. .                        | — 0.2    | — 0.2               | — 1.1    | — 0.5               |
| 21. NET NATIONAL OUTPUT AT FACTOR COST — NATIONAL INCOME .. .. . | 95.3     | 100.0               | 200.1    | 100.0               |

\*The national income of India in real terms is estimated to have recorded a fall of 3.7 per cent. during 1965-66 as revealed by the "quick" estimates of the national income prepared by the Central Statistical Organisation on the basis of the trends disclosed by current data.



According to the quick estimates of national income for 1965-66 recently released by the Central Statistical Organisation, the national income in India in real terms is estimated to have recorded a fall of 3.7 per cent as against a rise of 7.7 per cent in 1964-65.

The C.S.O. quick estimates are based on partial data. Of the overall fall, about 5.8 per cent is contributed by the agriculture sector of the economy.

On the basis of the C.S.O. estimate, the average annual increase in national income during the Third Plan period was 2.7 per cent.

The decline of per capita income in real terms is estimated in the C.S.O. study at 5.9 per cent for 1965-66. The average annual increase during the Third Plan is of the order 0.4 per cent, according to the C.S.O. estimates.

The contributions of individual sectors to overall percentage change in real income during 1965-66 is shown in the Table below :

| Sector                            | Percentage contribution to total national income in 1964-65 | Percentage 1965-66 over 1964-65 | Contribution to the overall percentage change in 1965-66 over 1964-65 |
|-----------------------------------|-------------------------------------------------------------|---------------------------------|-----------------------------------------------------------------------|
| Agriculture (proper)              | 36.9                                                        | 15.7                            | - 5.8                                                                 |
| Mining and factory establishments | 10.4                                                        | 5.7                             | 0.6                                                                   |
| Communications                    | 0.6                                                         | 10.7                            | 0.1                                                                   |
| Railways                          | 2.6                                                         | 9.8                             | 0.2                                                                   |
| Organised banking and insurance   | 1.1                                                         | 5.8                             | 0.1                                                                   |
| Other commerce and transport      | 15.5                                                        | - 2.0                           | - 0.3                                                                 |
| Others                            | 32.7                                                        | 4.2                             | 1.4                                                                   |
| All sectors                       | 100.0                                                       | - 3.7                           | - 3.7                                                                 |

#### CHANGES SINCE 1950-51

Changes in the contributions of various sectors and sub-sectors of the economy to the total national income (at current prices) are depicted in the table below :

|                                                           | 1950-51 | 1955-56 | 1960-61 | 1961-62 | 1962-63 | 1963-64 | 1964-65 (Previsional) |
|-----------------------------------------------------------|---------|---------|---------|---------|---------|---------|-----------------------|
| <b>AGRICULTURE</b>                                        |         |         |         |         |         |         |                       |
| 1. Agriculture, animal husbandry and ancillary activities | 43.9    | 66.8    | 67.7    | 67.9    | 79.4    | 100.0   | 100.0                 |
| 2. Forestry                                               | 0.7     | 1.1     | 1.2     | 1.3     | 1.4     | 1.5     | 1.5                   |
| 3. Fishery                                                | 0.6     | 1.0     | 0.7     | 0.8     | 0.7     | 1.2     | 1.2                   |
| 4. Total of agriculture                                   | 45.2    | 68.9    | 69.6    | 70.0    | 81.7    | 102.7   | 102.7                 |
| <b>MINING, MANUFACTURING AND SMALL ENTERPRISES</b>        |         |         |         |         |         |         |                       |
| 5. Mining                                                 | 1.0     | 1.6     | 1.7     | 1.9     | 2.3     | 2.3     | 2.3                   |
| 6. Factory establishments                                 | 7.8     | 13.2    | 15.4    | 16.8    | 18.5    | 26.7    | 26.7                  |
| 7. Small enterprises                                      | 9.7     | 11.2    | 11.7    | 12.1    | 12.5    | 13.1    | 13.1                  |
| 8. Total of mining, manufacturing and small enterprises   | 18.5    | 26.0    | 28.8    | 30.6    | 33.3    | 36.0    | 36.0                  |
| <b>COMMERCE, TRANSPORT &amp; COMMUNICATIONS</b>           |         |         |         |         |         |         |                       |
| 9. Communications (post, telegraph and telephone)         | 0.5     | 0.6     | 0.7     | 0.8     | 0.9     | 1.1     | 1.1                   |
| 10. Railways                                              | 2.5     | 3.6     | 3.8     | 4.6     | 5.1     | 5.2     | 5.2                   |
| 11. Organised banking and insurance                       | 0.9     | 1.6     | 1.9     | 2.1     | 2.4     | 2.8     | 2.8                   |
| 12. Other commerce and transport                          | 14.9    | 17.6    | 18.4    | 19.0    | 19.7    | 20.5    | 20.5                  |
| 13. Total of commerce, transport and communications       | 18.8    | 23.4    | 24.8    | 26.5    | 28.1    | 29.6    | 29.6                  |
| <b>OTHER SERVICES</b>                                     |         |         |         |         |         |         |                       |
| 14. Professions and liberal arts                          | 5.6     | 7.4     | 7.9     | 8.4     | 9.0     | 9.6     | 9.6                   |
| 15. Government services (administration)                  | 5.7     | 9.0     | 10.0    | 11.3    | 12.8    | 14.0    | 14.0                  |
| 16. Domestic service                                      | 1.4     | 1.9     | 2.1     | 2.2     | 2.3     | 2.5     | 2.5                   |
| 17. House property                                        | 4.6     | 5.3     | 5.5     | 5.6     | 5.8     | 6.0     | 6.0                   |
| 18. Total of other services                               | 17.3    | 23.6    | 25.5    | 27.5    | 29.9    | 32.0    | 32.0                  |
| 19. Net domestic product                                  | 99.8    | 141.9   | 148.7   | 154.8   | 173.0   | 201.2   | 201.2                 |
| 20. Net earned income from abroad                         | 0.0     | - 0.5   | - 0.7   | - 0.8   | - 0.9   | - 1.0   | - 1.0                 |
| 21. NET NATIONAL OUTPUT AT FACTOR COST - NATIONAL INCOME  | 99.8    | 141.4   | 148.0   | 154.0   | 172.1   | 200.1   | 200.1                 |

#### INCOME DISTRIBUTION COMMITTEE

The Planning Commission has constituted a Committee on Income Distribution and Levels of Living. The Committee's terms of reference are: To review changes in levels of living during the First and Second Five Year Plans; To study recent trends in the distribution of income and wealth and, in particular, to ascertain the extent

to which the operation of the economic system has resulted in concentration of wealth and means of production.

Professor P. C. Mahalanobis (Honorary Statistical Adviser to the Government of India) is the Chairman of the Committee.

The Committee's enquiry is being conducted at the expert level, its primary object being to

ascertain such statistical and economic data as may be gathered at present, to identify the gaps in the existing information and to suggest steps for removing these deficiencies in the future. Part I of the Committee's report has already been published and Part II is expected to be published shortly.



## CHEMICAL & PHARMACEUTICAL INDUSTRY

FOR purposes of industrial production, chemicals fall easily into one of two major groups: (a) Heavy Chemicals; and (b) Fine Chemicals.

According to the latest data, there are over 474 factories with a productive capital of nearly Rs. 306 crores and providing employment for about 1,29,730 workers.

66. The main suppliers are W. Germany, U.K., U.S.A., Japan, Hungary and U.S.S.R.

Some exports are also taking place. India exported sulphuric acid worth Rs. 132,295 in 1960-61, Rs. 78,559 in 1961-62, Rs. 1.40 lakhs in 1962-63, Rs. 1,90,281 in 1963-64 and Rs. 84,054 in 1964-65, Rs. 1,90,281 in 1963-64, Rs. 84,054 in 1964-65 and Rs. 71,405 in 1965-66.

### SULPHURIC ACID

The installed capacity and production of sulphuric acid since 1958 are shown below :  
(Metric tons) (Monthly averages or calendar months)

|      |    |    |    |    |    |    |    |    |    | Installed capacity | Production |
|------|----|----|----|----|----|----|----|----|----|--------------------|------------|
| 1958 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 24,560             | 19,185     |
| 1959 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 31,673             | 24,738     |
| 1960 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 39,622             | 29,495     |
| 1961 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 46,989             | 35,208     |
| 1962 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 58,189             | 39,122     |
| 1963 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 68,410             | 47,346     |
| 1964 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 84,263             | 56,553     |
| 1965 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 91,590             | 56,465     |

The Fourth Plan has set a target of 2.4 million tons of sulphuric acid. The following table shows the programme of development for sulphuric acid during the five year plan.

| (in '000 tonnes) |            |            |                          |            |                     |            |
|------------------|------------|------------|--------------------------|------------|---------------------|------------|
| 1950-51          | 1955-56    | 1960-61    | Estimated actual 1965-66 |            | Targets for 1970-71 |            |
| Production       | Production | Production | Capacity                 | Production | Capacity            | Production |
| 101              | 164        | 361        | 1,181                    | 664        | 2,600               | 2,400      |

Orders have been placed with a British Firm for setting up, on a turnkey job, a pyrites based sulphuric acid plant with a capacity of 400 tonnes per day. The plant is proposed to be located at Durgapur.

Whereas the production of sulphuric acid has so far been based on sulphur, a part of the capacity set up in the Third Plan period is linked with by-product smelter gases (zinc and

copper smelters) and with pyrites from the Amjor Deposits in Bihar. The scheme for the mining of 2,40,000 tonnes of pyrites and the establishment of a 400 tonnes per day sulphuric acid plant at Sindri are under implementation.

India imported sulphuric acid of the value of Rs. 21,034 in 1960-61, Rs. 68,144 in 1961-62, Rs. 51,002 in 1962-63, Rs. 90,165 in 1963-64, Rs. 1,21,690 in 1964-65 and Rs. 47,867 in 1965-

### ALKALI INDUSTRY

The alkali industry comprises the manufacture of soda ash and caustic soda, sodium bicarbonate, bleaching powder, benzene hexachloride, liquid chlorine and zinc chloride.

At the beginning of the Third Plan, production of soda ash was 1,48,000 tonnes. The estimated actual production for 1965-66 is 3,31,000 tonnes. The target for the Fourth Plan is 6,00,000 tonnes.

The trend of production of soda ash in metric tonnes is as under :—

1956 : 85,596 ; 1960 : 1,45,284 ; 1961 : 1,76,640 ; 1962 : 2,22,576 ; 1963 : 2,66,756 ; 1964 : 2,82,408 ; 1965 : 3,21,972.

The figures of imports of soda ash during the last few years are given below :

| Year    | Q     | V      |
|---------|-------|--------|
| 1960-61 | 99.65 | 180.22 |
| 1961-62 | 33.99 | 67.41  |
| 1962-63 | 40.54 | 74.25  |
| 1963-64 | 23.11 | 41.57  |
| 1964-65 | 33.47 | 60.01  |
| 1965-66 | 35.60 | 78.65  |

Q : Quantity in million kilograms.

V : Value in Rs. lakhs.

The following table summarises the programme of development of the soda ash industry :—

| 1955-56 | 1960-61 | Estimated actual for 1965-66 |            | Targets for 1970-71 |            |
|---------|---------|------------------------------|------------|---------------------|------------|
|         |         | Capacity                     | Production | Capacity            | Production |
| 81      | 148     | 363                          | 331        | 700                 | 600        |

In 1965, the production in tonnes of hydrogen peroxide was 2,472 as against 2,700 in the previous year. During 1965-66, India imported 2,895 kilograms of hydrogen peroxide valued at Rs. 15,526. U.S.A. and Netherlands were the principal suppliers.

**Caustic Soda.**—There were at the end of 1965, 25 units manufacturing caustic soda.

Actual indigenous production of caustic soda and the associated chemicals has been as under :—

| ('000 tonnes) |    |              |                 |                  |  |  |  |  |  |
|---------------|----|--------------|-----------------|------------------|--|--|--|--|--|
| Year          |    | Caustic Soda | Liquid chlorine | Bleaching powder |  |  |  |  |  |
| 1960          | .. | 98,340       | 31,704          | 5,928            |  |  |  |  |  |
| 1961          | .. | 1,19,856     | 33,924          | 7,128            |  |  |  |  |  |
| 1962          | .. | 1,26,624     | 37,860          | 6,720            |  |  |  |  |  |
| 1963          | .. | 1,52,280     | 44,148          | 6,972            |  |  |  |  |  |
| 1964          | .. | 1,84,032     | 50,580          | 7,932            |  |  |  |  |  |
| 1965          | .. | 2,14,788     | 51,012          | 7,356            |  |  |  |  |  |

Imports of caustic soda were: 1960-61: 38.75 million kgs.; 1961-62: 26.80 million kgs.; 1962-63: 86.98 million kgs.; 1963-64: 65.25 million kgs.; 1964-65: 67.12 million kgs.; 1965-66: 74.21 million Kgs.

During the Third Five Year Plan, the installed capacity of the industry rose from 1,26,000 tonnes in 1960-61 to 2,77,000 tonnes in 1965-66, and actual production from 99,000 tonnes to 2,18,000 tonnes. By the end of the Fourth Plan, the production is likely to reach 5,00,000 tonnes.

The table below summarises the programme of caustic soda industry during the Fourth Plan:

| ('000 Tonnes)      |          |          |  |
|--------------------|----------|----------|--|
| Estimated actual   |          |          |  |
|                    | 1965-66  | 1970-71  |  |
| Installed capacity | 2,77,000 | 6,00,000 |  |
| Actual production  | 2,18,000 | 5,00,000 |  |



## MISCELLANEOUS CHEMICALS

The progress of production of important miscellaneous chemicals during the period 1961 to 1965 is given below.

| Name of Product          | (metric tons) |        |        |        |        |
|--------------------------|---------------|--------|--------|--------|--------|
|                          | 1961          | 1962   | 1963   | 1964   | 1965   |
| Bleaching Powder .. ..   | 7,128         | 8,720  | 6,972  | 7,932  | 7,356  |
| Bichromates .. .. .      | 5,244         | 7,044  | 6,924  | 6,984  | 6,852  |
| Copper Sulphate .. ..    | 4,344         | 3,888  | 3,672  | 4,764  | 3,252  |
| Sodium Sulphide .. ..    | 2,604         | 2,292  | 2,928  | 3,132  | 3,432  |
| Hydrogen Peroxide .. ..  | 1,620         | 1,812  | 2,280  | 2,700  | 2,472  |
| Potassium Chlorate .. .. | 3,780         | 4,116  | 4,344  | 3,672  | 3,804  |
| Sodium Bicarbonate .. .. | 8,676         | 10,680 | 7,824  | 10,752 | 12,804 |
| Hydrochloric Acid .. ..  | 15,384        | 15,732 | 17,028 | 23,136 | 32,268 |
| Nitric Acid .. .. .      | 5,844         | 7,032  | 8,280  | 11,688 | 15,348 |
| Sodium Sulphate .. ..    | 21,564        | 23,004 | 28,908 | 32,976 | 36,708 |
| Sodium Aluminate .. ..   | 408           | 727    | 905    | 965    | 702    |
| Nickel Sulphate .. ..    | 32            | 112    | 326    | 497    | 448    |

The production of hydro-sulphite of soda, an important chemical for the textile industry, which has now to be imported at the cost of Rs. 1 crore per year, began for the first time in 1958. Two units which went into production had a capacity of 2,300 tonnes at the end of 1961. In 1965, installed capacity and production in tonnes stood at 3,852 and 4,512 respectively.

## FERTILISERS

## NITROGENOUS FERTILISERS

The total installed capacity of nitrogenous fertiliser factories as on 30-9-1965 was as follows: (metric tonnes of nutrient per annum).

|                                 |                |
|---------------------------------|----------------|
| Sindri .. .. .                  | 120,040        |
| FACT .. .. .                    | 28,320         |
| Mysore .. .. .                  | 1,380          |
| By-product ammonium sulphate .. | 14,840         |
| Sahu Chemicals .. .. .          | 10,160         |
| Nangal .. .. .                  | 79,540         |
| Rourkela .. .. .                | 60,880         |
| E.I.D.-Parry .. .. .            | 8,800          |
| <b>TOTAL .. .. .</b>            | <b>323,960</b> |

Source: Fertiliser Statistics, 1964-65.

The year-wise production of nitrogenous fertilisers and the capacity at the beginning of each year are as under:

| (Tonnes)   |          |            |
|------------|----------|------------|
| Year       | Capacity | Production |
| 1960 .. .. | 93,576   | 80,100     |
| 1961 .. .. | 164,808  | 108,336    |
| 1962 .. .. | 175,104  | 114,216    |
| 1963 .. .. | 193,968  | 123,396    |
| 1964 .. .. | 193,968  | 125,796    |
| 1965 .. .. | 399,828  | 243,000    |

Import of nitrogenous fertilisers on 1965-66 amounted to 10,41,672 tonnes and the import from U.S.A. was 5,96,144 tonnes.

*Development programme in the Third Plan:* The estimated actual production of nitrogenous fertilisers 1965-66 was, 233,000 tonnes. Apart from expansion of capacity in the existing plants, the Third Plan envisaged the setting up of three new units in the public sector to be located at Trombay (Maharashtra), Kamrup (Assam) and Gorakhpur (Uttar Pradesh).

*Public Sector projects:* Trombay fertiliser project will have a capacity of nearly 90,000 tons of nitrogen and 45,000 tons of phosphate per year. The factory will produce 3,30,000 tons of nitrophosphate. Total cost of the project is estimated to be Rs. 33.40 crores. It will make use of refinery gases and naphtha.

*Assam fertiliser project:* The factory will be located at Kamrup in Assam. The overall capacity of the plant will be 32,500 tons of nitrogen based on the production of 50,000 tons of urea and 50,000 tons of ammonium sulphate by the acid neutralisation process, the acid being produced from imported sulphur.

*Gorakhpur fertiliser project:* The end-product of the factory would be urea by the total recycle process. The capacity of the factory would be 80,000 tons.

In addition to the above public sector projects, there is a scheme for further expansion of Messrs. Fertilisers and Chemicals, Travancore, by 30,000 tons of nitrogen to manufacture ammonium sulphate/ammonium phosphate and ammonium chloride.

Private sector schemes include Kothagudium Fertiliser Project, Visakhapatnam Fertiliser Project, Madhya Pradesh Fertiliser Project, and Rajasthan Fertiliser Project. Besides, private enterprise in partnership with the West Bengal Government will set up a fertiliser factory at Durgapur with a capacity of 58,000 tons of nitrogen. In collaboration with private sector, the Government of Gujarat proposes to put up a factory with a capacity of 96,000 tons of nitrogen.

## FOURTH PLAN

The target for nitrogenous fertilisers in the Fourth Plan is 2.4 million tonnes of capacity and

2 million tonnes of production. This is proposed to be achieved by the expansion of some of the projects undertaken during the Third Plan and the three projects taken for implementation at Durgapur, Cochin & Madras.

The following table shows the estimated year-wise requirements of nitrogenous fertilisers in the Fourth Plan.

| Year          |    |    |    |    | Requirement ('000 tonnes) |
|---------------|----|----|----|----|---------------------------|
| 1966-67 .. .. | .. | .. | .. | .. | 1,000                     |
| 1967-68 .. .. | .. | .. | .. | .. | 1,350                     |
| 1968-69 .. .. | .. | .. | .. | .. | 1,750                     |
| 1969-70 .. .. | .. | .. | .. | .. | 2,050                     |
| 1970-71 .. .. | .. | .. | .. | .. | 2,400                     |

## PHOSPHATIC FERTILISERS

The progress made by the superphosphate industry is given below:

(Figures in tonnes of single superphosphate)

| Capacity |          | Production |  |
|----------|----------|------------|--|
| 1960 ..  | 57,276   | 53,028     |  |
| 1961 ..  | 70,740   | 62,040     |  |
| 1962 ..  | 1,06,296 | 74,616     |  |
| 1963 ..  | 1,25,088 | 96,672     |  |
| 1964 ..  | 1,41,672 | 117,948    |  |
| 1965 ..  | 1,47,480 | 1,14,924   |  |

Imported raw materials, rock phosphate and sulphur are used for the manufacture of single superphosphate. The following are the quantities and value of imported rock phosphate during the last few years:

| Quantity ('000 tons) |       | Value (Rs. crores) |  |
|----------------------|-------|--------------------|--|
| 1961-62 .. ..        | 253.9 | 2.29               |  |
| 1962-63 .. ..        | 305.9 | 2.59               |  |
| 1963-64 .. ..        | 336.8 | 2.76               |  |
| 1964-65 .. ..        | 426.3 | 3.74               |  |
| 1965-66 .. ..        | 565.7 | 5.56               |  |

*Potassic Fertilisers:* No systematic attempt has been made to develop the manufacture of potassic fertilisers in India. It is produced indigenously in the small scale sector and the annual production is estimated to be around 2,000 tons as muriate of potash. The figures of imports of potassic fertilisers during the last few years:

Q = Quantity in tonnes.  
V = Value in Rs. lakhs.

|                    | 1962-63 |       | 1963-64 |       | 1964-65 |       | 1965-66 |      |
|--------------------|---------|-------|---------|-------|---------|-------|---------|------|
|                    | Q       | V     | Q       | V     | Q       | V     | Q       | V    |
| Muriate of Potash  | 77,891  | 193.6 | 70,802  | 169.0 | 76,524  | 178.6 | 21,932  | 56.7 |
| Sulphate of Potash | 3,265   | 10.5  | 4,281   | 12.9  | 10,240  | 32.3  | 6,481   | 21.6 |



The main supplying countries are East Germany, West Germany and France.

Fourth Plan requirements of potassic fertilisers in lakh tonnes are given below: 1966-67—2.0; 1967-68—3.0; 1968-69—4.5; 1969-70—5.5; 1970-71—7.0. From the present trend it appears that the requirement would have to be met mainly by imports.

By the end of the Third Plan, the estimated actual capacity and production of phosphatic fertilisers were 2,30,000 and 1,11,000 tonnes. The Fourth Plan envisages a target of 10,00,000 tonnes of capacity and production.

There are at present eight units in West Bengal and Bihar with a rated capacity of about 425,900 tons of ammonium sulphate per annum. The Sindri factory went into production in November 1951.

The production of ammonium sulphate in 1961 was 79,080 tonnes, in 1964 88,512 tonnes and in 1965 82,944 tonnes.

In spite of the full utilisation of the capacity of the Sindri Factory, it has been necessary to

import large quantities of nitrogenous fertilizers because of increasing demand. India imported Rs. 10.67 crores worth of fertilisers in 1960-61, Rs. 11.89 crores in 1961-62, Rs. 27.26 crores in 1962-63, Rs. 24.6 crores in 1963-64; Rs. 20.5 crores in 1964-65, and Rs. 31.80 crores in 1965-66.

Imports of ammonium sulphate were: 1960-61: 25,278 tonnes; 1961-62: 242,066 tonnes; 1962-63: 573,292 tonnes; 1963-64: 451,865 tonnes; 1964-65: 453,140 tonnes, 1965-66: 839,860 tonnes.

| Chemical                      | Production |        |        |        |        | Main uses                                   |
|-------------------------------|------------|--------|--------|--------|--------|---------------------------------------------|
|                               | 1961       | 1962   | 1963   | 1964   | 1965   |                                             |
| Acetic acid (thousand kgs.).. | 3,660      | 5,258  | 7,488  | 7,068  | 7,932  | Rayon, white lead, acetates, dyeing, rubber |
| Acetone (tonnes) .. ..        | 756        | 540    | 900    | 624    | 816    | Solvent explosives                          |
| Benzene (thousand litres) ..  | 8,220      | 10,284 | 21,168 | 20,040 | 24,109 | Solvent                                     |

The Government is planning to provide one fertiliser factory for each State, though the new plants would be smaller than that at Sindri or Nangal, the cost being about Rs. 5 crores, as against Rs. 25 crores for the existing factories and those already approved.

#### FINE CHEMICALS

The term "fine chemicals" is applied usually to substances such as photographic materials, drugs and pharmaceutical products, paints, pigments and varnishes, and dyestuffs. All the figures given below are in tons per annum except where otherwise stated.

The average annual demand has been estimated at 60 tons for calcium lactate, 80 tons for iron-ammonium citrate, 200 tons for potassium citrate and 50 tons for sodium citrate. Government has, on the Board's recommendation, converted the 36 per cent. standard and 26 per cent. preferential revenue duty on calcium lactate into a protective duty.

Production of bromine and bromides at one of the alkali works has been attempted and an annual output of 144 thousand kgs. bromine, and 144 thousand kgs. bromide has been recorded. The total installed capacity of bromides in 1964 was 456 thousand kgs. and the actual production was 144 thousand kgs. as compared to 276 thousand kgs. in 1963. In 1965, production of bromide and bromine was 12 thousand kgs. and 192 thousand kgs. respectively.

Coal, tar and wood distillation products are not sufficiently exploited to manufacture fine chemicals and even the war-time production of methanol and formaldehyde has been recently curtailed. Synthetic fine chemicals are yet to be turned out in India on a commercial scale.

**Photographic Materials.**—The basic chemical required for the photographic industry are: (i) gelatin, silver halides and sensitizers in the coating of film, plate and paper base, and (ii) hypo-sodium sulphite metal, hydroquinone and chrome alum in the processing stages.

Borax, boric acid, acetic acid and metal and photographic-grade sodium sulphite are still imported. The capacity of sodium sulphite in 1960 was 856 tonnes and the production was 750 tonnes. There are four units producing sodium sulphite. Their production in 1961 amounted to 678 tonnes. The production for 1963 was 771 tonnes against 618 tonnes in 1962. The installed capacity stood at 870 tonnes in 1965; and production was 900

tonnes as against 7,417 tonnes in 1964. Production capacity of 30 tons for potash chrome alum has been established.

Pre-war imports of raw film base into India were enormous, the film industry alone consuming some 80 million ft. per annum. Hindustan Photo Films Manufacturing Co., Ltd., was incorporated in Nov. 1960, with an authorized capital of Rupees three crores to implement the project for the manufacture of raw films, photographic films, X-ray films and other sensitized materials in collaboration with Messrs. Ets Banchet & Co., France.

#### PAINTS AND VARNISHES

There are at least 200 factories manufacturing paints and varnishes, but nearly 150 of them are very small in size. The bigger ones are concentrated in Bombay and Calcutta. Eighteen units with a capacity of 36,360 tons are in Calcutta, and 16 with an annual capacity of 18,360 tons are in Bombay. Manufacture of ship bottom paints has been commenced by a unit in Calcutta. Another unit in Bombay has been allowed technical collaboration for marine paints.

The annual national loss due to corrosion of iron and steel is estimated at Rs. 60 crores. The prevention of corrosion occupies prime importance where the valuable and costly plants are concerned.

A wide variety of products including different kinds of paints, varnishes, enamels, lacquers, and other types of surface coating materials are

manufactured by the Industry which uses mainly indigenous and some imported raw materials. The important raw materials used are zinc oxide, white lead, titanium dioxide, red lead, yellow and green chrome pigments, carbon black, linseed oil, etc. The industry contributes substantially to the national exchequer in the form of taxes, excise duty, customs duty, etc.

The capacity of the paints, varnishes and enamels industry has recently been reassessed by the Development Wing of the Ministry of Industry at about 85,000 tons. The State-wise distribution of the reassessed capacity is as follows:

| State               | No. of factories | Annual capacity (tons) |
|---------------------|------------------|------------------------|
| Maharashtra .. ..   | 23               | 34,000                 |
| West Bengal .. ..   | 19               | 39,500                 |
| Uttar Pradesh .. .. | 5                | 8,100                  |
| Madras .. ..        | 3                | 2,000                  |
| Delhi .. ..         | 2                | 1,000                  |
| Andhra Pradesh ..   | 1                | 300                    |
| <b>TOTAL .. ..</b>  | <b>53</b>        | <b>84,900</b>          |

The production of paints, varnishes, zinc oxide, white lead, red lead and nitrocellulose lacquers including ancillaries from 1961 onwards is given below:

| Year      | Paints & Varnishes<br>(a) | White*<br>Lead<br>(b) | Zinc<br>Oxide<br>(c) | Red<br>Lead<br>(d) | Nitrocel-<br>lulose<br>Lacquers<br>(e) |
|-----------|---------------------------|-----------------------|----------------------|--------------------|----------------------------------------|
| 1961.. .. | 4,924                     | 902                   | 662                  | 287                | 148                                    |
| 1962.. .. | 5,450                     | 1,050                 | 865                  | 436                | 147                                    |
| 1963.. .. | 6,197                     | 1,096                 | 890                  | 387                | 164                                    |
| 1964.. .. | 6,314                     | 899                   | 795                  | 341                | 181                                    |
| 1965.. .. | 5,974                     | 767                   | 785                  | 193                | 179                                    |

Note: Figures are monthly averages.

(a) Thousand kg. (b) Tonnes. (c) Thousand Litres. \* Annual production.



Manufacture of new products like super-synthetic enamels for coating of copper wire, finishes for bakelite, luminous paints, anti-pest finishes, cold curved epikote finishes, hot dip protective coatings, etc. was taken during the Second Plan period.

There has been a marked improvement in exports of Indian paints to Middle East and African countries. Exports of pigments, paints, varnishes and related materials in 1965-66 amounted to Rs. 72 lakhs as against Rs. 33 lakhs in 1964-65.

## DRUGS AND PHARMACEUTICALS

Drugs and pharmaceuticals cover a large variety of products from simple extracts of vegetable drugs and glandular preparations to highly complex synthetic drugs and antibiotics.

The pharmaceutical industry in India can be said to have registered phenomenal growth. In the sphere of exports it has made a fair beginning despite severe world competition. The Pharmaceutical Enquiry Committee in 1954 assessed the capital investment at 23.64 crores. There are nearly 2,800 production units producing pharmaceuticals and drugs, licensed under the Drugs Act. Out of these, only 125 large-scale units are licensed under the Industrial Development and Regulation Act.

Annual exports amount to Rs. 8.2 million which are progressively increasing. Dependence on imported chemicals and substances has also progressively fallen though the volume of finished goods has rapidly increased, thus keeping foreign exchange expenditure to the minimum. The following are the principal fields in which progress has been remarkable: Penicillin, Streptomycin and Dihydrostreptomycin, Tetracycline, Chloramphenicol, synthetic drugs, vitamins, synthetic hormones, glandular products and vaccines and sera.

Most manufacturers in the organised sector have collaboration arrangements with well-known pharmaceutical firms in England, America, Switzerland, Germany, Italy, the U.S.S.R., etc. This collaboration is not only financial, but also extends to the scientific, technological, and training fields. The research findings and the technological know-how of these foreign firms are freely available to their Indian counterparts.

The total capital investment in this sector is about Rs. 560 million, out of which Rs. 174 million represents investment of foreign capital. These units employ about 40,000 workers, out of whom about 4,000 are technically trained. The products they manufacture are equal in quality and purity to those manufactured in best advanced countries of the world.

By the end of 1965-66, the estimated actual output of drugs is placed at Rs. 150 crores. The target for the Fourth Plan is Rs. 250 crores.

### Developments in the public sector :

The Third Plan visualised one big manufacturing unit in the public sector, viz., the Antibiotic Factory at Rishikesh under Russian collaboration. It will manufacture 300 tons of streptomycin sulphate, 140 M.M.U. penicillin, chlorotetracycline and other antibiotic drugs every year. Costing Rs. 22 crores, this project will save foreign exchange of Rs. 3 crores a year and is expected to earn an annual revenue of Rs. 25 crores. This factory will employ over 4,000 skilled and unskilled workers. Four insecticide and pesticides factories are already licensed in Bihar. These, costing about Rs. 20 lakhs, will be set up at Ranchi, Bhagalpur, Muzaffarpur and Patna. The Government of India has also approved of the scheme of Hindustan Antibiotics Ltd., Pimpri for setting up the plant for the manufacture of hamycin.

In 1965-66, India exported medicinal and pharmaceutical products worth Rs. 264 lakhs as against Rs. 208 lakhs in 1964-65.

During 1964-65 there was considerable increase in the production of antibiotics (penicillin, streptomycin and chloramphenicol) Vitamin C, Vitamin B<sub>6</sub> and Vitamin A, Antihistaminic

drug (buclizine), tranquilliser (hydroxyzine) and the anaesthetic drug procaine hydrochloride. Notable rise in production has also been registered in respect of anti TB (PAS and its salts and INH), antipyretic (Aspirin) and antidiabetic (Tolbutamide) drugs, and other items like nikethamide.

Synthetic production of prednisolone, an important corticosteroid hormone has been established from indigenous dioscorea deltoidea roots. Production has commenced for the first time of items like hydroxocobalamin (vitamin B-12) promethazine, an antihistaminic drug, while additional capacity has been established for the production of streptomycin with the commencement of production by one unit in Gujarat State. Additional capacity has also been established for the antidiabetic drug (tolbutamide) Vitamin B<sub>12</sub> and thiacetazone. One unit for the production of the antidiabetic drug insulin starting from pancreas glands has been established in Maharashtra State. Another unit which has so far been manufacturing sulpha drugs based on imported intermediates has set up a basic manufacturing plant for the purpose. A new undertaking has been established very recently for the manufacture of PAS and its salts particularly its benzoyl derivative.

Before the close of 1959, the Central Government took decisions on the locations for the drugs projects as under :

1. Synthetic drug project, Sanatnagar (Hyderabad), Andhra Pradesh; 2. Antibiotics

project, Rishikesh (U.P.); 3. Phyto-chemicals project, Neriampalam (Kerala); 4. Surgical Instruments project, Guindy (near Madras).

With the completion of the antibiotics and synthetic drug factories at Rishikesh and Sanatnagar in 1966-67 a very substantial increase in the output of essential drugs is likely to be achieved. In the Fourth Plan period, Hindustan Antibiotics, Pimpri proposes to diversify its range of production into new lines. The share of the public sector in the output of drugs by 1970-71 is expected to be of the order of 50 per cent. By the end of the Fourth Plan, the industry, besides being able to meet the entire requirements of all basic drugs, will make a significant contribution to exports.

**Production :** The important items of production in the public sector, e.g., penicillin and D.D.T. recorded increased output as shown below :

| Year       | Penicillin<br>million mega<br>units | D.D.T.<br>(tons) |
|------------|-------------------------------------|------------------|
| 1958 .. .. | 26.93                               | 1,755            |
| 1959 .. .. | 28.71                               | 2,199            |
| 1960 .. .. | 39.70                               | 2,786            |
| 1963 .. .. | 71.88                               | 2,569            |
| 1964 .. .. | 84.26                               | 2,593            |

Monthly average production of drugs from 1961 to 1965 is given below:

| Unit                          | 1961     | 1962    | 1963    | 1964    | 1965    |
|-------------------------------|----------|---------|---------|---------|---------|
| 1. Liver Extract :            |          |         |         |         |         |
| (i) Injection .. ..           | '000 cc. | 3780.0  | 3662.0  | 3582.0  | 3221.0  |
| (ii) Oral .. ..               | '000 kg. | 12.9    | 13.9    | 13.9    | 14.2    |
| 2. Anti-dysentery drugs .. .. | kg.      | 3,003.0 | 3,681.0 | 4,921.0 | 5,855.0 |
| 3. Nikethamide .. ..          | kg.      | 492.0   | 553.0   | 577.0   | 652.0   |
| 4. I. N. H. .. ..             | '000 kg. | 3.3     | 3.9     | 4.7     | 5.2     |
| 5. P. A. S. .. ..             | '000 kg. | 8.6     | 12.0    | 19.1    | 19.0    |
| 6. Vitamin A .. ..            | MMV      | 1.2     | 1.5     | 1.5     | 1.7     |

The following statement shows the year-wise value of important categories of drugs and pharmaceuticals imported during the last few years :

| Item                                    | 1962-63       | 1963-64       | 1964-65       | 1965-66       |
|-----------------------------------------|---------------|---------------|---------------|---------------|
| Antibiotics Aureomycin .. ..            | 0.52          | —             | —             | —             |
| Chloromycetin .. ..                     | 30.04         | 29.82         | 25.60         | 20.33         |
| Penicillin and its preparations .. ..   | 57.96         | 37.96         | 20.24         | 15.70         |
| Streptomycin and its preparations .. .. | 159.97        | 79.09         | 28.15         | 52.22         |
| Terramycin .. ..                        | 1.36          | 1.71          | 0.37          | 0.88          |
| Other antibiotics .. ..                 | 73.57         | 43.96         | 70.27         | 26.86         |
| <b>TOTAL .. ..</b>                      | <b>323.42</b> | <b>190.83</b> | <b>144.63</b> | <b>121.49</b> |
| Vitamins and vitamin preparations .. .. | 84.04         | 75.46         | 75.53         | 74.54         |
| Antimalarials .. ..                     | 30.59         | —             | —             | 15.85         |
| Sulpha drugs .. ..                      | 81.20         | 92.23         | 75.45         | 48.34         |
| Proprietary and patent medicine .. ..   | 75.87         | 90.01         | 50.04         | 40.98         |
| Other drugs and pharmaceuticals .. ..   | 329.18        | 385.84        | 202.71        | 201.77        |
| <b>GRAND TOTAL .. ..</b>                | <b>924.30</b> | <b>834.37</b> | <b>548.36</b> | <b>562.97</b> |

D.D.T. and B.H.C. are the two of the most important insecticides. Hindustan Insecticides Ltd., a public sector undertaking went into production in March 1955. The Fourth Plan envisages a substantial increase in the range and output of pesticides. The capacity is to be increased from about 18,000 tonnes in 1965-66 to 100,000 tonnes by 1970-71. In addition to the expansion of public sector projects under Hindustan Insecticides additional production of DDT and BHC is envisaged at the Hindustan Organic Chemicals and Gujarat Petro-Chemical complex.

The production targets for 1965-66 as accepted by the Planning Commission are summarised below :

| Item                       | Unit               | Production |
|----------------------------|--------------------|------------|
| Sulpha drugs .. ..         | Tonnes             | 1,016      |
| Penicillin .. ..           | Million mega units | 120        |
| Streptomycin .. ..         | Tonnes             | 152        |
| P.A.S. .. ..               | "                  | 400        |
| Anti-dysentery drugs .. .. | "                  | 70         |
| I.N.H. .. ..               | "                  | 102        |
| Phyto-chemicals .. ..      | "                  | 77.6       |
| D.D.T. .. ..               | "                  | 6,096      |
| B.H.C. .. ..               | "                  | 15,240     |



## PUBLIC SERVICES

**PUBLIC** Services in India can be broadly classified into four distinct categories: All India Services, Central Services, State Services and Local Bodies' Services. All India Services are common to the Union and the States and are created under Article 312 of the Constitution. The Central and State Services are intended for the administration in the respective fields assigned to the Union and the States under the Constitution. The Local Bodies in different States have their own Services though they may also utilise the State or All India Services for specific functions.

The Constitution provides for the setting up of a Public Service Commission for the Union and for each State. Two or more States may, however, join together to have a common Public Service Commission.

The Union Public Service Commission or the State Public Service Commission, as the case may be, is required under the Constitution to be consulted on all matters relating to the methods of recruitment to Civil Services and for civil posts and on the principles to be followed in making appointments to Civil Services and posts, and in making promotions and transfers from one service to another, as well as on disciplinary matters affecting a person serving under the Government of India or the Government of a State in a civil capacity.

However, the President in respect of the All-India Services and other services and posts in connection with the affairs of the Union, and the Governor in respect of the other services and posts in connection with the affairs of a State, may make regulations specifying the matters in which either generally or in any particular case or cases or in any particular circumstances, it shall not be necessary for the Public Service Commission to be consulted.

The Chairman and Members of the Union Public Service Commission, and of Joint Commissions if any, are appointed by the President of the Union while the chairman and members of a State Public Service Commission are appointed by the Governor.

A member of the Union Commission holds office for six years or till he attains the age of 65. A member of a State Commission also holds office for six years but retires earlier on attaining the age of 60.

In the discharge of their functions, the Union and State Commissions conduct examinations for recruitment to Government services.

The Union Public Service Commission also serves as the Commission for the Union Territories.

The annual reports of the Public Service Commissions which are required to include a list of cases in which Government did not accept the advice of Commissions, together with memoranda from the Government explaining the reasons for non-acceptance of the advice of the Commissions on such matters, are placed before the appropriate legislature.

### ALL INDIA SERVICES

Under the federal system of Government that exists in this country, there are 'Central Services' to administer purely central subjects such as defence, foreign affairs, railways, posts and telegraphs, customs, income-tax, etc. The officers of these services are in the exclusive employ of the Central Government. The subjects lying within the field of State autonomy such as land revenue, agriculture, forest, education, health, etc. are administered by States Services. In addition, India also has a third category of services known as the All India Services (I.A.S./I.P.S.) created under Article 312 of the Constitution. These services are common to the Centre and States. Officers of these services are liable to serve in connection with the affairs of a State or under the Union Government: mostly both at different

times, although at the State end service is generally confined to the particular State of allocation.

The All India Services are organised into a number of Cadres—one for each State, except for a joint cadre each of the IAS/IPS for the Union Territories of Delhi & Himachal Pradesh. Initial recruitment is made by the Central Government on the result of an open all India Competitive Examination held by the Union Public Service Commission. This shows the high quality inherent in a system of all India Competition. The officers so recruited are allotted by the Central Government to different State Cadres. The Central Government also arranges the initial training of recruits at Central training institutions to ensure a certain uniformity of standards. The strength of each cadre is so fixed as to include a reserve of officers for service under the Central Government on tenure deputation for periods varying from three to five years. This system ensures that:

- (i) evolution of high policies is not divorced from practical administration in the field acquired in the States: and the experience of different States is pooled at the policy making levels of the Union Government;
- (ii) the States, derive the benefit of their officers acquiring an all India outlook;
- (iii) the interchange of officers contributes to the administrative unity of the country.

The control of the Central Government over the All India services is exercised through the various rules and regulations framed by it, in consultation with the State Governments. In all important matters such as pay, cadre structure, seniority, pension, leave, discipline and appeal etc., apart from recruitment and promotion, uniform conditions of service have been provided. The more serious penalties such as reduction in rank, removal or dismissal are exercised only by the Central Government.

Recruitment to the two All India Services is made on the basis of an open competitive written examination, supplemented by a personality test, conducted by the Union Public Service Commission except for 25 per cent of the senior duty posts in the various State cadres of the two Services which are reserved for promotion from the State Civil Service and the State Police Service Officers respectively, including a proportion (15% of the above) from among any persons of outstanding ability and merit serving in State Services other than the State Civil Service.

The total authorized cadre strength of the I.A.S. and I.P.S. in the different States was 2,575 and 1,379 respectively as on 1st Jan. 1966 as against 1,206 and 590 respectively in 1950.

The State-wise break-up of I.A.S. and I.P.S. respectively is as follows: Andhra Pradesh 189, 80; Assam 117, 61; Bihar 190, 86; Delhi & H.P. 85, 56; Gujarat 173, 85; Jammu & Kashmir 51, 26; Kerala 85, 38; Madhya Pradesh 201, 149; Madras 173, 57; Maharashtra 201, 106; Mysore 145, 68; Orissa 170, 80; Punjab 167, 104; Rajasthan 144, 80; Uttar Pradesh 314, 175; West Bengal 170, 128.

In 1965, 129 and 74 officers were appointed to the I.A.S. and I.P.S. respectively on the results of the competitive examinations conducted by the U.P.S.C. During the same period 11 and 5 officers were appointed by promotion selection to the I.A.S. and I.P.S. from the State Services.

The States Reorganisation Commission's recommendation that at least 50 per cent of new entrants to the All-India Services be from outside the State has been implemented in case of both the I.A.S. and I.P.S.

### New All India Services

There are already two All India Services at present, namely, the Indian Administrative

Service and the Indian Police Service. Legislation providing for the creation of three more All India Services in the fields of forestry, engineering and medicine & health was enacted by the Parliament some time ago. The Indian Forest Service has since been constituted with effect from 1st July, 1966. Consultation on matters of details are taking place between the Centre and the State Governments about the initial constitution of the Indian Service of Engineers and the Indian Medical and Health Service.

All the State Governments have also agreed in principle to the creation of two more All India Services in the fields of agriculture and education. The Rajya Sabha adopted a Resolution in March, 1965 that it was necessary and expedient in the national interest to create these two Services. The Union Government have already introduced a Bill to further amend the All India Services Act, 1951 to bring within its scope the creation of Indian Agricultural Service and the Indian Educational Service.

The creation of new all-India services was recommended by the States Reorganisation Commission as one of the measures to be adopted to help in promoting national integration.

### Training

**NATIONAL ACADEMY OF ADMINISTRATION:** In the context of the objectives of a welfare State and the need for the successful implementation of the Five Year Plans, it has been considered essential that civil servants particularly those at the higher levels, should possess not merely professional skill and experience but also a wide outlook, greater adaptability and a deeper realisation of the ethics and obligations of public service. With this object in view, a combined course of training for new entrants to All India Services and Central Services, in background and foundational subjects, is now imparted at the National Academy of Administration which was set up at Mussoorie in September 1959.

The programme of training of probationers of All India Services and the Central Services class I, in the foundational subjects has since undergone some change. Due to increase in the number of probationers, the scheme of the foundational course was reviewed. It was considered that besides the accommodation difficulties, it has become difficult to ensure the requisite personal contact between them and the directing staff. It has, therefore, been decided to conduct two foundational courses with effect from 1965 instead of one previously. The probationers of various services to be given training in foundational subject in these courses are as under:—

First Foundational Course: 1st July to 30th Oct.: IAS., IFS., IPS., IA & AS., IRAS., IDAS., IITS.

Second Foundational Course: 15th Feb. to 15th June: TT & C.D., MLCS., IOFS., IPOS., CIS and IC & ES.

The Academy also has a refresher course for Central and State Government Officers with 10 to 15 years' service.

The Director of the Academy also functions as Director of Training, Government of India and in the latter capacity co-ordinates the training programmes of probationers in the All India Services as well as Central Services.

### Retirement Age

The retirement age of the Central Government employees has been extended from 55 years to 58 years.

### Central Health Service

The Central Health Service (Amendment) Rules, 1966, came into force on the 9th September, 1966. There shall be four categories in the Service and each category shall consist of the



grades specified in column (2) of the Table below and the scales of pay and classification of each such grade shall be as specified in columns (3) and (4) of the Table.

| Categories                                       | Scale of pay                              | Classification |
|--------------------------------------------------|-------------------------------------------|----------------|
| 2                                                | 3                                         | 4              |
| <b>Supertime Grade I</b>                         |                                           |                |
| (i) Director General of Health Services .. .. .  | Rs. 2,750.                                | Class I        |
| (ii) Additional D. G. of Health Services .. .. . | Rs. 2,250.                                | —do.—          |
| (iii) Other posts .. .. .                        | Rs. 1,800-100-2,000-125-2,250.            | —do.—          |
| <b>Supertime Grade II</b> .. .. .                | Rs. 1,300-60-1,600-100-1,800.             | Class I        |
| Specialists' Grade .. .. .                       | Rs. 600-40-1,000-E.B.-50-1,300.           | —do.—          |
| General Duty Officers, Grade I .. .. .           | Rs. 450-30-660-E.B.-40-1,100-50-1,250.    | —do.—          |
| General Duty Officers, Grade II                  |                                           |                |
| (i) (Graduate Officers) .. .. .                  | Rs. 350-25-500-30-590-E.B.-30-830-35-900. | Class II       |
| (ii) (Licentiate Officers) .. .. .               | Rs. 350-15-380-20-500-E.B.-20-600.        | —do.—          |

The authorised strength of the various categories of the Service on the date of commencement of the Central Health Service (Amendment) Rules, 1966, shall be as follows:

#### Authorised Strength

**Permanent:** Supertime Grade I 28; Supertime Grade II 96; Specialists' Grade 396; G.D.O. Grade I 653; G.D.O. Grade II (Graduate Officers) 932; Total 2,105.

**Temporary:** Supertime Grade I 9; Supertime Grade II 41; Specialists' Grade 133; G.D.O. Grade I 247; G.D.O. Grade II (Graduate Officers) 834; Total 1,264.

#### Non-practising Allowance

Persons appointed to the Service shall not be allowed private practice of any kind whatsoever, including consultant and laboratory practice. They shall, however, be entitled to a non-practising allowance at the rates indicated below:—

- Officer appointed to General Duty Officers Grade I, Specialists' Grade and Supertime Grades I and II. 50 per cent of pay subject to a maximum of six hundred rupees per mensem.
- Officers appointed to General Duty Officers, Grade II (Graduate Officers) and (Licentiate Officers) 33½ per cent of pay subject to a maximum of one hundred and fifty rupees per mensem.

#### Promotion Prospects

Vacancies in Supertime, Grade I, shall be filled on the recommendation of a Departmental Promotion Committee by promotion on the basis of merit with due regard to seniority officers holding posts in Supertime Grade II, who have rendered not less than 6 years of service in that grade and who possess the requisite qualifications and experience required for the vacancy to be filled.

Fifty per cent of the vacancies in Supertime Grade II shall be filled by promotion of Officers from (i) General Duty Officers, Grade I, with not less than ten years of service in that Grade and (ii) Specialists Grade Officers with not less than eight years of service in that Grade in the ratio of 2 : 3

Vacancies in the General Duty Officers, Grade I, shall be filled by the promotion of persons holding posts in the General Duty Officers, Grade II (Graduate Officers) or in any post which was equivalent to such post, immediately before the commencement of the Central Health Service (Amendment) Rules, 1966, who have rendered, whether before or after such commencement, not less than five years of service, by selection on the recommendation of a Departmental Promotion Committee and such recommendation

shall be made on the basis of the records of service of such officers and a qualifying test, provided that no qualifying test shall be held in the case of officers who have been appointed on the recommendation of the Commission to Category 'E' or in any equivalent post in the Service as in existence immediately before the commencement of the Central Health Service (Amendment) Rules, 1966.

Not more than twentyfive per cent of the vacancies occurring in the General Duty Officers Grade II (Graduate Officers) shall be filled by promotion of Officers belonging to General Duty Officers Grade II (Licentiate Officers) who have rendered not less than five years of service in that grade, on the advice of a Departmental Promotion Committee and such recommendation

shall be made on the basis of merit with due regard to seniority of the Officers.

The remaining vacancies in all the Grades of the Central Health Service will be filled through the Union Public Service Commission.

#### QUALIFICATIONS FOR CENTRAL SERVICES

The lower levels of Government services, namely, Class III and IV services are generally not required to have a university degree.

The higher level of Government services, All India and Central Class I and II will continue to require a candidate to possess a university degree. Generally the qualifications and age limits prescribed are as given below:—

| Service                                                                                                                              | Qualifications                                                                 | Age limits                                          |
|--------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------------------------------------------|
| <b>I. SUPERIOR SERVICES</b>                                                                                                          |                                                                                |                                                     |
| All India and Central (Class I)                                                                                                      | University Degree essential.                                                   | 21-24 years; for Indian Police Service—20-24 years. |
| <b>II. MIDDLE GROUP SERVICES</b>                                                                                                     |                                                                                |                                                     |
| (i) Central Class II (Gazetted)                                                                                                      | University Degree essential.                                                   | 21-24 years.                                        |
| (ii) Central Class II (non-gazetted)                                                                                                 | University Degree essential.                                                   | 20-24 years.                                        |
| (iii) Central Class III (non-clerical) other than SAS Apprentices and Divisional Accountants in the Indian Audit & Accounts Service. | Intermediate/Senior Cambridge/Higher Secondary or equivalent qualifications.   | 19-23 years.                                        |
| <b>III. CLERICAL SERVICES</b>                                                                                                        |                                                                                |                                                     |
| Upper Division other than those recruited direct to this grade in the Indian Audit & Accounts Department.                            | Intermediate/Senior Cambridge/Higher Secondary or equivalent qualifications.   | 18-21 years.†                                       |
| Lower Division.                                                                                                                      | Matriculation or equivalent qualifications until replaced by Higher Secondary. | 18-21 years.                                        |

The above will not, however, apply to technical, professional and specialist services.

† Exception: Appointment to the U.D.C.'s grade of the C.S.C.S. is made wholly by promotion of L.D. Clerks.

#### CENTRAL SERVICES

The total number of Central Government employees (including work charged personnel, contingent staff and local recruits abroad but excluding casual labour as on March 31, 1964 was 25,36,141.

All employees declared surplus as a result of the economy drive are reported to the surplus Employees' Cell located in the Ministry of Home Affairs and the Directorate General of Employ-

ment and Training, which has been created for reabsorption of surplus employees in alternative posts. All vacancies occurring in Central Government offices are reported to the Special Cell. Surplus employees on the register of the Special Cell are given top priority for employment in these vacancies. Vacancies for which suitable surplus employees are not available are released to local employment exchanges.

Recruitment to the non-technical Central Class I Services also takes place on the basis of



an open competitive written examination conducted by the Union Public Service Commission.

The following are the more important among the class I Central Services:—

Archaeological Service (Class I); Botanical Survey of India (Class I); Central Engineering Service (Class I); Central Electrical Engineering Service (Class I); Central Health Service (Class I); Central Revenues Chemical Service (Class I); Central Secretariat Service: (a) Selection Grade, (b) Grade I, (c) Grade II, General Central Service (Class I); Geological Survey of India (Class I); Indian Audit and Accounts Service; Indian Defence Accounts Service; Indian Foreign Service (Class I); Indian Meteorological Service (Class I); Indian Postal Service (Class I); Indian Posts and Telegraphs Traffic Service (Class I); Indian Revenue Service: (a) Customs Branch (Indian Customs Service, Class I); (b) Central Excise Branch Central Excise Service (Class I); (c) Income Tax Branch (Income Tax Service, Class I); Indian Salt Service (Class I); Mercantile Marine Training Ship Service (Class I); Mines Department (Class I); Overseas Communications Service (Class I); Survey of India (Class I); Telegraph Engineering Service (Class I); Zoological Survey of India (Class I); Indian Frontier Administrative Service (Class I); Central Legal Service (Class I); Railway Inspectorate Service (Class I); Indian Foreign Service (Branch B); Central Information Service; Indian Supply Service (Class I) and Indian Inspection Service (Class I); Indian Statistical Service; Indian Economic Service.

### INDUSTRIAL MANAGEMENT POOL

For staffing senior managerial posts in the public enterprises operating under the Union Ministries, the Government of India constituted in November, 1957 an Industrial Management Pool. At present there are 108 officers in the Pool working in various public undertakings. For the

present, the Ministries of Iron & Steel, Mines and Metals, Industry, Commerce, Supply and Technical Development and Transport and Aviation are participating in the Scheme which is under the administrative control of the Union Ministry of Home Affairs.

### SCIENTISTS' POOL

The Scientists' Pool under the Council of Scientific and Industrial Research was established in 1958, to provide temporary placement for well-qualified Indian scientists, technologists, engineers and medical personnel until they are absorbed in regular employment. This Pool is mainly intended for scientific and technical personnel who return from abroad after acquiring high qualifications in their subjects. There is also provision for the appointment of persons with Indian qualifications who have outstanding academic records. A limited number of places in the Scientists' Pool are also now available for placement of persons with high qualifications in some branches of Social Science. All persons enrolled in the Indians Abroad Section of the National Register of Scientific and Technical Personnel are considered for selection to the Pool. Advertisements are also issued periodically to enable suitable persons to apply.

Persons selected to the Pool are attached or seconded to Government Departments, State Undertakings, National Laboratories, Universities or Scientific and technical institutions, and other establishments including those in the private sector.

Six hundred and twenty-nine persons were working in the Pool on August 6, 1966. More than 4,500 persons have been selected for the scientists' pool since its constitution in 1958. The persons selected to the pool, start usually on a monthly salary between Rs. 400 and Rs. 700 per month. 1,235 persons have so far left the "Pool" on securing regular employment.

The number of persons selected to the pool from various countries of training up to August 1, 1966:

| Country of training              | Science | Engg. | Tech. | Medicine | Total |
|----------------------------------|---------|-------|-------|----------|-------|
| U.S.A. .. .. .                   | 843     | 712   | 104   | 185      | 1,844 |
| Canada .. .. .                   | 136     | 58    | 5     | 28       | 227   |
| U.K. .. .. .                     | 166     | 495   | 68    | 1,000    | 1,729 |
| W. Germany .. .. .               | 63      | 202   | 25    | 8        | 298   |
| Other European countries .. .. . | 67      | 87    | 19    | 8        | 181   |
| Other Countries .. .. .          | 51      | 47    | 3     | 5        | 106   |
| India .. .. .                    | 63      | 15    | 5     | 47       | 130   |
| Total .. .. .                    | 1,389   | 1,616 | 229   | 1,281    | 4,515 |

### SECRETARIAT TRAINING SCHOOL

The Secretariat Training School imparts training in various subjects including training in typewriting, to the ministerial staff of the Govt. of India, namely, Section Officers, Assistants and Lower Division Clerks who are recruited on the results of the Union Public Service Commission examinations and also to those who are already employed under the Government of India.

From April 2, 1965, an 8 weeks training in work study O. & M. techniques has been started. The aim of this course is to train officials for manning O. & M. work study units and for implementing programmes of administrative reforms in Central and State Governments.

The duration of the training course has subsequently been extended to twelve weeks, with effect from 10th January, 1966.

A new two months' training course for training the Lower Division Clerks of the Subordinate Offices of the Government of India, located in Delhi/New Delhi has been started with effect from 10th October, 1965.

The Secretariat Training School has also started Advanced and Beginners' courses for training the Upper and Lower Division Clerks of the Ministries and its Attached Offices, in English Shorthand and Typewriting from July, 1966.

### POLICE TRAINING

The Central Police Training College was established by the Government of India at Mount Abu on Sept. 15, 1948, to train I.P.S. probationers with the object of centralising the training of All India Police Service Officers. Before this the I.P. officers were trained in their respective State training centres after recruitment.

General theoretical training as well as practical professional training is imparted to the probationers. The I.P.S. probationers are taught criminal law, legal procedure and medical jurisprudence. They are trained in methods of observation of the scene of crime, the use of scientific aids like examination of finger-prints, foot-prints, blood stains, photography, hand-writing etc. as aid to the detection of crime.

### SERVICE CONDITIONS

The conditions of service of Central Government servants and norms of conduct for them are embodied in four sets of rules viz. the Fundamental and the Supplementary Rules, the Civil Service Regulations, the Central Civil Service (Conduct) Rules and the Central Civil Service (Classification, Control and Appeal) Rules. The Fundamental and the Supplementary Rules and the Civil Service Regulations were framed many years ago. The Conduct Rules and the

Classification (Control & Appeal) Rules are more recent.

The Conduct Rules require every Government servant to maintain integrity and devotion to duty. Government servants are expected to avoid participation in politics except to the extent of casting their votes by secret ballot at elections. They may not offer themselves as candidates even for elections to municipal and other local authorities. The rules provide that Government servants shall not join or continue to be members of associations the objects or activities of which are prejudicial to the interests of the sovereignty and integrity of India or public order or morality. Revised rules for recognition of Service Associations/Unions of Government employees are being framed. The Conduct Rules disallow non-industrial employees to organise strikes or demonstrations in furtherance of their service interests.

Staff Councils consisting of representatives of the different sections of employees and the nominees of Government have been in existence in some of the Ministries and other organisations for the purpose of promoting employer-employee understanding and to serve as a forum for discussion of general questions affecting the employees' conditions of service. With the object of promoting harmonious relations and of securing the greatest measure of cooperation between the Government in its capacity as employer and the general body of its employees in the matter of common concern and with the object, further, of increasing the efficiency of public service, the Government of India has decided to establish a machinery for joint consultation and arbitration of unresolved differences. The Joint Councils are being set up at National/Departmental/Regional/Office levels. They will replace the Staff Councils.

The Conduct Rules for the All India Services and the Railway Services require, as in the case of the Central Civil Services, that Government servants' transactions in immovable and movable property should in specified circumstances be reported to Government either for their information or for according sanction to those transactions. Officers of the All India Services and of the Class One Central Services may not take up commercial employment within two years of their retirement from Government service without first obtaining Government's permission. The son, daughter or other dependant of such officers may take up employment with a private firm having dealings with Government only after the officer concerned has reported the facts to Government and obtained their permission.

### ADMINISTRATIVE VIGILANCE DIVISION

The Administrative Vigilance Division was set up in August 1955 in pursuance of the decision of the then Home Minister that there should be in the Ministry of Home Affairs an organisation which would assume the overall responsibility and provide the necessary drive, direction and coordination to ensure sustained and vigorous action against lack of integrity. The Administrative Vigilance Division functions substantially in an advisory capacity in keeping with the basic principle that initiative for prevention of corruption in a Ministry/Department in its sphere of activity must come from within that Ministry/Department.

In particular, disciplinary cases relating to members of the following Services are dealt with in this Division:—

(1) All India Services—

(a) Cases of Officers employed at the Centre; (b) cases of officers who are serving in connection with the affairs of a State Government where it is proposed to impose the penalty of dismissal, removal or compulsory retirement; (2) Central Secretariat Service (Selection Grade and Grade I); (3) Industrial Management Pool; (4) Indian Economic Service; (5) Indian Statistical Service.



## CENTRAL BUREAU OF INVESTIGATION

The Government of India established the Central Bureau of Investigation on 1st April 1963. The Delhi Special Police Establishment has been merged in the Central Bureau of Investigation and has become its integral part as one of the Divisions. In July 1964, a new wing known as the Economic Offences Wing was established and formed part of the Delhi Special Police Establishment Division. In May 1965, still another wing was added viz. Food Offences Wing. The Delhi Special Police Establishment Division now consists of three wings, viz., General Wing, Economic Offences Wing and Food Offences Wing. Of the 2,308 new cases registered by the Delhi Special Police Establishment Division of the Central Bureau of Investigation during 1965, 1,658 (71.8 per cent) were registered on the basis of information collected by its own staff. During 1965, the Special Police Establishment Division collected 3,725 informations through its own sources.

Including those pending at the beginning of year, the S.P.E. Division processed during the year 1965, 4,175 informations. Of these, 1,573 were registered as cases for formal investigation; 952 were referred to Departments concerned for necessary action, 940 were dropped and 710 remained pending at the end of the year.

## DEPARTMENT OF ADMINISTRATIVE REFORMS

The Department of Administrative Reforms was set up in March, 1964 in the Ministry of Home Affairs, and the erstwhile Organisation & Methods Division of the Cabinet Secretariat was merged in it. Apart from continuing the work of the O & M Division, the new department has embarked upon a programme of activities significantly wider in scope than what was handled before. Comprehensive studies of important departments have been undertaken through study teams headed by Members of Parliament. Major reorganisation measures have been initiated in the Central Secretariat, starting with the Ministry of Works & Housing. Liaison is being maintained with State Governments in regard to administrative Reforms programmes in the States. Considerable emphasis has been given to implementing the reforms measures devised through studies. In all this, new ground has been broken in several directions.

The training programme of the erstwhile O & M Division has been reorganised and two new courses have been started for training administrators in skills of administrative analysis. The senior course is run with the cooperation of the Indian Institute of Public Administration and caters for middle level executives from the Centre, the States, and Public Undertakings. The Junior course is run in the Secretariat Training School and is aimed at training officers at the level of section officers and their equivalent. Short term training in operations research has also been imparted through special course for management personnel from public sector undertakings.

An administrative intelligence unit has been organised to provide a ready source of documented material on various aspects of administrative reform.

The department receives general direction about programming its activities from the Committee on Administration headed by the Cabinet Secretary.

## EDUCATION ALLOWANCE

All permanent and quasi-permanent non-gazetted Central Government servants and temporary non-gazetted Government servants who have put in not less than 3 years service and whose pay does not exceed Rs. 340 p.m. (between Rs. 350 and Rs. 399 subject to certain marginal adjustment) are eligible for the grant of Children's Educational allowance, subject to fulfilment of certain conditions. It will be admissible only when the child or children of a Government servant study in a recognised school away from the station at which he/she is posted and/or residing."

## Pay Commission Report

The Second Pay Commission's recommendations regarding the liberalisation of retirement benefits, casual leave and holiday and leave travel concessions and other benefits, viz. educational concessions, death benefits, D.A. etc. have been featured in the previous editions of the Directory.

## Whitley Plan

The Government have accepted in principle the Commission's recommendations regarding the working conditions, canteen facilities and staff welfare. An *ad hoc* inter-departmental committee as recommended by the Commission has been set up and its report has been submitted to the Cabinet.

The Commission have recommended setting up of a Whitley type machinery, with a Central Joint Council representing the whole body of Central Government employees, both industrial and non-industrial for negotiation and settlement of disputes. This scheme was inaugurated on Oct. 28, 1966.

## Panel for D.A.

In July 1966 the Government of India set up a three-member commission under the Chair-

manship of Mr. P. B. Gajendragadkar, former Chief Justice of India, to review the Second Pay Commission's formula for the grant of D.A. to Central Govt. employees.

The Commission submitted its recommendation to the Government on Oct. 8, 1966 by which Govt. employees earning upto Rs. 399 were to be benefited with an enhanced D.A. Though the commission has recommended only for those drawing below Rs. 400 the Govt. have considered proportionate increase in D.A. to employees drawing salary upto Rs. 1,000.

The increased D.A. is to cost the exchequer Rs. 31.5 crores more during 1966-67.

An Official announcement dated Oct. 19, 1966 stated that the increase embraced two elements. First, the rate of allowance has been stepped up from Dec. 1, 1965 to neutralize 90 per cent of the increase in the cost of living instead of 75 per cent. Secondly the rate of D.A. has been enhanced again from Aug. 1, 1966 as a result of the cost of living index having gone up by 10 points.

The following table outlines the D.A. position:

| Pay ranges (Rs.)                      | Existing rates of D.A. on 1-12-1965 | Revised rates from 1-12-1965 | Revised rates from 1-8-1966 |
|---------------------------------------|-------------------------------------|------------------------------|-----------------------------|
|                                       | Rs.                                 | Rs.                          | Rs.                         |
| Below 110 .. .. .                     | 38                                  | 41                           | 47                          |
| 110 and above but below 150 .. .. .   | 58                                  | 61                           | 70                          |
| 150 and above but below 210 .. .. .   | 76                                  | 78                           | 90                          |
| 210 and above but below 400 .. .. .   | 93                                  | 96                           | 110                         |
| 400 and above but below 1,000 .. .. . | 100                                 | 105                          | 120                         |

## STATISTICS

Below we give the total number of employees of the Central Government from 1960. Figures for the period relate to 31st March of each year.

1960: 20,25,237; 1961: 20,94,477; 1962: 21,56,220; 1963: 23,48,675; 1964: 25,36,441.

The distribution of regular employees by pay ranges as on 31st March 1964 is given below:—

|                        |    |    |    |    |    |    |    |    |    |           |
|------------------------|----|----|----|----|----|----|----|----|----|-----------|
| Below-75 :             | .. | .. | .. | .. | .. | .. | .. | .. | .. | 4,22,301  |
| 75-100 .. .. .         | .. | .. | .. | .. | .. | .. | .. | .. | .. | 8,48,792  |
| 100-150 .. .. .        | .. | .. | .. | .. | .. | .. | .. | .. | .. | 5,32,849  |
| 150-200 .. .. .        | .. | .. | .. | .. | .. | .. | .. | .. | .. | 3,20,368  |
| 200-300 .. .. .        | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1,51,412  |
| 300-400 .. .. .        | .. | .. | .. | .. | .. | .. | .. | .. | .. | 45,167    |
| 400-500 .. .. .        | .. | .. | .. | .. | .. | .. | .. | .. | .. | 22,115    |
| 500-750 .. .. .        | .. | .. | .. | .. | .. | .. | .. | .. | .. | 17,027    |
| 750-1000 .. .. .       | .. | .. | .. | .. | .. | .. | .. | .. | .. | 6,669     |
| 1000-1500 .. .. .      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 4,523     |
| 1500-2000 .. .. .      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1,119     |
| 2000-2500 .. .. .      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 449       |
| 2500-3000 .. .. .      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 82        |
| 3000 and above .. .. . | .. | .. | .. | .. | .. | .. | .. | .. | .. | 138       |
| Total .. .. .          | .. | .. | .. | .. | .. | .. | .. | .. | .. | 23,73,092 |

(Gazetted 36,896; Non-Gazetted 23,36,196).

Number of persons employed by department and class is given below. The figures are as on 31st March 1964.

## EMPLOYEES—BY CLASS AS ON 31st MARCH, 1964.

| Class of post                                              | No. of persons employed as on 31st March, 1964 |                      |          |
|------------------------------------------------------------|------------------------------------------------|----------------------|----------|
|                                                            | Railways                                       | Posts and Telegraphs | Others   |
|                                                            | 1                                              | 2                    | 3        |
| Class I .. .. .                                            | 3,513                                          | 790                  | 13,370   |
| Class II .. .. .                                           | 2,324                                          | 1,519                | 28,046   |
| Class III .. .. .                                          | 5,15,311                                       | 2,33,990             | 3,63,042 |
| Class IV .. .. .                                           | 7,52,106                                       | 52,236               | 3,85,321 |
| Unclassified .. .. .                                       | 7,462                                          | —                    | 14,062   |
| TOTAL .. .. .                                              | 12,80,716                                      | 2,88,535             | 8,03,841 |
| Permanent .. .. .                                          | 11,41,309                                      | 2,16,007             | 3,32,976 |
| Temporary .. .. .                                          | 1,39,407                                       | 72,528               | 4,70,865 |
| Work-charged, contingent and local recruits abroad .. .. . | 53,027                                         | 70,937               | 39,326   |



## CIVIL AVIATION

**ALLOTMENT:** Second Five-Year Plan, Rs. 2,444.30 lakhs including special allotment of Rs. 663 lakhs. The actual expenditure incurred during the Second Plan was Rs. 17.96 crores. Third Plan: Rs. 25.5 crores.

The budget estimates for 1965-66 for the Civil Aviation Department were: Revenue Expenditure: Rs. 8.80 crores; Capital Expenditure: Rs. 6,24,33,000 including charged expenditure and meteorological equipment; Revenue Receipts from landing, housing etc., Charges at civil aerodromes: Rs. 1,96,43,100.

### AIR TRANSPORT

In addition to the two Corporations—Indian Airlines Corporation and Air India—there were 17 flying clubs and nine air transport companies holding permits for non-scheduled services on 31st December, 1965.

Approximately 1,510,446 passengers and about 60,721,925 kilograms of cargo and mail were carried by scheduled and non-scheduled air transport services in 1965.

The scheduled air transport services flew 47,985,721 km. in 1965. The number of passengers carried increased from 1,388,753 in 1964 to 1,414,784 in 1965. The quantity of freight and mail carried during 1965 was 36,858,000 kgs. as against 42,493,000 kgs. in 1964.

During 1965 21,962 hours and 5,807,771 kilometres were flown on non-scheduled operations against the previous year's figures of 26,555 hours and 7,378,447 kilometres. The number of passengers and cargo carried were approximately 95,662 and 23,863,995 kgs. respectively as against the previous year's figures of 118,849 passengers and 29,449,262 kgs. of freight.

### INDIAN AIRLINES CORPORATION

(Airlines House, 113, Gurdwara Rakabganj Road, New Delhi).

INDIAN AIRLINES CORPORATION was formed on 1st August, 1953, as a State Corporation under the provisions of the Air Corporations Act, 1953.

The present fleet consists of 5 Caravelles; 11 Fokker Friendships; 12 Viscounts; 34 DC-3's and 3 DC-4's.

The operations of the Corporation have been divided into three Areas, namely, Delhi, Bombay and Calcutta. Each Area is under the charge of a Manager who is responsible to the General Manager for the proper administration and co-ordination between different departments in the area. The Headquarters Office of the Corporation has, besides the Chairman, Departmental Heads.

The total number of staff employed by the Corporation was 11,615 as on 1st Jan. 1966. The Corporation's services extend over the entire sub-continent, including Afghanistan, West Pakistan, Nepal, East Pakistan, Burma and Ceylon. The crew strength consists of 398 pilots.

#### Members of the Board:

A. S. Bam (Chairman), J. R. D. Tata, S. R. Vasavada, M. L. Khaitan, G. L. Mehta, M. A. Chidambaram, T. P. Singh, Air Chief Marshal Arjan Singh.

General Manager: A. S. Bam.

Area Managers: Delhi, Capt. R. G. Patwardhan; Bombay, Capt. D. A. Samant; Calcutta, A. H. Mehta.

Secretary: D. B. Kohli.

Indian Airlines Corporation is now a full member of the International Air Transport Association. Indian Airlines Corporation has set up training establishments for its Flying, Engineering and Traffic personnel. Besides regular passenger and freight services, I.A.C. operates

a Night Airmail Service linking Bombay, Delhi, Calcutta and Madras.

During July-December 1965, the Indian Airlines Corporation, on its scheduled services, flew approximately 14,426,509 kilometres, carrying 539,993 passengers, 6,921,521 kg. of cargo and 4,722,582 kg. of mail against 16,492,368 kilometres flown with 5,90,106 passengers, 11,900,261 kg. of cargo and 4,522,640 kg. of mail during the corresponding period of the previous year.

The capacity ton kilometres operated during the period under review 71,134,207 as against 76,703,525 during the corresponding period of 1964.

The Corporation has introduced a Scholarship Scheme for promising children of low paid staff.

### HIGHEST PROFIT

During 1964-65, the I.A.C. showed an operating surplus of Rs. 1.6 crores, the highest ever recorded, despite an addition to the wage bill of Rs. 1.15 crores. The operating expenditure during the year rose to Rs. 2,117.09 lakhs as against Rs. 1,863.75 lakhs in 1963-64 and the revenue to Rs. 2,280.96 lakhs from Rs. 1,937.82 lakhs. Although mainly a domestic operator, the I.A.C. earned through the IATA clearing house and on direct bookings by travel agents and charters, foreign exchange worth Rs. 4 crores.

According to the budget estimates it is expected to make a net profit of Rs. 1.34 crores in 1966-67. The Indian Airlines Corporation has made a net profit of Rs. 32.33 lakhs compared with Rs. 133.01 lakhs in 1964-65.

### AIR-INDIA

(New India Assurance Building, Third Floor, Mahatma Gandhi Road, Bombay 1).

Air-India International Limited now known as Air India, inaugurated its first international service to London on June 8, 1948. The initial frequency of one flight a week was gradually stepped up to 7 Super Constellation services a week with alternative stops at Rome, Paris, Prague, Dusseldorf, Zurich, Geneva, Cairo, Beirut and Damascus.

Air-India International Corporation was formed on August 1, 1953, as a wholly Government-owned Corporation under the Air Corporations Act of 1953.

The scale of operations and the route system of Air-India have expanded continuously since 1953, when it took over the predecessor company's Bombay-London and the Bombay-Nairobi services. To these, the Corporation added services to Singapore in July 1954, to Hong Kong in August 1954, to Tokyo in May 1955, to Sydney in October 1956, to Moscow in August 1958, to Jakarta in Oct. 1958, to New York in May 1960, to Kuwait in October 1960 and to Nadi (Fiji) in Aug. 1964.

In April 1960, Air-India celebrated entry into the jet age by starting Boeing 707 services to London and later in May to New York—thus becoming the first Asian carrier to operate over the Atlantic.

From a total of four stations serviced in June 1948, Air-India now serves 26 cities in 21 countries, covering 5 Continents.

### FLEET

Air-India's fleet as on 31st March 66 consists of seven Boeing 707s—five Boeing 707-420s and two Boeing 707-320Bs.

With a fleet of seven Boeing 707s, Air-India operates a daily service to New York, ten services a week to London—two of which are routed via Moscow—three services a week to Tokyo and two services a week to Nairobi, and one flight a week each to Singapore and Nadi (Fiji) via Sydney.

During 1964-65 Air-India flew 17.974 million revenue kilometres carrying 238,000 revenue

passengers, 1,099 tonnes of mail and 7,670 tonnes of cargo. Comparable figures for 1963-64 were 16.065 million revenue kilometres, 191,000 revenue passengers, 1148 tonnes of mail and 6,574 tonnes of cargo.

The Tripartite pool between Air-India, BOAC and Quantas came into being on April 1, 1960. This arrangement makes Air-India a partner in a giant international airline system which is in a better position to meet the increasing competition on international routes.

Air-India operates in pool with the Soviet airline, Aeroflot, on the Delhi/Moscow sector with the Czechoslovak airlines, CSA, on the Bombay/Prague sector and with East-African Airways on Bombay/Nairobi sector.

**Executive Officers:** J. R. D. Tata, Chairman; Air-Vice-Marshal M. S. Chaturvedi, Vice-Chairman and General Manager; S. K. Kooka, Commercial Director; N. J. Pavri, Financial Controller; K. K. Unni, Asst. General Manager; K. Vishvanath, Director of Operations; K. G. Appusamy, Director of Engineering; V. G. Gadgil, Controller of Stores & Purchases; A. S. Banavalikar, Personnel Manager; A. F. Dubash, Director of Planning & International Relations and R. N. Gundil, Secretary.

**Members of the Board:** J. R. D. Tata, Chairman; Air-Vice-Marshal M. S. Chaturvedi, Vice-Chairman; V. Shankar; S. R. Vasavada; M. A. Chidambaram; Air Chief Marshal Arjan Singh; M. L. Khaitan; G. L. Mehta and T. P. Singh.

**Commercial Headquarters:** Bank of India Building, Fourth Floor, Mahatma Gandhi Road, Bombay.

**Other Departments:** Santa Cruz Airport, Bombay 29. Tel: 535491.

**Information/Booking:** New India Assurance Building, Mahatma Gandhi Road, Fort, Bombay 1. Tel: 259191.

**Geneva Office—7, Rue de Chantepoulet; London Office—17/18 New Bond Street; New York Office—410 Park Avenue, New York 22; Nairobi Office—Lugard House, Government Road; Tokyo Office—Hibiya Mitsui Building; Sydney Office—P & O Bldg., 3 Elizabeth St.; Nandi Office—Terminal Building, Nandi Airport.**

**Net profit for the year ending March 31, 1965:** Rs. 3.04 crores.

**Operating Revenue:** Rs. 30.03 crores.

**Operating expenses:** Rs. 26.41 crores.

**Operating Profit:** Rs. 3.62 crores.

**Net Profit:** Rs. 3.04 crores.

**Total number of persons employed by Air-India:** 6,798 (31-3-1965).

**Unduplicated route kilometres:** 55,338 (31-3-1965).

**Net profit for 1965-66 is Rs. 1.63 crores.**

The Air-India is expected to make a profit of Rs. 32 lakhs in 1966-67, the revenues being estimated at Rs. 32.21 crores and expenditure at Rs. 31.89 crores.

### AERODROMES

Eighty-five aerodromes were controlled and operated by the Civil Aviation Department. Three of these, viz., Bombay (Santa Cruz), Calcutta (Dum Dum), Delhi (Palam) are international airports. The aerodromes at Ahmedabad, Patna, Bombay (Santa Cruz), Calcutta (Dum Dum), Delhi (Palam), Delhi (Safdarjung), Madras (St. Thomas Mt.), Tiruchirapalli, Varanasi, Jodhpur, Bhuj, Port Blair and Amritsar have been declared customs aerodromes.

**Aerodromes by Categories:** International Aerodromes (3): Bombay (Santa Cruz); Calcutta (Dum Dum); Delhi (Palam).

**Major Aerodromes (8):** Agartala; Ahmedabad; Begumpet; Delhi (Safdarjung); Gauhati; Madras (St. Thomas Mount); Nagpur; Tiruchirapalli.



**Intermediate Aerodromes (44):** Amritsar; Aurangabad; Balurghat; Baroda; Belgaum; Bhavnagar; Bhopal; Bhubaneswar (Cuttack); Bhuj; Bhuntar (Kulu); Bombay (Juhu); Coimbatore; Cooch-Bihar; Gaya; Indore; Jaipur; Junagadh (Keshod); Kailashahar; Kamalpur; Kandla; Khajuraho; Khowai; Kumbhirgram; Lucknow (Amausi); Madurai; Mangalore (Bajpe); Mohanbari; North Lakhimpur (Lilabari); Panna; Passighat; Patna; Phoolbagh; Porbandar; Port Blair; Raipur; Rajkot; Ranchi; Rupsi; Trivandrum; Tulihal; Udaipur; Varanasi; Vijayawada; Visakhapatnam.

**Minor Aerodromes (30):** Akola; Behala; Bilaspur; Chakulia; Cuddappah; Donakonda; Hadapsar (Gliderdrome, Poona); Jhansi; Jharsuguda; Jabalpur; Kanpur (Civil); Khandwa; Kolhapur; Kotah; Lalitpur; Malda; Muzafarpur (Rewaghat); Mysore; Nadirgul (Gliderdrome, Hyderabad); Palanpur (Deesa); Panagarh; Rajahmundry; Ramnadi; Roxaul; Satna; Shella; Sholapur; Tanjore; Vellore; Vijayawada; Warangal.

Work is in progress at the new aerodrome at Jogbani.

### WORKS

During the year 1965, construction of the new terminal buildings at Bhavnagar and Aurangabad aerodromes was completed. Work was also completed on the extension of the main runway at Lucknow, Ahmedabad and Udaipur aerodromes. Work on the extension and strengthening of the runway for Caravelle aircraft was completed at Begumpet aerodrome. Bulk of the land for the construction of a new terminal building at Delhi (Palam) airport was acquired.

Important works in progress include the construction of phases I and II of the new terminal building; construction of a hangar for aircraft on intercontinental services and extension of the instrument runways, at Calcutta (Dum Dum) airport; extension and strengthening of the runway at Patna aerodrome; extension and strengthening of the main runway at Lilabari aerodrome; strengthening and regrading of the main runway at Bhubaneswar aerodrome; strengthening of the runway at Mohanbari aerodrome; construction of a terminal building in Civil enclave at Cochin aerodrome; strengthening of the runway at Madurai aerodrome; extension and strengthening of the runway at Port Blair aerodrome; and extension, widening and strengthening of the runway at Trivandrum aerodrome.

Work was also in progress on the additions and alterations to the terminal building and extension of 14/32 runway at Bombay (Santacruz) Airport; extension and strengthening of the runway at Bhavnagar and Rajkot aerodromes; additions and alterations to the terminal building at Delhi (Palam) airport; widening of the runway at Udaipur aerodrome; strengthening of the main runway and taxi-track at Amritsar aerodrome; and construction of new runways at Indore and Kulu (Bhuntar) aerodromes.

### TRAINING CENTRE, ALLAHABAD

The Civil Aviation Training Centre, Allahabad comprises Aerodrome and Communication Schools.

During the period from 1st January to 31st December 1965, 37 Assistant Aerodrome Officers and 28 Aerodrome Operators received training in the *ab-initio* course and 24 Assistant Aerodrome Officers and 17 aerodrome operators received training in advanced refresher course. In the Communication School, 33 radio operators received training in refresher course, and 17 candidates received training in long range HF-R/T course, during the period under review. Ten candidates received training in radio teletype specialist course, and four technical assistants received training in refresher course.

At the end of December 1965 there were 79 trainees on the rolls of the Civil Aviation Training Centre, undergoing training in different courses.

The calibration unit and the overhaul unit continued to function at Kotah and Madras, respectively.

### FLYING CLUBS

There are at present 21 subsidised flying clubs with their headquarters at Amritsar, Banasthal, Vidyapith, Bangalore, Baroda, Bhubaneswar, Bombay, Calcutta, Coimbatore, Delhi, Gauhati, Hissar, Hyderabad, Jaipur, Indore (with a satellite centre at Bhopal), Jullundur Cantt., Lucknow (with satellite centres at Kanpur and Varanasi — The Allahabad Centre has been transferred to Kanpur), Madras, Nagpur, Patna, Patiala, and Trivandrum.

During the year 1965, 115 Private Pilots' Licences and six Commercial Pilots' Licences were issued to the trainees at the various Flying Clubs.

### GLIDING CENTRES/CLUBS

There are three Government Gliding Centres at Bangalore, Lucknow and Poona and six Gliding Clubs at Ahmedabad, Deolali, Jaipur, New Delhi, Pilani and Raipur. During the year 1965, 30 Glider Pilots were trained at the various Gliding Centres and Clubs.

### AERONAUTICAL COMMUNICATION SERVICES

During 1965-66, the last year of the Third Five Year Plan, the work of modernisation, improvement and reorganisation of the Aeronautical Telecommunication Service was continued.

There are at present 90 Aeronautical Communication Stations, providing 161 radio aids to navigation and 602 aeronautical Communication Channels.

The following are some of the more important activities of the Aeronautical Telecommunication Service during the year under review:

- (i) The outer marker and the outer locator components of the ILS facility at aeronautical communication station, Palam, commenced operation from the new site in line with 10/28 runway.
- (ii) The Marconi, medium power surveillance Radar was commissioned into service at Calcutta.
- (iii) The non-directional MF radio beacon facilities were commissioned at Aligarh, Dhanbad, Muzaffarnagar and Vikarabad.
- (iv) The low power non-directional MF Radio Beacon at Cooch Behar was replaced by one of medium power while the medium power non-directional MF radio beacon at Vishakhapatnam, was replaced by a high-power 3 KW beacon.
- (v) An extended range VHF frequency 124.5 Mc/s for providing direct pilot-to-controller communication for aircraft operating on PDRs 3 and 11 was commissioned at Delhi.
- (vi) The VHF D/F facility was provided at Palam. Later the Palam approach and VDF frequency was changed from 119.9 to 127.9 Mc/s.
- (vii) The A/G en-route HF RTF frequencies 5514 and 8939 Kc/s were commissioned at Varanasi, Begumpet, Amritsar and Bhubaneswar.
- (viii) Broadcast of the half hourly Dum Dum Aero etc. was introduced on the VOR facility at Calcutta.
- (ix) Gauhati was inducted as an additional correspondent on the existing Inter-Centre ATS Speech circuit between Agartala-Calcutta-Dacca.
- (x) Duplex operation of the Bombay-Ahmedabad landline teletypewriter circuit and the Calcutta-Gauhati Radio teletypewriter circuit was implemented.
- (xi) With a view to ensuring expeditious handling of message traffic, a number of W/T point to point circuits was bifurcated.
- (xii) Arrangements were made for provision of dual transmission on the various

Radio Teletypewriter circuits, operated at Calcutta.

- (xiii) The aeronautical communication facilities at Palam, formerly operated by the IAF, were taken over by the Civil Aviation Department, in April, 1965.
- (xiv) A meteorological synoptic reception channel was commissioned at Palam.
- (xv) Push Button Tape Relay System and a Teleprinter Exchange were commissioned at the newly constructed RTT Centre at Bombay.
- (xvi) A public Address System was installed at Bhuntar (Kulu).
- (xvii) Long distance direct landline speech circuits were commissioned between Delhi-Hindon, Delhi-Calcutta, Calcutta-Varanasi and Coimbatore-Sulur.

### AIRCRAFT

Aeronautical Inspection Organisation of the Civil Aviation Department is responsible for the registration and supervision of airworthiness of aircraft. This embraces the periodic inspection of aircraft in operation, including engines, instrument, and equipment; the supervision of their daily maintenance and annual overhaul schedules; enforcement of Certificate of Airworthiness inspection standards. These functions exercised by the Headquarters Organisation through the nine field offices at New Delhi, Bombay, Bangalore and Calcutta headed by the Controllers of Aeronautical Inspection, at Lucknow, Begumpet and Madras headed by the Senior Aircraft Inspectors and at Nagpur and Patna headed by Aircraft Inspectors.

### RESEARCH AND DEVELOPMENT

Research and development for Civil Aviation are undertaken by the Research and Development Organisation of the Civil Aviation Department at the technical centre, Safdarjung, New Delhi.

The Research and Development Directorate in Civil Aviation has two distinct functions/activities. One is airworthiness engineering function for the Directorate General of Civil Aviation, including field work and operational safety. These include type certification, approval of modifications, laying down of Design and Operational Airworthiness requirement, service failure investigations, evaluation of performance and economics of civil transport aircraft, personal planes, agricultural aircraft and helicopters and other *ad-hoc* technical problems referred to from time to time. The second function relates to research, development and evaluation at the Technical Centre Laboratory. These include design and development of light aircraft and gliders, standardisation and development testing of aeronautical materials and processes, development of safety devices and operational research.

As a result of the development efforts of this organization, the country has now become practically self sufficient in respect of its requirements of gliders and gliding equipment, including glider launching winches. It may be mentioned that two of the original designs viz., the 'Rohini' side-by-side two seater trainer and the IT-G single seater, have been taken up for mass production by the Defence Ministry at the Hindustan Aeronautics Ltd., Kanpur. Pioneering work has also been done by this organization in respect of gust research and the associated fatigue problems in Civil Transport Aircraft. A number of original papers on the subject have been published. The findings of these investigations will contribute in a large measure towards increased safety in aviation.

The principal achievements made by the Research and Development Directorate so far are enumerated below:—

- (i) Type-Certification of the HT-2 and Pushpak aircraft, the 'Ashvini' and 'Rohini' gliders, and "Permit-to-fly" for "Monsoon" and "Turbulent" aircraft.
- (ii) Type-Certification/Technical Examination of fixed pitch propellers for the HT-2 and Pushpak aircraft.



(iii) Type-Certification of indigenously developed aeronautical equipment like aircraft seats, lead-acid batteries and safety-harnesses.

(iv) Laying down of procedures for type-certification of aircraft and aircraft equipment and issue of "Permit-to-fly" for amateur built aircraft.

(v) Development and construction of two prototypes of primary training Glider, six prototypes of intermediary type single seater gliders, and two prototypes of single seater advanced sailplane.

(vi) Design, development and construction of five prototypes of 'Ashvini', four prototypes of 'Rohini' two seater training gliders, one prototype of 'Bharani' two seater advanced sailplane; and two prototypes of 'Kartik' single seater advanced sailplanes for soaring and cross-country flying.

A 2/3 seater light aircraft has been designed both for utility and normal categories and the first prototype is ready for flight trials.

(vii) Development of Arjun I, II and III glider launching winches and construction of 3 prototypes. Supply of drawings for quantity production of winches to the Indian Air Force.

At present a two-seater glider launching winch is under development.

(viii) Supply of production drawings of the gliders types designed and/or developed at the Technical Centre to interested organisations including the Indian Air Force for quantity production to meet the needs of the Civil and N.C.C. Gliding Clubs and Centres. As a result, all our requirements of gliders and sailplanes are met from indigenous production.

(ix) Development of C.G. Determinator for Viking aircraft.

(x) Collection and analysis of data on the prevailing gust conditions over the Indian air-routes by means of V. G. Recorders, Ryan Flight Recorders, Strain Range Recorders and Fatigue Meters installed on DC-3, Viscount and Friendship aircraft of the Indian Airlines Corporation.

(xi) Take-off performance tests on aircraft like DC-3, Viscount, Herald, Otter Prestwick Pioneer and HT-2 to determine their field length requirements.

(xii) Preparation of Operating Limitations for DC-3, and Viscount aircraft for passenger transport operations and Caribou aircraft, for supply of dropping operations.

(xiii) Scientific investigation of major accidents to civil aircraft like DC-3 aircraft, Avro 45 Domine aircraft, Glider Ka. 6B, Hyper Dakota, etc.

(xiv) The failures of fuel pumps in Caravelle aircraft were examined in this office and cause of the failures was identified as due to fuel problem. A large number of fuel samples drawn from storage installations all over India were tested enabling Indian Airlines Corporation to resume their operations with fuel suitable for operations.

(xv) Comparative technical evaluation of new transport aircraft types for international and domestic operations like Boeing 707, Viscount, Fokker Friendship, IL-18, etc., and personal planes for the use of State Governments and private operators.

(xvi) Development testing and drafting of specifications for indigenous aircraft materials like spruce and fir, mango, rose, palm and white cedar, plywoods, cotton fabrics, dopes, thinners, paint removers, aviation fuels and oils, webbing for safety harnesses, etc.

(xvii) Design and fabrication of structural test rig for full scale static tests on aircraft components.

(xviii) Installation of 'Palas' jet engine for studying the variation in performance under different atmospheric conditions and air-craft noise survey work.

(xix) Installation of Aviation Engine and Supercharge Engine for knock tests on Aviation fuels.

(xx) Examination of the Schemes for repair and modifications to civil aircraft, received from the operators from time to time.

(xxi) Investigations on the fatigue properties of light alloy materials, fittings and joints used on construction of aircraft.

(xxii) A low speed wind tunnel is also being designed and fabricated for testing of gliders and light aircraft.

(xxiii) With specialised equipment the intensity and characteristics of the noise in aircraft cabins have been measured in different aircraft like Boeing 707, Viscount, etc.

## ACCIDENTS

During the period from 1st January, 1965, to 31st December, 1965, there were 17 notifiable accidents involving 12 Indian Registered aircraft (8 fixed wing and 4 rotary wing), three gliders and two foreign Registered helicopters. Five of these

accidents were fatal resulting in the death of 11 members of the crew, 4 passengers and 3 outsiders.

Three of the aircraft were engaged on non-scheduled flights, three on training flights, four on spray operations, one on ferry flight and one on private flight. One foreign registered aircraft involved in the accident was engaged on exploration work and the other on spray operations. Of the three gliders involved in accidents two were engaged on local flights and one on giving joy ride.

## AIR AGREEMENTS

India is a member of the International Civil Aviation Organisation and has been elected to its Council.

India has entered into air services agreements with the following 23 countries on the dates shown against each:—

France, 16th July, 1947; Sweden 21st May, 1948; Pakistan, 23rd June, 1948; Ceylon, 21st December, 1948; Switzerland, 4th June, 1949; Australia, 11th July, 1949; The Philippines, 20th October, 1949; Netherlands, 24th May, 1951; U.K., 1st December, 1951; Afghanistan, 26th January, 1952; Egypt (U.A.R.) 14th June, 1952; Iraq, 3rd September, 1957; Japan, 26th November, 1955; U.S.A., 3rd February, 1956; Thailand, 12th June, 1956; Russia (U.S.S.R.) 2nd June, 1958; Italy, 12th March, 1962; Czechoslovakia, 7th June, 1961; West Germany, 18th February, 1965; Iran, 20th September, 1965; Nepal, 29th September, 1965; Hungary, 23rd February, 1966; Lebanon, 4th April, 1966.

The following agreements have been initialled:—

India-Kuwait, 24th February, 1964;  
India-Kenya/Uganda/Tanzania, 19th May, 1965;  
India-Belgium, 4th March, 1966;  
India-Ethiopia, 20th May, 1966.

Airlines of the following countries operate air services to and/or across India under temporary authorisation granted by the Government of India:—

Norway, Denmark, Sweden (Jointly under one authorisation), Kuwait, Burma, Syria, Ethiopia, Saudi Arabia.

Indian Airlines and Air-India operate to and/or across the following countries under temporary authorisation:—

Burma, Kuwait, Syria, Ethiopia, Saudi Arabia.

## FISHERIES

INDIA produces about 0.89 million tons of marine fish out of a total fish production of 1.3 million tons, which is only a quarter of the country's requirements, estimated at about 4 million tons annually.

About 73,400 fishing craft are estimated to be employed.

The average catch is about 2,500 lbs. per man per year.

The annual per capita availability of fish in India is estimated to be 3.4 lbs. as against 16 lbs. in Ceylon, 70 lbs. in Burma and 90 lbs. in Japan.

The fishing industry in India offers employment to about a million persons and contributes annually over Rs. 60 crores towards the national income. About 27,000 tons of fish products, consisting mostly of dry, dry-salted and wet-salted fish, are annually exported to neighbouring countries. The Third Plan target was to export Rs. 18 crores worth of fishery products per annum by 1966.

Some of the steps taken by Government to improve fish production are mechanisation of fishing craft, training centres for fishermen, cold storage facilities, formation of deep-sea fishing stations and research at the four main central stations, viz., Central Inland Fisheries Station, Calcutta, Central Marine Fisheries Research Station, Mandapam, Deep-sea Fishing Station, Bombay and the Central Fisheries Technological Research Station, Cochin.

Today more than 2,400 mechanised boats are operating on Indian coastline. In Bombay the local types of boats are being mechanised. New designs have been evolved for boats in Madras, Kerala and Andhra States. Experiment in improved types of fishing with small power craft are also in progress.

Cold storage facilities exist in Bombay, Mangalore, Calicut, Cochin, Quilon, Trivandrum, Madras and Calcutta. Additional plants are being installed in many other places. Some of these plants have been provided under T.C.M. and Norwegian aid programmes.

## PRODUCTION

Production is shown in the table below. About two-thirds of the catch are marine-fishes.

| '000 tonnes |        |        |       |  |
|-------------|--------|--------|-------|--|
| Year        | Marine | Inland | Total |  |
| 1960        | 878    | 282    | 1,160 |  |
| 1961        | 684    | 277    | 961   |  |
| 1962        | 644    | 330    | 974   |  |
| 1963        | 656    | 390    | 1,046 |  |
| 1964        | 860    | 455    | 1,315 |  |
| 1965        | 824    | 507    | 1,331 |  |

The following is a list of the names of fishes showing within brackets their production in metric tons in 1965 and 1964 respectively:

Elasmobranchs (31,431; 34,863); Eels (2,370; 2,255); Cat Fish (18,827; 22,790); Chirocentrus (7,347; 7,565); Oil Sardine (261,960; 2,74,409); Other Sardine (42,552; 40,318); Hilsa Ilisha (1,546; 3,441); Other Hilsa (9,023; 6,519); Anchovella (24,377; 25,199); Thriassocles (4,811;



6,619); Other Clupeids (18,728; 16,752); Harpodon Nemereus (73,894; 81,342); Saurus (540; 1,545); Hemihamphus and Belone (1,187; 1,527); Flying Fish (422; 920); Perches (8,082; 12,659); Red Mullet (2,011; 5,027); Polynemids (1,708; 2,155); Sciaenids (23,365; 25,198); Ribbon Fish (41,920; 25,897); Caranx (17,693; 26,930); Chorinemus (3,094; 2,448); Coryphaenas & Elacate (271; 345); Trachinotus (20; 115); Lelonathus (27,042); Gazza (66; 35); Lactarius (5,941; 6,508); Pomtrets (17,849; 19,583); Mackerel (43,069; 23,975); Seer Fish (9,426; 11,165); Tunnies (3,368; 5,002); Sphyraena (1,924; 1,663); Mugil (1,413; 2,916); Bregmaceros (5,499; 3,721); Soles (9,834; 8,146); Penaeid Prawns (35,846; 62,441); Non-penaeid prawns (41,415; 31,506); Other Crustaceans (2,392; 4,565); Cephalopods (265; 463); Miscellaneous (21,775; 24,445); Total Marine (8,24,429; 8,60,336); Total Inland (5,07,100; 4,55,273); Grand Total (13,31,500; 13,15,609).

The total landing of marine fish by State for 1964 & 1965 is shown below (where available):

|                                   |  | (In tonnes) |          |
|-----------------------------------|--|-------------|----------|
|                                   |  | 1964        | 1965     |
| Bengal & Orissa ..                |  | 10,642      | 12,244   |
| Andhra ..                         |  | 71,727      | 76,477   |
| Madras (including Pondicherry) .. |  | 1,31,809    | 1,06,029 |
| Kerala ..                         |  | 3,17,974    | 3,34,526 |
| Mysore ..                         |  | 1,04,218    | 66,102   |
| Maharashtra ..                    |  | 1,30,603    | 1,30,861 |
| Gujarat ..                        |  | 92,882      | 80,590   |
| Goa ..                            |  | 643         | 17,186   |
| Andaman (South) ..                |  | 148         | 224      |
| Minicoy & Laccadive Islands ..    |  | 190         | 190      |
| Trawlers ..                       |  | —           | —        |
| Total ..                          |  | 8,60,336    | 8,24,429 |

## RESEARCH

Research in Fisheries is carried out primarily under the aegis of the main central stations given below.

**Central Inland Fisheries Research Institute, Barrackpore:** Studies on inland fisheries resources and fish culture were intensified. Work in connection with the establishment of well-designed and sufficiently large fish farms for conducting experiments in fresh and brackish-water fish culture, was initiated. A number of spawning grounds of Hilsa and other commercially important fishes of the Ganga, Hooghly and Narbada rivers were demarcated. Intensive fish tagging experiments conducted during the year yielded valuable information about the migration of fishes. The problem of providing fish passes in dams and barrages was given special attention. Field work on induced breeding of major carps was continued.

The technique of induced breeding by hormone injection was extended to the Silver and Grass Carps with success. The studies on suitable machinery for extraction and storage of pituitary hormone carried during the last few years revealed that tricholore acetic acid extraction retains the potency of the hormone for over two months.

**Central Marine Fisheries Research Institute, Mandapam, Madras State:** Further progress was made in the investigations on the commercially important marine fishes and detailed statistics of marine fish landings were collected and analysed. The racial composition of mackerel stocks and the age determination of the oil sardine received special attention. Studies on the catches and size composition indicated that the variations in the strength of year classes may cause fluctuations in the oil sardine fisheries. Studies to estimate the primary production in the seas were carried out at Calicut, Tuticorin and Mandapam and programme of tagging experiments on Mackerel and Prawns were initiated. The programme of marine biological and oceanographical studies on the West Coast, launched in co-operation with the Indo-Norwe-

gian Project, made further progress. A new research unit was opened for the Andaman and Nicobar Islands at Port Blair.

**Central Fisheries Technological Research Station, Kerala State:** The Processing Wing of the Central Fisheries Technological Research Station concentrated its studies on the development of new and improved methods of fish processing and fixation of suitable standards for preserved fishery products. The source of contamination of fishery products was investigated when it was found that major sources of contamination were the fishing craft and primary processing factories. On the basis of these findings proper handling and cleaning schedules were drawn up and communicated to the industry. Significant improvement in the quality was noted by the observance of the schedule.

A significant contribution of the processing wing of the institute was the finding that frozen shelf life of Sardines could be increased from two months under normal conditions to about six months by adopting suitable glazing. The Quality Control Section of the Station rendered advice to the industry on the improvement of the quality of export products. Compulsory pre-shipment inspection and quality control of frozen and canned prawns was introduced from 15th March 1965 under the controlling authority of the Central Institute of Fisheries Technology. The operation of the pilot plant with the experimental tunnel dryer has made available valuable data for the design and construction of commercial dryers. The Craft and Gear Wing of the Station completed the design studies on fishing vessels required for the Government of India fleet for the Third Plan. Besides the above institutions the National Institute of Oceanography with different units of Biological, Chemical etc. was set up at Ernakulam (Kerala).

## OFF SHORE FISHING

The work of the deep sea fishing stations with its 23 boats was orientated in connection with other Central Fishery Research Institute for effective exploration and exploitation of the fishing potential in the offshore waters. The exploratory fishing vessels operated from Veraval, Bombay, Mangalore, Cochin, Tuticorin and Vishakapatnam and landed 858.6 tonnes of fish valued at Rs. 3.1 lakhs during the ten months of 1965. The quick freezing plant, cold storage and ice factory, run by the Deep Sea Fishing Station, Bombay was transferred to the Govt. of Maharashtra.

The fishery research institutions were brought under the jurisdiction of the reorganised ICAR. (See Agriculture).

The Gujarat Government is setting up a marine biological research station at Okha at a cost of about Rs. 3.5 millions to deal with the problem of fishery biology, oceanography and marine biology with the help of UNESCO and other foreign institutions.

**Deep Sea Fishing:** During Jan.-Sept. 1965, seven vessels operated from Cochin, Cannanore, Karwar and Mandapam and landed 300 tonnes of fish valued at Rs. 0.42 lakhs.

**Marketing:** For the improvement of fish marketing, six refrigerated railway vans are running—two at Palasa (Orissa)-Calcutta route, two in Calicut-Madras and two in Vijayawada-Howrah. Three more such vans are under construction. These vans have highlighted the need for more such vans not only on these routes but on others as well. Arrangements are, therefore, being made for the construction of six more refrigerated vans.

To meet the urgent requirements of refrigerated road transport, arrangements were made for importing 26 road vans. A few such trucks were also fabricated locally.

**Cold Storage:** Six ice and cold storages were established one each in Gujarat and M.P., two each in Kerala and Orissa. Work on four freezing plants with provision for frozen storage one each in Andhra, Goa, Kerala and Orissa are being completed.

A Central Fisheries Corporation has been set up with headquarters at Calcutta. This has been registered as a Govt. company with an authorised capital of Rs. 5 crores. It will initially engage in marketing fish in Calcutta City, subsequently extending its activities to the whole country.

## TRAINING

The first two-year course for training district fishery Officers in all aspects of fisheries, both marine and inland was imparted at the Central Institute of Fisheries Education at Bombay. The ten-month course of training at the Central Inland Fisheries Station has been revised and expanded and 44 trainees including four overseer trainees received training during 1965-66.

For training fishermen there are centres at Satpati near Bombay, Veraval in Saurashtra, Cochin in Kerala and Tuticorin in Madras. New training centres are being opened at Mangalore in Mysore State and at Kakinada in Andhra Pradesh. At these centres batches of 20 candidates are admitted for 6 months training. The fishery extension units conducted short term training courses on various fishery subjects in which 2,744 persons were drawn from State Fishing Depts. & C.D. Blocks. Fish farmers also participated.

The Central Deep Sea Fishing Station at Bombay gives training in modern fishing methods.

At the Central Institute of Fisheries Operations, Ernakulam, the first batch of 25 trainees for the Master Fisherman's Certificate Course and 32 for the Engine Drivers Course completed their training. The Marine Products Training Centre, Mangalore (started with Japanese collaboration) provides training in canning, freezing, microbiology etc. A batch of 29 was trained and another 27 are undergoing training there.

Local fishermen numbering 140 were trained in mechanised fishing and Indian instructors and fishermen continued to receive training in powered fishing on board the I.N.P. Fishing Fleet at Cochin.

## FOREIGN AID

The FAO, TCM and the Indo-Norwegian Project continued to render assistance in the overall development of the fisheries programme and in the implementation of specific projects of both the Central and State Governments. The administration of the Project hitherto vested with the Kerala Government has been handed over to the Government of India since April 1963 and the headquarters shifted from Neendakara to Ernakulam.

The activities of the project has been extended to Mandapam in Madras.

The FAO, TCM and Indo-Norwegian Foundation continued to give valuable technical assistance. One harbour specialist continued work in connection with the development of fishing harbours in the States of Maharashtra, Kerala, Madras and Mysore under the Expanded Technical Assistance Programme of F.A.O. Two fisheries engineers worked on the Madras, Malabar, Kanara and Kathiawar coasts, on the introduction of new types of fishing gear, use of mechanised aids and the training of fishermen in their use. Services of 4 master fishermen were also obtained from Japan. Under the Indo-Norwegian Project, 90 boats of improved types were built and a new 25 ft. boat was designed. A fish marketing expert was engaged in formulating fish marketing schemes in co-operation with the States on a national basis.

## FISHING HARBOUR

The construction of the fishing harbours at Veraval (Gujarat), Nagapattinam and Cuddalore (Madras State) and Vishakapatnam is completed. Construction of such harbours at Porbunder, Umbergaon, Karwar and Bhatkal (Mysore), Baypore, Balipatnam and Vizhigum (Kerala) and Kakinada (A.P.) is in progress. Two F.A.O. experts, a harbour specialist and harbour economist are drawing up schemes for pre-investment



survey. An Indian engineer has been trained under FAO assistance.

### FISH SEED COMMITTEE REPORT

The 'Fish Seed Committee' was constituted in Jan. 1963 with seven members headed by Dr. B. S. Bimachar as Chairman.

According to their report, there are 40,54,359 acres of cultivable water areas in the country, including those to be reclaimed for culture purposes. Of these, about 15,19,787 acres only are utilised at present, while another about 9,59,487 acres, which are readily available for culture, are left unutilised. The reclaimable water area amounts to as much as 15,75,085 acres.

Only 61-30% of the readily cultivable water area in the country is presently utilised for fish culture.

Total fish seed production in the country during 1964-65 amounted to only 365.90 crores of spawn, 21.11 crores of fry and 9.90 crores of fingerlings. Riverine collection of major crop spawn still remains the primary source of spawn production in the country. Its contribution to total production being as much as 91.87%. On the other hand, induced breeding of major carps, bundh-breeding and scale carp breeding respectively contributed to only 1.57%, 5.38% & 1.26% of the total.

The total seed requirements for the presently cultivated waters have been estimated at about 550.59 crores of spawn, 165.18 crores of fry and 82.59 crores of fingerlings, as against the meagre 1964-65 production of only 365.90 crores, 21.11 crores and 9.90 crores respectively of spawn, fry and fingerlings. If all the existing readily cultivable waters are to be adequately stocked, the present level of seed production in the country becomes deficit to the extent of 579.69 crores, 219.66 crores and 102.90 crores respectively of spawn, fry and fingerlings. The cost of seed production varies widely from state to state.

Intensive development of inland fisheries in the Community Development Blocks, with special emphasis on establishment of nurseries and intensive stocking of fry fish culture had been undertaken in 3,062 blocks, out of 5,131 blocks in the country. The rate of fingerling supply per block increased from 7,835 in 1960-61 to 16,593 in 1964-65. This includes 222 blocks taken under Applied Nutrition Programme, organised with the assistance of UNICEF.

Even though murels are in good demand in several states, there is no organised murel culture anywhere in the country. It is recommended that in such of those waters where carp culture is not feasible, or where a fast multiplying forage fish like Tilapia has established itself, murel culture can be undertaken to the State's advantage. Vast areas of cultivable brackishwaters, which are potentially rich sources of fish production, remain unharnessed at present. The concerned states should give proper attention to the development of this resource.

Intensive exploration of riverine resources all over the country, for locating lucrative fish seed collection centres, should be taken up immediately on an organised basis by State Governments. The riverine spawn collection technique standardised by the Central Inland Fisheries Research Institute may be followed, with their help wherever necessary. The Central Inland Fisheries Research Institute should take up the work of improving the existing gear and evolving improved gear. The feasibility of transplanting desirable species of fishes and prawns to newer areas must be explored. Attention should also be paid to the location of areas of brackishwater fish seed concentrations, and collection of seed therefrom.

Attempts should be made by various states to construct and utilise dry bundhs, after the pattern followed in Madhya Pradesh, and to attempt bundh-breeding of carps in all the existing wet bundhs and similar perennial waters, since this appears to be the most economical method of seed production. Induced breeding of major carps through the administration of pituitary

hormones should be intensified and extended all over the country. The possibility of similar breeding of some other cultivable fishes, such as Bhetki and mullets, should be explored. The Central Inland Fisheries Research Institute should continue its work on the induced breeding of Hilsa and its culturability in impoundments. The possibility of establishing a series of pituitary gland 'banks' must be explored by State Governments.

The knowledge gained so far in the breeding of Scale and Mirror Carps should be made use of for the intensive culture of these fishes all over the country. The possibility of producing larger number of healthy trout fry by constructing artificial spawning channels should be explored by the concerned states.

Work on improving the existing methods of transportation of fish seed and breeders should be taken up immediately. The need for improving the existing types of containers should also be looked into.

The Railway Board should be approached for providing sufficient number of special bogies at all important seed production centres and to provide more accommodation in faster trains. The Indian Airlines Corporation should be requested to allow concessional rates for air transport of seed and to provide more accommodation by planes. The Ministry of Transport and Communications should be approached to provide necessary facilities for loading fish seed in private planes at Dum Dum Airport. It is proposed that a perforated cup of fixed capacity, say 150 ml., be introduced as a standard measure throughout the country for measuring spawn and dry. Immediate steps should be taken by the states to establish adequate nursery and rearing farms to cover all regions of the state. The relative merits of different types of nurseries must be tested in statistically designed experiment by the Central Inland Fisheries Research Institute. Efforts should be made to bring under fish culture all the presently unutilised readily cultivable waters by the end of IV Plan period. The present low stocking rates prevailing in most parts of the country should be raised to the optimum level. Attempts should be made to convert available brackishwater areas into suitable fish farms.

### FOURTH FIVE YEAR PLAN

At the beginning of the Third Plan the baseline production was estimated to be 14 lakh tonnes. This was sought to be raised to 18 lakh tonnes by the end of Third Plan period. In 1961-62, however, the estimate of base line production was revised to 9.73 lakh tonnes and the target of production for 1965-66 was set at 11.5 lakh tonnes consisting of 8.5 lakh tonnes of inland water fish and 3.0 lakh tonnes of marine fish. The actual achievement during 1965 was 13.31 lakh tonnes (6.07 inland and 7.24 marine). The outlay for fisheries in Third Five Year Plan which was Rs. 24 crores is proposed to be increased to Rs. 113 crores in IV Plan. The production of fish is expected to increase from 11.5 lakh tonnes in 1965-66 to 15.3 lakh tonnes in 1970-71.

Deep sea fishing has undergone extensive and rapid technological progress abroad. As India's marine resources are rich in fish, stress was laid in the Third Plan on introducing technological changes to improve marine fishing capabilities. In the Fourth Plan, further stress will be laid on raising the technological status of the industry and expanding the fisheries cooperatives so that they may play an increasingly important role in production and marketing. It is proposed to acquire 200 trawlers, construct 8,000 mechanised boats and increase the output of other ancillary equipment for off-shore and deep sea fishing in particular. It is proposed to develop fishing harbours, set up more ice and cold storage plants and provide refrigerated vans for long distance transport from the points of landing to the points of consumption. In respect of inland fisheries, the major part of the increase in production is expected to be derived from presently unutilised but potentially rich water areas, intensive exploitation of existing culturable

waters, reclamation of derelict water areas and other measures.

Facilities for research and training as important adjuncts to development, will be expanded to accelerate the pace of conversion from traditional methods to modern mechanised methods of exploitation of fisheries. These include strengthening of the Central Marine Fisheries Research Institute at Mandapam, the Inland Fisheries Institute at Barrackpore, the Fisheries Technological Institute at Ernakulam, and the off-shore fishing stations at several places. The Central Fisheries Operatives Institute at Cochin and the Central Fisheries Education Institute at Bombay will be enlarged to provide greater training facilities for personnel engaged in different areas of the industry.

### ANDHRA PRADESH

Andhra Pradesh has a coast-line of about 600 miles. The continental shelf extends to 20 miles on an average with a fishable area of 12,000 sq. miles. There are 350 fishing villages in seven marine districts of A.P. with 1,80,000 fishermen having 20,000 boats and 61,000 fishing gear.

The fish production of the State is estimated at 1,58,000 metric tons of marine fish and 84,500 metric tons of inland fish annually. Fisheries contributed more than Rs. 13.2 crores during 1961-62 to the State income.

The training of 25 fishermen of the 22nd batch was commenced from August 1964 in the Fisheries Training Institute. The Institute has now been upgraded and a post-graduate diploma course in Fisheries was expected to be started from the academic year 1965-66 with a strength of 20 students.

Up to April 1965, 254 mechanised boats had been constructed. Of these, 91 mechanised boats had been distributed to fishermen. For 1965-66, an amount of Rs. 8.34 lakhs had been provided in the Budget for the construction of mechanised boats.

**Marketing:** Fish is being exported to Orissa and West Bengal. By the export of fish to West Bengal, there is substantial saving in foreign exchange expenditure due to import of fish from Pakistan.

**Deep Water Netting:** During 1963-64, nine deep water netting units were in operation in various reservoirs in the State and the total catches upto Jan. 1964 were 0.70 lakh kg. of fish.

**Cooperatives:** There are 472 fishermen cooperative societies with a membership of 49,643 and a share capital of Rs. 5,43,237 including six Marketing and 2 Apex Central Societies.

**Third Plan:** Fisheries secured Rs. 106 lakhs out of the total Plan investment of the State. In view of the development shown under fisheries during the first and second years of the Plan, the ceiling was increased to Rs. 1.31 crores and the number of schemes also increased to 33.

### GUJARAT

Gujarat has a coast line of over 1,000 miles extending from Lakhpat in the north to Umbergaon in the south. It has a total fishable area of 26,000 sq. miles including the Gulf of Kutch and Gulf of Cambay.

There are 51 important fishing ports and 125 other small roadsteads and fishing hamlets. No. of fishermen 2.5 lakhs; no. of active fishermen 30,000; no. of fishing vessels used in estuarine, coastal and offshore fishing: about 4,400 ranging from 1 to 15 tons. Total capital invested in fishing boats, engines, fishing gear and other accessories by fishermen and their co-operatives amounts to Rs. 2.5 crores.

Total landings in 1965-66: 1 crore metric tonnes worth Rs. 3.00 crores. Local consumption in the State: 16,000 tons. Balance is exported to Bombay, Delhi, Calcutta, Ceylon, Burma, Mauritius and Singapore. Value of fish exported to foreign countries: Rs. 10 lakhs.



**More important landings of the State on the basis of value :** Bombay ducks Rs. 1.3 crores; Pomfrets Rs. 78.5 lakhs; Indian Salmon and Jew fishes Rs. 14.8 lakhs; Prawns and shrimps Rs. 14.8 lakhs; Perches and Hilsa Rs. 18.2 lakhs; Shell fishes including pearls, chanks, cuttle-bones, window pane oysters and other marine sea shells Rs. 1.5 lakhs. Other miscellaneous fishes including sharks and rays, mullets, cat fishes, etc. accounting for Rs. 34 lakhs. The State also produces about Rs. 3.5 lakhs worth of fish isinglass for export to U.K. and Rs. 3 lakhs worth of fish meal and fish fertilizer and 1 lakh lbs. of shark liver.

**Important fishing ports :** Bifurcated Surat District : Umbergaon, Daman, Billimora, Navsari, Borsi, Umarsadi, Kolak, Bulsar, Bhadeli-Jagalala, Kosumba, Surat; Broach District : Broach, Bhadbhut, Kavi, Sarod; Amreli District : Madhvad, Kotda, Velan; Junagadh Dist. : Veraval, Porbunder, Mangrol, Navibunder, Chorwad, Jaleshwar, Hirakot, Sutrapada, Dhamlej, Navabunder, Rajpara; Bhavnagar Dist. : Bhavnagar, Ghogha; Jamnagar Dist. : Okha, Bedi, Salaya, Sikka, Jodiya; Rajkot Dist. : Navlakhi, Maliya; Kutch Dist. : Chero-vari, Lakhpat, Jakhau, Modhwa, Kandla, Kharirohar, Tuna, Rampara, Luni, Sekhdia, Mundra.

Inland fisheries is restricted to the districts of Baroda, Kaira, Panchmahals, Mehsana, Sabarkantha, Banaskantha, Broach, Surat and Dangs. There are 2,300 fishermen engaged in inland fisheries. Twelve lakhs of fish seed of major carps were collected from rivers like the Narmada, the Tapi etc. and supplied to the pisciculturists during 1965-66. Two fish farms and five fish nurseries have been established.

Per capita earning of fishermen: Rs. 875 a year.

**No. of ice factories 83; ice production 1,027 tonnes a day; no. of cold storages available 11; no. of mechanised boats: 1,138 (June, 1965). Quantity of fishing twine supplied: 40,000 kgs. One Fisheries Staff Training Centre at Ahmedabad to train 18 candidates per year; service stations 3; fishery schools: one each at Baroda, Bhadbhut, Umarsadi and Kolak; Cultural centres 27; shark liver oil extraction centres 4; fish meal plant: one at Jaffrabad; Govt. of India institutions in the State: Marine Fisheries Research station at Veraval; Survey Centre at Veraval; Offshore Fishing sub-station at Veraval; Central Institute of Fisheries Technology at Veraval.**

### Third Plan Achievement

A fish meal plant provided in the Second Plan, is working at Jaffrabad. Veraval fishing harbour development at a cost of Rs. 50 lakhs and the Kandla fishing harbour have been completed. A canning plant is being operated by a co-operative association for canning Shrimps and other fishes. Canned Shrimps are exported to foreign countries.

The Gujarat Fisheries Central Co-operative Association Ltd., formed in the Second Plan has constructed one cold storage, procured one freezing plant, constructed one fish godown, one boat building yard and one nylon twisting-cum-net making factory at Ahmedabad. Annual production: 1,00,000 lbs. of twine and 25,000 lbs. of netting. Total cost of the plant: Rs. 9 lakhs.

The State has 84 co-operatives with about 14,400 members.

The expenditure under the Third Plan was Rs. 1.81 crores.

A research wing has been opened in the Directorate to conduct research on the offshore fisheries. Three research vessels operating from 1962 have located excellent fishing grounds for prawns, perches etc. off the coast. A Marine Biological Research Station at Okha at a total cost of Rs. 14.39 lakhs has been sanctioned and the first phase of the work has been completed. A Technological Research Unit has been established at Jaffrabad for improving the quality of Bombay Ducks.

## KERALA STATE

Kerala State, the smallest maritime State in India with 590 kms. of sea coast, contributes to a little over 30 per cent of the total seafood landed in India. Oil Sardine (*Sardinella longiceps*) and the Indian mackerel (*Rastrelliger canagurta*), the two most important shoaling fishes of the west coast contribute to the major fishery of the Coast, the third important constituent being prawns. The fishing equipment consist of nearly 13,000 big and small non-mechanised canoes, over 8,000 catamarans besides nearly 1,000 mechanised boats using over 50,000 fishing gears of different types and sizes, thousands of hooks and lines, besides many mechanised boats.

The estimated landing of all fish in the State is about 2,21,913.7 m. tonnes of which 6,385.5 m. tonnes are contributed by inland water fishes the rest being sea fishes. This quantity is valued at about Rs. 5,85,66,316 of which Rs. 36,64,102 are from inland fisheries. About 20 per cent of the people are estimated to be fish eaters. At the most only 55 per cent of the total production is consumed as fresh fish, 26 per cent as dried and the rest is converted as fish manure or fish meal. The important items of fishery exports are frozen, canned and dried fish.

Along the coast there are 67 fish curing yards, some of which are provided with hygienic fish curing sheds, and salt is issued at a subsidised rate.

There are four Fishermen Training Centres at Cannanore, Ernakulam, Vizhinjam near Trivandrum and Beypore to train able bodied fishermen in the use of mechanised fishing crafts and modern fishing equipment. 1,454 persons underwent training till date. Mechanised boats, Nylon etc. are distributed at concessional rates through the Fishermen Co-operative Societies and Malsya Ulpadaka Co-operative Societies.

There are at present 265 primary fish producers' co-operative societies and 191 credit societies. There are 8 Regional Marketing Societies at Kozhikode, Vypeen, Neendakara, Karunagappally, Ernakulam, Alleppey, Anjengo and Vizhinjam.

The headquarters of Indo-Norwegian Project is at Ernakulam. The Indo-Norwegian Project helps in the development of fishing in this State at Cannanore. The programme of activities consists of construction of Fishermen Training Centre, Boat Building Yard, Freezing Plant and a fishing harbour at Mopla Bay.

There are eight ice & cold storage plants in the public sector working at Vizhinjam, Neendakara, Kayamkulam, Cochin, Calicut, Bhangad, Tanur and Madai. In addition to four Government freezing plants there are 11 private freezing plants also.

There are four research stations in the State engaged in the research of marine, estuarine and fresh water fishes. In addition, there are two research stations sponsored by the I.C.A.R. to conduct research on lime shell and giant fresh water prawns. There is a Fisheries Technological Station at Calicut conducting research on fishery by-products and other technological aspects. This station manufactures fish meal, fish manure and semi-dried prawn as well.

There are four brackish water fish farms, one fresh water fish farm and nine major reservoir fishery centres.

The financial outlay for fisheries development in the State during the Fourth Plan is tentatively fixed at Rs. 10.25 crores.

## MADRAS

Madras State has a coastline of 1,000 Kilometres with 9,000 square miles of inshore waters and a continental shelf of about 20,000 square miles and about six lakh acres of inland waters. There are about 3.5 lakhs of fishermen spread over 415 inland and 308 marine fishing villages of the State. There are at present about 28,000 catamarans, 817 mechanised fishing boats, and about 82,000 fishing nets of different types and 2,13,000 hooks and lines.

The estimated landings of marine fish in 1964-65 were about 1,60,218.578 M. Tons valued at Rs. 1,785.34 lakhs. The estimated landings of inland fish from various inland waters during 1964-65 were about 99,568.436 M. Tons valued at Rs. 555.07 lakhs.

The four marine biological stations, Ennore, Krusadai Island, Tuticorin and Cape Comorin, the two technological stations at Tuticorin and Cape Comorin and the Fresh Water Biological Station and Hydrological Station at Bhavansagar continued fisheries research.

The Pearl and Chank fisheries of the gulf of Mannar are state monopolies and yield substantial revenue besides supporting a large population of skilled divers. About five lakhs of chanks are fished every year.

The annual value of shells collected and sold will be about Rs. 15 lakhs.

Furthermore Madras State off its Ramnad coast is in possession of myriads of multi-coloured fancy Marine Shells. One could see in Rameswaram temple over 200 shell booths displaying an endless variety of shells, polished, carved, etched, lacquered and painted with different artistic designs. Also countless numbers of dainty articles of commerce such as toys, dolls, ash trays, pendants, buttons, handles, pins, brooches, bangles, rings etc. are manufactured. Chanks are exported to West Bengal.

The coral fisheries of Madras State which would supplement the limestone deposits on land in the State are inexhaustible. Coral islets are many off Ramnad and Tirunelveli coast. Corals are at present dug out in the sea.

A quantity of 1,596.21 lakhs of fingerlings was collected for the period upto 1964-65. The production of fish seed has been stepped up by adopting the modern technique of induced breeding by hormone treatment. Nurseries and rearing ponds have been set up.

For providing suitable landing and berthing facilities, the construction of first stage of Cuddalore harbour and a boat jetty at Pulicat were completed.

Twenty-five Curing Yards are maintained by the Government wherein good quality salt is supplied to fishermen at subsidised rates for curing fish hygienically under the technical supervision. A quantity of 22,082 M. Tons of cured fish was let out from the yards for the period upto 1964-65.

Cold Storages are provided in important fish landings centres and at fish markets.

A canning factory is working at Tuticorin.

This Department owns a fleet of eleven vehicles for the fishermen cooperative societies.

The Fisheries of major reservoirs formed by hydel and irrigation projects are taken over by the Fisheries Department to develop the fishery wealth.

There are 177 inland and 221 marine fishermen Co-operative Societies, 7 fishermen Co-operative Federations and 7 fishermen Co-operative Markets with about 47,765 members on their rolls with a paid up share capital of Rs. 5.61 lakhs. Long term and medium term loans extending over a period of 10 years and 5 years respectively are issued to these societies. A sum of Rs. 9.67 lakhs has been sanctioned as loan for the period upto 1964-65.

There are three Fisheries Training Centres at Tuticorin, Nagapattinam and Madras training 20 fishermen per batch. One training centre for training the service personnel in the Department, was opened at Madras. Another training Centre for training inland fishermen in reservoir fishing was also established at Mettur Dam.

The craft Research Unit at Tuticorin is conducting experiments on the fishing crafts and studies on the development and possibility of mechanising all country crafts.

An aquarium is located at Madras.



## MAHARASHTRA

**Fishery resources:** Marine resources of the Maharashtra State comprise the Arabian Sea of 720 km. long coast line, extending from Reddi in the south and ending at Zal in the north and aligning the maritime districts of Thana, Kolaba, Ratnagiri and Greater Bombay.

Fresh water resources comprise nearly 3,200 km. of rivers and 2,33,000 acres of ponds, lakes and reservoirs. Comparatively, estuarine resources containing brackish water are less extensive and comprise several creeks at Versova, Bassein, Manori, Bombay Harbours, Revdanda, Janjira, Dabhol, Bankot, Jaitapur, Jaigad, Vijaydurg etc.

**Estimated production and valuation:** Catch of fish from marine resources was estimated at 2,09,000 tonnes and that from inland resources was estimated at 12,000 tonnes during the year 1964-65.

Value of catch to producers was estimated at Rs. 8.89 crores during the year 1964-65.

**Fishermen's population:** Population of fisher community is about 2 lakhs of which there are 57,000 fishermen, actively engaged in the industry. There are 37,000 in marine fisheries and 20,000 in inland areas, some of them partly engaged in fishing.

**Fishing crafts:** Total number of vessels: 9,130; Vessels below 3 tons: 6,600; Vessels above 3 tons: 2,530; Vessels mechanised: 1,790.

**Marine Fisheries:** Important fishing villages: **Greater Bombay:** Lower Colaba, Worli, Danda, Versova; **Thana District:** Bassein, Arnala, Uttan, Edvan, Usarni, Satpati, Navapur, Ucheli, Navgaon, Dativre; **Kolaba District:** Karanja, Versoli, Alibag, Theronda, Revdanda, Murud, Shrivardhan; **Ratnagiri District:** Burundi, Dabhol, Jaigad, Ratnagiri, Vijaydurg, Jaitapur, Malwan, Devbag, Vengurla.

**Important varieties of marine fish, and Shell fish:** Saranga (White pomfret), Halwa (Black pomfret), Ghol (Jew fish), Dara (Giant thread fin), Rawas (Indian salmon), Kupa (Tuna), Surmai (Seer fish), Bol (Mullet), Bombil (Bombay duck), Bangda (Mackerel), Mushi (Shark), Wam (Eel), Shingada (Catfish), Karkara (pristipoma), Tarli (Sardine), Mandeli (Golden anchovies), Wagti and Ball (Ribbon fish), Kolambi (prawn), Karandi (Shrimp).

**Fishery survey:** Four medium sized trawlers of the department have completed survey of 8,200 sq. km. of sea, between Vengurla and Murud. The survey indicated 3,328 sq. km. of sea area off Ratnagiri District coast and 1,409 sq. km. area off Kolaba coast, can be gainfully exploited, with trawl nets.

**Trawler fishing:** Based on the findings of survey vessels of the department 71 mechanised vessels have successfully taken to trawling in the private sector. Besides, the department has added four 36' trawlers for exploitation of deeper and farther seas, two will be given to fishermen's co-operatives on hire and two will be operated departmentally.

The Government of India's deep sea fishing station operates trawlers in Bombay waters. The vessels landed 455 tonnes of fish in 1964-65. Messrs. New India Fisheries conducted trawling operations off Bombay and landed 1,060 tonnes of fish in the year 1964-65.

**Landing and harbour facilities:** Fishing ports along the coast of Maharashtra were surveyed with a view to assessing the requirements to improve the landing and harbouring facilities.

**Fresh water fisheries:** Important varieties of fresh water fishes: Tambir, Khalashi, Kanoshi, Pangat, Murrel, Shivdas, Catla, Rohu, Mrigal, Calbasu, Kharbi, Khavli, Shinghala.

**Major carp culture:** As many as 1,20,00,000 baby fish of Catla, Rohu and Mrigal were imported from West Bengal in the year 1965-66 and released in long seasonal and perennial waters in the State.

In the year 1965-66, as many as 1,30,00,000 spawn was produced as a result of induced spawning experiments.

Additionally collection of fry from the rivers is also undertaken, particularly around Kolhapur and Bhandara. During the year 1964-65, nearly 75,000 fry and 35,000 fingerlings of the economic variety of fish, named Tambir, were collected.

**Reservoir fishery:** Main reservoirs in the State covering 1,25,000 acres of water spread are stocked with fingerlings of major carps every year, with a view to establishing possible sources of their natural breeding eventually to become a source of supply of fry.

**Fish farms:** The three fish farms one each in Bhandara, Kolaba and Poona districts and 30 nursery units serve as a composite unit for demonstration of scientific methods of fish culture, biological studies of culturable varieties of fishes under controlled conditions and fish seed production centres.

**Fisheries Technology:** Technological work on fisheries is carried out at the Fisheries Technological laboratory at Sassoon Docks. The laboratory conducts research on development of new fish products, improvement of traditional products and handling and processing of fish. It also operates commercial schemes of manufacture and sale of shark liver oil products such as sharkovit, sharkomalt, elasmol pearls, elasmol liquid etc., fish meal, fish glue, and pearl essence. The laboratory is also authorised by the Government of India, for testing samples under compulsory pre-shipment quality control scheme for fish and fishery products.

In the year 1965-66, sale proceeds of Shark Liver Oil products amounted to Rs. 21,80,855. The production of neat shark liver oil with Vitamin 'A' potency of 10,000 I.U. was 35,118 litres.

The departmental fish canning plant, commissioned into service in October 1964, produced 18,843 fish cans in the year 1965-66.

The fish meal plant of the Government of India, was taken over by the State Government in August, 1965. The plant is equipped with a cooker-cum-dryer which is capable of heat treating the fish meal to a temperature lethal to harmful bacteria.

There are at present 66 ice factories and cold storages in the State with cold storage capacity of 1,600 tonnes.

Government continues to grant financial assistance on the basis of 1st subsidy and 1st loan to fishermen's co-operative societies for establishment of ice factories, cold storages and quick freezing plants. So far three such factories have been established at Malwan, District Ratnagiri, Satpati, District Thana and Versova, District Greater Bombay. Financial assistance has been sanctioned to two more co-operative societies of fishermen for establishment of ice factories and cold storages at Arnala and Palghar.

The department continued operation of ice factory, cold storage and quick freezing plant at Sassoon Docks, an ice factory and cold storage at Ratnagiri and a cold storage at Nagpur. Work to establish an ice factory and cold storage at Alibag and Bassein is in progress. A mobile flake ice plant is being operated at Nagpur under the special development programme for fisheries; capacities of factories at Sassoon Docks and Ratnagiri are being increased and new factories are being established at Murud, District Kolaba, Vengurla, District Ratnagiri.

Government Fish Curing Yards, 21 in the Ratnagiri District and one in Kolaba District, continued to afford facilities for salt curing of fish in hygienic conditions. During the year 1964-65, 2,000 tonnes of salt was issued at the yards for curing 7,200 tonnes of fish.

**Marketing of fish:** In the Greater Bombay District, there are 2 wholesale fish markets and 60 retail markets. Total quantity of fish sold in the Bombay city is approximately 35,000 tonnes. The volume of dry fish trade conducted from the Bombay city is worth Rs. 4,00,00,000. About

20 per cent of fresh fish brought to city is marketed through co-operative societies.

During the year 1965-66, five trucks were allotted to five societies of fishermen. From the inception of the scheme subsidy of Rs. 1.84 lakhs and loan of Rs. 7.53 lakhs have been granted to 20 co-operative societies, for purchase of 27 transport trucks.

The fisheries department maintains 13 fish stalls in Bombay.

The State Government has sanctioned subsidy of Rs. 32,833 and loans of Rs. 4,00,000 to the Maharashtra Rajya Machhimar Sahakari Sangh, the apex body of fishermen, to enable it to undertake marketing of dry fish and preparation and sale of fish meal.

**Fishery education:** Education of fisher-children and fisher-youths occupies an important place in the activities of the fisheries department. The department has under its control eight fisheries vocational schools, one each at Satpati and Navapur, District Thana, Karanja and Bagmandia in the Kolaba District, Ratnagiri, Jaitapur, Deobag and Tarkarli in the Ratnagiri District. Total Number of pupils in these schools is about 4,000. No fees are charged to pupils and text-books are provided to deserving pupils free of charge.

The Fisheries Department has also established a fisheries high school at Satpati, District Thana.

The departmental training centres are established at Versova, Ratnagiri, Alibag, Kolaba and Bassein.

Refresher courses of one month duration have been started recently at Satpati, Ratnagiri, Alibag and Bassein for the benefit of fishermen who have already mechanised their fishing vessels. During the year 1965-66 thirty-five candidates were trained.

**Government's assistance to the fishing trade:** Financial assistance: Loan of Rs. 41.68 lakhs and subsidy of Rs. 24.65 lakhs were disbursed during the year 1965-66 for development of the industry.

The assistance so far granted is to the tune of Rs. 355.17 lakhs of which Rs. 134.67 lakhs are subsidy and Rs. 220.50 lakh loan.

**Reservation of lands:** Government have taken a decision to give preference to the needs of the fishing industry while disposing off non-agricultural shore lands.

**Incentives:** As an additional incentive for fish farming, subsidy is being given on purchase of carp-fry, fish manure and for desilting and improving tanks for fish culture. Subsidy is being granted to fishermen's co-operative societies who export frozen fish to foreign countries.

**Taraporevala Aquarium:** The Taraporevala Aquarium continues its popularity as a centre of recreation and education. During the year 1965-66, 6,90,046 persons including foreign dignitaries visited the aquarium.

**Research & Investigation:** The fisheries department has well equipped research stations at Bombay and Ratnagiri, where research work is carried out on fisheries of regional importance and such aspects of marine biology as have a direct bearing on fisheries. The Station at Bombay is affiliated to the University of Bombay for post-graduate studies in Zoology while the Ratnagiri station is affiliated to Shivaji University. This station is provided with a research vessel 'Mysis' for undertaking hydrobiological studies at sea.

**Third Five Year Plan:** As against provision of Rs. 178.32 lakhs (nett) which was made for undertaking 26 schemes during the Third Plan period, a sum of Rs. 257 lakhs approximately was actually spent. Due to implementation of the production oriented schemes, the fish production from marine resources rose from 1.7 lakh tonnes to 2.1 lakh tonnes and that from fresh water resources, rose from 10,000 tonnes to 12,000 tonnes.



**Fourth Five Year Plan :** Total allocation for the Fourth Five Year Plan is Rs. 1,004 lakhs. During this period twenty-three schemes will be operated. Establishment of a fisheries corporation, and assistance for housing of fishermen are the two important new schemes that will be undertaken during the Fourth Plan period. At the end of the Fourth Plan, the marine fish production is expected to rise from 2.1 lakh tonnes to 3.1 lakh tonnes.

**Budget :** Initial budget of the department for the year 1966-67 is for Rs. 2,59,45,100.

## MYSORE

**Inland Fisheries :** There are about 30,000 minor tanks, 2,700 major tanks, 17 reservoirs and about 3,800 miles of rivers in the State.

**Inland Fisheries development is extended to all over the State and more and more inland fishery resources are being exploited.**

**Artificial Fish Breeding Centres :** Tungabhadra fish farm, Hessarghatta fish farm, Neerasagar fish farm, Vanivilas Sagar fish farm.

An Inland Fisheries Research Station has been started at Bangalore with field laboratories at important inland centres.

The estimated fish production at present from the inland resources is nearly 35,000 metric tons and the revenue in the form of direct realisation from exploitation of fisheries, through the sale of fishery rights, issue of licences, etc., is about Rs. 1,31,570.

**Acreage of inland waters in the State is 10,20,000 (approximate).** Inland fishermen population is estimated at 6,00,000.

**Marine Fisheries :** Mysore State has 200 miles of coast line on the Arabian Sea. All along this sea coast, there are many fishing villages, the most important of them being Karwar, Ankola, Kumta, Honnavar, Bhatkal, Majali, Bingi, Chendia, Gangolli, Malpe, Udiyavar, Bokapatnam and Mangalore.

More than 40 varieties of sea fishes are landed out of which the most important are Sardine, Mackerel, Seer and Sharks and Prawns. The total fish production on Mysore coast is over 20 per cent of India's marine fish production.

Thus, the marine fisheries confined to North and South Kanara can be regarded as one of the richest regions in India.

**Value of fish exploited :—**

**Quantity of fish in metric tons and the approximate value :—**North Kanara : 73,358 ; Rs. 2.81 crores ; South Kanara : 42,225 ; Rs. 2.21 crores.

There are about 20,000 fishermen actively engaged in fishing, about 6,500 boats and about 37,000 nets. The number dependent on the fishing industry is estimated at over 1,00,000.

**Average catch per fisherman per annum on Mysore coast : 5.75 tons.**

**Capital value of the industry together for North and South Kanara districts is estimated at Rs. 2.5 crores.**

**No. of fish curing yards :—**North Kanara : 15 ; South Kanara : 15.

The total Third Plan outlay was Rs. 130 lakhs.

During the Third Plan, the activities of the Indo-Norwegian Project were extended to Karwar. Under this project, work on providing harbour facilities, training of fishermen, boat construction and setting up of processing facilities have been taken up. At the Marine Products Processing Training Centre, Mangalore, training of technicians in fish (food) processing technology has been taken up.

The strength of the training centre at Mangalore was increased and a second training centre was opened at Karwar. Under the Special Development Programme, two more training centres are proposed at Gangolli and Honnavar.

In 1966, there were 198 lakh fry and finger, 29 fish nurseries, 199 mechanised boats and vessels, 14 ice and cold storage plants and 99 fisheries co-operatives.

## ORISSA

**Kinds of sea fish caught :** White Balts, Silver bellies, Jew fish, Seer fish, Ribbon fish, Perches, Sardines, Mackerel, Flat fish, Silverbar, Glass fish, Pomfret, Bombay duck, Catfish, Threadfins, Sharks, Rays, Skates and Eals, many types of clupeids like Pelone, Megalops, Indian shed etc. besides crustaceans such as Prawns and Lobsters.

**Kinds of estuarine fish caught :** Hilsa, Megalops, Elopes, Perches, Mulletts, Milk fish, Catfish, Threadfins, Pomfrets, Shrimp, Croackers, Sawfish, Sharks, Rays etc. besides crustaceans like Prawns and Crabs.

**Kinds of Inland Fish caught :** Major Indian Carpe, such as Rohu, Mrigal, Catla and Calbasu, the minor carps, Mahaseer, Catfishes like Wallago (Boalish), Silondia, Pangus, Mystus, Bagarius, Perches, Murrels, many types of mud fishes, minnows, feather backs etc.

**Important Marine fishing centres :** Pattisonapur, Markandi, Gopalpur, Prayagi, Aryapalli in Ganjam district. Arkhakuda, Puri and Konark in Puri district, Paradeep in Cuttack district, Chandnipal, Aruhabad, Eram, Chandipur and Kirtania in Balasore district.

**Important Estuarine Fishing centres :** Sonapur and Surala (Bahuda estuary in Ganjam Dist.). Damodarapur and Gajapatnagar (Rusikulya estuary in Ganjam). Rambha, Keshpur, Chilka, Balugaon, Gangadharpur, Kuhuri, Kaluparaghat, Bhusandapur and Satpara in Chilka area. Astaranga and Machagaon in Devi river estuary, Kujanga, Jatadhara and Hookitola in Mahanadi estuary, Satbhaya, Chandnipal, Karanjmal in Dhamra estuary and Kirtania in Subarnarekha estuary in Balasore districts.

**Important inland lake and reservoirs :** Hirakud reservoir in Sambalpur district, Ansupa lake in Cuttack district, Bhanjanagar and Surada reservoir in Ganjam district.

**Spawn Collection in Orissa Rivers :** Spawn (Hatchlings) are collected from the river system of Mahanadi, Brahmani, and Subarnarekha. At Govt. level 3 major spawn collection centres operate at Naupatna Pathapur and Kendupatna in river Mahanadi in Cuttack Dist.

**Processing Plants :** Fish canning factory—Majhidiha ; Fish freezing plant-cum-frozen storage—Majhidiha, Paradeep.

**Preservation :** In Orissa there are 8 ice plants-cum-cold storage in Marine and Inland fishing centres, 12 walkin coolers for preservation in smaller quantities and 2 mobile flake ice plants.

**Transportation :** There is a refrigerated van, besides a few insulated vans for special fish transport.

**Marine fishermen cooperative societies (District-wise) :** Balasore—Paschimbad, Adhuan, Aruhabad and Balasore ; Ganjam—Sonapur, Pattisonapur, Gopalpur, Markandy ; Puri—Puri.

**Important Inland Fish farms :** Kausalyaganga, Brickfield (Puri), Pipili, Laxmisagar, Kiakanland and Karanja (Baranga) in Puri District ; Chaudwar, Killa (Cuttack), Barimul and Jajpur in Cuttack District ; Dighi (Balasore), Amarda, Kathapal (Mayurbhanj), Digdan (Keonjhar Dist.), Angul (Dhenkanal Dist.), Sambalpur, Barapalli and Bomlei (Sambalpur Dist.), Bolangir and Sonepur (Bolangir Dist.), Humari, Berhampur, Belguntha, Parlakhemedi in Ganjam district, Jeypore in Koraput Dist. Bhawanipatna and Kokasara in Kalahandi district, Phulabani in Phulabani Dist.

### Production during Third Plan

Marine fish (edible) production by State Government during the Third plan : 1,846 tonnes ; Production of fish meal : 44 tonnes ; Production of canned fish : 4.5 tonnes ; Production of riverine spawn (in cups) : 17,747 ; Production of induced breeding carp spawn (in cups) : Pituitary 485, Cy. carpio 622 ; and Distribution of Fry (including Cy. carpio) : 7,76,82,000.

**Aquarium :** There is a small experimental aquarium attached to the Fisheries Department at Cuttack.

**Research :** A fresh water biological station has been established at Kausalyaganga in the district of Puri. Applied field research in Inland Fisheries is carried out at Kiakan (Puri), Kathpal (Mayurbhanj), Dighi (Balasore), Narayansagar Angul (Dhenkanal), Humari (Ganjam), and 20 other fish farms. Field research on marine fish farming is carried out at Khiragachamadeli (Paradeep), Keshpur and Sonapur fish farms in Ganjam district and Dhobali farm in Puri district.

Research has been completed on the manufacture of agar-agar and hydrolysed protein. Production of biscuits and tablets from concentrated fish protein is in progress.

Applied research is being continued on breeding of carps, life history of mullets, utilisation of weeds as compost, improved crafts and gears, freezing of fish, canning of prawn and fish, cultural practice of fish, rearing, growth and survival of fish by use of inorganic manure, on the new types of fishing gears with synthetic twines, culture and biology of mullets in brackish waters, culture of glaciaria, experiments on extraction of Iodine from chilka weed. Research has been taken up on electrical fishing gear and induced breeding of estuarine fish.

Budget allotment—1966-67 : Rs. 66,13,800.

## WEST BENGAL

**Kinds of sea fish caught :** Pomfret, Bhetki, Mackerel, Prawn, Topoi, Hilsa, Chanda, Bhola, Bombay Duck, Ribbon, Shark, Raya, Rock Cod, Skate, Eel, Cat fish, Phasa, etc.

Total quantity of fish caught in 1964-65 53,000 tonnes (based on international production only).

Total value of the sea fish caught in 1963-64 : Rs. 8,40,000.

Price per Kg. of different kinds of fish in March 1964.

| Varities     | Maxi-<br>mum | Mini-<br>mum | Average |
|--------------|--------------|--------------|---------|
|              | Rs. P.       | Rs. P.       | Rs. P.  |
| Carps ..     | 4.00         | 2.54         | 3.27    |
| Hilsa ..     | 3.50         | 2.40         | 2.95    |
| Bhetki ..    | 3.25         | 2.50         | 2.88    |
| Mulletts ..  | 3.25         | 2.50         | 2.88    |
| Butter ..    | 2.74         | 1.50         | 2.12    |
| Lobster ..   | 4.60†        | 3.42†        | 4.01†   |
| Shrimps ..   | 1.25         | 1.00         | 1.13    |
| Prawn ..     | 3.00         | 0.67         | 1.84    |
| Live fish .. | 5.33         | 3.34         | 4.34    |
| Misc. ..     | 2.00         | 0.67         | 1.34    |

† Figures for 1963.

Approximate strength of the fishing population : About one lakh (1961) plus two per cent increase per year.

Potential demand for fish in the local market : 5,92,000 metric tonnes (the State as a whole).

Gear used : Grill net, Drift net, Drag net, Fixed net, Herring trawl etc.

Ancillary industries like shark liver oil, gelatin, glue, fish-meal, and their production : One scheme for production of shark liver oil, fish-meal, processed fish and utilisation of other fish by-products is operated at Contai coast.

Production of fish bye-products during 1964-65 :

Shark Liver Oil 2,376 litres ; Fish Meal 42,150 kg. ; Fish Fertilizer 286 kg. ; Fish Food Manure 5,025 kg. ; Shark Flesh Dried 87 kg. ; Poultry Food 1,500 kg. ; Fish Biscuits 4 kg. ; Dried Shark Fin 234 kg. ; Dried Shrimps 228 kg. ; Dried Precooked Prawn 7 kg. ; Fresh Fish 377 kg. ; Dry Bombay Duck 205 kg. ; Processed Bombay Duck 368 kg.

The above products include only productions from Government fish technological stations at



Junput, Contai, Midnapore and Freserganj, 24 Parganas.

Extent to which production meets the demand: 20 per cent.

Approximate Revenue from fisheries during 1964-65: Rs. 17.16 crores.

Budget allotment for the Department of 1965-66: Rs. 1,08,40,000.

#### RESEARCH

There is one Freshwater Fisheries Research Station at Kalyani. There is one Technological

Research Station at Junpat for production and standardisation of various fish bye-products and fish curing yards both at Junpat and at Frager-gunge. Brackish Water Experimental Fish Farm at Junput, Hill-Stream Fisheries Research Station at Kalimpong and a number of Fish Seed Farms in a number of districts.

## SCHEDULED CASTES, TRIBES AND BACKWARD CLASSES

The total population of the Scheduled Castes and Scheduled Tribes according to the 1961 census respectively were 6,45,11,313 and 2,98,83,476 as against 5,53,27,021 and 2,25,25,477 respectively in 1951 census, while the percentage to the total population being 14.64 and 6.80 respectively in 1961 against 15.32 and 6.23 respectively in 1951.

#### HARIJAN SAFEGUARDS

A high power official committee set up by the Union Government has suggested that the special safeguards to Scheduled Castes and Scheduled Tribes be terminated by 1975, broadly synchronising with the end of the Fifth Plan. The committee is also understood to have made several proposals in detail for the revision of the lists of Sch. Castes and Scheduled Tribes for purposes of entitlement to political, educational and economic benefits provided by the constitution.

#### WELFARE SCHEMES

First Plan provision: Rs. 39 crores. Actual expenditure: Rs. 26 crores.

Second Plan provision: Rs. 91 crores (Tribes 50.7; Castes 28.8; denotified Tribes 3.12, other backward 8.8). Central sector: Rs. 32.00 crores. States sector: Rs. 59.29 crores.

Third Plan provision: Rs. 100.045 crores (Tribes Rs. 59.90 crores; Castes Rs. 40.14 crores; others Rs. 9 crores). The expenditure on welfare activities for backward classes was Rs. 101.00 crores in the Third Plan and Rs. 2,934 crores for the year 1965-66.

In the Third Five Year Plan, out of the provision of Rs. 100 crores, a sum of Rs. 1.25 crores had been provided under the Central Sector for grants in aid to non-official agencies, working for the Scheduled Castes, Scheduled Tribes and Backward Classes. The remaining amount of Rs. 98.75 crores had been allocated to the various States/Territories for welfare schemes undertaken by them for the Sch. Castes and Sch. Tribes, both under the Central and the State sectors. The following statement gives the Third Plan allocations and expenditure upto 1963-64 under Central and State Sectors for both Sch. Castes and Sch. Tribes respectively.

(Rs. in lakhs)

|                        | Allocations |          | Expenditure |          | Plan outlay |          |
|------------------------|-------------|----------|-------------|----------|-------------|----------|
|                        | Centre      | State    | Centre      | State    | Centre      | State    |
| Scheduled Castes .. .. | 595.97      | 1,452.99 | 597.39      | 1,351.72 | 8.03.19     | 3,104.79 |
| Scheduled Tribes .. .. | 1,004.94    | 1,724.05 | 788.52      | 1,559.76 | 2,196.70    | 3,681.23 |
| Total .. ..            | 1,600.91    | 3,177.04 | 1,385.91    | 2,911.48 | 2,999.89    | 6,786.02 |

Much importance is attached in the Fourth Plan for a sizeable programme for providing house sites and improving the housing conditions of Harijans and other backward classes.

The outlay for various schemes for the welfare of backward classes for the Fourth Plan has been tentatively envisaged at Rs. 205 crores as compared with Rs. 114 crores in the Third Plan.

The Govt. of India has constituted a study team under the chairmanship of P. Shilu Ao to give a practical effect to the recommendations relating to the welfare programmes for Sch. Tribes proposed in the Fourth Plan.

#### Land and Agriculture

One of the most important programmes in the field of agriculture is that of reclamation and improving the agricultural lands for the Scheduled Castes and Tribes.

An attempt has been made to collect information regarding the acreage of land allotted to the landless agriculturists in general and the number of the Sch. Caste and Sch. Tribe beneficiaries among them in different States. Information made available so far (upto 1963-64 in respect of the first three years of the Third Plan as the Statewise allotment of land in acres to the Sch.

Castes, Sch. Tribes and the number of families benefited respectively are as follows:

Andhra Pradesh 2,028; 482; 1,489; Bihar 9,579; 5,592; 5,740; Jammu & Kashmir 127; —; 42; Kerala 1,022; 1,163; 3,010; Madhya Pradesh 35,372; 23,662; 14,589; Madras 7,971; 339; 4,366; Mysore 612; —; 95; Orissa 13,142; 11,169; 320†; Punjab 1,977; —; 417; Uttar Pradesh 6,517; —; 4,104; West Bengal 6,753; 7,374; 12,408.

#### NON-OFFICIAL ORGANISATION

The following are the particulars of grants-in-aid released to voluntary organisations and the expenditure incurred respectively for 1963-64 (Rupees).

*For Scheduled Castes:* All-India Harijan Sevak Sangh, Delhi 3,78,520; 3,31,078; Bharatiya Depressed Classes League, Delhi 1,00,930; 1,15,601\*; Ishwar Saran Ashram, Allahabad 95,980; 67,368; Bharat Dalit Sevak Sangh, Poona 42,640; N.A.; Indian Red Cross Society, Delhi 42,702; 42,548; Ramakrishna Mission, Narendrapur, 24-Parganas 1,39,620; N.A.; Hind Sweepers' Sevak Samaj, Delhi 50,174; N.A.

*For Scheduled Tribes:* Bharatiya Adimjati Sevak Sangh, Delhi 1,53,594; 1,43,798; Ramakrishna Mission, Cherrapunji 2,02,190; N.A.; Tata Institute of Social Sciences, Bombay 83,200; 56,475; Andhra Pradesh Adimjati Sevak Sangh, Hyderabad 42,540; 40,324; Indian Council of Child Welfare, Delhi 38,780; 38,780; Ramakrishna Mission, Shillong 10,000; 18,694; National Council of Educational Research and Training, New Delhi 36,000; N.A.

*Both for the Scheduled Castes and the Scheduled Tribes:* Servants of India Society, Poona 96,897; 11,05,492\*.

*For other Backward Classes:* All-India Backward Classes Federation, Delhi 65,890; N.A.; Bharatiya Chumantu Jam (Khanabadosh) Sewak Sangh, New Delhi 84,660; 73,244.

Allocations and expenditure during the year 1963-64 from the provisions of Third Plan under State Sector are given in the table below.

(Rs. lakhs).

| Schemes                         | Scheduled Castes |             | Scheduled Tribes |             |
|---------------------------------|------------------|-------------|------------------|-------------|
|                                 | Allocations      | Expenditure | Allocations      | Expenditure |
| Education .. ..                 | 306.75           | 277.94      | 221.62           | 227.78      |
| Agriculture .. ..               | 40.44            | 40.92       | 83.41            | 72.15       |
| Cottage Industries .. ..        | 73.06            | 43.14       | 27.67            | 19.32       |
| Cooperation .. ..               | 14.97            | 18.12       | 12.68            | 11.82       |
| Animal Husbandry .. ..          | —                | —           | 7.46             | 6.01        |
| Medical & Public Health .. ..   | 26.19            | 26.38       | 44.44            | 41.23       |
| Housing .. ..                   | 29.76            | 28.62       | 16.59            | 13.49       |
| Communications .. ..            | —                | —           | 89.70            | 86.12       |
| Rehabilitation .. ..            | —                | —           | 1.72             | 1.72        |
| Community Centres .. ..         | 3.95             | 3.83        | 0.67             | 0.78        |
| Publicity .. ..                 | 1.37             | 0.37        | —                | —           |
| Aid to Voluntary Agencies .. .. | 2.57             | 2.21        | 2.90             | 2.64        |
| Miscellaneous .. ..             | 3.70             | 3.56        | 40.57            | 44.83       |
| Total .. ..                     | 502.76           | 445.09      | 549.43           | 527.89      |

\* Includes expenditure out of their own sources.

† Figures for 1963-64 only.



**SAFEGUARDS**

The Constitution of India has laid down certain safeguards for Scheduled Castes, Scheduled Tribes and Backward Classes, the weaker sections of the people. These include reservation of seats in the legislatures, recruitment of tribal candidates to services and posts in the Union and State Governments, appointment of a Commission to report on the administration of the

Scheduled areas and the welfare of the tribes.

**REPRESENTATION IN LEGISLATURES**

The following table gives particulars of State-wise reservation for Scheduled Castes and Scheduled Tribes in Lok Sabha and State Assemblies as fixed by the Commission with effect from 1967 general election.

| States            | Lok Sabha        |                  | Legislative Assembly |                  |
|-------------------|------------------|------------------|----------------------|------------------|
|                   | Scheduled Castes | Scheduled Tribes | Scheduled Castes     | Scheduled Tribes |
| Andhra Pradesh .. | 6                | 2                | 40                   | 11               |
| Assam .. ..       | 1                | 2                | 8                    | 10               |
| Bihar .. ..       | 7                | 5                | 45                   | 29               |
| Gujarat .. ..     | 2                | 3                | 11                   | 22               |
| Kerala .. ..      | 2                | ..               | 11                   | 2                |
| M.P. .. ..        | 5                | 8                | 39                   | 61               |
| Madras .. ..      | 7                | ..               | 42                   | 2                |
| Maharashtra ..    | 3                | 3                | 15                   | 16               |
| Mysore .. ..      | 4                | ..               | 29                   | 2                |
| Orissa .. ..      | 3                | 5                | 22                   | 34               |
| Punjab* .. ..     | 5                | ..               | 33                   | ..               |
| Rajasthan .. ..   | 4                | 3                | 31                   | 21               |
| U.P. .. ..        | 18               | ..               | 89                   | ..               |
| West Bengal ..    | 8                | 2                | 56                   | 17               |
| Total .. ..       | 75               | 33               | 471                  | 227              |

**REPRESENTATION IN GOVERNMENT**

The number of Scheduled Caste and Scheduled Tribe persons appointed as Ministers, Dy. Ministers and Parliamentary Secretaries in the Union Cabinet as on 1st April 1964 were 7 and 2 respectively. In the States, the number of Scheduled Caste and Sch. Tribes Ministers, Dy. Ministers and Parliamentary Secretaries were 25 and 27 respectively.

**Panchayati Raj Bodies:** According to the Report of the Commissioner for Scheduled Castes & Scheduled Tribes for 1963-64, there are a number of States where no representation has been made for the members of Scheduled Castes & Scheduled Tribes in the Panchayati Raj bodies. Some of the State Governments have provided, through legislation, for the cooption of the members of Scheduled Castes and Scheduled Tribes in the above bodies. Such a Coopted member may not be able to wield sufficient influence in the Zilla Parishad by the very reason of his being coopted. The report suggests to provide suitable safeguards to the members of the Sch. Castes and Scheduled Tribes by reserving seats for them in Gram Panchayats and other local bodies, preferably on population basis.

**SERVICES**

The quota reserved for Scheduled Castes and Scheduled Tribes in the Government of India services is as follows:—

**Direct Recruitment on all-India Basis:**

12½ per cent of vacancies filled by open competition and 16½ per cent of the vacancies filled

otherwise have been reserved for Scheduled Castes, and five per cent of the vacancies in all cases for the Scheduled Tribes filled through open competition or otherwise.

In cases of promotion, the following orders have been issued:

**For Non-Selection Posts:**

(a) if promotion is made subject to the passing of a qualifying departmental examination, the standard of qualification for Scheduled Castes and Scheduled Tribes need not be so high as prescribed for other candidates;

(b) if promotion is made otherwise than by a qualifying examination, Scheduled Caste and Scheduled Tribe Candidates should be adjudged sympathetically without applying too rigid a standard and the candidates belonging to these castes and tribes should not be superseded without their cases being reviewed at high levels.

**For Selection Posts:**

(a) If promotions are to be made on the basis of a competitive examination, the communal orders will apply and any Scheduled Caste and Scheduled Tribe candidates, who are above the minimum standard for necessary efficiency, may be selected for appointment against their reserved quota;

(b) If the promotion is made otherwise than through a competitive examination, no relaxed standards of merit are to be applied for Scheduled Caste or Scheduled Tribe candidates.

The position in regard to posts held by the Scheduled Castes and Tribes in the Central Government as at the end of 1963.

| Grade           | Scheduled Castes |          | Scheduled Tribes |        |
|-----------------|------------------|----------|------------------|--------|
|                 | 1959             | 1963     | 1959             | 1963   |
| Class I .. ..   | 135              | 250      | 27               | 24     |
| Class II .. ..  | 543              | 707      | 160              | 54     |
| Class III .. .. | 20,063           | 82,304   | 8,186            | 9,906  |
| Class IV .. ..  | 1,74,030         | 1,51,176 | 27,276           | 30,890 |

\* Composite State.

The position about the all-India services on 1st Jan. 1964 was as follows:

|                   |    | Scheduled Castes | Scheduled Tribes | Others |
|-------------------|----|------------------|------------------|--------|
| I.C.S./I.A.S. ..  | 81 | 23               | 1,893            |        |
| I.P.S./I.P. .. .. | 54 | 16               | 1,054            |        |
| IFS(A) .. ..      | 14 | 3                | 325              |        |
| IFS (B) .. ..     | 62 | 9                | 2,441            |        |

The statistics collected through the Employment Exchanges for 1963 are as follows:

**Scheduled Castes**

Total registration 4,60,941; Placements under Central Government 20,443; Placements under State Governments 23,442; Other employers 17,069; Number on live register at the end of the year 2,84,059.

As regards reserved vacancies, 17,321 vacancies were notified as reserved for Scheduled Castes during 1963 out of which only 7,616 vacancies were filled.

**Scheduled Tribes**

Total registration 83,224; Placements under Central Government 5,540; State Governments 3,705; Other employers 3,342; number on live register at the end of the year 45,992. As regards reserved vacancies 7,041 vacancies were notified for Scheduled Tribes during 1963, out of which 1,725 vacancies were filled.

**LEGAL AID, EDUCATION**

Legal aid is provided by some State Governments from their own funds or from grants made by the Central Government. Allocations for legal aid in the Third Plan under the State Sector for Scheduled Castes and Scheduled Tribes respectively are Rs. 4.00 lakhs and Rs. 3.55 lakhs.

**Complaints**

During 1963-64, 1,257 complaints were received in the head office and seven of the regional offices of the organisation. The nature of complaints and their number in each case are as follows: Service matters 226; Harassments by Govt. officials and others including assaults 265; Practice of untouchability 94; Land problems and housing 305; Drinking water facilities 22; and Miscellaneous 346.

**Education**

Almost all the State Govts. and Union Territory administrations have taken steps to exempt the Scheduled Caste and Scheduled Tribes from payment of tuition fees at various stages of education.

The following are the general concessions allowed to Scheduled Castes and Scheduled Tribes candidates for admission to the technical and educational institutions:—(a) 20 per cent of the seats should be reserved for Scheduled Castes and Tribes; (b) where admissions are restricted to candidates who obtain a certain minimum percentage of marks, and not merely the passing of a certain examination, there may be a 5 per cent reduction for them, provided that the lower percentage prescribed does not fall below the minimum required to pass the qualifying examinations; and (c) the maximum age limit for the admission of students belonging to these communities should be raised by three years.

More than 1,000 institutions have been opened in States for the basic education of Scheduled Tribes.

These institutions are of two categories: Ashrams and Sevashrams. Ashram schools are residential institutions where training in different trades or crafts like carpentry, weaving, smithy, tailoring and agriculture is given along with general education. All expenses are borne by the Government. Sevashrams are day schools where training in spinning and gardening is given along



with general education. The students are supplied with clothing, books, spinning material, etc., free of charge.

**Post-Matric Scholarships for Sch. Castes & Sch. Tribes (1963-64):** No. of applications received 62,800; 11,669; No. of scholarships awarded 60,165; 11,660; Amount sanctioned by the Ministries of Education & Home Affairs Rs. 2,69,49,500; Rs. 48,05,200; Expenditure incurred by the State Governments Rs. 2,92,96,496; Rs. 49,83,269.

During the first 3 years of the Third Plan a sum of nearly Rs. 9 crores has been spent on Post-matric scholarships for students belonging to Sch. Castes & Sch. Tribes. In the first four years of the Third Plan 2,39,503 post-matric scholarships have been awarded to such students.

### BACKWARD CLASSES

The principal criterion for determining Backward classes is their low social position in the traditional caste hierarchy of the Hindu Society. As many as 930 communities have been included in the above category and their estimated population is 115 millions. The Government of India have no recognised list of backward classes; but the State Governments have been advised to have their own lists of such classes based on economic criteria.

The Government of India has decided not to draw up any all India lists of Backward Classes and has advised the State Governments to apply preferably economic tests than caste.

Following a judgement of the Supreme Court, the Central Govt. have accepted economic factors and not caste as the basis for determining the backwardness of people. Some of the State Governments have accepted this as the criterion for judging backwardness and other State Governments are being persuaded to fall in line.

### DENOTIFIED COMMUNITIES

Caste-wise information of the Denotified Communities is not available. For their rehabilitation an amount of Rs. 4.22 crores had been spent during the First and Second Plan period and a provision of Rs. 3.75 crores had been made in the Third Plan. With a view to providing incentive to the State Govts. for giving proper attention to these communities and drawing up sui-

\* Composite State.

table schemes for them, it was decided that during the Third Plan, the programme for the welfare of the Denotified Communities should be centrally sponsored.

During the year 1963-64 an amount of Rs. 82.50 lakhs was allocated to various states

for the rehabilitation of these communities.

The following tables give State-wise and Scheme-wise provision in the Third Plan and expenditure incurred during 1963-64 for the Denotified Communities.

### STATE-WISE POSITION

(Rs. in lakhs)

| Name of the State      | Provision made in the Third Plan | Allocation made for 1963-64 | Expenditure incurred during 1963-64 |
|------------------------|----------------------------------|-----------------------------|-------------------------------------|
| Andhra Pradesh .. .. . | 25.70                            | 5.65                        | 4.97                                |
| Gujarat .. .. .        | 24.25                            | 5.34                        | 2.81                                |
| Madhya Pradesh .. .. . | 34.91                            | 7.68                        | 8.09                                |
| Madras .. .. .         | 79.85                            | 17.57                       | 17.37                               |
| Mysore .. .. .         | 21.05                            | 4.63                        | 3.29                                |
| Orissa .. .. .         | 9.70                             | 2.13                        | 1.88                                |
| Punjab* .. .. .        | 14.14                            | 3.11                        | 3.11                                |
| Rajasthan .. .. .      | 21.05                            | 4.63                        | 4.03                                |
| Uttar Pradesh .. .. .  | 140.00                           | 30.80                       | 71.32                               |
| West Bengal .. .. .    | 4.35                             | 0.96                        | 0.83                                |
| Total .. .. .          | 375.00                           | ..                          | ..                                  |

### Scheme-wise distribution

(Rs. lakhs)

| Name of the scheme               | Expenditure incurred during 1963-64 | Progressive Expenditure upto the end of 1963-64 |
|----------------------------------|-------------------------------------|-------------------------------------------------|
| Education .. .. .                | 21.73                               | 45.42                                           |
| Agriculture .. .. .              | 10.53                               | 31.07                                           |
| Cottage Industries .. .. .       | 6.88                                | 17.95                                           |
| Co-operation .. .. .             | 0.43                                | 1.00                                            |
| Housing .. .. .                  | 12.21                               | 14.85                                           |
| Social Education .. .. .         | 0.98                                | 2.87                                            |
| Medicale & Public Health .. .. . | 1.42                                | 2.20                                            |
| Colonisation.. .. .              | 8.60                                | 29.16                                           |
| Animal Husbandry .. .. .         | 0.92                                | 2.72                                            |
| Miscellaneous .. .. .            | ..                                  | 0.33                                            |
| Total .. .. .                    | 63.70                               | 166.57                                          |

## STEEL INDUSTRY\*

THE first successful and the most outstanding attempt to manufacture steel in the country on a commercial basis was that of the Tata Iron & Steel Co. which started its Steel Works at Sakchi in the year 1908. Pig iron was made in 1911 and the first steel ingot a year later.

The Indian Iron & Steel Company was started in 1918 at Hirapur about 4 miles from Asansol junction on the Eastern Railway for producing pig iron. Eighteen years later it floated another company, the Steel Corporation of Bengal to manufacture steel. Towards the end of 1952 the two companies were merged.

An iron works was started at Bhadravati in Mysore State in 1921 to which a steel plant was added in 1934. During World War II, a 25-ton basic furnace and two small electric furnaces were installed.

The total capital investment in the private sector is about Rs. 191 crores and the number of workers employed about 80,000. Of the total investment, Tatas account for Rs. 135 crores and the Indian Iron and Steel Co. for Rs. 56 crores.

The three steel plants set up in the public sector during the Second Plan period are Rourkela, Bhilai and Durgapur mills under the management of Hindustan Steel Ltd. The shares are owned wholly by the Central Government. The authorized share capital is Rs. 600 crores. The Government of India has advanced loans amounting to Rs. 400.1 crores upto the end of December 1965. The Government of India has subscribed Rs. 528 crores up to the end of December, 1965, towards share capital.

The revised overall cost of the three public sector steel projects are: Rourkela Rs. 230 crores (including the cost of all other ancillaries like township, water supply system, iron ore mines, limestone quarries and railway sidings); Bhilai Rs. 202 crores; Durgapur Rs. 205 crores.

Each of these has a production capacity of a million tons with scope for expansion. All the three have already gone into capacity production. The Mysore Iron and Steel Works Ltd. at Bhadravati is a Mysore State Govt. project.

Another public sector company the Bokaro Steel Ltd. for setting up the Bokaro Steel Plant at Bokaro, was registered in New Delhi on Jan. 29, 1964. The Company will have a share capital of Rs. 100 crores and an initial capacity of 1 million ingot tonnes.

(For details see under 'Government Industrial Undertakings').

The Second Plan target of steel (ingots) production was fixed at 6 million tons (or about 4.5 million tons of saleable steel), as against the production level of 1.6 million tons in 1955-56. This was proposed to be achieved by raising the capacity of the Tata Iron and Steel Works at Jamshedpur from 900,000 tons to 2 million tons, of the Indian Iron and Steel Company's works at Burnpur from 500,000 tons to 900,000 tons and of the Mysore Iron and Steel Works from 30,000 tons to 100,000 tons. The remaining three million tons were to be produced by setting up three new works in the public sector at Rourkela, Bhilai and Durgapur. The estimated capacity and production (ingots) in 1960-61 was 6.0 million tons and 3.5 million tons, respectively. By the end of Second Plan (1969-60), the actual production of saleable steel amounted to 4,488,898 tons for the entire Plan period.

\* See also under "Hindustan Steel Ltd." in *Late Particulars*.



### PRODUCTION

The recent trend of production in India is given below :—

(In thousand tonnes)

| Year.                                  | Pig iron. | Steel ingots. | Semi-finished steel. | Finished steel. |
|----------------------------------------|-----------|---------------|----------------------|-----------------|
| 1959                                   | 2,994     | 2,434         | 2,542                | 1,832           |
| 1960                                   | 4,130     | 3,287         | 3,463                | 2,280           |
| 1961                                   | 4,960     | 4,072         | 1,201                | 2,851           |
| 1962                                   | 5,764     | 5,113         | 1,086                | 3,799           |
| 1963                                   | 6,800     | 6,000         | 1,200                | 4,260           |
| 1964                                   | 6,600     | 6,030         | 1,080                | 4,344           |
| 1965                                   | 7,022     | 6,401         | 1,018                | 4,520           |
| Installed Capacity at the end of 1965. | 5,643     | 4,570         | 1,387                | 3,638           |

Steel production in India in 1965 increased to 4,528,718 tonnes from 4,343,017 tonnes in 1964. The figure includes production of different categories of steel in all the public and private sector plants. In 1965-66 (upto December, 1965) 6.95 lakh tonnes of steel was imported.

The per capita consumption of crude steel in India was only 14 kg. in 1962 as against Czechoslovakia 513; West Germany and U.S.A. 488; U.S.S.R. 334; U.K. 332; Japan 242 and China 20.

Against an annual target capacity of 1.5 million tons of pig iron envisaged in the Third Plan, the integrated steel works produced about

a million tons and the balance of half a million tons was available from small and medium sized pig iron plants in the private sector. So far, a capacity of about 285,000 tons (which includes two medium-sized plants each with a capacity of 100,000 tons per annum) has already been licensed. It is also proposed to license a further capacity to cover the gap in the private sector.

The targets fixed for the steel industry under the Third Five Year Plan were as follows :

|                                           | 1965-66  |            | Fixed investment during 1961-1966 (Rs crores) |
|-------------------------------------------|----------|------------|-----------------------------------------------|
|                                           | Capacity | Production |                                               |
| Steel ingots (mln. tons)                  | 10.2     | 9.2        | 640                                           |
| Finished steel (mln. tons)                | 7.5      | 6.8        |                                               |
| Pig iron for sale (mln. tons)             | 1.5      | 1.5        |                                               |
| Alloy, tool and special steel ('000 tons) | 200      | 200        | 30                                            |
| Grey iron castings (mln. tons)            | 1.2      | 1.2        |                                               |
| Steel castings (mln. tons)                | 0.20     | 0.20       |                                               |
| Steel forging ('000 tons)                 | 200      | 200        |                                               |

Of the total capacity target of 10.2 million tons (ingots), public sector accounts for 7.0 million tons and private sector for 3.2 million tons. The break-down is as follows :

**Public Sector** (In million tons): Bhilai 2.6; Rourkela 1.8; Durgapur 1.6; Mysore Iron and Steel Works 0.1; Bokaro Steel project 1.0.

In addition, there is included in the Plan a project for a pig iron plant using the iron ore from Salem and the Neyveli lignite, the capacity of which is to be still decided.

**Private Sector** (million tons): Tata Steel and Indian Steel 3.2.

Total 10.2 mln. tons.

While the expansion programmes in the public sector are expected to be completed by 1967, Bokaro project has not yet crossed the paper-plan stage.

The demand projections were made by three different agencies as follows (at the end of the IV Plan).

Dastur & Co.: 14.214 million tonnes.

U.S. Steel Consultants: 11.235 million tonnes.

N.C.A.E.R.: 12.270 million tonnes.

The Union Steel Ministry has suggested the creation of the installed capacity of the order of 14.7 million tonnes of ingots steel by 1970-71. The estimated targets of production of mild steel during the IVth Plan are as under :

(Million tonnes)

| Plant                       | 1966-67 | 1967-68 | 1968-69 | 1969-70 | 1970-71 |
|-----------------------------|---------|---------|---------|---------|---------|
| TISCO .. .. .               | 2.0     | 2.0     | 2.0     | 2.0     | 2.0     |
| IISCO .. .. .               | 1.0     | 1.0     | 1.1     | 1.2     | 1.3     |
| Rourkela .. .. .            | 1.1     | 1.2     | 1.8     | 1.8     | 2.0     |
| Bhilai .. .. .              | 1.8     | 2.5     | 2.5     | 2.5     | 3.0     |
| Durgapur .. .. .            | 1.1     | 1.3     | 1.6     | 1.6     | 2.6     |
| <b>Total</b>                |         |         |         |         |         |
| (i) ingots .. .. .          | 7.0     | 8.0     | 9.0     | 9.1     | 10.8    |
| (ii) finished steel .. .. . | 5.2     | 6.0     | 6.7     | 6.8     | 8.1     |

(For the Mysore Iron and Steel Works see under 'Government Industrial Undertakings').

### PRICE AND DISTRIBUTION

Since the war in 1939 the price and distribution of steel have been controlled by the Government.

The various stages regarding the price of steel till 1964 were given in the previous issue of the Directory.

A four-member committee headed by Dr. K. N. Raj was appointed by the Government to go into the question of distribution and control of iron and steel. In its report, the Committee not only suggested decontrol, but also favoured a higher retention price. These measures, it pointed out, would, on the one hand, remove market aberrations, and give, on the other, the much needed financial support to the steel producers.

Finally on March 2, 1964, the Government came out with its decision to abolish the statutory control over the price and distribution of all categories of steel except pig iron and ingot moulds and bottom plates, billets and tin bars, plates, sheets and wide strip, skelp, tin plates, hoops and their respective defectives, with effect from March 1, 1964.

A Joint Plant Committee was set up with the Iron and Steel Controller as Chairman and representatives of the main producers and the Railways as members. The Committee was to announce and list ex-works prices (including base prices and extras) of the decontrolled categories to which a fixed element of equalised freight was added. The Joint Plant Committee was also to plan the production of both controlled and decontrolled items on the basis of priorities

determined by the Government from time to time.

During the year 1965-66, the following steps were taken in implementing the general policy of decontrol :

- Control over price and distribution of pig iron (including ingot moulds and bottom plates), tin plates, baling hoops and box strappings (all including defectives) was withdrawn;
- Control over distribution of hot rolled sheets and/or strips of 10-14 gauges was withdrawn;
- Control over distribution of untested skelp and strips (mixed sizes) upto 312 mm. stands withdrawn till 31st December, 1966 only.

### SUPPLY POSITION

A large level steel priority committee with the Secretary of the Department of Iron and Steel as chairman will make bulk allocations of steel for priority purposes.

Indents for the controlled categories will have to be backed by quota certificates as hitherto.

The operations of the Steel Equalisation Fund have been discontinued from March 1, 1964, as freight equalisation has been entrusted to the Joint Plant Committee and statutory price control over the bulk of the production has been abolished. In consequence there will not be any distinction between sale prices and retention prices whether in the case of controlled or non-controlled items and therefore no surcharges.

At present the J.P.C. accepts the indents from the registered and controlled stockists and

actual users and non-registered and non-controlled stockists as well.

It has been reported that the Government had decided to permit an average increase of Rs. 30 per tonne on the main producer's retention price for controlled items.

Further, that the Joint Plant Committee for steel will raise the producer's price for decontrolled items by about Rs. 50 per tonne shortly (Nov. 1965).

Imports of steel on barter basis were also continued against export of pig-iron, ingots, blooms, billets etc. produced by Hindustan Steel Limited as well as against export of scrap and ores etc. Only those categories of steel which are essential to the economy of the country were allowed to be imported. In 1965-66 (upto December, 1965) India imported Rs. 72 crores worth of finished iron and steel products. During 1965-66 (up to December 1965) India exported Rs. 11 crores worth of finished steel and scrap.

### WAGE BOARD

The Govt. of India have appointed a Central Tripartite Wage Board for the iron and steel industry with Mr. G. K. Shinde as Chairman, to determine the categories of employees who should be brought within the scope of the proposed wage fixation and to work out a wage structure based on the principles of fair wages as set forth in the report of the Committee on Fair Wages. The award of the wage Board was accepted by the Govt. for implementation during the year 1965-66. The new wage rules came into effect in Hindustan Steel with effect from 1st April 1965.



### Special Steels Plant

Stainless steel vessels are made of one of the varieties of steel commonly known as alloy and special steels. Domestic production of the entire category is insignificant. So India's requirements are met by imports. The demand was expected to reach 200,000 tons by the end of the Third Plan.

The new plant to be located at Durgapur next to the integrated steel works is estimated to produce 80,000 tons of ingots per year or about 48,000 tons of finished products. The plant is estimated to cost Rs. 38.4 crores.

A special steel plant is to be set up in Maharashtra. The plant which will be in the private sector is promoted by the well-known business house of "Mahindras".

### RE-ROLLING MILLS

The steel re-rolling industry in India had its beginnings about the year 1928. In March 1961, there were over 175 re-rolling mills in the country, of which three were making distinctly special products, namely tin plates and tubes. Geographically the re-rolling units are well dispersed in almost all parts of the country. Largest concentration, however, is in Calcutta, Punjab, Kanpur and Bombay regions. In the south the mills are too few in number.

The Committee which reported on re-rolling mills (in April 1957) estimated the capacity of all the re-rollers in the country at about 700,000 tons on single shift.

While in the country as a whole, there is an adequate number of re-rolling units, the Committee recommended the establishment of new re-rolling units in certain States where there are no units at present. One new re-rolling unit each has been sanctioned in Assam, Andhra Pradesh, Bihar (north of Ganges) and Kerala and a few more in other regions too.

In addition, some plant and machinery have been licensed by the Iron and Steel Controller to be obtained from abroad or indigenously, mainly for replacement. The additional capacity during the Second Plan was assessed at 104,760 tons per annum.

In planning the development of the steel industry in the Third Plan, the position of the steel re-rolling industry was reviewed taking into account the demand for sections which could be rolled in the re-rolling mills. The review showed that it should be possible to license about 100,000 to 150,000 tons of additional capacity in the re-rolling industry to small units to meet local demands. Accordingly, a capacity of 128,600 tons for setting up new re-rolling mills in Assam, Bihar, Gujarat, Kerala, Madras, Madhya Pradesh, Andhra, Maharashtra and Jammu and Kashmir has been sanctioned, and a further capacity of 15,000 tons each for Mysore and Orissa is proposed to be sanctioned. The Bawa Steel Re-rolling Mill near Nagpur went into production in Feb. 1962.

By virtue of the Government's decision to abolish the statutory control on steel with effect from March 1, 1964, the re-rollers are practically free from all control as they are mostly engaged

in the rolling of non-flat products, which have been decontrolled.

Against the alloy steel requirements at the end of the Third Plan which had been estimated, at 200,000 tons a year, 85,000 tons are estimated to be available from the Central Alloy and Tool Steel Plant and Ordnance factories. A further capacity of 120,100 tons has been sanctioned for the manufacture of such steel in the private sector. This is in addition to an existing capacity of about 10,000 tons. For the manufacture of alloy steel castings and such alloy steels as do not require special rolling equipment, capacity already existing and licensed is about 100,000 tons. Recently, an additional capacity of 126,500 tons was also sanctioned. The production of special steels during 1964-65 was 82,981 tonnes.

Electric furnaces already sanctioned and those in progress are likely to provide a total of about 200,000 tons of billets a year for the re-rolling industry.

The question of permitting further capacity will be considered in the light of the recommendations of the Scrap Investigation Committee.

During the IVth Plan period the capacity of the Alloy Steel Project is expected to be expanded to 300,000 tonnes. The total domestic demand at the end of the IVth Plan is estimated at 500,000 tonnes per annum. To achieve this production, a capacity of about 570,000 tonnes has already been licensed—137,000 tonnes of which are in the public sector.

The demand for tinplates by the end of the Third Plan and the Fourth Plan has been estimated at 2,81,000 tonnes and 5,24,000 tonnes per annum respectively. The capacity booked up to the end of 1965 was 4,50,000 tonnes of which 1,40,000 tonnes had been commissioned. An additional capacity of 60,000 tonnes was also installed. In addition to the capacity of 4,50,000 tonnes booked so far, a second, 1,50,000 tonnes electrolytic line at Rourkela Steel Plant is proposed to be set up during the Fourth Plan, thus, in all, setting up a capacity of 6,00,000 tonnes per annum in the private and public sectors by the end of the Fourth Plan.

Re-rollers use steel semis (Billets) and steel re-rollable scrap for rolling steel sections mostly lighter sizes of bars, rods, flats, hoops and strips, etc. The main sources of supply are the main producers, Messrs. Tata Iron & Steel Co., Ltd., Indian Iron & Steel Co., Ltd., Hindustan Steel Ltd. (Bhilai and Durgapur). Re-rollable scrap is also available from miscellaneous other sources such as, the Railways, Engineering Concerns, etc. Present availability both of billets and scrap is inadequate and so the full capacity is not being utilised.

Raw materials required by the industry:— Having regard to the recent developments it was estimated that the recognised sector of the re-rolling industry including the Secondary Producers would require about 1.8 million tons of semis by the end of the Third Plan period. As against this provision was made for supply of only 1 million tons of semis during the Third Plan from the main producers.

The re-rollers at places like Amritsar, Jullundur, etc. situated at considerable distance from the ports had to incur heavy freight charges

which inflated their production costs. Relief was given to all outstation re-rollers from 1953 when the maximum statutory prices became applicable to deliveries f.o.r. all railhead stations in India.

Production during 1964-65 was 81 lakh tonnes as against 96 lakh tonnes in 1963-64.

Total investment in the industry is estimated to be of the order of Rs. 25 crores.

It is estimated that about 40,000 persons are employed by the industry in various parts of the country.

A seamless tube plant belonging to the Indian Tube Company (1953) Ltd. was formally inaugurated in Jamshedpur in the last week of January 1960. Work on the tube project commenced in 1953 and the first plant, the Fretz-Moon tube mill, came into operation in November 1955. The second plant, the Rs. 2-crore electric resistance weld mill and the ancillary cold rolled strip plant, went into production in April 1957.

The seamless tube plant, which has now been added, represents the third and final phase of the project. The present capacity of the works is about 140,000 tons of steel tubes per year. The Company has also established capacity at Jamshedpur for the manufacture of 30,000 tons per year of cold rolled steel strip for use in tube making and for sale as strip. In addition, a plant has been installed for the fabrication of upto 150,000 tubular steel poles per year.

With the commissioning of the 140,000-ton Jamshedpur tube plant, the total installed capacity of the tube industry now works out at 175,000 tons a year.

The Kalinga Tubes (Cuttack) account for a capacity of 30,000 tons and the Tube Investments in Madras for 5,000 tons.

The great bulk of the total capacity—about 68 per cent—is in Fretz-Moon tubes used for conveyance of gas, water and steam.

The other category of electrically welded precision tubes, used mainly in railway locomotives, bicycles and steam boilers, accounts for another 14 per cent. Seamless tubes make up the balance of 18 per cent, the main applications being high-pressure conveyance of gas, manufacture of transmission poles and lighting columns for water-well casing, besides numerous other industrial applications.

Generally speaking, the industry is a small to medium scale one. The individual units are, however, of varying sizes and capacities. There has been some increase in the capacities of mills due to improvements effected. The potential capacity of the industry is of the order of 2.5 million tonnes. The Government of India appointed a Technical Committee headed by S. C. Mukherjee to assess the capacity of re-rolling mills on billets and scraps.

In allowing further capacity the Government has taken a stand that it will be decided only after the recommendations of the above Committee.

A project has, however, been approved for setting up a unit at Rourkela which will produce 100,000 tons of tubes a year in sizes varying from 8" to 20" in diameter.

### FILM INDUSTRY

The passing away of Prime Minister Lal Bahadur Shastri put to severe test the capacity of Films Division, in all its branches. The documentary has been seen by a record number of audiences, all impressed and satisfied with what they saw, an experience rare to Films Division.

Other features of the year were greater use of State-made films for their respective regions and for an all-India showing.

Hindustan Photo Films Manufacturing Co., Ltd., Ootacamund. For the manufacture of cine,

photographic and X-Ray films the Govt. of India established in Nov. 1960 this company in the public sector. (For more details, see under article "Government Industrial Undertakings").

Exclusive shows of documentaries and news-reels have now become a regular feature in some of the large cities where special theatres for the purpose are available. A nominal entrance fee (from 25 to 50 nP. per head) is charged and Bombay, Calcutta and Delhi, have been arranging these shows throughout the year

now. Similar arrangements are likely to be extended to other towns and cities.

Here are some of the institutions in the film industry:

Indian Motion Picture Producers' Association, Indian Motion Picture Distributors' Association, Indian Documentary Producers' Association, Film Federation of India, all with headquarters in Bombay.

The Indian Motion Picture Producers' Association, Film Producers' Guild Cine-Lab Asso-



ciation and others have formed a supreme Council of Film Producers. Steps are being taken to organise the industry and its various arms.

UNESCO has sponsored a study of Indian film heroes and the Institute of Social Sciences, Agra, has undertaken in co-operation with a group of International scientists, the study for which \$20,000 have been sanctioned in the first instance.

Universities Film Council (with Mr. R. R. Diwakar as Chairman) has been established with the idea of making university students take intelligent interest in the films. It is proposed to have a society for each University which would arrange to show at least 16 films every year of outstanding and classical importance through the university societies.

The Film Institute of India has been set up in the former Prabhat studios at Poona for training of all categories of film technicians and artistes. The Institute conducts diploma courses in Screen-play writing, Direction, Editing, Motion Picture Photography, Sound Recording and Sound Engineering and Acting.

At the commencement of the sixth academic year of the Institute (1966-67), the Institute had 135 students in various courses. So far, 148 students have obtained diplomas occupying responsible positions in the industry.

The Institute has extensive ground for out-door shooting; a processing laboratory for its work and well equipped studios. Whenever not required for the use of the Institute, these facilities are made available to producers on hire and this helps maintaining close contact with the Film Industry. Under Colombo Plan and Special Commonwealth African Assistance Plan, three Nigerian, seven Afghan, one Sinhalese and one Nepali students are studying at the Institute.

There are hostels for boys and girls. There are 8 girls at present undergoing training.

**Film Library:** The Institute has a film library in which film classics are being collected from various countries. So far, 117 films have been obtained from various countries like USSR, USA, UK, France, Germany, Italy, Czechoslovakia etc. The library also has some selected Indian features and documentaries. More films from other countries are being negotiated. (See also under Poona District).

**National Film Archive of India:** Set up in February 1964, the National Film Archive of India is at present housed in the premises of the Film Institute, Poona. The Archive is a provisional member of the International Federation of Film Archives, Paris. The present collection of the Archive consists of 160 films (both feature and short), 1,115 stills, 170 books and 36 journals. Notable among the acquisitions is RAJA HARISCHANDRA, the first Indian feature film by D. G. Phalke and master material of 14 films, from which additional copies can be taken for study purposes and exchange with foreign Archives.

There is an Advisory Committee attached to the National Film Archive of India to advise the Government on matters pertaining to the Archive. It consists of five non-officials and four officials. Its first meeting was held in August 1965.

**Film Finance Corporation:** Established in the last week of March 1960, with the object of providing finance for the production of good quality films in the country. (For more details see under article "All India Corporations").

**Children's Film Society:** This was started in 1955. Its object is to undertake, aid, sponsor films of special interest to children. It has its headquarters in Delhi and has branches in some States.

During the period April to Dec. 1965, well over 1,300 commercial shows were arranged which were attended by about 5,50,000 persons. In addition, about 150 shows were held during this period by the members of the 16 mm. Film Library of the Society and were attended by about 66,000 persons.

A provision of Rs. 12 lakhs was made in the Budget for 1965-66 for grants-in-aid to the Society. The Society has earned a revenue of more than Rs. 2 lakhs. The Revised Estimates for the year under review have been placed at Rs. 10 lakhs.

### FILMS DIVISION

With headquarters in Bombay, this branch of the Ministry of I & B, is the biggest producer of documentaries and news reels in South Asia. In addition to its own production, it buys some select films from State Governments and private producers so that a variety in its documentaries is maintained. Some of the State Governments have a film production unit of their own for news reels and documentaries to be shown within their own limits.

Prime Minister Lal Bahadur Shastri's achievements, his "Last Journey" and functions connected with it, gave the Films Division an opportunity to compile more documentaries than one, for exhibiting the past glories of a dedicated life. These documentaries gave proof of the powerful hold of the film medium on people's mind.

Slowly, the Films Division is paying more and more attention to technical topics; naval aviation, Indian Ocean expedition, manufacture of optical glass, defence research and hockey are

some of the out of the way subjects about which documentaries were produced during the year.

Every cinema is required under the terms of its licence to exhibit at each show not more than 2,000 feet of film approved by the authorities specified in the licence. One newsreel or alternatively one documentary is released every week to all the cinema houses.

To non-profit making and charitable institutions such as schools, hospitals, films are supplied free.

Films that are suitable for foreign exhibition are supplied to Indian missions abroad. A monthly overseas edition of newsreels is also sent out to certain places. They are also marketed abroad on a commercial basis. Besides, there are arrangements for televising them with certain foreign countries—England, Canada and Japan. The films also help to promote tourism as they are regularly exhibited through the Tourist Division of the Ministry of Transport.

**News Reels & Documentaries:** In the production of documentaries and news-reels, the Films Division naturally holds a leading position mainly because of the compulsory exhibition of these films all over the country.

### Production by Films Division 1956-66

| Year    | Documentaries |       | News Reels | Compilation News Reels | Total |
|---------|---------------|-------|------------|------------------------|-------|
|         | B & W         | Color |            |                        |       |
| 1956-57 | 56            | 8     | 52         | 16                     | 132   |
| 1957-58 | 58            | 10    | 53         | 15                     | 136   |
| 1958-59 | 83            | 14    | 52         | 16                     | 165   |
| 1959-60 | 72            | 27    | 52         | 14                     | 165   |
| 1960-61 | 77            | 23    | 53         | 12                     | 165   |
| 1961-62 | 80            | 16    | 52         | 12                     | 160   |
| 1962-63 | 101           | 11    | 52         | 12                     | 176   |
| 1963-64 | 95            | 7     | 52         | 12                     | 166   |
| 1964-65 | 84            | 12    | 52         | 8                      | 166   |
| 1965-66 | 113*          | 22    | 52         | —                      | —     |

\* Including 43 for New York World Fair.

**Films for Record:** The Films Division also makes certain documentaries for record only when dignitaries visit this country or when our President goes abroad.

In the production of educational films, the Films Division has shown how the motion picture can be made to serve educational purposes for the benefit of the illiterate masses.

Films produced by others and by other State units continued to be purchased by the Films Division for commercial exhibition over its own circuit. With the decentralised civil administration, each district has come into prominence and the peculiarities, artistic, industrial and agricultural and otherwise, were sought to be explained by means of a documentary film.

**Mobile Publicity Units:** Seventy-nine mobile units maintained by the Field Publicity contacted about 230 lakh people during the year. Their trips provide contacts with the population of regions where no other agency reaches them.

On an average, each unit remains moving for 18 days; visits as many places and organises 25 film shows and as many meetings after or before the show. In chalking out the programme of tours, care is taken to conduct the tour on important fair and festival days of the region to contact maximum audiences. Supporting effort is given to various "camps", rallies and shibirs where the select audiences are available in a more receptive mood.

A full length documentary film on the biography of Mahatma Gandhi is under compilation as the repository of the Fund contains copies and originals of many shots relating to Gandhi's activities, collected from all over the world.

Shorter documentaries of individual aspects of Gandhiji's activities are also planned from the material available.

### Films for non-commercial release

**Non-Commercial Exhibition:** Documentaries and news-reels produced by the Films Division have a great demand outside the regular cinema houses for non-commercial exhibition. Mobile vans of commercial and industrial concerns, as part of their propaganda for their products, resort to showing of films to draw audiences. They seem to be quite successful in this effort. While they popularise their respective products, documentaries and news-reels get incidental publicity. During 1965, 3,191 shows were arranged by these organisations and 18,18,646 persons attended these shows.

The revenue and expenditure of the Films Division are as follows:—

| Year    | '000 Rs. |             |
|---------|----------|-------------|
|         | Revenue  | Expenditure |
| 1959-60 | 49.98    | 91.00       |
| 1960-61 | 50.82    | 89.06       |
| 1961-62 | 62.90    | 97.47       |
| 1962-63 | 66.10    | 106.00      |
| 1963-64 | 71.03    | 101.88      |
| 1964-65 | 94.98    | 104.22      |
| 1965-66 | 62.00    | 116.77      |

### News-reels

For obtaining a country-wide coverage, Films Division has stationed 15 cameramen in all the state capitals and for international coverage it has exchange arrangements with



22 news-reel producers from abroad. A wide distribution of Indian news items is thus secured on television also. State Governments who have their own "news-reel" units for their own distribution arrangement occasionally supply material to the Union news-reels.

Like documentaries, news-reels also are being dubbed in English and 12 Indian languages as from the beginning of 1960, for obtaining more intensive penetration.

Regular shows of documentaries and news-reels are arranged at the small theatre auditorium of the Films Division, Janpath, New Delhi, and Tarabai Hall, Marine Drive, Bombay, at the nominal charge of 25 P. per head per show.

Similar shows are being introduced in other cities as well, as they will help make audiences documentary-minded.

Films dealing with Plan activities, are supplied to State Governments, social education units, railways, exhibition directorate, information centres and so on.

News items of current interest including significant events from foreign countries continued to be included in the newsreels. The news stories were received from 26 foreign newsreel organisations as part of the arrangement for free exchange of newsreel material.

### AWARDS

(See article 'Awards and Prizes')

There are regional committees in Madras, Bombay and Calcutta which make a preliminary selection in the matter of feature films. These committees consist of persons who are qualified to judge. The final selection is made by the Government. In the matter of documentaries, educational films and children's films the selection is made solely by the Government.

The Ministry of Health instituted two cash prizes of Rs. 25,000 each to be given to the best all-India feature films on family planning (one produced in 1963 and the other in 1964). No film was considered suitable for the cash prize.

**Film Festivals in India & U.S.S.R.:** Nine Indian feature films were screened during the Indian Film Festival held in Moscow and four other cities of the U.S.S.R. Similarly, Soviet films were shown in India in Delhi and other four cities during February-March 1964.

The Filmfare awards are given on the basis of a readers' poll. (For more details see article "Awards and Prizes".)

### CENTRAL BOARD OF FILM CENSORS

The Board of Film Censors is a statutory body set up under the Cinematograph Act, 1952, for sanctioning films for public exhibition. Films suitable for unrestricted exhibition are granted 'U' certificates and those suitable for public exhibition restricted to adults only are given 'A' certificates.

The certificates issued by the Board are valid for 10 years from the date of issue. Provision exists for the issue of fresh certificates in respect of such films after the expiry of the 10-year period.

The Board at present consists of a Chairman and nine non-official members who work part-time in an honorary capacity. The headquarters of the Board are at Bombay. There are regional offices in Bombay, Calcutta and Madras. The Regional Officers are assisted by Advisory Panels appointed by the Government. The Panels consist of educationists, doctors, social workers, lawyers.

Every film is scrutinized by the Examining Committee, and a certificate is given or refused, or given with cuts or modifications. There is an appeal to a Revising Committee presided over by the Chairman. There is also a final appeal from the decision of the Board to the Government of India.

The Central Board of Film Censors has during the past 15 years, 1951-65, certified 13,613 Indian and 29,259 foreign films.

In 1965, the Board examined 2,783 films, out of which 29 were refused certification. Films certified (U) for universal exhibition were 1,557 (foreign) and 1,219 (Indian) and those carrying

(A) for Adults only were 137 foreign and 16 Indian.

The total metres cut by censors during 1965 was 10,733.

Fresh certificates were issued for 166 films in respect of which certificates had been issued more than 10 years ago. Of these two were granted 'A' certificates.

Broadly speaking, the Censors see that there is no encouragement to vice, crime or that there is no offence against decency or morality, or that they do not promote disrespect for law and order or to a foreign country or people.

### 16 MM. FILMS

The use of the 16 mm. film for propaganda and publicity is realised by Governments, municipalities, and trade and industry.

The National Institute of Audio-Visual Education, Indraprastha Estate, New Delhi, has been doing excellent work with 16 mm. films on a variety of topics. The Institute's Library is the single largest collection of 16 mm. films, mainly for information and education and they are available at reasonable cost to any one in the country.

There are in addition 16 mm. projectors and small theatres for films suitable for non-theatrical audiences maintained by the British Information Services, the British Council and the U.S. Information Services through their regional offices.

In the Defence Forces, 16 mm. films have been extensively used for training and entertainment. There are Inspectors of Visual Education under Directors of Education in the States who do valuable service by using 16 mm. projectors and film strips.

Most of the diplomatic missions and embassies in the Capital and Consulates in Bombay, Madras and Calcutta maintain a film section and arrange shows of special films.

The U.K. and U.S.A. representatives and the British Council maintain a special library of educational and informative films. These are available for exhibition free of charge.

Many international friendship societies too have libraries of 16 mm. films. Notable among these are the Indo-Soviet Cultural Society and the Indo-Czech Cultural Society.

In fact 16 mm. films on a variety of subjects are available from many countries in the world.

### EXPORT, IMPORT

The Film industry earns about Rs. 140 lakhs annually through export of films outside India. Excluding those in Pakistan, there are about 2,500 theatres available for the showing of Indian films in about 60 foreign countries where Indians live in some concentration and where Indian films are welcomed.

The main export market at present is Pakistan; but Indian exporters there are put to considerable difficulty. Ceylon, Malaysia, Burma, Indonesia, Cambodia, Thailand, Viet Nam, Aden, Persian Gulf Ports, Iran, Lebanon, East Africa, West Africa, Ghana, Tangiers, South Africa, West Indies, Fiji, Mauritius, Dutch Guiana, U.K. and Hongkong are the other chief markets for Indian films.

The Indian Motion Pictures Export Corporation Ltd. was set up in Bombay on Sept. 19, 1963, to promote export of Indian Films. For more details see article "All India Corporations". The export earnings from films were: 1959: Rs. 154 lakhs; 1960: Rs. 176 lakhs; 1961: Rs. 163 lakhs; 1962: Rs. 142 lakhs; 1963: Rs. 163 lakhs; 1964: Rs. 212 lakhs.

**Exhibition abroad:** Special news reel compilations are made every month for use in 36 Indian missions abroad and copies of documentaries are in demand for regular exhibition in 81 missions. Many television authorities show considerable interest in Indian films and the documentaries/news-reels are frequently used by them through the Indian missions in their respective countries.

An up-to-date Catalogue of the Films Division's documentaries is available.

Apart from traditional importers of Indian films like Ceylon and Singapore, other countries importing films from India now include U.K., U.S.S.R., France, U.S.A. and Canada.

Imports of exposed cinematograph films have been fairly heavy. Until 1936-37 imports remained below 10.8 million feet, touched the peak at 26 million feet in 1938-39 and dropped to 6.9 million feet in 1942-43 owing to wartime conditions. In the post-war period imports recovered to 16.2 million in 1945-46 and thereafter have fluctuated between 17 million feet and 12 million feet.

Under the import control regulations, import of foreign films is subject to a monetary ceiling and distributors are authorised to remit up to 70 per cent. of the gross revenue.

**Production of feature films (1956 to 65):** 1956: 296; 1957: 293; 1958: 293; 1959: 303; 1960: 320; 1961: 297; 1962: 312; 1963: 299; 1964: 303; 1965: 322.

**Production of feature films (1965) by Languages:** Hindi 97; Tamil 56; Telugu 50; Malayalam 31; Bengali 29; Kannada 21; Marathi 14; Gujarati 5; Punjabi 5; Oriya 3; Chhatisgarh, English, Konkani, Magadhi, Rajasthani, Sindhi: One each; Others 5; Total 322.

**Note:**—The figures of production of feature films have a minor discrepancy. Officials take every film that is certified by the Censors as "produced", during the period. The industry however considers films that are released as produced. There is an inevitable lag between the certified and released films.

### CINEMAS IN INDIA

India seems to have taken to production of feature films quite seriously, ranking the third in the world next to Japan in the total number of feature films produced yearly. There are 5,350 cinema houses providing a total of 92 lakh seats (including 1,450 travelling) and nearly 82,000 people are engaged in exhibition, 20,000 in production, 20,000 in distribution and allied business together. On a rough estimate Rs. 85 crores are invested in this business which has 61 studios, 39 processing labs. The average daily attendance achieves a formidable figure of 50 lakhs, because in larger cities there are 22 shows a week. The industry naturally pays Rs. 25 crores as entertainment tax per year and about Rs. 40 crores in other direct taxes, to Union and State Governments.

### IMPORT OF FILMS

|      | Raw Films                |                          | Exposed Films            |                          |
|------|--------------------------|--------------------------|--------------------------|--------------------------|
|      | Length<br>(lakh metres). | Value<br>(Rs. in lakhs). | Length<br>(lakh metres). | Value<br>(Rs. in lakhs). |
| 1960 | 827                      | 194                      | 51                       | 38                       |
| 1961 | 537                      | 166                      | 52                       | 45                       |
| 1962 | 722                      | 177                      | 56                       | 44                       |
| 1963 | 807                      | 204                      | 28                       | 27                       |
| 1964 | 726                      | 201                      | 35                       | 36                       |

### IMPORT OF EQUIPMENT

|                                      | 1960  | 1961  | 1962  | 1963  | 1964  |
|--------------------------------------|-------|-------|-------|-------|-------|
| Cinema projecting apparatus, etc. .. | 32.43 | 34.52 | 33.08 | 31.03 | 21.16 |
| Sound recording apparatus, etc. ..   | 1.41  | 3.76  | 2.95  | 2.09  | 0.68  |

### EXPORT EARNINGS (FILMS) 1960-64

1960: Rs. 176 lakhs; 1961: Rs. 163 lakhs; 1962: Rs. 142 lakhs; 1963: Rs. 163 lakhs; 1964: Rs. 212 lakhs.



country from both private and official sources abroad.

Foreign investments in business enterprises in India.—1962.

Foreign capital continued to flow into business enterprises during 1962 but at a somewhat-reduced rate (*vide* Table 2). The net inflow during the year, after allowing for repatriation, accounting and valuation changes, totalled Rs. 40.4 crores, which was lower than in 1960 and 1961 but higher than in 1958 and 1959. The main reason for the reduction in 1962, as compared to the previous year, was larger amortisation payments on loans obtained by private enterprises from official sources. In fact, the net inflow from foreign private sources was slightly higher in 1962 than in 1961 (Rs. 29.7 crores as against Rs. 28.1 crores). The aggregate book value of foreign investments in business enterprises at the end of 1962 amounted to Rs. 735.5 crores of which foreign private sources accounted for Rs. 625.5 crores and official sources for the balance of Rs. 110.0 crores (*vide* Table 1). The wide deviation between the capital flow and the changes in the book value of investments (Rs. 55.7 crores) during 1962, shown in Table 1, reflects in part the revaluation of assets and in part accounting changes, the two together amounting to Rs. 15.3 crores during the year.

Information relating to the inflow of capital into business enterprises is for the most part based on the data available from the records of the Bank's Exchange Control Department, supplemented by limited information made available by foreign controlled companies operating in India. Both these sources cover mainly the changes in liabilities arising out of direct investment. Information on portfolio investment is included in the assessment; but the information is incomplete. Long-term foreign investments in business enterprises, for the purpose of the article, represent all foreign investor and creditor capital received by business enterprises in the

the preceding year, the gross inflow at Rs. 22.8 crores was only Rs. 2.3 crores below the 1961 level and accounted for about 37 per cent of the gross addition to the value of foreign business investments (*vide* Table 2). The IBRD provided Rs. 5.6 crores, most of which was made available to the ICICI for relending to private sector industries. Other official agencies, such as the U.S. Eximbank and the Agency for International Development (AID), together a little under Rs. 8 crores to the private sector. Industry-wise AID loans were mainly for chemicals and fertilisers (Rs. 5.6 crores) and utilities (Rs. 0.2 crore). AID assistance to financial corporations, like the IFC and the National Small Industries Cooperation, totalled Rs. 1.5 crores. The scale of U.S. Eximbank assistance to the private sector during 1962 was much lower than in 1961 because a major portion of U.S. assistance is now channelled through the AID and also because the bulk of the drawings on the two loans extended to the metals and metal products and synthetic textile fibres industries were made in the previous year. The private sector was also the recipient of loans amounting to Rs. 5.8 crores sanctioned out of PL 480 counterpart funds to five firms which had American affiliation. These were rupee loan to various manufacturing industries, such as metals and metal products, rubber manufactures and paper products. Besides the above loans, there were further drawings of Rs. 3.5 crores on the deferred credit extended by Czechoslovakia to the engineering industry, raising the total outstanding liability to Czechoslovakia to Rs. 5.8 crores at end—1962. In earlier years repayments on loans obtained by business enterprises from official sources abroad were negligible, but beginning up from 1960 the outflow has progressively increased and in 1962 business enterprises repaid Rs. 12 crores of their earlier borrowings from foreign official sources; nearly two thirds of the repayments related to IBRD loans to iron and steel concerns in private ownership.

## GROSS CAPITAL FLOWS

In the seven years from end—1955 to end—1962, long-term foreign private capital inflow (gross) has varied between a low of Rs. 25.7 crores in 1959 and a high of Rs. 63.2 crores in 1960, when there was exceptionally heavy investment by the petroleum industry. The inflow fell to Rs. 35.6 crores in 1961 and amounted to Rs. 38.7 crores in 1962. The inflow in 1962 was Rs. 3 crores higher than in 1961 as well as the annual average for 1956-61 (*vide* Table 2).

(Rs. crores)

|          |                   |    |    |    | Total† | Of which from             |                            |
|----------|-------------------|----|----|----|--------|---------------------------|----------------------------|
|          |                   |    |    |    |        | Private sources<br>abroad | Official sources<br>abroad |
| June     | 1948              | .. | .. | .. | 264.6  | 264.6                     | —                          |
| December | 1953              | .. | .. | .  | 397.1  | 397.1                     | —                          |
|          | 1955              | .. | .. | .. | 442.4  | 439.7                     | 2.7                        |
|          | 1956              | .. | .. | .. | 478.3  | 463.5                     | 14.8                       |
|          | 1957              | .. | .. | .. | 532.0  | 484.3                     | 47.7                       |
|          | 1958              | .. | .. | .. | 562.5  | 488.6                     | 73.9                       |
|          | 1959              | .. | .. | .. | 582.8  | 498.9                     | 83.9                       |
|          | 1960              | .. | .. | .. | 364.7  | 552.2                     | 82.5                       |
|          | 1961 <sup>a</sup> | .. | .. | .. | 679.8  | 580.5                     | 99.3                       |
|          | 1962              | .. | .. | .. | 735.5  | 625.5                     | 110.0                      |

† Includes valuation changes ; these are, however, excluded in the computation of inflows.

**@ Revised.**

### Official capital in the private sector

In more recent years, creditor capital from official sources has been an important element in

|total foreign investments in business enterprises.

During 1962, even though the net inflow at Rs. 10.7 crores was Rs. 6.1 crores lower than in

**Table 2 Inflow of foreign investments into the private sector during 1956-62.**

| Table 2. Inflow of foreign investments into the private sector during 1955-62 |                                      |    |    |    |      |      |      |      |      | (Rs. crores) |      |
|-------------------------------------------------------------------------------|--------------------------------------|----|----|----|------|------|------|------|------|--------------|------|
|                                                                               |                                      |    |    |    | 1956 | 1957 | 1958 | 1959 | 1960 | 1961@        | 1962 |
| A.                                                                            | Private Sources (Net inflow)         | .. | .. | .. | 23.8 | 20.8 | 2.5  | 10.2 | 51.7 | 28.1         | 29.7 |
| 1.                                                                            | Gross inflow                         | .. | .. | .. | 30.8 | 26.8 | 28.1 | 25.7 | 63.2 | 35.6         | 38.7 |
|                                                                               | (i) Retained Earnings                | .. | .. | .. | 19.2 | 9.5  | 9.1  | 14.6 | 14.1 | 15.8         | 7.8  |
|                                                                               | (ii) Cash Inflow                     | .. | .. | .. | 3.1  | 5.8  | 4.8  | 3.3  | 6.2  | 4.0          | 5.0  |
|                                                                               | (iii) Non-cash Inflow                | .. | .. | .. | 8.5  | 11.4 | 14.2 | 7.8  | 43.0 | 15.8         | 25.8 |
| 2.                                                                            | Outflow                              | .. | .. | .. | 7.0  | 6.0  | 25.5 | 15.5 | 11.5 | 7.5          | 9.0  |
| B.                                                                            | Official Sources (Net Inflow)        | .. | .. | .. | 12.1 | 32.9 | 26.2 | 10.0 | -1.4 | 16.8         | 10.7 |
|                                                                               | (i) Gross Inflow                     | .. | .. | .. | 12.1 | 32.9 | 26.4 | 12.6 | 5.2  | 25.1         | 22.8 |
|                                                                               | (ii) Outflow                         | .. | .. | .. | —    | —    | 0.2  | 2.6  | 6.6  | 8.3          | 12.1 |
| C.                                                                            | Gross Inflow into the Private Sector | .. | .. | .. | 42.9 | 59.7 | 54.5 | 38.3 | 68.4 | 60.7         | 61.5 |
| D.                                                                            | Gross Outflow                        | .. | .. | .. | 7.0  | 6.0  | 25.7 | 18.1 | 18.1 | 15.8         | 21.0 |
| E.                                                                            | Net Inflow into the Private Sector   | .. | .. | .. | 35.9 | 53.7 | 28.7 | 20.2 | 50.3 | 44.9         | 40.4 |

② Revised, N.B. 1. Figures exclude foreign investments in banking and insurance companies. 2. The inflow has been computed wherever possible, by eliminating valuation change. To this extent the figures in the Table will not compare with those given Statements II, III and V. 3. Totals in the Table as well as in other Tables may not add up because of rounding.



## FRESH CAPITAL INFLOW

The 1962 result was greatly influenced by fairly large fresh capital flows; in fact the sharp drop in retained earning was more than compensated, as will be seen later, by the higher rate of parent company investment in their Indian branches and subsidiaries. Fresh capital inflow registered a rise from Rs. 19.8 crores in 1961 to Rs. 30.8 crores in 1962. Most of this increase came in the form of investment in kind, namely, supply of plant and machinery and technical know-how. Branch investments in kind rose from Rs. 3 crores in 1961 to Rs. 14.6 crores in 1962; most of this rise represented increased indebtedness of companies, primarily in the 'plantations' and 'services' categories, to their head offices abroad and was by and large related to the working capital needs of these concerns. In the case of rupee companies, there was a slowing down in the allotment of shares to non-residents in lieu of plant and machinery and technical know-how, etc. from Rs. 12.7 crores in 1961 to Rs. 11.12 crores during the year under review. The cash component of the fresh inflow indicated a modest rise of Rs. one crore to Rs. 5 crores. Industry-wise, the fresh capital flow was directed mainly towards manufacturing enterprises—food and beverages, chemicals, metals and metal products and machinery and machine tools accounting for Rs. 13.7 crores or more than 44 per cent of the total.

## TRENDS IN REINVESTED PROFITS

The steady growth in foreign investments in recent years continued to push the earnings of foreign controlled companies to higher levels, total gross earnings reaching Rs. 134.8 @ crores in 1962. However, owing mainly to higher tax provisions following the imposition of the super profits tax, there was a reduction during 1962 in net earnings. The proportionate share of the net earnings accruing to non-residents thus fell from Rs. 44 crores in 1961 to Rs. 39 crores in 1962 (vide Table 3). Of this companies engaged in manufacturing and petroleum accounted for Rs. 18.9 crores and Rs. 8.4 crores respectively. Despite the heavy flow of investment into manufacturing operations, net earnings of manufacturing concerns declined Rs. 3.3 crores, chemical and pharmaceutical producers being particularly affected. A sizeable reduction was also in evidence in the net profits of companies in the services category. In contrast profits earned by petroleum and plantation companies were marginally higher.

Table 3. Profits of foreign Controlled Companies

(Rs. crores)

|                | 1956 | 1957 | 1958 | 1959 | 1960 | 1961 | 1962 |
|----------------|------|------|------|------|------|------|------|
| Earned ..      | 40.6 | 35.1 | 34.5 | 37.9 | 40.6 | 44.3 | 39.0 |
| Distributed .. | 27.3 | 25.6 | 25.4 | 23.3 | 26.5 | 28.5 | 31.2 |
| Retained ..    | 19.2 | 9.5  | 9.1  | 14.6 | 14.1 | 15.8 | 7.8  |

## LIABILITIES AND ASSETS OF THE OFFICIAL SECTOR—1962

With progressively larger public outlays, changes in foreign liabilities and assets of the

public sector have been very pronounced. During 1962, official liabilities registered a further increase of Rs. 266 crores to Rs. 1,892.6 crores.

Table 4. Foreign Liabilities of the Official Sector

(Rs. crores)

| Countries                     | 1955  | 1961    | 1962    |
|-------------------------------|-------|---------|---------|
| Australia ..                  | 0.1   | 0.2     | 0.2     |
| Burma ..                      | 1.2   | 5.6     | 7.1     |
| Canada ..                     | 0.3   | 13.6    | 10.9    |
| Ceylon ..                     | 3.5   | 0.8     | 1.0     |
| Germany (West) ..             | 2.1   | 144.4   | 157.1   |
| Japan ..                      | 2.7   | 24.0    | 25.5    |
| Pakistan ..                   | 38.6  | 31.3    | 30.7    |
| U.K. @ ..                     | 33.9  | 171.7   | 193.5   |
| U.S.A. ..                     | 91.9  | 805.8   | 963.6   |
| U.S.S.R. ..                   | —     | 68.5    | 99.6    |
| International Institutions .. | 26.6  | 295.9   | 344.2   |
| Others ..                     | 5.2   | 64.5    | 59.2    |
| Total ..                      | 206.1 | 1,626.3 | 1,892.6 |

@ Includes World War I Loan of Rs. 20.6 crores.

Table 5. Foreign Assets of the Official Sector.

(Rs. crores)

| Countries                     | 1955    | 1961  | 1962  |
|-------------------------------|---------|-------|-------|
| Australia ..                  | 0.2     | —     | —     |
| Burma ..                      | 0.0     | 19.3  | 17.2  |
| Canada ..                     | 2.6     | 1.1   | 0.7   |
| Ceylon ..                     | —       | 0.1   | 0.1   |
| Germany (West) ..             | —       | 15.1  | 12.2  |
| Japan ..                      | 0.1     | 2.1   | 0.2   |
| Pakistan @ ..                 | 301.2   | 300.5 | 300.5 |
| U.K. ..                       | 814.9   | 137.2 | 92.7  |
| U.S.A. ..                     | 31.4    | 49.0  | 23.1  |
| International Institutions .. | 19.3    | 56.6  | 56.4  |
| Others ..                     | 0.6     | 3.2   | 1.9   |
| Total ..                      | 1,176.3 | 584.2 | 505.1 |

@ Include Rs. 300 crores on account of Partition Debt.

## OVERALL INVESTMENT POSITION

Table 6 which sets out the country's international investment position as at the end of 1955, 1961 and 1962, shows that in 1962 the external indebtedness of India continued to increase at a rapid rate. With the launching of

the Third Five Year Plan and the acceleration of planned investment, there was a pronounced increase in the country's foreign liabilities, which moved up by Rs. 330 crores in 1962, raising the accumulated total to nearly Rs. 2,700 crores. On the assets side, there was a sharp fall of Rs. 66 crores in 1962.

Table 6. India's Overall Investment Position Abroad

(Rs. crores)

|             | Liabilities |        |        | Assets  |       |       | Net Position |         |         |
|-------------|-------------|--------|--------|---------|-------|-------|--------------|---------|---------|
|             | 1955        | 1961   | 1962   | 1955    | 1961  | 1962  | 1955         | 1961    | 1962    |
| Private ..  | 450††       | 681††  | 737††  | 34@     | 39@   | 39@†  | - 416        | - 642   | - 698   |
| Banking ..  | 60          | 58     | 66     | 55      | 53    | 66    | - 5          | - 5     | —       |
| Official .. | 206*        | 1,626* | 1,892* | 1,176@@ | 584@@ | 505@@ | + 970        | - 1,042 | - 1,337 |
| Total ..    | 716         | 2,365  | 2,695  | 1,265   | 676   | 610   | + 549        | - 1,689 | - 2,085 |

† Provisional. †† Long-term foreign business investment including those of insurance companies. @ Foreign securities, shares and branch investment. \* Includes U.K. War Loan, Rs. 20.6 crores. @@ Includes Partition Debt Rs. 300 crores due from Pakistan.

On the liabilities side, a comparison of 1962 with 1955 shows that, while private foreign investments have expanded by Rs. 293 crores, the growth in official indebtedness was phenomenal—over Rs. 1,680 crores. More than half the increase in the latter resulted from the growth in short-term indebtedness arising out of P.L. 480 assistance; the balance represented long term assistance in the shape of development loans from friendly foreign countries. On the assets side, the overall decrease between 1955 and 1962 was Rs. 665 crores, largely the consequence of the reduction in the holdings both of long-term

sterling securities and short-term assets, mainly to finance imports.

The heavy flow of development funds (including official bilateral assistance as well as capital made available through multilateral institutions) has made India the largest recipient among the developing countries of financial resources from developed countries. The progressive increase in the net debtor position has, however, to be viewed against the sizeable capital formation in various fields—irrigation, power, transport and communications as well as manu-

facturing capacity. The large official flows have helped to create a strong economic structure in India, which in turn has helped to widen the outlets for private investment. The increased volume of external finance for development purposes is also an indication that the capability of the country to make productive use of the resources has increased considerably over the last few years. The growth in external debt has been accompanied by a continuous rise in debt service payments, but rapidly mounting debt is inevitable in the present phase of development of the country.

@ This includes the share of profits accruing to residents also.



Table 7. Foreign Business Investments as at the end of 1962\*

By Industry

(Rs. crores)

| Industry Group                        | Direct investments |                            |              | Portfolio investments |          |              | Total        | Official Sources | Total Portfolio investments | Total Business investments |
|---------------------------------------|--------------------|----------------------------|--------------|-----------------------|----------|--------------|--------------|------------------|-----------------------------|----------------------------|
|                                       | Branches           | Controlled rupee companies | Total        | Equity                | Creditor | Total        |              |                  |                             |                            |
|                                       | 1                  | 2                          | 3<br>(1 + 2) | 4                     | 5        | 6<br>(4 + 5) | 7<br>(3 + 6) | 8                | 9<br>(6 + 8)                | 10<br>(7 + 8)              |
| Plantations .. .. .                   | 98.5               | 8.6                        | 107.1        | 3.1                   | 0.1      | 3.2          | 110.3        | —                | 3.2                         | 110.3                      |
| Mining .. .. .                        | 10.6               | —                          | 10.6         | 2.4                   | —        | 2.4          | 13.0         | —                | 2.4                         | 13.0                       |
| Petroleum .. .. .                     | 89.6               | 62.2                       | 151.8        | 0.2                   | 0.2      | 0.4          | 152.2        | 1.8              | 2.2                         | 154.0                      |
| Manufacturing .. .. .                 | 31.5               | 177.4                      | 208.9        | 28.4                  | 7.6      | 36.0         | 244.9        | 82.5             | 118.5                       | 327.4                      |
| Foods, Beverages, etc. .. .. .        | 7.8                | 29.3                       | 37.1         | 1.4                   | 1.0      | 2.4          | 39.5         | —                | 2.4                         | 39.5                       |
| (i) Cigarettes and Tobacco .. .. .    | —                  | 26.3                       | 26.3         | 0.2                   | —        | 0.2          | 26.5         | —                | 0.2                         | 26.5                       |
| (ii) Others .. .. .                   | 7.8                | 3.0                        | 10.8         | 1.2                   | 1.0      | 2.2          | 13.0         | —                | 2.2                         | 13.0                       |
| Textile Products .. .. .              | 10.9               | 4.8                        | 15.7         | 6.1                   | 0.6      | 6.7          | 22.4         | 0.4              | 7.1                         | 22.8                       |
| (i) Cotton goods .. .. .              | —                  | 3.5                        | 3.5          | 2.9                   | 0.2      | 3.1          | 6.6          | —                | 3.1                         | 6.6                        |
| (ii) Jute & Coir goods .. .. .        | 10.9               | 0.5                        | 11.4         | 1.3                   | 0.3      | 1.6          | 13.0         | —                | 1.6                         | 13.0                       |
| (iii) Others .. .. .                  | —                  | 0.8                        | 0.8          | 1.9                   | 0.1      | 2.0          | 2.8          | 0.4              | 2.4                         | 3.2                        |
| Transport Equipment .. .. .           | —                  | 11.1                       | 11.1         | 4.1                   | 0.2      | 4.3          | 15.4         | 0.1              | 4.4                         | 15.5                       |
| (i) Automobiles & Accessories .. .. . | —                  | 5.9                        | 5.9          | 2.1                   | 0.1      | 2.2          | 8.1          | 0.1              | 2.3                         | 8.2                        |
| (ii) Others .. .. .                   | —                  | 5.2                        | 5.2          | 2.1                   | 0.1      | 2.2          | 7.4          | —                | 2.2                         | 7.4                        |
| Machinery & Machine Tools .. .. .     | 1.1                | 11.7                       | 12.8         | 2.6                   | 2.3      | 4.9          | 17.7         | 6.1              | 11.0                        | 23.8                       |
| Metals & Metal Products .. .. .       | 3.0                | 26.0                       | 29.0         | 5.1                   | 0.9      | 6.0          | 35.0         | 56.6             | 62.6                        | 91.6                       |
| (i) Iron & Steel Products .. .. .     | 0.4                | 15.9                       | 16.3         | 4.9                   | 0.3      | 5.2          | 21.5         | 50.5             | 55.7                        | 72.0                       |
| (ii) Others .. .. .                   | 2.6                | 10.0                       | 12.6         | 0.2                   | 0.6      | 0.8          | 13.4         | 6.1              | 6.9                         | 19.5                       |
| Electrical Goods & Machinery .. .. .  | 0.1                | 13.5                       | 14.0         | 2.7                   | 0.2      | 2.9          | 16.9         | —                | 2.9                         | 16.9                       |
| Chemicals & Allied Products .. .. .   | 4.2                | 48.3                       | 52.5         | 3.0                   | 0.9      | 3.9          | 56.4         | 8.6              | 12.5                        | 65.0                       |
| (i) Chemicals .. .. .                 | —                  | 13.6                       | 13.6         | 2.7                   | 0.6      | 3.3          | 16.9         | 8.4              | 11.7                        | 25.3                       |
| (ii) Medicines & Pharmaceuti-<br>     |                    |                            |              |                       |          |              |              |                  |                             |                            |

\* Include valuation changes.



# AGRICULTURE

INDIA is predominantly an agricultural country. About half of the country's national income is derived from agriculture and allied activities which absorb nearly  $\frac{1}{3}$  of its working force (of about 152 million in 1956 inclusive of dependents).

Some major facts about Indian agriculture (1963-64): Total geographical area according to village papers (reporting area): 300.1 million hectares; area not available for cultivation (including forests, 55.8 million hectares, land for non-agricultural uses and barren lands, 50.3 million hectares): 106.1 million hectares; other uncultivable lands like permanent pastures and grazing lands, land under free crops and cultivable wastes: 36.4 million hectares; fallow land: 21.3 million hectares; net area sown: 136.2 million hectares; area sown more than

once: 20.5 million hectares; gross area sown: 156.75 million hectares; net area irrigated 26.13 million hectares & gross area irrigated: 30.57 million hectares.

India virtually holds the monopoly in lac, leads the world in groundnut and tea production, and is the second largest producer of rice, jute, raw-sugar, rape, sesamum and castor seeds.

Average rainfall 45"; deficiency of 25 per cent is classed dry; deficiency of 40 per cent severe drought; usually one year in five is a dry year, one in ten, a year of severe drought, one in 20 to 25 years widespread severe drought.

Over one-fourth of the total irrigation of the country is got from lifting water from wells ranging in depth from a few feet to over fifty feet.

## AREA AND PRODUCTION

The following table will show the area under principal crops and the yield:

| Crops              | Area in '000 hectares |           | Production in '000 met. tons |          |
|--------------------|-----------------------|-----------|------------------------------|----------|
|                    | 1964-65               | 1965-66   | 1964-65                      | 1965-66  |
| Rice .. .. .       | 36,374.0              | 35,021.7  | 39,034.2                     | 30,614.2 |
| Wheat .. .. .      | 13,460.4              | 12,798.2  | 12,290.3                     | 10,720.5 |
| Barley .. .. .     | 2,084.3               | 2,551.1   | 2,522.6                      | 2,284.2  |
| Maize .. .. .      | 4,618.0               | 4,683.3   | 4,658.1                      | 4,632.0  |
| Jowar .. .. .      | 17,938.2              | 17,181.1  | 9,749.0                      | 7,492.1  |
| Bajra .. .. .      | 11,725.8              | 11,428.4  | 4,453.9                      | 3,597.8  |
| Ragi .. .. .       | 2,437.4               | 2,197.6   | 1,897.6                      | 1,304.0  |
| Small Millets ..   | 4,512.0               | 4,331.0   | 1,952.5                      | 1,601.6  |
| Total Cereals ..   | 93,740.7              | 90,192.4  | 76,558.2                     | 62,247.3 |
| Gram .. .. .       | 8,895.7               | 7,848.9   | 5,785.2                      | 5,343.0  |
| Redgram .. ..      | 2,495.0               | 2,402.3   | 1,887.8                      | 1,688.3  |
| Total pulses ..    | 23,792.7              | 21,450.0  | 12,437.4                     | 10,016.9 |
| Total foodgrain .. | 117,533.4             | 111,642.4 | 88,997.7                     | 72,264.2 |
| Sesamum .. ..      | 2,512.7               | 2,455.6   | 492.8                        | 406.5    |
| Groundnut .. ..    | 7,216.3               | 7,171.2   | 5,887.7                      | 4,022.1  |
| Rape & Mustard ..  | 2,881.0               | 2,891.0   | 1,466.0                      | 1,268.0  |
| Linseed .. ..      | 2,016.9               | 1,765.0   | 503.0                        | 329.0    |
| Castor seed .. ..  | 444.0                 | 365.5     | 108.3                        | 71.2     |
| Total oilseeds ..  | 15,110.0              | 14,639.0  | 8,468.0                      | 6,097.0  |
| Coconut .. ..      | 818.0                 | N.A.      | 4,806.0                      | 4,725.0  |
| Sugarcane .. ..    | 2,561.8               | 2,748.9   | 12,315.0                     | N.A.     |
| Tobacco .. ..      | 423.1                 | N.A.      | 869.7                        | N.A.     |
| Cotton .. .. .     | 8,271.0               | 7,827.0   | 5,664.0                      | 4,708.0  |
| Jute .. .. .       | 838.5                 | 748.2     | 6,020.5                      | 4,485.0  |
| Mesta .. .. .      | 359.5                 | 320.3     | 1,583.1                      | 1,244.0  |
| Sanhemp .. ..      | 194.8                 | 170.0     | 71.0                         | 56.0     |
| Pepper .. .. .     | 102.8                 | 102.1     | 24.0                         | 23.4     |
| Ginger .. .. .     | 21.9                  | 21.9      | 21.1                         | 21.1     |
| Chillies .. ..     | 713.5                 | N.A.      | 454.7                        | 420.0    |
| Turmeric .. ..     | 68.0                  | N.A.      | 122.4                        | 63.0     |
| Tea .. .. .        | 338.0                 | 342.0     | 454.7                        | 365.0    |
| Coffee .. .. .     | N.A.                  | N.A.      | 372.0                        | N.A.     |
| Rubber .. .. .     | 154.0                 | N.A.      | 43.5                         | N.A.     |
| Banana .. .. .     | 195.0                 | N.A.      | 2,670.0                      | N.A.     |
| Papaya .. .. .     | 7.0                   | N.A.      | N.A.                         | 228.0    |
| Potato .. .. .     | 431.0                 | 473.0     | 3,668.0                      | 3,893.0  |
| Sweet Potato ..    | 156.0                 | N.A.      | 1,137.0                      | N.A.     |
| Tapioca .. .. .    | 241.0                 | N.A.      | 3,044.0                      | N.A.     |
| Indigo .. .. .     | N.A.                  | N.A.      | N.A.                         | @        |
| Opium .. .. .      | 19.0                  | N.A.      | 0.7                          | N.A.     |
| Lac .. .. .        | N.A.                  | N.A.      | 17.7                         | N.A.     |
| Arecanut .. ..     | 124.0                 | N.A.      | 443.0                        | N.A.     |
| Cashewnut .. ..    | 157.0                 | N.A.      | 142.0                        | N.A.     |
| Cardamum .. ..     | 55.0                  | N.A.      | 4.0                          | N.A.     |

Note.—Data for 1964-65 and 1965-66, relate to Partially Revised and Final Estimates respectively (a) Production of rice is in terms of cleaned rice; groundnut as unshelled nuts; sugarcane as raw sugar or gur; cotton as lint jute and mesta as dry fibre in thousand bales (of 180 kg.); coconut as million nuts. (b) Pepper, Ginger and Chillies as dry material. (c) Opium production in 1,000 maunds (of 82 2/7 lbs.). Other pulses include black and green gram and lentil, etc. in Tripura, Orissa and Delhi wherefrom pulsewise data are not available. @ Negligible, below 500. N.A. Not available.

## INDEX OF PRODUCTION—ALL COMMODITIES

(Base 1949-50 = 100)

| Year            | INDEX NUMBERS OF PRODUCTION |                 |                  |
|-----------------|-----------------------------|-----------------|------------------|
|                 | Foodgrains.                 | Non-foodgrains. | All commodities. |
| 1962-63 .. .. . | 130.4                       | 151.8           | 137.5            |
| 1963-64 .. .. . | 135.9                       | 156.2           | 142.6            |
| 1964-65 .. .. . | 150.2                       | 174.9           | 158.4            |
| 1965-66 .. .. . | 121.4                       | 152.4           | 131.7            |

## INDEX OF PRODUCTION—INDIVIDUAL CROPS

| Commodity/Groups          | 1965-66            |
|---------------------------|--------------------|
| <b>I. FOODGRAINS</b>      |                    |
| (a) Cereals—              |                    |
| Rice .. .. .              | 121.6              |
| Maize .. .. .             | 165.7              |
| Jowar .. .. .             | 107.7              |
| Bajra .. .. .             | 112.7              |
| Ragi .. .. .              | 84.7               |
| Small Millets ..          | 82.2               |
| Wheat .. .. .             | 158.8              |
| Barley .. .. .            | 96.2               |
| Cereals .. .. .           | (Kharif) 119.4     |
|                           | (Rabi) 146.9       |
|                           | (as a whole) 124.4 |
| (b) Gram .. .. .          |                    |
| Tur .. .. .               | 114.0              |
| Other Pulses ..           | 85.2               |
|                           | 93.0               |
| Pulses .. .. .            | 101.0              |
| <b>TOTAL FOODGRAINS</b>   |                    |
|                           | 121.4              |
| <b>II. NON-FOODGRAINS</b> |                    |
| (a) Oilseeds—             |                    |
| Groundnut .. ..           | 121.8              |
| Sesamum .. .. .           | 98.0               |
| Rape & Mustard ..         | 156.1              |
| Linseed .. .. .           | 79.0               |
| Castor seed .. ..         | 52.8               |
| All Oilseeds .. ..        | 121.0              |
| (b) Fibres—               |                    |
| Cotton .. .. .            | 173.9              |
| Jute .. .. .              | 135.9              |
| Mesta .. .. .             | 189.6              |
| All Fibres .. .. .        | 166.1              |
| (c) Plantation Crops—     |                    |
| Tea .. .. .               | 140.1*             |
| Coffee .. .. .            | 250.3*             |
| Rubber .. .. .            | 236.0*             |
| All Plantation Crops ..   | 150.3              |
| (d) Other crops           |                    |
| Sugarcane .. ..           | 197.9              |
| Tobacco .. .. .           | 97.8*              |
| Potato .. .. .            | 224.7              |
| Pepper (Black) ..         | 111.1              |
| Chillies (Dry) ..         | 120.8              |
| Ginger (Dry) .. .         | 139.4              |
| <b>NON-FOODGRAINS</b>     |                    |
|                           | 152.4              |
| <b>ALL COMMODITIES</b>    |                    |
|                           | 131.7              |

\* Based on provisional estimates.

The agricultural season is divided into two main sub-divisions the Kharif season of the monsoon and the Rabi season of the cold weather. This is not well-marked in the extreme east or extreme south.

The ground is generally prepared for cultivation in April and May for kharif crops, and by the end of October or early November for rabi crops, i.e., after the kharif crops have been harvested. Kharif crops are sown in the monsoon, generally after the first shower. The usual time for sowing of rabi crops is the middle of November. The crops are harvested from the middle of March to the end of April.

The chief Kharif crops are: rice, jowar, bajra, maize, cotton, sugarcane, sesamum and groundnut. The chief Rabi crops are: wheat, barley, tea, gram, linseed, rape and mustard; and in south India rice, jowar and cotton.



## FOODGRAINS

Foodgrains production in 1964-65 reached the record level of over 88.4 million tonnes. This is nearly 9 million tons more than 1963-64. The increase is mostly due to the record rise in the production of wheat and rice in 1964-65. The previous record was 81 million tonnes in 1961-62.

### RICE

Rice crop occupies the largest area in the Indian Union, about 34 million hectares giving 32 million tons of rice. During 1965-66 the area under rice cultivation was 35.02 million hectares and the production was about 30.06 million tonnes.

Madras, Bihar, Bengal, Orissa, Madhya Pradesh, Uttar Pradesh, Assam, Andhra, Maharashtra, Mysore, Kerala and Gujarat are the main rice growing States and they together claim about 95 per cent of the total rice area in India.

Rice yield in India is, however, one of the lowest in the world. Though about 4,000 distinct types of rice differing in essential characteristics occur in this country, 455 superior strains giving an average of 10 to 20 per cent better yield than the farmers' varieties have been evolved.

### WHEAT

The area under wheat is about 13 million hectares and production about 10 million tons. During 1965-66, the area under wheat was 12.79 mill. hectares and production 10.72 mill. tonnes. Wheat is grown widely throughout the north as a winter crop, U.P., M.P. and Punjab supplying over 72 per cent of the total outturn in the country. This crop occupies, on an average, about 10 per cent, of the total cultivated area.

More than one-third of the crop is irrigated.

The crop is generally grown after a summer fallow and except in irrigated tracts, depends largely on the conservation of the soil moisture from the previous monsoon. The crop is generally harvested in February to April and the threshing and winnowing go on up till the end of May.

A virulent fungus disease called rust affects the production of wheat to a great extent. In normal years, the loss is about 5 per cent involving about sixty million rupees.

Systematically planned work on the development of rust resistant wheats is being done under theegis of the Indian Council of Agricultural Research and a large number of rust resistant varieties have been produced.

### MILLETS

Mostly of short duration (2½ to 6 months from seed to seed) millets are grown in localities and in conditions where most of the other cereal crops are not grown, such as poor and infertile soils and low rainfall (of 20-50").

**Jowar:**—Among the millets jowar occupies a premier position because of the size of the crop and the economic importance of the grain. About 17 million hectares are grown under this to yield about 9 million tons of grain. Maharashtra, Andhra, Mysore, M.P. and Gujarat contribute to over ¾ of the natural acreage. The jowar area and production respectively during 1965-66 were 11.18 mill. hectares and 7.49 mill. tonnes. A hybrid CSH. 1, suitable for growing under irrigated and rainfed conditions and yielding upto 60 mds. per acre under intensive manuring is prepared to be put under cultivation in about 40 lakh acres.

**Bajra:**—Occupies about 27 million acres to yield about four million tons of grains. U.P., Rajasthan, Punjab, Gujarat and Maharashtra, are the chief growing tracts. The duration of the crop varies from about 2½ to 5 months. During 1965-66 bajra was cultivated in 11.43 mill. hectares and produced about 3.59 mill. tons.

**Ragi:**—Ragi ranks third in importance among the Millets and occupies about 2 million hectares to produce about 1.8 million tons of

grain. Its average yield is rather high, 800 kg. per hectare compared to jowar and bajra with 500 and 350 kg. respectively. More than half the area is in Mysore, Madras and Andhra. The area and yield during 1965-66 were 2.2 mill. hectares & 1.3 mill. tonnes respectively.

**Other Millets:**—The others grouped under lesser or minor millets form about 1/6 of the total area under millets and are grown in about 4.6 mill. hectares and yield about 1.9 million tons of grain. The area and yield during 1965-66 were 4.3 mill. hectares and 1.6 mill. tons respectively. The most important among them are Kora or Kangi, Kodon, Cheena or Varagu, Oodalu, and Sawan.

**Maize:**—Maize is cultivated in India in about 4.5 mill. hectares to produce about 4.5 mill. tons of grain. The major growing areas, U.P., Bihar, Rajasthan, Punjab and M.P. which between themselves account for about three-fourth of the maize area. The area and production during 1965-66 were 4.68 mill. hectares and 4.63 mill. tonnes respectively. The average yield is only about 10 mds. per acre. Seven hybrids (Ganga 2 and 3, Ganga Saffed, Ganga high Starch, Ranjit, Deccan and Himalaya) giving 56-70 per cent more than local varieties have been produced.

**Barley:**—During 1965-66 barley was cultivated in an area of 2.5 mill. hectares and the production estimate was 2.28 mill. met. tons.

### COTTON

The area under cotton during 1965-66 was 7.55 mill. hectares against 8.15 mill. hectares in 1964-65.

The decrease in area during current year is due to late and inadequate rains at sowing time in Andhra Pradesh, Maharashtra and Mysore, which was offset to some extent by the increased area in the Madhya Pradesh and Rajasthan regions. Internal production is short of requirement of long staple type to the extent of about 6.8 lakh bales. The actual import varies on supply and demand, and availability of foreign exchanges. Due to shortfall in production imports were going on and in 1963-64 and 1964-65, 6.4 and 8.4 lakhs of bales respectively. The total imports during the current season are likely to be around 4.42 lakh bales. Exports expected under P.L. 480. Exports of surplus short staple naturally will be about 2.3 lakh bales, depending upon supply. It amounted to 2.7 and 2.5 lakh

bales during 1963-64 and 1964-65. Indigenous cotton consumption by mills is rising. In 1963-64 and 1964-65 the indigenous cotton consumption were 60.72 and 63.71 lakh bales respectively. During 1965-66, consumption is expected to be 56-58 lakh bales.

The evolution of Indo-American varieties and of Sea Island, Andrews and hybrid cottons which can replace imported cottons constitute an important landmark in the progress of cotton research. Further work for isolating still better and finer types continues under three schemes in operation in the Punjab, Bombay, Madras.

Cotton extension schemes initiated in 1950 were continued in the Third Plan and were in operation in Andhra Pradesh, Gujarat, Madhya Pradesh, Maharashtra, Mysore, Orissa, Punjab, Rajasthan and Uttar Pradesh.

Package programme for increased production of cotton in cotton growing States has been prepared. Under this, 4,35,000 acres were to be brought under intensive cultivation in 20 selected districts of nine cotton growing states. Production incentives such as subsidies for phosphate fertilizers/composts (25 per cent), green manure (Rs. 2 per md.) and pesticides (25 per cent) are also provided. The programme was in operation in Andhra Pradesh, Gujarat, Madhya Pradesh, Maharashtra, Madras, Mysore, Punjab and Rajasthan in 1964-65 and during 1965-66 about 1.6 million acres were expected to be covered by this programme.

### FRUIT

A wide variety of fruit and vegetables is cultivated in the country. The total area under all fruits at present is about three million acres.

During the Third Plan period about seven million acres of new orchards were expected to be planted and the fruits and vegetable production was expected to be 1,00,000 tons at end of the Plan.

In order to encourage the production and export of fruit products several concessions are given to the manufacturers through Directorate of Marketing by way of loans for starting new factories and renovating old ones, subsidy on tin-plate, rebate on excise duty on sugar etc.

Fruit products amounting to over 23,000 tons are now manufactured in the country.

### EXPORT OF FRUITS

| Fruits        | 1964-65               |                   | 1965-66               |                   |
|---------------|-----------------------|-------------------|-----------------------|-------------------|
|               | Quantity in met. tons | Value in Rs. min. | Quantity in met. tons | Value in Rs. min. |
| Apples        | 3                     | 0.008             | 7                     | 0.020             |
| Bananas       | 8,052                 | 3.028             | 18,931                | 3.768             |
| Citrus Fruits | 3,459                 | 1.463             | 138                   | 0.157             |
| Grapes        | 8                     | 0.016             | 43                    | 0.116             |
| Mangoes       | 1,070                 | 1.294             | 1,636                 | 0.853             |
| Pine apple    | 85                    | 0.046             | 16                    | 0.022             |

(Citrus fruits include orange, lemon, lime and others).

### REGULATED MARKETS

One of the visible benefits of regulated markets, which work on democratic principles, has been the reduction in the market charges to extents varying between 29 to 50 per cent. The saving to the producer on this account is estimated to be Rs. 3 for every Rs. 100 worth of goods sold by him. Open auction system which yields better price to the producer has also been introduced in a majority of the markets. New market yards with modern amenities are also being provided.

Training of personnel in Agricultural Marketing is provided through three courses. (1) One year course for training superior personnel of the State Marketing Dept. at Nagpur; (2) Five months course for training market secretaries

and superintendents at Sangli, Hyderabad and Lucknow; (3) Three months course for training grading supervisors and assessors at Nagpur and Madras. During 1965-66, thirty candidates were being trained in the one-year course while 128 and 164 candidates have been trained or are receiving training under 5 month and 3 month courses respectively. A Central Government stipend is paid at Rs. 75 p.m. for one year course and Rs. 50 for other courses.

The Directorate of Marketing is entrusted with the development of the fruit and vegetable preservation industry and administers the Fruit Products Order promulgated under the Essential Commodities Act of 1955. This Order envisages the compulsory licensing of the manufacturers of fruit products for sale.



The Directorate has carried out a large number of surveys on the marketing of agricultural and livestock commodities and has published over 130 marketing survey reports and brochures relating to 40 important commodities. During 1965 the Directorate had published a monograph on tobacco, a Directory of assembling markets and reports on the Cooperative marketing of cotton, coconut and coconut products, turmeric and price spread of groundnuts. Sixteen more reports relating to fruits, vegetables, walnuts, cardamom and wool etc. are under print.

To ensure that the producer may get an adequate return commensurate with the quality of his produce 367 grading units at the producer level have been set up, 267 in the regulated markets, 711 in selected marketing co-operatives and 29 in warehouses in various States. Specific programmes have also been undertaken to operate some pilot grading centres for grading tobacco at Ongole (A.P.) and of Kapas in Hubli-Gadag area (Mysore).

The number of regulated markets was 700, at the end of Sept. 1966. Number of Statewise regulated markets and grading units in brackets were as follows: Andhra Pradesh 123 (42); Assam—(16); Bihar 141 (12); Gujarat 196 (19); Kerala 4(6); Madhya Pradesh 145 (15); Madras 82 (40); Maharashtra 338 (94); Mysore 155 (42); Orissa 43(6); Punjab 383 (22); Rajasthan 84 (11); Uttar Pradesh 2 (15); West Bengal—(22); Tripura 1(—); Delhi 3 (1); Himachal Pradesh—(4).

**Marketing, Processing:** The main features of the programme are:— (1) Linking credit with marketing in the form of marketing societies; (2) Developing processing and distribution of farming requisite on co-operative lines, and (3) Promotion of storage and warehousing.

### COLD STORAGE

The wastage on fruits and vegetables produced in the country amounts to 15 to 20 per cent due to want of proper storage and marketing facilities.

The Cold Storage Order, 1965 issued under the Essential Commodities Act, 1965, came into force from Jan. 1, 1965. It makes obligatory for all cold storages with a capacity of 300 cft. or more for storing articles of food like fruits, milk, dairy products, eggs, fish, vegetables, potatoes etc., to take licences for the purpose from Agricultural Marketing Adviser to the Government of India. Since the promulgation of the order, 560 licences were granted.

The present capacity of cold storage in the country is about 2.5 million maunds provided by 200 cold storages mostly run by private traders.

The total number of Central Warehouses, under the Central Warehousing Corporation, functioning in the country at the end of 1966 was 85 with a total capacity of 4.40 lakh tonnes.

### AGRICULTURAL ECONOMICS

The Directorate of Economics & Statistics is one of the main organizations under the Central Government which deals with all agro-economic problems in the sphere of food and agriculture. It also co-ordinates all works relating to planning in agriculture sector, including financial reserves for the development programme, policies and procedures in Central and State Sectors.

The Directorate has a scheme for the improvement of marketing intelligence. This has been implemented in all States and Territories. Arrangements have been made for broadcasting daily prices of important agricultural commodities and weekly reviews on food and price positions on the rural programme of AIR. Market news bulletins are also issued regularly in regional languages for wider dissemination. About 500 markets in relation to 70 commodities are covered in the broadcasts.

A Price Intelligence Organisation has been set up in the Directorate to study on a regular basis the flow of market supplies, market sentiment, factors leading to rise or fall in prices,

crop outlook, market behaviour etc. to advise the Govt. from time to time in formulating proper price control measures.

A research division has been set up in the Directorate to co-ordinate Farm Management investigations and also to conduct research in production economics. Various economic surveys on productivity aspects of agriculture and the pattern of input/output, agroclimatic alignment etc. are also taken up.

The statistical wing of the Indian Council of Agricultural Research does fundamental and applied investigation in statistics and also trains statisticians for field work. It has issued comprehensive Index of field experiments carried out in the different States during the last decade.

### SOIL CONSERVATION

It is estimated that in the country as a whole about 200 million acres are exposed to erosion. Out of this about 100 million come under land under cultivation, 50 million acres are fallow and other uncultivated land and 50 million are desert mainly in Rajasthan.

The co-ordination of soil conservation work between the States and Territories is achieved through the agency of the Central Soil Conservation Board which was set up in the Ministry of Food and Agriculture in 1953. Similar boards are also set up in most of the States and Territories.

During First and Second Plan period only 3.2 mil. acres were covered by the soil conservation. During the Third Plan period 10 mil. acres were expected to benefit from soil conservation measures against a target of about eleven million acres.

Altogether 10 research-cum-training centres have been established at the following places:—

1. Ootacamund (Madras) for erosion control in the Nilgiri and other hills;
2. Bellary (Mysore) for soil conservation studies in black soils;
3. Kotah (Rajasthan) with sub-centre at Agra for erosion control in the Chambal and Jumna ravines;
4. Jodhpur (Rajasthan) for afforestation in the Rajasthan desert;
5. Dehra Dun (U.P.) for studying problems of afforestation in the Sivalik hills with the sub-station at Chandigarh (Punjab) for training *chors* (hill torrents);
6. Vasad (in the Gujarat tract for erosion control in the ravines along rivers in Gujarat);
7. Chandigarh (outer Sivaliks);
8. Chatra (water shed management);
9. Agra (Yamuna ravines);
10. Ibrahimpatnam (Andhra) for tackling red soil problems. The Board proposes to set up one more in Orissa.

Research and training in soil and water conservation are intensified at the Regional Research Centres. An additional training course in soil conservation for Gazetted officers was started at the training centre at Ootacamund. During 1965-66, 99 officers and 246 assistants from different States have either been trained or undergoing training bringing the total of trained personnel to 249 officers and 1,153 assistants during the Third Plan period.

During 1965-66 over 165 soil conservation schemes to cover 3.668 mil. acres of contour bunding, 7.151 mil. acres under dry farming, 0.214 mil. acres under afforestation and pasture development, and 0.075 mil. acres of saline and alkaline soils, wastelands etc., were in progress. Centrally sponsored soil conservation schemes were in operation in the catchments of river valley projects in 14 States to reduce silt in dams and reservoirs. During 1965-66 about 0.2 mil. acres were expected to be treated bringing the anticipated achievement since initiation of Third Plan to about three-fourth of the Plan target.

An Integrated All-India Soil and Land Use Survey Scheme has been executed by the Central Soil Conservation Board with four Zonal Centres at Delhi, Nagpur, Bangalore, and Haringhata, with effect from 1st March 1959. Under this scheme 8.849 mil. acres were surveyed upto 1964-65 and 1.9 mil. acres were expected to be covered during 1965-66.

### NEW SCHEMES

#### Agricultural Research

Out of the crosses made between Indian and Japanese rice varieties to evolve high-yielding non lodging varieties capable of responding to heavy fertilisation, *Hybrid ADT 27*, released in Madras State gave over 5,000 lb. per acre and matured in 90 to 100 days, permitting double cropping. Far superior to the Indo-Japanese hybrids were the foreign varieties of Taichung Native-1 which has yielded 7,000 to 8,000 lbs. per acre and *Tainan-3* which gave indication in Kerala as being even superior to Taichung Native-1. In wheat, similarly, the foreign varieties *Sonora-64* and *Lerma Rojo* have been selected for development along with the local varieties; (i.e. NP 846, resistant to all the three rusts and smut, suitable for the low hills; NP 818 suitable for higher elevations, and the early maturing NP 202 suited to the Nilgiris). The Hybrid C-306 with better grain quality and adaption to high fertility conditions, has been recommended for the Northern plains, however. In sorghums the hybrid *CSH-2* suitable for late Kharif season and yielding 30 to 40 per cent more than *CSH-1* has been released and in bajra, hybrid *BB-1* which yields about 30 mds. of grain with 40 lbs. nitrogen under irrigated conditions. Coordinated research schemes are proposed for rice, wheat, barley, sorghum, millet and pulses in the IV Plan for overall studies on these major food grains for their better production.

The finding that chemical amendments, green manure, farmyard manure and powdered gypsum help in correcting saline and alkaline soils has been confirmed in Andhra Pradesh, Kerala, Punjab and Uttar Pradesh. It was noticed in Andhra Pradesh that addition of one to two months old *Pillipesara* (*Phaseolus trilobus*) and six month old *casia* (*Cassia auriculata*) to the soil increased the organic matter by about one per cent and nitrogen by 0.2 per cent of soil and stimulated microbial population. Data collected during the course of about 15,000 fertilizer demonstration trials conducted during 1962-63 revealed that the Paddy yield varied from 10 to 20 quintals per hectare in the major rice growing States. Similar data of 79 experiments on rice at 20 centres, under the Model Agronomic Experiments Schemes showed that the application of 44.8 kg nitrogen per hectare gave a response of 3.9 quintals with an average response to 44.8 kg phosphorus of 0.6 quintal per hectare. The training programme for agricultural workers at the State level under the Fertilisers Demonstration Scheme, has been completed in Punjab, Rajasthan, Uttar Pradesh, Gujarat, Madhya Pradesh, Madras, Kerala and Orissa. Weeds in wheat and millets were effectively put down by pre-emergence treatment with 2, 4-D while MCPB gave a good account of checking weeds of pea and 3-4 DPA in weeds of rice.

Cocoa cultivation is to be extended during the Fourth Plan and suitable areas are being located and parent trees selected in the States. All India Coordinated Research Projects on eight fruits (mango, banana, citrus, grape, papaya, guava, pineapple and apple) and vegetables, on the lines of All India Project on maize, have been drawn up for the Fourth Plan.

#### Agricultural Education

Eight agricultural universities of the pattern of Land Grant Colleges have already been established in Bengal (Kalyani), in Orissa (Univ. of Agri. and Technology, Bhubaneswar), Punjab (Chandigarh), Rajasthan (Udaipur), U.P. (Pantnagar), Andhra (Rajendranagar), Madhya Pradesh (Jabalpur), and in Mysore (Hebbal). Four more agricultural universities are proposed to be established during the Fourth Plan period including one in Maharashtra and another in Madras State. The Indian Agricultural Research Institute, New Delhi, now declared as the only National institute for agricultural research in India also gives coaching and examination and tests for post graduate degree courses in agricultural diplomas.

There are 70 agricultural colleges in India.



## LAND POLICY

The land policy of the Government of India has been formulated for the promotion of agricultural production and for the provision of social justice in the rural economy. The policy of "Land to the Tiller" followed during the last 1½ decades has helped to establish owner cultivators on a large scale borne out by the census data of 1961. Out of every 100 cultivators, 76 were owner cultivators, 16 owner cum tenant cultivators and only 8 were pure tenant cultivators. The agrarian reform undertaken by the various State Governments during the past few years fall generally into four broad classes:—

- (1) The abolition of intermediaries.
- (2) Tenancy reform designed to, (a) Scale down rents to 1/4–1/5 of the produce, (b) to give permanent rights to the tenants (subject to the landlord's rights to resume a minimum holding for his personal cultivation within a limited time) and (c) to enable tenants to acquire ownership of their lands (subject to the landlord's right of resumption for personal cultivation) on payment of moderate compensation to the landlord spread over a period of years.
- (3) Fixation of ceiling on holdings.
- (4) Reorganisation of agriculture including (a) Consolidation of holdings, (b) Prevention of fragmentation and (c) Development of co-operative village management and co-operative farming.

The view taken in the Planning Commission is that once the land is redistributed on the basis of the current legislation, the land system should not be disturbed for a period of about 15 years thereafter.

### Land Reforms

The abolition of intermediaries in the rural areas had been carried out practically all over the country and about 20 million tenants of former intermediaries had come into direct relationship with the State Govts. becoming owners of their holdings.

### ABOLITION OF INTERMEDIARIES

The programme for the abolition of intermediary tenures has been almost entirely completed.

The position with regard to the abolition of intermediaries in the country as a whole is as follows:

|                                                                                  | In million acres | Percentage of total area. |
|----------------------------------------------------------------------------------|------------------|---------------------------|
| Area in which intermediary tenures existed ..                                    | 343.8            | 43                        |
| Area in which legislation for the abolition of intermediaries has been passed .. | 322.3            | 40                        |
| Area in which the abolition of intermediaries has been effected ..               | 306.0            | 38                        |
| Area in which intermediaries remain ..                                           | 37.8             | 5                         |

### TENANCY REFORM

The principal features of tenancy reforms are (a) security of tenure for tenants, (b) regulation of rent and (c) conversion of tenements into owners.

With the abolition of intermediaries, the tenures come under two broad categories, i.e. (i) owners who hold land directly from the State; (ii) and the tenants who hold land from owners. Their rights and obligations are regulated under tenancy laws enacted in the States. Thus the multiplicity of tenancy has been considerably reduced, and in the most parts, tenants who hold land under intermediaries have now become owners of land.

**Regulation of rent—Land revenue assessment:** Legislation has been adopted in all States for the regulation of rent. The Plan recommendation is that it should not exceed one-fourth or one-fifth of the gross produce. But the rent fixed,

however, varies with the State. Legislation has been enacted in all the States for regulating maximum rents which a landlord may receive.

**Security of Tenure:** Legislation providing security of tenure has been enacted in all the States.

**Resumption:** Legislation has been put through in most of the States prescribing a basis for the resumption of the land by the landlords.

**Ownership Right for Tenants:** Tenants were declared owners on payment of compensation to owners in almost all States.

The following table shows the number of tenants who have been conferred with ownership rights and the area respectively in each State.

| States/Territories    | No. of tenants | Area for which ownership conferred (acres) |
|-----------------------|----------------|--------------------------------------------|
| Andhra (Telangana) .. | 33             | 202                                        |
| Gujarat ..            | 462            | 1,408                                      |
| Madhya Pradesh ..     | 24             | 28                                         |
| Maharashtra ..        | 618            | 1,674                                      |
| Punjab ..             | 22             | 147                                        |
| Uttar Pradesh ..      | 1,500          | 2,000                                      |
| West Bengal ..        | ..             | 800                                        |
| Delhi ..              | 29             | 39                                         |
| Himachal Pradesh ..   | 24             | 28                                         |
| Tripura ..            | 10             | 12                                         |

**Compensation to Landlords:** The joint committee on the Constitution (17th Amendment) Bill has recommended on March 25, 1964, that no land under personal cultivation held within the prescribed ceiling limits can be acquired by the State without payment of compensation at a rate not less than its market value.

For the purpose of achieving this object, Clause I of Article 31A of the Constitution has been suitably amended.

Compensation payable by tenants for the acquisition of ownership varied from State to

State except in the Punjab (where it is fixed at 1/3 of the average market value). Compensation is generally a multiple of rent or land revenue. In Andhra (Hyderabad 6–15); Madhya Pradesh (Madhya Bharat: 2–8 of the net income of landlord); Ajmer: 12; former Vindhya Pradesh: 15; former Madhya Pradesh (7–10); Rajasthan: 15 (for unirrigated lands); 10 and Uttar Pradesh 10.

In the Travancore part of Kerala it is fixed at eight and a half times the net annual income.

The compensation is fixed as a multiple of the assessment in five States:—Gujarat and Maharashtra: 20–200 times of the assessment; Delhi: 20–40; Himachal Pradesh: 48 and Punjab (PEPSU): 90 times of the assessment. This compensation is generally payable in instalments (except in former Madhya Pradesh) spread over a period of 5–15 years.

### FIXATION OF CEILING

**Ceiling on Holding:** There is a general movement towards fixing a maximum and minimum on land holdings, as an aspect of land reform. This relates to (1) the absolute amount of land which any individual may hold and (2) the future acquisition of land.

Legislation placing ceiling on agricultural holdings have been enacted in all states and territories except Punjab\*. Though there is no outright ceiling on ownership in Punjab\*, the Government is empowered to settle ejected tenants on lands under personal authorities of owners in excess of the prescribed limits.

State-wise existing and future agricultural holdings in brackets respectively in acres, allowed by any individual, are as follows:—Andhra Pradesh 27–324 (12–200); Assam 50 (50); Bihar 20–60 (20–60); Gujarat 19–132 (19–132); Jammu & Kashmir 22½ (22½); Kerala 15–37½ (15–37½); Madhya Pradesh 25–75 (25–75); Madras 24–120 (24–120); Maharashtra 18–126 (12–126); Mysore 27–216 (18–144); Orissa 25–100 (25–100); Punjab\* 30 Standard (30 Standard); Rajasthan 30 Standard (30 Standard); Uttar Pradesh 40 (12½); West Bengal 30 Standard (30 Standard); Delhi 30 Standard (30 Standard); Manipur 25 (25); Tripura 25–75 (25–75).

### SURPLUS LAND

As a result of implementation of legislation for ceilings on holdings considerable acreage has become surplus and allotted to tenants etc. as below:—

#### Land declared surplus & allotted:

| States                  | Declared surplus (Lakh acres) | Allotment made                                                                                                                                 |
|-------------------------|-------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Andhra .. .. .          | 0.520                         | ..                                                                                                                                             |
| Assam .. .. .           | 0.21                          | 6,000 acres were taken over and tenants converted into owners.                                                                                 |
| Bengal .. .. .          | 7.8                           | State Government took possession of 4.35 lakh acres of agricultural land and leased out temporarily to landless person pending final disposal. |
| Jammu & Kashmir .. .. . | 4.5                           | Distributed to tenants.                                                                                                                        |
| Maharashtra .. .. .     | 1.4                           | 37,000 acres were taken over and placed under the management of the Maharashtra State Farming Cooperation set-up for the purpose.              |
| Punjab* .. .. .         | 4.2                           | 1.22 lakh acres settled by tenants and landless people.                                                                                        |
| U.P. .. .. .            | 2.0                           | Of this 1.65 lakh acres were taken possession of and 89,000 acres distributed.                                                                 |

In Assam, Bihar, Delhi, Gujarat, Madhya Pradesh, Maharashtra and parts of Tripura provisions of the Bill have been enforced and implementation is progressing.

### CONSOLIDATION

(a) **Size of Holding:** The average size of a holding for the whole of India is 7.5 acres, but this varies from State to State: Assam 5.3 acres, Bihar 4.1 acres, M.P. 13.9 acres, Madras 9.7 acres, Orissa 5.6 acres, Punjab 11.8 acres, U.P. 5.3 acres, W. Bengal 4.7 acres.

Kashmir 8.8 acres, Kerala 2.4 acres, Mysore 7.2 acres, Rajasthan 16.9 acres.

The majority of the holdings will be less than 5 acres, a great majority indeed less than 2.

The proportion of households that held either no land or less than five acres was about three-fourths, and the total share was about one-sixth of the whole area of cultivated land.

Legislation has been enacted in most of the States and in the Delhi and Himachal Pradesh

\* Composite State.



territories for prevention of holdings and consolidation of fragmented holdings. Consolidation has been completed over 54.9 million acres by the end of the fourth year of the Third Plan. During 1965-66 about 5 million acres were expected to be brought under consolidation of holdings.

State-wise consolidation effected upto 1964-65 in million acres was as follows: Andhra State 0.81; Assam —; Bihar 0.15; Gujarat 1.76; Jammu & Kashmir 0.01; Madhya Pradesh 0.25; Madras—; Maharashtra 4.16; Mysore 0.58; Orissa—; Punjab† 21.84; Rajasthan 0.97; Uttar Pradesh 14.55; West Bengal—; & Delhi 0.13; Himachal Pradesh 0.31.

In the Fourth Five Year Plan it is proposed to spend Rs. 100 million for subsidy and loans to new settlers and Rs. 320 million for consolidation of holdings to extend the programme to another 56 million acres.

(b) **Prevention of Fragmentation:** Legislation disallowing fragmentation has either been enacted or in the process of enactment in fifteen States. It has not been implemented in Bengal, Orissa & Punjab†. Bills are under consideration in non-Hyderabad portion of Andhra Pradesh, U.P. below 6½ acres; former Hyderabad below a basic holding ranging from 2-24 acres; Rajasthan below a size to be determined by the State Government; Delhi below 8 standard acres; Madhya Pradesh below 5 acres of irrigated or 10 acres of dry land.

#### CO-OPERATIVE FARMING

The main purpose of such type of farming is to secure economy in the use of machinery, and the advantages of large-scale farming.

#### FIVE-YEAR PLANS

The outlay for agricultural programmes from First, Second and Third Plan respectively were Rs. 5,700 mill., 9,440 million and 19,150 million.

In the Second Plan agricultural programmes were intended to provide adequate food to support the increased population and the raw materials needed for a growing industrial economy and also to make available larger exportable surpluses of agricultural commodities. The basic objective of the Third Five Year Plan was to achieve self-sufficiency in foodgrains and increase the production of other agricultural and commercial crops to meet the requirements of the industry and the export trade.

Reiterating the objects of the Third Plan, the Agricultural programme in Fourth Plan is given the highest priority leading to a compound rate of growth of 5.59 per cent per annum in farm

production, 5.92 per cent in food grain and 5.01 per cent in other crops.

The Fourth Plan envisages to step up output of lateral rubber from 50,000 tonnes (1965-66) to 72,000 tonnes in 1970-71; coffee from about 60,000 tonnes to 85,000 tonnes and tea from 375 million kilograms to 454 million kilograms in the same period. The export increase envisaged during the same period in coffee is from 27,000 to 45,000 tons and tea from 197 million kilograms (1965-66) to 300 million kilograms in 1970-71. The Fourth Plan outlay fixed for the agricultural programmes is Rs. 2,490 crores. The production target for foodgrains is 120 million tonnes.

The following table shows the estimates of agricultural production at the end of Fourth Plan period.

| Commodity       | Unit                    | Base level<br>1965-66 | Additional<br>production<br>Fourth<br>Plan | Estimates of<br>production<br>at the end of<br>Fourth Plan | Percentage<br>increase over<br>the base<br>level |
|-----------------|-------------------------|-----------------------|--------------------------------------------|------------------------------------------------------------|--------------------------------------------------|
| Foodgrains      | (in millions of tonnes) | 90.0                  | 30.0                                       | 120.0                                                      | 33                                               |
| Sugarcane (gur) | "                       | 11.0                  | 2.5                                        | 13.5                                                       | 23                                               |
| Oilseeds        | "                       | 7.5                   | 3.2                                        | 10.7                                                       | 43                                               |
| Cotton          | (in millions of bales)  | 6.3                   | 2.3                                        | 8.6                                                        | 37                                               |
| Jute            | "                       | 6.2                   | 2.8                                        | 9.0                                                        | 45                                               |
| Mest            | "                       | 1.8                   | 0.2                                        | 2.0                                                        | 11                                               |
| Pepper          | (in thousand tonnes)    | 30.0                  | 5.0                                        | 35.0                                                       | 17                                               |
| Cardamom        | "                       | 3.3                   | 0.5                                        | 3.8                                                        | 15                                               |
| Ginger          | "                       | 22.0                  | 5.0                                        | 27.0                                                       | 23                                               |
| Cashewnut       | "                       | 136.0                 | 192.0                                      | 328.0                                                      | 141                                              |
| Tobacco         | "                       | 400                   | 75                                         | 475                                                        | 19                                               |
| Coconut         | (in millions of nuts)   | 4,713                 | 400                                        | 5,113                                                      | 8                                                |
| Areca nut       | (in thousand tonnes)    | 101.9                 | 8.5                                        | 110.4                                                      | 8                                                |
| Lac             | "                       | 30                    | 20                                         | 50                                                         | 67                                               |

† Composite State.

#### CLASSIFICATION, AREA & PRODUCTION (1964-65)

(Hectares, tonnes in thousands)

| States and Territories                     | Forests         | Area not<br>available<br>for<br>cultivation | Uncultivated<br>land<br>excluding<br>fallow | Fallow<br>land  | Total<br>cropped<br>area | Rice          |               | Wheat         |               | Barley       |              |
|--------------------------------------------|-----------------|---------------------------------------------|---------------------------------------------|-----------------|--------------------------|---------------|---------------|---------------|---------------|--------------|--------------|
|                                            |                 |                                             |                                             |                 |                          | Area          | Production    | Area          | Production    | Area         | Production   |
| Andhra Pradesh ..                          | 6,117.1         | 4,060.4                                     | 2,848.9                                     | 3,023.0         | 12,757.5                 | 3,267         | 4,606         | 21            | 5             | —            | —            |
| Assam* ..                                  | 3,525.0         | 6,429.5                                     | 703.7                                       | 294.2           | 2,749.4                  | 1,904         | 1,912         | 4             | 3             | —            | —            |
| Bengal (West) ..                           | 1,107.6         | 1,293.4                                     | 628.9                                       | 378.8           | 6,390.7                  | 4,673         | 5,763         | 41            | 28            | 32           | 18           |
| Bihar ..                                   | 3,708.1         | 2,276.7                                     | 898.0                                       | 1,900.4         | 11,049.0                 | 5,288         | 4,987         | 659           | 398           | 347          | 184          |
| Gujarat ..                                 | 1,110.0         | 5,122.5                                     | 1,804.4                                     | 715.7           | 10,127.1                 | 532           | 470           | 443           | 425           | 6            | 0            |
| Jammu & Kashmir ..                         | 3,127.8         | 546.7                                       | 3,97.0                                      | 103.6           | 843.4                    | 227           | 208           | 172           | 92            | 17           | 12           |
| Kerala ..                                  | 1,055.0         | 835.1                                       | 366.6                                       | 80.1            | 2,461.7                  | 810           | 1,107         | —             | —             | —            | —            |
| Madhya Pradesh ..                          | 14,579.0        | 4,150.4                                     | 6,909.1                                     | 1,959.8         | 18,743.2                 | 4,301         | 3,426         | 3,201         | 1,997         | 161          | 157          |
| Madras ..                                  | 1,885.4         | 2,227.0                                     | 1,326.9                                     | 1,523.2         | 7,174.6                  | 2,638         | 4,048         | 1             | 1             | (a)          | (b)          |
| Maharashtra ..                             | 5,439.3         | 2,509.0                                     | 2,480.7                                     | 2,256.1         | 19,079.0                 | 1,361         | 1,474         | 900           | 409           | 5            | 3            |
| Mysore ..                                  | 2,691.6         | 1,757.9                                     | 2,707.7                                     | 1,261.0         | 10,851.4                 | 1,048         | 1,625         | 317           | 117           | 2            | 1            |
| Orissa ..                                  | 3,582.6         | 2,541.4                                     | 2,560.4                                     | 874.1           | 7,221.1                  | 4,384         | 4,421         | 14            | 7             | (a)          | (b)          |
| Punjab ..                                  | 364.6           | 3,297.7                                     | 573.9                                       | 480.4           | 9,746.7                  | 522           | 667           | 2,440         | 3,360         | 158          | 184          |
| Rajasthan ..                               | 957.8           | 6,262.4                                     | 8,450.5                                     | 4,838.4         | 14,464.1                 | 106           | 98            | 1,176         | 1,097         | 431          | 470          |
| Uttar Pradesh ..                           | 3,724.7         | 4,494.8                                     | 2,483.1                                     | 1,566.0         | 21,996.0                 | 4,431         | 33,12         | 3,872         | 3,984         | 1,477        | 1,432        |
| Delhi ..                                   | 1.2             | 34.4                                        | 8.2                                         | 6.9             | 118.6                    | 1             | 1             | 32            | 45            | 4            | 1            |
| Himachal Pradesh ..                        | 939.7           | 441.1                                       | 1,145.6                                     | 17.0            | 442.7                    | 47            | 47            | 160           | 110           | 23           | 13           |
| Manipur ..                                 | 602.2           | 1,408.7                                     | 21.4                                        | 0.4             | 170.4                    | 160           | 111           | —             | —             | —            | —            |
| Tripura ..                                 | 635.4           | 43.3                                        | 149.3                                       | 10.9            | 266.7                    | 219           | 190           | —             | —             | —            | —            |
| Nagaland ..                                | 28.7            | 1,033.0                                     | @                                           | @               | 48.6                     | 74            | 71            | —             | —             | —            | —            |
| NEFA ..                                    | —               | —                                           | —                                           | —               | —                        | 51            | 41            | —             | —             | —            | —            |
| Pondicherry ..                             | —               | 10.1                                        | 4.4                                         | 0.8             | 46.9                     | 33            | 40            | —             | —             | —            | —            |
| Andaman & Nicobar Islands ..               | 647.5           | 6.9                                         | 9.7                                         | 1.6             | 9.7                      | 7             | 9             | —             | —             | —            | —            |
| Laccadive, Minicoy and Amindivi Islands .. | —               | —                                           | —                                           | —               | 2.8                      | 52            | 99            | —             | —             | —            | —            |
| <b>TOTAL INDIA ..</b>                      | <b>55,830.9</b> | <b>50,307.4</b>                             | <b>36,428.4</b>                             | <b>21,202.7</b> | <b>156,755.3</b>         | <b>36,077</b> | <b>38,732</b> | <b>13,453</b> | <b>12,078</b> | <b>2,668</b> | <b>2,478</b> |

\* Assam including NEFA.

(a) Below 500 hectares.

@ Included under uncultivated waste lands.

(b) Below 500 tonnes.



## AREA AND PRODUCTION OF FOODGRAINS (1964-65)

(Hectares/tonnes in thousands)

| States and Territories                        | Jowar         |              | Bajra         |              | Ragi         |              | Small Millets |              | Maize        |              | Total Cereals |               |
|-----------------------------------------------|---------------|--------------|---------------|--------------|--------------|--------------|---------------|--------------|--------------|--------------|---------------|---------------|
|                                               | Area          | Production   | Area          | Production   | Area         | Production   | Area          | Production   | Area         | Production   | Area          | Production    |
| Andhra Pradesh .. ..                          | 2,497         | 1,212        | 608           | 307          | 327          | 260          | 971           | 406          | 192          | 189          | 7,883         | 6,984         |
| Assam .. ..                                   | —             | —            | —             | —            | —            | —            | 6             | 3            | 22           | 11           | 1,936         | 1,925         |
| Bengal (West) .. ..                           | 2             | 1            | (a)           | (b)          | 11           | 2            | 7             | 4            | 54           | 39           | 4,820         | 5,855         |
| Bihar .. ..                                   | 8             | 0            | 20            | 17           | 185          | 90           | 218           | 90           | 753          | 603          | 7,468         | 6,334         |
| Gujarat .. ..                                 | 1,359         | 428          | 1,346         | 788          | 59           | 49           | 138           | 123          | 236          | 302          | 4,119         | 2,588         |
| Jammu & Kashmir .. ..                         | (a)           | (b)          | 27            | 15           | —            | —            | 10            | 11           | 250          | 215          | 712           | 553           |
| Kerala .. ..                                  | 1             | 1            | —             | —            | 5            | 8            | 7             | 3            | —            | —            | 814           | 1,119         |
| Madhya Pradesh .. ..                          | 2,063         | 1,728        | 196           | 140          | 15           | 4            | 1,383         | 326          | 493          | 551          | 11,813        | 8,329         |
| Madras .. ..                                  | 752           | 588          | 484           | 307          | 338          | 339          | 520           | 405          | 6            | 6            | 4,739         | 5,694         |
| Maharashtra .. ..                             | 6,075         | 3,343        | 1,675         | 475          | 221          | 176          | 200           | 80           | 29           | 22           | 10,466        | 5,982         |
| Mysore .. ..                                  | 2,883         | 1,464        | 494           | 115          | 974          | 772          | 379           | 130          | 13           | 11           | 6,110         | 4,235         |
| Orissa .. ..                                  | 7             | 4            | 6             | 2            | 77           | 44           | 70            | 43           | 20           | 12           | 4,528         | 4,533         |
| Punjab† .. ..                                 | 291           | 51           | 935           | 340          | (a)          | (b)          | 5             | 2            | 564          | 743          | 4,915         | 5,347         |
| Rajasthan .. ..                               | 1,179         | 403          | 4,839         | 1,266        | —            | —            | 83            | 36           | 709          | 779          | 8,523         | 4,149         |
| Uttar Pradesh .. ..                           | 885           | 581          | 1,065         | 690          | 200          | 157          | 531           | 304          | 1,129        | 883          | 13,590        | 11,343        |
| Delhi .. ..                                   | 10            | 1            | 16            | 3            | —            | —            | 1             | (b)          | 1            | (b)          | 64            | 51            |
| Himachal Pradesh .. ..                        | —             | —            | (a)           | (b)          | 14           | 7            | 27            | 10           | 120          | 192          | 396           | 793           |
| Manipur .. ..                                 | —             | —            | —             | —            | —            | —            | —             | —            | —            | —            | 160           | 111           |
| Tripura .. ..                                 | —             | —            | —             | —            | —            | —            | —             | —            | —            | —            | 219           | 190           |
| Nagaland .. ..                                | —             | —            | —             | —            | —            | —            | —             | —            | —            | —            | 74            | 71            |
| NEFA .. ..                                    | —             | —            | —             | —            | —            | —            | —             | —            | —            | —            | 51            | 41            |
| Pondicherry .. ..                             | (a)           | (b)          | 1             | (b)          | 3            | 4            | 1             | 1            | —            | —            | 38            | 45            |
| Andaman & Nicobar Islands .. ..               | —             | —            | —             | —            | —            | —            | —             | —            | —            | —            | 7             | 9             |
| Laccadive, Minicoy and Amindivi Islands .. .. | —             | —            | —             | —            | —            | —            | —             | —            | —            | —            | 52            | 99            |
| Goa, Daman & Diu .. ..                        | —             | —            | —             | —            | —            | —            | —             | —            | —            | —            | —             | —             |
| <b>TOTAL INDIA .. ..</b>                      | <b>18,012</b> | <b>9,811</b> | <b>11,712</b> | <b>4,465</b> | <b>2,429</b> | <b>1,921</b> | <b>4,555</b>  | <b>1,977</b> | <b>4,591</b> | <b>4,558</b> | <b>93,497</b> | <b>76,020</b> |

(a) Below 500 hectares.

(b) Below 500 tonnes.

## AREA AND PRODUCTION OF FOODGRAINS (1964-65)—Contd.

Hectares } in thousands  
Tonnes }

| States and Territories                        | Gram         |              | Tur          |              | Other Pulses  |              | Total Pulses  |               | Total Foodgrains |               | Sugarcane      |                  |
|-----------------------------------------------|--------------|--------------|--------------|--------------|---------------|--------------|---------------|---------------|------------------|---------------|----------------|------------------|
|                                               | Area         | Production   | Area         | Production   | Area          | Production   | Area          | Production    | Area             | Production    | Area           | Production       |
| Andhra Pradesh .. ..                          | 85           | 26           | 178          | 79           | 1,139         | 222          | 1,402         | 327           | 9,285            | 7,311         | 133.5          | 1,164.4          |
| Assam .. ..                                   | 2            | 1            | 2            | 2            | 79            | 34           | 83            | 37            | 2,019            | 1,966         | 29.8           | 1,110.3          |
| Bengal .. ..                                  | 152          | 80           | 44           | 31           | 561           | 262          | 757           | 373           | 5,579            | 6,228         | 41.1           | 1,895.1          |
| Bihar .. ..                                   | 468          | 215          | 158          | 141          | 1,580         | 791          | 2,206         | 1,147         | 9,674            | 7,531         | 165.7          | 6,858.8          |
| Gujarat .. ..                                 | 101          | 57           | 87           | 45           | 345           | 128          | 533           | 230           | 4,652            | 2,818         | 35.0           | 2,048.4          |
| Jammu & Kashmir .. ..                         | 3            | 1            | —            | —            | 46            | 22           | 49            | 23            | 761              | 576           | 2.7            | 17.7             |
| Kerala .. ..                                  | —            | —            | 9            | 4            | 35            | 13           | 44            | 17            | 858              | 1,136         | 9.5            | 440.3            |
| Madhya Pradesh .. ..                          | 1,540        | 882          | 406          | 298          | 1,858         | 631          | 3,804         | 1,811         | 15,617           | 10,140        | 64.8           | 1,698.0          |
| Madras .. ..                                  | 2            | 1            | 54           | 20           | 356           | 77           | 412           | 98            | 5,151            | 5,792         | 83.2           | 6,320.2          |
| Maharashtra .. ..                             | 374          | 124          | 567          | 365          | 1,370         | 391          | 2,311         | 880           | 12,777           | 6,862         | 142.6          | 12,047.8         |
| Mysore .. ..                                  | 144          | 46           | 247          | 81           | 798           | 195          | 1,189         | 322           | 7,299            | 4,567         | 76.9           | 6,235.0          |
| Orissa .. ..                                  | 48           | 22           | 33           | 21           | 986           | 469          | 1,067         | 512           | 5,595            | 5,045         | 40.4           | 2,003.8          |
| Punjab† .. ..                                 | 2,156        | 1,685        | 4            | 2            | 165           | 69           | 2,325         | 1,756         | 7,240            | 7,103         | 277.0          | 11,650.0         |
| Rajasthan .. ..                               | 1,346        | 712          | 30           | 14           | 1,825         | 386          | 3,201         | 1,112         | 11,724           | 5,261         | 42.7           | 673.4            |
| Uttar Pradesh .. ..                           | 2,567        | 1,897        | 653          | 790          | 1,330         | 1,022        | 4,550         | 3,709         | 18,140           | 15,052        | 1,389.1        | 58,387.6         |
| Delhi .. ..                                   | 17           | 12           | (a)          | (b)          | 3             | 1            | 20            | 13            | 84               | 64            | 4.1            | 12.7             |
| Himachal Pradesh .. ..                        | 6            | 2            | 24           | 7            | —             | —            | 30            | 9             | 426              | 388           | 1.6            | 22.2             |
| Manipur .. ..                                 | —            | —            | —            | —            | —             | —            | —             | —             | 160              | 111           | —              | —                |
| Tripura .. ..                                 | —            | —            | —            | —            | 2             | 1            | 2             | 1             | 221              | 191           | 2.9            | 97.8             |
| Nagaland .. ..                                | —            | —            | —            | —            | —             | —            | —             | —             | 74               | 71            | —              | —                |
| NEFA .. ..                                    | —            | —            | —            | —            | —             | —            | —             | —             | 51               | 41            | —              | —                |
| Pondicherry .. ..                             | —            | —            | —            | —            | —             | —            | —             | —             | 38               | 45            | 1.4            | 123.5            |
| Andaman & Nicobar Islands .. ..               | —            | —            | —            | —            | —             | —            | —             | —             | 7                | 9             | —              | —                |
| Laccadive, Minicoy and Amindivi Islands .. .. | —            | —            | —            | —            | —             | —            | —             | —             | —                | —             | —              | —                |
| Goa, Daman & Diu .. ..                        | —            | —            | 1            | 1            | —             | —            | —             | —             | 53               | 100           | 0.1            | 5.6              |
| <b>ALL INDIA TOTAL .. ..</b>                  | <b>9,011</b> | <b>5,763</b> | <b>2,473</b> | <b>1,894</b> | <b>12,502</b> | <b>4,721</b> | <b>23,986</b> | <b>12,378</b> | <b>117,483</b>   | <b>88,398</b> | <b>2,546.7</b> | <b>122,226.6</b> |

† Composite State.

(a) Below 500 hectares.

(b) Below 500 tonnes.



## AGRICULTURE

## AREA AND PRODUCTION OF OIL SEEDS (1964-65)

(Hectares/tonnes in thousands)

| States and Territories                        | Groundnut<br>(Nuts in Shell) |            | Sesamum |            | Rape and Mustard |            | Linseed |            | Castor Seed |            | Total Oilseeds |            |
|-----------------------------------------------|------------------------------|------------|---------|------------|------------------|------------|---------|------------|-------------|------------|----------------|------------|
|                                               | Area                         | Production | Area    | Production | Area             | Production | Area    | Production | Area        | Production | Area           | Production |
| Andhra Pradesh .. ..                          | 947                          | 865        | 217     | 38         | 3                | (b)        | 33      | 5          | 297         | 49         | 1,497          | 957        |
| Assam .. ..                                   | —                            | —          | 9       | 4          | 122              | 50         | 1       | 1          | 2           | 1          | 134            | 56         |
| Bengal (West) .. ..                           | —                            | —          | 6       | 3          | 103              | 36         | 44      | 8          | —           | —          | 153            | 47         |
| Bihar .. ..                                   | —                            | —          | 27      | 8          | 86               | 31         | 110     | 41         | 7           | 4          | 230            | 84         |
| Gujarat .. ..                                 | 2,046                        | 1,561      | 114     | 24         | 33               | 17         | —       | —          | 64          | 21         | 2,257          | 1,623      |
| Jammu & Kashmir .. ..                         | —                            | —          | 8       | 2          | 26               | 16         | 10      | 6          | —           | —          | 44             | 24         |
| Kerala .. ..                                  | 15                           | 22         | 12      | 3          | —                | —          | —       | —          | —           | —          | 27             | 25         |
| Madhya Pradesh .. ..                          | 433                          | 318        | 333     | 48         | 165              | 55         | 655     | 138        | 6           | 2          | 1,597          | 561        |
| Madras .. ..                                  | 929                          | 1,113      | 126     | 40         | (a)              | (b)        | (a)     | (b)        | 12          | 5          | 1,067          | 1,158      |
| Maharashtra .. ..                             | 1,107                        | 830        | 125     | 31         | 4                | 1          | 214     | 48         | 4           | 1          | 1,454          | 911        |
| Mysore .. ..                                  | 870                          | 559        | 60      | 14         | 3                | 1          | 47      | 6          | 35          | 10         | 1,015          | 790        |
| Orissa .. ..                                  | 57                           | 70         | 103     | 27         | 55               | 15         | 34      | 9          | 19          | 7          | 268            | 128        |
| Punjab† .. ..                                 | 137                          | 172        | 21      | 8          | 245              | 128        | 10      | 5          | —           | —          | 413            | 313        |
| Rajasthan .. ..                               | 200                          | 96         | 575     | 60         | 207              | 79         | 90      | 21         | 1           | (b)        | 1,073          | 256        |
| Uttar Pradesh .. ..                           | 327                          | 365        | 758     | 155        | 1,753            | 943        | 762     | 178        | 2           | 1          | 3,602          | 1,642      |
| Delhi .. ..                                   | —                            | —          | —       | —          | 1                | (b)        | —       | —          | —           | —          | 1              | (b)        |
| Himachal Pradesh .. ..                        | —                            | —          | 1       | (b)        | 4                | 1          | 1       | (b)        | —           | —          | 6              | 1          |
| Manipur .. ..                                 | —                            | —          | —       | —          | —                | —          | —       | —          | —           | —          | —              | —          |
| Tripura .. ..                                 | —                            | —          | 3       | 1          | 4                | 2          | —       | —          | —           | —          | 7              | 3          |
| Nagaland .. ..                                | —                            | —          | —       | —          | —                | —          | —       | —          | —           | —          | —              | —          |
| NEFA .. ..                                    | —                            | —          | —       | —          | —                | —          | —       | —          | —           | —          | 4              | 5          |
| Pondicherry .. ..                             | 4                            | 5          | (a)     | (b)        | —                | —          | —       | —          | —           | —          | —              | —          |
| Andaman & Nicobar Islands .. ..               | —                            | —          | —       | —          | —                | —          | —       | —          | —           | —          | —              | —          |
| Laccadive, Minicoy and Amindivi Islands .. .. | —                            | —          | —       | —          | —                | —          | —       | —          | —           | —          | —              | —          |
| Goa, Daman & Diu .. ..                        | —                            | —          | —       | —          | —                | —          | —       | —          | —           | —          | —              | —          |
| ALL INDIA TOTAL .. ..                         | 7,072                        | 6,176      | 2,503   | 466        | 2,814            | 1,375      | 2,011   | 466        | 449         | 101        | 14,849         | 8,584      |

(a) below 500 hectares.

(b) below 500 tonnes.

## AREA AND PRODUCTION UNDER SPICES &amp; FIBRE CROPS (1964-65)

(Hectares/tonnes in thousands)

| States and Territories                        | Ginger  |            | Pepper  |            | Chillies |            | Cotton  |            | Jute    |            | Mesta   |            |
|-----------------------------------------------|---------|------------|---------|------------|----------|------------|---------|------------|---------|------------|---------|------------|
|                                               | Acreage | Production | Acreage | Production | Acreage  | Production | Acreage | Production | Acreage | Production | Acreage | Production |
| Andhra Pradesh .. ..                          | 2       | 1          | —       | —          | 158.5    | 122.0      | 388.7   | 138.1      | —       | —          | 97      | 494        |
| Assam .. ..                                   | —       | —          | —       | —          | 7.1      | 4.3        | 16.8    | 6.7        | 131.0   | 882        | 11      | 37         |
| Bengal (West) .. ..                           | 1       | 2          | —       | —          | 7.5      | 8.4        | (a)     | (b)        | 456     | 3,646      | 87      | 531        |
| Bihar .. ..                                   | —       | —          | —       | —          | 28.9     | 16.1       | 2.2     | 2.3        | 171     | 916        | 57      | 237        |
| Gujarat .. ..                                 | 1       | 1          | —       | —          | 19.7     | 13.1       | 1,739.3 | 1,425.6    | —       | —          | (a)     | 1          |
| Jammu & Kashmir .. ..                         | —       | —          | —       | —          | 1.2      | 1.9        | 1.3     | 2.3        | —       | —          | —       | —          |
| Kerala .. ..                                  | 12      | 11         | 100     | 22         | 3.3      | 2.2        | 8.7     | 9.9        | —       | —          | —       | —          |
| Madhya Pradesh .. ..                          | 1       | 1          | —       | —          | 44.9     | 17.7       | 777.2   | 429.2      | —       | —          | 9       | 17         |
| Madras .. ..                                  | 1       | 1          | (a)     | (b)        | 77.7     | 103.6      | 424.3   | 428.3      | —       | —          | (a)     | 1          |
| Maharashtra .. ..                             | 1       | (b)        | —       | —          | 166.7    | 82.9       | 2,759.0 | 1,232.5    | —       | —          | 51      | 92         |
| Mysore .. ..                                  | 1       | 2          | 3       | 2          | 98.2     | 29.7       | 1,034.6 | 367.2      | —       | —          | 23      | 57         |
| Orissa .. ..                                  | 1       | 1          | —       | —          | 23.5     | 8.9        | 0.8     | 0.3        | 55      | 415        | 15      | 76         |
| Punjab† .. ..                                 | (a)     | (b)        | —       | —          | 27.4     | 20.7       | 664     | 1,125.0    | —       | —          | (a)     | (b)        |
| Rajasthan .. ..                               | (a)     | (b)        | —       | —          | 29.5     | 16.0       | 261.1   | 183.7      | —       | —          | —       | —          |
| Uttar Pradesh .. ..                           | —       | —          | —       | —          | 17.6     | 6.5        | 68.7    | 47.8       | 18      | 160        | —       | —          |
| Delhi .. ..                                   | —       | —          | —       | —          | 0.10     | 0.10       | 0.2     | 0.1        | —       | —          | —       | —          |
| Himachal Pradesh .. ..                        | 1       | 1          | —       | —          | 0.5      | 0.20       | 0.3     | 0.1        | —       | —          | —       | —          |
| Manipur .. ..                                 | —       | —          | —       | —          | —        | —          | —       | —          | —       | —          | —       | —          |
| Tripura .. ..                                 | (a)     | (b)        | —       | —          | 1.1      | 0.4        | 6.1     | 5.8        | 10      | 60         | 9       | 46         |
| Nagaland .. ..                                | —       | —          | —       | —          | —        | —          | —       | —          | —       | —          | —       | —          |
| NEFA .. ..                                    | —       | —          | —       | —          | —        | —          | —       | —          | —       | —          | —       | —          |
| Pondicherry .. ..                             | —       | —          | (a)     | 1          | 1.1      | (b)        | 0.5     | 2.6        | —       | —          | —       | —          |
| Andaman & Nicobar Islands .. ..               | —       | —          | —       | —          | —        | —          | —       | —          | —       | —          | —       | —          |
| Laccadive, Minicoy and Amindivi Islands .. .. | —       | —          | —       | —          | —        | —          | —       | —          | —       | —          | —       | —          |
| TOTAL INDIA .. ..                             | 22      | 21         | 103     | 24         | 713.5    | 454.7      | 8,158.8 | 5,407.4    | 841     | 6,079      | 359     | 1,589      |

† Composite State.

(a) Below 500 hectares.

(b) Below 500 tonnes.



## CASH CROPS' AREA &amp; YIELD, SOWN AND IRRIGATED AREAS (1964-65)

(Hectares/tonnes in thousands)

| States and Territories                         | Potato       |                | Tobacco      |              | Sanhemp      |             | Area Sown        |                     | Irrigated        |                 |                 |
|------------------------------------------------|--------------|----------------|--------------|--------------|--------------|-------------|------------------|---------------------|------------------|-----------------|-----------------|
|                                                | Area         | Production     | Area         | Production   | Area         | Production  | Net Area Sown    | Sown more than once | Total Area Sown  | Nett            | Gross           |
| Andhra .. .. .                                 | 0.9          | 3.3            | 188.3        | 175.9        | 9.1          | 2.8         | 11,405.3         | 1,346.0             | 12,751.5         | 3,097.0         | 3,664.4         |
| Assam .. .. .                                  | 36.9         | 154.7          | 10.1         | 7.7          | —            | —           | 2,331.0          | 418.4               | 2,749.4          | 611.5           | 611.5           |
| Bengal (West) .. .. .                          | 68.9         | 786.0          | 16.0         | 12.7         | 4.2          | 3.6         | 5,443.3          | 947.4               | 6,390.7          | 1,430.1         | 1,453.6         |
| Bihar .. .. .                                  | 84.7         | 685.4          | 14.4         | 11.1         | 10.5         | 6.4         | 8,546.4          | 3,502.6             | 11,049.0         | 1,999.1         | 2,226.3         |
| Gujarat .. .. .                                | 4.4          | 62.5           | 79.3         | 78.0         | 0.8          | 0.4         | 9,563.4          | 563.7               | 10,127.1         | 750.3           | 789.1           |
| Jammu & Kashmir .. .. .                        | 0.7          | 1.6            | 0.7          | 0.6          | 1.3          | 0.6         | 697.7            | 145.7               | 843.4            | 271.9           | 293.8           |
| Kerala .. .. .                                 | —            | —              | 0.7          | 0.9          | —            | —           | 2,021.8          | 439.5               | 2,461.7          | 347.2           | 488.9           |
| Madhya Pradesh .. .. .                         | 14.0         | 162.5          | 3.2          | 1.7          | 37.0         | 13.9        | 16,521.5         | 2,221.7             | 18,743.2         | 1,034.8         | 1,054.6         |
| Madras .. .. .                                 | 8.8          | 57.1           | 17.0         | 24.9         | 0.8          | 0.6         | 6,052.0          | 1,122.6             | 7,174.6          | 2,481.5         | 3,267.8         |
| Maharashtra .. .. .                            | 14.7         | 64.7           | 22.2         | 11.3         | 19.6         | 6.5         | 18,085.1         | 993.7               | 19,079.3         | 1,231.0         | 1,428.5         |
| Mysore .. .. .                                 | 7.1          | 32.2           | 36.7         | 21.0         | 3.8          | 0.9         | 10,480.0         | 371.4               | 10,851.4         | 959.9           | 1,006.4         |
| Orissa .. .. .                                 | 17.8         | 50.8           | 8.5          | 5.6          | 6.4          | 4.0         | 5,981.2          | 1,239.9             | 7,221.1          | 1,230.2         | 1,738.1         |
| Punjab † .. .. .                               | 17.7         | 274.2          | 1.9          | 1.2          | 8.7          | 1.8         | 7,609.2          | 2,137.5             | 9,746.7          | 3,393.3         | 4,329.7         |
| Rajasthan .. .. .                              | 1.8          | 5.8            | 9.1          | 5.7          | 22.4         | 4.2         | 1,3496.9         | 967.2               | 14,464.7         | 1,676.2         | 2,043.6         |
| Uttar Pradesh .. .. .                          | 123.2        | 1,065.5        | 13.1         | 10.5         | 69.7         | 28.7        | 17,139.8         | 4,856.2             | 21,996.0         | 5,421.5         | 5,942.3         |
| Delhi .. .. .                                  | 0.2          | 1.5            | 0.1          | 0.2          | —            | —           | 87.4             | 31.2                | 118.6            | 33.2            | 33.2            |
| Himachal Pradesh .. .. .                       | 12.0         | 29.4           | 0.7          | 0.3          | (a)          | (b)         | 275.6            | 167.1               | 442.7            | 40.0            | 68.4            |
| Manipur .. .. .                                | —            | —              | —            | —            | —            | —           | 165.9            | 4.5                 | 170.4            | 68.0            | 68.0            |
| Tripura .. .. .                                | 2.5          | 14.6           | 1.1          | 0.4          | —            | —           | 227.0            | 39.7                | 266.7            | 14.2            | 14.2            |
| Nagaland .. .. .                               | —            | —              | —            | —            | —            | —           | 46.6             | 2.0                 | 48.6             | 12.1            | 12.1            |
| NEFA .. .. .                                   | —            | —              | —            | —            | —            | —           | —                | —                   | —                | —               | —               |
| Pondicherry .. .. .                            | —            | —              | —            | —            | —            | —           | 31.6             | 15.3                | 46.9             | 25.5            | 40.0            |
| Andaman & Nicobar Islands .. .. .              | —            | —              | —            | —            | —            | —           | 9.3              | 0.4                 | 9.7              | —               | —               |
| Laccadive, Minicoy and Amindiv Islands .. .. . | —            | —              | —            | —            | —            | —           | 2.8              | —                   | 2.8              | —               | —               |
| Goa, Daman & Diu .. .. .                       | —            | —              | —            | —            | —            | —           | —                | —                   | —                | —               | —               |
| <b>TOTAL INDIA.. .. .</b>                      | <b>416.6</b> | <b>3,452.4</b> | <b>423.1</b> | <b>369.7</b> | <b>104.3</b> | <b>72.6</b> | <b>136,221.0</b> | <b>20,534.3</b>     | <b>156,755.3</b> | <b>26,128.5</b> | <b>30,574.4</b> |

† Composite State.

## IMPORTANT EVENTS OF THE YEAR 1966

## JANUARY

2: Indian Cabinet approves of flexible approach to Tashkent Meet.

3: Prime Minister Shastri and President Ayub at Tashkent.

T. T. Krishnamachari explains resignation from Cabinet.

4: The Prime Minister of India, Lal Bahadur Shastri and the President of Pakistan, Field Marshal Ayub Khan, meet in Tashkent to try to resolve some of the outstanding differences between the two countries bitterly aggravated by their brief but sharp conflict in September, 1965.

7: Indo-Soviet Trade pact is extended till 1970.

10: Indo-Pakistani Agreement is signed at Tashkent.

11: Prime Minister Shastri dies at Tashkent within hours of the signing of the Tashkent Agreement.

Nanda is sworn in as acting Prime Minister.

14: Mahavir Tyagi, Minister for Rehabilitation resigns from the cabinet in protest against some of the clauses of the Tashkent Agreement.

18: Britain offers Rs. 10 crores credit to India to fight famine.

19: Mrs. Indira Gandhi is elected leader of the Congress Parliamentary Party, defeating Morarji Desai by 355 votes to 169 in the Congress Party contest, and thus becomes the first woman Prime Minister of the world's largest democracy.

20: West Bengal P.C.C. Chief Ajoy Mukherjee is deposed by the party.

24: Indira Gandhi cabinet is sworn in.  
Dr. Homi Babha, India's most famous nuclear scientist, dies in the Air-India Boeing "Kanchenjunga" crash on Mt. Blanc in the Alps.  
28: Violent Kerala bundh over ration cut.

## FEBRUARY

1: Indo-Pak army chiefs order troops' withdrawal.

E. M. S. is held under D.I.R.

5: D.A. rise to Central Staff. Protest by State Governments.

U.S. President Johnson orders emergency lifting of three million tonnes of grains to India.

12: Indian National Congress session at Jaipur.

15: U.S. Vice-President Humphrey in Delhi. Assam Mail is sabotaged near Dimapur; 37 dead.

19: National Plan for 1966-67 is fixed at Rs. 2,086 crores.

26: Veer Savarkar dies.

28: Rs. 261.12 crores revenue budget with Rs. 101 crores additional taxation, is presented to the Parliament by the Finance Minister Sachin Chaudhari.

## MARCH

2: Mizo Rebels active. Aijal under seige.

4: Street battles in Bengal towns. Food shortage and student unrest.

6: Aijal seige lifted.

9: Congress Working Committee accepts division of Punjab.

10: Police open fire in Bengal Town; 11 killed.

13: Anti-Suba agitation in Punjab towns.

14: Anti-Suba violence spreads to Delhi.

22: ECAFE session in Delhi. Mrs. Indira Gandhi's call to advanced nations to take in more imports.

25: Mrs. Indira Gandhi in Paris, confers with De Gaulle.

27: Mrs. Indira Gandhi arrives in Washington for talks with President Johnson.

28: President Johnson announces the setting up of a Rs. 150-crore Indo-U.S. Foundation for the benefit of inquiring young minds in the Indian Nation from the P.L. 480 counterpart funds.

## APRIL

3: Mrs. Indira Gandhi confers with Kosygin at Moscow.

5: Maharashtra Legislature wants border issue with Mysore reopened.

6: Mihir Sen swims Palk Strait.

12: Nepal Prime Minister Surya Bahadur Thapa in Delhi.

20: 43 killed in train explosion near Lumding, Assam.

23: Train blast near Diphu, 30 killed.

24: Miss Pushpa Athavale team scales 20,116-foot high mountain Kaktang peak in Sikkim.

## MAY

26: India lifts ban on trade with Pakistan.



## JUNE

- 5: Indian Rupee devalued by 36.5 per cent.  
8: Punjab Boundary Commission report.

## JULY

- 3: Tank factory in Avadi is inaugurated.  
5: President's rule for Punjab.  
7: Mrs. Indira Gandhi leaves on tour of the Soviet Union, U.A.R. and Yugoslavia.  
16: Soviet Union announces big economic aid for Fourth Plan.

## AUGUST

- 29: Draft Fourth Plan for Rs. 23,750 crores is announced.

## SEPTEMBER

- 2: Gold control is relaxed.  
4: Indonesian Foreign Minister Adam Malik in Delhi.  
10: Punjab Reorganisation Bill is passed.  
23: Cochin Oil Refinery is inaugurated.  
27: U.N. Secretary General U. Thant is named for Nehru Award.

## OCTOBER

- 4: Student unrest turns violent in U.P. & Bihar towns.  
9: Mysore & Maharashtra Governments agree on Border Commission.  
23: Orissa Cabinet crisis ends with Chief Minister Tripathi restoring portfolios to ministers.  
21: Non-aligned Summit begins in New Delhi. The Presidents of U.A.R., Yugoslavia and Prime Minister Indira Gandhi begin tripartite summit talks.  
24: Yugoslavia President Tito, U.A.R. President Nasser and Prime Minister Indira Gandhi, after three days' talk in Delhi, accept need for closer links among non-aligned nations.  
31: Violent demonstration in Andhra for fifth steel plant.  
Mihir Sen swims Panama.

## NOVEMBER

- 3: Cyclone hits Madras. Three ships run aground.  
7: Sadhus storm Parliament. Delhi bundh for cow protection.  
9: Home Minister Nanda resigns.  
11: Military train sabotage near Siliguri (West Bengal); fourteen killed.

- 13: Y. B. Chavan becomes Home Minister and Chagla, External Affairs Minister.

- 22: Swami Sankaracharya of Puri begins fast for protection of cow.

- Bandedkar Ministry resigns along with the dissolution of the assembly pending the Opinion poll in Goa, Daman & Diu.

- 30: Soviet Union announces Rs. 850 crore aid.

## DECEMBER

- 1: Parliament passes Goa opinion poll Bill.  
3: President's rule in Goa, Daman & Diu.  
6: India beats Brazil to enter challenge round of Davis Cup.  
14: India, U.A.R., Yugoslavia announce trade, commerce & development collaboration.  
17: Akali leader Sant Fateh Singh begins fast, threatens self-immolation, demanding abolition of link between Punjab and Haryana, inclusion of Chandigarh in Punjab and Control over Bhakra dam.  
19: India triumphs over Pakistan in the hockey final of the Asian games with an extra-time goal at Bangkok meet.  
21: V. K. Krishna Menon quits Congress.  
26: Sant Fateh Singh ends fast.

## FOURTH FIVE YEAR PLAN

The size and pattern of outlays and investments proposed in the draft outline of the Fourth Plan for the public and private sectors are given in the table below. The total outlay proposed is Rs. 23,750 crores, consisting of Rs. 16,000 crores in the public sector and Rs. 7,750 crores in the private sector.

Table 1. Outlay and investment: public and private sectors

| Head of development                                      | Total         | Public Sector  |               | Private sector Investment | Total Investment | Total Plan outlay (public and private sectors) |
|----------------------------------------------------------|---------------|----------------|---------------|---------------------------|------------------|------------------------------------------------|
|                                                          |               | Current Outlay | Investment    |                           |                  |                                                |
| Agriculture, community development & cooperation .. .. . | 2,410         | 835            | 1,575         | 900                       | 2,475            | 3,310                                          |
| Irrigation .. .. .                                       | 964*          | —              | 964           | —                         | 964              | 964                                            |
|                                                          | <b>2,374</b>  | <b>835</b>     | <b>2,539</b>  | <b>900</b>                | <b>3,419</b>     | <b>4,274</b>                                   |
| Power .. .. .                                            | 2,030         | —              | 2,030         | 50                        | 2,080            | 2,080                                          |
| Small industry .. .. .                                   | 370           | 140            | 230           | 320                       | 550              | 690                                            |
| Organised industry and mining .. .. .                    | 3,936         | —              | 3,936         | 2,350                     | 6,286            | 6,286                                          |
| Transport and communications .. .. .                     | 3,010         | —              | 3,010         | 630                       | 3,640            | 3,640                                          |
|                                                          | <b>9,346</b>  | <b>140</b>     | <b>9,206</b>  | <b>3,350</b>              | <b>12,556</b>    | <b>12,696</b>                                  |
| Education .. .. .                                        | 1,210         | 740            | 470           | 90                        | 560              | 1,300                                          |
| Scientific research .. .. .                              | 140†          | 50             | 90            | —                         | 90               | 140                                            |
| Health .. .. .                                           | 492           | 343            | 244           | —                         | 244              | 587                                            |
| Family planning‡                                         | 95            |                |               |                           |                  |                                                |
| Water supply .. .. .                                     | 373           | —              | 373           | —                         | 373              | 373                                            |
| Housing and construction .. .. .                         | 280           | —              | 280           | 1,500                     | 1,780            | 1,780                                          |
| Welfare of backward classes .. .. .                      | 180           | 115            | 65            | —                         | 65               | 180                                            |
| Social welfare .. .. .                                   | 50            | 40             | 10            | 10                        | 20               | 60                                             |
| Craftsmen training and labour welfare .. .. .            | 145           | 65             | 80            | —                         | 80               | 145                                            |
| Public cooperation .. .. .                               | 10            | 7              | 3             | —                         | 3                | 10                                             |
| Rural works .. .. .                                      | 95            | —              | 95            | —                         | 95               | 95                                             |
| Hill areas and special areas .. .. .                     | 50            | 15             | 35            | —                         | 35               | 50                                             |
| Rehabilitation .. .. .                                   | 90            | 30             | 60            | —                         | 60               | 90                                             |
|                                                          | <b>3,210</b>  | <b>1,405</b>   | <b>1,805</b>  | <b>1,600</b>              | <b>3,405</b>     | <b>4,610</b>                                   |
| Other programmes .. .. .                                 | 70            | 20             | 50            | —                         | 50               | 70                                             |
| Inventories .. .. .                                      | @             | @              | @             | 1,900                     | 1,900            | 1,900                                          |
| <b>Total .. .. .</b>                                     | <b>16,000</b> | <b>2,400</b>   | <b>13,600</b> | <b>7,750</b>              | <b>21,350</b>    | <b>23,750</b>                                  |

\* Includes Rs. 24 crores for Temghat Dam (Bokaro). † An additional amount of about Rs. 70 crores has been provided for scientific research under agriculture, health, industry, irrigation etc. bringing the total provision to Rs. 210 crores for scientific research as a whole.

‡ Department of Family Planning has proposed an additional outlay of Rs. 144 crores in the Fourth Plan.

@ Part of the inventories under public sector is covered in sectoral outlays part will be financed through the banking system.

The public sector will account for 64 per cent of the total investment in the Fourth Plan as against 61 per cent envisaged in the Third Plan and is expected to raise its share in the reproducible tangible wealth of the country from 35 per cent in 1965-66 to 43 per cent in 1970-71. Table 4 shows the investment pattern in public and private sectors in the Fourth Plan compared to the pattern envisaged in the Third Plan document. The actual amounts of investment in the Third Plan are likely to be higher than those given in the table.

Table 2. Investment in the Third and Fourth Plans.

| Head of development                                         | Third Plan    |                |               | Fourth Plan   |                |               |
|-------------------------------------------------------------|---------------|----------------|---------------|---------------|----------------|---------------|
|                                                             | Public sector | Private sector | Total         | Public sector | Private sector | Total         |
| Agriculture, community development and co-operation .. .. . | 660           | 800            | 1,460         | 1,575         | 900            | 2,475         |
| Irrigation .. .. .                                          | 650           | —              | 650           | 964           | —              | 964           |
| Power .. .. .                                               | 1,012         | 50             | 1,062         | 2,030         | 50             | 2,080         |
| Village and small industries .. .. .                        | 150           | 275            | 425           | 230           | 320            | 550           |
| Organised industry and mining .. .. .                       | 1,520         | 1,050          | 2,570         | 3,936         | 2,350          | 6,286         |
| Transport and communications .. .. .                        | 1,486         | 250            | 1,736         | 3,010         | 630            | 3,640         |
| Social services and other programmes .. .. .                | 622           | 1,075          | 1,697         | 1,855         | 1,600          | 3,455         |
| Inventories .. .. .                                         | 200           | 600            | 800           | @             | 1,900          | 1,900         |
| <b>Total .. .. .</b>                                        | <b>6,800</b>  | <b>4,100</b>   | <b>10,400</b> | <b>18,600</b> | <b>7,750</b>   | <b>21,850</b> |



It may be mentioned that as against the total outlay of Rs. 23,750 crores indicated in Table 1, the outlays proposed earlier were Rs. 21,500—22,500 crores suggested in the Memorandum presented to the National Development Council in Oct. 1964 and Rs. 21,480 crores indicated in the document on "Resources, Outlays and Programmes" presented in September 1965. The provision in the Third Plan was Rs. 11,600 crores (Rs. 7,500 crores in the public sector and Rs. 4,100 crores in the private sector) It may be noted that the Fourth Plan outlay proposed at present and the earlier figures mentioned above are not strictly comparable on account of the devaluation of the rupee. Table 3 shows the relative position of the likely expenditure in the Third Plan and the outlays now proposed under each head of development.

Table 3. Comparative position of outlay in the Fourth Plan and likely expenditure in the Third Plan.

|                                                     |  |  |  |  |  |  |  |  |  |  |  |  |  | (Rs. crores)                          |                                     |
|-----------------------------------------------------|--|--|--|--|--|--|--|--|--|--|--|--|--|---------------------------------------|-------------------------------------|
| Head of development                                 |  |  |  |  |  |  |  |  |  |  |  |  |  | Likely expenditure in the Third Plan* | Outlay proposed for the Fourth Plan |
| Agriculture, community development and co-operation |  |  |  |  |  |  |  |  |  |  |  |  |  | 1,103                                 | 2,410                               |
| Irrigation                                          |  |  |  |  |  |  |  |  |  |  |  |  |  | 657                                   | 964                                 |
| Power                                               |  |  |  |  |  |  |  |  |  |  |  |  |  | 1,262                                 | 2,030                               |
| Small industry                                      |  |  |  |  |  |  |  |  |  |  |  |  |  | 220                                   | 370                                 |
| Organised industry and mining                       |  |  |  |  |  |  |  |  |  |  |  |  |  | 1,735                                 | 3,936                               |
| Transport and communications                        |  |  |  |  |  |  |  |  |  |  |  |  |  | 2,116                                 | 3,010                               |
| Education                                           |  |  |  |  |  |  |  |  |  |  |  |  |  | 596                                   | 1,210                               |
| Scientific research                                 |  |  |  |  |  |  |  |  |  |  |  |  |  | 75                                    | 140                                 |
| Health                                              |  |  |  |  |  |  |  |  |  |  |  |  |  | 357                                   | 492                                 |
| Family Planning                                     |  |  |  |  |  |  |  |  |  |  |  |  |  |                                       | 95                                  |
| Water supply                                        |  |  |  |  |  |  |  |  |  |  |  |  |  |                                       | 373                                 |
| Housing and construction                            |  |  |  |  |  |  |  |  |  |  |  |  |  | 110                                   | 280                                 |
| Welfare of backward classes                         |  |  |  |  |  |  |  |  |  |  |  |  |  | 102                                   | 180                                 |
| Social welfare                                      |  |  |  |  |  |  |  |  |  |  |  |  |  | 19                                    | 50                                  |
| Craftsmen training and labour welfare               |  |  |  |  |  |  |  |  |  |  |  |  |  | 72                                    | 145                                 |
| Public co-operation                                 |  |  |  |  |  |  |  |  |  |  |  |  |  | 2                                     | 10                                  |
| Rural works                                         |  |  |  |  |  |  |  |  |  |  |  |  |  | 41†                                   | 95                                  |
| Hill areas and special areas                        |  |  |  |  |  |  |  |  |  |  |  |  |  | —                                     | 50                                  |
| Rehabilitation                                      |  |  |  |  |  |  |  |  |  |  |  |  |  | 48                                    | 90                                  |
| Other programmes                                    |  |  |  |  |  |  |  |  |  |  |  |  |  | 116                                   | 70                                  |
| Total                                               |  |  |  |  |  |  |  |  |  |  |  |  |  | 8,631@                                | 16,000                              |

\* The Third Plan figures have been worked out on the basis of the actuals for the first four years of the Plan and likely expenditure for 1965-66. However it is felt that the total expenditure may be lower than Rs. 8,631 crores.

† Includes Rs. 22 crores for local works.

@ A lump sum out of Rs. 3 crores was effected by Punjab State Government in 1965-66. Therefore the expenditure figure will be Rs. 8,628 crores.

The distribution of outlay between the Centre, States and Union Territories under different heads of development in the Fourth Plan, may be seen from Table 4.

Table 4. Fourth Plan outlay—Centre, State and Union Territories.

|                                                               |                                           |                                            |                                                      |       |        |                   | (Rs. crores)                                            |
|---------------------------------------------------------------|-------------------------------------------|--------------------------------------------|------------------------------------------------------|-------|--------|-------------------|---------------------------------------------------------|
| Head of development                                           | Centre                                    |                                            |                                                      | Total | States | Union Territories | (Total<br>(Centre, States<br>and Union<br>Territories)) |
|                                                               | Scheme to be<br>executed by<br>the Centre | Scheme to be<br>executed<br>through States | Centrally spon-<br>sored schemes<br>(Centre's share) |       |        |                   |                                                         |
| Agriculture community development<br>and co-operation .. .. . | 150                                       | —                                          | 282                                                  | 432   | 1,918  | 60                | 2,410                                                   |
| Irrigation .. .. .                                            | 44                                        | —                                          | —                                                    | 44    | 912*   | 8                 | 964                                                     |
| Power .. .. .                                                 | 260**                                     | —                                          | —                                                    | 260   | 1,717  | 53                | 2,030                                                   |
| Village and small industries .. .. .                          | 151                                       | —                                          | 20***                                                | 171   | 191    | 8                 | 370                                                     |
| Organised industry and mining .. .. .                         | 3,751                                     | —                                          | —                                                    | 3,751 | 178†   | 7                 | 3,936                                                   |
| Transport and communications .. .. .                          | 2,146                                     | 348@                                       | 81                                                   | 2,575 | 380    | 55                | 3,010                                                   |
| Education .. .. .                                             | 243                                       | —                                          | 80                                                   | 323   | 815    | 72                | 1,210                                                   |
| Scientific research .. .. .                                   | 140                                       | —                                          | —                                                    | 140   | —      | —                 | 140                                                     |
| Health .. .. .                                                | 116                                       | —                                          | 48                                                   | 164   | 291    | 37                | 492                                                     |
| Family Planning .. .. .                                       | —                                         | —                                          | 86@@                                                 | 86    | 9      | @@                | 95                                                      |
| Water supply .. .. .                                          | —                                         | —                                          | 3                                                    | 3     | 335    | 35                | 373                                                     |
| Housing and construction .. .. .                              | 55                                        | —                                          | 85‡                                                  | 140   | 105    | 35                | 280                                                     |
| Welfare of backward classes .. .. .                           | —                                         | —                                          | 90                                                   | 90    | 85     | 5                 | 180                                                     |
| Social welfare .. .. .                                        | 8                                         | —                                          | 22                                                   | 30    | 16     | 4                 | 50                                                      |
| Craftsmen training and labour wel-<br>fare .. .. .            | 15                                        | —                                          | 70                                                   | 85    | 56     | 4                 | 145                                                     |
| Public cooperation .. .. .                                    | 3                                         | —                                          | 4                                                    | 7     | 2      | 1                 | 10                                                      |
| Rural works .. .. .                                           | —                                         | —                                          | 95                                                   | 95    | —      | —                 | 95                                                      |
| Hill areas and special areas .. .. .                          | —                                         | —                                          | 6                                                    | 6     | 39     | 5                 | 50                                                      |
| Rehabilitation .. .. .                                        | 90                                        | —                                          | —                                                    | 90    | —      | —                 | 90                                                      |
| Other programmes .. .. .                                      | 40                                        | —                                          | 4                                                    | 44    | 24     | 2                 | 70                                                      |
| Total .. .. .                                                 | 7,212                                     | 348                                        | 976                                                  | 8,536 | 7,073  | 391               | 16,000                                                  |

\* Includes provision of Rs. 13 crores for anti-sea erosion works in Kerala and Rs. 85 crores for Rajasthan Canal Project. \*\* Includes provision for : (1) Atomic power station, Rs. 157 crores ; (2) Neyveli power station, Rs. 27 crores ; (3) D.V.C. Rs. 46 crores ; and (4) other schemes Rs. 30 crores. \*\*\* For Rural Industries projects. † Includes Rs. 25 crores for Talcher Complex. @ Includes provision of Rs. 236 crores for national highways, Rs. 70 crores for the Lateral road and Rs. 42 crores for others. @@ Outlay for Union Territories included under Centre. ‡ Includes provision of Rs. 15 crores for urban development.



**AGRICULTURE, COMMUNITY DEVELOPMENT AND COOPERATION**

In view of the critical importance of agriculture and the recent experience of short-falls, agricultural programmes as well as the production and supply of various inputs for agriculture will

be given the highest priority during the Fourth Plan. Taking into consideration the likely increase in demand for foodgrains and other related factors, efforts will be made to step up foodgrains production to 120 million tonnes by the end of the Fourth Plan. In making this estimate the actual production in 1964-65 (as well as the pro-

duction potential created by 1965-66) has been considered as the base and not the actual production in 1965-66 as that year was very abnormal. Table 5 indicates the estimates of agricultural production for the Fourth Plan along with achievements (in terms of production potential) at the end of the Third Plan :

**Table 5, Production Estimates**

| Commodity               | Unit           | 1964-65 | 1965-66<br>(base level<br>potential) | 1970-71<br>(estimated<br>production) |
|-------------------------|----------------|---------|--------------------------------------|--------------------------------------|
| Foodgrains .. .. .      | Million tonnes | 89.0    | 90.0                                 | 120.0                                |
| Sugarcane (gur) .. .. . | "              | 12.3    | 11.0                                 | 13.5                                 |
| Oilseeds .. .. .        | "              | 8.3     | 7.5                                  | 10.7                                 |
| Cotton .. .. .          | Million bales* | 5.4     | 6.3                                  | 8.6                                  |
| Jute .. .. .            | "              | 6.0     | 6.2                                  | 9.0                                  |
| Mesta .. .. .           | "              | 1.6     | 1.8                                  | 2.0                                  |
| Pepper .. .. .          | '000 tonnes    | N.A.    | 30.0                                 | 35.0                                 |
| Cardamom .. .. .        | "              | N.A.    | 3.3                                  | 3.8                                  |
| Ginger .. .. .          | "              | N.A.    | 22.0                                 | 27.0                                 |
| Cashewnut .. .. .       | "              | N.A.    | 136.0                                | 328.0                                |
| Tobacco .. .. .         | Million tonnes | 0.4     | 0.4                                  | 0.5                                  |

\* Bale of 180 kgs. each.

The physical programmes in the Fourth Plan to achieve the level of production mentioned in the above table are indicated below :

**Table 6, Programme Targets**

| Programme                                 | Unit                               | Third Plan |             | Fourth Plan<br>target |
|-------------------------------------------|------------------------------------|------------|-------------|-----------------------|
|                                           |                                    | Target     | Achievement |                       |
| Irrigation utilisation (additional gross) |                                    |            |             |                       |
| (a) major and medium .. .. .              | Million acres                      | 12.80      | 5.50        | 9.00                  |
| (b) minor .. .. .                         | "                                  | 12.80      | 13.10       | 17.00*                |
| Soil conservation (additional) .. .. .    | "                                  | 11.80      | 9.80        | 20.00                 |
| Land reclamation (additional) .. .. .     | "                                  | 3.60       | 4.20        | 2.50                  |
| Chemical fertilizers                      |                                    |            |             |                       |
| (a) Nitrogenous .. .. .                   | Million tonnes of N                | 1.02       | 0.60        | 2.00                  |
| (b) Phosphatic .. .. .                    | " of P <sub>2</sub> O <sub>5</sub> | 0.41       | 0.15        | 1.00                  |
| (c) Potassic .. .. .                      | " of K <sub>2</sub> O              | 0.20       | 0.09        | 0.35                  |
| Organic manures and green manuring        |                                    |            |             |                       |
| (a) Urban compost .. .. .                 | Million tonnes                     | 5.10       | 3.40        | 5.40                  |
| (b) Green manuring .. .. .                | Million acres                      | 41.00      | 21.50       | 64.00                 |
| Area under improved seeds                 |                                    |            |             |                       |
| (a) High yielding varieties .. .. .       | "                                  | —          | —           | 32.5                  |
| (b) Other varieties .. .. .               | "                                  | 204.0      | 120.0       | 241.5                 |
| Plant protection .. .. .                  | "                                  | 50.0       | 41.0        | 137.0                 |

\* includes 12 million acres newly irrigated area besides the area benefited by drainage, flood control, etc.

As compared to the achievements in the Third Plan, the targets for the Fourth Plan imply a considerable increase in physical programmes. There will be about four-fold increase in fertilizers and doubling of the programme under soil conservation and improved seeds. Green manuring is expected to be increased three-fold during this period.

**POWER**

The installed generating capacity will be 20 million kW by March 1971 as against 10.2 million kW at the end of the Third Plan. Under rural electrification programmes, 11.8 lakh electrical pump-sets will be energised and 110,000 villages and towns will be electrified by the end of the Fourth Plan as against 4.8 lakh electrical pump-sets and 52,300 villages and towns electrified by the end of the Third Plan.

**VILLAGE AND SMALL INDUSTRIES**

The target of production of cloth in the decentralised sector which includes handloom, powerloom and khadi has been set at 4,572 million metres by the end of the Fourth Plan, as against the estimated production of 3,146 million metres in 1965-66. The production of raw silk is envisaged at 31.0 lakh kgs. by the end of 1970-71 as against 21.5 lakh kgs. in 1965-66. It is proposed to set up 250 new industrial estates as against 300 completed by 1965-66.

A total provision of Rs. 370 crores is being made in the public sector for these programmes during the Fourth Plan. Investment in the private sector is estimated at about Rs. 320 crores, excluding inventories.

**INDUSTRY AND MINING**

The programme for the Fourth Plan provides highest priority to the industries manufacturing industrial inputs for agriculture, such as, fertilizers, pesticides, farm equipment, etc.; metals and machine building industries including steel, aluminium, zinc, etc.; intermediate goods industries, namely, industrial chemicals, petroleum, coal, iron and steel castings and forging, refractories and cement; and industries which produce essential consumers goods such as sugar, cloth, kerosene, etc. In implementing the above industrial programme, efforts will be made to utilise the existing capacity fully through appropriate balancing investments, to complete the projects carried over from the Third Plan quickly and to create additional capacity more expeditiously and with less investment by the expansion of the existing units in preference to the establishment of new units. The fairly substantial spill over from the Third Plan makes the task in the Fourth Plan less difficult than it may *prima facie* appear to be.

The industries in which a major role has been assigned to the public sector in the Fourth Plan are iron and steel, coal, industrial machinery including heavy electrical machinery, petroleum including refining, fertilizers, basic chemicals and essential drugs, etc. Although a capacity of about 14.8 million tonnes of steel ingots is expected to be created by the end of the Fourth Plan, the production is likely to be of the order of 11.7 million tonnes. Besides expansion of existing plants both in the public and private sectors, the fourth steel plant at Bokaro will provide an additional capacity of 1.7 million tonnes of steel ingots and 880,000 tonnes of pig iron. Provision has also been made for preliminary works on some new sites for steel plants. To meet the demand for alloy and tool steel, the capacity of the Durgapur plant will be trebled and other capacities in the public and private sectors will be increased so that the need for import of special steel may be eliminated by the end of the Fourth Plan. Aluminium production will be substantially increased and the development of additional copper mines at Rakha, Daribo and Agnigondala will be taken in hand on a priority basis. In the field of heavy machinery and machine building industries, self-sufficiency will be achieved in respect of thermal and hydro-generating sets, power boilers, transformers, large-sized electric motors, etc. The heavy machine building complex



at Ranchi with a capacity of 80,000 tonnes of metallurgical and other heavy equipment will be completed and production will be increased to meet about half the demand for metallurgical equipment in the new steel plants by 1970-71. The Fourth Plan programmes also include the establishment of new fertilizer units at Durgapur, Kotah, Goa, Cochin, Madras, Kanpur, Kathgodam and Haldia, besides expanding some of the existing units. The State Governments are expected to assume a special responsibility in regard to Industrial Development Corporations, industrial development areas and promotion of cooperative enterprises in cotton spinning, sugar and other agricultural processing industries.

#### EMPLOYMENT

During the Fourth Plan period, increase in the labour force will be of the order of 23 million. The Plan as formulated is expected to provide additional employment opportunities to the extent of about 14 million outside agriculture and

4.5 to 5 million in agriculture, or a total of 18.5 to 19 million. The rural works programme is likely to provide work during slack agricultural seasons to about 1.5 million persons in terms of 100 days of work in the year. In many parts of the country, it would be necessary to maintain a close watch on the employment situation and to be in readiness to provide additional work opportunities. This would be specially important in densely populated and the more backward regions. At the same time through coordinated implementation and efficient use of available capacities at the district and area levels, efforts should be made to achieve the maximum employment possible.

#### NATIONAL INCOME

If the targets envisaged for the Fourth Plan are fully achieved, national income, it is estimated, will rise to Rs. 30,530 crores by 1970-71

at 1965-66 prices. However, in view of factors like adverse weather, delays in securing external credits or in implementation and other unforeseen developments, it may be prudent to allow for a margin in the estimate of increase in national income over the Fourth Plan period: likely national income in 1970-71 may, therefore, be put at about Rs. 29,500 crores at 1965-66 prices. If this level of national income is achieved, it will imply an increase of 38 per cent over the 1964-65 level (Rs. 21,400 crores) or 48 per cent over the estimated actual level of national income in 1965-66 (Rs. 19,900 crores) at 1965-66 prices. Since 1965-66 was an abnormal year, the increase between 1965-66 and 1970-71 appears rather large. It would be more realistic to look at the increase in terms of the rise over 1964-65. On this basis the compound rate of growth for the period 1964-65 or 1970-71 would be about 5.5 per cent per annum. Per capita income will go up from Rs. 448 in 1964-65 to Rs. 532 in 1970-71 i.e. by 3 per cent per annum (compound).

Table 7. Production and development—Progress and target.

| Item                                                                  | Unit                                         | 1950-51 | 1955-56 | 1960-61 | 1964-65 | 1965-66<br>(likely) | 1970-71 | Percentage increase in     |                            |                            |                            |
|-----------------------------------------------------------------------|----------------------------------------------|---------|---------|---------|---------|---------------------|---------|----------------------------|----------------------------|----------------------------|----------------------------|
|                                                                       |                                              |         |         |         |         |                     |         | 1964-65<br>over<br>1950-51 | 1965-66<br>over<br>1950-51 | 1970-71<br>over<br>1964-65 | 1970-71<br>over<br>1965-66 |
| 1. Agriculture and Community development                              |                                              |         |         |         |         |                     |         |                            |                            |                            |                            |
| 1.1. Agricultural production                                          |                                              |         |         |         |         |                     |         |                            |                            |                            |                            |
| Foodgrains ..                                                         | Million tonnes                               | 54.92   | 69.22   | 82.02   | 88.95   | 72.29               | 120     | 62.0                       | 31.6                       | 34.9                       | 66.0                       |
| Cotton ..                                                             | Million bales†                               | 2.62    | 4.03    | 5.29    | 5.41    | 4.73                | 8.6     | 106.5                      | 80.5                       | 59.0                       | 81.8                       |
| Sugarcane (gur) ..                                                    | Million tonnes                               | 6.92    | 7.29    | 11.20   | 12.32   | 12.12               | 13.5    | 78.0                       | 75.1                       | 9.6                        | 11.4                       |
| Oilseeds ..                                                           | "                                            | 5.09    | 5.63    | 6.98    | 8.30    | 6.14                | 10.7    | 63.1                       | 20.6                       | 28.9                       | 74.3                       |
| Jute ..                                                               | Million bales‡                               | 3.51    | 4.43    | 4.13    | 6.02    | 4.48                | 9.0     | 71.5                       | 27.6                       | 49.5                       | 100.9                      |
| Tea ..                                                                | 000, tonnes                                  | 273     | 285     | 321     | n. a.   | 376                 | n. f.   | ..                         | 37.7                       | ..                         | ..                         |
| Tobacco ..                                                            | "                                            | 261     | 303     | 307     | 370     | 400                 | 475     | 41.8                       | 53.2                       | 28.4                       | 18.7                       |
| Fish ..                                                               | Million tonnes                               | 0.7     | 1.0     | 1.4     | n. a.   | 1.15‡               | 1.53    | ..                         | 64.3                       | ..                         | 33.0                       |
| Milk ..                                                               | "                                            | 17      | 19      | 22      | n. a.   | 24.60               | 32.25   | ..                         | 44.7                       | ..                         | 31.1                       |
| Wool ..                                                               | Million lbs.                                 | 60      | 65      | 72      | n. a.   | 83                  | 94      | ..                         | 38.3                       | ..                         | 13.2                       |
| Eggs ..                                                               | Million number                               | n. a.   | 1,903   | 2,880   | n. a.   | 4,675               | 11,000  | ..                         | 145.0§                     | ..                         | 135.3                      |
| 1.2. Agricultural services:                                           |                                              |         |         |         |         |                     |         |                            |                            |                            |                            |
| Minor irrigation† ..                                                  | Million acres (gross)                        | ..      | 9.5     | 9.0     | 9.3     | 13.1                | 17.0    | ..                         | 37.9§                      | 82.8*                      | 29.8§                      |
| Land reclamation† (additional)                                        | Million acres                                | ..      | 2.8     | 2.3     | 3.34    | 4.2                 | 2.5     | 19.3                       | 50.0§                      | ..                         | ..                         |
| Soil conservation† ..                                                 | "                                            | ..      | 0.7     | 2.5     | 6.28    | 9.8                 | 20.0    | 797.1**                    | n                          | 218.5*                     | 104.1§                     |
| Nitrogenous fertilizers consumed                                      | '000 tonnes of N                             | 56      | 107     | 210     | 555     | 600                 | 2,000   | 891.1                      | 971.4                      | 260.4                      | 233.3                      |
| Phosphatic fertilizers consumed ..                                    | '000 tonnes of P <sub>2</sub> O <sub>5</sub> | 7       | 13      | 70      | 149     | 150                 | 1,000   | p                          | p                          | 571                        | 566.7                      |
| Potassic fertilizers consumed                                         | '000 tonnes of K <sub>2</sub> O              | 6       | 12—     | 26      | 69      | 90                  | 350     | p                          | p                          | 407.2                      | 288.8                      |
| Organic and green manures                                             |                                              |         |         |         |         |                     |         |                            |                            |                            |                            |
| (a) Urban compost ..                                                  | Million tonnes                               | ..      | 2.15    | 3.05    | 3.66    | 3.40                | 5.40    | 70.21                      | 58.1                       | 47.5                       | 58.8                       |
| (b) Green manures ..                                                  | Million acres                                | ..      | 11.8    | 11.8    | 18.6    | 21.5                | 64.0    | ..                         | ..                         | 244.1                      | 151.2                      |
| Plant protection ..                                                   | Million acres                                | ..      | ..      | 16.0    | 38.0    | 41.0                | 137.0   | ..                         | ..                         | 260.5                      | 234.1                      |
| Area under improved seeds                                             | Million acres                                | ..      | 4.7     | 55.0    | 102     | 120                 | 274     | p                          | p                          | 168.6                      | 128.3                      |
| Irrigation and power                                                  |                                              |         |         |         |         |                     |         |                            |                            |                            |                            |
| Major and medium irrigation (additional) potential at channel outlets | Million acres (gross)                        | ..      | 6.5     | 5.2     | 4.1     | 6.3                 | 13.0    | ..                         | ..                         | 217.1*                     | 106.3§                     |
| Utilisation ..                                                        | "                                            | ..      | 3.1     | 5.2     | 5.8     | 5.5                 | 9.0     | 22.6**                     | 77.4§                      | 136.8*                     | 63.6§                      |
| Power electricity installed capacity ..                               | Million kW                                   | 2.3§    | 3.4§    | 5.6     | 8.6     | 10.2                | 20.0    | 273.9                      | 343.5                      | 132.6                      | 96.1                       |
| Electricity generated ..                                              | Million kWh                                  | 6,757§  | 10,777§ | 24,209  | 29,280  | 36,400              | 80,000  | 345.3                      | 453.6                      | 173.2                      | 119.8                      |
| Towns and villages electrified ..                                     | Thousands                                    | 3.7     | 7.4     | 24.2    | 43.6    | 52.3                | 110.0   | p                          | p                          | 152.3                      | 110.3                      |
| Pumps energised ..                                                    | Lakh numbers                                 | —       | —       | 1.6     | 4.0     | 4.8                 | 11.8    | ..                         | ..                         | 195.0                      | 145.8                      |
| Minerals iron ore ..                                                  | Million tonnes                               | 3.0     | 4.3     | 11.0    | 15.1    | 23.0                | 54.0    | 403.3                      | 666.7                      | 257.6                      | 134.8                      |
| Coal ..                                                               | "                                            | 32.8    | 39.0    | 55.7    | 64.4    | 70.0                | 106.0   | 96.3                       | 113.4                      | 64.6                       | 51.4                       |
| Large-scale Industries                                                |                                              |         |         |         |         |                     |         |                            |                            |                            |                            |
| Metallurgical Industries                                              |                                              |         |         |         |         |                     |         |                            |                            |                            |                            |
| Finished steel ..                                                     | Million tonnes                               | 1.04    | 1.3     | 2.3     | 4.43    | 4.6                 | 8.8     | 326.0                      | 342.3                      | 98.6                       | 91.3                       |



Table 7. Production and Development—Progress and Target—Contd.

| Item                                                                             | Unit                                            | 1950-51 | 1955-56 | 1960-61 | 1964-65 | 1965-66<br>(likely) | 1970-71 | Percentage increase in     |                            |                            |                            |
|----------------------------------------------------------------------------------|-------------------------------------------------|---------|---------|---------|---------|---------------------|---------|----------------------------|----------------------------|----------------------------|----------------------------|
|                                                                                  |                                                 |         |         |         |         |                     |         | 1964-65<br>over<br>1950-51 | 1965-66<br>over<br>1950-51 | 1970-71<br>over<br>1964-65 | 1970-71<br>over<br>1965-66 |
| Pig iron (for sale) .. ..                                                        | "                                               | 0.36    | 0.39    | 1.1     | 1.0     | 1.2                 | 3.0     | 177.8                      | 233.0                      | 200.0                      | 150.0                      |
| Steel ingots .. ..                                                               | "                                               | 1.47    | 1.74    | 3.4     | 6.1     | 6.2                 | 11.7    | 315.0                      | 321.8                      | 91.8                       | 88.7                       |
| Copper (virgin metal) ..                                                         | '000 tonnes                                     | 7.1     | 7.6     | 8.9     | 9.4     | 9.8                 | 37.5    | 32.4                       | 38.0                       | 293.9                      | 282.7                      |
| Aluminium (virgin metal) ..                                                      | "                                               | 4.0     | 7.4     | 18.3    | 54.1    | 65.0                | 330.0   | p                          | p                          | 510.0                      | 407.7                      |
| Mechanical and electrical<br>Engineering Cement<br>machinery .. ..               | Value in<br>Rs. lakhs                           | —       | 40      | 60      | 220     | 350                 | 2,000   | 450.0                      | 775.0                      | 809.1                      | 471.4                      |
| Sugar machinery .. ..                                                            | "                                               | —       | 20      | 420     | 910     | 800                 | 1,600   | p                          | p                          | 75.8                       | 100.0                      |
| Machine tools .. ..                                                              | "                                               | 30      | 80      | 700     | 2,000   | 2,300               | 10,500  | p                          | p                          | 425.0                      | 356.0                      |
| (Graded)                                                                         |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Ball and roller bearings ..                                                      | Million numbers                                 | 0.1     | 0.9     | 3.2     | 5.9     | 9.0                 | 30.0    | p                          | p                          | 408.5                      | 233.3                      |
| Diesel engines (stationary) ..                                                   | '000 numbers                                    | 5.5     | 10.4    | 43.2    | 74.1    | 85.0                | 2000.0  | p                          | p                          | 169.9                      | 135.3                      |
| Tractors (agricultural) ..                                                       | "                                               | ..      | ..      | neg.    | 3.2     | 5.6                 | 35.0    | ..                         | ..                         | 993.8                      | 525.0                      |
| Electric transformers ..                                                         | '000 kva                                        | 178     | 625     | 1,892   | 3,000   | 3,800               | 5,000   | p                          | p                          | 66.8                       | 51.5                       |
| (33 kv and below)                                                                |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Electric Cables .. ..                                                            | '000 tonnes                                     | 1.7     | 9.4     | 23.7    | 48.8    | 55.0                | 120.0   | p                          | p                          | 145.9                      | 118.2                      |
| (ACSR conductors)                                                                |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Railway locomotives ..                                                           | Numbers                                         | 7       | 179     | 272     | 266     | 276                 | 417     | p                          | p                          | 56.8                       | 51.1                       |
| (Steam, diesel & electric)                                                       |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Chemical fertilizers :                                                           |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Nitrogenous .. ..                                                                | '000 tonnes of N                                | 9       | 80      | 99      | 234     | 233                 | 2,000   | p                          | p                          | 754.7                      | 758.4                      |
| Phosphatic .. ..                                                                 | '000 tonnes of<br>P <sub>2</sub> O <sub>5</sub> | 9       | 12      | 54      | 131     | 111                 | 1,000   | p                          | p                          | 663.4                      | 800.9                      |
| Sulphuric acid .. ..                                                             | '000 tonnes                                     | 101     | 167     | 361     | 695     | 664                 | 2,400   | 588.1                      | 557.4                      | 245.3                      | 261.4                      |
| Soda ash .. ..                                                                   | '000 tonnes                                     | 45      | 82      | 148     | 286     | 331                 | 600     | 535.6                      | 635.6                      | 109.8                      | 81.3                       |
| Caustic soda .. ..                                                               | "                                               | 12      | 36      | 99      | 192     | 218                 | 500     | p                          | p                          | 100.4                      | 129.4                      |
| Other industries :                                                               |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Sewing machines .. ..                                                            | '000 numbers                                    | 33      | 111     | 303     | 330     | 450                 | 900     | 900.0                      | p                          | 172.7                      | 100.0                      |
| Bicycles .. ..                                                                   | "                                               | 99      | 513     | 1,071   | 1,442   | 1,770               | 3,500   | p                          | p                          | 142.7                      | 105.9                      |
| Automobiles .. ..                                                                | "                                               | 16.5    | 25.8    | 55.0    | 70.8    | 68.5                | 170.0   | 329.1                      | 315.2                      | 149.1                      | 148.2                      |
| Cotton textiles (Mill made) ..                                                   | Million metres                                  | 3,401   | 4,665   | 4,649   | 4,676   | 4,434               | 5,486   | 37.5                       | 30.4                       | 17.3                       | 23.7                       |
| Sugar .. ..                                                                      | '000 tonnes                                     | 1,134   | 1,890   | 3,029   | 3,260   | 3,550               | 4,500   | 187.5                      | 213.1                      | 38.0                       | 26.8                       |
| Cement .. ..                                                                     | Million tonnes                                  | 2.73    | 4.67    | 7.97    | 9.79    | 10.8                | 20.0    | 258.6                      | 295.6                      | 104.3                      | 85.2                       |
| Petroleum products .. ..                                                         | "                                               | 0.2     | 3.4     | 5.8     | 8.4     | 9.86                | 20.0    | p                          | p                          | 138.1                      | 102.8                      |
| Electric fans .. ..                                                              | Million numbers                                 | 0.20    | 0.29    | 1.06    | 1.27    | 1.5                 | 3.5     | 535.0                      | 650.0                      | 175.6                      | 133.3                      |
| Paper and paper board ..                                                         | '000 tonnes                                     | 116     | 190     | 350     | 494     | 550                 | 900     | 325.9                      | 374.1                      | 82.2                       | 63.6                       |
| Newsprint .. ..                                                                  | '000 tonnes                                     | ..      | 3.6     | 23.3    | 29.4    | 30                  | 150     | 711.1                      | 738.3                      | 413.7                      | 400.0                      |
| Village and Small Industries :                                                   |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Handloom, powerloom<br>and khadi*†                                               | Million metres                                  | 917     | 1,643   | 2,072   | 3,147   | 3,146               | 4,572   | 243.2                      | 243.1                      | 45.3                       | 45.3                       |
| Sericulture*† (raw silk) ..                                                      | Million kgs.                                    | 1.14@   | 1.40@   | 1.50    | 1.88    | 2.15                | 3.10    | 64.9                       | 88.6                       | 64.9                       | 44.2                       |
| Industrial estates .. ..                                                         | Numbers<br>(cumulative)                         | ..      | 1       | 66      | 235     | 300                 | 550     | n.a.                       | n.a.                       | 134.0                      | 83.3                       |
| Transport Services (Railways) :                                                  |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Passenger kilometres ..                                                          | '000 million                                    | 66.5    | 62.4    | 77.7    | 93.5    | 96.0                | 119.0   | 40.6                       | 44.4                       | 27.3                       | 24.0                       |
| Freight carried .. ..                                                            | Million tonnes                                  | 93      | 116     | 156     | 194     | 205                 | 308     | 108.6                      | 120.4                      | 58.8                       | 50.2                       |
| Transport Services (Roads) :                                                     |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Surfaced .. ..                                                                   | '000 kms.                                       | 156     | 183     | 235     | 275     | 284                 | 334     | 76.3                       | 82.1                       | 21.5                       | 17.6                       |
| Shipping .. ..                                                                   | Lakh grt                                        | 3.0     | 4.8     | 8.6     | 14.0    | 15.4                | 30.0    | 259.0                      | 294.0                      | 114.3                      | 94.8                       |
| Commercial Vehicles on road ..                                                   | '000 numbers                                    | 116.3   | 165.6   | 224     | 303     | 320                 | 525     | 160.5                      | 175.2                      | 73.3                       | 64.1                       |
| Major ports : Traffic handled ..                                                 | Million tonnes                                  | 19.3    | 23.4    | 38.8    | 48.4    | 50.2                | 82.5    | 150.8                      | 160.1                      | 70.5                       | 64.3                       |
| Communications :                                                                 |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Post Offices .. ..                                                               | '000 numbers                                    | 36      | 55      | 77      | 97      | 98                  | 110     | 169.4                      | 172.2                      | 13.5                       | 12.2                       |
| Telegraph Offices .. ..                                                          | "                                               | 3.6     | 5.1     | 6.9     | 8.2     | 8.7                 | 10.6    | 127.8                      | 141.7                      | 29.3                       | 21.8                       |
| No. of Telephones .. ..                                                          | "                                               | 168     | 278     | 463     | 766     | 873                 | 1,523   | 356.0                      | 419.6                      | 98.8                       | 74.5                       |
| General Education :                                                              |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Students in Schools ..                                                           | Million numbers                                 | 23.49   | 31.34   | 44.65   | 62.99   | 67.74               | 97.5    | 168.2                      | 188.4                      | 54.8                       | 43.9                       |
| (Age group 6-17)                                                                 |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| School going children as<br>percentage of children in<br>respective age groups : |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Primary stage .. ..                                                              | 6-11 years                                      | 42.6    | 52.9    | 62.2    | 75.4    | 78.5                | 92.2    | 77.0                       | 84.3                       | 22.3                       | 17.5                       |
| Middle stage .. ..                                                               | 11-14 years                                     | 12.7    | 16.5    | 22.5    | 30.0    | 32.2                | 47.4    | 136.2                      | 153.5                      | 58.0                       | 47.2                       |
| Higher secondary stage ..                                                        | 14-17 years                                     | 5.8     | 7.8     | 11.7    | 16.0    | 17.8                | 22.1    | 175.9                      | 206.9                      | 38.1                       | 24.2                       |
| Institutions :                                                                   |                                                 |         |         |         |         |                     |         |                            |                            |                            |                            |
| Primary Junior basic<br>Schools .. ..                                            | '000 numbers                                    | 209.7   | 278.1   | 330.4   | 387.0   | 405.9               | n.f.    | 84.5                       | 93.6                       | ..                         | ..                         |
| Middle/Senior basic schools ..                                                   | "                                               | 13.6    | 21.7    | 49.7    | 60.3    | 72.6                | n.f.    | 409.6                      | 433.8                      | ..                         | ..                         |
| High Higher secondary ..                                                         | "                                               | 7.3     | 10.8    | 17.2    | 23.6    | 24.1                | n.f.    | 223.3                      | 230.1                      | ..                         | ..                         |
| Multipurpose schools .. ..                                                       | "                                               | ..      | 0.9     | 2.3     | n.a.    | 2.7                 | n.f.    | ..                         | ..                         | ..                         | ..                         |

NOTE : For the items : Foodgrains, cotton, oilseeds, jute and tobacco, the figures for the years—1950-51, 1955-56 and 1960-61 are adjusted estimates with 1960-61 as the base, while in the case of sugarcane (gur), the base taken is 1961-62 (fully revised). † Basis of estimation has been revised. ‡ Bale of 180 kgs. each. § Increase over 1955-56. † Figures relate to the five year period ending with that year except those for 1964-65 in which case it relates to the four year period 1961-62 to 1964-65. £ Increase over additional over the respective Plan periods. — Relates, to supply position. p Represents increase over ten times. n.a. Not available. n.f. Not fixed. \* Represents increase over the addition during 1961-62 to 1964-65. \*\* Represents increase in the addition of 1964-65 over the achievement of the First Plan. § Calendar year. \*† Figures relate mostly to calendar years. @ Figures relate to the years 1951-56. neg.: Negligible.



Table 7. Production and Development—Progress and Target—Contd.

| Item                                            | Unit                                  | 1950-51 | 1955-56 | 1960-61 | 1964-65 | 1965-66 | 1970-71 | Percentage increase in     |                            |                            |                            |
|-------------------------------------------------|---------------------------------------|---------|---------|---------|---------|---------|---------|----------------------------|----------------------------|----------------------------|----------------------------|
|                                                 |                                       |         |         |         |         |         |         | 1964-65<br>over<br>1950-51 | 1965-66<br>over<br>1950-51 | 1970-71<br>over<br>1964-65 | 1970-71<br>over<br>1965-66 |
| Technical Education :                           |                                       |         |         |         |         |         |         |                            |                            |                            |                            |
| Engineering and Techno-<br>logy (Degree level)  | Admission<br>capacity<br>'000 numbers | 4.1     | 5.9     | 13.8    | 23.8    | 24.7    | 30.0    | 480.5                      | 502.4                      | 26.1                       | 21.5                       |
| Engineering and Techno-<br>logy (Diploma level) | "                                     | 5.9     | 10.5    | 25.8    | 46.2    | 49.9    | 68.0    | 683.1                      | 745.8                      | 47.2                       | 36.3                       |
| Agriculture :                                   |                                       |         |         |         |         |         |         |                            |                            |                            |                            |
| Degree level (in take) ..                       | Numbers                               | 1,060*  | 1,989   | 5,634   | 8,935   | n. a.   | 11,500  | 742.0                      | ..                         | 26.7                       | ..                         |
| Veterinary :                                    |                                       |         |         |         |         |         |         |                            |                            |                            |                            |
| Degree level (in take) ..                       | Numbers                               | 434*    | 1,269   | 1,300   | 1,319   | n. a.   | n. f.   | 203.9                      | ..                         | ..                         | ..                         |
| Health Institutions :                           |                                       |         |         |         |         |         |         |                            |                            |                            |                            |
| Hospitals and dispensaries                      | 000 numbers                           | 8.6     | 10.0    | 12.6    | n. a.   | 14.6    | n. f.   | ..                         | 69.8                       | ..                         | ..                         |
| Hospital beds ..                                | 000 numbers                           | 113     | 125     | 186     | 229     | 240     | 300     | 102.7                      | 112.4                      | 31.0                       | 25.0                       |
| Primary health units ..                         | Numbers                               | ..      | 725     | 2,800   | 4,500   | 4,800   | 5,200   | 520.7                      | 562.1                      | 15.6                       | 8.3                        |
| Family planning centres ..                      | "                                     | ..      | 147     | 1,649   | 7,701   | 11,474  | 48,405  | p                          | p                          | 528.6                      | 322.6                      |
| Personnel :                                     |                                       |         |         |         |         |         |         |                            |                            |                            |                            |
| Doctors (practising) ..                         | 000 numbers                           | 56.0    | 65.9    | 70.0    | 82.03   | 86.0    | 131.0   | 46.5                       | 53.6                       | 59.7                       | 52.3                       |
| Nurses (registered) ..                          | "                                     | 15.0    | 18.5    | 27.0    | 39.0    | 45.0    | 87.0    | 160.0                      | 200                        | 123.1                      | 93.3                       |
| Midwives (registered) ..                        | "                                     | 8.0     | 12.8    | 19.9    | 31.0    | 35.0    | 95.0    | 287.5                      | 337.5                      | 206.5                      | 171.4                      |
| Dais (registered) ..                            | "                                     | 1.8     | 6.4     | 11.5    | n. a.   | 30      | 280.0   | ..                         | p                          | ..                         | 833.3                      |
| Sanitary inspectors ..                          | "                                     | 3.5     | 4.0     | 6.0     | 14.0    | 18.0    | n. f.   | 300.0                      | 414.3                      | ..                         | ..                         |
| Health visitors ..                              | "                                     | 0.5     | 0.8     | 1.5     | n. a.   | 3.5     | 5.5     | ..                         | 600.0                      | ..                         | 57.1                       |

n. f. Not fixed. n. a. Not available. \* Relates to 1951-52. \$ Increase over 1955-56. p. Represents the increase over ten times.

Table 8. Selected First, Second and Third Plan achievements and Fourth Plan Targets.

| Item                                                                               | Unit                                        | 1950-51 | 1955-56 | 1960-61 | 1965-66 | 1970-71 |
|------------------------------------------------------------------------------------|---------------------------------------------|---------|---------|---------|---------|---------|
| National income at 1960-61 prices ..                                               | Rs. Crores                                  | 98,500  | 11,670  | 14,140  | 15,930  | 23,100  |
| Per capita income at 1960-61 prices ..                                             | Rupees                                      | 275     | 299     | 326     | 325     | 417     |
| Employment generated (Addl. Plan-wise) ..                                          | Million numbers                             | ..      | 7       | 9       | 13      | 18.5    |
| Agricultural Production—Index numbers ..                                           | 1949-50=100                                 | 95.6    | 116.8   | 142.2   | 158.3   | 207.8   |
| Foodgrains production ..                                                           | Million tonnes                              | 54.92@  | 69.22@  | 82.02   | 72.29   | 120.0   |
| <b>Irrigation utilisation (Plan-wise) :</b>                                        |                                             |         |         |         |         |         |
| Minor—Addl. gross ..                                                               | Million acres                               | ..      | 9.5     | 9.0     | 13.1    | 17.0    |
| Major and medium—Addl. gross ..                                                    | "                                           | ..      | 3.1     | 5.2     | 5.5     | 9.0     |
| <b>Co-operation :</b>                                                              |                                             |         |         |         |         |         |
| Short and medium-term loans advanced ..                                            | Rs. Crores                                  | 22.90   | 49.62   | 202.75  | 400.0   | 650.0   |
| Industrial production—Index numbers ..                                             | 1956 = 100                                  | 73.5    | 91.9    | 130.1   | 181.6   | 306.0   |
| Coal ..                                                                            | Million tonnes                              | 32.8    | 39.0    | 55.7    | 70.0    | 106.0   |
| Iron ore ..                                                                        | "                                           | 3.0     | 4.3     | 11.0    | 23.0    | 54.0    |
| Petroleum products ..                                                              | "                                           | 0.2     | 3.4     | 5.8     | 9.9     | 20.0    |
| Steel (Steel ingots) ..                                                            | "                                           | 1.47    | 1.74    | 3.4     | 6.2     | 11.7    |
| " (Finished steel) ..                                                              | "                                           | 1.04    | 1.3     | 2.3     | 4.6     | 8.8     |
| Machine tools (graded) ..                                                          | Value in Rs. lakhs                          | 30      | 80      | 700     | 2,300   | 10,500  |
| Agricultural tractors ..                                                           | 000 numbers                                 | ..      | ..      | neg.    | 3.2     | 35.0    |
| Fertilizer production—nitrogenous ..                                               | 000 tonnes of N                             | 9       | 80      | 99      | 233     | 2,000   |
| " " phosphatic ..                                                                  | 000 tonnes of P <sub>2</sub> O <sub>5</sub> | 9       | 12      | 54      | 111     | 1,000   |
| Cement ..                                                                          | Million tonnes                              | 2.73    | 4.67    | 7.97    | 10.8    | 20.0    |
| Cloth—Mill-made ..                                                                 | Million metres                              | 3,401   | 4,665   | 4,049   | 4,434   | 5,486   |
| " Handloom, Powerloom & Khadi ..                                                   | "                                           | 917     | 1,643   | 2,072   | 3,146   | 4,572   |
| Industrial estates ..                                                              | Numbers                                     | ..      | 1       | 66      | 300     | 550     |
| Electricity—Installed capacity ..                                                  | Million kw                                  | 2.3*    | 3.4*    | 5.6     | 10.2    | 20.0    |
| " — Towns & villages electrified ..                                                | 000 numbers                                 | 3.7     | 7.4     | 24.2    | 52.3    | 110.0   |
| Railways : Freight carried ..                                                      | Million tons                                | 93      | 116     | 156     | 205     | 308     |
| Surfaced roads ..                                                                  | 000 km                                      | 156     | 183     | 235     | 284     | 334     |
| Shipping ..                                                                        | Lakh grt.                                   | 3.9     | 4.8     | 8.6     | 15.4    | 30.0    |
| <b>Students in Schools (enrolment) :</b>                                           |                                             |         |         |         |         |         |
| Primary stage (age group 6-11) ..                                                  | Million numbers                             | 19.15   | 25.17   | 34.99   | 51.5    | 69.5    |
| Middle stage (age group 11-14) ..                                                  | "                                           | 3.12    | 4.19    | 6.7     | 11.0    | 19.0    |
| Secondary stage (age group 14-17) ..                                               | "                                           | 1.22    | 1.88    | 2.96    | 5.24    | 9.0     |
| <b>Technical education—Engineering and technology :</b>                            |                                             |         |         |         |         |         |
| Admission capacity :—                                                              |                                             |         |         |         |         |         |
| Degree level ..                                                                    | 000 numbers                                 | 4.1     | 5.9     | 13.8    | 24.7    | 30.0    |
| Diploma level ..                                                                   | "                                           | 5.9     | 10.5    | 25.8    | 49.9    | 68.0    |
| <b>Medical facilities :</b>                                                        |                                             |         |         |         |         |         |
| Hospital beds ..                                                                   | "                                           | 113     | 125     | 186     | 240     | 300     |
| Doctors (practising) ..                                                            | "                                           | 56.0    | 65.0    | 70.0    | 86.0    | 131.0   |
| Nurses (registered) ..                                                             | "                                           | 15.0    | 18.5    | 27.0    | 46.0    | 87.0    |
| Family planning centres ..                                                         | Numbers                                     | ..      | 147     | 1,649   | 11,474  | 48,405  |
| Industrial housing (Plan-wise) ..                                                  | Number of houses/tenements                  | ..      | 42,200  | 61,756  | 64,549  | 150,000 |
| <b>Scholarships for Backward Classes (Plan-wise) Post-matric and pre-matric ..</b> |                                             |         |         |         |         |         |
|                                                                                    | 000 numbers                                 | ..      | 1,900   | 4,807   | 11,999  | 77,500  |

@ Adjusted for statistical changes with 1960-61.

\* Relates to calendar year.

Neg. Negligible



## STATE PLANS

The Centre will meet almost half of the States' Fourth Plan outlays, as finalised by the Planning Commission. This means a reduction in the Centre's share of assistance to the States' Plan outlays, compared with the Third Plan, when the former's share was a little more than 60 per cent.

On the other hand, the State Governments have agreed to raise Rs. 3,500.3 crores in all for Fourth Plan schemes. This included current revenues, additional mobilisation of resources and loans from the open market.

The total Fourth Plan outlay of all the States amounts to Rs. 7,071.7 crores, of which Central assistance will be to the tune of Rs. 3,571.4 crores. This excludes Plan outlays of Union Territories, which are allocated Rs. 393.48 crores as their total outlay. The final figures of Central assistance to States shows an increase of Rs. 27.7 crores compared with Rs. 3,500 crores envisaged in the draft outline of the Fourth Plan.

The Fourth Plan outlays of each State, with the resources they were prepared to raise and the amount of Central assistance are respectively (in crores of rupees):—

Andhra Pradesh 522.0, 242.0, 280.0; Assam 190.0, 15.0, 175.0; Bihar 545.0, 253.0, 292.0; Gujarat 466.0, 281.0, 165.0; Haryana 168.4, 77.0, 91.4; Jammu and Kashmir 126.0, 19.0, 126.0; Kerala 293.0, 111.0, 182.0; Madhya Pradesh 458.0, 170.0, 288.0; Madras 564.0, 314.0, 250.0; Maharashtra 951.0, 690.0, 261.0; Mysore 421.0, 199.0, 222.0; Orissa 300.0, 150.0, 150.0; Punjab 280.0, 185.0, 95.0; Rajasthan 313.5, 86.5, 227.0; Uttar Pradesh 925.8, 430.8, 495.0; West Bengal 538.0, 293.0, 245.0; Nagaland 30.0, 3.0, 27.0.

The Plan outlays of Union Territories (in Rs. crores) are as follows:—Andamans and Nicobar Islands 11.00, Chandigarh 7.59, Dadra and Nagar Haveli 2.40, Delhi 155.64, Goa, Daman and Diu 40.24, Himachal Pradesh 94.38, Laccadive, Amindivi and Minicoy Islands 2.26, Manipur 24.27, NEFA 12.65, Pondicherry 12.25, Tripura 30.80.

The available details of State-wise Plan outlays are as follows:

**Andhra Pradesh:** Andhra Pradesh's Fourth Plan outlay has been determined at Rs. 522 crores as against Rs. 350 crore during the Third Plan.

Besides the Rs. 522 crores for the Plan, the Centre would further allot schemes of the order of Rs. 40 crores under the Centrally-sponsored schemes.

The Centre's share of contribution to the State Plan would be Rs. 280 crores.

**Assam:** The Planning Commission tentatively approved a Rs. 190 crore Fourth Plan for Assam.

The State's contribution to the Plan would be Rs. 15 crores. The Central assistance would be Rs. 175 crores.

The size of the States' Third Plan was Rs. 130 crores. Of the Rs. 190 crores, a sum of Rs. 30 crores is earmarked for the development of hill areas.

**Bihar:** The Plan outlay for Bihar would be Rs. 545 crores for which the Central assistance would be Rs. 292 crores.

**Gujarat:** A total outlay of Rs. 446 crores has been approved by the Planning Commission as against Rs. 236.5 crores during the Third Plan.

It is estimated that State resources during the Fourth Plan will be about Rs. 281 crores. The Central assistance to the State will be about Rs. 165 crores.

In addition, it is expected that Centrally-sponsored schemes, costing Rs. 20 crores, will be transferred to the State in the Fourth Plan.

For agricultural programmes, including co-operation and community development, an allocation of Rs. 86 crores has been made in the State's Plan. For irrigation Rs. 90 crores have been allocated and for power about Rs. 113 crores. This includes adequate provision for electrification of wells for irrigation purposes as well.

It is proposed to complete the Ukai Project during the Fourth Plan period, for which adequate provision has been made in the State Plan. For Dhuvaran-Stage II power project, to be completed by 1969-70, there will be a provision of Rs. 35 crores. These and other power projects will raise the total installed capacity of electric power in the State from the present figure of 600 MW to over 1,200 MW by the end of Fourth Plan.

A provision of Rs. 9 crores has been made for a fertilizer factory, and of Rs. 20 crores for construction of the new Capital at Gandhinagar in the State during the Fourth Plan.

**Haryana:** A total outlay of Rs. 169 crores has been approved for Haryana's Fourth Plan. In addition, Centrally-sponsored schemes of the order of Rs. 6 crores will be transferred to the State sector during the Fourth Plan period. This will bring the total size of Haryana Fourth Plan to Rs. 175 crores. The Central assistance will be Rs. 91 crores.

Haryana resources have been estimated at Rs. 77 crores.

The main sectoral allocations for Rs. 169 crore plan, which are subject to marginal adjustments, are (in crores of rupees):

Agricultural programmes 29.10, co-operation & community development 3.00, irrigation & power 43.00, multipurpose projects (Bhakra-Nangal and Beas) 45 (provisional Haryana share); industry & mining 9.50, transport & communications 8.95, social services 29.59, and miscellaneous 0.82.

**Jammu & Kashmir:** A tentative total outlay of Rs. 126 crores has been fixed by the Planning Commission for the Fourth Five Year Plan of Jammu & Kashmir State. The Central assistance would be Rs. 126 crores.

The allocation for agricultural programmes has been stepped up from Rs. 5.6 crores to Rs. 20 crores in the State's Fourth Plan. For other sectors the allocations are as follows: (in crores of rupees): community development and co-operation 3.7; irrigation & power 36; industry & mining 13.5; transport & communications 21.7; social services 23.8; others 7.

Electric power generation will be substantially stepped up from the present installed capacity of 27 MW to nearly 100 MW by the end of Fourth Plan.

**Kerala:** A total outlay of Rs. 293 crores has been approved for the Fourth Five Year Plan of Kerala. In addition, Centrally sponsored schemes, costing Rs. 10 crores, are likely to be transferred to the State during the Plan period. Kerala's Fourth Plan will thus ultimately be of the order of Rs. 303 crores. The Central assistance would be Rs. 182 crores.

The allocations for main sectors of development, with the total outlay of Rs. 293 crores, are as follows (in crores of rupees): Agricultural programmes 56.08, co-operation and community development 8.90, irrigation & power 120.00, industry and mining 28.30, transport & communications 18.91, social services 60.13, and miscellaneous 0.68.

**Madhya Pradesh:** An outlay of Rs. 458 crores has been approved by the Planning Commission. The Central assistance would be Rs. 288 crores.

**Madras:** A total outlay of Rs. 564 crores has been approved.

According to present estimates, the State resources will be of the order of Rs. 310 crores, in addition to Rs. 4 crores to be raised by the

metropolitan authority of Madras with the assistance of the State Government in the Fourth Plan. The Central assistance has been assessed at Rs. 250 crores.

The main sectoral allocations in the State's Fourth Plan are as follows (in crores of rupees): Agricultural programmes 113.47, co-operation and community development 25.05, irrigation & power 213.56, industry & mining 44.08, transport & communications 25.10, social services 137.91 and miscellaneous 4.67.

**Maharashtra:** The overall size of Maharashtra's Fourth Plan has been fixed at Rs. 951 crores, against the Third Plan outlay of Rs. 390.20 crores. The Central assistance would be Rs. 261 crores.

The sectoral distribution of the outlay is as under (Rs. crores): Agricultural Programmes 204.65; Co-operation 19.01; C. D. and Panchayats 13.10; Irrigation Projects 175.00; Power Projects 221.98; Industry & Mining 32.18; Road Development 54.95; Other Transport and Tourism 16.75; General Education 73.68; Technical Education 18.36; Health 25.26; Water Supply and Drainage 55.00; Housing and Urban Development 23.69; Other Social Services (including Miscellaneous) 17.19; Total 951.00.

**Mysore:** An outlay of Rs. 421 crores has been approved by the Planning Commission for Mysore's Fourth Five Year Plan. The Central assistance would be Rs. 222 crores.

**Nagaland:** A total outlay of Rs. 30 crores has been approved for the Fourth Five Year Plan of Nagaland. The Central assistance would be Rs. 27 crores.

The tentative allocations for main sectors of development (in crores of rupees) are as follows: Agricultural programmes 5.03; co-operation & community development 1.70; power 2.00; industry & mining 2.47; transport & communications 8.90; social services 9.42; and miscellaneous 0.48.

**Orissa:** A total outlay of the order of Rs. 300 crores has been fixed for Orissa's Fourth Plan. The Central assistance would be Rs. 150 crores.

The tentative sectoral allocations for the Fourth Five Year Plan, which are subject to marginal adjustments, are as follows (in crores of rupees): Agricultural programmes 57; co-operation and community development 15; irrigation & Power 100.68; industry & mining 39.50; transport & communications 29; social services 55.79; and miscellaneous 3.03.

**Punjab:** A total outlay of the order of Rs. 280 crores has been approved for Punjab's Fourth Five Year Plan by the Planning Commission. The Central assistance would be Rs. 95 crores.

The main sectoral allocations, subject to marginal adjustments, for the State's Fourth Plan, are as follows (in crores of rupees): Agricultural programmes 56.34, co-operation & community development 7.30, irrigation & power 63.04, multipurpose projects 66.60, industry & mining 17.33, transport & communications 16.30, and social services 50.40.

**Rajasthan:** A tentative total outlay of Rs. 313 crores has been fixed by the Planning Commission for the Fourth Five Year Plan of Rajasthan. This is about 50 per cent more than the expenditure on the State's Third Plan. The Central assistance would be Rs. 227 crores.

The main sectoral allocations proposed for Rajasthan Fourth Plan are (in crores of rupees): Agricultural programmes 43.04; irrigation & power 169.70; co-operation & community development 12.00; industry and mining 7.50; transport & communications 13.20; social services 62.51 and miscellaneous 5.52.

**Uttar Pradesh:** U.P.'s Fourth Plan allocation has been finalised and fixed at Rs. 926 crores. The Central assistance would be Rs. 495 crores.



## UNION TERRITORIES

Plan outlays for seven Union Territories namely Delhi, Goa, Daman and Diu, Himachal Pradesh, Laccadive, Minicoy and Amindivi Islands, Manipur, Pondicherry and Tripura, and the territorial unit of NEFA have been so far finalised. The details of the outlay are as follows:

**Delhi:** A total outlay of Rs. 155.64 crores has been approved by the Planning Commission.

The tentative allocations under main sectors of development for Delhi's Fourth Plan are as follows (in crores of rupees): Agricultural production 3; community development & co-operation 0.25; irrigation & power 48.00; industry 5; transport & communications 18.00; social services 70.11; miscellaneous 2.28.

**Goa, Daman & Diu:** A total outlay of Rs. 40.24 crores has been fixed by the Planning Commission for Goa's Fourth Five Year Plan, as against the Third Five Year Plan expenditure of Rs. 15.28 crores.

The outlays for main sectors of development for this Union territory (in crores of rupees) are as follows: Agricultural programmes 8.08; co-operation & community development 1.5; irrigation & power 7.62; industry & mining 1.74; transport & communications 5.64; social services 14.42; and miscellaneous 1.24.

**Himachal Pradesh:** A total outlay of Rs. 94.38 crores has been approved for Himachal Pradesh Fourth Five Year Plan by the Planning Commission.

The tentative allocations under main heads of development (in crores of rupees), which are subject to adjustment, are as follows: Agricultural programmes 26.50; community development and co-operation 3.50; irrigation & power 15.50; industry and mining 3.50; transport and communications 26.79; social services 18.00; and miscellaneous 0.59.

**Laccadive, Minicoy and Amindivi Islands:** The Fourth Plan outlay has been finalised at Rs. 2.26 crores by the Planning Commission. The following are the details of allotments:

Education Rs. 45 lakhs, medical Rs. 15 lakhs, housing Rs. 1 lakh, transport (shipping) Rs. 40 lakhs, power Rs. 10 lakhs, industries Rs. 3 lakhs, soil exploitation Rs. 1 lakh, co-operation Rs. 12 lakhs, fisheries Rs. 80 lakhs, agriculture Rs. 15 lakhs, animal husbandry Rs. 3 lakhs, statistical schemes Rs. 1 lakh, metric system Rs. 40,000.

Besides the Plan outlay, a sum of Rs. 80 lakhs has been provided by the Union Transport Ministry for developing navigation in Laccadives.

The Third Plan outlay for the Laccadive group had been Rs. 99 lakhs.

**Manipur:** A total outlay of Rs. 24.17 crores has been approved for Manipur's Fourth Plan by the Planning Commission.

The tentative sectoral allocations for the Fourth Five Year Plan are as follows (in crores of rupees): Agricultural programmes 2.84; co-operation and community development 1.00; irrigation & power 3.96; industry & mining

2.50; transport & communications 8.86; social services 6.31; and miscellaneous 0.70.

**Pondicherry:** A total outlay of Rs. 12.25 crores has been fixed for Pondicherry's Fourth Five Year Plan by the Planning Commission.

The tentative allocations for main sectors of development for Pondicherry's Fourth Plan (in crores of rupees) are as follows: Agricultural and community development programmes 2.42; education 2.64; health & water supply 2.18; irrigation & power 1.47; industry & mining 0.84; transport & communications 1.20; social services 1.42; and miscellaneous 0.21.

**Tripura:** A total outlay of Rs. 30.95 crores has been approved by the Planning Commission for Tripura's Fourth Five Year Plan, against the Third Plan expenditure of Rs. 15.51 crores.

The allocations for main sectors of development (in crores of rupees) are as follows: Agricultural programmes 5.50; co-operation & community development 1.40; irrigation & power 6.25; industry & mining 1.10; transport & communications 7.58; social services 8.50; miscellaneous 0.62.

**NEFA:** The Planning Commission has tentatively approved a total outlay of Rs. 16.08 crores for the Fourth Plan for the NEFA. This figure is a little more than double the total outlay of the Third Plan for the Agency.

The highest priority has been given to communications in the NEFA in the Fourth Plan. A total amount of Rs. 3 crores has been proposed for roads besides Rs. 75 lakhs for airstrips.

## THE PRESS

**THE** Annual Report of the Registrar of Newspapers for India for the year 1965 shows that there were 7,906 newspapers and periodicals including 525 dailies and 49 tri-weeklies and bi-weeklies, compared to 8,161 newspapers and periodicals including 514 dailies and 46 tri-weeklies and bi-weeklies in 1964. The figure for 1965 covers Jammu and Kashmir also.

The circulation of newspapers and periodicals rose by 5.5 per cent during 1965 (taking 4,137 common papers for which circulation data for 1964 as well as 1965 were available). The total circulation of these papers rose from 190.30 lakhs to 200.73 lakhs in 1965. The circulation of dailies common to both 1964 and 1965 rose by 8.8 per cent from 56.87 lakhs in 1964 to 61.87 lakhs in 1965. The total circulation of 5,042 papers, for which data were available, was 216.76 lakhs compared to 207.44 lakhs in 1964 (provisional), given in the last annual report.

Including 2,179 papers in the 'non-included categories', the total number of newspapers and periodicals on record at the end of 1965 stood at 10,085.

Of 7,906 papers at the end of 1965, 525 were dailies, 49 tri-and bi-weeklies and the remaining 7,332 were weeklies or periodicals brought out less frequently.

### CIRCULATION

Out of the total circulation of 217 lakhs in 1965, about 63 lakhs or 29.2 per cent was accounted for by dailies. Dailies including tri-and bi-weeklies, which have much affinity to daily papers, commanded a total circulation of 64.35 lakhs in 1965, weeklies commanded a total circulation of 63.35 lakhs and other periodicals 89.09 lakhs. The circulation of dailies rose by about 11 per cent over the previous year (preliminary) against 4.8 per cent rise in the circulation of all papers. The circulation of dailies and tri-weeklies together rose by 11.3 per cent from 57.8 lakhs in 1964 (preliminary) to 64.4 lakhs in 1965. The circulation of weeklies rose by 1.2 per cent from 62.6 lakhs in 1964 (preliminary) to 63.4

lakhs in 1965 and that of other periodicals rose by 2.3 per cent from 87.1 lakhs in 1964 (preliminary) to 89.1 lakhs in 1965.

In 1965 English language papers had the highest circulation (56.27 lakhs) followed by Hindi (39.71 lakhs), Tamil (25.18 lakhs), Malayalam (15.90 lakhs), Gujarati (14.60 lakhs), Marathi (14.39 lakhs), Bengali (11.57 lakhs) and Urdu (9.70 lakhs). Sanskrit had the lowest circulation, namely 6,000. Asamese had a circulation of 1.11 lakhs, Oriya 1.46 lakhs and Punjabi 2.58 lakhs.

In 1965, among the dailies, English had the highest circulation (16.58 lakhs), followed by Hindi (8.57 lakhs), Malayalam (6.91 lakhs) and Tamil (6.86 lakhs).

Of the total circulation of 217 lakhs in 1965, Maharashtra had the largest share (48.2 lakhs), followed by Madras (39.0 lakhs), Delhi (24.9 lakhs), West Bengal (20.9 lakhs), Kerala (18.4 lakhs) and Uttar Pradesh (18.3 lakhs). Nagaland and Himachal Pradesh reported the lowest circulation. (1,000 each).

Of the total circulation of 68.2 lakhs commanded by all dailies in India, Maharashtra had the largest share (12.7 lakhs), followed by Madras (10.3 lakhs), West Bengal (7.7 lakhs) and Kerala (7.2 lakhs). The lowest circulation was reported by Tripura (2,000).

Of the total circulation of 201 lakhs in 1965 of papers common to both 1964 and 1965, the biggest share was that of the dailies (61.8 lakhs). Monthlies and weeklies accounted for 60.9 lakhs and 59.3 lakhs respectively. As against the overall increase rate of 5.5 per cent, the circulation of bimonthlies, half-yearlies etc. common to 1964 and 1965 rose by 21.4 per cent, that of tri-weeklies and bi-weeklies by 11.5 per cent, weeklies 5.0 per cent. Quarterlies showed the smallest rate of increase 0.7 per cent. Annuals on the other hand, showed a decrease of 4.7 per cent.

**Readership:** The number of papers in India per lakh inhabitants was 1.7 for 1963, 1964 and 1965. Newspaper circulation per thousand inhabitants, computed on the above basis, worked

out to 50.6 and 50.9 in 1963 and 1964 respectively. The preliminary figure for 1965 was 44.5.

### OWNERSHIP

In 1965 there were fewer common ownership units and fewer papers owned by them than in 1964. Although the combined circulation of common ownership papers increased to some extent, their share of the total circulation showed only a nominal rise.

The combined circulation of dailies under common ownership was more than two-thirds of the total circulation of all dailies in the country. Their share of the total daily circulation in the metropolitan areas was as high as 93.3 per cent.

The predominant form of ownership of newspapers in 1965 was individual which accounted for 4,503 papers or 57.0 per cent of the total number. 'Societies and associations' (including religious societies) was the second biggest ownership category accounting for 1,585 papers (20.0 per cent). Firms and partnerships, joint stock companies (public and private limited) and Central and State Governments were the other important ownership categories accounting for 485 (6.2 per cent), 444 (5.6 per cent) and 396 (5.0 per cent) papers respectively in 1965.

The total number of papers owned by political parties in 1965 was 67 (including nine dailies, one bi-weekly and 29 weeklies) of which the Congress owned 33, the Communist Parties of India 18 and the Praja Socialist Party 6.

During 1960-65 the number of dailies (including tri-and bi-weeklies) under common ownership rose from 122 to 145, but the number of news interest weeklies under common ownership declined from 73 to 42. The total number of papers in 1965 under common ownership was 187, compared to 195 in 1960.

The circulation of common ownership dailies rose by 56.8 per cent from 27.54 lakhs in 1960 to 43.20 lakhs in 1965 and that of news interest weeklies by 48.3 per cent from 7.89 lakhs in 1960 to 11.70 lakhs in 1965. The total circulation of papers under common ownership rose by 54.9 per cent from 35.43 lakhs to 54.90 lakhs.



The largest number of news interest papers owned by a single common ownership unit in 1965 was 18 by the Express Newspapers which also owned the largest number of dailies (12) and the highest combined circulation (10.85 lakhs) for a common ownership unit. The unit also commanded the highest daily circulation (7.37 lakhs) for any common ownership unit during the year. The Bennett, Coleman and Co., Ltd. (10 papers) commanded the second largest circulation among common ownership units, namely 6.83 lakhs. The Hindustan Times and Allied Publications (8 papers) had a combined circulation of 2.64 lakhs only.

The combined circulation of 136 dailies owned by 59 common ownership units, for which circulation data were available, was 43.20 lakhs in 1965. This constituted 68.4 per cent of the total daily circulation. In 1964, 138 dailies owned by 63 common ownership units (for which circulation data were available) together accounted for a total circulation of 39.17 lakhs (67.8 per cent of the total daily circulation).

There were 22 common ownership units which together owned 51 dailies in the metropolitan centres (Delhi, Calcutta, Bombay and Madras) and accounted for 27.77 lakhs or 93.3 per cent of the total circulation (29.76 lakhs) of all metropolitan dailies.

### NEWSPAPERS

At the end of 1965 there were 7,906 newspapers and periodicals including 525 dailies, 49 tri-weeklies and bi-weeklies, 2,141 weeklies and 5,191 other periodicals as against 8,161 newspapers and periodicals including 514 dailies, 46 tri- and bi-weeklies, 2,311 weeklies and 5,290 other periodicals in 1964.

In 1965, newspapers were published in India in 43 languages in all and dailies in 20 languages. Besides, newspapers in the following further languages also came out in 1965 in the form of bilingual or multilingual papers: Bhilodi, Syriac; Dimasa; Halabi; Latin; Malvi; Pali; Pinar.

**Dailies:** In 1965 there were 525 dailies as against 514 in 1964. Twenty-eight news dailies and three tri-weeklies commenced publication in 1965 as against 27 new dailies and two new tri- and bi-weeklies in 1964.

The number and circulation of dailies language-wise in 1965 are given below (in descending order of circulation): English 56 papers (16.58 lakhs); Hindi 148 (8.57 lakhs); Malayalam 40 (6.91 lakhs); Tamil 28 (6.86 lakhs); Marathi 43 (6.27 lakhs); Gujarati 32 (4.86 lakhs); Bengali 8 (3.87 lakhs); Urdu 73 (3.22 lakhs); Kannada 37 (2.20 lakhs); Telugu 12 (2.07 lakhs); Oriya 4 (0.75 lakh); Punjabi 17 (0.41 lakh); Assamese 1 (0.07 lakh); Sanskrit 1 (circulation figure not available); Bilingual 12 (0.36 lakh); Multilingual 1 (0.01 lakh). Others 12 (0.22 lakh).

**Periodicals:** There were at the end of 1965, 7,332 periodicals. There were 396 periodicals brought out by the Government departments (227 Central Government and 169 State Governments) in 1965. These included 34 weeklies, 41 fortnightly, 175 monthlies and 111 quarterlies. As many as 188 among the Government-owned periodicals were in English, 89 in Hindi and 11 in Malayalam. Among Government publications were 16 papers in the language other than the principal ones. The total circulation of the Government publications for which data were available for 1965, was 5.0 lakhs or about 3.3 per cent of the circulation of all periodicals in the country. Government publications claimed 10.3 lakhs or 5.7 per cent of the circulation of all periodicals in 1964 (revised).

**New Publications:** During 1965, 953 papers commenced publication against 831 in 1964. In 1965, 28 new dailies were started as against 27 in 1964. The number of new publications was the largest in Hindi (261), English (173) and Urdu (78). The largest number of new weeklies was in Hindi (112) followed by Urdu (37) and English (24).

During 1965, 811 newspapers and periodicals ceased publication compared to 252 in 1964. These included 40 dailies as compared to 22 in 1964.

The number of papers which ceased publication was the largest in Hindi (239), followed by English (110) and Urdu (102). Of the 40 dailies which ceased publication in 1965, 18 were in Hindi and 5 each in Gujarati and Urdu. Among the weeklies which ceased, the largest number was in Hindi (139), followed by Urdu (51), Tamil (27) and English (24).

Of the 7,906 papers, more than one-third (2,843) were from the four metropolitan cities: Delhi, Calcutta, Bombay and Madras. State capitals (excluding metropolitan cities) accounted for 981 papers or 12.4 per cent of the total number of papers. Other cities with population of more than one lakh accounted for 2,311 or 30.0 per cent of the total number. Towns with population less than one lakh accounted for 1,771 papers or 22.5 per cent.

### DAILIES

Names of papers having circulation of over one lakh:

| English:                                                                | Circulation (1965) |
|-------------------------------------------------------------------------|--------------------|
| <i>Indian Express</i> (Delhi, Bombay, Madras, Vijayawada and Bangalore) | 3,52,106           |
| <i>Times of India</i> (Delhi and Bombay)                                | 1,95,354           |
| <i>Statesman</i> (Calcutta and Delhi)                                   | 1,51,341           |
| <i>Hindu</i> (Madras)                                                   | 1,41,327           |
| <i>Hindustan Times</i> (Delhi)                                          | 1,15,632           |
| <i>Amrita Bazar Patrika</i> (Calcutta)                                  | 1,11,783           |

### Hindi:

*Nav-Bharat Times* (Delhi and Bombay) .. .. . 1,63,250

### Tamil:

*Thanthi* (Madras, Madurai, Coimbatore and Tiruchirapalli) .. .. . 2,64,187  
*Dinamani* (Madras and Madurai) .. .. . 1,45,860

### Marathi:

*Lok Satta* (Bombay) .. .. . 1,42,330

### Malayalam:

*Matrubhoomi* (Calicut and Ernakulam) .. .. . 1,95,348  
*Malayala Manorama* (Kottayam) .. .. . 1,62,921

### Bengali:

*Ananda Bazar Patrika* (Calcutta) .. .. . 1,74,014  
*Jugantar* (Calcutta) .. .. . 1,41,513

### PERIODICALS

Names of periodicals having a circulation of over 50,000:

| English:                                                      | Circulation (1965) |
|---------------------------------------------------------------|--------------------|
| <i>Blitz News Magazine</i> , Weekly (Bombay) .. .. .          | 1,99,384           |
| <i>Readers' Digest</i> , Monthly (Bombay)                     | 1,38,696           |
| <i>Filmfare</i> , Fortnightly (Bombay) ..                     | 1,25,329           |
| <i>Illustrated Weekly of India</i> , Weekly (Bombay) .. .. .  | 99,439             |
| <i>Femina</i> , Weekly (Bombay) .. .. .                       | 76,379             |
| <i>Screen</i> , Weekly (Bombay) .. .. .                       | 71,260             |
| <b>Hindi:</b>                                                 |                    |
| <i>Kalyan</i> , Monthly (Gorakhpur) .. ..                     | 1,39,050           |
| <i>Dharmavug</i> , Weekly (Bombay) .. ..                      | 1,11,956           |
| <i>Chandamama</i> , Monthly (Madras) ..                       | 78,890             |
| <i>Saptahik Hindustan</i> , Weekly (Delhi)                    | 63,972             |
| <i>Parag</i> , Monthly (Bombay) .. .. .                       | 62,962             |
| <i>Blitz</i> , Weekly, Bombay .. .. .                         | 55,569             |
| <b>Tamil:</b>                                                 |                    |
| <i>Kumudam</i> , Weekly (Madras) .. ..                        | 3,15,243           |
| <i>Ananda Vikatan</i> , Weekly (Madras)                       | 1,73,875           |
| <i>Vaarrantari Rani</i> , Weekly (Madras)                     | 1,52,691           |
| <i>Kalkandu</i> , Weekly (Madras) .. ..                       | 1,21,274           |
| <i>Kalki</i> , Weekly (Madras) .. .. .                        | 1,03,846           |
| <i>Pesum Padam</i> , Monthly (Madras) ..                      | 65,691             |
| <b>Malayalam:</b>                                             |                    |
| <i>Malayala Manorama</i> , Weekly (Kottayam) .. .. .          | 2,26,058           |
| <i>Mathrubhumi</i> , Weekly (Kozhikode)                       | 94,847             |
| <b>Marathi:</b>                                               |                    |
| <i>Chandoba</i> , Monthly (Madras) .. ..                      | 52,271             |
| <b>Gujarati:</b>                                              |                    |
| <i>Jan Kalyan</i> , Monthly (Ahmedabad) .. .. .               | 51,427             |
| <b>Bengali:</b>                                               |                    |
| <i>Desh</i> , Weekly (Calcutta) .. .. .                       | 62,404             |
| <i>Betar Jagat</i> , Fortnightly (Calcutta)                   | 60,900             |
| <b>Telugu:</b>                                                |                    |
| <i>Andhra Prabha Illustrated</i> , Weekly (Madras) .. .. .    | 1,34,271           |
| <i>Andhra Sachitra Vara Patrika</i> , Weekly (Madras) .. .. . | 86,026             |

TABLE 1. DISTRIBUTION OF NEWSPAPERS ACCORDING TO STATE AND PERIODICITY (DECEMBER 31, 1965)

| State/Union Territory             | Dailies    | Tri- and bi-weeklies | Weeklies     | Fort-nightlies | Monthlies    | Quarterlies | Bi-monthlies, half yearlies, etc. | Annuals    | Grand Total  |
|-----------------------------------|------------|----------------------|--------------|----------------|--------------|-------------|-----------------------------------|------------|--------------|
| Andhra Pradesh .. .. .            | 21         | 4                    | 92           | 67             | 197          | 19          | 11                                | 2          | 413          |
| Assam .. .. .                     | 6          | 2                    | 29           | 10             | 22           | 5           | 2                                 | 2          | 78           |
| Bihar .. .. .                     | 10         | 2                    | 61           | 16             | 55           | 17          | 1                                 | 2          | 164          |
| Gujarat .. .. .                   | 26         | 2                    | 101          | 51             | 207          | 21          | 11                                | 2          | 421          |
| Jammu and Kashmir .. .. .         | 8          | 2                    | 32           | 3              | 1            | —           | —                                 | —          | 46           |
| Kerala .. .. .                    | 45         | —                    | 54           | 19             | 211          | 25          | 7                                 | 8          | 369          |
| Madhya Pradesh .. .. .            | 57         | 4                    | 109          | 19             | 60           | 14          | 4                                 | 1          | 288          |
| Madras .. .. .                    | 34         | 2                    | 86           | 110            | 362          | 61          | 29                                | 10         | 694          |
| Maharashtra .. .. .               | 81         | 7                    | 286          | 80             | 509          | 118         | 63                                | 57         | 1,207        |
| Mysore .. .. .                    | 47         | 5                    | 111          | 33             | 140          | 21          | 7                                 | 2          | 736          |
| Orissa .. .. .                    | 5          | —                    | 15           | 8              | 40           | 14          | 3                                 | —          | 85           |
| Punjab .. .. .                    | 31         | 3                    | 221          | 47             | 207          | 28          | 11                                | 6          | 554          |
| Rajasthan .. .. .                 | 12         | 1                    | 126          | 36             | 74           | 16          | 3                                 | 1          | 269          |
| Uttar Pradesh .. .. .             | 73         | 11                   | 477          | 108            | 348          | 56          | 27                                | 1          | 1,101        |
| West Bengal .. .. .               | 25         | 3                    | 184          | 108            | 400          | 129         | 49                                | 14         | 912          |
| Andaman & Nicobar Islands .. .. . | 1          | —                    | —            | —              | —            | —           | 1                                 | —          | 2            |
| Delhi .. .. .                     | 28         | —                    | 143          | 79             | 455          | 138         | 39                                | 7          | 887          |
| Goa .. .. .                       | 10         | —                    | 6            | 2              | 4            | —           | 1                                 | 1          | 24           |
| Himachal Pradesh .. .. .          | —          | —                    | —            | 1              | 3            | 1           | —                                 | —          | 5            |
| Manipur .. .. .                   | 5          | —                    | 1            | 2              | 3            | 1           | 1                                 | 1          | 14           |
| Nagaland .. .. .                  | —          | —                    | —            | —              | 1            | 1           | —                                 | —          | 2            |
| Pondicherry .. .. .               | —          | —                    | 2            | 1              | 3            | 10          | —                                 | —          | 16           |
| Tripura .. .. .                   | 2          | 1                    | 5            | 1              | —            | —           | —                                 | —          | 9            |
| <b>TOTAL .. .. .</b>              | <b>525</b> | <b>49</b>            | <b>2,141</b> | <b>807</b>     | <b>3,302</b> | <b>695</b>  | <b>270</b>                        | <b>117</b> | <b>7,006</b> |



TABLE 2. LANGUAGE AND PERIODICITY-WISE DISTRIBUTION ON DECEMBER 31, 1965

| Language              | Dailies    | Tri-and bi-<br>Weeklies | Weeklies     | Fort-<br>nightlies | Monthlies    | Quarter-<br>lies | Bi-monthlies,<br>half yearlies,<br>etc. | Annuaals   | Grand<br>Total |
|-----------------------|------------|-------------------------|--------------|--------------------|--------------|------------------|-----------------------------------------|------------|----------------|
| English .. .. .       | 56         | 5                       | 210          | 141                | 743          | 361              | 152                                     | 62         | 1,730          |
| Hindi .. .. .         | 148        | 10                      | 679          | 171                | 592          | 68               | 19                                      | 7          | 1,695          |
| Assamese .. .. .      | 1          | 1                       | 7            | 4                  | 10           | 2                | 1                                       | —          | 26             |
| Bengali .. .. .       | 8          | 4                       | 134          | 56                 | 205          | 66               | 15                                      | 3          | 491            |
| Gujarati .. .. .      | 32         | 3                       | 111          | 50                 | 238          | 26               | 12                                      | 5          | 477            |
| Kannada .. .. .       | 37         | 3                       | 85           | 20                 | 91           | 9                | 1                                       | 1          | 247            |
| Malayalam .. .. .     | 40         | —                       | 39           | 13                 | 145          | 5                | 2                                       | 4          | 248            |
| Marathi .. .. .       | 43         | 5                       | 147          | 30                 | 167          | 22               | 15                                      | 16         | 445            |
| Oriya .. .. .         | 4          | —                       | 12           | 7                  | 36           | 8                | 1                                       | —          | 68             |
| Punjabi .. .. .       | 17         | 1                       | 76           | 7                  | 82           | 5                | 1                                       | —          | 189            |
| Sanskrit .. .. .      | 1          | —                       | 2            | 3                  | 10           | 8                | 1                                       | —          | 25             |
| Tamil .. .. .         | 28         | —                       | 64           | 90                 | 211          | 9                | 3                                       | —          | 405            |
| Telugu .. .. .        | 12         | 2                       | 60           | 50                 | 150          | 5                | —                                       | —          | 279            |
| Urdu .. .. .          | 73         | 7                       | 308          | 80                 | 228          | 8                | 3                                       | 1          | 708            |
| Bilingual .. .. .     | 12         | 5                       | 146          | 56                 | 266          | 58               | 30                                      | 8          | 581            |
| Multi-lingual .. .. . | 1          | 2                       | 27           | 13                 | 66           | 17               | 11                                      | 8          | 145            |
| Others .. .. .        | 12         | 1                       | 43           | 16                 | 62           | 18               | 3                                       | 2          | 157            |
| <b>TOTAL .. .. .</b>  | <b>525</b> | <b>49</b>               | <b>2,141</b> | <b>807</b>         | <b>3,302</b> | <b>695</b>       | <b>270</b>                              | <b>117</b> | <b>7,906</b>   |

TABLE 3. CIRCULATION OF NEWSPAPERS (LANGUAGE &amp; PERIODICITY-WISE) DURING 1965

figs. in 000's.

| Language              | Dailies     | Tri- & bi-<br>Weeklies | Weeklies     | Fort-<br>nightlies | Monthlies    | Quarter-<br>lies | Bi-monthlies,<br>half-yearlies,<br>etc. | Annuaals   | Grand<br>Total |
|-----------------------|-------------|------------------------|--------------|--------------------|--------------|------------------|-----------------------------------------|------------|----------------|
| English .. .. .       | 1658        | 5                      | 1,338        | 415                | 1,707        | 322              | 130                                     | 53         | 5,627          |
| Hindi .. .. .         | 875         | 17                     | 1,155        | 235                | 1,693        | 30               | 60                                      | 10         | 3,971          |
| Assamese .. .. .      | 7           | 12                     | 61           | 5                  | 22           | 2                | 2                                       | —          | 111            |
| Bengali .. .. .       | 387         | 23                     | 359          | 47                 | 309          | 27               | 4                                       | 1          | 1,157          |
| Gujarati .. .. .      | 486         | 25                     | 404          | 57                 | 441          | 13               | 6                                       | 20         | 1,460          |
| Kannada .. .. .       | 220         | 5                      | 195          | 18                 | 162          | 7                | 1                                       | 1          | 609            |
| Malayalam .. .. .     | 691         | —                      | 521          | 19                 | 353          | 3                | 3                                       | 1          | 1,590          |
| Marathi .. .. .       | 627         | 4                      | 296          | 38                 | 368          | 11               | 22                                      | 75         | 1,439          |
| Oriya .. .. .         | 75          | —                      | 13           | 13                 | 42           | 3                | —                                       | —          | 146            |
| Punjabi .. .. .       | 41          | —                      | 78           | 6                  | 132          | 3                | —                                       | —          | 258            |
| Sanskrit .. .. .      | —           | —                      | —            | 2                  | 4            | —                | —                                       | —          | 6              |
| Tamil .. .. .         | 686         | —                      | 1,037        | 206                | 575          | 11               | 3                                       | —          | 2,518          |
| Telugu .. .. .        | 207         | 8                      | 306          | 53                 | 291          | 3                | —                                       | —          | 868            |
| Urdu .. .. .          | 322         | 5                      | 327          | 43                 | 269          | 3                | 1                                       | 2          | 970            |
| Bilingual .. .. .     | 36          | 8                      | 143          | 60                 | 314          | 42               | 9                                       | 5          | 618            |
| Multi-lingual .. .. . | 1           | —                      | 24           | 9                  | 85           | 17               | 3                                       | 5          | 144            |
| Others .. .. .        | 22          | —                      | 78           | 14                 | 50           | 18               | —                                       | 1          | 184            |
| <b>TOTAL .. .. .</b>  | <b>6323</b> | <b>112</b>             | <b>6,335</b> | <b>1,240</b>       | <b>6,727</b> | <b>515</b>       | <b>244</b>                              | <b>183</b> | <b>21,676</b>  |

TABLE 4. STATE-WISE DISTRIBUTION OF OWNERSHIP OF NEWSPAPERS AS ON DECEMBER 31, 1965

| State                      | Government |            | Indivi-<br>dual | Joint Stock<br>Company |                 | Firm or<br>Partner-<br>ship | Trust      | Co-<br>opera-<br>tive<br>Society | Society<br>or Asso-<br>ciation<br>includ-<br>ing reli-<br>gious<br>societies | Educa-<br>tional<br>Insti-<br>tutions | Inter-<br>national<br>organi-<br>sation | Organ of<br>Political<br>Party | Total        |
|----------------------------|------------|------------|-----------------|------------------------|-----------------|-----------------------------|------------|----------------------------------|------------------------------------------------------------------------------|---------------------------------------|-----------------------------------------|--------------------------------|--------------|
|                            | Central†   | State‡     |                 | Public<br>Ltd.         | Private<br>Ltd. |                             |            |                                  |                                                                              |                                       |                                         |                                |              |
| Andhra Pradesh .. .. .     | 3          | 11         | 268             | 5                      | 2               | 24                          | 8          | 1                                | 86                                                                           | 3                                     | ..                                      | 2                              | 413          |
| Assam .. .. .              | 1          | 4          | 36              | ..                     | 2               | 10                          | ..         | 3                                | 17                                                                           | 2                                     | ..                                      | 3                              | 78           |
| Bihar .. .. .              | 2          | 14         | 77              | 2                      | 10              | 14                          | 4          | 1                                | 39                                                                           | ..                                    | ..                                      | 1                              | 164          |
| Gujarat .. .. .            | 1          | 5          | 201             | 18                     | 4               | 44                          | 23         | 5                                | 106                                                                          | 10                                    | ..                                      | 4                              | 421          |
| Kerala .. .. .             | 11         | 8          | 199             | 17                     | 8               | 16                          | 7          | 4                                | 94                                                                           | 1                                     | ..                                      | 4                              | 369          |
| Madhya Pradesh .. .. .     | —          | 6          | 182             | 4                      | 5               | 15                          | 6          | 11                               | 39                                                                           | ..                                    | ..                                      | ..                             | 268          |
| Madras .. .. .             | 14         | 10         | 380             | 26                     | 24              | 47                          | 12         | 6                                | 167                                                                          | 5                                     | ..                                      | 3                              | 694          |
| Maharashtra .. .. .        | 18         | 12         | 524             | 54                     | 77              | 119                         | 62         | 19                               | 279                                                                          | 34                                    | ..                                      | 9                              | 1,207        |
| Mysore .. .. .             | 6          | 5          | 224             | 7                      | 14              | 15                          | 16         | 3                                | 72                                                                           | 2                                     | ..                                      | 2                              | 366          |
| Orissa .. .. .             | —          | 5          | 46              | ..                     | ..              | 5                           | 4          | 3                                | 21                                                                           | ..                                    | ..                                      | 1                              | 85           |
| Punjab .. .. .             | 1          | 17         | 421             | 3                      | 2               | 10                          | 10         | 7                                | 62                                                                           | 15                                    | ..                                      | 6                              | 554          |
| Rajasthan .. .. .          | —          | 10         | 199             | ..                     | 2               | 11                          | 2          | 1                                | 35                                                                           | 7                                     | ..                                      | 2                              | 269          |
| Uttar Pradesh .. .. .      | 9          | 38         | 771             | 17                     | 19              | 56                          | 17         | 6                                | 160                                                                          | ..                                    | ..                                      | 7                              | 1,100        |
| West Bengal .. .. .        | 22         | 14         | 532             | 7                      | 58              | 43                          | 7          | 4                                | 199                                                                          | 22                                    | ..                                      | 4                              | 912          |
| Delhi .. .. .              | 139        | 4          | 371             | 26                     | 30              | 50                          | 18         | 7                                | 195                                                                          | 26                                    | 8                                       | 12                             | 886          |
| Himachal Pradesh .. .. .   | ..         | 3          | 1               | ..                     | ..              | ..                          | ..         | ..                               | 1                                                                            | ..                                    | ..                                      | ..                             | 5            |
| Manipur .. .. .            | ..         | 1          | 3               | ..                     | ..              | ..                          | ..         | ..                               | 6                                                                            | ..                                    | ..                                      | 4                              | 14           |
| Tripura .. .. .            | ..         | ..         | 7               | ..                     | 1               | ..                          | ..         | 1                                | ..                                                                           | ..                                    | ..                                      | ..                             | 9            |
| Nagaland .. .. .           | ..         | ..         | 1               | ..                     | ..              | ..                          | ..         | ..                               | 1                                                                            | ..                                    | ..                                      | ..                             | 2            |
| Pondicherry .. .. .        | ..         | ..         | 4               | ..                     | ..              | ..                          | 8          | ..                               | 3                                                                            | ..                                    | ..                                      | 1                              | 16           |
| Goa .. .. .                | ..         | ..         | 14              | ..                     | ..              | 6                           | ..         | ..                               | 2                                                                            | ..                                    | ..                                      | ..                             | 22           |
| Andaman & Nicobars .. .. . | ..         | 2          | ..              | ..                     | ..              | ..                          | ..         | ..                               | ..                                                                           | ..                                    | ..                                      | ..                             | 2            |
| Jammu & Kashmir .. .. .    | ..         | ..         | 42              | ..                     | ..              | ..                          | 1          | ..                               | 1                                                                            | ..                                    | ..                                      | 2                              | 46           |
| <b>TOTAL .. .. .</b>       | <b>227</b> | <b>169</b> | <b>4,503</b>    | <b>186</b>             | <b>258</b>      | <b>435</b>                  | <b>205</b> | <b>82</b>                        | <b>1,585</b>                                                                 | <b>127</b>                            | <b>8</b>                                | <b>67</b>                      | <b>7,902</b> |

† Includes newspapers published by autonomous bodies under Central Govt.  
State Govt.

‡ Includes newspapers published by Local bodies under



TABLE 5

The following table shows the language-wise distribution by subject during 1965.

| Languages    |    |    |    |    | News & Current Affairs | Literary & Cultural | Religion & Philosophy | Women | Children | Film | Sports | Radio and Music | Education | Science | Medicine & Health | Art | Social Welfare | Commerce & Industry | Finance and Economics | Insurance, Banking & Co-operation. | Labour | Law & Public Administration | Agriculture and Animal Husbandry | Engineering & Technology | Transport and Communications | Total |
|--------------|----|----|----|----|------------------------|---------------------|-----------------------|-------|----------|------|--------|-----------------|-----------|---------|-------------------|-----|----------------|---------------------|-----------------------|------------------------------------|--------|-----------------------------|----------------------------------|--------------------------|------------------------------|-------|
|              |    |    |    |    |                        |                     |                       |       |          |      |        |                 |           |         |                   |     |                |                     |                       |                                    |        |                             |                                  |                          |                              |       |
| English      | .. | .. | .. | .. | 293                    | 94                  | 178                   | 10    | 6        | 41   | 13     | 8               | 48        | 69      | 142               | 16  | 41             | 248                 | 39                    | 29                                 | 44     | 110                         | 68                               | 115                      | 50                           | 1,662 |
| Hindi        | .. | .. | .. | .. | 705                    | 242                 | 171                   | 11    | 28       | 53   | —      | 5               | 22        | 7       | 37                | 1   | 97             | 27                  | 4                     | 13                                 | 24     | 16                          | 34                               | 1                        | 9                            | 1,507 |
| Urdu         | .. | .. | .. | .. | 331                    | 111                 | 93                    | 4     | 6        | 20   | 2      | 1               | 4         | —       | 21                | 1   | 20             | 20                  | 1                     | 14                                 | 33     | 12                          | 11                               | 9                        | 9                            | 624   |
| Bengali      | .. | .. | .. | .. | 150                    | 174                 | 55                    | 6     | 7        | 20   | 8      | 5               | 7         | 1       | 15                | 2   | 7              | —                   | —                     | 2                                  | 3      | 2                           | 4                                | 1                        | 4                            | 475   |
| Tamil        | .. | .. | .. | .. | 79                     | 84                  | 80                    | 4     | 10       | 35   | 1      | 3               | 4         | 1       | 11                | —   | 11             | 14                  | 1                     | 12                                 | 11     | 5                           | 7                                | 1                        | 2                            | 366   |
| Marathi      | .. | .. | .. | .. | 130                    | 78                  | 27                    | 5     | 16       | 5    | 1      | —               | 15        | —       | 5                 | 1   | 21             | 4                   | 1                     | 12                                 | 10     | 7                           | 12                               | 1                        | 1                            | 352   |
| Gujarati     | .. | .. | .. | .. | 74                     | 50                  | 50                    | 11    | 14       | 12   | —      | 1               | 21        | —       | 9                 | 2   | 2              | 3                   | —                     | 4                                  | 5      | 6                           | 4                                | 2                        | 1                            | 319   |
| Telugu       | .. | .. | .. | .. | 72                     | 23                  | 66                    | 2     | 7        | 21   | —      | 2               | 6         | —       | 11                | 1   | 8              | 3                   | —                     | 3                                  | 2      | 6                           | 2                                | —                        | —                            | 287   |
| Malayalam    | .. | .. | .. | .. | 10                     | 60                  | 48                    | 1     | 4        | 30   | —      | —               | 1         | —       | 3                 | 6   | 6              | 3                   | —                     | —                                  | 1      | —                           | 5                                | 1                        | —                            | 179   |
| Punjabi      | .. | .. | .. | .. | 71                     | 41                  | 31                    | 4     | 5        | 6    | —      | —               | —         | —       | 3                 | —   | 4              | —                   | —                     | —                                  | 2      | —                           | 2                                | —                        | 2                            | 171   |
| Kannada      | .. | .. | .. | .. | 57                     | 34                  | 32                    | —     | 2        | 5    | —      | —               | —         | —       | 2                 | 2   | 2              | 3                   | —                     | 2                                  | 1      | 2                           | 5                                | —                        | —                            | 165   |
| Oriya        | .. | .. | .. | .. | 16                     | 20                  | 8                     | 1     | 3        | 1    | —      | —               | —         | —       | 2                 | —   | 4              | 1                   | —                     | 1                                  | —      | 1                           | 1                                | —                        | —                            | 61    |
| Assamese     | .. | .. | .. | .. | 7                      | 6                   | —                     | 2     | 2        | —    | —      | 1               | 1         | —       | —                 | —   | —              | 1                   | —                     | —                                  | 1      | —                           | —                                | —                        | —                            | 24    |
| Sanskrit     | .. | .. | .. | .. | 1                      | 19                  | 2                     | —     | —        | —    | —      | —               | —         | —       | —                 | —   | —              | —                   | —                     | —                                  | —      | —                           | —                                | —                        | —                            | 22    |
| Bilingual    | .. | .. | .. | .. | 162                    | 51                  | 95                    | 3     | 5        | 11   | 3      | 2               | 31        | 4       | 28                | 1   | 20             | 20                  | 1                     | 14                                 | 33     | 12                          | 11                               | 9                        | 9                            | 525   |
| Multilingual | .. | .. | .. | .. | 31                     | 17                  | 26                    | —     | 4        | 2    | —      | —               | 6         | —       | 13                | —   | 5              | 8                   | —                     | 5                                  | 17     | 3                           | —                                | 2                        | 3                            | 142   |
| Others       | .. | .. | .. | .. | 38                     | 38                  | 28                    | 1     | 2        | 7    | —      | 11              | 1         | —       | —                 | —   | 2              | —                   | —                     | —                                  | 1      | —                           | 1                                | —                        | 1                            | 131   |
| TOTAL        | .. | .. | .. | .. | 2,227                  | 1,142               | 990                   | 65    | 121      | 269  | 28     | 39              | 173       | 82      | 302               | 33  | 252            | 357                 | 47                    | 101                                | 188    | 182                         | 167                              | 142                      | 95                           | 7,002 |

### Small Newspapers

The report of the Enquiry Committee on Small Newspapers was placed before the Lok Sabha by the Union Minister for Information and Broadcasting on March 9, 1966.

In arriving at the definition of a small newspaper, the committee took into consideration factors like the growth in population, rise in literacy, growing interest in public affairs and the need for small newspapers attaining economic viability. Considering the financial difficulties faced by small newspapers, the report desires that some relief in import duty on newsprint required by small newspapers, either by removing the duty altogether or by reducing it, should be given. The Central and State Governments should exempt the newsprint and white printing paper required by small newspapers from sales-tax, municipal octroi or any other duty of that kind.

The Committee has suggested in their report that Article 19 of the Constitution should be amended to make possible the implementation of the Newspaper (Price and Page) Act since the Supreme Court has struck down the price-page schedule. In the meantime, the Government should immediately enforce the schedule under the Essential Commodities Act.

The Committee has recommended that the Press and Registration of Books Act, 1867, should be amended to fix the responsibility for the publication of a journal on the publisher and the editor alone and to eliminate the responsibility of the printer.

The Committee is of opinion that newspaper consignments should be given preferential treatment where off-loading is unavoidable from planes. To facilitate the development of small newspapers, their representatives should also be given suitable concession in airfares by the Indian Airlines Corporation and other carriers. The postage rate should also be reduced to one paise per single copy weighing upto 50 gms. Fifty per cent of the current and future allocations of foreign exchange for the import of printing machinery should be set apart for the requirements of small newspapers and periodicals. The State Trading Corporation could also explore the possibilities of importing second-hand machines to save foreign exchange. The classification of small newspapers should be on the basis of circulation not exceeding 20,000 copies and gross revenue not exceeding Rs. 12.5 lakhs

in the case of dailies and 15,000 and Rs. 5 lakhs respectively in other publications.

**State Awards** :—Separate annual State awards should be instituted to encourage improvement in the production standards of the small newspapers and periodicals in three categories for each Indian language given in Schedule VIII of the Constitution. There should be three prizes in each category—Rs. 5,000; Rs. 2,000 and Rs. 1,000 for dailies; Rs. 3,000; Rs. 1,000 and Rs. 750 for weeklies and Rs. 2,000; Rs. 1,000 and Rs. 500 for fortnightly and monthlies.

The committee has recommended that a small newspaper should be recognised as a small industrial unit entitled to the facility of receiving machinery on a hire-purchase basis through the National Small Industries Corporation. Alternatively a separate finance corporation should be set up to provide credit facilities to small newspapers for buying printing machinery, newsprint and for building etc. The committee has suggested that 50 per cent of the expenditure on advertisements from Government should be apportioned to small newspapers and periodicals.

As the small newspapers are unable to avail of the services of established news services which they find expensive, the report suggested that an Indian News Agency should be entrusted by the Government with the task of preparing a 1,500 word news bulletin and news feature to be broadcast twice or thrice during the day by AIR. The same bulletin could simultaneously be given over to different regional stations of AIR over the creed.

### PRESS LAWS

In general the laws which affect the Press in India today are Press and Registration of Books Act, 1867; the Indian Official Secrets Act No. XIX of 1923; Sections 124-A, 153-A, 171-G, 255, 292, 293, 294-A, 295-A, 489-A, 499-502 and 505 of the Indian Penal Code; Sections 99-A-99-G and 108 of the Criminal Procedure Code; Sections 81, 84 and 87 of the Indian Evidence Act No. I of 1872; Sections 11, 12, 44, 52 of the Customs Act No. LII, 1902; Sections 19, 20, 26, 27-A-27-D of the Indian Post Office Act No. VI of 1898; Section 5 of the Indian Telegraph Act No. XIII of 1885; Sections 40, 52 and 53(1)(b) of the Patents and Designs Act No. II of 1911; the Police (Incitement to Disaffection) Act, 1922; Section 69 of the Trade Marks Act No. V of 1940;

the Contempt of Courts Act, 1952 (Act XXXII of 1952); The Indian Post Office (Amendment) Act LII of 1960; Article 19(1) (a) and (g) and Clause (2) and (6) of the same Article of the Constitution of India. The amendment to Article 19 (1)(g) reads: "Nothing in Sub-clause (A) of Clause 1 (the Citizen's Right to Freedom of Speech and Expression) shall affect the operation of any existing law or prevent the State from making any law in so far as such law imposes reasonable restrictions on the exercise of the right conferred by the said sub-clause in the interest of the sovereignty and integrity of India, the security of the State, friendly relations with foreign States, public order, decency, morality, or in relation to contempt of court, defamation or incitement to an offence (Arts. 105 and 194 of the Constitution of India); the Tax on Newspapers (Sales and Advertisements) Repeal Act No. XXVIII of 1951; S. 7 of the Collection of Statistics Act (XXXII of 1953); the Press and Registration of Books (Amendment) Act No. 55 of 1955.

The Delivery of Books (Public Libraries) Act 27 of 1954.

The Drugs and Magic Remedies (Objectionable Advertisements) Act 21 of 1954. This Act controls the advertisement of drugs in certain cases and prohibits the advertisement for certain purposes of remedies alleged to possess magic qualities.

The Criminal Procedure Amendment Act contains a section (198B) which empowers the Government to prosecute a newspaper for defamation of public servants.

The Working Journalists (Industrial Disputes) Act (No. 1 of 1955). The Act extends the provisions of the Industrial Disputes Act, 1947 to working journalists.

The Parliamentary Proceedings (Protection of Publication) Act (No. 24 of 1956). It protects the publication of a substantially true report of any proceedings of either House of Parliament.

Section 11 of the Prize Competitions Act (Act 2 of 1955) contains rules regarding printing and publishing tickets, coupons, etc. in connection with prize competitions.

The Working Journalists Conditions of Service and Miscellaneous Provisions Act (Act 45 of 1955) regulates conditions of service of working journalists.



The Punjab Special Powers (Press) Act was passed on 5th September 1955. It empowers the authorities to control the irresponsible activities of the press indulging in and fostering communal disharmony, dissemination of 'violent' news and pernicious propaganda of a communal nature.

The Newspaper (Price and Page) Act 45 of 1956.

The Young Persons (Harmful Publications) Act No. 93 of 1956.

The Copyright Act 14 of 1957.

The Indian Post Office (Amendment) Act No. 7 of 1958.

The Working Journalists (Fixation of Rates of Wages) Act 29 of 1958.

The Press and Registration of Books (Amendment) Act No. 26 of 1960.

The Newspaper (Price and Page) Continuance Act No. 36 of 1961.

The Indian Penal Code (Amendment) Act No. 41 of 1961.

The Drugs and Magic Remedies (objectionable advertisements) Amendment Act No. 42 of 1961.

Defence of India Act No. 51 of 1962.

The Working Journalists Amendment Act No. 65 of 1962.

The Press and Registration of Books (Amendment) Act No. 16 of 1965.

The Press Council Act No. 34 of 1965.

### NEWSPAPERS

The following is a list of some English dailies with the names of the editors :

*Amrita Bazar Patrika*, Tushar Kanti Ghosh : Calcutta.

*Assam Tribune*, Satish Ch. Kakati : Gauhati.

*Deccan Chronicle*, K. R. Pattabhiram (*Mg. Ed.*) : Secunderabad.

*Deccan Herald (Mg. Editor)* : K. A. Nettakalappa. (*Editor*) : V. B. Menon : Bangalore.

*Eastern Times*, J. B. Patnaik : Cuttack.

*Economic Times*, P. S. Hariharan : Bombay.

*Evening News of India*, N. J. Nanporia : Bombay.

*Financial Express*, G. M. Laud : Bombay.

*Free Press Bulletin*, A. B. Nair : Bombay.

*Free Press Journal*, A. B. Nair : Bombay.

*Hindu*, G. Narasimhan (*Mg. Editor*); G. Kasturi (*Editor*) : Madras.

*Hindustan Times*, S. Mulgaokar (*Editor-in-Chief*) : New Delhi.

*Hitavada*, A. D. Mani (*Chief Editor*) : Nagpur.

*Indian Express*, Frank Moraes (*Editor-in-Chief*) : Bombay, Delhi, Madras, Madurai, Vijayawada and Bangalore.

*Indian Nation*, Braj Nandan Azad : Patna.

*Leader*, M. Chatterji : Allahabad.

*Mail*, V. P. V. Rajan : Madras.

*Nagpur Times*, C. B. Bakhale : Nagpur.

*National Herald*, M. Chalapathi Rau : Lucknow.

*Nashind Times*, K. S. K. Menon : Panaji.

*Patriot*, E. Narayanan : New Delhi.

*Pioneer*, S. N. Ghosh : Lucknow.

*Searchlight*, Subhas Chandra Sarker : Patna.

*Statesman*, Alfred Evan Charlton : Calcutta and New Delhi.

*Times of India*, N. J. Nanporia : Bombay and New Delhi.

*Tribune*, R. Madhavan Nair : Ambala.

### INDIAN NEWS AGENCIES

The following list is not exhaustive :

Press Trust of India (P.T.I.).

357, Dr. Dadabhai Naoroji Road, Bombay.

NAFEN—Near and Far East News (Asia) Ltd.,

Temple Bar Bldg., 70, Forbes Street, Bombay 1.

Dhiman Press of India,

Ludhiana (Punjab)

Rao's Press Features

160, VII Block, Jayanagar, Bangalore 11.

United News of India, 9, Rafi Marg, New Delhi 1.

Hindustan Samachar, 17-A, Shanker Market, New Delhi 1.

India News & Feature Alliance, Jeevan Deep Bldg., Parliament St., New Delhi 1.

India Press Agency, IENS Bldg., Rafi Marg, New Delhi.

Eastern India News Agency, 199/A, Keshab Chandra Sen St., Calcutta 9.

Newsfeatures of India, Anand Kunj, Linking Road, Bombay-54.

Publication Syndicate, 14, Hanuman Road, New Delhi 1.

### FOREIGN NEWS AGENCIES

The following list is not exhaustive :

Agence France Presse : Bureau De New Delhi, 1, Curzon Road, New Delhi.

Associated Press (of America) : 19, Narendra Place, New Delhi.

Reuters : 27, Prithviraj Road, New Delhi.

Tass News Agency of U.S.S.R. : 155, Jor Bagh, New Delhi 3.

United Press International : I.E.N.S. Building, Rafi Marg, New Delhi.

### INFORMATION SERVICES

#### Indian Information Service

Indian Government publicity work is carried out chiefly through the following units of the Ministry of Information and Broadcasting :

1. All-India Radio, 2. Press Information Bureau, 3. Publications Division, 4. Films Division, 5. Directorate of Advertising and Visual Publicity, 6. Research and Reference Division, 7. Directorate of Field Publicity, 8. Song and Drama Division.

There are regional offices of the Bureau in Bombay, Calcutta, Madras, Bangalore, Ernakulam, Ahmedabad, Lucknow, Jullundur, Gauhati, Cuttack, Nagpur, Patna, Jaipur, Srinagar, Varanasi, Hyderabad, Bhopal, Poona and Jammu.

There is also a Defence Wing for publicity for the Armed Forces.

The Bureau also has Information Centres at New Delhi, Jullundur and Srinagar which are entirely run by the Union Ministry of Information and Broadcasting.

The Bureau's news, feature and reference services are provided in the following languages : English, Hindi, Urdu, Gujarati, Marathi, Tamil, Bengali, Telugu, Malayalam, Assamese, Oriya, Punjabi and Kannada.

Photographs and ebonoid blocks are also issued to the press.

The Bureau keeps the Government informed of the views and comments in the press on Government policy and actions.

Principal Information Officer : M. L. Bhardwaj

### DIRECTORATE OF ADVERTISING AND VISUAL PUBLICITY

The Directorate of Advertising & Visual Publicity functions as the central organization for the Press advertising and visual publicity campaigns of the various Ministries of the Government of India (excepting Railways) their attached and subordinate offices and a number of autonomous undertakings of the Government of India.

The Directorate has an Exhibition Division which, through its central and regional units, organises exhibitions depicting progress of the Five-Year Plans and other themes of national importance.

Director : B. Mukhopadhyay.

### British Broadcasting Corporation

Post Box No. 109, New Delhi.

### British Information Services (Chanakypuri, New Delhi).

Director : B. McC. Samples.

Deputy Director : G. R. Gauntlett.

Editor-in-Chief : John Smallwood.

Regional Information Officer & Visual Aids Officer : Miss J. M. Murdoch.

Bombay Office : (Mercantile Bank Building, Mahatma Gandhi Road).

Regional Information Officer : W. S. Ashford.

Calcutta Office : (1, Harington Street).

Regional Information Officer : L. R. H. Rowdon.

Madras Office : (150A, Mount Road).

Regional Information Officer : C. Le. G. Eaton.

### U. S. Information Service

Bahawalpur House, Sikandra Road, New Delhi.

Country Public Affairs Officer and Minister Counsellor for Public Affairs : William D. Miller.

Deputy Country Public Affairs Officer and Attache : David G. Briggs.

Executive Officer and Attache : Fred D. Hawkins.

Chief Information Officer and Attache : Lawrence P. Dalcher.

Chief Cultural Affairs Officer and Attache : Dr. Robert R. R. Brooks.

### BOMBAY OFFICE

("International", 16, Queen's Road Estate.)

Director, Herbert Baumgartner.

Chief Cultural Affairs Officer, Manning Hawthorne.

### CALCUTTA OFFICE

(7, Jawaharlal Nehru Road, Calcutta 13.)

Public Affairs Officer : Heath Bowman.

Information Officer : Philip F. Gould.

Cultural Affairs Officer : Robert J. Boycan.

### MADRAS OFFICE

(158, Mount Road, Madras 2.)

Public Affairs Officer, Paul K. Morris.

Information Officer, Eddie Deerfield.

Press Officer, Peter J. Reuss.

Cultural Affairs Officer, Fentress Gardner.

### U.S. INFORMATION SERVICE LIBRARY

24, Curzon Road, New Delhi.

### AMERICAN LIBRARY (USIS)

150-B, Mount Road, Madras 2.

### American Cultural Centre (USIS)

Main Road, Trivandrum.

### American Cultural Centre (USIS)

Sri Narasimha Raja Square, Bangalore 2.

### PRESS ASSOCIATIONS, SOCIETIES

All-India Newspaper Editors' Conference, 50-51, Theatre Communication Bldg, Connaught Place, New Delhi; *President*, A. K. Jain; *Secretary General*, Kuldip Nayar. *Hon. Treasurer*, Inderjit.

Indian and Eastern Newspaper Society, I.E.N.S. Bldgs., Rafi Margh, New Delhi 1 : *President* : C. G. K. Reddy (*Sport and Pastime*); *Dy. President* : J. M. D'Souza (*Illustrated Weekly of India*); *Vice-President* : M. L. Ganguli (*Jugantar*) *Hony. Treasurer* : Yunus Dohvi (*Shama*); *Secretary* : R. D. Seth.

Indian Federation of Working Journalists, Flat No. 29, New Central Market, Connaught Circus, New Delhi 1. *President* : A. C. Banerjee, *Secretary-General*, L. Meenakshi Sundaram; *Treasurer*, Kedar Ghosh.

Indian Languages Newspapers' Association (Janmabhoomi Bhavan, Ghoga Street, Fort, Bombay).

Press Owners' Association, Bombay (196-B, Gaiwadi, Girgaon, Bombay).

Southern India Journalists' Federation (16, Ritchie Street, Mount Road, Madras 2).



### FEATURE SYNDICATES

**King Features Syndicate** (235, East 45th Street, New York 17): *Agents*: Advertising Films of India Private Ltd., 4th Floor, Khorshed Bldg., Sir Pheroze Shah Mehta Road, Bombay 1 and 21, Princep Street, Calcutta 13.

### PRESS CLIPPINGS

**All-India Press Cutting Service**: D-2, Amerchand Mansions, Mayo Road, Bombay 1.

**Indian Press Service**: 18A, Friends Colony, New Delhi 14.

**The Asiatic Press-Clippings Service**: P. B. No. 1663, 91, The Mall, Kingsway, Delhi-9.

**International Clipping Service**: Lakshmi Building, Sir Pheroze Shah Mehta Road, Bombay 1.

**Oriental Languages Bureau**: Lakshmi Building, Sir Pheroze Shah Mehta Road, Fort, Bombay 1.

**The Universal Press Service**: 34, General Patters Road, Madras 2.

### PRESS PHOTO AGENCIES

**Bombay Photo Stores Private Ltd.**: 33-34, Park Mansions, Park Street, Calcutta.

**News Photo Flash**: 11-12, Scindia House, New Delhi.

**Press Photo Bureau**: 374, Pycrofts Road, Royapetta P.O., Madras 14.

### Wage Boards for Working Journalists & Non-Journalists

The second Wage Board for working journalists constituted by the Government of India on November 13, 1963 under the chairmanship of G. K. Shinde and the first Wage Board for the non-journalist employees of newspaper establishments under the chairmanship of Mr. G. K. Shinde constituted in Feb. 1964, published their tentative proposals in October and Dec. 1966 respectively for comments by the parties concerned. The final recommendations are expected to be made shortly for consideration by the Govt. of India.

There is also a Registrar of Newspapers who makes an annual report based on the terms of reference mentioned in the Journalist Act.

The Advertising Council of India has also been set up.

### PRESS COUNCIL

The Press Council Bill was passed in Nov. 1965. The President has given his assent. The object of the Council shall be to preserve the liberty of the press and maintain and improve the standards of newspapers in India. The Council may, in furtherance of its object, perform the following functions (a) to help newspapers to maintain their independence; (b) to build up a code of conduct for newspapers and journalists in accordance with high pro-

fessional standard; (c) to ensure on the part of newspapers and journalists the maintenance of high standards of public taste and foster a due sense of both the rights and responsibilities of citizenship; (d) to keep under review any development likely to restrict the supply and dissemination of news of public interest and importance; (e) to keep under review any assistance received by any newspaper or news agency in India from foreign sources; (f) to promote the establishment of such common service for the supply and dissemination of news to newspapers as may, from time to time, appear to it to be desirable; (g) to provide facilities for the proper education and training of persons in the profession of journalism; (h) to promote a proper functional relationship among all classes of persons engaged in the production or publication of newspapers; (i) to study developments which may tend towards monopoly or concentration of ownership of newspapers, including a study of the ownership or financial structure of newspapers, and if necessary, to suggest remedies therefor.

The Press Council was set up in Nov. 1966 with Justice J. R. Mudholkar as Chairman and 25 members, 19 belonging to various newspapers and the others from the fields of special knowledge science, literature and culture—two members of Lok Sabha nominated by the Speaker and one from Rajya Sabha nominated by the Chairman.

## AUTOMOBILE INDUSTRY

THE world's automobile industry in its present form is essentially a twentieth century development. One of the first automobiles to be seen in the streets of Bombay was owned by Shri Jamshedji Tata, the pioneer industrialist of India.

It would appear that the first motor car was imported into India in 1898. The practice to the end of the first world war was to purchase complete motor vehicles directly from abroad or through agents or dealers in India.

It was in 1920 that two automobile manufacturers, one from the U.S.A. and the other from Canada, set up local companies to do business in motor cars and trucks.

General Motors India Ltd. commenced assembling trucks and cars from components and parts imported from the U.S.A. in c.k.d. condition in their factory at Bombay in 1928. The first car came out of the assembly line on Dec. 4, 1928. The Ford Motor Company of India Ltd. commenced c.k.d. assembly of automobiles at Madras in 1930, and at Bombay and Calcutta in 1931.

Addison and Co., Ltd. commenced c.k.d. assembly of cars and trucks at Madras in 1936.

In addition to the above, other firms in the field were: Standard Motor Products of India Ltd., Madras; Automobile Products of India Ltd., Bombay; Ashok Motors Ltd., Madras; Dewar's Garage and Engineering Works, Calcutta; Peninsular Motor Corporation Ltd., Calcutta; French Motor Car Co., Ltd., Bombay; and Mahindra and Mahindra Ltd., Bombay.

The total annual assembling capacity of the firms mentioned above was estimated around 84,014 cars and commercial vehicles.

The importance of establishing an automobile industry was recognised by the Government of India in 1945 when a Panel on Automobiles and Tractors was constituted to make recommendations on the development or manufacture of automobiles and tractors in India. However, no definite action seems to have been taken on the recommendations of this Panel which were submitted in 1947. In the statement of Industrial Policy made in the Indian Parliament in April, 1948, automobiles and tractors were classified

among industries of importance, which would be subject to regulation and control by the Central Government. In 1949, Government of India decided that import of motor vehicles should be allowed only in completely knocked down condition (c.k.d.). At the same time, further increase in assembling capacity beyond what was in existence prior to 1948, was not encouraged. From April 1, 1950, customs duty on certain parts which were being manufactured in the country was raised pending enquiry into the question of grant of protection and assistance to the industry.

In 1944, two companies, Hindustan Motors Ltd., Calcutta, and Premier Automobiles Ltd., Bombay, with an authorised capital of Rs. 20 crores and Rs. 10 crores respectively, were established with a programme for progressive manufacture of complete automobiles.

Premier Automobiles Ltd. established their factory at Kurla, Bombay in March 1947. Hindustan Motors Ltd. commenced operations at Uttarpara near Calcutta in 1948.

In pursuance of an assurance given by Government during the debate in Parliament in March, 1950, an Automobile Expert Committee was appointed in June 1950 to examine the position in regard to the inclusion of particular parts of automobiles in categories bearing different rates of import duty and to make recommendations of their classification. The main recommendations of this Committee were accepted by the Government and given effect to in March 1951. Certain other measures were also taken to promote the development of the industry. For effective standardisation of types and models of vehicles to be imported into the country, restriction was imposed on the assemblers requiring them to import only three types of cars and trucks from each of the dollar and soft currency areas. In March 1952, the Government of India referred to the Tariff Commission for enquiry and report the question of the grant of protection and assistance towards encouragement of automobile industry in India. The Commission submitted its Report in 1953.

In 1953 Government accepted the recommendations of the Tariff Commission that out of the 12 manufacturers and/or assemblers in the country only 5 who had manufacturing

programmes should be allowed to assemble and progressively manufacture vehicles in the country except in the case of Jeep type vehicles. The remaining units which were pure assemblers curtailed their operations by stages and eventually closed down their assembly shops. Of the five approved manufacturers, one could not proceed with their programme of manufacture and consequently the approval was withdrawn.

Ashok Motors Ltd. one of the approved manufacturers subsequently entered into an agreement with Leyland Motors Ltd., England and converted themselves into a new company known as Ashok-Leyland Ltd. for the manufacture of commercial vehicles of G. V. W. of about 10 tons and above. Mahindra & Mahindra Ltd. submitted a programme for the manufacture of jeeps which was approved by Government. Approval was also granted to a new unit, viz. Tata Engineering & Locomotive Co., Ltd., for the manufacture of diesel commercial vehicles in collaboration with Daimler-Benz A.G. of West Germany. For automobile diesel engines, Government recognised Simpson & Co., Ltd., Madras, and the Automobile Products of India Ltd., Bombay, as approved manufacturers of Perkins and Meadows automobile diesel engines these two makes of engines being the power units for diesel chassis (less engines) manufactured by Hindustan Motors Ltd., and Premier Automobiles.

### MANUFACTURERS

With the additions mentioned above, the country had thus eight approved manufacturers of automobiles and/or engines by the end of 1955:

1. Hindustan Motors Ltd., Calcutta:—Hindustan Cars and Studebaker trucks now replaced by Bedford trucks.
2. Premier Automobiles Ltd., Bombay:—Flat Cars and Dodge and/or Fargo trucks.
3. Standard Motor Products of India Ltd., Madras:—Standard Cars.
4. Ashok-Leyland Ltd., Madras:—Leyland Trucks.
5. Mahindra & Mahindra Ltd., Bombay:—Willy's jeeps (now styled as Kaiser jeeps).



6. Tata Locomotive & Eng. Co. Ltd., Bombay:—Tata-Mercedes-Benz Trucks.
7. Simpson & Co., Ltd., Madras:—Perkins Engines.
8. Automobile Products of India Ltd., Bombay:—Meadows Engines.

Though the Government had originally accepted the recommendations of the Tariff Commission (1953) for the manufacture of (a) Baby and Big cars as well by Hindustan Motors Ltd., (b) Big cars as well by Premier Automobiles Ltd., and (c) medium cars as well by Standard Motor Products of India Ltd., certain policy changes were later made by the Government. The difficult foreign exchange situation that developed by the end of 1956 and in the beginning of 1957 necessitated these changes with the result that the types and makes of vehicles to be developed were rationalised to only 3 passenger cars, 3 medium type trucks, one heavy truck, one jeep and one light truck.

**Cars:** Three manufacturers of cars:

1. Standard Ten, 2. Fiat 1100, 3. Hindustan Ambassador/Land Master.

**Trucks:** One manufacturer of:

- (a) Trucks: Light—1 ton: Dodge/Fargo (Petrol or Diesel).

Three manufacturers of:

- (b) Trucks: Medium—3/5 tons: 1. Dodge/Fargo (with petrol or diesel engine), 2. Mercedes-Benz (with diesel engine), 3. Bedford.

One manufacturer of: (c) Trucks: Heavy: Leyland Comet, Tiger/Titan.

Three manufacturers of:

- Diesel Engines (for medium trucks): 1. Perkins—P6, 2. Meadows. Both suitable as original fitment for Dodge and Bedford Trucks, and 3. Tata Mercedes Benz.

One manufacturer of:

- Jeeps: Kaiser Jeeps (formerly called Willy's jeeps).

Thus the country had 3 models and 3 manufacturers for cars and medium trucks and one model and one manufacturer for light trucks, heavy trucks and jeeps in 1957.

The range of products in the field of light commercial vehicles ('trucks') was augmented in the year 1958 by the introduction of the Tempo Hanseat 1 ton three-wheeler commercial vehicle of Bajaj Tempo.

Messrs. Automobile Products of India Ltd., discontinued the manufacture of Meadows automobile diesel engines early in 1961 and the rights for the same were acquired by Messrs. The Premier Automobiles Ltd. The latter are now manufacturing Meadows engines and a percentage of their Dodge/Fargo diesel trucks are fitted with this make of engine.

Messrs. Standard Motor Products of India Ltd., Madras are now manufacturing Standard Heralds instead of Standard '10.'

#### MANUFACTURE IN DEFENCE ESTABLISHMENTS

The Ministry of Defence also entered the field of manufacture through an agreement with the M.A.N. of West Germany for the manufacture of multi-fuel medium trucks by the ordnance factories. This was in Sept. 1958. The rate of output was then reckoned at 2,000 per annum. It was understood that considerable saving would accrue to the Ministry.

The 'Shaktiman' truck, as the truck has been called, has advantages over other trucks which the Army have been getting like increased payload by 30 per cent, multi-fuel engine and other special features which will make it a sturdy cross-country vehicle more suitable than other kinds for military purpose.

In 1960-61, Government entered into a collaboration agreement with the manufacturers of Nissan trucks in Japan for the progressive manufacture of this make of vehicle in the ordnance establishments in India.

The manufacture of Shaktiman trucks in India commenced in June 1959. The manufacture of Nissan 1-ton trucks commenced in the year 1961-62 and the manufacture of Nissan petrol jeep type vehicles commenced in 1962-63.

Only 803 Shaktiman trucks were manufactured in 1961-62, the third year of production of these trucks, as against the planned output of 2,000 units. The indigenous content was of the order of 50 per cent against an anticipated indigenous content of 70 per cent in the third year. The total production of tracked vehicles in the Ordnance factories in India in the year 1962-63 was 2,733. Of these, 621 were 3-ton Shaktiman trucks, 1,046 Nissan 1-ton trucks and 1,066 Nissan (Jonga) Jeeps.

The manufacture of Nissan petrol trucks and Nissan jeep type vehicles received a fillip since the declaration of emergency. Early in 1964, a project report was drawn up for increasing the manufacture of Nissan jeep type vehicles and Nissan 1-ton trucks as these vehicles were expected to be useful for high altitude operation.

The unprovoked and flagrant aggression on India's northern and north-eastern frontiers by China in the autumn of 1962 necessarily brought in its wake a reappraisal of the transport requirements of the Defence departments.

Production of vehicles in the Ordnance establishments was stepped up. Simultaneously, a sizeable percentage of the production of the vehicles in the civilian factories commenced to be taken over by the Government for the Defence needs of the country.

The target of production of Shaktiman trucks in the Ordnance factories was reduced from 2,000 to 1,500 per annum. Against this, the production during 1963-64 was 1,030 and during 1964-65, it was 1,094. The assembly of the truck is done at the gun-carriage factory. 1,350 trucks were produced in the year 1965-66 and the indigenous content at the end of the calendar year 1965 was reported to be 70 per cent.

Components and parts, both finished and semi-finished, for Shaktiman are imported from Germany whereas those for Nissan are imported from Japan. As the capacity of the Ordnance factories is utilised for vital items of high priority, Shaktiman and Nissan vehicles manufactured in the Defence Sector are having increasing quantum of components and parts produced in the civilian sector. 3,600 Nissan vehicles were produced in the year 1965-66 with an indigenous content of 38 per cent. A vehicle factory is being established at Jabalpur for the manufacture of 6,000 Shaktiman 3-tonners and 7,200 Nissan jeeps and trucks per annum. The indigenous content of Shaktiman/Nissan trucks is expected to reach 90 per cent in about a period of two years from the date of commencement of manufacture in the new factory to be established at Jabalpur.

#### DEVELOPMENT COUNCIL FOR AUTOMOBILES

In 1959, the Government of India constituted a Development Council for Automobiles, Automobile Ancillary Industries and Transport Vehicle Industries. The Council is reconstituted once in every two years. The reconstituted Council of 1963 was entrusted with the additional responsibility of looking after tractor and earth-moving equipment industries. Subsequently, the road roller industry was also brought within the purview of this Council. The Council was recently reconstituted in March 1966 and the industries entrusted to its care include Automobiles, Automobile Ancillary Industries, Transport Vehicle Industries, Tractors, Earth-Moving equipment and Internal Combustion Engines.

The authorised capital of Automobile and Transport Vehicle Manufacturing Firms was about Rs. 65 crores with a paid-up capital of about Rs. 35 crores, early in 1961, at the end of the Second Five Year Plan period. The investment in Plant, Machinery and Buildings was over Rs. 30 crores. Of this total capital, the investment in the Ancillary Industry was about Rs. 6 crores.

The Development Council for Automobiles, etc., had estimated that the total investment in the industry by the end of the Third Plan period would be Rs. 130 crores, Rs. 100 crores by the Main Manufacturers and Rs. 30 crores by the Ancillary Sector. The Council had estimated the total value of production at the end of the Third Plan period at well over Rs. 260 crores.

The targets laid down in the Third Five Year Plan and the production achieved in the final year of the Third Five Year Plan are given below:

| Type of motor vehicle                        | Capacity target 1965-66 | Production 1965-66           |
|----------------------------------------------|-------------------------|------------------------------|
| Cars .. .. .                                 | 30,000                  | 25,029                       |
| Jeeps .. .. .                                | 10,000                  | 10,385                       |
| Commercial Vehicles ..                       | 60,000                  | 35,437                       |
| Motor cycles, scooters and three wheelers .. | 60,000                  | 42,823<br>(excluding mopeds) |
| Ancillary Industries ..                      | Rs. 250 million         | Rs. 450 million              |

In the beginning of the Third Plan period, emphasis was rightly placed on providing foreign exchange for the import of machinery necessary to increase the indigenous content to 90 per cent. Foreign Exchange allocations and Aid arrangements for imported plant and machinery for achieving the indigenous content of 90 per cent and for the planned expansion programme, were settled by the middle of 1964. The expansion programme for motor cars was, however, kept in abeyance. Most of the plant and machinery required by the Main Manufacturers and by the Ancillary Industry for achieving 90 per cent indigenous content were received and installed by the end of the Third Plan period. Thus, there has been a considerable increase in the authorised capital, paid-up capital, number of units in the ancillary sector and investment in plant, machinery and buildings in the automobile and ancillary industries during the last five years.

The order of production for the different makes of commercial vehicles at the end of the Third Five Year Plan was expected to be as follows:—Tata Mercedes Benz 24,000 Nos.; Dodge/Fargo vehicles 15,000 Nos.; Bedford vehicles 15,000 Nos.; Ashok Leyland Comets 6,000 Nos.

Messrs. Premier Automobiles Ltd. and Messrs. Hindustan Motors Ltd. have been granted licences to manufacture their own make of diesel engines while at the same time, Messrs. Simpson & Co. Ltd. have been granted a licence to manufacture a medium commercial vehicle chassis of their choice. The Bedford diesel engine project has made some progress whereas the other two projects appear to be still in the negotiation or blue-print stage.

The difficult foreign exchange position and the border situation resulted in a drastic cut in the allocation of foreign exchange for motor cars in the year 1963. Though commercial vehicles were given a high order of priority, a token cut was imposed in the allocation of foreign exchange for these as well. Despite this token cut, the overall allocation of foreign exchange for commercial vehicles stood at a higher figure in 1963-64 consequent to the need for stepping up the production to meet the requirements of Defence.

A World Bank Mission toured India in 1963 and inspected the major establishments in the Automobile & Ancillary Industries with a view to deciding the nature and extent of assistance which the World Bank could render for the Automobile, Road Transport and Machine Building Industries. Based on the recommendations



of this team, Automobile & Ancillary Industries were given assistance by the World Bank to the tune of 47 million dollars, i.e. about Rs. 23.4 crores. This assistance was confined to manufacture and maintenance of commercial vehicles i.e., to enable additional imports of (1) components and parts in c.k.d. and semi-finished form, (2) spare parts and (3) machinery by way of balancing equipment, all for commercial vehicles.

Similar assistance of a slightly higher order was made available by the World Bank in the second half of 1965 which should go a long way to ensure a continuous flow of production till the end of 1965-66.

Representatives of the World Bank carry out surveys or on the spot studies, almost once a year, with a view to assessing the extent of utilisation of the loan advanced and the need for further assistance at a future date. Such surveys and assistance have now become an yearly feature.

### INVESTMENTS AND CAPACITIES

The total investment by the 8 main vehicle manufacturers was about Rs. 700 million in December, 1965. This would have been augmented by about Rs. 200 million in the year 1966. The total investment in the Motor Cycle, Scooter and Three-Wheeler Industries was about Rs. 70 million in December, 1965 and would have reached well over Rs. 80 million by the end of 1966. The investment in the Ancillary Industry has seen a phenomenal increase from about Rs. 65 million in March 1961 to about Rs. 400 million at the end of 1966. During the Third Plan period one more vehicle with pay-load over 7-tons was added to the range of commercial vehicles. Messrs Ashok Leyland Ltd. have been licensed to manufacture 2,000 Leyland Beaver/Hippo vehicles per annum. The other 3 truck manufacturers have been given freedom to manufacture chassis heavier than those currently in production. Messrs Standard Motor Products of India Ltd. have been permitted to manufacture a light commercial vehicle of 1-ton capacity. Messrs Mahindra & Mahindra the jeep pick-up van and Messrs Bajaj Tempo Ltd. the 4-wheeler Tempo viking vehicle. Thus in all, there are at present seven units engaged in the production of commercial vehicles and their capacity at the end of 1965-66 was 63,000 Nos. per annum. The production in the Third Plan was short of the target particularly in the case of commercial vehicles. A number of difficulties are attributed for not achieving the target. These include the acute foreign exchange position due to which the industry was not enabled to secure adequate quantum of raw material and components. The stringent conditions prevailing in the money market and the crippling burden of taxation on road transport were jointly responsible for a slackness in the demand for commercial vehicles.

### PRODUCTION

The progress of the Automobile Industry till the end of 1957 was fairly satisfactory. There was a set-back in 1958 mainly because of the lack of adequate provision of foreign exchange for the import of raw materials and components. The rising tempo of production has been maintained from 1959 onwards. There was, however, a drop in production of passenger cars in 1963 for reasons stated earlier. The production figures from 1959 onwards, year by year, are tabulated below :—

| Production for the year | Passenger Cars & Station Wagons | Jeeps  | Commercial Vehicles |
|-------------------------|---------------------------------|--------|---------------------|
| 1959 ..                 | 11,993                          | 4,563  | 20,342              |
| 1960 ..                 | 19,096                          | 5,501  | 27,512              |
| 1961 ..                 | 21,662                          | 7,052  | 26,214              |
| 1962 ..                 | 23,326                          | 7,597  | 26,894              |
| 1963 ..                 | 15,711                          | 8,104  | 28,482              |
| 1964 ..                 | 23,227                          | 10,391 | 33,157              |
| 1965 ..                 | 24,790                          | 10,483 | 37,408              |
| 1966 ..                 | 27,597                          | 9,777  | 35,156              |

Production of Diesel Engines for fitment on Dodge/Fargo and Bedford Chassis is given hereunder :—

|         | Perkins P6V | Meadows | Total  |
|---------|-------------|---------|--------|
| 1959 .. | 7,814       | 893     | 8,707  |
| 1960 .. | 9,249       | 1,317   | 10,566 |
| 1961 .. | 9,761       | 60      | 9,821  |
| 1962 .. | 7,653       | 822     | 8,475  |
| 1963 .. | 7,993       | 958     | 8,951  |
| 1964 .. | 7,625       | 604     | 8,229  |
| 1965 .. | 7,847       | 1,027   | 8,874  |
| 1966 .. | 6,711       | 639     | 7,350  |

One of the recognised yardsticks for judging the progress achieved by a new industry is the extent of the indigenous content in the finished product, i.e., in the completed vehicle in the case of the Automobile Industry. In 1953, there was very little manufacture, only assembly from imported components; the indigenous components were tyres, tubes, batteries and upholstery materials. Soon thereafter, plant and machinery for manufacture of components and parts commenced to be installed in the factories of the main manufacturers as well as the ancillary manufacturers. The rate of increase of indigenous content is dependent upon the installation of additional machine tools which in turn is dependent upon the foreign exchange made available to the industry for the import of specialized machines.

The trend of increase in the indigenous content of the vehicles can be gauged from the statement given below :—

|                           | As in 1956 | As at March 1960 | As at end of 1961 | As at end of 1963 | As at end of 1964 | As at end of 1965 |
|---------------------------|------------|------------------|-------------------|-------------------|-------------------|-------------------|
| 1. Bedford ..             | ..         | 48.0             | 53.5              | 60.0              | 74.0              | 75.0              |
| 2. Dodge Fargo ..         | ..         | 48.0             | 68.0              | 76.0              | 79.8              | 89.0              |
| 3. Fiat ..                | ..         | 30.0             | 47.0              | 49.0              | 64.1              | 74.0              |
| 4. Hindustan ..           | ..         | 50.0             | 70.5              | 74.5              | 76.9              | 81.0              |
| 5. Universal Jeep ..      | ..         | 45.0             | 65.0              | 68.0              | 79.1              | 88.0              |
| 6. Leyland Comet ..       | ..         | 35.0             | 38.5              | 52.0              | 76.0              | 81.5              |
| 7. Tata Mercedes-Benz ..  | ..         | 45.0             | 64.0              | 67.0              | 79.0              | 86.0              |
| 8. Standard ..            | ..         | 20.0             | 32.5              | 44.0              | 60.2              | 75.0              |
| 9. Tempo three-wheeler .. | N.A.       | N.A.             | N.A.              | N.A.              | 86.4              | 88.5              |

The indigenous content of diesel engines reached the 90 per cent mark in 1965. The average indigenous content of automobiles at the end of 1966 was well over 90 per cent and had reached 95 per cent in a few types.

### AD HOC COMMITTEE ON AUTOMOBILES

*Satisfactory progress* : In 1959, the Government appointed an Ad Hoc Committee to review the progress of the automobile industry, to recommend the measures to be taken to reduce the cost to the consumer of the different vehicles and to examine the feasibility of producing a low cost car within the price range of Rs. 5,000 to Rs. 7,000. The Report of the Committee was received by the Government in the beginning of 1960. Reviewing the progress made by the automobile industry since the Tariff Commission's enquiry in 1956, the Committee has remarked that the decision to grant protection to the industry was a sound one, that the achievement of self-sufficiency regarding transport vehicles was of great importance to the economy and that even in regard to passenger cars the consumer would have been far worse off, if in the present difficulties regarding foreign exchange there had been no domestic industry. The Committee considered the progress of the automobile industry satisfactory on the whole and particularly in the last few years. It also observed that most of the automobile vehicles were expected to reach 80 per cent or more of indigenous content before the end of 1961. In regard to the production of the low cost car, the Committee were of the view

that its production was feasible. To examine further the development of the low cost car, the Government appointed an Expert Committee, who submitted the report in May, 1961. After mature consideration by expert committees, finance bodies and the Planning Commission, the proposal to manufacture a low cost car was kept in abeyance during the Third Five Year Plan period.

The subject of the low cost car or the "people's cheap car" as it is commonly called is raised at frequent intervals during question hours in the Lok Sabha. It is reported that there is no proposal to include the manufacture of a low cost car in the Fourth Five Year Plan as well primarily due to the critical foreign exchange situation.

### MOTOR CYCLES, SCOOTERS, THREE-WHEELER VEHICLES

Manufacture of motor cycles, scooters and three-wheelers was established in the year 1955. At the beginning of the Third Plan, there were three manufacturers, namely Messrs. Enfield for motor cycles & Automobile Products of India & Bajaj Auto Limited producing scooters and three-wheelers. The number has now increased to seven and the new comers cover motor cycles, scooters, mopeds and three-wheelers. The Third Plan production target was 60,000. Although the licensed capacity of the existing units (76,700) is now substantially in excess of the above target, the production achieved during 1961-66 unit-wise was as follows :—

|                       | 1961 | 1962   | 1963   | 1964   | 1965   | 1966   |
|-----------------------|------|--------|--------|--------|--------|--------|
| <i>Motor cycles :</i> |      |        |        |        |        |        |
| 150 cc                | ..   | 8,636  | 7,640  | 9,456  | 13,858 | 21,364 |
| 350 cc                | ..   | ..     | ..     | ..     | ..     | 25,040 |
| <i>Scooters :</i>     |      |        |        |        |        |        |
| 150 cc                | ..   | 13,617 | 15,936 | 15,422 | 20,043 | 20,667 |
| 48 cc                 | ..   | ..     | ..     | ..     | ..     | 21,471 |
| <i>3-Wheelers :</i>   |      |        |        |        |        |        |
| 150 cc                | ..   | 1,267  | 1,426  | 1,701  | 2,493  | 1,884  |
| 350 cc                | ..   | ..     | ..     | ..     | ..     | 1,255  |
| 400 cc                | ..   | ..     | ..     | ..     | ..     | ..     |
| <b>TOTAL</b>          | ..   | 23,520 | 25,002 | 26,579 | 36,394 | 43,915 |



The indigenous content as at December, 1965 was as under :—

|                   | per cent |
|-------------------|----------|
| Enfield .. .. .   | 88.0     |
| Jawa .. .. .      | 75.0     |
| Rajdoot .. .. .   | 85.0     |
| Lambretta .. .. . | 86.8     |
| Vespa .. .. .     | 78.6     |

The average indigenous content of the two- and three-wheeler vehicles as well was nearing 90 per cent by the end of 1966.

The main difficulty experienced by the existing units in the two and three wheeler sector in stepping up production despite higher installed capacity was the paucity of foreign exchange and thereby the difficulties in securing raw materials and components. The Industry was recently included among the priority industries for which import licences on a liberalised scale have been issued. Further, three-wheelers are now classified as commercial vehicles. The production which suffered a set back in the early part of 1966 is now picking up.

Transport capacity could be augmented by using truck-trailer combination. With this end in view, the manufacture of trailers has been strongly encouraged. There are at present 12 units manufacturing trailers of 2, 4 and 8 wheel types having a carrying capacity of upto 10 tons. The production of trailers since 1963-64 has been as under (in Nos.): 1963-64 : 3,364 ; 1964-65 : 8,763 ; 1965-66 : 8,373.

The trailer manufacturing industry is dependent upon imports to a limited extent, the imports being confined to special and alloy steels not produced in the country.

#### ANCILLARIES

Items like tyres, tubes, battery, rubber parts, upholstery material and paints were all obtained from indigenous sources when the industry switched over from assembly to manufacture. In 1961, there were in all about 90 units manufacturing various ancillary products. During the course of the Third Plan, the total number of ancillary units increased to 140. Substantial expansions have also taken place in several units. The items which still remain to be satisfactorily developed are magnetos and carburettors for the motor cycle and scooter industry and the steering gear and axle box for commercial vehicles. The production of steering gears, rear axles and carburettors have commenced in a limited way.

In addition to the licensed units, there are a number of ancillary establishments in the cottage and small scale industries sectors.

It can be safely stated that by the end of 1964 production capacities were established for the manufacture of all components and parts earmarked for the ancillary sector. It is, however, true that the installed capacities for some of the ancillary items fall short of the combined requirements of the original manufacturers and the replacement market. Similar to vehicle manufacturers, the ancillary manufacturers as well, were allotted foreign exchange for the expansion programmes envisaged in the Third Five Year Plan. Plant and machinery for increasing the production in the ancillary sector were in course of erection at the end of 1964.

Some of the important ancillary items which have recorded significant progress in the year 1965 are wheels, brakes, radiators, steering wheels, tie rod ends, shock absorbers, clutch assemblies and brake linings, etc.

The production value of the ancillary industry since 1961-62 has been as follows (in Rs. crores): 1961-62 : 12 ; 1962-63 : 20 ; 1963-64 : 27.6 ; 1964-65 : 35 ; 1965-66 : 45.

#### Automobile Prices

The relation between quantity of output and cost of production is more pronounced in the case of mass production industries like the automobile industry than in a majority of other industries. That is the main reason why the restricted volume of production has a direct impact on the cost of production in India. The ex-factory price of a vehicle in India is inclusive of direct and indirect taxes, particularly import duties and excise duties. The customer, in addition, is called upon to pay sales tax on the vehicles. The incidence of Government duties is so high that the purchaser of an automobile contributes anything from 30 to 40 per cent of the price paid by him towards the Government Exchequer.

The National Council of Applied Economic Research carried out a painstaking and thorough study of the selling prices of the end products of the Automobile Industry and the incidence of taxes and duties in the prices to the consumer as in the first quarter of the year 1965. According to the NCAER, taxes and duties were as high as 42 per cent of the selling prices of vehicles, early in 1965.

The Indian Automobile Manufacturer is working under another serious handicap in as much as he is called upon to pay a high price for the capital plant and machinery installed in his works. In addition, he has to buy imported raw materials at a cost 50 per cent in excess of that paid by his counter-part in foreign countries.

#### EMPLOYMENT

The total employed directly in the automobile and ancillary manufacturing industries including those in the Small Scale Industry Sector is in the neighbourhood of 1,25,000. This figure, however, does not include the indirect employment this industry affords in various distribution operation and maintenance centres, connected with it. It would not be an exaggeration to say that the indirect employment figure would be about 20 times the figure of labour directly employed by the industry.

The National Council of Applied Economic Research conducted an enquiry in 1960 on the employment potential in road transport in India and came to the conclusion that the total number of persons who find employment in the road transport industry in its broad sense is about 2.40 millions.

Considering the increase in the vehicle population of the country and the progress of automobile and allied industries in the last six years, it can be safely reckoned that about 3.5 million persons find employment now in the road transport and allied industries.

#### THE AUTOMOBILE INDUSTRY AND THE FOURTH PLAN

In the case of commercial vehicles, the revised estimates of the Development Council are reported to have been tentatively accepted by the Planning Commission. The target of capacity of 95,000 Nos. with a production target of 85,000 Nos. is well below the original estimate of 1,20,000 Nos. The capacity target of 95,000 Nos. is distributed according to pay-load as below :—

|                                |               |
|--------------------------------|---------------|
| Upto 3 tonnes .. .. .          | 26,000        |
| Between 3 and 9 tonnes .. .. . | 65,000        |
| Over 9 tonnes .. .. .          | 4,000         |
| <b>Total .. .. .</b>           | <b>95,000</b> |

The major expansion in the capacity is with regard to light commercial vehicles and it was felt that the intra-city traffic would grow at a rapid pace.

In the case of passenger cars, despite the demand being considerably in excess of supplies, consideration of priorities and availability of funds seem to have weighed with the Development Council and the Planning Commission while fixing a production target of 50,000 Nos. It is expected that this target can be met by the existing units mainly through balancing equipment and a few additional items of plant and machinery.

The Fourth Plan target for jeeps has been kept at 20,000 and it is expected that the existing unit will be able to achieve this production target.

The total existing installed capacity for motor cycles, scooters and mopeds is assessed at about 1,42,000 Nos. The demand for scooters is rapidly increasing and there are long queues and accumulated orders. The industry was recently included among the priority industries for which import licences on a liberalised scale have been issued. It is expected that with the addition of marginal balancing equipment, the capacity target of 1,50,000 could be easily met. The production target of 1,20,000 is not to be considered as a ceiling and improvements on the production would be welcome. Motor cycle-cum-scooter manufacturers were hopeful of reaching a production of about 1,50,000 per annum by 1968 and hold the view that they would be able to reach a production of 2,50,000 vehicles by 1970-71 if they were allowed to import capital goods of total value Rs. 2 crores. With this expansion, the existing units may reach a more economical level of production and effect a 10 to 15 per cent reduction in cost of production.

In view of the rapid progress made by the ancillary industries and the rising requirements to sustain the increased level of production of vehicles as well as to meet the maintenance requirements of vehicles on the road, capacity and production targets of Rs. 120 crores and Rs. 100 crores respectively have been proposed.

#### Export of Automobiles and Ancillaries

It is gratifying to record that a start has been made in the export of Indian manufactured vehicles and automobile ancillary products to neighbouring countries. Vehicles of Indian origin now run on the roads of nearby countries viz. U.A.R., Aden, Ceylon, Viet Nam, Cambodia, Tibet, Sikkim, Bhutan, etc.

The value of exports stood at Rs. 2 million and Rs. 4 million in 1962-63 and 1963-64 respectively. The Rs. 11 million mark was touched in 1964-65 and the exports were well over Rs. 12 million in 1965-66. Sizeable orders for Tata Mercedes-Benz and Ashok Leyland Comet vehicles were placed on the respective manufacturers by the Ceylon Passenger Transport Board in the last two years. Messrs. TELCO alone have booked export orders for Rs. 12 million in 1966-67.

The Engineering Export Promotion Council has recommended an export target of Rs. 20 millions for the final year of the Fourth Plan period.

#### AUTOMOTIVE RESEARCH ASSOCIATION OF INDIA

A research association for the Automobile Industry was registered in Bombay towards the end of the year 1966. It is understood that the research association is modelled on the lines of the Textile, Art Silk and Cement Manufacturers' research associations. As a first step, the association is reported to be engaged in the admission of members and the drawing up of general outlines of a phased programme of activities.

The Tariff Commission has been requested by the Government of India to inquire into the prices of automobiles and automobile ancillaries and continuance of protection to the industry beyond 31st December, 1967. Replies to the various questionnaires issued by the Commission were under scrutiny at the time of going to the press.



## STATEMENT

Population of motor vehicles in the different States of India.

| STATE                           | Motor Cycles    | Auto-rickshaws | Jeeps         | Private Motor Cars | Motor Cabs    | Other Public service vehicles | Goods Vehicles  | Miscellaneous Vehicles | Total           | As on      |
|---------------------------------|-----------------|----------------|---------------|--------------------|---------------|-------------------------------|-----------------|------------------------|-----------------|------------|
| Andhra Pradesh ..               | 11,618          | 72             | 4,326         | 20,687             | 1,233         | 5,839                         | 14,322          | 5,102                  | 63,199          | 31- 3-1965 |
| Assam .. ..                     | 1,389           | 58             | 2,542         | 8,297              | 331           | 1,887                         | 9,619           | 5,771                  | 29,944          | 31- 3-1965 |
| Bihar .. ..                     | 7,310           | 24             | 4,043         | 12,163             | 870           | 2,453                         | 12,432          | 1,681                  | 40,976          | 31- 3-1965 |
| Gujarat .. ..                   | 14,942          | 2,545          | —             | 21,259†            | 1,025         | 3,454                         | 14,620          | 7,911                  | 65,756          | 31- 3-1965 |
| Jammu & Kashmir@ ..             | 871             | 16             | 354           | 1,226              | 186           | 830                           | 3,181           | 69                     | 6,733           | 31- 3-1964 |
| Kerala .. ..                    | 5,231           | 323            | 2,093         | 18,303             | 4,118         | 4,370                         | 8,848           | 1,104                  | 44,390          | 31- 3-1966 |
| Madhya Pradesh ..               | 7,182@@         | —              | 3,902         | 10,523             | 692           | 4,072                         | 13,615          | 5,206                  | 45,197          | 31- 3-1964 |
| Madras* .. ..                   | 14,183          | 696            | 2,937         | 31,525             | 3,238         | 6,240                         | 13,872          | 1,928                  | 74,619          | 31- 3-1965 |
| Maharashtra .. ..               | 25,876          | 1,279          | 5,672         | 60,451             | 8,617         | 7,216                         | 38,659          | 6,992                  | 1,54,762        | 31- 3-1965 |
| Mysore .. ..                    | 14,780          | 1,668          | 2,712         | 19,502             | 1,140         | 6,440                         | 15,200          | 4,500                  | 65,948          | 31- 3-1965 |
| Orissa .. ..                    | 1,794           | —              | 2,473         | 3,170              | 139           | 950                           | 6,120           | 853                    | 15,499          | 31- 3-1964 |
| Punjab† .. ..                   | 9,554           | 733            | 1,073         | 6,480              | 680           | 2,340                         | 8,120           | 2,188                  | 31,168          | 31-12-1964 |
| Rajasthan .. ..                 | 6,640           | —              | —             | 14,605             | 416           | 5,857                         | 12,709          | 6,561                  | 46,788          | 31- 3-1965 |
| Uttar Pradesh* ..               | 15,497          | 14*            | 4,825         | 15,615             | 450           | 6,982*                        | 18,525          | 2,603                  | 64,511          | 31- 3-1965 |
| West Bengal@ ..                 | 14,640          | 117            | 6,776         | 64,781             | 5,401         | 5,469                         | 31,348          | 6,621                  | 1,35,153        | 31- 3-1964 |
| Himachal Pradesh ..             | 21              | 1              | 228           | 62                 | 142*          | 309*                          | 548             | 87                     | 1,398           | 31- 3-1964 |
| Manipur .. ..                   | 142             | —              | 511           | 134                | —             | 161                           | 614             | 140                    | 1,702           | 31- 3-1965 |
| Tripura .. ..                   | 107             | —              | 491           | 148                | 79            | 228                           | 733             | 205                    | 1,991           | 31- 3-1965 |
| Delhi* .. ..                    | 22,700          | 4,710          | 748           | 18,839             | 1,976         | 1,479                         | 4,397           | 4,000                  | 58,849          | 31- 3-1964 |
| Andaman & Nicobar Islands .. .. | 81              | —              | 65            | 31                 | 20            | 16                            | 175             | 100                    | 488             | 31- 3-1966 |
| Goa .. ..                       | 1,898           | 2              | —             | 3,532‡             | 448           | 3,691                         | 522             | —                      | 10,093          | 31- 3-1965 |
| <b>Grand Total ..</b>           | <b>1,76,462</b> | <b>12,258</b>  | <b>45,771</b> | <b>3,31,338</b>    | <b>31,251</b> | <b>70,283</b>                 | <b>2,28,179</b> | <b>63,622</b>          | <b>9,59,164</b> |            |

\* Provisional Figures.

@ Estimated Figures.

† Includes Jeeps.

@@ Includes Autorickshaws.

† Composite State.

## RAILWAYS

THE total route kilometrage of all the railways in India on March 31, 1966 was 59,060.55. The total electrified route kilometrage was 2,423.27.

The total route kilometrage is made up of the following:

Govt. railways (k.m.) 58,398.51.

Non-Govt. railways—662.04.

The total capital at charge of Govt. railways on March 31, 1966 was Rs. 2,687.14 crores.

There are three kinds of gauge, broad (1.676m.), metre (1.000m.) and narrow (0.762m.). There is also a light gauge usually laid on the mountains (0.610m.). An example of the last one is the Howrah-Amra Light Railway lines subsidised by the district board.

The total route kilometrage by gauge was as follows:

Broad gauge : 28,570.74

Metre gauge : 25,522.55

Narrow gauge : 4,305.22

There are in all 6,986 railway stations. In any one day of 24 hours, over 5 million people travel by rail and over 5 lakh tons of goods (food, cloth, raw materials and finished products) begin a rail journey from one part to another in India.

The total number of employees, permanent and temporary, on Govt. railways at the end of 1965-66 was, 1,351,303 including 24,355 under construction department and 15 officers from the Indian Audit Account Services. The railways have a fleet service of approximately 11,540 locomotives, 29,551 coaching vehicles and

289,400 wagons or freight cars. About 10,000 trains run daily.

## ZONAL ADMINISTRATION\*

The entire Government railway system is now grouped into nine administrations: the Southern Railway, the Western Railway, the Central Railway, the Northern Railway, the Eastern Railway, the South-Eastern Railway, the North-Eastern Railway, the North-East Frontier Railway, and the South Central Railway. This new zone was inaugurated on Oct. 2, 1966.

The headquarters of the Southern Railway is at Madras, of the Western Railway at Bombay, of the Central Railway also at Bombay, of the Northern Railway at Delhi, of the Eastern Railway at Calcutta, of the South-Eastern Railway also at Calcutta, of the North-Eastern at Gorakhpur, the North-East Frontier Railway at Pandu and the new one South Central at Hyderabad.

Some of these railways comprise smaller systems.

There are ten non-Government Railways. The route kilometrage is given in brackets after the name :—

Ahmadpur-Katwa (51.92); Arrah-Sasaram Light (104.86); Bankura-Damodar River (96.48); Burdwan Katwa (52.24); Dehri-Rohas Light (104.61); Futwah-Islampur (43.45); Howrah-Amra Light (70.31); Howrah-Sheakhala Light (27.16); Shahdara (Delhi)-Saharanpur Light (148.87).

They are all narrow gauge (0.762 m.) except the two Howrah-Amra and Howrah-Sheakhala which are 0.610 m.

The highest administrative authority for the railways is the Railway Board.

There are a number of Committees which have been associated with the Railway Administration: Standing Finance Committee, Central Advisory Council, Railway Rates Tribunal, Indian Railway Fuel Committee.

There are also a number of standardization Committees such as for bridges, structure, track, signalling and inter-locking, building, locomotive, carriage and wagon, electrical, specifications.

There are also Railway Users' Consultative Committees at the zonal, regional and national level. There is a Time Tables Committee, Suburban Railway Users' Consultative Committee, Passenger Amenities Committee, Catering Supervisory Committee, Book-Stall Committee. A Public Co-operative Committee consisting of members from National Railway Users' Consultative Council and members of Parliament was formed to combat crime. Zonal Parliamentary Committees have been constituted which meet the respective General Managers of the Zonal Railways in company with the Railway Minister and the Railway Board.

There are Railway Service Commissions in Bombay, Calcutta, Allahabad and Madras.

There is a training college for railway officers and staff at Baroda and 50 Training Schools.

There is a Railway Testing and Research Centre at Lucknow and a sub-centre at Chittaranjan mainly to help in the promotion of self-sufficiency in railway stores.

\* The new zone, the South Central Zone, has been set up with headquarters at Secunderabad. The capital investment of the Indian Railways as of July 1965 was Rs. 3,000 crores.



## STATISTICS

The principal statistics for the year 1965-66 are given below. The first column shows the position for all railways, the second only for Government railways:

|                                                                   | All Railways | Government Railways. |
|-------------------------------------------------------------------|--------------|----------------------|
| Capital at charge (Rs. crores)* .. .. .                           | 2,687.14     | 2,418.23             |
| Route kilometrage (March 31) .. .. .                              | 59,060.55    | 58,398.51            |
| Gross earnings (Rs. crores) <sup>1</sup> .. .. .                  | 748.30*      | 746.31*              |
| Total working expenses (Rs. crores) <sup>2</sup> .. .. .          | 586.34†      | 584.35†              |
| Operating ratio (per cent) <sup>3</sup> .. .. .                   | 78.36        | 78.30                |
| No. of passengers originating (million) .. .. .                   | 2,120.05     | 2,097.40             |
| Passenger k.m. (million) .. .. .                                  | 96,756.46    | 96,293.62            |
| Earnings from carriage of passengers (Rs. crores) .. .. .         | 220.32*      | 219.17*              |
| Average earnings per passenger kilometre (Paise) .. .. .          | 2.28*        | 2.28*                |
| Freight tonnes originating (million) <sup>4</sup> .. .. .         | 204.20       | 203.06               |
| Freight tonnes k.m. (million) .. .. .                             | 116,847.97   | 116,783.59           |
| Earnings from carriage of goods (Rs. crores) <sup>5</sup> .. .. . | 453.06       | 452.35               |
| Average earnings per freight tonne k.m. (Paise) .. .. .           | 4.58         | 4.58                 |
| Total train k.m. (million) .. .. .                                | 453.44       | 449.82               |
| Gross earnings per train k.m. (Rs.) .. .. .                       | 17.4*        | 17.50*               |
| Working expenses <sup>6</sup> per train k.m. (Rs.) .. .. .        | 13.8†        | 13.90†               |
| Net earnings <sup>7</sup> per train k.m. (Rs.) .. .. .            | 3.59*        | 3.62*                |
| Net earnings <sup>8</sup> per mean k.m. worked (Rs.) .. .. .      | 27,848.00*   | 28,166.00*           |

(1) 'Gross earnings' represent the true earnings in an accounting period irrespective of whether the amounts have been realised or not. They include earnings from Marmugao Harbour and also earnings awaiting realisation. (2) 'Working expenses' are the administrative figures of railway accounts representing true expenses of the railway system in an accounting period irrespective of whether the expenses have been disbursed. (3) 'Operating ratio' shown here represents the percentage of working expenses to gross earnings as defined in explanations at (1) & (2) above. (4) Freight tonnes originating, includes the tonnage of railway stores and materials carried in material/ballast trains on open lines for railway project works. These statistics were not taken into account in earlier years. (5) 'Earnings from carriage goods' exclude earning from demurrage, wharfage etc. (6) 'Net earnings' represents gross earnings minus working expenses, as defined in explanation (1) and (2) above. (7) 'Capital at Charge' includes the capital outlay on worked lines but excludes that on railway manufacturing units and miscellaneous independent projects such as the Chittaranjan Locomotive Works, the Integral Coach Factory, the Diesel Locomotive Works etc.

\* Includes the element of passenger fare tax with effect from April 1, 1961. † During 1965-66, the contribution to the Depreciation Reserve Fund was Rs. 85 crores against Rs. 83 crores in 1964-65, Rs. 80 crores in 1963-64 and Rs. 67 crores in the previous year.

Other information about Indian Railways for 1965-66 is given below:—

|                                                                                   |               |
|-----------------------------------------------------------------------------------|---------------|
| New Lines opened to Traffic                                                       | 771.91 k.m.   |
| Lines under Construction ..                                                       | 1,815.34 k.m. |
| Total No. of Locos ..                                                             | 11,833        |
| No. of Steam Locos (including sentinel types) ..                                  | 10,714        |
| No. of Diesel Electric Locos ..                                                   | 645           |
| No. of Electric Locos ..                                                          | 382           |
| No. of Diesel Hydraulic and Mechanical ..                                         | 82            |
| No. of Passenger Carriages (including brake vans and Railway service vehicles) .. | 32,862        |
| Total No. of Seats ..                                                             | 1,598,286     |
| No. of air conditioned seats ..                                                   | 2,404         |
| No. of 1st Class seats ..                                                         | 116,227       |
| No. of 2nd Class seats ..                                                         | 61,980        |
| No. of 3rd Class seats ..                                                         | 1,417,675     |
| No. of Goods Wagons ..                                                            | 356,898       |
| Total carrying Capacity in tonnes ..                                              | 6,861,266     |
| Total No. of Passengers Carried ('000) ..                                         | 2,120,052     |
| No. of A.C. ..                                                                    | 225           |

|                                                              |             |
|--------------------------------------------------------------|-------------|
| No. of 1st Class Passengers ('000) ..                        | 69,425      |
| No. of 2nd Class Passengers ('000) ..                        | 12,021      |
| No. of 3rd Class Passengers ('000) ..                        | 2,038,381   |
| Total passenger k.m. ('000) ..                               | 96,756,458  |
| Average k.m. a passenger carried ..                          | 45.6        |
| Total Earnings from Passengers (Rs. in '000) ..              | 2,20,32,20  |
| Earnings from A.C. Passengers (Rs. in '000) ..               | 1,99,05     |
| Earnings from 1st Class Passengers (Rs. in '000) ..          | 16,87,81    |
| Earnings from 2nd Class Passengers (Rs. in '000) ..          | 8,79,03     |
| Earnings from 3rd Class Passengers (Rs. in '000) ..          | 1,92,66,31  |
| Goods Carried ('000 tonnes) ..                               | 237,325     |
| Net tonne k.m. ('000) ..                                     | 116,847,970 |
| Average k.m. a tonne of Goods was Carried ..                 | 572.2       |
| Total fuel consumed in terms of coal in tonnes ..            | 18,241,505  |
| Value of stores imported direct (Rs. in '000) ..             | 36,41,00    |
| Value of imported stores purchased in India (Rs. in '000) .. | 13,54,00    |
| Value of stores of indigenous origin (Rs. in '000) ..        | 2,79,76,00  |
| Cost of Police and Railway Protection Force (in Rupees) ..   | 9,63,34,860 |
| Capital at charge, Chittaranjan Works (Rs. in '000) ..       | 37,20,30    |
| Capital at charge, Integral Coach Factory (Rs. in '000) ..   | 19,10,41    |
| Capital at charge, Diesel Locomotive Works (Rs. in '000) ..  | 27,49,71    |
| Capital at charge, D. B. K. Railway Project (Rs. in '000) .. | 62,67,82    |
| Railway Electrification (Rs. in '000) ..                     | 1,14,24,85  |
| Railway Board (Rs. in '000) ..                               | 4,13,95     |

## STAFF

|                                                                              |           |
|------------------------------------------------------------------------------|-----------|
| The total strength of Staff including non-govt. railways (March 31, 1966) .. | 1,356,988 |
| Class I and II Staff ..                                                      | 6,602     |
| Class III Staff ..                                                           | 550,372   |
| Class III and IV Staff ..                                                    | 1,350,380 |
| Class III running Staff ..                                                   | 65,458    |
| Class III Workshop and Artisan Staff ..                                      | 171,858   |

|                                                                                            |            |
|--------------------------------------------------------------------------------------------|------------|
| Class III Staff other than Workshop artisan and running ..                                 | 313,058    |
| Class IV running staff ..                                                                  | 26,878     |
| Class IV other than Workshop artisan and running ..                                        | 555,258    |
| Class IV Workshop artisan ..                                                               | 212,296    |
| The total cost of all Staff (Rs. in '000) ..                                               | 3,09,72,38 |
| The total cost of Class I and Class II (Rs. in '000) ..                                    | 8,27,35    |
| The total cost of Class III running staff (Rs. in '000) ..                                 | 26,76,84   |
| The total cost of Class III staff other than running workshop and artisan (Rs. in '000) .. | 1,06,80,79 |
| The total cost of Class III staff, Workshop and artisan (Rs. in '000) ..                   | 48,68,52   |
| The total cost of Class IV running staff (Rs. in '000) ..                                  | 6,31,48    |
| The total cost of Class IV staff other than workshop artisan and running (Rs. in '000) ..  | 81,21,14   |
| Class IV, workshop and artisan (Rs. in '000) ..                                            | 31,66,76   |
| Total cost of workshop artisan staff, Class III or IV (Rs. in '000) ..                     | 80,35,28   |
| Man-days lost due to Sickness for classes other than I and II ..                           | 13,804,579 |
| Man-days lost due to Strikes and labour trouble by staff other than Class I & II ..        | 72         |
| Total Man-days lost ..                                                                     | 13,864,651 |
| No. of attacks by various kinds of diseases ..                                             | 475,591    |
| No. of deaths due to various kinds of diseases ..                                          | 591        |

## Female Employees

|                                                          |        |
|----------------------------------------------------------|--------|
| Total No. of Female Employees Class I and II Officers .. | 15,565 |
| ..                                                       | 136    |

## Class III Staff:

|                               |       |
|-------------------------------|-------|
| Workshop and artisan staff .. | ..    |
| Clerks ..                     | 3,792 |
| Stenographers ..              | 179   |
| Nurses ..                     | 1,719 |
| Teachers ..                   | 1,104 |
| Others ..                     | 1,463 |

## Class IV Staff:

|                                          |       |
|------------------------------------------|-------|
| Workshop and artisan staff ..            | 326   |
| Other than workshop and artisan staff .. | 6,846 |

## ACCIDENTS

During the year (1965-66) three major accidents took place, brief particulars of which are as under:—

1) On 18th June 1965, at about 20.03 hrs. train No. 880 UP Goods ex Gangapur City to Kota ran into the rear of a up material train which was standing on the main line of Gudla station of the Western Railway. The engine of the goods train along with seven wagons next to it got derailed. Four empty bogies, rail wagons and the brake van of the material train were smashed. As a result of this collision, 17 persons were killed and 13 injured. The cost of damage to the railway property was estimated at approximately Rs. 48,500. According to the finding of the additional Commissioner of the Railway Safety, Bombay, the collision was caused by the goods train being driven past the Gudla UP Home signals at danger.

2) On 23rd July 1965 at about 21.42 hrs. just after train No. 3 UP Assam Mail had passed Selang Hat station on the Mariani-Tinsukia section of the North-East Frontier Railway, a loud explosion was heard. The train engine along with two bogies next to it derailed and capsized and the third bogie derailed. As a result two persons were killed and 30 injured. The cost of damage to the railway property was estimated at approximately Rs. 1,76,000. The additional Commissioner of Railway Safety, Calcutta enquired into this accident. According to his conclusions, the accident was brought about by the track having been blown up by some



unknown party as the train was approaching. The explosion was a deliberate act of sabotage.

3) On 16th February 1966 at about 21.10 hrs. while train No. 3 UP Assam Mail was running between Furkating and Kamarbandha hill stations on the Lumding-Mariani section of the N.E. Frontier Railway, there was an explosion in the rear compartment of the third class bogie marshalled fifth from the train engine. The train was brought to a stop. While the guard was rendering first aid to the injured and preparing to set up emergency lights for relief work, another explosion occurred in the front compartment of the same coach about half an hour after the first explosion. As a result, 38 persons were killed and 50 injured. The cost of damage to railway property was estimated at approximately Rs. 70,000. According to the findings of the enquiry committee consisting of railway officers, these explosions were caused by two time bombs which had been planted in the coach by some unknown party and that it was a deliberate act of sabotage.

Accidents classified under different heads:—  
Collisions: Collisions involving passenger trains 40; Collisions involving goods train or goods vehicles 45.

#### Casualties 1964-65 & 1965-66

|                                       | Killed       |              | Injured       |               |
|---------------------------------------|--------------|--------------|---------------|---------------|
|                                       | 1964-65      | 1965-66      | 1964-65       | 1965-66       |
| Passengers .. .. .                    | 521          | 481          | 3,063         | 3,420         |
| Railway Servants .. .. .              | 348          | 376          | 22,506        | 20,894        |
| Other than passengers & Railway Staff | 544          | 533          | 356           | 658           |
| Trespassers .. .. .                   | 4,136        | 4,235        | 2,035         | 2,147         |
| Suicides .. .. .                      | 351          | 332          | 29            | 32            |
| <b>Total .. .. .</b>                  | <b>5,900</b> | <b>5,957</b> | <b>27,989</b> | <b>26,151</b> |

#### CENTRAL RAILWAY, 1965-66 (Victoria Terminus, Bombay 1)

|                                                                             |          |
|-----------------------------------------------------------------------------|----------|
| Total Route Kilometrage ..                                                  | 8,910.38 |
| Broad Gauge .. .. .                                                         | 6,198.11 |
| Metre Gauge .. .. .                                                         | 1,543.53 |
| Narrow Gauge .. .. .                                                        | 1,166.74 |
| New Construction in Hand, Kilometrage .. .. .                               | 119.10   |
| Kilometrage Electrified ..                                                  | 297.54   |
| Capital at Charge (Rs. in Crores)                                           | 400.51   |
| Gross Earnings .. .. .                                                      | 139.44   |
| Working Expenses .. .. .                                                    | 100.06   |
| Net Earnings .. .. .                                                        | 39.38    |
| No. of Locomotives actually running on March 31, 1966 .. .. .               | 1,570    |
| <div> <div>Steam</div> <div>Electric</div> <div>Diesel</div> </div>         |          |
| Total No. of Passenger Carriages actually running on March 31, 1966 .. .. . | 3,269    |
| Seats by Classes—                                                           |          |
| Air Conditioned .. .. .                                                     | 816      |
| First Class .. .. .                                                         | 23,641   |
| Second Class .. .. .                                                        | 6,020    |
| Third Class .. .. .                                                         | 217,554  |
| No. of Passengers Carried (in millions) .. .. .                             | 506.3    |
| No. of Wagons actually running on March 31, 1966 .. .. .                    | 34,136   |
| <div> <div>Covered</div> <div>Open</div> </div>                             |          |
| Tonnage carried (in millions) ..                                            | 47.85    |
| Total No. of Staff on March 31, 1966 .. .. .                                | 2,29,083 |

#### EASTERN RAILWAY, 1965-66 (Fairlie Place, Calcutta)

|                                      |          |
|--------------------------------------|----------|
| Total Route Kilometrage ..           | 4,040.08 |
| Broad Gauge .. .. .                  | 4,012.50 |
| Metre Gauge .. .. .                  | Nil      |
| Narrow Gauge .. .. .                 | 27.58    |
| Kilometrage electrified .. ..        | 1,085.06 |
| Capital at charge (Rs. in Crores) .. | 3,31.13  |
| Gross earnings (Rs. in Crores) ..    | 1,05.64  |

**Derailments:** Derailment of passenger trains 183; Derailments of trains other than passenger 835. Derailments due to train wrecking 7.

**Fires:** Fires in trains (when a fire in train results in death, or injuries, or damage to Railway property amounting to Rs. 500 and above) 43.

**Level Crossing:** Accidents involving trains at level crossings 27.

**Failure of Railway equipment:** Failure of engines owing to faulty design, material or workmanship in the mechanical department 2,012; Failure of couplings and draft gear 844; Failure of axles 4; Failure of tyre and wheels 2; Other rolling stock failures 393.

**Failure of permanent way:** Broken rails 171; Failure of bridges, tunnels, etc. Nil; Flooding of portions of permanent way 24; Landslips 11.

**Other Accidents:** Passenger trains taking the wrong roads through points but not derailed 8; Attempted train wrecking 134; Trains running into road traffic and or road traffic running into trains at level crossings 291; Running over obstructions 50; Running over cattle 777; Miscellaneous 105. Total 6,382.

|                                                    |                 |
|----------------------------------------------------|-----------------|
| Working expenses (Rs. in Crores)                   | 82.55           |
| Net earnings (Rs. in Crores)                       | 23.09           |
| No. of Rolling stock on 31-3-66:                   |                 |
| Locomotives                                        |                 |
| Steam .. .. .                                      | 1,364           |
| Diesel .. .. .                                     | 89              |
| Electric .. .. .                                   | 156             |
| Motor Coaches .. .. .                              | 54              |
| Trailer Coaches .. .. .                            | 322             |
| Passenger Carriages (in vehicle units)             |                 |
| Other Coaching vehicles (in vehicle units) .. .. . | 450             |
| Wagons (in vehicle units) .. .. .                  | 66,741          |
| No. of passengers carried .. .. .                  | 3,22.24 million |
| Total tonnage lifted (originating) ..              | 68.28 million   |
| Staff (on 31-3-66) .. .. .                         | 199,262         |

#### NORTHERN RAILWAY, 1965-66 (Baroda House, New Delhi 1)

|                                                              |           |
|--------------------------------------------------------------|-----------|
| Total Kilometrage .. .. .                                    | 10,407.53 |
| Broad Gauge .. .. .                                          | 6,849.92  |
| Metre Gauge .. .. .                                          | 3,297.65  |
| Narrow Gauge .. .. .                                         | 259.56    |
| Mileage Electrified .. .. .                                  | 152.00    |
| Capital at Charge (Rs. in Crores)                            | 3,49.28   |
| Gross earnings (Rs. Crores) ..                               | 1,04.57   |
| Working Expenses (Rs. in Crores) .. .. .                     | 85.92     |
| No. of Passengers Carried on the System (in million) .. .. . | 208       |
| Net earnings Rs. in Crores ..                                | 18.65     |
| No. of Locomotives:                                          |           |
| Steam .. .. .                                                | 1,337     |
| Diesel Hydraulic .. .. .                                     | 15        |
| Electric .. .. .                                             | Nil       |
| Diesel Electric .. .. .                                      | 72        |
| No. of passenger coaches .. .. .                             | 2,600     |

#### Passenger carrying capacity:

|                         |         |        |       |
|-------------------------|---------|--------|-------|
| Air-conditioned .. .. . | 257     | 52     | Nil   |
| 1st Class .. .. .       | 11,805  | 2,116  | 435   |
| 2nd Class .. .. .       | 8,910   | 1,866  | 252   |
| 3rd Class .. .. .       | 154,889 | 47,188 | 3,222 |

#### No. of Goods Wagons, open:

|                    |        |     |     |
|--------------------|--------|-----|-----|
| High sided .. .. . | 13,778 | 981 | 71  |
| Low sided .. .. .  | 539    | 245 | Nil |

#### No. of Goods Wagons, covered .. .. .

|         |        |       |     |
|---------|--------|-------|-----|
| .. .. . | 26,360 | 5,442 | 136 |
|---------|--------|-------|-----|

Tonnage lifted (Tonnes in million) 43.50

Staff (Total) .. .. . 194,461

#### NORTH-EASTERN RAILWAY, 1965-66 (Gorakhpur)

|                                           |          |
|-------------------------------------------|----------|
| Total Kilometrage .. .. .                 | 4,961.48 |
| Broad Gauge .. .. .                       | 54.08    |
| Metre Gauge .. .. .                       | 4,907.40 |
| Narrow Gauge .. .. .                      | Nil      |
| New Construction in Hand .. ..            | Nil      |
| Kilometrage Electrified .. .. .           | Nil      |
| Capital at Charge (Rs. in Crores) .. .. . | 1,04.72  |
| Gross Earnings (Rs. in Crores) ..         | 31.22    |
| Working Expenses (Rs. in Crores) ..       | 32.86    |
| Net Earnings (Rs. in Crores) ..           | 1.72     |
| Total No. of Engines on line (in units)   | 833      |
| No. of Locomotives (Electric) .. ..       | Nil      |
| No. of Passenger Coaches .. .. .          | 2,473    |

#### Passenger Carrying Capacity:—

|                             |                 |
|-----------------------------|-----------------|
| (a) Air Conditioned .. .. . | 96              |
| (b) 1st Class .. .. .       | 5,848           |
| (c) 2nd Class .. .. .       | 7,806           |
| (d) 3rd Class .. .. .       | 122,592         |
| <b>Total .. .. .</b>        | <b>136,341*</b> |

No. of Passengers Carried (in '000) 119,117  
B.G. 706.2  
M.G. 131,655

No. of Goods Wagons, Covered (in units) 20,169  
No. of Goods Wagons, Open .. .. . 4,139  
No. of Goods Wagons, Special .. .. . 4,129  
Tonnage lifted (tons in thousands) 14,515  
No. of Staff (Total) (in units) 92,306

\* (Including 2 reserved carriages with 0 berths in 1st Class and 11 dining and Buffet cars with 284 seats in 3rd Class).

#### NORTH-EAST FRONTIER RAILWAY, 1965-66 (Pandu, Assam)

|                                    |          |
|------------------------------------|----------|
| Total Route Kilometrage .. .. .    | 3,621.34 |
| Broad Gauge .. .. .                | 638.60   |
| Metre Gauge .. .. .                | 2,895.26 |
| Narrow Gauge .. .. .               | 87.48    |
| Mileage electrified .. .. .        | Nil      |
| Capital at Charge in Rs. Crores .. | 1,80.15  |

#### No. of Locomotives:

|                  |          |          |
|------------------|----------|----------|
| Steam .. .. .    | M.G. 434 | N.G. 31  |
| Diesel .. .. .   | M.G. 64  | N.G. Nil |
| Electric .. .. . | Nil      | B.G. Nil |

No. of passenger coaches .. .. . 1,279 M.G.  
156 B.G.

#### Passenger carrying capacity†:

|                         |             |
|-------------------------|-------------|
| Air-Conditioned .. .. . | 70 M.G.     |
| 1st Class .. .. .       | 3,098 M.G.  |
| 2nd Class .. .. .       | 873 B.G.    |
| 3rd Class .. .. .       | 2,863 M.G.  |
| .. .. .                 | 971 B.G.    |
| .. .. .                 | 57,778 M.G. |
| .. .. .                 | 9,250 B.G.  |

No. of passengers carried (on the system) .. .. . 47,542,300

No. of goods wagons (covered) M.G. in units .. .. . 7,136 M.G.

No. of goods wagons (open) M.G. in units .. .. . 2,663

Tonnes carried (Total) .. .. . 9,978,000

No. of staff (Total) .. .. . 77,383

† Excluding 192 seats in Buffet/Dining cars.



### SOUTHERN RAILWAY, 1965-66 (Madras Central, Madras)

|                                                  |            |
|--------------------------------------------------|------------|
| Total Route Kilometrage ..                       | 10,220.98  |
| Broad Gauge .. .. .                              | 3,305.07   |
| Metre Gauge .. .. .                              | 6,759.15   |
| Narrow Gauge .. .. .                             | 156.76     |
| New Construction in Hand:                        |            |
| Mangalore-Hassan Line ..                         | 189.21     |
| Bangalore-Salem Line.. ..                        | 229.28     |
| Mangalore-Perambur .. ..                         | 23.47      |
| Electrified .. .. .                              | 163.13     |
| Kilometrage electrified ..                       | 163.13     |
| Capital at Charge (Rs. in Crores)                | 3,49.85    |
| Gross Revenue Receipts (Rs. in Crores)           | 95.92      |
| Working Expenses (Rs. in Crores)                 | 83.33      |
| Net Revenue Receipts (Rs. in Crores)             | 12.49      |
| Rolling Stock:                                   |            |
| No. of Locos (Steam) .. ..                       | 1,786      |
| No. of Locos (Electric) ..                       | 22         |
| No. of Locos (Diesel Electric)                   | 93         |
| No. of Passenger Coaches ..                      | 3,769      |
| Air Conditioned Passenger Seating Capacity .. .. |            |
| I Class .. .. .                                  | 14,150     |
| II .. .. .                                       | 11,723     |
| III .. .. .                                      | 240,361    |
| No. of Passengers Carried (in thousands) .. ..   | 267,546    |
| No. of Goods Wagons (Covered)                    | 26,616     |
| No. of Goods Wagons (Open)..                     | 12,269     |
| Tonnage carried (tonnes in thousands) .. .. .    | 25,366,000 |
| Staff (Total) .. .. .                            | 177,170    |

### SOUTH-EASTERN RAILWAY, 1965-66 (Garden Reach, Calcutta 43)

|                                |                    |
|--------------------------------|--------------------|
| Total Route Kilometrage ..     | 6,281.77           |
| Broad gauge .. .. .            | 4,876.41           |
| Metre gauge .. .. .            | Nil                |
| Narrow gauge .. .. .           | 1,405.36           |
| Kilometrage electrified ..     | 665.37             |
| Kilometrage under construction | 523.07             |
| Capital at charge (Rs. Crores) | 4,06.49            |
| Gross earnings (Rs. Crores) .. | 1,18.49            |
| Working expenses (Rs. Crores)  | 81.46              |
| Number of Locos:               |                    |
| Steam .. .. .                  | 1,079              |
| Diesel .. .. .                 | 148                |
| Electric .. .. .               | 100                |
| Railcars .. .. .               | Nil                |
| No. of passenger coaches ..    | 1,922              |
| No. of goods wagons:           |                    |
| Covered .. .. .                | 15,061             |
| Open .. .. .                   | 21,374             |
| No. of staff .. .. .           | 1,62,729           |
| Passenger carrying capacity:   |                    |
| Air-conditioned .. .. .        | 336                |
| 1st class .. .. .              | 8,153              |
| 2nd class .. .. .              | 5,300              |
| 3rd class .. .. .              | 99,316             |
| No. of Passengers carried ..   | 103,268,600        |
| Tonnes of goods lifted ..      | 64,887,000         |
| Capital at charge .. .. .      | Rs. 4,06,49,28,000 |
| Gross earnings .. .. .         | Rs. 1,18,49,61,000 |
| Working expenses .. .. .       | Rs. 81,46,75,000   |
| Net earnings .. .. .           | Rs. 37,02,86,000   |

### WESTERN RAILWAY, 1965-66 (Churchgate, Bombay)

|                            |          |
|----------------------------|----------|
| Total Route Kilometrage .. | 9,954.95 |
| Broad Gauge .. .. .        | 2,635.65 |
| Metre Gauge .. .. .        | 6,117.56 |
| Narrow Gauge .. .. .       | 1,201.74 |
| Kilometrage electrified .. | 60.17    |

|                                                               |           |
|---------------------------------------------------------------|-----------|
| Capital at Charge (Rs. in Crores) .. .. .                     | 296.06    |
| Gross Revenue Receipts (Rs. in Crores) .. .. .                | 1,14.72   |
| Working Expenses (Excluding Suspense) (Rs. in Crores) .. .. . | 83.52     |
| Net Revenue Receipts (Rs. in Crores) .. .. .                  | 31.20     |
| No. of Locos (Steam) .. ..                                    | 1,681     |
| No. of Locos (Diesel Electric)                                | 58        |
| No. of Locos (Diesel Hydraulic)                               | 27        |
| Electric Motor Coaches ..                                     | 94        |
| No. of Passenger Coaches ..                                   | 4,152     |
| Passenger carrying capacity (Seats by classes)—               |           |
| Air conditioned—                                              |           |
| Broad Gauge .. .. .                                           | 422       |
| Metre Gauge .. .. .                                           | 100       |
| 1st Class—                                                    |           |
| Broad Gauge .. .. .                                           | 15,758    |
| Metre Gauge .. .. .                                           | 8,449     |
| Narrow Gauge .. .. .                                          | 866       |
| 2nd Class—                                                    |           |
| Broad Gauge .. .. .                                           | 3,396     |
| Metre Gauge .. .. .                                           | 5,569     |
| 3rd Class—                                                    |           |
| Broad Gauge .. .. .                                           | 98,696    |
| Metre Gauge .. .. .                                           | 113,127   |
| Narrow Gauge .. .. .                                          | 11,393    |
| No. of Passengers carried (in thousands) .. .. .              | 569,004.3 |
| No. of Goods Wagons (covered)                                 | 29,347    |
| No. of special wagons ..                                      | 7,563     |
| No. of Goods Wagons (open) ..                                 | 11,218    |
| Tons carried (in thousands) ..                                | 35,097    |
| No. of staff .. .. .                                          | 182,275   |

### REVIEW OF 1965-66

The main items are given in the table at the beginning of this article. Below we give some more points. The comparison whenever made is with figures for 1964-65:—

During 1965-66 the railways were able to carry higher levels of freight and passenger traffic. Revenue earning goods traffic increased by 13.2 million tonnes (8.89 per cent) as compared to the previous year, while non-revenue goods traffic dropped by 4 million tonnes (8.92 per cent), resulting in a net increase in originating freight tonnes of 9.3 million or 4.76 per cent.

The gross earnings of all Indian Railways, including non-Government Railways, were Rs. 748.3 crores in 1965-66 against Rs. 666.04 crores in the previous year. Of this, the gross traffic receipts of Government Railways, including worked lines accounts for Rs. 733.57 crores against Rs. 660.85 crores in the previous year. Passenger kilometres increased by 3 per cent, but passenger earnings were 9.98 percent higher, due to revision of passenger fares. Revenue from goods traffic increased by Rs. 53.98 crores or 13.55 per cent. The surplus for the year was Rs. 18.56 crores against Rs. 13.18 crores for the previous year, after meeting all the charges.

**Punctuality:** The percentage of passenger and mixed trains not losing time to the total number of trains run on all Govt. Railways during 1965-66, is given below (Figures in brackets are for 1964-65).

**Broad Gauge:** All trains (87.62) 85.51; Mail and important through trains (83.69) 84.36; Mixed trains (89.91) 89.51; Suburban (93.94) 85.73; Other passenger trains (80.85) 81.07.

During 1965-66 there were 100,530 cases of alarm chain pulling against 93,935 cases in the previous year.

The number of wagons loaded on the broad gauge during 1965-66 was 8,168,027, an increase of 6,26,191 wagons or 8.30 per cent over 1964-65. On the metre gauge the figure was 3,979,733, an increase of 195,614 wagons or 5.17 per cent more than 1964-65.

There was considerable increase in the case of wagons. The number of public service wagons in use by all Indian Railways at the end of 1965-66 in the broad gauge wagon pool was 391,756, that is 27,117 wagons more than that of the previous year.

The number of public service wagons in use in the metre gauge wagon pool at the end of the year was 294,174 that is, 6,057 wagons more than that of 1964-65 figures.

### Claims, Compensations and Refunds

The number of new claims received this year, including some reopened, was 586,738 which compares with 560,713 in last year. The number of claims settled was 587,481 as against 556,163 during the previous year and the number outstanding at the close of the year was 31,904 against 32,647 at the end of 1964-65. The net amount paid as compensation was Rs. 5.11 crores for goods lost or damaged as against Rs. 4.41 crores in 1964-65.

During the year 1965-66, 10,165 fresh suits were instituted against 11,952 in 1964-65. At the end of 1964-65 the number of suits pending was 16,347. Of all the suits 5,391 were settled out of court, 3,322 cases were either dismissed, withdrawn or transferred and 3,878 were decreed, leaving a balance of 13,921 at the end of the year.

### TICKETLESS TRAVEL

Concrete efforts were continued to check the incidence of ticketless travel through the normal ticket checking arrangements as well as through specially selected squads. As a result of the checks made during the year 6.55 million passengers were detected travelling without tickets or with improper tickets. An amount of Rs. 196.91 lakhs was realised from them by way of fare and excess charges. Amount realised from unbooked and partially booked luggage was Rs. 40.78 lakhs.

### COMPLAINTS

At the beginning of the year 2,395 complaints were pending disposal and 42,570 complaints were received during the year. Of these 43,075 were disposed of in the course of the year. The average time taken in the disposal of a complaint was 39.5 days.

### Security Measures

The cases of theft of railway property showed a sharp decline from 34,089 during 1964-65 to 26,186 during 1965-66. The net loss on account of such thefts amounted to Rs. 17,66,594 during 1965-66 against Rs. 19,11,841 in the previous year. The number of loss of booked consignments from running trains, yards, goods sheds and platforms was also brought down considerably from 2,047 in 1964-65 to 1,891 during 1965-66. The amount of losses due to pilferage increased from Rs. 3,06,136 in 1964-65 to Rs. 4,37,998 in 1965-66 and caused concern.

A pilot scheme was enforced to combat pilferages. The scheme was further intensified and extended to all zonal railways. During the year the Railway Protection Force had to open fire on 33 occasions on wagon looters and criminals.

During the year 1965-66, there were on all zonal railways 144 cases of tampering with railway track or placing obstacles on the track.

The Fire Service of the R.P.F. dealt with 2,000 cases of fire, involving property worth Rs. 32 lakhs during the year.

### NEW LINES

New lines totalling 771.91 km. in length were opened to public traffic on Indian Railways during the year 1965-66. Lines totalling 340.27 km. were converted into double lines and 37.92 km. of lines into treble lines and opened to traffic. New lines totalling 2,315.34 km. were under construction. Besides, the conversion from the metre gauge to the broad gauge of 279 km. of route length was in progress. Surveys for 874.82 km. of new lines were also sanctioned.

Zonalwise names of new lines opened, gauge and approximate kilometrage respectively are:

**Central:** Butibori—Ummer, Broad, 33.71; Panvel—Uran, Broad, 26.90.



**Eastern :** Extension line between Mugma and Thaparnagar, Broad, 6.49; Mogra—Tribeni, Broad, 3.36.

**Northern :** Mukerian—Talwara (rail siding), Broad, 28.69; Madhopur—Kathua rail link, Broad, 8.27.

**N.E. Frontier :** Gogamukh—Silapathar—Murkong Seleik, Metre, 108.56; Raninagar—Jogighopa, Broad, 258.16.

**Southern :** Hospet—Gurtakal, Broad, —; Hageri—Karigunuru, Broad, 72.51; Karigunuru—Hospet, Broad, 6.75.

**South-Eastern :** Surakachar—Geora Road, Broad, 8.71.

**Western :** Udaipur—Himmatnagar, Metre, 209.80.

#### Lines Under Construction

**Central :** Panvel—Apta, Broad, 14.84; Morwa (Singrauli)—Katni (Beohari—Katni portion), Broad, 104.26.

**Northern :** Hindumalkot—Sriganganagar, Broad, 27.49; Ghaziabad—Tughlakabad (including Yamuna Bridge), Broad, 54.30; Delhi avoiding lines and connected traffic facilities, Broad, 17.67; Morwa—Katni—Morwa—Beohari, Broad, 150.00; Singrauli—Obra, Broad, 57.56.

**Southern :** Bangalore—Salem, Metre, 229.28; Mangalore—Hasan, Metre 189.21 and Broad 23.47.

**South-Eastern :** Rail link to serve Haldia Port, Broad, 72.55.

**Western :** Guwa—Shajapur—Maksi, Broad, 193.35; Jhund—Kandla, Broad, 230.84.

**Dandakaranya—Balangir—Kiriburu Railway Projects :** Kottavalasa—Bailadilla, Broad, 450.52.

#### Conversion

**Southern :** Poona—Miraj, Broad, 279.00.

#### Lines Sanctioned

**Northern :** Pokaran—Jaisalmer, Metre, 105.00.

**Western :** Rajkot—Jasdan, Metre, 61.16; 140.82; Bhavnagar—Tarapore, Broad, 140.82.

**D.B.K.R. Projects :** Dantewara—Dhalli Rajhara, Broad, 219.63; Ambaguda—Lanjigarh, Broad, 199.52; Bhadrachellam Road—Kovvur, Broad, 148.69.

#### EXTERNAL ASSISTANCE

A loan of \$68 million (Rs. 51 crores at post-devaluation rate) was negotiated with the International Development Association during 1965-66, which was sanctioned later and the agreement was signed on 29th June 1966.

A new loan for Deutsche Mark 18 million (Rs. 3.38 crores at post devaluation rate) was obtained from the Govt. of Federal Republic of Germany during the year 1965-66. This loan is intended for the purchase of the components for the production of 30 diesel hydraulic shunting locomotives of 650 H.P. at the Chittaranjan Locomotive Works, erection of route relay interlocking at Ahmedabad station on the Western Railway, and the purchase of about 20,500 roller bearings for axle boxes.

**Passenger Amenities :** An amount of Rs. 4.25 crores was incurred, on provision for amenities on station premises and trains for the convenience of passengers and other railway users, during 1965-66. The facility of sleeping accommodation in third class was extended to 15 more pairs in 1965-66 and brought up the total to 61 pairs—47 on the broad gauge and 14 on the metre gauge.

**Improved lower class coaches :** All passenger coaches are at present built indigenously to the latest design. 299 broad gauge, 428 metre gauge and 17 narrow gauge lower class coaches were placed in service during the year, apart from 18 broad gauge, 3 metre gauge and 7 narrow gauge upper class composite coaches, as well as 113 broad gauge electric multiple unit coaches containing III class accommodation.

**City Booking Offices, Agencies, Out-agencies, Street Collection, etc. :** For the convenience of the travelling public and trade 7 out-agencies—one on the Central, two on the N-E Frontier, three on the Southern and one on the Western Railways—were opened during

the year. 13 Out-agencies—two on Central, two on the North Eastern, six on the Southern, and three on the Western Railways—were closed. One city booking agency on the South Eastern Railway and another one on the Western Railway were opened during the year.

Street collection and delivery services were introduced at Rajkot on the Western Railway.

**Catering arrangements :** Departmental catering was arranged at 93 stations and in 25 pairs of passenger trains. At other stations, about 5,000 contractors provided the service.

**Steps to alleviate overcrowding in trains :** Diesel and electric locomotives employed by the Railways in selected trunk routes have enhanced the passenger transport capacity by 25%.

The following are the main heads of passenger amenities with expenditure (Rs. in thousands): Water supply at stations, etc. 32.09; Retiring rooms and waiting accommodation etc. 36.93; Refreshment rooms and vendors' stalls of all description 8.81; Provision of latrines 27.04; Extending, raising and widening, surfacing and other improvements 170.50; Over-bridges, subways and extensions 10.26; Bathing facilities at stations 42; Improvement to existing carriages such as fans etc. 18.83; Improved lighting and provision for fans on stations, platforms and waiting rooms etc. 29.91; Improvement of approaches and circulating areas at stations including tube-lighting 30.20. Opening of new flag stations or conversion of halts into flag stations 4.04; Miscellaneous improvements, namely, sheet time tables at Stations and other amenities 54.90.

**Electrification :** Good progress was made in the introduction of 25 kv AC electrification traction on various sections of the Central, the Eastern, the Northern, the South Eastern and the Southern Railways during the year. Electrification work was completed on 385 route kilometres (equivalent to 1,144 track kilometres).

#### STAFF WELFARE

During 1965-66 five training courses were held. These courses were attended by 89 officers including seven from foreign countries. Two of the courses were initial courses of two months' duration. The remaining three were advanced courses of 14 weeks' duration.

The school also conducted a special course for deputy chief engineers. Civil engineers from Ceylon, Iran, Kenya, Malaysia, Nigeria, Pakistan, Saudi Arabia, Sudan and Thailand have so far attended the initial and advanced courses.

During 1965-66, 830 engineers (Degree/Diploma holders) and 7,656 other candidates were selected by the Railway Service Commission. By the sale of application forms Rs. 6,85,084 were realised and the expenditure for the year was Rs. 18,91,264.

**Labour Relations :** The relations with organised labour continued to be generally cordial. The permanent negotiating machinery meetings continued to be held at the Railway Board's level and at the railways' level. There was no loss of man-days on the Indian Railways during the year (1965-66). The permanent negotiating machinery for settlement of disputes also continued to function satisfactorily.

**Railway Schools :** The total number of schools functioning on the Railways during 1965-66 was 7,326 (Intermediate colleges two, higher secondary/high schools 42, middle schools 26, and primary schools 662). Pupils numbering 125,333 were on the roll in these schools.

**Staff Benefit Fund :** A contribution from railway revenues at a rate of Rs. 4.50 per non-gazetted railway servant in respect of the zonal railways and ad hoc grants to other units of smaller size were made available and an amount of Rs. 72.30 lakhs was credited to the Staff Benefit Fund. The balance brought forward from the preceding year amounted to Rs. 20.09 lakhs, and an additional ad hoc grant amounting to Rs. 8.15 lakhs was made to the fund for sports activities. During the year an amount of Rs. 70,98,026 was spent (Details: Education of children and Staff, Rs. 25,57,205; Recreation and amusement 7,35,478; Sports 6,41,759; Relief to dis-

tress and assistance to sick employees 28,58,594; Scouting 1,42,860; Miscellaneous 1,62,130).

**Holiday Homes :** Holiday homes for Class III and Class IV staff at various places continued to be popular, two more such homes were established—one at Srinagar and the other at Shillong.

**Technical Education Scholarships :** During 1965-66 1,123 new scholarships were granted in addition to 1,893 scholarships continuing from the previous year. The scholarship on technical education is available to children of the railway employees whose salary does not exceed Rs. 425 per month and is financed from the Staff Benefit Fund.

**Coop. Credit Societies & Banks :** There were 26 cooperative credit societies of railway employees and the membership was 727,889 at the end of the year. The paid-up share capital was Rs. 652.55 lakhs and the total amount of loan issued during the year was Rs. 2,335.86 lakhs. The total profit of all the societies were Rs. 44.66 lakhs and dividend declared was 7 per cent.

**Railwaymen's Cooperative Housing Societies** (end of 1965-66): No. of Coop. Housing Societies 19; Membership 3,610; Working capital including deposits: Rs. 21.23 lakhs; Number of buildings under construction: 42.

**Cooperative Labour Contract Societies :** During the year (1965-66) 51 cooperative labour contract societies with 5,577 members and a paid-up share capital of Rs. 1,64,851 undertook handling and vending/catering contracts at 94 stations and 12 cooperative labour contract societies with 753 members and a paid-up share capital of Rs. 1,95,529 undertook civil engineering contracts at 15 stations. The annual value of the contracts amounted to Rs. 58.46 lakhs and 14.48 lakhs respectively.

**Staff Quarters :** During the year (1965-66), in view of the Railway Board's policy of providing quarters to essential staff, who are required to live near the site of their works and for non-essential staff at places where private accommodation is not available 15,095 staff quarters and 34 barracks were constructed on the Indian Railways. They are: Type I—8,224; Type II—5,912; Type III—621; Type IV—224; Officers' Flats—114; and Barracks 34.

**Medical :** The cost of medical and health services per employee per annum went up from Rs. 84.92 in 1964-65 to Rs. 92.73 in 1965-66. The total expenditure for the year (1965-66) was Rs. 12.5 crores against Rs. 11.1 crore in the preceding year. Other particulars are: Number of hospitals 90; Number of health units 563; Number of beds in hospitals and health units 8,355 (including 831 for T.B. & 932 for maternity); Dental clinics 66; Number of doctors (DMO/AMO/Assistant Surgeons) 2,231; Number of operations performed 310,542.

#### THIRD FIVE YEAR PLAN

Third Plan total provision and provision for 1965-66 respectively are as follows:

| Plan-Head                                                            | (Rs. in crores)       |                       |
|----------------------------------------------------------------------|-----------------------|-----------------------|
|                                                                      | Provision for 5 years | Provision for 1965-66 |
| Rolling stock ..                                                     | 542.36                | 127.37                |
| Machinery and plant ..                                               | 47.55                 | 10.14                 |
| Track renewals ..                                                    | 11.22                 | 3.66                  |
| Bridge works ..                                                      | 215.73                | 42.53                 |
| Line capacity works ..                                               | 28.50                 | 7.18                  |
| Signalling and Safety ..                                             | 319.42                | 71.86                 |
| Workshops and Sheds ..                                               | 37.70                 | 9.75                  |
| Electrification ..                                                   | 80.70                 | 25.25                 |
| Other electrical works ..                                            | 4.13                  | 0.79                  |
| Staff quarters ..                                                    | 44.38                 | 9.13                  |
| Staff welfare ..                                                     | 16.68                 | 3.69                  |
| User's amenities ..                                                  | 14.63                 | 4.26                  |
| New lines ..                                                         | 212.13                | 40.59                 |
| Other specified works ..                                             | 27.35                 | 6.84                  |
| Investment in roads ..                                               | 7.65                  | 2.33                  |
| Store suspense, manufacture suspense, miscellaneous advances etc. .. | 49.53                 | 10.12                 |
| <b>Total ..</b>                                                      | <b>1,659.66</b>       | <b>355.30</b>         |



## RAILWAY BUDGET (1967-68)

The interim budget for 1967-68, which the new Railway Minister, Mr. C. M. Poonacha, presented to the Lok Sabha on March 20, 1967, showed that the current year 1966-67 will close with a deficit of Rs. 15.27 crores.

He informed Parliament that the deficit was the result of a coincidence of a steep increase in operating expenses and a substantial shortfall in anticipated traffic.

The budget gives the estimates for the whole year but seeks only a vote on account to cover

the first four months of the financial year 1967-68.

Mr. Poonacha revealed that in 1965-66, the Railways actually showed a surplus of Rs. 18.56 crores against Rs. 29.99 crores anticipated in the revised estimates. The shortfall of Rs. 11.43 crores was on account of a decrease of Rs. 8.23 crores in traffic revenue and an increase of Rs. 3.20 crores in working expenses.

## BUDGET AT A GLANCE

In crores of rupees

|                                                                                         | Actuals<br>1965-66 | Budget<br>1966-67 | Revised<br>1966-67 | Budget<br>1967-68 |
|-----------------------------------------------------------------------------------------|--------------------|-------------------|--------------------|-------------------|
| Gross traffic receipts .. .. .                                                          | 733.57             | 795.33            | 783.75             | 826               |
| Ordinary revenue working expenses (net) I.E.<br>after taking credit or recoveries .. .. | 485.85             | 508.68            | 535.74             | 553.21            |
| Appropriation to depreciation reserve fund<br>from revenue .. .. .                      | 85                 | 100               | 100                | 99                |
| Appropriation to Pension Fund .. ..                                                     | 12                 | 13.5              | 13.5               | 14.9              |
| Net miscellaneous expenditure (including<br>cost of works charged to revenue) ..        | 15.88              | 17.47             | 16.69              | 17.05             |
| <b>Total .. .. .</b>                                                                    | <b>598.73</b>      | <b>639.65</b>     | <b>665.93</b>      | <b>684.16</b>     |
| Net revenue .. .. .                                                                     | 134.84             | 155.68            | 117.82             | 141.84            |
| Dividend to General Revenues .. ..                                                      | 116.28             | 133.49            | 133.09             | 41.84             |
| Net surplus (+) deficit (-) .. .. .                                                     | 18.56 (+)          | 22.19 (+)         | 15.27 (-)          | -                 |

## Shortfall

Against the expectation of an additional 12 million tonnes of traffic, the actual materialisation was expected to be not more than 4.5 to 5 million tonnes.

During the first ten months of the year 1966-67, revenue earning traffic on the Railways increased by only about 4 million tonnes. This shortfall was expected to affect revenue to the extent of Rs. 11.58 crores.

While the estimated traffic receipts were not likely to materialise, working expenses had risen by about Rs. 27 crores. Most of the increase was due to post-budget developments outside the Railways' control. The increase in dearness allowance had accounted for more than half of this increase.

Among other factors were the revision of the prices of coal five times between April and December, 1966, the rising prices of materials used in repairs, maintenance and operation and the increase in the tariffs of several State Electricity Boards.

## Sluggishness

Mr. Poonacha said the lower level of revenue earning traffic reflected partly the relative sluggishness of economic activity.

Added to it were disruption of traffic owing to civil disturbances, agitations and bandhs, serious drought conditions in Bihar, Eastern U.P. and M.P.; heavy floods in Assam and the cyclones on the Coromandel coast and prolonged strikes by road hauliers in U.P. and West Bengal. Besides, the movement of imported food grains from the ports to the interior saw an unprecedented spurt.

During the year so far, the Railways had already moved 8.5 million tonnes of grains and fertilisers as compared to only 6 million tonnes in the first 11 months last year. Similarly, there was prompt movement of grains, pumping sets and other articles for drought stricken areas.

During the first ten months of 1966-67, 19 per cent more wagons were ferried across the Ganga, as compared to the last year.

## More Trains

Similar improvements in passenger services engaged the attention of the Railways during the year. Sixty-nine new passenger trains were introduced. The run of 41 trains was also extended during the period. The frequency of the popular air-conditioned express services

between Delhi and Bombay and Calcutta and Delhi has been increased from twice to thrice a week. Similar air-conditioned deluxe express trains would be introduced on three other trunk routes from April 1.

On suburban sections, 83 new trains were introduced during the current year and the run of 14 BG suburban train services extended. Introduction of diesel traction on some important long distance passenger trains had enabled the Railways to haul more coaches.

Among nearly 250 trains, which were accelerated during the year, notable instances were the New Delhi-Madras Southern Express, the Howrah-Amritsar Mail and the Bombay-Delhi Frontier Mail.

Mr. Poonacha said that in order to keep further capital expenditure under check, the Railways were constantly assessing the traffic potential. As a result, there had been a steep reduction in the provision for works and rolling stock.

Simultaneously, the Railways had intensified efforts to effect economy in operating costs. In August, 1966, a complete ban had been placed on the recruitment of ministerial staff. Procedures were being rationalised and simplified.

With regard to the Budget Estimates for the year 1967-68, Mr. Poonacha anticipated an increase of Rs. 42.25 crores over the revised estimates of Rs. 783.75 crores for the current year, thereby placing the gross traffic receipts at Rs. 826 crores.

The estimates assume a rise of about Rs. 8 crores in passenger earnings and Rs. 33 crores in goods earnings based on an anticipated increase of about 8.5 million tonnes in originating freight traffic.

Net traffic receipts for 1967-68, before appropriation to Depreciation Reserve Fund and Pension Fund, were expected to be about Rs. 25 crores higher than the revised estimates for the current year in spite of an anticipated increase of about Rs. 17.4 crores in revenue working expenses.

## Shrinking

The Minister stressed that the estimates of working expenses as now framed were based on the present level of prices and staff costs and contained no cushion for any increases in either of them.

The Railways expected to be left only with Rs. 99 crores for appropriation to the Depreciation Reserve Fund. This amount was Rs. 16 crores short of the figure of Rs. 115 crores recommended for 1967-68 by the Railway Convention Committee in 1965 and approved by Parliament. In fact, the appropriation would be Rs. 1 crore less than in the current year.

It was apprehended that the Development Fund would be almost wiped out at the end of the current year, as a consequence of the railway surplus, from which this fund was fed, having been substantially less than the outgo from the fund during the last two years and there being no surplus this year.



# IRRIGATION

THE net area under irrigation in India during 1962-63 and 1963-64 were 25.96 and 26.13 million hectares and the gross area 30.02 and 30.57 million hectares respectively. The net sown area during 1963-64 was 136.22 million hectares. The percentage of net irrigated area to the net sown area in the entire country was 19.16. This is the second largest irrigated area in any country of the world, the largest being in China.

The total capacity of India's canals is over 220,000 cusecs, and the canals are over 67,500 miles in length.

The total amount of annual flow of water in the Indian Union is 1,360 million acre feet. Of this only 76 million acre feet or 5.6 per cent are at present being used for irrigation purposes.

Prior to the commencement of planning, only about 22.66 million hectares were provided with irrigation facilities in India. Development of irrigation during the First, Second and Third Plans would bring the total area irrigated in the country to about 36.42 million hectares. About 500 major and medium Irrigation Projects were taken up during the three Plans, which on completion, would irrigate 17.81 million hectares. The benefits from these projects by the end of the Third Plan were expected, however, to be limited to about 7.3 million hectares of additional irrigated area. According to present indications, a sum of about Rs. 810 crores is likely to be available for major and medium irrigation schemes during the Fourth Plan period, which would create an additional potential of 5.26 million hectares.

Rainfall in the country is unequal and in many areas uncertain. The distribution is as follows:

| Range                           | (in million acres) | Percentage |
|---------------------------------|--------------------|------------|
| Area between 0-30 inches .. ..  | 237.6              | 29.6       |
| Area between 30-50 inches .. .. | 339.2              | 42.0       |
| Area between 50-75 inches .. .. | 143.9              | 17.8       |
| 75 inches and above .. ..       | 85.6               | 10.6       |
| Total area .. ..                | 806.3              | 100.0      |

The total water resources of Indian rivers in terms of annual flow is estimated at 1,360 million acre feet of water, distributed as follows:—

1. Rivers (excluding the Indus system) falling into the Arabian Sea, 251.5; 2. Rivers (excluding Ganga and Brahmaputra systems) falling into the Bay of Bengal, 334.0; 3. Indus basin in India, 64.4; 4. Ganga System, 397.1; 5. Brahmaputra System, 309.0.

Out of the water resources of 1,360 million acre feet owing to physiological conditions only about a third, about 460 million acre feet are utilisable. About 88 million acres (6.5 per cent of total and 19.5 per cent of usable) were utilised by 1951. In the First and Second Five-Year Plans 11 and 13 per cent of the total water respectively were to be used. By the end of the Second Plan, about 120 mil. acre ft. (about 27 per cent of usable flow or 8.9 per cent of total annual flow) was utilised. This increased to about 150 million acre feet or 33 per cent of the usable flow by the end of the Third Five Year Plan. Another 50 million acre feet are likely to be added (totalling upto 200 million acre feet) or 45 per cent of the usable flow in the Fourth Five Year Plan.

## Outlay in the three Plans

(Rs. in crores)

|               |    |    |    |    |    | Five year Plans |        |           |             |
|---------------|----|----|----|----|----|-----------------|--------|-----------|-------------|
|               |    |    |    |    |    | First           | Second | Third     |             |
|               |    |    |    |    |    |                 |        | Provision | Expenditure |
| Irrigation    | .. | .. | .. | .. | .. | 300             | 380    | 600       | 572         |
| Flood Control | .. | .. | .. | .. | .. | 14              | 49     | 61        | 85          |
| Total         | .. | .. | .. | .. | .. | 314             | 429    | 661       | 657         |

## AREA PROGRAMME

Area programme development is being promoted by the Govt. of India to increase fuller utilisation of irrigation potential created through the execution of major and medium irrigation programmes. This provides for comprehensive measures to land levelling and development in fully irrigated areas, establishment of experimental farms for evolving suitable cropping patterns for the area and arrangements for provision of production requisites. Responsibility for construction of channels at various stages has been fixed so as to secure maximum utilisation of irrigation.

## UTILISATION OF IRRIGATION POTENTIAL

The area irrigated from all sources at the beginning of the First Five Year Plan (1950-51) was 51.5 million acres, of which about 22 million acres were irrigated by major and medium irrigation projects. From major and medium irrigation projects an additional area of about 9.15 million acres was brought under irrigation during the First and Second Plan periods. During the Third Five Year Plan against a target of additional 19.6 million acres (8.0 million hectares), the actual achievement was 18.1 million acres (7.3 million hectares). The pace of development of irrigation as compared to the creation of irrigation potentials may be seen from the table

below — the gross area in million acres, cumulative from 1st Plan onwards.

| To end of                 | Potential       | Utilisation     | Percentage  |
|---------------------------|-----------------|-----------------|-------------|
|                           | (Million acres) | (Million acres) | utilisation |
| 1955-56 (1st Plan period) | ..              | 6.5             | 3.1         |
| 1956-61 (2nd Plan period) | ..              | 11.7            | 8.3         |
| 1961-66 (3rd Plan period) | 18.0*           | 18.8            | 87.0        |

\* anticipated.

Gross area cumulative from First Plan onwards. (In million acres)

|              | First Plan | Second Plan | Third Plan anticipated |
|--------------|------------|-------------|------------------------|
| Potentiality | ..         | 6.5         | 11.7                   |
| Utilisation  | ..         | 3.1         | 8.3                    |

Net area irrigated by categories of projects and benefits from them are tabulated at the beginning of F. Y. Plans I, II & III below. (In million acres)

| Plan period | Major & Medium Projects | Minor Irrigation | Total |
|-------------|-------------------------|------------------|-------|
| 1950-51 ..  | ..                      | 22.0             | 29.5  |
| 1955-56 ..  | ..                      | 24.9             | 31.3  |
| 1960-61 ..  | ..                      | 31.0             | 39.0  |
| 1965-66 ..  | ..                      | 42.5             | 47.5  |

(Target)

## Name of major irrigation projects taken up in the Third Plan

| Name of Scheme                                 | Estimated cost<br>(Rs. million) | Ultimate<br>irrigation<br>potential<br>(million acre) |
|------------------------------------------------|---------------------------------|-------------------------------------------------------|
| ANDHRA PRADESH                                 |                                 |                                                       |
| Pochampad .. .. .                              | 406.1                           | 0.57                                                  |
| BIHAR                                          |                                 |                                                       |
| Chandan Reservoir .. .. .                      | 59.0                            | 0.14                                                  |
| MADHYA PRADESH                                 |                                 |                                                       |
| Gasdeo† .. .. .                                | 90.0                            | Water supply<br>scheme                                |
| MADRAS                                         |                                 |                                                       |
| Chittar Pattanamkal .. .. .                    | 77.6                            | 0.05                                                  |
| MYSORE                                         |                                 |                                                       |
| Malaprabha .. .. .                             | 200.0                           | 0.30                                                  |
| Upper Krishna.. .. .                           | 611.0                           | 0.60                                                  |
| PUNJAB                                         |                                 |                                                       |
| Beas Project Unit-I (Sutlej Beas Link) .. .. . | 108.0                           | 0.80                                                  |
| Beas Project Unit-II (Pong Dam) .. .. .        | 297.0                           | 0.79                                                  |
| RAJASTHAN                                      |                                 |                                                       |
| Beas Project Unit-I (Sutlej Beas Link) .. .. . | 18.0                            | } Under Rajas-<br>than Canal.                         |
| Beas Project Unit-II (Pong Dam) .. .. .        | 631.0                           |                                                       |
| UTTAR PRADESH                                  |                                 |                                                       |
| Western Gandak canal .. .. .                   | 363.9                           | 0.60                                                  |

† Advanced stage of construction.



Additional Central assistance was granted during 1965-66 to the following projects to accelerate their completion and utilisation: Nagarjuna-sagar Rs. 10 crores; Tungabhadra High Level Canal Rs. 1.60 crores; Tawa Rs. 1.00 crore; Mahanadi Delta Rs. 0.80 crore; Kashi Rs. 0.50 crore; Gandak Rs. 0.50 crore; Kerala Projects (Neyyar First and Second Stages, Pothundy, Chittoorpuzha, Periyar Valley, Gayatri and Pamba) Rs. 1.10 crores.

### MINOR IRRIGATION

Minor irrigation works are works that can be conceived and handled to a large extent by the local people themselves, and individually cost Rs. 10 lakhs or less.

Works like wells, pumping sets, Persian wheels are executed entirely by individual cultivators. Many other works like tanks, anicuts, and channels benefiting groups of cultivators are also executed by the cultivators themselves on a cooperative basis. Financial assistance from Government, mostly in the form of loan, is given for both categories of these works. Subsidy, subject to a maximum of 25 per cent of the total cost, is also given to encourage construction particularly in backward and unproven areas.

Minor irrigation schemes which require some specialised technical knowledge in surveys and execution are handled by the Departments concerned of the States. State Governments levy irrigation rates or cess on the areas benefited.

Minor irrigation schemes include construction of open wells, tanks and minor drainage schemes; embankments which are important from the point of view of food production and checking intrusion of salt water in coastal areas; restoration of old tanks, stream diversion schemes; and installation of pumping appliances and improvement of water supply from wells and storage dams. There are also such works as construction of kuhls in hilly areas, filter points in coastal alluvium and installation of improved lift appliances, Persian wheels and pumping sets on wells. Tubewells also form part of minor irrigation works.

The targets for the Second and Third Plans under minor irrigation were 9 million acres and 14.78 million acres and expenditure was Rs. 137 crores and Rs. 244.78 crores respectively. The achievement expected during the Third Plan was construction of 450,000 new wells, repair of 60,000 old wells, deepening of 100,000 wells, installation of 240,000 electric and 80,000 Diesel Pump sets and 65,000 Persian wheels, 415 artesian tubewells, 12,000 private tubewells, 2,762 State tubewells and 2,500 filter point tubewells.

Under the accelerated programmes priority is given to such minor irrigation schemes which will be quickly completed and fully and instantly utilised. Provision to supplement irrigation facilities during the period of keen demands is made through the construction of new wells and private tube wells in the command areas of existing major and medium irrigation projects. During 1965-66, the pattern of financial assistance for minor irrigation schemes was liberalised bringing all the lift irrigation schemes under the purview of the subsidy programme.

The target set for the Fourth Plan is to benefit 17 million acres with a combined total outlay of Rs. 771 crores. The targets tentatively placed are: sinking of 800,000 new wells, boring of 300,000 wells, deepening of 200,000 wells, installation of 500,000 electric pump sets, 175,000 diesel pump sets, and 75,000 Persian wheels. Besides, construction of 400 artesian tubewells, 50,000 private tubewells and 5,000 State tubewells and 300 filter point tubewells was envisaged.

### TANKS AND WELLS

Tank irrigation is very important in Andhra, Madras, Orissa and Uttar Pradesh where over 3.1, 2.0, 1.2 and 1.0 million acres respectively, are irrigated by tanks. Bengal, Mysore, Bihar, Gujarat and Maharashtra have over half a million acres under tank irrigation.

**Wells:** Wells are mainly of two types, i.e. surface or sub-surface. Unlike tanks, they can be constructed irrespective of topographical and geological limitations, provided sub-soil water is in reach.

Well irrigation commands over 5.9 million acres in Uttar Pradesh and 2.3 million in Punjab, Rajasthan, Gujarat and Maharashtra. It is also of considerable importance in Madras, Andhra, Madhya Pradesh and Bihar where over 1 million acres are irrigated by wells.

Pumping sets of high efficiency have come into common use for water lifting and also for draining. The number of irrigation pumps in use increased from 107,355 in 1951 (i.e., oil powered 82,218, and Electrically driven 25,137) to 3,90,000 (230,000 by oil engines and 1,60,000 by electric pumps by 1961).

### Tubewells

A tubewell irrigates about 400 acres while a surface well barely 5 acres.

The tubewell programme included in the Third Plan provided for the construction of about 2,400 tubewells.

It has been estimated that annual enrichment of underground water resources is of the order of 300 million acre feet of which only 42 million acre feet would have been utilised by the end of Third Five Year Plan (1965-66) for irrigating about 25 million acres against the ultimate feasibility of irrigation of 45 million acres. A centrally sponsored scheme for ground water surveys and investigation has been initiated.

During the period 1961-65 the exploratory tubewell organisation drilled 198 bores out of which 64 proved successful. In addition 237 productive tubewells were constructed during the same period. Drilling has been completed in 198 sites in Rajasthan of which 134 were successful. The organisation also drilled 214 productive tubewells in Bihar, Delhi, Gujarat (Kutch), Punjab, Rajasthan & U.P. of which 157 were successful.

Irrigation with tubewells has developed satisfactorily and in most cases 75 per cent of the potential has been utilised.

### RESEARCH

There are now nineteen stations in India, dealing with irrigation research problems:—

Andhra Pradesh Engineering Research Laboratories, Hyderabad, Andhra Pradesh (1945); Bhakra Dam Project Laboratory, Nangal, Punjab (1947); Bihar Institute of Hydraulic and Allied Research, Khagaul, Patna, Bihar (1956); Central Soil Mechanics & Concrete Research Station, New Delhi (1954); Concrete & Soil Research Laboratories, Madras, (1945); Central Water & Power Research Station, Poona, Maharashtra (1916); Damodar Valley Corporation, Maithon Dhanabad, Bihar, (1949); Gujarat Engineering Research Institute, Baroda, Gujarat (1960); Hirakud Research Station, Hirakud, Orissa (1947); Indian Institute of Science, Bangalore Mysore (1950); Irrigation Research Station, Poondi, Madras (1944); Kerala Engineering Research Institute Peechi, Kerala (1960); Koyna Project Research Laboratory, Koyna Nagar, Maharashtra (1956); Land Reclamation, Irrigation & Power Research Inst. Amritsar, Punjab (1947); Maharashtra Research Institute, Nasik, Maharashtra (1959); Mysore Engineering Research Station, Krishnarajasaagar, Mysore (1945); River Research Institute, West Bengal, Calcutta (1943); River Research Station, Chandmari, Gauhati, Assam (1966); UP Irrigation Research Institute, Roorkee, U.P. (1938).

### FLOOD CONTROL AND SOIL CONSERVATION

Since 1954 when the flood control programme was inaugurated on a coordinated basis, over 6,880 k.m. (4,300 miles) of embankments and 7,840 k.m. (4,900 miles) of drainage channels have been constructed in different States affording protection to about four million hectares (ten million acres) of land. Eighty town protection schemes have been taken up against floods/

erosion and 4,300 villages have been raised above flood level. From 1954 up to March 1961 Rs. 629 million have been spent. During the Third Plan Rs. 481 million have been spent up to March 1964. During 1964-65 the expenditure was about Rs. 200.5 million. The approximate area benefited by flood control schemes completed every year is about 0.324 to 0.405 million hectares (0.8 to one million acre) on an average. The additional area to be protected at the end of the First Year of the Fourth Five Year Plan will be about one million hectares (2.5 million acres).

During the first two Plans loans and grants amounting to Rs. 553.3 million were given to the State Governments for flood control schemes. Against the original Third Five Year Plan provision of Rs. 610 million the outlay on the programme was to go up to Rs. 810 million. About 7 million acres had benefited from flood control schemes undertaken in the first two Plans and an additional 4.5 million acres were expected to be benefited in the Third Plan.

Floods of 1964 have brought out the necessity for making studies of the affected areas for evolving suitable remedial measures:— (a) A committee has been set up for formulation of comprehensive plans for controlling floods in coastal areas of Andhra Pradesh in the districts of Krishna, Godavari and Guntur which are subjected to floods annually causing heavy damage to crops. (b) A study group has been set up for assessing the problem of erosion by Brahmaputra river in Assam and formulating remedial measures. (c) Committee set up for assessment of drainage problem in Gurgaon District (Punjab), Bharatpur District (Rajasthan) and other districts of U.P. and to suggest comprehensive drainage schemes. (d) Committee set up for assessment of flood control problem in North Bihar and formulate flood control measures. (e) Committee set up to draw comprehensive plan for flood protection in Delhi and surrounding areas.

During the year 1965, floods were comparatively less severe as the rainfall in the monsoon season was less than normal in most parts of the country and were mainly confined to parts of Assam, Bihar, Madhya Pradesh, Rajasthan, Uttar Pradesh and West Bengal. But a distinct feature of this year's floods in the Brahmaputra, Kamla Balan and Gandak was that these were caused by heavy rainfall in the head reaches and not by rainfall in the plains. The acute flood situation in parts of Rajasthan, Uttar Pradesh and Madhya Pradesh was due to abnormally heavy rainfall in the catchments, of some drains and rivers.

According to the assessment made so far, the floods affected an area of about 10 lakh hectares including a cropped area of about 2 lakh hectares. The estimated damage to crops was to the extent of about Rs. 8 crores. A population of nearly 30 lakhs in 4,900 villages was affected. The number of houses damaged was nearly 22,000. The floods took a toll of 76 human lives. The total damage has been assessed at about Rs. 7 crores.

**Soil Erosion:** Problem of beach erosion in Kerala is serious. The outlay on the coast line protective programme of the State Government during the Third Plan was about Rs. 43 million. American experts are studying the problem and a scheme for collection of basic data for evolution of corrective measures is being implemented. For soil conservation works in the catchments of 14 Rivers Valley projects (Kosi, Damodar Valley, Mayurakshi, Kangsabath, Hirakud, Madkud, Thungabhadra, Kamala, Ghod, Dantiwada, Bhakra Nangal and Bhru in Jammu & Kashmir) Rs. 110 million had been provided. Out of the total catchment area of about 280,000 sq. kilometres (108,000 sq. miles) about 75,000 sq. kilometres (28,800 sq. miles) are in Nepal. Out of the rest lying in India an area of about 1,984 sq. k.m. was covered by soil conservation measures costing Rs. 48 million during the first three years of the Third Plan. During 1965-66 1,039 sq. k.m. were expected to be covered up at an estimated expenditure of Rs. 40 million.



## RIVER VALLEY PROJECTS

The major river valley projects are as follows:—

(1) Beas Project, (2) Bhakra-Nangal Project, (3) Hirakud Project, (4) Damodar Valley Project, (5) Tungabhadra Project, (6) Kosi Project, (7) Chambal Project, (8) Nagarjunasagar Project, (9) Koyna Project, (10) Rihand Project, (11) Bhadra Reservoir Project, (12) Kakrapar Project, (13) Machkund Project, and (14) Mayurakshi Project.

Below we give notes on some individual projects.

**Beas Project:**—The Beas Project in Punjab is being jointly executed by the Rajasthan and Punjab Governments with the financial assistance of the Central Government.

The main object of the project, which is estimated to cost Rs. 208 crores, is to harness the water and power potential of the Beas whose 250-mile course from Rohtang Pass to its confluence with the Sutlej at Harike lies in Indian territory. Of the river's total run of (13.6 million acre feet of water) about 11.4 million acre feet not only goes waste but causes devastation on large scale.

On completion, the project will facilitate the irrigation of 4.5 million acres of land in Punjab and Rajasthan and generate 6,36,000 kW. of power, besides augmenting the capacity of the Bhakra power plant by 1,48,000 kW. The irrigation and power facilities to be provided by the project will lead to an additional industrial and agricultural output worth Rs. 100 crores a year. Rajasthan alone will get eight million acre feet of water for irrigating about 3.5 million acres of desert land.

The project comprises two units: Beas-Sutlej Link is predominantly a power project and Beas Dam at Pong an irrigation project.

The first unit of the project, estimated to cost Rs. 97 crores, consists of a 200-foot rockfill diversion dam at Pandoh, 12 miles upstream of Mandi in Himachal Pradesh, an eight-mile long tunnel with a diameter of 25 feet from Pandoh to Baggi, a 7.2 mile Hydel channel from Baggi to Sunder Nagar and finally a 8.5 mile long tunnel with a diameter of 25 feet from Sunder Nagar to the penstocks leading to the Sutlej power house at Slapar, headworks of Gobind-sagar.

Provision has been made for diverting the flow into Gobindsagar through a by-pass tunnel even before the Sutlej Power House is completed at the tail end of the link for augmenting the Bhakra power output.

Excavation work was started for the intake structure of the Pandoh-Baggi tunnel.

The Beas dam at Pong is estimated to cost Rs. 11 crores. The project envisages the construction of a 5,750 feet long and 380 feet high rockfill dam. It will create a reservoir impounding 6.5 million acre feet of water over an area of about 100 square miles.

Construction of the dam involves diversion of the river through five tunnels with a diameter of 30 feet. Excavation work on two of these tunnels has been completed. They will be permanently used as outlet tunnels for irrigation purposes. The three other tunnels, which are nearing completion, will afterwards be used for generating electricity through six units to be installed in a power house on the left bank.

The aggregate length of the five tunnels is over 16,000 feet. The flow of water through the tunnels is proposed to be regulated with the help of hydraulic gates. The tunnels were completed in Dec. 1965.

The expenditure incurred on Unit I by the end of the year 1965-66 is Rs. 18.53 crores and on Unit II is about Rs. 34.08 crores.

**Bhadra Project (Mysore):**—This is one of the biggest irrigation and multi-purpose projects undertaken by the State. The scheme

includes the construction of a reservoir on the river Bhadra at Lakkavalli (Shimoga District) with a storage capacity of 63,035 million c.ft. to irrigate 2,44,663 acres of land in the dry taluks of Shimoga, Chitaldrug and Bellary districts and to generate electric power to the extent of 40,400 kW. at the dam site. It consists of the construction of a 194 ft. high masonry dam, 1,445 ft. long. The reservoir submerges 27,802 acres and 28 villages.

The cost of the project is estimated at about Rs. 35.73 crores including the cost of power plant of about Rs. 380 lakhs.

**Power Project:** The installed capacity of the power station is 33,200 kW. During the Third Plan, all aspects of the power project were completed. These include one unit of 2000 kW; two units of 12,000 kW. each in the river bed station and one unit of 7,200 kW in the right bank station.

**Bhakra-Nangal Project (Punjab):** The Bhakra Nangal Project in Punjab is the biggest multipurpose river valley project in Asia and has the following main components:—(1) 740 feet high straight gravity concrete Dam at Bhakra, eight miles from Nangal, with two Power Houses at its base, one on each bank of the River. (2) A diversion Dam at Nangal, 62 miles North of Chandigarh. (3) Forty miles long Hydel Channel from Nangal to Rupar with two low head Power Houses—Ganguwal and Kotla. (4) A widespread network of transmission lines with series of Grid Sub-stations. (5) 108 miles of Bhakra main Canal and 2,790 miles long canal branches and distributaries spread over in two States—Punjab and Rajasthan.

The whole Project has been completed except the Right Bank Power House on which work is going on in full swing.

The project is expected to irrigate about 10 million acres of land and build up an ultimate power potential of 12,04,000 kW. The States that will benefit are the Punjab, Rajasthan, Himachal Pradesh, Jammu and Kashmir and Delhi.

The Project will irrigate six mil. acres of new land and will improve 3.5 mil. acres of land already under irrigation.

The Project started yielding rich dividends even before its completion. Irrigation started in July, 1954-55 when 9.1 lakh acres in the Punjab\* were irrigated and 0.54 lakh acres in Rajasthan. In the year 1957-58, 1958-59, 1959-60, 1960-61, 1961-62, 1962-63 and 1963-64 an area of 14.86, 17.12, 18.18, 16.70, 19.61, 23.21 and 25.59 lakh acres in the Punjab\* and 1.79, 2.67, 3.44, 2.17, 2.99, 3.99, and 4.49 lakh acres in Rajasthan were irrigated, as a result of which economic condition of people improved as also a considerable amount of revenue has accrued to the Governments of Punjab\* and Rajasthan.

The total expenditure incurred till the end of Dec. 1964 was Rs. 171.61 crores against the sanctioned estimate of Rs. 175 crores.

The Nangal Dam, the Hydel Channel and the Bhakra Canal have already been completed.

Of the four power houses of this Project, the Ganguwal and Kotla Power Houses, on the Nangal Hydel Channel with two generators of 24,000 kW each are already commissioned and a third generator of 29,000 kW. was added in each Power House in 1961 raising the total output of each power house to 77,000 kW. Of the two power houses at the base of the Bhakra Dam the left power house with 5 units each of 90,000 kW. has been fully commissioned.

The commitments from this plant are Nangal Fertilizers: 1,60,000 kW.; Delhi: 60,000 kW.; Rajasthan: 22,000 kW. and Kashmir: 4,500 kW.

Work on the construction of Right Bank Power House is in full swing. The power house is estimated to cost Rs. 27 crores, and it will have an ultimate installed capacity of 600 MW.

The increase in foodgrains as a result of the irrigation from the project is expected to be 8,50,000 tons a year. Other additional yields that will accrue from the project are: Sugar-cane 15,00,000 tons, Cotton 6,00,000 bales and pulses and oilseeds 36,000 tons.

**Damodar Valley Project (Bihar and West Bengal).**—The Damodar Valley Project which is one of the most important multi-purpose schemes in this country and is to benefit the States of Bihar and West Bengal, has as its main features the construction of (a) multi-purpose storage dams with hydro-electricity plants, (b) an irrigation project with a network of irrigation canals and distributaries measuring 1,550 miles including an 85-mile long irrigation-navigation canal, (c) thermal power stations and the associated transmission and distribution facilities.

The ultimate benefits that will accrue from this scheme include (a) effective flood control of the Damodar River, (b) irrigation of 9,73,000 acres including 2,20,000 acres of old irrigated area in the kharif season and 55,000 acres in the rabi season resulting in an additional yield of rice and rabi crop and jute valued at Rs. 15 crores a year, (c) the installation of generating capacity of 9,79,000 kW of electric power, which will promote the growth of industry, lead to the electrification of railways, etc., (d) cheap transport facilities through the navigation canal carrying an annual traffic through the canal of coal, sand, chemicals, foodgrains etc. to the extent of nearly 2 million tons, (e) efficient drainage of about 700 sq. miles of waterlogged area in the lower valley in W. Bengal (f) prevention of soil erosion by afforestation, (g) land reclamation and improvement, (h) antimalarial measures and public health promotion works, and (i) development of fishery, tourism, etc.

About 6.92 lakh acres of land in West Bengal have already been brought under irrigation.

Of the electric power generated, 875,000 kW will be thermal and 104,000 kW will be hydroelectric.

The first phase of the D.V. Project comprises (1) a thermal power station of 150,000 kW capacity at Bokaro, Bihar; (2) Tilaiya dam with a power station of 4,000 kW in Hazaribagh district, Bihar; (3) the Konar dam 24 miles from Hazaribagh, (4) the Maithon dam with a power station of 60,000 kW in Dhanbad district (Bihar); (5) the Panchet Hill dam with a power station of 40,000 kW (Initial) in Dhanbad district (Bihar); (6) the Durgapur Barrage and Canals in the districts of Burdwan, Bankura, Hooghly and Howrah (West Bengal) and (7) the transmission and distribution system.

The Bokaro Thermal Power Station has now an installed capacity of 225,000 kW.

The Konnar Dam, The Maithon Dam and the Panchet Dam together provide irrigation for 9,73,000 acres of kharif and 55,000 acres of rabi crops and supply for industrial and domestic use of the region.

The Panchet Hill Power Station has an initial installed capacity of 40,000 kW.

During the kharif seasons of 1962-63, 1963-64 and 1964-65 water from the Durgapur Barrage was supplied to irrigate an area of 6.25, 6.39 and 6.54 lakh acres respectively. During 1964-65 an irrigational potential of 7,70,000 acres was created.

The D.V.C. power system supplied through an expanding network of transmission lines reaching right upto Calcutta 2,606 million units in 1962-63, 2,851 million units in 1963-64 and 2,949 million units in 1964-65 and 3,411 million units in 1965-66.

Considerable progress has been achieved in the construction of transmission and distribution facilities. Already 951 miles of 132 KV and 119 miles of 33 KV lines including 11 miles transferred to West Bengal State Electricity Board in April 1965, have been completed. Also upto March 1966, 28 sub-stations of 132 KV and 17 sub-stations of 33 KV have been completed.

\* Composite State.



In addition to the unfinished works carried over from the Second Five Year Plan, the following additional important schemes had been taken up for execution during the Third Five Year Plan period: (1) Extension of the Durgapur Thermal Power Station by a 1,25,000 kW Unit was in progress and likely to be commissioned by the end of 1966, (2) Extension of the Chandrapura Thermal Power Station by a 1,25,000 kW Unit was in progress and likely to be commissioned by June 1967, (3) Augmentation of transmission system, (4) Dam to store water for industrial and domestic purposes (5) Extension and improvements (Barrage and Irrigation) and water course.

The estimated cost of the project including, the new schemes taken up during the period of the Third Five Year Plan was about Rs. 210.61 crores. The aggregate expenditure on the various projects upto the end of November 1965 worked out to about Rs. 196.16 crores.

Third Plan outlay: Rs. 83.43 crores.

Budget Estimates (1963-64): Rs. 17.79-48 lakhs; (1964-65): Rs. 19.67-42 lakhs; (1965-66): Rs. 1,911.55 lakhs; (1966-67): Rs. 1,657.26 lakhs.

About 93,333 acres of afforestation work under Soil Conservation scheme have been completed upto March, 1965 (of which 23,366 acres by D.V.C. and 69,967 acres by the Govt. of Bihar).

The annual gross revenue from power during 1961-62, 1962-63, 1963-64, 1964-65 and 1965-66 was Rs. 10.39 crores, Rs. 13.15 crores, Rs. 15.10 crores, Rs. 16.19 crores and Rs. 20.31 crores respectively.

**Hirakud Dam Project (Orissa).**—This project is the biggest multipurpose River Valley Project on river Mahanadi in Orissa State and is situated near Sambalpur. The main functions of the Project are flood control, irrigation and power. The construction of the project was taken up in two stages. In the 1st Stage the Hirakud Dam, Hirakud Canal system and Burla Power House were completed. The Chiplima Power House was completed in the 2nd Stage.

The total culturable commandable area under Hirakud Irrigation in Sambalpur and Bolangir Districts is 3.8 lakhs of acres and the total annual irrigation potential is 6.00 lakh acres. The Hirakud Dam Project is also providing regulated supply for perennial irrigation of about 9 lakhs of acres in Mahanadi Delta in the districts of Cuttack and Puri.

The power is developed in two stages at Burla Power House (at the foot of the dam) and at Chiplima Power House, 16 miles down stream of the Dam. The Burla Power House has got 6 power units of total installed capacity of 198 M.W. and Chiplima Power House has 3 power units of total installed capacity of 72 M.W., the total installed capacity being 270 M.W. The project provides power to many industries and the rural areas of Orissa.

**Mahi Scheme:** The revised estimated cost of the project has been worked out to be Rs. 495 lakhs. The scheme when completed is likely to irrigate 76,000 acres of land.

**Tungabhadra Project (Andhra, Mysore).**—The project is now being executed by the Tungabhadra Board and the Governments of Andhra Pradesh and Mysore.

**Head Works:** The Tungabhadra Dam across the river Tungabhadra at Mallapuram in Bellary District (Mysore) is 8,006 feet long and 162 feet high at the deepest foundation and 116 feet high on an average above the river bed. The reservoir extends to an area of 146 square miles and has a capacity of nearly 3.1 million acre feet at the full reservoir level of 1633.

**Canals:** There is only one canal on the northern side. This will irrigate about 5,80,000 acres of land in Raichur District of Mysore State.

There are two canals on the southern side of the river—the Low Level Canal and the High

Level Canal. The former is 217 miles in length. This canal, accommodates 2,500 cusecs of water for irrigation, feeds the canal power house at Hampi and irrigates lands in Mysore State and Andhra Pradesh. The net irrigable area under the Low Level Canal is 92,345 acres in Mysore and 1,48,725 acres in Andhra Pradesh.

The Govt. of India have sanctioned the execution of the High Level Canal in two stages. The first stage costing Rs. 13 crores was completed in Jan. 1967 and the work on the distributive system was in progress. When the first stage of the canal is completed, it will irrigate 1,19,115 acres of land in Andhra Pradesh and 68,250 acres of land in Mysore; when the second stage is completed, an additional area of 1,32,685 acres of land will be brought under irrigation in Andhra Pradesh and similarly an additional 68,500 acres of land in Mysore.

**Hydro-Electric Scheme:** When completed the Hydro-Electric Scheme on the southern side will consist of two Power Houses with four generators in each power house, each of 9,000 kW capacity making an aggregate of 72,000 kW. The first station is near the Dam and the second at the end of the Power Canal. The total installed capacity of the Tungabhadra Hydro-Electric scheme is at present 72 MW from the two power stations situated on the southern side.

On the northern side of the Project, it is proposed to have one power house near the Dam with 4 units of 9,000 kW capacity each and three more power houses on the canal. All the power houses taken together will generate 1,00,500 kW of power.

The cost of the sanctioned scheme is Rs. 90.67 crores, Rs. 66.75 crores for irrigation and Rs. 23.92 crores for power.

**Benefits:** About 4.5 lakh acres of land have been brought under irrigation so far. In the same way, 99,000 kW of power was being produced and supplied to the consumers (May 1965).

The estimated cost of the entire project (northern and southern sides) when completed in all respects, is about Rs. 108 crores which will ultimately add a total of about Rs. 20 crores per annum to the national wealth in the shape of food and commercial crops. It will bring 12.1 lakh acres of land under irrigation and generate 172.5 MW of power.

The programme of intensive stocking of fishes has been taken up in the reservoir. The maximum yield of fish will be about 1,000 tons per year.

**Kosi Project (Bihar).**—Total expenditure on the project (old scheme) upto the end of Feb. 1965 was Rs. 58.72 crores. The Kosi canal systems on the eastern and western sides of the river have been designed to provide annual irrigation to an area of about 26 lakh acres in the districts of Saharsa, Purnea, Darbhanga and Monghyr of Bihar and Saptari of Nepal.

A hydro-power scheme with an installed capacity of 20,000 kW is under execution and is scheduled to be completed by 1966-67. According to the agreement on the project, 50 per cent of the power to be generated has been earmarked for Nepal.

The work on the project is being implemented by the Government of Bihar.

**Chatral Canal System:** As part of India's Aid to Nepal the Chatral Canal Project has been taken up. The canal will take off at 30 miles upstream of Kosi Barrage and will irrigate annually 2.12 lakh acres in the Morang and Saptari districts of Nepal. This scheme will cost about Rs. 6.50 crores. This scheme, when completed, would yield an additional produce of thirty-nine lakh maunds per year valued at Rs. 4.75 crores.

Schemes to extend irrigation facilities to an area of 3.97 lakh acres between the Kosi river and the original command of Eastern Canal system has been taken up at an estimated cost of Rs. 685.75 lakhs including the cost of village channels. 69 per cent of the work has been completed so far.

The final solution of Kosi lies in the construction of dams in the hilly reach of the river. Investigations are in progress to locate a dam near Kothar across the Kosi in Nepal, about one mile from Chatral, being put up to control the river as also to generate 10 lakh kW of hydro-electric power.

#### Rajasthan Canal:

(For details see under Rajasthan State.)

**Nagarjunasagar Project (Andhra Pradesh).**—The project is situated near Nandikonda village in Miryalguda Taluk of Naglonda district. The project comprises the construction of a gravity type masonry dam—the tallest and largest masonry dam in the world—two irrigation canals on either side of the river and a power house with 8 generating units each with 50,000 kW. installed capacity. The main dam, when completed, will be 409 ft. high (ultimate stage), 360 ft. wide at the base and about a mile long. It will be flanked on either side by compacted earth dams. Each flanking dam will also be about a mile long. A 28-ft. roadway will run on the top of the dam linking the flanks over the central spillway. Eight penstocks, 16 ft. in diameter will be installed in the dam.

**First phase:** The first phase (now in execution) of the project is expected to irrigate 21.50 lakh acres, partly for paddy and sugarcane and partly for cotton, groundnut, maize, jowar and other millets. The quantity of foodgrains production anticipated is eight lakh tons per annum under the first phase of the scheme and 12 lakh tons in the ultimate phase.

**Nagarjunasagar Dam:** The dam, when completed, will impound the waters of the Krishna in a 110 sq. mile man-made lake, the biggest in India and the third largest in the world. The ultimate storage capacity of the reservoir is estimated at about 9.37 million acre feet of water, thus dwarfing the Bhakra reservoir of 7.4 million acre feet of capacity.

**Nagarjunasagar right canal:** Under the first phase of the project (now in execution) the right canal will run to a length of 135 miles. The right canal will irrigate about 11.20 lakh acres, benefiting large tracts of land in Guntur, Nellore and Kurnool. In the ultimate phase, the canal will extend to a length of 276 miles.

**Nagarjunasagar left canal:** Under the first phase of the project (now in execution) the Left Main Canal will run to a length of 108 miles. The canal will irrigate about 8.80 lakh acres. In the ultimate stage it will extend to a length of 140 miles in Nalgonda and Khammam districts serving the needs of Miryalguda and Huzurnagar taluk of Khammam district and Nandigama, Tiruvur, Nuzvid and Gannavaram taluks of Krishna district.

**Estimated cost and expenditure in (crores) incurred on the Nagarjunasagar Project upto May 1965:** (a) Nagarjunasagar Dam: 47.64, 49.01; (b) Nagarjunasagar Right Canals: 47.74, 21.45; Nagarjunasagar Left Canals: 44.16, 16.01.

The revised estimate for Nagarjunasagar Project for the year 1964-65 is Rs. 1,400 lakhs and the provision for 1965-66 is Rs. 1,800 lakhs.

#### GANDAK PROJECT

It is one of the major projects in which India and Nepal are collaborating as neighbours. Within India, it is an inter-State project in which Bihar and Uttar Pradesh are joining hands.



## NET AREA IRRIGATED BY SOURCES, 1963-64 @

The following table gives the figures in thousand acres :

| STATES AND TERRITORIES              | CANALS |         |       | Tanks | Tube Wells | Wells | Other Sources | Total  |
|-------------------------------------|--------|---------|-------|-------|------------|-------|---------------|--------|
|                                     | Govt.  | Private | Total |       |            |       |               |        |
| Andhra .. .. .                      | 3,172  | 69      | 3,241 | 3,031 | 68         | 912   | 401           | 7,653  |
| Assam .. .. .                       | 178    | 721     | 899   | —     | —          | —     | 612           | 1,511  |
| Bengal (West)* .. .. .              | 1,269  | 956     | 2,227 | 812   | —          | 40    | 455           | 3,534  |
| Bihar .. .. .                       | 1,501  | 91      | 1,592 | 634   | 265        | 511   | 1,938         | 4,940  |
| Gujarat* .. .. .                    | 228    | 32      | 260   | 45    | —          | 1,459 | 90            | 1,854  |
| Jammu and Kashmir .. .. .           | 157    | 494     | 651   | 1     | (a)        | 3     | 17            | 672    |
| Kerala .. .. .                      | 385    | 14      | 399   | 127   | —          | 5     | 326           | 857    |
| Madhya Pradesh .. .. .              | 1,219  | 4       | 1,222 | 346   | 2          | 891   | 95            | 2,567  |
| Madras .. .. .                      | 2,158  | 3       | 2,161 | 2,260 | 17         | 1,476 | 101           | 6,015  |
| Maharashtra .. .. .                 | 542    | 76      | 618   | 512   | —          | 1,608 | 104           | 2,842  |
| Mysore .. .. .                      | 675    | 15      | 690   | 931   | —          | 435   | 316           | 2,372  |
| Orissa* .. .. .                     | 487    | 69      | 556   | 1,223 | —          | 94    | 541           | 2,414  |
| Punjab .. .. .                      | 5,433  | 118     | 5,551 | 23    | 583        | 1,993 | 235           | 8,385  |
| Rajasthan .. .. .                   | 1,589  | —       | 1,589 | 299   | 4          | 2,630 | 72            | 4,594  |
| U.P. .. .. .                        | 5,355  | 3       | 5,358 | 1,090 | 1,581      | 4,557 | 703           | 13,289 |
| Delhi .. .. .                       | 34     | —       | 34    | 11    | —          | 37    | —             | 82     |
| Himachal Pradesh .. .. .            | (a)    | —       | (a)   | (a)   | (a)        | (a)   | 98            | 98     |
| Manipur .. .. .                     | —      | 168     | 168   | —     | —          | —     | —             | 168    |
| Tripura .. .. .                     | —      | —       | —     | 1     | —          | —     | 13            | 14     |
| Nagaland .. .. .                    | —      | —       | —     | —     | —          | —     | 30            | 30     |
| Pondicherry .. .. .                 | —      | —       | —     | —     | —          | —     | —             | —      |
| Andaman and Nicobar .. .. .         | 28     | —       | 28    | 16    | 19         | —     | (a)           | 63     |
| Laccadive, Amindivi Islands .. .. . | —      | —       | —     | —     | —          | —     | —             | —      |
| Goa Daman Diu .. .. .               | —      | —       | —     | —     | —          | —     | —             | —      |

@ Latest available.

\*Figures are for 1962-63.

(a) Below 500 acres.

## INDO-PAKISTAN RELATIONS

In essence, the post-Tashkent relations between India and Pakistan took the form of an attempt by India to normalise and regularise the relations between the two countries as the Tashkent Agreement required, while Pakistan resisted all such attempts on the ground that relations cannot be normalised unless the subject of Kashmir was discussed and its status changed in a manner that was acceptable to Pakistan. The Indian case, briefly, was that all problems that could be settled, should first be settled, and in the atmosphere of goodwill and amity so created one could go on to tackle other more difficult questions that cause friction.

The result of this disagreement was a kind of stalemate in which only the problems specifically created by the hostilities such as, for instance, the disengagement of troops and goods and ships impounded during the war could be dealt with. That is the general setting of Indo-Pakistan relations in the period subsequent to the hostilities in September 1965. India continued to revert to individual issues, kept making concrete proposals and used every possible opportunity to get the talks going mostly without much success. For instance, as late as February 18, 1967 the Indian High Commissioner in Pakistan, Mr. S. Sen, held consultations with senior officials of the Pakistan Ministry of External Affairs on the proposal for resumption between technical officials about the resumption of air services and telecommunications between the two countries. India made it clear once more that no delay should be caused in normalising relations in other spheres besides the resumption of air services and telecommunications. In particular India wanted particular attention to be paid to the restoration of river traffic between West Bengal and Assam.

It may, before going into details, be useful to summarise the general position as it looks from India. It would seem that the future would probably be more hopeful than the past. For one thing, one of the two pillars on which Mr. Bhutto built up his anti-Indian policy, the

pro-Peking Indonesian Communist Party is now decimated and President Sukarno's own powers are drastically cut. For another, China's power and influence and capacity to lend support moral or material have been drastically reduced by the disorganisation produced by the cultural revolution. President Ayub is thus no longer in the position of being able to exert pressure on Washington and Moscow by playing up the China's alliance. This may produce a thorough re-appraisal of Pakistan's general attitude. But as yet there is not much actual practical evidence that Pakistan may be re-considering her foreign policies particularly in regard to India. There is still a strong extremist sentiment in Pakistan nurtured and kept alive by Mr. Bhutto who is still a power to be reckoned with. But there are other countervailing forces. The food situation is difficult in both wings; the significance of this is that the country is dependent on American supplies of food, and to that extent is open to pressure and persuasion. Recent American foreign policy pronouncements would require that President Ayub exercise due care and moderation. President Ayub has also other difficult political problems at home—the continuing unrest in Baluchistan, the growing demand for autonomy in East Pakistan. All this has undoubtedly produced a certain receptive and conciliatory mood so far as the removal of the more active tensions are concerned such as the ones created on the border by army movements, itself produced largely by misunderstanding.

India believes that it should be possible to restore relations at least to the pre-1965 level as provided for in the Tashkent Declaration. That is why in her efforts to persuade Pakistan to agree to bilateral talks, India is even willing to discuss the subject of Kashmir. But in India it is feared that Pakistan accepted the Agreement primarily with the idea of getting Indian forces out of highly strategic areas in her own territory like the Jammu and Kashmir passes and the environs of Lahore and Sialkot. Once she succeeded in getting her territory evacuated,

Pakistan is prepared to rest content with the present state of political stalemate provided misunderstanding does not reach a level where troop movements occur and serious tensions arise once again. There is thus a real lack of any desire to improve political relations. This highlights the success and failure of the Tashkent Agreement. It succeeded in bringing about a disengagement of the two armed forces, which was a paramount necessity at the time. Subsequent discussions produced certain helpful ground-rules with the result that the two armies do not any longer face one another in battle array. It must also be stated that after some frantic initial search for armaments to replace what she lost and also rebuild her strength Pakistan has not kept up the original pace of the re-armament drive.

At the moment Indo-Pakistan relations have an air of being frozen. Trade and commerce have not been renewed, but the fact that peace has been maintained and that the arms race has to all appearance come to an end must be reckoned a distinct gain, though of a negative sort. This has provided a respite in which the two countries can devote their resources for repairing their economy and increasing production.

It remains India's stand, as we have mentioned before, that the first necessity is to create a friendly climate and this can only be done by discussing and agreeing on less controversial items. India does not refuse to discuss Kashmir—she recognizes that it causes friction, though this is due to wrong-headedness on the part of Pakistan—but she says that if Kashmir must be discussed it should be discussed last rather than first. Let us get on with restoring economic relations. After all India and Pakistan are one another's natural trading partners, and have a large stake in forging the closest possible economic ties. We can do much to remove the trail of rancour and bitterness caused by the war and re-establish goodwill. To achieve this, Pakistan should put an end once for all to the anti-Indian



propaganda barrage that she has maintained for so long, and which keep bitter memories alive.

India has acted in the belief that her obligations under the agreement are not and should not be dependent on what Pakistan may or may not choose to do. An honest implementation of the Tashkent Agreement by India may indirectly compel Pakistan to follow a similar course. It is in this spirit that India took the first steps in restoring postal and telecommunications, releasing aid cargoes and resuming pension payments without expectation of reciprocity. To put it at its worst, a faithful implementation of the agreement would deprive Pakistan of at least one excuse for not adhering to the Tashkent Declaration.

We can now proceed to deal with the details more systematically. The Tashkent Declaration covers four categories of action:—normalisation of the relations in the military sphere to be achieved by the return of the armed forces to the position *ante bellum*; normalisation of relations in the civilian sphere also by reversion to the position which existed before the hostilities; to make a start with efforts to tackle some long-term problems that cause friction; adoption of measures to strengthen and improve good relations.

Necessary steps were taken in accordance with these terms. Military withdrawals to the pre-Aug. 5 position were completed by February 25, 1966. Prisoners of war were exchanged; High Commissioners returned and normal diplomatic relations were resumed. Regulated over-flights across each other's territories commenced from February 10, 1966. The restoration of telecommunications and postal services started. Airmail began to be sent through third country carriers from October 1966 and sea mail from November.

Article IV of the Declaration called for fulfilment of existing arrangements. In terms of this payment of pensions to migrated officials as required by the Agreement of July 1959 which had been suspended on the outbreak of the conflict was restored on May 1, 1966.

Indo-Pakistani officials started meeting periodically and agreed on measures for the demarcation of Berubari and Hilli towards fulfilment of the Nehru-Noon Agreement of 1958 and for demarcation on the ground of some other sectors on the eastern borders which were still outstanding.

One land border checkpost was kept open on each side of the western and eastern border to enable some special categories of people to move between the two countries since March 16, 1966 in partial fulfilment of the 1962 Indo-Pakistan Passport and Visa Scheme.

In the spirit of Article VIII which envisages discussions on the return of seized properties and assets, India not only agreed to the return of three Pakistani ships she had detained, but also announced in July 1966 that she is returning all

detained cargo other than military contraband. The bulk of this restoration has been completed.

Subsequent to the withdrawal of troops which was completed on February 25, 1966, the Army Chiefs of India and Pakistan met on September 13 and 14, 1966 on India's initiative and reached agreement that before troops were moved to the borders, the other country would be notified to remove causes that give rise to suspicion and tension. Such troop movements relate to rotation or replacement or exercises in some strength. The Air Chiefs of the two sides also met subsequently.

On January 28, 1966, India proposed that an Indo-Pakistan inter-Ministerial meeting should be held to consider further steps towards the implementation of the Tashkent Declaration. It was suggested that the discussion should cover among other things restoration of trade and economic relations and communications, envisaged in Article VI and the return of properties in accordance with Article VIII. The proposals did not contemplate any limitation on the range of subjects to be discussed. On February 4, however, the Pakistan Government produced a list of six items which it wanted to bring up at the Minister's meeting, beginning with Kashmir. These items proved to be highly controversial and would have given the talks a bad start. The manner in which the points were set out was also highly provocative. Undeterred, the Indian High Commissioner had two meetings with President Ayub and eventually the Pakistan Government agreed that the two sides should meet without an agenda, and either side could raise any subject it liked.

The inter-Ministerial meeting took place in Rawalpindi on March 1 and 2, 1966. The seriousness with which India took the meeting is attested for by the fact that the delegation included three Ministers and five secretaries who were ready to discuss any measures that may be proposed to improve Indo-Pakistan relations, including such matters as the uses of eastern river waters and the movement of refugees in which Pakistan had said she was specially interested. Pakistan, however, made it clear that no discussion could take place on any item unless substantial progress was first made towards agreement over Kashmir. This came as something of a surprise since there was nothing in the Tashkent Agreement to warrant the adoption of such an attitude. Also, Pakistan had co-operated in carrying out a number of provisions of the Tashkent Agreement without waiting to see whether there was any accord over the future of Kashmir. The Indian delegation appeared to have told Pakistan that the subject of Kashmir could be raised, but that it would serve no useful purpose since the subject had been raised only two months earlier and the heads of the two Governments had agreed to disagree. The Pakistani stand-point was that the Tashkent Agreement turned on Kashmir; and if there was

no progress on Kashmir there could be no progress on any other subject. So, if India wanted any talks at all they should start with Kashmir and produce some promise of agreement. In the joint communique that was issued at the end of the Rawalpindi meeting the two countries agreed to have further meetings.

Sardar Swaran Singh made a statement on March 4, 1966, which pointed out that the significance of Tashkent was two-fold. First, the two sides would not resort to force to settle their differences, but would resolve them peacefully; and secondly, they would proceed with the resolution of individual issues, even though on some others their positions were widely divergent.

On May 19, 1966 the Prime Minister of India stated that India was willing to have a meeting with Pakistan at any level that could make for progress under the Tashkent Agreement. However, despite continuous enquiry by India no meeting has taken place so far (Feb. 19, 1967). The Government of India has informed Pakistan repeatedly of its desire to cooperate fully with Pakistan in implementing the Declaration. India is ready to discuss any issue without any pre-conditions so as to bring about as much progress in as many fields as possible and improve relations between the two countries.

The response from Pakistan has been halting, obstructive, at best negative. It is yet to respond to India's request for a technical level meeting between the Posts and Telegraph experts of the two countries to improve direct telegraph and telephone communications and settle related financial matters or normalise relations in the whole field of communications.

In the matter of return of seized properties, Pakistan unlike India agreed to return only the three ocean going Indian ships seized by her to the underwriters and such of Aid cargo as she still had to the donors.

Again in contrast to what India did, Pakistan not only resumed its anti-Indian propaganda which had been suspended for a short time soon after Tashkent but frustrated every Indian move to normalise the relations between the two countries. Thus, India kept open for long all the 50 land traffic checkposts on the western and eastern borders. Again India offered to release all impounded cargo and ships in November 1965 on a reciprocal basis. Pakistan asked for the exchange of seized railway stock, and when India responded with an invitation for talks on the return of the seized assets and properties as a whole Pakistan drew back.

India had expressed her willingness to discuss long range measures to improve economic and trade relations between the two countries. Failing to evoke any positive response, India on May 26, 1966 unilaterally removed the ban on trade with Pakistan. Pakistan still continues her total ban on trade with India.

## FORESTS

**TOTAL Forests:** 302,688 sq. miles.  
Percentage of Forests to Land: 21.8. Per capita forest area will be about half an acre.

Financial return per acre of Forest: Rs. 2.60.

The forests are unevenly distributed and the production is also proportionately low, being only 2.6 c.ft. per acre per year as compared to 56.8 c.ft. in France, 37.3 c.ft. in Japan and 18.1 c.ft. in U.S.A.

Private forests: In Assam 400 sq. miles (in Khasi and Jaintia Hills), Orissa 600 sq. miles mostly in zamindari agencies, Punjab 340 sq. miles in scattered units, and Himachal Pradesh 29 sq. miles in Jabbal Division.

About 16 per cent of the total forest area is inaccessible and 45 per cent of these could yield timber and other forest produce.

Most of the country's forests are worked according to Forest Working Plans prepared by special staff. On the basis of present conditions and past working, these plans lay down, for a 10-15-year period at a time, silvicultural systems, schedules for thinnings and other cultural work, methods of management, staff requirements and exploitation programmes, besides development schemes for roads and buildings.

The formation of forest plantations involving a long-term policy for increased production is now-a-days an important feature of Indian Forestry, e.g. the very valuable and extensive plantations of Teak, Bluegum, Wattle, Casuarina, Sal, Deodar, as also evergreen species and softwoods for matches.

'Forests' are a State subject.

The Government of India, however, are responsible for forest research and forest education. The Ministry of Food and Agriculture in the Government of India co-ordinates forest activities in the country, but no forests are directly worked by it except the Andaman forests. The Inspector-General of Forests is their technical adviser in forest matters.

### FORESTRY COMMISSION

On the recommendations of the Central Board of Forestry, a Central Forestry Commission has been established to study the implementation of the national forest policy by the State Governments and Union Territories and make suggestions for improvement wherever necessary. The Commission will also collect, standardise and publish statistics relating to forestry; pool and disseminate technical information on forestry;



conduct market studies on timber and other forest products and their utilisation; render assistance and technical advice in the implementation and evaluation of the forestry development programmes and provide liaison between the Central Soil Conservation Board, the Advisory Board on Research, the River Commission, the Central Flood Control Board and other agencies whose work has direct or indirect bearing on forests and forest development. In view of the importance of the plantation of fast growing species of trees for the development of forest-based industries and of fuel and with a view to maintaining international cooperation in this field, it has been decided that the Central Forestry Commission may also function as the National Commission for Popular and other fast growing species. The National Commission will study the scientific, technical, social and economic aspects of various species, provide facilities for exchange of ideas and material between research workers, producers and users of these species, arrange joint research programmes and study tours and provide liaison with the International Poplar Commission set up under the aegis of the Food & Agricultural Organisation. A Panel on Forestry Education has also been constituted to guide the country's policy on forestry education. Further, as recommended by the Central Board of Forestry, three eminent scientists have been appointed as Professors Emeritus.

### EDUCATION AND RESEARCH

Forest research and education are centralised in one large institution known as the Forest Research Institute and Colleges located at Dehra Dun.

The Forest Research Institute as such came into being in 1906 as an adjunct to the then Imperial Forest College. Through progressive stages of development the Institute has now attained a position which has earned for it international prestige as evidenced by its recognition by the Food and Agricultural Organisation of the United Nations as a Centre for training in Forestry for South-East Asia.

The Forest Research Institute and Colleges are under the administrative control of the Ministry of Food and Agriculture of the Government of India. Its administrative Head is designated the President. It has under its control two Regional Forest Research Centres, one at Bangalore and the other at Coimbatore to deal with the special problems pertaining to the area. It has a strength of about 175 officers and about 1,600 other staff.

The Institute was reorganised into four directorates working under the President, viz., 1) The Directorate of Forest Education, 2) The Directorate of Forestry Research, 3) the Directorate of Forest Products Research and 4) the Directorate of Biological Research.

The education wing of the Institute comprising three Colleges is in the charge of the Director of Forest Education. The colleges have a strength of about 700 students including 20 from foreign countries.

The Indian Forest College trains recruits of the State Governments to their gazetted forest services. The course stretches over a period of two years and the minimum qualification for admission is a B.Sc. degree.

The Northern Forest Rangers College (Dehra Dun) and the Southern Forest Rangers College (located in Coimbatore) offer training for two years to rangers selected by State Governments in the northern and southern regions of the country respectively, the minimum qualification for admission being Inter Science.

**Directorate of Forestry Research:** This has two branches (1) Silviculture Branch—studies rates of growth of the different kinds of trees, forest management, influences of forests, study of soils and forest ecology. It also has a museum, a demonstration area and experimental gardens under its control. The important cloves of fast growing poplars which hold promise of early production of industrial wood have been

successfully established. Extensive work on the cultivation of economic plants is continued. (2) The other is the Logging Branch dealing with the methods of scientific felling of trees and economic extraction and conversion of timber. Fifty sets of efficient modern logging tools supplied at half the cost by the Government of Switzerland were distributed to various States and Union Territories for demonstration purposes.

**Directorate of Biological Research:** Has six branches under it:—

(1) The Minor Forest Products Branch is engaged in economic research on forest plants which constitute about 30 per cent of the forest wealth of India and earn foreign exchange of about Rs. 40 crores annually. The branch has established Artemisia and Santonin industry in India and has done work on the cultivation of medicinal and essential oil yielding plants.

(2) The Botany Branch maintains a herbarium which has over a quarter-million carefully preserved authentic specimens from all over the world and about 3-4 thousand exotic and indigenous specimens are added every year to it. The branch takes up the identification of plants, their breeding and experiments on genetics and introduction of new species of trees in various regions.

(3) The Forest Pathology Branch specializes in investigations of tree diseases and timber decays caused by fungi with a view to evolving methods of control. This branch forms one of the centres of the Indian National Committee on Type Cultures of Micro-organisms.

(4) The Entomology Branch functions to reduce the losses to forest trees and forest products caused by harmful insects and pests.

(5) The Wood Anatomy Branch has one of the finest timber collections in the world comprising about 15,000 indigenous and foreign wood samples.

(6) The Wood Preservation Branch conducts experiments on improving the timber by impregnation with various chemicals and preservatives and thus protects it from deterioration and damage by the insects and fungi. Both the above branches coach the students for the certificate and diploma courses in these subjects, which are awarded by the Institute.

**Directorate of Forest Products Research:** Has six branches:—

(1) The Wood Seasoning Branch has designed a number of seasoning sheds and seasoning kilns including veneer driers. It has also found out Indian substitutes for foreign timbers for various wood based industries and textile mills accessories.

(2) The Composite Wood Branch undertakes to study the problems of improved woods like plywood, compregnated wood, building boards etc. and also conducts research on suitability of various glues.

(3) The Cellulose and Paper Branch is the only place in India where organised research is being done on the utilisation of forest produce and agricultural wastes for the production of pulp, paper and boards. The branch is equipped with a six-ton pilot paper plant by which the researches carried out in the laboratory are piloted before they are advised to the paper industry. The branch has diploma and short-term courses regularly in pulp and paper technology.

(4) The Timber Mechanics Branch studies the various properties of timbers and also finds out their suitability for various purposes.

(5) The Timber Engineering Branch has done work on the utilisation of non-conventional timbers and the use of short-length, small dimensioned timbers for making buildings, pavilions and bridges.

(6) The Chemistry of Forest Products Branch has done work on extraction of essential oils from the various forest produce and also Katha from *Acacia catechu* tree.

There is a well equipped Publicity & Liaison Branch for the various branches of the Institute. Their research results and activities are published in technical journals. The publication of research papers, strengthening of liaison with various woodbased industries and departments of the Government, and organisation of meetings and conferences are the main activities of this branch.

The staff of this Institute are provided with adequate housing accommodation and there is also a well-equipped rest house for visitors. The Institute has a high school, a hospital, a co-operative society, clubs, play-grounds and P. & T. office in the campus.

### U. N. AID

The U.N. is expected to help India's Rs. 1,440-lakh project of scientific survey of forest resources from its special fund.

The U.N. is expected to contribute, mainly in the form of technical experts and equipment, including helicopters and aerial survey apparatus, to the tune of Rs. 40 lakhs.

Two of the U.N. aided projects are "Pre-investment Survey of the Forest Resources" and Establishment of Logging and Training centres. The first project costing Rs. 131 lakhs is assisted by Rs. 42.15 lakhs from U.N. special Fund to investigate the availability of forest raw materials for industrial development in three selected zones covering 11,500 sq. miles, assess the raw material requirements of wood based industries and to determine suitable areas for industrial plantations. The survey will be made first at the Central Zone, and three foreign experts with their Indian counterpart personnel have already joined the project. In the second project four logging training centres will be set up in each of the four regions of the country for improving the efficiency of timber extraction and for improving training in the area of modern logging equipment and mechanised transport of timber. Estimated to cost Rs. 52.46 lakhs out of which Rs. 25.23 lakhs will be provided by U. N. Special Fund, the first training course in the project has already been selected at Dehra Dun Logging Training Centre.

As against 64,400 acres brought under quick growing species during 1964-65 an area of 71,000 acres was expected to be covered during 1965-66.

### FOREST PRODUCE

Forest produce is divided into two main heads—(1) Major produce, i.e., timber and firewood, and (2) Minor produce, comprising all other products, such as bamboos, canes, leaves, fruits, fibres, grasses, gums, resins, essential oils, medicinal and poisonous plants, fatty oils and fats, dyes, tans and animal and mineral products.

The annual output of timber is 274 million c.ft. and 700 million c.ft. of firewood. At present annual import of wood and wood products is of the order of 40 million c.ft.

The bulk of the timber supply is used for railway sleepers, constructional requirements, furniture, plywood (especially for tea chests), matches, etc.; but the country imports timber for specialized uses such as jute and textile mill accessories.

Exports from India are limited to selected rosewood logs for high grade furniture to Europe, teak poles for the Middle East and a few other items.

**A. N. Islands:** From April to Dec. 15, 1965, about 42,000 tonnes of timber were extracted of which about 18,000 tonnes were shipped to mainland. About 1,200 acres have also been brought under teak plantations under the scheme for raising industrial plantations.

Timber production in India is not sufficient to meet internal needs. While foreign markets could be readily developed for Indian timber, exports are limited to small quantities of ornamental timbers for European countries, teak poles for the Middle East from the west coast and traditional despatches to markets in Pakistan. Exports are regulated by quotas which are periodically re-examined.



**ANNUAL TRADE STATISTICS OF FOREST PRODUCTS OF INDIA (1964-65 & 1965-66)**  
(Value in Thousand rupees)

| Name of products                                                                               | Description of Foreign trade | 1964-65  | 1965-66  |
|------------------------------------------------------------------------------------------------|------------------------------|----------|----------|
| <b>I. Major Forest Products</b>                                                                |                              |          |          |
| 1. Wood, lumber & cork .. .. .                                                                 | Imports                      | 18,337   | 18,214   |
|                                                                                                | Exports                      | 22,934   | 19,077   |
| 2. Pulp & Waste paper .. .. .                                                                  | Imports                      | 79,743   | 58,804   |
|                                                                                                | Exports                      | 47       | 324      |
| 3. Wood, cork manufactures (excl. furniture) .. .. .                                           | Imports                      | 5,015    | 5,274    |
|                                                                                                | Exports                      | 2,733    | 981      |
| 4. Paper, paper board & manufacture thereof .. .. .                                            | Imports                      | 1,30,951 | 1,33,801 |
|                                                                                                | Exports                      | 9,585    | 12,033   |
| 5. Wood furniture & fixtures (excl. Artware) .. .. .                                           | Imports                      | 72       | 1,116    |
|                                                                                                | Exports                      | 319      | 1,009    |
| 6. Important wild animals, (not for food) .. .. .                                              | Imports                      | —        | 3        |
|                                                                                                | Exports                      | 2,280    | 1,914    |
| <b>TOTAL MAJOR FOREST PRODUCTS</b> .. .. .                                                     | Imports                      | 2,34,118 | 2,17,212 |
|                                                                                                | Exports                      | 37,898   | 35,338   |
| <b>II. Minor Forest Products</b>                                                               |                              |          |          |
| 1. Plants & parts of plants for use in dyeing & tanning whether ground or not .. .. .          | Imports                      | 3,514    | 2,314    |
|                                                                                                | Exports                      | 7,295    | 8,242    |
| 2. Natural gums, resins, balsam & lac products .. .. .                                         | Imports                      | 10,421   | 12,147   |
|                                                                                                | Exports                      | 74,489   | 72,194   |
| 3. Vegetable materials for planting etc. .. .. .                                               | Imports                      | 93       | 56       |
|                                                                                                | Exports                      | 4,017    | 1,890    |
| 4. Plants, seeds, flowers & part of plants (mainly for use in medicine or perfumeries) .. .. . | Imports                      | 3,843    | 5,457    |
|                                                                                                | Exports                      | 39,434   | 36,891   |
| <b>TOTAL MINOR FOREST PRODUCT</b> .. .. .                                                      | Imports                      | 17,871   | 19,974   |
|                                                                                                | Exports                      | 1,25,235 | 1,19,217 |
| <b>GRAND TOTAL (ITEMS I &amp; II)</b> .. .. .                                                  | Imports                      | 2,51,989 | 2,37,186 |
|                                                                                                | Exports                      | 1,63,133 | 1,54,555 |

**EXPORT OF WILD ANIMALS & THEIR VALUES**

Quantity in numbers; (value in Rs. 1,000)

|         |    | Monkeys |       | Elephants |       | Tigers |       | Total  |       |
|---------|----|---------|-------|-----------|-------|--------|-------|--------|-------|
|         |    | Nos.    | Value | Nos.      | Value | Nos.   | Value | Nos.   | Value |
| 1963-64 | .. | 76,190  | 3,455 | 19        | 132   | 7      | 21    | 76,216 | 3,608 |
| 1964-65 | .. | 45,166  | 2,241 | 6         | 39    | —      | —     | 45,172 | 2,280 |

Imports are regulated by protective or revenue duties and are restricted to such specialized items as are not readily obtainable from local production.

**FORESTRY (FOURTH PLAN)**

The demand for various forest products both for industrial use and for fuel purposes has been rapidly increasing. As against the current production of 8 million cubic metres for industrial wood, the demand has been estimated to be 11 million cubic metres in 1965-66, 17 million cubic metres in 1970-71 and 24 million cubic metres in 1975-76. With improved logging techniques the current production may go up by 0.5 million cubic metres and an additional one million cubic metres may be obtained by clearing some of the old forests. But there will still remain a considerable gap between demand and supply.

**PLANTATION SCHEMES**

In order to meet this deficiency three important schemes, namely :

- Plantation of quick growing species ;
- Plantation of economic species (teak, sissoo, semal, etc.) ; and

- Plantations to be raised under the scheme of rehabilitation of degraded forests

will be taken up in the Fourth Plan. In addition, it is proposed to raise extensive wood plantations including the farm forestry and afforestation schemes for the soil conservation programmes.

The forests which would have to be cleared to raise the plantations proposed in the Fourth Plan are expected to make available approximately 4.8 million cubic metres.

For raising the production of fuel wood, greater attention will have to be given to the farm forestry programme. The Forest Department would also be responsible for the extension work in Panchayats and in blocks to stimulate the local bodies to take up farm forestry.

**PRE-INVESTMENT SURVEY AND IMPROVED LOGGING**

Two schemes, namely, pre-investment survey of forest resources and establishment of logging and training centres have recently been put into operation with financial assistance from the UN Special Fund. The pre-investment survey scheme has as its objective the assessment of existing forest resources and the site potential in order to meet the growing needs of the country. Under the scheme for the establishment of logging and training centres, it is proposed to set up four centres at Dehra Dun, Coimbatore, Gauhati and Chanda.

**TRAINING**

The development programmes for forests proposed in the Fourth Plan cannot be implemented without adequate technical staff. The Indian Forest College at Dehra Dun, which is the only college in the country for training forest officers could, with great difficulty cope with the training of officers in the Third Plan. Provision to strengthen both the officers' and the rangers' colleges at Dehra Dun has been made in the Fourth Plan. A new ranger's college is also proposed to be started in central India, in addition to the existing colleges at Dehra Dun and Coimbatore.

**Communications :** Quite a large area under forest is at present inadequately served with communications, with the result that the out-turn of the produce is reduced and the cost of extraction becomes expensive. If all these areas are opened up with a good road system capable of use throughout the year, it would be possible to increase the forest output. It has, therefore, been proposed that the existing roads should be properly maintained and a phased programme spread over 10 years for construction of new roads should be formulated. This scheme would have considerable developmental potential, particularly, among the tribal people, since a large part of the programme would be in tribal areas.

**TARGETS**

The important targets for the forestry programme in the Fourth Plan are given in the table below :—

**Physical Targets of Forestry Programmes**

| Schemes                                | Unit       | Third Plan |                           | Fourth Plan |
|----------------------------------------|------------|------------|---------------------------|-------------|
|                                        |            | Target     | Achievement (anticipated) | Target      |
| Plantation of quick growing species .. | lakh acres | 1.37       | 1.60                      | 10.00       |
| Economic plantations .. .. .           | —do.—      | 7.00       | 6.00                      | 8.40        |
| Rehabilitation of degraded forests ..  | —do.—      | 5.20       | 5.20                      | 5.00        |
| <b>Communications</b>                  |            |            |                           |             |
| (a) construction of new roads ..       | 000 miles  | 11.00      | 7.00                      | 10.00       |
| (b) maintenance of old roads ..        | —do.—      | 2.00       | 2.80                      | 7.50        |
| Forest consolidation .. .. .           | —do.—      | 45.82      | 25.00                     | 32.00       |
| Farm forestry .. .. .                  | lakh acres | 12.00      | 0.00                      | 8.90        |



## Forest Statistics

| States & Union Territories            |    |    |    |    |    |    |    |    |    | 1963-64 (in sq. miles) forest area |           |            |
|---------------------------------------|----|----|----|----|----|----|----|----|----|------------------------------------|-----------|------------|
|                                       |    |    |    |    |    |    |    |    |    | Reserved                           | Protected | Unclassed* |
| Andhra Pradesh†                       | .. | .. | .. | .. | .. | .. | .. | .. | .. | 15,530                             | 7,229     | 1,273      |
| Assam                                 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 6,240                              | —         | 3,850      |
| Bengal (West)                         | .. | .. | .. | .. | .. | .. | .. | .. | .. | 2,693                              | 1,577     | 229        |
| Bihar                                 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1,577                              | 9,988     | 580        |
| Gujarat†                              | .. | .. | .. | .. | .. | .. | .. | .. | .. | 2,701                              | 834       | 3,348      |
| Jammu & Kashmir                       | .. | .. | .. | .. | .. | .. | .. | .. | .. | 8,140                              | —         | —          |
| Kerala                                | .. | .. | .. | .. | .. | .. | .. | .. | .. | 4,687                              | —         | 1,153      |
| Madhya Pradesh†                       | .. | .. | .. | .. | .. | .. | .. | .. | .. | 30,407                             | 35,595    | 736        |
| Madras†                               | .. | .. | .. | .. | .. | .. | .. | .. | .. | 6,653                              | 1,476     | 440        |
| Maharashtra                           | .. | .. | .. | .. | .. | .. | .. | .. | .. | 15,630                             | 6,541     | 2,193      |
| Mysore†                               | .. | .. | .. | .. | .. | .. | .. | .. | .. | 11,125                             | 926       | 1,943      |
| Orissa†                               | .. | .. | .. | .. | .. | .. | .. | .. | .. | 11,102                             | 6,676     | 8,011      |
| Punjab†                               | .. | .. | .. | .. | .. | .. | .. | .. | .. | 223                                | 3,537     | 1,160      |
| Rajasthan                             | .. | .. | .. | .. | .. | .. | .. | .. | .. | 4,317                              | 6,980     | 3,526      |
| Uttar Pradesh                         | .. | .. | .. | .. | .. | .. | .. | .. | .. | 9,647                              | 742       | 3,281      |
| Delhi                                 | .. | .. | .. | .. | .. | .. | .. | .. | .. | 8                                  | 5         | 11         |
| Himachal Pradesh                      | .. | .. | .. | .. | .. | .. | .. | .. | .. | 582                                | 3,149     | 144        |
| Manipur                               | .. | .. | .. | .. | .. | .. | .. | .. | .. | —                                  | —         | —          |
| Tripura                               | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1,588                              | 864       | —          |
| Andaman & Nicobar Islands             | .. | .. | .. | .. | .. | .. | .. | .. | .. | 1,498                              | 555       | 447        |
| Laccadive, Minicoy & Amindivi Islands | .. | .. | .. | .. | .. | .. | .. | .. | .. | —                                  | —         | —          |
| Naga Hills-Tuensang Area              | .. | .. | .. | .. | .. | .. | .. | .. | .. | 127                                | 200       | 700        |
| NEFA                                  | .. | .. | .. | .. | .. | .. | .. | .. | .. | 565                                | 2,064     | 15,057     |
| Goa                                   | .. | .. | .. | .. | .. | .. | .. | .. | .. | 2,167                              | —         | —          |

\* Including private forests.

† Denotes data for the year 1962-63.

‡ Composite State.

## FOOD

THE areas covered by the Punjab\* and Madhya Pradesh (former Vindhya Pradesh) are generally surplus in wheat.

The areas covered by the following States are generally surplus in rice: Orissa, Madhya Pradesh, Andhra, Punjab.\*

From the point of view of food generally the position is roughly as follows: Surplus areas:

Madhya Pradesh, Punjab,\* Orissa, Andhra, Self-sufficient areas: U.P., Rajasthan, Madras, Mysore, Assam. Deficit areas: Maharashtra, Gujarat, Himachal Pradesh, Bihar, West Bengal, Kerala, Kashmir, Tripura. Manipur is marginal.

## PRODUCTION

(See under main article "Agriculture")

## Total Internal Procurement and Issue of Food Grains.

(000 met. tons)

| Calendar Year | Procured by |        |       | Issued through |        |        |
|---------------|-------------|--------|-------|----------------|--------|--------|
|               | State       | Centre | Total | State          | Centre | Total  |
| 1962..        | 183         | 296    | 479   | 1,281          | 3,084  | 4,365  |
| 1963..        | 205         | 545    | 750   | 1,678          | 3,505  | 5,178  |
| 1964..        | 689         | 741    | 1,430 | 3,908          | 4,757  | 8,665  |
| 1965@         | 2,350       | 1,668  | 4,018 | 5,516          | 4,546  | 10,062 |

@ Subject to revision.

\* Composite State.

## SUPPLY

The demand and supply of cereals from 1963-1965:

(000 met. tons)

|                           |        | 1963  | 1964  | 1965(e) |
|---------------------------|--------|-------|-------|---------|
| Procurement               | ..     | 750   | 1,430 | 4,018   |
|                           | States | 205   | 689   | 2,350   |
|                           | Centre | 545   | 741   | 1,668   |
|                           | Total  | 750   | 1,430 | 4,018   |
| Opening Stocks in Godowns | ..     | 1,673 | 3,908 | 5,516   |
|                           | States | 1,673 | 3,908 | 5,516   |
|                           | Centre | 3,505 | 4,757 | 4,546   |
|                           | Total  | 5,178 | 8,665 | 10,062  |

The balance sheet of foodgrains distributed by Governments during 1964 and 1965 was as follows:

(in thousand met. tons)

|                                               | 1964 | 1965 (a) |
|-----------------------------------------------|------|----------|
| Opening Stock with States..                   | 319  | 480      |
| Procurement .. ..                             | 545  | 741      |
| Stocks with States at the end of the year ..  | 486  | 914      |
| Central Reserves at the end of the year .. .. | 530  | 1,104    |

(a) Provisional.

Offtake from Central Government stock in 1964, was 8-665 million tons comprising 1-859 million tons rice, 6-785 million tons wheat and 0-021 million tons other grains. In 1965 it was

10-062 m. tons comprising 3-586 m. tons of rice, 5-939 m. tons of wheat and 0-537 m. tons of other grains. The total number of fair price shops in different States at the end of Dec. 1965 was about 110,283.

The total procurement of rice in 1965 was 2-951 million tons. Of this 1-472 m. tons were procured by the Centre and the rest 1-479 m. tons by the States as detailed below: (Fig. in million tons): Andhra Pradesh 0-652; Assam 0-071; Gujarat 0-036; J. & K. State 0-018; Kerala 0-038; Madhya Pradesh 0-366; Madras 0-446; Maharashtra 0-155; Orissa 0-262; Mysore 0-104; Punjab\* 0-288; U.P. 0-123; W. Bengal 0-362.

Manipur and Tripura procured 20,000 and 10,000 tons respectively.

With effect from 1st April 1966 foodgrains have been supplied to State Governments and others at a specially reduced price with a view to stabilising the market price in the country.

Supplies of foodgrains to State Governments from Central Stocks (Mill. met. tons).

| Year    | Rice  | Wheat | Others | Total |
|---------|-------|-------|--------|-------|
| 1962 .. | 0-529 | 2-505 | 0-029  | 2-629 |
| 1963 .. | 0-478 | 3-034 | 0-010  | 3-084 |
| 1964 .. | 0-818 | 3-939 | —      | 3-605 |
| 1965 @  | 1-311 | 3-235 | —      | 4-757 |

\* Composite State.

@ Subject to revision.

## IMPORTS (1961-65)

Imports of foodgrains into India in 1965 were about 7,462 thousand metric tons.

The imports over the years were as follows:

Figures in million tons and value in Rs. Crores respectively are: 1961: 3-495, 129-56; 1962: 3-64, 141-1; 1963: 4-56, 183-6; 1964: 6-266, 266-25 & 1965: 7-462, 290-32. Of the 1965 imports, 6-583 mln. tonnes were wheat, 0-783 mln. tonnes rice and 98,000 tons milo.

(e) Figures for 1965 are provisional and subject to revision.



The imports of individual grains were as follows:

|                         | (in million metric tons) |       |       |
|-------------------------|--------------------------|-------|-------|
|                         | 1963                     | 1964  | 1965* |
| Rice .. .. .            | 0.483                    | 0.645 | 0.783 |
| Wheat (including flour) | 4.073                    | 5.621 | 6.583 |
| Others .. .. .          | —                        | —     | 0.096 |

\* Subject to revision.

Countries from which imports were obtained from 1963 to 1965 with quantity (in million metric tons) were as follows:

| Country      | Quantity     |              |              |
|--------------|--------------|--------------|--------------|
|              | 1963         | 1964         | 1965         |
| U.S.A. ..    | 4.198        | 5.586        | 6.403        |
| Australia .. | 0.156        | 0.261        | 0.324        |
| Canada ..    | 0.019        | 0.107        | 0.238        |
| U.A.R. ..    | —            | 0.029        | 0.040        |
| Burma ..     | 0.173        | 0.152        | 0.204        |
| Others ..    | 0.010        | 0.131        | 0.253        |
| <b>TOTAL</b> | <b>4.556</b> | <b>6.266</b> | <b>7.462</b> |

Countries from which wheat and rice were imported during the year 1965: (quantity in million metric tons).

|                    | Wheat        |              | Rice |   |
|--------------------|--------------|--------------|------|---|
| U.S.A. .. .. .     | 6.021        | 0.286        | —    | — |
| Australia .. ..    | 0.324        | —            | —    | — |
| Burma .. .. .      | —            | 0.204        | —    | — |
| Canada .. .. .     | 0.238        | —            | —    | — |
| U.A.R. .. .. .     | —            | 0.040        | —    | — |
| Others .. .. .     | —            | 0.253        | —    | — |
| <b>TOTAL</b> .. .. | <b>6.583</b> | <b>0.783</b> |      |   |

The Plan provided for an import of 6 million tons of foodgrains costing about Rs. 48 crores a year.

### PRICE LEVEL

The movement in the price is shown by the following table of index numbers of wholesale prices:

|                       | (Base 1952-53 — 100) |          |         |          |         |  |
|-----------------------|----------------------|----------|---------|----------|---------|--|
|                       | 1964                 |          | 1965    |          | 1966    |  |
|                       | January              | December | January | December | January |  |
| All commodities .. .. | 136.3                | 158.2    | 159.7   | 169.6    | 169.0   |  |
| Food Articles .. ..   | 137.9                | 166.0    | 167.8   | 173.2    | 171.9   |  |
| Cereals .. .. .       | 118.5                | 142.1    | 145.0   | 151.9    | 152.9   |  |
| Pulses .. .. .        | 124.0                | 194.8    | 196.3   | 167.1    | 162.4   |  |
| Rice .. .. .          | 120.0                | 128.9    | 127.9   | 117.1    | 148.2   |  |
| Wheat .. .. .         | 112.0                | 145.4    | 151.2   | 139.4    | 140.9   |  |
| Jowar .. .. .         | 122.7                | 203.7    | 217.2   | 197.9    | 193.3   |  |
| Bajra .. .. .         | 139.3                | 179.8    | 197.1   | 199.2    | 195.3   |  |
| Ragi .. .. .          | 115.1                | 192.4    | 203.3   | 246.6    | 244.7   |  |
| Gram .. .. .          | 112.5                | 192.5    | 187.1   | 152.0    | 154.7   |  |
| Arhar .. .. .         | 141.3                | 231.4    | 241.4   | 188.7    | 179.4   |  |
| Mung .. .. .          | 129.4                | 184.1    | 189.0   | 176.3    | 178.0   |  |
| Urad .. .. .          | 123.7                | 143.3    | 140.8   | 149.7    | 147.2   |  |
| Masur .. .. .         | 127.2                | 225.6    | 239.7   | 187.0    | 162.2   |  |

|                      | 1964  | 1965  | 1966  |
|----------------------|-------|-------|-------|
| Sugar .. .. .        | 145.2 | 151.1 | 151.1 |
| Gur .. .. .          | 205.0 | 218.4 | 200.0 |
| Oilseeds .. .. .     | 153.6 | 220.9 | 219.0 |
| Edible oils .. .. .  | 149.8 | 222.5 | 220.4 |
| Groundnut .. .. .    | 139.0 | 193.6 | 189.3 |
| „ oil .. .. .        | 129.3 | 174.4 | 167.6 |
| Sesamum .. .. .      | 145.6 | 185.1 | 186.4 |
| „ oil .. .. .        | 138.0 | 187.7 | 183.3 |
| Mustard .. .. .      | 175.8 | 328.8 | 293.1 |
| „ oil .. .. .        | 174.4 | 331.9 | 332.8 |
| Copra .. .. .        | 174.3 | 188.0 | 191.6 |
| Copra oil .. .. .    | 185.9 | 213.6 | 217.8 |
| Oil cakes .. .. .    | 165.1 | 216.1 | 226.4 |
| Cotton (raw) .. ..   | 119.8 | 129.1 | 128.6 |
| „ (Manufd) .. ..     | 135.9 | 138.7 | 138.7 |
| Tobacco (raw) .. ..  | 116.4 | 132.7 | 135.8 |
| Pepper (dry) .. ..   | 31.2  | 39.5  | 42.7  |
| Chillies (dry) .. .. | 187.4 | 156.5 | 166.0 |

### SEED

The coverage under improved seeds of foodgrains is estimated to have risen from 104 million acres in 1964-65 to 120 mill. acres in 1965-66.

A bill on seed certification has been passed for laying down standards of quality and making arrangements for seed analysis, inspection certification and regulation of notified seeds.

The Govt. of India has set up in 1963 a Central Seed Corporation as a company registered under the Indian Companies Act, 1956 with a share capital of Rs. 50 million divided into five lakh equity shares of Rs. 100 each to promote the production of improved seeds in the country by financial aid, technical guidance, organising marketing agencies and sponsoring training programmes in collaboration with Central and State Governments and other interests.

The corporation has been entrusted with the production and supply of foundation seed for all hybrid crops and high-yielding varieties throughout the country. Arrangements have been made to meet the seed requirements of dwarf varieties of rice and wheat of high yield potential like T.N. 1, I.R. 8 & Tainan 3 in rice. Fourth Plan proposes area under improved seed: (a) High yielding variety 32.50 m. acres; (b) other improved 241.50 m. acres.

### FERTILIZERS & MANURES

India's requirement of nitrogen fertilizer is placed at between 2 and 2.5 million tons. Minimum requirement would probably be estimated at 1.5 million tons on the basis of 30 lbs. per acre.

It is estimated that the use of one ton of fertilizer on an area of 75 acres results in an extra 10-ton production of food grain.

An expert Committee under the chairmanship of Mr. B. Shivraman was appointed to examine the problems relating to production, pricing and distribution of fertilizers and the report was submitted in May 1965.

### Consumption of Fertilizers

| Plant Food         | (met. tons) |          |
|--------------------|-------------|----------|
|                    | 1964-65     | 1965-66  |
| Nitrogen .. ..     | 5,55,246    | 5,80,000 |
| Phosphoric Acid .. | 1,48,689    | 1,40,000 |
| Potash .. .. .     | 55,922      | 80,000   |

The Fourth Plan draft proposals and achievements in 1965-66 in brackets in respect of Nitrogen, Phosphoric acid and Potash respectively in million tonnes were: 2.00 (0.60); 1.00 (0.15) and 0.35 (0.09).

The night soil compost scheme, which has now been introduced in Madras, Rajasthan, Punjab, Orissa and Mysore, will cover 500 bigger panchayats, for which Central assistance has been given at the rate of Rs. 2,000 per panchayat.

A total number of 2,250 urban centres was also engaged in night soil compost production in the States. 111 million tons of rural compost were expected to be produced in 1964-65 and 124 mill. tons in 1965-66.

### Urban Compost

| Year    | Quantity prepared (million tons) | No. of centres | Quantity distributed (million tons) |
|---------|----------------------------------|----------------|-------------------------------------|
| 1962-63 | 3.10                             | —              | —                                   |
| 1963-64 | 3.30                             | 2,410          | —                                   |
| 1964-65 | 3.53                             | 2,508          | —                                   |
| 1965-66 | 3.90                             | —              | —                                   |

The Fourth Plan draft proposals and achievements in 1965-66 within brackets in million acres were as under: Compost 5.40 (3.40); Grain manuring 64.00 (21.50).

Distribution of green manure seeds in parcels is encouraged in most States. A subsidy of Rs. 2 per maund is given to the State for multiplying green manuring seed. The total area green manured during 1962-63: 16 million acres; 1963-64: 17 million acres and 1964-65: 18.4 million acres.

### Mechanisation and Mechanised Farms

With a view to increasing mechanisation in agriculture the production of wheel type tractors has been stepped up. Against an assessed requirement of 10,000 tractors in 1965, 6,196 tractors were produced and licence for the import of 2,435 tractors was issued.



There are already two Central Mechanised farms at Surat and Jelsar. Fifteen more such farms are going to be set up with the help of U.S.S.R., one in each State.

## THE FOOD PROBLEM

The *per capita* net availability of food grains in India :

| Year     | Popula-<br>tion | (Million tonnes)<br>Total cereal |        | Net Availability<br>(million tons) |        |       | Daily Per capita net<br>availability (Gram) |        |      |
|----------|-----------------|----------------------------------|--------|------------------------------------|--------|-------|---------------------------------------------|--------|------|
|          | (Million)       | Produc-<br>tion                  | Import | Cereal                             | Pulses | Fish  | Cereal                                      | Pulses | Fish |
| 1960 ..  | 432.7           | 56.77                            | 5.13   | 60.50                              | 10.32  | 1.047 | 382.7                                       | 65.2   | 6.5  |
| 1961 ..  | 442.7           | 60.65                            | 3.49   | 64.31                              | 11.11  | 0.867 | 396.9                                       | 68.0   | 5.4  |
| 1962 ..  | 453.4           | 62.08                            | 3.64   | 66.08                              | 10.28  | 0.899 | 399.7                                       | 62.4   | 5.4  |
| 1963* .. | 464.3           | 58.63                            | 4.55   | 63.20                              | 9.99   | 0.957 | 371.4                                       | 59.5   | 5.7  |
| 1964* .. | 475.5           | 61.41                            | 6.26   | 68.91                              | 8.79   | 1.189 | 396.9                                       | 51.0   | 6.8  |
| 1965* .. | 487.0           | 66.52                            | 7.46   | 72.95                              | 10.82  | 1.142 | 411.1                                       | 59.5   | 6.5  |

\*Provisional and subject to revision.

The *per capita* consumption in India of all food items in terms of calories compares as follows:—Canada : 3,140 ; U.S.A. : 3,150 ; U.K. : 3,270 ; Japan : 2,110 ; and India : 1,880.

The problem can be summed up in some such way as the following :—

The consumption of food grains and pulses in India has been increasing over the last three years faster than production.

The increase in population of eight million persons per year in itself will require one million tons of additional food grains each year. With an increase of the *per capita* intake of 100 calories per day, India would require an additional five million tons food grains per year.

It will take another five years for India to achieve the 81-million-ton food target of the Second Five-Year Plan. Consumption in the meantime will increase to 87 million tons, leaving a net deficit of six million tons per year.

Of this, India would probably import one million tons per year commercially. The balance of five million tons would need to be met somehow.

A reserve for India is necessary to meet crop failures and other contingencies.

### Agreements (1965)

The following agreements were signed in 1965 for food grain imports. (1) Contract (Feb. 12, 1965) for purchase of 50,000 tonnes of Australian wheat; (2) Aid by Canadian Govt. of \$17 million under the Special Food Aid programme for the purchase of about 234,800 tonnes of wheat; (3) On the expiry of P.L. 480 agreement on the import of wheat and rice exchange of letters between U.S. officials and Indian Officials for additional P.L. 480 allotments (July 26, 1965) for about 10 lakh tons of wheat, (Sept. 29, 1965) for about 5 lakh tonnes of wheat, (Nov. 4, 1965) for another 5 lakh tonnes of wheat and (Dec. 10, 1965) for 15 lakh tonnes of wheat (milo from U.S.A.); (4) Contract (Sept. 24, 1965) for commercial purchase of 95,428 tonnes of wheat from U.S.A., (5) unconditional gift (Feb. 17, 1965) from Govt. of Australia of 150,000 tons of wheat for the maintenance of supplies interrupted by prolonged U.S.A. strike; (6) Agreement (Feb. 3, 1965) for the purchase of 2 lakh tonnes of rice from Burma; (7) Two agreements (Jan. 8, 1965 and Sept. 10, 1965) with the Govt. of Thailand for the purchase of a total quantity of 183,500 tons of rice; (8) Agreement (Jan. 11, 1965) for purchase of 50,000 tonnes of rice from Pakistan under barter deal of which only 10,000 tonnes of rice was imported.

The import of cereals was stepped up from 4.6 million tonnes (1963) to 7.5 million tonnes (1965) and agreements had already been entered into for the import of over eleven million tonnes of cereals during 1966.

### Buffer Stocks

The Government of India propose to build up a buffer stock of four million tons of wheat and two million tons of rice. The stock of wheat

is to be built from imports from U.S.A. under P.L. 480 agreement of May 1960 and that of rice from internal procurement and imports.

Distribution of foodgrains from Government stocks channelled through 110,000 (1965) fair price shops.

**Rationing :** The principle of statutory rationing has been accepted by all States. It was decided in Aug. 1965 that in cities of one million population, later modified into one lakh and above, rationing should be introduced. In Kerala informal rationing was introduced from Nov. 1, 1964; Greater Calcutta throughout 1965 (extended to Asansol, Durgapur, Siliguri industrial complex from Feb. 1966) Madras and Coimbatore (Oct. 1965), Delhi (Dec. 8, 1965), Hyderabad, Secunderabad & Vishakapatnam (Feb. 1966) and Kanpur Feb. 16, 1966.

### Distribution (1961-65)

| Year    | mill. Tonnes. |       |              |        |
|---------|---------------|-------|--------------|--------|
|         | Rice          | Wheat | Other grains | Total  |
| 1961 .. | 0.950         | 2.983 | 0.044        | 3.977  |
| 1962 .. | 1.134         | 3.221 | 0.014        | 4.365  |
| 1963 .. | 1.361         | 3.816 | 0.001        | 5.178  |
| 1964 .. | 1.859         | 6.785 | 0.021        | 8.665  |
| 1965 .. | 3.586         | 5.939 | 0.537        | 10.062 |

### Price Support

The main purpose of fixing minimum support prices is to give an incentive to produce more by providing a guarantee against undue fall in prices.

Maximum whole-sale and retail prices of rice were fixed in Bengal (Jan. '64) and in the Southern States (Aug. 1964). Subsequently the Government fixed the maximum price of paddy Re. 1/- higher than the support prices. Maximum prices of wheat have been fixed by the Govt. of Rajasthan and of jawar by Madhya Pradesh and Maharashtra. The Govt. have accepted the continuation of minimum support prices for paddy with minor adjustments in Assam, Bengal, Madras, Maharashtra & Orissa for 1965-66.

To regulate trade activities the wholesale dealers in foodgrains are licensed in all States.

### WAREHOUSES

The Central Warehousing Corporation has set up 83 warehouses, the number of which has gone up to 85 in 1964-65 and 89 in 1965-66, with capacities of 1,77,857 ; 206, 772 and 217,054 tonnes respectively. The stock held during the years was 93,605 ; 108,964 and 108,432 tonnes foodgrains respectively. The State Warehousing Corporations set up 444 warehouses and 93 sub-warehouses with a total storage capacity of 5,61,000 tonnes upto Aug. 1966. The Food Corporation is expected to take most of them.

As many as 80 types of commodities are now stored in the warehouses including foodgrains, oilseeds cattle fodder, raw cotton, cotton seed,

raw jute, turmeric, gur, ginger, pepper, cardamom, coffee seeds, chicory, fertilizers and food products.

### Food Corporation

The Food Corporation was set up as a statutory body in Jan. 1965 to function in the long term comprehensive strategy for solving the food problem.

### Subsidiary Foods

A Food and Nutrition Board with 10 members consisting of scientists and technologists has been set up in the Department of Food for securing accelerated, coordinated, effective implementation of programmes of development and popularisation of subsidiary and protective food with the Secretary in Dept. of Food as the Chairman.

The Board has initiated investigations for the development of cotton-seed protein for human consumption, fortification of common salt with calcium and development of food from green vegetation and further work on parboiled rice and vegetable milk powder.

Demonstration-cum-community canning and Food preservation centres have been established one each at Delhi, Bombay, Madras and Calcutta. Four mobile food and nutrition extension units for the systematic campaign for promotion and popularisation of food preservation technique, suitable dietary habits, cost balanced diet and scientific technique of cookery, proper utilisation of food etc. with Hd. Quarters at Delhi, Bombay, Calcutta and Madras, have also started functioning. The three Institutes of Catering Technology and Applied Nutrition at Calcutta, Bombay & Madras and the Institute of Hotel Management, Catering and Nutrition (Delhi) imparted training for diploma and Craftsman course. During 1965-66 about 100 persons got diploma and 400 were trained for craftsman course.

Pilot plants for the production of edible groundnut flour for the manufacture of multi-purpose food, enriched atta, maida etc. have been set up in Coimbatore and Bombay. One unit each of one ton multipurpose food per day production capacity was set up in Calcutta and in Sitapur (U.P.) Roller mills wheat products price control order was amended to permit enrichment of atta with 5-10 per cent edible groundnut flour.

### Processing Technology :

With a view to increasing out-turn of rice six modern rice mills were set up in Tiruwarur (Madras), Tadepallegudam (Andhra), Mandya (Mysore), Raipur (M.P.), Balgarh (Orissa) and Mejari (W. Bengal) in the cooperative sector and one in Bikaner (Bihar) in public sector. A training-cum-demonstration centre was also started in modern rice milling technology in Andhra, Madras and M.P. Programme to establish 300 modern rice mills, with a capacity of 2 tonnes per hour and another 75 with 4 tonnes per hour has been launched by the Food Corporation. The Govt. of India has now set up a committee under the chairmanship of the Chairman of Food Corporation to locate a centre for research and farming in modern rice technology in which Ford Foundation is also interested.

### PACKAGE PROGRAMME

The above programme which was initially introduced in 7 districts and subsequently extended to cover 9 other selected districts has completed its five-year operation.

During 1964-65, the programme was in operation in 280 out of 311 blocks covering about 30 lakh hectares, representing about 37 per cent of the total cultivated area of the Districts. As a result of the package approach, crop production increased much; in Ludhiana wheat yield doubled over 3-4 years; paddy yield in 1964-65 recorded 25-50 per cent increase in the pre-dominant paddy districts. Maize and barley yields increased by 90 and 80 per cent respectively in Aligarh (U.P.) As a result of the Intensive Agricultural District Programme (IADP) consumption of N. fertilisers increased from 0.93 lakh tons (in pre-package period) to 2.88 lakhs



(1964-65) and phosphate from 0.22 lakh ton to 1.35 lakh tons during the same period. About 70 per cent of them were applied to foodgrains. The coverage by improved seeds increased by 2½ times, plant protection by about 3 times.

Based on the experience of Intensive Agricultural District Programme (IADP) 'package' approach was extended in 1964-65 to Intensive Agricultural Area Programme (IAAP) in 114 districts. It covered 1,084 blocks in 1964-65 (64.55 hectares) and was extended to 1,285 blocks in 1965-66.

In addition to the above the Govt. of India has launched a programme for intensive foodgrain production based upon high yielding varieties, primarily in irrigated areas with all the requisite imports and technical knowhow covering 2.50 million acres of rice, 80 million acres of wheat and 4 million acres each in jowar, bajra and maize with an expectation of an additional yield of 12.50 million tons of rice, 8 million tons of wheat and 2 million tons of jowar & maize each and one million tons of bajra.

### EXPORT PROMOTIONS

Export promotion division is set up in the Ministry for export of agricultural commodities. It has set up a number of study groups to carry out intensive study of important agricultural commodities that enter into our export trade and to recommend measures for augmenting export supplies and increasing exportability of agricultural commodities and agriculture based industries. The study team submitted its report in Feb. 1965 and work relating to their recommendations is being taken up. In Dec. 1966, another high power inter Ministerial Committee (under the Chairmanship of the Secretary for Agriculture) to insure effective implementation of the development programmes in respect of the export orientated agricultural commodities including raw cotton, tea, tobacco & oilseeds. This high power standing committee will ensure the closest working between ministries of Commerce, Agriculture, Finance & Planning in order to achieve speedy and effective results.

Five advisory panels have been set up to advise the Govt. in matters of policy and implementation of research, development and educational programmes relating to Indian farming.

### AGRICULTURAL PRICES COMMISSION

An Agricultural Prices Commission was established in Jan. 65 to keep the situation (of providing economic incentives to farmers) under constant review and to advise the Government on agricultural price policy and price structure in relation to the urgent need for increasing production of agricultural commodities ensuring at the same time reasonable prices to the consumer. The commission recommended on price policy for cotton for 1965-66, Kharif cereals for 1965-66 season and for jute for 1966-67, keeping

in view the recommendations of the Commission. Minimum prices have been fixed at economic levels to guarantee the farmer against loss arising out of undue fall in prices, so that he can put in the necessary investment & effort to step up production.

### FOODGRAIN POLICY COMMITTEE REPORT

The Foodgrains Policy Committee set up by the Government of India in 1966 and headed by Mr. B. Venkatappiah in its report has advocated national management of food. To ensure that the national food budget is implemented without any disparity as between State and State, a National Food Council should be set up to formulate, review, revise and implement the food budget. This council, should be presided over by the Prime Minister and include all the Chief Ministers and the Union Ministers of Food & Agriculture and Planning.

The Committee was asked to examine the existing zonal arrangements in regard to the movement of foodgrains and the systems of procurement and distribution in the country and to make recommendations for modifications if any in these arrangements for bringing about an equitable distribution of foodgrains at reasonable prices between different regions and sections of the country. The Committee noted that national management of food could not be successful without national discipline and a sense of sharing a common purpose. National management of food implied a national plan of supply and distribution which in turn meant procurement to ensure supplies, control over inter-state movement to facilitate procurement and keep prices at a reasonable level, a system of public distribution to ensure equitable sharing and the building up of a buffer stock to provide against difficult years.

The Committee is of the view that a chronic and marginal food shortage is likely to continue in the next five to ten years. 'An important objective of food policy is to ensure that the shortage of foodgrains does not lead to an excessive and unbridled rise in their prices', the Committee says.

The lasting remedy for food shortage is to ensure that production keeps pace with the increase in demand. Besides larger production of foodgrains, there has to be a better management of food. The nation must achieve self-reliance in foodgrains as quickly as possible, imports available should go into the building up of reserves and the distribution system should operate to mitigate hardships to the poorer classes.

The system of public distribution could function only if the necessary supplies for maintaining it are acquired by the Government. The larger the supplies through the public distribution system the greater would be the impact on prices. The report warned that imports are not likely to be available as easily as they are now, obviously referring to the move in the USA to make importing countries pay for food in dollars.

Strict adherence by the surplus states to obligations under the national food budget is therefore essential. The surplus States should consider themselves, and not the Central Government, primarily responsible for meeting all commitments made in regard to the supply of foodgrains to the deficit states.

The Committee has recommended that statutory rationing should be extended to Ahmedabad and Bangalore. Urgent steps are to be taken to reduce the dependence of the public distribution system on imports and immediate steps to build up a buffer stock of not less than four million tons during the next three or four years. The Union Government should endeavour to put aside at least a million tons of foodgrains every year in the next three or four years unless the year was extremely bad.

The imposition of restrictions on private trade, especially inter-state trade, is the only way out since open market purchases would raise prices and defeat the objective of holding the price line. As an important part of the national food policy, each State, surplus or deficit, should introduce a minimum graded levy on the producer in respect of major foodgrains. While food management by the State Government can co-exist with the operations of private trade in its own allotted sphere within the State, the same cannot be said of inter-state operations. These must be the sole concern of the Government and its agencies working within the framework of the national food budget.

"State control over inter-state trade in foodgrains should be continued", the Committee has insisted. It recommends that the Food Corporation of India should handle inter-state trade to ensure proper planned movement. The Committee has backed the Food Corporation as the best agency for inter-state transfers and said that the FCI should be brought in as a trader where private trade is functioning. Where a number of procurement agencies like the co-operatives, millers and private traders are at work the Foodgrains Policy Committee has recommended that the FCI should also be appointed as a procurement agent. It has recommended certain organisational and other measures to equip the Food Corporation to discharge its new role efficiently and also to foster closer association and understanding between the FCI and the State Governments.

The Committee has also urged that a Standing Committee should be set up to exercise the powers of the National Food Council. It has recommended the setting up of a Central Food Committee presided over by the Union Food Secretary and composed of the Union Agricultural Secretary, Food Secretaries of all the states, the Chairman of the Agricultural Prices Commission, the Chairman of the Food Corporation of India and six non-official members, to prepare the national food budget for consideration and approval by the standing Committee of the National Food Council.

## LIVESTOCK

**T**HE total livestock population in India is placed at 336.53 million, according to provisional estimates of the 1961 livestock census as against the 1956 census figure of 308.60 million. The net contribution of livestock to the national income at present is estimated to be over Rs. 10,000 million including Rs. 4,000 million contribution in terms of bullock/draught power.

Meat from livestock is a valuable source of protein; about 0.9 per cent of the total cattle population is slaughtered for meat, and 36 and 32.5 per cent of the goat and sheep population respectively. The annual production of meat from goat is about 0.15 million tons and that of mutton 0.11 million tons. Production of beef, buffalo flesh and pork amounts to 0.12, 0.09 and 0.02 million tons respectively. The total annual production of meat from all species is

estimated to be over 0.46 million tons valued at Rs. 760 million.

Live stock products like raw skins, wool and bones figure in our export and between themselves totalled to form about 6.61 per cent of the annual average export covered during the First Plan and about 7.88 per cent during the Second Plan. The annual average of the first three years (1961-64) of the Third Plan was about 6.21 per cent. In monetary term the average annual export earnings through raw skins, hairs and bones were Rs. 1,642 lakhs and Rs. 2,220 lakhs during the first two Plan periods and Rs. 2,003 lakhs during the first three years of the Third Plan.

### CATTLE

Among the well-defined breeds of cattle (26 and 8 of buffaloes), three broad divisions are:

dairy or milch and draught cattle and those that serve a dual purpose.

**Dairy Milch:**—The Sahiwal, the best milch breed, are responsive to environment, have an yield of 4,000 lbs. a year. The Sindhi are also responsive to environment, the Gir in Saurashtra and Rajasthan have an yield of 3,700 lbs. a year. In the order of the productivity of milk the cattle may be arranged as follows: the Sahiwal, the Kankrej, the Ongole.

**Draught:**—The Amritmahal Hallikar (Mysore) are good for draught purposes but are poor milkers.

**Dual:**—The Gao in Madhya Pradesh are draught animals but also good milkers, 3,000 lbs. The Kangayam in the south and south-east of the country are powerful draught animals of



average milk yield. The Kankrej, are essentially draught but have milk potentialities (3,000 lbs.); they belong to Gujarat. The best known in this group are the Haryana (Punjab, 3,000 lbs.), Tharparkar (Gujarat and Rajasthan, 3,000 lbs.), and Ongole (Andhra).

The best known breeds of buffaloes (26 in all) are the Murrah, Nili and Ravi of the Punjab, the Jufferbadi of Kathiawad, Mehsana of Gujarat, Nagpuri of Vidarbha and the Surti and Pandharpuri (a type of Nagpuri buffaloes) of Maharashtra. All except the Nagpuri are noted dairy breeds. Murrah is adapted to all climates. They also yield on an average about 3,000 lbs. of milk for over 300 days in a year.

The average annual milk yield of a buffalo is 1,100 lbs. against 413 lbs. of the Indian cow. Buffalo milk being one and a half times as rich

in fat content as cow milk, is more valued for butter and ghee production. Buffaloes are also better utilisers of coarse fodder and are less expensive to keep.

It is estimated that contribution of draught power in terms of rupees is about four hundred crores. The area cultivated by a pair of working animals is about 8-16 acres. There are about 160 cattle and buffalo farms in the country maintaining about 22 breeds of cattle and two of buffaloes.

Livestock Development is stepped up through special schemes such as key village blocks with cattle breeding farms and arrangements for bull rearing, artificial insemination, subsidised calf rearing and also Goshalas and Gosadans. The programme included also poultry development schemes.

#### Cattle Development Programmes

| Items                                                     | Achievement<br>1st & 2nd Plans<br>1951-61 | Third<br>Plan<br>Target | Achievement<br>1961-66 |
|-----------------------------------------------------------|-------------------------------------------|-------------------------|------------------------|
| <b>Key Village Blocks (Nos.)</b>                          |                                           |                         |                        |
| (a) Established .. .. .                                   | 407                                       | 79                      | 75                     |
| (b) Expanded .. .. .                                      | 114                                       | 64                      | 54                     |
| (c) Central semen collection stations .. .. .             | 18                                        | —                       | 2                      |
| (d) Marketing Cell .. .. .                                | 9                                         | —                       | 2                      |
| Subsidised rearing of calves (Nos.) .. .. .               | 34,791                                    | 44,440                  | 14,791                 |
| <b>Cattle breeding farms (Nos.):</b>                      |                                           |                         |                        |
| Established .. .. .                                       | 160                                       | 10                      | 10                     |
| Expanded .. .. .                                          | —                                         | 35                      | 35                     |
| Establishment of bull breeding farms (Nos.) .. .. .       | —                                         | 13                      | 13                     |
| Goshalas (Nos.) .. .. .                                   | 255                                       | 168                     | 76                     |
| Gosadans (Nos.) .. .. .                                   | 61                                        | 23                      | 4                      |
| <b>Feed and Fodder</b>                                    |                                           |                         |                        |
| (a) Pasture demonstration plots (No. established) .. .. . | —                                         | —                       | 328                    |
| (b) Pasturage improvement .. .. .                         | —                                         | —                       | 23                     |
| (c) Farms for forage seed .. .. .                         | —                                         | —                       | 18                     |

**Service Training Centres:**—For the development of livestock six service training centres were established. The services of F.A.O. experts have been obtained to conduct four practical training courses of two months' duration each in artificial insemination and physiology of reproduction.

**Feed and Fodder:**—During 1964-65 the programme of feed and fodder resources operated in all the States except Nagaland and three Union Territories. 148 pasture demonstration plots were established during 1964-65. Production of seeds and other propagative material of fodder and forage grasses were taken up at eleven farms, while pasture improvement was taken up in nine farms during the period. Besides, construction of 557 silopits was subsidised and 578 chaff cutters distributed. It is proposed to establish five fodder banks in various parts of the country at a total cost of Rs. 13.75 lakhs in Andhra, Maharashtra and U.P. with a capacity of 2,000 tonnes, in Bihar 3,000 tonnes and Rajasthan 4,000 tonnes located near forest areas and rail heads for bulk storage and easy transport facilities. Fodder and grazing centres were set up in all the States except Assam, Jammu and Kashmir, Orissa and Nagaland and two Union Territories.

**Salvaging:**—Under the scheme for the salvage of superior calves from milk colonies, 5,269 calves of six months age and above were bought from Aarey and Haringhata milk colonies upto Jan. 1966 and distributed freely to bona fide breeders. Hissar is reorganised to produce 660 Haryana and 150 Tharparkar breed bulls annually to meet the demand of other States after the requirement of the Punjab Govt. In 1964-65, 585 substandard animals were culled from the farm and 250 acres of farm land was developed.

**Gosadans:**—The Gosadan Scheme aims at the removal and segregation of old, unproductive and uneconomic cattle. Old, infirm and useless cattle are segregated and sent to gosadans located in remote forests and other waste lands where grazing facilities are not fully utilised. All male stock were castrated before admission

into the gosadans. The remains of dead animals such as skins, hides and hoofs, etc. were to be utilised by setting up a small 'chamlaya' at each centre. Against a target (revised) of 38 during the two Plans, 36 gosadans were established. Emphasis was laid in the Third Plan on the establishment of collection centres to increase the number of admissions to Gosadans. The Model Training-cum-Production Centre, Lucknow, so far trained 249 candidates in hide drying, curing and carcass utilisation, 93 in farming and 83 in foot-wear and leather utilisation. Another such training-cum-production centre is being set up in Andhra Pradesh.

**Gaushala Development:** The object is to convert them into efficient milk production centres and to breed better cattle. Total number of gaushalas taken up for development since the initiation in the 2nd Five-Year Plan upto 1964-66 was 328.

To eliminate the damage to crops by wild and stray cattle a scheme to catch and dispose them had been in operation as a part of Gaushala Scheme in the States of Delhi, Jammu & Kashmir, M.P., U.P. and Punjab. From April 1962 to Dec. 1964 32,075 cattle were rounded up out of which 4,231 productive ones, were distributed for breeding purposes and 13,683 unproductive ones sent to gosadans. The remaining cattle were auctioned and released on payment of fine. Between April and December 1965, 18,588 cattle were rounded up, of which 2,138 productive ones were distributed for breeding including 711 distributed among settlers in Dandakaranya. 4,235 unproductive ones were sent to Gosadans and the rest auctioned. The productive cattle already distributed is reported to be giving 8-12 lbs. milk daily. The scheme provides also for the training of State catching teams and the establishment of concentration camps.

Milk production in rural areas is linked with marketing surplus production in urban centres, the supply and collection being done through a net-work of Producers Cooperative Societies in the villages. During the Third Plan

period 55 new supply schemes were to be taken up in cities of 1 lakh population and above and in growing industrial townships. For the development of rural milk pockets four milk product factories and two cheese factories have been established.

**Mass Castration:**—The Govt. of India has a scheme for mass castration of undesirable young male calves in operation in Bengal, Mysore, Orissa, Punjab, Rajasthan, Tripura and U.P. to restrict the multiplication of inferior cattle. During 1965-66 1.3 lakhs of such animals were castrated by 20 teams set up in these States for mass castration campaign.

In the veterinary field, it was proposed to double the number of hospitals and dispensaries during the Third Plan from 4,000 to 8,000. Every development block would have at least one hospital or dispensary. The entire bovine population of the country were expected to be vaccinated against contagious diseases.

#### SHEEP

It has been estimated that the number of sheep in the country was about 40.3 million in 1961. In Punjab\*, Uttar Pradesh and Rajasthan, the annual production per sheep is estimated at between 3.1 lb. and 4 lb., while in the rest of the States it does not exceed 1 lb. The average for the whole of the country is in the neighbourhood of 2 lb. per sheep per year. It is estimated that in 1960-61, about 73.26 mill. lbs. of wool was produced.

Sheep also supply meat worth about Rs. 120 million every year in addition to pelts and manure. In 1960-61 about 290.40 million lbs. of mutton was available for human consumption. (67.5 per cent of the Indian population are vegetarians according to 1961 census) and 15.3 million sheep skins are used in leather industry. Sheep manure is very much valued among other manures as it contains twice as much nitrogen and potassium as are present in cattle manure. An individual sheep contributes 0.5 to 0.7 tons of manure annually.

India still requires large quantities of wool. About 16 million pounds of wool, tops and yarns costing about Rs. 120 million are imported. At the same time, we export about 38 million pounds valued at Rs. 61 million annually.

Sheep and wool development schemes have been launched on the lines of the key village scheme for cattle improvement, in 250 centres in different States. The Third Five Year Plan has laid great stress on sheep and wool development programme. Out of the provision made, two training centres, one sheep breeding farm and 122 wool extension centres have been set up upto the end of 1964-65.

Research in sheep breeding is promoted in three major sheep rearing tracts, viz. Temperate Himalayan, North Indian Plains and in the Deccan Plateaux, to evolve strains of sheep which will yield wool for apparel and also for superior types of carpets.

#### GOATS

Goats form an integral part of Indian agricultural economy. The goat is the principal source of meat supply; it also provides manure, skin, hair (Mohair) and milk. Estimated availability of goat meat for human consumption was Rs. 533.6 million in 1960-61. 31.9 million goat skins were utilised in leather industry and 9.94 million lbs. of goat hair was also produced during 1960-61. About 21.3 million pieces of goat skins and hides valued at Rs. 75 million are produced in India, of which skins worth about 57.2 million rupees are exported. Rajasthan has the largest goat population followed by Maharashtra, Bihar and U.P.

The important breeds of Indian goats fall under four broad groups:—Himalayan Goats are found in the hills of Kashmir, Punjab\* and Uttar Pradesh. These are mostly reared for mohair production and also for meat. There is also the Pashmani goat of Kashmir which

\* Composite State.



produces an undercoat of very fine variety of hair which goes into the manufacture of shawls. The plain goats comprise some of the best mutton and milch animals. Some of the better known breeds are Marwari, Konor and Jamnapari. The last yields 600 lbs. in a lactation of 250 days. Deccan plateau goats yield small quantities of milk and are mostly reared for mutton.

Results from the Punjab\* and U.P. have shown that selected goats yield (6 to 8 lbs. milk per day going up to even 12 lbs. in U.P.) on an average about 400 lbs. of milk per lactation of 150 days while a few went up to 700 lbs. and even higher.

Large provision has been made for sheep and goat development in the Third Five Year Plan. There are now 54 sheep breeding farms in the country of which 17 farms will be expanded to produce 2,500 quality rams for use in rural areas. The production is also expected to go up from 72 million pounds to 90 million pounds. It was expected that by the end of the Third Plan there would be 447 extension centres in the country for which 158 sheep and wool extension centres and eight training centres are also to be set up. A large-scale sheep shearing and grading programme linked to sheep development forms an important part of the U.N. special fund project commenced during 1963-64 in Rajasthan. Under the guidance of five Australian specialists a training school in wool grading has been started at Jodhpur. Such six more centres were expected during the Third Plan. A survey of sheep and wool production in Punjab\* has been conducted and similar work for grading and marketing will be extended there. A Central Institute with two sub-stations (one in Kulu and another in Madras) was established in Rajasthan to coordinate research in wool production.

#### POULTRY

There were about 117 million poultry in India in 1961, as against about 95 million five years before.

Even at a low rate of production, the annual contribution of Indian poultry to the country's economy is not less than Rs. 100 million.

At present, the *per capita* consumption of eggs in India is only four per annum as compared with 400 in U.K., U.S.A. or Denmark.

**Poultry Development.**—To stimulate poultry development as a subsidiary industry in the rural areas, a pilot project was approved early in 1955.

The project will popularise scientific poultry farming, provide consumers with good quality products at reasonable price and give also gainful occupation to a large number of poultry keepers. In view of the difficulty in bringing eggs and poultry products from long distances, transport difficulties and inadequate cold storage facilities, etc., this project will be implemented around large towns and cities having a population of one lakh only at present.

The salient features of the projects are—(i) It will be run on commercial and self-supporting basis through co-operatives, (ii) necessary requirements such as stock, disease protection arrangements, poultry feed, equipment, technical guidance, loans, subsidy and facilities for collection grading and marketing of the produce will be provided simultaneously, (iii) stimulate growth of commercial enterprise and gainful occupation of about 300 poultry farmers providing a monthly income ranging from 50 to 100 rupees per month, (iv) popularise rearing of day old chicks by the poultry farmers themselves so as to provide the basis for the development of a sound poultry industry and (v) provide the consumers with fresh, clean and good quality eggs and poultry at reasonable cost.

During 2nd Five-Year Plan five regional poultry farms were established in Bangalore, Maharashtra, Bhubaneswar, Delhi and Himachal Pradesh and 266 extension-cum-development centres against the Plan target of 300. During 1965-66 these farms were expected to produce 26 lakh eggs and distribute 8.6 lakh breeding stock against 21.4 lakh eggs and 2.7 lakh birds in 1964-65.

The Third Five Year Plan provided for the establishment of fifty intensive poultry development blocks at an estimated cost of Rs. one lakh each.

Seven blocks out of these have been established so far (two each in Andhra, Bihar and Punjab\* and one in Himachal Pradesh).

The present demand in an average town of about one lakh population is about 10,000 eggs and 300 table birds per day.

With proper management, better feeding and housing, each hen will lay at least 144 eggs in a year against the average production of 60.

Besides, under the special development programme for husbandry, 26 intensive egg and poultry production-cum-marketing centres, two poultry dressing plants and eight poultry feed manufacturing plants are being set up and expansion of 25 State poultry farms has been taken up. Loans of Rs. 85.48 lakhs have been provided by the Central Government for setting up poultry farms in the private sector.

Target and achievement at the end of the Third Five Year Plan respectively are: State Poultry Farm (Expansion) 56; 85; Poultry Extension Centres (Expansion) 17; 41; Intensive Poultry Development Blocks 50; 57; Marketing Centres 12; 12; Duck Extension Centres 17; 20; Feed Manufacturing Centres 43; 40; Training persons in poultry keeping 2000; 21,355.

State-wise distribution of poultry development blocks under the phased programme for poultry development is as follows:—

Andhra Pradesh 5; Assam 1; Bihar 3; Gujarat 2; Himachal Pradesh 1; Jammu & Kashmir 1; Kerala 3; Maharashtra 2; Madhya Pradesh 4; Madras 6; Mysore 5; Orissa 2; Punjab\* 3; Rajasthan 3; Uttar Pradesh 6; West Bengal 4.

A large commercial firm with Canadian collaboration has been started near Gurgaon (Delhi) in 1962-63 and another similar one has also been started in Bombay. A poultry breeding farm is set up in Karnal in collaboration with Pioneer Hi-bred Corn Co., Zowa, U.S.A. Balanced poultry feed is manufactured by over 30 private firms.

**World Food Programme Aid:**—India and the World Food Programme signed an agreement on Feb. 1, 1964 covering aid for a project for increasing production of eggs and poultry at Babugarh (U.P.). Under the agreement India will receive \$ 1,71,900 (about Rs. 8.3 lakhs) from WFP of the United Nations. Under the agreement 20,000 tons of maize for the preparation and distribution of poultry feed in the country will be available out of which 3,000 tonnes have already arrived. Under the Freedom from Hunger campaign 15,000 high yielding day-old chicks are expected from Australia and a part of it i.e. 2,800 are already received and reared in regional poultry farm Delhi and Balugal.

**Piggery.**—Under the 2nd Five-Year Plan an All-India Piggery Development Scheme was promoted to augment food production of high nutritive value at low cost and also to improve the economic condition of Harijans who mostly are engaged in piggery activities.

During the Second and Third Plan periods two regional pig breeding station bacon factories have been established at Aligarh and at Harinaghat and two more such stations have been set up at Aarey (Maharashtra) and Kasanpalli (Andhra Pradesh). These stations sold 189 boars and 145 sows during 1965-66. Up to the end of 1964-65, 9 pig-breeding units and 44 pig development blocks were set up.

#### DAIRYING

Like agriculture dairying is one of the major industries in India as milk and milk products contribute not less than Rs. 6,200 million to the national income.

The dairy industry is still unorganised. Of 200 million cattle and buffaloes, 72 million or 36 per cent are milch animals (females over 3 years). Milk yield is, however, low: Cow 413 lb.

per year, buffalo 1,100 lb. It has been estimated that 28.6 per cent of milch cows yield less than half a pound of milk whereas 94.3 per cent yield less than 2 lbs. per day and only 0.3 per cent yield over 4 lbs. per day; the corresponding figures for buffaloes being 0.1 per cent, 19.2 per cent and 18.8 per cent. Recent sample surveys conducted in typical cattle breeding tracts by the Indian Institute of Agricultural Research, Delhi indicates that the average daily yield in the country for milch cows and buffaloes is 450 and 1,336 gms. respectively, giving an average total annual yield of 361.35 gms. and 1,072.81 gms. for cows and buffaloes. Though buffaloes form only 30 per cent of milch animals, due to their comparatively high yield, they account for 55.9 per cent of the total milk produced. Buffalo milk has better fat content 6.5 to 7 per cent as against 4 to 5 per cent of cow.

Gross production of milk is 20.65 mln. tons, of which 13.2 mln. tons are marketed, the rest being used for home consumption or for feeding the calves. *Per capita* daily consumption of milk and milk products varies from 16.89 oz. in the Punjab\* to 26.4 oz. in Orissa; average 5.5 oz.

As a prelude to setting up city milk plants, pilot milk schemes were in operation in 15 centres during 1962-63. The dairy plants in operation during 1962-63, 1963-64 and 1964-65 were 18, 22 and 29 respectively, and 4, 3 and 4 new plants were also established during these years. During 1965-66 two new dairy plants were commissioned one at Baroda and another at Bangalore thereby raising the total number of organised milk plants to 30. The total daily average output of milk of these were about 8.5, 9.0, 10.0 and 13.0 lakh litres respectively during these four years. Construction and installation of equipment are in progress for other 26 dairies (five of which with assistance of New Zealand Govt. and UNICEF).

The dairy plants at Calcutta & Madras are associated with cattle colonies like Bombay Milk scheme. In them, 12,000, 13,000 and 14,000 cattle have been resettled during 1962-63, 1963-64 and 1964-65 respectively. A second milk colony for Bombay is being set up at Venkas. A cattle feed compounding factory was set up at Anand by Kaira Dt. Coop. Milk Producers Union to supply balanced cattle feed to the Coop. Milk producers. It produces daily about 100 tonnes of mixed feed.

In the field of milk products development, creameries have been started at Aligarh, Baran and Junagadh. Milk products factories have been set up at Amritsar and Rajkot and another two (at Anand and Mehsana with the assistance of Denmark) were commissioned during 1965-66. Two similar plants were under construction at Miraj (Maharashtra) and Vijayawada (Andhra). A milk drying plant is proposed for Bikaner Milk plant (with New Zealand assistance) at Indore. Dairy plants are expected to be set up at Madurai and Kanpur (with UNICEF aid). Dairy projects at Ludhiana, Baroda and Calcutta (expansion) are also helped by U.N.I.C.E.F. Assistance under Colombo Plan has been received from New Zealand for establishing dairies at Dehra Dun and Dhulia.

The State Governments of W. Bengal, Gujarat and Punjab have issued milk control orders which have encouraged rapid development of dairy output in these States.

#### FOURTH PLAN

**Cattle Development:**—In view of increased demand for milk and milk products, it has been considered essential to take up 30 intensive cattle development projects in addition to 100 new key village blocks and to expand the 209 existing ones. It is also proposed to establish 27 bull rearing farms, expand 60 existing livestock farms and to develop 380 gaushalas into breeding-cum-milk production centres. To meet the increasing demand of exotic animals the two Jersey farms will be expanded. Extensive areas will be covered with important breeds like Haryana, Tharparkar, Gir, Sindhi and Sahiwal.



**Feed and Fodder Development** :—It is proposed to undertake intensive fodder development in intensive cattle development and key village blocks, to establish 50 seed production farms and 25 mixed farming units, develop 25 grass bires and to exploit forest grasses. Pasture development and controlled grazing will be given high priority in semi-arid areas suitable for cattle and sheep rearing.

**Sheep and Wool Development** :—The Main objective in sheep development would be to increase the supply of wool and improve the quality of clip, and also help to improve meat supply. For improved breeding of sheep, local breeds are being crossed with rams of exotic fine woolled types in the Western Himalayan region and in selected areas of the Deccan plateau. For North Indian plains, selective breeding among the existing types is being emphasised. The programmes of improvement in shearing, grading and marketing of wool will find an important place under the Fourth Plan.

**Poultry Development** :—Development of cold storage, refrigerated transport, poultry dressing plants, organisation of feed manufacturing units, credit supply and distribution of production requisites will be given due attention. Further, attention will be paid to the formation of poultry farming societies in compact areas selected for intensive development.

**Piggery Development** :—It has been suggested that piggery development in future should be carried out in compact areas to establish pockets of improved breeds. In order to provide marketing incentives to producers, it is proposed to establish bacon factories in the vicinity of these areas.

**Disease Control** :—A special feature of the disease control programme will be the establishment of animal quarantine and certification service at four stations. For effective control of diseases among livestock, increased production of sera and vaccine and the establishment of diagnostic and investigation laboratories at important district headquarters are proposed.

**Mixed farming** :—A comprehensive programme for mixed farming (through intensive efforts) including subsidies, loans and technical guidance is envisaged in 25 selected blocks with special staff for supervision and popularisation of the work through mixed farming demonstration centres on farmers own holdings. Provision of grant for purchase of livestock, fencing material, fodder production, housing of livestock and fodder conservation is included in the scheme. Loans would also be available for purchase of necessary equipment. 100 mixed farming units are proposed to be taken up at a total cost of Rs. 245.0 lakhs (Rs. 70.00 lakhs for services and Rs. 175.0 lakhs for loans). Similarly, introduction of sheep among farming communities will be taken up by assisting farmers with loans, as well as grants, for owning small flocks of sheep which could be raised in a mixed farming economy. During the 4th Plan, it is proposed to locate 14,000 units of 20 sheep each in the different states. The cost of the scheme will be Rs. 252 lakhs.

**Research and Education** :—Preliminary steps taken during the Third Plan for the establishment of one livestock research station in each state would be completed during the Fourth Plan period.

**Milk Supply Schemes** :—It is envisaged to set up 35 milk supply schemes, expand 57 existing ones and to complete 36 spillover/continuing ones. In addition it is proposed to establish 26 milk product factories/creameries, 198 rural dairying centres and 12 cattle feed compounding factories in conjunction with large dairy plants. The dairy extension programme which includes organisation of co-operative societies, granting of loans for purchase of milch animals, setting up of feed supply units and providing extension staff to help farmers in increasing the production of milk and its hygienic handling would form an integral part of the dairy development programme.

List of dairy plants in operation and under implementation

| S. No.            | State            | Plants in operation<br>Average (1,000 litres) |          |                  | Plants under implementation |                      |
|-------------------|------------------|-----------------------------------------------|----------|------------------|-----------------------------|----------------------|
|                   |                  | Location                                      | Capacity | Daily            | Location                    | Capacity (1,000 lbs) |
| I                 | Andhra Pradesh   | Guntur .. ..                                  | 4.0      | 0.451            | Chittoor                    |                      |
|                   |                  | Kurnool .. ..                                 | 4.0      | 0.930            | Hyderabad (P)               | 9.64                 |
|                   |                  |                                               |          |                  | Nellore                     |                      |
|                   |                  |                                               |          |                  | Rajahmundry                 |                      |
|                   |                  |                                               |          |                  | Vishakapatnam (P)           |                      |
|                   |                  |                                               |          |                  | Vijayawada (milk products)  |                      |
|                   |                  |                                               |          |                  | Warangal                    |                      |
| II                | Assam            |                                               |          |                  | Gauhati (P)                 | 3.57                 |
|                   |                  |                                               |          |                  | Shillong (P)                | 2.1                  |
| III               | Bihar            | Barauni                                       | 2.00     | 22.00 kg + 700   | Darbhanga                   |                      |
|                   |                  | (Cream in kg.)                                |          | litre milk       | Dhanbad                     |                      |
|                   |                  | Bhagalpur .. ..                               | 6.0      | 6.46             | Ranchi                      |                      |
|                   |                  | Gaya .. ..                                    | 6.0      | 0.33             |                             |                      |
|                   |                  | Patna .. ..                                   | 10.0     | 2.21             |                             |                      |
| IV                | Gujarat          | Ahmedabad                                     | 275.0    | 55.0             | Surat                       | 16.3                 |
|                   |                  | Anand (milk product)                          | 200.0    | 135.14           |                             |                      |
|                   |                  | Baroda .. ..                                  | 35.0     | 17.64            |                             |                      |
|                   |                  | Bhavnagar                                     | 6.0      | 0.59             |                             |                      |
|                   |                  | Jamnagar                                      | 10.0     | 1.4              |                             |                      |
|                   |                  | Junagadh                                      |          |                  |                             |                      |
|                   |                  | (Cream kg.)                                   | 2000     | —                |                             |                      |
|                   |                  | Mehsana (milk product)                        | 100.0    | 36.36            |                             |                      |
|                   |                  | Rajkot .. ..                                  | 37.5     | 12.86            |                             |                      |
|                   |                  | Surindernagar                                 | 6.0      | 0.74             |                             |                      |
| V                 | Jammu & Kashmir  | Srinagar ..                                   | 10.0     | 5.5              | Jammu (P)                   | 0.4                  |
| VI                | Kerala           | Calicut ..                                    | 6.0      | 4.48             | Alleppey                    |                      |
|                   |                  | Palghat ..                                    | —        | —                | Cannanore                   |                      |
|                   |                  | Trivandrum                                    | 6.0      | 7.63             | Ernakulam                   |                      |
|                   |                  |                                               |          |                  | Kottayam                    |                      |
| VII               | Madhya Pradesh   | Bhopal ..                                     | 10.0     | 2.59             | Gwalior (P)                 | 0.47                 |
|                   |                  |                                               |          |                  | Indore                      | —                    |
|                   |                  |                                               |          |                  | Jabalpur (P)                | 0.9                  |
| VIII              | Madras           | Coimbatore                                    | 10.0     | 10.93            | Krode                       |                      |
|                   |                  | Kodaikanal ..                                 | 4.0      | 0.55             | Madurai (P)                 | 3.0                  |
|                   |                  | Madras (city)                                 | 80.0     | 21.58            | Nanjnad                     |                      |
|                   |                  | Tiruchirapalli                                | 6.0      | 6.5              | Thanjavur (P)               | 3.0                  |
| IX                | Maharashtra      | Bombay (city)                                 | 460.0    | 330.61           | Akola                       | 2.2                  |
|                   |                  | Kholapur                                      | 6.0      | 4.95             | Amravati (P)                | 2.12                 |
|                   |                  | Nasik .. ..                                   | 6.0      | 1.6              | Aurangabad (P)              | 1.0                  |
|                   |                  | Poona .. ..                                   | 70.0     | 43.1             | Dhulia (P)                  | 2.2                  |
|                   |                  |                                               |          |                  | Miraj (Milk product)        | 17.9                 |
|                   |                  |                                               |          |                  | Nagpur (P)                  | 5.66                 |
|                   |                  |                                               |          |                  | Sholapur (P)                | 2.7                  |
| X                 | Mysore           | Bangalore                                     | 50.0     | 19.77            | Bhadravati (P)              | 0.4                  |
|                   |                  | Kudige ..                                     | 4.0      | 1.56             | Davangere (P)               | 0.8                  |
|                   |                  |                                               |          |                  | Belgaum (P)                 | —                    |
|                   |                  |                                               |          |                  | Gulberga (P)                | —                    |
|                   |                  |                                               |          |                  | Hubli-Dharwar (P)           | 3.3                  |
|                   |                  |                                               |          |                  | Mysore (P)                  | 0.83                 |
|                   |                  |                                               |          |                  | Mangalore (P)               | 1.3                  |
| XI                | Orissa           | Cuttack ..                                    | 6.0      | 3.23             |                             |                      |
| XII               | Punjab*          | Amritsar                                      |          |                  | Dasuya                      | } Creamery           |
|                   |                  | (Milk products)                               | 80.0     | 37.98            | Gohana                      |                      |
|                   |                  | Chandigarh                                    | 20.0     | 21.44            | Jind                        |                      |
|                   |                  | Hissar ..                                     | 6.0      | 2.67             |                             |                      |
|                   |                  |                                               |          |                  | Ludhiana (Milk (P)          |                      |
|                   |                  |                                               |          |                  | Samana (Creamery)           |                      |
| XIII              | Rajasthan        | Jaipur .. ..                                  | 6.0      | 4.94             |                             |                      |
| XIV               | U. Pradesh       | Agra .. ..                                    | 6.0      | 2.36             | Bareilly                    |                      |
|                   |                  | Aligarh (Creamery in kg.)                     | 2000     | 1350 kg. (Cream) | Dehra Dun (P)               |                      |
|                   |                  | Lucknow                                       | 40.0     | 11.16            | Gorakhpur                   |                      |
|                   |                  |                                               |          |                  | Kanpur (P)                  |                      |
|                   |                  |                                               |          |                  | Mathura                     |                      |
|                   |                  |                                               |          |                  | Moradabad (Milk (P)         |                      |
| XV                | West Bengal      | Calcutta (city)                               | 200.0    | 130.72           | Durgapur                    |                      |
|                   |                  |                                               |          |                  | Siliguri                    |                      |
| UNION TERRITORIES |                  |                                               |          |                  |                             |                      |
| XVI               | Himachal Pradesh | —                                             | —        | —                | Mandi (P)                   | 0.553                |
|                   |                  |                                               |          |                  | Nahan (P)                   | 0.500                |
| XVII              | Tripura          | Agartala                                      | 6.0      | 2.49             |                             |                      |
| XVIII             | Goa Centre       | Delhi                                         | 255.0    | 197.1            | Panaji (P)                  | 1.6                  |

\* Composite State.



Besides the above plants, the working group has recommended to establish some more dairy plants in different States. The names of the States and the location respectively are as follows:—*Assam*: Jorhat and Tezpur; *Bihar*: Shahabad, Jamshedpur and Chapra; *Jammu & Kashmir*: Udhampur, and Anan-nag; *Kerala*: Quilon, Alleppey and Trichur; *Madhya Pradesh*: Raipur and Ujjain; *Madras*: Salem, Vellore and Tirunelveli; *Maharashtra*: Udgir; *Rajasthan*: Alwar, Ajmer and Jodhpur; *Uttar Pradesh*: Rampur, Saharanpur and Shahjahanpur; *West Bengal*: Kharagpur and Farakka.

### ANIMAL DISEASES

The chief diseases are glanders and surra in equines, foot and mouth disease, haemorrhagic septicaemia, black quarter and anthrax in ruminants and tuberculosis, Johne's disease and contagious abortion. Glanders is incurable but surra can now be successfully treated with Naganol or Antrypol. This disease (surra) also affects camels, cattle and dogs.

Rinderpest causes a mortality of about 60 per cent resulting in an annual loss of 0.4 million heads of cattle, valued at about 300 million rupees. Because of the eradication campaign of the past, Kerala, Mysore and Madras are now free from the disease. But, further north, in Andhra Pradesh, Gujarat and Maharashtra State the disease is prevalent and a pilot scheme to vaccinate and brand about 12 million cattle and buffaloes has been in operation since October, 1954. As a result of the last eight years' work over 112.4 million cattle and buffaloes have been protected out of an inoculable population of 131.6 million.

4.95 million cattle and buffaloes were vaccinated during 1965-66 bringing the total to 135.7 million vaccinations since the inception of the scheme. The incidence of the disease was also further reduced from 354 outbreaks in 1964-65 to 300 in 1965-66.

Indian poultry are also subject to several contagious diseases. Infections coryza and allied conditions in poultry are widespread and studies to control them are being carried on in Madras, Orissa & U.P.

### Research and Educational Institutions

The Indian Veterinary Research Institute has centres at two places in Uttar Pradesh, Izatnagar, and at Mukteswar near Bareilly.

The Institute supplies the veterinary demands of the whole of India for sera and vaccines and except for two minor institutions (one in Madras and the other in Mysore), it is the only source in India for these products. The present output of these products meets only 1/3rd of the demands.

Similarly, research in dairying is done at the Indian Dairy Research Institute, Karnal (Punjab) and at its southern regional station at Bangalore (Mysore). The Indian Dairy Research Institute, its southern regional station at Bangalore, give courses in Animal Husbandry and Dairying. There is also the Agricultural Institute, Allahabad. Both these institutes now come under the reorganised Indian council of Agricultural Research and they are proposed to be raised to National Institutes. The eight agricultural universities already established invariably contain animal husbandry wings.

There are 23 Veterinary Colleges in India, one each at Hyderabad, Tirupathi (Andhra Pradesh); Gauhati (Assam); Patna and Ranchi (Bihar); Anand (Gujarat); Trichur (Kerala); Jabalpur (Madhya Pradesh); Madras (Madras); Bombay, Nagpur (Maharashtra); Hebbal (Mysore); Cuttack, Mhow (Orissa); Hissar (Punjab), Bikaner (Rajasthan); Mathura, Nainital and Izatnagar, (Uttar Pradesh); Kalyani and Calcutta (West Bengal).

### Animal Husbandry Research

Coordinated scheme on cross breeding of cattle in hilly and heavy rainfall areas of the country with *Jersey* semen has been in operation at 8 centres in different parts of the country, while the scheme for development of hill cattle by cross breeding with jersey was in operation in 11 states. *Jersey* bulls required for the various developmental projects were supplied from the Jersey farms of Kataula (Himachal Pradesh) and Hesaraghata (Mysore) and Jersey semen from the Central Artificial Insemination Station, Bangalore and bull depots at Gauhati and Kalimpong.

The experimental breeding trials for improvement of sheep and wool have revealed that the breeds of *Merino* origin such as *Rambouillet*/ *Spanish Merino*/ *Polworth* are suitable for improving the local flocks in Himalayan region and in some parts of Deccan. Further trials with *Romeny Marsh*/ *Kulibishev* breed at Ootacamund indicate that these breeds are suitable for raising fast growing lambs finishing early for the market and yielding wool of good spinning quality. Selective breeding trials with *Chokla* and *Palanwade* breeds of sheep, have revealed that mass selection for certain wool attributes among these breeds can be undertaken in the field for improving the wool quality. In the scheme for improvement of mutton breeds of local sheep working in Andhra Pradesh, Maharashtra and Madras, it has been found in the Andhra scheme that *Nellore Sheep* are more economical producers of meat than *Mandya sheep*. The Central Sheep and Wool Research Institute, Malpura, Rajasthan expanded its activities by undertaking physiological studies on the adaptability of exotic breeds as *Romney Marsh* and *South Down*, to the local conditions. Further studies are in progress to determine the most suitable fodder for sheep under the local conditions in Rajasthan, and to test the adaptability of temperate fodder and forage crops at its Kulu sub-station, for use as winter store feed for hill/sheep. A second sub-station of the Institute is proposed to be established at Kodaikanal in Madras.

Studies are in progress at the various Regional Animal Nutrition Stations to find out the nutritive value of different feeds, subsidiary feeds and fodders available in the respective regions and replacement ration for calves. Research is being conducted on feeding of economic balanced concentrates mixtures incorporating cotton seed cake in place of cotton seed to milch animals at Anand. Encouraging results have been achieved and feeding of cotton seed cake has been found to be economical.

Under the Rinderpest Eradication Scheme, 4.95 million cattle and buffaloes were vaccinated during 1965-66 bringing the total to 135.7 million vaccinations since the inception of the scheme. The incidence of the disease was further reduced from 354 outbreaks in 1964-65 to 300 in 1965-66. The incidence of *Brucellosis* has also been considerably reduced as a result of systematic work.

### LIVESTOCK STATISTICS

The following table shows the estimates of livestock population for 1961.

(In thousands).

| Area                                        | Cattle         | Buffaloes     | Sheep         | Goats         | Horses & Ponies | Other Livestock | Total Livestock | Poultry        |
|---------------------------------------------|----------------|---------------|---------------|---------------|-----------------|-----------------|-----------------|----------------|
| <b>STATES</b>                               |                |               |               |               |                 |                 |                 |                |
| Andhra Pradesh                              | 12,345         | 6,949         | 8,363         | 4,247         | 71              | 676             | 32,651          | 16,248         |
| Assam .. ..                                 | 6,497          | 571           | 54            | 1,878         | 16              | 450             | 9,466           | 11,251         |
| Bengal (West) ..                            | 11,465         | 847           | 548           | 4,474         | 25              | 130             | 17,590          | 11,675         |
| Bihar .. ..                                 | 16,104         | 3,698         | 1,156         | 8,671         | 133             | 848             | 30,610          | 12,358         |
| Gujarat .. ..                               | 6,553          | 2,915         | 1,481         | 2,222         | 113             | 165             | 13,449          | 2,047          |
| J a m m u & Kashmir .. ..                   | 1,831          | 401           | 1,161         | 577           | 64              | 41              | 4,076           | 1,608          |
| Kerala .. ..                                | 2,753          | 485           | 24            | 1,312         | *               | 123             | 4,697           | 9,106          |
| Madhya Pradesh                              | 24,774         | 5,576         | 1,009         | 5,539         | 203             | 466             | 37,567          | 6,525          |
| Madras .. ..                                | 10,817         | 2,574         | 7,159         | 3,427         | 20              | 643             | 24,641          | 11,296         |
| Maharashtra ..                              | 15,526         | 3,134         | 2,125         | 5,168         | 112             | 271             | 26,336          | 10,769         |
| Mysore .. ..                                | 9,659          | 3,022         | 4,763         | 2,905         | 46              | 268             | 20,664          | 9,522          |
| Orissa .. ..                                | 9,810          | 1,075         | 994           | 2,382         | 58              | 210             | 14,528          | 6,548          |
| Punjab† .. ..                               | 6,053          | 4,426         | 901           | 1,221         | 74              | 518             | 13,194          | 2,237          |
| Rajasthan .. ..                             | 13,140         | 4,019         | 7,360         | 8,052         | 94              | 849             | 33,514          | 718            |
| Uttar Pradesh ..                            | 26,284         | 10,973        | 2,462         | 7,958         | 296             | 1,431           | 49,404          | 3,254          |
| Delhi .. ..                                 | 89             | 61            | 33            | 6             | 18              | 00              | 267             | 79             |
| Himachal Pradesh                            | 1,213          | 208           | 662           | 595           | 6               | 9               | 2,692           | 91             |
| Manipur .. ..                               | 268            | 52            | 2             | 13            | *               | 82              | 417             | 785            |
| Tripura .. ..                               | 481            | 43            | 3             | 153           | 1               | 37              | 718             | 703            |
| Andaman & Nicobar Islands ..                | 7              | 8             | *             | 9             | *               | 14              | 39              | 77             |
| Laccadive, Minicoy & Amindivi Islands .. .. | 1              | ..            | ..            | 4             | ..              | ..              | 6               | 15             |
| <b>TOTAL INDIA</b>                          | <b>176,670</b> | <b>51,037</b> | <b>40,260</b> | <b>60,813</b> | <b>1,350</b>    | <b>7,291</b>    | <b>336,527</b>  | <b>116,912</b> |

\* Less than 500.

† Composite State.



## ANDAMAN AND NICOBAR ISLANDS

**CAPITAL:** Port Blair. Pop. 63,548 (1961). Literacy : 40.1%.

The Andamans are a string of islands of various sizes, large and small, lying between the 6th and 14th Parallels in the Bay of Bengal. The northernmost 'Landfall Island' is 560 miles from the mouth of Hooghly River. The headquarters Port Blair is about 780 and 740 miles from Calcutta and Madras respectively. The main part of the groups is composed of five large islands, viz. North Andaman, Middle Andaman, South Andaman, Baratang and Rutland Islands generally known as the Great Andaman. To the south of the Great Andaman is the island of Little Andaman. These Islands consist mostly of a mass of hills covered with dense tropical forests and separated by three straits and several creeks. These Islands have several very good harbours—Port Blair, Port Coranwallis, Mayabunder and Port Elphinstone.

The Nicobar Islands from Car Nicobar in the north to Great Nicobar in the south intervene between Little Andaman and Sumatra. The southern island of Great Nicobar is about 100 miles from Pulo Brasse off Achin Head in Sumatra and the northern island of Car Nicobar 75 miles from Little Andaman. These islands are partly hilly and partly flat. The most important harbour in the area is Nancowry reputed to be the finest harbour in the east.

The climate of the islands can be generally described as tropical; warm but tempered by pleasant sea breezes. The islands are exposed to both monsoons with north-easterly gale from November to January and south-westerly gale from May to October. The weather is smooth only from January to April and to some extent in October. The average rainfall is 123 inches. The temperature varies between 23.0°C to 30.5°C throughout the year. The scenery of the islands is everywhere strikingly beautiful.

### POPULATION

63,548 (1961 census).

### FORESTS

Forests cover an area of 2,500 sq. miles in the Andamans and the Nicobars. Out of this 78 per cent is under ever-green and deciduous forests.

The forests are rich in commercial timber and are suppliers of timber to the plywood and matchwood industries.

The species of timber found in the forest region are mainly padauk, Andaman redwood, Gurjan—a plywood species and Papita—a matchwood species. Annually the Forest department exports approximately 30,000 tons of timber to the mainland worth about Rs. 1 crore.

Since 1954 teak plantations are being raised in Andaman Islands with great success. Large areas have been brought under matchwood and cane plantations under the Five Year Plan schemes.

A Wild Life Sanctuary has been established at Ross Island which is at a distance of about one mile from Aberdeen Jetty (Port Blair).

### AGRICULTURE

The total revenue area is in the vicinity of 32,900 acres. The principal crops are rice, coconut and arecanut. The

estimated area under paddy cultivation is about 17,430 acres. The average yield of rice in 1965-66 was 12.7 maunds per acre. Commercial prospects of cultivation of rubber, coffee, and lac in these islands are considered to be bright by the experts.

**Animal Husbandry:** There are at present 5 veterinary dispensaries and 11 veterinary outposts functioning in the various parts of these islands. A poultry farm has been established at Port Blair.

### COLONISATION

From the commencement of the Colonisation process, in 1949 to March 1962, 3,281 families had been settled who have come from West Bengal, Kerala, Bihar and Madras.

Ancillary services like schools, hospitals and dispensaries have been provided in the colonisation area.

The Ministry of Rehabilitation, Govt. of India, has been made responsible for the development of Special Areas which includes Andaman and Nicobar Islands. An inter-ministerial team sponsored by this Ministry visited these islands from 5th to 20th February, 1965 for drawing up an integrated resource development programme for these Islands.

Under this Programme, 533 Sahkaris and their families totalling 1,240 persons, in addition to some of the staff of the Rashtriya Vikas Dal, were brought to these Islands till April 1966.

### INDUSTRY

Saw milling is the main important industrial activity in the Territory and provides employment to 1,209 workers corresponding to 56 per cent of total industrial employment. The other industries include Government Dockyard, transport workshop, a printing press at Port Blair, tractor repair shop and boat building yards at Long Island. Besides, a number of training-cum-production centres have been started by the Government.

**Power:** Port Blair has a 450 kW power station established in 1950. An additional generating set of 300 kW was installed in 1963. Six numbers 24 kW diesel generator sets have been established—2 each at Rangat, Mayabunder and Car Nicobar.

### ROADS

At present the Territory has a total length of 328 km. of black top road as against 172 km. in 1960-61.

**Transport:** Port Blair has a city and rural transport service comprising 15 passenger buses.

**Minor Ports:** Under a central plan scheme jetties for inter island communications are being constructed. Installation of navigational aids in Andaman and Nicobar waters had been entrusted to the Director-General of Lighthouses and Lightships.

**Shipping:** Two ships m.v. 'Andamans' and m.v. 'Nicobar' (both passenger-cum-Cargo ships) ply between the mainland and the Islands. For inter-island communications, the vessels s.s. 'Cholunga' and t.s.s. 'Yerewa' maintain the communications.

There is a weekly air service between Calcutta and Port Blair during fair weather.



## EDUCATION

This is an educationally backward territory and education up to higher secondary stage is free. There are 108 primary/junior basic schools, 9 middle/senior basic schools, 2 higher secondary schools—one for boys and girls at Car Nicobar and the other for girls at Port Blair, one higher secondary multi-purpose school and one junior basic teachers training school. There is at present no College in this Territory. However, students belonging to these Islands are granted scholarships for prosecution of studies on the mainland.

**Tourism:** As a first step towards development of tourism in these islands, one tourists' home at Corbyns Cove and the other at Port Blair have been constructed.

**Medical:** All treatment, medical or surgical including the ambulance transports is completely free. For specialised treatment patients are sent to the mainland at Government cost.

A new General Hospital (Gobind Ballabh Pant Hospital) has been constructed at Port Blair. There is also a 50-bedded T.B. Hospital at Port Blair. Besides, there are hospitals at Car Nicobar, Nancowrie, Bamboo Flat, Mayabunder, Long Island, Rangat and Diglipur. The total strength of the beds is 428 including the bed strength of the T.B. Hospital. There are 38 dispensaries all over the Islands.

A Malaria and Filaria Survey Control Unit under the National Health Scheme operates in the central group of Nicobar Islands. A V. D. Unit has been set up in Car Nicobar. The incidence of diseases in these islands is remarkably low compared to that of the mainland.

## COMMUNITY DEVELOPMENT

Five C.D. Blocks have been established covering the entire Territory of Andaman and Nicobar Islands.

**Panchayats:** Thirty-two Gram Panchayats and 31 Nyaya Panchayats have been established in the Andaman group of Islands. In the Nicobar group, the traditional Panchayats continue.

\* A sum of Rs. 11 crores has been fixed for the Fourth Five Year Plan.

## CO-OPERATION

The number of co-operative societies in the Andaman and Nicobar Islands has increased from 85 in 1960-61 to 161 in 1965-66.

A co-operative farming society and several co-operative plantation societies have started functioning.

## BANKS

A branch of the State Bank of India was opened at Port Blair in 1957 which also conducts Government Treasury business. A State Co-operative Bank has also come into existence with effect from 31st March 1966.

## THIRD FIVE YEAR PLAN\*

The Third Five Year Plan of these islands entails an outlay of Rs. 979.320 lakhs and the total expenditure incurred was of the order of Rs. 617.307 lakhs or 63.03% of the approved outlay. The main items of expenditure were, Agricultural-programmes Rs. 253.791 lakhs; Community Development and Co-operation Rs. 31.98 lakhs; Power Rs. 14.35 lakhs; Industries Rs. 14.76 lakhs; Transport and Communication Rs. 514.00 lakhs; Social services Rs. 132.89 lakhs and Miscellaneous Rs. 17.55 lakhs. In addition, the Ministry of Transport have provided Rs. 42 lakhs in the Central Plan for the development of Minor Ports in these islands.

## ADMINISTRATION

The Islands are administered by the Central Government through a Chief Commissioner. The budget estimates for 1966-67 are as follows:—

Total Revenue expenditure Rs. 5,68,73,600; Total Capital Expenditure Rs. 1,75,43,000; Total Revenue Receipts Rs. 2,25,06,000.

*Chief Commissioner:* Mahabir Singh, I.A.S.

*Chief Secretary:* Sardar Gurbachan Singh; *Development Commissioner-cum-Development Secretary:* P. B. Mathur, I.A.S.; *Chief Conservator of Forests:* J. C. Varmah;

*Secretary (Finance):* Prem Lal; *Secretary (Judicial):* S. Chakravarty.

# ANDHRA PRADESH

**CAPITAL:** Hyderabad. Area: 1,06,286 sq. miles; Population: 3,59,83,447 (Males 1,81,61,671; females 1,78,21,776 (1961 census).

Sex ratio 98.1 females for every 100 males. Highest sex ratio in Srikakulam—104 females for 100 males. Lowest in Anantapur—94.6 females for 100 males.

No. of Districts: 20. No. of Towns: 212. No. of Talukas: 189.

Density 339 per sq. mile. Literacy 21.2 per cent.

The number of Municipal Corporations: 1. The number of Town Municipalities in Telangana: 79; Number of Municipalities in Andhra: 47; Number of Panchayats in the State: 14,552; Number of Panchayat Samities: 271; Zilla Parishads: 20; Number of inhabited villages in the State: 27,084.

The State income stood at Rs. 1,323.20 crores and the per capita income at Rs. 354.31 during 1963-64.

Strength of Legislative Assembly: 301.

The strength of the Legislative Council: 90.

No. of members from Andhra Pradesh to the Rajya Sabha: 18.

No. of members from Andhra Pradesh to the Lok Sabha: 43.

## DISTRICTS

Districts with District headquarters in brackets:

Anantapur (Anantapur), Chittoor (Chittoor), Cuddappah (Cuddappah), East Godavari (Kakinada), Guntur (Guntur), Krishna (Masulipatnam), Kurnool (Kurnool), Nellore (Nellore), Srikakulam (Srikakulam), Vishakapatnam (Vishakapatnam), West Godavari (Eluru), Hyderabad (Hyderabad), Mahboobnagar (Mahboobnagar), Warangal (Warangal), Khammam (Khammam), Karimnagar (Karimnagar), Adilabad (Adilabad), Nizamabad (Nizamabad), Medak (Sangareddy), Nalgonda (Nalgonda).

## POPULATION

(For area and population of districts according to 1961 Census see under "Population".)



## AGRICULTURE

The total geographical area of the State is 67,451,693 acres (1960-61).

Net area sown was 11,406,000 hectares (1963-64); Barren and uncultivable land: 2,131,000 hectares (1963-64); Land put to non-agricultural uses: 1,946,000 hectares (1963-64); Cultivable waste: 1,395,000 hectares (1963-64); Permanent pastures and other grazing lands: 1,167,000 hectares (1963-64); Land under miscellaneous crops, trees and groves not included in the net area sown: 286,000 hectares (1963-64); Current fallows: 2,212,000 hectares (1963-64); Other fallow lands: 811,000 hectares (1963-64); Forests: 6,117,000 hectares (1963-64); Total cropped area: 12,752,000 hectares (1963-64).

## LAND REFORMS

The State Government in consultation with the Government of India enacted the Andhra Pradesh Ceiling on Agricultural Holdings Act, 1960 which prescribed the minimum extent of land that a person may hold. The Bill was passed by the Assembly on July 9, 1960.

(See article "Agriculture" for ceiling on holdings of land)

## LIVESTOCK (1961)

(See main article on "Livestock")

## INDUSTRY

The revised total 3rd Plan provision for the entire industrial sector was Rs. 1,672 lakhs, of which large and medium industries claimed Rs. 728 lakhs.

In the first instance ground was prepared to hold out more attractive incentives to entrepreneurs with the constitution of the Andhra Pradesh Industrial Development Corporation, the Small Scale Industries Development Corporation and the Andhra Pradesh State Financial Corporation. The Industrial Development Corporation, was constituted to offer financial aid to industries and also to take up worthwhile ones for direct promotion with financial collaboration from the private sector wherever necessary.

The Corporation has on hand the following five ambitious ventures at the moment for direct promotion: (1) Rs. 1 crore High Tension and Low Tension Insulators Project for the manufacture of 2,400 tons H.T. and L.T. Insulators per annum, (2) Rs. 3 crore Integrated Glass Project, (3) Rs. 4.5 crore Ball Bearings Project with a capacity of 3.72 million numbers per annum, (4) Rs. 7 crore Pig Iron Project and (5) Rs. 1 crore Power Cables Project.

The Government of India have issued a letter of intent for the manufacture of 600 miles of PILC paper insulated power cables per annum. The project is expected to cost Rs. 1 crore.

The Third Plan outlay and the proposed provision for the Fourth Plan for large and medium industries respectively are Rs. 6.13 crores and 21.65 crores.

## INDUSTRIAL ESTATES

Several steps have been taken by the State and Union Governments to assist in the development of small-scale industries, such as the setting up of production-cum-training centres, research units, model industrial units, giving loans under the State Aid Act—the establishment of Small Industries Service Institutes, supplying machinery on hire purchase basis and provision of marketing facilities. Another step of far-reaching importance taken by the Government is to set up industrial estates to locate small-scale industrial units.

A large variety of products such as cycles and cycle accessories, steel furniture, scientific instruments, wire nails, radios, tape recorders, electric measuring instruments, cycle dynamo lights, automobile springs, air-conditioners, safety razor blades, PVC cables, transformers, switch-gear, electric accessories, plastic goods, builders' hardware, storage batteries, stainless steel vessels, agriculture implements etc., are being manufactured on these Estates.

During the Third Five-Year Plan period, an amount of Rs. 220 lakhs had been provided for Industrial Estates and it is proposed to establish 14 Assisted Private Industrial Estates, 10 conventional type estates, 5 Rural Industrial Estates and one Cooperative Industrial Estate in addition to the expansion of the existing four Industrial Estates at Sanatnagar, Visakhapatnam, Vijayawada and Warangal.

## INDUSTRIAL COOPERATIVE SOCIETIES

Industrial cooperative societies deal with a large variety of trades such as handlooms, palm jaggery and neera manufacture, leather works, carpentry, scientific engineering works etc., covering a wide field in the village and small scale industrial sector.

The amount spent and allocated for the development of industrial cooperative societies during the Second and Third Plan periods respectively were Rs. 7.02 lakhs and Rs. 10 lakhs.

## MINERALS

The chief minerals produced in the State are coal, iron ore, limestone, manganese and asbestos. The coal industry is situated at Kothagudem, Tandur, Yellandu and Sasti in Telangana region. Other minerals are widely distributed. According to the Geological Survey of India, two large deposits of iron ore containing an estimated reserve of nearly 389 million tons of ore have been located in Guntur and Nellore districts.

(See under main article "Mines and Minerals" for production figures)

## COTTAGE INDUSTRIES

The most important industry is that of handloom. There are about 4 lakh handlooms in the State; besides, there are 14,000 looms for woollen fabrics. The State has thus the largest number of looms in India and this industry provides employment for about 323,000 persons and livelihood for 1,615,000 persons. Assuming that the overall production per month per weaver is 100 yards, the annual output of handloom cloth per annum works out to about 39 crore yards of cloth.

Other important cottage industries are Kambli-weaving which employs about 39,000 persons, coir making employing about 12,000 persons and basket making which employs about 40,000 persons.

Certain handicrafts of Andhra Pradesh are world famous. Notable among these are the silver filigree articles of Karimnagar, the exquisite toys of Nirmal, Kondapalli, Nakkapalli and Tirupathi, the carpets of Warangal and Eluru and the lace goods of Narsapur.

## TRANSPORT

The total railway route kilometrage open for traffic in Andhra Pradesh as on March 31, 1961 was 4,544.1 out of which 2,648.1 were Broad Gauge, 1,858.77 Metre Gauge and 36.93 Narrow Gauge. The total road mileage including National Highways and State Highways 13,053.



The Andhra Pradesh Road Transport Corporation as in March 1964: No. of routes 366; route mileage 7,101; mileage covered by vehicles (Lakhs) 617.00; expenditure on passenger amenities Rs. 8,36,991.81; expenditure on operative improvements Rs. 87,132.46; Gross earnings Rs. 964.95 lakhs.

*Other particulars as in Feb. 1965:* Fleet strength 2,076 buses; No. of depots 36; effective mileage per day (in miles) 1,78,206; passengers carried per day (in lakhs) 6.01; Number of staff 13,480.

The number of registered goods vehicles in the State as on March 31, 1962 was as follows: State carriages 4,465; goods vehicles 8,458; cars 16,101; motor cycles 5,379; taxis 505; others 1,870.

Hyderabad City is connected by air with Bombay, Nagpur, Madras, Visakhapatnam and Bangalore. Hyderabad City is served by Begumpet aerodrome. Hyderabad is also linked by air to Delhi and Calcutta.

### POWER PROJECTS

The aggregate power demand in Andhra Pradesh which was 180 M.W. at the beginning of the Third Plan was expected to rise to about 500 MW by the end of the Third Plan period. The installed capacity of 213 MW at the beginning of the Third Plan, has gone up to 291.8 MW at the end of the Plan.

#### Machkund Hydro-Electric Scheme (Stage I and Stage II)

The Machkund Hydro-Electric Scheme is a joint venture of the States of Andhra Pradesh and Orissa. The two States share the capital outlay and power benefits in the ratio of 70:30 respectively. An ultimate installed capacity of 1,14,750 kW of which 70 per cent is Andhra Pradesh's share is available under this scheme.

#### Tungabhadra Hydro-Electric Scheme (Details are given under "Irrigation").

#### Tungabhadra Nellore Hydro-Thermal Scheme

The scheme envisages the installation of one 30-MW thermal set at Nellore. The plant has been commissioned already.

#### Upper Sileru Hydro-Electric Scheme

The scheme envisages the installation of two sets of 60 MW each by utilising the tail race waters of Machkund power house.

#### Telangana Hydro-Thermal Scheme

The scheme envisages the integrated development of power generated at Hussainsagar, Ramagundam Thermal station and at Nizamsagar Hydrel stations in Telangana region. The scheme is making good progress and the additional power generated will be of the order of 14 MW.

#### Srisailem Hydro-Electric Scheme

The scheme envisages installation of 4 × 110 MW sets in the first stage. Work on the project is proceeding briskly.

The project is estimated to cost Rs. 45.75 crores. The dam and power house are programmed to be completed by 1970-71 and one unit of 110 MW is expected to be commissioned before the end of the Fourth Plan. The remaining units will be commissioned in 1971-72. The expenditure incurred on the project is about Rs. 4 crores.

### Balimela Dam

This is a joint scheme of Andhra Pradesh and Orissa Governments under execution by the Balimela Control Board. The total storage capacity of the Dam is 135 T.M. Cft., and 100.25 T.M. Cft. will be the live or effective capacity. There will be a power house erected at the toe of the Balimela Dam. The power generated here, i.e., 40 MW will be exclusively for the use of Andhra Pradesh. Andhra's share of the cost of the project is about Rs. 12 crores.

#### Kothagudem Thermal Scheme (Stage I)

This new scheme envisages the installation of 2 × 60 MW sets.

#### Ramagundam Thermal Extension Scheme (Stage I)

This new Scheme envisages the installation of one 60 MW set at Ramagundam. It is expected to be commissioned by April 1967.

#### Gas Turbo Sets at Hyderabad

This scheme envisages the installation of 2 × 10 M.W. Gas Turbo sets at Erragadda to relieve to some extent the power shortage in the twin cities of Hyderabad and Secunderabad, particularly during the peak load hours. The sets have been installed and commissioned into service.

#### Lower Sileru Hydro-Electric Scheme (Stage I)

This scheme envisages the installation of 3 × 100 M.W. Sets at Donkarai village on the river Sileru as the first stage of the project at an estimated cost of Rs. 25.34 crores. The power generated under this scheme will be exclusively for the benefit of Andhra Pradesh. Preliminary works have been taken up.

### IRRIGATION

In the Third Plan irrigation projects including flood control schemes accounted for Rs. 90.99 crores forming 26.4 per cent of the total revised outlay of Rs. 344.97 crores. In the draft Fourth Plan of the size of Rs. 700 crores, a provision of Rs. 75 crores is earmarked for major and medium irrigation schemes excluding Nagarjunasagar Project.

Against the irrigation potential of 9.53 lakh acres created in the first Three Plans, an additional irrigation potential of 25.13 lakh acres will be created in the Fourth Plan alone under all major and medium irrigation projects including Nagarjunasagar. The area expected to be brought under irrigation at the end of the Third and Fourth Plans are 8.27 lakh acres and 18.73 lakh acres respectively.

#### Major Irrigation Schemes

*Prakasam Barrage:* The total ayacut under this scheme is 12.25 lakh acres and it is estimated to cost Rs. 3.91 crores; *Bhairavunitippa Project:* It commands an ayacut of 12,000 acres and is estimated to cost Rs. 144.75 lakhs; *Upper Pennar Project:* Proposed to feed an ayacut of 12,000 acres and is estimated to cost Rs. 158 lakhs; *Rallapadu Project:* Intended to irrigate 7,640 acres and is estimated to cost Rs. 107.91 lakhs; *Rompuru Drainage Scheme:* 8,190 acres are benefited and is estimated to cost Rs. 128.02 lakhs; *Tungabhadra Project Low Level Canal:* The Canal is designed to irrigate about 92,000 acres in Mysore State and about 1,57,000 acres in Andhra Pradesh. Total estimated cost of the scheme is Rs. 1,391.00 lakhs; *Tungabhadra Project High Level Canal:* Expected to



irrigate 1.191 lakh acres in Andhra Pradesh and 70,300 acres in Mysore State. Estimated to cost Rs. 1,180 lakhs. *Rajolibanda Diversion Scheme*: The canal irrigates an ayacut of about 5,900 acres in Mysore State and about 87,900 acres in Andhra. Estimated cost is Rs. 372 lakhs; *Kadam Project*: Total utilization of the ayacut will be 65,000 acres. Estimated cost is Rs. 784.12 lakhs; *Pochampad Reservoir Project*: Designed to irrigate 5.7 lakh acres and is estimated to cost Rs. 40.10 crores.

Nagarjunasagar Project, Tungabhadra Project High level canal, Pochampad Project, Vamsadhara Project, Rajolibanda Diversion Scheme and Kadam Project are the major projects in Andhra Pradesh that are, at the moment, at various stages of progress. In respect of Nagarjunasagar Project the work on Stage I was completed on Aug. 3, 1966.

### CO-OPERATION

(See article on "Co-operative Movement").

### COMMUNITY DEVELOPMENT

Andhra Pradesh was the first State in India to introduce Panchayati Raj. There were (April 1965) 321 Blocks in operation, covering the entire State with Community Development Programme.

### LABOUR

During 1964, 109 strikes were reported resulting in a loss of approximately 5,20,250 man-days, 85 disputes were referred to adjudication. 160 Industrial disputes were settled in conciliation by the industrial relations machinery. 603 trade unions were operating in the beginning of the financial year 1964-65. 92 trade unions were registered between April 1964 and Jan. 1965. The total number of factories as on Jan. 1, 1965 was 5,773 in the State.

### Employment

During 1963-64 the employment exchanges in the State registered as many as 2,31,844 persons. The total number of vacancies received from various employers was 40,388. During April to Dec. 1964, 1,76,637 persons have been registered and 28,244 have been placed. There were 1,32,070 persons of various categories awaiting employment assistance on the live register of the exchanges as on March 1, 1964.

### PUBLIC HEALTH

During the Third Five-Year Plan Rs. 1,984.42 lakhs were provided for medical and public health schemes including water supply and sanitation.

In Andhra Pradesh, at the end of 1963-64, there were 255 Primary Health Centres. By the end of the Third Plan, it was expected that 330 primary health centres would be in existence.

There are also as many as 237 subsidised rural dispensaries functioning in Andhra Pradesh, besides the Primary Health Centres.

*T. B. Control*. There are at present 12 T.B. Sanatoria in Andhra Pradesh. In addition to this, nine Tuberculosis Domiciliary Centres are functioning in the cities of Hyderabad and Secunderabad. The Centres provide medical facilities and treatment at the residence of the patients. Besides, 43 T.B. Clinics are also functioning in the State to provide medical aid for T.B. patients.

There is an Institute for Diseases of Chest and T.B. at Irrumnuma in Hyderabad which imparts training in T.B. for doctors and other para-medical personnel.

### Leprosy Control

Andhra Pradesh is endemic with a high percentage of incidence of leprosy. In order to combat this, 18 centres are now functioning in the State, one in each district where the incidence of leprosy is about 3 per 1,000 of population. Two of the above centres have been converted into Leprosy Control Units.

There are at present 73 survey education and treatment centres functioning in the State.

### Family Planning

Towards the end of 1965-66, there were 306 rural family planning clinics attached to the Primary Health Centres and 65 Urban Family Planning clinics attached to Government hospitals functioning. In addition to these, there are 49 family planning centres in the twin cities of Hyderabad and Secunderabad. Facilities for vasectomy operations and insertion of loop are provided in all major hospitals, district hospitals and taluk hospitals.

### Hospitals, Beds, Staff, etc. 1963-64.

*Allopathic*: Hospitals 360; Hospitals for spl. treatment 32; Dispensaries 913; Beds 21,346; Doctors 2,741. *Ayurvedic*: 1965-66. Hospitals 2; Dispensaries 1,069; Doctors and Vaidis 769. *Unani*: Hospital 1; Dispensaries 77; Doctors and Hakims 100.

### EDUCATION

Total no. of educational institutions in the State in 1963-64 was 57,632. No. of students in these institutions: 57,41,091. No. of Universities: Four.

The total number of annual admissions in the eight Medical Colleges is 1,090. Due to the National Emergency, the number of admissions has been increased by 190.

(For more statistical information see "Education Tables").

### FOURTH PLAN

(See under "Fourth Plan").

### ANDHRA PRADESH AGRICULTURAL UNIVERSITY

Dilkusha, Hyderabad 4.

The University is patterned on the Land grant colleges system of the United States and came into existence from 12th June 1964.

The University has six constituent Colleges, three in the faculty of Agriculture, two in the faculty of Veterinary Science and one in the faculty of Home Science.

The total No. of seats available in each faculty is as follows: (1) Agriculture 400; (2) Veterinary Science 140; (3) Home Science 60.

The medium of instruction and examination in the University is English.

*Chancellor*: The Governor of Andhra Pradesh.

*Vice-Chancellor*: O. Pulla Reddi, I.C.S. (Retd.).

*Registrar*: M. Sriramulu.

### ANDHRA UNIVERSITY

(Waltair)

*Chancellor*: Pattom A. Thanu Pillai, Governor of Andhra Pradesh.

*Vice-Chancellor*: Prof. K. R. Srinivasa Iyengar, M.A., D.Litt.



*Principal (Univ. Colleges) :* Dr. P. T. Rao, M.Sc., D.Sc.

*Registrar :* P. V. V. Seshagiri, M.Sc., F.B.S.

*Deputy Registrar :* M. G. K. Reddi, M.A. (Hons.), B.L.

Number of University Colleges : 5 ; No. of professional colleges : 7 ; No. of affiliated colleges : 32 ; No. of oriental colleges : 17.

#### 1964-65 Budget

|                                                  |                                                             |
|--------------------------------------------------|-------------------------------------------------------------|
| Income .. .. .                                   | Rs. 95,72,564                                               |
| Expenditure .. .. .                              | Rs. 86,42,653                                               |
| Grants :                                         |                                                             |
| (a) From State Govt. .. .. .                     | Recurring<br>Rs. 16,68,085<br>Non-recurring<br>Rs. 6,11,100 |
| (b) From University<br>Grants Commission .. .. . | Recurring<br>Rs. 2,61,894<br>Non-recurring<br>Rs. 5,59,000  |
| (c) From Govt. of India .. .. .                  | Recurring<br>Rs. 12,000                                     |

Total No. of students at the University Colleges, in 1964-65 is 2,566.

This university is teaching as well as affiliating. English is the medium of instruction.

### OSMANIA UNIVERSITY

Hyderabad 7.

The Osmania University is a residential, teaching and affiliating university. It comprises eight Faculties, namely, Arts, Science, Commerce, Medicine, Engineering, Education, Law and Technology. There are five University Colleges, nine constituent Degree Colleges (including one exclusively Women's College and three Evening Colleges for Degree Courses for those in employment).

47 Affiliated Colleges including 3 Medical, 1 Physical Education, 2 Engineering, 2 Training Colleges, 1 Nursing, 27 Degree Colleges of Arts, Science & Commerce (including 3 meant exclusively for women) and 11 P.U.C. Colleges.

Enrolment (1965-66) : 29,870 (Arts and Science : Boys 17,751 ; Girls 4,580 ; Professional : Boys 6,449 ; Girls 1,090).

During 1965-66, 7 Colleges were affiliated to the University, 6 with P.U.C. (Humanities) and one with B.E. (5-Year Course). Also 5 Colleges were affiliated for evening session, 4 with P.U.C. (Humanities) and one with P.U.C. (Humanities), B.A., B.Com.

#### CHANCELLOR

Pattom A. Thanu Pillai, Governor.

#### VICE-CHANCELLOR

Dr. D. S. Reddi, M.A. (Oxon.).

#### REGISTRAR

L. B. Deshpande, B.Sc.

Total number of Arts and Science Colleges : Arts Colleges 13 ; Science Colleges 7 ; Arts and Science 28 and Professional 13.

Total number of Women's Colleges : Eight.

Total enrolment in Arts and Science Colleges : Boys 17,751 ; Girls 4,580.

Total number of Professors : 145 ; Other teachers 2,133.

Total number of Professional Colleges : 13 (Education, three ; Engineering, three ; Law, two ; Medical, three ; Physical Education, one ; Nursing, one). Total enrolment in Professional Colleges : Boys 6,449 ; Girls 1,090.

### BUDGET 1965-66

Receipts : Rs. 1,23,51,762. Expenditure : Rs. 1,27,49,665.

Contribution by State Government : Rs. 64,22,100 ; Central Govt. : Rs. 4,000.

### SRI VENKATESWARA UNIVERSITY

Tirupati

A Residential, teaching and affiliating University having jurisdiction extending over the districts of Anantapur, Chittoor, Cuddappah, Kurnool and Nellore in Andhra Pradesh.

Affiliated Colleges : 17.

Instruction is being provided for Pass and Post-Graduate Degree courses of study in the teaching departments of English, Telugu, Sanskrit, Hindi, Arabic, Persian, Urdu, Philosophy, Psychology, Economics, History, Mathematics, Statistics, Physics, Chemistry, Botany, Zoology, Geology, M.Sc. Home Science in the University College (Arts & Sciences). Research work leading to the Ph.D. Degree is also permissible in all these departments except in the Statistics Department. M.A. Degree course in Home Science has been started in the academic year 1964-65.

The University College of Engineering provides instruction for the Five Year Integrated Course in Engineering, Civil, Electrical and Mechanical branches.

Pre-University course of study came into operation in the academic year 1957-'58 and was followed by the Three Year Degree courses in the next academic year, 1958-'59. These two courses replaced the old two-year Intermediate and Degree courses of study respectively.

Consequent on the abolition of Three Year Honours courses, two year Masterate courses have been started in the University College with effect from the academic year 1959-'60. Provision has also been made for doing research leading to D.Sc. and D.Litt. degrees.

The medium of instruction and examination in the University is English excepting Modern Indian Languages and the languages for the Oriental Titles.

*Chancellor :* The Governor of Andhra Pradesh.

*Vice-Chancellor :* Dr. V. C. Vaman Rao, M.A., Ph.D. (Dublin).

*Registrar :* Y. Viswanathan.

Total number of students in the University Colleges at the beginning of the academic year 1965-66 : Boys 1,186 ; Girls 156. Total 1,342.

The total strength of the University (including University College) in 1965-66 was 14,651.

#### 1964-65 BUDGET

|                         |                 |
|-------------------------|-----------------|
| Opening Balance .. .. . | Rs. 80,06,495   |
| Receipts .. .. .        | Rs. 1,26,19,307 |
| Expenditure .. .. .     | Rs. 1,51,71,052 |
| Closing Balance .. .. . | Rs. 54,54,750   |

### MUNICIPAL CORPORATION OF HYDERABAD

*Mayor,* Mir Akber Ali Nasiri.

*Deputy Mayor,* Syed Rahmat Ali.

#### PRINCIPAL OFFICIALS

*Commissioner :* Ajit Singh, I.A.S.

*Addl. Commissioner, Secunderabad Division :* M. Dharma-raj Mathur.

#### BUDGET FOR 1966-67

|                     |                 |
|---------------------|-----------------|
| Income .. .. .      | Rs. 3,22,35,308 |
| Expenditure .. .. . | Rs. 3,22,35,308 |



## ASSAM STATE

**CAPITAL:** Shillong. Area : 47,290 sq. miles (122,481 sq. km.) according to Assam Survey. Geographical area 30·1 million acres.

Population (1961 census) : 11,872,772. Density 252 per sq. mile (97 per sq. km.). Literacy 27·4 per cent.

Nearly one half of the area of Assam State is covered by hills. Plains : 24,557·96 sq. miles; Hills 22,732·00 sq. miles. Besides, a total area of 32,914 sq. miles, mostly hilly, has been transferred to Assam State from N.E.F.A. The hill areas are sparsely populated and inhabited by the hill tribes.

### DISTRICTS

Names of Districts showing within brackets the headquarters of each District and the area in square miles of each District followed by the names and areas in sq. miles of the talukas in the particular District respectively are as follows :—

Cachar (Silchar; 2,680) : Hailakandi 512; Karimganj 709; Silchar 1,459.

Darrang (Tezpur; 3,367) : Mangaldai, 1,272; Tezpur 2,095; Garo Hills (Tura 3,149).

Goalpara (Dhubri; 3,979) : Dhubri 1,054; Goalpara 1,098; Kokrajhar 1,827.

Kamrup (Gauhati; 3,844) : Barpeta 1,254; Gauhati 1,617·318; Nalbari 972·682.

Lakhimpur (Dibrugarh; 5,012) : Dibrugarh 3,667; North Lakhimpur 1,345.

Mizo District (Aijal; 8,089) : Aijal 4,861; Lungleh 3,228.

Nowgong (Nowgong; 2,167).

Sibsagar (Jorhat; 3,476) : Golaghat 1,363; Jorhat 1,094; Sibsaigar 1,019.

United Khasi and Jaintia Hills (Shillong; 5,554) : Jowai 1,515; Shillong 4,039.

United Mikir and North Cachar Hills (Diphu; 5,883) : Mikir Hills, 3,995; North Cachar 1,888.

The hill districts have been given, under the Constitution of India, a large measure of self-governing rights according to their respective tribal traditions and customs, exercised through Autonomous District Councils under the supervision of the Government of Assam.

The third administrative division of the State is to be formed including Mizo Hills and Cachar districts. The other two are the Hills and Plains divisions.

There are now 16 Mahkuma Parishads, 120 Anchalik Panchayats and 2,570 Gaon Panchayats in the Plains Districts of the State. These Panchayats have covered 11,085 villages.

Number of Circles : In Assam Tahsils are termed as Circles : 67. Number of Municipalities : 17. Number of Town Committees : 29.

### GEOGRAPHY

Assam has three distinct natural divisions : Brahmaputra or Assam Valley, Surma or Barak Valley and the hills.

The river-basins are naturally fertile and present in the main few difficulties to the cultivator. Rainfall being high the problem in general is to dispose of the surplus water and to control the action of floods rather than irrigation in the usual sense.

Rice is the staple food crop. Tea and jute are the most important crops grown for export. Besides, potatoes are

also cultivated in Assam. A good deal of short staple cotton and fruits like oranges and pineapples are grown in the hills.

Rainfall is everywhere abundant, and ranges from 50 to 258 inches a year leaving aside the highest recorded rainfall in this part of India with the maximum reached at Cherapunji (905 inches in 1861 : record precipitation for one day is 41 inches). This is reputed to be the wettest place in the world. Temperatures are moderate.

Earthquakes of considerable severity have taken place. By far the worst in recent times was that which occurred on August 15, 1950, one of the world's five biggest recorded tremors. According to old records the Assam earthquake of 1897 is regarded as the severest in human history.

### COTTAGE INDUSTRIES

Main cottage industries : Sericulture and Weaving. Principal areas for Sericulture : Sibsagar, Nowgong, Goalpara, United Khasi-Jaintia Hills and United Mikir-North Cachar Hills, Lakhimpur and Kamrup districts.

Handloom weaving is done in most of the families in Assam. Number of fly and throw-shuttle looms in the State is more than 6,00,000.

Production of individual industries : Cloth—55,000,000 metres; Mulberry raw silk—15,000 kgms.; Muga raw silk—60,000 kgms.; Open Eri Cocoon—250,000 kgms.

Total number of workers in Cottage industries : 12,50,000 (inclusive of part-time and whole-time workers in sericulture and weaving). Average workers per establishment 2.

Number of workers in individual industries : Handloom Weaving (850,000); Sericulture (400,000).

### AGRICULTURE

*Latest available :*

More than 70 per cent of the total working population of the State are engaged directly or indirectly in agriculture.

Main food crops of the State : Rice, Rape, Mustard, Sugar-cane, Potato, Pulses, Maize and Oranges.

Main cash crops of the State : Tea, Jute, Cotton and Tobacco.

Production of food crops in lakh tonnes (figures are for 1964-65) :

Autumn Rice 3·28; Winter Rice 15·69; Spring 0·15; Maize 0·11; Wheat 0·04; Rabi Pulses 0·34; Sesamum 0·05; Gram 0·01; Rape and Mustard 0·60; Potato 0·55; Sugarcane 1·25; Tur 0·02; Linseed 0·005; Castor 0·008; Other cereals 0·03; Tobacco 0·08; Mesta 0·38; Sweet Potato 0·27; Chillies 0·05; Jute 8·82 lakh bales; Cotton 0·07 lakh bales.

One plain district (7 blocks) is covered by Intensive Agriculture District Programme (Package Programme); Six other districts are covered by Rice Package; Fourteen blocks under Jute Package; Three blocks under Potato Package and one block is under Sugarcane Package. There is one Agricultural College; four Gram Sevak Training Centres; one Gram Sevika Training Centre; 15 Agricultural Research Stations; nine Agricultural District Level Farms; one Jute Seed Farm; four Fruit Preservation Factories; 102 Thirty-Acre Farms.

Source :—(Agricultural Diary 1966 and Agri. Information Officer, Shri P. R. Nath).



## LIVESTOCK AND POULTRY

According to the livestock census of 1961, the livestock population of Assam stood at 9,47,900. Over the decade, the livestock population increased by 37 per cent from 6.9 millions in 1951 to 9.5 millions in 1961. The census also reveals that per thousand hectares of cultivated area the number of cattle was highest in Assam among the States of India.

As per estimated figures, the number of livestock in 1963-64 (thousand numbers) in Assam are as follows: Cattle 6,764; Buffaloes 608; Sheep 57; Goats 1,921; Horses and Ponies 17; Other livestock 476. Total livestock 9,843. Poultry 10,585.

Source: (Economic Survey, 1965, Page 8.)

## PLANTATIONS

*Latest available data:*

Plantation in the State: Tea.

Area under Plantation: 1,66,429 hectares in 1964.

Number of Tea Plantations: 726 (covered under the Plantation Labour Act).

Production of Tea: 192,831,000 kg. (1964).

Average daily number of workers: Engaged in plantation 492,793 (1963); Engaged in factories 57,516 (1964). (As covered under the Assam Factories Act, 1948.)

**Fisheries:** *Variety of fish produced:* Raba, Katla, Mrigal, Mali, etc.

Assam State has met the fish seed demands from their own resources. Culture of mirror carps, scale carps etc. has become popular in the Hill Districts of the State.

## FORESTS

Forest area: Approximately 17,634 sq. miles including unclassified state forests.

Main types of forest with some species of trees of economic importance occurring in them:

Evergreen forests, mixed deciduous forests, deciduous and dry deciduous forests, riverain forests, Savannah forests, swamp forests, bamboos and temperate forests containing sal, teak, hollock, holong, bansam, amari, gamari, ajhar, sissoo, simul, cane, bamboos, reeds and various species of medicinal importance.

Assam possesses one of the richest fauna in Asia and it is claimed that outside Africa, there is no part in the world with so many varieties of animals, birds, reptiles and insects. Rhinoceroses, elephants, wild buffaloes, bisons and mithuns, swamp deer, sambhar, spotted deer, barking deer, tiger, leopards, black panther, king cobra, pink-headed duck and giant hornbill are some of the well-known specimens of wild life.

Five sanctuaries and two game reserves with a total area of about 523.79 sq. miles, are maintained by the Government Forest Department for the protection of the interesting and in some cases the numerically dwindling species. Kaziranga and Manas are the two most famous sanctuaries.

Main forest produce: Timber, firewood, bamboo, cane, lac, elephant tusks, thatch, stone, sand, drugs, incense and perfumes, fibres and flosses. Assam has probably the biggest bamboo and reed reserves, contributing 42 per cent of India's total output.

## LAND TENURE SYSTEM

There are two classes of land tenure system in the State—the permanently settled estates and the temporarily settled estates.

*Permanently settled estates:* These are found in Goalpara District and Karimganj Sub-division of the Cachar District. In Goalpara district the permanently settled estates held by the proprietors and the rights of most of the intermediaries under them have been acquired under the Assam State Acquisition of Zamindaris Act and the tenants holding lands under them have come into direct relationship with the Government. In Karimganj Sub-division of Cachar district there are permanently settled estates and the acquisition of estates in Karimganj Sub-division has since been completed. The tenants who hold either directly under the Zamindars or intermediaries pay rent in cash or kind. There are crop-shares too. There are also a small number of people in Karimganj who hold land under landlords on condition of rendering service. An amount of Rs. 1,05,50,000 has been paid both as ad-interim and final compensation upto March 31, 1966, for acquisition of estates and tenures under the Assam State Acquisition of Zamindaris Act.

*Temporary settlement system:* Also known as the Ryotwari system prevails in the other plains districts of the State and also in portions of Goalpara District and Karimganj which are not permanently settled. These lands are assessed to full revenue and are called Khiraj lands.

The peculiarity of this system is that generally the cultivators hold lands directly under the Government unlike the lands in permanently settled estates.

There are three tenancy Acts in Assam, viz. The Goalpara Tenancy Act, The Sylhet Tenancy Act and The Assam (Temporarily Settled Districts) Tenancy Act. The former two Acts apply to the Districts of Goalpara and Cachar (those portions of former Sylhet District which have remained in Assam after partition) respectively. The last Act applies to the plains districts of Assam. These Acts confer rights of occupancy, determine the rent payable by the tenants and regulate the relationship between the landlords and the tenants. Government has also passed a law called the Assam Fixation of Ceiling on Land Holdings Act (1956), whereby the holding of agricultural lands has generally been limited to a maximum of 150 bighas (about 50 acres) per family.

## MINES, INDUSTRIES

The only minerals in Assam worked on a commercial scale are coal, limestone, petroleum oil and sillimanite. Petroleum output about 116,703,702 gallons (1961); coal output 774,834 tons (1962); limestone output 78,045 tons (1962); and sillimanite 8,095 tons (1962). An oil refinery has already been set up at Gauhati.

Silk is manufactured in the Assam valley; also cotton weaving prevails as a cottage industry, women playing a predominant part.

Tea is the main industry, but there is a large petroleum mining concern with Digboi in Upper Assam as the centre and also some coal-mines. There is a big match manufacturing concern at Dhubri. Boat-building, brass and metal and earthenware, limestone burning, cane and bamboo work, furniture making, sola hat, smithy, brick making, mustard oil pressing, rice and saw mills are other industries. But agriculture employs about 80 per cent of the population. Assam carries on a considerable trade with the adjoining hill tribes and countries.

## POWER

The Gauhati Thermal, the project at Narangi, costing Rs. 1.22 crores, will generate 12.5 mw power for defence and industrial uses in and around Gauhati. The project will utilise the surplus light diesel oil produced by the Gauhati refinery.



**Power Projects :** Planned power development made a beginning in the State with the commissioning of Umtru Hydel Project which benefits Kamrup and K. and J. Hills. The power project based on natural gas from Nahorkatiya oil fields with an installed capacity of 69,000 kW has been commissioned. This meets the local demands of Upper Assam districts. Another hydro-electric project at Umiam in Khasi-Jaintia Hills, expected to generate 36,000 kW in the first phase, has been completed. The second phase, with a further capacity of 18,000 kW was under construction and was to be completed by the end of 1966. This system known as Umiam-Umtro grid, will serve the district of United Khasi and Jaintia Hills, Kamrup, Cachar, Darrang and Goalpara districts. A thermal station of 5,000 kW based on local coal available in the Garo Hills was under construction and was expected to be ready by the end of 1966.

The Kopili project, a large multi-purpose project is likely to be taken up during the IV Plan period.

The Spun Silk Mill at Jagiroad (Public Sector) has gone into production. The Cement factory at Cherrapunji with a capacity of 250 tons daily, (State participation Scheme) was expected to go into production soon. Licences have been issued for the establishment and expansion of a number of other industries such as four large paper and pulp industries, hard board, chip board, commercial plywood, timber seasoning units, steel fabrication and light engineering manufacture.

**Gas-Based Industries :** The two projects which have been decided to be taken up as part of the first-phase natural gas utilisation programme are (1) a power project, with an installed capacity of about 50,000 kW near Nahorkatiya and (2) a fertiliser plant at Namrup near Nahorkatiya with production pattern of 50,000 tons of urea and 50,000 tons of ammonium sulphate annually. Both these projects would be in the public sector.

For manufacture of hard board a large unit has been licensed.

Two cotton spinning mills with a total spindlage of 50,000 have been licensed in the State.

### HANDLOOM INDUSTRY

Handloom industry is an age-old cottage industry of Assam.

It is the largest and the most important cottage industry next to Agriculture, both in hills and plain districts. Most of the weavers of the State are women and they generally weave cloth for their domestic use in leisure time.

At the end of 1963-64, the number of weavers' co-operative societies had increased from 317 to 34,546. The membership had also increased from 8,322 to 39,086. Up to the end of 1963-64, share capital loans amounting to Rs. 6.69 lakhs and working capital loan to the tune of Rs. 61.31 lakhs had been given.

**Powerlooms :** Out of 192 powerlooms for which the Government of India has sanctioned financial assistance, 29 powerlooms have been installed at the industrial estate at Gauhati and the remaining powerlooms have been allotted to powerloom societies at Golaghat, Nowgong, Gauhati and Nalbari. There is a training centre at the industrial estate at Gauhati for imparting training to weavers in powerloom societies.

### TRANSPORT

Much of the trade of Assam is carried by river. Steamer companies maintain fleets of vessels which ply to and from Neamati, Tezpur, Gauhati, Goalpara, Dhubri, Karimganj, Silchar and many other smaller stations.

From January 1958, the entire railway system in Assam has been made part of a new Zone of the Indian Railways—the North East Frontier Railway. Pandu (Maligaon) near Gauhati has been made the headquarters of N.E.F. Railway.

Because of the slender surface link between Assam and the rest of India, air services are of great value to the State. Almost all the big towns—Tezpur, Jorhat, Dibrugarh, North Lakhimpur, Silchar, Dhubri and Gauhati are now served by daily scheduled flights. Pasighat and Along in NEFA have also been placed on the airmap.

The total length of motorable roads as on March 31, 1962, stood at 6,374 miles including 740 miles of National Highway. Of these 5,113 miles were in the plains and 1,260 in the hills. Besides, there were on this date 1,993 miles of bridle roads.

Nationalisation of motor transport in the State was started in 1948, and till March 31, 1965, 1,624 miles were covered.

January 1, 1965 :

Number of vehicles operated by the Department 645 ; Number of passenger buses 444 ; Number of 1st Class service cars 24 ; Number of Goods Vehicles 155 ; Number of other vehicles (ambulance, staff car, etc.) 26 ; Number of passengers carried in a day 26,271 ; Goods carried in a day 10,637 maunds ; Service mileage daily operated by the Nationalised Transport 29,000 (approximately).

The programme of road-making has its special significance in that it is designed to make Assam self-sufficient in ensuring quick transport of its exports to and imports from other parts of the Indian Republic without having to pass through Pakistan. At the same time communications within the State are being improved by provision of necessary feeder roads from and to the arterial road system of the State so that local surplus produce may find good markets.

### CIVIL SUPPLIES

*Latest figures :*

The approximate monthly import requirements in tons of food-stuffs and other essential commodities are as follows :—Wheat 5,000 ; Salt 7,600 ; Sugar 5,500 ; Gur 2,000 ; Mustard Oil 3,000 ; Pulses 6,000 ; Paper 150 ; Cloth 10,000 bales ; Yarn 2,500 bales ; Iron & Steel 4,500 ; Cement 10,000 ; Misc. goods 15,000 ; Rice 42,000.

### CO-OPERATION

For statistical information see the main article on Co-operation. Some specific types of co-operative societies and their number, not dealt with in the article on Co-operation, are given below.

Large sized Credit Societies (221) ; Small sized Credit Societies (4,816) ; Consumers and Trading (687) ; Wholesale Stores (9) ; Weavers' Co-op. Societies (1,573) ; Urban and Salary Earners' Societies (210) ; Multipurpose Co-op. Societies (179) ; Farming Societies (303) ; Industrial Societies (360) ; Fishery Societies (255) ; Primary Marketing Societies (200) ; District Marketing Societies (3) ; Milk Union (1) ; Primary Milk Societies (23) ; Co-operative Unions (15) ; Housing Societies (2) ; Cotton Ginning Mills (2) ; Jute Mill (1) ; Sugar Mill (1) ; Rice Mills (3) ; Other agricultural processing Societies (425) ; Other types of Societies (124) ; Apex Weaver (1) ; Apex Marketing (1) ; Apex Bank (1) ; (Till 30th June, 1965).

Number of Co-operative Central Banks : 9.

Apex Banks : 1 with 17 branches.

Number of Co-operative Central Land Mortgage Bank: 1.



Number of Co-operative Primary Land Mortgage Banks : 16.

*Budget allotment for the Department for the year 1966-67.*  
Co-operation : General: Rs. 61,99,000 ; Sixth Schedule : Rs. 11,18,300. *Capital Outlay etc.* : General: Rs. 24,14,000 ; Sixth Schedule : Rs. 1,78,000. *Loans to Co-operative Societies* : General: Rs. 11,15,700 ; Sixth Schedule : Rs. 4,83,400.

## HEALTH SERVICES

*Latest figures available :*

Commonest diseases in State and mortality from each disease during 1964 : Malaria 1,850 ; Kala-Azar 60 ; Total of all fevers 7,990 ; Small-pox 40 ; Dysentery and Diarrhoea 3,017 ; Respiratory diseases 2,278 ; Injuries 561 ; Cholera 312 ; Enteric fever 84 ; Beriberi 46 ; Diphtheria 30 ; other causes 21,319.

*Present Facilities : Hospitals :* Government T.B. Hospitals 4 (387 beds) ; Private T.B. Hospitals 4 (256 beds) ; Government Mental Hospital 1 (796 beds) ; Leprosy Colonies 18 ; Leprosy Treatment Centres 245 having accommodation for 1,116 inmates ; Kala-Azar Hospitals 2 ; Kala-Azar Wards 10 ; F. P. Clinics 180 ; Sterilization Units 26 ; I.U.C.D. Centres 147 ; F. P. Mobile Units 13.

General Hospitals and dispensaries : (Allopathic and Ayurvedic) 790.

Total Number of pharmacists 4,164.

Total number of registered Doctors 4,141.

Total number of Government Doctors 1,108.

Total number of outdoor patients treated 56,91,378.

Total number of registered nurses 1,940 ; Total number of Auxiliary Nurse Midwives 783 ; Total number of registered Dhais 1,300 ; Total number of Midwives 1,478.

Total number of Medical Colleges : Allopathic 2 ; Ayurvedic 1.

Total Number of Students : Allopathic 1,640 ; Ayurvedic 35.

Special medical Research Institutes : 2 (Pasteur Institute, Shillong and Malaria Institute, Shillong).

Postgraduated studies conducted in Assam Medical College, Dibrugarh in all subjects.

General Nursing Training : Training Schools : 15 (Govt. 4, Private 11) ; School for Auxiliary Nurse Midwives : 17 (Govt. 11, Private 6) ; Nurse Midwife's Schools : 15 (Govt. 4, Private 11).

Budget allotment (1966-67) : (A) for Public Health : General (Normal) Rs. 1,60,90,400 (for the sixth Scheduled Areas Rs. 57,53,800) ; Forth Plan General Rs. 41,94,000 (for the sixth Scheduled Areas Rs. 12,33,000). (B) for Medical : General (Normal) Rs. 2,64,20,527 (for the 6th Scheduled Areas Rs. 34,21,648).

## EDUCATION

(For particulars about general education see under Educational Tables.)

*Social Education :* The scheme for social education was first launched in the State in the year 1949-50. Till 1963-64 a total number of 3,28,487 adults were made literate. The number of social education centres during 1963-64 was 649 and 22,469 students (males 16,995 and females 5,474) were admitted in these centres. There were 649 teachers (males 552 ; females 97). Number of persons educated during the year was 16,190. Five Social Education Workers'

Training Camps were organised in 1963-64 where 215 workers were trained. In order to cater to the needs of the post-literacy courses 1,125 village libraries were given grants-in-aid besides free distribution of books. The above figures exclude the libraries sponsored by the development blocks.

### *Hindi in the Education System :*

Hindi has been introduced as a compulsory subject from class IV to class VIII in secondary schools, from class IV to X in higher secondary and multi-purpose schools and as optional in class XI.

There are five Training (Normal) schools in the State where Hindi is compulsory. In the special schools i.e. in Madrasas it is a compulsory subject. The subject is being introduced in the Government and non-Government Colleges gradually both as mother tongue and as alternative language.

### *Basic Education :*

There are 42 Senior Government Basic Schools and 347 Junior Government Basic Schools in the State. Besides, there are 656 Middle Vernacular and Senior Basic Schools and 17,947 Lower Primary and Junior Basic Schools under the State Elementary Education Board.

There are 28 Government Basic Training Centres in the State for giving training to junior teachers. There is also a Basic Training College for imparting training to senior teachers. Each training centre has the intake capacity of 130 to 200 students with a teaching staff of six per centre.

## LABOUR

Total number of registered population in tea industry 11,45,425 ; Total number of registered Trade unions 146 ; Total number of Trade Union Members 2,90,012 ; Total number of Industrial Disputes in 1963 : 18 ; Total number of workers involved in it 10,416 ; Man-days lost 10,571 ; Total number of Community Labour Welfare Centres 12.

## COMMUNITY PROJECTS

(See under article, Community Development Projects.)

## HOUSING

Finance available for housing : Schemes are entirely financed by loans and subsidies from the Government of India, Ministry of Works and Housing except that for slum clearance schemes a matching subsidy is given by the State Government. Allotment by Government of India for the Third Five-Year Plan period : Rs. 199 lakhs.

Subsidised Industrial Housing Scheme : Out of the total allocation of Rs. 2.44 lakhs during the Third Plan an expenditure of Rs. 0.86 lakh has been incurred. Only 24 tenements were completed in 1961-62.

Slum Clearance Scheme : Entire allocation under this scheme during the Third Plan was diverted to the Gauhati Development Authority for implementation.

Land Acquisition and Development Scheme : A sum of Rs. 21 lakhs was allocated under this scheme during the Third Plan period, but no expenditure was incurred.

## FOURTH PLAN

The Planning Commission tentatively approved an outlay of Rs. 190 crores for the State Fourth Plan, on Oct. 31, 1966. The State's contribution to the Plan would be Rs. 15 crores. Of the Rs. 190 crores, a sum of Rs. 50 crores was earmarked for the development of hill areas.



## UNIVERSITY OF GAUHATI

Gauhati-14, Assam.

VICE-CHANCELLOR.

Dr. M. N. Goswami.

REGISTRAR

C. Das, M.A., B.L.

Teaching, Affiliating and Residential.

Subjects where provision exists for post-graduate and research :

Assamese, Philosophy, Economics, History, Education, Mathematics, Statistics, Botany, Commerce, English, Physics, Chemistry, Geology, Anthropology, Agricultural

Botany, Sanskrit, Political Science, Bengali, Geography, Zoology.

Number of colleges affiliated : 97 (Permanently affiliated 18 ; Temporarily or provisionally 54 including one constituent college).

Number of students : Affiliated Colleges : 35,470 : University Departments : 1,577 ; Constituent College (Law College) : 627.

Grant from State Government :

Annual recurring grant of Rs. 15,50,000 (1964-65).

Receipts : Rs. 93,40,032.06 (1964-65).

Expenditure : Rs. 89,67,329.09 (1964-65).

Budget Estimates (1966-67) : Income Rs. 47.69 lakhs ; Expenditure Rs. 60.19 lakhs.

## NORTH-EAST FRONTIER AGENCY

**H** EADQUARTERS : Shillong, Assam. Area : 31,438 sq. miles (81,425.9 sq. kilometres).

The population of NEFA after the separation of one of its former Frontier Divisions to the Naga Unit is 3,36,558.

The North-East Frontier Agency, geographically and constitutionally a part of Assam is situated on the borders of Bhutan, Tibet region and Sikiang province of China and Burma. The Agency's international border is about 800 miles.

The Agency is now under the administrative control of the Home Ministry.

The Agency Secretariat is situated in Shillong, capital of Assam.

Districts in the Agency with headquarters in brackets : Kameng District (Bomdila) ; Subansiri District (Ziro) ; Siang District (Along) ; Lohit District (Tezu) ; Tirap District (Khonsa).

### GEOGRAPHY

The North-East Frontier Agency is a wild mountainous country and presents a remarkable topographical variety. The northern regions bounded by the Himalayas are snowbound in the winter. On the east, the hill ranges bordering on Burma also present a formidable barrier. Near Assam State areas the Agency has some plains.

The entire area is intersected by rivers. The main river artery of Assam, the Brahmaputra, known during its course in Tibet as the Tsangpo enters the Siang District of the North-East Frontier Agency cutting the main Himalayas southwards near Gelling.

### FORESTS

The reserve forests constitute 564.67 sq. miles and proposed reserve forest 3,007.03 sq. miles as per record available with the Government. In the year 1960-61, 20.34 lakh c. ft. timber was extracted and a total revenue of Rs. 25.45 lakhs earned. The revenue for 1962-63 was Rs. 29.28 lakhs and for 1963-64 it was Rs. 36.68 lakhs.

The fauna and flora of the Agency are rich. Wild elephants, buffaloes, tigers, various kinds of deer, leopards, bison, mithuns, bears, pigs, wild goats, and many kinds of cats are found. To the people of the Agency the mithun is most important as it serves apart from its religious and sacrificial significance as a barter currency and medium of exchange.

The monsoon sets in from the month of May and continues till the end of September. The average annual rainfall at Bomdi La is 40.12" ; Pasighat—229.05" ; Tezu—160.03" and Changlang—78.22".

### TRIBES

The Agency is inhabited exclusively by Hill Tribes. A broad list of the main tribes district-wise is given below :

*Kameng District* :—Monpa, Sherdukpens Bangnis (Yanoo and Khrodeng), Aka or Hrasso, Khowa or Bugun, Miji or Dammao, Khamba, Sulung, Bangro.

*Subansiri District* :—Tagin or Moya, Dafia or Nussu and Nishang, Apatani, Bangro Mikir, Hill Miri, Sulung.

*Siang District* :—Adi (it has some 20 sub-tribes, some of them are almost treated as main Tribes), Khamba, Memba, Hill Miri, Idu.

*Lohit District* :—Padam, Hill Miri, Mishmi L. C. Digaru or Taraon, Idu or Chulikata, Miji or Kaman, Singha, Khampti.

*Tirap District* :—Nocte, Singpho, Tangsa Wancho, Yobin.

A large number of distinct languages and dialects are spoken. The number of languages is about 30 and the dialects about 42.

### EDUCATION

Education in the Agency is of the Basic type with due emphasis on crafts and agriculture. 167 schools have already been converted to Basic pattern.

Upto the end of the primary stage, the mother tongue of the students is the medium of instruction in schools, and text books in various tribal languages have already been prepared upto Class I. Assamese will be the medium of instruction from Class IV onwards and it will also be introduced as a subject of study early in the primary stage. Hindi and English are also taught as compulsory languages from Classes III and IV respectively.

During 1964-65 there were 268 institutions distributed as follows : Higher Secondary 4 ; Higher English 4 ; Middle English 19 ; Lower Primary 233 ; Nursery 4 ; Technical Institutions 3 ; College 1.

During 1963-64 there were 593 teachers (excluding technical institutions) in 211 schools with a total enrolment of 10,773 students.



The most important aspect of the educational programme in NEFA has been the establishment and reorganisation of schools in the border areas.

### COTTAGE INDUSTRIES

Regular Cottage Industries Training Centres have been opened at 11 places to impart training in weaving, spinning, tailoring, carpet-making, carpentry, wood-carving, cane and bamboo work, smithy, painting, sawing, soap-making and pottery. Rearing of silk and *endi* is demonstrated at sericultural farms at Pasighat, Bordumsa and Namsang. There are also 12 irregular centres.

As of March 1965, the total number of persons trained was 2,660. Expenditure during 1964-65 was Rs. 12.80 lakhs.

### PUBLIC HEALTH

Figures for 1965-66: The number of patients treated throughout the Agency 236,000; Number of hospitals, dispensaries, health units 91; Number of doctors 134; Number of compounders 133; Number of nurses 140. There was one doctor for every 2,800 persons, a nurse for every 2,520 persons; one hospital dispensary for every 3,698 persons.

45 teams have been raised under the national small-pox eradication programme.

B.C.G. teams are touring the Agency area specially in Siang Frontier Division where the incidence of tuberculosis has given rise to concern. A 50-bedded T.B. hospital, the first of its kind, was opened at Margherita.

### AGRICULTURE

Agriculture is the mainstay of the people of the Agency.

So far 42,609 acres of land have been reclaimed and developed for permanent cultivation, mostly for paddy and 18,000 acres of land have been brought under irrigation. The anticipated increase in food production is estimated at 13,000 tons. Tools and implements worth Rs. 4,72,000 have been distributed to the cultivators at subsidised rates. Nine agricultural and livestock farms have been established in various parts of NEFA for providing improved seeds, training farmers, and giving demonstration of improved methods of production.

Animal husbandry has been put on a scientific basis. There were in June 1965 21 veterinary dispensaries and 42 veterinary aid centres. As on March 31, 1964, there were 12 cattle farms and 38 cattle up-grading centres in various parts of the Agency to help the farmer look after the cattle.

### CO-OPERATIVE MOVEMENT

Most of NEFA tribes have a very strong social sense, and every village is in its own way a Co-operative Society. There were on June 30, 1966, 77 Primary Co-operative Societies which included 52 Consumers' Co-operatives, 3 Multi-purpose Co-operatives, two Industrial Co-operative Societies, one Dairy Co-operative Farm, 7 School Co-operatives, two Labour Co-operatives and 7 Transport Co-operatives. There is a Central Co-operative Store and Union Limited, at Monanbari performing the functions of a supervising union.

### COMMUNITY PROJECTS

Forty-one Community Development and National Extension Blocks in the Agency cover 22,839 sq. miles with a total population of 2.86 lakhs.

### COMMUNICATIONS

Physical achievements from 1951 to 1965 consist of roads (jeepable) 1,200 kilometers, mule paths 399.50 miles, porter track 2,129.50 miles, bridle paths 131 miles, improvement to roads 176.50 miles, improvement to porter tracks 391.75 miles. Total 3,941.25 miles.

### FIVE YEAR PLANS

The Planning Commission has allotted a sum of Rs. 715 lakhs for the Third Plan period (1961-66). The target for 1964-65 was of the order of Rs. 246.38 lakhs.

The administration proposes to encourage the formation of transport co-operatives to run passenger and cargo services in the region.

The draft Fourth Five Year Plan for the Agency is of the order of Rs. 17.17 crores. The Annual Plan for 1967-68 as approved by the Planning Commission envisages a total outlay of Rs. 2.50 crores. Top most priority has been put on communications. An amount of Rs. 60 lakhs has been allotted for roads besides Rs. 15 lakhs for air-strips. The annual Plan includes a provision of Rs. 25,000 for strengthening administrative machinery at the headquarters.

## BIHAR

(See after W. Bengal.)

## DELHI

**AREA:** 1,483.05 Kms.; Pop. 26,58,612 (India 1965).

Under the Constitution of India, Delhi is a Union Territory. Parliament administers the areas directly through the Union Home Minister. The chief executive official of the Territory is the Lieutenant Governor. Delhi has an Advisory Council which is associated with the Home Minister.

The highest Court of Appeal in Delhi is the Punjab High Court—a circuit bench sits in Delhi.

### NEW ADMINISTRATIVE SET-UP

The Union Government gave its final approval to the scheme of a new administrative set-up for Delhi on June 7, 1965.

The Bill on the New Administrative set up for Delhi was passed by the Lok Sabha and Rajya Sabha in May 1966. The Bill provides for the establishment of a metropolitan council for the Union Territory.

The new administrations set up came into being with effect from Sept. 9, 1966 headed by Mr. A. N. Jha as Lt. Governor.

High Court: The Rajya Sabha passed the Delhi High Court Bill, 1965, on Sept. 5, 1966 to provide for the constitution of a High Court for the Union Territory of Delhi.

### Average Quota of Monthly Essential Articles

The following are the estimated quantities of certain selected commodities imported into Delhi Territory



(monthly average in tonnes) for the calendar year 1965 :

Wheat 34,300 ; Gram 6,212 ; Rice 1,022 ; Pulses 2,358 ; Refined Sugar 6,936 ; Tea 599 ; Ghee, Cream and Butter 1,524 ; Dried Fruits 4,345 ; Provisions 1,032 ; Spices 1,412 ; Steam Coal, Soft Coke and Hard Coke 54,512 ; Kerosine oil (000 litres) 9,410 ; Hides and skins 309 ; Agra stone 8,560 ; Cement 18,808 ; Chemicals 6,194 ; Face Cream, Powder and Tooth Paste 100 ; Hair oil and Perfumed oil 92 ; English Medicine 1,115 ; Soaps 1,068 ; Shoes and apparel 322 ; Hard ware and cutlery 11,637 ; Photo goods 257 ; Betel Leaf 62.

### Employment

According to 1965 figures there were 11,657 registrations (monthly averages) at the Regional Employment Exchange and 2,210 placings against 3,759 vacancies notified. The number of registrations on the live register at the close of 1965 was 76,993. The number of registrations for April 1966 was 9,296 and placing 1,997 against 3,767 vacancies notified. The total number of registration at the end of the month was 73,018.

### INDUSTRY

A sum of Rs. 1.65 crores was allocated under the Third Plan for the development of industries in Delhi.

The main industries are : cotton mills ; hand and power-loom weaving ; hosiery ; pottery ; flour mills ; vegetable oil mills and expellers ; paints and varnishes ; rubber goods ; imitation jewellery ; copper and brass utensils ; wire netting ; sola hats ; leather goods, sports goods, tanning and fibre industry.

The total number of registered factories at the end of December 1965 was 1,400.

The total number of handlooms in Delhi by 31st March 1963 was 800. The industry provides livelihood for about 3,000 persons, and the total production is estimated at 5 lakh yds.

The prototype production-cum-training centre at Okhla Industrial Estate is an Indo-German venture. This will manufacture prototypes of machines and machine tools and train about 500 workers every year.

### INDUSTRIAL ESTATES

The Okhla Industrial Estate, seven miles south of Delhi is one of the biggest of its kind in India. There are 45 factories in the Estate all humming with activity. Forty more units have already been constructed and allotted to small-scale industrialists. The items manufactured by the units in the Estate include amplifiers, radio parts, electric motors, room coolers, power presses, automobile accessories, bicycle parts, lathes, drilling machines, machine tools, safety razor blades, insulated wires and household and utility articles. A sum of Rs. 33 lakhs has been provided in the Third Plan to complete construction of 45 units at Okhla Industrial Estate.

At the instance of the Government of India it has been proposed to construct a small industrial estate in the Pilot Project Area of Alipur. Seven industrial sheds were constructed at Badli as part of a rural industrial estate to be established at a cost of Rs. 4.5 lakhs. Besides, five more Rural Estates are proposed to be set up in various rural areas of Delhi costing about Rs. 150 lakhs.

### AGRICULTURE

Figures given below are for 1964-65 :

Total land : 365,598 acres ; area under forests : 3,497 acres ; area not available for cultivation : 90,511 acres ;

other uncultivated land excluding fallow land : 42,550 acres ; fallow land : 48,984 acres ; net area sown : 1,80,056 acres ; total irrigated area : 60,767 acres.

Area in acres and production in tonnes respectively of each crop for the year 1964-65 are given below. Figures in brackets show production.

Rice 2,692 (408) ; Jowar 24,811 (3,438) ; Bajra 39,866 (3,269) ; Maize 1,455 (111) ; Wheat 78,748 (38,000) ; Barley 8,621 (513) ; Gram 41,129 (11,000) ; Sugarcane 10,143 (1,251) ; Chillies 253 (224) ; Oilseeds 1,787 (91) ; Cotton 476 (26) ; Potatoes 508 (1,451) ; Tobacco 203 (181) ; Fruits 2,589 (N.A.) ; Vegetables 7,314 (N.A.) ; Pulses 7,997 (1,123) ; Arhar 103 (15).

### Land Reform

The Delhi Land Reforms Act 1954 provides for the abolition of proprietary rights and conferment of ownership on all tenants and subtenants from whom compensation would be recovered and paid to owners. Over 8,000 tenants of various categories have acquired Bhumidari rights in an area of about 38,000 acres.

The Delhi Land Reforms Act was amended in October 1956 to exclude areas controlled, notified, held, occupied or owned by the Delhi Improvement Trust from the purview of the Act.

The Delhi Land Reforms (Amendment) Act, 1959 removes some difficulties in the working of the Act and includes Improvement Trust areas excluded by the 1956 Act. Out of 306 villages, the work of consolidation has been done in 268 villages. Under the Delhi Panchayat Raj (Amendment) Act, 1959, 215 Gaon Panchayats and 23 Circle Panchayats covering all the 305 villages in Delhi, have been established.

The Delhi Landholders (ceiling) Bill passed in Aug. 1960, fixes the ceiling on land holdings at 30 standard acres for a family of five. Leases in future have been prohibited except by small owners holding less than eight standard acres and persons suffering from a disability. Future tenants will have a minimum term of five years. The maximum rent has been fixed at one-fifth of the gross produce.

### Dairy, Poultry

It is estimated that there is one milch animal for every three or four persons. The average yield of a cow and buffalo comes to 2 seers and 4.2 seers respectively.

The annual average daily production of milk is estimated at 7,000 maunds.

Poultry 1964 : No. of poultry farms (Govt.) 3 ; (Private) 444 ; No. of chicks produced during the year 54,451 ; No. of eggs produced 4,69,600.

### TRANSPORT

Delhi occupies a pivotal point in the network of national railways, highways and airways. It is one of the biggest railway junctions in the country. All the principal inter-State roads of significance converge on Delhi. It is also linked with important cities and foreign countries by air through its two air ports, Willingdon and Palam.

Registration : The total number of vehicles registered during 1964-65 was 1,16,172 but the actual number of vehicles on road during the quarter ending March, 1965 on the basis of the taxation figures was 72,033 as below :—

Passenger buses 1,570 ; Goods Vehicles 5,737 ; Tourist Cars 342 ; Taxis 1,744 ; 2-seater auto rickshaws 5,184 ; 4-seater m/cycle rickshaws 478 ; Motor Cycles 30,851 ; Private cars 26,227 ; Total 72,033.



The Delhi Transport Undertaking of the Delhi Municipal Corpn. has 880 buses operating on 56 routes. Total distance covered per day : 1,38,000 kilometres.

### HEALTH

(Monthly Average 1964)

Birth rate 30.1 ; death rate 8.5 ; infant mortality per thousand live births : 73.0. Live births 7,442, still births 81.

*Deaths* : Caused by Small-pox 3 ; Dysentery and Diarrhoea 88 ; Respiratory diseases 395 and Injuries and suicides 59.

There are 35 hospitals and 87 dispensaries of the modern system of medicine, two Ayurvedic and Unani hospitals and 15 dispensaries and six Homoeopathic dispensaries. The total bed strength is about 5,000.

Money allotted under the Third Five Year Plan for medical development schemes : Rs. 1.55 crores.

### EDUCATION

The number of recognised educational institutions increased from 1,508 to 1,581 during 1963-64.

There is one University in Delhi known as Delhi University and three institutions namely Jamia Millia Islamia, Indian School of International Studies and Indian Agricultural Research Institute for higher learning are deemed to be Universities under Section 3 of the University Grants Commission Act. Two novel types of institutions called Janata Colleges one for men and the other for women are being run in Delhi's rural areas to impart community training to the villagers. Literacy percentage in Delhi : 53 (1961). One engineering college at Kashmere Gate and five polytechnics including one for girls, and seven industrial training institutes have been set up during 1963-64.

The expenditure on education during 1963-64 amounted to Rs. 5,35,04,903 thus showing an increase of Rs. 64,58,480 over the previous year. Education upto Class VIII for students reading at Govt. and aided schools was made free during 1961-62. A television scheme was introduced in Delhi schools and during 1961-62, 152 schools were equipped with television sets. During 1964-65, 15 new higher secondary schools were opened and 150 additional sections were started in the existing higher secondary schools which resulted in providing 9,000 additional seats. The enrolment in the Higher Secondary Schools during the year was 6,73,791 as against 6,10,200 in the previous year.

### COMMUNITY DEVELOPMENT

The village development scheme covers 281 villages. A sum of Rs. 10.891 lakhs was spent during the Third Five Year Plan on the Community Development and Panchayat Raj in the rural areas of Delhi. The entire rural area of Delhi is now covered by the Panchayat Raj system. The Community Development Blocks presently comprise 281 villages, a population of 3,59,000, a total area of 2,66,800 acres and the 213 village panchayats cover 269 villages.

The total number of co-operative societies on March 31, 1965 stood at 2,072 with a membership of 2,39,930 as against 2,186 societies with a membership of 2,48,458 during the previous year.

### HOUSING

The Delhi Development Authority has undertaken to develop about 20 residential, about 15 industrial and commercial and about 15 miscellaneous schemes in different areas of Delhi.

Amount disbursed for Low Income Group Housing Scheme during 1964-65 : Rs. 52.50 lakhs (Rs. 4 lakhs

advanced to the Municipal Corporation for the Construction of Staff quarters at Nimri); Houses Constructed : 545 ; Houses under Construction 890. Amount disbursed for Middle Income Group : Rs. 60 lakhs ; Houses Constructed : 273 ; Houses under Construction : 160. Amount disbursed for village Housing Project Scheme : Rs. 1.20 lakhs ; Houses Constructed : 69 ; Houses under Construction 42.

### DELHI MUNICIPAL CORPORATION

The Delhi Municipal Corporation has 86 members, including six aldermen.

An estimate of the party position including the six aldermen is as follows : Congress 72, Jan Sangh 8, Communists 2, Independents 3.

*Mayor*, Hansraj Gupta.

#### Officials

*Commissioner*, Khem Lal Rathee.

*Deputy Commissioners*, D. D. Joshi, I.A.S. ; Parmatma Saroop ; N. N. Tondon, I.A.S. ; Girdhari Lal.

*Gen. Manager, Electricity Undertaking*, J. M. Raina, I.A.S.

*Secretary*, Hem Raj Sharma.

### DELHI UNIVERSITY

Delhi.

The University of Delhi is a teaching and affiliating University.

The University confers the following Degrees and Diplomas on students on passing the appropriate examinations :

Degrees : Ph.D. (Arts, Science, Law, Education, Medical Sciences and Social Sciences), M.A., M.Lib. Sc., M.Com., M.Sc., LL.M., B.C.L., LL.B., M.Ed., B.A. (Hons.), B.Ed., B.A. (Pass), B.Sc. (Hons.), B.Sc. (Pass), B.Com., M.Sc. (Home Science) in Rural Community Extension, B.Sc. (Home Science), M. Nursing, B.Sc. (Nursing) Hons., B.Sc. (Elect., Mech., Civil.), Engg. B.Arch., M.B.B.S., M.Sc. in Medical Biochemistry (for non-medical students), M.D. (Physiology, Pharmacology, Bacteriology, Medical Biochemistry, Pathology, Anaesthesia, Paediatrics, Medicine, Obstetrics, and Gynaecology), M.S. (Anatomy, Surgery, Ophthalmology, E.N.T.R., Orthopaedics), D.Sc., D.C.L., D.Litt., M.Litt. (Buddhist Studies and Linguistics).

Diplomas : D.T.C.D., Anaesthesia, Child Health, Radiation Med., Otolaryngology, Dermatology, Venereology, Med. Radio Diagnosis, Med. Radio Therapy, Obstetrics & Gynaecology, Dip. Lib. Sc., Dip. in Russian Language, Dip. in Hindi, Urdu, Panjabi, Modern Persian, Bengali, Arabic, Business Management & Industrial Administration, Post M.A. Dip. in Linguistics, Dip. in Hindustani and Karnatak Music, Dip. in French, German and Italian, Dip. in Geography (Eve.).

Certificates : Cert. of Proficiency in Russian language. Cert. in German, Italian, Spanish, Swahili, Hausa, Tamil, Telugu, Kannada, Malayalam, Marathi, Gujarati, Hindi, Urdu, Bengali, Cert. in Translation (English-Hindi). Post-Diploma Translation Cert. in Russian.

Medium of instruction : English.

No. of students (Aug. 1965) : 33,278 (including 13,625 women) ; Income (1964-65) : Rs. 80,21,322 ; Expenditure (1964-65) : Rs. 77,01,005.

*Chancellor*, Dr. Zakir Hussain. *Pro-Chancellor*, Vacant. *Vice-Chancellor*, Dr. C. D. Deshmukh. *Pro-Vice-Chancellor*, Dr. B. N. Ganguli. *Registrar*, L. N. Welingkar.



## GOA, DAMAN AND DIU

**CAPITAL:** Panaji Area : 1,431 sq. miles (Goa 1,394 sq. miles; Daman 22 sq. miles; Diu 15 sq. miles). Pop. : 6,34,584 (1960 Census).

The Hindu population is estimated at 3,88,654; Catholics 2,30,997; Muslims 14,716.

All the three territories are situated practically within the area covered by Maharashtra and Gujarat States. Goa is on the Konkan Coast; Daman lies on the Gujarat coast at the entrance to the Gulf of Cambay; and Diu is a tiny islet and along with the isolated spots, Gogola and Simbor, lies on the southern fringe of the Kathiawad peninsula.

The Goa region constitutes one district under the charge of a Collector, with headquarters in Panaji. The district is divided into two sub-divisions, namely the north sub-division comprising Goa, Pernem, Bardez, Bicholim and Satari and the south sub-division comprising Ponda, Sanguem, Quepem, Salcete, Vasco and Canacona. The Daman region is also under the charge of a Collector while Diu is in charge of an Administrator.

**Important towns:** Panaji (Capital: Pop. 34,634); Margao (Principal business centre: Pop. 15,257); Mapuca (Pop. 8,260); Vasco da Gama (Pop. 6,254).

**Other towns:** Ponda, Pernem, Canacona, Quepem.

**Rivers:** Mandovi, Zuari, Terekhol, Chapora, Baga, Talpona, Sal and Galgibaga.

**Ferries:** Panaji—Betim (over Mandovi); Agacaim—Cortalim (over Zuari); Panaji—Aldona (over Mandovi); Dona Paula—Marmagao (over Zuari).

### HISTORIC AND RELIGIOUS PLACES

In Old Goa, about eight miles from Panaji, there are several convents, the most important among them being the Basilica of Bom Jesus, popularly known as the Church of St. Francis Xavier. The body of Goa's patron saint, Francis Xavier is kept there. Not far from this Church are the Cathedral Sé Convent built between 1562 and 1619, the Convent of St. Francis Assisi, completed in 1667. At Pilar, five miles from Panaji, is located the noted Pilar Seminary. The exposition of the Body of St. Francis Xavier was held at Bom Jesus Basilica in December 1964.

Ponda taluka is well known for famous Hindu temples which house family deities of multitudes of Goans. Noted among these are the Mangesh Temple, a small but elegant structure situated on the side of a hill at Priol with a majestic tower at its entrance, and the Shantadurga temple at Quela, with a triple image of Vishnu, Shantadurga and Siva. At Bandora are located temples of Mahalakshmi and Nagesh.

### HISTORIC DATES

|                                                                                        |                 |
|----------------------------------------------------------------------------------------|-----------------|
| Occupation of Goa by Alfonso de Albuquerque .. .. .                                    | 1510            |
| Occupation of Diu by Portuguese .. .. .                                                | 1534            |
| Establishment of Inquisition in Goa .. .. .                                            | 1546            |
| Occupation of Daman by Portuguese .. .. .                                              | 1561            |
| Naval Treaty between Shivaji, founder of the Maratha empire and the Portuguese .. .. . | 1665            |
| Maratha war with Portuguese for conquest of Bassein .. .. .                            | 1737-1739       |
| Proclamation of Portuguese Republic (in Portugal) .. .. .                              | October 5, 1910 |

|                                                                                                  |                |
|--------------------------------------------------------------------------------------------------|----------------|
| Beginning of Salazarian dictatorship .. .. .                                                     | May 28, 1926   |
| First satyagraha campaign for Goan liberation .. .. .                                            | June 18, 1946  |
| Liberation of Nagar Haveli .. .. .                                                               | August 1954    |
| Decision of Hague Court regarding Portuguese right of passage from Daman to Nagar Haveli .. .. . | April 20, 1960 |
| Liberation of Goa and appointment of Military Governor .. .. .                                   | Dec. 19, 1961  |
| Installation of civil administration .. .. .                                                     | June 8, 1962   |
| First democratic elections on adult franchise .. .. .                                            | Dec. 9, 1963   |
| Installation of the first popular Ministry .. .. .                                               | Dec. 20, 1963  |
| Commissioning of I.N.S. "Gomantak," the first Indian Naval Shore establishment in Goa .. .. .    | March 7, 1964  |

### COMMERCE, INDUSTRIES AND BANKS

The State Bank of India operates with branches in Panaji, Vasco, Margao and Mapuca, while a few other commercial Banks have opened their branches in Goa since March 1963.

The Life Insurance Corporation of India operates in the Territory.

Free movement of trade between Goa and the rest of the country was restored after liberation in respect of products of Goan and Indian origin.

With the coming into force of the Industries (Development & Regulation) Act, 1951 in Goa, Government's approval for starting about 261 new small-scale industries in Goa, Daman and Diu has been obtained. These include units for production of a large variety of industrial and consumer goods.

Two industrial estates are being set up at Margao and Vasco da Gama to be run by co-operative societies. A rural industries project, with a capital outlay of Rs. 20 lakhs, has been sanctioned for encouraging small-scale and village industries. The Industrial Development Corporation was set up in Goa on June 12, 1966. Thirteen projects under major industries have been licensed. Land Acquisition Act has been made applicable to this Territory.

### AGRICULTURE

The chief agricultural products of Goa are rice, coconuts, cashew-nuts, betel-nuts and mangoes. Rice grown is not sufficient for local consumption for the whole year.

Goa has a land surface of 1,537 square miles. Paddy fields cover 12.4 per cent of the cultivable area. The distribution of other areas is as follows: 5 per cent for coconut cultivation, 8.9 per cent for cashew-nut cultivation, 32.8 per cent under forests, 6.6 per cent for hill tract cultivation, 19.8 per cent uncultivated productive area. Cashew, arecanuts, mangoes and coconuts are exported.

The new Agricultural Tenancy Act gives security of tenure to the cultivator and also ensures efficient management of land for increase in agricultural production.

Annual production of rice is about 50,000 to 60,000 metric tons and the annual consumption is estimated to be about 73,000 metric tons. Main vegetables viz., jack fruit, sweet potatoes, brinjals, etc. valued at Rs. 30 lakhs are produced annually.



*Comunidades*: A large part of the cultivable lands belongs to village communities, popularly known as *comunidades* which are a type of agricultural co-operatives. There are a number of such communities in each of the 11 administrative divisions—31 in Ilhas, 37 in Salcete, 39 in Bardez, 14 in Mormugao, 28 in Ponda, 21 in Bicholim, 24 in Quepem, 12 in Pernem, 7 in Sanguem, 2 in Satari and 7 in Canacona. The Land Reforms Commission has suggested in its report that their administration be turned over to Block Development officers.

### MINERALS

Goa has vast mineral wealth and abounds in scenic beauty. Export of manganese and iron ores is the mainstay of Goa's economy and has been a valuable foreign exchange earner.

The main operational centres are Pailigao and Sirigao near Bicholim. There are as many as 445 mines producing manganese and ferromanganese ore and 353 producing iron ore. The mining method adopted in almost all the mines in Goa is open-cast and benching system. The usual percentage of iron content in these ores varies between 55 and 65. The high grade hematite ore containing about 68 per cent of iron and magnetite also occur in some places.

The manganese ores found in Goa are Pyrolusite and Psilomelane. Most of these deposits occur in pocket formation and are mainly located in southern parts of Sanguem and Quepem talukas. Mines under exploration during 1965: Iron ore 94; ferro-manganese 114; manganese: nil; total 218.

Production during 1965 (metric tons): Iron ore 65,84,061; ferro-manganese 77,236; manganese 33,286.

Exports in metric tons and value in Rs. respectively of iron ore etc. during 1965: Iron ore 68,05,097; 19,25,81,746; manganese 60,260; 46,78,755; ferro-manganese 2,74,070; 89,88,195; black iron 2,05,454; 54,04,500.

Mormugao harbour, one of the finest natural harbours in the country, is the main outlet for the ore and has a vast hinterland in Mysore and Maharashtra States, and plans are under way for extensive dredging of the harbour to develop into a first rate port.

### COTTAGE AND SMALL SCALE INDUSTRIES

Goa has very few cottage and small scale or even large industries. Some of these are: ornamented wood works (Cuncolim), cashew-nut peeling-packing factory (Bicholim), match factory (Ponda), umbrella factories (Piedade and Margao), soap factories (Bicholim and Mapuca), handloom factory (Aldona), candle factory (Margao) and pottery works (Bicholim). A Small Industries Service Institute has been set up in Margao and Department of Industries has been attached to the Secretariat in Panaji for promoting projects for rapid industrialisation of the Territory.

### PLANNING

A Planning Board appointed under the Chairmanship of Mr. W. X. Mascarenhas, an experienced Goan engineer, submitted in January 1963 a Rs. 29.04-crore draft plan with territory's development schemes for integration with India's Third Five-Year Plan. The power needs of the region are expected to be partially met from the Koyna Hydro-Electric projects in Maharashtra and Sharavathi projects in Mysore State. The possibility of drawing power supply from the waters of the Dudhsagar falls near Castle Rock in course of time is also under examination. Two towns Bicholim and Pernem were the first to receive electric supply from Koyna on Dec. 19, 1963.

A detailed scheme had been prepared to develop Goa as a tourist centre during the Third Plan period at an estimated cost of Rs. 39.20 lakhs.

A total outlay of Rs. 40.24 crores has been fixed by the Planning Commission Goa's for Fourth Five Year Plan, as against the Third Five Year Plan expenditure of Rs. 15.28 crores.

The outlays for main sectors of development for this Union territory (in crores of rupees) are as follows: Agricultural programmes 8.08; co-operation & community development 1.5; irrigation & power 7.62; industry & mining 1.74; transport & communications 5.64; social services 14.42; and miscellaneous 1.24. The Plan provision for 1967-68 is Rs. 8.8 crores.

### EDUCATION

Five Arts and Science Colleges in Goa, one Arts and Science College at Daman have been opened, since liberation, by private societies. A polytechnic leading to diploma courses in engineering has been started from June 1963, while an engineering college providing for degree courses is proposed to be opened later. The Goa Medical School was up-graded into a medical college and First Year M.B.B.S. course introduced from July 1963.

There has been significant progress in the last two years in the sphere of education. Free and compulsory education has been introduced at the primary level. As against 17,000 students in 176 Government schools before liberation, there are now 794 Government primary schools, the enrolment at primary level including non-Government schools being 1,15,000.

In the field of secondary education, the Grant-in-Code has been introduced on the pattern prevailing in Maharashtra State. The number of secondary schools is 159 with an enrolment of 22,565 as against 78 schools with 8,000 students before liberation.

### TRANSPORT AND COMMUNICATIONS

Rail communication which was suspended in 1954 was restored after the liberation and a direct train service between Vasco da Gama and Poona has been introduced. There is a proposal to convert the metre gauge into broad gauge to facilitate increasing passenger and goods traffic.

Mormugao, the chief port described as the "Gateway of Goa," is one of the major harbours on the west coast of India. It permits of ocean-going vessels of various sizes from all parts of the world, but ships mainly from Japan, America and Europe call at the port to take cargo of iron and manganese ore. Coastal steamer services between Bombay and Panaji and Bombay and Mormugao were resumed in March 1962 after suspension for eight years before the liberation of the enclaves. Road transport services between Panaji and Belgaum via Anmod, to and from Savantwadi via Doddamarg and between Betim and Poona and between Hubli and Panaji have also been introduced. Goa is criss-crossed by as many as half a dozen rivers and rivulets, and internal waterways are being developed fully for transport of men and goods. Bridges across Mandovi and Zuari rivers at Panaji and Cortalim have also been planned. A bridge across the Diu creek at Tad, about three miles from Diu, which will link Diu with the mainland of India, is under construction.

The treacherous stretch of nearly 50 miles of road from Ponda to Anmod, including the treacherous ghat section, was repaired, widened and asphalted during the early part of 1963 in a record time of six months enabling speedier



traffic on one of Goa's important road outlets connecting it with Belgaum.

Improvement of road communications is an integral part of the development plan formulated by Government for the new Union Territory of Goa, Daman and Diu. There are at present 2,119 kilometers of roads in this Territory of which 1,261 kilometers are Government roads and the remaining 858 kilometers are municipal roads. Nearly 50 per cent of the Government roads have black-topped surface.

The West Coast Highway, linking Bombay with Cape Comorin, is expected to be completed, as far as the Goa portion is concerned, to the extent of 87 kilometers shortly.

Construction of a major bridge over Mandovi has been started. One bridge at Daman and another at Diu are also under construction.

*Postal and telegraphic facilities:* At present there are 109 post offices in Goa. All towns with more than 2,000 population are proposed to be covered with one post office each. At present, telegraphic facilities for filing telegraphs are provided at Panaji, Mapuca, Vasco da Gama, Maigao and Curchorem. A fully automatic telephone exchange was pressed into service on the liberation anniversary day — 19th Dec. 1962 — replacing the Magneto system in Panaji. A telephone exchange operating on C.B. (Central Battery) system replaced the obsolete magneto system in Vasco on Jan. 26, 1964.

Radio Goa broadcasts for a total of nine and half hours (9½) every day programmes in four languages, Konkani, Marathi, English and Portuguese. The transmitters are located at Bambolim, four miles from Panaji.

### PRESS

A stringent censorship controlled the freedom of the press during the Portuguese regime. One of the initial acts of the Administration after liberation was the abolition of pre-censorship of newspapers. At present there are two English dailies (of which one is evening daily), 2 Marathi dailies, 1 Konkani daily and 3 Portuguese dailies. *Weeklies:* English 1; Marathi 2; Konkani 2; Portuguese 2. *Fortnightly:* Konkani 1. *Monthlies:* English 2; Marathi 2; Konkani 1; Portuguese 2.

## DADRA AND NAGAR HAVELI

*Headquarters:* Silvassa.

Area 189 sq. miles; Population 57,932 (males 29,517; females 28,415) (1961 census). 5,232 men and 1,110 women are literate.

A Rs. 85-lakh development plan has been prepared for the 191-square-mile enclave of Nagar Haveli. Among the construction activities included in the plan are three bridges over the two rivers, costing Rs. 10 lakhs, 75 miles of roads, schools and village water system.

Handmade paper industry, catechu (Ratla used in pan) manufacture, tanneries and tile and brick factories, a

### ADMINISTRATION

President's rule for a period of six months was introduced in the Union Territory of Goa, Daman & Diu with effect from Dec. 3, 1966, following the resignation of the first popular ministry headed by Mr. Dayanand Bhandarkar and the dissolution of the State Legislative Assembly.

*APPEAL COURT FOR GOA:* President Radhakrishnan promulgated on Jan. 2, 1964 a regulation providing for the establishment of a judicial commissioner's court for Goa, Daman and Diu.

The judicial commissioner's court will be the highest civil and criminal court of appeal and revision in Goa, Daman and Diu, the regulation said.

Indian citizenship has been conferred on persons born or domiciled in the territories of Goa, Daman and Diu and Dadra and Nagar Haveli.

### DAMAN

Daman in Gujarat has a total area of 22 square miles and a population of 23,093 inhabitants, mostly of Gujarati extraction.

There are some very interesting historical relics here such as the old fort and a few surviving churches reminiscent of the old times.

### DIU

About 150 miles to the north-west of Daman lies the tiny islet of Diu off the southern coast of Kathiawad. It is a small town separated from the mainland by a narrow arm of the sea. Dependent on it and surrounded by the territory of Junagadh is the enclave of Gogola and also the island and fort of Pani Cota in the bay of Simbor.

Diu is reached from Bombay by the Western Railway via Viramgam and Delwada. Access by sea is easier and more rapid but there is no harbour. There is an excellent roadstead where ships can safely anchor in two fathoms of water.

Area: 15 sq. miles. The population is 15,922.

public library and a maternity home have also been constructed. Over 3,000 students now attend schools, on which the administration spends about Rs. 88,000. Spinning and carpentry are taught in the schools.

Number of workshops registered in the area: 1,314.

A model cottage hospital, a veterinary dispensary and four dispensaries have started functioning.

Dadra and Nagar Haveli are administered directly by the Centre and does not come under the Control of the Goa Government.



## GUJARAT

**CAPITAL:** Ahmedabad.

The State of Gujarat came into being on May 1, 1960.

Area : 71,056 sq. miles. Population : 20·63 million (1961 census). See "*Population*" for detailed 1961 census figures.

There are 19 Districts and 186 Talukas. The number of municipalities is 59 (including Ahmedabad Municipal Corporation).

Districts with headquarters in brackets are as follows :—

Ahmedabad (Ahmedabad), Baroda (Baroda), Banaskantha (Palanpur), Broach (Broach), Mehsana (Mehsana), Kaira (Kaira), Panch Mahals (Godhra), the Dangs (Ahwa), Surat (Surat), Sabarkantha (Himatnagar), Jamnagar (Jamnagar), Bhavnagar (Bhavnagar), Amreli (Amreli), Junagadh (Junagadh), Kutch (Bhuj), Rajkot (Rajkot), Surendranagar (Surendranagar), Bulsar (Bulsar), Gandhinagar (Ahmedabad).

(For names of talukas and their area and towns and their population see under "*Population*".)

Gujarat State has a unicameral legislature. The strength of the Legislative Assembly is 154. The State sends 11 members to the Rajya Sabha and 22 to the Lok Sabha.

Though the State has fertile land it is deficit in food to the extent of 1·8 million tons a year. Its resources of industry and power are at the present time low. There is also a surprisingly high percentage of backward and Scheduled Classes and Scheduled Tribes. They constitute 93 per cent of the population of Dangs, 53 per cent in Surat, 38 per cent in Panch Mahals, 47 per cent in Broach and 27 per cent in Baroda. One bright feature is the existence of mineral oil in the Ankleshwar, Kalol and Cambay region.

Gujarati will be the language of administration, law courts and university, and Hindi for communication with the Union Government.

### GEOGRAPHY

Gujarat State is situated on the west coast of India between 20·1 and 24·7 degrees north latitude and 68·4 and 74·4 degrees east longitude. The State is bounded by the Arabian Sea on the west, Rajasthan in the north and east, Madhya Pradesh in the south-east and Maharashtra in the south.

The bigger rivers are Banas, Saraswati, Sabarmati, Mahi and of course, the Narmada and Tapti. The smaller rivers are Machhu, Bhadar, Shetrunji and Damanganga. The land slopes gradually from the east to the west. The soils are of two classes the black cotton soil which yields the famous Broach cottons, the finest in India and alluvial which under careful cultivation in Ahmedabad and Kaira make splendid garden land. The plains watered by the Narmada and Tapti are very rich. Their fertility is so marked that they are sometimes called the Garden of India.

On the basis of average rainfall the regional features can be summarised as follows :—

South Gujarat, where the rainfall varies between 30" and 60". The annual range in temperature is wide.

North Gujarat, where the rainfall varies between 20" and 40" but is mostly around 40" in Godhra and 25" in Viramgam. The area has lower winter temperatures.

Saurashtra, the area comprising the coastal regions of Jamnagar and Junagadh. This is dry, the rainfall being less than 25".

South-central Saurashtra and the Cambay region : The rainfall is 25" and over.

Kutch is semi-desert, the rainfall being very low.

The per capita income in 1961-62 was Rs. 355 compared with Rs. 330 for the Indian Union as a whole. The main source of income is agriculture. The figures in Rs. crores for 1961-62 are :—

State income : 741. Sector-wise distribution : Agriculture, animal husbandry, ancillary activities 343 ; mining, manufacturing and small enterprises 178 ; commerce, transport, communications 118 ; other services 102.

The total geographical area of Gujarat is 4,52,17,500 acres. Of this, only 52·45 per cent is the net area sown. The percentage of barren and uncultivable land is 25·90.

The percentage of area under barren and unculturable land is very high. This is partly because of extensive barren lands in Kutch. The State is rich in permanent pastures and grazing lands.

The main food grains are bajri, jawar, rice and wheat. Rice is grown chiefly in the south Gujarat districts of Kaira, Panch Mahals, Baroda and Surat ; cereals are grown in the north Gujarat and Saurashtra Districts. Wheat is grown more especially in north Gujarat and to some extent in Saurashtra. The district of Panch Mahals is also noted for maize. The total production of 22·56 lakh tons gives a per capita consumption of 11·45 oz. a day.

Among non-foodgrain crops, cotton, tobacco, groundnut and maize are important. More than one-fifth of the area under cotton in the Indian Union is in this State.

The State has limited forest resources. The area occupied is about 5·15 per cent of the total geographical area of the State. The forest areas are concentrated mainly in Dangs, Junagadh, Panch Mahals, Baroda, Broach, Surat and Banaskantha Districts and to some extent in Jamnagar and Kutch.

The major forest produce are teak, bamboos, yellow wood, red wood, black wood, sandalwood, Khar, Simal, Dhumda, Dudhia, etc. Minor forest produce is grass, honey, wax, colouring wood. Dangs has rich teak forests. The Gir forests in Saurashtra contain a lions' sanctuary, the only one in India.

The State has a total livestock population of 135 lakhs and poultry 20·48 lakhs. There is a high proportion of she-buffaloes over three years. The State is noted for its high yield of milk per head of cattle. Certain breeds like Kankrej and Gir are wellknown. The high milk yield generally contributes to the high production of milk and dairy products.

Banking facilities are better than elsewhere ; there is a bank for every 42,787. Of the different areas in the State Ahmedabad has the highest facilities.

The Gujarat State Cooperative Land Development Bank Ltd., established in 1951, functions in the State through its 145 branches and 4 Primary Banks. The bank has advanced long-term loans to the agriculturists exceeding Rs. 40·12 crores. It has a membership of 4·20 lakhs. The paid-up share capital is Rs. 2·61 crores and reserve and other funds exceed Rs. 56 lakhs.



Gujarat is rich in minerals like salt, limestone, manganese, gypsum, china clay, calcite, bauxite, etc. Large deposits of bauxite of very good grade are located in Saurashtra and Kutch. The reserves of bauxites in the State are of the order of 17 million tonnes. The fluorite deposit located near Chhotaudepur in Baroda district is one of the largest in Asia and has reserves of the order of 11.6 million tonnes. Limestone reserved in the State run into several thousand million tonnes, the best quality limestone being located in Saurashtra and Kutch. The State also has deposits of lignite, china clay and other clays, glass sand and quartz, dolomite, agate, calcite etc.

Oil and natural gas have been found in Ankleshwar, Kalol and Cambay oil fields where drilling is in progress. A refinery is to be set up at Koyali in Baroda District.

The major industries of the State are textile (including ginning and pressing of cotton), general and electrical engineering, vegetable oils, chemicals (including salt), soda ash and cement. The concentration of industry is most striking in Ahmedabad, Baroda and Surat.

The distribution would roughly be as follows:—textiles and its ancillaries in Ahmedabad, silver thread in Surat, cement at Porbandar, Dwarka and Sikka, chemicals around Baroda.

There are six industrial estates in the State and more are to be started shortly. Government has also decided to carry out pilot plant tests of certain minerals for industrial use.

Power development in Gujarat is higher than the average for India. About 53 per cent of the number of towns is electrified. A major thermal power station with an installed capacity of 200/254 MW has been constructed and was expected to be commissioned by the middle of 1964.

Road transport is not satisfactory for the State as a whole — 20.93 miles for 100 square miles of area or 73.22 miles for lakh of population. The position of road transport is relatively good in Dangs, Amreli, Junagadh, Rajkot and Bhavnagar Districts. It is very poor in the districts of Mehsana, Sabarkantha and Banaskantha.

Saurashtra has a net-work of railways. The Baroda area is also well-served.

There are 51 ports in Gujarat (one major, eight medium, 42 minor). The bigger ports with their annual turnover:—Kandla (15,72,185 M. tons), Okha (6,76,591 tons), Bedi (3,47,683 tons), Bhavnagar (4,19,606 tons), Verawal (2,92,566 tons), Sikka (3,04,195 tons), Porbandar (2,25,776 tons).

About education nearly 13.34 per cent of the population attends school.

There are three universities in Gujarat — the Gujarat University in Ahmedabad, the Maharaja Sayajirao University in Baroda and the Sardar Vallabhbhai Vidyapeeth in Vallabh-Vidyanagar District, Kaira. The establishment of two more universities is under consideration.

Each Government dispensary or hospital in the State serves about 18,000 of the population and each bed about 2,400. On an average about 8,540 persons register every month for employment. Out of this about 847 are placed in employment.

The Third Plan total outlay was Rs. 235 crores and the expenditure during the first four years was Rs. 180.90 crores i.e. 76 per cent.

The Fourth Plan outlay is Rs. 446 crores—State's resources Rs. 281 crores and Central assistance Rs. 165 crores.

### NEW CAPITAL

The Government had decided to build the new capital of the State at Gandhinagar, 15 miles north of Ahmedabad City on the west bank of the Sabarmati river.

### PANCHAYATI RAJ

There are in all 11,562 Gram Panchayats and 49 Nagar Panchayats in the State covering a rural population of 1.80 crores. In pursuance of the policy of Government to cover every village in the State by Gram Panchayat, all villages in the State are covered by Gram Panchayats except some villages in Kutch and Dangs District.

The Gujarat Panchayats Act, 1961, aims at three tier system of rural administration. It is applicable to all Gram/Nagar Panchayats in all the Districts of the State except Dangs District. Under this Act, Taluka Panchayats and District Panchayats have been established for each taluka and each District. The District Panchayat is an apex body in the Panchayati Raj system with powers of supervision, guidance and control over the lower level i.e. Taluka and Gram/Nagar Panchayats. The Taluka Panchayat supervises the working of and has control over the Gram/Nagar Panchayats within its jurisdiction. The powers and functions of these three types of bodies are well defined.

Other more important features of the Gujarat Panchayat Act, 1961 were given in the previous editions of the *Directory*.

The Gujarat Panchayats Act, 1961 has been brought into force in all the districts of Gujarat State except Dangs district.

Municipalities having a population not exceeding 10,000 have been converted into Gram Panchayats. Those having population exceeding 10,000 but not exceeding 20,000 have been converted into Nagar Panchayats.

Taluka Panchayats and District Panchayats were constituted in all the districts of the State, except the district of Dangs.

The State Council for Panchayats and the Gujarat Panchayats Service Selection Board have been constituted. Similarly, the District Panchayat Service Selection Committees and District Primary Education Staff Selection Committees have also been formed for each district Panchayat.

### Village Volunteer Force

For the total mobilisation of both human and material resources for the defence effort the scheme of the Village Volunteer Force has been implemented throughout the State with effect from Jan. 26, 1963.

As an integral part of this scheme, Defence Labour Banks are being organised in every village. The total number of Defence Labour Banks organised upto August 65 is 4,845. The bank is based on the donation of free labour at the minimum rate of one day per month from every able-bodied adult or monetary contribution in lieu.

### BASIC FACTS AND FIGURES

No. of towns 181 ; no. of villages 19,017.

Land utilization in '000 acres:—Total area 45,259 ; area under forest 2,743 ; barren and uncultivable land 11,425 ; permanent pastures and grazing lands 2,550 ; net area sown 23,632 ; others 4,908.

**Area and Outturn of Principal Food and Non-Food Crops** — area in '000 acres and outturn in '000 tons — for 1963-64 (first figure shows area, second production):—

Rice 1,284 and 477 ; wheat 1,028 and 361 ; jowar 3,324 and 402 ; bajra 2,951 and 640 ; all cereals 9,643 and 2,282 ;



tur 207 and 45; gram 252 and 54; all pulses 1,329 and 195; total food grains 10,973 and 2,484; cotton 4,169 and 1,313 (bales); groundnut 4,560 and 1,251.

**Area Irrigated:** by sources in 1961-62. The figures are in lakh acres:—

Government canals 2.29; private canals 0.32; wells 14.59; tanks 0.45; other sources 0.90; gross area irrigated 19.50.

Area irrigated by crops in 1961-62. The figures are in '00 acres:—

Rice 1,623; wheat 5,559; jowar 1,348; bajri 1,005; all food crops 12,668; cotton 2,782; groundnut 986; tobacco 377; total non-food crops 6,827; total gross area irrigated 19,495.

**Agricultural Implements in 1961:**—Wooden ploughs 14,59,616; iron ploughs 1,05,868; carts 7,08,767; sugarcane crushers worked by power 2,009; sugarcane crushers worked by bullocks 4,307; oil engines with pumps for irrigation 44,992; electric pumps for irrigation 6,229; Government tractors 2,005; ghanis five seers and over 3,277; ghanis less than five seers 823.

**Livestock Position in 1961:**—Cattle—male over three years 30,45,875; cattle—female over three years 18,37,655; young stock 16,73,025; total 65,56,555; buffaloes—male over three years 39,996; buffaloes—female over 3 years 17,02,377; youngstock 11,74,208; total buffaloes 29,16,581; total bovine 94,73,136; sheep and goats 37,04,529; total livestock 1,34,54,395; total poultry 20,48,284.

**Co-operation in 1963-64** (number of societies):—agricultural societies 9,976; non-agricultural societies 5,766; land development banks (incl. State Banks) 5; central banks (incl. State Banks) 22; total 15,769.

Co-operation in 1963-64 (number of members): of agricultural societies 13.40 lakhs; of non-agricultural societies 8.50 lakhs; of land development banks (incl. State Banks) 3.85 lakhs; of central banks (incl. State Banks) 0.29 lakhs; total 26.04 lakhs.

Co-operation in 1963-64 (share capital of societies in Rs. lakhs):—Agricultural 1,749; non-agricultural 885; land development banks (incl. State Land Mortgage Banks) 224; central banks (incl. State Banks) 916; total 3,774.

Co-operation in 1963-64 (working capital in Rs. lakhs):—Central banks (incl. State Banks) 7,845; agricultural societies 7,226; non-agricultural societies 5,941; land development banks (incl. State Land Mortgage Banks) 2,727; total 23,739.

Population covered by cooperative movement (in lakhs) during the same period was 130.20.

**Joint-Stock Companies as in March 1963:**—(Provisional). The first figure shows the number of Companies, the second authorised capital and third paid-up capital in '000 Rs.:—Commerce 252; 3,07,850; 1,20,295; Processing and manufacture of foodstuffs, textiles, leather and products thereof 217; 8,33,526; 3,85,208; Processing and manufacture of metals, Chemicals and products thereof 215; 7,53,904; 1,77,043; Other processing and manufactures 94; 2,22,901; 70,090; Construction and utilities 33; 49,013; 15,798; Transport and Communications 19; 35,615; 11,589; Mining and quarrying 15; 8,295; 6,387; Personal and other services 12; 4,100; 1,471; Agriculture and allied activities 27; 1,882; 1,130; Community and business services 889; 22,19,487; total 7,90,499.

**Medical Statistics for 1964:**—No. of hospitals and dispensaries 1,271; no. of beds 100,044; no. of indoor patients treated 3,18,188; no. of outdoor patients treated 75,39,982; no. of doctors 1,260; no. of nurses 1,634.

**Education Statistics for 1964-65.** The first figure shows the number of institutions, the second of pupils:—

Higher education 145 and 71,308; Secondary education 1,364 and 4,94,076; Primary education 19,575 and 27,78,048; others 4,000 and 1,32,000. Total 25,084 and 34,75,432.

No. of teachers as in 1964-65: Primary 72,518; Secondary 19,314; Higher 3,995; Total 95,827.

*Statistics about electric power as in 1964* (figures in '000 K.W.H.):—

Power generated: 18,61,287.

Power consumed: domestic 86,995; commercial 47,474; industrial 11,06,638; others 91,488; total 13,32,595.

**Working Class (1961):** The State has 84.75 lakh workers. Of the male population of 106.34 lakhs 53.47 per cent and that of the female population of 99.99 lakhs 27.89 per cent are workers. They could be classified as follows (figures in lakhs): Cultivators 45.19; agricultural labourers 12.52; mining, quarrying etc. 1.05; household industry 5.36; construction 0.90; trade and commerce 4.11; transport, storage and communications 1.59; other services 8.47.

Statistics about Industry as in June 1964:—

No. of factories 4,299; employment 4,08,104.

Information about number of factories and average number of workers employed therein daily respectively under each category is given below:—

Textile 919; 2,12,522; ginning and pressing 476; 46,774; food, beverages and tobacco 866; 38,425; engineering 818; 29,171; non-metallic mineral products 336; 24,066; chemicals and pharmaceuticals 115; 16,918; wood, furniture and fixtures 121; 4,564; electricity, gas and steam 75; 3,463; paper and paper products 29; 2,874; rubber and rubber products 16; 1,141; others 528; 28,186.

**Mineral Production as in Oct. 1963.** First figure shows quantity in tonnes, second value in '000 Rs.:—

Bauxite 1,81,128 and 2,014; Calcite 3,925 and 24; china clay 50,030 and 413; Fire clay 62,679 and 316; Limestone 11,97,406 and 5,866; Manganese 24,479 and 1,116; Salt 24,54,200 and 66,411; Dolomite 30,830 and 244; Feldspar 271 and 1.

Production 1964: Rs. 13.80 crores; per capita production 1964: Rs. 6.5.

### Employment Exchanges

The number of persons seeking employment through the employment exchanges recorded decrease from 1,37,052 in 1963 to 1,31,396 in 1964. The number on the live register was 72,454 at the end of the year 1964 as against 75,685 in 1963.

**Transport as on March 31, 1965:** The Nationalised Motor Transport system in the State is operating 2,752 routes covering a length of 1,17,186 kilometers. It carries on an average 6.32 lakh passengers and earns Rs. 3.60 lakhs per day.

Other particulars are as follows:—No. of vehicles on road per day 1,672; capital invested Rs. 1,674.35 lakhs; total expenditure (including payment of interest to participating Govt. etc.) Rs. 1,301.96 lakhs.

No. of Motor Vehicles in operation as in March 1965: Motor cycles 13,854; Motor cars 17,254; Taxis 779; Auto Rickshaws 2,336; Stage carriages 3,206; Private carriers 2,305; Public carriers 7,868; Others 4,852; Total 52,454.



Mileage of metalled and non-metalled **Roads** as in March 1963 :—

Metalled 8,165 ; non-metalled 6,937 ; total 15,102.

Railway mileage :

Broad gauge 561 ; metre 2,037 ; narrow 719 ; total 337.

**Village Panchayats (as on March 31, 1966)† :—**

No. of Gram Panchayats 11,562 ; population covered 1.80 crores.

**Community Development Programme 1964-65 :—**

Stage I blocks 115 ; Stage II blocks 94 ; Sp. M.D.P. blocks 3 ; T.D. blocks 32 ; Population covered by C.D. & T.D. Blocks 1,83,20,000.

Improved seeds distributed (Quintal) 6,45,309 ; fertilizers distributed (Quintal) 22,60,000 ; agricultural demonstrations held (Nos.) 20,239 ; additional area brought under irrigation (acres) 1,92,446 ; drinking water wells constructed (Nos.) 832 ; drinking water wells renovated (Nos.) 1,055 ; adult education centres started (Nos.) 688 ; adults made literate (Nos.) 12,323 ; youth and farmers' clubs started (Nos.) 995 ; reading rooms/libraries started (Nos.) 274 ; kacha roads constructed (kms.) 618.7 ; people's contribution (Rs.) 52,52,000.

**Small Savings :—**Figures for 1962-63 : target Rs. 1,033 lakhs ; net collection Rs. 228 lakhs. During 1963-64 : target Rs. 721.60 lakhs ; net collection Rs. 810.05 lakhs.

**Housing :** The total allocation for housing in Gujarat in the Third Plan was Rs. 1,039 lakhs. The allocation for the first three years was Rs. 391.07 lakhs, but the amount actually drawn was only Rs. 246.11 lakhs.

**Consumer Price Index** number (base average Aug. 1926 to July 1927 as 100):—(For Ahmedabad).

|                   | 1960 | 1961 | 1962 | 1963 |
|-------------------|------|------|------|------|
| Food .. ..        | 322  | 324  | 328  | 316  |
| Fuel, lighting .. | 337  | 342  | 331  | 349  |
| Clothing .. ..    | 339  | 339  | 339  | 339  |
| House rent ..     | 107  | 107  | 107  | 107  |
| Miscellaneous ..  | 349  | 357  | 366  | 369  |
| Cost of living .. | 298  | 300  | 302  | 296  |

Index nos. of wholesale prices (base 1952-53 = 100):—

|                                      | 1961  | 1962  | 1963  | 1964  |
|--------------------------------------|-------|-------|-------|-------|
| Food articles ..                     | 119.5 | 124.9 | 132.7 | 154.9 |
| Liquor and tobacco                   | 103.6 | 99.8  | 115.3 | 126.9 |
| Fuel, power, light and lubricants .. | 121.8 | 123.4 | 136.3 | 142.8 |
| Industrial raw material .. ..        | 147.7 | 137.3 | 137.2 | 156.4 |
| Manufacture .. ..                    | 127.0 | 129.0 | 130.3 | 134.8 |

**Small-Industries Corporation :** This corporation was incorporated on March 26, 1962 and started functioning. The corporation is expected to give aid, counsel, assist and to promote the interest of small industries in the State by providing technical and managerial assistance, and procuring raw materials, machinery, equipment, tools etc. required by the small industries. During 1964 the corporation made purchases of goods to the tune of Rs. 1,29,46,211 and sold goods worth Rs. 1,27,14,816.

### ELECTRIC POWER PROJECTS

The position as at the end of 31st March, 1965 in respect of the entire power system under the Board's Control was as follows :—

Assets of the Electricity Board : Rs. 7,850.09 lakhs ; Total Installed capacity : 2,93,170 kW. (Steam 2,47,500 ; Diesel 45,670) ; Amount spent on Electricity Scheme in 1964-65 : Rs. 1,204.62 lakhs ; Working Expenditure : Rs. 1,204.86 lakhs ; Total No. of Towns and Villages

electrified : 1,331 ; Total length trans. line 11 kV and above : 11,775 circuit kms. ; Total No. of consumers : 3,16,430 ; Total connected load : 3,08,615 kW. ; Total generation including bulk purchase from other agencies (in million KWH): 959.32 (Thermal 602.67 ; Diesel 91.23 ; Purchased 265.42) ; Total aggregate demand in kW : 1,83,220 ; Total sales (in million KWH): 764.14 ; Total estimated cost of schemes under the 3rd Plan : Rs. 6,549 lakhs ; Total Govt. provision for the 3rd Plan : Rs. 4,668 lakhs ; Total estimated foreign exchange component in 3rd Five Year Plan : Rs. 2,000 lakhs.

Hitherto, the Board used to meet the power demand of the State through various small independent distribution systems as well as a very large number of small diesel stations. With the completion and commissioning of the Central Thermal Generating Station at Dhuvaran in March, 1965, and the establishment of the high tension transmission lines, the entire State of Gujarat was covered under one grid with the exception of Kutch region. Thus at the end of March, 1965, there were only two power systems operating, viz. (1) Gujarat Power System (excluding Kutch) and (2) Kutch System. The particulars of installed generating capacity, maximum demand and the units generated in respect of each of the above two power systems are given below :

| Sr. No.                          | Particular                                         | Installed capacity kW | Aggregate Max. Demand kW | Units generated/purchased (10 <sup>6</sup> × KWH) |
|----------------------------------|----------------------------------------------------|-----------------------|--------------------------|---------------------------------------------------|
| <b>I. Gujarat Power System :</b> |                                                    |                       |                          |                                                   |
| 1.                               | Bulk purchase from A.E. Co. at Sabarmati S/S .. .. | —                     | 53,260                   | 257.57                                            |
| 2.                               | Bulk purchase from Bhavnagar licensee .. ..        | —                     | 7,810                    | 7.85                                              |
| 3.                               | Dhuvaran Thermal Power Station ..                  | 1,27,000              | 77,000                   | 64.54                                             |
| 4.                               | Utran Thermal Power Station ..                     | 67,500                | 65,300                   | 359.16                                            |
| 5.                               | Sikka Thermal Power Station ..                     | 16,000                | 13,400                   | 32.91                                             |
| 6.                               | Porbandar Thermal Power Station ..                 | 15,000                | 12,370                   | 68.08                                             |
| 7.                               | Shahpur Thermal Power Station ..                   | 16,000                | 13,950                   | 62.00                                             |
| 8.                               | Diesel Station ..                                  | 43,393                | 11,540                   | 89.34                                             |
|                                  | <b>Total ..</b>                                    | <b>2,84,893</b>       | <b>1,78,240</b>          | <b>941.45</b>                                     |
| <b>II. Kutch Power System :</b>  |                                                    |                       |                          |                                                   |
| 1.                               | Kandla Thermal Power Station ..                    | 60,000                | 3,000                    | 15.98                                             |
| 2.                               | Diesel Station ..                                  | 2,277                 | 1,980                    | 1.89                                              |
|                                  | <b>Total ..</b>                                    | <b>8,277</b>          | <b>4,980</b>             | <b>17.87</b>                                      |
|                                  | <b>Grand Total</b>                                 | <b>2,93,170</b>       | <b>1,83,220</b>          | <b>959.32</b>                                     |

† For more details see under article on Community Development & Panchayats.



### IRRIGATION PROJECTS

Below we give a table in which are shown irrigation projects under construction.

| Name of Project                          | Estimated cost<br>(in lakhs of Rs.) | Area likely to be irrigated on completion<br>(Acres)                                                                      |
|------------------------------------------|-------------------------------------|---------------------------------------------------------------------------------------------------------------------------|
| 1                                        | 2                                   | 3                                                                                                                         |
| 1. Ukai ..                               | 6,120.02                            | 3,91,650<br>In addition it will assure irrigation to 5,62,250 acres of Kakrapar.                                          |
| 2. Kadana ..                             | 1,686.00                            | 40,905<br>In addition it assures irrigation to 6,39,600 acres under the command of Mahi Right Bank Canal Project Stage I. |
| 3. Narmada ..                            | 4,141.43                            | 9,97,500                                                                                                                  |
| 4. Kakrapar ..                           | 1,857.00                            | 5,62,250                                                                                                                  |
| 5. Mahi Right Bank Canal Project stage I | 2,492.75                            | 4,60,000                                                                                                                  |
| 6. Dantiwada ..                          | 1,087.28                            | 1,10,000                                                                                                                  |
| 7. Hathmati ..                           | 544.58                              | 57,900<br>In addition it will assure irrigation to 34,400 acres of existing canal system.                                 |
| 8. Meshwa ..                             | 246.33                              | 40,000<br>In addition it will assure irrigation to 19,000 acres.                                                          |
| 9. Saraswati ..                          | 131.53                              | 16,600                                                                                                                    |
| 10. Shetrunji (Palitana) ..              | 696.00                              | 86,000                                                                                                                    |
| 11. Bhadar ..                            | 417.29                              | 42,400                                                                                                                    |
| 12. Shetrunji (Khodiar) ..               | 190.88                              | 19,000                                                                                                                    |
| 13. Machhu II ..                         | 213.88                              | 19,000                                                                                                                    |

**Flood control:** A provision of Rs. 100 lakhs has been made in the Fourth Plan for the execution of flood control works.

### UKAI PROJECT

The project envisages the construction of reservoir on river Tapi at Ukai in Surat district at an estimated cost of Rs. 6,120.02 lakhs to irrigate 3,91,650 acres of land in Surat and Broach districts, and in addition 5,62,250 acres at present under Kakrapar canals will get assured supply of water.

Besides, 27,800 acres under command of Ukai canal and 56,200 acres under Kakrapar system will receive perennial irrigation. It also provides for generation of installed power of 1,30,000 kW. at 60 per cent load factor in normal years and 50,000 kW. at 60 per cent L.F. firm power in worst year. Thus, Ukai dam has great potentialities for the development of cheap and economical hydroelectric power. Partial flood control is an additional feature of this scheme. The Government has also appointed Ukai Control Board and Ukai Rehabilitation Committee. The dam and power portions of the project are planned to be completed by the end of Fourth Plan.

### KADANA PROJECT

The project envisages the construction of a reservoir on the Mahi river near Kadana village of Santrampur taluka in the Panch Mahals District at an estimated cost of Rs. 1,686 lakhs. A direct canal from the reservoir will irrigate 40,905 acres of land in the Panch Mahals district and will besides provide assured water supply to the 4.6

lakh acres under the command of the Mahi Right Bank Canal Project Stage I. It is also proposed to have continuous power generation of 6,000 kW. at a later date. The storage of Kadana Project will be augmented by the regulated releases from the Banswara project. An agreement in this regard has been reached with the Rajasthan Government.

### NARMADA PROJECT

The first stage sanctioned for Rs. 4,141.43 lakhs envisages construction of a dam across the river near the village Navagam in Rajpipla taluka of the Broach District with canal system to irrigate an area of 9,97,500 acres of the Broach and the Baroda districts. The Committee appointed by the Government of India in 1964 under the chairmanship of Dr. A. N. Khosala has recommended F.R.L. 500 for the Navagam Dam, irrigation of 45.81 lakh acres in Gujarat and 1 lakh acres in Rajasthan and installation of generating units of 1000 M.W. and 240 M.W. in the river bed and canal power houses respectively.

**Koyali Refineries:** The shipments of machinery for the refinery plant have been received from the U.S.S.R. The Soviet oil experts were going ahead with the preparations of the designs for the two million ton refinery.

A fertilizer plant is being set up near the refinery site by the State Govt.

### HOUSING PROGRAMMES (1966-67)

- Subsidised Industrial Housing Scheme:*—2,636 tenements in various towns of Gujarat State like Ahmedabad, Baroda, Surat, Rajkot, Porbandar, Bulsar, Kandla, Gandhidham.
- Low Income Group Housing Scheme:*—1,120 tenements in the various towns like Ahmedabad, Baroda, Surat, Rajkot, Bhavnagar, Broach, Bhuj, Gandhidham.
- Middle Income Group Housing Scheme:*—136 tenements in the various towns of Gujarat State like Ahmedabad, Rajkot, Jamnagar, Bhavnagar, Gandhidham.
- Low-Income Group for Weaver Section:*—264 tenements in various towns of Gujarat State.

The table below shows the achievements made by the Gujarat Housing Board during the Third Five Year Plan.

| Scheme                                           | No. of Tenements completed | No. of Tenements under construction | Expenditure to end of March, 1966 |
|--------------------------------------------------|----------------------------|-------------------------------------|-----------------------------------|
| (Rs. in lakhs)                                   |                            |                                     |                                   |
| 1. Housing Scheme for Industrial Workers.        | 17,450                     | 2,436                               | 667.79                            |
| 2. Housing Scheme for Low Income Group People    | 676                        | 1,300                               | 100.83                            |
| 3. Housing Scheme for Middle Income Group People | 210                        | 160                                 | 46.97                             |
| 4. Land Acquisition and Development Scheme ..    | —                          | —                                   | 24.81                             |
| 5. E.S.I. Scheme                                 | —                          | —                                   | 110.00                            |
|                                                  | 18,336                     | 3,896                               | 950.40                            |



### THIRD FIVE-YEAR PLAN

During the first four years of the Third Five Year Plan, an expenditure of Rs. 180.85 crores or 76.4 per cent of the Plan outlay of Rs. 236.50 was incurred. During the year 1965-66 the Plan expenditure was expected to be about Rs. 59.72 crores. The total expenditure during the Third Plan, was therefore, likely to be over Rs. 240.56 crores, exceeding the Plan outlay by a small margin. In respect of physical achievements also the progress was generally satisfactory and in some cases, the original targets were even exceeded.

The State has framed its Annual Plan 1966-67 keeping in view the requirements in the present emergent situation. The following table shows the sectoral allocations for the Annual Plan 1966-67.

(Rs. in Crores)

| Sr. No. | Head of Development                          | Outlay for 1966-67 | Percentage to total |
|---------|----------------------------------------------|--------------------|---------------------|
| 1.      | Agricultural Programmes ..                   | 14.14              | 28.28               |
| 2.      | Co-operation and Community Development .. .. | 2.82               | 5.62                |
| 3.      | Irrigation and Power .. ..                   | 19.52              | 39.06               |
| 4.      | Industries and Mining .. ..                  | 2.51               | 5.02                |
| 5.      | Transport and Communications                 | 4.20               | 8.42                |
| 6.      | Social Services .. ..                        | 6.77               | 13.52               |
| 7.      | Miscellaneous .. ..                          | 0.04               | 0.08                |
|         | Total .. ..                                  | 50.00              | 100.00              |

High priority has been assigned to agriculture, irrigation and power programmes. Programmes in other sectors also have been framed keeping in view of the needs of the present situation.

The additional production potential target of 3.20 lakh tons oilseeds and 4 lakh bales of cotton at the end of the Third Plan have been largely achieved, bringing the total production potential to 13.95 lakh tons of oilseeds and 14.67 lakh bales of cotton at the end of the Third Plan.

The traditional methods of irrigation by open wells received considerable attention during the Third Plan. As against the original target of construction of 35,480 new wells and repairs to 7,200 old wells about 50,600 new wells have been constructed and 9,500 old wells repaired during the Third Plan. The target of supplying 25,000 pumping sets envisaged in the Third Plan has been exceeded by about 14,500. A large number of tubewells has been constructed by the end of the Third Plan. Till February, 1966, 186 tubewells have been electrified including 155 tubewells electrified prior to the Third Plan. The total minor irrigation potential created by the end of the Third Plan is 29.41 lakh acres. The total irrigation potential created from major and medium irrigation projects by the end of the Third Plan comes to 12.10 lakh acres.

The entire rural population of the State has been covered under the Community Development programme

since October, 1963. The co-operative movement too has made rapid strides. The Co-operatives will have covered about 53 per cent of the agricultural population and about 38 per cent of the rural population. The short term and medium term finance which was Rs. 23.59 crores at the end of the Second Plan was expected to have risen to about Rs. 40 crores by the end of the Third Plan.

The total installed capacity at the end of the Third Plan was about 618 M.W. and the total number of towns and villages electrified was 1,765.

Gujarat is one of the most important industrially developed States in the country. According to the provisional results of the 'Annual Survey' of Industries (1953) Gujarat contributes 9.7 per cent in the total number of large scale factories, 9.2 per cent in employment, 7.9 per cent in the value of output and 9.2 per cent in employment, 7.9 per cent in the productive capital employed, 8.5 per cent in the value of output and and 9.2 per cent in net value added by manufacture in the large scale sector in the country. A recent event of great national significance is commissioning of the three million-ton of oil refinery at Koyali. Another important project on which considerable work has been done is the Gujarat State Fertilizer Factory. A good institutional framework exists already in the Gujarat Financial Corporation, Gujarat Industrial Development Corporation, the Small Industries Corporation.

Nationalisation of passenger road transport services in the State has been almost completed by the end of the Third Plan. The traffic at intermediate and minor ports in the State has increased from 23.46 lakh tonnes in 1960-61 to about 32 lakh tonnes at the end of the Third Plan.

Under Education, percentage of school going children in the age-group 6-11 increased to 91.56 per cent at the end of the Third Plan against the target of 80 per cent.

The total number of beds in Government Hospitals etc., has been brought to 9,500.

There are 18 Craftsmen training institutes with intake capacity of about 4,200.

The Employees' State Insurance Scheme has been implemented in Ahmedabad from 4th October, 1964.

### FOURTH PLAN\*

A total outlay of Rs. 446 crores was approved by the Planning Commission for the State's Fourth Five-Year Plan. The outlay represents an increase of about 90 per cent over that of the Third Five Year Plan.

The Plan lays special emphasis on agricultural programmes and irrigation and power projects. For agricultural programmes, including cooperation and community development, an allocation of Rs. 86 crores has been made. For irrigation Rs. 90 crores have been allocated and for power about Rs. 113 crores. This includes adequate provision for electrification of wells.

It is proposed to complete the Ukai project during the Fourth Plan for which adequate provision has been made. For the Dhuvaran—stage II power project, to be completed by 1969-70, there will be provision of Rs. 35 crores. These and other power projects will raise the total installed capacity of electric power in the State from the present 600 mw. to over 1,200 mw. by the end of the Plan.

A provision of Rs. 9 crores has been made for a fertilizer factory, and of Rs. 20 crores for the construction of the new capital at Gandhinagar.

\* At the end of the Fourth Plan, 21.8 per cent of towns and villages will be electrified, raising the total number to 4,096.



## AHMEDABAD DISTRICT\*

*Headquarters* : Ahmedabad. (Provisional Capital of Gujarat).

*Talukas or Mahals* : Deskroi, Dhandhuka, Dholkal, Dehgam, Viramgam, City Taluka Sanand.

A district in Gujarat, it lies between North Latitude 28° 23' and 23° 37' and East Longitude 71° 21' and 70° 28'. It is bounded on the north by Mehsana and Sabarkantha Districts, on the west by Surendranagar District, on the south by Bhavnagar District and on the east by Kaira. The total area of the District is 3,461 sq. miles. The language spoken is Gujarati.

In the extreme south of the District and also just beyond the northern boundary are a few rocky hills. But between these two points the whole District forms a level plain gradually rising towards the north and east. The chief physical feature is the river Sabarmati which rises in the north-east, near the extremity of the Aravali Range and flows towards the south-west falling finally into the Gulf of Cambay.

The District as a whole is open and poorly wooded. The chief trees are mango, rayan, mahua and nim. Many of the trees and shrubs supply food, medicines and material for dyeing and tanning.

The rainfall varies but slightly between the central portions of the District and the outlying tracts. The annual rainfall averages about 30 inches.

The Chief food crops are wheat, jowar and bajra and the chief money crop, cotton. The best rice is grown in Daskroi and the next best in Sanand and Dholka.

Ahmedabad city which is the second biggest textile centre in India is the only large industrial area in the District. The number of textile mills and factories is about 150 including about 72 textile mills. Ahmedabad is also a centre of railway communications. Ahmedabad has also a number of archaeological landmarks and an international diversionary airport.

The population of Ahmedabad City according to the 1961 census is 11·5 lakhs.

### AHMEDABAD MUNICIPAL CORPORATION

*Mayor* : Dr. Somabhai C. Desai.

*Dy. Mayor* : Dr. Vasudeo Natvarlal Tripathi.

#### ADMINISTRATIVE PERSONNEL

*Municipal Commissioner* : H. K. L. Capoor, I.A.S.

*Deputy Municipal Commissioners* : A. S. Thakore, N. H. Thacker, M.Com., LL.M. and M. A. Panchal.

*Municipal Secretary* : N. M. Desai.

#### BUDGET 1965-66.

*Revenue Receipt* : Rs. 6,53,39,584 ; *Expenditure* : Rs. 7,56,22,294 ; *Outlay on works* : Rs. 6,77,99,154.

### GUJARAT UNIVERSITY

(Ahmedabad 9.)

Estd. 1950.

(Total Affiliated Colleges : 115)

*Chancellor*.—Nityanand Kanungo.

*Vice-Chancellor*.—U. J. Joshi, M.A.

*Registrar*.—K. C. Parikh.

#### BUDGET—1965-66

*Income* : Rs. 57,62,720 (Recurring), Rs. 17,92,886 (Non-recurring).

*Expenditure* : Rs. 68,35,150 (Recurring), Rs. 19,42,500 (Non-recurring).

Total number of students on the rolls of the colleges and recognised institutions (1963-64) : 49,291.

Number of External students registered (1963-64) : 5,933.

## AMRELI DISTRICT\*

*Headquarters* : Amreli.

*Talukas and Mahals* : Amreli, Kodinar, Dhari, Khambha, Jafrabad, Rajula, Lilia, Lathi, Kunkavav, Vadia, Babra.

The area of Amreli District is 1,545 square miles.

The District is level country broken only by Gir Hills in the Dhari Taluka. The average yearly rainfall is between 23 to 25 inches.

The Okha Port in Amreli District is one of the best deep sea ports in India. In Okhamandal Taluka, Port Okha, Mithapur and Dwarka have become industrial centres.

## BANASKANTHA DISTRICT\*

*Headquarters* : Palanpur.

*Talukas and Mahals* : Palanpur, Deesa, Dhanera, Vadgam, Tharad, Wav, Deodar, Kankerj, Danta, Radhanpur, Shanthapur.

The area of the District is 4,037 square miles.

\* See article on "Population" for population figures.



## BARODA DISTRICT\*

*Headquarters* : Baroda.

*Talukas and Mahals* :—Baroda, Savli, Waghodia, Padra, Karjan, Sinor, Dabhoi, Sankheda, Naswadi, Chhota-Udepur, Jabugam, Tilakwada.

The area of the District is 2,961 sq. miles.

Geological experts of the Oil and Natural Gas Commission of the Govt. of India are prospecting for oil in Baroda. Oil and Natural gas workshop has been located at Baroda at a cost of Rs. 2 crores. Gujarat Refinery with a capacity of 3 million tons is being set up in this District. Second unit of a million tons capacity is expected to start production shortly. At present 3,300 tons of oil is sent to Bombay Refineries daily.

Ankleshvar gas will be made available to Baroda industries and domestic consumption soon.

Third Unit of the Refinery (of a million tons) is expected to be ready by the end of 1967.

A Fertilizer Factory is being set up, and Petrochemical industries will follow suit.

The District as a whole has not less than 1,635 primary schools, 135 secondary schools, 800 libraries, 300 gymnasiums and welfare associations.

The annual rainfall averages about 30 inches. The chief food crops are wheat, jowar, bajra, pulses, kodra, bawta,

maize. Rice is now grown extensively interspaced with cotton.

Baroda, the headquarters of the District is fully modernised. The District is also well advanced in industry. In recent years a number of factories, big and small have sprung up. It is also the Headquarters of Oil & Natural Gas Commission Establishment in Gujarat.

Among the large medical institutions the most important is the Shri Sayajirao State General Hospital in Baroda city. There is also the Shri Jamnaba Hospital run by the Government. A new Hospital at a cost of Rs. one crore is under construction. Shri Padmavatibai Tuberculosis Hospital and Sanatorium is located some 8 miles from Baroda city.

MAHARAJA SAYAJIRAO UNIVERSITY OF BARODA

Baroda 2.

*Budget for the year 1966-67 :*

*Income* : Rs. 88,07,656 including Government of Gujarat grant of Rs. 35,39,800. *Expenditure* : Rs. 1,04,73,480.

*Chancellor*, His Highness Shrimant Fatesinh Gaekwad, Maharaja of Baroda.

*Vice-Chancellor*, Dr. C. S. Patel.

*Pro-Vice-Chancellor*, Prof. P. J. Madan.

*Registrar*, B. K. Zutshi.

## BHAVNAGAR DISTRICT\*

*Area* : 4,652 sq. miles.

*Headquarters* : Bhavnagar.

*Talukas* : Bhavnagar, Botad, Gadhada, Kundla, Mahuva, Palitana, Sihor, Talaja, Datha, Umralla, Vallabhipur, Gariadhar, Gogho.

The port of Bhavnagar is well-equipped, and it is one of the main trading centres of the area.

The main crops are bajra, jawar, oilseeds, rice, cotton and wheat.

## BROACH DISTRICT\*

*Headquarters* : Broach. *Sub-Division* : Rajpipla.

*Talukas and Mahals* : Broach, Vagra, Amod, Jambusar, Ankleshwar, Hansot, Nandod, Jhaghadia, Valia, Dediapada, Sagbara.

The area of the District is 2,986 sq. miles. The language spoken is Gujarati.

## BULSAR DISTRICT

*Population* : 1,042,561. *Headquarters* : Bulsar, Bulsar City (35,063).

*Talukas* : Navsari (225,720); Chikhli (139,986); Bansda (92,352); Bulsar (169,899); Dharampur (152,669); Pardi (130,898); and Umbergaon (95,973).

*Mahals* : Gandevi Mahal (130,304).

The offices of the Collector, the District Panchayat and allied bodies, the DSP, Employment Exchange, the District Information Office, the Sales Tax, the District Treasury and other District level offices have been located at Bulsar. However, in view of the importance attached

to Navsari Town, Offices of the District Judge, Civil Surgeon, Executive Engineer, District Inspector of Land Records, etc. and local offices will continue as before at Navsari.

Bulsar is a "BAGAYAT" district famous for its fruit gardens especially as "Mango" producing centre. Its importance has increased due to the establishment of Atul Products at the foot of the Parnera Hills, near Bulsar. On the other side of the Town is situated 'Tithal' on seashore a place for Holiday Home. The new district can also boast of having one sugar factory at Gandevi.

\* See article on "Population" for population figures.



## DANGS DISTRICT\*

*Headquarters* : Ahwa.

*Taluka* : Dangs.

Dangs District lies between north latitude 20° 33' and 21° 3', east longitude 73° 28' and 73° 57'. The area is 689 square miles. The rail terminus for the District is Waghai on the Billimora-Waghai line on the Western Railway

and is 171 miles from Bombay.

The language spoken by the Dangis is called Dangi.

The District contains some of the richest forests in Gujarat State, which form the principal source of revenue. Dangs teak is considered as one of the best varieties of Indian teak.

## JAMNAGAR DISTRICT\*

*Area* : 3,944 sq. miles.

*Headquarters* : Jamnagar.

*Talukas* : Jamnagar, Dhrol, Kalavad, Khambalia, Jamjodhpur, Bhanvad, Jodia, Kalyanpur, Lalpur, Okhamandal.

There are seven towns and 656 villages in the District.

People live mainly on agriculture. Including both cultivated and waste land the District has an area of 21,97,674

acres. The average rainfall is 20" to 22". Potato is cultivated on a large scale in the district.

The main small industries are the manufacture of agricultural implements, brass and copper vessels, the making of baskets, the manufacture of tiles, lime, oil crushing, handlooms, salt, the keeping of poultry.

Sikka, Bedi and Rosy are the three ports of the district. Sikka is known for its cement industry.

## JUNAGADH DISTRICT\*

*Area* : 4,186 sq. miles.

*Headquarters* : Junagadh.

*Talukas and Petas* : Bhesan, Junagadh, Keshod, Kutiyana, Malia, Manavadar, Mangrol, Mendarda, Patan, Porbandar, Ranavav, Talala, Una, Vanthali, Visavadar.

Agricultural land under paddy, jawar, bajra, wheat, groundnut and cotton is 14,09,400 acres in extent.

Junagadh is well-known because of the lions in the Gir forests. This is the only place in Asia where lions are found.

Porbandar and Veraval are the two important ports in the district.

The main industries of the district consist of cement, ginning and pressing, oil, etc. New industries like soda-ash and rayon are coming up.

## KAIRA DISTRICT\*

*Headquarters* : Kaira (Revenue), Nadiad (Judicial).

*Talukas and Mahals* : Matar, Mehmedabad, Nadiad, Kapadvanj, Anand, Borsad, Thasra, Balasinor, Cambay, Petlad.

The area of the district is 2,621 square miles. The language spoken is Gujarati.

Tobacco is grown in Kaira District while at Sevalia in the Thasra, the A.C.C. has a cement factory. The Government of India have opened a tobacco research institute at Anand.

There is an Infant Food & Cheese Plant at Anand run by the Kaira Dt. Co-op. Milk Producers' Union Ltd.

SARDAR VALLABHBHAI VIDYAPEETH

Vallabh Vidyanagar, W. Rly. (Gujarat).

The Sardar Vallabhbhai Vidyapeeth has been established under Bombay† Act No. XL of 1955 as a teaching and affiliating university in a rural setting with the object of

accelerating the process of regeneration of villages by the application of modern Arts, Sciences and Technology to rural requirements.

*Constituent Colleges* : 13.

*Post-graduate Departments* : 13.

*Chancellor* : Nityanand Kanungo, Governor of Gujarat.

*Vice-Chancellor* : I. J. Patel.

*Registrar* : K. A. Amin.

### BUDGET ESTIMATES FOR 1966-67

|    |                   |    |    | Recurring<br>Rs. |
|----|-------------------|----|----|------------------|
| 1. | Total Income      | .. | .. | 22,49,700        |
| 2. | Total Expenditure | .. | .. | 28,24,000        |
| 3. | Grants :          | .. | .. | ..               |
|    | (a) State (Govt.) | .. | .. | 9,47,000         |
|    | (b) U.G.C.        | .. | .. | 1,45,000         |

\* See article on "Population" for population figures.

† Bilingual.



## KUTCH DISTRICT\*

*Headquarters* : Bhuj.

*Talukas and Mahals* : Bhuj, Mandvi, Mundra, Anjar, Rahpar, Bhachau, Nakhatrana, Lakhpat, Abdassa, Khavda and Khadir.

The District has a land area of 16,567 sq. miles including approx. 9,000 sq. miles of Rann.

Kutch is a semi-arid region. Rainfall is very irregular and scanty. Sub-soil waters in 70 per cent of the area are saline.

*Agriculture* : There is a fair proportion of good cultivable land in Kutch, the principal crops being bajra, jawar, wheat, barley, cotton and pulses. The cultivation of groundnuts is also increasing day by day.

The whole Dist. is covered under the Community Development Programme.

Position of the road mileage at the end of the Third Five Year Plan period : Total mileage 1178 ; National Highways 47 miles, State Highways 311 miles, Major District Roads 432 miles, other District Roads 306 miles and village approach roads 82 miles.

The District is rich in gypsum, clays and limestone, and has large deposits of lignite, bauxite and ochres.

Kutchis are an enterprising and seafaring people. Over six lakhs of Kutchis are distributed in principal cities of India and over 15,000 are abroad.

The main items of export are salt, cotton, wool, castor seeds, bones, hides, skins and fish. The main items of import are foodgrains, oil seeds, cloth, condiments, etc.

*Education* : There are 39 High Schools and 686 primary schools. There are also two Basic Training colleges for primary teachers and a school for the deaf and dumb. There are 3 colleges at Bhuj, Adipur and Mandvi.

*Health* : Free Medical relief is available in the district. There are 24 hospitals, 57 dispensaries, 9 primary health Centres, one T.B. sanatorium, 3 T.B. clinics, one mental hospital, one laboratory and two eye hospitals. There are also 21 private hospitals and dispensaries.

*Transport* : 447 villages and towns are served by Road Transport Corporation on 11 different routes covering a route mileage of 3897 miles a day. The length of railway line passing through the district is 202.13 K. metres.

Kandla is a major port. Minor ports are Mandvi, Mundra, Jakhau, Lakhpat and Koteswar.

The new townships of Gandhidham and Adipur have been established near Kandla to resettle the displaced persons from West Pakistan. One Industrial Estate is also organised near Gandhidham.

## MEHSANA DISTRICT\*

*Headquarters* : Mehsana.

*Talukas and Mahals* : Patan, Chanasma, Sidhpur, Mehsana, Kheralu, Visnagar, Kalol, Vijapur, Kadi, Sami, Harij.

The area of the District is 4,324 sq. miles.

## PANCH MAHALS DISTRICT\*

*Headquarters* : Godhra.

*Talukas and Mahals* : Godhra, Dohad, Kalol, Halol, Jhalod, Deogad-Baria, Limkheda, Santrampur, Lunavada and Shehera Talukas, and Jambughoda Mahal.

The Panchmahals District lies between  $23\frac{1}{2}$  degrees and  $24\frac{1}{2}$  degrees North Latitude, and  $13\frac{1}{2}$  and  $74\frac{1}{2}$  East Longitude on the eastern frontiers of Gujarat and is divided into two sub-divisions namely Godhra Sub-Division covering Godhra, Kalol, Halol, Jambughoda, Shehera and Lunavada Talukas ; and Dohad sub-division covering Dohad, Jhalod, Santrampur, Limkheda and Devgad-Baria Talukas. The area of the district is 3486 sq. miles and the population according to 1961 census is 14,68,946. The language spoken is Gujarati. The total area of the land in the district is 2,185,774 acres.

The total area under agriculture is 14,42,666 acres yielding 421,000 tons of foodgrains including cereals, pulses, oilseeds and all edibles principally groundnuts. The acreage under different crops are : Paddy 31,842, Bajri 5,740, Jawar 2,540, Groundnuts 43,530, Wheat 10,168, Maize 72,026, and Gram 3,970. The areas covered by cash crops are Digvijaya and vijaya cotton 47,798,

CO2 12,549, Tobacco 2,861 acres. There is Hybrid maize breeding research centre in 25 acres at Vavdi-Bijarag on the outskirts of Godhra.

The average rainfall in the district is now only 25 inches. The lowest temperature is 40 degrees F. heat and highest 115 degrees F. heat.

The District has a forest area of 515,848 acres. The forests yield teak-wood, and hard-wood such as Mahuda, Sadad, Kher and Dhavda. The forests also produce Mahuda flowers, hay-fodder, timru leaves for bidi manufacture, and bamboos.

The irrigation projects in the District are Pata-Dungri Dam south of Dohad, Suki Dam north of Dohad in Jhalod Taluka, Titodi Dam south of Jhalod, and Karad Right Bank Dam in Devgad-Baria Taluka, and Tanachhida Irrigation project 15 miles from Dohad.

Agriculture, Mining and Forest produce are the main industries in the district which contains rich mineral deposits such as manganese ore, galena, copper, limestone. There are big manganese mines worked at Shivrajpur, Pani Mines and Bamankuwa.

\* See article on "Population" for population figures.



## COMMUNICATIONS

Bombay Delhi Broad-gauge main line of Western Railway passes through Panchmahals district. Gujarat State Road Transport Corporation also runs various bus services and operates numerous routes in the district.

Pavagadh Hill station about 2,600 feet in height is situated in Halol taluka about 22 miles from Godhra. It is also a pilgrim centre.

The famous Bhadrakali temple of goddess is on the peak of the Hill and there are ancient monuments preserved by Archaeological Department of the Central Government.

## RAJKOT DISTRICT\*

*Area* : 4,588 sq. miles.

*Headquarters* : Rajkot.

*Talukas* : Rajkot ; Jasdan ; Babra ; Morvi ; Wankaner ; Gondal ; Jetpur ; Dhoraji ; Kandorna ; Kotda-Sangani ; Lodhika ; Maliya Padadhari, Upleta.

Rajkot District has four sub-divisions, nine talukas, five mahals and one peta mahal.

The area of the land under cultivation is about 21,38,678 acres. The main industries of Rajkot District consist of textiles, hosiery, handlooms, the production of hydro-generated oils, potteries, salt-making, engineering, etc.

## SABARKANTHA DISTRICT\*

*Headquarters* : Himatnagar.

*Talukas and Mahals* : Himatnagar, Prantij, Modasa, Bayad, Idar, Khedbrahma, Bhiloda, Meghraj, Vijaynagar, Malpur.

The area of Sabarkantha is about 2,843 sq. miles.

The average yearly rainfall is between 25 and 30 inches.

The principal crops are bajri, maize, paddy, jawar, cotton, wheat, sesamum and groundnut. About 30 per cent of the people consist of Bhils and other backward classes. The main occupation of the people is agriculture. Except for a few ginning factories and oil mills, the District is very backward in industry.

## SURAT DISTRICT

*Headquarters* : Surat.

*Population* : About 1,427,019. Headquarters at Surat (Surat City) (288,167).

*Talukas* : Olpad (79,444) ; Chorasi (455,303) ; Mangrol (95,367) ; Kamrel (62,822) ; Mandvi (93,805) ; Bardoli (90,608) ; Songadh (76,870) ; Vyara (119,100) and Mahuva (65,533).

*Mahals* : Palsana (41,807) ; Valod (42,828) ; Uchhal (31,535) and Nizar (58,801).

Besides being noteworthy historically, Surat is the biggest jari production as well as artsilk powerloom centre. Nearly half the population of the city depends on handicrafts. Jari work, laces, silk and jari brocades, embroidery, ivory sand sandalwood carving, inlay work of varakh-nakashi and ivory bangles are the major handicrafts for which Surat is famous not only throughout India but even abroad. A co-operative industrial estate which has developed at Udhna, three miles from Surat, is stated to be the biggest industrial estate of its type in the country. There is one sugar factory at Bardoli.

## SURENDRANAGAR DISTRICT\*

*Area* : 4,006 sq. miles.

*Headquarters* : Surendranagar.

*Tahsils* :—Wadhwan (Wadhwan); Chotila (Chotila); Mull (Mull); Dhrangadra (Dhrangadra); Halvad (Halvad); Dasda (Dasda); Limbdi (Limbdi); Lakhtar (Lakhtar); Sayla (Sayla).

There are about 12 towns with a population of over 5,000 and 672 villages.

About 70 per cent of the population lives in the rural areas. The main occupation of the people is agriculture, and the important crops are bajra, jawar, cotton, paddy, groundnut, wheat and gram.

The main industries of the district consist of textiles, salt, soda-ash, potteries, ginning and pressing factories.

\* See article on "Population" for population figures.

## KURUKSHETRA UNIVERSITY

Kurukshetra.

*Estd.* : 1956. It is a teaching-cum-residential University for the encouragement of higher education and research especially in Sanskrit, Prakrits and modern Indian languages as also in Indian Philosophy and ancient Indian History and other aspects of Indology.

*Chancellor* : Governor, Punjab State ; *Registrar* : Vikas Mishra ; *Vice-Chancellor* : D. C. Verma.

*Number of Constituent Colleges* : Three ; *Number of Recognised Colleges* : Two.

## Budget Estimates for 1965-66

*Total Income* : Rs. 70,97,270 ; *Total Expenditure* : Rs. 78,20,660.



## HARYANA\*

**H**ARYANA came into being on Tuesday the 1st of November 1966, as the 17th and smallest State in the Indian Union, as a result of the reorganisation of the composite Punjab State into Haryana and Punjab.

Haryana, fragmented by the British a century ago, has an area of 44,000 square kilometres. It will have an annual budget of approximately Rs. 63 crores. It will have only one division, seven small districts, 27 tehsils, 62 towns and about 7,000 villages. It is essentially a rural State with a population of 7,527,000 of which only 1,300,000 are in urban areas.

*Districts :* Ambala, Karnal, Rohtak, Gurgaon, Mohindergarh, Hissar & Jind.

Its Legislative Assembly consists of only 54 members. Its strength will be raised to 81 after the general election. It will be represented by five members in the Rajya Sabha and by nine in the Lok Sabha.

The region is situated away from the three perennial rivers the Ravi, the Beas and the Sutlej. The Ghaggar, which is not perennial, touches only the northern parts of the area and the Yamuna forms its boundary with Uttar Pradesh on the eastern side.

Rainfall is comparatively low and erratic, soil is sandy and light in texture, and above all, there is paucity of sub-soil water and in a large number of tracts it is brackish.

There are no mineral resources except in Mohindergarh. The area is frequently visited either by heavy floods or by serious drought.

### ECONOMY

The striking increase in farm output, especially sugarcane and cotton, has given a fillip to the agro-based industries. Of the 11 cotton textile mills in the Punjab, six are working at Bhiwani, Hissar, Faridabad and Rohtak. Four more textile mills are under completion in Haryana. Two sugar factories at Rohtak and Panipat were added to the existing one at Yamunanagar. All the three paper mills and two cement factories are located in Haryana.

The other important units are a shoe factory, five large-scale cycle assembling and cycle components units and eight rerolling mills, besides more than 2,000 units engaged in the manufacture of agricultural implements, machine tools, electric goods and bolts and nuts.

After the reorganisation, Haryana will be left with 162 large and medium-scale factories and 4,718 small-scale units,

Agricultural productivity has recorded a sizable increase.

The region has rich historical and cultural traditions. Here, the Vedic culture developed and spread. Some of the most decisive battles of Indian history were fought here. Even today the sturdy Jat of Haryana is known as one of world's best soldiers.

The per capita income in Haryana is Rs. 339. Only 32.74 per cent of cultivated area is irrigated. Only food crops are grown. Thirty-six per cent of the towns and villages is electrified. There are 73 large and medium factories, and 4,133 small industrial units.

The Fourth Plan outlay has been fixed for the State at Rs. 169 crores.

(Note: Kurukshetra University is given on the facing page.)

## HIMACHAL PRADESH\*

**C**APITAL: Simla. Area: 28,241 sq. Km.; Population: 1.34 million (1961 census); Strength of Vidhan Sabha 43. Density of population: 370; Sex ratio: 946 females to 1,000 males. Literacy: 17.1 per cent.

Himachal Pradesh lies between North Latitude 30° 22' 40" to 33° 12' 40" and East Longitude 75° 47' 55" and 97° 4' 20". It is bounded on the north by the Jammu and Kashmir State, on the south by Tehri-Garhwal and Dehra Dun Districts of Uttar Pradesh and the Ambala District of Punjab; on the west by Ambala, Hoshiarpur and Kangra and on the east by Tibet.

The Territory of Himachal Pradesh is divided into seven districts, viz.: Kinnaur, Simla, Sirmur, Bilaspur, Kangra, Lahaul-Spiti and Mandi.

### ECONOMY

The main agricultural wealth of the Territory consists of fruits such as apple, apricot, peach and vegetables like seed potato, ginger, tomato, peas etc.

The climatic conditions of the Pradesh are suitable for the growing of a large variety of fruits including citrus, and dry fruits. Apples and pears are grown in the cooler regions. The superior varieties of apples which were restricted to Kotgarh and Kothaj are now being grown extensively in other parts of the Pradesh ranging between five thousand to eight thousand feet above sea level. With the new orchards rapidly coming up, the production of fruit increased considerably during the 3rd Five Year Plan.

Salt is another important item; while forests yield timber, fire-wood and charcoal. Handicrafts which include

Pashmina shawls, wool of fine quality, resin, herbs and skins are another source of income.

Himachal Pradesh forests supply the largest quantities of coniferous timber in Northern India. They are the main source of revenue in the territory, the estimated revenue during 1966-67 being Rs. 4.12 crores including revenue from the sale of resin and turpentine. The entire Territory is divided into four forest circles which are further subdivided into 16 territorial divisions. Besides, a Forest Utilization Division has been created to develop the resources of the Territory. Bilaspur Circle has been created under the Soil Conservation Scheme.

Seed potato is the chief cash crop in which the Territory has established itself as an important supplier to the plains of India. In 1965-66 alone, 2,58,960 quintals of seed potatoes were sold to other parts of India. The total acreage under potatoes, which was about 18,000 in 1950-51, stood at 31,000 in 1965-66.

One of the oldest foundries of the country is located at Nahan besides a resin and turpentine factory.

Under the Rs. 27.93 crore Third Plan, roads and transport had been given top priority with 34.08 per cent of the entire allotment earmarked for their development. Agriculture, horticulture, minor irrigation, forests, animal husbandry etc. had been allotted 23.16 per cent of the allocation while social services (Education, Medical Welfare, Housing etc.) got 22.63 per cent. Rs. 1.11 crores had been earmarked for expansion of industrial undertakings. Himachal Pradesh was able to utilise about Rs. 33.75 crores during the Third Plan. Fourth Plan.†

\* See article on "Population" for Population figures and area. Commission for the Fourth Plan. See under main article *Fourth Five Year Plan* for more details.

† A total outlay of Rs. 94.38 crores has been approved by the Planning Commission for the Fourth Plan.



**Power**—The Department of Multipurpose Projects & Power started functioning in April, 1964 to investigate the vast hydroelectric potential of H.P. Besides this, the Department is also required to deal with problems connected with soil conservation and flood control.

### REORGANISATION

Himachal Pradesh clearly gained most from the reorganisation of Punjab, which took place with effect from

November 1, 1966. The merger of Punjab's hill areas has more than doubled Himachal's size and added considerably to its forest and mineral wealth. All five rivers—the Chenab, the Ravi, the Beas, the Sutlej and the Yamuna—flow through the Territory. It is estimated that the Government can have an annual income of Rs. 200 crores once Himachal's vast forest, hydel and mineral resources are fully exploited. Simla has now been elevated from the position of headquarters of a Punjab district to that of capital of new Himachal Pradesh.

## JAMMU AND KASHMIR STATE

**CAPITAL:** Srinagar. Area: 2,22,800 sq. kms.; Population 35.61 lakhs (1961 census).

Official language: Urdu; Regional languages: Kashmiri, Dogri, Balti, Punjabi, Pahari, Ladakhi. There are three municipalities, six town area committees and 28 notified area committees in the State.

The State has a Legislative Assembly (100 including 25 for occupied areas) and a Legislative Council (36).

For administrative purposes, the State is divided into two provinces: Kashmir (including the Frontier District of Ladakh) and Jammu.

Names of Districts are given under "Population".

The Jammu and Kashmir State constituting the extreme western section of the Himalayas, lies between 32°17' and 36°58' north latitude, and 73°26' and 80°30' east longitude.

The rainfall in the State varies from 30 to 60 inches a year except in Ladakh District where it is four inches. In Kashmir Valley, the annual rainfall varies from 30 to 35 inches.

About 16.7 per cent of the total population is urban. There are 2 cities, 41 towns and 6,971 villages in the whole State.

A low level tunnel called the Jawahar Tunnel constructed at a cost of Rs. three crores provides an all-weather link between Kashmir Valley and the outside world.

Jammu and Kashmir, as an integral part of the country, is now firmly set on the road to development, ushering in an era of progress and prosperity.

### AGRICULTURE

Agriculture is the main occupation of the people. Total area under cultivation is 17.03 lakh acres out of which 7.10 lakh acres receive irrigation and 9.93 lakh acres are rainfed. The average size of the holding for a rural family of five members is 2.86 acres. The main crops grown are rice and maize in temperate regions and wheat and maize in sub-tropical regions.

During 1964-65, 20,251 mds. of foundation seeds of improved varieties were distributed as classified below: paddy 6,986 mds.; wheat 11,322 mds.; maize 1,943 mds. Likewise in 1965-66, 2,47,000 mds. of fertilizer for intensive development of agriculture was also distributed to the farmers.

#### Irrigation:

The total provision under the Third Plan for irrigation works was as under:

|                           |    |                  |
|---------------------------|----|------------------|
| Medium Irrigation Schemes | .. | Rs. 243.93 lakhs |
| Minor Irrigation Schemes  | .. | Rs. 123.09 lakhs |
| Total                     | .. | Rs. 367.02 lakhs |

### INDUSTRIAL DEVELOPMENT

A number of important steps have been taken to promote development of industries in the State. Several boards (such as the Industrial Development Board, Small-Scale Industries Advisory Board and the Industrial Planning Board) have been set up to accelerate the process of Industrial development.

The Financial Corporation has been set up to finance enterprises in the State.

As many as 20 Industrial Estates have been established in important towns to provide suitable accommodation, water and power supply to the prospective entrepreneurs. About 80 units have so far come up in these Estates and more are being set up. A State Board for Khadi and Village industries has been re-constituted which is assisting 80 societies and various individuals, providing employment to over 2,000 persons.

A scheme for the revival of Kani Shawls and training facility centres for carpet industry, carpentry and various other lines of handicrafts and handlooms have been set up.

#### Power Generation:

The total installed generation capacity in the State on the eve of independence was only 4.00 MWS and in 1965-66 it rose to 36.52 MWS. The generating capacity at Ganderbal and Mohara Power Stations has been augmented by 9,000 and 6,000 KWS respectively. The lower Jhelum project will have an installed capacity of 64 MWS in the first phase and 112 MWS in the final stage.

The Hydro-electric Station at Bhaderwah was commissioned during the year 1964-65 providing power to Udhampur and Doda Towns.

The Hydro Electric Project at Chenani stands approved for the generation of 23.3 MWS at an estimated cost of Rs. 648 lakhs to meet the power shortage in Jammu Province. Work on the project is in progress and the power plan is scheduled to be completed by 1969-70.

#### Tourism:

Greater attention was devoted to the development of Srinagar, Pahalgam, Gulmarg and Kokernag from the point of view of tourism.

Places of pilgrimages, such as Shri Vaishnodeviji in Jammu and Shri Amarnathji in Kashmir, being very popular among Indian tourists, have been made accessible as far as possible. Other places of pilgrimage like Samadhi Baba Jitto, Jhiri, Sukrala Devi, Purmandal and Martand have also been made easy of reach to the tourist-cum-pilgrim. Accommodation facilities have also been provided at these spots as in other places of pilgrimage. During 1966-67, Kashmir State plans to spend Rs. 34 lakhs on the expansion of tourist facilities.



## EDUCATION

Education is free from primary to post-graduate standard. A special feature of the educational programme has been the opening of more elementary schools in order to universalise education in the State. In the State there were 5,268 primary schools, 977 middle, 366 high and higher secondary schools in Aug. 1966. A number of existing secondary schools have been converted into Higher Secondary Schools. Teaching of science has been introduced in a large number of High Schools especially in rural areas.

Apart from three aided institutions, the number of colleges in the State is 16.

Two Post-graduate Teachers' Training Colleges were established, one each at Srinagar and Jammu. As many as 200 graduates are being trained annually in those institutions. During the Third Plan period 10 training schools for teachers have been established in the State.

A provision of Rs. 15 lakhs was made in 1965-66 for promotion of social education in the State and 943 social education centres were opened. There was also a provision of Rs. 25.67 lakhs for promotion of N.C.C., sports, scouting, etc. The strength of the N.C.C. in the State at present is 19,310 Cadets.

An outlay of Rs. 145 lakhs was provided in the 3rd Five Year Plan for technical education. There are at present one polytechnic, each at Jammu and Srinagar, one Regional Engineering College, one Medical College and seven Industrial Training Institutions.

## ROAD

At the end of the Third Five Year Plan the mileage of roads in the State was 3,427 including 1,190 miles of bridle paths and jeepable roads.

## PUBLIC HEALTH

The per capita expenditure on public health has gone up from 47 paise in 1947 to Rs. 4.80 at present. The budget provision for public health in 1965-66 was Rs. 272 lakhs.

There are 20 hospitals in the State excluding military hospitals. The total bed-strength in the hospitals at present is 3,814 as against 600 in 1947.

The number of dispensaries and primary health centres has risen to 600 in 1965-66 as against 87 in 1947-48. The district hospitals have adequate arrangements for anti-rabies, pathological, gynaecological, surgical, laboratory and dental treatment. The number of Family Planning centres as on Aug. 1966 was 15.

## CO-OPERATIVES

Over 38 per cent of the rural population in the State are covered by the Agricultural Credit Co-operative Societies. These co-operatives cover as many as 6,559 villages and 5,92,400 rural families.

Besides, the agricultural credit and consumer co-operatives, various other co-operatives, such as Fishermen Co-operative Society, Transport Co-operatives, Milk Supply Society, Industrial Co-operatives etc., have sprung up in recent years to help in the co-operative endeavour.

At present there are 906 Agricultural Credit Co-operatives in the State engaged in dispensing short and medium-term credit, supply of fertilizers and basic consumer goods and marketing of food-grains and fruits including walnuts. The membership of these Societies is about 2.56 lakhs.

There are three Central Co-operative Banks and one State Co-operative Bank in the State for financing the Co-operatives of various types.

In the Industrial sector Co-operatives for Handlooms, Handicrafts and Oil Ghanies have been organised. They provide work to about 2,500 artisans and craftsmen. The following table shows the working and financial position of the Societies :

|                | No. of Societies | Member-ship | Value of goods produced | Value of goods sold |
|----------------|------------------|-------------|-------------------------|---------------------|
| Handicrafts .. | 18               | 766         | 7,42,572                | 7,37,257            |
| Handloom ..    | 19               | 388         | 6,07,587                | 6,44,608            |
| Oil Ghanies .. | 77               | N.A.        | N.A.                    | N.A.                |
| Others ..      | 29               | 1,756       | 23,842                  | 32,842              |

To facilitate the marketing of products of Handicrafts Co-operatives, a Federation named as Kashmir Arts Co-operatives is functioning at Srinagar which in collaboration with the Indian Co-operative Union arranges the sale of the products of its constituents within the State and outside. Likewise Marketing Federations—one for Kashmir and one for Jammu—have been organised for Handloom viz. the J & K Handloom Fabrics Co-operatives and Industrial Association respectively.

## HOUSING

Under the 3rd Plan, the scope of housing was extended to cover the Subsidized Industrial Housing Scheme, the Rural Housing Scheme, the Land Acquisition and Development Scheme and the Middle-Income Group Housing Scheme.

Under the Low Income Group Housing Scheme, the physical achievements were 1,128 houses against the target of 1,000.

## FIVE YEAR PLANS

The total investment of the first three Five Year Plans has been of the order of about Rs. 112 crores which includes the total outlay of Rs. 75 crores of the 3rd plan. The size of the Fourth Plan has been fixed at Rs. 128 crores against an outlay of Rs. 164 crores proposed by the State.

## CONSTITUTION

A Constitution was finally approved and adopted unanimously on November 17, 1956. It came into effect on January 26, 1957.

The Constitution declares the State of Jammu and Kashmir to be "an integral part of the Union of India." This is irrevocable. Section 147 of the Constitution lays down that no amendment seeking a change in this can be moved in either House of the legislature.

With the adoption of the Constitution, the State has come much closer to the rest of the country. Having entered into financial arrangements with the Union Government in 1957, the State is on par with other States in respect of financial matters including proportionate allocation of funds from the Centre. The development schemes and projects under the Five Year Plans are being approved by the Planning Commission and expenditure on them is sanctioned on the recommendation of the Commission. Every major project is examined by various Central agencies like the Central Water and Power Commission and Working groups of Central Ministries and the Planning Commission to ascertain their technical and economic feasibility.



A State cadre of IAS and IPS officers has been created. This has brought about the integration of services ensuring the sharing and pooling of experience and talent. The State's participation in the Northern Zonal Council has widened the area of co-operation with other States leading to greater exchange of experience, technical know-how and pooling of administrative and other resources in various fields of development. The Accounts and Audit department of the State is now under the Auditor-General of India.

In 1959, the State Assembly unanimously decided to seek amendment of the State's Constitution to provide for the extension of the jurisdiction of the Election Commission and the Supreme Court over Jammu and Kashmir. The recommendations of the State Legislature have been incorporated in the Indian Constitution through a Presidential Order issued on January 26, 1960.

An Act passed by the Legislative Assembly of the State authorises the Government to permit those non-State subjects to purchase land and other immovable property in Jammu and Kashmir who intend to set up industries in the State. The Government of Jammu and Kashmir have also entered into agreement with some Indian firms to establish industrial enterprises in the State. There is no ban now on the investment of outside capital in Jammu and Kashmir. In addition to the Constitutional and economic integration, the Government of Jammu and Kashmir is also endeavouring to foster cultural and literary synthesis between Kashmir and the rest of the country.

#### JAMMU AND KASHMIR STATE FINANCIAL CORPORATION

(See "State Corporations.")

## KERALA

**CAPITAL:** Trivandrum. Area: 15,002 sq. miles. Coastal line: 360 miles. Total population: 16,903,715 (1961 census). Density of population (1961): 1,127. Sex ratio: 1,022 females per 1,000 males. Literacy per 1,000: 468.

Figures for March 31, 1961: Number of districts 9; taluks 55; villages 1,635; municipal towns 27; corporations 2; panchayats 922.

Names of Districts with names of District Headquarters within brackets: Trivandrum (Trivandrum); Quilon (Quilon); Kottayam (Kottayam); Alleppey (Alleppey); Trichur (Trichur); Cannanore (Cannanore); Kozhikode (Kozhikode); Palghat (Palghat); Ernakulam (Ernakulam).

For population of districts according to the 1961 census, see "Population."

**Geography:** The climate of the whole region is generally temperate and the rainfall heavy. Languages spoken in the State are Malayalam, Tamil and Kannada.

#### INDUSTRIES

**Important industries of the State:** Coir, textiles, tea, rubber, manufacture of bricks and tiles, cashew nut processing, printing, saw milling including plywoods and manufacture of splints and veneers for matches, rice milling, handloom, handicrafts and extraction of oils.

#### THE UNIVERSITY OF JAMMU AND KASHMIR

*Chancellor:* Dr. Karan Singh Ji, Governor.

*Pro-Chancellor:* G. M. Sadiq, Chief Minister.

*Vice-Chancellor:* T. M. Advani.

*Registrar:* Abdul Aziz.

Number of affiliated colleges and oriental institutions: 34.

Number of students who appeared for the previous examinations in 1962-63: Men 19,216; Women 5,397.

*Budget for 1963-64:*

Actual Income: Rs. 18,84,299; Actual Expenditure: Rs. 28,67,037.93; State Govt. grant: Rs. 3,00,000.00; Central Govt. grant and U. G. C. grant: Rs. 8,65,789.60.

The medium of instruction is English except in classical and modern Indian language classes, where the medium of instruction is the language concerned or an allied language.

#### ASSOCIATIONS

JAMMU & KASHMIR PRADESH YOUTH CONGRESS  
Lall Chowk, Srinagar.

BEOPAR MANDAL  
Sri Runbir Gunj, Srinagar 2.

KASHMIR CHAMBER OF COMMERCE & INDUSTRY  
Residency Road, Srinagar.

*President:* S. K. Kaul; *Vice-President:* R. K. Sawhney;  
*Secretary-General:* P. N. Puri; *Jt. Secretary-General:* Mohamed Shafi; *Treasurer:* D. S. Oberoi.

**Main large-scale industries of State:** Rubber, plywood, fertilisers and chemicals, rayons, glass, paper, aluminium, sugar, cement, textiles, titanium dioxide, soaps, shark liver oil, ceramics, rare earths and engineering cables, penstock, wire ropes, heavy transformers, spinning mills, D.D.T., machine tools & Petroleum products.

**Chief products of the large-scale industries of the State:** Chemicals, ammonium sulphate, ammonium chloride, ammonium phosphate, superphosphate, sulphuric acid, ammonia, caustic soda, chlorine, calcium carbide, copper sulphate, titanium dioxide, rare earth salts, cycle rims, crockery and sanitary wares, electric porcelain, fire bricks, china clay, rayon grade pulp, sugar, etc.

**Miscellaneous:** Aluminium ingots, glassware, cement, rayon, transparent paper, vegetable oils and soaps, vanaspati, alcohol, pharmaceuticals, galenicals, plywood, ceramicware, rubber goods, paper, cotton textiles and engineering materials, agriculture implements, dyeing and printing, manufacture of jewellery, canning and preservation of fish, starch, cutlery, locks, rubberised coir products, cycle parts and sewing machines.

The Third Plan Schemes for industrial development in Kerala are under two separate sectors, viz., the Central Sector and the State Sector.

According to available information, the Central Government was to locate five public sector projects in



Kerala during the 3rd Plan period. They are : the Second Ship-building Yard at Cochin at a cost of Rs. 20 crores ; a Forme Press at Koratti ; a Precision Instrument Factory in Palghat District ; Hindustan Machine Tool Factory at Ernakulam at a cost of Rs. 7½ crores ; and Oil Refinery at Cochin, Ernakulam District, at a cost of Rs. 22.75 crores. HMT, and Cochin Refineries have gone into production. During IV Plan period, besides the Shipyard and the Precision Instruments Factory, the Cochin Fertilisers (Cochin), Hindustan Latex (Trivandrum) will be taken for implementation.

The industrial programme under State sector, entailed a total estimated outlay of Rs. 1,719.50 lakhs in the Third Plan. The break-up between different industries in Rs. lakhs is as given below : Large and Medium Industries in Public Sector 174.50 ; Large and Medium Industries in Private Sector 280.00 ; Plantation Industries 465.00 ; Handloom Industries 165.00 ; Small Scale Industries 255.00 ; Industrial Estates 125.00 ; Handicrafts 35.00 ; Coir Industry 175.00 ; Sericulture 5.00 ; Khadi and Village Industries 40.00.

Preference has been given under the public sector to the expansion and modernisation of the existing industrial units. The reorganisation and expansion of (i) the Kerala Soap Institute, Calicut, (ii) the Government Oil Factory, Calicut, (iii) the Government Ceramic Concern, Kundara, (iv) the Travancore Rubber Works, Trivandrum, (v) the Cycle Rim Factory, Trivandrum, (vi) the Government Spinning Mill, Trivandrum, and (vii) the Electrical and Allied Industries, Kundara are those included in the Plan.

Under the Private Sector, the Kerala State Industrial Development Corporation (KIDC) has been organised to help capital formation in respect of deserving enterprises. The Corporation has undertaken to offer financial and technical services to industrialists for setting up industries.

**Plantation Industry :** With a view to reducing the import of rubber, an ambitious programme for the development of rubber plantation industry has been included in the Third Plan for the State. The programme of development comprises planting by Government and individuals and encouraging distribution of loans to auction purchasers of forest lands.

A trading and export corporation will also be established for the procurement and storage of ginger.

**Village and Small Industries :** To promote the growth of industries in the rural and underdeveloped areas, a scheme of giving subsidies to small scale industrialists starting industries in such areas, has been drawn up. The Kerala State Small Industries Development Corporation have taken up works in connection with the above programmes.

**Industrial Estates :** In order to provide factory accommodation to small scale industries nine units of Small Industrial Estates costing Rs. 5 lakhs each are being constructed in or near towns having a population between 5,000 to 20,000 and also a medium Industrial Estate costing Rs. 15.00 lakhs is under construction at Umayanellore in Quilon District. Further, action has been taken to establish a Marine Industrial Estate in Ernakulam District to establish a few Small Scale units with the collaboration of the Norwegian Agency for International Development. In addition to these programmes, 25 Nos. of workshed units are being implemented in the Community Development Blocks of the State where there are village artisans employed on traditional trades. Eighteen Industrial Estates (two in each district) are in different stages of implementation in the State. Fourteen of these have been completed and the rest are reaching completion. Of these estates the one at Changanacherry is exclusively for starting rubber

and plastic based industries. More than 30 such units have been sponsored. They are expected to go into production shortly. A common facility centre with testing, training and library facilities is also organised there to cater to these industries.

A total amount of Rs. 47.29 lakhs has been set apart for development area and development plots in cities for the assignment of suitable sites to the entrepreneurs with all facilities like, water, transport, communications, etc. leaving the entrepreneurs to construct the factory sheds on their own subject to the minimum approved standards in the "development areas" covering about 450 acres at Aroor and 150 acres at Ankamaly, 450 acres in Alwaye, 109 acres in Trivandrum and 200 acres in Palghat.

**Handicrafts :** Brass and bell metal work, handloom furnishing fabrics and lace cloth, screwpine, kora grass and palmyra leaf weaving, rattan work, kuft gari, bamboo and reed weaving, Kathakali costumes manufacture, traditional folk jewellery making, Aranmula Metal Mirror making, laminated woodwork, toys and dolls making, lace and embroidery, lacquerware, ivory, horn, wood, coconut shell carvings, etc. are the important handicrafts of this State. There are about 15,000 persons employed in 3,000 establishments in these crafts. There are about 300 Handicraft Co-operatives in the State. It was proposed to organise 100 Co-operatives more during the Third Plan period and develop 30 societies on an intensive basis.

**Handloom Industries :** Total No. of looms in the State : 1,20,000 ; Total No. of looms in the Co-operative fold (Regd.) as on March 31, 1966 : 45,401 ; Total No. of looms registered outside Co-operative fold as on March 31, 1966 : 63,596 ; Total No. of societies in the State as on March 31, 1966 : 404 ; Total No. of society members as on 30th June 1966 : 270 ; Total No. of individual members as on 30th June 1966 : 52,501 ; Total paid-up share capital as in June 1966 : Rs. 43,13,000 ; working capital as in June 1966 : Rs. 1,82,46,000 ; Total production in metre on June 30, 1966 : 2,06,67,000 (valued at Rs. 2,22,66,000) ; Financial target fixed for Third Five Year Plan : Rs. 1,65,00,000. Total expenditure during Third Plan : Rs. 1,39,94,888.

**Cashew Industry :** There are about 250 cashew processing factories in India of which nearly 75 per cent are in Kerala, employing more than a lakh workers.

From paltry 50 tons in 1925 production of cashew kernels has rapidly risen to over 55,000 tons in 1963. Export during 1963 reached an all time record of 53,000 tons yielding foreign exchange to a tune of Rs. 21½ crores. Cashew-nut shell liquid also contributes to India's foreign exchange earnings to the extent of over Rs. 1 crore.

---

## SEWING & EMBROIDERY THREADS MANUFACTURERS

J. & P. COATS ( INDIA ) PRIVATE LTD.  
Koratti, Kerala ( S. India )

---

**Coir Industry :** The important items in the programme will be the organisation of primary coir co-operatives, coir marketing societies, and societies for the manufacture of mats and mattings, ropes, bristle and mattress fibre. A model coir factory has already been organised at Beypore to modernise the manufacturing side of the coir industry.



The provision for coir development for the Third Plan period was Rs. 175 lakhs.

*Sericulture* : Third Plan provided Rs. 5 lakhs for the expansion of the Sericulture Farm at Ambalavayal in Wynad area.

*Khadi and Village Industries* : The Kerala Khadi and Village Industries Board was constituted in August 1957 so as to help the villagers in organising co-operatives and to give loans and grants and other technical assistance for the development of Village and Cottage Industries such as Khadi and Ambar, village oil, hand-pounding of paddy, village pottery, non-edible oil soap, handmade paper, gur khandsari, bee-keeping, village leather, palm gur, fibre, carpentry, blacksmithy, etc. The implementation of Khadi and Village Industries schemes would provide employment to not less than 32,767 persons full time and 13,239 part time. About 820 co-operative societies have been registered for Khadi and Village Industries. To facilitate the marketing of the products of these industries a Central Marketing Society will also be organised. The total provision made during the Third Plan period was Rs. 40 lakhs.

*Chief minerals produced in the State* : The beach sands contain the much valued and strategic mineral monazite besides five others of great economic value namely ilmenite, rutile, sircon, sillimenite and garnet. The extensive white clay deposits contribute to the ceramic industry. Other minerals available are mica, graphite, limestone, quartz-sand and lignite.

Substantial white sand reserves suitable for glass manufacture have been found in some places of Alleppey and Ernakulam Districts. Deposits of Kaolin have been found in Kundara, Quilon District and several other places in the districts of Trichur and Cannanore.

### LABOUR

*Names of industries in which a minimum wage is fixed* : For the whole State : Rice mill, flour mill or dal mill, beedi making, cigar making, plantations (coffee, tea, rubber & cardamom), oil milling, local authorities (municipalities, Panchayats and Trivandrum Corporation), construction and maintenance of roads and buildings, stone breaking and crushing, public motor transport, tanneries & leather manufacture, match industry, shops and establishments including hotels and restaurants, cashew factory, tile industry, printing presses, timber industry, toddy tapping, agriculture, coir manufacture and plywood.

*Revision of minimum wages* : Agriculture (1-12-1964) ; Rice mill (1-5-1964) ; Tanneries and leather (1-12-1964) ; Tiles (1-4-1965) ; Public Motor Transport (1-2-1965).

Beedi and Cigar (1-2-1966) ; Panchayat Contingent Employees Services (1-8-1964).

Plantation (1-3-1965) ; Cashew (1-9-1964) ; Coir (24-12-1964) ; Toddy Tapping (18-4-1966).

Number of registered factories in the State as on 31st December 1964 : 2,707 ; Number of working factories which submitted the annual returns : 1,496 ; Average daily employment in the working factories submitted returns : 101,351. Total average daily employment in all the registered working factories (estimated) 1,86,147.

Number of accidents in registered factories during 1964 (including fatal cases) : 2,158.

Number of fatal accidents : 18.

Number of registered Trade Unions as on 31st March 1965 : 1,730.

### PARTICULARS OF WORKSTOPPAGES (1964)

| Industry   | By Causes             |       |       | DETAILS OF WORKSTOPPAGES |              |        |                                  |                         | RESULT                    |            |              | METHODS OF SETTLEMENT |            |              |                    |              |           |    | No. of strikes continuing from Dec. 63 to Jan. 65 | No. of strikes continued included in Col. 3 | No. of token strikes | Others |  |
|------------|-----------------------|-------|-------|--------------------------|--------------|--------|----------------------------------|-------------------------|---------------------------|------------|--------------|-----------------------|------------|--------------|--------------------|--------------|-----------|----|---------------------------------------------------|---------------------------------------------|----------------------|--------|--|
|            | Total No. of disputes | Wages | Bonus | Working condition        | Retrenchment | Others | No. of workers normally employed | No. of workers affected | Total No. of mandays lost | Successful | Unsuccessful | Partially successful  | Indefinite | Conciliation | Direct negotiation | Adjudication | Mediation |    |                                                   |                                             |                      |        |  |
| Total      | 200                   | 77    | 27    | 9                        | 6            | 81     | 1,18,346                         | 1,02,114                | 9,25,605                  | 96         | 12           | 46                    | 22         | 54           | 52                 | 7            | 46        | 17 | 20                                                | 4                                           | 5                    |        |  |
| Plantation | 43                    | 15    | 3     | 2                        | 3            | 20     | 32,733                           | 25,225                  | 3,41,388                  | 16         | 2            | 10                    | 6          | 8            | 16                 | 1            | 5         | 4  | 8                                                 | 1                                           | 1                    |        |  |
| Tiles      | 40                    | 4     | 10    | 2                        | 1            | 23     | 11,965                           | 11,021                  | 66,831                    | 25         | 1            | 7                     | ..         | 17           | 7                  | ..           | 8         | 1  | 5                                                 | 2                                           | ..                   |        |  |
| Textiles   | 12                    | 5     | 2     | 1                        | 1            | 3      | 6,388                            | 5,363                   | 1,10,239                  | 2          | 2            | 3                     | 2          | 2            | 3                  | ..           | 2         | 2  | 2                                                 | 1                                           | 1                    |        |  |
| Coir       | ..                    | ..    | ..    | ..                       | ..           | ..     | ..                               | ..                      | ..                        | ..         | ..           | ..                    | ..         | ..           | ..                 | ..           | ..        | .. | ..                                                | ..                                          | ..                   |        |  |
| Saw mill   | 10                    | 4     | 1     | ..                       | ..           | 5      | 1,352                            | 1,352                   | 26,559                    | 8          | ..           | 1                     | 1          | 3            | 2                  | ..           | 4         | 1  | ..                                                | ..                                          | ..                   | 1      |  |
| Cashew     | 14                    | 6     | ..    | 3                        | ..           | 5      | 10,404                           | 9,231                   | 55,879                    | 8          | 6            | ..                    | ..         | 3            | ..                 | ..           | 8         | 3  | ..                                                | ..                                          | ..                   | ..     |  |
| Others     | 81                    | 43    | 11    | 1                        | 1            | 25     | 55,504                           | 49,922                  | 3,24,709                  | 37         | 1            | 25                    | 13         | 21           | 24                 | 6            | 19        | 6  | 5                                                 | ..                                          | ..                   | 2      |  |



**Kerala Labour and Industrial Bureau :** The Bureau will promote and co-ordinate research in labour and industrial problems, including organisational and administrative aspects. It will also foster the application of research in the development of commerce, trade and industry and for the fruitful utilisation of natural resources in the industrialisation of the State.

The Bureau has initiated an 'industry study series' intended to give wide knowledge of the problems of industrial development in general and more in particular of those concerning the economy of Kerala.

**Equipment :** Ploughs (wooden : 562,281 ; iron : 6,441) ; carts : 21,040 ; sugarcane crushers (power 175 ; bullocks 1,071) ; oil engines : 3,372 ; electric pumps : 2,565 ; tractors : 276 ; Ghoris (more than 5 seers : 2,058 ; less than 5 seers : 2,164).

### LIVESTOCK 1961

(See under main article "Livestock")

### AGRICULTURE

Of the total population 53.6 per cent depend upon agriculture, though the per capita extent of cultivated

land is only 30 per cent. The non-agricultural population is about 6.3 millions.

**Foodcrops :** Rice, jowar, ragi, other cereals and millets, tur, other pulses, sugarcane, pepper, chillies, ginger, turmeric, cardamom, betelnut, mango, citrus fruits, banana (including plantain), cashewnut, tapioca, sweet potato and onion.

Main cash crops of the State : Coconut, Arecanut, Tea, Coffee, Cardamom, Rubber, Pepper, Gingelly, Cotton, Turmeric, Sugarcane, Ginger, Lemon grass, Groundnut, Cashewnut.

### PEST CONTROL (INDIA) PRIVATE LTD.

Consulting Entomologists—Termite Control  
Disinfestation—Fumigation Service.

Address : XXIII/13166-C, Mahatma Gandhi Road,  
Ernakulam-6.

Head Office : Yusuf Building, Mahatma Gandhi  
Road, Bombay-1.

For further details please see Bombay  
Commercial Firms Section.

### AREA, PRODUCTION AND AVERAGE YIELD OF IMPORTANT CROPS IN KERALA FOR 1964-65

| Name of Crops                             | 1964-65                  |                           |                                           |                      | Remarks | 1963-64                  |                           |                                           |
|-------------------------------------------|--------------------------|---------------------------|-------------------------------------------|----------------------|---------|--------------------------|---------------------------|-------------------------------------------|
|                                           | Area<br>(in<br>Hectares) | Produc-<br>tion<br>(Tons) | Average<br>yield per<br>Hectare<br>(lbs.) |                      |         | Area<br>(in<br>Hectares) | Produc-<br>tion<br>(Tons) | Average<br>yield per<br>Hectare<br>(lbs.) |
| 1. Rice .. ..                             | 8,01,121                 | 11,21,383                 | 2,131                                     | ..                   | ..      | 8,05,084                 | 11,28,003                 | 2,133                                     |
| 2. Other cereals &<br>Millet .. ..        | 6,720                    | 3,128                     | ..                                        | ..                   | ..      | 6,728                    | 3,236                     | ..                                        |
| 3. Pulses .. ..                           | 43,595                   | 17,061                    | ..                                        | ..                   | ..      | 43,852                   | 17,127                    | ..                                        |
| 4. Sugarcane .. ..                        | 9,510                    | 44,034                    | 4,630                                     | (Gur)                | ..      | 9,486                    | 44,089                    | 4,648                                     |
| 5. Ginger (Dry) .. ..                     | 11,973                   | 11,328                    | 946                                       | (Dry)                | ..      | 11,958                   | 11,291                    | 944                                       |
| 6. Turmeric (Dry) .. ..                   | 4,614                    | 3,910                     | 847                                       | (Cured)              | ..      | 4,615                    | 3,912                     | 847                                       |
| 7. Bananas (Including<br>Plantains) .. .. | 45,199                   | 78,135†<br>2,63,251‡      | 7,286<br>7,636                            | (Raw)<br>(Plantains) | ..      | 43,141                   | 3,25,813                  | 7,286                                     |
| 8. Tapioca .. ..                          | 2,09,371                 | 27,63,197                 | 13,198                                    | ..                   | ..      | 2,09,906                 | 25,23,574                 | 12,022                                    |
| 9. Sesamum .. ..                          | 12,007                   | 2,399                     | 200                                       | ..                   | ..      | 11,991                   | 2,596                     | 216                                       |
| 10. Groundnut .. ..                       | 14,523                   | 21,838                    | 1,504                                     | ..                   | ..      | 14,512                   | 20,774                    | 1,431                                     |
| 11. Black pepper .. ..                    | 99,552                   | 22,228                    | 223                                       | ..                   | ..      | 99,382                   | 22,423                    | 225                                       |
| 12. Cashewnut .. ..                       | 85,974                   | 96,463                    | 1,122                                     | ..                   | ..      | 82,368                   | 92,312                    | 1,121                                     |
| 13. Cardamom .. ..                        | 28,684                   | 1,606                     | 56                                        | (Cured)              | ..      | 28,683                   | 1,283                     | 45                                        |
| 14. Coconut .. ..                         | 5,58,991                 | 3,278*                    | 5,864                                     | (Nos.)               | ..      | 5,44,986                 | 3,262                     | 5,985                                     |
| 15. Betelnuts .. ..                       | 59,488                   | 8,945*                    | 1,50,366                                  | (Nos.)               | ..      | 56,695                   | 8,522                     | 1,50,311                                  |
| 16. Cotton .. ..                          | 8,695                    | 9,851**                   | 204                                       | ..                   | ..      | 7,962                    | 7,932                     | 179                                       |
| 17. Tea .. ..                             | 39,356                   | 42,075                    | 1,069                                     | ..                   | ..      | 38,405                   | 41,039                    | 1,068                                     |
| 18. Coffee .. ..                          | 21,733                   | 9,685                     | 446                                       | ..                   | ..      | 20,021                   | 8,568                     | 428                                       |
| 19. Rubber .. ..                          | 1,46,952                 | 40,065                    | 273                                       | ..                   | ..      | 1,42,906                 | 33,790                    | 236                                       |
| 20. Tobacco .. ..                         | 705                      | 920                       | 1,305                                     | ..                   | ..      | 704                      | 920                       | 1,306                                     |

Classification of area in hectares as on 30th June 1965 : Forests 10,51,708 ; Barren and uncultivable land 1,15,941 ; land put to non-agricultural uses 2,21,887 ; cultivable waste 1,18,761 ; permanent pastures and grazing lands 34,435 ; land under miscellaneous crops not included in net area sown 2,08,928 ; fallow and other current fallows 34,124 ; net area sown 20,37,010 ; area sown more than once 4,52,437 ; total cropped area 24,89,447 ; net area irrigated 3,51,640 ; gross area irrigated 4,94,095.

Total number of rubber, coffee and tea plantations : Rubber 70,807 (as on 31st Dec. 1964) ; Tea 2,118 (as on 31st Dec. 1963) ; Coffee 14,152 (as on 30th June 1965).

\* Million nuts.

\*\* Bales of 180 kgs. each.

† Banana.

‡ Plantain.

### LAND REFORMS

The Kerala Land Reforms Act has come into force.

**Foreign Aid :** The Swiss Government will grant 1,640,000 Swiss francs for carrying out the first stage of a farming development project in Kerala which has been located in the High Ranges.

### FISHERIES

See article on 'Fisheries' for details.

### FORESTS

The figures relate to 1964-65.



Total forest area in State : 4,088 sq. miles 140 acres; Reserved forests 8,833 sq. K.M. 38.6 Hectares; reserved lands 142 sq. K.M. 65.8 Hectares; proposed for fuel and fodder reserves 1 sq. K.M. 16.5 Hectares; private forests proposed to be acquired 612 sq. miles approximately or 1,590 sq. K.M.

Location of forests : The main forest tract lies north to south, along the Western Ghats, forming the eastern boundary of the State.

Revenue from the forests : Rs. 5,23,66,036; expenditure : Rs. 1,35,61,607.

Main forest produce : Timber, firewood, bamboos, reeds and ivory.

Quantity of each variety : Timber (round logs) 2,84,662 cum.; Poles 2,49,581 nos.; Firewood 1,35,403.756 tons; Bamboos 90,34,460 nos.; Charcoal 58,690 bags; Ivory 1,342.026 kgms.

## TRANSPORT

Total mileage of roads : 10,739.

Metalled roads including special surfaced roads under P.W.D. control : 6,711 miles.

National highways : 280 miles.

Total mileage of waterways : 1,116 miles (Navigable length of rivers 521 miles; navigable length of canals and cross canals 595 miles).

Total number of aerodromes : Two.

*Particulars of Ports* : Major Ports : 1—Cochin; Intermediate ports : 2—Alleppey and Calicut; Minor Ports : 9—Trivandrum, Quilon, Koilthottam, Ponnani, Badagara, Tellicherry, Cannanore, Azhikkal and Kasargod.

Number of ports and harbours : 11.

*Railways* (March 31, 1964) : Kilometreage : 886.73. (Broad gauge 553.26 and Metre gauge 333.47).

Number of broadcasting stations : 2.

Kerala State Road Transport Corporation :

Capital invested : Rs. 4,96,88,817 (as on 31-3-1965).

Figures for the following items are as on 31-12-1965 :

Road mileage monopolised : N.A.

Road mileage over which services are operated along with private operators : N.A.

Number of routes : 593.

Route kilometreage : 19,341.

Number of buses owned : 918.

Number of lorries owned : 49

Number of other vehicles : 32.

Total number of employees : 7,855.

Passenger earnings (Dec. 1965) : Rs. 53,46,050.

Kilometres operated per day by buses : 1,80,545.

Kilometres operated per day by lorries : 2,729.

Number of persons transported per day : 4,09,599.

Total amount of goods carried : about 15 lorries of 5 tons each a day.

## POWER PROJECTS

### Projects in Operation

*Pallivasal H. E. Project* : In the high ranges in Devicolum below Munnar. Started in 1940. Installed capacity 13,500 kW. Actual production during 1964-65 : 218 million units.

*Sengulam Hydro-Electric Scheme* : The power station is located at Vellathuval below Pallivasal and is a tail race development of Pallivasal scheme. The installed capacity is 48,000 kW. Production during 1964-65 : 135 million units.

*Poringalkuthu Hydro-Electric Scheme* : The power station is located at Poringalkuthu on the Chalakudy river in Trichur District. The installed capacity now is 32,000 kW comprising four generating sets of 8,000 kW each. Production during 1964-65 : 132 million units.

*Neriamangalam Hydro-Electric Scheme* : The power station is located at Panamkutti on the right bank of the Periyar river. The installed capacity of the station is 45,000 kW comprising 3 generating units each of 15,000 kW. The production during 1964-65 : 229 m. units.

*Panniar Hydro-Electric Scheme* : The power house will be located on the left bank of the Muthirapuzha river almost opposite to the Sengulam power house. The power station has an installed capacity of 30,000 kW comprising two units each of 15,000 kW. Production during 1964-65 : 80.3 million units.

### Projects in Execution

*Sholayar Hydro-Electric Scheme* : This scheme is located on the bank of the Sholayar river, a tributary of the Chalakudy river in Trichur District. The generating station will have three sets each of 18,000 kW capacity. The estimated cost of the scheme is Rs. 650 lakhs. The first unit was expected to be commissioned in April 1966.

*Sabarigiri (Pamba) Hydro-Electric Project* : This envisages development of power from the waters of the Pamba and Kakki rivers. The project works are in progress. The power station will have an installed capacity of 300,000 kW, consisting of six units of 50,000 kW each, involving an expenditure of Rs. 3,640 lakhs.

The project comprises the construction of a 171-ft. high dam across Pamba river, and a 360-ft. high dam across Kakki river, with a saddle dam and inter-connecting tunnel, 10,524 ft. long, between Pamba and Kakki reservoirs.

The head-race tunnel, about 18,000 ft. long, having a capacity of 1,970 cusecs, will take off from Kakki reservoir. Work on the scheme is progressing. The project is being executed with loan from U.S. Aid.

The present installed capacity of the Hydro Electric Stations in the State rose to 192,500 kW. The energy output from the hydro electric station during the year 1963-64 was 762.88 million units.

### Projects of the Third Five-Year Plan

*Idikki H. E. Project* : This is the largest hydro electric scheme planned for execution in the State. The first stage of the scheme estimated to cost Rs. 6,265 lakhs will have an installed capacity of 390 MW, developing firm power of 213 MW at 100 per cent load factor. The scheme after completion will irrigate 115,000 acres in Thodupuzhe, Meenachil and Vaikam Taluks and will be located in the Kottayam and Ernakulam Districts across the Periyar River.

*Kuttiadi H. E. Project* : The project envisages power development from the Kuttiadi river in Malabar area of this State. The scheme estimated to cost Rs. 518 lakhs will contribute 245 million units to the energy potential of the grid. The power station will have an installed capacity of 75,000 kW.

It is proposed to inter-connect the Kerala and Madras power systems through a 220 kV transmission line during the 66-67 Year.

Transmission lines have been constructed in the Malabar area of the State and part of the load in this area is being met from the Kerala grid. Supply is also being received from the Madras State Electricity Board for distribution in the Malabar area.



## IRRIGATION

**Major Irrigation Schemes :** The following are the major irrigation projects :

| Name of Scheme                    |                         |       | Estimated cost in Rs. lakhs | Area to be served in acres |
|-----------------------------------|-------------------------|-------|-----------------------------|----------------------------|
| 1.                                | Malampuzha              | .. .. | 545.00                      | 47,600                     |
| 2.                                | Walayar                 | .. .. | 131.66                      | 8,000                      |
| 3.                                | Mangalam                | .. .. | 106.00                      | 8,000                      |
| 4.                                | Vazhani                 | .. .. | 107.57                      | 8,810                      |
| 5.                                | Peechi                  | .. .. | 235.00                      | 46,000                     |
| 6.                                | Chalakudy (1st stage)   | .. .. | 153.25                      | 28,400                     |
|                                   | (2nd stage)             | .. .. | 60.00                       | 10,000                     |
| 7.                                | Neyyar (1st stage)      | .. .. | 224.00                      | 19,000                     |
|                                   | (2nd stage)             | .. .. | 170.00                      | 10,000                     |
| 8.                                | Gayathri                | .. .. | 220.00                      | 13,500                     |
| 9.                                | Kallada                 | .. .. | 1,290.00                    | 1,30,000                   |
| 10.                               | Pamba                   | .. .. | 384.00                      | 33,000                     |
| 11.                               | Kuttiadi                | .. .. | 496.00                      | 36,000                     |
| 12.                               | Kanjirapuzha            | .. .. | 365.10                      | 24,000                     |
| 13.                               | Chittoorpuzha           | .. .. | 99.17                       | 27,800                     |
| 14.                               | Pazhassi                | .. .. | 442.00                      | 40,000                     |
| 15.                               | Pothundy                | .. .. | 234.25                      | 11,000                     |
| 16.                               | Cheerakuzhy             | .. .. | 47.34                       | 4,000                      |
| 17.                               | Periyar Valley          | .. .. | 640.00                      | 63,300                     |
| <b>Land Development Schemes :</b> |                         |       |                             |                            |
| 1.                                | Thannirmukkom Regulator | .. .. | 150.00                      | 1,21,000                   |
| 2.                                | Kattampally             | .. .. | 52.81                       | 4,000                      |

Of the above schemes Malampuzha, Walayar, Mangalam, Vazhani and Peechi Schemes and the 1st stages of Chalakudy and Neyyar schemes have been fully commissioned.

Besides these, the schemes viz., Chalakudy second stage, Neyyar second stage, Gayathri (Meenkara including Chulliar), Pothundy, Cheerakuzhy and Periyar Valley were started during the Second Five Year Plan and the schemes Chalakudy second stage have been commissioned and Gayathri schemes first stage has been completed. Schemes viz. Chulliar (Gayathri 2nd stage), Neyyar I & II are nearing completion. Both the schemes are in good progress.

Six new projects have been taken up for execution during the Third Five Year Plan and they are Kallada, Pamba, Kuttiadi, Kanjirapuzha, Pazhassi and Chittoorpuzha. Works in the Pamba and Kuttiadi projects have been started and are in good progress. The other schemes are only in the initial stages of execution.

Works relating to the regulator at Thannirmukkom, the Second stage of the Kuttanad Development Scheme and the Kattampally Projects are in progress. When the Second stage of the Kuttanad Development Scheme is completed, an area of about 1,21,000 acres will be benefited in the Kuttanad area.

**Shipyard :** The work on the second shipyard at Cochin is expected to start during the Fourth Plan period.

The Union Government proposes to build at Cochin ocean-going steamers with 20,000-ton displacement.

**Land Tenure :** There are a number of land tenure systems in the State. Janmam lands, Pandaram, Kanapattam, Verumpattam, Adima, Anubhogam, etc., are some of these.

**Panchayati Raj :** Panchayat Raj has started taking concrete shape in Kerala and elected panchayats are now functioning all over the State.

## EDUCATION

Particulars showing the number of schools under each category, and schools run by Government and private bodies respectively within brackets for 1964-65 were as follows :—

Number of students under instruction 40,10,101 (21,73,270 boys, 18,36,831 girls) ; Percentage of the total number of pupils under instruction to the total population : 22.5.

Percentage of literacy (1961 Census) : 46.2.

17.3 lakhs of children participated in the CARE feeding programme and an amount of Rs. 41.8 lakhs has been spent during 1964-65.

Gross expenditure on General education during 1964-65 : Rs. 19,88,35,231.14.

## SPECIAL SCHOOLS

Strength of students in each category of Spl. Schools with classification of boys and girls respectively in brackets are as follows.

Nursery Schools 7,108 (3,703 boys and 3,405 girls) ; Schools for the handicapped 428 (337 boys and 91 girls) ; Training schools 12,757 (5,200 men and 7,557 women).

## DISTRIBUTION OF INSTITUTIONS

Number of educational institutions under each category with number of Govt. institutions in brackets respectively are as follows :

Secondary High schools 1,130 (339) ; Post Basic Schools 3 (—) ; Fishery High Schools 6 (6) ; Anglo Indian High Schools 8 (—) ; Upper Primary Schools 2,339 (710) ; Senior Basic Schools 73 (23) ; Fishery Upper Primary Schools 21 (21) ; Harijan Welfare Upper Primary Schools 4 (4) ; Anglo-Indian Upper Primary Schools 1 (—) ; Lower Primary Schools 6,288 (2,455) ; Junior Basic Schools 370 (177) ; Fishery Lower Primary Schools 28 (28) ; Harijan Welfare Lower Primary Schools 244 (238) ; Basic Training Schools 104 (31) ; Anglo Indian Training Schools 1 (—) ; Nursery Training Schools 3 (3) ; Pre-Primary Schools 136 (22) ; Fine Arts (Music & Dancing) 2 (2) ; Schools for the Handicapped 7 (5) ; Drawing and Painting Schools 1 (1) ; Hindi Training College 1 (1) ; Post Graduate B.T. College 1 (1) ; Total 10,770 (4,067).

For educational statistics see under "Education".

Total number of arts and science colleges (Govt.) as of December 1965 : 10 ; Govt. Training Colleges 4 ; Govt. Physical Education Colleges 2 ; Govt. Sanskrit Colleges 3 ; Govt. Music College 1 ; Govt. Music Academies 2.

No. of technical institutes in Kerala State under the Directorate of Technical Education : *Public Sector* : Ten. *Private Sector* : Six.

Craft education in various subjects such as bookbinding, cutting and tailoring, coir work, rattan work, gardening, spinning and weaving, fishing, wood work, etc., has been introduced in all the upper primary and secondary schools, the subjects chosen in each school being dependent upon the availability of raw materials and local conditions.

## PUBLIC HEALTH

Figures as on 1-1-1966 :

Number of medical institutions 476 ; Government hospitals 100 ; Govt. dispensaries 218 ; Primary health centres (including M. C. H. Centres) 156 ; grant-in-aid institutions 13 ; secondary health centres 1 ; beds (Govt.) 16,965 ; Beds (grant-in-aid) 1,069 ; out-patients treated 2,24,03,840 ; in-patients treated 7,50,167 ; out-patients



treated in grant-in-aid institutions 2,08,516 ; in-patients treated in grant-in-aid institutions 12,872.

### FIVE-YEAR PLANS

#### Third Plan

Kerala has a Central Planning Advisory Board to advise the Government generally on matters connected with development and planning.

The distribution of the Third Plan expenditure was as follows (Rs. lakhs) :—

Agricultural programmes Rs. 3,171.70 ; Co-operation and Community Development Rs. 1,123.16 ; Irrigation and Power (including Flood control and anti-sea erosion) Rs. 5,919.00 ; Industry and Mining Rs. 1,719.50 ; Transport and Communications Rs. 1,088.00 ; Social Services Rs. 3,826.44 and Miscellaneous Schemes Rs. 152.20.

#### Fourth Plan

A total outlay of Rs. 293 has been approved by the Planning Commission for the Fourth Five Year Plan of Kerala. In addition, centrally sponsored schemes, costing Rs. 10 crores, are likely to be transferred to the State during the Plan period. Kerala's Fourth Plan will thus ultimately be of the order of Rs. 309 crores.

It is estimated that the State's resources during the Fourth Plan will be Rs. 111 crores, including Rs. one crore to be raised by the proposed Cochin Authority, with the assistance of the State Government.

The allocations for main sectors of development, with the total outlay of Rs. 293 crores, are as follows (in crores of rupees) : Agricultural Programmes 56.08 ; Cooperation and Community Development 8.90 ; Irrigation and Power 120.00 ; Industry and Mining 28.30 ; Transport and Communications 18.91 ; Social Services 60.13, and miscellaneous 0.68.

### UNIVERSITY OF KERALA

Trivandrum.

(The University of Travancore was reconstituted as the University of Kerala with effect from 30th August 1957).

Chancellor, Bhagwan Sahay, I.C.S. (Governor of Kerala). Pro-Chancellor, Vacant. Vice-Chancellor, V. Narayana Pillai. Registrar, A. M. N. Chakiar, B.A.

Type of University : Teaching and Federal.

Subjects in which there is provision for post-graduate teaching and or research courses leading to the M.Sc., Ph.D. and D.Sc. Degrees. English, History, Economics, Politics, Philosophy, Psychology, Social Work, Sociology, Education, Mathematics, Physics, Applied Physics, Chemistry, Applied Chemistry, Analytical Chemistry, Botany, Zoology, Statistics, Geology, Home Science, Demography, Malayalam, Sanskrit, Hindi, Linguistics, Marine Biology, Oceanography, Law, Engineering, Medicine, Commerce, Tamil, Agriculture and Veterinary Science.

Number of colleges under the University : Arts and Science Colleges 50. Professional Colleges 34 ; Colleges under the Faculty of Oriental Studies 6 ; Junior Colleges 50.

Total number of students in the University during 1965-66 : 1,14,407 (Men 72,232 ; Women 42,175).

Medium of instruction : English.

Finance :

The year 1964-65 opened with a balance of Rs. 43,32,353. The total receipts during the year, under Govt. grant, fees and miscellaneous accounts amounted to Rs. 1,27,82,388.

The total expenditure during the year under the various heads came to Rs. 1,40,66,828. The closing balance for the year came to Rs. 30,47,913.

### ADMINISTRATIVE PERSONNEL

(See under States Administrative Personnel).

## LACCADIVE, MINICOY AND AMINDIVI ISLANDS

HEADQUARTERS : Kavaratti Island. *Administrator*, C. H. Naire, I.F.A.S.

*Secretary*, P. M. Joseph.

Area : 11 sq. miles ; Pop. : 24,108 (1961 census). Sex ratio : 1,020 females per 1,000 males. Density : 2,192 per sq. mile. Literacy : 23.3 per cent.

| Island    | Area           | Population | Density per sq. mile. |
|-----------|----------------|------------|-----------------------|
| Minicoy   | 1.75 sq. miles | 4,138      | 2,360                 |
| Kalpeni   | 1.02 sq. miles | 2,613      | 3,393                 |
| Androth   | 1.67 sq. miles | 4,183      | 2,504                 |
| Agatti    | 1.08 sq. miles | 2,411      | 2,232                 |
| Kavaratti | 1.35 sq. miles | 2,828      | 2,095                 |
| Amini     | 0.97 sq. mile  | 3,531      | 3,640                 |
| Kadmat    | 1.17 sq. miles | 1,851      | 1,582                 |
| Chetlat   | 0.39 sq. mile  | 953        | 2,451                 |
| Kiltan    | 0.62 sq. mile  | 1,520      | 2,443                 |
| Bitra     | 0.05 sq. mile  | 80         | 1,600                 |

The Laccadive, Minicoy and Amindivi group of Islands form a small sprawling group of coral islands in the Arabian

Sea, lying between the latitudes of 8° and 12° north lat. and they now constitute a Union Territory under an Administrator.

Ten of the islands are inhabited out of a total number of 19. Minicoy, Kalpeni, Kavaratti, Agatti and Androth lie in the Laccadive group and Amini, Kadmat, Kiltan, Chetlat and Bitra in the Amindivi group.

The islands lie from north to south, Minicoy being the southernmost and Chetlat the northernmost. They are within 20 to 114 miles away from one another except Amini and Kadmat which are only six miles apart. The islands lie 125 to 250 miles off the Kerala coast.

Mainly as a result of isolation, the Islanders have remained backward economically. They have been declared 'Scheduled Tribes' but in reality are far more advanced than tribes elsewhere.

The Union Territory is under the jurisdiction of the Kerala High Court.

One member is nominated to the Lok Sabha from the Islands. This seat is to be made elective with passing of the Union Territories (Direct Election to the House of the People) Act of 1965. Elections in the islands will take place in 1967, along with the rest of the country.



## ECONOMY

The main industry on the islands is production of coir.

During the Second Plan about 800 people were trained in improved methods of coir twisting on charkas at the Coir-cum-Training-cum-Production centres. A handloom weaving centre was started at Agatti during 1960-61. A few islanders have been trained in weaving and they produce clothing to meet local needs. An oil mill has been started in Kavaratti under the Co-operative Sector, during 1966. A hosiery factory is to be set up in Kalpeni shortly.

## AGRICULTURE

The only agriculture on the islands is coconut cultivation. Cultivation of coconuts is now done scientifically with departmental advice and direction.

## ANIMAL HUSBANDRY

Six poultry units and a model poultry farm were started during the IIInd Plan. There is a farm and a veterinary hospital at Kavaratti. Good quality bucks are supplied to all islands to improve goat rearing. A Dairy Farm has also been opened in Kavaratti island.

## FISHERIES

Fisheries development has been taken on a fairly big scale. On Minicoy, the bonito or mass fishing forms an important and valuable industry. This industry is being extended to Kavaratti and Agatti Islands.

A small unit for canning tuna was opened at Agatti Island. Another canning unit is expected to be opened at Minicoy shortly.

## CO-OPERATION

All the Islands have now Co-operative Societies, which supply the consumer goods needed by the islanders. They also market the island's products like copra on the mainland markets. During 1964-65 consumer goods worth Rs. 19 lakhs were supplied by the co-operative societies and the total value of copra marketed through them came to Rs. 25 lakhs. A Co-operative Marketing Federation has been registered in 1966 to centralise marketing activities of the various Co-operative Societies in the islands.

## PUBLIC HEALTH

Leprosy is on the increase in two islands, Minicoy and Androth. A leprosy colony started in 1952 at Androth with the aid of a local committee has been taken over by the Government.

In Minicoy too there is a leprosy colony. At Kadmat another colony was started on Sept. 22, 1960. The spread of this dire disease has been brought under control. Filariasis has also been brought under control. A recent survey has shown that the overall rate of filariasis has come down from 14.8 per cent in 1951 to 6.08 per cent.

There are two hospitals at Kavaratti and Minicoy, six Primary health Centres and one Dispensary in the Union Territory at present. Each Island has a Medical Officer. In addition to this, there is one Lady Medical Officer each for Minicoy and Kavaratti and another for the remaining Islands.

Medical aid is free in all the islands. Acute cases which cannot be treated in the islands are brought to the mainland and the patient is provided facilities to get free medical aid and the expenses.

## EDUCATION

There are two high schools, 13 senior basic schools, eight junior basic schools, six feeder schools, six Nursery schools and one single teacher school in the islands at present. A higher secondary school has been started in Kavaratti during 1965-66. When the Administration took over in 1956 there were only nine incomplete elementary schools. From 1,521 students in 1956-57, the strength has increased to 5,200 in 1965-66. The number of teachers has increased from 14 to 232.

Education is free at all stages. For those going to colleges scholarships are given and free boarding and lodging facilities are provided. There are at present 24 scholarship holders for post-matriculate courses of which 11 are for M.B.B.S., two for engineering and two for agriculture.

It is proposed to start one more high school at Androth in 1967.

## TRANSPORT AND COMMUNICATIONS

The normal communication to the islands is by means of island sailing boats during the months of October to May when the islanders buy all their requirements from the mainland and sell their produce especially copra, coconuts, cadjan leaves, vinegar, palm gur, dried fish and coir in the mainland markets. For the rest of the year the islands are practically cut off from any contact with the mainland.

A steamer service has been introduced by chartering two power vessels for service to the islands during fair season. A small power launch has also been purchased by the Administration for inter-island communication of touring officials. It is proposed to buy a more powerful launch for this purpose.

Every inhabited Island has a wireless station except the tiny Island of Bitra where the population is less than 100. Inter-Island communication is rare because the islanders have more contact with the mainland than among themselves.

There are post offices in all the islands and money order facilities have been provided.

## POWER

During the last two years electricity has been introduced in Minicoy, Amini and Kavaratti Islands. It is proposed to electrify all the islands by the end of the Fourth Five-Year Plan. Two more islands viz. Androth and Kalpeni were to be electrified in 1966.

## FIVE-YEAR PLANS

A provision of Rs. 97.96 lakhs was made for development schemes in the Islands during the Third Plan period. An expenditure of Rs. 47.6 lakhs is estimated to have been made during the first three years of the Plan out of the total outlay of Rs. 99.08 lakhs.

The Fourth Plan outlay has been finalised at Rs. 2.26 crores. (*See Fourth Five Year Plan for more details*).



## MADHYA PRADESH

Area : 171,217 square miles.

Population (1961) : 32·37 million. Percentage of increase 1951-61 : 24·17; density 189; sex ratio 953 females for every 1,000 males; literacy 17·1 per cent. For district population see under "Population".

Main languages spoken in the State are : Hindi, Urdu, Marathi, Rajasthani, Gujarati, Sindhi.

### ADMINISTRATIVE SET-UP

For administrative purposes, the State has been split up into seven divisions with a Commissioner at the head of each. The headquarters of each of these are located at Bhopal, Bilaspur, Gwalior, Indore, Jabalpur, Raipur and Rewa. The following are the names in italics of the headquarters of the divisions with the area in sq. miles of each division and names of districts (headquarters in brackets) under their charge :—

- (1) *Bhopal* (22,233) : Raisen (Raisen); Hoshangabad (Hoshangabad); Betul (Betul); Rajgarh (Rajgarh); Shajapur (Shajapur).
- (2) *Bilaspur* (21,305) : Bilaspur (Bilaspur); Raigarh (Raigarh); Surguja (Ambikapur).
- (3) *Gwalior* (17,253) : Gwalior (Gwalior); Bhind (Bhind); Morena (Morena); Shivpuri (Shivpuri); Guna (Guna); Datia (Datia).
- (4) *Indore* (27,341) : Indore (Indore); Ratlam (Ratlam); Ujjain (Ujjain); Mandasaur (Mandasaur); Dewas (Dewas); Dhar (Dhar); Jhabua (Jhabua); West Nimar (Khargone); East Nimar (Khandwa).
- (5) *Jabalpur* (29,326) : Jabalpur (Jabalpur); Balaghat (Balaghat); Chhindwara (Chhindwara); Seoni (Seoni); Sagar (Sagar); Mandla (Mandla); Damoh (Damoh); Narsimhapur (Narsimhapur).
- (6) *Raipur* (30,914) : Raipur (Raipur); Bastar (Jagdalpur); Durg (Durg).
- (7) *Rewa* (22,845) : Rewa (Rewa); Sidhi (Sidhi); Satna (Satna); Panna (Panna); Chhatarpur (Chhatarpur); Tikamgarh (Tikamgarh); Shahdol (Shahdol).

|                          |    |    |    |    |     |
|--------------------------|----|----|----|----|-----|
| Number of Districts      | .. | .. | .. | .. | 43  |
| Number of Tahsils        | .. | .. | .. | .. | 190 |
| Number of Municipalities | .. | .. | .. | .. | 160 |

In the 1967 General Election the Vidhan Sabha will have 296 seats against the original 288 seats.

### PANCHAYATS

The Madhya Pradesh Panchayat Act 1962 envisages a three-tier system of panchayats, viz., Gram Panchayats at Village Level, Janpad Panchayats at Block Level and Zila Panchayats at District Level.

For the purpose of constituting Gram Panchayats, the State has been divided into 12,800 Gram Sabha areas, comprising 1,91,448 wards. The 12,800 Gram Panchayats have already started functioning.

In view of national emergency, the time table for elections to Janpad Panchayats and Zila Panchayats has been kept in abeyance. It is anticipated that ultimately there will be 390 Janpad Panchayats and 43 District Panchayats. In the District of Bastar and Jashpur Tahsil of Raigarh district, 1,251 Adimjatiya Panchayats and 57 Pargana Panchayats on the old pattern are still in existence. The work of constituting Nyaya Panchayats in accordance with the new Act was expected to be completed by the end of August, 1966.

### FOREST

About 2/5th of the State's lands are classed as forest, out of which 66,000 sq. miles are in charge of the State Forest Department for management. Forest area per thousand persons works out to 1,660 acres. Roughly the State contains about 14,500 sq. miles of teak forest, another 16,000 sq. miles of 'Sal' forest and the remaining 35,500 sq. miles of mixed forest, the large area of which may grow teak. Other important species are Bija, Saj, Tinsa, Salai, Semal and Haldu. An amount of Rs. 757·63 lakhs was spent on various forest development schemes during last three Five-Year Plans (1951-56 to 1965-66). An amount of Rs. 13·00 crores is expected to be spent on development schemes during the Fourth Plan period. State trading of tendu leaves has been introduced to augment the revenue. The State forests yielded a revenue of more than Rs. 16 crores during the year 1965-66 as compared to Rs. 6·14 crores in the year 1956-57. It is expected that the revenue may further shoot up to Rs. 25 crores by the end of the Fourth Plan period.

### MINERALS

Madhya Pradesh is a minerally rich State abundant in resources of coal, manganese, limestone, iron-ore, bauxite, clays, ochres, corundum, sillimanite, silicasand, dolomite, steatite (Tale), red oxide of iron ore, mica, graphite, felspar, diamond and lepidolite. Nearly 22 various minerals at present are being exploited from 533 mines. The estimated value of the output of these mines was round about Rs. 30·98 crores in 1965.

Production of different minerals for 1965 are as follows : Iron ore 2·88 million tonnes; Coal 9·131 million tonnes; Manganese 28·77 lakh tonnes; Bauxite 108,317 tonnes; Limestone 3·74 million tonnes; Fire-clay and China-clay 109,310 tonnes; Ochres 16,014 tonnes; Corundum 481 tonnes; Sillimanite 890 tonnes; Silica sand 41,746 tonnes; Dolomite 4·11 lakh tonnes; Steatite 4,545 tonnes; Diamond 4,466 carats; Fluorite 172 tonnes; Asbestos 27 tonnes; Vermiculite 6 tonnes (1964); Lepidolite 9 tonnes (1964); Pyrophyllite 360 tonnes; Felspar 1,201 tonnes; Mica 2 tonnes.

### TRANSPORT (End Dec. 1964)

3,063 passenger buses daily cover 3,17,714 miles on 1,869 routes. The number of goods vehicles registered is 13,032.

### MEDIUM AND LARGE-SCALE INDUSTRY

Main medium & large-scale industries of the State with location in brackets :—

Cotton Textiles (Indore 7, Gwalior 2, Ujjain 4, Mandasaur 1, Dewas 1, Ratlam 1, Bhopal 1, Burhanpur 1, Rajnandgaon 1, Jabalpur 1, Sanawad 1, Khandwa 1); News Print Paper Mill (Nepanagar, Amlai, Sehore); Cement (Banmore, Kymore, Satna, Jamul); Sugar (Jaora, Dalauda, Mehidpur, Dabra, Sehore); Potteries (Gwalior, Ratlam, Jabalpur); Refractories (Jabalpur, Katni, Newar); Iron and Steel (Bhilai); Heavy Electrical equipment (Bhopal); Jute Mill (Raigarh); Art Silk Fabrics (Indore, Gwalior, Nagda); Staple Fibre yarn (Nagda); Viscose Staple Fibre (Nagda); Sulphuric Acid (Nagda, Kumhari); Superphosphate (Kumhari); Carbon-bi-Sulphide and Anhydrous Sodium Sulphate (Nagda); Glue (Bhopal); Asbestos Cement sheets (Katni); Roller Flour Mill (Indore, Bhopal, Ganj Basoda, Raipur); Biscuits (Indore, Gwalior); Textile



Machinery (Gwalior); Welding Electrodes (Raipur); Power Driven Pumps (Dewas); Steel Castings (Indore); Re-rolling Mill (Kumhari; Raipur, Indore, Ujjain, Bangrod); Vegetable Oil (Dewas, Khandwa, Ujjain, Ganj Basoda); Vanaspati (Indore); Alcohol (Ratlam); Valves (Bhopal); Densified Wood (Bhopal). Cables (Satna); Police Boots (Morar-Gwalior); Straw Board (Bhopal, Ratlam); Glass (Jabalpur); Starch (Mandsaur); Gelatine (Jabalpur); Particle Board and Decorative Veneers (Itarsi); Vickey Moped Factory (Gwalior).

The Cotton Textile Industry in the State has 13,175 looms and 5,99,573 spindles in 22 mills (18 composite, 1 weaving and 3 spinning). One composite Textile Mill in the name of Bimal Mills, Ujjain has gone into production having 17,600 spindles and 380 looms. Nimar Textiles Mills at Khandwa having 25,080 spindles has also started production. Two composite cotton mills at Bhind and Bilaspur and one spinning mill at Burhanpur are under construction.

One of the biggest cement factories in the country is situated at Kymore near Katni. Other cement factories are situated at Banmore, Satna and Jamul (Dist. Durg). The sanctioned capacity of all the three existing factories is 16.44 lakh metric tonnes per annum. A cement factory with a capacity of 8,19,000 tonnes per annum is fastly coming up at Jamul, Durg District.

National News Print and Paper Mills Ltd., Nepanagar is working with a capacity of 30,000 tonnes/year. A licence has been given to expand its capacity upto 75,000 tonnes per year of Newsprint. In the private Sector, Orient Paper Mills at Amlai Distt. Shahdol has also started production having a licensed capacity of 48,000 tonnes of pulp and 48,000 tonnes of paper.

The Public Sector Steel Plant, Bhilai has also been licensed to expand the capacity upto 2.5 million tonnes/year.

The State owned projects spinning mill at Sanawad, Solvent Extraction Plant at Ujjain, Alcohol Plant at Ratlam have commenced production and are managed by M.P. State Industries Corporation.

A licence for paper covered Strips factory at Bhopal with a capacity of 1,200 tonnes per year is also under implementation in the public sector.

A Particle Board Factory established at Itarsi has also gone into production.

One Gelatine factory situated at Jabalpur having a licensed capacity of 1,200 tonnes/annum has started production.

First-Vicky Mopeds Scooter factory at Gwalior has been established with German collaboration having a licensed capacity of 15,000 Nos. per year.

The other important industries for which licences have been given under the Industries (Development and Regulation) Act, 1951 for this State are :—

Chlorosulphonic Acid (Kumhari), Coal (Chhindwara), Mining and Quarry Trailing Cables at Satna.

Switch Gears and Transformers (Indore), Dairy machinery (Ujjain), G.L.S. Lamps and Flourescent Tubes (Bagratawa-Distt. Hoshangabad), Industrial Flour Mill Machinery (Gwalior), Co-operative Sugar Mill (Kailaras), L.T.C. Coke, (Burhar).

### COTTAGE INDUSTRIES

The State is also famous for traditional village and home crafts. The Handloom Industry has earned a good reputation for its Chanderi and Maheshwari Saris, Kosa Silk and

other traditional fabrics. The well-known Handicrafts are printing (Chunari, Handa), leather toys, papier maché, lacquerware articles, rag dolls, Sari supari works, soft stone work, Bhopal zari purses, cow dung toys of Sheopur, stone carving at Gwalior, bell metal articles of Jagdalpur, leather crafts, screw pine articles, palm leaf articles, glass bead, lac ornaments and others.

Main Cottage Industries in the State with location in brackets :—Handloom (1,00,000 looms) spread all over the State but best developed at (Chanderi, Maheshwar, Burhanpur, Jabalpur, Raipur and Sausar); Kosa Tussar silk (Raigarh, Champa, Bilaspur, Surguja); Mulberry (Indore, Jhabua, Depalpur, Dhar); Fine sarees (Chanderi, Maheshwar, Burhanpur); Wood work and lacquerware (Sheopur, Sabalgarh, Budhni, Rewa, Gwalior); Wooden toys (Rewa, Bhopal, Gwalior, Ratlam); Soft-stone (Jabalpur, Chhatarpur); Lac (Seoni, Raipur, Bilaspur, Umaria and Rewa); Saw Milling (Betul, Bhopal, Balaghat, Bilaspur, Raipur, Indore, Jabalpur, Sagar and Mandla); Brassware (Balaghat, Chhindwara, Indore, Gwalior, Raipur and Chhatarpur); Textile handprinting (Ujjain, Mandsaur, Morena, Indore, Hoshangabad); Diamond cutting and polishing (Panna); Papier Maché (Gwalior, Ujjain, Indore); Zari embroidery (Bhopal); Art metalware (Bastar, Betul, Hoshangabad, Satna, Mandla).

### LIVESTOCK (1964-65)

Cattle 2,25,86,067; Buffaloes 55,44,936; Sheep 8,06,029; Goats 46,13,756; Horses & Ponies 1,44,921; Other Livestock 3,58,385; Total livestock 3,41,54,094.

Poultry 33,46,085.

### AGRICULTURE (1964-65)

Total net area sown: 4,13,52,016 acres; 1,67,34,582 hectares.

Total area under food crops: 3,93,63,744 acres; 1,59,29,956 hectares.

Total net area irrigated: 26,61,839 acres; 10,77,208 hectares.

Production in tonnes: Rice 35,05,660; Wheat 19,80,779; Jowar (Rabi) 16,167; Jowar (Kharif) 17,11,820; Maize 5,50,401; Bajra 1,41,763; Barley 1,52,323; Gram 8,44,378; Kodon-Kutki 2,71,551; Tur 3,08,844; Moong & Moth (Kharif) 39,196; Moong & Moth (Rabi) 10,184; Urad (Kharif) 1,09,311; Urad (Rabi) 50,596; Kulthi (Rabi) 1,426; Kulthi (Kharif) 51,853; Lac 2,89,392; Masur 1,10,733.

### CASH CROPS

Production in tonnes: Sugarcane (in terms of Gur) 1,79,169; Groundnut 3,41,768; Linseed 1,49,004; Rape and Mustard 56,767; Castor 1,630; Tobacco 1,920; Nigar Seed 51,007; Cotton (in bales of 400 lbs.) 4,92,404.

### CEILING ON AGRICULTURAL HOLDINGS

With a view to providing for the imposition of ceiling on agricultural holdings, acquisition and disposal of surplus land, Madhya Pradesh Ceiling on Agricultural Holdings Act, 1960, has been enacted and has been brought into force with effect from 15-11-1961. The salient provisions of the Act were given in the previous edition of the Directory. See also article "Agriculture".

### ELECTRICITY

Actual expenditure on electric power during the Third Plan period was Rs. 9,048.51 lakhs.



A brief description of the major schemes to be taken up new or continuing during the Third Plan is as follows :—

### Tawa Hydro-Electric Project (Power Part)

Initially this project was a multi-purpose project with proposed installed capacity of 42,000 kW. The master plan prepared for overall development of Narmada Basin does not envisage any hydel generation at this project, which will now cater for irrigation needs only.

### Korba Thermal Station

During the Second Plan period 3 × 30,000 kW sets were installed. One more boiler and one 10,000 kW set with boilers has been added in July, 1963.

In the Third Plan, 200 MW extension was taken in hand. The station is being erected under Russian aid. Four turbo generator sets each of 50 MW capacity are under installation. The station was expected to commence generation in June 1966.

### Amarkantak (Birsinghpur) Thermal Station

Two sets of 30 MW each for the Thermal Power Station at Amlai near Burhar and associated transmission lines etc. are provided under this scheme. The station has been commissioned in Jan. 1965.

### Satpura Thermal Station

This Thermal Station is being constructed in the Pathra-kheda Coal area of Betul district. It provides for 5 × 60,000 kW Thermal Station with 220 kV step-up sub-station. An amount of Rs. 14.00 crores had been provided in the 3rd Plan. The total cost of project will be Rs. 3,794 lakhs. The station was to commence generation from October 1966.

### Gandhisagar (Stage I)

Under Stage I, three generating sets of 23,000 kW each have already been installed at Gandhisagar power station and the fourth set of 23,000 kW has been added in Aug. 1963. A sum of Rs. 20.00 lakhs has been provided for installing the 5th and the last 23,000 kW set at this Power House which was to be completed by August 1966.

### Ranapratap Sagar Power Station (Stage II)

In Ranapratap Sagar Power House four sets of 43,000 kW will be installed at a cost of Rs. 1,424 lakhs. The scheme will be completed in the Fourth Plan. A provision of Rs. 270 lakhs has been made in the Third Plan. The Power Station will be commissioned in 1967-68.

### Jawahar Sagar Power Station (Stage III)

The scheme provides for the installation of 3 units each of 33,000 kW. A sum of Rs. 100.00 lakhs was available for the Project during the Third Five-Year Plan. The Power Station will be commissioned in 1968-69.

### Chandni-Indore Interconnection

In order to meet the additional power requirement of Nepa Mills 132 kV line from Indore to Nepanagar inter-connecting Chambal system with Chandni power house has been completed in Dec. 1963. This arrangement has enabled Chandni Power house to generate power upto its full installed capacity.

### Power Supply to Central India Coal Fields

This scheme envisages laying of 125 miles of 132 kV transmission lines from Korba Thermal Station to Central

India Coal Fields of Chirimiri, Bistrampur and Jhilimili for supplying power to enable them to increase coal production. The scheme has been completed in April, 1963.

### Transmission System

During the Third Plan, 1,218 km of 220 kV, 1,496 km of 132 kV and 48.4 km of 66 kV lines were planned to be constructed to form an integrated "Grid" covering a large part of the State and load centres. An amount of Rs. 1,510.46 lakhs had been provided. These lines include interstate 132 kV lines to interconnect Madhya Pradesh system with those of Maharashtra, U.P. and Orissa. Interconnection with Rajasthan already exists. A total of 1,266 kMs has been completed in the 3rd Plan.

### Rural Electrification & Sub-Transmission Lines

During the Third Plan most of the villages having a population of 2,000 and above have been electrified except those which are far away from the existing and proposed lines. Villages *en route* which have smaller population but are otherwise economically justifiable for electrification will also be electrified. During the Third Plan, the number of electrified places has risen from 538 to 1,311. Power supply to 5,450 irrigation pumps was extended in the 3rd Plan.

Provision for continuing the new schemes during the Fourth Plan period is Rs. 160 crores.

The progress of development of electricity in the State is as indicated below :—

| Particulars                                 | End of First Plan | End of Second Plan | End of Third Plan | Target for 4th Plan |
|---------------------------------------------|-------------------|--------------------|-------------------|---------------------|
| Installed capacity in MW                    | 81.6              | 206                | 287.5             | 1,090               |
| Transmission lines in route kM (over 66 kV) | 200               | 1,092              | 2,584             | 5,115               |
| Yearly generation in (M. kWh)               | 98.7              | 403.5              | 1,143.3           | 3,590               |
| No. of consumers in thousand                | 51.30             | 121.50             | 275.8             | 600.00              |
| Per capita consumption                      | 6.15              | 14                 | 30                | 85.5                |
| No. of towns/villages electrified           | 142               | 538                | 1,311             | 3,911               |

### Tawa Multi-Purpose Project

The revised estimate of the project amounts to Rs. 48.05 crores. The project on completion is expected to irrigate 7.5 lakh acres of land and generate 20,000 kW power.

### CO-OPERATION

(See under article on Co-operation.)



## EDUCATION

The figures relate to 1965-66 :

Total No. of Degree Colleges : 135 (Govt. colleges 68, Private 67).

Total No. of Teacher Training Colleges : 120 (108 B.T. Institutions, 11 P.G.B.T. Colleges, 1 non-P.G.B.T. College).

Total No. of Professional Colleges : 25.

(Medical 6, Engineering 8, Agriculture 6, Veterinary 2, Ayurvedic 3).

Polytechnics : 22 (13 Govt., 9 non-Govt.).

Number of Universities : 8.

Names of the Universities with location in brackets :—

University of Sagar (Sagar); Jabalpur University (Jabalpur); Vikram University (Ujjain); Indira Kala Sangeet Vishwavidyalaya (Khairagarh); Ravi Shanker University (Raipur); Indore University (Indore); Jivaji University (Gwalior) and Jawaharlal Nehru Krishi Vishwavidyalaya (Jabalpur).

## PUBLIC HEALTH

Figures for 1965-66 :

Common diseases in the State : Malaria, Filariasis, Tuberculosis, Venereal diseases, Dysentery, Diarrhoea, Gastroenteritis and Leprosy.

Total No. of patients treated in the State during 1965 : 3,32,200 (Indoor) ; 1,10,34,576 (Outdoor).

T.B. Patients treated during 1964 : 1,29,024.

Number of Medical Institutions and beds at the end of 3rd Plan :

|                                       |                  |        |
|---------------------------------------|------------------|--------|
| Number of Hospitals & Dispensaries    | ..               | 526    |
| Number of beds                        | .. .. .          | 14,549 |
| Number of Medical Colleges            | .. .. .          | 6      |
| No. of allopathic hospitals           | .. .. .          | 81     |
| No. of Primary Health Centres         | .. .. .          | 395    |
|                                       | (456 sanctioned) |        |
| No. of T.B. Hospital & T.B. Sanatoria | ..               | 8      |
| No. of Leprosy Homes                  | .. .. .          | 13     |
| No. of Mental Hospitals               | .. .. .          | 2      |

Other Services :

|                                 |         |     |
|---------------------------------|---------|-----|
| No. of T.B. clinics             | .. .. . | 27  |
| No. of Leprosy clinics          | .. .. . | 191 |
| No. of Leprosy Control units    | .. .. . | 6   |
| No. of Leprosy S. E. T. Centres | .. .. . | 40  |
| No. of M. C. W. Centres         | .. .. . | 148 |
| No. of V. D. clinics            | .. .. . | 15  |
| No. of Dental clinics           | .. .. . | 15  |
| No. of Family Planning clinics  | .. .. . | 783 |
| No. of Matru grihas             | .. .. . | 871 |

## LABOUR

Position as on 31st Dec. 1964 :

Number of registered factories (excluding 15 defence factories) : 2,406.

Number of workers employed in registered factories : 1,71,397.

Important industries with the number of units (employing more than 100 workers), and workers employed respectively in each industry within brackets :

Textile (including cotton, silk, art silk, staple fibre, jute, carpet) 29 (48,196) ; Basic Metal Industry (Iron and Steel) 18 (9,957) ; Electric machinery apparatus, appliances and supplies 4 (8,186) ; Sugar 7 (4,205) ; Rice mills 20 (2,094) ; Oil mills 9 (1,095) ; Cement 2 (2,828) ; Electricity, gas and steam 9 (2,061) ; Potteries 6 (2,890) ; Printing presses 5 (1,519) ; Paper and straw boards 5 (3,393) ; Asbestos products 2 (2,321) ; Lime stone 4 (1,081) ; Motor transport 7 (1,249) ; Machinery except electrical machinery 9 (3,349) ; starch 1 (250) ; Manufacture of bakery products 1 (725).

On March 31, 1965, the number of registered trade unions was 410 (excluding cancelled unions) out of which 238 unions had submitted their returns for 1964-65. After scrutiny 140 returns had been accepted by the Registrar of Trade Unions, membership of which came to 76,229.

Total number of employments covered under the Minimum Wages Act : 13 (1965).

Approximate number of workers employed in the above employments : 4,48,561 (1965).

Important categories of employments under the Minimum Wages Act and the approximate number of workers employed in each category :

Rice, flour and dal mill 13,330 ; Tobacco (including Bidi making) manufacturing 2,29,471 ; Oil mill 4,072 ; Local authority 28,289 ; Construction or maintenance of roads or in building operation 42,084 ; Stone breaking or in stone crushing 3,084 ; Public motor transport 7,431 ; Lac manufacturing 371 ; Tanneries and leather manufacturing 158 ; Potteries 2,212 ; Cotton, ginning and pressing 138 ; Printing Press 946.

The Madhya Pradesh Shops & Establishments Act, 1958 was in force in 45 towns in the State on December 31, 1964.

On Dec. 31, 1964 there were 1,13,746 registered establishments out of which 31,811 were found closed and 81,935 live establishments left at the end of 1964.

Provident Fund Scheme (March 31, 1964)—

Number of factories covered by the Employees' Provident Fund Scheme (March 31, 1964)—704. Number of factories exempted—35. Number of factories partially exempted 8, total number of workers contributing under the Scheme—1,41,426.

Number of family units (one family unit assumed to be comprised of three adults and one minor) covered by the Employees' State Insurance Scheme (December 31, 1964)—1,28,942. The Scheme was in operation in Banmore, Bhopal, Burhanpur, Dewas, Gwalior, Indore, Jabalpur, Mandsaur, Nagda, Raigarh, Raipur, Rajnandgaon, Ratlam, Satna and Ujjain.



## IRRIGATION SCHEMES

| Name of Project              | Location District | When started | When to be completed | Capacity M. Cft. | Area proposed for irrigation (Acres) | Total cost (Rs. lakhs) | Estimated rise in output after completion (Tons) | Remarks              |
|------------------------------|-------------------|--------------|----------------------|------------------|--------------------------------------|------------------------|--------------------------------------------------|----------------------|
| (1)                          | (2)               | (3)          | (4)                  | (5)              | (6)                                  | (7)                    | (8)                                              | (9)                  |
| Tawa .. ..                   | Hoshangabad       | 1962         | 1973<br>(Probable)   | 98,330           | 7,87,500                             | 2,710.00               | 1,96,875                                         |                      |
| Barna .. ..                  | Raisen            | 1960-61      | N.A.                 | 14,371           | 1,64,160                             | 555.70                 | 41,040                                           |                      |
| Hasdeo barrange ..           | Bilaspur          | 1961         | 1967                 | N.A.             | —                                    | 900.00                 | —                                                |                      |
| Nahlesara .. ..              | Balaghat          | 1957         | 1966                 | 513              | 11,150                               | 196.02                 | 2,788                                            |                      |
| Beniganj .. ..               | Chhatarpur        | 1958         | 1966                 | 736.65           | 10,000                               | 45.50                  | 2,500                                            |                      |
| Chandrakeshar ..             | Dewas             | 1958         | IV Plan              | 1,006.13         | 12,000                               | 163.06                 | 3,000                                            |                      |
| Devendranagar ..             | Panna             | 1958         | 1966                 | 359.85           | 6,000                                | 47.41                  | 1,500                                            |                      |
| Kedarnala .. ..              | Raigarh           | 1958         | N.A.                 | 590.46           | 11,500                               | 53.76                  | 2,875                                            |                      |
| Bilanadi .. ..               | Sagar             | 1956         | IV Plan              | 2,004.00         | 32,000                               | 157.14                 | 8,000                                            |                      |
| Chillar .. ..                | Shajapur          | 1960         | IV Plan              | 1,098.92         | 13,000                               | 118.36                 | 3,250                                            |                      |
| Gopalpura .. ..              | Mandsaur          | 1952         | N.A.                 | 185.91           | 2,000                                | 21.05                  | 500                                              |                      |
| Nagdanala .. ..              | Tikamgarh         | 1961         | 1966                 | 566              | 7,500                                | 42.95                  | 1,875                                            |                      |
| Kulgarhi .. ..               | Satna             | 1959         | N.A.                 | 270.79           | 5,200                                | 43.64                  | 1,300                                            |                      |
| <i>Projects in Operation</i> |                   |              |                      |                  |                                      |                        |                                                  |                      |
| Ari .. ..                    | Seoni             | 1946         | 1951                 | 455.23           | 10,500                               | 30.00                  | 2,625                                            |                      |
| Gangulpara .. ..             | Balaghat          | 1954         | 1957                 | 387.5            | 8,520                                | 51.87                  | 2,130                                            |                      |
| Dukrikheda .. ..             | Hoshangabad       | 1953         | 1961                 | 407              | 6,600                                | 40.72                  | 1,650                                            |                      |
| Gondli .. ..                 | Durg              | 1953         | 1961                 | 3,087            | 7,610                                | 69.95                  | 1,903                                            |                      |
| Sampna .. ..                 | Betul             | 1954         | 1957                 | 505.45           | 9,500                                | 45.22                  | 2,375                                            |                      |
| Mola Dam .. ..               | Guna              | 1955         | 1961                 | 413.00           | 5,000                                | 30.00                  | 1,250                                            |                      |
| Kundanala .. ..              | Dhar              | 1955         | 1961                 | 286.00           | 4,080                                | 29.71                  | 1,020                                            |                      |
| Mahanadi .. ..               | Raipur            | 1957         | 1966                 | Weir work        | 1,40,000                             | 276.68                 | 35,000                                           |                      |
| Morwan .. ..                 | Mandsaur          | 1956         | 1965                 | 556.56           | 6,600                                | 44.30                  | 1,650                                            |                      |
| Satak .. ..                  | West Nimar        | 1956         | 1966                 | 584.58           | 9,500                                | 67.40                  | 2,375                                            |                      |
| Sagar Nadi .. ..             | Seoni             | 1956         | 1965                 | 191.58           | 3,940                                | 38.07                  | 985                                              |                      |
| Keswa Nalla .. ..            | Raipur            | 1956         | 1966                 | 630.67           | 9,500                                | 56.75                  | 2,375                                            |                      |
| Shivgarh Bedli ..            | Ratlam            | 1955         | 1961                 | 144.44           | 3,600                                | 18.27                  | 900                                              |                      |
| Barodia .. ..                | Rajgarh           | 1956         | 1965                 | 205.64           | 3,000                                | 20.40                  | 750                                              |                      |
| Chambal .. ..                | Mandsaur          | 1954         | 1961                 | 2,44,400         | 7,00,000*                            | 6,359.00               | 1,75,000                                         | * Power : 80,000 kW. |
| <i>(Stage I)</i>             |                   |              |                      |                  |                                      |                        |                                                  |                      |
| Saroda .. ..                 | Durg              | 1953         | 1965                 | 1,065            | 18,168                               | 160.45                 | 4,542                                            |                      |
| Kharadi .. ..                | Balaghat          | 1954         | 1965                 | 483              | 9,000                                | 30.04                  | 2,250                                            |                      |
| Nandanwara .. ..             | Tikamgarh         | 1958         | 1965                 | 755              | 4,495                                | 13.00                  | 1,124                                            |                      |
| Daroli .. ..                 | Damoh             | 1956         | 1965                 | 171.86           | 5,600                                | 31.08                  | 1,400                                            |                      |
| Bhitrigarh .. ..             | Jabalpur          | 1957         | 1965                 | 193.71           | 2,736                                | 27.75                  | 684                                              |                      |
| Dhuandhar .. ..              | Mandla            | 1958         | 1966                 | 180.81           | 3,400                                | 45.85                  | 850                                              |                      |
| Maniari .. ..                | Bilaspur          | 1956         | 1966                 | 5,216            | 24,000                               | 3,297                  | 6,000                                            |                      |
| <i>(Development)</i>         |                   |              |                      |                  |                                      |                        |                                                  |                      |
| Dudhawa .. ..                | Bastar            | 1955         | 1966                 | 1,019            | —                                    | 267.49                 | —                                                |                      |

## THIRD FIVE-YEAR PLAN

An outlay of Rs. 300.00 crores was fixed for the Third Plan of Madhya Pradesh. The distribution of the outlay among different sectors is given below :—(Rs. in crores).

(i) Agriculture and community development 76.45; (ii) Irrigation and power 117.80; (iii) Industry and mining 10.50; (iv) Transport and communications 17.80; (v) Education 31.98; (vi) Health including drinking water supply 21.30; (vii) Housing 5.50; (viii) Labour and Labour welfare 1.20; (ix) Welfare of backward classes 8.00; (x) Social welfare 0.70; (xi) Miscellaneous including State Capital Project 8.77; Grand Total 300.00.

## FOURTH PLAN (1966-67)

For the annual plan for 1966-67, an outlay of Rs. 58.10 crores has been approved. Of this outlay, the Central

Assistance will be Rs. 39.60 crores and the balance of Rs. 18.50 crores will be found by the State Government from its own resources. The distribution among different sectors of development is as follows :—

Agricultural programmes Rs. 17.98 crores; Co-operation and Community Development Rs. 4.10 crores; Chambal Hydel Scheme Rs. 2.15 crores; Tawa, Hasdeo, Barna and Halali irrigation projects Rs. 2.79 crores; Medium irrigation projects Rs. 2.07 crores; Power generation Rs. 13.50 crores; Industrial and mineral development Rs. 2.19 crores; Roads Rs. 1.79 crores; Road transport Rs. 1.69 crores; Education Rs. 2.76 crores; Public Health Rs. 1.98 crores; Rural and urban water supply Rs. 1.74 crores; Housing Rs. 0.35 crore; Welfare of backward classes Rs. 0.86 crore; Craftsmen training scheme Rs. 0.51 crore and Bhopal Capital Project Rs. 1.25 crores.



In addition to this, Rs. 1.45 crores have been agreed to for Kharkhera irrigation project outside the State Plan.

An outlay of Rs. 450 crores has been fixed by the Planning Commission for the State's Fourth Five Year Plan.

### ADMINISTRATIVE PERSONNEL

(See under 'States Administrative Personnel'.)

### UNIVERSITIES

#### INDIRA KALA SANGEET VISHWAVIDYALAYA KHAIRAGARH

Founded 1956.

Chancellor : K. C. Reddy, B.A., B.L., LL.D., Governor, Madhya Pradesh.

Pro-Chancellors : Narsingh Rao Dixit, Education Minister, Madhya Pradesh; Raja Bahadur Birendra Bahadur Singh, M.P.; Shrimati Rani Padmavati Devi, Minister for Social Welfare.

Rector : P. N. Chinchore, M.A., M.Mus.; Treasurer : R. K. Jha; Registrar : B. B. Biswas, B.A., LL.B.

It is a teaching, affiliating, examining and residential University of Music and Fine Arts.

Number of affiliated Colleges : 29.

Number of students in the University : 4,000.

#### Budget Estimates : 1965-66 :—

Total Income Rs. 1,37,371.

Total Expenditure Rs. 1,61,681.

The media of instruction for all classes are Marathi, Urdu, Hindi and English.

#### INDORE UNIVERSITY

Indore.

Estd : 1964. It began as an affiliating University, but is intended to develop as a federal University with teaching departments.

Chancellor : K. C. Reddy, B.A., B.L., LL.D., Governor of M. P.; Vice-Chancellor : H. S. Kamath, M.A., I.C.S. (Retd.); Registrar : G. N. Tandan, M.A.

No. of affiliated colleges : 16.

University Teaching Dept. : 1.

No. of students in the University : 12,570.

#### Budget (1965-66)

Receipts : Rs. 8,42,300.

Expenditure : Rs. 12,14,350.

#### Development Budget

Receipts : Rs. 77,000.

Expenditure : Rs. 77,000.

#### JABALPUR UNIVERSITY

Jabalpur.

Estd : 1957. It is a teaching and affiliating University.

Chancellor : K. C. Reddy, B.A., B.L., LL.D., Governor of Madhya Pradesh; Vice-Chancellor, Dr. Dharendra Verma, M.A., D.Litt.; Registrar : S. C. Seth, M.A. (Officiating).

Number of affiliated colleges : 20. (The status of colleges as constituent colleges to be decided later.)

Number of University Departments of post-graduate Studies and Research : 12.

Number of students in the Colleges and University Departments : 14,094.

#### Normal Budget (1966-67)

|                                          | Rs.       |
|------------------------------------------|-----------|
| Receipts .. .. .                         | 21,36,140 |
| Expenditure .. .. .                      | 21,65,580 |
| Govt. of India Special Grant (U.G.C.) .. | 1,50,000  |
| State Government                         |           |
| (a) Maintenance Grant .. .. .            | 4,00,000  |
| (b) Special Grant .. .. .                | 6,000     |

#### Development Budget (1966-67)

|                                      | Rs.       |
|--------------------------------------|-----------|
| Receipts .. .. .                     | 22,00,900 |
| Expenditure .. .. .                  | 27,13,030 |
| University Grants Commission .. .. . | 14,18,994 |
| State Government .. .. .             | 7,48,781  |
| Contribution from General Funds ..   | 5,12,130  |

#### JAWAHARLAL NEHRU KRISHI VISHWA VIDYALAYA

Jabalpur.

Estd. 1964.

Chancellor : K. C. Reddy, Governor, Madhya Pradesh; Vice-Chancellor : Dr. J. S. Patel; Registrar : T. C. R. Menon, M.A., I.A.S.

#### Budget (1966-67)

Receipts : Rs. 2,03,96,800.

Expenditure : Rs. 2,17,12,900.

#### JIWAJI UNIVERSITY

Gwalior.

Established in 1964, it is a teaching, affiliating and residential University.

Chancellor : K. C. Reddy, Governor, Madhya Pradesh; Vice-Chancellor : S. S. Bhandarkar, M.A.; Registrar : Pandit Sham Narain.

No. of affiliated colleges : 29 (as on 31-3-1966).

No. of constituent Colleges : 8 (as on 31-3-1966).

#### Budget (1966-67)

Receipts : Rs. 58,22,830.

Expenditure : Rs. 57,63,100.

#### RAVISHANKAR UNIVERSITY

Raipur.

Chancellor : K. C. Reddy, Governor, Madhya Pradesh; Vice-Chancellor : Dr. B. R. Saksena, M.A., D.Litt.; Registrar : K. P. Chaube, M.A.

Constituent Colleges : 10.

Affiliated Colleges : 35.

Students (1965-66) : 20,000 (approximate).

#### Budget Estimates (1966-67)

Estimated Income : Rs. 30,52,650.

Estimated Expenditure : Rs. 29,76,176.

Expected Grant from State Govt. : Rs. 4,00,000.

Expected Grants from State Govt. for development : Rs. 3,19,140.



**SAUGAR UNIVERSITY**

Founded : 1946.

*Chancellor* : Dr. K. N. Katju, M.A., Ph.D., LL.D., D.Litt. ;  
*Vice-Chancellor* : Dr. M. P. Sharma, M.A., D.Litt. ; *Rector* :  
Prof. Ishwar Chandra, M.A. ; *Registrar* : S. J. Naidu.

It is a teaching and affiliating University.

Number of affiliated colleges : 70.

Number of students : Teaching Departments : 2,729 ;  
Affiliated Colleges : 15,128.

*Library* : 1,17,120 (includes volumes, journals and pamphlets).

**Budget (1966-67)**

Receipts : Rs. 69,74,075.

Total expenditure : Rs. 71,07,544. } Excluding build-  
ing grants.

**VIKRAM UNIVERSITY**

(Ujjain)

Founded : 1957.

It is an affiliating and teaching University. The media of instruction are English and Hindi.

*Chancellor* : K. C. Reddy, B.A., B.L., LL.D., Governor of Madhya Pradesh ; *Vice-Chancellor* : Acharya Nand Dulare Bajpeyi, M.A. ; *Registrar* : V. Shankaran, M.A.

Number of University Schools of Studies : 7.

Number of Constituent Colleges : 14.

Number of Affiliated Colleges : 24.

University Teaching Department : 1.

Number of Students (1965-66) : 30,230 (Regd.).

Total Income including Govt. Grants : 61,33,780.

Total Expenditure : Rs. 52,55,070.

**MADHYA PRADESH FINANCIAL CORPORATION**

(See under "State Corporations".)

**MADRAS**

(See page 413)

**MAHARASHTRA**

**T**HE State came into being on May 1, 1960 when the Bombay Reorganisation Act, 1960, came into force.

This Act split the old Bombay State into two States, Maharashtra and Gujarat.

The strength of the Maharashtra Assembly is 265, of the Council 78. The State sends 19 members to the Rajya Sabha and 45 to the Lok Sabha.

It is the third biggest State in the Union both in respect of area and population.

Capital : Bombay.

Area : 1,18,717 sq. miles ; Population : 39.55 millions (1961 census).

**DISTRICTS AND TALUKAS**

(For the names, area and population, see under article "Population").

The State is divided into 26 Districts. There are 231 Talukas and Mahals and 223 municipal towns.

The Districts with their headquarters in brackets are :—

Dhulia (Dhulia), Nasik (Nasik), Thana (Thana), Greater Bombay (Bombay), Kolaba (Alibag), Ratnagiri (Ratnagiri), Ahmednagar (Ahmednagar), Poona (Poona), Satara (Satara), Sangli (Sangli), Kolhapur (Kolhapur), Sholapur (Sholapur), Jalgaon (Jalgaon), Aurangabad (Aurangabad), Parbhani (Parbhani), Bhira (Bhira), Osmanabad (Osmanabad), Nanded (Nanded), Buldhana (Buldhana), Akola (Akola), Amravati (Amravati), Yeotmal (Yeotmal), Wardha (Wardha), Nagpur (Nagpur), Chanda (Chanda), Bhandara (Bhandara).

These 26 Districts are grouped into four Divisions.

*Bombay Division* : Greater Bombay, Thana, Kolaba, Nasik, Dhulia, Jalgaon, Ratnagiri.

*Poona Division* : Ahmednagar, Poona, Satara, Sangli, Kolhapur, Sholapur.

*Aurangabad Division* : Aurangabad, Parbhani, Bhira, Osmanabad, Nanded.

*Nagpur Division* : Buldhana, Akola, Amravati, Yeotmal, Wardha, Nagpur, Bhandara, Chanda.

**GEOGRAPHY**

The Sahyadris or the Western Ghats run quite close and almost parallel to the west coast, leaving a very narrow strip of land between the sea and the lofty mountain barrier, which at no place is more than 60 miles in breadth. This narrow strip of land known as Konkan, stretches from Daman to Vengurla to a distance of about 350 miles. Interspersed with hills, the land is very undulating and the soil far from fertile, only suitable for paddy cultivation in flat patches, which lie couched in small valleys and perched on hill slopes. The mountain sides are, however, covered by evergreen vegetation, which lends Konkan its spell-binding scenic beauty and also its horticultural wealth.

The North Konkan is a flat alluvial belt along the coast formed by the rivers Ulhas and Vaitarna in their lower courses. This belt is not more than ten miles wide, with a series of parallel ridges in the background. Along the coast is a string of small ports like Rewas, Harnai, Dabhol, Ratnagiri, Vijayadurg, Malvan and Vengurla served by the Konkan ferry service.

To the east of the Sahyadris stretches a vast plateau intercepted by rivers which rise in the Sahyadris and flow eastward. In the north is the Satpura range which runs almost in a straight line from east to west. The main Sahyadri range all along its length sends its arms across the tableland. To the north of Nasik is the Satmala range with its continuation in the Balaghat range, which goes right upto the eastern border of Vidarbha and Marathwada. The transverse ranges to the south of Nasik are much shorter and of little consequence.



The State is drained by a number of rivers—Tapi, Godavari, Bhima, Krishna, Wardha and Vainganga. The smaller rivers are the tributaries of one or the other of these rivers.

In between the Satpuras in the north and the Balaghat range in the south lies the great Tapi trough. The Tapi, rising in the Satpuras, flows westward, with the Girna flowing into it in its upper course. The Tapi valley, which comprises the western parts of Vidarbha and districts of Dhulia and Jalgaon, is one fertile belt of black soil, which grows cotton and is known as 'the black cotton soil.'

To the farther east is the Vainganga-Wardha valley. The two rivers, Wardha and Vainganga, flow south-east before they drain into the Godavari. The land abounds in lakes and tanks, many of which are man-made, which add to the natural beauty of the land. The green meadows dotted by the blood-red *palas* flowers lend a unique charm to the land on this eastern border of Maharashtra.

To the south of the Balaghats, right from Nasik to Nanded stretches the great valley of the Godavari, the cradle of Maharashtrian culture. The Godavari rises in the Brahmagiri mountain near Trimbakeshwar, which is one of the twelve 'Jyotirlingas'. From about fifteen miles from Trimbakeshwar is Nasik on the banks of the Godavari which is also a sacred place of the Hindus. Paithan in

Marathwada was once the seat of learning and the centre of cultural movements. Still farther east is Nanded, the holy place of the Sikhs, with the famous Gurudwara shrine on the banks of the Godavari.

Whereas the Godavari valley linked by the valleys of Wardha and Vainganga which flow into it, is the nerve centre of Maharashtra, the Krishna valley is its southern periphery and historically its strong arm. It covers Satara, Sangli, Sholapur and Kolhapur districts. The eastern portions of the valley which cover the eastern Talukas of the districts of Satara, Sangli, Kolhapur and Sholapur are less fertile.

It is interesting to note that in Maharashtra the trades relating to distribution of commodities are run to a large extent by Gujaratis and Marwaris. Thus even in the remotest village, the cloth dealer is usually a Gujarati, while the grocer is generally a Marwari.

There are a number of Adibasi communities in Maharashtra, who live either in dense forests or on the mountain perches of the Sahyadris and the Satpuras. The main communities among these are the Agaris, the Warlis, the Katkaris and the Thakurs of Thana and Kolaba districts, the Bhils of Dhulia and the Korkus and the Gonds of Vidarbha.

## BASIC FACTS AND FIGURES

**Income during 1962-63** (in crores of rupees): 1,748.2 (100.0). Agriculture and allied activities 641.3 (36.7); Mining, manufacturing, small enterprises and construction 454.0 (26.0); others 652.9 (37.3). Per capita income Rs. 428. Figures in brackets show percentages to the total income.

### LAND UTILIZATION

Classification of land and area in '00 hectares for 1963-64 respectively are:

Total Geographical Area 307,749; Area under Forests 54,191; Net Area Sown 181,416; Gross Cropped Area 191,235; Barren & Uncultivable Land 17,970; Land put to non-agricultural use 7,096; Culturable waste 8,797; Land under miscellaneous tree crops 1,918; Permanent pastures 13,927; Current fallows 11,107; Other fallows 11,327.

### Area Under Different Crops

Crop wise area ('000 hectares) under cultivation during 1963-64 & 1964-65 respectively are:

Rice 1,329; 1,354; Wheat 898; 900; Jowar 6,042; 6,075; Bajra 1,664; 1,676; Total cereals: 10,383; 10,467; Total Pulses: 2,326; 2,311; Sugarcane 140; 143; Cotton (Lint) 2,769; 2,759; Groundnut 1,103; 1,107; Tobacco 20; 22; Ragi 219; 221; Maize —; —; Barley —; —; Tur 557; 567; Gram 384; 374; Potatoes 14; N.A.; Chillies —; —; Sesamum 128; 125; Castor Seed —; —; Rape, Mustard, Linseed 217; 218.

*Note:* Figures for 1963-64 and 1964-65 are based on partially revised estimates and final forecast estimates respectively and are subject to revision.

(In '00 Hectares)

Area irrigated by crops during 1963-64†: Rice 2,849; Wheat 1,428; Jowar 3,095; Sugarcane 1,363; Cotton 726; Groundnut 106.

The area under certain groups of crops (figures in '00) as in 1962-63:—

Fruits and vegetables, 1,528; condiments and spices 2,016; oil seeds 19,306; drugs and narcotics 223; fodder crops 9,234; total non-food crops 56,263.

**Out-turn of Principal Crops in '000 M. tonnes for 1964-65†:** Rice 1,465; wheat 409; jowar 3,345; bajra 475; tur 365; gram 124; Total of all cereals and pulses 6,865; cotton (lint) 222; groundnut 831; sugarcane 1,152; tobacco 11.

**Area Irrigated by Sources ('00 hectares), 1963-64:** Govt. canals 2,214; Private canals 312; tanks 2,075; wells 6,535; other sources 401; net irrigated 11,537; gross irrigated 13,080.

**Agricultural Implements (1961):** Wooden ploughs 16,73,499; Carts 13,43,378; Sugarcane Crushers 15,801; Oil Engines with Pumps for Irrigation purposes 63,747; Electric Pumps for Irrigation 6,530; Tractors 1,427; Ghanis 5,608.

**Livestock 1961:** (See main article "Livestock").

**Cooperation:** Number of societies†, number of members and working capital (Rs. lakhs) respectively as in 1964-65†: Agricultural, § 25,049; 33,31,000; 1,67,91; Non-Agricultural 11,467; 19,29,000; 90,53; Land Mortgage Banks 28; 4,37,000; 36,54; State and Central Banks 29,69,000; 2,50,06; Urban Banks 193; 5,27,000; 41,03; Total number of all types of cooperative societies, total number of members and total working capital (Rs. lakhs) respectively: 36,766; 62,93,000; 5,86,07.

Various types of banking offices at the beginning of 1965:

Scheduled banks 752; Non-Scheduled banks 10; Co-operative banks 732; Total banking offices 1,494.

**Education (1965-66)†:** No. of Institutions, pupils and teachers respectively under each category is as follows:— Primary 41,045; 56,15,000; 1,45,000; Secondary 3,875; 15,07,000; 54,000; Higher 467; 1,69,000.

† Excludes Supervising Unions, Divisional and District Cooperative Boards and Insurance Societies. ‡ Provisional. § Includes Grain Banks.



It is calculated that about a fourth of the population of Greater Bombay consists of students. In the State as a whole students make up one-sixth of the population. The number of institutions per lakh of population is nearly 108. The number of teachers per thousand of population is 5; in Greater Bombay it is 7.

**Technical Institutions (1964-65):** Engineering Institutions 8; Polytechnics 22; Technical Institutions 2; Government College of Architecture 1; Non-Government Institutions for architectural Diploma Courses 4; Technical High Schools 87; Industrial Training Institutions 32.

**Electricity:** (Figures in million kilowatt hours) as in 1964-65†. *Output:* Steam 2,139, Oil 85, Hydro 2,914. *Consumption:* Domestic light and small power 373, Commercial light and small power 295, Industrial power 2,925, Public lighting 30, Traction 457, Irrigation and dewatering 38, Water works 50.

## INDUSTRIES

(See after Madras)

**Community Development Programme:**—Coverage (1964-65): No. of blocks of CPA pattern 444; No. of villages 38,669; Population covered 2,62,29,000.

The following table gives progressive achievements under C. D. Programmes.

| Items                                  | Units    | 31st March 1965 |
|----------------------------------------|----------|-----------------|
| Distribution of fertilisers ..         | B.Mds.   | 2,34,05,041     |
| Distribution of improved seeds         | B.Mds.   | 4,058,282       |
| Animals castrated .. ..                | No.      | 1,467,884       |
| Pedigree Bulls supplied ..             | No.      | 7,124           |
| Area reclaimed and bunded ..           | Acres    | 4,062,843       |
| Additional area irrigated ..           | Acres    | 1,010,027       |
| Drinking water wells constructed .. .. | No.      | 16,182          |
| Adults made literate .. ..             | No.      | 15,81,580       |
| Youth Clubs started .. ..              | No.      | 19,199          |
| Mahila Samitees started ..             | No.      | 11,529          |
| Katcha roads constructed ..            | Furlongs | 85,784          |
| People's contribution ..               | Rs. '000 | 1,07,331        |
| Government expenditure ..              | Rs. '000 | 4,91,671        |

**Medical:**—(Figures for 1965): Number of hospitals and dispensaries in the State: 122; Number of beds

18,358; Municipal Hospitals and dispensaries 991; Number of beds 6,192; Private aided and non-aided 267; Number of beds 11,321.

**Transport and Communications:** Figures as on 1st Jan. 1966\*: Number of motor cycles 28,219; Motor cars 70,241; Taxi cabs 8,802; Auto-Rickshaws 933; Stage carriages (Diesel engined 5,033; Petrol engined 559); Lorries: Public carriers (Diesel engined 14,273; Petrol engined 12,249); Private carriers (Diesel engined 2,884; Petrol engined 6,072); Ambulances 280; School buses 351; Private Service vehicles 406; Trailers 3,467; Tractors 3,029; Others 539; Total number of vehicles 1,57,337.

**Roads in Kilometres** (Figures as on 31st March 1966)\*: Total 44,578; National highways 2,399; State highways 10,823; Major district roads 12,881; Other district roads 8,050; Village roads 10,425.

A road styled Bombay-Goa Road connecting Goa with Bombay, under construction, was expected to be completed by the end of the Third Plan.

**Railway kilometrage:** Total 5,227 kms. (Broad Gauge 2,767 kms; Metre Gauge 1,197 kms.; Narrow Gauge 1,263 kms.).

**Nationalised Road Transport** (Figures as in November 1965): No. of routes 2,700; route distance in km. 1,62,528; average no. of vehicles on road per day 2,772; average daily earning 7,45,000; average no. of passengers who travelled per day 9,15,000.

**Employment Exchange Statistics:** (Figures for 1964-65): Registrations 3,52,146; Vacancies notified 95,767; Placements 44,869; Those on the live register 2,53,162.

The following figures show the position of employment statistics from April to Dec. 1965: Registrations 31,838; Placements 4,930; Vacancies notified 8,032 and number on live register 2,72,371.

**Village Panchayats:** The total income of Village Panchayats in 1963-64 was Rs. 10.59 crores as against Rs. 7.34 crores in 1962-63. The Government grants contributed about 55 per cent of the total revenue. The total expenditure of Village Panchayats in 1963-64 was about Rs. 8.40 crores.

The receipts of the Zilla Parishads (1965-66 budget estimates) amounted to Rs. 62.77 crores in 1965-66, of which more than 91 per cent (Rs. 57.41 crores) were Government grants. The purposive grants and the Plan grants formed the major share e.g. 18.68 per cent and 16.58 per cent respectively of the total Government grants.

**Small Savings:** In small savings Maharashtra enjoyed the premier position in India till last year. During 1964-65, the target fixed for the State was Rs. 22 crores. As against this target, the net collection was Rs. 24.20 crores. The target for 1965-66 has been Rs. 22.27 crores, the net collection during the first ten months ending January 1966 were Rs. 17.07 crores.

## Cost of Living Index

| Year       | Bombay <sup>1</sup> | Sholapur <sup>2</sup> | Jalgaon <sup>3</sup> | Nanded <sup>4</sup> | Aurangabad <sup>5</sup> | Nagpur <sup>6</sup> |
|------------|---------------------|-----------------------|----------------------|---------------------|-------------------------|---------------------|
| 1961 .. .. | 431                 | 352                   | 485                  | 239                 | 212                     | 495                 |
| 1962 .. .. | 444                 | 381                   | 519                  | 259                 | 234                     | 502                 |
| 1963 .. .. | 448                 | 380                   | 524                  | 266                 | 235                     | 525                 |
| 1964 .. .. | 516                 | 456                   | 682                  | 321                 | 282                     | 651                 |

\* Anticipated length. <sup>1</sup> Base: Average from July, 1933 to June 1934 as 100. <sup>2</sup> Base: Average from February 1927 to January 1928 as 100. <sup>3</sup> Base: Average prices for August 1939 as 100. <sup>4</sup> <sup>5</sup> Base: Average August 1943 to July 1944 as 100. <sup>6</sup> Base: Average price for August 1939 as 100. † Provisional.



## T—Contd.

|                                                                | PAGE               |
|----------------------------------------------------------------|--------------------|
| Tractors and Spares .. .. .                                    | 831                |
| Trade Agreements (Import & Export Trade) ..                    | 107                |
| " Commissions .. .. .                                          | 955                |
| " Development Policy .. .. .                                   | 105                |
| " Foreign .. .. .                                              | 103                |
| " Representatives Abroad, Govt. of India ..                    | 949                |
| " Union Act .. .. .                                            | 74                 |
| " Unions, Statistics .. .. .                                   | 74                 |
| Trades & Professions ( <i>See under States and Districts</i> ) |                    |
| Training Institutions (Defence Services) ..                    | 9, 11, 12          |
| Transformers Manufacturers .. .. .                             | 831                |
| Transport Companies .. .. .                                    | 526                |
| " Contractors .. .. .                                          | 831                |
| " Reorganisation Committee .. .. .                             | 175                |
| Travancore Plywood Industries .. .. .                          | 129                |
| Travel Agencies (A Tourist's Guide) .. .. .                    | 18                 |
| " Agents .. .. .                                               | 526, 569, 832, 911 |
| Tripartite Labour Machinery (Labour) .. ..                     | 81                 |
| Tripura .. .. .                                                | 401                |
| " Small Industries Corporation .. .. .                         | 93                 |
| Trombay Atomic Energy Establishment .. ..                      | 169                |
| " Fertilization Unit .. .. .                                   | 119                |
| Tuberculosis (Public Health) .. .. .                           | 138                |
| " Association of India .. .. .                                 | 440                |
| Tube-wells (Irrigation) .. .. .                                | 300                |
| Tungabhadra Project .. .. .                                    | 302                |
| Typewriters and Accessories .. .. .                            | 833, 911           |
| Tyre Manufacturers & Distributors .. .. .                      | 833                |

## U

|                                                         |          |
|---------------------------------------------------------|----------|
| Udaipur University .. .. .                              | 401      |
| Ukai Project (Gujarat) .. .. .                          | 336      |
| U.N. Aid to India .. .. .                               | 26       |
| U.N. Bodies in India .. .. .                            | 954      |
| U.N. Children's Fund (UNICEF) .. .. .                   | 954      |
| U.S. Agency for International Development ..            | 187      |
| U.S. Aid to India .. .. .                               | 187      |
| U.S. Educational Foundation .. .. .                     | 441      |
| Umbrellas, Umbrella Parts Mfrs. & Merchants             | 834      |
| UNESCO Research Centre .. .. .                          | 954      |
| Union Parliament (Constitution of India) ..             | 62       |
| " Public Service Commission .. .. .                     | 943      |
| " Territories (Constitution of India) .. ..             | 64       |
| " (Five Year Plans) .. .. .                             | 284      |
| Unit Trust of India .. .. .                             | 88       |
| Universities ( <i>See also under each State</i> ) .. .. | 149      |
| Universities Information Bureau .. .. .                 | 469      |
| University Education .. .. .                            | 148, 214 |
| " Grants Commission .. .. .                             | 143      |
| " of Agricultural Sciences .. .. .                      | 394      |
| U.S. Aid to India .. .. .                               | 187      |
| U.S. Information Service (The Press) .. ..              | 288      |
| U.S. Technicians .. .. .                                | 190      |
| Upholstery Materials .. .. .                            | 834      |
| Uranium Metal Plant .. .. .                             | 169      |
| Utkal University .. .. .                                | 424      |
| Uttar Pradesh .. .. .                                   | 425      |
| " Associations .. .. .                                  | 477      |
| " Universities .. .. .                                  | 430      |
| Uttar Pradesh Corporation .. .. .                       | 93, 1081 |

## V

|                                            |     |
|--------------------------------------------|-----|
| Vacuum Flasks & Bottles .. .. .            | 834 |
| Vanaspati (Vegetable Oil Industry) .. .. . | 99  |
| Varanaseya Sanskrit Viswa Vidyalyaya .. .. | 478 |

|                                            | PAGE    |
|--------------------------------------------|---------|
| Vee Belts .. .. .                          | 835     |
| Vegetable Oil Industry .. .. .             | 98      |
| Venereal Diseases (Public Health) .. .. .  | 137     |
| Venkateswara University .. .. .            | 320     |
| Victoria Jubilee Technical Institute .. .. | 469     |
| Vigilance Association, Bombay .. .. .      | 460     |
| Vijnan Mandirs (Education) .. .. .         | 145     |
| Vikram University .. .. .                  | 360     |
| Village Housing Projects .. .. .           | 135     |
| " Leather Industry .. .. .                 | 96      |
| " Oil (Cottage Industries) .. .. .         | 95      |
| " Pottery Industry .. .. .                 | 97      |
| " Small Industries .. .. .                 | 94, 279 |
| Visvabharati University .. .. .            | 406     |
| Visva Yoga Bharati .. .. .                 | 465     |
| Vividh Bharati .. .. .                     | 132     |

## W

|                                                                |                    |
|----------------------------------------------------------------|--------------------|
| Wage Board for Working Journalists and Non-Journalists .. .. . | 289                |
| Wages (Labour) .. .. .                                         | 76                 |
| Wardha District .. .. .                                        | 384                |
| Warehouses (Food) .. .. .                                      | 309                |
| Warehousing Corporation, Central .. .. .                       | 85                 |
| Washeries (Govt. Ind. Undertakings) .. ..                      | 127                |
| Watch & Clock Importers & Dealers .. .. .                      | 835                |
| Water Meters .. .. .                                           | 836                |
| Waterproofing Products Mfrs. & Dealers .. ..                   | 837                |
| Water Supply & Sanitation .. .. .                              | 139                |
| Weighing Machine Manufacturers, Dealers and Repairers .. .. .  | 837                |
| Weights and Measures, Metric System .. ..                      | 5                  |
| Welding Set & Materials .. .. .                                | 527, 569, 839, 912 |
| Welfare Board, Social .. .. .                                  | 16                 |
| West Bengal .. .. .                                            | 403                |
| " Associations, Societies etc. .. .. .                         | 479                |
| " Chambers of Commerce .. .. .                                 | 484                |
| " Commercial Firms .. .. .                                     | 851                |
| " Corporation, Calcutta .. .. .                                | 405                |
| " Educational Institutions .. .. .                             | 405                |
| " Fisheries .. .. .                                            | 258                |
| " Societies, Associations, etc. .. .. .                        | 479                |
| " Trades and Professions .. .. .                               | 864                |
| " University of Calcutta .. .. .                               | 405                |
| " Visva-Bharati University .. .. .                             | 406                |
| Western Railway, Statistics .. .. .                            | 296                |
| Wheat (Agriculture) .. .. .                                    | 270                |
| Whitley Plan (Public Services) .. .. .                         | 250                |
| Who's Who in India .. .. .                                     | 956                |
| Winches .. .. .                                                | 839                |
| Wine & Spirit Merchants .. .. .                                | 840, 913           |
| Wire Products Mfrs. and Dealers .. .. .                        | 840                |
| " Ropes .. .. .                                                | 841                |
| Wireless .. .. .                                               | 14                 |
| Women's Education .. .. .                                      | 146                |
| " University, S.N.D. Thackersey .. .. .                        | 375                |
| Wood Working Tools, Saws & Machinery .. ..                     | 841                |
| Woollen Industry .. .. .                                       | 100                |
| Workers Education Scheme .. .. .                               | 80                 |
| Working Class under Different Categories (Population) .. .. .  | 16                 |
| Workmen's Compensation Act (Labour) .. ..                      | 7                  |
| Workshop for the Blind .. .. .                                 | 45                 |
| " Machinery .. .. .                                            | 8/2                |
| World Bank & I.D.A. .. .. .                                    | 31, 1084           |
| Worli Dairy .. .. .                                            | 56                 |



| Y                                           | PAGE | Z                                          | PAGE |
|---------------------------------------------|------|--------------------------------------------|------|
| Yarn Merchants .. .. .                      | 842  | Zinc (Non-Ferrous Industry) .. .. .        | 197  |
| Youth Hostels' Association of India .. .. . | 471  | Zip Fastener Mfrs. .. .. .                 | 843  |
| Yeotmal District .. .. .                    | 385  | Zonal Administration (Railways) .. .. .    | 293  |
| Yoga Institute, The .. .. .                 | 465  | „ Councils (Constitution of India) .. .. . | 63   |
| Yoga-Vedanta Forest Academy .. .. .         | 478  | Zoroastrian Brotherhood .. .. .            | 465  |
| Yogic Self-Culture Society .. .. .          | 465  |                                            |      |
| Y.W.C.A. .. .. .                            | 441  |                                            |      |

*Statement about ownership and other particulars about newspaper entitled "The Times of India Directory & Year Book" (including "Who's Who"), Bombay, as required to be published under Sec. 19D of the Sub-Sec. (b) of the Press and Registration of Books Act read with Rule 8 of the Registration of Newspapers (Central) Rules, 1956 (as amended).*

**FORM IV**

(See Rule 8)

- Place of publication : The Times of India Press, The Times of India Building, Dr. Dadabhai Naoroji Road, Bombay-1.
- Periodicity of its publication : Every year.
- Printer's Name : Pyarelal Sah for the Proprietors : Bennett, Coleman & Co., Ltd.  
 Nationality : Indian.  
 Address : Rehmat Manzil, 2nd Floor, Flat No. 8, 75, Vir Nariman Road, Bombay-1.
- Publisher's Name : Pyarelal Sah for the Proprietors : Bennett, Coleman & Co., Ltd.  
 Nationality : Indian.  
 Address : Rehmat Manzil, 2nd Floor, Flat No. 8, 75, Vir Nariman Road, Bombay-1.
- Editor's Name : N. J. Nanporia.  
 Nationality : Indian.  
 Address : Somerset Place, Off Bhulabhai Desai Road, Bombay-26.

**SHAREHOLDERS**

- |                                                                                                                                                       |                                                                                    |                                                                               |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|
| 6. Names and addresses of individuals who own the newspaper and partners or shareholders holding more than one per cent of the total Paid-up Capital: | (1) Bharat Nidhi Ltd.,<br>11, Clive Row,<br>Calcutta-1.                            | (5) Allahabad Bank Nominees Ltd.,<br>14, India Exchange Place,<br>Calcutta-1. |
|                                                                                                                                                       | (2) Messrs. Sahu Jain Ltd.,<br>11, Clive Row,<br>Calcutta-1.                       | (6) Shri Ashok Kumar Jain,<br>11, Clive Row,<br>Calcutta-1.                   |
|                                                                                                                                                       | (3) The Jaipur Udyog Ltd.,<br>Sawai Madhopur,<br>Rajasthan.                        | (7) Ashoka Vinayoga Ltd.,<br>1-B, Old Post Office Street,<br>Calcutta.        |
|                                                                                                                                                       | (4) Messrs. Sone Valley Portland Cement Co. Ltd.,<br>11, Clive Row,<br>Calcutta-1. |                                                                               |

I, Pyarelal Sah, hereby declare that the particulars given above are true to the best of my knowledge and belief.

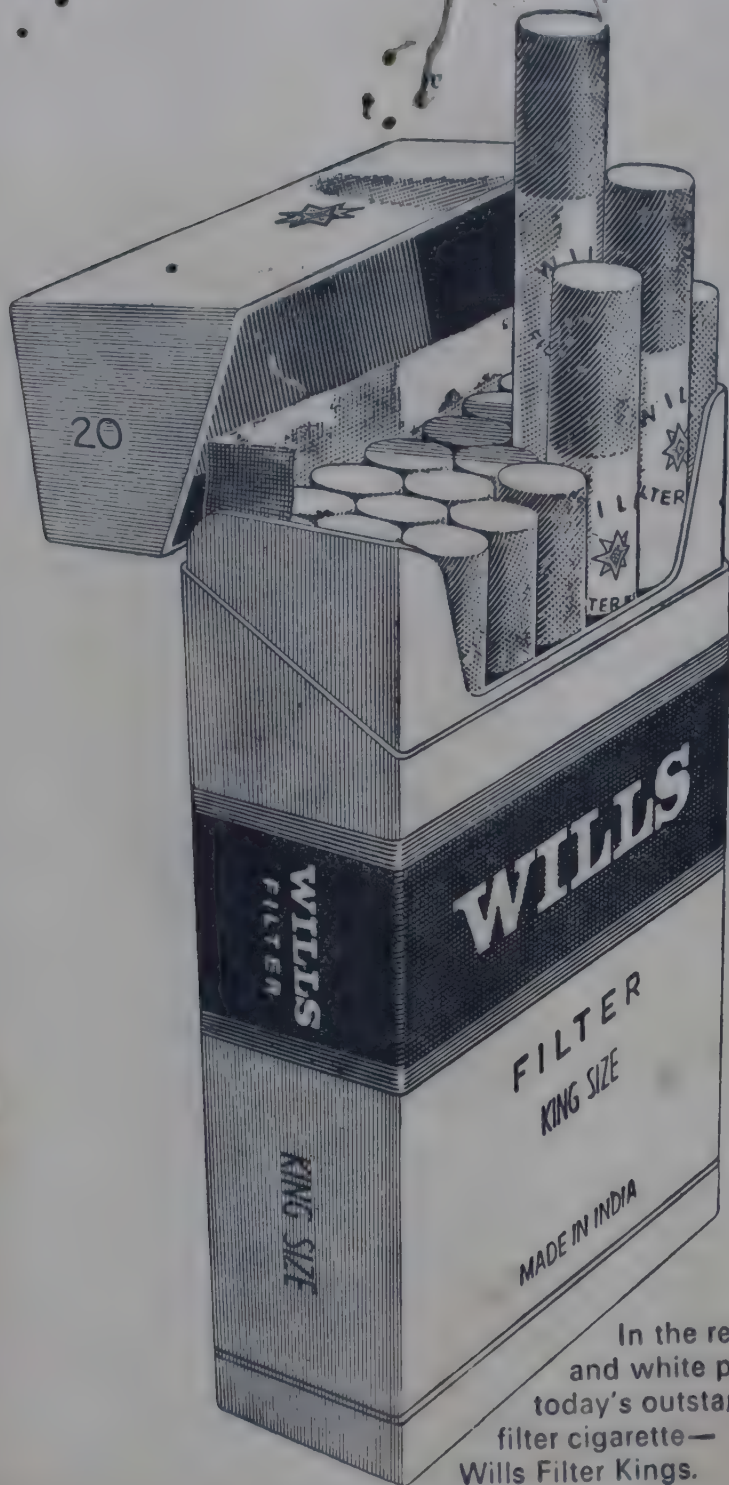
Date : July, 1967.

P. L. Sah  
 Signature of Publisher









In step with the international trend

# Wills Kings

## FILTER and PLAIN

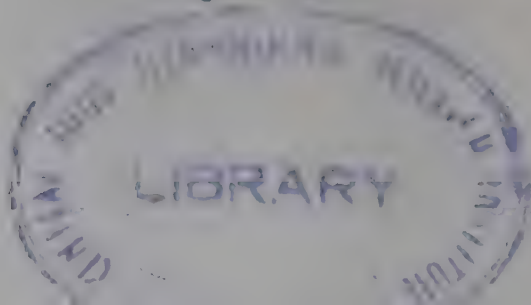


In the red, gold  
and white pack, get  
today's outstanding  
filter cigarette—  
Wills Filter Kings.

**Rs. 1.50 for 20**  
ALSO AVAILABLE IN 10's PACKETS



In the blue, gold  
and white pack, comes  
the full bodied taste, the  
rich flavour of special  
Virginia tobacco—Wills Kings.





## All India Index Number of Wholesale Prices

(See page 39).

### ECONOMY

The whole of Vidarbha is completely free from scarcity threats.

Rice is abundantly grown in the coastal Districts of Thana, Kolaba, Ratnagiri and also in Chanda and Bhandara. It accounts for one-fifth of the foodgrains grown in the State. Wheat accounts for a little more than one-twentieth. Millets are grown abundantly in the Deccan, Vidarbha and Marathwada districts. Jawar is the major cereal and accounts for half the production.

The production of cotton in 1963-64 was 1,79,000 metric tons and groundnut 8,06,900 metric tons in Maharashtra. The production of cotton and groundnut was 9,44,000 metric tons and 48,21,000 metric tons respectively in the country.

The State has abundant forest wealth. Forests form 20.7 per cent of the area of the State. There are forest areas in all districts, but the thickest forest areas are, in Chanda, Amravati, Yeotmal, Bhandara, Nagpur, Dhulia, Thana and Nasik Districts. They produce various types of timber, teak and minor forest produce.

In the matter of live-stock, the milk-yielding buffalo population is greater than the cattle only in Kolhapur and Greater Bombay. The sheep and goat abound in all Districts but are particularly noticeable in Nasik, Dhulia, Ahmednagar and Sholapur. The concentration of horses and ponies is greater in Marathwada, Dhulia and Ahmednagar.

267 new joint Stock companies (31 public and 236 private) were registered during 1964-65 with an authorised capital of Rs. 105 crores as against 243 new companies with authorised capital of Rs. 39 crores in 1963-64.

During the year 1964-65, 15 public companies with authorised capital of Rs. 247 lakhs and paid-up capital of Rs. 100 lakhs and 90 private companies with authorised capital of Rs. 396 lakhs and paid-up capital of Rs. 74 lakhs went into liquidation. During 1963-64, 132 companies with paid-up capital of Rs. 240 lakhs were reported to have gone into liquidation.

Vidarbha region of Maharashtra is outstandingly rich in mineral wealth. Nagpur and Bhandara districts of Vidarbha region possess some of the largest deposits of manganese ore in India. Salt is produced in the Coastal districts. The only Coal bearing area, having extensive reserves of first grade and medium grade Coal is found around Kamptee, Umrer and Bokhara in Nagpur district and Warora in Chanda district. Large deposits of iron ore are found in Ratnagiri and Chanda districts. Lime stone is at present mined only in Nagpur and Yeotmal districts.

The more important industries are cotton textiles, general and electrical engineering, chemicals, petroleum, transport and transport equipment, sugar, vegetable oils, paper, paper boards and soap. In 1964 there were 9,207 working factories in the State providing employment to about 9,08,000 workers. Out of the 9,207 registered factories in the State, nearly half, that is about 4,626 factories are in the Greater Bombay area.

Out of the Rs. 866 crores of productive capital in Maharashtra in 1963, the textile industry alone accounts for 16 per cent. It is apparent that Greater Bombay alone contributes 69 per cent of productive capital.

Today all places with a population of 50,000 and over are electrified. Power generation and consumption in Greater Bombay are high.

The length of roads is estimated to be about 43,013 kilometres in March 1965. 1,565 kilometres more were expected to be added by March 1966.

## ELECTRIC POWER DEVELOPMENT

The allocation for Irrigation and Power during 1966-67 is Rs. 46.02 crores or about 38.2 per cent of the total Annual Plan of Rs. 120.46 crores.

The total installed capacity as on 31st March 1965 was 1,224 MW; output of electricity 4,439 million KWH and consumption 3,569 million KWH. The per capita power generated and consumed was 112 KWH and 90 KWH respectively as compared with 66 KWH and 52 KWH in the Indian Union as a whole.

The power requirements of the State have been assessed at 2,288 MW at the end of the Fourth Five Year Plan. To meet this demand, the State's Fourth Five Year Plan includes projects, hydro and thermal, of a total capacity of 1,580 MW. This together with 190 MW accruing from the Nuclear Power Station, is expected to meet the anticipated demand of 2,288 MW in 1970-71 in full and also leave some surplus to meet unforeseen demands, if any, during the Fourth Plan period.

Maharashtra has a hydro potential of over 3,000 MW mainly concentrated in or around the Western Ghats.

**Projects in progress :** Of the hydro power projects in progress, two more generators of 75 MW each of the Koyna Project were recently commissioned. The Purna Project in Marathwada is nearing completion. The extension of the State Electricity Board's Khaperkheda steam station by 60 MW was completed towards the end of 1964. The extension of the Paras Steam station by 60 MW more and establishment of a new steam station of 60 MW at Bhusaval are in an advanced stage of construction. In the private sector, an additional capacity of 150 MW was commissioned by Tatas in their steam power station at Trombay.

**New Projects :** Three more steam stations, of a total capacity of 900 MW, are to be constructed by the State Electricity Board during the Fourth Five Year Plan period. One of these, of 280 MW, will be constructed near Nasik in the Western Maharashtra, the second of 60 MW in Parli-Vajinath in Marathwada and the third, a super-station of 560 MW, near Nagpur in Vidarbha. Though of the Fourth Plan programme, advance action in respect of these projects had been initiated in the Third Plan itself.

**Transmission Lines :** The total length of transmission lines was expected to be around 1,750 circuit kms. at the end of the Third Five Year Plan and additional lines of a total length of 2,414 circuit kms. are proposed to be constructed during the Fourth Plan period.

**Rural Electrification :** In rural electrification, the accent is on electrification of villages which are within easy reach of grid lines and which offer sufficient load, particularly load for agriculture and small industries. There are 35,851 towns and villages in the State. Of these as many as 4,665 villages had been electrified by 31st March 1966, i.e., the end of the Third Five Year Plan. Agricultural pumps supplied with electricity aggregated 44,014. A target of



supplying electricity to 10,000 more villages and 1,00,000 agricultural pumps has been fixed for the Fourth Five Year Plan.

### MAHARASHTRA STATE ELECTRICITY BOARD

Position as on 31st March 1965 :

|                            |            |
|----------------------------|------------|
| Total installed capacity : | 447,771 KW |
| Steam :                    | 172,500 KW |
| Hydro :                    | 245,824 KW |
| Diesel :                   | 29,447 KW  |

Number of towns and villages and agricultural pumps supplied with electricity :

|                                                                         | Villages | Pumps  |
|-------------------------------------------------------------------------|----------|--------|
| Western Maharashtra .. ..                                               | 1,314    | 9,216  |
| Vidarbha .. ..                                                          | 1,584    | 14,587 |
| Marathwada .. ..                                                        | 219      | 1,208  |
| Total (State) .. ..                                                     | 3,117    | 25,011 |
| Total length of Transmission lines 11 KV and above (Circuit kms) ..     | 17,613   |        |
| Total number of consumers .. ..                                         | 3,93,410 |        |
| Total electricity production in 1964-65 (Miln. KWH) .. ..               | 2,372.53 |        |
| Total electricity purchased in 1964-65 from out-agencies (Miln. KWH) .. | 278.11   |        |
| Total sales in 1964-65 (Miln. KWH) ..                                   | 2,319.25 |        |
| Total expenditure on Electricity Schemes in 1964-65 (Rs. crores) ..     | 17.58    |        |
| Capital assets on 31st March 1965 (Rs. crores) .. ..                    | 79.77    |        |
| Gross Revenue on 1964-65 (Rs. crores)                                   | 16.51    |        |
| Working expenditure for the year ending 31st March 1965 (Rs. crores) .. | 12.03    |        |

### POWER PROJECTS IN OPERATION

The following statement shows particulars of the Board's power projects in operation as on March 31, 1965 :

**Bombay-Koyna System :** Intended mainly to serve the Western Maharashtra region, this system comprises three hydro power stations, viz., the Koyna, Radhanagari and Bhatgar. Certain parts of the Poona, Nasik and Kolaba districts are served by purchasing bulk power from Tatas and the Central Railway Administration and transmitting it over the Board's lines for distribution to its consumers. In addition there are 15 diesel power stations in some places in Sholapur, Kolhapur, Dhulia, Jalgaon, Nasik, Thana and Ratnagiri districts where grid lines have not yet penetrated.

#### Capacity of Power Stations :

|                                 |                   |
|---------------------------------|-------------------|
| Koyna .. ..                     | 240,000 KW        |
| Radhanagari .. ..               | 4,800 KW          |
| Bhatgar .. ..                   | 1,024 KW          |
| Diesel Stations (total) .. ..   | 15,339 KW         |
| Units generated in 1964-65 ..   | 1,726 miln. KWH   |
| Units purchased .. ..           | 278 KWH           |
| Units sold .. ..                | 1,792 KWH         |
| No. of consumers served .. ..   | 2,40,477          |
| Length of transmission lines .. | 7,816 circuit KMS |

**Vidarbha Grid System :** This system is served by three inter-connected steam power stations — Khaperkheda (120,000 KWH), Ballarshah (22,500 KW) and Paras (30,000 KW). There are also two small diesel power stations of a total capacity of 135 KW at Aheri and Dharni. Units generated in 1964-65 : 628 million KWH ; units sold—512 million KWH ; number of consumers served—1,19,588 ; length of transmission lines—7,518 circuit KMS.

**Minor Diesel Schemes :** These were located mostly in Marathwada where grid lines had not yet reached. With the availability of grid power from 1964-65, one by one the stations are closed and grid power supplied to places served by them and also to places lying along the routes of the grid lines. In 1964-65 there were, in all 14 diesel power stations of a total capacity of 13,973 KW in Marathwada. Units generated aggregated 18 million KWH, units sold 16 million KWH ; number of consumers served 33,345 ; and length of transmission lines 2,279 circuit KMS.

### CHOLA, KOYNA

A brief note each on two other power schemes is in order.

Central Railway's Power House at Chola has a total installed capacity of 136,000 kw and supplies electric power for the requirements of Central and Western Railways' electrified lines in Bombay. This power house is interconnected with the Tata-Koyna system.

The second scheme is Koyna, it is the biggest scheme in Maharashtra.

The Koyna Hydro Electric comprises three Stages. The Stage-I of the project was completed as the four generating sets of 60 MW capacity each were commissioned and handed over to the State Electricity Board for operation and maintenance on 1st April 1963. Stage-I of the project is estimated to cost Rs. 31.28 crores.

The Stage-II of the project comprises raising the dam to its final height to store 98,000 M.cft. of water excavation and lining of pressure shafts Nos. 3, and 4, and second power cable tunnel, installation of four generating units of 75 MW capacity each in the underground power house and erection of 220 KV line to Bombay. It also includes construction of power house at the foot of the Dam having two generating units of 20 MW capacity each. The work of Stage-II of the project is nearing completion except the power house at the foot of the dam, work on which is yet to be started.

Stage-II of the project is estimated to cost Rs. 18.16 crores. An expenditure of Rs. 4,795.69 lakhs had been incurred on Stages I & II of the project till the end of December 1965.

The Stage-III of the project contemplates further generation of power on the tail-race waters of Stages I & II by constructing a system of balancing reservoirs, Head-race and tail-race tunnel, pressure shafts and an underground power house. The project envisages construction of a power house for generation of 320 MW at 20 per cent load factor by installing four generations of 80 MW Capacity each. This station is envisaged to run as a peaking station to meet the demand of power at its peak. The project has been administratively approved for Rs. 3,188.90 lakhs. The preliminary work of the project has already started and the project is programmed to be completed by 1971-72. An expenditure of Rs. 42.75 lakhs has been incurred on Stage-III of the project till the end of December 1965.



## HOUSING

Housing schemes are coordinated by the Urban Development, Public Health and Housing Department of the Government. The actual building work and ancillary functions are discharged by the Housing Boards. Finance comes partly from the Government of India.

There are two Boards now, the Maharashtra Housing Board for the western Maharashtra and Marathwada areas and the Vidarbha Housing Board for Vidarbha.

**Subsidised Industrial Housing Scheme :** This scheme is meant for industrial workers whose income does not exceed Rs. 350 per month. The scheme is executed through the Maharashtra Housing Board, Vidarbha Housing Board, Employers and Co-operative Societies of Industrial workers. The Housing Boards are provided with 100 per cent financial assistance. The financial assistance is given to the employers at the rate of 50 per cent loan and 25 per cent subsidy and to the Co-operative Societies at the rate of 65 per cent loan and 25 per cent subsidy. In addition, employers can also give their 25 per cent share of subsidy to the Housing Boards for construction of tenements for their employees. The rents charged are subsidised rents as fixed by the Government of India. The total number of tenements completed, agency-wise till March 31, 1966 is as follows : Maharashtra Housing Board 25,809; Vidarbha Housing Board 3,612; Employers 4,085; Co-operative Housing Societies 320; Total 33,826.

The construction of 2,610 tenements including spill-over works would be the programme of the two Housing Boards during 1966-67.

**Slum Clearance Scheme :** This scheme provides for construction of tenements and provision of plots for slum dwellers whose income does not exceed Rs. 250 per month in Bombay and Rs. 175 per month else where. The scheme is executed through the agency of local bodies and the Maharashtra Housing Board. The rents charged are subsidised rents as fixed by the Government of India. The total number of tenements constructed by the various agencies till the end of March 1966 is as follows : Maharashtra Housing Board 13,021; Bombay Municipal Corporation 3,875; Poona Municipal Corporation 724; Nagpur Municipal Corporation 332 (plots); Nagpur Improvement Trust 50 tenements and 650 (plots); Dhulia Municipality 64; Total 17,734 tenements and 982 plots.

The construction of 6,718 tenements including the spill-over works would be the programme of the Maharashtra Housing Board for 1966-67.

**Low Income Group Housing Scheme :** This scheme is meant for persons whose total annual income does not exceed Rs. 6,000. The scheme is in operation in the municipal areas of the State. Loans equal to 80 per cent of the cost of construction subject to a maximum of Rs. 10,000 per tenement are granted under the scheme to individuals, institutions, local bodies etc. The total number of tenements completed through the various agencies till the end of March 1966 is as follows : Maharashtra Housing Board 8,035; Vidarbha Housing Board 54; Individual 384; Local Bodies 1,496; Co-operative Societies 3,262; Institutions 85; Total 13,316.

The construction of 886 tenements including spill-over works would be the programme of the two Boards for 1966-67.

**Economically Weaker Sections Schemes :** This scheme provides for construction of tenements for persons whose monthly income does not exceed Rs. 250 per month in Bombay and Rs. 175 elsewhere. The scheme is executed

through the agencies of the Vidarbha Housing Board and the Maharashtra Housing Board, which are given 100 per cent financial assistance. Under the integrated Subsidised Housing Scheme for industrial workers and economically weaker sections the subsidy portion of central assistance has been raised to 50 per cent from 25 per cent and the rents to be charged would be subsidised rents as fixed by the Government of India. This is applicable only to projects sanctioned after the 1st April 1966. The total number of tenements constructed by the various agencies till the end of March 1966 is as follows : Maharashtra Housing Board 690.

The construction of 520 tenements including spill-over works would be the programme of the two Boards for 1966-67.

**Sweepers Housing Scheme :** This is meant for providing residential houses to the sweeper employees of the various local bodies in the State. The scheme is executed through the agency of local bodies, individual sweepers and recognised social service agencies, which are given financial assistance by way of loan and subsidy based on the approved cost. The total number of tenements constructed under the scheme till the end of March 1966, is 262.

**Middle Income Group Housing Scheme :** This scheme is meant for persons whose monthly income is between Rs. 501 and 1,250. The scheme is implemented through the Maharashtra Housing Board and the Vidarbha Housing Board. Funds required by the Boards are made available to them from the loans drawn from the Life Insurance Corporation of India by the Government. The tenements constructed are given on rental and hire-purchase basis. The total number of tenements constructed till the end of March 1966 by the two Boards is 1,709.

The construction of 1,021 tenements including spill-over works would be the programme of the two boards for 1966-67.

**Land Acquisition and Development Scheme :** The scheme is executed through the agencies of the Maharashtra Housing Board and the Nagpur Improvement Trust, which are given financial assistance to the extent of 100 per cent. The Maharashtra Housing Board has been allowed to constitute "Revolving Fund" out of the amount of Rs. 110 lakhs given to it under the Scheme. Since 1962-63, assistance for this scheme is given to the two agencies from the loans drawn by the Government from the Life Insurance Corporation of India. The area acquired and notified for acquisition respectively in acres till the end of Sept. 1964 by the two agencies is given below : Maharashtra Housing Board 515; 1,258; Nagpur Improvement Trust 91.82; nil; Total 606.82; 1,258.

## ROAD TRANSPORT

A single road transport corporation for the entire State, known as the Maharashtra State Road Transport Corporation, came into existence from July 1, 1961.

The position of Maharashtra State Transport for 1964-65 is given below : No. of passengers carried (in lakhs)—2,898.79; Capital invested (Rs. in lakhs)—2,194.35. Total gross revenue (Rs. in lakhs)—2,321.66; Total revenue expenditure (Rs. in lakhs)—2,295.75.

The operational data of Maharashtra State Road Transport Corporation as of March 1965 :

No. of passenger vehicles—3,229; No. of goods vehicles—145; No. of routes operated—2,621; Route mileage—98,549; Major workshops—One central, 11 divisional



and 86 depot and sub-depot workshops; No. of persons employed—22,654; No. of nationalised city services—Eleven; No. of municipalised city bus services—four; Rate per passenger mile—5 P.; Total bus miles operated—12,15,05,608; Total No. of passengers carried—2,898.79 lakhs; No. of bus stations—59, temporary bus stations—162; No. of refreshment rooms—382; No. of cloak-rooms—84; Pick-up stands—449.

### MILK SCHEME—1966

Staff employed : Govt. Regular 4,971; Parttime 3,320; daily rated 2,000.

Area of Govt. Land : 4,057.42 hectares (Aarey 1,279.97 hec.; Palghar 1,379.58 hec.; cultivated under irrigated fodders at Aarey for Para-grass 210.43 hec.; Vankas 1,179.44 hec.; Worli 8 hec.).

Daily quantity of milk procured : Aarey 108,893 litres; Kaira District Milk Producers' Union, Anand (Gujarat State) 79,626 litres (25,000 litres spared for Defence Work); Co-operative Societies (Greater Bombay) 12,649 litres; Mofussil Schemes 71,883 litres.

#### Distribution of Milk (per day in litres) :

| Type                                      |          |
|-------------------------------------------|----------|
| Whole Milk .. .. .                        | 232,459  |
| Toned Milk .. .. .                        | 95,834   |
| Double Toned Milk to Municipal Schools .. | 26,250   |
| Sterilised Milk .. .. .                   | 728      |
| Cow Milk .. .. .                          | 700      |
| Total Litres .. .. .                      | 3,55,971 |

Number of distribution centres : Part-time centres—1,565; Full-time centres—10; Mobile milk-bar—1; Total number of consumers taking milk from scheme : Families—280,000; Hospitals and Institutions (bulk Supply)—506.

Sale price of milk per litre : Whole Milk Rs. 1.30\*; Cow Milk Rs. 1.30; Toned Milk Re. 0.60†; Doubled Toned Milk Re. 0.45; Sterilised Milk Re. 0.20 per bottle at Government Centre; Re. 0.25 per bottle at Govt. and private milk bars.

Transport : Milk distribution vehicles 171; Milk procurement vehicles 46 (including 5 milk tankers); Staff vehicles 48; vehicles for other work 43.

Water Consumption (daily) : 18,16,000 litres (Aarey); 2,910,000 litres (Worli).

Electricity (Weekly) : 52,500 units (Aarey); 110,000 units (Worli).

Fuel Furnace Oil (Weekly) : 30,000 litres (Aarey); 49,000 litres (Worli).

Bottles replaced (Weekly) : 10,000 (Aarey); 15,000 (Worli).

Detergents (Weekly) : 3,300 kgs. (Aarey); 6,607 kgs. (Worli).

### The Aarey Milk Colony

Started: 13th March 1949; Investments by the Govt. at Aarey : Rs. 40 million; by Cattle-owners (in cattle) Rs. 30 million.

Pasteurising Capacity (Central Dairy) : 18,000 litres per hour.

Bottling capacity : 40,000 bottles per hour.

Number of livestock as on March 1966; (Aarey) : 15692 (Buffaloes 15409, Cows 283); dry 461 (Buffaloes

406, Cows 55); bulls 161 (buffaloes 158, cows 3); Young stock 3,565 (buffaloes 3,550, cows 15); in Districts (undergoing salvage) 15,125; at Palghar (undergoing salvage) 1,200.

Number of Licensee Cattle-owners 215; Number of Dairy Farm units 30.

### The Worli Dairy

Started : Nov. 7, 1961; Investment on land, buildings etc. : Rs. 1,06,18,000; Value of machinery purchased by State Govt. Rs. 28,34,000; Value of machinery supplied by UNICEF Rs. 75,16,000.

Pasteurising Capacity : 40,000 litres per hour; Bottling capacity : 50,000 bottles per hour.

### LABOUR

Particulars about labour in Maharashtra State are given below :

Total number of registered factories as on Dec. 31, 1964 : 9,757.

Number of Works Committees functioning as on 31st Dec. 1965 : 210.

Average daily number of workers employed in factories as on Dec. 31, 1964 : 9,07,501.

Number of towns covered as on Jan. 1, 1966 by the Bombay Shops & Establishments Act, 1948 : 120.

Number of industries covered by the Bombay Industrial Relations Act, 1946 as on Dec. 31, 1965 : 10. Bombay Industrial Relations Act is made applicable to all industries except Saw Mills in Vidarbha area and to Cotton Textile and Sugar Industries in Marathwada area of this State since 1st May 1965.

Trade Unions (March 31, 1965) : Number of workers covered by the Bombay Industrial Relations Act, 1946 : 3,33,192; Number of registered trade unions : 1,877; Total membership of registered trade unions : 11,29,033; Number of regd. trade unions affiliated to I.N.T.U.C. : 137; Membership of unions affiliated to I.N.T.U.C. : 2,37,718; Number of regd. trade unions affiliated to A.I.T.U.C. : 52; Membership of unions affiliated to A.I.T.U.C. : 1,88,056; Number of regd. trade unions affiliated to H.M.S. : 51; Membership of unions affiliated to H.M.S. : 35,785.

Shops, Establishments and Factories (1964) : No of Shops and Establishment : 2,69,403; No. of employees employed (Shops & Establishment) : 5,55,153; Total No. of (registered) working factories (31st December 1964) : 9,757; Average daily attendance of factory workers : 9,07,501.

Industrial Disputes in 1965 : No. of strikes 592; No. of workers directly involved 5,55,298; No. of workers indirectly involved 2,931; No. of man-days lost 13,82,044.

### THE MAHARASHTRA LABOUR WELFARE BOARD

Jambori Maidan, Worli, Bombay 18 (W.B.)

The number of welfare centres under the control of the Maharashtra Labour Welfare Board are 73. In addition, there are three sub-centres carrying out activities on a restricted scale. Activities of these centres include recreation through entertainment, games and sports, health programme through first aid and health education, community and social education, subsidiary occupations and handicraft for women, nursery schools and scouts and guides for children, creches for toddlers, Tailoring Classes, etc.

Along with the programme of mass recreation, health and education, there has also been an emphasis on skilled recreation with an educative bias.

\* Rs. 1.70 from April 24, 1967.

† Re. 0.90 from April 24, 1967.



Attendance for 73 welfare centres in the State during 1964-65 was 3,21,55,159 with a regular membership of 1,28,974.

#### Industrial Disputes (1965)\*

No. of strikes 592; No. of workers directly involved 5,55,298; No. of workers indirectly involved 2,931; No. of man days lost 13,82,044.

**Official Language:** Maharashtra Official Language Act, 1964 has been passed in the State Legislature and Directorate of Languages has nearly finalised the initial preparations like training of typists and stenographers, preparing administrative lexicon and other help books, etc. needed for the change-over from English to Marathi.

**Decentralisation of Administration:** In the State all villages have been brought within the fold of Panchayati Raj. Out of the total number of 38,437 villages, 38,259 villages have been covered by establishment of 20,823 Gram Panchayats. In addition 3,518 Nyaya Panchayats have been notified. Elections to these Nyaya Panchayats are in progress. So far (Feb. 1966) elections to 2,686 Nyaya Panchayats have taken place.

#### EMPLOYEES STATE INSURANCE SCHEME

(See after Madras)

\* Figures are provisional.

The following table shows particulars about some of the bigger projects under construction.

| Projects     | Location                               | When started | Date of completion | Area to be irrigated (Acres)            | District benefited    | Estimated cost Rs. in lakhs     | Amount spent upto 31-3-1966 Rs. in lakhs |
|--------------|----------------------------------------|--------------|--------------------|-----------------------------------------|-----------------------|---------------------------------|------------------------------------------|
| Vir .. ..    | Vir, Purandar, Dt. Poona.              | 1956         | 1965               | 66,000                                  | Satara and Sholapur.  | 541.13<br>(Revised anticipated) | 470.58                                   |
| Warna ..     | Khujgaon, Shirala, Dt. Sangli.         | —            | Not fixed          | 2,23,439                                | Kolhapur and Sangli.  | 3,108.00                        | 32.12                                    |
| Ghod ..      | Chinchani, Sirur, Dt. Poona.           | April 1954   | 1966               | 60,800                                  | Ahmednagar and Poona. | 556.15<br>(Revised anticipated) | 566.56                                   |
| Girna ..     | Panzan, Nandgaon, Dt. Nasik.           | 1958         | 1967-68            | 1,41,350                                | Jalgaon.              | 1,275.00<br>(—do.—)             | 1,100.12                                 |
| Mula ..      | Baregaon Nandur, Dt. Ahmednagar.       | 1957         | 1972               | 1,62,000                                | Ahmednagar.           | 1,611.00<br>(—do.—)             | 750.12                                   |
| Karwand ..   | Pimparala Sirpur, Dt. Dhulia.          | 1964-65      | 1967-68            | 11,200                                  | Dhulia.               | 147.55                          | 72.36                                    |
| Bor ..       | Bori, Dt. Wardha.                      | 1958         | 1968               | 33,000                                  | Wardha.               | 361.69<br>(—do.—)               | 335.27                                   |
| Malganga ..  | Sanglad Khurd and Budruk, Dt. Buldana. | 1958         | 1967               | 21,600                                  | Buldana.              | 231.32                          | 270.56                                   |
| Katepurna .. | Vastipur, Dt. Akola.                   | 1958         | 1971               | 24,640                                  | Akola.                | 412.73                          | 146.66                                   |
| Bagh ..      | Sirpur Gondia, Dt. Bhandara.           | 1958         | 1970               | 61,000<br>plus<br>22,000<br>(follow on) | Bhandara.             | 584.38                          | 92.22                                    |
| Dina ..      | Regree Gadchiroli, Dt. Chanda.         | 1958         | 1971               | 30,500                                  | Chanda.               | 226.91                          | 59.18                                    |
| Itiadoh ..   | Gothangaon Sakoli, Dt. Bhandara.       | 1958         | 1971               | 71,500                                  | Bhandara and Chanda.  | 692.02                          | 94.33                                    |

#### IRRIGATION

The total area irrigated through all irrigational sources in Maharashtra State in 1962-63 was 27.82 lakh acres (net) and 31.58 lakh acres (gross).

Below are given particulars about projects in operation.

**Bhatghar Dam and Nira Canals:**—On Bhatghar, Poona Dt., completed in 1938, irrigates 1,55,582 acres in Poona, Sholapur and Satara Dts. The cost of the scheme is Rs. 7.20 crores.

**Bhandardara Dam and Pravara Canals System:**—On Bhandardara in Ahmednagar Dist., completed in 1926, irrigates 65,912 acres in Ahmednagar. Cost 1.62 crores.

**Darna Dam and Godavari Canals System:**—At Darna in Nasik Dist., completed in 1916, irrigates 69,117 acres in Ahmednagar and Nasik Dists. Cost Rs. 3.51 crores.

**Chankapur Tank and Girna Canals:**—At Chankapur in Dist. Nasik, completed in 1910, irrigates 10,348 acres in Nasik. Cost Rs. 21 lakhs.

**Gangapur Dam:**—At Gangapur in Nasik Dist. Stage I, physically completed in 1957, would irrigate 21,500 acres in Nasik and 20,000 acres in Ahmednagar Dist. Cost Rs. 3.95 crores. Stage II is completed except few canal works which will be completed during the current year. It would irrigate 19,000 acres in Nasik. Cost Rs. 111.55 lakhs. An expenditure of Rs. 5.23 crores has been incurred till March 1966 on Gangapur Stage I and II.



The following table shows particulars about some of the bigger projects under construction—(Contd).

| Projects          | Location                                               | When started | Date of completion                                      | Area to be irrigated (Acres) | District benefited       | Estimated cost Rs. in lakhs    | Amount spent upto 31-3-1966 Rs. in lakhs |
|-------------------|--------------------------------------------------------|--------------|---------------------------------------------------------|------------------------------|--------------------------|--------------------------------|------------------------------------------|
| Purna ..          | Sidheshwar, Jintur, Dt. Parbhani.                      | 1957         | 1966-67                                                 | 1,52,000                     | Parbhani and Nanded.     | 1,491.00 (Revised anticipated) | 1,402.26                                 |
| Manar Stage I ..  | Warwant, Kandhar, Dt. Nanded.                          | 1959         | 1966-67                                                 | 25,000                       | Nanded.                  | 223.08                         | 225.19                                   |
| Manar Stage II .. | (—do.—)                                                | 1963         | 1968                                                    | 41,000                       | Nanded.                  | 200.00                         | 124.97                                   |
| Kal ..            | Dolvahal Roha, Dt. Kolaba                              | 1965         | 1970                                                    | 19,683                       | Kolaba.                  | 242.00                         | 24.56                                    |
| Bhima ..          | (1) Phagne, Mawal, Dt. Poona<br>(2) Ujjani, Sholapur } | 1963         | 1973                                                    | 3,09,100                     | Poona and Sholapur.      | 42,58.00                       | 130.76                                   |
| Pus ..            | Marsul, Pusad, Dt. Yeotmal                             | 1964         | 1970                                                    | 28,950                       | Yeotmal.                 | 368.00                         | 43.26                                    |
| Jayakwadi Stage I | Near Paithan, Aurangabad Dt.                           | 1965         | During 5th plan provided necessary funds are available. | 3,50,000                     | Aurangabad and Parbhani. | 3,681.00                       | 204.34                                   |

### MEDIUM AND MINOR PROJECTS

The medium and minor irrigation projects are expected to bring an additional area of 12,09,140 acres under irrigation.

An amount of Rs. 1,202.17 lakhs has been spent on the Minor Irrigation Works during the Third Plan period and a new irrigation potential of 1,08,190 acres is created.

### MAJOR AND MEDIUM PROJECTS

In the Third Plan, in all 27 new major and medium irrigation projects were included in addition to the 49 spill over schemes, for a total outlay of Rs. 69.06 crores which included flood protection works, extension and improvement, survey and investigation of major and medium irrigation projects etc. Against this provision expenditure of the order of Rs. 6,583.25 lakhs has been incurred during the Third Plan period. Out of the schemes which were under execution in the Third Plan, as many as 36 were physically completed and have started yielding benefits.

The Third Plan envisaged the creation of additional potential of 8.33 lakh acres due to Major and Medium projects. Against this, the actual achievement by the end of 1965-66 is 3.14 lakhs acres.

The names of the Major Projects and proposed outlays in Rs. lakhs for 1966-67 for each of them respectively are as follows :—

Mula 191.65; Karwand 37.72; Khadakwasla stage-I 128.41; Vir 2.00; Bhima Irrigation 52.43; Girna 141.43; Ghod 1.78; Dina 8.66; Itiadoh 74.79; Bagh 74.70; Bor 20.50; Katepurna 40.51; Nalganga 8.91; Manar Stage I 1.80; Manar Stage II 41.84; Purna 73.45; Jayakwadi 111.42.

### INDUSTRIES

(See after Madras)

### AGRICULTURE

During the Third Five Year Plan period production of foodgrains declined significantly to 56.06 lakh tonnes in the first year from the record production of 67.55 lakh tonnes in the earlier year. But it steadily increased from 56.06 lakh tonnes in 1961-62 to 59.85 lakh tonnes in 1964-65. The production of pulses during 1962-63 was lowest at 8.28 lakh tonnes. During 1963-64 and 1964-65 the production remained at 8.8 lakh tonnes. The production of Cotton in 1963-64 was 2.60 lakhs tonnes. During 1964-65 it declined to 2.22 lakh tonnes.

Sugarcane is grown in all the districts except the Konkan districts, the major cane growing districts being Ahmednagar, Kolhapur, Poona, Nasik, Satara, Sangli, Sholapur, Osmanabad and Aurangabad. These nine districts have about 1.23 lakh hectares under sugarcane yielding 9.74 lakh M. tonnes of sugarcane (in terms of gur) in 1962-63. Estimated production of sugarcane in 1963-64 was 11.49 lakh tonnes.

The Marathwada districts have nearly 6.52 lakh hectares under oilseeds, the corresponding figures for Vidarbha districts being 3.66 lakh M. tonnes. The western Maharashtra including Jalgaon has about 9.12 lakh hectares under oilseeds.

As regards cotton, the area and production in Marathwada, Vidarbha and Western region including Jalgaon is as follows : Marathwada : 7 lakh hectares, 5 lakh tonnes; Vidarbha : 15 lakh hectares and 10 lakh tonnes; Western region : 4 lakh hectares and 7 lakh tonnes.

Although the Konkan districts are lean in the production of food crops, they excel in horticultural wealth. Ratnagiri district has 9,200 acres under mangoes. Similarly, the district has 8,900 acres under cashewnut. Thana district is the home of bananas, with an acreage of 2,900. Nagpur oranges are well-known. They are grown in Nagpur, Amravati and Wardha Districts, which have about 37,000 acres under them. In Jalgaon district also the area under bananas is large viz. about 30,000 acres.



## LAND REFORMS

For the purposes of tenancy reform, Maharashtra State falls into the following main categories:—

- (i) The former Bombay areas consisting of 13 districts which are governed by the Bombay Tenancy and Agricultural Lands Act, 1948;
- (ii) Vidharbha areas consisting of 4 districts of former Central Province and 4 Berar districts, governed by the Bombay Tenancy and Agricultural Lands (Vidarbha Region) Act, 1958;
- (iii) The Marathwada area consisting of 5 districts governed by the Hyderabad Tenancy and Agricultural Lands Act, 1950.

The main provisions of these laws are more or less similar and they can broadly be grouped under the following five topics:—

- (i) Security of tenure for tenants, (ii) Regulation of rent, (iii) Resumption for personal cultivation, (iv) Rights of ownership for tenants, (v) Land management.

Details about "Land Reforms" were given in the previous editions of the Directory.

The programme of consolidation of small and uneconomic holdings was completed in 1,869 villages by the end of 1963, covering an area of nearly 31 lakh acres. In the western Maharashtra about 5,20,000 tenants out of 16 lakh tenants have till March 1965 become owners of 10.28 lakh acres of land as a result of legislation for compulsory transfer of ownership from landlord to tenant.

## MINERALS

The rich deposits of iron ores, estimated to be of the order of about 212 million tonnes, located in Chanda district of Vidarbha and Ratnagiri district of Konkan, very large deposits of manganese ore, both of high and low grade, occurring in Vidarbha, particularly Nagpur and Bhandara districts, extensive deposits of bauxite, estimated about 34.5 million tonnes in Kolhapur district alone, as also in parts of Ratnagiri, Thana and Kolaba districts and coal reserves of over 4,633 million tonnes in Vidarbha, constitute the mineral wealth of Maharashtra.

In addition to these major minerals, there also occur other minerals like ilmenite, chromite, mica, silica, limestone, clay, etc.

**Iron Ore:**—Very rich deposits of iron ore, estimated to be of the order of about 212 million tonnes, are located in various parts of Maharashtra, particularly in Ratnagiri and Kolaba districts and in Chanda district of Vidarbha region.

Important occurrences of iron ore are located in Ratnagiri District in Konkan, round about in Vengurla taluka and Bandapeta in Sawantwadi taluka. The overall potential appears to be enormous, the iron content in them varying from 45 to 66 per cent. A few mining concessionaires are already working in the Redi area and the present annual output is about 0.39 million tonnes. Patches of iron ore, lateritic or otherwise, are also known to occur in Kolaba district, round about Janjira.

Nagpur region, however, seems to be rich, not only in manganese and coal deposits, but also in iron ore. Those occurring in Chanda district are the most important, both in extent and quality. They occur at places like Lohara, Asola, Dewalgaon, Bissi, Pipalgaon, Fuser, Ratnapur and Surajgarh.

**Manganese:**—The Vidarbha region has very large deposits of manganese ore, both of high and low grade. There are 102 working mines exploiting manganese ore in various parts of Maharashtra. Most of the areas bearing

high grade ore have already been leased out. For the present, almost the entire quantity of manganese ore produced is exported in raw condition. However, recently, two ferro-manganese plants which utilize a sizeable quantity of the ore have been set up one each in Nagpur and Bhandara districts.

In Bombay division also, the manganese ore appears to be occurring almost side by side with the three iron-ore belts running parallel in Ratnagiri district.

**Bauxite:**—Kolhapur district has rich deposits of bauxite. More than 34.5 million tonnes of bauxite exist in this zone. They occur at Udgiri, Dhangarwadi, Rangewadi, Radhanagari, Waki, Gargoti, Panhala, Ajra and Vishalgadh all in Kolhapur district.

In the Coastal region, bauxite occurs in Ratnagiri, Thana and Kolaba districts. The deposits of Ratnagiri lie in the up-ghat region at Amboli. The reserves were estimated at over one million tonnes in Ratnagiri district. The ore occurs at Tungar hills in Thana district and in the Borivli, Jogeshwari and Goregaon area. In Kolaba district, bauxite deposits of good quality have been reported at Dohane, Ambegaon and Wakalghar in Murud taluka and Wave and Shinona in the Shriwardhan taluka. The proved and estimated reserves in Kolaba district are 2.2 and 1.6 million tonnes respectively.

**Coal:**—Coal occurs at Kamptee in Nagpur district and in the Wardha valley. The Wardha valley comprises the Bandar, Warora, Majri, Rajura, Chanda (Durgapur, Mahakali, Babulpeth and Lalpeth), Ghugus and Ballarpur fields. The deposits are, however, of the second grade as compared to the Jharia grade and are of non-coking variety. At present, about 10 coal mines are being worked in this area. The Bhandar reserves are estimated at about 110 million tonnes, while the Warora field reserves are roughly over 61 million tonnes. The reserves of the Rajura and Wani coal fields are of the order of 295 million tonnes.

In Nagpur district, coal has been proved at Tekadi and Juni Kamptee. The estimated reserves are of the order of 387 million tonnes. Areas between Kanhan and Saoner are likely to contain extensive deposits of coal. Mining operations have been undertaken at Kamptee. However, the present production is diverted exclusively to the Khaparkheda thermal power station.

However the total coal reserves in the Vidarbha region are of the order of 5,257 million tonnes.

**Limestone:**—The Marathwada region has limited mineral resources, which consist chiefly of building stones, semi-precious stones, zeolites and material for lapidary industry. Limestone deposits have, however, been discovered south-west of Mohada in the Kinwat Taluka of Nanded district. The workable reserves are provisionally estimated at 0.71 million tonnes. The deposits are of poor quality.

Important deposits of limestone in Nagpur Division are located near Rajura in Yeotmal district and Warora in Chanda district. In Chanda district, limestone occurs about 0.4 kilometres north-west of Purkepar village, about 6.4 kilometres east of Nawargaon. It also occurs in Kondala village and at Wardha. The estimated reserves of Chanda district are of the order of 10.16 million tonnes of workable limestone, suitable for cement manufacture. The estimated reserves of Yeotmal District are of the order of 4,064 million tonnes.

In Poona Division, limestone has been located at Kallur, Nandur, and Khandarwadi in Ahmednagar district. Recent surveys reveal good deposits of limestone in the Miraj taluka of Sangli district.



Limestone deposits are also known to occur in Ratnagiri district to the south-west of Phonda ghat and in the high hills of Hanumat ghats. Limestone patches occur right from Dabhol to Panvel, Malad to Bassein and Palghar to Dahana.

**Dolomite:**—Extensive deposits of dolomite and dolomitic limestone occur in Yeotmal, Chanda and Nagpur districts of Vidarbha region. A reserve of 50 million tonnes of flux grade dolomite have been proved in Wani tehsil, Yeotmal district. The reserves of dolomitic marbles in Nagpur district are estimated at 186 million tonnes. The dolomite of Nagpur and Yeotmal districts is used as flux by the ferro-manganese plants situated in Kanhan and Tumsar.

The distribution of some other minerals are:—

**Ilmenite:**—Deposits of ilmenite sand (ilmenite content—70 to 76 per cent) occur sporadically along a 40 kilometre long coastal belt from Purnagarh to Malgund and beyond in Ratnagiri district. Probable reserves at some important localities like Rajwade, Bhatia, Ratnagiri, Purnagarh, Gaonkhedi and Malgund are 0.24 million tonnes. These are not worked at present.

**Chromite:**—Ratnagiri District (Kankavali, Vagda), estimates 71,000 tonnes, and Bhandara district (Pauni), estimates 487,000 tonnes. Chromite is mined in Bhandara district only.

**Mica:**—Important occurrence of mica is near Kudaval in Ratnagiri district. Besides, mica is reported from Chanda, Nagpur and Bhandara districts.

**Silica:**—Ratnagiri District; estimates over 21 million tonnes. Now worked. Yield 23,000 tonnes a year.

**Clay:**—Ratnagiri District (Talegaon, Malvan, Vengurla, Kudal, Sawantwadi); Thana District (Ghokhara Mouza near Bassein Road); Nagpur District (Bozargaon, Shemda, Khapri); Amravati District (Belkher, Kharaili, Pandhari); Chanda District (Kothari, Isapur, Ballarshah, Junona,

Bhandak). Some leased for pottery works at Nagpur, Jabalpur and Chanda.

**Felspar and quartz:**—Ratnagiri District (Kadwa-Pan-gharat; also southern areas).

**Ochres:** Ratnagiri District (Savantwadi, Kudal, Vengurla).

In 1964, the total value of mineral production in Maharashtra was Rs. 71.6 million as against Rs. 67.2 million in 1963. The State ranks tenth in mineral production in India.

**Source:**—Intelligence Branch, Mineral Economics Division, Indian Bureau of Mines, Nagpur.

### THIRD PLAN

**State level Schemes:** Of the total revised plan outlay of Rs. 418.38 crores, the outlay on State level schemes is Rs. 36.46 crores. The table below shows the region-wise distribution of the revised State Plan outlay less the outlays on State level schemes and the resultant per capita outlays in the different regions on the basis of their population according to 1961 census.

| Division                           | Total revised outlay<br>(Rs. crores) | Per capita outlay<br>(Rs.) |
|------------------------------------|--------------------------------------|----------------------------|
| Greater Bombay .. ..               | 30.39                                | 73                         |
| Bombay excluding Bombay City .. .. | 91.40                                | 96                         |
| Poona .. ..                        | 97.34                                | 93                         |
| Nagpur .. ..                       | 96.11                                | 104                        |
| Aurangabad .. ..                   | 66.68                                | 105                        |
| Total .. ..                        | 381.92                               | 96                         |

*Note:* Because of security reasons, we have not been able to get details about region-wise irrigation projects.

## GREATER BOMBAY

The area of Greater Bombay is 186 sq. miles and the population 4,152,056 (1961 Census).

The area of Bombay City is 26 sq. miles and the area of the Bombay Suburban District is 160 sq. miles. For population see under "Population".

The northern boundary runs from the north of Dahisar village in the west, in the centre between the milestones 21 and 22 on the Agra Road.

The municipal area of Greater Bombay described above is also the area covered by Bombay City and the Bombay Suburban District from the point of view of revenue division.

The Collector for Bombay City is also the Collector for the Bombay Suburban District. Bombay City Collectorate is directly under the Government and is governed in accordance with the provisions of the Bombay City Land Revenue Act of 1876.

The Bombay Suburban District has besides the Collector, one Additional Collector, one District Deputy Collector, one Additional District Deputy Collector and three Mamlatdars one for each of the Talukas. Andheri (also called South Salsette) with headquarters in Andheri, Borivli with headquarters in Borivli and Kurla with headquarters at Mulund (with effect from Aug. 16, 1962). The headquarters of the Additional District Deputy Collector is at Andheri.

There are 33 Presidency Magistrates Courts, 10 Police Divisions and 38 police stations in Gr. Bombay.

### AGRICULTURE

In Bombay Island proper though about 8 sq. miles of unbuilt and undeveloped land is available there is practically no agriculture. Vegetables, flowers and fruits are grown in private gardens and wadis but on a very negligible scale. In the newly merged areas and the adjoining suburbs, however, extensive paddy cultivation is carried on. Vegetables and fruits are also grown especially during the monsoon. The produce is largely marketed in Bombay.

### COMMERCE AND INDUSTRY

Commercially and industrially Bombay is the second, if not the first City in India. It is the principal centre of the cotton textile industry (56 cotton mills with 58,547 looms and 31,06,502 spindles). Its share in looms and spindles is 32.45 per cent and 24.06 per cent respectively of the total in the country. There are over 566 textile factories including silk, woollen and hosiery; over 986 engineering undertakings; over 146 establishments manufacturing articles of food, drink and tobacco; over 256 establishments producing chemicals, etc.; 19 hides and skins processing concerns, and over 2,000 factories of a miscellaneous character.

During 1964 it was reckoned that there were 1,753 factories employing under 20 workers; 1,423 factories employ-



in between 20 and 50 workers; 1,260 employing between 50 and 500; 173 employing between 500 and 5,000 and 16 having more than 5,000 workers.

The following are the number of factories registered and working under different categories and their daily average number of employees respectively during 1964: Food except beverage 301; 290; 16,654; Textiles 660; 649; 264,770; Printing, publishing, and allied industries 424; 414; 19,391; Chemicals and Chemical products 322; 314; 29,409; Metal products (except machinery and transport equipment) 656; 642; 37,478; Machinery (except electrical machinery) 421; 412; 31,354; Electrical machinery 253; 250; 25,542; Transport equipment 148; 145; 51,717; Others 15,38; 15,09; 110, 379; Total 4,723; 4,625; 586,694.

The Reserve Bank of India, the central banking and currency authority has its Central Office in Bombay and 30 Indian Scheduled Banks operate in Bombay. Of the scheduled banks four have their registered offices here. There are 14 foreign Scheduled Banks. Of these eight have their principal offices located in Bombay.

Being the best natural harbour in India, the trade carried through Bombay is about 46 per cent of the total trade of India. The principal items of import are bricks, cement, sand, etc.; China clay; coal; cotton; glassware; grain; hardware; iron and steel; kerosene; fuel oil; motor vehicle parts; machinery; boilers and railway materials; oilman stores; oils; vegetables, etc.; paper; piece-goods; petrol; sugar; timber; twist and yarn; Government and naval and military stores.

The main exports are cola; cotton; flour; groundnuts; hemp; hides and skins; kerosene and fuel oils; manganese ore; myrobalans; oil-cake; piece-goods; seeds; spices; sugar; wool packages; twist and yarn; Government and naval and military stores;

The total returns to the Central Government from Greater Bombay in customs revenue for the year 1964-65 is about 45.63 per cent of the total revenue from the seaborne and air borne trade of India. The income-tax return to the Central Government from Greater Bombay is about 31.82 per cent of the total income from the country. The Corporation Tax amounts to about 42.5 per cent of the total collections in Gr. Bombay.

## THE GREATER BOMBAY CORPORATION

To improve the tempo of civic amenities and to add substantially to the convenience of the public the administration was divided ward-wise from 1964-65. The Municipal Commissioner in his budgetary note (1966-67) says that the "Scheme is as yet in an experimental stage and will have to be followed up by framing the budget estimates also on ward-wise basis." In the meantime a consolidated budget has been prepared by amalgamating the divisions corresponding to city, suburbs and extended suburbs.

The municipal area of Greater Bombay is now divided into 14 administrative wards. These are A, B, C, D, E, F (North); F (South); G (North); G (South); H; K; L + M; N + T; P + R.

For election purposes the municipal area of Greater Bombay is divided into 44 electoral wards—numbered 1 to 44.

The municipal government of Greater Bombay vests in the Municipal Corporation, composed of 131 representatives elected on adult franchise.

## COMMUNICATIONS

From the communications point of view Bombay holds a unique position. There are numerous air routes connecting Bombay with the rest of the country, and it is also directly linked with foreign countries aurally. The head offices of two chief railway systems, the Central and Western Railways are in Bombay which is rail linked with Calcutta, Delhi, Nagpur and Madras. It is the second biggest port and the chief sea communications centre of India. Greater Bombay's transport requirements are met by the local services of the two railways, Central and Western, besides the bus services of the municipalised Bombay Electric Supply and Transport Undertaking.

## HOUSING

Statement showing the number of tenements constructed and completed by the Maharashtra Housing Board from April 1, 1947 to Dec. 31, 1965 in the Greater Bombay area, under the respective groups: Old industrial housing scheme 2,608; scheme for B.S.O.R. 500; old low income group housing scheme 2,075; military hutments 1,575; subsidised industrial housing scheme 24,910; rehabilitation scheme 19,715; new low income group housing scheme 7,749; slum clearance scheme 12,427; housing scheme for dishoused persons 200; middle income group housing scheme 1,464; economically weaker section housing scheme 666; acquisition and development of lands 515 acres; Juhu-Vile Parle development scheme 426 acres; Total expenditure incurred during the above period for the whole State Rs. 3,559.28 lakhs. (This is inclusive of Rs. 40.46 lakh rupees for the assets transferred from Marathwada). This is exclusive of the tenements and expenditure incurred on the works transferred to Gujarat Housing Board due to bifurcation.

Total number of households : 568,862.

22,695 households were examined in a sample survey. The number of persons living in them was 107,282—66,530 males and 40,752 females.

Out of these households, the number of small households (3 members and less) was 9,110, and the number of persons living in them was 18,518; of medium households (4 to 6 members) 8,238, and the number of persons 39,699; of large households (7 to 9 members) 3,656, and the number of persons 28,454; of very large households (10 and above) 1,691, and the number of persons 20,611.

The Corporation has four statutory committees, the Standing Committee, the Improvements Committee, the Bombay Electric Supply and Transport Committee and the Education Committee.

The executive power in regard to general municipal administration vests in the Municipal Commissioner. The administration of the B.E.S.T. Undertaking, however, vests in the General Manager, B.E.S.T.

The Corporation is required to meet at least once a month. In actual practice it meets twice a week and oftener if necessary. Meetings of the Corporation are presided over by the Mayor who also convenes the meetings. The Mayor's term of offices is one year and he is elected at the first meeting in April.

The Corporation has decided to adopt the Maharashtra State Government rolls and Legislative Assembly Constituencies after sub-dividing each of the said constituencies into five single member municipal wards and to raise the



term of the corporation from 4 to 5 years. The next municipal general election which were to be held in March 1966, are now proposed, by the State Government, to be postponed till 1968 on the basis of single member constituencies (120 wards).

The four most important officers of the Corporation are the Municipal Commissioner, the General Manager of the Undertaking, the Municipal Secretary and the Municipal Chief Auditor.

### EDUCATION AND MEDICAL RELIEF

Primary education is free and compulsory in the Lower Primary standards of Municipal Schools all over Greater Bombay. It is the special responsibility of the Corporation.

But only about 88 children out of 100 receive an education.

From 1958 the benefit of free education was extended to the upper primary classes too.

There were 892 Municipal Schools and Classes conducted by the Education Committee and 520 Aided or Recognised Schools. The total number of pupils in all Primary Schools was about 6,00,000 out of whom 4,80,000 were in Municipal Schools and the rest in other Schools. The Corporation spent about Rs. 5.4 crores on primary education in 1964-65. Of this Government contributed Rs. 65 lakhs. There was a net increase of 30,000 pupils in Municipal Schools during the year.

Education cess collected during 1963-64 was Rs. 59,60,778.

With the sanction of the State Government the Corporation has started 17 secondary schools. Instruction is imparted through Marathi, Gujarati, Urdu, Hindi and Kannada.

The Municipality maintains the Victoria and Albert Museum at Victoria Gardens and 19 libraries.

**Medical Relief :** The Municipality runs one large hospital for infectious diseases (except tuberculosis, venereal disease and leprosy) at Sane Guruji Road and three other large general hospitals in the City proper (K.E.M. ; Nair and the Lokamanya Tilak Hospital, previously known as the Sion Hospital) and a group of hospitals for the treatment of tuberculosis at Sewri, an isolation centre at Dadar and four clinics and an ear, nose, throat hospital at Napier Road. Altogether 1,188 beds are reserved for T.B. patients. In the Suburbs there are four general hospitals and 1 T.B. Clinic and 300 beds reserved for T.B. patients. Medical treatment is administered also through 59 general dispensaries, 2 Ayurvedic dispensaries, 1 Unani, 6 women's and children's clinics, 9 Mobile Hospital Units, and 17 Maternity Homes. The five general hospitals have maternity wards where maternity cases are treated free of charge. There are 35 family planning centres in Greater Bombay. Anti-rabies treatment is given free of charge at the K.E.M., Nair and Lokamanya hospitals as well as the Bhabha Hospital at Bandra, the Municipal General Hospital at Ghatkopar (at Rajawadi); K. B. Bhabha Hospital, Kurla & Smt. M. T. Agarwal Municipal General Hospital, Mulund.

### WATER SUPPLY

The water supply of the City is drawn from four lakes : Tansa, Vaitarna, Vihar and Tulsi. The Tansa Lake combined with Vaitarna has a maximum supply capacity of 200 million gallons per day and is the main source of water supply. It is situated about 66 miles north-east of Bombay. The Vihar lake can supply 20 million gallons a day exclusively to the north-east part of the City and also partly to Chembur and Kurla. It is situated about 18 miles north of

Bombay. The Tulsi Lake which is to the north-west of Vihar Lake supplies 3 million gallons a day.

Under Section 140 of the Bombay Municipal Corporation Act the Corporation can levy water tax on buildings, lands and premises in the City. The tax is fixed as a certain percentage of the rateable value of the building, land or premises. The supply of water to any premises can be cut off in default of payment of water tax or any sum due for water or hire of meter or expenses of work done.

If the Municipal Commissioner finds that any premises are not provided with an adequate supply of pure water he has the power under Section 271(2) to compel the person who pays the property tax to obtain an adequate supply from Municipal Water Works and carry out all such works as is necessary for a proper distribution of water.

For purposes of distribution Bombay is divided into four divisions, viz., area getting supply from (a) Malabar Hill Reservoir, (b) Bhandarwada Hill Reservoir, (c) Worli Hill Reservoir, (d) and direct supply.

Total water supplied to Greater Bombay per day is about 215 million gallons.

The schemes envisaged to augment the present water supply are : Rs. 5.25 crores Dahisar river dam, which is expected to yield 6 million gallons of water per day and construction of a dam on the Upper Vaitarna river.

The Municipal Corporation will have to make arrangements to convey the additional supply (full supply estimated at 120 million gallon per day) by laying an additional pipe line from Tansa to Bombay. The work of driving a tunnel from Mulund to Kandivali is already in progress. The Corporation will also have to construct additional service reservoirs and distributory mains in Greater Bombay area for proper distribution of water. All the works are likely to cost about Rs. 42.2 crores.

Regular bacteriological and chemical analysis of water is carried out by the Municipal Analyst.

### PUBLIC HEALTH DEPARTMENT

The Department is divided into several branches such as environmental sanitation, food, sanitation and food adulteration, vital statistics, regulation of places for disposal of the dead, prevention and control of communicable diseases, maternity and child hygiene, family planning, medical relief and health propaganda.

The vaccination staff includes a Superintendent, a Head Vaccinator, a number of Vaccinators including a Lady Vaccinator. There are 89 public vaccination stations 7 of which work daily at : 1. The Central Vaccine Depot, Parel. 2. The Sanitary Institute Building, Princess Street. 3. Municipal Suburban Offices, Waterfield Road, Bandra. 4. Andheri Maternity Home, Andheri. 5. Seth N. L. High School, Malad. 6. Kasturba Hospital, Sane Guruj Road. 7. Ferry wharf (closed from June 1, to Sept. 30). The remaining centres work on one day every week by rotation for about 2½ hours. Vaccinations are also done at the Municipal general hospitals.

Hygiene includes maternity and child welfare, family planning and school health.

There are 25 Maternity Homes in Greater Bombay and five maternity wards in general hospitals, each in charge of a Lady Medical Officer. A number of Health visitors do the follow-up work and ensure domiciliary care under the direction of the Lady Medical Officers. A small maternity unit is conducted at Dharavi. Expectant mothers are encouraged to attend ante-natal clinics, of which there are 27 in number. Maternity Homes in the City are at Cadell



Road, Victoria Road, Bellasis Road, Khetwadi, Imamwada Road and Naigaum. And child welfare clinics are conducted (besides the Maternity Homes) at Fergusson Road Dispensary, Dadar Main Road Dispensary, Ambewadi Dispensary at Parel Tank Road, District Dispensary at Souther Street, Tardeo Flats Dispensary, District Dispensary at Charni Road, District Dispensary at Panjrapole, Palton Road Stables Dispensary. Four child health centres, two well-baby centres and three paediatric centres are conducted at Maternity homes.

There are 35 family welfare planning clinics conducted at Municipal maternity homes and hospitals where instruction and advice in the spacing of births are given. Operative procedures are done at the larger Municipal hospitals as well as at Naigaum Maternity Home on a voluntary basis only.

School Health Work is limited to Municipal Schools only and is under a Medical Officer. Children found to have defects are taken for treatment in school buses to the school clinic at K.E.M. Hospital. Dental care is given at the Dental Clinic at the Bai Yamunabai L. Nair Hospital. All children in municipal schools are given free milk on working days.

The Public Health Laboratory which is under the charge of a Municipal Analyst conducts routine and special examinations of water, sewage, food, urine, blood and sputa of patients at Municipal Institutions. There is also a Health Museum maintained for the education of citizens.

Conservancy includes cleansing of streets, etc., removal and disposal of refuse, destruction of rats and dogs, veterinary service, removal of carcasses, disinfection, ambulance and so on.

Medical Relief is given at the following hospitals : K.E.M., Nair, Lokmanya Tilak Hospital, R.P.T.B. and Kasturba Hospital, at 58 Municipal General Dispensaries, nine Mobile Hospital units and one Eye Hospital and Dispensary.

### WELFARE WORK

To stimulate civic awareness and promote closer contact with the public, the Corporation has been running an illustrated English monthly called 'The Bombay Civic Journal' from March 1954. It deals with the activities and problems not only of the Bombay Municipality, but also of other local bodies all over the country and seeks to foster 'an objective discussion of civic issues and the larger questions relating to local self-government from the national angle'.

Another new development has been the starting of a Public Relations Department in February 1956. This department, besides doing educative publicity through films, posters, pamphlets, press notes etc., has also been issuing useful booklets for the guidance of citizens.

Other activities include the production of films for health education, the introduction of various modern devices for traffic movement, starting of a unit for research in primary education, the opening of a municipal bank, the building of two open-air theatres for the recreation of citizens, holding of civic exhibitions, organisation of health and cleanliness weeks, conducting of seminars, establishment of an electric crematorium, construction of sub-ways, two fly-overs and the starting of a department of preventive and social medicine at the Topiwala National Medical College and a convalescent home at the K.E.M. Hospital and maintenance of a swimming pool.

### GREATER BOMBAY (1964-65)

Area : About 1,05,909.82 acres.

Population : 41,52,056 (1961 census) (City 27,71,933 ; Suburbs 10,36,585 ; Extended suburbs 3,43,538). The mid-year (1964-65) estimated population of the city, suburbs and extended suburbs was 29,64,000 ; 12,65,000, 4,25,000 respectively.

Below we give particulars about Greater Bombay :

No. of Hospitals (Municipal, Government and Private) 21 ; No. of Municipal Hospitals 14 ; No. of Municipal Dispensaries incl. of women and children as well as Ayurvedic Dispensaries 59 ; No. of Primary Schools (Municipal and Private) 1,400 ; No. of pupils in all Primary Schools about 6,00,000 ; No. of Municipal Primary Schools 900 ; No. of children in Municipal Primary Schools 4,80,000 ; No. of teachers in Municipal Primary Schools 11,274 ; No. of Municipal Medical Colleges 4 including a Dental College ; No. of Motor Vehicles 68,777 ; Road Mileage about 590 ; No. of Markets (municipal and private) 79 ; No. of gardens, open spaces etc. 137 ; No. of Fire Brigade Stations 15 ; No. of fire alarms 219 ; Total no. of Municipal employees 45,000 including those engaged on temporary and daily wages basis and excluding the B.E.S.T. ; Annual wage bill of employees about Rs. 7 crores.

### CITY

Below we give some facts about the City for 1964-65 :

Area of the City : 67.78 sq. kms. ; Population : 29,64,000 according to 1964-65 mid-year estimates ; Density of population : 43,083 per sq. km.

INCOME (in Rs.) : Actuals for 1964-65 : General Tax 7,11,52,288 ; Water Tax at 4½ per cent including other receipts from Water Works 4,97,41,185 ; Halalkhore Tax at 3½ per cent including receipts from special service 1,11,40,107 ; Total income (Rs.) : 19,31,15,507.

EXPENDITURE (Rs.) : City proper for 1964-65 : Primary Education (for City and Suburbs including Cess plus grants) 4,51,93,089 ; Medical Relief 3,09,94,816 ; Water Works (Maintenance etc. 68,26,217 and Debt Charges 2,95,35,432) 3,63,61,649 ; Public Health 53,92,568 ; Fire Brigade 26,52,230 ; General Supervision, Collection of Revenue etc. 58,79,685 ; Debt charges (excluding Water Works) 1,94,27,831 ; Total expenditure including other items 17,84,41,368.

TAXES, LOANS ETC. (Rs.) 1964-65 : Incidence of taxation per head 56.40 ; Total rateable value of properties 35,89,80,736 ; Properties registered in the Assessment Book 69,069 ; Rateable value per head of population 129.51 ; Redemption or Sinking Fund in hand or invested 17,66,32,392 ; Net loan debt 33,24,88,360 ; Net debt per head of population 121.78 ; Number of vehicles and animals taxed 67,601.

BIRTHS AND DEATHS (1965)—For Greater Bombay : Total number of births registered during the year 1964-65 1,32,602 ; Total number of deaths during the year 45,151.

### BUDGET 1966-67 (Estimates)

Here are a few salient features of the City Budget for 1966-67 as adopted by the Municipal Corporation (Rs.) : Opening balance on April 1, 1966 4,40,68,251 ; Income on existing basis of taxation 33,04,90,159 ; Expenditure 32,37,72,790 ; Deficit 67,17,369 ; Closing Balance 5,07,85,620.

#### Revenue Account :

New or increased provisions made on revenue account are in respect of medicines, drugs, stores, diets in hospitals



and dispensaries, collection and transport of refuse and maintainance of roads, gas and electric lighting and for running Municipal high schools. Rs. 100 lakhs have been provided for undertaking housing schemes on a cooperative basis.

#### *Loan Works : (1966-67)*

The Loan Works programme includes provision for completion of works already in progress and new works necessary in the interest of health, sanitation, water supply and other civic services. The total amount provided for 1966-67 is Rs. 23,12,92,000 including Rs. 1,32,03,000 for plant and machinery.

Some of the major works for which funds have been provided are as under (in Rs. '000):—Construction of centralised ward office buildings 14,70; Master Plan for distribution of water supply in the city 4,02,44; Upper Vaitarna scheme 7,46,25; Bhatsai scheme 15,00; Construction of building No. 3 at L.T.M.G. Hospital, Sion 5,00; Resurfacing the major roads in the city 70,00; Construction of vehicular bridge connecting Princess Street to Netaji Subhas road etc. 10,00; Construction of slaughter house, at Deonar Rs. 10,10; Widening of Tulsi pipe road Rs. 15,00; Construction of roads and over bridges on railways at different places in the suburbs 15,00; Construction of 250 bedded hospital at Juhu development scheme, Vile Parle West Rs. 8,00.

Total Loan Funds (1966-67) : Rs. 23,99,05.

A loan of Rs. 8-00 crores is proposed for financing the capital expenditure during 1966-67.

The civic budget for 1967-68 is estimated to show a surplus of Rs. 22-43 lakhs. The income is estimated at Rs. 37-01 crores and the expenditure Rs. 36-79 crores.

#### **SUBURBS (1964-65)**

Area of the Suburbs: 175-08 sq. kms.; Population: 12,65,000 according to 1965 mid-year estimates; Density of population: 6,900 per sq. km.

#### *INCOME : Actuals (Rs.) :*

General Tax 2,08,30,044; Water Tax by measurement (including other receipts from Water Works) 1,22,48,536; Halalkhore Tax at 3½ per cent including receipts from special service 26,90,843; Total income, including revenue from other sources 4,33,67,987; Rate charged for water supplied by measurement from Rs. 1-65 to Rs. 5-50 per 10,000 litres according to class of property.

**EXPENDITURE (Rs.) :** Education (Primary) 38,71,344; Medical Relief and Education 31,22,603. Water Works (Maintenance etc. 96,42,806 and Debt Charges 1,22,57,70) 2,19,00,513; Public Health 19,60,846; Fire Brigade 5,67,780; General Supervision, Collection of Revenue etc. 14,98,516; Grants-in-aid to Public Institutions 43,888; Debt charges excluding Water Works 1,06,72,782; Total expenditure including other items 4,85,85,441.

**TAXES, LOANS ETC. (Rs.) :** Incidence of taxation per head (as per census of 1961) 35-83; Total rateable value

of properties 10,71,81,055; Properties registered in the Assessment Book 61,689; Rateable value per head of population (as per census of 1961) 116-87; Debts outstanding 10,51,35,500; Redemption or Sinking Fund in hand or invested 2,26,18,485; Net Loan Debt 8,25,17,015; Net debt per head of population (as per census of 1961) 79-60.

#### **EXTENDED SUBURBS**

**INCOME:—Actuals for 1964-65 (Rs.) :** General Tax 53,91,869; Water Tax (including other receipts from Water Works) 24,83,720; Halalkhore Tax at 3½ per cent including receipts for special service 8,56,540; Grant-in-aid from Government 2,47,429; Total income, including revenue from sources 1,13,89,934.

**EXPENDITURE (Rs.) :** Education (Primary) 11,85,000; Medical Relief 8,43,591; Water Works 36,80,077; Public Health 6,99,650; General Supervision, Collection of Revenue etc. 1,81,643; Grants-in-aid to Public Institutions 9,900; Total expenditure including other items 1,08,92,174.

**Loans, Taxes Etc. (Rs.) :** Incidence of taxation per head as per 1961 census 26-30; Total rateable value of properties 3,41,28,598; Properties registered in the Assessment Book 26,967; Rateable value per head of populations 110-16; Debts outstanding, 2,12,00,000; Net loan per head of population as per 1961 Census 61-71.

#### **B.E.S. & T. UNDERTAKING**

(Of the Bombay Municipal Corporation)

Particulars relate to 1964-65 are: Total staff in the Undertaking 1,337;

**Bus Section :** No. of vehicles including luxury buses for tourists 1,337; Route kilometres 1,168-0; No. of passengers carried per day 19,10,884; Specially-built luxury buses for tourists 4; Total income for the year Rs. 9,58,69,885; Total expenditure Rs. 10,26,68,361.

**Electric Supply Section :** Total number of units purchased 86,61,80,000; Total number of units sold (Supply) 80,37,81,000; Total number of units sold (Traction) 8,87,230; Total number of consumers 3,56,528; Total income Rs. 8,31,12,002; Total expenditure Rs. 7,13,31,199.

#### **Budget, 1966-67**

Estimated opening balance Rs. 1,00,000.

**INCOME—**(Including share of administrative receipts): Electric Supply Rs. 10,04,87,750; Buses Rs. 11,39,26,723; Trolley Buses Rs. 12,36,027; Total Rs. 21,57,60,500.

**EXPENDITURE** (Including share of administrative expences): Electric Supply Rs. 8,83,21,925; Buses Rs. 12,47,79,692; Trolley Buses 13,94,463; Total Rs. 21,44,96,080.

Appropriation to statutory and other funds or objects Rs. 11,64,420; Estimated closing balance Rs. 1,00,000; Total Rs. 21,57,60,500.

The budget estimates of the B.E.S.T. for 1967-68 show a surplus of Rs. 5-985 lakhs, with the inclusion of an additional income of Rs. 30 lakhs from the revision of tariffs and Rs. 190 lakhs from the revision of bus fares. The income is estimated at Rs. 2,279 lakhs and expenditure at Rs. 2,273-020 lakhs.

## **UNIVERSITY OF BOMBAY**

### **Bombay I.**

**I**NCORPORATED under Act XXII of 1857 (subsequently amended by Act VII of 1904, and reconstituted by the Bombay University Act IV of 1928 and Act XXXI of 1953).

**Chancellor :** Dr. P. V. Cherian, Governor of Maharashtra, **Vice-Chancellor :** Dr. P. B. Gajendragadkar, **Rector :** Prof. G. D. Parikh, **Registrar :** T. V. Chidambaram, **Deputy Registrar :** F. P. Soares.



*Number of Teaching Deptts., constituent colleges and recognised postgraduate institutions as on 1st August 1965.*

|                                                                           |    |
|---------------------------------------------------------------------------|----|
| University Deptts. . . . .                                                | 14 |
| Constituent colleges . . . . .                                            | 58 |
| Recognised post-graduate institutions . . . . .                           | 15 |
| Institutions recognised as qualified institutions under 0.84 AA . . . . . | 2  |
| Total . . . . .                                                           | 89 |

*Number of students as on 1st August 1965.*

|                                                             |        |
|-------------------------------------------------------------|--------|
| Students in University Departments . . . . .                | 2,322  |
| Students in constituent colleges . . . . .                  | 62,176 |
| Students in recognized post-graduate institutions . . . . . | 518    |
| Total . . . . .                                             | 65,006 |

**Budget Estimates 1966-67**

|                              | Recurring   | Non-recurring | Total       |
|------------------------------|-------------|---------------|-------------|
|                              | Rs.         | Rs.           | Rs.         |
| Income . . . . .             | 1,17,61,254 | 56,13,809     | 1,73,75,063 |
| Expenditure . . . . .        | 1,19,93,756 | 57,56,809     | 1,77,50,565 |
| State Govt. Grants . . . . . | 13,33,219   | —             | 13,33,219   |

**List of Colleges (1965-66)**

R. D. & S. H. National College, Bandra, Bombay-50 ; Ramniranjan Jhunjhunwala College, Ghatkopar, Bombay-77 ; Sophia College for Women, Bhulabhai Desai Road, Bombay-26 ; Kishinchand Chellaram College, Dinshaw Wachha Road, Churchgate, Bombay-1 ; Parle Tilak Vidyalaya's Parle College, Vile-Parle (East), Bombay-57 ; St. Xavier's Institute of Education, 15, New Marine Lines, Opp. U.S.I.S., Bombay-1 ; Government Dental College, St. George's Hospital Compound, Fort, Bombay-1 ; D. E. Society's Kirti College, Cadell Road, Bombay-28 ; L. U. Jhaveri College of Arts & M. V. College of Science, Andheri (East), Bombay-69 ; Dhemphe College of Arts & Science, Panjim, Goa ; Siddharth College of Commerce & Economics, Anand Bhuvan, Dr. Dadabhai Naoroji Road, Bombay-1 ; Siddharth College of Arts & Science, Anand Bhuvan, Government Law College, Churchgate, Bombay-1 ; K. C. Law College, Dinshaw Wachha Road, Churchgate, Bombay-1 ; New Law College, Tulsi Pipe Road, Matunga (W. Rly.), Bombay 16 ; St. Xavier's College, Mapuca, Goa ; Sydenham College of Commerce & Economics, 'B' Road, Churchgate, Bombay-1 ; Elphinstone College, Bombay-1 ; Seth G. S. Medical College, Parel, Bombay-12 ; Ruparel College, Tulsi Pipe Road, Matunga, Bombay-16 ; V. J. Technical Institute, Matunga, Bombay-19 ; Grant Medical College, Byculla, Bombay-8 ; Sir J. J. College of Architecture, Dr. D. N. Road, Bombay-1 ; Siddharth College of Law, Anand Bhavan, Dr. Dadabhai Naoroji Road, Bombay-1 ; M. L. Dahanukar College of Commerce, Vile Parle, Bombay-57 ; H. R. College of Commerce & Economics, Dinshaw Wachha Road, Churchgate, Bombay-1 ; Mithibai College of Arts &

Chauhan Inst. of Science, Vile Parle (West), Bombay-56 ; College of Nursing, J. J. Hospital Compound, Bombay-8 ; Hazarimal Somani College of Arts & Science, Chowpatty, Bombay-7 ; Bandra College of Commerce & Economics, Bandra, Bombay-50 ; Sadhana School of Educational Research & Training, Near Lion's Park, Juhu Road, Santa Cruz, Bombay-54 ; Secondary Training College, 3, Cruickshank Road, Bombay-1 ; Sardar Patel College of Engineering Versova Road, Andheri, Bombay-58 ; Chinai College of Commerce & Economics, Andheri (East), Bombay 69 (AS) ; Smt. Parwatibai Chougule College of Arts & Science, Margao, Goa ; Ismail Yusuf College, Jogeshwari, Bombay-60 ; Topiwala National Medical College, Dr. A. L. Nair Road, Bombay-8 ; Ramnarain Ruia College, Matunga, Bombay-19 ; R. A. Podar College of Commerce & Economics, Matunga, Bombay-19 ; S. I. E. S. College of Arts & Science, Sion (West), Bombay-22 ; St. Xavier's College, Cruickshank Road, Bombay-1 ; Khalsa College, Matunga, Bombay-19 ; K. J. Somaiya College, Ghatkopar, Bombay-77 ; Jai Hind College, 'A' Road, Churchgate, Bombay-1 ; Maharshi Dayanand College, Government Gate Road, Parel, Bombay-12 ; Nair Hospital Dental College, Dr. A. L. Nair Road, Bombay-8 ; Bombay Veterinary College, Parel, Bombay-12 ; Nossa Sr. de Piedade Institute of Education, Panjim, Goa ; Admar Mutt Education Society's College of Arts & Science, Dahisar, Bombay-68 ; Goa Medical College, Panjim, Goa ; M. M. College of Arts and N. M. Institute of Science (Bhavan's College), Andheri-58 ; Chikisak Samuha Sir Sitaram and Lady Shantabai Patkar College of Arts and Science, Goregaon (West), Bombay-62 ; Carmal College for Women, Nuvem, Goa ; Shri Vile Parle Kalavni Mandal's Shri Narsee Monji College of Commerce and Economics, Juhu Development Scheme, Vile Parle (West), Bombay-56 ; College of Pharmacy, Panjim, Goa ; Municipal Medical College, Sion, Bombay 22 ; Institute of Science, Fort, Bombay ; Wilson College, Bombay-7.

**S. N. D. THACKERSEY WOMEN'S UNIVERSITY**

1, Nathibai Thackersey Road, Queen's Road, Bombay 1.

The University conducts an Arts College, a College of Nursing, a College of Education, a College of Home Science, and a School of Library Science at Bombay, and one Arts College and a College of Education at Poona. It also conducts two High Schools at Bombay and Poona. Five Colleges at Ahmedabad, Bhavnagar, Baroda, Surat and Matunga are permanently affiliated to this University and four colleges at Ghatkopar, Fanaswadi, Surendranagar and Visnagar are temporarily affiliated to it.

*Chancellor :* Governor of Maharashtra.

*Vice-Chancellor :* Dr. Smt. Premlila V. Thackersey.

*Dean of the Faculty of Arts :* Smt. Sharda Divan.

*Registrar :* Smt. Kamalini H. Bhansali.

*Budget : 1966-67 :*

|               | Recurring | Non-Recurring | Total     |
|---------------|-----------|---------------|-----------|
| Income :      | 26,70,657 | 4,88,640      | 31,59,297 |
| Expenditure : | 33,55,885 | 13,30,800     | 46,86,685 |



## RAINFALL OF BOMBAY

## COLABA OBSERVATORY

Note: From the year 1957 rainfall figures are recorded in Millimeters instead of inches. 1 inch equals 25.4 mm.

| Years  | May   | June    | July    | August  | September | October | November | Yearly Total | Number of Rainy Days in the year* | Maximum fall in one day |
|--------|-------|---------|---------|---------|-----------|---------|----------|--------------|-----------------------------------|-------------------------|
| 1890.. | 0.06  | 24.55   | 21.54   | 10.61   | 6.45      | 0.58    | 1.25     | 65.18        | 116                               | 4.61                    |
| 1..    | 0.00  | 18.99   | 32.48   | 6.94    | 22.53     | 1.04    | 0.00     | 77.18        | 100                               | 5.82                    |
| 2..    | 0.11  | 18.30   | 23.86   | 36.56   | 18.73     | 1.89    | 0.67     | 95.12        | 114                               | 5.43                    |
| 3..    | 6.30  | 21.47   | 16.14   | 13.55   | 7.54      | 0.45    | 1.63     | 67.24        | 124                               | 4.97                    |
| 4..    | 0.00  | 16.87   | 26.16   | 8.40    | 12.04     | 3.08    | 0.00     | 66.85        | 124                               | 4.77                    |
| 5..    | 0.08  | 17.84   | 18.04   | 15.97   | 11.91     | 3.62    | 0.06     | 67.59        | 109                               | 6.82                    |
| 6..    | 0.26  | 28.02   | 36.44   | 20.77   | 1.62      | 0.01    | 0.53     | 87.65        | 102                               | 6.21                    |
| 7..    | 0.00  | 14.40   | 30.19   | 13.82   | 20.60     | 2.51    | 0.00     | 81.53        | 108                               | 4.92                    |
| 8..    | 0.16  | 27.21   | 20.72   | 5.28    | 19.94     | 0.43    | 0.13     | 74.09        | 110                               | 5.13                    |
| 9..    | 0.03  | 20.81   | 4.72    | 5.23    | 3.49      | 0.00    | 0.00     | 35.90        | 87                                | 6.58                    |
| 1900.. | 0.00  | 18.26   | 25.75   | 17.62   | 7.49      | 0.00    | 0.00     | 69.12        | 91                                | 3.04                    |
| 1..    | 0.01  | 25.36   | 32.70   | 14.27   | 1.81      | 0.39    | 0.00     | 75.32        | 98                                | 6.55                    |
| 2..    | 0.00  | 9.77    | 16.96   | 16.53   | 27.11     | 0.78    | 0.01     | 71.97        | 100                               | 6.74                    |
| 3..    | 7.79  | 19.75   | 24.82   | 18.23   | 7.82      | 5.91    | 0.00     | 84.49        | 111                               | 6.03                    |
| 4..    | 0.02  | 15.10   | 10.14   | 5.72    | 1.81      | 0.56    | 0.00     | 33.42        | 90                                | 3.33                    |
| 5..    | 0.00  | 6.53    | 15.30   | 4.35    | 6.16      | 0.20    | 1.04     | 33.66        | 89                                | 4.00                    |
| 6..    | 0.00  | 13.20   | 18.10   | 20.91   | 3.94      | 0.00    | 0.00     | 56.30        | 95                                | 4.89                    |
| 7..    | 0.00  | 22.49   | 59.26   | 15.93   | 2.75      | 0.02    | 0.00     | 100.78       | 94                                | 3.84                    |
| 8..    | 0.00  | 15.19   | 21.13   | 9.67    | 6.71      | 0.62    | 0.00     | 53.54        | 100                               | 4.30                    |
| 9..    | 0.00  | 16.68   | 31.37   | 7.82    | 15.35     | 0.00    | 0.00     | 71.22        | 100                               | 4.07                    |
| 1910.. | 0.03  | 23.92   | 7.42    | 16.89   | 13.84     | 0.62    | 0.14     | 67.86        | 104                               | 3.14                    |
| 1..    | 0.04  | 10.85   | 15.89   | 16.90   | 2.50      | 0.00    | 0.27     | 46.51        | 92                                | 4.78                    |
| 2..    | 0.43  | 10.79   | 25.77   | 9.70    | 3.09      | 0.65    | 3.62     | 54.05        | 87                                | 7.86                    |
| 3..    | 0.00  | 25.81   | 33.58   | 3.47    | 5.75      | 2.35    | 0.00     | 70.96        | 94                                | 5.50                    |
| 4..    | 0.00  | 16.69   | 31.12   | 12.44   | 21.03     | 0.01    | 0.18     | 81.62        | 114                               | 6.28                    |
| 5..    | 0.36  | 40.10   | 14.89   | 8.93    | 10.21     | 2.55    | 0.02     | 77.68        | 100                               | 11.41                   |
| 6..    | 0.07  | 23.55   | 25.10   | 17.19   | 14.59     | 4.79    | 0.72     | 86.05        | 128                               | 7.60                    |
| 7..    | 0.83  | 15.33   | 12.91   | 33.27   | 19.53     | 16.11   | 0.00     | 99.76        | 184                               | 5.96                    |
| 8..    | 11.17 | 10.65   | 4.31    | 4.80    | 3.06      | 0.00    | 0.09     | 35.54        | 94                                | 4.98                    |
| 9..    | 0.00  | 23.35   | 24.49   | 10.63   | 3.16      | 1.40    | 0.18     | 68.32        | 106                               | 3.74                    |
| 1920.. | 0.00  | 3.16    | 22.60   | 4.58    | 4.05      | 0.34    | 0.00     | 41.05        | 93                                | 5.51                    |
| 1..    | 0.00  | 26.79   | 35.67   | 10.37   | 13.13     | 0.06    | 0.00     | 86.02        | 101                               | 7.68                    |
| 2..    | 0.00  | 26.63   | 31.00   | 5.15    | 7.48      | 0.61    | 0.00     | 70.96        | 111                               | 6.56                    |
| 3..    | 0.00  | 3.96    | 41.83   | 3.33    | 13.32     | ..      | 0.00     | 77.56        | 90                                | 11.03                   |
| 4..    | 0.00  | 7.46    | 16.75   | 15.42   | 12.12     | 0.06    | 0.33     | 52.19        | 101                               | 3.12                    |
| 5..    | 3.83  | 26.86   | 3.31    | 7.71    | 3.55      | 0.19    | 0.37     | 50.82        | 109                               | 7.54                    |
| 6..    | 0.10  | 6.31    | 30.68   | 21.93   | 3.84      | 1.29    | 0.00     | 72.64        | 107                               | 3.21                    |
| 7..    | 0.00  | 35.52   | 14.08   | 6.59    | 5.30      | 7.25    | 5.43     | 74.38        | 123                               | 7.10                    |
| 8..    | 0.00  | 23.46   | 30.24   | 16.69   | 9.31      | 0.43    | 0.09     | 85.73        | 109                               | 3.96                    |
| 9..    | 0.00  | 26.09   | 15.73   | 5.85    | 6.49      | 3.73    | 0.22     | 59.76        | 114                               | 5.26                    |
| 1930.. | 0.02  | 27.43   | 9.61    | 6.60    | 43.77     | 2.50    | 0.00     | 89.98        | 93                                | 21.59                   |
| 1..    | 0.00  | 7.66    | 46.94   | 22.69   | 4.53      | 13.02   | 2.40     | 97.94        | 111                               | 10.06                   |
| 2..    | 0.57  | 10.64   | 35.47   | 6.77    | 11.13     | 9.01    | 0.07     | 73.66        | 106                               | 5.62                    |
| 3..    | 3.23  | 9.91    | 15.69   | 17.25   | 12.42     | 2.93    | 0.01     | 62.37        | 116                               | 5.23                    |
| 4..    | 0.00  | 29.06   | 22.74   | 12.14   | 5.83      | 0.21    | 3.23     | 73.25        | 110                               | 5.05                    |
| 5..    | 0.00  | 23.14   | 23.70   | 16.71   | 11.33     | 1.04    | 0.13     | 81.62        | 99                                | 7.00                    |
| 6..    | 0.34  | 32.62   | 3.13    | 9.23    | 5.73      | 0.00    | 2.31     | 53.43        | 113                               | 5.60                    |
| 7..    | 0.00  | 13.32   | 20.42   | 5.45    | 14.20     | 1.77    | 0.00     | 70.16        | 109                               | 3.63                    |
| 8..    | 1.29  | 31.24   | 16.06   | 16.77   | 10.35     | 15.17   | 1.13     | 92.01        | 124                               | 7.13                    |
| 9..    | 0.00  | 4.67    | 33.03   | 10.87   | 5.39      | 0.17    | 0.15     | 54.34        | 95                                | 9.12                    |
| 1940.. | 0.00  | 29.93   | 21.03   | 23.27   | 11.26     | 4.89    | 0.76     | 97.58        | 106                               | 6.42                    |
| 1..    | 0.00  | 3.09    | 14.03   | 5.33    | 6.17      | 1.62    | 0.00     | 35.31        | 81                                | 4.14                    |
| 2..    | 0.00  | 27.39   | 32.36   | 3.24    | 13.52     | 0.00    | 0.00     | 81.30        | 96                                | 7.03                    |
| 3..    | 6.02  | 30.19   | 29.62   | 3.30    | 3.15      | 3.77    | 0.04     | 81.37        | 116                               | 3.01                    |
| 4..    | 0.20  | 9.47    | 45.56   | 16.32   | 1.68      | 0.30    | 0.00     | 74.10        | 90                                | 7.13                    |
| 5..    | 0.00  | 24.36   | 31.37   | 26.10   | 6.16      | 0.70    | 0.37     | 90.33        | 99                                | 3.63                    |
| 6..    | 0.23  | 21.61   | 16.29   | 15.23   | 17.90     | 0.31    | 6.46     | 79.14        | 120                               | 10.43                   |
| 7..    | 0.00  | 3.61    | 22.03   | 20.56   | 25.45     | 2.92    | 0.00     | 77.09        | 104                               | 10.33                   |
| 8..    | 0.00  | 3.73    | 27.16   | 17.03   | 11.73     | 2.11    | 4.54     | 71.74        | 105                               | 6.79                    |
| 9..    | 0.93  | 13.31   | 23.64   | 15.22   | 49.01     | 1.35    | 0.00     | 103.51       | 124                               | 26.93                   |
| 1950.. | 0.13  | 11.22   | 23.32   | 3.39    | 21.50     | 1.33    | 0.06     | 61.50        | 93                                | 5.97                    |
| 1..    | 1.63  | 20.25   | 35.11   | 3.55    | 1.74      | 2.71    | 0.11     | 70.41        | 103                               | 5.11                    |
| 2..    | 0.00  | 23.69   | 27.51   | 6.32    | 3.03      | 2.26    | 0.00     | 63.33        | 97                                | 7.06                    |
| 3..    | 0.00  | 32.59   | 39.99   | 12.99   | 4.59      | 3.24    | 0.00     | 93.57        | 103                               | 3.33                    |
| 4..    | 0.00  | 24.66   | 51.56   | 33.72   | 24.84     | 1.39    | 0.00     | 137.08       | 103                               | 10.31                   |
| 5..    | 0.04  | 13.93   | 21.65   | 34.75   | 11.44     | 5.31    | 0.97     | 88.64        | 116                               | 6.77                    |
| 6..    | 1.69  | 25.86   | 32.34   | 17.37   | 20.69     | 2.33    | 0.50     | 101.28       | 133                               | 3.83                    |
| 7..    | 25.4  | 233.0   | 777.2   | 578.9   | 65.7      | 21.2    | 23.9     | 1,775.3      | 93                                | 162.9                   |
| 8..    | 3.6   | 362.6   | 330.3   | 1,265.4 | 353.1     | 1.3     | 1.3      | 3,319.2      | 101                               | 239.2                   |
| 9..    | 5.4   | 651.5   | 745.4   | 446.0   | 231.0     | 273.6   | 0.0      | 2,393.6      | 116                               | 163.1                   |
| 1960.. | 39.6  | 1,011.1 | 500.0   | 225.4   | 97.3      | 244.7   | 0.0      | 2,113.9      | 112                               | 201.4                   |
| 1..    | 12.3  | 392.7   | 1,109.3 | 299.5   | 269.9     | 101.2   | 0.0      | 2,205.1      | 123                               | 164.9                   |
| 2..    | 26.6  | 433.4   | 751.0   | 396.0   | 341.3     | 21.5    | 0.6      | 2,029.6      | 113                               | 243.4                   |
| 3..    | Tr.   | 370.3   | 797.3   | 1,004.1 | 330.1     | 17.3    | 5.5      | 2,530.9      | 110                               | 189.1                   |
| 4..    | Tr.   | 654.3   | 470.6   | 464.2   | 258.4     | 114.9   | 1.4      | 1,964.3      | 106                               | 112.1                   |
| 5..    | Tr.   | 654.3   | 917.7   | 364.6   | 77.9      | Tr.     | 3.6      | 2,024.1      | 87                                | 249.4                   |

\* A rainy day is one on which 0.01" of rain or more has fallen.



## AHMEDNAGAR DISTRICT

*Headquarters* : Ahmednagar.

*Talukas* : Nagar, Rahuri, Newasa, Shrirampur, Sangamner, Akola, Kopergaon, Sheogaon, Pathardi, Jamkhed, Shrigonda, Parner, Karjat.

The area of the District is 6,586 sq. miles. Population : 1,775,969 (1961 Census) (Males 905,313 ; females 870,656). The language spoken is Marathi.

The staple food grains are jawar and bajra. Wheat and gram are grown in the vicinity of the rivers and rice in the westernmost Akola Taluka including other irrigated areas. Vari and ragi are cultivated in soils which are suited to coarser grain. The pulses are tur, mung, math and kulith. Among the cash crops may be mentioned cotton, hemp, safflower, sesamum, linseed, sugarcane, tobacco, kardi, pan, groundnut, tomatoes, bananas and potatoes. Recently sisal fibre crop plantations are undertaken on an extensive scale.

The chief historical places of interest to visitors are the Ahmednagar Fort, the tomb of Mughal Emperor Aurangzeb (on the outskirts of the town), the temple of Dnyaneshwar, the residential palaces of the Shindyas and the Peshawas at Jamgaon and Kopergaon respectively.

Among industries sugar is now one of the most important. There are twelve sugar factories in the District. Gur making, handloom weaving, iron foundries and bidi making are the other important industries.

There are ten irrigation tanks in the District.

There is a Holiday home at Bhandardara, a summer resort and hill station.

Apart from Colleges, there are about 98 Secondary High Schools in the district out of which three high schools are exclusively for girls.

## AKOLA DISTRICT

*Headquarters* : Akola.

*Talukas* : Akola, Balapur, Murtjapur, Akot, Mangrulpur, Washim.

Area : 4,095 sq. miles. Population : 1,189,354 (1961 Census) (Males 613,832 ; females 575,522).

The greater part of it is fertile alluvial land but the Satpura plateau rises abruptly on its northern border

with the ancient fort of Narnala nestling on one of the hills and commanding the whole Poorna plain. The average rainfall is 30 inches and the temperature in summer rises in certain places to 118 degrees during the day.

The District is mainly agricultural but there are cloth mills, a number of cotton ginning and pressing factories and oil mills.

## AMRAVATI DISTRICT

*Headquarters* : Amravati.

*Tahsils* : Amravati, Chandur, Morsi, Achalpur, Daryapur, Melghat.

The area of the District is 4,723 sq. miles. The language spoken is Marathi. Population : 1,232,780 (1961 Census) (Males 637,861 ; females 594,919).

Amravati is a plain about 800 feet above sea-level.

The staple food grain is jawar. Other food grains are wheat and pulses. Cash crops include cotton and oilseeds, of which cotton is the more important.

## AURANGABAD DISTRICT

*Headquarters* : Aurangabad.

*Talukas and Mahals* : Aurangabad, Kannad, Vaijapur, Gangapur, Bhokardan, Ambad, Paithan, Jalna, Jafferabad (Mahal), Khuldabad (Mahal), Sillod, Soegaon (Mahal).

Area : 6,314 sq. miles. Population : 1,532,341 (1961 Census) (Males 781,635 ; females 750,706).

The most important cave temples in India — at Ellora and Ajanta — are found in this District. The great fort of Daulatabad is an extraordinary structure ; the village of Khuldabad has the tombs of the Emperor Aurangzeb and of Asaf Jah, the founder of the former ruling dynasty.

Total number of students in University Departments and all the affiliated Colleges : Nearly 14,023.

There are eight faculties in which provision for teaching courses of study leading to the following degrees has been made :—

Faculty of Arts : B.A., M.A., Ph.D. ; Faculty of Science : B.Sc., M.Sc., Ph.D. ; Faculty of Law : LL.B., LL.M. ; Faculty of Medicine : M.B., B.S., M.D., & M.S. ; Faculty of Commerce : B.Com., M.Com. ; Faculty of Agriculture : B.Sc. (Agriculture), M.Sc. (Agriculture) ; Faculty of Education : B.Ed., M.Ed. ; Faculty of Engineering : B.E. (Civil), B.E. (Electrical), B.E. (Mechanical), M.E. (Civil).

The University has so far instituted the Departments of (i) Marathi Language and Literature, (ii) Economics, (iii) Chemistry, (iv) Zoology, (v) Political Science, (vi) History and Ancient Indian Culture, (vii) Botany, (viii) Mathematics, (ix) Physics, (x) English.

### MARATHWADA UNIVERSITY

Estd. 1958.

Total No. of Affiliated Colleges : 28.



The post-graduate teaching has been instituted in the following subjects :—

English, Marathi, Hindi, Sanskrit, History, Economics, Urdu, Sociology, Education, Medicine, Law, Mathematics, Chemistry, Botany, Commerce, Engineering, Political Science and Zoology.

Research : Facilities exist for research in Economics, Chemistry, Zoology, Botany, Political Science, Marathi Languages and Literature, History and Ancient Indian Culture, Mathematics and Physics, English, Urdu, Hindi.

*Chancellor* : Governor of Maharashtra.

*Vice-Chancellor* : Dr. N. R. Tawde.

*Registrar* : M. B. Chitnis.

Budget Estimates for 1966-67

*Grants from the State Government* : Rs. 20,95,533.

*Grants by the University Grants Commission and the Government of India* : Rs. 13,41,700.

*Other Income* : Rs. 13,91,882.

*Expenditure* : Rs. 54,66,370.

## BHANDARA DISTRICT

*Headquarters* : Bhandara.

*Tahsils* : Bhandara, Gondia, Sakoli.

The area of the District is 3,582 sq. miles. Population : 1,268,286 (1961 Census) (Males 635,174 ; females 633,112). The chief language is Marathi but Hindi is also spoken by a considerable section of the population.

The principal food crops are rice, jawar, wheat, gram, linseed and pulses. Ginger, oranges and plantains are also grown and sent to Nagpur. Mineral deposits include those of manganese, iron and a little gold.

The chief industries are weaving, making of brass vessels and stone jars, of soft grass matting for bedding, and of bamboo baskets.

## BHIR DISTRICT

*Headquarters* : Bhir.

*Talukas and Mahals* : Mominabad, Manjlegaon, Gevrai, Bhir, Ashti, Patoda (Mahal), Kaij.

*Area* : 4,268 sq. miles. Population : 1,001,466 (1961 Census) (Males 508,827 ; females 492,639).

There are forts and buildings at Bhir which are of archaeological interest. Amba has a temple dedicated to

Jogai. The temple of Baijnath at Parli is a celebrated place of Hindu pilgrimage.

The soil is mostly black cotton. On this are grown cotton, white jawar, gram, gingelly and wheat, while on the masab and kharab soils are grown white bajra, yellow jawar, pulses and oilseeds. Cotton and linseed are produced extensively in the District. The staple food crops are jawar and bajra. Wheat and rice are next in importance.

## BULDANA DISTRICT

*Headquarters* : Buldana.

*Tahsils* : Chikhali, Mehker, Malkapur, Khamgaon, Jalgaon.

The area of the District is 3,751 sq. miles. Population : 1,059,698 (1961 Census) (Males 541,026 ; females 518,672). The language spoken is Marathi.

Jawar is the chief food crop, though wheat is also grown. The most profitable cash crop is cotton with oilseeds coming next.

The principal industry is the preparation of cotton for the market. Exports consist of raw cotton, oilseeds, grain and pulses, and the imports include grain and pulses, coal and coke, sugar and salt.

## CHANDA DISTRICT

*Headquarters* : Chanda.

*Tahsils* : Chanda, Warora, Brahmapuri, Gardchiroli, Sironcha, Rajura.

The area of the District is 9,200 sq. miles. Population : 1,238,070 (1961 Census) (Males 623,681 ; Females 614,389). The languages spoken are Marathi, Hindi, Telugu and Gondi.

Except in the open country on the west and north, the whole District is thickly wooded.

The forest vegetation in the District is of a mixed character. Teak is fairly general but is not anywhere very plentiful. The principal trees are Saj, Bijasal, Rohan, Kaddan, Haldu, Semal, Mahua, Dhaura, Tendu, Garari

and Palas. The forests are well distributed, and very few villages are more than three miles from some part of them.

The annual rainfall averages about 51 inches at Chanda Town and 46 at Warora.

Rice which is the most important crop is grown in the centre and east of the District. Jawar is the chief crop in Sironcha and the Warora Tahsils, while linseed, gram and wheat are grown principally in the black-soil lands of the Chanda Haveli and those adjoining the Wardha river. Cotton is also an important cash crop.

Coal-mines occur and there are match factories, ceramic industries and paper manufacture.



## DHULIA DISTRICT

*Headquarters* : Dhulia.

*Talukas and Mahals* : Shirpur, Shahada, Taloda, Sindkheda, Nandurbar, Nawapur, Dhulia, Sakri, Akrani, Akal-kuva.

Area : 5,022 ; Population : 1,351,236 (1961 Census) (Males 686,942 ; Females 664,294).

Dhulia District lies roughly between 20° 38' and 22° North Latitude and 73° 35' and 75° 17' East Longitude. It is bounded on the north by Khargone District in Madhya Pradesh, on the east by Jalgaon District, on the south by Nasik District and on the west by Surat District.

The languages spoken are Marathi, Gujarati and Bhil.

The main crops of this District are cotton, wheat, bajra, jawar and groundnut. Sugar-cane and chillies form the main irrigated crops. There are two types of irrigation in this District : (1) Well irrigation and (2) Bandhara irrigation.

There is a Government Agricultural Institute, where Gram Sewaks are trained.

### INDUSTRIES

Dhulia is the biggest cotton centre in the Dhulia District and has a well regulated Cotton Market. There is also another regulated Cotton Market at Dondaiche in the Sindkheda Taluka. There are spinning and weaving factories as well as cotton ginning and pressing factories.

Dhulia has also been lately developing into a groundnut oil industry centre. There are about 42 oil mills, including 14 at Dhulia, which together produce about 2,000 tons of groundnut cake. There are also saw mills.

The newly built hill station of Toranmal, is situated on the Satpura range plateau at an altitude of 4,200 feet. The climate is very salubrious.

## JALGAON DISTRICT

*Headquarters* : Jalgaon.

*Talukas* : Chalisgaon, Amalner, Parola, Chopda, Erandol, Pachora, Jamner, Jalgaon, Yaval, Raver, Bhusawal.

*Mahals* : Edlabad, Bhadgaon.

Jalgaon District, with Jalgaon as capital, is one of the northernmost Districts in Maharashtra.

The area of the District is 4,573 sq. miles. Population : 1,765,047 (1961 Census) (Males 902,001 ; females 863,046).

### AGRICULTURE

The most important crops are cotton, groundnuts, jawar, bajri, gram, millet, linseed and sesamum. The most important garden crops are chillies, coriander, melons, watermelons, betel leaf, bananas, mosambis, santra and sugarcane. Cotton and groundnut are even more important. There is a large export trade in groundnut oil and hydrogenated oil or vanaspati.

Jalgaon is the biggest town and District headquarters, a great trade centre, and also an educational centre. The town is 37 miles from Ajanta Caves.

The rainfall (mean annual is 28.27 inches) is usually both general and regular, which fact in itself discourages irrigation, except for two weirs, at Jaunda (Chalisgaon taluka) and Dahigaon (Erandol taluka) on Girna River project, irrigating about twenty thousand acres of land.

The main industry is based on agriculture. There are several oil mills in the District, besides several bullock driven presses. There is a silk mill in the District. There is also a factory, which manufactures crackers and fireworks.

There are in the whole District three spinning and weaving factories, about 100 cotton ginning and pressing works, about ten dyeing factories, three big railway workshops (at Bhusawal) all employing more than 26,000 people.

## KOLABA DISTRICT

*Headquarters* : Alibag.

*Talukas and Mahals* : Alibag, Pen, Panvel, Karjat, Roha, Mangaon, Mahad, Khalapur, Uran, Poladpur, Murud, Shrivardhan, Mhasala and Sudhagad.

Kolaba District in the Konkan area of Maharashtra lies between North Latitude 17° 52' and 19° 3' and East Longitude 73° 7' and 73° 42'.

The total area of the District is 2,716 sq. miles. Population : 1,058,855 (1961 Census).

Notable places in the District are Raigarh near Mahad, once the capital of the great Shivaji and Kanakeshwara near Alibag, which is now a holiday resort being situated on a hill. Elephanta in Kolaba is famous for caves. Alibag has the world famous magnetic observatory. The historical sea-fort Kolaba, at Alibag, was the naval capital of Shivaji.

### AGRICULTURE, POWER

On the flat lands of the District rice is grown, and the sea-front is fringed by a belt of coconut and arecanut palms. There is large-scale plantation of mango grafts. There is a thriving fishing industry. The District has three Power Houses. Uran and Pen are big salt-producing centres. Panvel and Khapoli have assumed importance for their industrial growth in recent years.

### MATHERAN (HILL STATION)

Matheran is a hill station and sanitarium, about three hours' journey from Bombay and Poona. Visitors are conveyed up the hill from Neral (Central Rly). The town is about 2,500 feet above sea-level, and is a favourite hot weather resort.



## KOLHAPUR DISTRICT

*Headquarters* : Kolhapur.

*Talukas and Mahals* : Karwir, Panhala, Shahuwadi, Radhanagari, Bhudargad, Hatkanangle, Gadhinglaj, Kagal, Shirol, Bavada, Ajra, Chandgad.

The total area of the District is 3,141 square miles. Population : 1,596,493 (1961 Census) (Males 811,693; females 784,800). The language spoken is mostly Marathi, though Kannada is also spoken in a few parts. Kolhapur city, the headquarters, is a great trading centre for jaggery.

The chief agricultural products are jawar, rice, cotton, nagli, bajra, wheat, tobacco, sugarcane and ground-nut.

Besides cotton mills, there are ginning and pressing factories. There are also ginning and powdering mills, groundnut crushing and oil mills, a sugar mill, cinema-film producing companies and soap factories and repair workshops.

### SHIVAJI UNIVERSITY

Kolhapur 3.

Estd. 1962. It is situated at Kolhapur with jurisdiction over the five districts of Southern Maharashtra, i.e. Kolhapur, Sangli, Satara, Sholapur and Ratnagiri. There are 43 colleges and institutes within the area of the University of which eight are situated at the seat of the University. The University has the following faculties. 1. Faculty of Arts and Social Sciences: B.A.; M.A.; Ph.D. (Dip. Lib. Sc.). 2. Faculty of Science: B.Sc.; M.Sc.; Ph.D. 3. Faculty of Law: LL.B.; LL.M. 4. Faculty of Commerce: B.Com.; M.Com. 5. Faculty of Education: B.Ed.; M.Ed.; Ph.D.; T.D. (Dip. in Teaching). 6. Faculty of Engineering: B.E. (Civil); B.E. (Mechanical); B.E. (Electrical); M.E. 7. Faculty of Medicine: M.B.B.S. 8. Faculty of Agriculture: B.Sc. (Agri.).

*Chancellor* : Dr. P. V. Cherian. *Vice-Chancellor* : Dr. A. G. Pawar. *Registrar* : B. A. Changule.

## NAGPUR DISTRICT

*Headquarters* : Nagpur.

*Talukas* : Nagpur, Ramtek, Katol, Saoner, Umrer.

The area of the District is 3,842 sq. miles and the population 1,512,807 (1961 Census) (Males 784,161; females 728,646). The language spoken is Marathi.

The richest part of the District is the western half of the Katol Tehsil. It possesses a soil profusely fertile and teems with the richest garden cultivation. From Pikapar Hills in the Katol Tehsil the plains extend to the eastern border. Its surface is scarcely ever level, but it is closely cultivated, abounds in mango groves and trees of all sorts, and towards the east is studded with small tanks which form a feature of the landscape. The elevation of the plain country is from 900 to 1,000 feet above sea-level.

The forests are mainly situated in a large block on the Satpura Hills to the north-east, while isolated patches are dotted on the hills, extending along the south-western border.

The annual rainfall averages about 47·5 inches.

Cotton and jawar are the chief produce of the District which is also famous for its oranges. There are some manganese mines and limestone quarries in the District and coal-mines at Kamptee.

There are five textile mills in Nagpur City, 2 steel Rerolling Mills, a number of oil mills, a pottery concern,

saw mills, a rubber factory, a thriving frame making industry, a large fruit canning industry and a large number of handloom factories. Nagpur saris are in great demand in all parts of the country.

### NAGPUR UNIVERSITY

Year of Foundation : 1923.

*Chancellor*, Governor of Maharashtra.

*Vice-Chancellor*, Dr. V. B. Kolte.

*Registrar*, S. V. Bhagwat.

Teaching and affiliating : University Colleges 3, University Teaching Departments 22; Affiliated Colleges 81.

*Students* (1964-65):

University Colleges : 563 (Men 504; Women 59).

University Teaching Departments : 947 (Men 731; Women 216).

Affiliated Colleges : 38,980 (Men 32,938; Women 6,042).

*Budget Estimates* (1964-65):

Central Government Grants : Rs. 1,32,815·05

State Government Grants : Rs. 16,35,191·46

University Grants Commission : Rs. 11,97,015·86

Total Income : Rs. 1,00,34,944·94

Total Expenditure : Rs. 95,76,313·44

## NANDED DISTRICT

*Headquarters* : Nanded.

*Talukas and Mahals* : Deglur, Kandhar, Biloli, Nanded, Hadgaon, Bhokar (Mahal), Mukhed (Mahal), Kinwat.

Area : 4,806 sq. miles. Population : 1,079,674 (1961 Census) (Males 547,974; females 531,700).

The District is on the whole dry and healthy. The annual temperature varies between 100° and 60°. The average rainfall is about 35 inches.

There are tombs of Muslim saints and Nanded has the Gurudwara of the Hyderabad Sikhs where Guru Govind was buried.

Rabi crop consists of jawar, gram, wheat, oilseeds. The Kharif crop consists of bajra, linseed, cotton and maize. The staple food crop is jawar and the main cash crop cotton.



## NASIK DISTRICT

*Headquarters* : Nasik.

*Talukas and Mahals* : Kalwan, Dindori, Niphad, Yeola, Igatpuri, Nandgaon, Nasik, Sinnar, Baglan, Malegaon, Chandor, Peint, Surgana.

Nasik District is a historic place in Maharashtra and the city one of the oldest in the Deccan and a place of pilgrimage. The area of the District is 6,020 sq. miles.

Population : 1,855,246 (1961 Census) (Males 953,531; females 901,705). The language spoken is Marathi.

With the exception of a few villages in the west the whole District lies on a tableland at an elevation of 1,300 to 2,100 feet above sea-level.

The main food crops are rice, wheat and bajra.

## OSMANABAD DISTRICT

*Headquarters* : Osmanabad.

*Talukas and Mahals* : Latur, Tuljapur, Osmanabad, Kalam, Omerga, Owsa, Bhoom (Mahal), Parendah, Ahmadpur, Nilanga, Udgir.

Area : 5,504 sq. miles. Population : 1,477,656 (1961 Census) (Males 758,235; females 719,421).

The average annual rainfall is about 32 inches.

Six places of archaeological interest are the fort of Naldurg, the Jumma Masjid in Owsa Taluka, the caves around the town of Osmanabad, the two caves at Hasan-gaon, the old fortress at Parendah. Tuljapur is a place of Hindu pilgrimage.

The staple food grain is jawar. Wheat, rice and bajra are next in importance. Cotton is grown everywhere, while sugarcane is sometimes grown with well irrigation.

## PARBHANI DISTRICT

*Headquarters* : Parbhani.

*Talukas* : Parbhani, Gangakhed, Pathri, Jintur, Hingoli, Basmat, Kalamnuri, Partur.

Area : 4,854 sq. miles. Population : 1,206,236 (1961 Census) (Males 611,787; females 594,449).

The climate is healthy from February to May but it is feverish during the monsoon and the cold weather. The annual range of temperature is from 105° to 60°. The average annual rainfall is about 35 inches.

Structures of note in the District are the temple of Nagnath at Aundh, the Jain temple of Parsnath near Jintur, the temple near Bamu and the shrine of Ramzan Shah.

The soil is partly black cotton and partly masab and kharab. On the black soil are grown white jawar, wheat, gram, tuar, while on the kharab soils are grown jawar, bajra, indigo, sesamum, oilseeds and pulses. The staple food crops are jawar, wheat and bajra. Cotton is grown throughout the District. About one-twentieth of the land is under forest.

## POONA DISTRICT

*Headquarters* : Poona.

*Talukas or Mahals* : Ambegaon, Baramati (Bhimtadi), Dhond, Haveli, Indapur, Junnar, Khed, Mawal, Mulshi, Poona City, Purandhar, Sirur, Bhore, Velhe.

The population according to 1961 census is 2,466,880 and the area of the District is 6,032 sq. miles. Number of males : 1,268,710; females 1,198,870. The language spoken is Marathi.

The city proper extends along the Mutha river for about 1½ miles inland; its length is about 2 miles from east to west and its breadth about 1½ miles, the total area being about 2½ square miles. However, with the fast springing satellite colonies as a result of rapid growth of various types of industries, the urban parts of the City now extend as far as Pimpri and Chinchwad on the Poona-Bombay road, Hadapsar on Poona-Sholapur road, Aarey-wadgaon and beyond on the Poona-Bangalore national highway and Yeravda and Koregaon on the North-East of the city and along the Poona-Ahmednagar road.

The rainfall varies considerably in different parts of the District. In the western parts it is heavy and regular, in the central belt moderate, and in the east very irregular. The main crops are paddy and jawar. But the District is a

deficit area in the matter of food grains. The District has an exportable surplus of jaggery and sugar.

The city of Poona lies at the confluence of two small rivers, the Mutha and the Mula, on the Western margin of the Deccan plateau at a height of about 1,800 ft. above sea-level. Only 30 miles separate the city from the main range of the Western Ghats and 119 miles from the State capital, Bombay.

It is the headquarters of the Southern Command and also of the Poona Sub-Area. The National Defence Academy is located in Khadakvasla. Some of the other military establishments around Poona are : the Ordnance Depot and the Arsenal at Kirkee and the Vehicles Depot at Dehu Road. The Indian Navy Mechanical Training establishment I.N.S. "Shivaji" is located at Lonavla, and the newly established Naval Engineering College, first of its kind in India, in the precincts of I.N.S. "Shivaji". Ammunition Factory, High Explosives Factory and 512 Command Workshop all at Poona.

Armed Forces Medical College for post-graduate training in military medical science is also located in Poona. A Medical College for degree course run by the Army, which is perhaps the only one of its kind in the world from the



point of view that the Army is running it, is located in Poona.

Yet other institutions are the Institute of Armament Studies and the Artificial Limbs Centre, the only one of its kind not only in India but also in South and West Asia and the fourth largest in the world. A gliding centre is also located near Poona. The National Cadet Corps Academy on Purandhar Fort, 30 miles South-East of Poona. College of Military Engg.

Other important institutions of All-India character located in Poona are given below :

*Meteorological Office ; Central Water and Power Research Station ; National Chemical Laboratory ; Overseas Communications' Beam Wireless Station at Dighi ; Headquarters of the Servants of India Society ; Bhandarkar Oriental Research Institute ; Penicillin Factory, Pimpri ; Virus Research Centre, the only one of its kind in India ; The Film Institute of India.*

Poona, which was till recently predominantly an educational centre, is fast developing as an industrial area as well. Besides the two industrial estates at Hadapsar and Pimpri, the whole belt along the Bombay-Poona Road from Kirkee, Dapodi, Pimpri, Chinchwad upto Lonavla is fast attracting industries of various types.

There are 4 sugar factories in the Dist. and 1 sugar manufacturing machinery factory at Pimpri.

The district can also boast of important places of historical and archaeological interests. Shivneri fort, birth place of the great Maratha Hero, Chhatrapati Shivaji, the famous Karla & Bhaja caves which constitute a fine example of Buddhist architecture of 1st Century B.C., Samadhis of Kasturba Gandhi and Mahadevbhai Desai are located in the district.

## UNIVERSITY OF POONA

Ganeshkhind, Poona 7.

Estd. 1948.

The University is both teaching and affiliating in character.

It has the following nine Faculties and has provision for courses for the following degree :—*Faculty of Arts* : B.A., M.A., Ph.D., D.Litt., B.A. (External), M.A. (External); *Faculty of Mental, Moral and Social Sciences* : B.A., B.A. (External), M.A., M.A. (External), B.T., M.Ed., Ph.D., D.Litt., B.Lib.; *Faculty of Commerce* : B.Com., B.Com. (External), M.Com., M.Com. (External), Ph.D., D.Litt.; *Faculty of Science* : B.Sc. (General), M.Sc., M.Sc. (Maths.), M.Sc. (Maths.) (External), Ph.D.; *Faculty of Law* : LL.B., LL.M., LL.M. (External), LL.D., Ph.D.; *Faculty of Medicine* : M.B.B.S., M.D., M.S., Ph.D., B.Sc. (Nursing), M.Sc. (Med.); *Faculty of Engineering* : B.E. (Civil, Mechanical, Electrical, Telecommunications and Metallurgy), M.E., M.Sc. (Engg.), Ph.D.; *Faculty of Agriculture* : B.Sc. (Agri.), M.Sc. (Agri.), Ph.D.; *Faculty of Ayurvedic Medicine* : B.A.M. & S., M.A.Sc.

The University has instituted external degrees for the benefit of employed person and married women, the B.A. (External), M.A. (External), B.Com. (External) and M.Com. (External) degrees in the Faculties of Arts and Mental, Moral and Social Sciences and Faculty of Commerce, M.Sc. (Maths.) (External) in the Faculty of Science,

## LONAVLA

This hill station is situated at the top of the Bhore Ghat incline about 2,030 feet above sea-level.

The Govt. of Maharashtra has started a holiday camp at Karla at a distance of about 1½ miles from Malawali Railway Station.

The following are some of the Forts and places of interest :—

Fort of Lohgadh, Fort of Visapur, Fort of Rajmachi which stands on the top of the Sahyadri Range and commands a grand view of Matheran, Konkan and even part of Bombay, Duke's Nose, Tungarli Municipal Lake.

The temperature varies from 65 in the cold weather to 85 in the hottest month. The rainfall varies from 160 to 250.

## KHANDALA

Khandala, a health resort, 78 miles from Bombay by rail and 71 by road lies in Mawal Taluka. It is situated at the top of the Bhore Ghat at an elevation of about 2,000 feet above sea-level, and has an agreeable and bracing climate all through the year.

Among places worth a visit in and around the town are Tata Electric Supply Company's reservoir called Forbay Dam, Byramjee's Point, the Duke's Nose, Tiger's Leap, all of which provide magnificent views of the surrounding country. About nine miles from Khandala are the Karla caves considered to be the oldest specimen of Buddhist caves in India. In Walwan lake which is about four miles from Khandala good mahashir fishing is available. At Khandala "Rajmachi Park" is one of the most beautiful spots.

LL.M. (External) in the Faculty of Law to which students can qualify by appearing for the examinations direct without having to undergo instruction in a College or University.

The University has also instituted a Faculty of Fine Arts and Music and the degree of Bachelor of Music, but it has not started functioning so far.

The following diplomas and certificates have been instituted (1) Diploma in Oriental (Sanskritic) Learning; (2) Certificate and Lower and Higher Diploma Courses in Modern Foreign Languages (French, and German); (3) Diploma in Public Health; (4) Diploma in Psychological Medicine; (5) Diploma in Anaesthesia; (6) Diploma in Music; (7) Diploma in Clinical Pathology; (8) Diploma in Library Science; (9) Diploma in Teaching.

The University has in all 46 affiliated colleges and 7 recognized research institutions.

The total strength of students in all the colleges and the University is in the neighbourhood of 35,238.

Chancellor : Governor of Maharashtra ; Vice-Chancellor : Dr. D. R. Gadgil ; Registrar : W. H. Golay.

## BUDGET (1965-66)

Income : Rs. 78,96,670 ; Expenditure : Rs. 84,03,365.



## RATNAGIRI DISTRICT

**Headquarters :** Ratnagiri.

**Talukas :** Dapoli, Mandangad, Khed, Chiplun, Guhagar, Sangameshwar, Ratnagiri, Rajapur, Devgad, Sawantwadi, Malwan.

**Petas :** Lanja, Vengurla, Kankavli, Kudal.

The area of the District is 5,025 sq. miles. Population : 1,827,203 (1961 Census) (Males 816,804 ; females 1,010,399).

This is the backward district with peculiar circumstances. Ratnagiri is known and famous as the birth place of Lokamanya Tilak.

The length of the district is 230 miles and breadth 30 to 40 miles. It is bounded by Sahyadri to the east, by sea to the west, by Kolaba district to the north and by Goa to the south.

The main crop is Alphonso mango — the king of fruits. The chief crop is rice on banks of rivers and on plain ground on 3,15,840 acres of land yielding 1,13,300 tons. Groundnut and sugarcane crop is under experiment since two years. Second important crop in the form of industry is sea fish.

One hundred and seventy-five High Schools, 5 Colleges, one Agricultural College, 8 Training Colleges (6 males and 2 females), Polytechnic, I.T.I., N.C.C. Unit cater to the educational needs of the district.

Ratnagiri midway between Bombay and Goa is soon going to be converted into an all weather port at Mirya Bay. Jaygad and Vijaydurg are safest ports. Several others are under improvement. Sindhudurg sea fort near Malwan was constructed some 300 years back by Shivaji, of which Government is undertaking reconstruction.

This district has 15 weekly newspapers, all except one at Ratnagiri.

The southern district and Bombay is linked to Ratnagiri by sea in the fair season and by road all the year. State Transport buses are plying direct to Bombay from several places in the district.

Bhagini Mandal and Mahila Mandal are the organisations at Ratnagiri devoted to female activities. At Sawantwadi there is a NIVARA KENDRA for the relief of the distressed and uncared for ladies. Kasturba Arogya Kendra and Matru Mandir at Lanja and Devrukh respectively do good for ladies and children. Animal husbandry centres, Health and S.M.P. Centres with five Ayurvedic Dispensaries give service to animals and human beings.

Notable place in this district is Marleshwar, a place about 10 miles to the east of Devrukh in Sahyadri in the interior. Temple of God Shiva is encircled by very high hills. This place is known for purity.

The climate of the district is moderate.

## SANGLI DISTRICT

**Headquarters :—**Sangli.

**Sub-Divisions :—**Miraj, Khanapur.

**Talukas and Mahals :—**Miraj, Tasgaon, Walwa, Khanapur, Jath, Shirala, Atpadi & Kavathe — Mahankal (3 Mahals).

**Area :** 3,299 square miles. Population : 1,230,716 (1961 Census).

The climate of the District is generally dry and healthy, with an average rainfall ranging from 15 to 25 inches.

The Krishna, the Verala, the Warana, and the Agarani are the four important rivers flowing through the District. The soil on the banks of these rivers is very fertile, yielding rich sugarcane crops.

The principal crops grown in the District are jowar, millets, pulses, wheat, ground-nut, turmeric, tobacco, sugarcane and a little cotton and rice and some oil-seeds.

Sangli, which is the headquarters of the District, is an important centre of trade and commerce specially for tobacco, groundnuts, turmeric, jaggery, chillies, ghee, and cotton trade. It has ginning, weaving and spinning mills, groundnut, turmeric, iron and steel factories. The town is also known for its silver, copper and brassware and gold ornaments. Bidi making is another big Industry.

Besides, Sangli is a big centre of forward-delivery transactions in groundnut-kernel.

## SATARA DISTRICT

**Headquarters :** Satara.

**Talukas and Mahals :** Wai, Satara, Koregaon, Khatau, Karad, Patan, Jaoli, Man, Phaltan, Khandala, Mahableshwar.

The area of the District is 4,041 sq. miles. Population : 1,430,105 (1961 Census) (Males 698,555 ; females 731,550). The language spoken is Marathi.

The chief agricultural produce are jawar and bajri. Others include ragi, wari, wheat, rice and pulses. Cash crops which are a minor item include tobacco, groundnut and sugarcane.

Forests in the Sahyadri range have considerable store of timber and fire-wood. Sandalwood and bamboo are occasionally found.

Government have undertaken the Koyna river project envisaging the construction of a gigantic Dam close to Helwak village (Patan Taluka) water from which can be used for agricultural purposes by people from Satara, Sholapur and Bijapur Districts and for generating electricity for industrial purposes.

There is a large engineering concern manufacturing farm implements, machine tools, and textile machinery at Satara Road Station. Another engineering concern has been established at Udyamnagar near Karad while the one at Karad proper has been expanded with State aid.

### MAHABLESHWAR

Mahableshwar, 75 miles from Poona, is called the queen of the hill stations in Maharashtra. It is situated on one



of the great slopes of the Sahyadri range at an elevation of 4,700 feet above sea-level. During the 8 months from October to May the climate is most agreeable. By day the temperature varies between 80 and 86, while the nights are cool and pleasant. But during the monsoon the rainfall is so heavy, the average being about 250 inches a year, that the place is almost uninhabitable.

It is now possible for people of moderate means to go to the hill station for a comparatively inexpensive holiday and change in the newly opened Holiday Camp set up by the Maharashtra Govt.

The Camp is normally thrown open during the months October to May, and applications for accommodation have to be addressed to the Executive Engineer, Poona Division, Poona. Hotels are open only eight months in the year and are closed during the monsoon.

## SHOLAPUR DISTRICT

*Headquarters* : Sholapur.

*Talukas* : Sholapur South, Sholapur North, Barsi, Pandharpur, Sangola, Malshiras, Karmala, Akalkot, Mangalwedha, Mohol, Madha.

*Headquarters* : Thana.

*Talukas and Mahals* : Thana, Kalyan, Bhiwandi, Shahapur, Murbad, Wada, Jawhar, Bassein, Palghar, Dahanu, Mokhada Peta.

Area : 3,658 sq. miles. Population : 1,652,678 (1961 Census) (Males 861,117 ; females 791,561).

The languages spoken are Marathi, Gujarati and Urdu.

In the north-east the hills are covered with wood, and the valleys are but partially cultivated. The villages are seldom more than scattered groups of huts, and the population consists mainly of uncivilised aboriginal tribes, many of whom still wander from place to place as they find water or to suit their fancy.

Thana District is fast developing into a prominent industrial area. Hundreds of acres of land are being converted into sites for factories. Scores of factories have already been set up particularly along the railway track and the Bombay-Agra and Bombay-Poona Roads.

Bhiwandi, a Taluka town nine miles from Thana situated on the Bombay-Agra Road is noted for handloom and powerloom fabrics. The town is mostly inhabited by Momins and in some parts of the town every house has a spinning wheel. Bhiwandi Taluka is also famous for its timber and charcoal trade.

Kalyan, the biggest and the most thickly populated town in the District, is 34 miles from Bombay and is a

## PANCHGANI

Panchgani is a well known hill station in Satara District, situated 63 miles from Poona. It is 4,300 feet above sea-level and has a cool, salubrious and comparatively dry climate. The average rainfall is about 80 inches a year. Panchgani is thus a well known sanatorium.

Panchgani is habitable throughout the year, and there are excellent shops for provisions and oilman stores. The town is electrified and the roads are well lighted. The town has a large and up-to-date tuberculosis sanatorium — Bel Air Sanatorium.

Panchgani is famous for its schools. They all have their own buildings with laboratories, dormitories and hospitals.

The languages spoken are mainly Marathi and also Telugu and Kannada.

Area : 5,809 square miles. Population : 1,860,119 (1961 Census) (Males 960,655 ; females 899,464).

## THANA DISTRICT

junction on the Central Railway's north-east and south-east sections. "Ulhasnagar" the largest refugee township in Maharashtra is situated in Thana District two miles from Kalyan near the Ulhas River. The township is designed to accommodate 90,000 people.

The main produce of the District is rice which is of superior Kolamb variety.

Dahanu and Bassein Talukas are specially famous for fruit garden and the bulk of Bombay's fruit supply comes from these areas.

At Thana, Bhyandar and Belapur there are extensive salt works.

The chief articles of export from Thana District are paddy, rice, vegetables, salt, betel-leaves, plantains, bricks, grass, firewood, charcoal, lime, fish fresh or dried, timber, coconuts, mangoes, flowers, saris, handloom fabrics, woollen cloth and milk.

Tansa and Vihar lakes and the Vaitarna river which are the main sources of Bombay's water supply are situated in Thana District and are connected with Bombay by a special trolley line.

The Fort, the Portuguese Cathedral, a few carved and inscribed stones, and several reservoirs are now the only signs that Thana was once an important city. Bassein, on the Western Railway, contains the famous ruins of the ancient Portuguese dominion in Salsette.

## WARDHA DISTRICT

*Headquarters* : Wardha.

*Tahsils, Sub-Divisions* : Wardha, Hinganghat, Arvi.

The area of the District is 2,429 sq. miles. Population : 634,277 (1961 Census) (Males 322,894 ; females 311,388). The languages spoken are Marathi and Hindustani.

Wardha is noteworthy in that it has been the seat of a number of Gandhian institutions concerned

with village uplift and the ideals of self-sufficiency and self-service.

Wardha has black cotton soil and the most important cash crops grown are jawar and cotton. Though there are rivers like Wainganga, agriculture depends on rain. There is thus an elaborate programme today for sinking new wells and deepening old ones. There are pressing and ginning mills in the District and also textile mills.



## YEOTMAL DISTRICT

*Headquarters* : Yeotmal.

*Tahsils* : Yeotmal, Darwha, Kelapur, Wuni, Pusad.

The area of the District is 5,246 sq. miles. Population : 1,098,470 (1961 Census) (Males 557,010 ; females 541,460). The language spoken is Marathi.

The staple foodgrain is jawar ; other foodgrains are wheat and pulses. As elsewhere the most profitable cash crops are cotton and oilseeds. Forests cover a larger area than in any other District in the State and yield considerable quantity of timber and fuel. The principal industry is the preparation of cotton for the market.

## MANIPUR

Area : 8,628 sq. miles ; Population : 7,80,037 ; Density : 90 ; Sex Ratio : 1,015 females per 1,000 males ; Literacy : 30.04 per cent. Capital : Imphal ; Strength of Legislative Assembly : 32 including two nominated members.

For details, about area and population of sub-divisions, see under "Population".

Manipur bounded on the east and south by Burma and on the north and west by the Naga Hills and the Cachar District of Assam, is a highly strategic territory on the eastern frontier of India. Two land routes from Burma pass through its territory.

Seven hundred square miles of the Territory form a central valley, 2,600 feet above sea-level, which is shut in on all sides by extensive hill tracts at places over 6,000 feet, covering the rest of the Territory. The climate varies from temperate in the valley to cold in the high hills. The rainfall on the average is 65 inches in a year.

The main population is "Meiteis" inhabiting the valley with some 40 tribes and sub-tribes known by the generic names of Nagas and Kukis. Though a number of different

dialects are spoken in the Territory, Manipuri and English are the official languages. The people are carefree and healthy, with a passion for religious festivals involving community dances in which both sexes join.

The soil is fertile. Rice is the principal crop.

The area under cultivation is about three lakh acres.

Handloom weaving is a popular industry throughout the Territory and Manipuri cloth of various picturesque and indigenous designs is in demand throughout India and even outside.

There are 11 colleges, 168 high, junior high and higher secondary schools, 282 middle schools and 2,314 primary and junior basic schools. The total number of students for the year ending 31st March 1966 was nearly 1,95,000.

There are 9 hospitals, 60 dispensaries, 12 primary Health Centres, 28 Sub-Centres, 10 Family Planning Centres, one T. B. Clinic, 4 Leprosy Sub-Centres, one V. D. Clinic and one Dental Clinic.

## MYSORE STATE

*Area* : 192,203 sq. kms. (74,210 sq. miles).

*Population* : (1961 census) : 23,586,772 (males 12,040,923 ; females 11,545,849). Percentage increase 1951-61 : 21.57. Sex ratio : 966 females for 1,000 males. Density : 318 per sq. mile. Literacy : 25.4 per cent. 5.4 per cent of the whole India population and area 6.5 per cent of the whole of India.

*Capital* : Bangalore.

The State is divided into four Divisions for administrative purposes.

There are 20 Districts, 172 Talukas, 288 towns and 25,880 inhabited villages.

The Mysore Village Panchayat and Local Boards Act, 1959, came into force on November 1, 1959. Changes in the Panchayati Raj system, with the constitution of the Zilla Parishads instead of District Development Councils, and measures to widen the scope of other panchayati institutions, are in the offing (June 1966).

### Facts and Figures not shown otherwise

Area under rice (d) 100,850 hectares ; Area under ragi (d) 945,711 hectares ; Area under bajra (d) 502,620 hectares ; Area under millets (d) 406,245 hectares ; Area under

minor wheat (d) 305,298 hectares ; Area under sugar-canes (d) 68,090 hectares ; Area under cotton (d) 1,038,937 hectares ; Land revenue (b) Rs. 44,947,249 ; Land revenue per capita (b) Rs. 1.90 ; No. of persons employed in Govt. Service (i) 162,397 ; No. of persons employed in Municipalities (i) 21,230 ; No. of Village panchayats (i) 7,452 ; No. of municipalities including Corporations (i) 174 ; No. of Post Offices (April 1964) 6,722 ; No. of Telephone exchanges (j) 144 ; No. of telephones in use (j) 27,224 ; No. of radios in use (j) 193,656 ; No. of Police stations including outposts (j) 806 ; No. of jails including lock-ups (j) 105 ; No. of towns and villages electrified (j) 4,193 ; Length of roads (j) 47,770 kilometres ; Length of railway line (1956) 2,699 kilometres ; No. of registered motor vehicles (j) 56,761 ; C. D. Blocks (1-3-1964) 268.

### AGRICULTURE

Out of the total geographical area of about 45 million acres, 6.6 million acres are covered by forest, 2.1 million acres are put to non-agricultural use, 2.1 million acres are barren and uncultivable land, 4.3 million acres are pasture and grazing lands, 3.3 million acres are fallow lands. The net area sown is about 25.2 million acres. The gross area irrigated is 2.1 million acres.

The important cereal crops that are grown in the State are rice, jowar, ragi and wheat. Important cash crops

(b) 1961-62 ; (d) final forecast 1962-63 ; (i) as on 31-3-1962 ; (j) as on 31-12-1962.



include coffee, cotton, tobacco, oilseeds, sugarcane, coconut, cashewnut and castor. Among the States, Mysore ranks first in respect of the production of coffee, ragi and cardamom.

For area and production of cash crops, see article on "Agriculture".

For figures on agricultural production see under sub-heading "Five Year Plans".

**Reclamation of Land by Tractors and Bulldozers:**—By the end of 1965-66, 198 tractors were supplied by the Government on a hire purchase system. Nearly 37,000 acres were reclaimed at the end of the Third Plan.

**Irrigation Wells and Pumpsets:** Total number of wells during the Third Plan : 32,000 ; Irrigation pumps installed : 27,119 ; Number of bore wells : 354.

About one lakh acres under the Thunga and Bhadra major irrigation schemes came under intensive cultivation during 1966-67 summer.

**Development of Local Manurial Resources:** The Third Plan achieved a production of 60 lakh tons of compost.

**Chemical Fertilizers:** In 1965-66, a total quantity of nearly 4 lakh tons of chemical fertilizers was distributed in the State.

**Improved Seeds:** The Third Plan aimed at establishing 53 more seed farms. 5,575 tons of improved seeds were produced during the First Plan, 8,600 tons in the Second Plan and 15,666 tons in the Third Plan.

**Adoption of Improved Agronomic Practices:** During the Third Plan, up to March 31, 1966, seven lakh acres had been brought under the Japanese method and 38 lakh acres, under Rabi and Khariff campaigns.

**Control of Pests and Diseases:** Sprayers and dusters are being distributed at 50 per cent concessional rates to enable the farmers to take up plant protection measures themselves. Rs. 79 lakhs were spent during the Third Plan to protect 15,20,000 acres.

**Soil Conservation:** During the Third Plan, an area of nearly 2 lakh acres were contour bunded.

Attempts were also made to grow high yielding varieties of hybrid jowar, bajra and also paddy.

All agricultural colleges and agricultural research stations have been transferred to the University of Agricultural Sciences.

**Vegetables and Fruits:** The area under vegetables was increased during the Third Plan period from 1,40,000 acres to 1,55,000 acres.

**Horticulture:** The annual output of the various nurseries will be 4 lakh fruit plants. A master plan costing Rs. 9,91,266 has been prepared for the development of horticulture. In partial execution the plan encourages intensive vegetable and quick growing fruits in Bangalore and Mysore.

**Cash Crops:** Out of a total cultivated area of 280.8 lakh acres, nearly 64.3 lakh acres are under cash crops and out of a total agricultural income of Rs. 276.34 crores generated in the State, Rs. 90 crores are by cash crops. They form an important part also of the State's foreign export trade.

**Cashew:** It was expected that an area of about 75,000 acres would be brought under cashew in the private sector by the farmers themselves with the aid of loans proposed to be given to them. It was also estimated that an additional area of 8,000 acres would be brought under

cashew cultivation by the Forest Department by the end of the Third Plan.

**Cardamom:** Cardamom is occupying an estimated area of about 49,000 acres. The estimated production is about 1,000 tons which is nearly 45 per cent of the national production.

**Tobacco:** Tobacco is cultivated in an area of about 1 lakh acres and the annual estimated production is about 25,000 tons.

**Sugarcane:** Sugarcane occupies an area of about 1.5 lakh acres in Mysore producing about 4,12,500 tons of gur. By the end of the Third Plan, it was expected that an area of 1.70 lakh acres would be brought under this crop.

**Areca nut:** The production is about 25,000 tons of nut which is nearly 27 per cent of the annual production in India.

**Rubber:** Plantations extended over 785 acres, cinchona plantations over 44 acres and eucalyptus over 20,125 acres.

**Animal Husbandry:** (Figures in million): Cattle 9.67; Buffaloes 3.02; Sheep 4.76; Goats 2.89; Poultry 8.84.

The State has a network of about 600 Veterinary Institutions comprising 19 District Hospitals, 175 Taluk Dispensaries and 400 Rural Veterinary Dispensaries. The Mysore Serum Institute produces all the necessary biologicals to combat and prevent contagious diseases among livestock. Two Clinical Laboratories—one at Belgaum and the other at Mangalore—are under construction.

**Bangalore Dairy Project:** Aided by UNICEF, this is designed to handle 50,000 litres of milk with provision to expand the capacity to 1,50,000 litres. At present it supplies 20,000 litres to Bangalore City.

## COMMUNITY DEVELOPMENT PROGRAMME

The entire State is now covered by Community Development Blocks, with emphasis on agricultural production and applied nutrition programmes.

The Village Volunteer Force and Defence Labour Banks Scheme were inaugurated in 1962-63 with the three-fold object of encouraging production, mass education and defence efforts. 7,00,000 volunteers have been enrolled in the Volunteer Force and 4,000 Labour Banks have been constituted. A scheme to ensure panchayat agricultural production plans has also been inaugurated.

## LAND REFORMS

The Mysore Land Reforms Act (1961) came into force in Oct. 1965.

See also under main article on "Agriculture".

## Survey and Settlement

Three schemes (1) Consolidation of holdings; (2) Cadastral survey of Inam villages and (3) Record of Rights and Agricultural Statistics, undertaken in the Third Plan, will be continued in the Fourth Plan. Out of 2,143 ex-Inam villages in the old Mysore Area and Bellary District, 1,737 villages have been surveyed and 1,424 villages settled.

## FOREST

Area : 13,575 sq. miles (18.4 per cent of the State area).

**Classifications and area:** Wet evergreen and Semi-evergreen 1,315 sq. miles; Moist Deciduous 843 sq. miles;



Dry Deciduous 3,020 sq. miles; Dry Thorn 8,397 sq. miles.

| Species                             | Plantations<br>as on<br>31-3-56 | Plantations<br>raised<br>during<br>the II Plan | Plantations<br>raised<br>as at the<br>end of<br>Third Plan |
|-------------------------------------|---------------------------------|------------------------------------------------|------------------------------------------------------------|
| 1                                   | 2                               | 3                                              | 4                                                          |
|                                     | (Acres)                         | (Acres)                                        | (Acres)                                                    |
| Teak .. ..                          | 91,060                          | 30,592                                         | 1,61,512                                                   |
| Fuel and Miscel-<br>laneous species | 46,324                          | 72,528                                         | 2,44,687                                                   |
| Soft Woods ..                       | 430                             | 7,622                                          | 20,207                                                     |
| Cashew .. ..                        | 3,143                           | 8,362                                          | 24,797                                                     |
| Rubber .. ..                        | ..                              | ..                                             | 797                                                        |
| Linaloe .. ..                       | ..                              | 150                                            | 1,165                                                      |
| <b>TOTAL ..</b>                     | <b>1,40,957</b>                 | <b>1,19,254</b>                                | <b>4,53,165</b>                                            |

Net revenue from forests has risen from Rs. 275 lakhs in 1956-57 to Rs. 988 lakhs in 1965-66.

### IRRIGATION

Percentage of irrigated area to the total crop area : 7.3.

**Minor irrigation :** During the Third Five Year Plan the total provision for minor irrigation works (tanks including restoration, etc.) was Rs. 850 lakhs.

The number of wells sanctioned till the end of the Third Five Year Plan were as follows:—1960-61 : 16,700 wells; 1961-62 : 5,009 wells; 1962-63 : 10,500 wells; 1963-64 : 2,700 wells; 1964-65 : 2,500 wells; 1965-66 : 10,000 wells. Total 42,900 wells.

If the Scheme was implemented as proposed, about 63,000 acres were expected to be brought under irrigation before the end of the Third Five Year Plan resulting in an increased food production of 42,900 tons.

**Major and Medium Irrigation :** In addition to the 25 Projects taken up during I and II Plan period, 7 new schemes — 3 Major and 4 Medium — had been included in the III Five Year Plan. The estimated cost of the 7 new schemes included in the III Five Year Plan was Rs. 99.41 crores with an irrigation potential of 10.52 lakh acres. Thus the total estimated cost of I, II and III Plan schemes amounted to Rs. 228.69 crores with a gross potential of

25.14 lakh acres. There was a provision of Rs. 40.66 crores in the III Five Year Plan (Rs. 31.27 crores for the I and II Plan schemes, and Rs. 9.39 crores for the III Plan schemes).

Under the 32 Major and Medium Irrigation Projects included under I, II and III Five Year Plans the gross irrigation potential available was 25.14 lakh acres. The targets and achievements and potential and utilisation were as under :—

|                                                          | Potential<br>(cumulative<br>in lakh acres) | Utilisation<br>(cumulative<br>in lakh acres) |
|----------------------------------------------------------|--------------------------------------------|----------------------------------------------|
| Achievements up to end of<br>Second Five Year Plan       | 4.63                                       | 2.91                                         |
| Targets set out up to end<br>of Third Five Year<br>Plan— |                                            |                                              |
| (a) as per Plan book ..                                  | 13.58                                      | 11.74                                        |
| (b) as per realistic pro-<br>gramme .. ..                | 8.90                                       | 7.17                                         |
| Actual achievements to<br>end of 1963-64 ..              | 6.82                                       | 4.58                                         |
| Achievement to end of<br>1964-65.. ..                    | 7.48                                       | 6.12                                         |

**New Irrigation Projects :** Preliminary work on Upper Krishna and Malaprabha Projects has started. It is proposed to start preliminary works in respect of Chandramalli Project in Gulbarga District and of Harangi and Hemavathi Projects in Coorg and Hassan Districts, respectively.

The progress achieved in some of the projects is as under :—

|                                      | Potential<br>created<br>Acres | Area<br>developed<br>Acres |
|--------------------------------------|-------------------------------|----------------------------|
| Tungabhadra (L.B.) ..                | 3,40,000                      | 2,16,668                   |
| Ghataprabha Project I<br>Stage .. .. | 1,20,000                      | 41,537                     |
| —Do.— II Stage.. ..                  | 32,320                        | 10,353                     |
| Bhadra Project .. ..                 | 63,610                        | 32,075                     |
| Tungabhadra Project<br>(R.B.) .. ..  | 92,000                        | 57,178                     |

### Particulars of Major and Medium Irrigation Projects

| Name of the Project.                                                      | Location.                       | When<br>started. | When to be<br>Completed. | Area to be<br>irrigated in<br>Acres. | Total cost<br>in lakhs. | Estimated rise in<br>output of food-<br>grains after com-<br>pletion in Tons. |
|---------------------------------------------------------------------------|---------------------------------|------------------|--------------------------|--------------------------------------|-------------------------|-------------------------------------------------------------------------------|
| (a) Tungabhadra Pro-<br>ject Left Bank.                                   | Mallapuram site near<br>Hospet. | 1945             | 2nd year of<br>IV Plan.  | 3,59,545                             | 3,220.00                | 9,200                                                                         |
| (b) Tungabhadra Pro-<br>ject Right Bank ..                                | —do.—                           | 1945             | During IV<br>Plan.       | 20,825                               | 121.40                  | 9,000                                                                         |
| Contribution to T.B.<br>Board LLC Spl. Irriga-<br>tion under TBP Bellary. |                                 |                  |                          |                                      |                         |                                                                               |
| Ghataprabha Project<br>Stage I.                                           | Dupdal Weir.                    | 1949             | 2nd year of<br>IV Plan.  | 78,463                               | 567.40                  | 14,000                                                                        |



## Particulars of Major and Medium Irrigation Projects—Contd.

| Name of the Project.          | Location.                                                                                          | When started.    | When to be Completed.  | Area to be irrigated in Acres. | Total cost in lakhs. | Estimated rise in output of food-grains after completion in Tons. |
|-------------------------------|----------------------------------------------------------------------------------------------------|------------------|------------------------|--------------------------------|----------------------|-------------------------------------------------------------------|
| Bhadra Project .. ..          | Across river Bhadra near Lakkavalli in Chickmagalur Dist.                                          | 1947             | 2nd year of IV Plan.   | 1,96,443                       | 3,193.00             | 18,000                                                            |
| Ghataprabha Project Stage II. | Hidkal.                                                                                            | 1956             | By the end of IV Plan. | 1,87,610                       | 2,468.00             | 20,000                                                            |
| Chickhole Project ..          | Chamarajanagar Taluk, Mysore Dist.                                                                 | 1957             | 1969-70                | 3,238                          | 78.00                | 650                                                               |
| Rajolibunda .. ..             | Rajolibunda village, Manvi Taluk, Raichur Dist.                                                    | 1947             | During IV Plan.        | 1,411                          | 433.00               | 1,176                                                             |
| Tunga Anicut .. ..            | Anicut across Tunga river near Sacrebyle, Shimoga Dist.                                            | 1946             | —do.—                  | 7,534                          | 296.86               | 5,440                                                             |
| Nugu Reservoir ..             | Near Birwal, H. D. Kote, Mysore Dist.                                                              | 1947             | —do.—                  | 2,000                          | 311.14               | 4,000                                                             |
| Ambligola Project ..          | Shikaripur Taluk, Shimoga Dist.                                                                    | 1953             | —do.—                  | 3,182                          | 104.00               | 1,500                                                             |
| Tungabhadra Stage II. H.L.C.  | Near Hospet, Bellary Dist.                                                                         | 1959             | —do.—                  | 70,339                         | 224.00               | 10,000                                                            |
| Kabini Project .. ..          | At Beedarahalli Beechanahalli, H. D. Kote Taluk, Mysore Dist.                                      | 1958             | By the end of IV Plan. | 50,000                         | 1,000.00             | 10,000                                                            |
| Hagaribommanahally ..         | Bellary Dist.                                                                                      | 1960             | 1968-69                | 7,350                          | 85.41                | 1,500                                                             |
| Jambadahalla .. ..            | Near Duglapur in Tarikere Taluk, Chickmagalur Dist.                                                | 1959             | 1969-70                | 6,000                          | 115.00               | 1,200                                                             |
| Hathikoni .. ..               | Near Hathikoni Village, Gulbarga Dist.                                                             | 1959             | 1970-71                | 5,300                          | 57.84                | 800                                                               |
| Dharma Project ..             | Near Yamagalali Mudgad Taluk, N. K. Dist.                                                          | 1958             | 1970-71                | 3,200                          | 95.48                | 2,400                                                             |
| Hebbahalla .. ..              | Near H. D. Kote, Mysore Dist.                                                                      | 1958-59          | End of IV Plan.        | 1,570                          | 58.00                | 325                                                               |
| Lakshmanathirtha Project      | Coorg Dist.                                                                                        | 1958             | 1969-70                | 7,000                          | 161.61               | 1,400                                                             |
| Kanakanala .. ..              | Mahapur village, Raichur Dist.                                                                     | 1960             | End of III Plan.       | 5,100                          | 75.00                | 750                                                               |
| Arkavathi .. ..               | Arobele village, Bangalore Dist.                                                                   | Not yet finished | 1969-70                | 6,000                          | 85.00                | 1,200                                                             |
| K.R.S. Works .. ..            | Mysore Dist.                                                                                       | —                | 1970-71                | —                              | 300.00               | 29,000                                                            |
| Harangi Project ..            | Near Hardur, Frazerpet Taluk, Coorg Dist.                                                          | Not started      | Spillover to V Plan.   | 81,000                         | 1,105.84             | 16,200                                                            |
| Upper Krishna Project*        | Between villages of Narayanapur, Shorapur Taluk of Gulbarga Dist.<br>2) Almatti Dam, Bijapur Dist. | —                | —do.—                  | 6,00,000                       | 5,820.00             | 1,20,000                                                          |
| Malaprabha Project ..         | Belgaum Dist.                                                                                      | 1960-61          | 1970-71                | 3,00,000                       | 2,000.00             | 40,000                                                            |
| Hemvathi .. ..                | Near Gorur, Hassan Dist.                                                                           | —                | Spillover to V Plan.   | 33,000                         | 390.00               | 6,600                                                             |
| Kambadakada .. ..             | At Kambadakada village in Coorg Dist.                                                              | —                | —do.—                  | 22,500                         | 190.00               | 4,500                                                             |
| Harinala .. ..                | —                                                                                                  | 1961-62          | 1969-70                | 10,750                         | 83.41                | 1,800                                                             |
| Bijjur .. ..                  | South Kanara Dist.                                                                                 | —                | 1968-69                | 45,000                         | 51.80                | 900                                                               |
| Investigation of Projects     | —                                                                                                  | —                | —                      | —                              | —                    | —                                                                 |
| Chandramapalli Project        | Gulbarga Dist.                                                                                     | —                | 1970-71                | 20,62,001                      | 99.84                | 2,100                                                             |

\* Work at Narayanapur has been suspended in preference to a site at Siddapur which is being examined.



## CO-OPERATION

The structure of co-operative credit in the State consists of three tiers: the primary, the intermediate and the apex. At the apex level, there is the Mysore State Co-operative Apex Bank which has been re-constituted as a federal body and whose jurisdiction is extended to the whole of the State. The Central Land Mortgage Bank has been reorganised and reconstituted with the entire State as its jurisdiction.

There are 17,000 Co-operative Societies with a membership of 35 lakhs. Their total borrowing amounts to Rs. 75 crores and working capital Rs. 139 crores.

Number of Agricultural Credit Societies: 8,800; Number of District Co-operative Banks: 19; Number of Land Development Banks: 155; Number of Primary Marketing Societies: 245; Number of Housing Co-operative Societies: 639; Number of Coir Co-operative Societies: 21.

## Co-operative Sugar Factories

Nine Co-operative Sugar Factories are in existence in the State of which 4 have gone into production and 5 have secured industrial licence.

## Co-operative Farming

There are 310 farming societies with a membership of 8,597 and paid up share capital of Rs. 10.09 lakhs, commanding an area of 52,869 acres.

## Consumers' co-operatives

There are at present 13 whole-sale stores and 759 primary stores with an aggregate membership of 70,086 and share capital of Rs. 50.49 lakhs.

The Third Plan brought about sixty per cent of the agricultural population under the co-operative fold. Two thousand more service co-operatives, 50 primary land mortgage banks, 44 processing units and 900 godowns will be started and 160 marketing societies will be re-organised.

## ELECTRIC POWER

## Hydro-Electric Projects completed recently

| Name of Project.                               | Location.                                                     | Commencement. | Completion.       | Installed capacity. | Cost in crores of Rs.     |
|------------------------------------------------|---------------------------------------------------------------|---------------|-------------------|---------------------|---------------------------|
| Sharavathi Valley Project ..                   | 15 miles from Talaguppa Rly. Station near Jog (Linganamakhi). | 1956          | 1965<br>(I Stage) | 178,200 Kw.(a)      | 56 (Revised)<br>(I Stage) |
| Bhadra Hydro-Electric Project.                 | 18 miles from Bhadravathi (Lakkavalli).                       | 1956          | 1962              | 33,200 Kw.(b)       | 3.8                       |
| Tungabhadra Hydro-Electric Project Right Bank. | 4 miles from Hospet Rly. Station.                             | 1953          | 1962              | 72,000 Kw.(c)       | 1.44 (Mysore's share)     |
| Tungabhadra Hydro-Electric Project Left Bank.  | 3 miles from Munirabad Rly. Station (Mallapuram).             | 1955          | 1961              | 27,000 Kw.(d)       | 6.042                     |

Estimated rise in output after completion is about 1,466 million units over the 1956-57 figure. (a) 891,000 Kw. ultimate capacity. (b) 40,400 Kw. ultimate capacity. (c) This is a joint venture of Andhra Pradesh and Mysore. Mysore's share is 14,400 Kwa. (20 per cent of the generated power.) Two units of 9,000 Kw. installed and two more units being installed at the dam and canal power house. (d) Ultimate capacity 36,000 Kw.

Names of power stations (besides the ones completed recently) in operation, their location and installed capacity:

| Name                    | Installed capacity (Kw.) | Location                                           |
|-------------------------|--------------------------|----------------------------------------------------|
| Sivasamudram .. ..      | 42,000                   | 28 miles from Maddur Rly. Stn. towards South East. |
| Shimshapura .. ..       | 17,200                   | 28 miles from Maddur Rly. Stn. towards South East. |
| Jog (M.G.H.E. Works) .. | 120,000                  | 12½ miles from Talaguppa Rly. Stn. towards North.  |

Villages electrified:—1,300 till March 1966.

No. of irrigation pumps serviced: 23,600.

Diesel Stations showing within brackets the installed capacity in Kw. and units generated in millions in 1964-1965 respectively: Mercara (414; 0.705); Somwarpet (150; 0.146); Virajpet (240; 0.242); Shorapur (100; 0.065); Gourikoppal (80; 0.111); Raichur (1,240; 2.916); Gulbarga (826; 1.944); Yadgir (400; 0.537); Bailhongal (200; 0.197); Guledgud (567; 1.027); Hukeri (500; 0.975); Ilkar (200; 0.322); Chittapur (50; 0.047); Humnabad (200; 0.055); Aland (100; 0.015); Kushtagi (50; 0.001).

The following are some of the other diesel stations with the installed capacity in Kw.:—Udipi 110 Kw; Karkala 32 Kw; Mangalore 1,017 Kw.

## POWER

**Sharavathi Valley Project:**—The Sharavathi Valley Project now under execution is the biggest and one of the most economical projects in the State and one of the few economical projects in India. The River Sharavathi though only 82 miles in length has a tremendous power potential amounting to about 1.35 million kilo watts. This project is being executed in three stages.

**Bhadra Hydro-Electric Project:**—The Bhadra Hydro-Electric Project is mainly an irrigation project and



the power generation here is only incidental. The installed capacity of this station is 33,200 KW comprising 2 units of 12,000 KW each in the River bed station, one unit of 2,000 KW in the left bank station and one unit of 7,200 KW in the right bank station.

#### **Tungabhadra Hydro-Electric Project (Left Bank) :**

—This project contemplates installation of 3 units each of 9,000 KW and transmission of power by means of 110 KV transmission line from Munirabad to Shahabad. All three units of 9,000 KW each have been commissioned.

**Kalinadi Hydro-Electric Project :**—Provisions have been made for carrying out the preliminary works on the Kalinadi scheme during the III Plan period.

**Mysore State Electricity Board :—III Five Year Plan :** The Third Five Year Plan of the Mysore State Electricity Board was a further projection of the Second Plan Schemes viz., Extension of Main and Sub-transmission lines, erection of step down stations, extension of power supply to villages and power supply to Irrigation Pumpsets etc. to distribute the power to various parts of the State from the Power Projects like Bhadra, Munirabad and Sharavathi Valley Project. The total provision for the Third Plan Projects of the Board under the head "Power" was Rs. 2,067.98 lakhs besides a provision of Rs. 1,075 lakhs for power supply to Irrigation Pumpsets under 'Minor Irrigation'. An expenditure of Rs. 305.17 lakhs had been incurred under power and Rs. 155.04 lakhs under power supply to Irrigation Pumpsets during the first two years of the Third Plan. Besides meeting its own demand, Mysore is now in a position to supply power to neighbouring States — Andhra Pradesh, Madras, Kerala and Goa — on a temporary basis.

### **INDUSTRIES**

Production in some of the important industries 1964-65 :—

| Industry                                            | Unit    | 1963-64 | 1964-65 |
|-----------------------------------------------------|---------|---------|---------|
| Pig Iron ..                                         | M. Tons | 102,324 | 102,324 |
| Crude and Semi-finished Steel and Finished Steel .. | "       | 89,611  | 89,611  |
| Sugar ..                                            | "       | 119,094 | 119,094 |
| Paper ..                                            | "       | 49,981  | 49,981  |
| Cement '000 ..                                      | "       | 859.6   | 859.6   |

Main large-scale industries in the State with location: Textiles (Bangalore, Devangere, Bellary, Mysore, Hubli, Gadag, Gokak, Gulbarga); Engineering (Bangalore, Harihar); Mineral and Metal (Bangalore, Bhadravati, Bellary, Kolar, Shimoga); Food, drink and tobacco (Bangalore); Chemicals, dyes, etc. (Bangalore, Mysore); Paper and printing (Bhadravati, Nanjangud, Dandeli, Mandya and Bangalore); Process relating to wood, stone and glass (all over the State); Process connected with hides and skins (Bangalore); Gins and presses (Devangere, Belgaum, Bellary, Dharwar, Gulbarga & Raichur); Fisheries (Mangalore, Karwar).

Major industries owned by the Union Government located in Bangalore. (See under Govt. Industrial Undertakings).

Government Aided Concerns : Radio & Electrical Manufacturing Co., Bangalore; Mysore Lamp Works, Bangalore; Mysore Paper Mills, Bhadravati; Mysore Sugar Company, Mandya and Mysore Industrial & Testing Laboratory Ltd., Bangalore; Mysore Spun Silk Mills,

Channapatna; Mysore Chemicals and Fertilisers, Belagula; Mysore Tobacco Co. curing centres at Mandya, Mysore, Kolar; Mysore Stoneware Pipes and Potteries, Soladevanahalli, near Chikbanavar Railway Station; Mysore Coffee Curing Works, Chikmagalur; Mysore Chrome Tanning Co., Bangalore; Mysore Water Proofs Ltd.; H.A.L. Post, Bangalore; Mysore Match Co. Ltd., Shimoga; Mysore Vegetable Oil Products, Bangalore; Mysore Kirloskars Ltd., Harihar; Mysore Cements, Ammasandra, Tumkur; Mysore National Paper Mills, Bilgola; Mysore Lac and Paints, Mysore; Mysore Fruit Products, Bangalore.

In the public sector are the New Government Electric Factory, Bangalore and the Government Porcelain Factory, Malleswaram, Bangalore. For details see under the main article "Government Industrial Undertakings".

Production in Rs. (lakhs) in some Govt. Industrial Concerns in 1964-65: Sandalwood Factory: 133.74; Soap Factory: 118.14; Govt. Electric Factory: 99.84; Porcelain Factory: 73.29; Implements Factory: 36.54; Total: 461.55.

A watch factory has been set up at Bangalore in the public sector (as an adjunct to Hindustan Machine Tools) designed to manufacture about half a million full lever watches annually. The Bangalore factory has the collaboration of the Japanese firm, Citizen Watch Company.

No. of Industrial Estates, 8. (Bangalore, Ramanagaram, Mysore, Hubli, Harihar, Belgaum, Gulbarga and Mangalore.)

No. of Sugar factories: 9; No. of Paper factories: 4; No. of Cement factories: 4; No. of textile and allied mills: 39.

A letter of interest has been granted to Indian Aluminium Co., Calcutta, to set up a plant to manufacture aluminium ingots near Belgaum with an initial capacity of 30,000 tonnes per annum.

### **Employment**

During the Third Plan period, the total outlay on Central Government schemes proposed to be executed in the State (like the Mangalore-Hassan Railway, development of Mangalore Port, West Coast Roads, etc.) is expected to be of the order of Rs. 57 crores. The total additional employment likely to be created on account of these schemes is estimated to be about 1.10 lakhs.

The overall additional employment opportunities likely to be generated during the Third Plan period by Plan investment (both Central and State) may, therefore, be placed at about 5.67 lakhs.

In 1964-65, Employment Exchanges notified 28,067 vacancies and placed 16,831 persons in employment.

### **LABOUR**

**Labour Welfare Centres :** Ten Labour Welfare Centres were started at Mysore, Gulbarga, Bijapur and Yeshwantpur to extend labour welfare activities and provide recreation to the workers.

#### **Expansion of Labour Welfare Activities.**

**Banking Facilities to the Industrial Workers :** With a view to affording relief to the industrial workers indebted to money-lenders, a scheme to provide credit facilities at reasonable rates of interest on co-operative basis was taken up and it is now under the charge of a co-operative officer deputed by the Co-operative Department.

**Apprenticeship Act :** Under this scheme 1,400 candidates would have received training.



**Employment Exchanges :** A network of Employment Exchanges are now functioning in all the districts and also four units of Employment Information and Assistance Bureau in the rural areas at Pavagada, Yadavgiri, Shirhatti and Nagamangala Taluks.

**Factories and Boilers :** There are 3,100 factories on the registers of the Department.

**The Employees' State Insurance Scheme :** The Scheme is now in force in Mysore, Mangalore, Hubli, Gulbarga, Gokak, Dandeli and Belgaum. The total number of beneficiaries so far is over 200,000 family units. The Scheme will shortly cover Davangere, Harihar and Kollegal and a few more smaller centres.

**The Rural Manpower Utilisation Works :** The main schemes undertaken in this programme are Minor Irrigation, Soil Conservation, Afforestation, Development, Repairs to Field Channels and Road Works.

### HOUSING

**Achievements of the Mysore Housing Board from 1961-62 to 1965-66 :**

Amount drawn : Rs. 84.50 lakhs ; Number of houses built (General) : 1,922.

**Low Income Group Housing :** (from 1961-62 to 1965-66): Amount drawn : Rs. 399.00 lakhs ; No. of houses built : 3,200.

**Subsidised Rental Housing :** (from 1962-63 to 1965-66): Provision : Rs. 31 lakhs ; No. of houses built : 314.

**Middle Income Group Housing :** (from 1961-62 to 1965-66): Amount drawn : Rs. 148 lakhs ; No. of houses built : 694.

### SMALL-SCALE INDUSTRIES

Important cottage industries showing their centres in Mysore State within brackets: Lacquerware (Chennapatna, Gokak, Nelamangala, Chikmagalur and Shimoga); Sandalwood carving (Sagar, Sorab, Mysore); Ivory and Inlay works (Sagar, Sorab, Mysore); Brass works (Nelamangala); Rattan work (Mysore, Chikmagalur, Shimoga and Sagar); Bidriware (Bidar); Glass Bangle making (Yeshwantpur and Ghodgeri); Mat weaving (Kengeri, Amruthur, Nagamangala, Hassan, Kumbalur, Anandapuram and Hiriyur); Leather stitching (Birur, Sagar, Doddasiddavanahally, Indi, Ramdurg, Ashani, Sandatti and Karwar); Pottery (Ramanagaram, Khanapur, Madikebeedu and Krishnarajapura); Tile-making (Mangalore); Coir Industry (Mangalore, Karwar); Agarbatti (Mysore, Bangalore); Cotton Hosiery (Shahapur).

The important centres for small scale industries are Bangalore, Belgaum, Tumkur, Hubli, Hospet, Bhadravati and Mangalore. Among the important products that have got all-India market, the following are noteworthy: Cycle Dynamo Lamps; Centre lathes; Wood working machinery; Punch presses; Ornamental lamps; Charcoal Irons; Pooja articles of non-ferrous metals. Apart from the above, the State also produces oil-engines, pressed-metalware and components for large-scale industries located in the State.

**Sericulture :** See under main article "Sericulture and Silk."

### MINERALS

**Mineral Production :** Minerals showing, within brackets, the location, average annual quantity in tons and value in Rs. respectively; (Figures for gold and silver are given earlier). Asbestos (Hassan; 170 : 25,000); Chromite (Hassan; 4,000 : 3,00,000); Feldspar (Kolar; 600 : 15,000);

China Clay (Bangalore, Hassan, Shimoga and Tumkur; 30,000 : 4,10,000); Limestone (Shimoga, Gulbarga and Bijapur; 8,00,000 : 8,00,000).

Total number of men employed : About 45,000.

Number of men employed in each mineral industry : Gold (30,000); Other minerals (15,000).

During the Third Plan period, the following minerals have been located and their reserves assessed :—

(1) **Iron ore.**—Iron ore deposits estimated at about 500 million tons of exportable grade have been proved in the Bababudan Hill, Chikmagalur District; near Kodachadri and Kotebore, Shimoga District; near Kalche, Kodalgadde, Sunksal, etc., North Kanara District; near Karekurchi, Habbigegudda, Janehar, Tumkur District and Vajra, Lakkihalli Bheemasamudra, etc., Chitradurga District. This is in addition to the ore reserves in the Bellary-Hospet area, where a reserve of about 1,000 million tons is assessed.

(2) **High Calcium Limestone**—occurring between Bagalkot and Yadwad, Bijapur-Belgaum Districts have been mapped in detail and some of them have also been prospected by drilling. So far about 600 million tons of limestone are assessed. Further prospecting is under progress. The high calcium limestone deposits near Nagargali, North Kanara District and those in Hosadurga Taluk, Chitradurga District, were also mapped in detail and the reserves are assessed at 30 million tons and 50 million tons, respectively.

(3) **Fuller's Earth.**—Fuller's Earth deposits suitable for refining of mineral and vegetable oils occurring near Korvi and other villages, Chincholi Taluk, Gulbarga District, have been prospected and estimated to contain about 2 million tons.

(4) **Bauxite.**—The surveys conducted for Bauxite deposits in Belgaum District have revealed the occurrence of about 2 million tons of Bauxite.

The value of production in Rs. (lakhs) of some important minerals in 1964 : Gold : 298.13 ; Iron ore : 137.63 ; Manganese ore : 70.43 ; Limestone : 40.63 ; China clay : 2.63 ; Quartz : 4.84 ; Magnetite : 2.96 ; Bauxite : 1.94.

**Board of Mineral Development**—Besides export of Iron Ore and Manganese Ore, the Board deals with the mining and sale within India of commodities like Chrome Ore, Clay, Graphite, Quartz, Feldspar, Soapstone, etc. The export is at present restricted to Iron Ore and Manganese Ore. This commercial venture is a foreign exchange earner, and during the year 1963-64 the export of Iron Ore and Manganese Ore to foreign markets totalled up to 4.62 lakh tonnes, securing a foreign-exchange component equivalent to Rs. 126 lakhs.

During 1964-65 the sales touched Rs. 1.5 crores.

### PUBLIC HEALTH

Mysore State has 208 hospitals, with 19,000 beds, 800 dispensaries, 4,500 registered doctors, 1,700 registered nurses, 1,750 midwives, 450 primary health units, 19 national malaria eradication programme units, one national filaria control unit, 10 subsidiary leprosy units, 12 district medical laboratories and 92 family planning centres.

Ayurvedic hospitals 8, Ayurvedic dispensaries 500; Unani dispensaries 71 and Homeopathic dispensaries 10.

Some of the important schemes carried out :—National Malaria Eradication Programme; National Filaria Control Programme; National Small Pox Eradication Programme; Leprosy Control Programme; The B.C.G. Vaccination Scheme.



### Third Plan—Physical Targets and Achievements

Total III Plan Provision Rs. 432·850 lakhs. Total expenditure for the period from 1st April '61 to 31st Dec. '65 : Rs. 400 lakhs.

It was proposed to establish 2,500 additional beds in Hospitals, of which 1,167 have been established.

240 more beds have been provided at the Mental Hospital, Bangalore.

180 additional beds have been established for T.B. patients out of the target of 300 beds.

In all about 3,000 additional beds were likely to be established by the end of the IIIrd Plan, raising the total number from 14,000 to 17,000 beds. But, for a population of 240 lakhs at least 24,000 beds have to be provided and hence this scheme is proposed to be continued in the IV Plan also, to provide another 3,000 additional beds.

As against III Plan target of establishing 5 Blood Banks, 5 Dental Clinics, 8 T.B. District Centres, 5 V.D. Clinics, and 3 Children Guidance Clinics, it has been possible to achieve 2 Dental Clinics, 3 T.B. Clinics, 6 T.B. District Centres, 1 V.D. Clinic, and 1 Child Guidance Clinic. Sanction has been received for 3 Blood Banks and one more Dental Clinic, which are under the process of being started.

**Medical Education:**—At the commencement of the Third Plan, the total admission capacity of the four Medical Colleges in the State was 640, which has since been raised to 1,220 by providing 140 additional seats in existing colleges, and 440 seats in four new Medical Colleges. There are 4 Govt. Medical Colleges and 5 Private Medical Colleges.

A Logopaedic Institute is proposed to be started in Mysore.

The Dental College of the State has an admission capacity of 30 students.

**Venereal Diseases:** Five Special V. D. Clinics have been established at Gulbarga, Kolar, Shimoga, Mandya and Bijapur. A Mobile V. D. Clinic has been functioning at Ankola in North Kanara District.

**Family Planning:** In May 1966, there were 125 rural family planning welfare organisations and 10 urban family planning units.

No. of mobile vasectomy units : 4 ; no. of operations upto 1964-65 : 12,500.

Three Regional Family Planning Training Centres have been established at Ramanagaram, Mysore and Mangalore.

**Laboratories:** The Public Health Laboratory at Bangalore has been up-graded and 12 District Laboratories have been established in the Districts. The Vaccine Institutes at Bangalore and Belgaum have been expanded to cope with the increasing demand for smallpox vaccine.

### EDUCATION

A Sainik school has been established at Bijapur.

Compulsory education for the age-group 6-7 was introduced during 1961-62 and for the age-group 7-8 in 1962-63.

**THIRD PLAN:** The total outlay under General Education for the Third Plan was Rs. 1,451·72 lakhs of which the provision for Elementary Education was Rs. 1,051·21 lakhs.

Secondary education has been made totally free from 1966-67. It is estimated that nearly five lakh pupils will be covered by the scheme.

There are four universities in Mysore State : (1) Bangalore University, Bangalore ; (2) Mysore University,

Mysore ; (3) Karnatak University, Dharwar ; (4) Agricultural University, Hebbal, Bangalore. Besides the Indian Institute of Science, an institute for advanced engineering sciences, enjoys University Status.

**Primary Education:** An Institute of Education started functioning at Dharwar from 1963-64. The aim of the institution is to raise the standard of teaching in the primary school giving training to the Primary School teachers.

**Secondary Education:** As many as 522 high schools have been established during the four years of the Third Plan.

Four Youth Vocational Training Centres have been established during 1964-65 under Central Govt. scheme aided by UNICEF. This scheme will impart vocational training to students who do not continue high school education after the VIIth standard.

**Hindi Education:** The Third Plan saw the establishment of 3 Hindi Shikshak Training Colleges in the State. 4,375 Hindi Teachers' posts have been sanctioned for teaching of Hindi as a compulsory subject in senior primary schools. 240 Hindi teachers for high schools have also been sanctioned.

**Technical Education:** During the Third Plan period upto Dec. 1964 two polytechnic for women, one school of arts and crafts and two junior technical schools were started.

There is now at least one polytechnic in each District of the State.

### MYSORE STATE ROAD TRANSPORT CORPORATION

Bangalore 1.

The Mysore State Road Transport Corporation has recorded considerable progress during 1965. The fleet strength of the Organisation was 1,922 passenger vehicles and 106 departmental vehicles and the labour force 13,320 as on 1st January 1965. The Passenger Transport Services are operated on 1,600 routes covering a route mileage of 49,951 miles and catering to the transport needs of more than 5·27 lakh passengers every day all over the State. The Road Transport Operations of the Corporation are now spread over more than  $\frac{1}{3}$  of the Mysore State.

### COMMUNICATIONS

Total length of Railway : 2,699 kilometres ; Broad gauge 483 kilometres ; Metre gauge 2,062 kilometres ; Narrow gauge 154 kilometres.

The most significant development regarding Mysore's ports during the past few years has been the development of the mineral ore export programme in the State. Since it had been estimated that the capacity of the ports to ship mineral ore during the Third Plan would fall short of actual requirements by about three million tons towards 1965-66, top priority had been given for the development of Mangalore and Karwar into all weather deep draft ports. The 123-mile Hassan-Mangalore rail link had also been included under the Central Sector of the Third Five-Year Plan.

In regard to communications, the P.W.D. has exceeded the Plan ceiling of Rs. 9 crores in the first two years of the Plan period. A 151-mile long West Coast road and ore carrying roads over a length of 379 miles are under execution.

Number of minor ports : 2 ; Coastline : 200 miles.

No. of airports : 3 ; No. of airstrips : 4.



## TOURISM

No. of foreign tourists: 1963-64: 2,244; 1964-65: 2,768; 1965-66: 3,500.

## MYSORE STATE FINANCIAL CORPORATION

(See Under "State Corporations".)

## THIRD PLAN

Provision: Rs. 250 crores.

The performance has been very good in many important sectors like "Minor Irrigation," "Large and Medium Industries," "Roads," "Health" and "Fisheries."

**Agricultural Production:** Production of Food grains 46.39 lakh tonnes; Production of Oil seeds 8.75 lakh tonnes; Production of Cotton 5.5 lakh bales; No. of Seed Farms 106; Plant protection 18.00 lakh acres; Sugar-cane (yield per acre) 35 tonnes.

**Minor Irrigation:** Additional acreage under new tanks 1.00 lakh acres; Additional stabilisation of old achkats 1.8 lakh acres; No. of borewells 354; No. of new wells dug 31,400; No. of electrical pumpsets distributed 17,200; No. of diesel sets distributed 10,000; No. of new electric supply to pump sets 23,300.

**Fisheries:** No. of boat building yards expanded 2; No. of mechanised boats supplied 150; Units of fisheries requisites supplied 3,000; Supply of salt at subsidised rates 19,500 (tonnes); No. of fishermen trained in mechanised fishing 750; Stocking fish fry in inland waters 150 lakhs.

**Co-operation:** No. of village credit co-operatives 11,107; Coverage of villages 100 per cent; Coverage of Agricultural population 67 per cent; Yearly amount of short and medium term finance Rs. 37.5 crores; Yearly amount of long term finance Rs. 7.5 crores.

**Power:** Additional capacity (generation) 400 Mwts; No. of villages to be electrified 1,119.

**Roads:** Formation (miles) 806; Improvement (miles) 2,524; Rural roads (miles) 11,598; Asphaltting (miles) 2,287; Major bridges 86.

**Education:** Percentage of children in schools (age group 6-11) 90 per cent; Enrolment in primary schools 12 lakhs; Enrolment in age group 11-17: 24 lakhs; Proportion of trained teachers in primary and secondary schools 75 per cent; No. of Engineering Colleges 15; Schools with proper accommodation 50 per cent; No. of Polytechnics 27; No. of women's polytechnics 2; Yearly in-take in Engineering Colleges 2,270; Yearly in-take in polytechnics 4,000.

**Health:** No. of Government Medical Colleges 4; No. of private medical colleges 4; Admission capacity per year 1,220; Capacity of nursing training 900; District laboratories 13; Proportion of urban population provided with safe drinking water 83; No. of rural water supply programmes 113.

**Housing:** Subsidised Industrial Housing Scheme 2,250 houses; Low Income Group Housing Scheme 3,300 houses; Village Housing Scheme 6,821 houses; Slum Clearance Scheme (plots) 450; Slum Clearance Scheme (tenements) 227; Land acquired and developed 136 acres; Land acquired to be developed 244.

**Social Welfare:** No. of Co-ordinated Welfare Extension Projects 23; No. of Remand Homes 19; No. of certified schools 7; No. of State Homes 4; No. of Reception Centres 7.

**Welfare of Backward Classes:** Additional Hostels for Boys 55; Additional Hostels for Girls 35; Private hostels given grant-in-aid 30.

## FOURTH PLAN

Provision Rs. 938.09 crores.

**Distribution. (Rs. in crores):** Agricultural Programmes Outlay: 450; Community Development, Co-operation and Panchayats 20.61; Irrigation and Power 185.00; Industry and Mining 35.43; Transport and Communications 34.62; Social Services 133.00; General & Tech. Education 30.00; Health 27.00; Local Bodies, Housing, Welfare and Labour 21.23; Miscellaneous 1.11.

## EDUCATIONAL INSTITUTIONS

### BANGALORE UNIVERSITY

Bangalore 1.

**Chancellor:** Governor of Mysore.

**Vice-Chancellor:** Prof. V. K. Gokak.

**Registrar:** P. Mallikarjunappa, M.Sc.

**Estd.:** 1964. 31 colleges located in the Bangalore City are now under its jurisdiction. Jurisdiction of the University extends over the Bangalore Urban District but Colleges of Agriculture and Veterinary Sciences are excluded.

Total enrolment in the University and constituent colleges is 19,299, consisting of 13,622 men and 5,677 women. There are 1,001 teachers (761 Men, 240 Women) giving a Teacher-pupil ratio of 1:20.

The University provides facilities for training and research in the faculties of: (a) Humanities and Social Sciences, (b) Science, (c) Engineering and Technology, (d) Law, (e) Medicine.

There are 42 departments of study. Post graduate facilities are available in Medicine, Surgery, Soil Mechanics and Foundation Engineering, Structural Engineering, Mechanical Engineering, Home Science, Chemistry,

Physics, Mathematics, Botany, Zoology, Geology, English, Kannada, Economics, Sociology and Law (Jurisprudence and Contracts).

Undergraduate training is available at Pass level in all subjects and Honours level in some subjects.

### KARNATAK UNIVERSITY

Dharwar 3.

Founded in 1950. A Teaching and Affiliating University having jurisdiction over the districts of Belgaum, Bellary, Bidar, Bijapur, Dharwar, Gulbarga, North Kanara, in Mysore State.

Medium of Examination is English; Teaching departments 23; Affiliated Colleges 49; Recognised Institutions, nil; Constituent Colleges 4.

**Chancellor,** Governor of Mysore.

**Vice-Chancellor,** D. C. Pavate, M.A. (Cantab.).

**Registrar,** S. S. Wodeyar, M.A., LL.B.

Total number of students (1964-65): 23,403; (1965-66): 25,478.



## BUDGET — 1965-66 (ESTIMATES)

|                                      | Rs.       |
|--------------------------------------|-----------|
| Income (including Govt. Grant) .. .. | 49,47,125 |
| Expenditure .. ..                    | 52,22,614 |
| State Govt. Grant .. ..              | 24,17,547 |

## UNIVERSITY TEACHING DEPARTMENTS

Names of the departments with courses offered within brackets : Kannada (M.A., Ph.D.); Statistics (M.A. (Stat.), M.Sc. (Stat.), Ph.D.); Physics (M.Sc., Ph.D.); Chemistry (M.Sc., Ph.D.); Geology (M.Sc., Ph.D.); History (M.A., Ph.D.); Economics (M.A., Ph.D.); English (M.A., Ph.D.); Philosophy (M.A., Ph.D.); Politics (M.A., Ph.D.); Kannada Research Institute, Dharwar (M.A. Ancient Indian History and Culture, Archaeology, Epigraphy, Ph.D.); Sociology (M.A., Ph.D.); Mathematics (M.A. and M.Sc., Ph.D.); Sanskrit (M.A., Ph.D.); Geography (M.Sc., Ph.D.); Anthropology and Social Welfare (M.A., Ph.D.); Botany (M.Sc., Ph.D.); Zoology (M.Sc., Ph.D.); Commerce (M.Com., Ph.D.); Education (M.Ed., Ph.D.); Law (LL.M., Ph.D.).

School of Foreign Languages (Certificate and Diploma courses in French and German); University Library (Diploma in Librarianship).

## UNIVERSITY OF AGRICULTURAL SCIENCES

XI Main, 16th Cross Road, Malleswaram,  
Bangalore-3.

*Chancellor* : Governor of Mysore.

† Provisional.

*Vice-Chancellor* : Dr. K. C. Naik, B.A., M.Sc., Ph.D. (Bristol).

*Registrar* : Vacant.

The University was inaugurated in 1964. It is not teaching and affiliating University, but a residential University, with constituent colleges responsible for residential teaching, research and extension education throughout the State of Mysore.

Estimates† (1966-67) : Govt. Grant : Rs. 1,55,00,700; Govt. of India Grant : Rs. 2,00,000; Other sources : Rs. 17,88,520; Opening balance : Rs. 7,13,720; Total : Rs. 1,82,03,035; Expenditure : Rs. 1,76,98,605; Closing balance : Rs. 5,04,430.

## UNIVERSITY OF MYSORE

Karya Soudha, Crawford Hall, P. B. No. 14, Mysore.

*Chancellor* : Governor of Mysore.

*Pro-Chancellor* : S. R. Kanthi, Minister for Education.

*Vice-Chancellor* : Dr. K. L. Shrimali.

*Registrar* : K. R. Ramachandran

This is a teaching and affiliating University; No. of University Colleges : 3; No. of affiliated colleges : 63; Total No. of students during 1964-65 : 29,187; Estimates (1966-67) : Government Grant : Rs. 77,11,000; Grant from University Grants Commission : Rs. 14,04,000; University (fees, etc.) : Rs. 29,78,320; Opening Balance : Rs. 3,72,700; Total : Rs. 1,24,66,022; Expenditure : Rs. 1,24,03,080; Closing Balance : Rs. 62,942.

## NAGALAND

*Area* : 6,366 sq. miles.

*Population* : 369,200 (1961 Census).

*Headquarters* : Kohima.

Administrative Districts with headquarters shown within brackets : Kohima (Kohima); Mokokchung (Mokokchung); Tuensang (Tuensang).

There are 860 villages.

The economy of the unit is mainly dependent on agriculture. Revenue is derived from house tax and forest produce like bamboo, cane, timber, thatch and 'Agar'.

The deficit in food production at the beginning of the Third Five Year Plan was estimated at 5,400 tons, the major crop being rice which accounts for 80 per cent of the total output of food. This deficit has been greatly reduced and the production of foodgrains has increased by 8,200 tons. In the villages people depend mostly on their own cottage industry for cloth. Yarn is made locally though it is also imported. Towns now import mill cloth.

The main tribes in the Area are : Angami, Sema, Lhota, Ao, Rengma, Chakesang, Sangtam, Konyak, Chang, Phom, Yimchunger, Khemnyuan, Zeliang-Kuki.

The formal inauguration of the State of Nagaland took place on Dec. 1, 1963. General Elections for Nagaland Legislative Assembly with an initial strength of 40 (it may be raised to 60 after ten years) were held in the second week of January, 1964.

The new Ministry which was sworn in on January 25, 1964 by the Governor of Nagaland consisted of seven Ministers including one Deputy Minister and a Parliamentary Secretary.

\* See page 283 for allocations for the total outlay on Fourth Five Year Plan.

## PEACE TALKS

An underground Naga Delegation led by Mr. K. Sukhmet met the Prime Minister in February, 1966 in Delhi. Another meeting was held in Delhi in the second week of April 1966. Referring to these high level talks Smt. Indira Gandhi at a Press Conference on April 12 said : "A Settlement of the Naga problem could be worked out only within the frame work of the Indian Union".

The peace talks and negotiations held so far, have helped to remove suspicions and tension to a considerable extent. But the peace talks reached a deadlock on Oct. 29, 1966 when the Naga delegation pressed for the recognition of sovereignty to Nagaland.

## DEVELOPMENT PROGRAMME IN THIRD PLAN

An out-lay of Rs. 7.25 crores had been approved for the Third Five Year Plan subject to the increase of allocation from year to year based on the actual performance. At the end of the financial year 1965-66 the actual expenditure under Plan scheme came to Rs. 1,095 lakhs.

Under agricultural production scheme the total production potential was brought to 80,900 tons by the end of 1963-64 as against 77,200 tons in 1961-62. The estimated area under rice and production by the end of 1963-64 was 1,70,500 acres and 70,000 tons respectively.

Forests are the main source of revenue in Nagaland. By the end of 1963-64 the out-turn of timber was brought to 6,32,000 cft. as against 1,60,000 cft. in 1960-61. During the year 1963-64, 65,933 cft. of sleepers and timbers were supplied to the Railways and Defence and other Departments. The total revenue earned during the year was Rs. 9,74,434 as against Rs. 2,92,000 in 1960-61.



**Roads:** (1965-66)—National Highway (from Dimapur to Mao) 64 miles; jeepable roads 1,415 miles; Mule path and Bridle trucks 280 miles; Fair weather motorable road 1,373 miles; Metalled road 55 miles. In 1965-66 a sum of Rs. 269.60 lakhs was spent on roads.

**Transport:** (1965-66)—Nationalised Routes 5; Passenger services 442 kms.; Goods services 176 kms.; Taxi services 215 kms.; Town Bus services 150 kms. The expenditure during the year was Rs. 37.59 lakhs. The State Transport Service was inaugurated on 26th Jan. 1965.

**Education:** (March 1965-66)—No. of Govt. Primary Schools 800; Govt. Middle Schools 126; Govt. High Schools 30; Colleges 2; Polytechnical school 1; Teacher's Training Institute 3; Adult Literacy Centres 30. Total

number of students is 68,826. L. P. Schools 53,860; M. E. Schools 10,716; High Schools 4,000; Colleges 250. The expenditure during the year was Rs. 127.02 lakhs.

**Health:** (1965-66)—Number of Hospitals 30; Number of Dispensaries 31; Number of beds 712.

All the villages in Nagaland have been covered by 17 Community Development Blocks for which an amount of Rs. 87.43 lakhs will have been spent by 1965-66.

Sufficient fund had also been provided for other schemes such as Animal Husbandry, Fishery, Cooperative, Power, Industries, Research & Cultural Programme, Housing, Labour and Labour Welfare, Welfare of Backward Class, Statistics and Information and Publicity.

## ORISSA

(See page 421)

## PONDICHERRY

**Area:** 185 sq. miles (481.8 sq. Km.); **Population:** 3,69,079 (1961 census).

**Capital:** Pondicherry.

Popular ministry consisting of a Chief Minister and three ministers started functioning from September 11, 1964.

The Union Territory of Pondicherry consists of: (1) On the Eastern Coast: (a) Pondicherry, the Capital, together with the adjoining territory, divided into 8 communes; situated at about 98 miles south of Madras, the Territory is an enclave in the district of South Arcot in Madras State. **Area:** 290.1 sq. Km.; **Population:** 2,58,561 (1961 census).

(b) **Karaikal:** divided into 6 communes; it is at a distance of 92 miles from Pondicherry and is an enclave in the Tanjore District. **Area:** 158 sq. Km.; **Population:** 84,001.

(c) **Yanam:** with the adjoining territory forming one single commune; situated in the delta of the Godavari, it is an enclave in the district of East Godavari in Andhra Pradesh. **Area:** 20.7 sq. Km.; **Population:** 7,032 (1961 census).

(2) **Mahe:** The territory of Mahe on the west coast consists of the town of Mahe on the left bank of the river of the same name; and the dependent territory of Naluthara on the right bank containing the four villages of Chembra, Chalakara, Palour and Pandaquel. It is an enclave in the District of Cannanore in Kerala State.

**Area:** 104 sq. Km.; **Population:** 19,485 (1961 census).

The first general election in Pondicherry after the "de jure" transfer took place on Aug. 23, 1964.

### ECONOMY

**AGRICULTURE** (1965-66):

Total production of food grains: 52,000 tonnes.

Production of individual food crops (in tonnes): Rice 47,000; Ragi 3,200; Cumbu 1,100; Cholam 200; Varagu 200; other millets 60.

Production of individual cash crops (in tonnes) Sugarcane 1,64,000; Groundnut 4,700; Chillies 35; Pepper 14; Onion 150; Cotton 321.

Total area of the State (according to village papers): 46,867 Hectares.

Total area (net) cultivated: 31,259 Hectares.

Total area under food crops: 37,100 „

Total area under cash crops: 6,459 „

Net area irrigated: 25,686 Hectares.

(By tanks 5,825 hectares; channels 11,098 hectares; tube-wells 8,636 hectares; ordinary wells 70 hectares; other sources 57 hectares.)

### CO-OPERATION

*Position as on 30th June 1965:*

Total number of cooperative societies: 172.

Total membership: 46,212.

Total working capital: Rs. 2,10,22,000.

### ELECTRICITY

The Power House which was in existence was closed down and disposed of in November 1963 and as such does not generate.

Electricity purchased: (1965-66): 599.432 lakh kW.

### INDUSTRIES

**Large Scale Industries of the Territory:**

The Anglo-French Textiles Ltd., Pondicherry; Swadeshi Cotton Mills, Pondicherry; Sri Barathi Mills, Pondicherry; The New Horizon Sugar Mills, Pondicherry; Soundararaja Cotton Mills, Karaikal and The Cannanore Spinning and Weaving Mills, Mahe.

Total number of automatic looms 2,386.

Total number of spindles 1,17,944.

**Medium Scale Industries:**

Pondy Cycle Parts Manufacturers; Pondy Rolling Mills; Modern Electrical Industries, and The Cauvery Textiles.

**Other Small Scale and Cottage Industries:**

Engineering and allied units including foundries 25; Non-ferrous metal units 25; Wooden Articles & Furniture



15; Soap Manufacturing 7; Camphor Tablet Manufacturing 12; Electrical units 4; Food articles & Processing Units 24; Leather Goods 7; Ayurvedic Medicine 1; Handicrafts 2; Handmade paper unit 1; Mirror Framing units 7; Soda Factory 7; Non-Scheduled Industries 8; Miscellaneous 60.

#### Industrial Cooperative Societies :

Palm Gur Society 2; Toy Making Society 1; Brick Makers' Society 1; Mat Weaving Society 4; Carpentry & Blacksmithy Society 2; Women Cottage Society 1; Coir Making Society 2; Oil Mongers' Society 1; Handmade Paper Society 1; Handpounding Rice Workers Society 1; Pondicherry State Small Scale Industrial Co-operative Society 1; Gramodyog Co-operative Society 1; Tailoring Society 1; Multimetal Society 1; Appalam Making Society 1.

#### HOUSING

Under the Industrial Housing Scheme, 200 tenements were constructed in the Pondicherry area during the Second Plan period at a cost of Rs. 5.5 lakhs. Under the Co-operative Housing Scheme, 213 low and middle income group houses were constructed during 1957 to 1966 and a loan to the tune of Rs. 21.75 lakhs was disbursed to the members in this connection.

An amount of Rs. 1.76 lakhs for the construction of 40 tenements as an extension to the industrial Housing Colony at Gandhinagar has been sanctioned during 1965-66.

#### ROADS

Total length of roads (both Government and Commune) : 549.85 Kms.

Total metalled road : 256.51 Kms.

A new pier has been built at Pondicherry at a cost of about Rs. 42 lakhs. Ships lie at a distance from the shore and contact with land is maintained by means of boats.

#### EDUCATION (1964-65)

Total number of Nursery schools : 37 (for boys nil ; for girls 37).

Total number of teachers : 50 (Men 6 ; Women 44).

Total number of students : 1,961 (boys 925 ; girls 1,036).

Total number of Primary schools : 239 (for boys 225 ; for girls 14).

Total number of students : 19,952 (boys 11,960 ; girls 7,992).

Total number of teachers : 556 (Men 438 ; women 118).

Total number of middle schools 69 (for boys 49 ; for girls 20).

Total number of students : 21,451 (boys 12,773 ; girls 8,678).

Total number of teachers : 740 (Men 413 ; women 327).

Total number of High Schools : 37 (for boys 28 ; for girls 9).

Total number of students : 17,345 (boys 11,612 ; girls 5,733).

Total number of teachers : 723 (men 482 ; women 241).

Total number of colleges for boys and girls : 4.

Total number of students : 1,587 (boys 1,147 ; girls 440).

Total number of teachers : 146 (men 109 ; women 37).

*Professional Institutions and their strength* : One Medical College 334 (boys 254 ; girls 80) ; One Polytechnic 260 (all boys) ; Teachers' Training Centre 229 (boys 143 ; girls 86) ; One School of Arts and Crafts 82 (all boys) ; One School of Nursing 62 (all girls).

#### FIVE YEAR PLANS

The Third Plan of the Pondicherry State envisaged a total outlay of Rs. 10.17 crores.

Revised Estimate for 1965-66 : Rs. 211.51 lakhs.

Budget Estimate for 1966-67 : Rs. 200.54 lakhs.

The tentative allocations for the main sectors in the annual plan for 1966-67 are : agricultural programmes Rs. 28.38 lakhs ; co-operation and community development Rs. 12.08 lakhs ; irrigation and power Rs. 30.70 lakhs ; industry and mining Rs. 10.54 lakhs ; transport and communications Rs. 14.63 lakhs ; social services Rs. 89.67 lakhs and miscellaneous Rs. 14.54 lakhs.

The anticipated expenditure up to the end of Third Plan (1961-66) is estimated at Rs. 644.72 lakhs.

A total outlay of Rs. 12.25 crores has been fixed by the Planning Commission for the Fourth Five Year Plan of Pondicherry. For more details see article on Fourth Five Year Plan.

#### CHAMBER OF COMMERCE

Post Box No. 26, Karaikal.

*President* : M. Mohd. Ismail Maricar ; *Vice-President* : A. M. Dawood Shah ; *Hon.-Secretary* : S. Vijaya Raghavan ; *Treasurer* : R. Ramasami Chettiar.

#### CHAMBER OF COMMERCE

Pondicherry

*President* : J. M. Colombani ; *Vice-President* : R. Jayarama Iyer ; *Hon.-Secretary and Treasurer* : H. M. Cassime.

### PUNJAB\*

**CAPITAL** : Chandigarh — a centrally administered area.

The reorganised Punjab came into existence on November 1, 1966. The new State has an area of about 50,255 square kilometres. Its population is estimated at 1,11,47,000. About 27.75 per cent of the population is literate. Administratively, there are two divisions, 11 districts, 37 tehsils, 110 blocks and as many towns and 12,000 villages.

The following are the districts : Amritsar, Gurdaspur, Hoshiarpur, Jullundur, Ludhiana, Bhatinda, Ferozepore, Patiala, Sangrur, Rupar and Kapurthala. The names of

the district-wise tehsils, their area and population and the area and population of the districts are given in the article on "Population".

The existing strength of the Vidhan Sabha is 87. This will be raised to 104 after the general election in February 1967. The State will retain the Vidhan Parishad, but its membership will be reduced from 51 to 40. The State will be represented by 13 members in the Lok Sabha and by seven in the Rajya Sabha.

As the State has just come into existence other basic facts and figures about the State like Agriculture,

\* The agricultural production in 1965-66 (in lakh tonnes) : Foodgrains 33.8 ; sugarcane 6.0 ; oilseed 2.0 ; cotton 7.5. Total cultivated area 3.86 mln. hectares ; total cropped area 5.1 mln. hectares ; net irrigated area 2.1 mln. hectares of which 0.88 mln. hectares are irrigated by wells and tubewells.



Industries, Education, Public Health etc. are not available.

Sixty-three per cent of the State receives facilities of irrigation. There are 402 large and medium factories and 12,839 small industrial units in the State. About 62·3 per cent of the area is electrified.

## PUNJAB AGRICULTURAL UNIVERSITY

Ludhiana.

Estd. : 1962. The basic structure and organisation of the University has been patterned on the model of the Land Grant Universities in the United States with a complete integration of its State-wide functions of residential teaching, research and extension education in Agriculture, Agricultural Engineering and Veterinary Sciences. The University has its two campuses at Ludhiana and Hissar.

Chancellor : Governor, Punjab ; Vice-Chancellor : P. N. Thapar ; Registrar : C. D. Khanna.

Number of constituent Colleges : 7.

Post-Graduate Departments : Agronomy, Horticulture (Fruits and vegetables), Dairying, Biochemistry, Agricultural Chemistry and Science, Plant breeding, Plant Physiology, Entomology, Mycology and Plant pathology, Agricultural Economics and extension Education.

Classes for M.Sc. Animal Husbandry and Veterinary Science also function.

Budget (1966-67) : Income : Rs. 3,64,65,115 ; Expenditure : Rs. 3,64,65,115.

## PUNJABI UNIVERSITY

Patiala.

This University was established for advancement of Punjabi Studies and development of Punjabi Language as medium of instruction and for the promotion of higher education and research. The University started functioning on April 30, 1962. This is a Unitary/Residential-cum-Teaching University.

Chancellor : Governor, Punjab ; Vice-Chancellor : Sardar Kirpal Singh Narang ; Registrar : Sardar Harbans Singh.

Budget Estimates (Revised for 1965-66) : Income : Rs. 51,30,953·65 ; Expenditure : Rs. 57,20,843·88.

# RAJASTHAN STATE

CAPITAL : Jaipur. Area : 3,40,060 sq. kms. (according to village papers 1963-64) ; 3,42,272 sq. kms. (according to Surveyor-General of India).

Population (1961 census) : 20,155,602.

Rajasthan is divided into 26 districts, 83 sub-divisions and 195 tehsils.

No. of village panchayats : 7,388 (1964-65) ; No. of panchayat Samities 232. The Village Panchayats cover 34,528 villages and serve 16,874 thousand people.

## DISTRICTS & TEHSILS, AREA AND POPULATION

See article "Population."

## MINERALS

Rajasthan is an important mineral and building material producing State. It ranks next to Bihar in Mica which is chiefly found in Ajmer, Udaipur, Bhilwara and Jaipur Districts. Over a lakh persons have been employed in the State mining industry.

The chief non-metallic minerals are Silica sand, Felspar, Asbestos, Barytes, Clays, Emerald, Fuller's earth, Bentonite, etc. The metallic minerals are lead, zinc, iron ore and manganese ore. The State is the sole supplier of gypsum for fertiliser manufacture to Sindri plant.

Lignite (coal) is mined near Palana in Bikaner District. There are vast deposits of high quality building stones such as marbles, sandstones and limestones. Limestone is used for the manufacture of cement at Lakheri and Sawai Madhopur and for lime at a number of places. Marble quarries at Makrana in Nagaur District are famous for building stone.

Large resources of sodium sulphate and salt also occur at Deedwana and Sambhar lake. Uranium deposits have been found at Umra and Udaisagar in Udaipur District.

Provisional production in thousand metric tonnes of some important minerals in 1964 : Coal (Lignite) 1·2 ; Metallic minerals : (a) Ferrous (1) Iron ore 34·0 ; (2) Manganese ore 1·7 (b) Non-ferrous : (1) Lead concentrate 6·1 (2), Zinc concentrate 10·7, Minerals : Asbestos 2·0 ; Barytes 9·2 ; Calcite 4·7 ; Emerald (crude) 10·0 ; Felspar 12·3 ; Garnet 0·2 ; Glass sand 4·8 ; Graphite 0·26 ; Gypsum 749·5 ; Lime stone (for cement making) 1,720·1 ; Mica (Crude) 4·8 ; Quartz 8·4 ; Salenite 6·8 ; Soap stone 111·6 ; white clay 6·4 ; Yellow Ochre 0·25 ; Building Materials : Building stone (including Kankar, Bajri and Sand stone etc.) 5,932·5 ; Lime stone (for Lime making) 546·9, Marble 40·0, Bentonite, 2·7 ; Fuller's earth 7·5 ; Brick earth and ordinary clay 1,023·7.

The State produced minerals worth Rs. 8 crores during 1964.

Production (1964) : Gypsum 7,49,500 tons ; Soap stone 1,11,600 ; felspar 12,300 tons ; quartz 8,400 tons ; calcite 47,000 tons ; asbestos 2,000 tons and glass sand 4,800 tons.

## INDUSTRIES

Among the large-scale industries in the State mention may be made of cotton textile (14 units), cement (2 units), glass (1 unit), sugar (2 units), ball-bearings (1 unit) and electric metres (1 unit). The industrial production of some commodities during 1964 was as under :—

Cloth—lakh kg. 87 (597 lakh meters) ; Yarn—lakh kg. 285 ; Glass—metric tonnes 457 ; Cement—lakh metric tonnes 10·6 ; Salt—lakh metric tonnes 3·9 ; Ball bearing—lakh number 40·4 ; Sugar—'000 metric tonnes 6·6 ; Foreign spirit—'000 litres 1,258·0 ; Rectified spirit—'000 litres 1,702·7 ; Denatured spirit—'000 litres 48·2 ; Country spirit—'000 litres 2,080·6.

The most important cottage and small-scale industries are Tie and Dye Fabrics, Gota Kinar wooden toys, Hand-made paper, Papier Mache toys, Gem cutting, cloth printing, manufacture of agricultural tools and implements, Embroidered shoes (Jutiyan) and leather bags, water



bottles (Badlas) and handloom weaving. From the point of view of employment, khadi and village industries also play an important role in this State.

### AGRICULTURE

**Land Utilisation :** According to land utilisation statistics for the year ending June 1964, the total geographical area of the State was 34,006 thousand hectares, comprising 958 thousand hectares under forests, 6,262 thousand hectares not available for cultivation, 8,451 thousand hectares uncultivated land, 4,838 thousand hectares of fallow land and 13,497 thousand hectares net area sown. The total cropped area was 14,464 thousand hectares, the area sown more than once being 967 thousand hectares only.

#### *Agricultural Production :*

**Main Food Crops of the State :** Cereals—Bajra, Jowar, Wheat, Maize, Barley, Small millets, Rice; Pulses: Gram, Tur, other Rabi pulses, other Kharif pulses.

**Main cash crops of the State :** Oilseeds : Sesamum, Rape and Mustard, Linseed, Groundnut, Cotton, Sugarcane, Tobacco, Chillies, Potatoes.

**Area and production of principal food crops in '000 Hectares and Metric tonnes for the year 1964-65 respectively are as follows :—**

**Cereals :** Bajra 4,840 ; 1,266 ; Jowar 1,179 ; 403 ; Wheat 1,176 ; 1,097 ; Maize 709 ; 779 ; Barley 431 ; 470 ; Small millets 83 ; 36 ; Rice 106 ; 98.

**Pulses :** Gram 1,346 ; 712 ; Tur 30 ; 14 ; Other Rabi Pulses 15 ; 10 ; Other Kharif Pulses 1,810 ; 376.

**Oilseeds :** Sesamum 575 ; 59 ; Rape and Mustard 207 ; 79 ; Linseed 90 ; 21 ; Groundnut 199 ; 96.

**Others :** Cotton 261 ; 186 ; Sugarcane 43 ; 673 ; Tobacco 9 ; 6 ; Chillies 30 ; 16 ; Potatoes 2 ; 6.

**Fish :** Variety of fish produced : There are large number of tanks, lakes and rivers in which inland fishes are found. The main species are the major carps, viz. Rohu, Migal, Kalbasu and Katla ; Minor carps, viz. Mahaseer ; Cat Fishes : Launchi and Seenghara ; Live Fish : Sol, Magur and Singhi.

During the year 1964-65, 30.14 lakh fish seeds were produced and distributed to the private pisciculturists against the stipulated target of 30 lakh fish seeds and an area of 615 hectares was covered under this programme thereby bringing the total area covered in the State till the end of the year to 1,481 hectares.

**Sugarcane :** During the year 1963-64 and 1964-65, the average yield of sugarcane came to 1,947 and 1,976 Kg. maunds per hectare, respectively.

### LIVESTOCK

The following figures relate to 1964-65 :

Number of Veterinary Hospitals : 162.

Number of Veterinary Dispensaries : 132.

Artificial Insemination Centres : 18.

Key Village Centres : 20.

Mobile dispensaries : 17.

Mass Immunisation Centres : 7.

Total livestock population : 335.15 lakhs (1961).

(See also article on Livestock).

### LAND REFORMS

By the end of March, 1961, the Jagirdari, Zamindari and Biswedari tenures had been abolished. The Rajasthan Tenancy Act, 1955, has provided for security of tenure

and fixity of rent. There are now only four classes of tenants viz., Khatedars, Malika, Tenant-Khudkasht and Gair Khatedar tenants. Rents have been fixed and forced labour prohibited. Ceilings on existing holdings and on future acquisitions have also been prescribed.

By the end of March, 1964, a sum of Rs. 3.55 crores was paid as final compensation to 80,100 Jagirdars.

The State Government has also taken effective steps for the rehabilitation of *ex*-Jagirdars and have allotted lands to them at concessional rates in the irrigated area, coming under the command of Bhakra Project.

The Rajasthan Govt. has taken a decision that ceiling on agricultural holdings in Rajasthan will be imposed in one stage instead of four stages as envisaged earlier.

The ceilings prescribed under the Act for a family consisting of five persons is 30 standard acres of land capable of producing 300 maunds of wheat per year or any other produce equivalent in price of wheat. It also provides that if a family consists of more than five persons, every person in addition to five will get additional six acres of land subject to the maximum of 60 acres of land.

During the year 1964, under the programme of Bhoodan Yagna in the State no land was donated and of the total land available for distribution, 3,545 hectares of land was distributed amongst 1,697 families.

### PANCHAYATS

The Panchayat Samitis are the executive bodies with wide powers including those for formulating and executing the development programmes, and for imposing taxes. The Zila Parishads are the supervisory and co-ordinating bodies.

Under this democratic decentralisation, at the end of 1964-65, there were 7,391 village panchayats and 1,368 Nyaya Panchayats covering 34,528 villages serving the total rural population of the State.

### IRRIGATION

**Bhakra Project :** The supply in the Bhakra Canals in Rajasthan is still non-perennial. The total area irrigated during the year 1964-65 was 213.27 thousand hectares.

**Jawai Project :** The total area irrigated from this project during 1964-65 was 6.76 thousand hectares.

**Chambal Project :** The work on this project was started during 1953-54 and both cost and benefits are shared with the Govt. of Madhya Pradesh and the project will be completed in three stages (i) Gandhi Sagar Project, (ii) Rana Pratap Sagar Project, (iii) Kota Dam Project. Most of the work of the first stage i.e. the Kota barrage, the Gandhi Sagar, the right main canal and the left main canal were completed by the end of the 2nd Plan and the remaining work was completed during 1961-62. The irrigation was started from this project in November, 1960 and an area of 88.22 thousand hectares was irrigated during 1964-65.

The available statistics in respect of irrigation by sources and crops for 1961-62 reveal that out of the total irrigated land of 1,823 thousand hectares, 581 thousand hectares were irrigated through canals, 977 thousand hectares through wells and 214 thousand hectares by tanks, 50 thousand hectares through other sources. Similarly in 1962-63 the area irrigated by different sources in thousand hectares was 643, 1066, 121 and 29 respectively. The total irrigated area during 1962-63 was 1,859 thousand hectares. Out of the total irrigated area, 1,449 thousand hectares were under food crops, 140 thousand hectares under cotton, 31 thousand hectares under sugarcane and 202 thousand



hectares under other crops. Similarly in 1962-63, the crop-wise area irrigated in thousand hectares was 1,470, 146, 29 and 214 respectively. The total area irrigated more than once was 246 thousand hectares. With the irrigation facilities being extended through construction of a number of major, medium and minor irrigation works and adoption of other improved agricultural practices, Rajasthan which, till recently had been a regular deficit state, has not only attained self-sufficiency in foodgrains, but has also shown a sizeable surplus.

### Rajasthan Canal

The Rajasthan Canal from Harika (Punjab) to Ramgarh (Jaisalmer district) on completion will be 425 miles long and will irrigate 36.9 lakh acres, out of the net culturable commanded area of 67.4 lakh acres. The gross commanded area under this project will be 50 lakh acres.

An amount of Rs. 38 crores was provided in the State's III Plan for this project out of which Rs. 24.47 crores or 64.40 per cent were spent in the first four years of the Plan. During 1964-65 a sum of Rs. 519.43 lakhs or 95.06 per cent of the allotment of Rs. 546.44 lakhs was spent. During the same year 192 lakh cft. of earth work, 50 lakh cft. of compaction and 0.41 lakh cft. lining were completed in the Punjab portion of Rajasthan feeder. Likewise by the end of the year 2,645 lakh cft. earth work, 1,047 lakh cft. of compaction and 1.16 lakh cft. of lining were completed.

Rajasthan canal will depend on the water of the rivers Beas and Ravi. For ensuring perennial supply, Pong Dam on the Beas is being constructed by the Government of Punjab under the aegis of Beas control. The work on the project was started in the year 1960 and is expected to be completed by 1971-72.

In addition to the irrigation benefits, it will have six units of 60,000 kW-installed capacity each for generating power. The Rajasthan Government had made a provision of Rs. 25 crores in its Third Five Year Plan to meet its share of expenditure on the Pong dam. Out of this amount, a sum of Rs. 18.99 crores or 75.98 per cent is estimated to have been spent. During 1964-65, the share of expenditure of the State was estimated to be Rs. 764.65 lakhs.

### POWER PROJECTS

The State's Third Five Year Plan envisaged to increase the installed capacity of the State by 253 thousand kW and electrification of 303 additional localities by the end of the Third Plan period.

During 1964-65, the installation of one 3,000 kW Turbo-set at Jodhpur was completed. Besides, the installation work of five units of 62.5 MW each at Satpura Thermal project in Madhya Pradesh was in progress which is expected to be completed by 1966-67. Rajasthan will get about 103 MW of firm power as its share from the project. The fourth unit of 23 MW was commissioned at Gandhisagar during November, 1963 in which Rajasthan is a fifty per cent partner with Madhya Pradesh. Bhakra Left Bank Power Station has been fully commissioned and 22 MW of power is at present available to Rajasthan from it. The work on Bhakra Right Bank power is likely to be completed during 1966-67 and about 45 MW of firm power will be available to Rajasthan. The work on Beas Sutlej project is in progress and is likely to be completed during the early Fifth Plan period.

One set purchased from Elect. Board, Punjab\* was commissioned at Bhilwara and the two at Jaipur are being installed. A net work of transmission lines has been spread supplying power to various corners of Rajasthan.

As a result 196 Kms. of 132 kV, 1,050 Kms. of 33 kV and 108 Kms. of 11 kV lines were laid—bringing the progressive achievement to 1,181, 3,463, 104 and 2,029 Kms. of 132 kV, 66 kV, 33 kV and 11 kV lines respectively. The inclusion of 220 kV Hissar-Khetri-Jaipur Transmission line in the Third Plan programme on the direction of the Planning Commission and the Central Water and Power Commission was a major step taken by the Government in 1965. The preliminary work has started and it is proposed to complete the Hissar Khetri section (82 miles) including Grid-sub-station at Khetri by the end of 1965-66. The 132 kV line from Ratangarh to Jaipur has been completed.

During 1964-65, 280 localities were electrified as against 160 during 1963-64, thus bringing the total to 758 localities electrified so far, out of which 14 localities were electrified by privately owned power houses.

During 1964-65, 101.09 million Kwh of electricity was generated in Rajasthan and 330.18 million Kwh and 0.01 million Kwh were purchased from the adjoining States and non-electric utilities respectively, bringing the total electricity generated and purchased to 431.28 million Kwh. The percentage distribution of power consumed for different uses during the year reveals that maximum amount of power continued to be consumed for industrial purposes amounting to 65.25 per cent of the total power sold. This was followed in order by domestic purposes constituting 10.23 per cent, commercial purposes 9.89 per cent, public water and sewage pumping 8.54 per cent, irrigation and agricultural dewatering 3.99 per cent and public lighting 2.12 per cent.

The Union Government has decided to build a second nuclear power station with an initial capacity of 200 megawatt at Rana Pratap Sagar near Kotah. It is expected to be completed by the end of 1967 and is estimated to cost Rs. 32 crores. An additional 200 mw. unit, at an estimated cost of Rs. 30 crores at the Rajasthan atomic power station, was approved by the Govt. of India on June 28, 1965. This additional unit is expected to go into commission towards the end of the Fourth Plan.

### CO-OPERATION

By the end of the co-operative year ending June, 1964-65 the number of co-operative societies was 22,395 with a membership of 13,81,363. The share capital and the working capital of these societies stood at Rs. 999.21 lakhs and Rs. 4,829.70 lakhs respectively.

(For further particulars see main article on "Co-operative Movement").

### MEDICAL & PUBLIC HEALTH

For expansion of medical facilities, 191 primary health centres were functioning till the end of 1964. The number of allopathic hospitals and dispensaries at the end of the year 1964 stood at 323 and 243 respectively. Besides, 18 Ayurvedic and Unani Hospitals with 305 beds and 1,331 dispensaries, were functioning in the State. Further details are given below :

Kinds of State Public Hospitals: Figures for 1964 :  
T. B. Hospitals : (i) Sanatorium 2 ; (ii) Hospitals 7 ;  
(iii) Clinics 6 ; Leprosy hospitals 2 ; Mental hospitals 2 ;  
Isolation : (i) Hospitals 2 ; Other hospitals : 269 ; Dispensaries : 243.

Number of beds : Maternity 1,224 ; T.B. 1,024 ; Isolation 273 ; Leprosy 95 ; V. D. 40 ; Mental 280 ; Eyes 459 ; General 7,836.

\* Composite State.



During 1964 there were 1,352 doctors, 462 staff nurses, 850 midwives, 2,829 compounders, 1,132 sanitary inspectors and malaria surveyors, 992 vaccinators, 310 health visitors and 226 dais. During 1964 there were 18 Ayurvedic and Unani hospitals, 1,331 Ayurvedic and Unani dispensaries; one Yogic centre. During 1964-65 there were 1,507 vaidyas and hakims, 1,273 compounders/nurses and 305 beds.

Patients treated in allopathic institutions in 1964 were : Outdoor 122.61 lakhs, and indoor 5.32 lakhs respectively.

There are three medical colleges, the Sawai Mansingh Medical College at Jaipur, the Medical College, Udaipur and the Medical College, Bikaner.

### ROADS & TRANSPORT

*Position in 1964-65.*

Total length of roads : 29,559 km.

Cement concrete roads : 43 km.

Painted roads : 10,812 km.

Metalled roads : 5,851 km.

Gravelled roads : 6,116 km.

Fair weather and dressed up tracks : 6,737 km.

Total number of motor vehicles (1964) : 46,221.

Number of private cars and jeeps 14,593; Private buses 475; Cycles and tricycles 6,738; Taxis, cars and contract carriages 353; Stage carriages 5,396; Public carriers 10,692; Private carriers 1,538; Tractors 6,058; Others 378.

### LABOUR (1964-65)

Number of registered factories : 1,464 (at the beginning of 1965).

Number of registered Trade Unions in State : 450.

Total membership : 70,128.

*Industrial Disputes* : Disputes 65; Workers involved 19,423; Man-days lost 1,91,424.

Accidents (enquired into); Fatal 18; Non-Fatal 2,943.

Workmen's compensation : cases decided 174; amount paid Rs. 1,95,677.

Employees' Provident Fund Scheme : No. of factories covered 426; Workers benefited 42,444; Contribution from the workers Rs. 24,67,000.

Twenty-eight Labour Welfare centres, in places having 500 or more industrial workers, have been established by the end of the year 1964-65.

No. of labourers benefited : 24,850.

No. of children benefited : 14,171.

No. of adults educated : 2,520.

No. of children educated : 4,311.

No. of factories covered by State insurance : 133.

No. of workers insured : 42,000.

Eighteen Employment exchanges were functioning in the State covering all the 26 districts.

Registration during 1964 : 1,34,324. Placing during 1964 : 18,384.

### EDUCATION, 1963-64

(See under Education Tables for more statistics.)

Educational Institutions of all the standards : 30,055.

Teachers : 71,366, Students : 20,31,817.

Centres for adult education : 8,481.

Number of adults made literate 69,330.

Elementary education is free throughout the State.

Place of language in the education system : Regional language is Hindi which is compulsory. English is compulsory after Standard VI. Hindi is the medium of instruction.

The Rajasthan Government passed on Aug. 21, 1964, the Primary Education Bill which seeks to provide free and compulsory primary education for children in the State.

### FOURTH FIVE YEAR PLAN

A tentative total outlay of Rs. 313 crores was fixed by the Planning Commission for the Fourth Five Year Plan. This is about 50 per cent more than the expenditure on the State's Third Plan. The main sectoral allocations are (in crores of rupees) : Agricultural programmes 43.04; irrigation and power 169.70; co-operation and community development 12.00; industry and mining 7.50; transport and communications 13.20; social services 62.51; miscellaneous 5.52. Allocation for education including technical education will be about Rs. 24.24 crores.

A sum of Rs. 3,666.00 lakhs has been earmarked for the year 1966-67 for plan schemes, out of which Rs. 1,934.00 lakhs has been allotted to Irrigation and Power, followed by Agricultural Programme Rs. 786.36 lakhs, Social Services Rs. 478.28 lakhs, Co-operation and Community Development Rs. 242.36 lakhs, Transport and Communication Rs. 180.30 lakhs, Industries and Mining Rs. 26.55 lakhs and Miscellaneous Rs. 18.15 lakhs.

### UNIVERSITY OF JODHPUR

Jodhpur

(Established 1962)

This is a Unitary and Teaching University.

*Chancellor* : Governor of Rajasthan (ex-Officio); *Vice-Chancellor* : Dr. M. L. Roonwal; *Registrar* : S. N. Jodhawat.

### UNIVERSITY DEPARTMENTS

*Faculty of Arts* : English, Hindi and Sanskrit, History, Philosophy and Psychology; *Faculty of Social Sciences* : Economics, Sociology, Political Science and Geography; *Faculty of Science* : Physics, Mathematics, Chemistry, Zoology, and Botany; *Faculty of Commerce* : Diploma Courses in Commerce; J.D.C. Part I and II; Costs and Works Accountancy and Steno-Typing; *Faculty of Engineering* : Civil, Structural, Mechanical, Electrical and Mining.

This University also provides facilities for researches in the above subjects.

(1965-66) : No. of students—7,000; No. of teachers—336; No. of Research Scholars—264.

### MEDIA OF INSTRUCTION

In the Post-graduate Classes except in Hindi and Sanskrit, generally the medium of instruction is English, while Hindi is the medium upto the Degree level.

### BUDGET (1965-66)

|                     |                 |
|---------------------|-----------------|
| Income .. .. .      | Rs. 97.08 lakhs |
| Expenditure .. .. . | Rs. 75.32 lakhs |

### UNIVERSITY OF RAJASTHAN

Jaipur

*Chancellor* : Governor of Rajasthan; *Vice-Chancellor* : Prof. M. V. Matur, M.A. B.Com. (Allhd.), M.P.A. (Harvard); *Registrar* : C. L. Singhal.



Total number of colleges affiliated to the University : 71.

Total number of male students in the colleges at the end of the 1965-66 Session was 23,240.

Total number of female students in the colleges at the 1965-66 Session was 3,354.

Total number of male and female students in the University Departments at the end of the Session was 1,169 and 292 respectively.

Total number of male and female students in the University colleges was 3,192 and 1,674 respectively.

#### BUDGET ESTIMATES (1964-65)

|                                 | Rs.          |
|---------------------------------|--------------|
| Total Income .. .. .            | 78,37,761·00 |
| Total Expenditure .. .. .       | 83,14,713·00 |
| Grants if any :—                |              |
| State Government .. .. .        | 36,50,050·00 |
| University Grants Commission .. | 11,82,405·00 |
| Central Govt. .. .. .           | 56,625·00    |

#### UNIVERSITY OF UDAIPUR

Udaipur.  
(Estd. July 1962)

Vice-Chancellor : Dr. G. S. Mahajani.  
Registrar : R. S. Gupta.

The University though primarily established to cater to the needs of agricultural education, research and agricultural extension, now provides instruction in other disciplines also. At present the University comprises Five University Colleges and six Affiliated Colleges.

The total enrolment of the University for the year 1965-66 was 4,709.

The courses offered are : Pre-University in Arts, Science and Commerce, Pre-professional (Ag.), B.A., B.Com., B.Sc., B.Sc. (Home Science), B.Sc. (Ag.), M.A., M.Sc., M.Sc. (Ag.), M.V.Sc., M.Com., LL.B., B.Ed., M.Ed. From July 1964, the University has also instituted Ph.D. Course.

The special feature of this University is the adoption of internal grading system on the pattern of the Land Grant College of the U.S.A.

The total budget for 1965-66 of the University was Rs. 98·55 lakhs.

## TRIPURA

**C**APITAL : Agartala. Area : 4,116 sq. miles.

Particulars about population, literacy, density etc. are given under article "Population".

Number of towns : 6.

There is only one District—Tripura having one municipality.

The Territory is divided into ten administrative sub-divisions and 46 tehsils. The names of sub-divisions and tehsils respectively are : Sadar—Sadar, Puranagartala, Bamutia, Mohanpur, Simna, Ishanchandranagar, Kamalasagar, Takarjala, Bishalgar, Charilam ; Khowai—Khowai, Kalyanpur, Asharambari and Teliamura ; Kailasahar—Kailasahar, Fatikroy and Chomanu ; Dharmanagar—Dharmanagar, Brajendranagar, Kurti, Kanchanpur and Longai ; Sonamura—Sonamura, Kathalia, Bakshanagar, Dhanpur and Matinagar ; Udaipur—Radhakishorepore and Salgarh ; Belonia—Belonia, Rajnagar, Radhanagar, Puranrajbari, Sidhinagar, Rishyamukh and Muharipur ; Sabroom—Sabroom, Manu, Amilghat, Samarendraganj and Gora-kapa ; Kamalpur—Kamalpur and Kulai ; Amarapur—Birganj, Omphi and Dumboornagar.

#### GEOGRAPHY

Cut off from the rest of India and surrounded on three sides by East Pakistan with an international boundary of 528 miles, it forms an almost isolated pocket connected with the main land by a 125 mile access road through the hills to the border of Cachar District in Assam. Very recently a railway line has been extended upto Dharmanagar town, the northern most sub-divisional headquarters of this Territory. Agartala, the capital of this Territory, is situated to the east of Calcutta at distance of 197 miles by air & 1,050 miles by land route through the Assam rail-link.

#### ADMINISTRATION

The administration of this Territory is carried on by the Chief Commissioner. With the enforcement of the Govt. of Union Territories Act 1963, a Legislative Assembly has been set-up for the Union Territory of Tripura and a Council of Ministers has been formed with effect from 1st July 1963, with the Chief Minister at the head to aid and advise the Chief Commissioner.

The Court of the Judicial Commissioner is the highest Judiciary in this Territory.

#### AGRICULTURAL PRODUCTION

The agricultural wealth of the Territory consists of rice, jute, cotton, tea and fruits, while its forests yield timber, firewood and charcoal. Paddy is the main source of revenue. Area in '000 acres under the crop and production in '000 tons respectively are : Winter rice : 282·50 ; 113·32 ; Autumn rice : 161·50 ; 57·27 ; Summer rice : 10·00 ; 3·35 ; Pulses : (Khariff) : 1·15 ; 0·21 ; Rabi Pulses : 3·20 ; 0·57 ; Fibres : Jute : 29·50 ; 81·12 ; Mesta : 33·00 ; 74·25 ; Cotton : 17·00 ; 6·29 ; Rape & Mustard : 9·90 ; 1·66 ; Sesmum : 8·40 ; 1·41 ; Sugarcane : 7·20 ; 9·62 ; Potato : 6·00 ; 15·00 ; Area & Classification of Area (1962-63) : Total geographical area of the Territory : 26,34,240 acres ; Area under forest : 15,70,000 acres ; Total cropped area : 6,59,000 acres ; Net area sown : 5,61,500 acres.

**Livestock** : Total cattle 4,94,960 ; buffaloes 42,564 ; horses and ponies 1,097 ; sheep 3,351 ; goats 1,57,815 ; other livestock 35,218 ; total poultry 7,57,295 (1961 census).

The fishing population may be reckoned as 2,500 families.

#### EDUCATION

Number of schools/colleges and total number of students during 1964-65 (as on 31st March, 1965) :



Total No. of Pre-Primary schools—367; total No. of Primary schools (Basic and Non-Basic)—1,359; Total No. of Middle Schools (Basic and Non-Basic)—130; Total No. of High/Higher Secondary Schools—70; Total No. of schools for professional and special education—566; (Agricultural Trg. Institute—1; Nursing Trg. Centre—1; Industrial Trg. Centres—4; Schools for Oriental studies—24; Social Workers Trg. School—1; Adult Social Education Centres—504; Hindi Prachar Centre—31; Total No. of students in schools for General Education (including Pre-Primary Students)—1,77,907 (Boys—1,11,916 and Girls—65,991); Total No. of students in schools for professional and special education 17,156 plus 1,994 (Boys 12,144 plus 1,228; Girls 5,012 plus 566); Total No. of colleges for general education 2,386 (Boys 1,793 and Girls 593); Total No. of colleges for professional and special education 8 (Teachers' training colleges—post-graduate basic 1; post graduate non-basic 2; under graduate basic 1; Music college 1; Polytechnic 1).

Total No. of students in Colleges for professional and special education—816 (69); Boys—724 (4) including 257 Boys in polytechnic and Girls 92 (65).

N.B.—Figures within bracket indicate the number of students reading in these schools, but belonging to other educational institutions.

### CO-OPERATIVE

State Co-op. Bank 1, Land Mortgage Bank 1, Service Societies 157, Multipurpose Societies 180, Large-sized Societies 25, Small-sized with un-limited liabilities 12, Small-sized Societies with limited liabilities 17, Farming Societies 3, Non-Agricultural Credit Societies 9, Apex Marketing Societies 1, Primary Marketing Societies 14, Purchase & Sale Societies 25, State Consumers Societies 1, Primary Consumers' Societies 34, Fishery Societies 7, Milk Supply Societies 2, Housing Societies 6, Processing Societies 6, Non-Agricultural Non-Credit Societies 16, State Co-op. Union 1, Housing Societies 2; Weavers' Societies 66, Other Industrial Societies 76.

### INDUSTRIES

The Industries in the Territory include cottage and small industries like handloom weaving, carpentry, blacksmithy, sugar making, basketry, pottery, saw mill, brick manufacture, bakery, tinkersmithy, agricultural implements, manufacture of footwear and other leather goods, fruit canning etc. But efforts have now been initiated for starting large industries and other organised small industrial units. A 15,000-spindles Spinning Mill is being set up. A licence for a plywood factory has been issued. Preliminary action is also being taken for setting up a jute mill, a sugar factory, powerlooms on decentralised basis and forest and agro-based industrial complexes.

### TRANSPORT

Total length of roads is 1,580 Km. out of which metalled 736 Km. are surfaced. Tripura is linked with Assam by road through the Assam-Agartala road. There are no big irrigation works in this Territory. There is a new railway link which connects Dharmanagar with Kalkalighat Railway Station in Assam. Most of the rivers in the Territory carry country boat traffic. There are three airstrips and one aerodrome in this Territory.

### ELECTRICITY

The source of power in the Territory is from diesel stations located at Agartala, Ambassa, Khowai, Dharamnagar, Kailasahar, Udaipur and Bogafa. The aggregate installed capacity of the generating stations is 2,661 Kw. Power facilities are now available in 36 localities. Preliminary works for implementation of a scheme called Gumti Hydro Electric Scheme have also been taken up.

### LAND REFORMS

The provisions of the Tripura Land Revenue and Land Reforms Act, 1960 are being gradually implemented. The provision regarding acquisition of intermediary estates has been implemented throughout Tripura.

### EMPLOYMENT EXCHANGE

Figures for 1965 (upto December): Number of registrations 8,443; No. of vacancies notified 1,738; No. of candidates placed 1,158; No. in the waiting list in the Live Register 13,439.

Total No. of employees: 26,704. (5,587 private sector; 21,117 public sector).

### HEALTH

No. of Hospitals 11; No. of Public Health Centres 22; Dispensaries 119; No. of beds 790; No. of doctors 180; No. of Nurses 222; V. D. and Skin Clinic 1; Family Planning Clinic 1; Anti-natal Clinic 1; Eye Clinic 1; Chest Clinic 1; Leprosy Clinic 1; Dental Clinic 1; Family Planning Centres 13; E. N. T. Clinic 1; Psychiatric Clinic 1; and Well Baby Clinic 1.

### PANCHAYAT

The work of setting up Panchayats in Tripura was started in the Third Plan period. Total No. of Gram Panchayats: 215. Nyaya Panchayats are also being established simultaneously with Gram Panchayats.

### FOURTH PLAN

A total outlay of Rs. 30.95 crores, has been approved by the Planning Commission. (For details see article on "Fourth Five Year Plan").

## UTTAR PRADESH

(See page 425)



## WEST BENGAL

**CAPITAL:** Calcutta. Area: 33,829 sq. miles; -Population: 34.93 million (1961 Census). Percentage of increase 1951-61: 32.79. Density: 1,032. Sex ratio 878 females per 1,000 males. Literacy: 29.3 per cent.

There are three Divisions in the State, the Burdwan Division, the Jalpaiguri Division and the Presidency Division.

The Districts in the Burdwan Division with their headquarters in brackets are as follows: Bankura (Bankura), Birbhum (Suri), Burdwan (Burdwan), Hooghly (Chinsura), Midnapore (Midnapore), Purulia (Purulia). The Districts in the Jalpaiguri Division with their headquarters in brackets are as follows: Cooch-Behar (Cooch-Behar), Darjeeling (Darjeeling), Dinajpur\* (Balurghat), Jalpaiguri (Jalpaiguri), Malda (Malda), Murshidabad (Berhampur), Nadia (Krishnagar), 24-Parganas (Alipur). Calcutta and Howrah comprise the Presidency Division.

**Panchayats:** Panchayati Raj, was introduced all over the State on Oct. 2, 1964. The rural area of West Bengal has been covered by a network of Gram and Anchal panchayats. The total number of Gram Panchayats (Oct. 2, 1964) in the State was 19,649 and that of Anchal Panchayats 2,925. The State has 15 Zilla Parishads to replace the existing District Boards and 325 Anchal Parishads. All the Anchal Panchayats will be covered by Nyaya Panchayats. By Oct. 2, 1964, 52 Nyaya Panchayat, had been set up.

### POPULATION

(See under "Population").

### AGRICULTURE

Acreage and production of principal crops in 1964-65 are as follows:

|                 | Production<br>(tons) | Area<br>(acres) |
|-----------------|----------------------|-----------------|
| Rice .. ..      | 5,765,000            | 11,500,000      |
| Wheat .. ..     | 27,500               | 135,700         |
| Sugarcane .. .. | 190,300              | 101,600         |
| Jute .. ..      | 3,617,000†           | 1,128,000       |

† Bales.

The total provision in the State's Third Plan in respect of agriculture was Rs. 53.60 crores.

**Land Tenure:** All rent-receiving interests in agricultural lands vest in the State and the numerous tenants and sub-tenants, as the case may be, now hold land directly under the State Government. All forests too are now managed directly by the Government.

There are roughly 1.28 million acres of cultivated land in the State, of which, according to preliminary but by no means accurate statistics, only 400,000 acres will be found surplus for redistribution among the tillers of the soil.

**Sonarpur-Arapaneh Scheme:** The Sonarpur-Arapaneh-Matla Drainage Scheme of reclaiming vast water-logged tracts 105 sq. miles in area, with powerful pumping plants, is the first of its kind in India. Under the first part of the Scheme, a submerged area of 23,360 acres has been reclaimed for cultivation. The total yield of paddy from these large tracts of land was 21,000 maunds.

\* Also called West Dinajpur.

**Bagjola Drainage Scheme:** Rs. 104-lakh Bagjola Drainage Scheme is intended to improve the drainage of 116 square miles of area. The scheme when completed will reclaim 25,600 acres of water-logged lands and render them fit for cultivation, which will result in annual additional yield of 12,091 tons of paddy and 1,619 tons of rabi crops.

### FORESTS

(See under article on "Forests").

### IRRIGATION

Area under irrigation: over 35 lakh acres.

Some individual schemes with total cost in Rs. lakhs and area in acres benefited (kharif season) respectively are as follows: Mayurakshi Reservoir 20.46.60; 560,000; Harahatuganj Drainage 12.94; 16,000; Berai Canal 21.78; 9,000; Jibanti-Banki 3.11; 6,400; Jampoi 0.52; 800; Soadighi Gangakhali 24.84; 29,400; Jhargram 9.74; 5,000; Suvankar Daura 17.17; 6,000; Trans-Damodar 4.15; 32,900; Saraswati 6.25; 7,100; 20 Minor Schemes 5.34; 45,292; 52 Procurement Bonus Schemes 21.62; 87,717; 23 Emergency Schemes 13.84; 62,880; 5 New Minor Schemes 1.86; 13,676; Excavation of Nonaganj river 4.25; 4,860; Sonarpur-Arapaneh-Matla 138.72; 46,400; Bagjola-Ghuni-Jatragachi 108.93; 25,600; Improvement of Kamakhya Khal 3.52; 3,840.

### DAMODAR VALLEY CORPORATION

(See under "Irrigation").

### TWO DEVELOPMENT SCHEMES

**The Ganga Barrage Scheme:** Work in connection with the Ganga Barrage, also called Farakka Barrage Scheme, is now in progress.

Benefits expected from the barrage: 1. Supply of water to resuscitate the moribund rivers in West Bengal and also improve the Sunderbans rivers; 2. Provision for irrigation and flushing on a vast scale; 3. Improvement of the Calcutta Port; 4. Provision of a direct railway and road link between the northern and southern parts of the State; 5. Provision of an inland water route entirely through the Indian Union starting from Calcutta and going up to Bihar and Uttar Pradesh and ultimately to Assam.

### POWER

**Jaldhaka Project** in West Bengal was taken up during the year 1961. The other scheme in the Third Five Year Plan is Bandel Super Thermal Power Station comprising four 82.5 Mw turbo alternator sets with a maximum continuous rating of 330 Mw.

**Extension of North Calcutta Electrification Scheme:** Stringing of the second circuit of 27 miles of the existing 66 kV double circuit tower line between Shamnagar and Ranaghat.

**Jaldhaka Hydro-Electric Scheme:** Tapping of river Jaldhaka in north Bengal to generate 27 Mw of power at the first stage and 9 Mw at the second stage. **Balasun Hydro-Electric Scheme:** Harnessing of river Balasun in Darjeeling District. **Kharagpur Midnapore Electrification Scheme:** Purchase of power in bulk from D.V.C.'s Kharagpur sub-station and distribution in Midnapore district.



through a network of transmission lines. Length of overhead lines laid : 114 miles of 11 kV and 33 kV. *Howrah-Hooghly Rural Electrification Scheme* : Length of overhead transmission lines laid : About 80 miles of 11 kV. *Durgapur Malda Transmission Scheme* : Places supplied with power : Districts of Murshidabad, Malda and West Dinajpur. *Suburban Electrification Scheme* : Total Plan provision for colliery electrification, tube-well irrigation, Central testing laboratory and suburban electrification schemes : Rs. 29.21 lakhs. *Durgapur Power Station* : With the increase in power demand both in public and private sectors around Durgapur, the State Government was called upon to expand the power station by installing 3 × 75 MW and 1 × 150 MW turbo-alternator sets. These units are designed for burning washery middlings. Two Units are already in operation.

By the end of the Third Plan, 2,200 villages in the State will have received the supply of power and 750 deep irrigation wells will have been electrically operated. One hundred and thirteen towns and 798 villages in West Bengal have been electrified till March 1964.

## INDUSTRY

West Bengal ranks second among the major industrial States of India. With only 3 per cent of the country's area, the State shares 8 per cent of India's population. Her share in the manufacturing labour force is even more—22.5 per cent.

Principal industries of the State : Jute, tea, coal, cotton, textiles, paper, rubber, engineering, etc.

No. of registered factories : 5,852 (1965). No. of workers : 8,53,880 (1964).

No. of jute mills : 83 in 1962 (employing about 2,00,000 workers, 1960).

Total acreage under jute cultivation in West Bengal : 11,02,400.

No. of cotton mills : 41 (43,624 workers; total no. of spindles 6,62,566; no. of looms 11,389; approximate quantity of cotton consumed 2,87,706 bales of 3½ cwt. each bale) (31st August 1963).

A sleeper casting factory with an output of 50 tonnes of sleepers per day was to go into production shortly.

No. of tea gardens : 285 (250,000 workers). West Bengal produces about 90 million pounds of tea.

No. of coal mines : 228 (about 1,22,000 workers daily on an average). The total output of the West Bengal coal mines is about 16.3 million tons.

No. of paper mills : 5 (about 10,000 workers).

Main small scale industries : Handloom weaving, sericulture and silk, brass and bell metal, hand-made paper, palm gur and mat industries.

No. of looms engaged in handloom weaving : 1,50,000.

Principal centres of handloom weaving : Santipur (Nadia), Santiniketan (Birbhum), Rajbalhat, Dhaniakhali (Hooghly).

Principal silk industry Districts : Malda, Murshidabad and Bankura.

## LABOUR

No. of registered trade unions : 3,379 (1965).

No. of members of trade unions : about 900,000.

The Employees' State Insurance Act, which provides for sickness and other medical benefits, covers 9,75,463 insured employees in Calcutta, Howrah, Hooghly and 24 Parganas. The family members are entitled to only medical benefits.

The Employees' Provident Funds Act covers 6,147 factories/establishments. Out of 13,44,871 employees employed in these factories/establishments at the end of 1965, 10,74,600 were regularly subscribing to the statutory fund.

No. of labour welfare centres run by Government : 40.

No. of tenements completed under the Subsidised Industrial Housing Scheme : about 10,964.

About 4,90,407 persons, including 25,910 women, were on the live register of Employment Exchanges at the end of 1965 in West Bengal.

Over 53,000 persons secured jobs through Employment Exchanges in the State during 1965.

## CO-OPERATION

(See under "Co-operative Movement".)

## ROADS

There are six national highways in West Bengal: Calcutta-Delhi (152 miles), Calcutta-Bombay/Madras (90 miles—common alignment in West Bengal), Bihar-Assam (181 miles), Siliguri-Gangtok (35 miles), Calcutta-Siliguri (203.5 miles) and Calcutta-Bongaon (43 miles).

Superior type of extra-municipal roads, maintained by P.W.D. and local bodies are 6,500 miles while the interior motorable type is 13,000 miles.

The estimated expenditure in the Third Plan on roads and bridges was about Rs. 25 crores.

The State Transport Corporation owns (1964) a fleet of 898 vehicles. The State Transport provides employment for approximately 13,000 persons of whom a large number are displaced persons. About 13,95,000 passengers are carried every day. The State buses cover about 75,800 miles daily.

## COMMUNITY DEVELOPMENT PROJECTS

The Community Development Projects now cover almost the entire population.

(See also main article "Community Development Projects".)

## EDUCATION

(See article on "Education").

## HEALTH (1965)

(Figures provisional. Per 1,000 population).

Birth rate : 16.9; Death rate : 6.7; Infant mortality : 53.2; Maternal mortality : 2.7; Death rate from T.B. : 0.1; Death rate from Cholera : 0.02; Death rate from small-pox : 0.02.

No. of hospitals, dispensaries and clinics : Urban 599; Rural 1,457; Health Centres : 682; No. of beds : 5,100; Total no. of beds in hospitals : 33,167; No. of T.B. hospitals and Sanatoria : 12; T.B. chest clinics : 73; Mobile Units for domiciliary treatment of T.B. cases : 9; No. of T.B. beds : 4,619; Rural Health Centre beds : 5,100; Maternity and child welfare centres : 352; Maternity homes and hospitals : 18; Maternity beds : 6,009; Medical colleges : 5; No. of students in colleges : 594 (M.B.B.S.); Nursing training centres : 25; No. of seats : 2,447; Pharmacy training centre : 1; No. of students at the centre : 80; No. of beds for treatment of leprosy : 2,127; For venereal diseases : 70; For treatment of mental diseases : 1,458 (including 918 beds maintained by West Bengal Govt. in two Mental Hospitals at Ranchi and 90 beds of Bangiya Unmad Ashram, Dum Dum); V. D. clinics : 51; No. of beds for infectious diseases : 1,431; Family Planning centres : 278.

Per capita expenditure : Rs. 4.63.



## FIVE-YEAR PLANS

The Third Five Year total Plan outlay was Rs. 293.15 crores.

The Fourth Plan outlay is Rs. 528.5 Crores. Allocations are : agriculture Rs. 82 crores ; community development and cooperation Rs. 20 crores ; irrigation and power Rs. 144 crores, industry Rs. 45 crores ; transport and communications Rs. 44 crores, social services Rs. 158 crores, and miscellaneous Rs. 35.50 crores.

## CORPORATION OF CALCUTTA

5, Surendra Nath Banerjee Road, Calcutta 13.  
*Mayor*, Gobinda Chandray Dey.  
*Dy. Mayor*, Shib Kumar Khanna.  
*Commissioner*, H. C. Mukherji.  
*Dy. Commissioners*, A. K. Bhattacharjee ; Priyo Guha.  
*Secretary*, S. N. Bose.  
*Chief Engineer*, S. Mitter.  
*Executive Engineer, Water Works*, S. L. Pal.  
*Executive Engineer, Drainage*, B. Nandi.

## EDUCATIONAL INSTITUTIONS

## UNIVERSITY OF CALCUTTA

*Chancellor*, Smt. Padmaja Naidu (Governor of West Bengal).  
*Vice-Chancellor* : Dr. Bidhubhushan Malik.  
*Registrar*, Dr. Golap Chandra Roy Chaudhuri.  
 No. of affiliated Colleges : 162.  
 No. of University Colleges : 6.  
 Total no. of students : 94,386 boys and 38,790 girls (1964-65).

## BUDGET (1965-66)

|                                 |                 |
|---------------------------------|-----------------|
| Receipts .. .. .                | Rs. 1,08,63,089 |
| Expenditure .. .. .             | Rs. 1,47,83,548 |
| West Bengal Govt. grant .. .. . | Rs. 21,52,000   |

## THE UNIVERSITY OF BURDWAN

Rajbati, Burdwan

*Chancellor*, Smt. Padmaja Naidu, Governor of W. Bengal.  
*Vice-Chancellor*, Dr. D. M. Sen, M.A. Ph.D. (Lond.).  
*Registrar*, S. M. Chatterji, M.Sc.  
*Teaching* :

Courses provided at present and degrees.

*Post-graduate Courses in Arts* : English, History, Economics, Bengali, Sanskrit, Philosophy, Mathematics and Pol. Science.

*Post-graduate Courses in Science* : Physics, Chemistry, Mathematics and Botany.

*Post-graduate Course in Commerce* : M.com.

*Degree Courses* (in affiliated Colleges) : Arts (B.A.), Science (B.Sc.), Engineering (B.E.), Textile Technology (B. Tech.), Teachers' Training (B.T.), Dip in Library Science, French, Music & Cert. in French & Music.

*Honours Courses* : (in affiliated Colleges) : English, Bengali, Sanskrit, History, Economics, Philosophy, Arabic, French, Persian, Hindi, Pol. Science, Physics, Chemistry, Mathematics, B.com. Hons. in Botany, Zoology & Geography whole course.

*Medium of Instruction* : English & Regional language (Bengali).

*No. of students* : In post-Graduate classes :—898 (1965-66). In affiliated Colleges :—27,785 (1965-66).

*No. of affiliated Colleges* : 43 (including one Engineering, one Textile Technology and four Teachers' Training).

## ANNUAL ACCOUNT, (1965-66).

*Receipts including opening balance* : Rs. 75,73,196.26.

*Expenditure* : Rs. 68,35,135.46.

## JADAVPUR UNIVERSITY

(P.O. Jadavpur University, Calcutta 32).

*Unitary University*.

Courses provided at present and Degrees :—

*Engineering Courses* :

Bachelor's Degree Courses (5-year) in Mechanical Engineering (B.M.E.) ; Electrical Engineering (B.E.E.) ; Chemical Engineering (B.Ch.E.) ; Civil Engineering (B.C.E.) and Tele-Communication Engineering (B. Tel. E.) ; Evening part-time Engineering (B. Tel. E.) ; Architecture (B. Arch.) ; Evening part-time degree courses (4-year course for Licentiates) in Mechanical (B.M.E.), Electrical (B.E.E.) and Civil (B.C.E.) Engineering ; Degree Course (4-year) in Pharmacy ; Degree Course (3-year) in Food Technology and Bio-Chemical Engineering (B. Tech.).

*Post-graduate Courses* : Master's Degree Courses (2-year) in Mechanical Engineering (M.M.E.) ; Electrical Engineering (M.E.E.) ; Chemical Engineering (M.Ch.E.), Civil Engineering (M.C.E.), Tele-Communication Engineering (M. Tel. E.) and Food Technology (M. Tech.).

*Science Courses* :

Preparatory Course (1-year). Honours Degree Courses (3-year) in Chemistry, Mathematics, Physics, Geological Sciences (B.Sc.).

*Post-graduate Courses* : Master's degree courses (2-year) in Mathematics, Physics, Chemistry and in Applied Geology (M.Sc.).

*Arts Courses* :

Preparatory Course (1-year). Honours Degree Courses (3-year) in Bengali, Comparative Literature, Economics, English, History, Political Science, Philosophy, Sanskrit (B.A.) ; Degree Course (1-year) in Library Science (B. Lib. Sc.).

*Post-graduate Courses* : Master's degree courses (2-year) in Bengali, Comparative Literature-Economics, English, History, International Relations, Philosophy, Sanskrit (M.A.).

*Faculties* : Arts, Science, Engineering and Technology.  
 Medium of instruction : English.

Number of Students :—4,700 (31-3-1966).

*Chancellor*, Smt. Padmaja Naidu ; *Vice-Chancellor*, Prof. Hem Chandra Guha ; *Registrar*, P. C. V. Mallik.

## BUDGET, 1966-67

Income : Rs. 1,10,96,500 (inclusive of maintenance grants).

Expenditure : Rs. 1,11,63.00.

## UNIVERSITY OF KALYANI

(P.O. Kalyani, West Bengal, India).

*Teaching* :

Courses provided at present and Degrees :—B.Sc. (Ag.) Hons. 4-year integrated course ; B.Sc. (Animal Science) 4-year course ; B.Sc. Hons. in Chemistry, Physics, Botany



and Zoology—3-year course; B.A. Hons. in Economics—3-year course; B.T.—one-year course; Diploma in Physical Education—1 year.

Post-graduate Courses: M.Sc. in Chemistry (with special papers in Organic, Inorganic and Physical Chemistry), Physics, Zoology, Botany; M.Sc. (Ag.) in Plant Pathology, Agronomy, Horticulture, Cytogenetics, Soil Science, Entomology and Agricultural Extension; M.A. in English; M.A. in Economics.

Medium of instruction: English.

Number of Students at present (Feb. 1966): Agriculture (including Animal Science) 623, Science 144, Arts 66, Physical Education 24, B.T. 161, Research for Ph.D. in Science 27, Research for Ph.D. in Agriculture 15, Research for Ph.D. in Arts 1.

This is a Residential University.

Chancellor: Shrimati Padmaja Naidu; Vice-Chancellor: Dr. S. N. Das Gupta, D.Sc., F.N.I.; Registrar: Dr. D. C. Sen, D.Sc.

### UNIVERSITY OF NORTH BENGAL

P.O. North Bengal University, Raja Rajarammohunpur (DARJEELING)

Chancellor: Smt. Padmaja Naidu, Governor of West Bengal; Vice-Chancellor: Prof. A. C. Roy; Registrar: P. B. Mitra.

### BUDGET (1963-64)

Income: Rs. 5,17,057.

Expenditure: Rs. 18,10,180.

Grants: Rs. 15,14,500.

### VISVA-BHARATI

Santiniketan, West Bengal.

Founded by Rabindranath Tagore in 1921; incorporated as a Central University, 1951.

It is a unitary, teaching and residential university.

Visva-Bharati maintains the following Institutions:

Patha-Bhavana (School), Siksha-Bhavana (College of Graduate Studies), Vidya-Bhavana (College of Post-Graduate Studies and Research), Vinaya-Bhavana (Teachers' Training College), Kala-Bhavana (College of Fine Arts and Crafts), Sangit-Bhavana (College of Music and Dance), Rabindra-Bhavana (College of Study and Research in the Life and Writings of Tagore) and Palli-Siksha-Sadana (Institute of Graduate studies in Agriculture

and Social Sciences). The University maintains also the following Research Departments: (1) Cheena-Bhavana, (2) Indo-Tibetan Institute, (3) Hindi-Bhavana, which organise teaching and Research in Chinese, Tibetan and Hindi respectively.

The Visva-Bharati Central Library contains 1,65,189 volumes including periodicals. There are sectional and seminar libraries attached to various departments. The University has its own hospital with a Chief Medical Officer and his assistants. The Guest House, which makes catering arrangements of its own, is open to visitors and guardians.

Besides the academic institutions, the University conducts two Departments: one for Rural Reconstruction and the other for Publication of Books.

A two-year Certificate Course in Indian and Foreign languages viz. Sanskrit, Bengali, Hindi, Oriya, Chinese, Japanese, Tibetan, French, German and English is available to Post-Graduate and Under-Graduate students. Those who have successfully completed the Certificate Course may continue another year's further study for the Diploma in the same languages.

Silpa-Sadana (Cottage Industry Training Centre) provides 2-year Certificate course and 3-year Diploma course in Weaving and Woodwork.

The Social Education Organizers' Training Centre, started under the Community Project Scheme, provides for training of organizers deputed by the different States of the Indian Union.

Siksha-Charcha (Junior Basic Teachers' Training College), sponsored by the West Bengal Government, provides one year certificate course in both theory and practice of Basic Education.

A scheme of agro-economic research is being conducted at the university under the auspices of the Ministry of Food and Agriculture, Govt. of India.

### Budget for 1965-66:

|               |    |    |    |    |               |
|---------------|----|----|----|----|---------------|
| Govt. Grants  | .. | .. | .. | .. | Rs. 44,31,545 |
| Other Sources | .. | .. | .. | .. | Rs. 9,15,333  |
| Total         | .. | .. | .. | .. | Rs. 53,46,878 |
| Expenditure   | .. | .. | .. | .. | Rs. 52,28,740 |

Chancellor: Smt. Indira Gandhi. Vice-Chancellor: Dr. Kalidas Bhattacharyya, Registrar: H. C. Bhattacharyya.

## BIHAR STATE

**CAPITAL:** Patna. Area: 67,196 sq. miles. Geographical area: 42.8 million acres (5.8 per cent of the area of India).

Total Population: 46,455,610 (1961 census). Density 691; Literacy 18.23 per cent. Population (1966) 52.1 million.

Administrative Divisions:—Patna, Bhagalpur, Tirhut and Chota Nagpur.

Districts with names of District Headquarters in brackets in each Division:

Patna Division: Patna (Patna); Gaya (Gaya); Shahabad (Arrah).

Tirhut Division: Muzaffarpur (Muzaffarpur); Saran (Chapra); Champaran (Motihari); Darbhanga (Laheria-sarai).

Bhagalpur Division: Bhagalpur (Bhagalpur); Moghyr Purnea (Purnea); Santal Parganas (Dumka); Saharsa (Saharsa).

Chota Nagpur Division: Ranchi (Ranchi); Hazaribagh (Hazaribagh); Palamau (Daltenganj); Singhbhum (Chaibassa); Dhanbad (Dhanbad).

Number of Districts: 17; Number of District Boards: 17; Number of Municipalities (including Patna Municipal Corporation): 49; Improvement Trust: 4; Notified Area Committees: 41.



Names of towns with a population of over 50,000 : Patna, Monghyr, Jamshedpur, Muzaffarpur, Gaya, Chapra, Bhagalpur, Arrah, Ranchi, Darbhanga and Gaya.

(For names, area and population of taluks see under 'Population').

## GEOGRAPHY

Bihar is more thickly populated than Germany. Hindus form an overwhelming majority of the population. Though Muslims form about one-tenth of the total population they constitute more than one-fifth of the urban population of the State. The scheduled tribes account for 9.1 per cent as ascertained from 1961 census. These are inhabitants of the Chota Nagpur plateau and the Santal Parganas, the latter district being a continuation of the plateau in a north-easterly direction.

Although there is a great deal of mineral wealth in Chota Nagpur and important industries are developing in connection with it, still for the bulk of the population of the State agriculture continues to be the basic occupation. Over 77 per cent depend on agriculture as compared to 69.5 per cent for India as a whole.

The soil throughout the whole of that portion of the Indo-Gangetic plain lying within the State boundaries is extremely fertile, particularly in North Bihar, in parts of which the density of the population is more than 900 people to the square mile. The State occupies a transitional position between Ganges delta with its damp climate so suitable for the paddy crop and the States to the north and west where large irrigation schemes have had to be provided to enable the soil to produce its bounty. As in the delta of the Ganga, rice is by far the most important crop as it occupies normally an area of approximately 12 million acres or over 50 per cent of the net cropped area of the State. In the circumstances, the importance of the south-west monsoon to the State of Bihar cannot be overestimated.

In addition to the rice crop, however, other grain crops are grown on a tolerably large scale. Of the monsoon cereals, maize, wheat and barley are extensively grown. The cultivation of oilseeds like castor, mustard and linseed forms a large and important part of the agriculture of Bihar.

After Uttar Pradesh, Bihar is the most important white sugar area in India, some one-sixth of the total production of white sugar in the country being turned out in Bihar factories.

Jute has been an important crop and is confined almost entirely to the Purnea District part of which has gone to West Bengal after reorganization.

Tobacco is a crop of increasing importance in the State and one which is likely to expand in importance.

## LARGE AND MEDIUM INDUSTRIES

**Heavy Engineering Corporation Ltd.:** The Heavy Engineering Corporation Ltd. was incorporated in Bihar on 31st December 1958 with its headquarters at Ranchi, as a full-owned Government of India Undertaking to meet the country's growing requirements of heavy capital equipment.

### Indian Refineries Limited.

Details are given in the article on "Petroleum Industry".

### National Coal Development Corporation Limited.

Please see "All India Corporations" for details.

### Sindri Fertilizers and Chemicals Ltd.

Details are given under "Govt. Industrial Undertakings".

### Pyrates and Chemicals Development Company Ltd.

Please see under "Govt. Industrial Undertakings".

**Uranium Processing Plant:** The Government of India are also setting up a plant for processing uranium ore at an estimated cost of Rs. 4.3 crores at Jadugudda in the Singhbhum district. The plant will exploit large deposits of atomic minerals in the State and supply uranium fuel for all the atomic reactors in the country.

## STATE PUBLIC SECTOR PROJECTS

For the development of industries in the State, some of the major steps taken by the State Government include the establishments (a) Bihar State Financial Corporation, a statutory body and (b) the Bihar State Industrial Development Corporation as well as (c) the Bihar State Small Industries Corporation, both companies entirely owned and financed by the State Govt. Also see under "State Corporations".

### Bihar State Superphosphate Factory, Sindri (Dhanbad).

Please see under "Govt. Industrial Undertakings".

### High Tension Insulator Factory, Ranchi.

See under "Government Industrial Undertakings".

**Electric Equipment Factory, Tatisilwai, Ranchi:** An Electric Equipment Factory is being established at Tatisilwai (Ranchi) in collaboration with the General Electric Co., at an estimated capital cost of Rs. 1.38 crores for manufacture of electric motors, transformers and switch gears. The total capacity of the factory will be 1,62,000 KVA of transformers and 63,000 H.P. motors per year. 137 acres of land has already been acquired for this purpose and preliminary works like preparation of project report, development of site, construction of site offices completed.

The erection of the factory is likely to be completed by 1967-68.

**Industrial Estates and Workshop Sheds:** Two urban, two semi-urban and twenty-seven rural industrial estates had been sanctioned during the Third Plan period. The two urban estates are being located at Bhagalpur and Muzaffarpur. The two semi-urban industrial estates are coming up at Purnea and Daltonganj.

## KHADI AND VILLAGE INDUSTRIES

The area of Bihar has been divided into 588 anchal-cum-development Blocks, out of these 440, which come to about 76 per cent, have been covered by some kind of development activity under the Khadi and Village Industries. As regards Khadi production, Bihar has a place of pride in the whole country. In 1965 Khadi and Village Industries in Bihar produced articles worth Rs. 8 crores, 53 lakhs and 31 thousands. The sales effected were Rs. 8,34,90,000. The total number of persons finding part time or whole time employment was 31 lakhs and 80 thousands and the sum of Rs. 2 crores, 61 lakhs and 58 thousands was distributed among them as wages. The number of Khadi Bhawans in the State is 497.

Industries other than the Khadi, which are being organised in Bihar are as follows:—

Ghani oil, hand processing of cereals and pulses, leather, gur khandasari, palmgur, non-edible oil and soap.



handmade paper, bee-keeping, pottery, fibre cottage match, carpentry and black-smithy, gobar gas and gram ekai.

The Industries which have made considerable progress are ghani oil, hand processing of cereals and pulse and bee-keeping. The ghani oil industry has 1,100 co-operatives which have produced oil worth Rs. 4,61,12,477 and given employment to 7,844 persons. The hand processing of cereals and pulses has 507 cooperatives which have produced rice worth Rs. 42,69,923 and given employment to 13,706 persons. The bee-keeping industry made a remarkable progress in the year 1964-65. 4,226 bee-keepers produced 1,04,150 kilograms of honey—57 per cent more than the production in year 1963-64.

### SMALL-SCALE INDUSTRIES

Common facility service centres, rural workshop production centres, model workshops and raw materials depots are some of the important schemes which are being implemented for the development of small-scale industries. Production centres consist of a footwear unit at Bhagalpur and a shoe-lace factory at Hajipur. Under model workshop, 4 tanneries, one footwear unit and 3 carpentry units are being started. Ten rural workshop sheds have been sanctioned and they are under various stages of implementation.

**Handloom:** Handloom is the most organised cottage industry in the State employing nearly 10 lakhs of persons annually on two lakh looms.

**Handicrafts:** During the Third Five Year Plan two production centres, in cane and bamboo, one each in paper machine and one centre for bell and brass metal have been set up. A craft museum has been located in Patna for display of handicrafts products. For supply of raw materials to handicrafts workers at reasonable prices, a raw materials depot has been located in Patna. An institute of industrial designs is functioning at Dighas which besides making research in designs, also conducts training courses for artisans and instructional staff of training centres.

**Sericulture:** Bihar is the largest producer of tassar in India and about one lakh persons in this State are engaged in different branches of this industry, from the rearing of silk worm to the finishing of silk fabrics. Incidentally, this industry provides large-scale employment to the Adivasis of Chhotanagpur and Santhal Parganas.

**Technical Education:** At present six engineering colleges and 12 engineering schools and polytechnics are functioning in the State. These institutions now have an annual intake capacity of 1,196 at the degree level and 1,475 at the diploma level. During the Third Five Year Plan the above training capacity was proposed to be expanded further for meeting longer requirements of trained manpower in industry.

In the field of mining education, it is proposed to introduce co-operative courses in mining engineering at the Bihar Institute of Technology, Sindri. Evening mining classes for training out skilled operators for mining industry are also proposed to be set up in Bokaro—Barkakana area.

Three industrial pilot projects and three women's industrial schools have been established for small industries. Four industrial estates at Patna, Ranchi, Biharsharif and Darbhanga were completed. Also, locations have been finalised for setting up eight rural and six urban estates.

### MINERALS (1964)

| Mineral                              | Unit of quantity | Quantity  | Value Rs. '000 |
|--------------------------------------|------------------|-----------|----------------|
| Apatite .. ..                        | Tonnes           | 3,402     | 102            |
| Asbestos .. ..                       | "                | 417       | 51             |
| Bauxite .. ..                        | "                | 336,762   | 2,869          |
| Chinaclay (Non-saleable crude) .. .. | "                | 108,573   | N.A.           |
| Chinaclay (saleable crude) .. ..     | "                | 9,754     | 98             |
| Chinaclay (Processed) .. ..          | "                | 30,522    | 2,053          |
| Chromite .. ..                       | "                | 2,243     | 101            |
| Coal .. ..                           | '000 Tonnes      | 29,580    | 695,160        |
| Copper Ore .. ..                     | Tonnes           | 472,963   | 24,121         |
| Dolomite .. ..                       | "                | 4,956     | 39             |
| Felspar .. ..                        | "                | 328       | 4              |
| Fireclay .. ..                       | "                | 80,105    | 781            |
| Iron Ore .. ..                       | "                | 3,531,651 | 33,116         |
| Kyanite .. ..                        | "                | 33,475    | 6,252          |
| Limestone .. ..                      | "                | 2,128,646 | 14,314         |
| Manganese ore .. ..                  | "                | 24,637    | 687            |
| Mica (crude) .. ..                   | "                | 10,402    | 11,659         |
| Quartz and Silica .. ..              | "                | 21,140    | 353            |
| Steatite .. ..                       | "                | 4,202     | 22             |
| Total value .. ..                    |                  |           | 791,782        |

The districtwise distribution of the minerals (names of districts in brackets) is as follows:—

Apatite (Singhbhum); Asbestos (Singhbhum); Bauxite (Ranchi, Palamau & Monghyr); Chinaclay (Singhbhum, Bhagalpur, Santhalpargana, Ranchi); Chromite (Singhbhum); Coal (Dhanbad, Hazaribagh, Palamau & Santhalparganas); Copper Ore (Singhbhum); Crude Mica (Hazaribagh, Gaya, Monghyr); Dolomite (Singhbhum, Palamau, Shahabad, Hazaribagh); Felspar (Hazaribagh, Gaya, Monghyr); Fire-Clay (Dhanbad, Hazaribagh, Palamau & Santhal Parganas); Iron-Ore (Singhbhum, Palamau); Kyanite (Singhbhum); Limestone (Shahabad, Palamau, Hazaribagh, Singhbhum, Ranchi); Manganese Ore (Singhbhum); Pyrite (Shahabad) Quartz & Silica (Singhbhum, Dhanbad); Steatite (Singhbhum).

The State Government has formed a body known as the Mica Syndicate to improve the mica industry in Bihar. The State Government is also taking steps to set up cement factories, and investigations are in progress for the search of fresh lime stone deposits to feed these proposed factories. The site of the proposed sulphuric acid plant has been shifted to Sindhri from Shahabad.

### AGRICULTURE

Bihar, with 5.71 per cent of the Union's land area, has 10.59 per cent of her population. It is the second most populous State in the country coming next only to Uttar Pradesh. In terms of area, however, Bihar's rank is eight. The rural population is estimated to be 91.56 per cent of the total population of the State. The proportion of total population depending on agriculture is estimated to be 77 per cent.

The total geographical area of the State is estimated to be 42.72 million acres out of which nearly 20.63 million



acres are cultivated. Including double cropping, the total gross cropped area of the State is estimated at 27.43 million acres. The areas under culturable waste and fallow lands are 1.39 and 5.04 million acres respectively. The gross irrigated area of the State was nearly 5.40 million acres.

The acreages (in million acres) under principal crops during 1961-62 are estimated to be :—

Rice 13.05; Wheat 1.63; Barley 0.91; Maize 1.86; Arhar 0.45; Sugarcane 0.41; Tobacco 0.04; Potato 0.20; Jute 0.42; Chillies 0.07.

The productions of important crops during 1961-62 are as shown below (in million tons) :—

Rice 4.90; Wheat 0.39; Barley 0.20; Maize 0.59; Arhar 0.12; Sugarcane 6.75; Tobacco 0.01; Potato 0.63; Jute 0.93 (in million bales); Chillies 0.02.

Sugarcane is mostly grown in the districts of Champaran, Saran, Darbhanga and Muzaffarpur. Jute is cultivated in the districts of Purnea and Saharsa. Tobacco is grown in Muzaffarpur, Monghyr, Purnea and Darbhanga.

Total production and area under cultivation of oilseeds at the end of 1966 respectively were 0.82 lakh tons and 6.50 lakh acres. There were 192 plant protection centres, i.e. one centre for every 3 blocks in the State at the end of 1966. Potato cultivation is expected to cover an area of 2.07 lakh acres by the end of 1967.

The average annual yield of jute at the end of 1966 was 2.5 bales per acre and the acreage under jute was 5 lakh acres. During 1965-66 about 5,000 acres were brought under cotton cultivations. Tobacco was cultivated in 43,000 acres (1965-66) and production was 14,000 tonnes. Sugarcane production was 59.4 lakh tonnes.

Various types of inland fishes are produced in the State. These are mainly carps, cat-fishes, feather backs, murrells etc. The estimated average annual production of fish is nearly 10 lakh mds. which is mostly exported outside the State. The estimated fishing population is a little more than two millions.

### FORESTS (1965-66)

| Main forest produce |    |    |    | Quantity         |
|---------------------|----|----|----|------------------|
| Timber ..           | .. | .. | .. | 1,26,00,000 cft. |
| Fuel ..             | .. | .. | .. | 1,70,00,000 "    |
| Bamboo ..           | .. | .. | .. | 1,70,000 tons    |
| Sabaigrass ..       | .. | .. | .. | 2,39,600 mds.    |

The total area of reserved, protected and unclassed forests in Bihar is 12,147 sq. miles. There are two national parks, 17 games sanctuaries and 227 shooting blocks in the State.

1,36,200 acres of land had been afforested in the first four years of the Third Plan. It was proposed to afforest over 35,000 acres of denuded forest lands during the final year of the Third Plan.

Upto 1964-65, bamboo had been planted over 12,000 acres and eucalyptus over 6,300 acres. During 1965-66, it was proposed to plant bamboo over 3,000 acres and eucalyptus over 3,700 acres.

(See also under "Forests" for other particulars).

### ROAD TRANSPORT CORPORATION

"Sultan Palace", Patna

The total fleet strength at the end of the Third Plan was 1,148 and the number of schedules was 845. The scheduled mileage was 1.02 lakhs. The corporation is spending Rs. 87.26 lakhs in 1967-68 over strengthening the fleet and increasing schedules.

The Corporation serves 14 districts, 3 in North Bihar and 11 in South Bihar.

### IRRIGATION

The water resources available and the present possibilities of utilising the same through various assured irrigation schemes in the three natural divisions of this State, (i) South Bihar Plains; (ii) Chotanagpur and Santhal Parganas; and (iii) North Bihar, have been assessed on the basis of the rain-fall pattern and failure of crops and a master-plan of irrigation in Bihar has been prepared. The irrigation schemes aim at bringing 104 lakh acres of culturable land under assured irrigation.

Major and medium irrigation Schemes are under the control of the Irrigation Department and the River Valley Projects Department.

By the end of Third Plan, total irrigation potential of 27.97 lakh acres was created from medium and State-owned major irrigation schemes against which the utilization was of the order of 26 lakh acres.

Due to the execution of the various irrigation schemes during the First and the Second Five Year Plan, 11 per cent of the total culturable land had been brought under assured irrigation.

By the end of the Third Five Year Plan period, about 5,00,000 acres of land had been reclaimed by drainage of chauras.

The Third Five Year Plan envisaged a total outlay of Rs. 12.82 crores over medium irrigation schemes besides major projects like the Kosi, the Gandak and the Sone Barrage. Four spill over schemes out of six and two new schemes out of nine taken up during the Third Plan for execution were completed during the Plan period. Third Plan expenditure was Rs. 12.71 crores.

In the flood control sector the Third Plan ceiling was to spend Rs. 2.20 crores over Flood Control Schemes excluding the Kosi Project and to protect an additional area of 3.50 lakh acres from ravages of floods. A sum of Rs. 3.17 crores had been spent during the Third Plan and an additional benefit of 3.62 lakh acres has been achieved.

**Badua Dam :** The Rs. 6.28 crore Badua Dam Project in Bhagalpur and Monghyr districts was completed by the end of the Third Plan.

The catchment area of the dam is a little over 185 sq. miles. Its reservoir would have a gross storage capacity of 1,04,000-acre feet of flood and rain water.

### POWER

A provision of Rs. 79.55 crores, including a contribution of Rs. 20.04 crores for the Power programme of the D.V.C., was envisaged in the Third Plan.

The Electricity Board has taken up the installation of two big Power generating stations, one at Barauni of 145 MW and other at Patratu of 400 MW at an estimated cost of Rs. 1,347.35 lakhs and Rs. 4,600 lakhs respectively.



The progress of electrification in the State is given below :—

| Item                           | Achievement at the end of the Second Plan | Achievement during 1961-63 (upto December) |
|--------------------------------|-------------------------------------------|--------------------------------------------|
| 1                              | 2                                         | 6                                          |
| Diesel Stations .. ..          | 11,000 KW                                 | —                                          |
| H. T. Line Miles .. ..         | 7,814                                     | 1,041                                      |
| L. T. Line (Miles) .. ..       | 3,536                                     | 352.5                                      |
| Sub-Station (Nos.) .. ..       | 3,733                                     | 383                                        |
| Tubewells and Surface Wells..  | 4,527                                     | 1,051                                      |
| Towns and Villages Electrified | 1,758                                     | 748                                        |

**Barauni Thermal Station :—**Two 15 MW sets have already been commissioned and most of the erection of equipments for the Third 15 MW set is complete.

**Patratu Thermal Power Station :—**The work on the scheme was started in 1960-61. The total installation will consist of four 50 MW sets and two 100 MW sets.

**Gandak Hydel Project :—**It is proposed to construct a power house with 3 sets of 5 MW each on the Western Canal of the Gandak Project. The Generating Station was however expected to go into commission during the beginning of the 4th Five Year Plan.

(Details are given in the article on "Irrigation".)

The work regarding railway track electrification has now been completed in all respects.

**Maithon-Sultanganj lines :—**To cater to the demand for power in East Bihar area (Monghyr, Bhagalpur and Santhal Parganas), a 120 mile long 132 K.V. transmission line from Maithon to Sultanganj has been constructed.

**Transmission :—**For transmitting the power generated at Barauni, Gandak, Kosi and Patratu stations, it is proposed to have a big net-work of 132 K.V. transmission lines together with 132/38 K. V. Grid substations at various load centres all over the State.

**Rural Electrification :—**It was expected that at the end of the Third Plan about 4,000 towns and villages would have been electrified.

It was estimated that the total requirement of power at the end of the Third Five Year Plan would be 104 MW in North Bihar. Barauni Thermal power station would have a firm capacity of 95 MW by the end of the Third Five Year Plan.

It was expected that by the end of this Plan, the per capita consumption in the State will increase from 24 units to 67.5 units (excluding self generating units), while the corresponding figure for the whole country will be 79 units.

### LAND TENURE

The Bihar Land Reforms Act, 1950 was put into force with effect from 25th September 1950, and now all intermediary interests have been acquired by the Government. The Zamindari system in Bihar now stands completely abolished.

The Government has laid down a sliding scale for the assessment of compensation. Where the net income does not exceed Rs. 500, the compensation payable is twenty times the net income, and where the net income computed exceeds Rs. 1,00,000 it is payable at three times the amount subject to a minimum of Rs. 4 lakhs.

The total compensation is estimated at about Rs. 100 crores except the interest payable on bonds. Of this, a sum of Rs. 14.60 crores has already been paid in bonds up to November 1966 and another sum of Rs. 17.26 crores has also been paid otherwise, either in cash or by adjustment of arrears of various Government dues.

Provision has also been made for ad-interim payment. A total sum of Rs. 17.81 crores has also been paid upto the period ending November 1966 on this account.

The assessment of compensation for mines and minerals has either to be fixed by agreement or by a tribunal appointed for the purpose.

As for funds to finance compensation, the proposal for Zamindari abolition in Bihar has been drawn up as a self-liquidating scheme.

The gross rental from the agricultural land, forests, royalty from mines and other miscellaneous sources in the State is about Rs. 10 crores, which is likely to increase further as a result of reclamation of waste lands, the development as well as expansion of the forests, mines, sairats, etc.

The amount of compensation will be paid in cash or in bonds or partly in cash and partly in bonds. The bonds will be either negotiable and transferable, and will be payable in forty equal instalments, and carry interest at two and a half per cent per annum with effect from the date of issue.

**Waste Land Reclamation :** During the Third Plan period against a target of 75,000 acres, 15,797.46 acres of waste land were reclaimed by tractors and 51,947.72 acres by manual labour. During the Fourth Plan a target of 1,00,000 acres has been fixed for reclamation both by tractors and manual labour at a cost of Rs. 130 lakhs. During the period 15,200 landless families are to be settled in the colonisation blocks and also on isolated plots.

### RELIEF MEASURES

During 1964-65, an expenditure of Rs. 22.88 lakhs was incurred due to famine, drought or other natural calamities.

### COMMUNITY DEVELOPMENT AND PANCHAYATS

The whole State of Bihar has now been covered by Community Development Blocks. In April, 1966, 587 Blocks were in operation. Out of the total of these 587 Blocks, 195 Blocks are functioning in C.D. stage I, 324 in C.D. stage II and 68 in post stage II phases.

As in other States, the Panchayat Raj scheme in the State has also three tiers of local administration—Village Panchayats at the Block level, Panchayat Samities at the Block level and Zila Parishads at the district level.

### CO-OPERATION

Figures as of June 1964.

Number of Cooperative Societies of all types—37,822 ; Membership—23.14 lakhs ; Working capital Rs. 3,958.40 lakhs.

Types of Cooperative Societies and number of each type as on 30th June 1964.

Provincial and Central Cooperative Banks 36 ; other central societies 80 ; Cooperative Farming Societies 300 ; Primary Agricultural Credit Societies 19,568 ; Weavers' Cooperative Societies 1,077 ; Oilmen's Cooperative Societies 1,494 ; Fishermen Cooperative Societies 219 ; Cooperative Stores 403 ; Cane Marketing Unions 72 ; Cane-growers Cooperative Societies 9,098 ; Milk Societies 113 ; Industrial Societies 1,544 ; Marketing Societies 245 ; Other types of societies 3,573.



*Weavers' Societies* : No. of societies as on 30th June, 1964—1,077 ; value of goods produced Rs. 338.44 lakhs.

### LIVESTOCK

According to the Livestock Census 1961, Bihar possesses the following livestock (in million) : Cattle 16.18 ; Buffaloes 3.69 ; Sheep 1.15 ; Goat 8.67 ; Pig 0.80 ; Poultry 12.35.

*Cattle Development* : At present seven Govt. Cattle breeding farms are functioning in the State to produce improved bulls. In addition, 43 key village blocks, 10 large town A.1 centres, 107 artificial insemination centres, three semen banks and two intensive cattle development blocks under crash programme are functioning in the State for upgrading the local cattle, more milk yield and better draught performance. 7,330 improved bulls had been distributed in the Community Development Blocks for natural mating till 1964-65.

*Piggery Development* : There are now 13 Piggery Development Blocks and four Piggery Development Units functioning in the State. Under the crash programme, a pig breeding farm cum bacon factory has been started at Ranchi with ten piggery development blocks around it. 4,030 pigs have been distributed in the C.D. Blocks till 1964-65.

*Sheep & Goat Development* : Two sheep and goat breeding farms are functioning in the State. Besides, 20 Sheep and Wool Extension Centres have been established for the production of quality wool and mutton. 1,363 rams and 2,380 ducks have been distributed in C. D. Blocks till 1964-65 for grading up the local sheep and goat population.

*Poultry Development* : For the development of poultry, birds of improved breeds are being introduced in the State through four range poultry farms, 21 poultry extension centres, 12 poultry development centres, 11 poultry farms at C. D. Block headquarters in the industrial belt, 92 poultry hatching and rearing centres, two intensive poultry development blocks and two intensive egg and poultry production cum marketing centres. A small poultry dressing plant has been started at Patna under the Crash Programme to meet the demand of dressed poultry meat ; 2,76,775 improved birds, 3,04,423 eggs, 1,71,326 day old chicks have been distributed in the State during the Third Plan till the end of 1964-65.

A Duck Extension Centre is also functioning in the State.

*Disease control* : 632 veterinary hospitals and dispensaries including 18 mobile veterinary dispensaries are functioning in the State.

*Other Institutions* : Bihar Veterinary College, Patna ; Veterinary College, Ranchi ; Livestock Research Station, Patna ; Animal Production Research Institute, Pusa ; Stockman Training Centre, Dumraon ; Stockman Training Centre, Gauriakarma ; Extension Training Centre, Bhagalpur.

### HEALTH SERVICES

The following particulars are for 1966 :

Allopathic hospitals 116 ; Allopathic dispensaries 778 ; Primary health centres 587 ; Beds in allopathic hospitals including primary health centres 12,775 ; Ayurvedic and Unani dispensaries 125 ; T. B. Hospitals 1 ; Mental Hospitals 2 ; Beds in T.B. hospitals 1,200 and in Mental hospitals 1,794.

Allopathic doctors 7,992 ; Nurses 396 ; Student Nurses 1,726 ; Lady Health Visitors 230 ; Dais/Nurse-Dais 2,650 (trained) ; Compounders 4,575 ; Ayurvedic and Unani doctors 125 ; Compounders in Government employment 691.

Number of Medical Colleges (Allopathic) 5 ; Dental Colleges 11. Annual intake of the medical college 525.

There is one Govt. sanatorium at Itki, two T.B. Demonstration Centres one at Patna and the other at Darbhanga, one Govt. Hospital at Koilwar, three private sanatoria, two at Ranchi and one at Dehri-on-Sone (Shahabad).

There is a leprosarium at Brahmba near Ranchi with a provision of 150 beds. Two leper asylums one at Gaya and the other at Deoghar with bed capacity of 150 and 100 respectively are also functioning.

Under health schemes the programmes for the eradication of malaria and small-pox, and family planning have been intensified during the year 1962-63. During 1962-63, 490 primary health centres were functioning in the State.

### LABOUR

Number of registered factories as on Dec. 31, 1963 : 9,791 ; number of workers employed : 2,14,878.

Number of employees covered by the Employees State Insurance Scheme as on March 31, 1965 : 55,000.

Number of registered trade unions as on 31st March 1965 : 660.

Number of Employment Exchanges during 1964 : 25 ; Employment Information and Assistance Bureaux 6 ; University Employment Information and Guidance Bureaux 2 ; Vacancies notified 54,637.

25 welfare centres opened till March, 1965 by the State Government provide opportunities for cultural activities and sports and training in crafts for supplementing the industrial income.

### HOUSING SCHEME

The progress of the various Housing Schemes since the inception of the Housing Department is given below :

Name of the scheme, provision, expenditure and physical achievement respectively are as follows. The provision and expenditure are given in rupees lakhs.

Subsidised Industrial Housing Scheme 145.27 ; 144.52 ; 3,307 ; Low-Income Group Housing Scheme 247.48 ; 245.59 ; 3,204 ; Slum Clearance Scheme 31.01 ; 25.56 ; 64 ; Middle-Income Group Housing Scheme 72.15 ; 54.80 ; 270\* ; Land Acquisition and Development Scheme 38.65 ; 38.65 ; 250 acres of land acquired ; Housing Scheme for Scheduled Castes 24.51 ; 21.34 ; 32,319 ; Rental Housing Scheme † 12.20 ; 0.50 ; Housing Scheme for Scheduled Castes engaged in sweeping and scavenging etc. 0.57 ; 0.45 ; 48.

### Third Plan Outlay

(Figures in Rs. lakhs)

Subsidised Industrial Housing Scheme 225.00 ; Low-Income Group Housing Scheme 225.00 ; Village Housing Project Scheme 100.00 ; Slum Clearance Scheme 100.00 ; Land Acquisition and Development Scheme 150.00 ; Middle Income Group Housing Scheme 100.00 ; Housing Scheme for Scheduled Castes, engaged in sweeping, scavenging etc. in Central Sector 17.25 ; Rental Housing Scheme for State Government employees 100.00 ; Housing Scheme for Scheduled Castes in Central Sector 5.00 ; Total 1,022.25.

### EDUCATION

The State Government provides free and compulsory primary education for all children of the age-group 6-11. At the end of 1965-66, there were 44,200 primary schools with 40.59 lakh pupils and 85,411 teachers. The number of pupils in the middle school, in the age-group of 11-14, was 7.22 lakhs. The number of high school attending pupils was 5.09 lakhs.

\* March 31, 1962.

† Started from 1961-62.



At the end of the Third Plan the percentage of the pupils in 6-11 age-group was 55.7.

### POPULATION

(See article on "Population".)

### BHAGALPUR UNIVERSITY

Bhagalpur.

(Founded—1960.)

*Chancellor* : M. Ananthasayanam Ayyangar.

*Vice-Chancellor* : Dr. Bhrigunath Narayan Singh.

*Treasurer* : Bhagwati Kumar Sinha.

*Registrar* : Amarendra Narayan.

Bhagalpur University is a teaching and affiliating University.

The medium of instruction in all the non-language subjects for the Pre-University, 3-year Degree Course, B.A., B.Sc., B.Com., Examinations in Arts, Science and Commerce is Hindi provided that technical terms in English may be used for the present. The medium of instruction in non-language subjects for all other examinations is English.

Provision for teaching upto the Post-Graduate Standard exists in the following subjects:—(a) Hindi (b) Commerce (c) Rural Economics & Cooperation (d) Sociology (e) Labour and Social Welfare (f) Statistics (g) English (h) Political Science (i) Philosophy (j) Mathematics (k) Economics (l) History (m) Psychology (n) Physics (o) Chemistry (p) Botany (q) Zoology. There is also provision for research by scholars for higher degrees under the University. There is also provision for research by scholars for doctorate degrees.

Number of Colleges : *Constituent colleges* 3. *Affiliated* 34. *Technical & Professional* 5.

*Number of students* :—24,233.

### BUDGET ESTIMATES (1965-66)

|             |    |    |    |    |    | Rs.         |
|-------------|----|----|----|----|----|-------------|
| Income      | .. | .. | .. | .. | .. | 1,62,97,285 |
| Expenditure | .. | .. | .. | .. | .. | 1,76,02,060 |

### Grant From The State Government

|               |    |    |    |    |    |               |
|---------------|----|----|----|----|----|---------------|
| Recurring     | .. | .. | .. | .. | .. | Rs. 23,07,371 |
| Non-Recurring | .. | .. | .. | .. | .. | Rs. 11,54,161 |

### UNIVERSITY OF BIHAR

Muzaffarpur.

Founded 1952, Reconstituted in July 1960.

*Chancellor* : M. Ananthasayanam Ayyangar.

*Vice-Chancellor* : B. M. K. Sinha.

*Treasurer* : N. P. Sinha.

*Registrar* : Dr. K. S. Varma.

The Bihar University is a teaching-cum-affiliating University.

Medium of instruction : Hindi upto Bachelor's degree in the Faculties of Arts, Science and Commerce.

Number of colleges affiliated : *Constituent Colleges* : 3 ; *Technical and Professional Colleges* : 6 ; *Affiliated Colleges* : 35.

*Number of students* : 30,364 (1963-64).

*Income* (1965-66 budget estimates) : Rs. 1,46,10,514.

### MAGADH UNIVERSITY

Bodh Gaya

(Camp-Gaya, Bihar)

*Nature* : Teaching-cum-affiliating University.

*Courses provided at present and Degree* :—Pre-University Course in English, Hindi, Urdu and Bengali Composition. Principal Hindi, Urdu and Bengali, Sanskrit, Economics, Civics, Logic, Psychology, Pali, Persian, Geography, Domestic Science, Mathematics, Chemistry, Physics, and Zoology.

3 Year Degree Course in English, Hindi, Urdu, Bengali Composition. Principal Hindi, Urdu and Bengali, Sanskrit, Economics, Political Science, Philosophy, Psychology, Pali, Persian, Geography, Domestic Science, Mathematics, Chemistry, Physics, Geology, Biology, Botany and Zoology.

Honours Courses in English, Hindi, Urdu, Sanskrit, Economics, Political Science, Philosophy, Pali, Geography, Mathematics, History, Botany, Zoology, Chemistry, Physics & Psychology.

*Technical Degree Course* : B.V.Sc. and M.V.Sc. Courses in Veterinary Science,

Post-Graduate Course in English, Hindi, Economics, Mathematics, History, Philosophy, Physics, Chemistry, Botany, Zoology, Geography, Sanskrit and Prakrit, Political Science, Ancient Indian & Asian Studies, Applied Economics, Commerce and Veterinary Science.

*Courses in Law up to B. L. Degree* : *University Departments and Constituent College* : Post-graduate departments in English, Hindi, Economics, Mathematics, History, Philosophy, Sanskrit and Prakrit, Political Science, Ancient Indian & Asian Studies, Applied Economics and Commerce, Geography, Physics, Chemistry, Botany and Zoology.

Medium of Instruction :—English in Post-Graduate Classes and Hindi up to Degree Standard.

*Number of Students* : 21,195.

*Chancellor* : Ananthasayanam Ayyangar, Governor of Bihar.

*Vice-Chancellor* : Zawar Hussain.

*Registrar* : K. P. Sinha.

### BUDGET (1966-67)

*Receipts*: Rs. 1,12,09,181 ; *Expenditure*: Rs. 1,17,76,210.

### KAMESHWARA SINGH DARBHANGA SANSKRIT UNIVERSITY

Camp 4, Circular Road, Patna.

(Founded in 1961.)

*Chancellor* : Governor of Bihar.

*Vice-Chancellor* : Col. S. V. Sohoni.

*Registrar* : D. P. Pandeya.

The University provides teaching in all branches of Sanskrit learning from Prathma up to Acharya Examinations, which is the highest standard of teaching. Sanskrit is the official language of the University.

The subjects taught are :—Veda, Darshan, Vyakaran, Jyotish, Dharmashastra, Puran, Arthashastra, Sahitya and Ayurveda etc., etc. along with a comparative study of these with the advancement of modern allied subjects.

It provides higher researches in all the abovementioned branches of Sanskrit learning.



Number of Colleges : Government Colleges 4, Affiliated Colleges 12. Besides, 400 Sanskrit Institutions teaching up to the highest standard from the beginning are affiliated to the University.

Number of Students : 10,000.

It awards degrees of Shastri, Acharyas, which are equivalent to post-graduate degrees of B.A. and M.A. in the modern University and also the research degrees of Ph.D., D.Litt.

### PATNA UNIVERSITY

Patna 5.

*Chancellor* : M. Ananthasayanam Ayyangar, Governor of Bihar.

*Vice-Chancellor* : Dr. K. K. Datta.

*Treasurer* : M. P. Sinha.

*Registrar* : Sita Ram Prasad.

*No. of Constituent Colleges* : 10.

*University Departments* : Arts, Science, Medicine, Commerce, Education and Law.

Number of teachers in the University during 1965-66 : 700.

Number of students in the University : 11,479 (Men 8,687 ; Women 2,792).

Hindi is the medium of instruction up to the Pass course of the Three-Year Degree course in Arts, Science and Commerce and Bachelor of Education examinations. Hindi or English is the medium of instruction in the Honours course and Master's examinations in Arts, Commerce and Education. English is the medium of instruction for the Master's degree in the Faculty of Science and all the exa-

minations in the Faculties of Law, Engineering and Medicine.

### BUDGET (1965-66)

Income : Rs. 1,45,44,506. (This includes income from Government grant also). Recurring Rs. 99,92,599 and non-recurring Rs. 45,51,907.

Expenditure : Rs. 1,64,58,063.

### RANCHI UNIVERSITY, RANCHI

(Founded in July, 1960)

*Chancellor* : M. Ananthasayanam Ayyangar.

*Vice-Chancellor* : Col. A. F. Markham.

*Treasurer* : H. K. Lal.

*Registrar* : Dr. M. P. Gupta.

The Ranchi University is a teaching-cum-affiliating University.

Medium of Instruction : Hindi upto Bachelor's degree in Arts, Science and Commerce. In the Honours and Post-graduate classes and rest of the Faculty the medium of instruction is English.

Number of Colleges affiliated : Constituent Colleges : Four ; Technical and Professional Colleges : Ten ; Other Affiliated Colleges : 21.

Number of students : 25,357 (1965-66).

Income : Rs. 1,37,73,421 (1965-66).

Expenditure : Rs. 1,16,33,720 (1965-66).

Grant from the State Government and U.G.C. Recurring Rs. 39,87,181 (1965-66). Non-recurring Rs. 10,38,402 (1965-66).

## MADRAS STATE

**CAPITAL** : Madras. Area : 50,331 sq. miles ; Population : 33,686,953 (1961 Census) (males 16,910,978 ; females 16,775,975). Percentage of increase 1951-61 : 11.85. Density per sq. mile 669. Literacy 31.4 per cent—males 44.5 per cent ; females 18.2 per cent. Sex ratio : 992 females per 1,000 males.

No. of Villages in the State : 14,742 ; Villages uninhabited : 615 ; No. of towns in the State : 338.

Districts with District headquarters in brackets : Madras (Madras). Chingleput (Saidapet), South Arcot (Cuddalore), Thanjavur (Thanjavur), Madurai (Madurai), Ramanathapuram (Tallakulam at Madurai), Tirunelveli (Tirunelveli), North Arcot (Vellore), Salem (Salem), Tiruchirapalli (Tiruchirapalli), Coimbatore (Coimbatore), Nilgiris (Ootacamund), Kanyakumari (Nagercoil).

The bifurcation of Salem District into Salem and Dharmapuri Districts has been effected for administrative convenience with effect from May 31, 1965.

Languages spoken : Tamil, Malayalam, Telugu. The vast majority of the people is of the Dravidian race.

There are on the whole 375 Panchayat Union Councils. The total number of Panchayats in the State is 12,418.

**Local Administration** : The Units of Local Administration comprise (i) Madras City Municipal Corporation for Madras District, (ii) Municipalities for major towns : 64, (iii) Townships for special localities like Mettur, Bhavani-sagar, Courtallam and Kodaikanal, which are industrial

areas, institutional or labour colonies or health resorts, (iv) Panchayat Unions at Development Block Level and (v) Panchayats for minor towns and villages. The Madras City Municipal Corporation Act 1919 governs the Madras Municipal Corporation in the Madras District and the Madras Municipalities Act governs the Municipalities in other Districts. The townships are governed by special provisions.

**Official Language** : Tamil is now the official language of correspondence in all the Departments of Government upto the district level.

**Judiciary** : Madras State has completely separated the judiciary from the executive.

### FORESTS (1965-66)

Area of reserved forests 17,236 Sq. kms. ; Area of reserved forests to total land area of State 13.2 per cent ; Area of reserved lands 3834 Sq. kms. ; Output of timber (64-65) 36,340 cubic metres ; Quantity of fuel extracted 3,43,092 tonnes ; Quantity of sandal wood extracted (64-65) 1,400 tonnes.

### LIVESTOCK (1964)

Cattle 11,747,365 ; Buffaloes 3,138,672 ; Sheep 7,344,160 ; Goats 3,295,322 ; Pigs 512,649 ; Other livestock (Mules, donkeys, camels, horses, etc. 147,056 ; Total livestock 26,185,224.

Fowls 11,458,291 ; Ducks 494,007 ; Others 139,392 ; Total Poultry 12,091,690.



## INDUSTRIES

Chief Industries in this State are textiles, general and electrical engineering, automobile, sugar, cement, tobacco including bidi and cigar manufacture, bricks and tiles, tanning, glassware, chemicals, bicycles, leather and footwear and manufacture of utensils.

### Cotton Textiles

*Co-operative Sector* : (As on December 1965) No. of Co-operative Spinning mills : 9 ; Capital outlay : Rs. 6.75 crores ; No. of spindles : 1.60 lakh ; Annual production : 66,000 bales.

*Private Sector* : No. of textile mills : 168 ; No. of spindles : 3.6 million ; No. of looms : 9,056 ; Production of yarn : 172.99 m. kgs. ; Staple fibre yarn : 14.15 m. kgs.

### Sugar

There are 4 Co-operative sugar mills, with a crushing capacity of 3,400 tons of cane per day and 12 factories with the private sector with a capacity of 18,950 per day respectively in the State.

### Cement

Cement plant, under the State sector is designed to produce 1,200 tons of portland cement per day, near Rajapalayam at a cost of Rs. 600 lakhs.

The private sector cement plants produce 360 tons of cement per day.

### Bicycles

The bicycle unit turned out 298,614 cycles during 1965. There are four factories to produce cycle parts in the City.

### Fertilizers

There are 6 units and 4 turned out 136,389 tonnes of fertilizers during 1965.

*Caustic Soda* : The two factories produced 56,825 tonnes in the year 1965.

## EMPLOYMENT IN INDUSTRIAL SECTOR

The total number of factories registered and notified under the Factories Act 1948 in commission at the end of the year 1965 was 6,840 and the average daily number of workers employed in them was 3,68,967.

*Handloom* : (Co-operative Societies) Number of Cotton looms in the Co-operative Societies in the State during 1964-65 was 2,30,000. There were 1,082 weavers' Co-operative Societies and the number of weavers was 2,31,401. These Co-operative Societies together produced cloth worth Rs. 13.8 crores and sales amounted to Rs. 13.5 crores. The wages paid was Rs. 380 lakhs.

In the field of large scale Industry, public undertakings in the Central Sector figure prominently. The aggregate capital investment in these projects up to the end of 1965 is of the order of Rs. 195 crores. During the year 1965, all the projects have progressed according to schedule.

*Integral Coach Factory* : Established in 1955, it has reached its full production capacity of 750 coaches per year on double shift, and has now embarked on diversification of its production pattern.

*Neyveli Lignite Project* : The biggest industrial venture of the Central Sector in the State, the integrated Neyveli Lignite Project, involves a capital outlay of Rs. 160 crores. This project is designed to mine 3.5 million tons of lignite per annum, to be raised to 5.5 million tons under the

first expansion and then later, to 6.3 million tons. This lignite is to be used for : (i) generating power of 300 MW initially which will be raised to 400 MW shortly and then to 600 MW ; (ii) the production of 1.52 lakh tons of urea per annum ; and (iii) for the manufacture of 3.63 lakh tonnes of carbonised lignettes.

Besides, a number of other by-products, like chartints, fuel-oil, kerosene and carbolic acid will also be produced.

*Hindustan Photo Films* : Designed to produce various types of photographic materials, this project is being set up at Ootacamund with French collaboration at a cost of Rs. 11 crores including the township. All the civil works in respect of the factory building have been practically completed and the erection work of the plant and its equipment is at an advanced stage.

*Hindustan Teleprinters* : Planned to produce 1,300 teleprinters per year in its first stage, the factory has already outgrown its capacity and has taken up plans for expansion and diversification. It is now geared up to produce 2,700 units, per year. Between April and November 1965, the Company has produced 1,640 units of teleprinters and has provided employment to over 600 persons.

*High Pressure Boiler Plant* : Involving a capital outlay of roughly Rs. 25 crores, this Project is planned to manufacture, while in full production, 12 high pressure boilers for equivalent electrical output of 60 MW each, 1,800 tonnes of high pressure valves and some pressure vessels for other industries. Manufacture of jigs and fixtures was taken up from May 1965 and the factory started production of high pressure valves from October 1965. Work has also commenced on the manufacture of some of the components for the two high pressure boilers that have been taken up for construction by the factory. These two boilers are expected to be completed by the middle of 1967.

The Heavy vehicles factory at Avadi, and the Small Arms Factory near Tiruchirapalli have started production.

*Surgical Instruments Project* : The factory was commissioned on 1st September 1965. During 1965-66, 35 items of surgical instruments were being taken up for manufacture.

*Oil Refinery* : The Oil refinery is to go on stream by the end of 1968. The refinery will have an initial capacity of 2.5 million tons of crude oil per year, to be expanded later to 3.5 million tons.

*Continuous Cooling Plant* : To manufacture steel billets required by the re-rolling mills, this plant will have a capacity of 50,000 tons of steel billets per annum initially and one lakh tons per annum in the second stage, with facilities to expand to 2 lakh tons ultimately.

*Tamilnad Cement Factory* : This plant, designed to produce 1,200 tons of portland cement per day, is being set up at Alangulam near Rajapalayam at a cost of Rs. 600 lakhs.

*Aluminium Company* : The Madras Aluminium Company at Mettur, started production in May 1965 and till December 1965, about 6,000 tons of ingots have been produced. The factory has a capacity of 10,000 tons of Aluminium ingots per annum, to be expanded to 20,000 tons shortly.

Madras continues to maintain its lead in the automobile industry and automobile ancillary industry.

*Industrial Estates* : There were 21 industrial estates having 431 units in the State. During 1965-66 only 372 units were working, employing 11,077 persons.



## SMALL SCALE INDUSTRIES

The State's Programme for the development of Small Scale Industries, assists small industrialists in different ways like technical advice in better utilization of tools and machines, other facilities, etc.

During 1964-65, 29 production centres and 16 service centres were effectively functioning. The total value of production in these 45 units during the year was Rs. 327.83 lakhs.

## MINES AND MINERALS

Output of Minerals in Madras State — 1964

| Minerals         | District       | Quantity in tonnes | Value<br>Rs. P. |
|------------------|----------------|--------------------|-----------------|
| Gypsum .. ..     | Tirunelveli    | 3,776.00           | 72,738.00       |
|                  | Ramanathapuram | 7,660.33           | 1,14,905.00     |
| Bauxite .. ..    | Salem          | 28,712.53          | 3,58,906.63     |
| Magnesite .. ..  | Salem          | 2,01,344.00        | 49,76,974.00    |
| Limestone.. ..   | Salem          | 2,06,289.25        | 16,09,272.84    |
|                  | Tirunelveli    | 6,70,025.52        | 5,02,519.14     |
|                  | Ramanathapuram | 1,91,650.35        | N.A.            |
| Mica .. ..       | Nilgiris       | 235 mds            | 172.00          |
| Felspar .. ..    | Salem          | 982.00             | 8,180.00        |
| Soapstone .. ..  | Salem          | 109.00             | 3,972.97        |
| Garnetsand .. .. | Tirunelveli    | 600.00             | 4,800.00        |
| Iron ore .. ..   | Nilgiris       | 7,491.45           | N.A.            |

## KHADI

Madras has been pioneer in the development of khadi industry. The most important organizational change has been the formation of the Madras State Khadi and Village Industries Board on a statutory basis.

The production and value of Khadi during 1965-66 were 40,98,200 metres and Rs. 152,69,334 respectively. Employment during 1964-65 was 1,11,182 spinners and 4,293 weavers. The wages for 1964-65 amounted to Rs. 70,30,882.

## AGRICULTURE

The figures furnished below relate to the year 1964-65 and are provisional.

Total area cultivated (Gross area): 17.7 million acres (7.18 million hectares); Total area irrigated (Net area) 6.0 million acres (2.4 million hectares) or 40.2 per cent of the net area cultivated; gross area irrigated 8.1 million acres (3.3 million hectares) or 45.8 per cent of the gross area cultivated. Net area grown: 14.91 million acres (6.03 million hectares).

*Classification of Area (hectares):* Forests 1,885,890; Barren and uncultivable land 889,211; Land put to non-agricultural uses 1,342,872; Cultivable Waste 689,878; Permanent Pastures and other grazing lands 346,049; Land under miscellaneous tree crops and groves not included in the net area grown 277,840; Current fallows 941,833; Other fallow lands 609,408; Net area grown 6,031,862; Area of the State according to village papers 13,014,843.

Statement showing the area in hectares and yield in tonnes respectively under important food crops in 1964-65 was:

Paddy (Rice) 2,637,700; 4,048,300; Cholam, Cumbu and Maize 1,238,290; 847,985; Millets 520,977; 405,872; Ragi 338,200; 338,700; Pulses 411,460; 107,670; Sugar-cane 83,160; 695,920; Potatoes 6,510; 40,720; Sweet Potatoes 3,260; 32,640; Tapioca 25,000; 242,920.

(P) Provisional.

The State's total input of food grains (cereals and pulses) in 1964-65 was 57.49 lakh metric tons.

The principal commercial crops of the State showing area in hectares and yield in tonnes respectively under cultivation in 1964-65 were: Groundnut 929,400; 950,690; Cotton 424,270; 430,400 (bales of 180 kg. limit); Gingelly 120,400; 38,480; Tobacco 17,000; 24,890; Coconut 78,390; 737,557 (in 1,000 units); Coffee 19,798 (P); 4,650 (P); Tea 27,920 (P); 25,920 (P); Pepper 210; 50; Rubber 3,368; 3,020.

Production of rice in 1964-65 was 4,048,300 metric tons.

Bananas, mangoes and citrus are the most important fruit crops of the State. The area under bananas was 36,790 hectares with the yield of 679,800 tonnes.

**Cotton and Oil Seeds:** Production of cotton during the year 1964-65 was 4.30 lakh bales of 180 Kg. lint, and that of oil seeds (groundnut gingelly and castor) for the same period was 9.94 lakh tonnes.

**Plantation Schemes:** The important schemes of economic plantations undertaken during the Third Plan period relate to rubber plantations in Kanyakumari district, bamboo plantations in Coimbatore district and quick growing fuel plantations in the districts of Chingleput, South Arcot and North Arcot. Rubber plantation of 829 acres (1964-65) 820 acres (1965-66) bamboo plantations of 1,097 acres (1964-65), 3,988 acres (1965-66) were covered by the scheme.

## Dairy and Milk Project

The total quantity of milk in litres and value in rupees respectively handled during the period from 1st April 1964 — 31st March 1965: Cow's Milk 33,82,462; 27,73,618.84 (P); Buffalo's Milk 42,49,749; 62,236.45 (P); Toned Milk 12,66,659; 7,09,329.04 (P).

## Fisheries

Estimated landings of inland fish from the various inland waters in 1965-66: 86,554.503 tonnes of the value of Rs. 485.56 lakhs. Estimated Marine fish landings for



the State 1965-66 : 1,65,395.640 tonnes of the value of Rs. 1,859.04 lakhs.

### IRRIGATION

*Source and area irrigated (Hectares) :* Government Canals 868,029; Private canals 4,649; Tanks 956,438; Tube wells 8,543; Wells, sole irrigation 596,729; Other sources i.e. springs, channels etc. 44,818; Total net area irrigated 2,479,206.

Total Land Area of State 32.19 mil. acres; Cultivated area in the State 18.5 mil. acres; Total area which is expected to be irrigated when the major and medium projects proposed under the Third Five-Year Plan are completed 6.120 mil. acres; Anticipated extra food production on completion of irrigation projects taken up during the Third Plan 2.60 lakh tons of foodgrains; Total investment proposed in Third Plan Rs. 2,742 lakhs.

### Major Projects

Major Projects with location of Districts, estimated cost in Rs. lakhs and area benefited in acres in brackets respectively are: Lower Bhavani Project (Coimbatore and Tiruchi Districts) 1,020 (1,95,000); Mettur Canals Scheme (Salem and Coimbatore Districts) 192.91 (45,000); Manimuthar Reservoir Project (Tirunelveli District) 505 (1,03,000); Franiar Reservoir Project (105.89) Headwork of the Project transferred to Andhra State; Amravathi Reservoir Project (Coimbatore District) 329.76 (51,000); Vaigai Reservoir (Madurai District) 330.00 (21,600); Sathanur Reservoir Project (North and South Arcot Districts) 258 (21,000); Krishnagiri Reservoir Project (Salem District) 202.43 (8,000); New Kathalai High Level Canal 224.58 (181,000); Pullambadi Canal Scheme 205.89 (20,000); Vidur Project 88.94 (2,000) Pondicherry figures not available; Neyyar II Stage 90.30 (2,500).

### Irrigation Schemes — Third Five Year Plan

| Sl. No. | Project                                        | Cost of Project as approved<br>(Rs. in lakhs) | Revised Estimate | Year of opening Project | Target                              |                                       | Actual area irrigated                                                                                                                                    |               | Remarks            |
|---------|------------------------------------------------|-----------------------------------------------|------------------|-------------------------|-------------------------------------|---------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|--------------------|
|         |                                                |                                               |                  |                         | New                                 | Stabilization                         | New                                                                                                                                                      | Stabilization |                    |
|         |                                                |                                               |                  |                         |                                     |                                       | (in lakhs of acres)                                                                                                                                      |               |                    |
| 1.      | Improvement to Palar Anicut and Channels .. .. | 48.10                                         | ..               | 1964-65                 | 0.03                                | ..                                    | Due to the improvements effected, the tanks in Palar Anicut system received copious supplies during 1964-65. The actual benefits have not been assessed. |               |                    |
| 2.      | Sathanut Project II Stage ..                   | 55.00                                         | 60.00            | 1964-65                 | 0.05<br>(Under Anicut)              | ..                                    | 0.05                                                                                                                                                     | ..            |                    |
| 3.      | Chittoor Pattanamakal Scheme ..                | 680.00                                        | 667.00           | ..                      | 0.15<br>in K. Kumari<br>Tirunelveli | Tirukoilur<br>and 0.17 in<br>District | ..                                                                                                                                                       | ..            | Under Execution    |
| 4.      | Gomukhinadhi Scheme .. ..                      | 87.00                                         | 125.00           | 1964-65                 | 0.5                                 | ..                                    | 0.004                                                                                                                                                    | ..            | Project completed  |
| 5.      | Marjalar Project ..                            | 65.80                                         | ..               | ..                      | 0.012                               | 0.032                                 | ..                                                                                                                                                       | ..            | Under Execution    |
| 6.      | Ramanadhi Scheme ..                            | 87.00                                         | ..               | ..                      | 0.005                               | 0.015                                 | ..                                                                                                                                                       | ..            | Not yet sanctioned |
| 7.      | Gatana Scheme ..                               | 158.00                                        | ..               | ..                      | 0.01                                | 0.071                                 | ..                                                                                                                                                       | ..            | —do.—              |
| 8.      | Modernising Vagai Channel ..                   | 395.00                                        | ..               | ..                      | 0.14                                | 0.95                                  | ..                                                                                                                                                       | ..            | —do.—              |
| 9.      | Manimuktha Nadhi Scheme .. ..                  | 91.00                                         | ..               | ..                      | 0.04                                | 0.002                                 | ..                                                                                                                                                       | ..            | —do.—              |

### Minor Irrigation

There are 33,000 minor irrigation sources in the State out of which 27,000 are tanks and 6,000 are spring channels. Out of these sources about 30,000 have ayacut of more than 10 acres.

The number of irrigation pump sets electrified and the area irrigated as on March 31, 1965 respectively was 2,25,362 and 9,89,600 acres.

Third Plan Provision (Rs. in lakhs) 12,80,88. About 5,000 minor irrigation works were to be renovated during the Third Plan. Up to March 1966, 3,415 works had been renovated at a cost of Rs. 800 lakhs.

*Desilting-cum-reclamation :* As against the Third Plan Programme of covering 4,000 acres of new area and 16,000 acres of foreshore reclamation, the anticipated coverage by the end of the Third Plan period was expected to be 2,000 acres of new area and 1,360 acres of foreshore lands.

### ELECTRICITY

Madras State ranks first in India in hydro-electric development, in the use of electric power for irrigation purposes and by way of number of consumers.

Total capital outlay of the power schemes as on 31-12-1965 Rs. 253.28 crores: Gross Revenue (Revenue



receipts) Rs. 3,252 lakhs; Revenue expenses Rs. 2,026 lakhs; Capital Expenditure Rs. 2,370 lakhs.

Installed capacity (as on 31-12-66) of different hydro-electric projects : Pykara 70,200 KW ; Mayar 36,000 KW ; Mettur 40,000 KW ; Papanasam 28,000 KW ; Periar 1,05,000 KW ; Kundah PH I 60,000 KW ; Kundah PH II 1,75,000 KW ; Kundah PH III 1,20,000 KW ; Kundah PH IV 50,000 KW ; Kundah PH V 20,000 KW ; Mettur Tunnel PH 2,00,000 KW ; Madurai 14,000 KW ; Madras 87,500 KW ; Senkanpatty PH 35,000 KW ; Periyar II Stage 30,000 KW ; Madras grid 10,70,700 KW ; Neyveli (Centrally Administered) 300,000 KW ; Total 1,370,000 KW ; Power Demand 845 MW.

**Rural Electrification :** Number of towns and villages and hamlets electrified as on 31-12-1965 — 2,650.

*Number of connections given :* Agricultural pumpsets — 33,404 ; Industry — 1466·175 M. Units ; Domestic — 119,149.

39,569 Kilometers of high tension transmission lines of voltages varying from 11,000 to 230,000 and 73,226 kilometers of low tension distribution lines and 17,114 distribution stations.

## ROADS

*National Highways :*

*Surfaced & Unsurfaced roads in miles :* National Highways 1,091 ; — ; State Highways 1,096 ; 2 ; All other roads 23,465 ; 12,322 ; Total 25,652 ; 12,324.

The outlay made by the Government of India for the development of National Highways in this State in the Third Plan was Rs. 200 lakhs against which the Government of India allotted Rs. 137 lakhs. The actual expenditure was expected to be Rs. 152 lakhs.

## TRANSPORT

The Bus Transport in Madras City is Government owned. Position in the year 1964-65 : Number of routes served by the Department : 153 ; Total daily mileage : 42,764,866 ; Number of Suburban routes : 28 ; Number of long distance routes : 39 ; Fleet strength : 1,076 ; Number of passengers : 250,695,424 ; Collections (Sale of tickets) : Rs. 5,67,90,790.

## CO-OPERATION

The Third Plan outlay for Co-operation was Rs. 471·06 lakhs and the allotment for 1965-66 was Rs. 91·25 lakhs. During the Third Plan 76 joint farming societies were organized.

About 936 societies have been organized. 2,200 village credit societies were selected under the revitalization scheme. 13 land mortgage banks have been organized. The co-operatives would cover 88 per cent of the rural population (according to 1961 census) and issue loans to the extend of Rs. 50 crores (short term, medium term and long term) by the end of 1965-66.

## EDUCATION (1965-66)

*General :* No. of Primary Schools 30,580 ; No. of Pupils 50 lakhs ; No. of High Schools 2,235 ; No. of pupils 12·12 lakhs ; Expenditure on Education Rs. 38 crores ; No. of students benefited by mid-day meals 16·03 lakhs ; No. of schools covered by the scheme 28,841 ; Government expenditure Rs. 167 lakhs ; Public contribution Rs. 112 lakhs.

Teacher Training Schools for Men 76 ; Intake 12,794 ; Training schools for Women 63 ; Intake 8,258.

Teacher Training Colleges (1964-65) : 19 ; Intake 1,900.

Schools for Handicapped (1964-65) : 14 ; Intake 1,500.

University Education (1965-66) Universities 3.

Colleges for general Education (Arts and Science) 93 ; Enrolment 75,013.

*Technical Education :* No. of Engineering Colleges 12 ; Intake 2,167 ; No. of Polytechnics 35 ; Intake 4,792.

*Medical Education :* No. of Medical Colleges 7 ; Intake per annum 936.

*Medical Education :* Veterinary College 7 ; Intake per annum 936 ; Intake of Assistants in Training College 250.

*Agricultural Education :* Intake of Students in Coimbatore College 162 ; Intake of Students in Annamalai University 75 ; Intake in Madurai Agricultural College 80.

## Fourth Plan

The outlay of the Fourth Five Year Plan of Madras State is Rs. 564 crores inclusive of the Central assistance of Rs. 250 crores.

The State's Fourth Five Year Plan fully reflects the current national awareness of the overriding importance of agricultural production. The outlay of agricultural and allied programmes will be of the order of Rs. 233 crores. The Plan seeks to create an additional production potential of the order of 20 lakh tonnes over a base of 60 lakh tonnes of foodgrains.

The allocation for power is about Rs. 175 crores. The installed capacity will be stepped up by 680 MW. The Parambikulam Aliyar Hydro-electric scheme and the Kodayar hydro-electric scheme will be completed by the end of the Fourth Plan period.

The outlay on industrial programme is to be augmented to Rs. 44 crores. Wide dispersal of development of small scale industries will be secured through emphasis on rural industrial estates.

## THE CORPORATION

Ripon Buildings,  
Madras 3.

Mayor, R. Sambandam.

Dy. Mayor, T. Krishnamurthy.

Commissioner, J. A. Amba Sankar, I.A.S.

Total number of elected members : 100.

Total number of co-opted members : 4.

Total electorate : 9,48,779.

Party position in the Corporation Council : Dravida Munnetra Kazhagam 54 ; Congress Municipal Party 40 ; Muslim League Municipal Party 5 ; Independents 4 ; Communist 1.

## BUDGET 1965-66

|                     |                 |
|---------------------|-----------------|
| Revenue .. .. .     | Rs. 7,13,72,840 |
| Expenditure .. .. . | Rs. 7,27,89,720 |

## COIMBATORE DISTRICT

Dt. Hqrs. : Coimbatore.

The Coimbatore District, next in importance to the City of Madras, has an area covering 6,024 square miles with a population of 3,154,296. It is one of the major districts in Tamil Nad. The Anamallais (elephant hills) which form part of the District in the south have large coffee and tea plantations covering 40,000 acres and employing 40,000 workers whose annual wage bill is nearly Rs. 3 crores. Some 35 million lbs. of tea and 1,000



tons of coffee are produced. There are also cardamom and cinchona plantations. The finest teak in India is produced on these hills.

The work on the Rs. 40 crore Parambikulam Aliyar multi-purpose project is in full swing. It is the best example of interstate cooperation in the South made possible by an agreement between Madras and Kerala for utilising the waters of the west-flowing Parambikulam and Sholayar rivers at the same time guaranteeing the existing irrigation in Kerala. This multi-valley project is a masterpiece of integration of waters flowing through different valleys by the construction of 8 reservoirs—6 in the Anamalais and 2 in the plains—through 12½ miles of inter-connecting tunnels. A special feature of the project is that irrigation is subsidised by power. The power part consists of producing 180,000 kW. in five stations utilising the drops available.

Coimbatore, the District Headquarters, is the largest industrial cit in Madras State. The district has 71 textile mills, 57 of which are spinning mills and the rest weaving mills.

There are also a number of iron foundries, Coimbatore being the first in India to manufacture pump-sets for irrigation. A medium sized blast furnace is in operation. A cement factory of the A.C.C. produces 1,500 tons a day.

A branch of the Asbestos Cements Ltd. is also located at Podanur.

A 22-lakh synthetic gem factory, the first of its kind in Asia, was opened in 1957. The factory which is an Indo-Swiss venture, hopes to meet the full demand for synthetic gems, which are now being imported, producing in the first year alone gems valued at Rs. 20 lakhs.

The finishing part is done at Tiruchirapalli and Jaipur by cottage industry groups.

A Rs. 10-crore Indo-Italian venture, South India Viscose Ltd., manufacturing rayon pulp, four miles from Mettupalayam went into production in 1961.

Another Rs. ten-crore venture with Italian aid is an aluminium factory at Mettur on the banks of Cauvery. A third is an Indo-American Venture—Rs. 10-crore paper factory at Erode.

Two factories are engaged in the production of textile machinery and parts. The ultimate plan of the factories is to manufacture all modern equipment required for textile industry.

Three factories in Coimbatore produce nut and plastic buttons.

The Central Govt. has a plan to build an industrial estate on the northern outskirts of the city. A Security printing press is also under construction at Naickenpalayam.

The Regional Agricultural Research Institute caters to the needs of Madras, Kerala, Mysore and Andhra Pradesh and is open to 40 postgraduates. The institute awards the highest degrees of M.Sc. (Ag.) and Ph.D. to successful candidates.

Other specialised institutions are the Union Government's Sugarcane Breeding Institute, the Southern Herbarium of the Botanical Survey of India and the Regional Research Station of the Indian Council of Agricultural Research for cotton, millets and oilseeds.

## EDUCATIONAL INSTITUTIONS IN MADRAS STATE

### UNIVERSITY OF MADRAS

Chepauk, Madras 5.

This University, founded in 1857, was reorganized in 1923 as a Teaching and Residential University, and it continues to exercise control over the quality of the teaching given by its constituent and affiliated colleges. The Vice-Chancellor is a whole-time salaried officer. The authorities of the University include a Senate, Syndicate, Academic Council, Faculties and Boards of Studies.

Laboratories for research in Zoology, Botany, Physics, Geology, Organic Chemistry, Biochemistry, Physical Chemistry and Textile and Chemical Technology, are provided. There are also Departments of study and research in the following subjects: Anthropology, Indian History and Archaeology, Indian Economics, Indian Philosophy, Psychology, Mathematics, Statistics, Geography, Politics and Public Administration, Constitutional and International Law, Business Administration, Sanskrit, Tamil, Telugu, Kannada, Malayalam, Hindi, Arabic, Persian and Urdu, and Indian Music.

*Degrees:* B.A., M.A., M.Litt., Ph.D., D.Litt., B.L., M.L., B.Sc., M.Sc. (by Exam.), M.Sc. (by thesis and Exam.), Ph.D., D.Sc., B.E., M.Sc., Engg., B.Com., M.Com., B.Sc. (Ag.), M.Sc. (Ag.), B.V.Sc., M.V.Sc., M.B., B.S., M.D., M.S., B.S.Sc., B. Pharm., B.D.S., B.Sc. (Nursing), B.Sc. (Tech.), B. Tech., M. Tech., B.T., M.Ed., B.Sc., Home Science, M.Sc., Home Science, B.Lib.Sc., B.Arch., M.A. Social Work.

*Diplomas:* Gynaecology and Obstetrics, Venereology, Dermatology, Ophthalmology, Oto-Rhino-Laryngology, Radiology, Orthopaedics, Tuberculosis, Child Health,

Clinical Pathology, Anaesthesia, Radio Therapy, Radio Diagnosis, Archaeology, Anthropology, Modern European Languages (French and German), Journalism, Physical Education, Social Service, Analytical Chemistry, Horticulture, Economics, Politics and Public Administration, Indian Music, Co-operation, Statistics, Geography and Business Management, Criminology and Forensic Science.

*Oriental Titles:* Siromani, Vidvan, Afzal-ul-Ulama, Munshi-i-Fazil, Adib-i-Fazil, Tabib-i-Kamil, Afzal-ul-Attibba, Malpan and Soppar, Sangita Siromani.

*Chancellor,* Governor of Madras.

*Pro-Chancellor,* Minister for Education, Madras.

*Vice-Chancellor,* Lt.-Col. Sir A. Lakshmanaswamy Mudaliar.

*Registrar,* B. M. Thirunaryanan.

Total number of Colleges (Arts, Science and Professional)—84; Total number of Students 81,967.

Professional Colleges: 27

Oriental Title Institutions: 17.

### MADURAI UNIVERSITY

The Madurai University Bill introduced in the Legislative Assembly of Madras State on the 27th of July 1965, was passed into law and received the assent of the Governor on 8-12-65.

The new University will cover the Revenue Districts of Madurai, Ramanathapuram, Tirunelveli and Kanyakumari in Madras State and will have its headquarters at Madurai.



There are 54 Colleges attached to this University.

For the time being all the statutes, ordinances and regulations of the Madras University will be followed by the Madurai University until they are replaced by statutes, ordinances and regulations framed by the authorities under provisions of the Madurai University Act.

*Vice-Chancellor*, Prof. T. P. Meenakshisundaram, M.A., B.L., M.O.L.

*Registrar*, R. Perumal, M.A., B.T.

### ANNAMALAI UNIVERSITY

Annamalainagar P.O.

South India.

*Chancellor*, Governor of Madras. *Pro-Chancellor*, Dr. Rajah Sir M. A. Muthia Chettiar. *Vice-Chancellor*,

Dr. S. P. Adinarayan.

*Registrar*, T. D. Meenakshisundaram.

P. A. Sitapathi, M.A. (in charge).

Total number of students in the University 4,502 and Muthiah Polytechnic 326.

Accounts and Government Grant (1964-65) :

Total income from grants from Government and other resources : Rs. 1,03,97,06%.

Total estimated expenditure on salaries, contingencies, buildings and equipment : Rs. 1,23,18,609.

Recurring grant receipts : Rs. 16,76,202.

The medium of instruction is English.

## MAHARASHTRA—(Contd.)

### EMPLOYEES' STATE INSURANCE SCHEME

In the State 8,29,000 employees have been covered by the E. S. I. Scheme. Their region-wise split-up is as follows : Gr. Bombay 7,12,000 ; Poona 39,350 (including Chinchwad and Pimpri) ; Sholapur 28,350 ; Kolhapur 5,600 ; Nanded 5,400 and Nagpur 38,000. There are 14 hospitals, 4 dispensaries, 15 ambulance units and 4 casualty centres. Number of beds provided in the hospitals is 1,602 out of which 710 beds are for T.B. patients.

### INDUSTRIES (1962)

**Engineering** :—In the field of engineering industry, there have been several notable developments particularly in the Bombay region. Some of these are machine tools like lathes, shaping machines, pillar drills, power hammers, metal cutting saws, steel and malleable iron castings, welding electrodes, electrical stampings, link chains, melting crucibles, umbrella ribs, steel furniture, safes and cash boxes, steel balls and copper roller engraving for textile industry.

Another feature is the beginning made in the manufacture of modern appliances like typewriters, refrigerators, wireless receiving sets, wooden and plastic cabinets and household electrical gadgets. Manufacture of modern equipment for agricultural plant protection, pressure stoves and lamps, stainless steel-pressed wares and equipment, industrial machinery for textile and chemical industries and fabrication of heavy structurals like transmission tower and pipe line, cranes, etc. has also developed in recent years.

The engineering industries located at Kirloskarwadi, Poona and Satara are known for their agricultural implements, engines and other products. There are about 84 units in the Poona division itself, manufacturing diesel engines, oil-engines, sugar-mill machinery, jeep trailers and tractors, non-ferrous utensils, agricultural implements, power looms, etc. In electrical engineering, the manufacture of electrical motors, transformers, cables for transmission and switch gears are worthy of mention.

**Sugar** :—Maharashtra is one of the major sugar-producing States in the country, having 34 sugar factories, with a crushing capacity of 53.20 lakh tonnes per year. They are located in the districts of Ahmednagar (13), Kolhapur

(6), Poona (4), Satara (3), Sholapur (3), Nasik (3), Sangli (1) and Aurangabad (1).

One of the important features of this industry is the organisation of co-operative sugar factories. Out of the total licensed 34 factories, 20 are co-operatives. Letters of intent have been granted to six sugar mills in co-operative sector to be established one each in Osmanabad, Poona, Sangli, Dhulia, Nanded and Ahmednagar districts.

**Industrial Alcohol** :—Allied to the sugar industry is the industrial alcohol industry, which can be developed from the molasses available from sugar factories. Out of about 18,391 million litres of alcohol made wholly from molasses in the country, 3,347 million litres are made in the 8 distilleries located in the Poona Division.

**Chemicals** :—The chemical industry in Maharashtra has made galloping progress.

Bombay and Thana are the main centres of dyestuffs industry manufacturing a wide range of products. Ceramic and glass, gases, oils and soaps, paints, pigments and varnishes, food products, rubber goods and other chemical industries also follow the same pattern.

**The Automobile Industry** :—Bombay is progressively undertaking the manufacture of cars, utility vehicles and scooters in three large assembly plants. The ancillary industry manufacturing component parts is also steadily developing under the patronage of the automobile industry. The Bicycle Industry is also making headway, having an annual licensed capacity of 2,30,000 bicycles.

**Paper Mills** :—There are in all nine paper mills in Maharashtra, two at Khopoli, one each in Bombay, Kalyan, Poona, Ogalewadi, Roha, Nagpur and Ballarpur. Three more units have been licensed for manufacture of paper and pulp one each at Ahmednagar, Satara and Sangli districts. Besides, a unit in Ratnagiri district is granted a letter of intent for manufacture of paper and pulp.

**Oil Mills** :—Groundnut being one of the important cash crops in Nagpur and Aurangabad divisions, there are several oil mills located in these regions. In Aurangabad division itself there are 80 independent oil mills. In Nagpur division, there are about 69 oil mills. Akola in this division has one oil hydrogenation plant. In Bombay divi-



sion, oil milling industries concentrated in Jalgaon, Dhulia and Nasik Districts where there are 43, 42, and 21 oil mills respectively, Jalgaon having 3 oil hydrogenation plants. In addition, most of the ginning and pressing factories in the cotton growing tracts, which grow groundnuts also, have oil mills for off season working.

Ginning and pressing is an important processing industry serving the cotton growing areas. There are about 531 such factories all over the State, a large number of them, having been located in Nagpur division. A little over 95 ginning and pressing units are spread over the entire cotton-producing area in Aurangabad division giving seasonal employment to over 8,000 persons. In Bombay division, 28 ginning and pressing factories are located in Dhulia district and 64 in Jalgaon district while there are 89 such factories in Poona division. Nagpur division is having 229 factories.

**Petrochemical Industry:**—The organic chemical industry in India has so far been based upon the fermentation of alcohol, acetylene from calcium carbide and benzene and allied products from coal-tar. With the setting up of petroleum refineries in the country, there is scope for utilising petroleum naphtha for production of intermediates required for the organic chemical industry. One petro-chemical complex is expected to come up near Bombay in the Trans-Thana-Creek area. In this complex several organic products such as ethylene oxide, diacetone alcohol, P.V.C. etc. will be produced with petroleum naphtha as the starting material.

**Textiles:**—Twenty-eight per cent of the total spindle capacity and 38 per cent of the loom capacity of the country are in Maharashtra. The total number of mills in the State is 93 (14 spinning and 79 composite) with a capacity of 45,01,000 spindles and 80,307 looms.

Of this, 59 mills constituting 80 per cent capacity are in the city of Bombay.

In addition, there are also 1.6 lakhs of cotton handlooms. 86,000 are in the composite fold and about 74,000 powerlooms. The total number of workers employed is as follows:

Organised Sector 2,60,520 ; Handloom Sector 2,50,000 (approximately) ; Powerloom Sector 1,50,000 (approximately).

Maharashtra occupies an important place in the field of growing of cotton in the country. Of the total production in the country, about 25 per cent is produced in the State, amounting to 14 lakhs of bales. The quality of cotton is mostly short and medium staple. Recently growth of long staple cotton has picked up in certain irrigated tracts in the district of Ahmednagar.

The following table gives industry-wise employment, productive capital and output for the year 1962.

| Name of the Industry                          | Employment<br>(Actual) | Productive Capital<br>(Rs. lakhs) | Output<br>(Rs. lakhs) |
|-----------------------------------------------|------------------------|-----------------------------------|-----------------------|
| Canning & Preserving of Fruits & Vegetables.. | 805                    | 60                                | 99                    |
| Grain Mills .. ..                             | 5,956                  | 348                               | 2,685                 |
| Bakery Products ..                            | 3,128                  | 234                               | 644                   |
| Sugar and Gur ..                              | 22,298                 | 3,547                             | 4,067                 |
| Miscellaneous Food Preparations ..            | 19,698                 | 1,691                             | 10,584                |
| Spinning, Weaving & Finishing of Textiles     | 3,15,976               | 12,669                            | 32,683                |
| Paper and Paper Products .. ..                | 7,644                  | 881                               | 1,266                 |
| Basic Industrial Chemicals .. ..              | 11,023                 | 3,372                             | 3,314                 |
| Paints, Varnishes etc. ..                     | 2,530                  | 311                               | 703                   |
| Miscellaneous Chemicals                       | 27,915                 | 5,919                             | 10,270                |
| Glass & Glass Products                        | 8,153                  | 265                               | 458                   |
| Iron & Steel .. ..                            | 23,862                 | 1,980                             | 3,500                 |
| Non-Ferrous Metals ..                         | 6,682                  | 579                               | 1,814                 |
| Machinery except Electrical .. ..             | 40,469                 | 3,583                             | 4,824                 |
| Electrical Machinery etc. .. ..               | 23,373                 | 2,625                             | 3,923                 |
| Motor Cycles & Bicycles                       | 4,006                  | 333                               | 571                   |
| Other Industries ..                           | 2,94,851               | 33,386                            | 38,365                |
| All Industries ..                             | 8,18,369               | 71,783                            | 1,19,770              |

During 1964, the total no. of working factories was 9,207 and average daily employment 9,07,501 (figures relate to the factories covered under the Factories Act, 1948).

Details about strikes, workers involved, and mandays lost for 1964 (actual) and 1965 (provisional) respectively are : 616 ; 580 ; 2,79,463 ; 5,57,647 ; 15,94,160 ; 13,77,103.

Mineral production and value in '000 metric tons, '000 Rs. respectively for the year 1964 (actual) : Coal : 10,19 ; 2,45,47 ; Iron Ore : 3,36 ; 59,06 ; Manganese Ore : 2,23 ; 1,97,48 ; Lime Stone : 100 ; 3,60 ; Salt : 482 ; N.A. 1965 (Provisional) : Coal : 7,51 ; 1,89,53 ; Iron Ore : 2,50 ; 40,33 ; Manganese Ore : 1,77 ; 1,55,10 ; Lime Stone : 79 ; 3,11 ; Salt : 4,41 ; N.A.



# ORISSA

**CAPITAL:** Bhubaneshwar.

**Area:** 60,164 sq. miles.

**Total Population:** 17,548,846 (Males 8,770,586 and Females 8,778,260) (1961 Census). Increase over the 1951 census: 19.82 per cent; Literacy: 21.7 per cent; Density of persons per sq. mile: 292.

**Administrative Divisions:** The whole of the State is divided into 13 Districts. The following are the Administrative Districts with names of district headquarters:

Cuttack (Cuttack); Puri (Puri); Dhenkanal (Dhenkanal); Baudh-Khondmals (Phulbani); Balasore (Balasore); Sambalpur (Sambalpur); Ganjam (Chatrapur); Koraput (Koraput); Mayurbhanj (Baripada); Sundergarh (Sundergarh); Bolangir (Bolangir-patna); Keonjhar (Keonjhar).

For area and population of districts according to 1961 census, see article "Population".

**Number of Revenue Sub-Divisions** 52 consisting of a number of Tahsils and Thanas.

**Number of Municipalities:** 19 (1961).

**Number of Notified Area Councils:** 28 (1961).

**Number of villages:** 52,125 (1961).

Panchayat Samiti was inaugurated throughout the State on Jan. 26, 1961, an important stage in the process of democratic decentralization of administration.

## LARGE-SCALE INDUSTRY

**Main large scale industries of State.**

Textiles; Cement; Refrigerators; Paper; Glass; Sugar; Iron and Steel; Potteries; Spinning Mills; Tube Mill; Refractories and pipes; Ferro-manganese; Chlorine and Caustic Soda; Low Shaft Furnace; Structural Transmission Towers; Coil and Coil Products; Aluminium Ingots; Aluminium Cables; Steel Reinforced; Cast Iron Specials; Cast Iron spun pipes; Cast Iron Castings; Paper.

## CHIEF INDUSTRIAL UNITS

The Orissa Textile Mills, Chowdwar, Cuttack; The Orissa Cement Factory, Rajgangpur; The Kalinga Tube Ltd., Chowdwar; The Kalinga Industries Ltd., Cuttack; Orient Paper Mills, Brajrajnagar, Shree Durga Glass Works Ltd., Baranga; Orissa Industries Ltd., Baranga; The Titagarh Paper Mills, Chowdwar; The National Foundry and Rolling Mills Ltd., Cuttack; The Mayurbhanj Glass Works Ltd., Bahalda Road, Mayurbhanj; Tata Ferro-manganese Plant, Joda; Ferro-manganese Plant, Rayagada; Orient Weaving Mills Ltd., Cuttack; Mayurbhanj Textiles, Baripada; Mayurbhanj Potteries, Baripada; Refractory Plant, Rajgangpur; Hindustan Steel Ltd., Rourkela; Belpahar Refractories, Belpahar, Sambalpur; Straw Products Ltd., Jakeypore, Koraput; Indian Metal Ferro Alloys Ltd., Rayagada; Kalinga Textiles, Rajgangpur; Indian Aluminium Co. Ltd., Hirakud; Orissa Ceramics Industries, Jharsuguda; Jeypore Sugar Co. Ltd., Rayagada; Kalinga Iron Works Ltd., Barbil; Cement Factory, Bargarh.

The Rs. 3-crore paper mill of the Titaghur Paper Mills Co., Ltd., was opened at Chowdwar in Cuttack district on March 12, 1960.

A new smelter plant of the Indian Aluminium Company called the Hirakud Reduction Plant was inaugurated by the Chief Minister of Orissa on February 12, 1959.

Situated a little more than a stone's throw from the Hirakud multi-purpose project, the smelter has been built at a cost of Rs. 5 crores by the Indian Aluminium Company and forms part of a Rs. 14 crore integrated expansion project involving bauxite, alumina and metal production facilities.

It has an installed capacity of 10,000 tons of aluminium which saves the nation Rs. 2.5 crores of foreign exchange annually.

The Rourkela steel plant which has started production has a capacity of one million tons a year.

## SMALL & COTTAGE INDUSTRIES

Small and cottage industries with their locations in brackets are: Biscuit Factory (Cuttack, Berhampur, Rourkela), Steel (Parlakhimedi, Cuttack), Salt (Ganjam, Puri, Cuttack), Fire Bricks (Rajgangpur, Baranga, Jharsuguda), Foundry (Tapang, Berhampur, Dhanmandal, Rourkela, Baripada, Sambalpur, Balasore), Wood work (Cuttack, Bhubaneswar, Baripada, Jharsuguda), Tannery (Baud and Titlagarh), Footwear (Puri, Cuttack), Roofing tiles (Cuttack, Puri, Balasore, Ganjam, Sambalpur); Radio Manufacturing (Cuttack, Rourkela), Glazed-wall Tile (Baranga, Rourkela), Agricultural implements (Cuttack), Cycle parts, Tin containers (Parlakhimedi, Cuttack); Railway-sleepers (Rairangpur, Dhanmandal and Sambalpur); Boats and Launches (Cuttack); Sports Goods (Cuttack); Mathematical Instruments (Berhampur); Aluminium Utensils (Rourkela, Puri); Cashew nuts and Oil (Puri); Watch making (Berhampur); Leatherbag (Rourkela); Ice factory (Rourkela, Cuttack); Hard boards (Cuttack); Paints (Cuttack); Bucket (Cuttack, Jaipur).

Handloom, Hides and Skins, Salt manufactures, Horn works, Bell metal, Potteries, Filigree, Blacksmithy, Carpentry, Tailoring, Cane Works, Soap making, Trunk manufacturing and Paddy husking, Eri rearing, Rope-making, Toys, Bamboo works, Mats, Weaving, Spinning, Flaying of hides and horns, Tasar rearing, Stone carving, Incense and Perfumery, Golden Grass Products, Ivory works, Brass fish-work, Applione works.

1963-64: Sugar units 4; tile units 3; rice mills 3, saw mills 8; oil mills 8; aluminium utensils unit 1; rice hullers 3; bucket industry 1; carpentry unit 1; deep sea fishing 1, and cold storage 2.

1964-65: Saw mills 2; rice mills 8; sugar 2; stone crushing 1; tile 4; tile with brick kiln 1; hume pipe 1; rice huller with oil expeller 2; wood screw; aluminium 1; jute twine 1; bucket-cum-trunk 1; light engineering 1; hinges 1; wire nail manufacturing unit 1; oil mills 2.

## MINERALS, METALS

Orissa's mineral potential is enormous. Her reserves of Iron Ore, Manganese Ore, Chromite, Limestone and Graphite are among the very best in India. The minerals which are worked in large quantities include besides those stated above, Coal, Dolomite, Galena, Fire clay and China Clay. Deposits of Bauxite, Vanadiferous Magnetite, Kyanite, Galena, Asbestos, Soapstone and Mica also occur in the State.

**Location:—**

**Iron Ore:—**Badampahar, Gorumahisani, Hatisikhli, Thakurani, Joda, Bolani, Sakradihi, Pipokri\*, Gandhamaradan\*, Jhiling, Tomka, Daitari\* and Hirapur\*. Total estimated reserves: Over 8,000 million tons.

\* Indicates occurrences which have not been worked.



**Manganese Ore** :—Thakurani, Joda, Bamebari, Gurda, Kalaparbat, Siljora, Dalpahar, Bhutura, Korra valley and Kuttinga. Total estimated reserves : over 20 million tons of all grades.

**Chromite** :—Baula—Nuasahi, Saraubil, Sukraugi, Bhimtangar, Kaliapani. Total estimated reserves : Around five million tons.

**Coal** :—Talchir (Deulbera, Dera, Talchir, S. Balanda) and Rampur (Hingir—Rampur and Orient collieries) are the two coal fields of the State producing non-coking coal. The reserves in those fields may be of the order of several thousand million tons.

**Limestone** :—Birmitrapur, Hatibari, Purnapani, Lanjihera, Dungri,\* Umpavalle, Kottameta—Nandiveda\*. The total reserves may exceed 500 million tons.

**Dolomite** :—Birmitrapur in Sundargarh district.

**Graphite** :—Sargipali, Matupali, Dharuakhaman, Bamuni, Sigjhran, Loitera, Densurgi, Tumudibandh, Majhibhelum, Kariguda and Athamalik.

**China Clay** :—Khola, Joshipur, Chanachbani and Jamkesar.

**Fire Clay** :—Belpahar, Talabira, Darlipali, Jaganath Prasad, Gopalpur\* and Ratansara.

**Bauxite** :—Gandhamaradan Plateau, Kahipur Tiluk, Khariar, Karlapat plateaux. Total reserves : About two million tons.

**Vandiferous Magnetite** :—Huasahi, Betai, Rangamatia, Betharan, Kumardubi, Hatichar, Kesam, Majurbeka.

## PORTS

The main ports in the State are Paradeep, Chandbali and Gopalpur. See under main article "Ports" for details.

## AGRICULTURE

The latest available position (1963-64) is as follows. The first figure in brackets shows the area in acres, and the second the yield in tons :

Rice (106,47,000 ; 42,40,000) ; Wheat (38,000 ; 8,000) ; Jowar (18,000 ; 4,000) ; Maize (34,000 ; 7,000) ; Bajra (14,000 ; 2,000) ; Gram (66,000 ; 13,000) ; Tur (10,000 ; 22,000) ; Other kharif pulses (3,58,000 ; 76,000) ; Other rabi pulses (15,57,000 ; 3,16,000) ; Ground nut (1,14,000 ; 69,000) ; Linseed (46,000 ; 5,000) ; Sesamum (2,55,000 ; 27,000) ; Rape and mustard (1,43,000 ; 16,000) ; Cotton (4,000 ; 670 bales) ; Jute (1,35,000 ; 3,60,000 bales) ; Meeta (31,000 ; 71,000 bales) ; Sugarcane (1,00,000 ; 1,92,000).

## LAND REFORMS

Some of the important steps taken under Land Reforms include Estate Abolition, abolition of Hereditary Village Office System in the district of Ganjam, abolition of village office system in ex-State areas and reorganisation of Tahsils. About 3 lakhs of rent-free estates have been vested in Government by blanket notification under Orissa Estate Abolition (Amendment) Act, 1963, and the claims of the intermediaries are being finalised by holding Camp Courts and spot visits.

Provisions of the Orissa Irrigation Act, 1959 came into force from June 1, 1961 in all the districts of the State except in the old districts of Cuttack, Balasore and Ganjam. From June 1, 1963 water rates were levied in the districts of Cuttack and Balasore under the provisions of the Orissa Irrigation Act, 1959 and from July 1, 1963 in districts of Ganjam.

\* Indicates occurrences which have not been worked.

## FORESTS

The total forest area of the State is estimated to be 25,358.21 square miles which account for 42 per cent of the land area.

The major portion of the forest area is covered by protected forests, Khesra forests and ex-zamindari and private forests. Sixty per cent only is well-demarcated and supports forest growth of reasonable value. Even within the demarcated forests 80 per cent of the available species are utilised as fire wood. At the beginning of the Third Plan they were yielding a revenue of about Rs. 3 crores. With proper planning and investment the revenue is expected to go up. During the Third Plan, survey of forest resources, demarcation of more forest areas, plantation of fast growing species, development of forests of commercial importance, improved methods of logging, farm forestry, afforestation and enrichment of depleted forests and provision of better communication facilities and wild life protection have been taken up.

The Forest Corporation, set up in 1962, continued its work of exploitation of forest resources of the State satisfactorily.

Sal is the most important species in the State. The other important timber species are Bija, Sissoo, Kusum, Simul, Bandhan, Gambhar, Champa, Teak etc. Bamboos occur extensively in the State and besides meeting the local requirements for various purposes, feed the various paper mills. Kendu leaves bring in a substantial revenue to the State.

The forests occur in all the thirteen districts of the State, but their distribution is rather uneven in the coastal districts, like Puri, Cuttack and Balasore.

Total revenue from the forest for the year (till Sept. 30, 1963)—42.71 lakhs.

Total expenditure on the State forests during the year—Rs. 15 lakhs.

## TRANSPORT

During 1963-64 upto the end of Sept. 1963, 137 miles of existing roads had been improved, 16 miles of new roads constructed, 14 bridges completed and work on 21 new bridges was taken up.

Transport has been nationalised in the State from 1-1-48.

Name of Transport Authority : The State Transport Services, Orissa.

### Orissa Road Transport Company Ltd.

The Orissa Road Transport Company came into being with effect from the 1st January 1951 with the participation of the State Government, Central Government and members of the public.

Out of the paid-up capital of Rs. 30,00,725 the State Government and Central Government own shares to the extent of Rs. 23,36,300 and Rs. 6,00,000 respectively. Shares to the extent of Rs. 63,700 are held by the public besides forfeited shares of Rs. 725. The State Government's shares work out 78 per cent of the total paid-up capital.

## CO-OPERATIVES

(See main article *Cooperative Movement for details*).

## PUBLIC HEALTH

Position in 1964.

Commonest diseases in State and mortality from each of these in 1964 : Cholera (attacks 1,047, deaths 458) ; Small-pox (attacks 906, deaths 204) ; Fevers (including malaria etc.) 1,08,787.†

† Figures for 1963.



Allopathic Hospitals 176\*; Allopathic Dispensaries 296\*; No. of Allopathic beds 7,484\*; Maternity Homes 3; Maternity Centres 32; Maternity & Child Welfare Centres 34; Primary Health Centres 178; Family Planning Clinics 124; No. of Doctors registered 1,847; No. of Doctors employed 800; No. of Nurses registered 699; No. of Nurses employed 420; No. of Midwives registered 487; No. of Dais registered 334; No. of Health Visitors (employed) 111; No. of Ayurvedic Hospitals 3; No. of Ayurvedic Dispensaries 121.

## EDUCATION

(See under article "Education" for details).

## LABOUR, HOUSING

Position in 1962 :

Names of industries in which minimum wage is fixed : Rice Mill, Flour Mill and Dal Mill, Tobacco (including bidi and gudakhu making) manufactory, road construction, building operations and stone breaking or stone crushing, Public Motor Transport, employment in agricultural operations and employment under Local Authority (excepting Gram Panchayats, Anchal Sasan and Notified Area Councils).

The minimum rates for wages in respect of the following scheduled employments were revised with effect from 26-11-1960 : (1) Rice Mill, Flour Mill or Dal Mill, (2) Tobacco (including bidi making and gudakhu making) manufactory, (3) Agricultural operation, (4) Road construction or building operation and stone breaking or stone crushing within the notified area of Rourkela.

The following employments have been added to Part I of the Schedule appended to the Minimum Wages Act, 1948—Salt pans, printing presses, tile and brick making, private road transport, hotels, eating houses and restaurants, distilleries, shops and establishments, metal industries, cinema industry, saw mills, handloom and hosiery.

Number of registered factories : 721.

Average daily number of workers in registered factories : 27,557.

Average number of workers employed daily in the mines : 36,434.

Average monthly earnings of industrial workers : Rs. 79.70.

Number of Trade Unions in the State : 120.

Total membership of trade unions : 76,221.

Number of Labour Welfare Centres : 46 (34 managed by private bodies and 12 managed by State Govt.).

Number of houses built under Subsidised Industrial Housing Scheme : By private enterprises : 1,513. By Government : 1,174.

Number of houses constructed under the Low Income Group Scheme upto the end of Dec. 1962 : 1,287.

Number of houses completed under the Middle Income Group Housing Scheme upto June 1962 : 101.

## POWER AND IRRIGATION

**Power :**—The Electricity schemes may be divided in two parts, namely, generation of electricity and construction of power projects on the one hand and transmission and distribution of power to consumers on the other. The former are in the direct charge of the State Government while the latter are the responsibility of the State Electricity Board.

The more important schemes of generation :

- (i) Hirakud Stage II.
- (ii) Talcher Thermal Station, and
- (iii) Balimela Hydro-Electric Project.

**Hirakud Stage II :**—At Hirakud, during the Third Plan period the fifth and sixth units have been commissioned. At Chiplima the first and second units were put to commercial use in July and February, 1962 respectively. The third unit was completed in September, 1963. With the commissioning of this set, Stage II of Hirakud Project was completed. It has now a scheduled capacity of 270 MW and is capable of supplying 121 MW of firm power.

**Talcher Thermal Scheme :**—The Talcher Thermal Scheme envisages setting up of four units of 62.5 MW each at Talcher. Of 259 MW generated 230 MW will be available for sale. This station will be interconnected with Hirakud Grid on the one hand and Machkund and Balimela systems on the other. It will draw coal from the coal mines operated by the National Coal Development Corporation at Talcher. The present programme is that the first of the four units will be commissioned in Nov., 1965, with subsequent units coming up at intervals of three months thereafter. The estimate of the Scheme is Rs. 30.35 crores. A provision of Rs. 9.3 crores has been made in the 1965-66 Plan for this scheme.

**Balimela Hydro-Electric Project :**—An agreement was reached between Governments of Andhra Pradesh and Orissa on 4th September, 1962, regarding the construction of the dam on river Sileru at Balimela for generation of electricity. The total estimated cost of the dam is Rs. 24 crores. The share of Andhra Pradesh has been pegged at Rs. 12 crores. The cost of the power portion is estimated at Rs. 21.83 crores. This project will have a capacity of generating 360 MW of power or 135 MW or firm power at 100 per cent L.F. The tail water will subsequently be used for irrigating about 2.4 lakh acres of land in the Malkangiri Motu plains. An amount of Rs. 9.7 crores had been provided in the Third Plan.

**Rural Electrification :**—The progress of rural electrification in Orissa was very slow up to the end of the Second Plan. By the end of the Second Plan period the total number of places electrified were 176. The rural electrification scheme of the Third Plan provides for an outlay of Rs. 3.35 crores for electrifying 400 villages.

**Balimela Transmission Schemes :**—Rayagada-Talcher 220 KV Transmission line is a part of the Balimela Transmission system. The object of this scheme is to link up the Talcher Thermal Station with the Balimela Power-House. The scheme will provide the essential link between all the power systems, Talcher Thermal and the hydel systems of Hirakud, Machkund and Balimela.

**Transmission and Distribution Schemes :**—Transmission and Distribution Scheme includes all the 33/11 KV lines which are being laid in the State. The Third Plan provision was Rs. 6.03 crores. This programme was to meet the needs of Block industries, Panchayat Samiti industries, other Small-scale industries and lift irrigation. By the end of 1963-64 expenditure on this programme was Rs. 3.95 crores. The anticipated expenditure for 1964-65 was Rs. 1.6 crores. A provision of Rs. 47.12 lakhs had been made for 1965-66.

**Talcher Transmission Scheme :**—Under the Talcher Transmission scheme a double circuit 132 KV line is being constructed between Talcher and Jaipur Road and a 220 KV line between Talcher and Joda. The total cost of the scheme is Rs. 4.95 crores. An amount of Rs. 4.32 crores had been provided in the Plan. Work was proceeding according to schedule.

\* Figures for 1963.



## IRRIGATION

(See also tables under 'Irrigation')

At present the following existing irrigation projects are providing irrigation facilities to the extent mentioned against each (in acres): Rushikulya canals 1,64,400; Mahanadi Delta canals 2,00,000; Hirakud Dam Project (canals) 2,77,793; High Level Canal Range III 40,000; Jaipur Canals 35,465; Haldia and Baldia Projects 18,000.

**Hirakud Dam Project (Stage I):** The project is complete. By this multi-purpose river valley project, irrigation potential for the entire ayacut of 3·8 lakh acres was created by Oct., 1960. The actual utilisation upto the end of 1963-64 was 2,77,783 acres khariff and 1,07,653 acres rabi.

The total culturable commandable area of the Hirakud Canal system is 3·8 lakh acres, out of which 3·2 lakh acres are cultivated at present.

**Mahanadi Delta Irrigation Scheme:** The execution of this project is in full swing. Upto the end of 1963-64, a gross area of 3,93,780 acres of land received irrigation facilities out of which khariff area was 3,00,570 acres and rabi area was 93,210 acres.

The project cost will be about Rs. 34·34 crores and on completion it will irrigate 7,77,000 acres in Cuttack and Puri districts in addition to the existing 2,00,000 acres of irrigated land under existing Delta Canals in Cuttack district. With 167 per cent of intensity, the gross irrigation after completion will stand at 16,08,000 acres.

**Salandi Project:** The works on main dam, spillway and barrage of canals and distributaries are in progress. By the end of the Third Plan 7,000 acres of gross potential were expected to be created and 4,000 acres to be utilised. On completion, it will irrigate 1,13,000 acres of land.

**Anandapur Barrage Project:** This is a new scheme and found a place in the Third Plan. It is under investigation.

**Medium Projects:** Salki project is expected to be completed in the first year of the Fourth Plan and Joro-Harbhanga by the end of the Fourth Plan. Other medium projects are likely to be completed by the second year of the Fourth Plan. In Salki project, the headworks right side canal with distributaries have been completed and an area of 25,430 acres of land is now being irrigated.

Under Hiradharbati project, irrigation potential for 6,000 acres has already been created and irrigation is being given to these areas. During 1964-65, additional potential for 4,500 acres was expected to be created and utilised. Under Dhanoi project, potential for 8,000 acres was expected to be created during 1965-66, out of which utilisation would be 6,000 acres. The Bahuda project was likely to irrigate about 4,000 acres by June, 1966.

By the end of the Third Plan, an additional area of 55,000 acres of land was expected to be irrigated from the medium projects under construction.

Some of the important medium irrigation projects are given below. The estimated cost in rupees lakhs and the area in acres to be irrigated on completion respectively are given in brackets:

Bahuda Stage I (57·39; 26,100); Joro-Harbhanga (366; 80,250); Pitamahar (46·29; 12,000); Hiradharbati (31·37; 14,750); Salia (227·36; 26,750); Salki (143·34; 45,000); Dorjang (372·36; 24,000); Dhanoi (113·85; 12,540); Godohado (105; 10,880); Budhabudhiani (100·74; 8,700).

## COMMUNITY DEVELOPMENT

(See under article on Community Development projects.)

## PANCHAYATS

Panchayati Raj has been introduced in the State since 26 January 1961 with three-tier system of administration. Gram Panchayats existed in the State. Panchayat Samitis were constituted with area coterminous with the area of a Block. Zilla Parishads have been constituted with area coterminous with the area of a district. There are 2,358 Gram Panchayats, 307 Panchayat Samitis and 13 Zilla Parishads in the State.

The Gram Panchayat is the main executive agency of all developmental programmes in its area. The Panchayat Samiti is responsible for planning, execution and supervision of all the development programmes including that of Community Development and Tribal Development Block programmes. But the Zilla Parishad is a supervisory body and it is responsible for coordinating the Block plans and to prepare a consolidated plan for the district.

## UNIVERSITY OF AGRICULTURE AND TECHNOLOGY

Bhubaneswar.

*Chancellor:* Dr. A. N. Khosla, Governor, Orissa.

*Vice-Chancellor:* Dr. K. Ramiah, D.Sc., F.N.I., F.A.Sc.

*Registrar:* N. R. Patnaik, I.A.S. (Retd.).

*Comptroller:* M. D. Misra, M.A., O.F.S.

*Constituent Colleges:* 4.

*Degrees awarded:* B.Sc. (Ag.); M.Sc. (Ag.); B.V.Sc. & A.H.

## BUDGET FOR 1966-67

*Income:* Rs. 57,13,320·00; *Expenditure:* Rs. 54,05,300·00.

## UTKAL UNIVERSITY

Vani Vihar, Bhubaneswar-4, Orissa.

*Chancellor,* Governor of Orissa; *Vice-Chancellor,* Col.

Commandant Dr. S. Misra, M.A., Ph.D. (London);

*Registrar,* D. P. Barai, M.A. Dip-in-Edn.

*Affiliating-cum-Teaching University.*

*Subjects for Post-Graduate teaching and Research:* Oriya, Sanskrit, Philosophy, English, Applied Economics, Economics, History, Mathematics, Physics, Chemistry, Botany, Geology, Psychology, Political Science, Statistics, Anthropology, Commerce and Zoology.

The medium of instruction at the University stage is English.

Number of colleges affiliated to the University: 81.

Number of teaching departments under its control: 17, including University College of Engineering and M. S. Law College.

Annual income (including Government grants, donations and endowments during the year 1964-65 Rs. 70,89,103·00.



## UTTAR PRADESH

**CAPITAL:** Lucknow.

Area : 113,454 square miles.

Population : 7,36,72,906 (1961 census).

Males : 3,86,64,463 ; Females : 3,50,88,451. Density : 384 per sq. mile. Percentage of increase 16.54 from 1951 Census.

Uttar Pradesh is a member of the Central Zone of which the other member is Madhya Pradesh. The headquarters of the zone is at Allahabad.

Number of Districts : 54 ; Tahsils : 231 ; Antaram Zilla Parishads : 51 ; Municipalities : 137 ; Town Areas : 274 ; Notified Areas : 37 ; Panchayats : 72,333 ; Villages : 1, 11, 742.

There are eleven revenue divisions under 11 full-fledged commissionerships namely Meerut (Hqrs. Meerut), Allahabad (Hqrs. Allahabad), Varanasi (Hqrs. Varanasi), Lucknow (Hqrs. Lucknow), Agra (Hqrs. Agra), Gorakhpur (Hqrs. Gorakhpur), Faizabad (Hqrs. Faizabad), Rohilkhand (Hqrs. Bareilly), Jhansi (Hqrs. Jhansi), the Kumaon (Hqrs. Nainital) and Uttarakhand (Hqrs. Lucknow).

Names of the eleven revenue divisions with the districts comprising each :

*Meerut Division* : Dehra Dun, Saharanpur, Muzaffarnagar, Meerut, Bulandshahr.

*Agra Division* : Aligarh, Agra, Manipuri, Etah, Mathura.

*Allahabad Division* : Farukhabad (Fategarh), Etawah, Kanpur, Fatehpur, Allahabad.

*Rohilkhand Division* : Bareilly, Bijnor, Budaun, Moradabad, Rampur, Shahjahanpur, Pillibhit.

*Jhansi Division* : Jhansi, Jalaun (Orai), Hamirpur, Banda.

*Varanasi Division* : Varanasi, Mirzapur, Jaunpur, Ghazipur, Ballia.

*Gorakhpur Division* : Gorakhpur, Deoria, Basti, Azamgarh.

*Kumaon Division* : Naini Tal, Almora, Garhwal (Pauri), Tehri-Garhwal (Narendranagar).

*Lucknow Division* : Lucknow, Unnao, Rae Bareilly, Sitapur, Hardoi, Kheri (Lakhimpur).

*Faizabad Division* : Faizabad, Gonda, Bahraich, Sultanpur, Pratapgarh, Barabanki.

*Uttarakhand Division* : Uttar Kashi, Chamoli, Pithorgarh.

(See under "Population" for area and population of Tahsils).

### RETIREMENT AGE

The State Government has raised the retirement age of the employees to 58.

### PANCHAYATI RAJ

In pursuance of the policy of 'democratic decentralisation' of power embodied in the Report of the Committee on Plan Projects popularly known as Balvantray Mehta Committee, Panchayati Raj has been established in this State. Accordingly a three-tier structure of local bodies, viz. Gaon Sabhas, Kshettra Samitis and Zilla Parishads at village, block and district levels respectively is being built up.

The Gaon Sabhas were already functioning under the U.P. Panchayat Raj Act, 1947. Kshettra Samitis were

constituted under the U.P. Kshettra Samitis and Zilla Parishads Adhiniyam, 1961. Zilla Parishads came into being on June 30, 1963 in the State and replaced the Antaram Zilla Parishads. With the establishment of this institution, the process of Panchayati Raj has been completed in the State. These different bodies shall in addition to discharging the local governmental functions, also have the responsibility of preparing plans of development and executing them in their respective areas themselves.

### AGRICULTURE

Main food crops : Wheat, barley, gram, rice, juar, bajra and maize.

Main cash crops : Sugar-cane, linseed, rape seed, mustard, groundnut, til, cotton and jute.

Food production in the State went down from 14.25 million tons in 1960-61 to 13.83 million tons in 1961-62, 13.28 million tons in 1962-63 and 11.6 million tons in 1963-64. It rose to 14.8 million tons in 1964-65.

As immediate steps to increase food production, more than 2,05,000 wells had been sunk during the Third Five Year Plan. Land under potato cultivation has been increased from 35,000 acres to 75,000 acres.

(For more details see under the article on 'Agriculture' pp. 269-276).

Area of State in acres : 7,29,78,929.

### FOOD AND CIVIL SUPPLIES

Foodgrains distribution through fair price shops remained in force. The number of fair price shops in the State in March, 1964 was 11,138.

The releases of foodgrains from the Government stocks during the financial year upto March 31, 1964 were : wheat 2,74,359 tonnes ; rice 1,32,053 tonnes.

During the financial year 1963-64, the State Govt. obtained from the Government of India 3,37,057 tonnes of wheat.

The purchases of rice were made through the levy system. The total purchases during the financial year upto March 31, 1964 were 1,16,898 tonnes for State Government and 49,775 tonnes for the Govt. of India.

Under the U.P. Sugar Dealers' Licensing Order, 1962, all persons engaged in the sale of sugar in quantities exceeding 50 quintals at a time are required to take licences.

### LAND TENURE

With the abolition of zamindaris, following the enforcement of the U.P. Zamindari and Land Reforms Act, 1950, on July 1, 1952 in 48 out of the State's 51 districts, estates of nearly 20 lakh zamindars were taken over resulting in direct contact with 12,800,000 Kisans. The area of land taken over from intermediaries is about 6 crore acres. There are now only a few tracts where Zamindari has not yet been abolished.

Liquidated zamindars retain such of Sir, Khudkast and groves of which they have become Bhumidhars.

The new land tenures under the U.P. Zamindari Abolition and Land Reforms Act are : Bhumidhar, Sirdar and Asami.



The main features of the Zamindari Abolition and Land Reforms Act are: Extinction of intermediaries' rights; Payment of equitable compensation; Payment of rehabilitation grant to ex-intermediaries who paid land revenue upto Rs. 10,000 per annum; Undisturbed possession of land by actual tillers of soil and conferment of greater rights upon them; Undisturbed possession by every person of his house, well or grove; No landlord-tenant system to be in force in future i.e. prohibition of sub-letting except in restricted cases of disabled persons; Prevention of uneconomical holdings; restriction on future acquisition of land by way of purchase or gift by Bhumidars already holding  $12\frac{1}{2}$  acres or more land; and ownership of all common land in the village community with powers of land management.

Every ex-intermediary (ex-zamindar) is entitled to compensation at the rate of eight times his net assets. In addition, every ex-intermediary, whose annual land revenue did not exceed Rs. 10,000, would be given rehabilitation grant at a graduated specified scale.

The abolition of zamindaris released 4,54,42,000 acres, that is, 96.8 per cent of the total land holdings, in the State. Two classes of cultivators, *bhumidhars* (owners of land) and *sirdars* (wielders of the plough), enjoy different rights.

Of the alienated lands, nearly ten million acres of waste land were made over to the village communities for management. Another 2,400,000 acres of waste land and private forests were handed over to the Forest Department for development.

The final zamindari abolition compensation payable to ex-intermediaries is assessed at Rs. 69.53 crores. Upto the end of Dec. 1963, compensation to the tune of Rs. 66.24 crores (approximate) had been paid to them of which a sum of Rs. 49,90,66,350 was paid in  $2\frac{1}{2}$  per cent interest bearing transferable 40-year bonds and the balance in cash. In addition, a sum of Rs. 2,51,250 has been paid in stock certificates.

Rehabilitation grants payable to ex-intermediaries have been estimated at about Rs. 70 crores. Upto the end of Dec. 1963, grants totalling about Rs. 55.75 crores had been paid, of which Rs. 53,37,81,950 were paid in 25-year non-interest bearing transferable bonds and the balance in cash.

The State Government are also paying compensation to former landholders of *adhivasis* who were declared as *sirdars* in 1954. Their number is about 38,11,973. The amount of compensation payable to their erstwhile landholders is estimated at about Rs. 13 crores. Till the end of Dec. 1963, compensation on this account amounting to Rs. 9,78,07,352 has been paid to them in cash and Rs. 29,23,500 in bonds.

The first step under the U.P. Urban Areas Zamindari and Land Reforms Act, 1956 was taken in 1961, when the notification under Section 8 was issued vesting all the agricultural areas in 167 urban areas in the State from July 1, 1961. Zamindari has by now been abolished in 332 urban areas.

The State Government have also enacted legislation to impose ceiling on land holdings and to acquire on payment of compensation surplus land with a view to providing for a more equitable distribution of land by making it available to landless agricultural labourers, cultivation on cooperative basis, conservation of part of available land resources to increase food production and building up to reserve stocks against lean years by carrying on cultivation on modern scientific lines in State-owned farms. The ceiling area applicable to a tenure-holder having a family up to five members, is 40 acres of fair quality land. In the case of

a family having more than five members, every additional member will be allowed eight acres of fair quality land subject to a maximum of 64 acres of such land for the entire family. As a result of imposition of ceiling, it is estimated that about two lakh acres of surplus land will be available for distribution among the landless.

Upto March 1964, the total area finally declared surplus under Section 14(1) of the Act stood at 1,43,714 acres, out of which possession was taken over of 1,07,633 acres out of which an area of 44,339 acres was temporarily settled. Compensation was finalised in 783 cases involving an amount of Rs. 14,34,335, out of which Rs. 4,35,452 were paid in cash.

**Consolidation of holdings:** Till Jan. 31, 1964 the scheme of consolidation had been completed and chaks transferred in 29,307 villages. The scheme affected 37,65,412 tenure holders who held 2,84,14,660 plots, which were transformed into 49,14,384 chaks

### IRRIGATION

Area irrigated by State Irrigation works (1962-63): 93,00,321 acres.

Number of tube-wells energised and brought into operation till March 1963: 7,125. Area irrigated by tube-wells 20,03,759 acres; by canals 72,96,562 acres (including canals, lakes, tanks and bundhies).

Total additional area brought under irrigation from State irrigation works of the first and second plans during 1962-63 was 42.6 lakh acres.

**Continuing Schemes:** Names of the schemes with the irrigation benefits in thousand acres, and probable or actual date of completion respectively within brackets: Matatila Dam (409.58; 1963-64); Ramganga Multipurpose project (1,706.10; spillover to Fourth Plan); Sarda Sagar Stage II (185.15; 1962-63); Nanak Sagar (132.72; 1962-63); Meja Reservoir (52.38; 1965-66); Kwano Pumped Canal (21.23; 1962-63); Dohrihat Pumped Canal (118.80; 1962-63); Tanda Pumped Canal (67.90; 1961-62); Remodelling Eastern Yamuna Canal (22.00; 1961-62); Remodelling Agra Canal (27.40; 1961-62); Balmiki Reservoir (15.50; 1961-62); Jirgo Reservoir (64.00; 1961-62); Tumaria Reservoir (40.00; 1962-63); Upper Kahjuri Reservoir (18.00; 1961-62).

### Minor Irrigation (1965)

Against 84,973 masonry wells constructed in the first three years of the Third Plan, as many as 91,246 wells were expected to be completed during 1965.

The State Govt. has sanctioned an intensification of minor irrigation programme in the areas not covered by crash or intensive minor irrigation programme by giving loan upto Rs. 2,000 for the construction of masonry wells allowing 25 per cent subsidy on the loan. Loan up to Rs. 400 is also allowed for repair of old wells, upto Rs. 500 for boring wells, upto Rs. 650 for Persian wheels, upto Rs. 6,500 for pumping plant, upto Rs. 10,000 for private tube-wells and Rs. 5,000 for construction of 'bundhis' with a subsidy of 25 per cent and Rs. 2,500 for repairing old 'bundhis'.

Under the Third Plan the target under minor irrigation included those of construction of 2,35,978 masonry wells, boring of 1,21,345 wells, installation of 1,33,898 Persian wheels and 12,948 pumping sets. During the preceding three years 84,973 masonry wells were constructed, 41,992 wells were bored, 57,391 Persian wheels and 7,275 pumping sets were installed. During the fourth year of the Third Plan, upto Nov. 1964, 37,498 wells were constructed, 12,991



wells bored, 16,970 Persian wheels and 2,804 pumping sets installed. By the end of 1965, 91,246 masonry wells would have been completed, 42,971 wells bored, 44,045 Persian wheels and 5,126 pumping sets installed. For the year 1966, it was proposed to construct 1,00,000 masonry wells, bore 48,000 wells, and install 35,000 Persian wheels and 20,000 pumping sets. Under the Third Plan a provision of Rs. 24.32 crores of loan was made and Rs. 17.74 crores were spent in the first three years. At the end of the Third Plan, it is expected the total expenditure would come to Rs. 46 crores, and the area covered by the irrigation work would be 96.99 lakh acres of land.

Names of certain irrigation systems with the total area irrigated during 1962-63 : Upper Ganga Canal 17,90,724 ; Lower Ganga Canal 13,77,758 ; Eastern Yamuna Canal 5,16,077 ; Agra Canal 3,88,497 ; Batwa Canal 3,74,099 ; Ramganga Canal 18,722 ; State Tube wells 19,88,854 ; Banganga Canal 6,941 ; Sarda Canal 15,10,275 ; Rohilkhand Canal 53,228 ; Ghagra Canal 40,959 ; Ken Canal 2,50,760 ; Canals in Tarai Division 50,315 ; Canals in Kumaon Division 7,710 ; Dhasan Canal 95,088 ; Belan Canal 46,293 ; Doharighat pumped Canal 46,130 ; Chakia and Chandauli Canals 1,97,173 ; Lakes and Tanks 62,023 ; Bundhies 19,015 ; Rampur Canal 52,068 ; Dun Canal 29,384 ; Total area irrigated 89,22,223 ; Minor irrigation and other systems 3,78,098. The grand total of area irrigated during 1962-63 was 93,00,321 acres.

Total irrigation potential created by Plan projects upto March 1963 : 117.6 lakh acres.

Total utilisation of irrigation potential anticipated up to March 1963 was 108.9 lakh acres.

#### Community Projects

(See main article "Community Development Projects").

#### POWER

In the field of power development, much progress was made during the year 1966. However on account of severe drought hydel power production suffered a setback.

The installed capacity of power increased to 910 mw. The installed capacity of the biggest hydel power station of the State, Rihand, was stepped up from 250 mw to 300 mw. The work on the other four major hydel schemes, viz. Yamuna Stage I and stage II, Ramganga and Obra Hydel having an installed capacity of 84.75 mw, 360 mw, 165 mw and 99 mw respectively progressed satisfactorily.

The power from the Matatila hydel project was extended to Mauranipur and Lucknow. Under the Yamuna Hydel Scheme Stage 1, two generating sets of 11.25 mw each at the Dhakrani power station and two sets of 17.5 mw each at the Dhalipur power station were commissioned.

In order to improve the generating capacity of the Sohawal steam power station in Faizabad district, the U.P. State Electricity Board started work on a short-term scheme estimated to cost Rs. 18 lakhs.

To meet the demand for electric power in this area, the Board also stated work on a bigger scheme costing Rs. 214 lakhs, under which work began on an extra high voltage transmission line from Allahabad to Gonda via Sultanpur and Sohawal, involving major river crossings, one on the river Ganga below Sangam at Allahabad and the other on the Ghagra at Ajodhya. On completion of the scheme, there would be plenty of power available in the area.

About 8,000 electrically operated tube-wells were at work at the end of 1964. The number is to go up to 12,000 by the end of the Fourth Plan. By the end of the Third Plan 4,650 towns were expected to be electrified, the number to go up to 16,000 by the end of the Fourth Plan. Demand in the industrial sector, along with the railway traction, will go up to 1,500 megawatts at the end of the IVth Plan.

The following generation schemes were included in the Third Five Year Plan besides those which have been commissioned already and shown above.

They are included in the table given below :

#### Projects Under Execution

| Name of Power House           | Installed Capacity in kW. | District      | Cost in lakhs of rupees | When started | Completion |
|-------------------------------|---------------------------|---------------|-------------------------|--------------|------------|
| Yamuna Hydel :                |                           |               |                         |              |            |
| Stage I .. .. .               | 84,750                    | Dehra Dun     | 6,238.15                | 1961-62      | 1966-67    |
| Stage II .. .. .              | 3,60,000                  |               |                         |              | 1971-72    |
| Matatila Hydel .. .. .        | 30,000                    | Jhansi        | 823.00                  | 1960-61      | 1965-66    |
| Ramganga .. .. .              | 1,65,000                  | Moradabad     | 1,931.77                | 1962-63      | 1971-72    |
| Obra Thermal .. .. .          | 2,50,000                  | Mirzapur      | 2,300.00                | 1962-63      | 1967-68    |
| Obra-Hydel .. .. .            | 1,00,000                  | Mirzapur      | 1,059.00                | 1961-62      | 1967-68    |
| New Thermal at Kanpur .. .. . | 64,000                    | Kanpur        | 681.61                  | 1962-63      | 1965-66    |
| Sixth Unit at Rihand .. .. .  | 50,000                    | Mirzapur      | 78.58                   | 1962-63      | 1965-66    |
| Harduaganj Stage III .. .. .  | 1,00,000                  | Aligarh       | 1,190.00                | 1963-64      | 1966-67    |
| Hill Schemes .. .. .          | 12,000                    | Almora        | 73.67                   | 1962-63      | 1965-66    |
|                               |                           | Nainital      |                         |              |            |
|                               |                           | Tehri Garhwal |                         |              |            |

#### LARGE-SCALE INDUSTRIES

Important industries of the State : Sugar, Edible Oils, Hydrogenated Oil, Tobacco products, Industrial Machinery, Machine Tools, Electrical Machinery and Electrical Accessories, cycle and cycle parts, Foundries, Iron Rolling and Foundries, Leather Tanning and Leather goods, Woollen Textiles, Cotton Textiles, Glass and Glass Bangles, Jute Textiles, Paper, Straw Board, Electric Lamps, Chemicals, Fertilizers, Distilleries and Breweries, Rayon, Match, Rosin and Turpentine, Cement etc.

In the public sector, the State Government runs two projects namely, Government Cement Factory, Churk, district Mirzapur and the Government Precision Instruments Factory, Lucknow.

(For details see article Government Industrial Undertakings).

Under the Central Sector Projects is the Antibiotics Factory at Rishikesh.

(For details see under Government Industrial Undertakings).



In the private sector, 30 new industrial units with a total investment of over Rs. 31·80 crores, went into production during the 18 months ended September last. Fifty-six new industrial licences were issued by the Union Government, involving investment of Rs. 24·50 crores during the same period. Thirty-three units were registered with the DGTD.

The U.P. State Industrial Corporation, under its industrial areas programme, took possession of 2,866 acres of land, developed 1,734 acres and allotted 507 acres consisting of 157 plots to industrialists till September 1966.

## REMINGTON RAND OF INDIA LTD.

21A, Ashok Marg, Lucknow.  
 REMINGTON TYPEWRITERS  
 and Business Equipment.  
 Phone : 28211.  
 Grams : "REMINGTONS"

49 licences were granted during 1963-64 under the Industrial (Development and Regulation) Act. Since the inception of Third Plan, 52 licensed units have already gone into production, which include the following industries: Metallurgical; Transportation; Industrial; Machinery; Machine Tools; Mechanical Instruments; Fertilisers; Chemicals; Textiles; Sugar; Fermentation Glass and Ceramics; Food and Vanaspati.

Some of the important lines of manufacture into which the licensed units have started production are A.C.S.R. Conductors (Ghaziabad), Sugar Mill Machinery (Allahabad), Electric Meters (Ghaziabad), Sugar in Co-operative Sector (Sarsawan, Saharanpur), Breweries and Malt Extract (Ghaziabad), Synthetic Rubber (Bareilly), Aluminium Ingots (Mirzapur), Railway Wagons (Ghaziabad), Fertilizers (Unnao), Electrodes (Modinagar), Calcium Carbonate (Rishikesh), Auto Parts (Ghaziabad), Machine tools (Bareilly) and Cement (Mirzapur), expansion project of Churk Cement Factory. The Camphor Factory at Bareilly, first of its kind in India, has also since gone into production. Besides, the following projects have started production:—Railway Wagon Plant at Kanpur; Milk Power Factories at Muzaffarnagar and Etah.

*The Aluminium Factory at Mirzapur:* The Aluminium Factory at Mirzapur has a capacity of 20,000 tonnes per annum of aluminium ingots and the licence for the expansion of the production capacity of the unit to 50,000 tonnes was obtained in January, 1963. This unit started production in April, 1963. During 1963, it produced goods worth Rs. 7·64 crores.

In Oct. 1964, 71 sugar factories were working in the State which produced sugar worth Rs. 9,635·24 lakhs during 1963. These factories employed 55,201 workers. The concentration of sugar factories is at Deoria (14), Meerut (8), Gorakhpur (50), Saharanpur (5), Basti (4), Gonda (4), Muzaffarnagar (4).

Thirty one textile units were functioning in the State, which produced goods worth Rs. 5,435·74 lakhs and employed 69,067 workers during 1963.

Engineering units, iron rolling and foundries are mainly located at Kanpur, Ghaziabad, Meerut, Bareilly, Allahabad, Aligarh and Agra.

There are two large-scale glass and glass product manufacturing units located at Moradabad and Allahabad. These factories produced goods worth Rs. 42·90 lakhs and employed 537 persons during 1963.

In the Third Plan five heavy industrial projects with an outlay of Rs. 109 crores were set up in the State.

## SMALL SCALE AND COTTAGE INDUSTRIES

Some of the important small scale industries of the State are Iron Casting, Brass and Aluminium utensils, Locks and Cutlery, Agricultural implements, Industrial Machinery and Machine Tools, Cycle and Cycle parts, Edible Oil, Khandsari, manufacture of Shoes and Boots (Leather), Leather Tanning and Finishing, Fine Pharmaceuticals and Chemicals, Glass and Glass Products including Glass Bangles, Tube Making and Wire Drawing.

Important cottage industries of the State are Handloom, Gur, Leather Tanning, Leather Shoes, Durries and Carpets, Brasswares, Calico Printing, Cane Bamboo Articles, Yarn Spinning, Ghani, Pottery, Wood Working, Locks etc. Besides this, U.P. is famous for its handicrafts such as artistic handloom fabrics of Tanda (Faizabad), Mau Nath Bhanjan (Azamgarh), Etawah, Sandila (Hardoi), Ghazipur, Varanasi, Meerut, Allahabad, Zari goods of Agra and Lucknow, Varanasi, Bareilly, Calico Printing of Farrukhabad, Lucknow, Bharatganj (Allahabad), Pilkhuwa (Meerut), Mathura, Wooden Toys of Bareilly, Dehra Dun, Varanasi, Ivory Articles of Lucknow and Varanasi, Pottery of Khurja and Chunar, Tarkashi of Mainpuri, Ebony goods of Nagina, Silk Brocades of Varanasi, Carpets of Mirzapur and Bhadohi, wood carving of Saharanpur, Marble articles of Agra, Horn goods of Sambhal (Moradabad), Artistic brass and copper-ware of Varanasi and Moradabad.

The number of registered small-scale industrial units had gone up from 5,000 to 11,000 in 1965.

(For sugar industry see article "Sugar Industry.")

## TRANSPORT (31-3-1964)

Total mileage of roads : 38,062.

Mileage of metalled roads : 15,180 under the P.W.D. and 1,716 under District Boards. This was expected to rise to 16,600 miles at the end of 1965-66.

Number of passenger service buses : 3,863 (excluding roadways vehicles). Number of goods carrying lorries, trucks : 14,179. Number of taxis : 532.

Fleet of motor vehicles (roadways fleet): Passenger buses 3,359; trucks 192; taxis 84.

The State owns a transport service under the name of U.P. Government Roadways, managed as a Government Department with the Transport Commissioner as the head.

The State is divided into eight regions namely Agra, Allahabad, Bareilly, Kumaon, Gorakhpur, Kanpur, Lucknow and Meerut. Each region is in the charge of a General Manager.

The U.P. Road Transport Service (Development) Act, 1955, provides for the grant of compensation to the displaced operators who were not provided alternative routes.

The headquarters of the Transport Commissioner is Lucknow.

Capital invested : Rs. 14·89 crores (1962-63).

Number of routes operated 767. Mileage of routes : 44,440. Road mileage covered : 10,019.

Total kilometres covered (1963-64) : 20,54,60,667.

Number of vehicles owned by authority on Dec. 31, 1963 : Buses : 4,018; Trucks : 15,525; Taxis : 595.

Number of nationalised city bus services : 59.



Cities where Roadways operate city bus services : Kanpur, Allahabad, Bareilly, Lucknow, Varanasi and Agra.

Names of places where suburban bus services operate : Mathura-Vrindaban, Fatehgarh-Farrukhabad and Dehra Dun-Premnagar-Clement Town.

Names of inter-State routes operated by the Government Roadways : Varanasi-Bhabua, Allahabad-Rewa, Agra-Gwalior, Dehra Dun-Ambala and Hardwar-Pehowa.

Roadways have 56 depot workshops and regional workshops undertaking maintenance and repairs of Roadways fleet. There is a Central Workshop at Kanpur undertaking heavy repairs, reconditioning of engines, chassis, manufacture of bus bodies and batteries, etc. in addition to training of technical personnel.

Special tourist buses have been provided to carry tourists to places of interest and scenic beauty.

Number of passengers carried by Roadways buses (1963-64) : 17,83,37,648.

Total revenue (1962-63) : Rs. 12,95,35,180.

Profit : Rs. 212 lakhs approximately (1962-63).

No. of persons employed (March, 1964) 23,485.

Rates of bus fare for lower class : 2.5 paise per passenger per kilometre.

Goods service has not been nationalised.

The U.P. Government proposes to nationalise 4,000 miles of road transport during the next five years to bring a total of 14,000 miles of road transport under nationalisation by 1971.

## CO-OPERATION

(See main article "Co-operative Movement").

## HOUSING

(See main article "Housing")

## MEDICAL AND PUBLIC HEALTH

Number of beds in State Hospitals : 27,294 (1963).

Number of operations performed in State-owned hospitals and dispensaries : 2,15,43,095 (1961).

Number of Doctors in Government Service : 2,056 (April 1964).

Number of Doctors registered in U.P. : 9,221 (1963).

Number of Nurses : 3,143 (1963).

Number of Registered Vaidas and Hakims : 39,150 (1963).

Number of Vaidas and Hakims in Government service : 734 (1963).

Number of Ayurvedic and Unani dispensaries : 1,074 (1962).

State budget on Medical Department : Rs. 6,51,22,844 (1963-64).

State budget on Public Health (1963-64) : Rs. 2,91,60,600.

With the assistance of the W.H.O. and UNICEF, 200 child welfare centres have been opened since 1947.

Number of T.B. Sanatoria : 12 ; T.B. Isolation Hospitals 5 ; T.B. Clinics : 42. Total number of beds in the T.B. Sanatoria and clinics : 2,006 ; T.B. Wards 22 (1963).

Number of leprosy asylums : 18.

Number of beds : 1,561 (1963).

One study and treatment centre at Dehra Dun and 8 subsidiary centres at Gorakhpur, Basti, Varanasi, Bahraich, Moradabad, Kheri, Barabanki and Azamgarh also function in the State under Government of India's Pilot Project Scheme for control of leprosy. Also there are 3 leprosy clinics at Kanpur, Varanasi and Deoria and 2 mobile leprosy units at Hamirpur and Jhansi.

Number of women's & Dufferin hospitals under Govt. supervision : 170 (1963).

The Employees' State Insurance scheme is in operation in Kanpur, Lucknow, Agra, Saharanpur, Allahabad, Varanasi, Rampur, Aligarh Hathras, Bareilly, Shikohabad, Modinagar, Ghaziabad, Mirzapur and Sahjanwa in Gorakhpur District, Meerut, Firozabad, Moradabad, Jhansi, Izatnagar, Roorkee, Hapur, Mathura, Dehra Dun, Churk, Silapur, Ghazipur and Hirangaon.

From November 1959, families of workers insured under this scheme are also being provided medical treatment. The total number of dispensaries opened under the scheme has since risen from 40 to 76 including nine mobile dispensaries (Sept. 1964).

During the Third Plan period, 771 new family planning clinics (721 rural and 50 urban) were established. At the end of Sept. 1966, there were 871 clinics. For the first year of the Fourth Plan period, a budgetary allocation of Rs. 3.35 crores has been made for family planning. In 1965-66 only 75,000 sterilisation operations were performed against a target of 500,000 operations. By the end of 1965-66 in eight months only 45,347 took advantage of the IUCD (loop) as against a target of 200,000 for 1965-66.

67 National Malaria Eradication units are functioning in the State.

## PEST CONTROL (INDIA) PRIVATE LTD. Consulting Entomologists—Termite Control —Disinfestation—Fumigation Service.

Address : 15, Pannalal Road, Allahabad 2.

Head Offices : Yusuf Building, Mahatma Gandhi Road, Bombay 1.

For further details please see Bombay Commercial Firms Section.

## LABOUR

Industries in which minimum wage is fixed : Rice, Flour, Dal Mills, Tobacco (including Bidi making), Manufactory Cinchona Rubber, Tea or Coffee Plantation in Dehra Dun District only, Oil, Road Construction or Building operations, Stone Breaking or Stone Crushing, Lac Manufactory, Tanneries and Leather Goods Manufactory, Public Motor Transport and Woollen Carpet Industry.

There occurred 96 strikes till June, 1963 involving 1,88,954 workers resulting in a loss of 5,07,804 man-days.

The industrial lay-offs claimed another loss of 11,04,925 man-days and involved 57,289 workers. The number of the lay-offs was 1,391 in 1963.

State Govt. Acts for the welfare of the labourers :

(1) U.P. Shops and Commercial Establishment Act (1947), (2) U.P. Industrial Disputes Act, (3) U.P. Maternity Welfare Act, (4) U.P. Sugar and Alcohol Industry Labour Welfare and Development Fund Act, (5) U.P. Industrial Housing Act (1955).

Trade Unions : 1,102 (March 1964).

Labour Welfare Centres : 70 (March 1964).

Under subsidised Industrial Housing Scheme 20,690 houses were constructed till Dec. 31, 1963. Under the sugar factory labour housing scheme, 1,538 houses were constructed in 62 sugar mills at a cost of Rs. 45,54,186.



Provident Fund Scheme covers 1,80,488 employees in 1,454 factories. Employees' State Insurance Scheme has been enforced in 28 industrial towns, covering 3,15,460 employees. On Dec. 31, 1963, the number of living old age pension holders was 10,539.

Number of employment exchanges and that of Industrial Training Institutes, both run by the Directorate of Training & Employment are 51 each.

The Directorate also runs schemes for collection of employment market information and vocational guidance.

**Social Welfare Department :** The Department runs a scheme for women welfare in 39 districts, looks after the administration of Suppression of Immoral Women and Children's Institution Act and Probation Acts, runs a couple of centres for youth and child welfare.

The department runs five homes at the State level and 21 centres at the district level for the after-care treatment of destitute persons, both men and women.

The Samaj Kalyan Samiti Scheme is one of the most important schemes of the Department run for creating community consciousness in urban people in all district level headquarter cities.

### EDUCATION (1963-64)

(See *Educational Statistics* (1963-64 on page 212).

Girls' education in the State has been made free up to class X from Jan. 1965. Nearly 1,75,000 girl students benefited by this decision.

### JUDICIARY

The scheme of separation of Executive from Judiciary, which is one of the directive principles of the Constitution, was started in 1949. It was gradually extended to other districts, and now the scheme is in operation in all the districts of the State, except in the seven hill districts of the Kumaun and Uttarkhand Divisions.

Letters patent appeals against the appellate jurisdiction of the single judges have been abolished by the U.P. High Court Act, 1962.

### U. P. FINANCIAL CORPORATION

(See *State Corporations*)

### UNIVERSITIES

#### Agra University

**Chancellor :** Governor, Uttar Pradesh (*Ex-Officio*).

**Vice-Chancellor :** Dr. Ranjan, M.Sc., D.Sc., F.N.I.

**Registrar :** R. S. Agarwal.

Affiliated Colleges 142 ; Students 60,440 (approx.)

#### BUDGET ESTIMATES FOR 1965-66

Total income : Rs. 37,72,700.

Total expenditure : Rs. 38,37,708.

#### Aligarh Muslim University

##### Aligarh

**Chancellor :** Nawab Saidul Mulk Dr. Hafiz Mohd. Ahmad Said Khan of Chhatari.

**Vice-Chancellor :** Dr. Nawab Ali Yawar Jung Bahadur, B.A. (Hons.) (Oxford), Padma Bhushan.

**Pro-Vice-Chancellor :** Mohammed Fazlur Rahman.

**Registrar :** Y. D. Khan.

Residential Students 4,000 (approx.).

### BUDGET ESTIMATES FOR 1965-66

(Normal)

|                                   | Rs.       |
|-----------------------------------|-----------|
| Anticipated income .. .. .        | 98,50,000 |
| Anticipated expenditure .. .. .   | 99,65,800 |
| Central Govt. Grants .. .. .      | 79,22,500 |
| Income from other sources .. .. . | 19,27,500 |
| Total .. .. .                     | 98,50,000 |

### PLANNED DEVELOPMENT (1965-66)

|                                 | Rs.         |
|---------------------------------|-------------|
| Anticipated Income .. .. .      | 1,88,88,751 |
| Anticipated Expenditure .. .. . | 1,89,20,905 |

From the academic year 1967-68, the University has instituted a one-year Pre-University and a three year integrated degree course in place of the Intermediate and the two year degree courses.

The medium of instruction in all classes of the University is English.

### Allahabad University

**Chancellor :** Governor of U.P.

**Vice-Chancellor :** R. K. Nehru.

**Registrar :** K. P. Mohiley, M.A.

Unitary, teaching, residential ; Colleges 6 ; Students 6,182.

### BUDGET ESTIMATES, 1966-67

|                                       |                 |
|---------------------------------------|-----------------|
| Total income : .. .. .                | Rs. 73,65,906   |
| Total Expenditure : .. .. .           | Rs. 73,65,906   |
| State Govt. Grant : Recurring .. .. . | Rs. 54,47,899   |
| Total .. .. .                         | Rs. 2,01,79,711 |

### ACTUALS FOR 1965-66

Total income : Rs. 18,49,033.

Total expenditure : Rs. 51,92,092.

State Govt. Grant : Rs. 27,32,941.

English and Hindi are the media of instruction for graduate course and English is the medium of instruction for post-graduate course.

### Banaras Hindu University

#### Varanasi 5.

**Chancellor :** His Highness Dr. Karan Singh.

**Pro-Chancellor :** His Highness Dr. Vibhuti Narayan Singh.

**Vice-Chancellor :** Vacant.

**Pro-Vice-Chancellor :** M. C. Bijawat, B.Sc., B.E.

**Registrar :** Major S. L. Dar, M.A., LL.B.

Residential : Constituent Colleges 13 ; Affiliated Colleges 4 ; Students 7,937 (1964-65).

### BUDGET ESTIMATES FOR 1966-67

Income : Rs. 93,78,610.

Expenditure : Rs. 2,07,46,710.

(These figures exclude Development grant and Block grant receivable by the University).



**Gorakhpur University**

*Chancellor* : Governor, Uttar Pradesh (*Ex-officio*).

*Vice-Chancellor* : Prof. Madan Mohan, M.A., M.L.C.

*Registrar* : Dr. Virmani Prasad Upadhyaya.

*Teaching and Affiliating* :

Constituent College : 1.

Affiliated College : 47.

Students : 18,440.

**BUDGET ESTIMATES FOR 1966-67.**

Total income : Rs. 75,12,889.

Total Expenditure : Rs. 75,12,889.

State Govt. Grant : Recurring Rs. 32,27,847.

State Govt. Grant : Non-recurring Rs. 10,00,000.

The medium of instruction in all undergraduate classes of the University is Hindi and for post-graduate classes English except Hindi subject.

**Lucknow University**

Residential, Unitary and Teaching University.

*Chancellor*, Governor of Uttar Pradesh.

*Vice-Chancellor* : Dr. A. V. Rao, M.A., Ph.D. (Lond.),  
Bar-at-Law.

*Registrar* : P. C. Mital, M.A.

*Librarian* : Dr. P. N. Sharma, D.Sc.

Number of students : 16,875 including 3,775 women students and 464 research scholars for 1965-66.

The medium of instruction in the University is Hindi.

**Budget (1965-66)**

|                        |    |    |    |    | Rs.       |
|------------------------|----|----|----|----|-----------|
| Income (estimate)      | .. | .. | .. | .. | 59,84,983 |
| Actuals                | .. | .. | .. | .. | 47,16,925 |
| Expenditure (estimate) | .. | .. | .. | .. | 59,84,983 |
| Actuals                | .. | .. | .. | .. | 50,60,758 |

**Roorkee University**

Roorkee

*Chancellor* : Governor of Uttar Pradesh.

*Vice-Chancellor* : M. R. Chopra.

*Registrar* : V. N. Kak, M.A.

Unitary, Teaching and Residential, Students (1964-65) : Full time 2,224 (Men 2,186) (Women 38). New Admissions 537 (Men 525, Women 12). Post-Graduate : Full time 198 Men.

Students from other countries —27 (Nepal 25, Cameroun (N. Africa) 1, Burma 1.

The medium of instruction is English.

**Budget (1964-65)****Income :**

|                                                                                   | Rs.                |
|-----------------------------------------------------------------------------------|--------------------|
| Grant received from Central Govt.                                                 | .. 3,80,151.00     |
| Grant in aid from State Govt.                                                     | .. .. 49,61,230.00 |
| Grant received from U.G.C.                                                        | .. .. 24,03,011.00 |
| Grant received from C.S.I.R., New Delhi                                           | .. 3,49,777.00     |
| Other sources (Students fee, rent income from buildings and miscellaneous income) | 9,34,000.00        |
| Total                                                                             | .. .. 90,28,169.00 |

*Expenditure* : Rs. 90,28,000.00.

**U. P. Agricultural University**

Pant Nagar (District Nainital).

This University set up on the model of the Land Grant Colleges of U.S.A., aims at developing rural leadership and competence.

The University, which is the first of its kind in the country, has four constituent colleges and one school of basic sciences & humanities—an Agricultural College, a College of Animal Husbandry and Veterinary Sciences and a College of Agricultural Engineering and Technology and a Post-Graduate College. The University provides comprehensive education on Agriculture and allied subjects on the basis of an integrated system of teaching, research and extension. It has a capacity to train 325 candidates per year for undergraduate and 60 for Post-graduate studies—25 per cent of the seats being specifically reserved for students from outside the State.

**Budget (1966-67)**

|               | Rs.                |
|---------------|--------------------|
| Recurring     | .. .. 45.11 lakhs. |
| Non-recurring | .. .. 10.00 lakhs. |

*Vice-Chancellor* : D. P. Singh, I.A.S.

*Registrar* : P. K. Jain.



# STATE ASSOCIATIONS

## ANDHRA PRADESH

### ASSOCIATIONS, INSTITUTIONS, ETC.

#### ADMINISTRATIVE STAFF COLLEGE OF INDIA

Bella Vista, Hyderabad 4.

Gives training to senior executives from different spheres of administration and fields of activity—public and private. Provides opportunity for self-development and for the study of the skills and techniques of higher management and leadership.

*Principal* : R. L. Gupta.

#### ALL-INDIA GRAPHITE, CRUCIBLE MANUFACTURERS ASSOCIATION (Regd.)

Rajahmundry.

#### ANDHRA CHAMBER OF COMMERCE

Andhra Chamber Building, 272/73, Angappa Naick Street, Madras 1.  
Also at 68-B, Rashtrapati Road, Secunderabad

#### THE ANDHRA FILM CHAMBER OF COMMERCE

Andhraratna Road, Gandhinagaram, Vijayawada 3.

#### ANDHRA HISTORICAL RESEARCH SOCIETY

Rajahmundry.

#### ANDHRA PRADESH AGRICULTURAL MACHINERY & APPLIANCES ASSOCIATION

148, Rashtrapati Road, Secunderabad.

#### ANDHRA PRADESH CHEMISTS & DRUGGISTS ASSOCIATION

Metropolitan Club, Hanuman Tekdi, Hyderabad.

#### ANDHRA PRADESH HOTELS ASSOCIATION

93, Sarojini Devi Road, Secunderabad.

#### ANDHRA PRADESH PAPER MERCHANTS ASSOCIATION

335, Gowliguda, Hyderabad.

#### ANDHRA PRADESH PRINTERS' ASSOCIATION

3-4-649 (Upstairs), Narayanguda, Hyderabad.

#### ANDHRA PRADESH SANGEETA NATAKA AKADEMI

Kala Bhavan, Saifabad, Hyderabad 4.

#### ANDHRA PRADESH SMALL INDUSTRIES ASSOCIATION

Industrial Estate, Vijayawada 7.

#### ANDHRA PRADESH STATE COUNCIL FOR CHILD WELFARE

6-3-1186, Begumpet, Hyderabad 16.

#### ANDHRA SAHITYA PARISHAT (Telugu Academy)

Kakinada.

#### ANDHRA STATE GUNNY TRADERS ASSOCIATION (Regd.)

Pullativari St., Vijayawada 1.

#### THE AUTOMOBILE ASSOCIATION OF SOUTHERN INDIA

60, Mahatma Gandhi Road, Secunderabad

#### THE BHARAT SCOUTS AND GUIDES

Domalguda, Hyderabad.

#### THE BHIMAVARAM CHAMBER OF COMMERCE

Bhimavaram (Dt. W. Godavari).

#### BUILDERS' ASSOCIATION OF INDIA

Red Hills, Hyderabad 4.

#### CENTRAL INSTITUTE OF ENGLISH

Hyderabad 7.

*Chairman* : Dr. P. E. Dustoor ; *Director* : Prof. V. K. Gokak.

#### CENTRAL TRAINING INSTITUTE OF INSTRUCTORS

I.T.I. Bldg., Mallepalley, Hyderabad.

#### THE CHAMBER OF COMMERCE, ATTIL

Tadepalligudem (Dt. W. Godavari).

#### CHITTOOR DISTRICT SMALL SCALE INDUSTRIES ASSOCIATION

205, Town Planning Area, Tirupati.

#### THE COCANADA CHAMBER OF COMMERCE

Commercial Road, Kakinada 1.

#### FAMILY PLANNING ASSOCIATION

5-1-227, Jambagh, Hyderabad.

#### FEDERATION OF ANDHRA PRADESH CHAMBERS OF COMMERCE AND INDUSTRY

8573, Rashtrapati Road, Secunderabad 3.  
*President* : A. N. Rajagopal ; *Secretary* : C. A. Rebello.

#### FEDERATION OF ANDHRA PRADESH SMALL INDUSTRIES ASSOCIATIONS

128, M. Gandhi Road North, Secunderabad.

#### THE GODAVARI CHAMBER OF COMMERCE LTD.

Vallabhai Street, Kakinada, East Godavari Dist.

*President* : R. Satyanarayanamurty ; *Vice-Pres.* : A. Subbiah ; *Secy.* : N. Rajah.

#### GOUTHAMI CHAMBER OF COMMERCE

Main Road, Rajahmundry.

#### HYDERABAD CHILDREN'S AID SOCIETY

3-6-488, Hardikarbagh, Himayatnagar, Hyderabad 1.

#### THE HYDERABAD CLOTH MERCHANTS' ASSOCIATION (REGD.)

No. 15-9-812, First Floor, P.O. Afzulgunj, Hyderabad.

#### HYDERABAD EDUCATIONAL CONFERENCE

No. 19, Bachelors Quarters, Jawaharlal Nehru Road, Hyderabad 1.

#### HYDERABAD KIRANA MERCHANTS ASSOCIATION

Begum Bazar, Hyderabad.

#### HYDERABAD SECUNDERABAD IRON & HARDWARE CONTROL STOCKISTS' ASSOCIATION

3364, Rashtrapati Road, Secunderabad 3.

#### THE HYDERABAD STATE FILM CHAMBER OF COMMERCE

30, Ghasmandy Road, Secunderabad.

#### HYDERABAD STATE MOTOR MERCHANTS' ASSOCIATION

Mahatma Gandhi Road, Secunderabad.

#### HYDERABAD STOCK EXCHANGE LTD.

Bank Street, Hyderabad.

*President* : Mukundas Malani ; *Vice-President* : P. B. Afzulpurkar ; *Secretary* : M. V. Bharatia.

#### HYDERABAD TRADE ASSOCIATION

Singhvee Bhavan, Tilak Road, Hyderabad.

#### THE INDIAN CHAMBER OF COMMERCE

P. Box 67, Guntur.

*President* : Maddi Ranganath Sai ; *Vice-Presidents* : Jamili Nammalvar, Kakanj Sankar Rao, Tellakula Koteswara Rao ; *Hon. Secretaries* : P. Mrutyunjaya Row, D. Rajanikanta Rao.

#### INDIAN CONFERENCE OF SOCIAL WORK

Red Hills, Hyderabad 4.

#### INDO-GERMAN CULTURAL SOCIETY

208, Bibi Alawa, Hyderabad-24.

#### INDO-IRAQ CULTURAL SOCIETY

17-6-674, Chawrasta, Buglow Beni, Hyderabad 24.

#### INDUSTRIAL ESTATE MANUFACTURERS ASSOCIATION

B-17, Sanatnagar, Hyderabad 18.

*President* : V. R. Reddy ; *Gen. Secy.* : V. K. Jain ; *Treasurer* : Hanumandas Darak.

#### THE INSTITUTION OF ENGINEERS (INDIA) A. P. CENTRE

Khairatabad, Hyderabad 4.

#### KALAKSHETRAM

Eluru (W. G. Dist.).

#### THE KRISHNA DISTRICT CHAMBER OF COMMERCE

Fort Road, Masulipatam.

#### THE NELLORE CHAMBER OF COMMERCE

Tobacco Field, Nellore 1.

*Hon. Secretary and Treasurer*, Kalahasti Ramanatham, M.A., B.Ed.

#### NUTRITION RESEARCH LABORATORIES

Tarnaka, Hyderabad 7.

#### OIL TECHNOLOGICAL RESEARCH INSTITUTE

Anantapur.

#### PALASA CASHEW MANUFACTURERS' ASSOCIATION

Palasa. (Dt. Srikakulam).

#### RAJAHMUNDY CHAMBER OF COMMERCE LTD.

Rajahmundry 1.

#### REGIONAL RESEARCH LABORATORY

Hyderabad 9.

*Director* : G. S. Sidhu.

*Note* : Office-bearers and addresses change periodically.



**SECUNDERABAD TRADES ASSOCIATION**  
151, Sappers Lines, Secunderabad.

**SECUNDERABAD YARN MERCHANTS' ASSOCIATION**  
1725, Gunj Bazar, Secunderabad.

**SHREE GOUTHAMI VIDYA PEETHAM**  
Kambam Choultry Street, Seethampeta,  
Rajahmundry.

**SOCIETY FOR CULTURAL RELATIONS WITH FOREIGN COUNTRIES**

156, Dewdi Nawab Ikram Yakhootpura,  
Hyderabad 23.

**ST. JOHN AMBULANCE ASSOCIATION**  
St. Mary's Road, Secunderabad.

**TELUGU BHASHA SAMITI**  
*Head Office* : Osmania Univ. Campus, Hyderabad.  
*Regd. Office* : 71 University Buildings, Madras 5.

**TRAINING CENTRE FOR THE ADULT DEAF**

(Ministry of Education)  
Malakpet, Hyderabad.

**VIZAGAPATAM CHAMBER OF COMMERCE**  
16/9, Main Road, Visakhapatnam 1.

**VIZIANAGARAM CHAMBER OF COMMERCE**  
Main Road, Vizianagaram.

## ASSAM

**ASAM SANGEET NATAK ACADEMY**  
Kismet, Upland Road, Shillong.

**ASSAM CHAMBER OF COMMERCE**  
Keatings Road, Shillong.

**ASSAM CHAMBER OF COMMERCE & INDUSTRY**  
Morello Bldg., Shillong.

**ASSAM ENGINEERING INSTITUTE**  
Chandmarl, Gauhati.

**ASSAM NATIONAL CHAMBER OF COMMERCE**  
P.O. Ulubari, Gauhati.

**ASSAM SAHITYA SABHA**  
Chandrakanta Handique Bhawan, Jorhat.

**ASSAM SEVA SAMITI**  
Gauhati.

**ASSAM TEA PLANTERS' ASSOCIATION**  
Jorhat.

**ASSAM TEXTILE INSTITUTE**  
Gauhati.

**H.R.H. THE PRINCE OF WALES INSTITUTE OF ENGINEERING AND TECHNOLOGY**  
Jorhat.

**INDIAN MEDICAL ASSOCIATION, (ASSAM STATE BRANCH)**  
Chowkidinghee  
P. O. Rehabari (Dibrugarh)

**KAMARUPA ANUSANDHAN SAMITY**  
Gauhati.

**NARAYANI HANDIQUI HISTORICAL INSTITUTE**  
Gauhati.

**PASTEUR INSTITUTE & MEDICAL RESEARCH INSTITUTE**  
Shillong.

## BIHAR

**ABDUL KALAM ACADEMY**  
Park View, Near Birla Mandir, Sabjibagh,  
Patna 4.

**ALL INDIA ADIBASI MAHASABHA**  
Ranchi.

**ALL INDIA JHARKHAND PARTY**  
Pathal Kuduwa, Ranchi.

**THE BIHAR CHAMBER OF COMMERCE**  
(Estd. 1926).

Judges' Court Road, P.O. Box No. 71, Patna 1.  
*President* : K. N. Sahaya ; *Vice-Presidents* :  
S. N. Kabra, C. L. Datta ; *Hon. Treasurer* :  
C. L. Poddar ; *Hon. Secretary* : K. C. Bhargava.

**BIHAR INDUSTRIES ASSOCIATION**  
Sinha Library Road, Patna-1.

**BIHAR PAPER MERCHANTS' ASSOCIATION**  
D Block, New Area, Kadamkuan, Patna 3.

**BIHAR PIPE DISTRIBUTORS ASSOCIATION**  
Govind Mitra Road, Patna 4.

**EASTERN BIHAR CHAMBER OF COMMERCE**  
Bhagalpur 2.

**GOVERNMENT SILK INSTITUTE**  
Bhagalpur.

**GOVERNMENT VACCINE INSTITUTE AND PASTEUR INSTITUTE**  
Namkum (Ranchi).

**INDIAN COAL MERCHANTS' ASSOCIATION**  
P. Box 113, Jharla.

**INDIAN COLLIERY OWNERS ASSOCIATION**

I.C.O. Association Road, P.O. Box No. 70,  
P. O. Dhanbad, Dist. Dhanbad.

**INDIAN CONFERENCE OF SOCIAL WORK**  
Bihar State Branch, Annie Besant Road,  
Patna 4.

**THE INDIAN INSTITUTE FOR CULTURAL STUDIES**

P.O. Mandar Vidyapith (Dt. Bhagalpur).

**INDIAN SCHOOL OF MINES**  
Dhanbad.

**INDIAN SUGAR MILLS ASSOCIATION, BIHAR BRANCH**  
Exhibition Road, Patna 1.

**THE INSTITUTION OF ENGINEERS (INDIA)**

Huda House, Gandhi Maldan Road, P.B. 77,  
Patna 1.

**THE JAMSHEDPUR CHAMBER OF COMMERCE**

35, Laxmi Mansion, Jamshedpur.

*President* : John P. Costa ; *Vice-Presidents* :  
P. Sharma, P. Agarwalla, S. K. Sen ; *Hon. Secretary* : S. N. Mital ; *Hon. Treasurer* : N. C. Das.

**K. P. JAYASWAL RESEARCH INSTITUTE**  
Museum Buildings, Patna-1.

**MANDAR VIDYAPITH**  
P.O. Mandar Vidyapith, Via Barahat, Dist.  
Bhagalpur.

**MUZAFFARNAGAR CHAMBER OF COMMERCE**  
Muzaffarnagar.

**NAVA NALANDA MAHAVIHARA**  
(Nalanda Institute of Post Graduate & Research  
in Buddhist Learning and Pall).  
Nalanda (Dt. Patna).

**RABINDRA PARISHAD**  
Rabindra Bhawan, Gardiner Road, Patna 1.

**RESEARCH INSTITUTE OF PRAKRIT, JAINOLOGY & AHIMSA**  
Vaishali (Dt. Muzaffarpur).

**RURAL INSTITUTE**  
Birouli (Dt. Darbhanga).

**SOIL CONSERVATION SOCIETY OF INDIA**  
15, Bayley Road, Patna.

**VINDHYA KALA MANDIR**  
Kankarbagh, Patna 7.

**YOGODA SAT-SANGA VIDYALAYA**  
Ranchi.

Imparts academical and spiritual education.  
Medium—English.



## DELHI

## ASSOCIATIONS, SOCIETIES, ETC.

**AERONAUTICAL SOCIETY OF INDIA**  
13B, Indraprastha Estate, New Delhi-1.

*President* : Air Vice Marshal M. S. Chaturvedi;  
*Vice-Presidents* : Dr. S. Dhawan, P. R. Krishna Rao; *Capt. L. M. Manilal*; *Capt. K. Vishvanath*.

**AGRICULTURE MACHINERY DEALERS & MANUFACTURERS ASSOCIATION OF INDIA**

(Pratap Building, Connaught Circus, New Delhi 1.)

**AIR-CONDITIONING AND REFRIGERATION COUNCIL OF INDIA**  
P. Box No. 93, New Delhi 1.

*President* : V. P. Punj; *Secretary* : R. L. Sharma.

**AKHIL BHARATIYA SHAREERIK SHIKSHA PARISHAD**

Post Box No. 234, New Delhi-1.

*Regd. Office* : A. 11/99, Lajpat Nagar, New Delhi-14.

**ALL-INDIA ANGLO-INDIAN ASSOCIATION**  
Bombay Life Building, Connaught Circus, New Delhi.

**ALL-INDIA AYURVEDIC CONGRESS**  
Mahalakshmi Market, Chandni Chowk, Delhi 6.

**ALL INDIA BLIND RELIEF SOCIETY**  
2F, Lajpatnagar, New Delhi 14.

**ALL INDIA BOY SCOUTS ASSOCIATION**  
(General Headquarters.)

7, Jangpura B Extension, Mathura Road, New Delhi 14.

**ALL INDIA BRICK & TILE MANUFACTURERS' FEDERATION**  
1-B/21, Jhandewalan Extn., New Delhi 1.

*President* : S. D. Contractor; *Secretary* : A. N. Kapahi.

**ALL INDIA COUNCIL OF SPORTS**  
C/o Ministry of Education, New Delhi-2.

*President* : S. K. Somaiya; *Secretary* : O. N. Chandoke.

**ALL INDIA DISTILLERS ASSOCIATION**  
H-37, Connaught Circus, New Delhi.

**ALL INDIA FINE ARTS AND CRAFTS SOCIETY**  
Old Mill Road (Rafi Marg), New Delhi.

**ALL-INDIA GLASS MANUFACTURERS' FEDERATION**  
77, Deshbandu Gupta Road, New Delhi.

*President* : S. N. Agarwal; *Vice-Presidents* : B. B. Sarkar (Sr.), P. C. Varshnei (Jr.); *Hony. General Secretary* : H. C. Gupta.

**ALL INDIA HARIJAN SEVAK SANGH**  
Kingsway, Delhi 9.  
Founded 1932.

The object is the eradication of untouchability by truthful and non-violent means. In furtherance of its object, the Sangh seeks to establish contact with caste Hindus and show them that untouchability as it is practised, is repugnant to the fundamental principles of Hinduism. It also seeks to serve Harijans so as to promote their moral, social and material welfare.

*President* : Shrimati Rameshwari Nehru;  
*Vice-Presidents* : Vidyoti Hari, R. S. Dhotre;  
*Secretary* : Jivanlal Jairamdas.

The Sangh spent during the year 1964-65 Rs. 26,41,891.05 on the removal of untouchability, Bhangi Kasht Mukti, and other Welfare activities. It conducted 119 hostels with 5,262 Harijan and 1,305 Non-Harijan boys and girls besides 3 Industrial training centres, 354 co-operative societies and 165 Balwadis, 'Sanskar Kendras', Ashram Schools and creches. During 1964-65 it secured the opening of 941 temples, 1,557 wells and tanks, 832 barber saloons, 1,795 hotels and restaurants to Harijans. Where there was opposition it reported to the police 146 cases under the Untouchability (Offences) Act out of which 15 were convicted, 37 were compromised, one was dismissed and the remaining 93 were still pending.

**ALL INDIA HINDI PUBLISHERS' ASSOCIATION**

'Chandralok', Jawaharnagar, Delhi-6.

**ALL INDIA INDUSTRIAL EDITORS' COUNCIL**

4, Birbal Road, New Delhi 14.

**ALL INDIA INSTITUTE OF MEDICAL SCIENCES**

Ansari Nagar, New Delhi 16.

*Director* : Dr. K. L. Wig; *Dy. Director (Adm.)* : N. B. Chatterji.

**ALL INDIA MANAGEMENT ASSOCIATION**  
12-A, Nizam-ud-Din West, New Delhi 13.

*President* : Dr. K. S. Basu; *Executive Director* : Prem Pandhi.

**ALL INDIA MANUFACTURERS' ORGANISATION**

(Delhi State Board),

30, Ferozeshah Road, New Delhi.

**ALL INDIA MOTOR UNIONS CONGRESS**  
16-A, Asaf Ali Road, New Delhi.

**ALL-INDIA NEWSPAPER EDITORS' CONFERENCE**

50, Theatre Communication Bldgs., Connaught Place, New Delhi.

**ALL INDIA NEWSPAPER EMPLOYEES' FEDERATION**

Flat No. 29, New Central Market, Connaught Place, New Delhi.

*President* : Mrs. Subhadra Joshi, M.P.

*Vice-Presidents* : K. L. Das Gupta (Calcutta); K. N. Malaviya (Delhi); P. C. Batra (Delhi); M. P. More (Bombay); Deen Dayalu (Madras); *General Secretary* : K. L. Kapur; *Treasurer* : R. N. Kapur.

**ALL-INDIA ORGANISATION OF INDUSTRIAL EMPLOYERS**

Federation House, New Delhi 1.

The objects of the Organisation are to promote and protect the industrial development of India by studying various problems relating to trade, industry and labour and advising the Central and State Governments suitably; to study questions coming up at the International Labour Organisation and other international and national conferences from the point of view of Indian industry and to enable the Indian representatives at these conferences to take an appropriate stand; and to promote harmonious relations between the management and labour.

*President* : R. H. Mody; *Secretary-General* : G. L. Bansal; *Secretary* : P. Chentsal Rao.

**ALL-INDIA PEACE COUNCIL**

14, Munshi Niketan, Asaf Ali Road, New Delhi.

**ALL INDIA RADIO MERCHANTS' ASSOCIATION**

(Delhi Zone)

1681/28, Mangal Market, Delhi 6.

**ALL INDIA SAFETY GLASS TRADE ASSOCIATION**

6511, Fatehpuri, Delhi 6.

**ALL-INDIA TRADE UNION CONGRESS**

5-E, Jhandewalan, Rani Jhansi Road, New Delhi.

*President* : S. S. Mirajkar; *Vice-Presidents* : Dr. Ranen Sen, M.P., P. Ramamurthi, S. S. Yusuf, Parvati Krishnan, P. Balachandra Menon, Kedar Das, M. Ismail; *General Secretary* : S. A. Dange.

**ALL INDIA VOTERS' ASSOCIATION**

Flat 44, Bhagat Singh Market, Lady Hardinge Road, New Delhi 1.

**ALL INDIA WOMEN HOCKEY ASSOCIATION**

57, Kaka Nagar, New Delhi.

**ALL INDIA WOMEN'S CONFERENCE**

Sarojini House, 6, Bhagwandass Road, New Delhi 1.

*President* : Smt. M. S. H. Jhabvala; *Hon. General Secretary* : Smt. Lakshmi Baghuramiah; *Hon. Treasurer* : Smt. Pramoda Gosalia.

*Branches* : All over India—40, including 370 constituent branches.

*Membership* : 70,000, all over India.

*Aims and Objects* : To work for a society based on the principles of social justice, personal integrity and equal rights and opportunities for all.

*Other important objects are :*

(i) To work actively for the general progress and welfare of women and children and to help women to utilise to the fullest the Fundamental Rights conferred on them by the Constitution of the Indian Union. (ii) To co-operate with peoples and organisations of the world for the implementation of these principles which alone can assure permanent international unity and world peace.

**AMATEUR ATHLETIC FEDERATION OF INDIA**

99, Panch Kuin Road, New Delhi.

**ASSOCIATION FOR MORAL AND SOCIAL HYGIENE IN INDIA**

4, Rouse Avenue, New Delhi.

*Aims and Objects* :—To secure eradication of all aspects of prostitution. To promote understanding and education in respect of sex relations, to raise the standard of character and to encourage healthy family relations. To secure equal ethical standards of living for men and women. To establish and run Protective Homes and other institutions for the rehabilitation of women and children, health clinics, Family Life Institute and to organise training programmes for the workers in the field and to publish journals and other literature.

**ASSOCIATION OF ELECTRICAL CONTRACTORS**

H-35/10, Connaught Place, New Delhi.

**AUTOMOBILE ASSOCIATION OF INDIA**  
N-43, Connaught Circus, New Delhi.

**AUTOMOBILE ASSOCIATION OF UPPER INDIA**

Lilaram Bldgs., 14F, Connaught Place,  
P.O. Box No. 28, New Delhi.



### BADLI INDUSTRIAL ESTATE ASSOCIATION

Opposite Badli Railway Station, Delhi-6.

### BHARAT KRISHAK SAMAJ (FARMERS' FORUM, INDIA)

1-A, Nizamuddin West, New Delhi 13.

### BHARAT SADHU SAMAJ

Chanakyapuri, New Delhi 11.

An All-India Organisation of Ascetic Order.

### BHARAT SCOUTS AND GUIDES

16, Ring Road, Indraprastha Estate, New Delhi.

### BHARAT SEWAK SAMAJ

54, Theatre Communications Bldg., Connaught Circus, New Delhi 1.

A national organisation, non-political and non-official in character, started in 1952 to mobilise people's support, co-operation and participation for the success of the national plans.

It has got 22 State, 322 District and 5,000 village branches in the country. It has a membership of about 1,00,000.

At present the Samaj is carrying on the following programmes of socio-economic betterment of the people in close co-operation with the Planning Commission, Union Ministries, State Governments and other voluntary organisations:

(1) Rural Lok Karya Kshetras, (2) Urban Welfare Centres, (3) Health and Family Planning (4) Mass contact and Social Enlightenment, (5) National Consumer Service, (6) Social Standards and redressal of people's grievances, (7) Work Camps, (8) Relief & Rehabilitation, (9) Training of workers.

The Samaj has a Youth Wing, known as Bharat Yuvak Samaj, the object of which is to harness the spare time and energy of the Youth to the programmes of reconstruction of the country.

The Samaj has a Construction Service, the object of which is to bring about honest dealings in the construction work, to cut down construction costs and to plough back the savings for welfare schemes.

*President:* Padma Bhushan Hari Bhau Upadhyaya; *Chairman:* Padmashri Brij Krishan Chandiwalla; *Senior Vice-Chairman:* Swami Hari-narayananda; *Vice-Chairman:* Radha Raman; *General Secretary:* Major T. Ramachandra.

### BHARATIYA ADIMJATI SEWAK SANGH

New Link Road, Jhandewalan, New Delhi 1.

*Aims and Objects:*—To work for the development of the tribal communities in India socially, economically, culturally and educationally.

### BHARATIYA KAL KENDRA

2, Mata Sundri Road, New Delhi.

### BHARATIYA NATYA SANGH

(Theatre Centre, India—Affiliated to the International Theatre Institute of the UNESCO) Flat No. 34, New Central Market, Connaught Circus, New Delhi.

An All India organization set up in 1950. It reaches more than 350 groups all over the country through 24 regional centres in Delhi, Calcutta, Jaipur, Udaipur, Baroda, Rajkot, Kanpur, Ahmedabad, Patna, Imphal, Cuttack, Bombay, Poona, Secunderabad, Madras, Bangalore, Agra, Jaipur, Kashmir, Allahabad, Sangli and Utkal.

It is devoted to the promotion of theatre-arts in the country and is working on several research and survey projects of all India character. It organizes seminars and exhibitions on a specific theatrical themes. It also publishes a Quarterly.

*President:* Smt. Kamaladevi Chattopadhyay; *Vice-Presidents:* I. L. Dass, Ibetome Singh, Markand Bhattacharya, M. Anandem; *General Secretary:* Smt. Sharda Devi.

### BLOOD BANK ORGANISATION

4, Pusa Road, New Delhi 5.

### BRIHAN MAHARASHTRA MANDAL

5/20, W.E.A., New Delhi 5.

### CENTRE FOR INTERNATIONAL STUDIES

(Massachusetts Institute of Technology), 161/48, Chanakyapuri, New Delhi 21.

### CENTRAL BUILDERS' ASSOCIATION

44, Regal Building, Connaught Place, New Delhi.

### CHILDREN'S FILM SOCIETY—INDIA

Sapru House, New Delhi.

*Chairman:* Smt. Nandini Satpathy.

The following States and Union Territories are members:

Andaman & Nicobar Islands, Bihar, Goa, Daman & Diu, Gujarat, Laccadive, Minicoy Islands, Madras, M.P., Manipur, Mysore, Nagaland, Pondicherry, Rajasthan, Tripura, U.P., and West Bengal.

### COMMITTEE ON RELIEF AND GIFT SUPPLIES, NATIONAL CHRISTIAN COUNCIL OF INDIA

4, Mathura Road, Jangpura, New Delhi 14.

### CONVENTION OF THE TEACHERS OF THE DEAF IN INDIA

C/o Govt. Lady Noyce School for Deaf & Dumb, Kotla Ferozeshah, Delhi Gate, New Delhi 1.

### CO-OPERATIVE FOR AMERICAN RELIEF EVERYWHERE INC.

Post Box No. 3064, C127, Defence Colony, New Delhi 3.

*Director of CARE in India:* George D. Taylor. *Deputy Director of CARE in India:* Philip D. Harvey.

Has regional Offices in all important cities in India.

### CULTURAL FILM SOCIETY

(Sapru House, Barakhamba Road, New Delhi.)

### DELHI BRICK KILN OWNERS' ASSOCIATION

1-E/21, Jhandewalan Extension, New Delhi-1.

### DELHI BUILDING MATERIAL MERCHANTS' ASSOCIATION

C/o Bulldwell Stores, Outside Ajmeri Gate, Delhi.

### DELHI CALENDAR MANUFACTURERS' ASSOCIATION

P. Box No. 1727, Delhi.

### DELHI CHAMBER OF COMMERCE

Dilbar Building, Paharganj, Desh Bandhu Gupta Road, New Delhi 1.

*President:* G. S. Shroff; *Senior Vice-President:* N. C. Malik; *Junior Vice-President:* M. P. Chopra; *Honorary Secretary:* Sirdar P. S. Sodhbans, F.C.A., F.A.C.C.A. (Lond.).

### DELHI CHEMICAL IMPORTERS & DEALERS' ASSOCIATION

2nd Floor, Gopinath Bldg., Khari Baoli, Delhi 6.

### DELHI ELECTRICAL TRADERS' ASSOCIATION

Behind State Bank of India, Chandni Chowk, Delhi.

### DELHI FACTORY OWNERS' FEDERATION

Phelps Bldg., 9-A, Connaught Place, New Delhi 1.

### DELHI GLASSWARE MERCHANTS' ASSOCIATION

Fatehpuri, Delhi 6.

### DELHI HINDUSTANI MERCANTILE ASSOCIATION

641/1213, Chandni Chowk, Delhi 6.

### DELHI HOSIERY MANUFACTURERS' ASSOCIATION

88, Model Basti, New Delhi 5.

### DELHI IRON FOUNDERS & WORKSHOPS ASSOCIATION

4782, Hauz Qazi, Delhi.

### DELHI JEWELLERS' ASSOCIATION

19-E, Connaught Place, New Delhi.

### DELHI LIBRARY ASSOCIATION (Regd.)

P.B. No. 1270, C/o Hardinge Public Library, Queen's Garden, Delhi-6.

### DELHI METAL MERCHANTS' ASSOCIATION

Sadar Bazar, Delhi 6.

### DELHI MOTOR TRADERS' ASSOCIATION

Post Box 1098, Kashmere Gate, Delhi 6.

### DELHI OPTICIANS' ASSOCIATION

C/o Imperial Optical Works, Katra Barien, Delhi.

### DELHI PAINT MERCHANTS' ASSOCIATION

C/o Lalit & Co. Fatehpuri, Delhi.

### DELHI PAPER MERCHANTS' ASSOCIATION

Chawri Bazar, Delhi 6.

### DELHI PLASTIC CABLE MANUFACTURERS' ASSOCIATION

Amar Bhawan, Behind State Bank, Delhi 6.

### DELHI PRINTERS' ASSOCIATION

26-A, New Central (Shankar) Market, Connaught Circus, New Delhi.

### DELHI PRODUCTIVITY COUNCIL

III/L-20, Lajpatnagar, New Delhi 14.

### THE DELHI PROVINCIAL TEXTILE RETAILERS' ASSOCIATION

"Vastrilok", 1, Queen's Garden, Delhi 6.

### DELHI PUBLIC LIBRARY

(8. P. Mukerji Marg, Delhi 6.)

### DELHI PUBLISHERS' ASSOCIATION

Chawri Bazar, Delhi 6.

### DELHI SCHOOL OF SOCIAL WORK

(8, University of Delhi, Delhi 6).

Delhi School of Social Work is a post-graduate institution maintained by the University of Delhi and trains students for M.A. in Social work.

### DELHI SILPI CHAKRA

Flat No. 10, Shankar Market, Connaught Circus, New Delhi 1.

Assocn. of Working Artists.

### THE DELHI SMALL-SCALE SOAP MAKERS' ASSOCIATION

25, Guru-ki-Mandi, Delhi -6.

### DELHI STATE CHEMISTS' ASSOCIATION

Surgical & Medicine Market, Bhagirath Palace, Chandni Chowk, Delhi 6.



**DELHI STATE NYLON HOSIERY MANUFACTURERS' ASSOCIATION (Regd.)**  
5509, Basti Harphool Singh, Sadar Thana Road, Delhi-6.

**DELHI STATIONERY MANUFACTURERS' ASSOCIATION**  
C/o Royal Khalsa Stationery Mart, Nai Sarak, Delhi.

**DELHI TUBERCULOSIS ASSOCIATION**  
Mpl. T. B. Clinic, S. P. Mukerji Marg, Delhi 6.

**THE DELHI WATCH TRADERS' SYNDICATE**  
Post Box No. 1751, Delhi.

**DENTAL COUNCIL OF INDIA**  
Temple Lane, Kotla Road, New Delhi 1.

*President*: Padma Bhushan, Col. N. N. Bery,  
*Vice-President*: Dr. U. S. Malik; *Secretary*:  
Capt. S. Bratt; *Asstt. Secy.*: D. N. Chauhan.

**ENGINEERING ASSOCIATION OF INDIA**  
(Northern Regional Office)

A-26, N. D. South Extension, Part II,  
New Delhi-16.

*Chairman*: Styra Paul; *Vice-Chairman*: K. G. Khosla; *Regional Secretary*: T. N. Srivastava.

**ENTOMOLOGICAL SOCIETY OF INDIA**  
Indian Agricultural Research Institute,  
New Delhi 12.

*President*: Dr. S. Pradhan; *Chief Editor*  
(*Indian Journal of Entomology*), Dr. S. K. Prasad;  
*General Secretary*: Dr. M. G. Jotwani.

**THE FAMILY PLANNING ASSOCIATION**  
15, Alipur Road, Delhi 6.

**FEDERATION OF ALL INDIA AUTOMOBILE SPARE PARTS DEALERS' ASSOCIATIONS**

3620/21, Netaji Subhas Marg, Daryaganj,  
(Faizbazar) Delhi 6.

**FEDERATION OF ALL INDIA FOOD GRAIN DEALERS' ASSOCIATIONS**  
3979, Naya Bazar, Delhi 6.

**FEDERATION OF ASSOCIATIONS OF SMALL INDUSTRIES OF INDIA**

"Laghoodyog Kutee," 23-B/2, Rohtak Road,  
New Delhi 5.

Accredited representative organisation of small scale industry having branches at Bombay and Calcutta. Publishes a monthly bulletin "FASII Bulletin for Small Industry".

*President*: A. R. Bhat; *Vice-Presidents*:  
S. K. Choudhury, C. D. Shah, K. C. Jain,  
R. S. Aradhya; *Treasurer*: G. L. Gupta;  
*Honorary Secretaries*: M. L. Goel, J. M. L. Tambi, J. P. Agrawal.

*Secretary*: S. G. Gupte; *Jt. Secretary*: N. Pal;  
*Regional Secretaries*: S. N. Wavde (Bombay), M. Pal (Calcutta).

**FEDERATION OF BISCUIT MANUFACTURERS OF INDIA**  
17, Alipur Road, Delhi 6.

*President*: A. C. Khanna; *Vice-President*:  
P. Mohanlal.

**FEDERATION OF HOTEL AND RESTAURANT ASSOCIATIONS OF INDIA**  
15-A, Nizamuddin West, New Delhi 13.

*President*: Ram Pershad; *Vice-Presidents*:  
Maneck S. Shaw, S. N. Singh; *Hony. Secretary*:  
P. Ananda Rau.

## FEDERATION OF INDIAN EXPORT ORGANISATIONS

Allahabad Bank Bldg., 17, Parliament St.,  
New Delhi.

## FEDERATION OF INDIAN CHAMBERS OF COMMERCE AND INDUSTRY

(Estd. 1927)

Federation House, Tansen Marg, New Delhi.

The Federation is recognised by the Central Government as the premier organisation representing commercial and industrial interests in the country. The headquarters of the Federation are situated in New Delhi.

The Federation has on its roll 175 Chambers of Commerce and Trade and Industrial Associations and 356 Associate Members, comprising leading business houses in the country. The Federation, through its constituents, covers almost the whole of the organized Indian industry and trade. It is represented on almost all important Consultative Bodies of Government. The Central Advisory Council of Industries, the Export-Import Advisory Council, Capital issues Advisory Committee, are some of the important Bodies on which the Federation is represented.

The Federation issues a bulletin *Fortnightly Review* containing information and comments on current economic events in India and abroad.

*President*: L. N. Birla; *Vice-President*: G. M. Modi; *Secretary-General*: G. L. Bansal;  
*Secretary*: P. Chentsal Rao.

## THE FEDERATION OF PLYWOOD INDUSTRY

4E/13, Jhandewalan Extension, New Delhi 1.

*President*: P. D. Chitlangia; *Vice-Presidents*:  
H. K. Vissanji, B. K. Khaitan; *Asstt. Secy.*:  
G. B. Deshpande.

## THE FORD FOUNDATION

32, Ferozshah Road, New Delhi.

Assistance made available by the Foundation is in the form of grants for a broad range of India's development projects. All programmes receiving aid are closely related to India's Five Year Plans. Up to mid-1965, since 1951, the Foundation's technical and financial assistance to India's programmes has amounted to \$85,000,000. Programmes assisted have included those in rural development, intensive agricultural improvement, family planning, industrial training and development, management training, education, economic and social research, urban planning, and others.

The Ford Foundation announced on Nov. 2, 1966 further grants totalling \$2,014,000 to Indian private institutions and Govt. branches.

*Representative in India*: Dr. Douglas Ensminger.

## FURNITURE MERCHANTS' ASSOCIATION

C/o Oriental Furnishing & Bldg. Co., Connaught Circus, New Delhi.

## GANDHI SMARAK NIDHI

Central Office:

Rajghat, New Delhi 1.

*Total money collected*: Rs. 10.97 crores;  
*Interest accrued till the end of 1965*: Rs. 4.44 crores;  
*Spent till the end of 1965*: Rs. 8.68 crores  
about, Budget for 1966 Rs. 80.39 lakhs about.

*Chairman*: R. R. Diwaker; *Vice-Chairman*:  
Smt. Sucheta Kripalani; *Secretary*: Devendra Kumar Gupta.

## GENERAL MACHINERY MERCHANTS' ASSOCIATION

76, G. B. Road, Delhi 6.

## HANDICRAFTS EXPORTERS' ASSOCIATION

32, Park Area, Karol Bagh, New Delhi 6.

*Chairman*: V. N. Behal; *Hon. Gen. Secy.*:  
A. L. Sarna; *Hon. Treasurer*: T. N. Pahawa.

## THE HIMALAYAN SOCIETY

Regal Hotel, Delhi.

*Bombay Address*: Shreeniwas House, Waudby Road, Fort, Bombay.

*Training Camp*: Badalu (Kumaon Hills).

## INDIA INTERNATIONAL CENTRE

40, Lodi Estate, New Delhi 3.

*President*: Dr. C. D. Deshmukh; *Director*:  
D. L. Mazumdar; *Secretary*: V. V. Sastri.

## THE INDIAN ACADEMY OF PHOTOGRAPHY

AIFACS Bldg., Old Mill Road, New Delhi.

## INDIAN ADULT EDUCATION ASSOCIATION

17-B, Indraprastha Marg, New Delhi.

It is the only national organisation of adult education workers and agencies in this country, having 108 affiliated institutions spread all over India in addition to a large number of individual members.

*President*: Dr. Mohan Sinha Mehta; *Hon. Genl. Secy.*: S. C. Dutta; *Treasurer*: Prof. M. Mujeeb.

## INDIAN AND EASTERN NEWSPAPER SOCIETY

P. O. Box 69, I.E.N.S. Building, Rafi Marg,  
New Delhi 1.

*Membership*: 199.

*President*: C. G. K. Reddy; *Dy. President*:  
J. M. D'Souza; *Vice-President*: M. L. Ganguli;  
*Hony. Treasurer*: Yunus Dehlvi; *Secretary*:  
R. D. Seth.

## INDIAN ASSOCIATION FOR AFRO-ASIAN SOLIDARITY

14B, Janpath Barracks, New Delhi.

## INDIAN ASSOCIATION FOR CHEST DISEASES

Vallabhbhai Patel Chest Institute, University  
Campus, Delhi 6.

## INDIAN BOARD FOR WILD LIFE

Ministry of Food & Agriculture, Department of  
Agriculture, New Delhi.

*Chairman*: Major General His Highness the  
Maharaja Shri Jaya Chamaraja Wadiyar Bha-  
dur, Governor of Madras.

*Pro-Chairman*: Anna Sahib P. Sinde.

*Vice-Chairman*: B. Sivaraman.

*Secretary*: S. K. Sarkar.

## INDIAN BUDDHIST SOCIETY

7, Ferozshah Road, New Delhi.

(Branch: 207, Ghorpadepeeth, Poona 2).

## THE INDIAN BUREAU OF PARLIAMENTARY STUDIES

16, Golf Link Road, New Delhi.

*President*: Sohan Lal; *Vice-Presidents*: S. V. Krishnamoorthy Rao, M.P., Mrs. Violet Alva, M.P.; *Secretary-General*: M. S. Gurupadaswamy, M.P.

## INDIAN COOPERATIVE UNION LTD.

AIFACS Bldg., Rafi Marg, New Delhi.

## INDIAN COUNCIL FOR CHILD WELFARE

4, Rouse Avenue, New Delhi 1.



### INDIAN COUNCIL FOR CULTURAL RELATIONS

Azad Bhavan, Indraprastha Estate, New Delhi 1.

The Council is an autonomous organisation entirely financed by the Government of India; established in April 1950 in order to promote cultural relations with other countries.

The Council brings to India distinguished scholars, scientists, statesmen and artists from other countries for an exchange of views. It sponsors visits of Indian scholars to other countries on study and lecture tours; it establishes Chairs and Lectureships of Indian studies abroad; it arranges exhibitions, talks, film shows and lectures in different parts of the country. The Council looks after the welfare of overseas students in India and has its own International Students' Houses at Bombay, Calcutta and Delhi and an International centre at Madras. The publication programme of the Council includes four journals, a series of books and brochures relating to various aspects of life in India and translation of Indian works into foreign languages. The Council also administers the Jawaharlal Nehru Award.

**President:** M. C. Chagla; **Vice-Presidents:** Dr. C. D. Dehmukh, Dr. H. N. Kunzru; **Secretary:** Imam Rahman.

### INDIAN COUNCIL OF HUMAN RELATIONS

71, Pandara Road, New Delhi, 14; Radha Bazar Lane, Calcutta-1.

### THE INDIAN COUNCIL OF MEDICAL RESEARCH

Medical Enclave, Near Safdarjung Hospital, P.B. 494, New Delhi 16.

### INDIAN COUNCIL OF MEDICAL RESEARCH

Medical Enclave (Ansari Nagar) P.B. No. 494, New Delhi-16.

Indian Council of Medical Research was constituted in 1911. Control and management of the Council is vested in a Governing Body which in scientific and technical matters is assisted by a Scientific Advisory Board and its Advisory Committees/Expert Groups on specific subjects.

The Council publishes a Report on the research work carried out under its auspices and a monthly Journal known as 'Indian Journal of Medical Research'. Special reports are published from time to time.

The Council has established a Research Cadre and a Supernumerary Research Cadre to attract workers interested in biomedical research. A scheme for appointment of Emeritus Medical Scientists has been initiated to enable eminent retired scientists to pursue the research work in which they are specialised and to train younger workers.

The Council maintains the Nutrition Research Laboratories, Hyderabad, Virus Research Centre, Poona, Tuberculosis Chemotherapy Centre, Madras, Cholera Research Centre, Calcutta and Indian Registry of Pathology, New Delhi. It has established a number of Units for some important subjects. A Blood Group Reference Centre, Reproductive Biology and a Contraceptive Testing unit have been set up in Bombay. Besides, a large number of *ad hoc* research schemes are sanctioned by the Council each year. In collaboration with the Central Council of Ayurvedic Research, the Council has set up a number of circuits for undertaking a comprehensive programme of research on indigenous drugs.

The I.C.M.R. maintains Chairs of Professor of Pathology and Bacteriology and Professor of Protozoology at Calcutta School of Tropical Medicine. It also awards a number of research Fellowships. The Council maintains a Library at Kasauli. Microfilm and Photocopy Service Units have been set up at Bombay and Kasauli.

**President:** Dr. Sushila Nayar; **Chairman, Scientific Advisory Board:** Dr. K. N. Rao; **Director:** Col. B. L. Taneja.

### INDIAN COUNCIL OF WORLD AFFAIRS

Sapru House, Barakhamba Road, New Delhi 1.

**President:** Hriday Nath Kunzru; **Treasurer:** P. A. Narielwala; **Chairman Research Board:** S. Gopal; **Secretary-General:** S. L. Poplai.

### INDIAN FEDERATION OF UNIVERSITY WOMEN'S ASSOCIATIONS

**Address:** 6, Bhagwandass Road, New Delhi-1.

**President:** Mrs. Lakshmi M. Menon; **Secretary:** Mrs. Meher D. N. Wadia.

There are member Associations in:

Ahmedabad, Ajmer, Bangalore, Bombay, Calcutta, Chandigarh, Coimbatore, Coonoor, Dehra Dun, Delhi, Ernakulam, Jaipur, Kozhikode, Lucknow, Madras, Nagpur, Patna, Poona, Surat, Tiruchirapalli, Trivandrum

One of the chief aims of the Indian Federation is to promote friendship and understanding among the University women of different nationalities.

### INDIAN FEDERATION OF WORKING JOURNALISTS

Flat No. 29, New Central Market, Connaught Circus, New Delhi 1.

### INDIAN INSTITUTE OF FOREIGN TRADE

41-A, Friends Colony, Mathura Road, New Delhi 14.

### INDIAN INSTITUTE OF MASS COMMUNICATION

2, Ring Road, Kilokri, New Delhi 14.

### INDIAN INSTITUTE OF PUBLIC ADMINISTRATION

(Indraprastha Estate, Ring Road, New Delhi.)

### INDIAN INVESTMENT CENTRE

National Insurance Bldg., Parliament Street, New Delhi 1.

The Indian Investment Centre, established in February 1961, is a non-profit making semi-Government organisation managed by a Governing Body composed of 10 prominent representatives of Industry, Finance and Government.

The basic objective of the Centre is to stimulate the flow of foreign private capital, technological skills and know-how into India. With this end in view, the Centre undertakes (a) to promote among the capital exporting countries a wider knowledge and understanding of the Indian economy, Government's economic policies and the 'investment climate' of the country, (b) to assist Indian entrepreneurs in their efforts to set up joint ventures, and (c) to help foreign industrial entrepreneurs in concluding collaboration agreements and in securing government approvals.

The Centre has its branch offices in New York at 708, Third Avenue, New York, N.Y. 10017, U.S.A. and in Dusseldorf at Karlstrasse 76, Dusseldorf-4, Federal Republic of Germany.

**Chairman:** G. L. Mehta; **Executive Director:** R. V. Raman; **Secretary:** G. R. Desai.

### THE INDIAN LAW INSTITUTE

Bhagwandass Road, New Delhi.

**President (Ex-Officio):** K. N. Wanchoo, Chief Justice of India; **Hon. Treasurer:** Vacant; **Director:** G. S. Sharma.

### INDIAN MATHEMATICAL SOCIETY

Hans Raj College, Delhi-7.

f. 1907; 800 mems.; 2,000 vols.

**President:** Prof. R. S. Verma; **Secy.:** Shanti Narayan. **Edits:** Prof. T. P. Srinivasan and Prof. M. Venkataraman. **Librarian:** Prof. C. T. Rajgopal; publishes Journal of the Indian Mathematical Society and Mathematics Student.

### THE INDIAN MEDICAL ASSOCIATION

I.M.A. House, Indraprastha Marg, New Delhi 1. Established in 1928.

### INDIAN NATIONAL TRADE UNION CONGRESS

17, Janpath, New Delhi 1.

Founded in May 1947, the INTUC today is the biggest and most representative trade union organisation in the country. More than 2,000 trade unions with a membership of over 20,08,183 workers from all trades and industries throughout the country are affiliated to it.

The INTUC aims at eliminating social, political or economic exploitation of workers, organising the workers under trade unions, securing speedy improvement of conditions of work and life and raising the status of workers in industry and society. The INTUC believes in adopting constitutional and peaceful methods for securing the redressal of grievances of workers according to the Gandhian Ideology.

**President:** V. V. Dravid; **General Secretary:** G. Ramanujam; **Treasurer:** A. N. Buch; **Assistant Secretary:** N. K. Bhatt.

**Weekly Journal (English) The Indian Worker:** Managing Editor: S. R. Vasavada; Editor: H. D. Mukerji.

### INDIAN NURSING COUNCIL

Kotla Road, Temple Lane, New Delhi.

Statutory body constituted under the Indian Nursing Council Act, 1947, in order to establish a uniform standard of training for nurses, midwives and health visitors.

**President:** Dr. K. N. Rao, Director-General of Health Services; **Vice-President:** Mrs. A. Gupta, Principal, College of Nursing, New Delhi; **Member-Secretary:** Miss T. K. Adnanvala, Nursing Adviser, Directorate General of Health Services, New Delhi.

### INDIAN PHYTOPATHOLOGICAL SOCIETY

Indian Agricultural Research Institute, New Delhi 12.

### INDIAN RED CROSS SOCIETY

Red Cross Road, New Delhi 1.

**President:** Dr. S. Radhakrishnan; **Chairman:** Managing Body: Dr. (Miss) Sushila Nayar; **Hon.-Treasurer:** S. Ratnam; **Secretary-General:** Maj. Gen. C. K. Lakshmanan.

The Society's humanitarian services include: Relief work in times of flood, famine or epidemic, training of health visitors, nurses and *dais*, training of men and women in First Aid, Home Nursing etc., the supply of comforts and amenities to Military and Civil Hospitals, running a Red Cross Home at Bangalore for permanently disabled ex-servicemen, Red Cross Welfare Services in Military Hospitals, Maternity and Child Welfare, Junior Red Cross, Red Cross Blood Banks and Health Education. During emergencies and in times of conflict, the Society's work is considerably enlarged by undertaking duties in accordance with the Geneva Conventions and by rendering special services to the sick and wounded Defence personnel.

### INDIAN ROADS CONGRESS

Jamnagar House, Mansingh Road, New Delhi 11.

### INDIAN SCHOOL OF INTERNATIONAL STUDIES

(Sapru House, Barakhamba Road, New Delhi).

### INDIAN SOCIAL INSTITUTE

N. D. South Extension II, D-25-D, New Delhi 16.

**Purpose:** Research publications; social study courses; training in co-operation; promotion and organization of socio-economic projects; family life education.

**Director:** Rev. Anthony A. D'Souza, S.L.J.



### THE INDIAN SCHOOL OF PUBLIC ADMINISTRATION

(Indraprastha Estate, Ring Road, New Delhi 1).

*Director of the Institute and Principal of the School:* Dr. J. N. Khosla, B.Sc. (Econ.), (Lond.), Ph.D. (Econ.), (Lond.), Barrister-at-Law.

### INDIAN SOCIETY OF GENETICS & PLANT BREEDING

Botany Dn., Indian Agricultural Research Institute, New Delhi 12.

*Editor:* S. Ramanujam; *President:* Dr. B. L. Paliwal; *Secretary:* Dr. H. K. Jain; *Treasurer:* Dr. M. P. Singh.

### INDIAN SOCIETY OF GASTROENTEROLOGY

D/3, Ansari Nagar, New Delhi 16.

### INDIAN SOCIETY OF SOIL SCIENCE

Indian Agricultural Research Institute, Delhi 12.

### INDIAN STANDARDS INSTITUTION

Manak Bhavan, 9, Bahadur Shah Zafar Marg, New Delhi 1.

*President:* Minister of Industry, Government of India; *Vice-Presidents:* J. J. Ghandy, Prabhu V. Mehta; *Director:* Dr. A. N. Ghosh; *Dy. Director-General:* B. S. Krishnamachar.

The Indian Standards Institution (ISI)—Bharatiya Manasanstha—was set up in 1947 by a Resolution of the Government of India. The aims and objects include preparation of standards, on national and international basis, relating to structures, commodities, materials, practices, operations; promotion of standardization, quality control and simplification in industry and commerce; etc. The Institution also operates, under an Act of Parliament, ISI Certification Marks Scheme under which manufactured items are certified and marked with ISI Mark of Certification as a third party guarantee to the purchaser that the goods bearing the mark have been produced according to the provisions of the relevant Indian standards. For promotion of international trade, the Institution collaborates actively with the international organizations dealing with standardization.

For keeping liaison and rendering service to industry, trade and commerce in different regions, the Institution has branch offices at Bombay, Calcutta, Madras and Kanpur.

*Important Statistics as on 31st March 1966:*

Number of standards published 3,363; Number of licences issued for ISI Mark 1,235; Number of products carrying ISI Mark 285; Number of Subscribing Members 3,824; Number of standardization committees 1,602; Committee membership 18,786.

### INDO-GERMAN CHAMBER OF COMMERCE

"E" Block, Sixth Radial Road, Connaught Place, New Delhi.

### INSTITUTE FOR THE ADVANCEMENT OF SCIENCE AND CULTURE

Hauz Khas Enclave, New Delhi-16.

### INSTITUTE FOR SOCIAL GUIDANCE

2-F, Lajpatnagar, New Delhi 14.

### INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA

Post Box 268, Indraprastha Marg, New Delhi 1.

The Institute of Chartered Accountants of India which is an autonomous body with perpetual succession was established on the 1st of July, 1949.

The Institute had on its Register 2,305 Fellows and 5,027 Associate members as on 1st April 1966. Out of these 2,125 Fellow members and 2,671 Associate members were in practice.

*Council of the Institute:*—*President:* M. P. Chitale; *Vice-President:* B. Thakur; *Secretary to the Council:* C. Balakrishnan; *Registrar:* N. Subramanian.

### INSTITUTE OF ECONOMIC GROWTH

University Enclave, Delhi 7.

### INSTITUTE OF FOREIGN LANGUAGES

### INTERNATIONAL CULTURAL CENTRE

44/3, Regal Buildings, Connaught Circus, New Delhi.

### INSTITUTE OF INDOLOGY

(Bharatiya Vidya Samsthana)

88, Lucknow Road, Delhi.

### THE INSTITUTE OF NUCLEAR MEDICINE & ALLIED SCIENCES

(Research & Development Organisation)  
Probyn Road, Delhi 7.

Diseases like hyper-thyroidism, heart ailments, leukaemia and polycythemia are treated by radiomedicines. Radiotracers are used for investigation of blood diseases, liver diseases and electrolyte disturbances. The Institute has a well organised Health Physics Department oriented to Radiation Protection. Recognised by Delhi University for post graduate education in Radiation Medicine.

### INSTITUTE OF OFFICE MANAGEMENT, INDIA

N-34, Jangpura Extension, New Delhi-14.

*Aims and objects:* (1) The Institute has liaison with Administrative Management Society of U.S.A., Systems & Procedures Association of U.S.A. and Institute of Office Management of U.K. (2) It disseminates knowledge about modern techniques of Office Management to its members. (3) It renders assistance to its members in designing forms for internal use and in the case of industrial associations, it will design forms prescribed by State Government and Central Government for submission to them in a manner which is least expensive to the industry and most useful to the Government. (4) It conducts Diploma examination in Office Management in collaboration with the U.K. Institute twice a year. (5) It publishes a two monthly journal to inform its members of the improvements and developments in office procedures. (6) A Certificate Course in Office Supervision for graduate women is also conducted in collaboration with the Universities of Delhi and Punjab.

*President:* Prof. A. Dasgupta; *Vice-President:* K. Hartley; *Hon. Secretary:* J. Prasad; *Hon. Treasurer:* Ramesh C. Bansal.

### INSTITUTION OF CATERING TECHNOLOGY & APPLIED NUTRITION (DELHI) SOCIETY

Pusa, New Delhi 12.

### INSTITUTIONS OF ENGINEERS (INDIA) (D. I. Centre)

Bahadur Shah Zafar Marg, Near Tilak Bridge, New Delhi.

### THE INSTITUTION OF SURVEYORS

Kashmir House, King George's Avenue, New Delhi 11.

### THE INSTITUTION OF TELECOMMUNICATION ENGINEERS

P. Box 2012, New Delhi.

### INSTITUTION OF WORK STUDY (INDIA)

Kashmir House, New Delhi 11.

*President:* Maj. Gen. Harkirat Singh; *Chairman:* Brig. K. Pennathur; *Hon. General Secretary:* J. S. Kohli.

### INTERNATIONAL ACADEMY OF INDIAN CULTURE

J-22, Hauz Khas Enclave, New Delhi 16.

### INTERNATIONAL CHAMBER OF COMMERCE, INDIAN NATIONAL COMMITTEE

Federation House, New Delhi 1.

The Indian National Committee of the International Chamber of Commerce was established *inter alia* for the following purposes in the year 1929:—

(i) To facilitate the commercial intercourse of countries; (ii) To encourage progress and to promote peace and cordial relations among countries and their citizens by the cooperation of business men and organisations devoted to the development of commerce and industry.

*President:* S. L. Kirloskar; *Vice-President:* R. B. Amin; *Secretary-General:* G. L. Bansal; *Secretary:* P. Chentsal Rao.

### INTERNATIONAL COMMISSION ON IRRIGATION AND DRAINAGE

48, Nyaya Marg, Chanakyapuri, New Delhi 11.

*Secretary-General:* K. K. Framji.

### INTERNATIONAL CONFEDERATION OF FREE TRADE UNIONS—ASIAN REGIONAL ORGANISATION (ICFTU-ARO)

P-20, Green Park Extn., New Delhi 16.

Asian organization of free democratic trade unions, independent of all external domination and promoting interests of working people and assuring dignity of labour in Asia, affiliating twenty-one trade union organizations from fourteen Asian countries with more than seven million members.

ICFTU Asian Trade Union College established in 1952 trains Asian workers on the lines of democratic trade unionism.

### INTERNATIONAL CULTURAL CENTRE

16, Hailey Road, New Delhi.

The Centre works in co-operation with non-governmental and semi-governmental groups to serve as a channel of communication between India and other countries in the field of arts and humanities. Its main objective is to help understanding and appreciation of the world's art forms and movements through cultural exchange and thus enrich and influence the development of the arts in India itself.

*Chairman:* P. A. Narielwala; *Executive Director:* Mrs. Rekha Menon.

### INTERNATIONAL CULTURAL FORUM

2653, Roshanpura, Naisarak, Delhi 6.

*U.K. Office:* 127, Neville Ave. Hove 4, Sussex, England.

### INTERNATIONAL SOCIETY OF PLANT MORPHOLOGISTS

Dept. of Botany, Univ. of Delhi, Delhi 6.

### IRON HARDWARE MERCHANTS' & MANUFACTURERS ASSOCIATION

Bazar Sirkiwala, Delhi 6.

### JAIN SOCIETY FOR THE PROTECTION OF ORPHANS IN INDIA

Daryaganj, Delhi.

### JAMIA RURAL INSTITUTE

Jamia Millia, New Delhi 25.

*Director:* Prof. M. Mujeeb.

### KALAKENDRA RESEARCH AND INFORMATION ORGANIZATION

25E/6, East Patel Nagar, New Delhi 12.

### LALIT KALA ACADEMI

(National Academy of Art, Rabindra Bhavan, New Delhi 1).

The Lalit Kala Akademi was set up in August 1954 by the Govt. of India. Its aim is to promote



the study of and research in painting, sculpture, architecture and applied arts. There are a General Council and Executive Board, a Finance Committee and other Standing Committees.

*Chairman, Executive Board:* Dr. Mulk Raj Anand; *Vice-Chairman:* N. S. Bendre; *Secretary:* B. C. Sanyal.

#### LIME MANUFACTURERS ASSOCIATION OF INDIA

10, Alipur Road, Delhi 6.

#### THE LITTLE THEATRE GROUP

Flat 10, Shanker Market, Connaught Circus, New Delhi.

#### MACHINERY MERCHANTS' ASSOCIATION

Burn Bastion Road, Delhi.

#### MADAN MOHAN LALL AYURVEDIC RESEARCH SOCIETY

Bara Hindu Rao, Delhi 6.

#### MAX MUELLER BHAVAN

The Indo-German Cultural Centre

Library: E-Block, Con. Place, New Delhi.  
Office: 3-Curzon Road, New Delhi.

*Director:* Prof. Dr. H. J. Koellreutter.

#### MEDICAL COUNCIL OF INDIA

Temple Lane, Kotla Road, New Delhi.

Is a Statutory Body constituted/reconstituted under the Indian Medical Council Acts, 1933/1956. Its main functions are (a) maintenance of uniform minimum standard of medical education, both undergraduate and postgraduate, and prescribing standards; (b) reciprocity in the matter of mutual recognition of medical qualifications with other countries; and (c) maintenance of Indian Medical Register.

*President:* Dr. C. S. Patel; *Vice-President:* Dr. Tulsi Das; *Secretary:* Dr. V. V. Puri.

#### MOTION PICTURES ASSOCIATION

52/55, Mangal Market, Chandni Chowk, Delhi.

#### NATIONAL AGRICULTURAL CO-OPERATIVE MARKETING FEDERATION LTD.

34, South Patel Nagar, New Delhi 12.

#### NATIONAL BOOK TRUST, INDIA

23, Nizamuddin East, New Delhi 13.

An autonomous body set up by the Govt. of India in the Ministry of Education. Aims and objects: To produce and encourage the production of good literature available at moderate prices; to bring out booklists, arrange exhibitions and seminars and take all necessary steps to make the people book-minded. With these objects in view, the Trust has planned several series of books. The Trust is also organising National & Regional Book Exhibitions, Seminars, Workshops etc.

*Chairman:* Dr. B. V. Keskar; *Secretary:* K. S. Duggal.

#### NATIONAL CO-OPERATIVE UNION OF INDIA

72, Jorbagh Nursery, New Delhi 3.

#### NATIONAL COUNCIL OF APPLIED ECONOMIC RESEARCH

Parisila Bhawan, 11, Indraprasta Estate, New Delhi 1.

The National Council started functioning from 1st August, 1956, as an independent research organisation to study current important economic problems on an objective basis on its own

initiative or at the instance of Government, business concerns, associations or individuals and to help in analysing and finding solutions to specific problems in the planning and management of industrial and other undertakings. The Council has been established with the active support and encouragement of the Government of India and the business community. The Council is largely self-financing. Its sources of income include grants from the Government of India and the Ford Foundation, project fees charged from the sponsors and membership fees.

The studies undertaken by the Council cover broadly the following topics: Area surveys, Taxation and Finance, Industry, Agriculture, Demand forecasts, Energy, Transport, Saving & Consumption, planning and General Studies.

The Council has already completed 150 studies on behalf of the Ministries of the Govt. of India, the State Governments, and the business community, 115 of which have also been published.

The Council is currently engaged in a number of studies e.g. Estimates of State Incomes, Industrial Programming for 4th Plan of Demand Studies of a number of Consumer and Capital Goods; Consumer Expenditure Survey in developmental and non-developmental areas, Study of Maintenance Imports, Regional Survey Export possibilities of different commodities Study of Cropping Pattern.

*President:* Asoka Mehta; *Director-General,* Dr. P. S. Lokanathan; *Secretary and Registrar:* V. G. K. Thathachary.

#### ANTIONAL CULTURAL ORGANISATION

C-2/169, Lodi Road, New Delhi-3.

#### NATIONAL COUNCIL OF EDUCATIONAL RESEARCH AND TRAINING

5, West Patel Nagar, Patel Road, New Delhi 12.

#### NATIONAL FEDERATION OF CO-OPERATIVE SUGAR FACTORIES LIMITED.

34 (2nd Floor), South Patel Nagar, New Delhi 8.

The National Federation was set up in Dec' 1960, with the object of co-ordinating and facilitating the working of co-op. Sugar factories, State and Zonal Federation and to assist in the promotion of organisation of new co-op. sugar factories.

There are 75 co-operative sugar factories licensed so far, and one private sector sugar factory was also taken over by a co-operative society bringing the total to 76. Of this 52 were in production in 1965-66, 51 in 1964-65 and 48 in 1963-64. Others are in various stages of formation and two of these are expected to go into production in 1966-67.

Co-operative sugar factories produced in 1963-64, 23.3 per cent and in 1964-65, 24.5 per cent of the total production in the country. In 1965-66 the co-operative sugar factories produced upto 30th June, '66 about 8.97 lakh tonnes of sugar which is 26 per cent of the total production.

The co-operative sugar factories have a large share in the export of raw sugar which earns the much needed foreign exchange for the country.

The National Federation has undertaken many useful activities during the last six years of its existence and has made its presence felt. It is now recognised by Government as the main spokesman of the co-operative sector in the sugar industry.

*President:* Prof. D. R. Gadgil; *Vice-President:* P. S. Rajagopal Naidu; *Secretary:* A. L. N. Moorthy.

#### THE NATIONAL FEDERATION OF P & T EMPLOYEES

9, Pusa Road, New Delhi.

*President:* Mahesh Dutt Misra, M.P.; *Secretary-General:* D. Gannanah; *Secretary:* P. N. Mathur.

#### NATIONAL INSTITUTE OF SCIENCES OF INDIA

Bahadur Shah Zafar Marg, New Delhi 1.

*Objects:*—Founded in 1935 for the promotion of natural knowledge in the country including its practical application to problems of national welfare. Recognised by Government as the premier scientific organisation representing all branches of science in India. Has three co-operating Academies, viz., Asiatic Society (Calcutta), Indian Academy of Sciences (Bangalore) and National Academy of Sciences, India (Allahabad). Annual Subscription Rs. 36.

*Publications:* *Proceedings, Transactions, Bulletin, Progress of Science in India, Monographs.*

*President:* Dr. V. R. Khanolkar; *Treasurer:* Prof. R. C. Majumdar; *Foreign Secy.:* Prof. B. R. Seshachar; *Secretaries:* Prof. N. C. Auluck, Prof. N. K. Panikkar; *Editor of Publications:* Prof. P. Maheshwari.

#### NATIONAL PRODUCTIVITY COUNCIL

38, Golf Links, New Delhi 3.

The Council was established in 1958 by the Government of India as an autonomous organisation to help increase productivity in every sector of the national economy. It is organised on the ILO tripartite pattern representing Government, employers, and workers. As it has grown, it has also taken within its organisation specialised institutions and the Local Productivity Councils, established practically all over the country and working as the spearhead of the Productivity Movement.

During the last eight years that NPC has been working, Productivity consciousness has been created practically throughout the whole structure of industry through training programmes (local and foreign), Productivity Survey and Implementation Service, publication of productivity literature, audio-visual activities, etc. It has also organised a Fuel Efficiency Service, and entered the area of Agriculture to make available to farmers NPC experience in the application of Productivity Techniques.

NPC has six Regional Directorates (Ludhiana, Kanpur, Calcutta, Madras, Bangalore, and Bombay) covering all the principal industrial areas of the country. NPC Specialists are located at these regional centres and their services are available to Local Productivity Councils, which are themselves autonomous organisations organised on the same tripartite pattern.

*President:* Union Minister for Industry; *Chairman:* Dr. P. S. Lokanathan; *Executive Director:* K. Pennathur.

#### NATIONAL RIFLE ASSOCIATION OF INDIA

82-83, Theatre Communications Building, Connaught Circus, New Delhi.

#### NATIONAL SCHOOL OF DRAMA & ASIAN THEATRE INSTITUTE

Rabindra Bhavan, Ferozeshah Road, New Delhi 1.

#### NEW DELHI TRADERS' ASSOCIATION

19-E, Connaught Place, New Delhi.

#### NORTHERN INDIA REGIONAL COUNCIL OF THE INSTITUTE OF CHARTERED ACCOUNTANTS OF INDIA

G-8, Central Revenue Buildings, New Delhi.

The Regional Council represents the States of Punjab, Delhi and Himachal Pradesh and has a total membership of 700 as on 1st April, 1966. The number of members in practice and those in service are 50 per cent each.

*Chairman:* T. R. Chadha; *Vice-Chairman:* B. R. Maheshwari; *Secretary and Treasurer:* P. L. Jaitly.



**OPERATIONAL RESEARCH SOCIETY OF INDIA**

Defence Science Laboratory, Metcalfe House,  
Delhi 6.

**PHARMACY COUNCIL OF INDIA**

2nd Floor, Combined Councils' Building,  
Temple Lane, Kothla Road, New Delhi.

*President*: Dr. S. Rohatgi; *Vice-President*:  
Dr. P. K. Sanyal; *Ag. Secretary*: Devinder K.  
Jain.

**PRESS INSTITUTE OF INDIA**

66, Lucknow Road, Delhi 7.

**PUNJAB & DELHI CHAMBER OF  
COMMERCE & INDUSTRY**

(Pheps Bldg., 9-A, Connaught Place, Post Box  
No. 130, New Delhi 1.)

**PUNJAB MERCHANTS' CHAMBER (Regd.)**  
45, Khurshid Market, Sadar Bazar, Delhi.

**QUAKE INTERNATIONAL CENTRE**  
27, Raipur Road, Delhi 6.

**RAJDHANI CYCLE BEOPAR MANDAL**  
6, Esplanade Road, Delhi 6.

**RAMAKRISHNA MISSION**  
Ramakrishna Ashrama Marg, New Delhi 1.

**THE ROCKEFELLER FOUNDATION**  
17, Kautilya Marg, Chanakyapuri, New Delhi 21.

Since its inception in 1920 valuable assistance has been provided by the Foundation to several institutions in such fields as medical education, public health, agriculture, humanities and social sciences. The total amount of grants including fellowships and travel grants made by the foundation upto Dec. 31, 1965 was reported to be \$17,424,727.

For the first quarter 1965, the Rockefeller Foundation had announced several grants to Indian Institutions and individuals amounting to \$115,155.

*Officer-in-Charge & Field Director, Indian Agricultural Programme*: Dr. Ralph W. Cummings. *Asst. Field Director*: Dr. Guy B. Baird. *Rep. in India for Medical and Natural and Sciences*: Dr. LeRoy R. Allen.

**THE ROLLER FLOUR MILLERS'  
FEDERATION OF INDIA**

41-L, Connaught Circus, P. Box No. 637, New Delhi 1.

*Chairman*: S. P. Virmani; *Vice-Chairman*: R. K. Vissanji; *Secretaries*: Walker, Chandlok & Co., Chartered Accountants; *Executive Secretary*: R. P. Bansal.

**SAHITYA AKADEMI (NATIONAL  
ACADEMY OF LETTERS)**

Rabindra Bhavan, New Delhi.

The Akademi is a national organisation to work for the development and co-ordination of Indian letters, and to set high literary standards.

Among the more concrete projects of the Akademi are a bibliography of Indian literature, critical edition of Kalidasa's works, selections from Sanskrit and Pali literature, annual anthologies of best Indian poems, translations of standard histories of Indian literatures, anthologies covering poetry, one-act plays, essays and short stories in Indian languages, translation of select classics from one Indian language into others, translation of foreign classics into Indian languages, a series of short volumes on significant Indian authors, etc.

The Akademi has already published a Who's Who of Indian writers containing bibliographical and biographical data about 5,500 writers in major Indian languages.

The Akademi publishes a quarterly journal *Indian Literature* (in English) and a six-monthly *Sanskrita Pratibha* (in Sanskrit), besides a Monthly News Bulletin in English.

*President*: Dr. S. Radhakrishnan; *Vice-President*: Dr. Zakir Husain; *Secretary*: Krishna Kripalani.

**SANGEET NATAK AKADEMI**

(National Academy of Dance, Drama & Music)  
Rabindra Bhavan, Ferozeshah Road, New Delhi 1.

The Akademi—an autonomous body set up by the Government of India—was established in 1953. The chief objective of the Akademi is to foster and develop music, dance and drama. The Akademi gives grants to various performing arts organisations, promotes research, sets up training institutions, organises seminars, festivals and subsidizes the publications on music, dance and drama.

*Programmes*: The Akademi has a comprehensive programme of documentation of the folk performing arts through films, tapes and photographs. It has built up a library of tape music, both classical and folk. It maintains a museum of musical instruments and a sound recording studio. It sponsors rare forms and specialised artists in music, dance and drama. It publishes a half-yearly journal—SANGEET NATAK—and a monthly News Bulletin.

It runs National School of Drama with a 3-year broad-based training course in dramatics. It also runs an institute—Jawaharlal Nehru Manipur Dance Academy—for the training in Manipuri Dance at Imphal and another institute—Kathak Kendra—for training in Kathak dance in Delhi.

*Chairman*: Smt. Indira Gandhi; *Vice-Chairman*: S. N. Mozumdar; *Financial Adviser*: M. S. Sundara; *Secretary*: Dr. Suresh Awasthi.

**SANT NIRANKARI MANDAL (Regd.)**  
Sant Nirankari Colony, Delhi 9.

*Aims and Objects*: To promote the feelings of Universal Brotherhood and equality amongst all human beings without caste, creed and colour through realisation of God and to develop equal respect for all the prophets and their holy scriptures. Under the kind patronage of His Holiness Baba Gurbachan Singh Jee Maharaj.

*President*: S. Labh Singh; *Secretary*: Ram Saran.

**SANT PARMANAND BLIND RELIEF  
MISSION**

18, Alipore Road, Delhi 8.

*Object*: Eradication of blindness in India.

**SANYUKTA SADACHAR SAMITI**

20, 'L' Block, North Block Secretariat,  
New Delhi 3.

The objects of the Samiti are:—(i) to create a social and moral climate which will foster moral values and ethical living and discourage anti-social attitudes and corrupt practices; and with this end in view, to launch an intensive and wide-spread campaign in the country for moral awakening and social enlightenment; (ii) to develop the will and capacity of the people to fight and eradicate corruption in all forms; (iii) to mobilise the strength and resources of social and religious organisations of the country for eradication of corruption in all forms; and (iv) to assist in the redress of people's grievances relating to all forms of corruption and set up a suitable machinery for this purpose.

**SCIENCE APPARATUS DEALERS'  
ASSOCIATION**

C/o Sindsagar Industries, Inside Sultansingh Bldg., Kashmere Gate, Delhi.

**SERVANTS OF THE PEOPLE SOCIETY**  
(Lok Sevak Mandal)

Lajpat Bhawan, Lajpat Nagar, New Delhi 14.

**SHRI RAM INSTITUTE FOR INDUSTRIAL  
RESEARCH**

19, University Road, Civil Lines, Delhi 7.

The Institute's objective is to assist national industrial growth through research for the textile, high polymer and chemical industries. It undertakes contract research for Government and for private industry on a no-profit no-loss basis.

*Chairman*: Dr. C. D. Deshmukh; *Vice-Chairman*: Lala Charat Ram; *Director*: Dr. V. B. Chipalkatti.

**SMALL-SCALE INDUSTRIES ASSOCIATION**  
33, Deputy Ganj, Delhi.

**SOCIETY OF INCORPORATED  
ACCOUNTANTS AND AUDITORS OF INDIA**  
Daryaganj, Delhi.

**SPORTS GOODS EXPORT PROMOTION  
COUNCIL**  
5, Rani Jhansi Road, New Delhi 1.

**ST. JOHN AMBULANCE ASSOCIATION  
(INDIA) AND ST. JOHN AMBULANCE  
BRIGADE (INDIA)**  
(Estd. 1912)

1, Red Cross Road, New Delhi 1.

*Objects*: Instruction in First Aid, Home Nursing and allied subjects and relief of suffering of the sick and injured in peace and war.

The St. John Ambulance Brigade is a uniformed, disciplined body of men with First Aid Certificates and women with Home Nursing Certificates. They met together regularly for practice are inspected and re-examined annually and undertake to turn out for public duty whenever required.

There are 22 Districts covering almost all the States and major railways in India with headquarters at Ahmedabad, Bangalore, Bhubaneswar, Bombay, Calcutta, Chandigarh, New Delhi, Gorakhpur, Hyderabad, Indore, Jaipur, Lucknow, Madras, Patna, Shillong.

*Surgeon-in-Chief and Secretary-General*: Maj.-General C. K. Lakshmanan.

**SUPREME COURT BAR ASSOCIATION**  
Supreme Court Bldgs., Hardinge Avenue,  
New Delhi.

**TABLE TENNIS FEDERATION OF INDIA**  
National Stadium, Post Box No. 282,  
New Delhi 1.

**TRAINED NURSES' ASSOCIATION OF  
INDIA**

L-16, Green Park, New Delhi 16.

The number of registered members is 7,454 and student members 17,240 totalling 24,694. The official organ of the Association is *The Nursing Journal of India*.

*President*: Miss A. Jacob; *Vice-Presidents*: Miss G. Kapadia; Miss Edith Paul; M. A. Ahad; *General Secretary*: Miss I. Dorabji; *Secretary*: Student Nurses' Assocn.: Miss M. Philip; *Hon. Treasurer*: Miss B. Dawson; *Editor*: Miss I. Dorabji.

**TUBERCULOSIS ASSOCIATION OF INDIA**  
*Office*:—3, Red Cross Road, New Delhi 2.

Twenty State Tuberculosis Associations are affiliated to this Association. It runs model T.B. institutions, namely, the Lady Lillithgow Sanatorium, Kasauli (Simla Hills) with which is annexed the King Edward Sanatorium, Dharam-pore; the New Delhi Tuberculosis Centre, New Delhi and Tuberculosis Hospital, Mehrauli (Delhi). Publishes the *Indian Journal of Tuberculosis* quarterly and brings out *Directory of Tuberculosis Institutions in India*. Conducts annually the T.B. Seal Sale Campaign, trains doctors and health visitors and organises every year conferences of T.B. workers in Tuberculosis and Chest Disease.



*Chairman* : Dr. K. N. Rao, Director-General of Health Services, Government of India; *Hon. Treasurer* : S. Ratnam; *Hon. Tech. Adviser* : Dr. N. L. Bordia; *Secretary-General* : B. M. Cariappa.

#### UNITED CHAMBER OF TRADE ASSOCIATIONS

Nal Sarak (Katra Rath), Delhi.

*President* : Maheshwar Dayal; *Hon. Genl. Secy.* : P. R. Mittal; *Secretary* : O. P. Agrawal.

#### UNITED STATES EDUCATIONAL FOUNDATION IN INDIA

Fulbright House, 12, Hailey Road, New Delhi 1.

*Chairman, Board of Directors* : Dr. Robert R. Brooks; *Director* : Dr. Margaret L. Cormack.

#### VALLABHBHAI PATEL CHEST INSTITUTE

Univ. of Delhi, Patel Marg, Delhi 7.

**WIRENETTING MANUFACTURERS' ORGANISATION**  
C/o Shukla Netting Works, Hauz Kazi, Delhi.

**YOGA INSTITUTE OF PSYCHO-PHYSICAL THERAPY**  
2F, Lajpatnagar, New Delhi 1-4.

**YOUNG FARMERS' ASSOCIATION, INDIA**  
32, Jorbagh, New Delhi 3.

The Association is running five Training Centres for the sons of farmers and offer training in practise orientation. It has launched Crash Programmes in selected areas for raising the food production of the country.

**YOUNG WOMEN'S CHRISTIAN ASSOCIATION OF INDIA**  
Parliament Street, New Delhi.  
*President* : Mrs. Violet Alva; *Vice-Presidents* : Mrs. Achamma Matthal; Mrs. G. L. Chandran;

Mrs. V. K. Mani; Miss Sarah Paul; Mrs. Dorothy Roy; Miss Doris Wilson; *Gen. Secy.* : Miss Ivy Khan.

Hostels for working women are maintained in more than 30 centres, and Holiday Homes are operated, in the hill stations of Ootacamund, Coonoor, Darjeeling, Mussoorie, Naini Tal and Simla.

Primarily a welfare organization, the programme is geared to meet the interests and needs of various groups. Rural Welfare work, adult education classes, vocational training, Employment Bureaus and Nursery Schools form part of its regular programme. Training of Youth in Citizenship is a major emphasis—carried out through Camps, Conferences, Seminars and Summer Schools.

**YOUTH HOSTELS ASSOCIATION OF INDIA**  
No. 2, East Park Road, Karol Bagh, New Delhi 5.

## GUJARAT AHMEDABAD

### AHMEDABAD

#### THE AHMEDABAD MILLS & GIN STORES MERCHANTS' ASSOCIATION

Reid Road, Railwaypur Post, Ahmedabad 2.

*President* : Rasiklal D. Shah; *Vice-President* : Indra M. Kantawala; *Hon. Secretary* : Popatlal C. Dani.

#### AHMEDABAD MILLOWNERS' ASSOCIATION

Post Box No. 7, Navrangpura, Ahmedabad 9.

*President* : Kantilal Kanalyalal; *Vice-President* : Balkrishna Harivallabhdas; *Secretary* : H. G. Acharya; *Asstt. Secretary* : R. G. Acharya.

#### AHMEDABAD PRINTING PRESS, ASSOCIATION

Purohit Printing Press, Gheekanta Road, Ahmedabad 1.

#### THE AHMEDABAD SHARE & STOCK BROKERS' ASSOCIATION

Manekchowk, Ahmedabad.

*President* : Ratilal Nathalal; *Vice-President* : Kantilal P. Broker; *Hon. Treasurer* : Chinubhai Dalsukhram; *Secretary* : J. C. Pandya.

#### AHMEDABAD TEXTILE INDUSTRY'S RESEARCH ASSOCIATION

Navrangpura, Ahmedabad 9.

*Registration* : 1947. *Inauguration* : 1954. Establishment of a Regional Centre at Indore : 1956. Membership : 114 textile mills and allied industrial concerns in Gujarat, Maharashtra, Madhya Pradesh, Madras, Rajasthan, North India and West Bengal.

*Aims and Objects* : 1. Research for improved materials, technology and human relations in industry. 2. Dissemination of scientific knowledge and consultation to member mills to solve current operational problems. 3. Training for specialised jobs such as laboratory-in-charges, quality control officers, supervisory and operative training officers, guidance to research students for post-graduate degrees of Gujarat University, M. S. Univ. of Baroda, Bombay Univ. and Madras Univ.

*Director* : Dr. P. C. Mehta, B.Sc. (Tech.), M.A., Ph.D. (Princeton).

#### THE ALL INDIA PICKER & TEXTILE LEATHER MANUFACTURERS' ASSOCIATION

Post Box No. 156, Ahmedabad.

*President* : D. C. Karaka; *Hon. Secretary & Treasurer* : I. M. Mansuri.

### DARPANA

"Chidambaram", Usmanpura, Ahmedabad 13.

Academy of Dance, Drama, Music, Puppetry & Choreography.

*Director* : Smt. Mrinalini Sarabhai.

#### GUJARAT DYESTUFFS MANUFACTURERS' ASSOCIATION

Bansidhar House, Kankaria Road, Ahmedabad.

*President* : R. M. Patel; *Vice-President* : R. C. Parikh; *Secretary* : S. Mathur.

#### GUJARAT INVESTORS' AND SHAREHOLDERS' ASSOCIATION

Near Dhanasuthar's Pole, Relief Road, Ahmedabad 1.

*President* : S. V. Desai; *Hon. Secys* : G. N. Gupta, P. R. Sheredalal.

#### GUJARAT VEPARI MAHAMANDAL (Gujarat Chamber of Commerce)

Shri Ambica Mills—Gujarat Chamber Building, Ranchhodlal Road, Post Box No. 162, Ahmedabad.

*President* : Charandas Haridas; *Vice-President* : Vihalbhai Amin; *Hon. Secretary* : Manubhai Parikh.

#### GUJARAT VIDYAPITH (National Univ. of Gujarat). Ahmedabad 14.

Founded by Mahatma Gandhi in 1920. The Vidyapith works for spreading national education and particularly strives to make basic national education popular and was founded with the aim, among others, of providing university instruction in the mother tongue. It confers a degree of Bachelor of Social Science to its students who have undergone three years' course after matriculation. It has also provision for Post-graduate teaching for Master degree in Hindi, Gujarati, Rural Economics, Social Anthropology. It also conducts two courses for training Hindi teachers equivalent to T.D. and B.Ed. and another course equivalent to B.Ed. for Basic Education Teachers for Secondary Schools. The Vidyapith is now declared by Government of India as an institution deemed to be University under Section 3 of the U.G.C. Act.

*Chancellor* : Morarji Desai; *Vice-Chancellor* : Thakorebhai Desai; *Registrar* : Ramlal Parikh.

#### HAROLD LASKI INSTITUTE OF POLITICAL SCIENCE

Mavalankar Haveli, Bhadra, Ahmedabad 1.

It is an educational and non-partisan body, founded on August 15, 1954, to encourage and facilitate the scientific study of political questions and problems. The Institute, as such, does not express an opinion on any aspect of political theory or practice. It maintains a Reference Library, Lending Libraries and Reading Rooms, holds monthly Seminars, and discussions, and arranges talks with a view to better understanding the various issues of past and current political and allied problems. In pursuance of these aims the Institute brings out publications from time to time and publishes since July 1961 the monthly "Laski Institute Bulletin" and "Politics"—the occasional miscellany. The Institute is an Associate Member of the International Political Science Association, Paris. The Institute runs the Commonwealth, Asia and Africa Study Centres as well. Fortnightly group discussions in Politics and Psychology are held at the Institute. In November 1965, the John F. Kennedy Memorial Room has been set up, with the theme "U.S.A. and the developing countries."

*Founder Director* : Prof. P. G. Mavalankar; *Asstt. Director* : Vishnu G. Patel.

#### INDIAN INSTITUTE OF MANAGEMENT Vastrapur, Ahmedabad 6.

*Aims* : (i) To provide educational facilities for training young men and women for management careers, and for developing experienced administrators. (ii) To conduct research and to contribute to the growth of knowledge of business and administration. (iii) To provide for the development of teachers in business management and administration.

*Chairman* : P. L. Tandon; *Director* : Prof. Ravi J. Matthal; *Director (Programmes)* : Dr. Kamla Chowdhry; *Administrative Officer-cum-Secretary* : M. K. Subramaniam.

#### NATIONAL DESIGN INSTITUTE

Paldi, Ahmedabad 7.

This Institute is an autonomous non-profit training, service and research centre in design and allied fields sponsored by the Government of India in cooperation with the Ford Foundation and the State of Gujarat.

*Chairman* : Gautam Sarabhai; *Secretary* : N. V. L. Narasimhan.

#### SHETH BHOLABHAI JESINGBHAI INSTITUTE OF LEARNING AND RESEARCH

R. C. Marg, Ahmedabad 9.



## TEXTILE LABOUR ASSOCIATION

'Gandhi Majur Sevalaya', P.B. No. 110, Bhadra, Ahmedabad.

Membership : 94,654.

President : Smt. Anasuyaben Sarabhai; Gen. Secretary : Khandubhai K. Desai; Secretaries : S. R. Vasavada, N. H. Shaikh.

## OTHER ASSOCIATIONS

Ahmedabad Automobiles Dealers' Association, C/o Jayant Motor Stores, Railwaypura, Ahmedabad 2.

Ahmedabad Booksellers' Association, Gandhi Road, Ahmedabad.

Ahmedabad Builders' Association, Gujarat Institute of Civil Engineers and Architects, Law College Road, Ahmedabad 6.

Ahmedabad Building Materials Suppliers' Association, Kadia Naka, Darlapur, Ahmedabad.

Ahmedabad Bullion Exchange Association Ltd., Manek Chowk, Ahmedabad.

Ahmedabad Chemical Merchants' Association, Kapasia Bazar, Ahmedabad.

Ahmedabad Chemists' Association, 1891, 2nd Floor, Fuwara, Gandhi Road, Ahmedabad-1.

Ahmedabad Colour Merchants' Association, Astodia Road, Ahmedabad.

Ahmedabad Commercial Association, Chokha Bazar, Ahmedabad.

Ahmedabad Cotton Mahajan, Sakar Bazar, Ahmedabad 2.

Ahmedabad Cotton Merchants' Association, Manek Chowk, Ahmedabad.

Ahmedabad Cotton Waste Merchants' Association, Cotton Waste Bldg., Relief Road, Ahmedabad.

Ahmedabad Cycle Merchants' Association, Inside Panchkuva, Ahmedabad.

Ahmedabad Education Society, Lal Bhavan, Bhadra, Ahmedabad 1.

Ahmedabad Electrical Merchants & Contractors' Association, Kapadia Electric Works, Bala-hanuman, Gandhi Road, Ahmedabad.

Ahmedabad Factory Owners' Association, Gheekanta Road, Ahmedabad.

Ahmedabad Ghee and Oil Brokers' Association, Narottamdas Bldg., Kapasia Bazar, Ahmedabad 2.

Ahmedabad Grain Merchants' Association, Chokha Bazar, Railwaypura, Ahmedabad 2.

Ahmedabad Glass & Frame Merchants' Association, Gandhi Road, Ahmedabad.

Ahmedabad Hessian Association, Arenda Hall, Kapasia Bazar, Ahmedabad 2.

Ahmedabad Hosiery Factory Owners' Association, 449, Kankaria Road, Ahmedabad 1.

Ahmedabad Hotel Owners' Association, Outside Kalupur Gate, Ahmedabad.

Ahmedabad Iron, Hardware and Paint Merchants' Federation, Bala Hanuman, Kaveshwar's Pole, Ahmedabad.

Ahmedabad Junior Chamber, C/o Himavan Samaj Kalyan Kendra, Near Shanti Kunj Society, Pritamrai Marg, Ahmedabad 7.

Ahmedabad Medical Society, Opp. H. K. Arts College, Ashram Road, Ahmedabad.

Ahmedabad Metal Merchants Assocn., Kansara Dehla, Railwaypura, Ahmedabad 2.

Ahmedabad New Rangati Kapad Mahajan, Rangati Kapad Bazar, Astodia, Ahmedabad.

The Ahmedabad Paper Merchants' Association, 995, Khadia, Char Rasta, Ahmedabad.

Ahmedabad Pipe Merchants' Assocn., 675, Chinubhai Bldg., Sakar Bazar, Ahmedabad.

Ahmedabad Printing & Dyeing Association, New Cotton Mill No. 1 Compound, Outside Raipur Gate, Ahmedabad.

Ahmedabad Printing Press Association, Purohit Printing Press, Gheekanta Road, Ahmedabad 1.

Ahmedabad Radio Merchants' Association, C/o. H. B. Trivedi & Co., Gandhi Road, Ahmedabad.

Ahmedabad Sanitaryware Merchants' Association, C/o Bharat Stationery Stores, Hawa Mansion, Relief Road, Ahmedabad.

Ahmedabad Shroff Mahajan, Manek Chowk, Opp. Share Bazar, Ahmedabad.

Ahmedabad Small Scale Non-ferrous Metal Industries Association, 595/12, Kansara Dehla, Railwaypura, Ahmedabad 2.

Ahmedabad Soap Manufacturers' Association, Jeshingbhai Wadi, Gheekanta Road, Ahmedabad.

Ahmedabad Thread Manufacturers' Association, Sakar Bazar, Ahmedabad.

Ahmedabad Tea Merchants' Association, Chokha Bazar, Kalupur, Ahmedabad.

Ahmedabad Timber Merchants' Association, Sahakari Lati Bazar, Jagannathji Road, Ahmedabad 17.

Ahmedabad Tobacco Merchants' Association, Hathipura, Ahmedabad.

Ahmedabad Trunk & Buckets Factory Owners' Association, 710, Revdi Bazar, Ahmedabad.

Ahmedabad Utensils Merchants' Association, Kansara Dehla, Railwaypura, Ahmedabad.

Ahmedabad Watch Merchants' Association, 723/3, Richey Road, Ahmedabad 1.

Ahmedabad Yarn Merchants' Association, Sakar Bazar, Ahmedabad.

All India Institute of Homeopath, 25, Shantisadan Society, Ahmedabad.

Bharat Sadhu Samaj, Ellis Bridge, Sanyas Ashram, Ahmedabad 6.

Blind Men's Association, Near ATIRA, Univ., Campus, Navrangpura, Ahmedabad 9.

Camera Pictorialists of Ahmedabad, 'Sarang', Tolak Nagar, Ellis Bridge, Ahmedabad.

Confectionery Mfg. Owners' Association, 155/156, Juna Madhavpura, Ahmedabad.

Gujarat Cotton Brokers' Association, Manek Chowk, Ahmedabad.

Gujarat Handloom Woollen Industries Assocn., 318/1, Bamanlal Jain Road, Astodia, Ahmedabad.

Gujarat Institute of Civil Engineers & Architects, Law College Road, Ahmedabad 6.

Gujarat State Hair Oil and Perfumery Traders' Association, Opp. Jumma Masjid, Gandhi Road, Ahmedabad.

Indian Pharmaceutical Association, L. M. Coll. of Pharmacy, Ahmedabad 9.

Institute of Engineers (India), Law College Road, Ahmedabad 6.

Machinery Merchants' Association, 661, Kanuga Mansion, Kapasia Bazar, Ahmedabad 2.

Maskati Cloth Market Association, Maskati Market, Railwaypura Post, Ahmedabad 2.

Physical Research Laboratory, Navrangpura, Ahmedabad 9.

School for Deaf Mutes and for the Blind, Ashram Road, Navrangpura, Ahmedabad 9.

T. K. Polio Clinic & Physiotherapy Institution, Pritam Nagar, Ellis Bridge, Ahmedabad.

Textile Association (India), Toll Naka, Gandhi Bridge, Ahmedabad 9.

Textile Leather Manufacturers' Association, Post Box 156, Ahmedabad.

Western India Automobile Association, The Cellar, Khanpur, Ahmedabad.

West India Cotton Association Ltd., Cotton Hall, Manekchowk, Ahmedabad.

## BARODA

## BARODA PAPER MERCHANTS' ASSOCIATION

C/o K. N. Mehta & Co., Mandvi Road, Baroda.

## CENTRAL GUJARAT CHAMBER OF COMMERCE

Federation Bldg., Race Course Road, Baroda 5.

President : Lalitchandra M. Patel; Vice-President : Nanubhai B. Amin; Hon. Secretaries : Sakeral M. Shah, Navinchandra C. Patel.

## ENGINEERING RESEARCH INSTITUTE

Race Course Road, Baroda 5.

## THE FEDERATION OF GUJARAT MILLS &amp; INDUSTRIES

Race Course Road, Baroda 5.

The present membership is 200. The membership is open to all industrial undertakings.

President : Upendra M. Patel; Vice-President : Indubhai C. Patel; Hon. Secy. and Treasurer : Chandrakant M. Parikh.

## FEDERATION OF SMALL SCALE &amp; COTTAGE INDUSTRIES

Dadasaheb Haveli, 3rd Floor, Mandvi, Baroda.

## GUJARAT OPTICAL MANUFACTURERS' ASSOCIATION

Mangal Bazar, Baroda.

## GUJARAT SOAP MAKERS' ASSOCIATION

C/o Shree Krishna Industries, Pratapnagar Road, Baroda 4.

## ORIENTAL INSTITUTE

Smt. Hansa Mehta Library Building, Tilak Road, Baroda.

## PARESH TECHNICAL INSTITUTE

Palace Road, Baroda, and Vayudevti Building, Bajwada, Baroda.

## TEXTILE &amp; ALLIED INDUSTRIES RESEARCH ORGANISATION (TAIRO)

Kala-Bhavan Premises, Baroda.

## BHAVNAGAR

## BHAVNAGAR SMALL INDUSTRIES ASSOCIATION

Darbargadh, Bhavnagar.

## SAURASHTRA CHAMBER OF COMMERCE

Old Darbargadh, Bhavnagar.

## BROACH

Broach; The Broach Red Cross Society, Near Tower, Broach; The Majoor Mahajan, Broach Branch, Near Sevashram, Broach; The Bharat Sevak Samaj, Jawahar Bazar, Broach; The Broach Education Society, Jawahar Bazar, Broach, The Broach Sad Vidya Mandal, Jawahar Bazar, Broach; The Broach Jilla Vidvarthi Sahayak Mandal, Lallubhai Chakla, Broach.

## THE BROACH CHAMBER OF COMMERCE &amp; INDUSTRIES

Lallubhai Chakla, Broach.

President : Nag'ibhai I. Narielwala; Vice-Presidents : Nanubhai M. Shah, Rohinton P. Jambusarwala, Gopaldas Laxmidas Patel; Hon. Secretary : Sham B. Shethana.

## BULSAR

## GUJARAT METAL INDUSTRIES ASSOCIATION

C/o Naran Lala Metal Works, Near Station, Navsari.

## JAMNAGAR

## NAWANAGAR CHAMBER OF COMMERCE

Chamber Hall, Grain Market, Jamnagar.

President : F. P. Tamboli; Vice-President : V. G. Chotal; Hon. Secretaries : D. P. Premani, H. M. Thacker; Treasurer : H. D. Buddhi.



**INDUSTRIAL INFORMATION CENTRE**

(An organisation of Nawanagar Chamber of Commerce)

Chamber Hall, Jamnagar.

The Centre functions in the interests of the industrialists of this region and also gives basic data of the prospective industries to the entrepreneurs.

*Chairman* : J. V. Gorecha ; *Vice-Chairman* : S. B. Shah ; *Hon. Secretary* : D. P. Premani.

**SHARDA PEETH**

Dwarka.

A seat established for spiritual and cultural guidance and uplift in Western India, by the first Jagadguru Shankaracharya the Great.

Under its auspices an educational society called Shri Sharada Peeth Vidvasabha is established which runs an Arts College, Shri Dwarakadhish Sanskrit Academy, Indological (Oriental) Research Institute, Jnan Mandir, Museum and several cultural and philosophical institutions at Dwarka and other places.

*Head* : H. H. Jagadguru Shri Shankaracharya Shri Abhinava Sachchidananda Tirth Swamiji.

**WOOL MERCHANTS' ASSOCIATION**

Jamnagar.

**JUNAGADH****PORBANDAR CHAMBER OF COMMERCE**

Manekchowk, Porbandar.

*President* : Sarat K. Vakil ; *Vice-President* : Kanji J. Dattari ; *Hon. Secretary* : B. P. Makhecha.

**KAIRA****CHAROTAR EDUCATION SOCIETY, ANAND INSTITUTE OF AGRICULTURE, ANIMAL HUSBANDRY & DAIRYING**

Anand.

**THE KAIRA DISTRICT CO-OPERATIVE MILK PRODUCERS' UNION LTD.**

Anand (W. Rly.).

This Co-operative Union daily collects 5,00,000 lbs. of milk in winter and 2,50,000 lbs. of milk in summer from its 487 affiliated village societies. Out of this 1,93,000 lbs. of milk are daily sent to the Aarey Milk Colony, Bombay and after meeting local requirements, the remaining quantity of milk is converted into Amul Butter, Whole Milk Powder, Amul Sweetened Condensed Milk, Amul Ghee, Casein & Amul Cheese.

The Union has received financial assistance from the U.N. Children's Fund, Government of New Zealand under the Colombo Plan, the Government of India and the Government of Gujarat.

Total turnover of the Union in 1964-65 was Rs. 6,00,00,000 and it was expected to be Rs. 8,00,00,000 in 1965-66.

**KAIRA DISTRICT TOBACCO MERCHANTS' ASSOCIATION**

Station Road, Nadiad.

**OTHER INSTITUTIONS**

American Methodist Mission Hospital, Nadiad ; Charotar Medical Relief Society & Ayurvedic College, Uttar Sanda, Nadiad ; Dr. Jayant Shah Hospital, Nadiad ; Government Agriculture Institute, Anand ; The J. & J. College of Science and C. B. Arts Institute, Nadiad ; The Mahagujarat Ayurvedic Hospital Nadiad ; Oil & Natural Gas Commission, Cambay ; Ranchhodrai Temple, Dakor ; Samjulaaxmi Madhavilal Maternity Hospital, Nadiad ; The Shankerbhai Jorabhai Mahagujarat Ayurvedic C. B. Patel Arts College, Nadiad ; Sonawala Law College, Nadiad ; Petlad College, Petlad ; Bhawan's College, Dakor, Parekh Arts & Science Colleges, Kapadwanj ; R. Parekh Arts College, Cambay, J. U. Patel Commerce College, Nadiad Hindu Anathashram, Nadiad ; Santram Hospital, Nadiad ; Swaminarayan Temple, Vadtal ; Vithal Kanya Vidyalaya, Nadiad ; Dhuvaran Thermal Station, Dhuvaran.

**KUTCH****ANJAR MERCHANTS' ASSOCIATION**

Anjar (Kutch).

**THE CHAMBER OF COMMERCE**

BBZ-N-41, Gandhidham.

**MEHSANA****ISABGOL MANUFACTURERS' & EXPORTERS' ASSOCIATION**

Bindu Sarowar Road, Sidhpur.

**KALOL SMALL INDUSTRIES ASSOCIATION**

Navjivan Road, Kalol.

**PANCHMAHALS**

Panchmahals District Bar Association, Civil Courts, Godhra.

Panchmahals Chamber of Commerce, Station Road, Godhra.

Theosophical Society, Godhra Lodge, Parbha Road, Godhra.

Godhra Medical Practitioners Association, Nava Bazaar, Godhra.

All India Sindhi Samaj Trust, Teerath Building, Near Old Post Office, Godhra.

Nari Sanrakshan Kendra, Civil Lines Area, Godhra.

Shreyas Education Society, Laxminarayan Trust Building, Godhra.

**RAJKOT****MORVI CHAMBER OF COMMERCE & INDUSTRIES**

Cotton Association Hall, Near Darbargadh, Morvi.

*Hon. Secys.* : C. M. Sanghvi, N. K. Vorab.

**THE SAURASHTRA OIL & OILSEEDS ASSOCIATION LTD.**

Commercial Chamber, Rajkot.

**KERALA****ALL INDIA MANUFACTURERS' ORGANISATION**

(Kerala State Board)

Mohan Vihar, Karikamuri Road, Ernakulam 1.

**ALLEPPEY OIL MILLERS' & MERCHANTS' ASSOCIATION**

Naga Mahal Bldgs., Alleppey.

**ALLEPPEY PRODUCE MERCHANTS' ASSOCIATION**

Alleppey.

**ANANDA NRITYA KALALAYAM SCHOOL OF KATHAKALI DANCE**

*Head Office* : Palace Ward, Thevalli, Quilon 1.  
*Branch* : Kakkad, Kunnankulam.

**AUTOMOBILE ASSOCIATION OF SOUTHERN INDIA**

Pulical Bldgs., M. G. Road, Ernakulam.

**BADAGARA SHIPPERS' ASSOCIATION**

Badagara.

**SURAT**

C.G.S. Mahila Vidhyalay Mandal, Gopipura Peoples' Education Society. Sarvajani Education Society. Anath Mahajan Balashram, Katari-gam. Union Education Society. Shri Tap. Brahmacharyashram Sabha, Laldarwaja, Surat Education Society, Navyug Kelavani Mandal.

**JEEVAN BHARATI**

Greenlands, Nanpara, Surat.

Founded in 1946, the Jeevan Bharati is an experimental educational institution under the management of Jeevan Bharati Mandal. It has been recognised by the Government of Gujarat as a multipurpose school.

**SARVAJANIK EDUCATION SOCIETY**

Surat.

**THE SOUTHERN GUJARAT CHAMBER OF COMMERCE & INDUSTRY**

Safe Deposit Chambers, Surat.

The present strength is 981.

*President* : Surajram H. Bachkaniwala ; *Vice-President* : Mohanlal C. Dhamanwala ; *Secretary* : Dinkerrai B. Patel.

**THE SURAT JARI GOODS PRODUCERS' CO-OPERATIVE SOCIETY, LTD.**

Taj Manzil, opp. Tower, Surat.

The society has a strength of 612 members; Seth Hirajal Ranchhodas Jariwala, *President* ; Nagindas Chunilal Jariwala, *Vice-President* ; Dhiraajal N. Choksi, *Hon. Secretary*.

**THE SURAT VANKAR SAHAKARI SANGH LTD.**

Kinkhabwala Wadi, Begampura, Surat.

**THE SURAT WEAVING ASSOCIATION**

Limda Chowk, Lokhandwala Bldg., Mahatma Gandhi Road, Surat.

**SURENDRANAGAR****SAURASHTRA GINNING AND PRESSING FACTORIES ASSOCIATION**

C/o Dhrangadhra House, Surendranagar.

**SAURASHTRA MILLOWNERS' ASSOCIATION**

Dhrangadhra House, Surendranagar.

*President* : Chandulal Vardhaman Shah ; *Vice-President* : Dharendra N. Mehta ; *Secretary* : A. P. Shah.

**SHRI ZALAWAD CHAMBER OF COMMERCE & INDUSTRIES**

Main Bazar, Surendranagar.

*President* : I. V. P. Jain ; *Vice-President* : L. G. Dave ; *Secretary* : A. N. Bhimnathwala.

**THE CALICUT CHAMBER OF COMMERCE & INDUSTRY**

Beach Road, Calicut 1.

*Chairman* : Syed Alavi Jifri ; *Hon. Secretary* : E. R. Pereira.

**THE CASHEW EXPORT PROMOTION COUNCIL**

'World Trade Centre', Mahatma Gandhi Road, Ernakulam-6.

*Chairman* : P. S. Habeeb Mohamed ; *Secretary* : R. K. Pillai.



**CENTRAL COCONUT RESEARCH STATION**  
Kayangulam, Ochira P. O.

**CENTRAL COCONUT RESEARCH STATION**  
Kasaragod.

**CENTRAL INSTITUTE OF FISHERIES TECHNOLOGY**  
P.B. No. 39, Chittoor Road, Ernakulam 1.

**THE CENTRAL KERALA TILE MANUFACTURERS' ASSOCIATION**  
Trichur 1.

**THE CENTRAL TRAVANCORE PLANTERS' ASSOCIATION**  
Twyford Estate, Fairfield P.O.

*Chairman* : K. N. V. Ayyar; *Hon. Secy.* : A. V. Narayanaswami.

**CHAMBER OF COMMERCE**  
Arecal Bldgs., M.C. Road, Kottayam.

**CHAMBER OF COMMERCE**  
Trichur 1.

*President* : C. C. George; *Secretary* : Kurian S. Manavalan; *Jt. Secretary* : C. M. George; *Treasurer* : C. E. D. Lonappen.

**CHAMBER OF COMMERCE**  
Chalai, Trivandrum.

**THE CHANGANACHERRY MERCHANTS' ASSOCIATION**  
Market, Changanacherry.

**CHRISTIAN LITERATURE SOCIETY**  
Malayalam Branch.  
Tiruvalla P.O.

**COCHIN CHAMBER OF COMMERCE AND INDUSTRY**  
Aerodrome Road, Willingdon Island,  
P. Box No. 3, Cochin 3.

*President* : O. Thomas; *Vice-President* : P. E. C. Kelly; *Secretary* : P. Sethuram.

**COCHIN PAPER, CUTLERY & ALLIED TRADERS' ASSOCIATION**  
Jain Temple Trust Bldg., IV/47, New Road,  
Cochin 2.

**DAIRY PRODUCTS IMPORTERS' ASSOCIATION**  
Jain Temple Trust Bldg., IV/47, New Road,  
Cochin 2.

**ERNAKULAM CHAMBER OF COMMERCE**  
Ernakulam 1.

*President* : Joseph Chakola; *Vice-Presidents* : John P. Valavi, K. C. I. Mather; *Secretary* : A. M. Ali Mohammed.

**ERNAKULAM PRESS OWNERS' ASSOCIATION**  
Deepam Press Bldgs., Basin Road, Ernakulam 1.

**FAMILY PLANNING ASSOCIATION OF INDIA**  
Shanthi Bhavan, Bhakthi Vilas Road,  
Trivandrum.

**GANDHI ASHRAM**  
Mayannur, Via Ottapalam.  
*President* : M. P. Govinda Menon; *Secretary* : K. N. Nambisan; *Joint Secretary* : Smt. Kamala Nambisan.

The Gandhi Ashram does constructive work on sarvodaya lines. Besides Khadi—Ambar and traditional, most of the other village industries of the Khadi Commission, such as soap

making, oil pressing, pottery, tanning and bone crushing, hand-pounding, bee-keeping, fibre industry, etc. are being worked at the Ashram. A Lok Karya Kshetra also works under the auspices of the Ashram. The Ashram is conducting a training unit in N-E oils Soap industry also.

**GANDHI SEVA SADAN**  
Gandhi Seva Sadan P.O., Via Lakkiti,  
Dist. Palghat. Estd. : 1945

*Activities* :—Pre-Basic School, Senior Basic School, Post Basic School and Basic Training School; Gandhi Seva Sadan Kathakali and Classic Art Academy for Kathakali and Dance; Pottery, Khadi and Mat Weaving, Soap making, Ambar Charkha making, Goseva, Handmade Paper, Handpounding of Paddy etc.; Harijan Hostel, Orphanage, Maternity & Child Welfare Centre, etc.

*Chairman* : M. Kannanunni Nair; *Secretary* : K. Kumaran.

**INDIA PEPPER AND SPICE TRADE ASSOCIATION**  
XI/118, Jew Town, Cochin 2.

**INDIAN CHAMBER OF COMMERCE**  
P.O. Box No. 136,  
Cochin-2.

*President* : D. B. Khona; *Vice-President* : S. S. Koder; *Secretary* : V. K. Raja.

**INDIAN CONFERENCE OF SOCIAL WORK (Kerala State Branch)**  
Post Box No. 6, Ernakulam 1.

**INDIAN LEMONGRASS OIL EXPORTERS' ASSOCIATION**  
P. Box 52, Cochin 1.

**INDIAN RED CROSS SOCIETY (Kerala State Branch)**  
Near General Hospital, Trivandrum 1.

**INDO-NORWEGIAN PROJECT**  
P. Box 137, Ernakulam.  
*Project Director* : Emil Fjernerros.

**INDUSTRIAL & COMMERCIAL RESEARCH SOCIETY OF INDIA**  
Vallia Veedu, Kozhencheri.

**INSTITUTION OF ENGINEERS (INDIA)**  
12/33B, Observatory Hill, Trivandrum 1.

**INTERNATIONAL FELLOWSHIP**  
Mahilagiri, Thottumukkam P.O.  
(Dt. Alwaye).

Also at 13, Venkatesapuram, Madras 23.

**KERALA BLIND WELFARE ASSOCIATION**  
Mankadapallipuram P.O.  
Angadipuram.

Conducts a blind school and an Industrial Centre, 'Kerala School for the Blind' and Kerala Industrial Home for the Blind, at Mankadapallipuram.

**KERALA COIR PRODUCERS' AND DEALERS' ASSOCIATION**  
Alleppey.

**KERALA KALAMANDALAM**  
Cheruthuruthy P.O.

An Academy of Arts imparting training on scientific lines in Kathakali, Koothu-koodiyattam, Panchavadyam, Ottanthullal, Mohiniyattam and Bharathanatyam.

**KERALA SAHITHYA AKADEMI**  
Trichur.

**KERALA SANGEETHA NATAKA AKADEMI**  
Trichur 1.

**KERALA STATE COUNCIL FOR CHILD WELFARE**  
15/674, Bhaktivilas Road, Trivandrum 14.

**THE KERALA STATE OIL MILLERS' ASSOCIATION (Regd.).**  
Ernakulam Mills Buildings, Ernakulam.

**KERALA STATE SMALL INDUSTRIES ASSOCIATION**  
New Road, Cochin 2.

**KOZHIKODE TIMBER EXPORTERS' ASSOCIATION**  
Mooriyad, Calicut-7.

**THE MALABAR BUS OWNERS' ASSOCIATION**  
Oyitty Road, Kozhikode.

**THE MALABAR CHAMBER OF COMMERCE**  
Calicut 1.

*President* : P. P. Hassan Koya; *Vice-President* : R. N. Saboo; *Vice-President & Hony. Treasurer* : Rev. Fr. J. M. Vergottini, S.J.; *Hony. Secretaries* : C. C. Vulson; R. Ramakrishna Chettiar.

**THE MALABAR MARKET COMMITTEE**  
8/80, Silk Street, Post Box No. 171,  
Kozhikode 1.

**THE MALABAR PRODUCE MERCHANTS' ASSOCIATION**  
Silk Street, Calicut 1.

**MALABAR SAW MILLS' ASSOCIATION**  
Kallai, Calicut-3.

**THE MALABAR UMBRELLA STICKS MANUFACTURERS' ASSOCIATION**  
Kuttichira, Calicut 1.

**MARINE PRODUCTS EXPORT PROMOTION COUNCIL**  
World Trade Centre, M. G. Road, Ernakulam 6.

*Chairman* : M. P. Alexander, *Secretary* : M. P. Haran.

**NAIR SERVICE SOCIETY**  
Perunnai, Changanacherry.

**NATANA NIKETANAM**  
Trichur.

Founded in 1955. Only institution of its kind for imparting advanced and specialised training in the art of Kathakali and Bharat Natyam to girls.

**NORTH MALABAR CHAMBER OF COMMERCE**  
Fort Road, Cannanore.

**NORTH TRAVANCORE CHAMBER OF COMMERCE**  
Bank of Alwaye Buildings, Alwaye.

*President* : M. M. Abdul Hameed; *Vice-President* : K. Raghunath Kamath; *Secretary* : T. O. Abdullah.

**THE PALGHAT CHAMBER OF COMMERCE**  
Palghat 1.

*President* : P. H. Rama Iyer; *Vice-Presidents* : R. S. P. Swaminathan, and M. A. Rehman; *Hony. Secretaries* : P. K. Krishnaswamy and C. L. Sundararajan, *Treasurer* : R. V. Govindaraj Gowder.

**REGIONAL CHAMBER OF COMMERCE**  
Big Bazar, Palghat.

*President* : N. S. Harihara Iyer; *Vice-President* : V. Bojraj; *Secretary* : N. S. Kunji Bava Sahab.



**SAHITYA PRAVARTHAKA CO-OPERATIVE SOCIETY**  
Kottayam

A co-operative organisation of the authors of Kerala with branches in Trivandrum, Ernakulam and Trichur. Stabilising literary work as a profession is one of the major aims of the society.

**SEAFOOD CANNERS' AND FREEZERS' ASSOCIATION OF INDIA**

Cochin Company Buildings, XIX/5, Kochangadi, Cochin 5.

**SOUTH INDIA PLYWOOD MANUFACTURERS' ASSOCIATION**  
Calicut 1.

**SOUTH INDIA SOAP MAKERS' ASSOCIATION**  
Oyitty Road, Post Box 74, Calicut 1.

**SOUTH KERALA PLANTERS' ASSOCIATION.**  
Kulathupuzha P.O.

**SOUTH MALABAR TIMBER MERCHANTS' ASSOCIATION**  
Kallai, Calicut 3.

**SPICES EXPORT PROMOTION COUNCIL**  
World Trade Centre, M. Gandhi Road, Ernakulam 6.

**TEA TRADE ASSOCIATION OF COCHIN**  
'Sebrof House', P. Box No. 36, Willingdon Island, Cochin 3.

Chairman : P. H. Shaw; Vice-Chairman : A. V. Saraf; Secretary : N. K. Rajan.

**TRAVANCORE CHAMBER OF COMMERCE**  
Alleppey.

Chairman : V. J. Joseph; Vice-Chairman : Revi Karunakaran; Secretary, N. Venkatasubban.

**TRAVANCORE-COCHIN COIR YARN MERCHANTS' ASSOCIATION**  
Rajagopala Mandiram, Mullakkal, Alleppey.

**TRAVANCORE COIR MATS AND MATTING MANUFACTURERS' ASSOCIATION**  
Alleppey.

**THE TRAVANCORE OIL MILLERS' ASSOCIATION**  
Naga Mahal, Alleppey.

**THE TRAVANCORE TILE MANUFACTURERS' ASSOCIATION**  
Quilon.

**THE WEST COAST EMPLOYERS' FEDERATION**  
Cochin 3.

President : H. T. Clifton; Vice-President : A. D. Spence; Secretary : P. Sethuram.

**THE WEST COAST INDUSTRIALISTS ASSOCIATION**  
Empress Hotel Road, Kozhikode 1.

## MADHYA PRADESH

**ADIWASI CHAMBER OF COMMERCE**  
Alirajpur.

**BHATKHANDI LALITKALA SHIKSHA SAMITI**  
Gandhi Chowk, Raipur.

**BIRLA RESEARCH INSTITUTE FOR APPLIED SCIENCES**  
Birlagram—Nagda (M.P.)

It is a registered society whose objective is to help national industrial growth through research. It proposes to establish a few research laboratories. The first research division—Rayon and High Polymer, has already been started at Birlagram, M.P. The other divisions are in planning stage. It undertakes research for private industry on no profit no loss basis.

Chairman : G. D. Birla; Director General : Dr. S. M. Mitra.

**CENTRAL INDIA CHAMBER OF COMMERCE & INDUSTRIES**  
Bambakhana, Ujjain.

President : B. K. Sethi; Vice-Presidents : I. H. Parikh, A. N. Arora; Hon. Gen. Secys. : B. M. Agrawal, M. D. Gupta; Treasurer : M. L. Agrawal.

**CENTRAL INDIA COTTON ASSOCIATION LTD.**  
Chhota Sarafa, Ujjain.

**THE CHAMBER OF COMMERCE**  
Ratlam.

**FEDERATION OF ALL INDIA LOCAL AUTHORITIES**  
"Chandralok", Satna.

**FOREST CONTRACTORS' ASSOCIATION**  
Chhindwara.

**INDORE PAINTS & HARDWARE MERCHANTS' ASSOCIATION**  
Siyaganj, Indore.

**INDUSTRIAL ESTATE MANUFACTURERS' ASSOCIATION**

Industrial Estate, Polo Ground, Indore 3.

President : M. M. Kela; Vice-Pres. : S. S. Kimtee; Secretary : S. C. Kasliwal; Treasurer : G. B. Luthria.

**INSTITUTE OF PLANT INDUSTRY**  
Old Residency Area, Indore.

**JIWADI INDUSTRIAL RESEARCH LABORATORY**  
Tansen Road, Gwalior 2.

**KASTURBA GANDHI NATIONAL MEMORIAL TRUST**

Address :—P. O. Kasturbagram, Dist. Indore.

Aims and Objects :—Welfare of women and children in rural areas of India. The Trust trains women workers for educational, vocational and health programmes and after training deports them to rural areas.

**MADHYA PRADESH CHAMBER OF COMMERCE AND INDUSTRY**

"Chamber Bhavan", Dharma Mandir Road, Lashkar, Gwalior.

President : D. P. Mandella; Vice-President : T. Harkhavat; Hony. Secretary : B. D. Lahariya.

**MADHYA PRADESH TEXTILE MILLS ASSOCIATION**

8, South Tukoganj, Street No. 1, Indore.

Chairman : K. A. Desai; Vice-Chairman : B. M. Bhandari; Secretary : R. C. Bhandari.

**MADHYA PRADESH STATE COUNCIL FOR CHILD WELFARE**  
Secretariat Building, Bhopal.

**MADHYA PRADESH WELFARE ASSOCIATION FOR THE BLIND**  
83, Bozanket Market, Indore.

**MAHAKOSHAL CHAMBER OF COMMERCE**  
Jawaharganj, Jabalpur.

President : Seth Narasing Das; Vice-Presidents : K. Rathi, R. Nath; Hon. Secy. : H. Gupta.

**THE MALWA CHAMBER OF COMMERCE**  
57, Sitlamata Bazar, Indore City.

**M. P. READYMADE VASTRA VIKRETA SANGH**

M. G. Road, Indore.

Secretary : Kumud Kadia.

**M. P. SUGAR MILLS' ASSOCIATION**  
Jail Road, Indore.

**RAIPUR CHAMBER OF COMMERCE & INDUSTRIES**

Sadar Bazar, Raipur.

Pres. : Mohanlal Nathani; Vice-Presidents : G. Daga, L. K. Parakh; Hon. Secy. : P. C. Jain.

**SCINDIA ORIENTAL INSTITUTE**  
University Road, Ujjain.

**SHRI GOVINDRAM SEKSARIA TECHNOLOGICAL INSTITUTE**  
Opposite Nehru Park, Indore.

**THE TRIBAL RESEARCH INSTITUTE**  
Chhindwara.

## MADRAS

**ACADEMY OF TAMIL CULTURE**  
Madras 7.

**THE ADYAR LIBRARY & RESEARCH CENTRE**  
Adyar, Madras 20.

**AGRI-HORTICULTURAL SOCIETY OF MADRAS**

18, Cathedral Road, Madras 6.

**ALL INDIA ANGLO INDIAN ASSOCIATION**  
20, Ritherdon Road, Madras 7.

**ALL-INDIA CARROM FEDERATION**  
28, Second Line Beach, Madras 1.

**ALL INDIA CHESS FEDERATION**  
817, Thambu Chetty St., Madras 1.

**ALL INDIA COFFEE MERCHANTS' ASSOCIATION**  
22/48, 49, Raja Street, Coimbatore.



- ALL INDIA MANUFACTURERS' ORGANISATION**  
(Madras State Board)  
7/15, Haddows Road, Nungambakkam, Madras 6.
- ALL INDIA RADIO MERCHANTS' ASSOCIATION** (Madras Zone)  
22 General Patters Road, Madras 2.
- ALL INDIA RAILWAYMEN'S FEDERATION**  
Madras 4.
- ANDHRA CHAMBER OF COMMERCE**  
Andhra Chamber Building, 272/73, Angappa Naick Street, P.B. 1511, Madras 1.  
Also at 68-B, Rashtrapathi Road, Secunderabad.  
*President:* V. G. S. V. Prasad; *Vice-Presidents:* Rasiklal M. Mehta; Y. Venkanna Choudhary; M. Harischandra Prasad; *Treasurer:* C. Audiseshu; *Secretary:* M. S. Sambasivam; *Asstt. Secretary, Secunderabad Office:* K. P. Ramamurthy.
- ANDHRA MAHILA SABHA**  
Luz Church Road, Mylapore, Madras 4.  
Vidyanagar, Hyderabad.
- THE ANGLO-INDIAN & DOMICILED EUROPEAN ASSOCIATION OF SOUTHERN INDIA**  
White Memorial Hall, Egmore, Madras, 8.
- THE ANJUMANE-HIMAYATHE-ISLAM AND MUSLIM ORPHANAGES**  
No. 33, North Boag Road, T. Nagar, Madras 17.
- ARTS ACADEMY**  
42, Purasawalkam High Road, Vepery, Madras 7.
- THE ASSOCIATION OF ELECTRICAL UNDERTAKINGS, SOUTHERN INDIA**  
20, Second Line Beach, Madras 1.
- ASSOCIATION OF PLANTERS OF THE STATE OF MADRAS**  
'Canowie', Coonoor.  
*Chairman:* N. H. Sethna; *Vice-Chairman:* M. M. Muthiah; *Secretary:* C. S. Krishnaswami.
- AUTOMOBILE ASSOCIATION OF SOUTHERN INDIA**  
38-A, Mount Road, Madras 6.  
*President:* M. A. Chidambaram; *Chairman:* S. V. B. Row; *Hon. Treasurer:* K. Hariharan; *Secretary:* Lt.-Col. (Retd.) M. Osman.
- BALA BHARAT**  
Olcott Gardens, Adyar, Madras 20.
- BARNARD INSTITUTE OF RADIOLOGY**  
General Hospital, Madras 3.
- THE BHARAT SCOUTS AND GUIDES**  
State Headquarters: "Wenlock Park", South Beach Road, Triplicane, Madras 5.
- BIBLE SOCIETY OF INDIA AND CEYLON (MADRAS AUXILIARY)**  
Post Box 502, Park Town, Madras 3.
- BOOK INDUSTRY COUNCIL OF SOUTH INDIA**  
25, Sterling Road, Madras 34.
- THE BRITISH COUNCIL**  
150-A, Mount Road, Madras 2.
- BUILDERS' ASSOCIATION OF INDIA**  
53, Sir Mohamed Usman Road, T. Nagar, Madras 17.
- CANCER INSTITUTE**  
Adyar, Madras 20.  
*Chairman:* Dr. (Mrs.) S. Muthulakshmi Reddi; *Secretary:* Dr. V. Shanta, M.D.; *Director & Scientific Director:* Dr. S. Krishnamurthi, M.S.
- CATHOLIC CENTRE**  
Armenian Street, Madras 1.
- CENTRAL FOOTWEAR TRAINING INSTITUTE**  
Guindy, Madras 32.
- CENTRAL LEPROSY TEACHING AND RESEARCH INSTITUTE**  
Chingleput.  
*Director/Secretary:* Dr. Dharmendra.
- CHAMKUR ART ACADEMY**  
23, Apparasami Koil Street, Mylapore, Madras 4.
- CHILDREN'S WRITERS' ASSOCIATION**  
10, Vaidyaramier St., Madras 17.
- CHRISTIAN LITERATURE SOCIETY**  
Park Town, Post Box 501, Madras 3.
- THE CINE TECHNICIANS' ASSOCIATION OF SOUTH INDIA**  
No. 15, Arulammal Street, Thyagarayanagar, Madras 17.
- COIMBATORE AND NILGIRI DISTRICTS MASTER PRINTERS' ASSOCIATION**  
100, Oppanakara Street, Coimbatore.
- COIMBATORE BUTTER & GHEE MERCHANTS' ASSOCIATION**  
9, Sublah Mudaliar Street, Coimbatore 1.
- COIMBATORE CHAMBER OF COMMERCE**  
Post Box No. 12, Race Course Road, Coimbatore.
- THE COIMBATORE CLOTH MERCHANTS' ASSOCIATION**  
11/41, Ratnasabapathi Mudaliar Road, Coimbatore 2.
- COIMBATORE DISTRICT HARDWARE MERCHANTS' ASSOCIATION** (Regd.)  
15/13, Mill Road, Coimbatore.
- COIMBATORE DISTRICT PAPER MERCHANTS' ASSOCIATION**  
Thomas Street, Coimbatore 1.
- CONNEMARA PUBLIC LIBRARY**  
Pantheon Road, Egmore, Madras 8.
- THE COUNCIL OF PUBLIC AFFAIRS**  
11, Second Main Road, Madras 28.  
Daiyajna Samaj
- 44, Purasawalkam High Road, Madras-7.
- DEVELOPMENT CENTRE FOR MUSICAL INSTRUMENTS**  
Sangita Vidyalaya, Annamalai-manram, Madras 1.
- EAST INDIA TOBACCO FEDERATION**  
2/6, Second Line Beach, Madras.
- EMPLOYERS' FEDERATION OF SOUTHERN INDIA**  
Dare House, 1st Line Beach, Madras 1.  
*Chairman:* N. S. Bhat; *Vice-Chairman:* J. C. Watson; *Secretary:* V. J. Ross.
- FORUM OF FREE ENTERPRISE**  
35, Mount Road, Madras 2.
- FRIEND-IN-NEED SOCIETY**  
Finabree Garden, 19/20, Poonamallee High Road, Madras 3.
- GANDHI LINCOLN INSTITUTE OF HUMAN RELATIONSHIP**  
Gandhigram (Dt. Madurai).  
*Director:* G. Ramachandran; *Secretary:* R. Srinivasan.
- GANDHI MEMORIAL**  
All India Depressed Classes, Educational Employment & Welfare Association.  
Gokulam, Madras 18.
- GOKULAM METHOD VILLAGE WELFARE ASSOCIATION**  
11-B, Eldams Road, Teynampet, Madras 18.  
Provides, Textile Instructors' course with a hostel attached; Free Higher Ele. and Adult Education, Library, bajana, socio-economic-cultural programmes for poor slumfolk etc.
- GOVT. TUBERCULOSIS INSTITUTE**  
Spur Tank Road, Chetput, Madras 31.
- GUILD OF SERVICE (SEVA SAMAJAM)**  
Pioneer House, Peelamedu, Coimbatore 4.
- HANDLOOM TEXTILES MANUFACTURERS' AND EXPORTERS' SOCIETY**  
Salem Main Road, Komarapalayam P.O., (Salem District).
- HANDLOOM TEXTILE PRINTERS' ASSOCIATION**  
222, Nethaji Road, Erode.
- THE HINDU GOOD TEMPLARS' LEAGUE**  
(Estd. 1895)  
85/A, Audiyappa Naicken Street, Madras 1.  
Works for prohibition and brotherhood.
- HINDUSTAN CHAMBER OF COMMERCE**  
'Hindustan Chamber Buildings'  
8, Kondi Chetty Street, Madras-1.  
*President:* T. S. Narayanaswami; *Vice-Presidents:* P. V. S. Mani; D. N. Jhunjhunwala; Deepak L. Banker; S. K. Somani; *Treasurer:* Balwant Rai; *Secretary:* G. R. Rao.
- INDIA SUNDAY SCHOOL UNION**  
Coonoor.  
The India Sunday School Union, founded in Allahabad in 1876, is an interdenominational and ecumenical organisation having for its object the strengthening of religious and moral education in Christian schools throughout India.
- INDIAN BOTANICAL SOCIETY**  
Univ. Botany Laboratory, Madras 5.
- THE INDIAN CHAMBER OF COMMERCE**  
6/83, Avanashi Road, Post Box No. 200, Coimbatore.
- THE INDIAN CHAMBER OF COMMERCE**  
84-B, South Raja Street, Tuticorin.  
*President:* A. P. C. Veerabahu; *Vice-Presidents:* I. S. Machado, P. S. T. S. Thiraviaratus Nadar; *Secretary:* V. V. D. Nithyanandam.
- INDIAN CHILD EVANGELISM FELLOWSHIP**  
9, Bronsan Garden Road, Kilpauk, Madras 10.  
Also at 2, Jubilee Road, Poona 1.



**INDIAN COUNCIL OF CHILD EDUCATION**  
39, Edward Elliotts Road, Mylapore,  
Madras 4.

**INDIAN ENGINEERING ASSOCIATION**  
(SOUTHERN REGION)  
88: "Dare House", North Beach Road,  
Madras 1

*Chairman* : F. C. Mathias; *Dy.-Chairman* : R. W. England; *Secretary* : V. J. Ross.

**INDIAN INSTITUTE FOR POPULATION STUDIES**  
Gandhinagar, Madras 20.  
Estd. in 1950

**INDIAN INSTITUTE OF HOMOEOPATHS**  
30, Bakthapuri St., Kumbakonam and  
6, Stringers St., Madras 1. 4, Manjanakara  
Street, Madurai 1 and Arunachala Asari St.,  
Salem 1.

**INDIAN INSTITUTE OF TECHNOLOGY**  
Madras 36.

This Institute, started from July 1959, is the third in the chain of the five Higher Technological Institutes set up by the Government of India for the advancement of Technological education in the country. *Chairman* : Dr. A. L. Mudaliar; *Director* : Prof. B. Sengupto; *Registrar* : C. V. Sethunathan.

**INDIAN RED CROSS SOCIETY, MADRAS STATE BRANCH**  
Red Cross Buildings, Monteith Road, Egmore,  
Madras 8.

**INDIAN ROADS AND TRANSPORT DEVELOPMENT ASSOCIATION LTD.**  
Post Box No. 1270, Burmah-Shell House,  
Esplanade, Madras.

**INDO-U.S.A. CULTURAL ORGANISATION**  
Rajapalayam.

**INDUSTRIAL ESTATE MANUFACTURERS' ASSOCIATION**  
Industrial Estate, Guindy, Madras 32.

**INSTITUTE OF AUTOMOBILE ENGINEERING AND BUSINESS MANAGEMENT**  
85, Mount Road, Teynampet, Madras 18.

**INSTITUTE OF CATERING TECHNOLOGY & APPLIED NUTRITION**  
Adyar, Madras 20.

**INSTITUTE OF LEATHER TECHNOLOGY**  
Madras 20.

**INSTITUTE OF MANAGEMENT**  
C/o "Karpagam", 24/80, Sullivan Street,  
Coimbatore 1.

**INSTITUTE OF RURAL HEALTH AND FAMILY PLANNING**  
Gandhigram P.O., Madurai District.

**INSTITUTION OF ENGINEERS (INDIA)**  
1, Adam's Road, Chepauk, Madras 5.

**INSURANCE ASSOCIATION OF INDIA**  
Madras Regional Council,  
2-6, Second Line Beach, Madras 1.

**KALAI KAZHAGAM**  
35, Vadial Street, Devakottal.

**KALAKSHETRA—INTERNATIONAL ART CENTRE, TIRUVANMIYUR**  
MADRAS 41.

Founded in 1936.

The centre has a weaving section, famous for the production of attractive Indian sarrees, a photographic division offering colour process, Microfilm and Photostat electronically operated Vario Kliscograph block making—black and white colour—Service & a Publication Department.

Dr. U. V. Swaminatha Aiyar (Tamil) Library— is affiliated to Kalakshetra and located in the Tiruvannamiyur campus. Two other educational institutions, namely the Besant Theosophical High School and the Arundale Training Centre for training teachers (Montessori System), work in close collaboration.

*President* : Srimati Rukmini Devi; *Vice-Presidents* : Dr. C. P. Ramaswami Aiyar; T. L. Venkatarama Aiyar; Dr. P. V. Rajamannar; Smt. Sumati Morarji; *Secretary* : K. Sankara Menon; *Treasurer* : N. Gopal Iyer.

**THE KARNATAKA ASSOCIATION**  
7/49, Sarojini Street, Ramnagar,  
Coimbatore.

**KARUR WEAVING & KNITTING FACTORY OWNERS' ASSOCIATION LTD.**  
New Street, Karur.

**THE KENNEL CLUB OF INDIA**  
Coonoor 1—Nilgiris.

**KING INSTITUTE**  
Guindy, Madras 32.

**THE KUPPUSWAMI SASTRI RESEARCH INSTITUTE**  
Sanskrit College, Mylapore, Madras 4.

**LEATHER EXPORT PROMOTION COUNCIL**  
"Marble Hall"  
3/38, Vepery High Road, Madras 3.

*Chairman* : Janab M. J. Jamal Moldeen Sahib, M.P.; *Vice-Chairman* : A. Nagappa Chettiar; *Secretary* : Janab B. Ali Khan Sahib.

**THE MADRAS AERATED WATER REQUISITES MERCHANTS' ASSOCIATION**  
No. 296, Wall Tax Road, Madras 3.

**THE MADRAS ALUMINIUM MERCHANTS' AND MANUFACTURERS' ASSOCIATION**  
499, Mint Street, Madras-3.

**THE MADRAS BETEL NUT MERCHANTS' ASSOCIATION**  
17, Anna Pillai Street,  
G. T. Madras-1.

**THE MADRAS BUTTER AND GHEE MERCHANTS' ASSOCIATION (REGD.)**  
137, Audiappa Naick Street, Madras.

**MADRAS CHAMBER OF COMMERCE**  
"Dare House," First Line Beach, Madras.  
*Chairman* : A. W. Stansfeld; *Vice-Chairman* : John K. John; *Secretary* : V. J. Ross.

**MADRAS CHAMBER OF SMALL INDUSTRIES**  
Y. M. I. A. Bldg., 9, Armenian St., Madras 1.

**MADRAS CHILLIES MERCHANTS' ASSOCIATION**  
18, Chinnathambimudali Street, Madras.

**MADRAS CITY COUNCIL FOR CHILD WELFARE**

81, Suryanarayana Chetty Street, Royapuram,  
Madras 13.

**THE MADRAS CRICKET ASSOCIATION**  
Nehru Stadium, Madras 3.

**MADRAS CYCLE IMPORTERS' ASSOCIATION**  
7-B, Broadway, Madras.

**MADRAS DYES AND CHEMICALS MERCHANTS' ASSOCIATION**  
209, Govindappa Naick Street, Madras-1.

**THE MADRAS FRUITS COMMISSION AGENTS' ASSOCIATION**  
12, Bunder Street, Madras.

**MADRAS GUNNY MERCHANTS' ASSOCIATION**  
35-A, Audiappa Naicken Street, Madras 1.

**MADRAS HARDWARE & PAINT MERCHANTS' ASSOCIATION**  
45, Venkatachala Mudali St., Madras 3.

**MADRAS HOTELS ASSOCIATION**  
289, Netaji Subhas Chandra Bose Road,  
Madras 1.

**THE MADRAS INDUSTRIES ASSOCIATION**  
3/144, Mount Road, Thousand Lights,  
Madras 6.

**MADRAS INSTITUTE OF TECHNOLOGY**  
Chromepet P.O., Chingleput Dist.

**MADRAS JEWELLERS' & DIAMOND MERCHANTS' ASSOCIATION**  
11 & 12, Car Street, Netaji Subhaschandra Bose Road, Madras 1.

**THE MADRAS KIRANA MERCHANTS' ASSOCIATION**  
210, Govindappa Naick Street, Madras 1.

**MADRAS LIBRARY ASSOCIATION**  
32, Sami Pillai Street, Triplicane, Madras 5.

**MADRAS LITERARY SOCIETY AND AUXILIARY OF THE ROYAL ASIATIC SOCIETY**  
*Office*: College Road, Nungumbakkam, Madras 6.

**MADRAS MAHA BODHI SOCIAL SERVICE SOCIETY**  
10, Kennet Lane, Egmore, Madras 8.  
Also runs an orphanage.

**MADRAS MANIYARI MERCHANTS' ASSOCIATION**  
No. 1-A, Narayana Mudali Lane, Madras 1.

**MADRAS MATHEMATICS CLUB**  
Dept. of Mathematics, Univ. of Madras,  
Senate Buildings, Chepauk, Madras 5.

**MADRAS METALWARE MANUFACTURERS' & MERCHANTS' ASSOCIATION**  
102, Narayana Mudali St., Madras 1.

**MADRAS MOTOR PARTS DEALERS' ASSOCIATION**  
22, General Patters Road, Mount Road, Madras 2.



*President*: S. Narayanan; *Vice-Presidents*: K. R. Raghavan, B. I. Chandhok; *Hon. Secretary*: N. S. Rishi.

**MADRAS OIL & SEEDS ASSOCIATION**  
320, Linghi Chetty Street, P.O. Box No. 1639, Madras 1.

**THE MADRAS OIL AND SEEDS EXCHANGE LTD.**

No. 24, Thambu Chetty St., Madras 1.

**MADRAS OPTICIANS' ASSOCIATION**  
7/22, Broadway, Madras 1.

**THE MADRAS PAPER MERCHANTS' ASSOCIATION**

No. 2, Anderson St., 1st Floor, Madras 1.

**THE MADRAS PIECEGOODS MERCHANTS' ASSOCIATION**

100, Godown Street, Madras 1.

**MADRAS PRODUCTIVITY COUNCIL**  
22, Royapettah High Road, Madras 14.

**THE MADRAS PROVINCIAL FOOD GRAINS MERCHANTS' ASSOCIATION**

40, Anderson Street, Madras 1.

**MADRAS REPORTERS GUILD**

Government Estate, Mount Road, Madras 2.  
(Monthly publication: *Newsman*).

**MADRAS SCHOOL OF SOCIAL WORK**  
Casamajor Road, Egmore, Madras 8.

**THE MADRAS SEVA SADAN**

No. 5, Harrington Road, Chetput, Madras 31.

**THE MADRAS SOCIETY FOR THE PROTECTION OF CHILDREN AND**

**DR. VARADAPPA NAIDU'S ORPHANAGE AND JUNIOR APPROVED SCHOOL**  
465, T. H. Road, Washermanpet, Madras 21.

**MADRAS STATE CARROM ASSOCIATION**  
28, Ratakully Lane, Madras 21.

**MADRAS STATE COTTONSEED MERCHANTS' ASSOCIATION**  
95, Thadicombu Road, Dindigul.

**MADRAS STATE FAMILY PLANNING ASSOCIATION**

42, Harrington Road, Chetput, Madras 31.

**THE MADRAS STATE HANDLOOM INDUSTRY & TRADE ASSOCIATION**

Post Box No. 1598, 81, Linghi Chetty Street, Madras 1.

*President*: S. K. Sambandhan; *Vice-Presidents*: T. A. Kannappan, S. M. Syed Mohsin, R. Kothandaraman, V. P. Sarangapani; *Hony. Secretaries*: K. S. Saravana Mudaliar, T. S. Palanivelu; *Hon. Treasurer*: A. V. Punnyakoti Chettiar.

**MADRAS STATE LORRY OWNERS' ASSOCIATION**

104, Varathamuthiappan St., Madras 1.

**MADRAS STATE SANGITA NATAKA SANGAM**  
(Estd. 1955)

'Brodie Castle', Greenaways Road, Madras-28.

**THE MADRAS STATE TAMIL DEVELOPMENT & RESEARCH COUNCIL**  
Fort St. George, Madras 9.

*Chairman*: M. Bakhtavatsalam (Chief Minister and Minister for Education, Govt. of Madras).

**MADRAS STOCK EXCHANGE LTD.**

'Bombay Mutual Building Annexe', 322/323, Linghi Chetty Street, Madras 1.

*President*: K. Venkataraman; *Vice-President*: G. R. Chandrasekariya; *Treasurer*: E. V. Rajagopalan; *Secretary*: E. R. Krishnamurti.

**MADRAS TIMBER MERCHANTS' ASSOCIATION**

Sydenham's Gardens, Madras 7.

**MADRAS TRADES ASSOCIATION**

Spencer's Bldgs., Mount Road, Madras 2.

*Chairman*: A. Krishnamoorthy; *Vice-Chairman*: G. Morley; *Secretary*: A. S. Devitre.

**MADRAS VIGILANCE ASSOCIATION**

Abhaya Nilayam, 2, Santhome High Road, Madras.

**THE MADRAS WINDOW GLASS MERCHANTS' ASSOCIATION**

Room No. 5, 92/96, Devaraja Mudali St., Madras 3.

**MADRAS YARN MERCHANTS' ASSOCIATION**

38, Mint Street, P.T., Madras 3.

**THE MADURA EXHIBITORS' ASSOCIATION**

New Cinema Buildings, Mainguard Square, Madurai.

**MADURA RAMNAD CHAMBER OF COMMERCE**

90-92, East Avanimoola Street, Madurai 1.

*President*: L. Narayanan Chettiar; *Vice-Presidents*: P. C. M. Balakrishnan, G. P. Sangoye; *Hon. Secretaries*: V. P. R. Gangaram Dorairaj; V. A. Balasubramaniam; *Treasurer*: Jatalal D. Solanki.

**MADURA TAMIL SANGAM**  
Tamil Sangam Road, Madurai.

**THE MADURA YARN MERCHANTS' ASSOCIATION LTD.**

134, South Masi St., Madurai.

**MARINE BIOLOGICAL ASSOCIATION OF INDIA**

Mandapam Camp.

(Editorial Office: 10, South St., Madras 28.)

**MOTOR VEHICLES AND ALLIED INDUSTRIES ASSOCIATION**

22, Edward Elliot's Road, Madras 4.

*Chairman*: K. V. Srinivasan; *Vice-Chairman*: P. Chandriah; *Secretary*: S. Govindaswami.

**MUSIC ACADEMY**

115-E, Mowbray's Road, Madras 14.

**THE MUSLIM EDUCATIONAL ASSOCIATION OF SOUTHERN INDIA**

'Association Gardens,' 49, Peters Road, Royapettah, Madras 14.

**NAGAI EXPORTERS AND IMPORTERS ASSOCIATION**

6, Second Line Beach, Nagapattinam.

**NATIONAL CHAMBER OF COMMERCE**  
22, Broadway, Madras 1.

*President*: M. S. Abdul Majid; *Hon. Secretary*: B. Abdul Qadir.

**NATIONAL COUNCIL OF WOMEN IN INDIA**  
'Philroy', Madras-34.

*President*: Smt. Mary Chibwala Jadhav; *Ex. Officio Vice-President*: Mrs. K. D. Cassad;

*Vice-Presidents*: Mrs. D. C. Kothari; Mrs. V. Virmani; Mrs. A. J. Cama; Mrs. A. Basil; Mrs. V. Wazalwar; Mrs. M. Paranjpe; *Hon. General Secretary*: Smt. Padma Narasimhan; *Hony. Treasurer*: Mrs. Roda Kapadia; *Editor, Bulletin*: Mrs. Padmini Manchanda.

**THE NEGAPATAM CHAMBER OF COMMERCE**

50, Neela South Street, Nagapattinam.

*President*: N. S. Balasubramaniam; *Vice-Presidents*: Janab M. Syed Hassan; V. P. Pillai; *Secretary*: Janab J. Md. Abubacker.

**THE NEO-MALTHUSIAN LEAGUE "BIRTH CONTROL CLINIC"**

"Baba Nilayam," Bharathi Road, Coimbatore 9.

**NURSES' ASSOCIATION**

Rundall's Rd., Vepery, Madras 7.

**THE ONION TRADERS' ASSOCIATION**

2/41, Malayaperumal Street, Madras 1.

**P. S. G. & SONS CHARITY INDUSTRIAL INSTITUTE**

Peelamedu Post, Coimbatore 4.

**PASTEUR INSTITUTE OF SOUTHERN INDIA**

Coonoor 3, Nilgiris District.

**THE PERFORMING RIGHTS SOCIETY**  
132, Coral Merchant Street, Madras 1.

**THE PROGRESSIVE PAINTERS' ASSOCIATION**

Govt. School of Arts & Crafts, Madras 3.

**PROVINCIAL BAR FEDERATION**  
High Court Buildings, Madras 1.

**THE PUBLISHERS' ASSOCIATION OF SOUTH INDIA**

3, Kondichetty Street, Madras 1.

**RAJAPALAYAM CHAMBER OF COMMERCE**  
Hospital Road, Rajapalayam (Ramnad Dist.).

**RAMALINGAM TUBERCULOSIS SANATORIUM**

Perundurai (Dist. Coimbatore).

**RASIKA RANJANI SABHA**

Sundareswarar Street, Mylapore, Madras 4.

**THE SALEM DISTRICT CHAMBER OF COMMERCE**

Venkata Rao Road, Salem.

**SALEM DYEING FACTORY OWNERS' ASSOCIATION**

86, Ambalavanasami Koil Street, Gugal, Salem.

**THE SALEM GUGAI HANDLOOM CLOTH MANUFACTURERS' ASSOCIATION**

'Raghunatha Nilayam', 277, Trichy Main Road, Post Box No. 629, Gugal, Salem 6.

**THE SALT MANUFACTURERS & MERCHANTS ASSOCIATION**

159, Victoria Street, Tuticorin 1.

**THE SANSKRIT ACADEMY**

Sanskrit College Buildings, Mylapore, Madras 4.

**SERVANTS OF INDIA SOCIETY**

8, Westcott Road, Royapettah, Madras 14.

**THE SESHASAYEE INSTITUTE OF TECHNOLOGY**

Ariyamangalam (Tiruchirappalli).



**THE SIVAKASI CHAMBER OF MATCH INDUSTRIES**

7-1-36, Sivan Sannathi Street, Sivakasi.

**SMALL SCALE COTTAGE FIREWORKS MANUFACTURERS' ASSOCIATION**

Door No. 7-3/5, Seeni Moopnagar Street, Sivakasi.

**THE SMALL SCALE INDUSTRIES ASSOCIATION (MADRAS STATE)**

44, Mount Road, Guindy, Madras 15.

**SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS**

Vepery High Road, Vepery, Madras 7.

**SOIL CONSERVATION RESEARCH DEMONSTRATION & TRAINING CENTRE**

Patna House, Ootacamund.

**THE SOUTH INDIA IRON & HARDWARE MERCHANTS' ASSOCIATION**

"Catholic Centre", No. 6, Armenian Street, Madras 1.

**SOUTH INDIA MINERALS ASSOCIATION**

52/53, Jehangir Street, Madras 1.

**SOUTH INDIA PIPE DEALERS SYNDICATE LTD.**

8, Sembudoss Street, Madras 1.

**SOUTH INDIA PLASTICS MANUFACTURERS' ASSCN.**

298, Wall Tax Road, Madras 3.

**SOUTH INDIA TANNERS AND DEALERS ASSOCIATION**

Ranipet, North Arcot District.

**THE SOUTH INDIA TEACHERS' UNION**

Raja Annamalaipuram, Madras 28.

**THE SOUTH INDIA TEXTILE RESEARCH ASSOCIATION**

Coimbatore. 14.

*Director* : K. Sreenivasan, M.Sc. (Tech.), F.T.I.**THE SOUTH INDIAN ATHLETIC ASSOCIATION LIMITED**

Moore Pavillon, People's Park, Madras 3.

**THE SOUTH INDIAN FILM CHAMBER OF COMMERCE**

122, Mount Road, Madras 6.

*President* : A. L. Srinivasan; *Vice-President* : Sunderlal Nahata; *Hony. Secretaries* : D. V. S. Raju; C. N. Ramanujam; *Hony. Treasurer* : Janab Ahamed Yaseen.**SOUTH INDIAN GLASS MANUFACTURERS' ASSOCIATION**

C/o South India Glass and Enamel Works Ltd., Cherry Road, Salem 7.

*President* : A. P. Jamal; *Secretary* : S. Sathyanarayanan.**SOUTH INDIAN MOTION PICTURE STUDIOS ASSOCIATION**

122, Mount Woods Road, Madras 2.

**SOUTH INDIAN PHOTOGRAPHIC AND ALLIED TRADES ASSOCIATION LTD.**

3, Velders Street, Mount Road, Madras 2.

**THE SOUTH INDIAN SOCIETY OF AUCTIONEERS & ESTATE AGENTS**

No. 5, Thambu Chetty St., Madras 1.

**SOUTH INDIAN SOCIETY OF PAINTERS**

No. 13, 111, Trust Cross, Madras 28.

**THE SOUTH TRAVANCORE CHAMBER OF COMMERCE**

N.M.C. No. 29/201, Cape Road, Kottar, Nagercoil.

**THE SOUTHERN INDIA BRAHMO SAMAJ**

135, Anna Pillai Street, G.T., Madras 1.

**SOUTHERN INDIA CHAMBER OF COMMERCE**

Indian Chamber Buildings, Madras 1.

*No. of members* : 900.*President* : A. Nagappa Chettiar; *Vice-Presidents* : P. Maruthai Pillai; K. Govindan; *Secretary* : P. S. Subramaniam.**SOUTHERN INDIA COTTON WASTE MERCHANTS' & EXPORTERS' ASSOCIATION**

No. 5, Vysial Street, Coimbatore 1.

**THE SOUTHERN INDIA ENGINEERING MANUFACTURERS' ASSOCIATION**

Post Box No. 211, Coimbatore.

**SOUTHERN INDIA JOURNALISTS' FEDERATION**

15, Ritchie Street, Mount Road, Madras 2.

**THE SOUTHERN INDIA METAL DISTRIBUTORS' ASSOCIATION**

127, Mint Street, Madras 1.

**THE SOUTHERN INDIA MILLOWNERS ASSOCIATION**

"Shanmukhamanram," Coimbatore 1.

*President* : G. R. Govindarajulu; *Vice-Chairmen* : A. D. Galloway; R. Doraiswamy; *Secretary* : C. G. Reddi.**THE SOUTHERN INDIA ROLLER FLOUR MILLS ASSOCIATION LIMITED**

221, Govindappa Nalck Street, Madras-1.

**THE SOUTHERN INDIA SKIN & HIDE MERCHANTS' ASSOCIATION**

16, Sydenham's Road, Periamet, Madras 3.

**THE SOUTHERN INDIA VYSYA ASSOCIATION**

17, Godown Street, Madras 1.

**SOUTHERN LANGUAGES BOOK TRUST**

25, Sterling Road, Nungambakkam, Madras 34.

The objectives are to sponsor the production, publication, and distribution of high quality low priced books in large numbers in the four major South Indian languages—Tamil, Telugu, Malayalam and Kannada.

**SRI AVINASHILINGAM HOME SCIENCE COLLEGE**

Coimbatore 11.

A leading institution in Home Science in India. It has graduate and post-graduate courses in Home Science and other Sciences and Arts and within the campus there are institutions from the Nursery School to the M.Sc. and doctorate and also a Mukhya Sevika Training Centre.

**SRI RAMAKRISHNA MATH (Publication Department)**

11, Sri Ramakrishna Math Road, Mylapore, Madras 4.

**SRI RAMKRISHNA MISSION VIDYALAYA**

Sri Ramkrishna Vidyalaya P.O., Dist. Coimbatore.

Started in 1930 on the crest of freedom movement. It now consists of about a dozen institutions, the earliest being the residential High

School. The Govt. of India have proposed to give it a "deemed" University status under Section 3 of the University Grants Commission Act.

*Director* : T. S. Avinashilingam.**SRI THYAGA BRAHMA GANA SABHA**

Vani Mahal, 85, Gopathy Narayanaswamy Chetty Road, Thyagarayanagar, Madras 17.

**ST. JOHN AMBULANCE ASSOCIATION (INDIA), MADRAS STATE CENTRE**

Red Cross Buildings, Montelth Road, Egmore, Madras 8.

**THE TAMIL CHAMBER OF COMMERCE**

310-311, Linghi Chetty Street, Madras 1.

*President* : C. S. Loganatha Mudaliar; *Hon. Secy.* : C. L. Mehta.**TAMIL WRITERS' ASSOCIATION**

Crescent Society Buildings, Mount Road, Madras 2.

**THE TAMILNAD FOODGRAINS MERCHANTS' ASSOCIATION LTD.**

7, Swami Sannadhi Lane, East Masi Street, Madurai.

**TAMILNAD MOTOR PARTS DEALERS ASSOCIATION**

24, Tamil Sangam Road, Madurai.

**TAMILNAD PRINTERS' ASSOCIATION**

18-A, Jadamuni Kovil East, Second Street, Madurai.

**TAMILNAD VARTHAGAR KAZHAGAM**

70, Chetty New Street, Kumbakonam.

**THE TAMILNADU PAPER MERCHANTS' ASSOCIATION**

43, 44, East Avani Moola St., Madurai.

**THE TEXTILE ASSOCIATION (INDIA) SOUTH INDIA BRANCH**

C/o The Coimbatore Cotton Mills Ltd., Singanallur P.O., Coimbatore.

**THEOSOPHICAL SOCIETY**

International Headquarters: Adyar, Madras 20.

*President* : N. Sri Ram, B.A.; *Vice-President* : James S. Perkins; *Recording Secretary* : Miss K. A. Beechey; *Treasurer* : Stuart G. Nicholls.**THE TIRUPUR COTTON MERCHANTS' ASSOCIATION**

Tirupur (Coimbatore District—Madras State).

**TOBACCO EXPORT PROMOTION COUNCIL**

123, Mount Road, Madras 6.

**THE TRICHINOPOLY DISTRICT CHAMBER OF COMMERCE**

Theradikadal Street, Tiruchirappalli 2.

*President* : A. V. R. Krishnasami Reddier; *Vice-Presidents* : P. R. Seetharama Iyer; U. H. Srinivasa Rao; *Secretary* : K. Mayandi.**TUTICORIN CHAMBER OF COMMERCE**

South Beach Road, Tuticorin.

*Chairman* : T. R. Parthasarathy; *Hony. Secretary* : I. G. Arumugam.**THE TUTICORIN-CEYLON CURRENT EXPORTERS' & IMPORTERS' CHAMBER**

8, South Raja Street, Tuticorin.

*President* : S. Ponsingh; *Vice-President* : S. A. Narayanan; *Hon. Secretary* : K. Sankaran Pillai.



**TUTICORIN TRADES ASSOCIATION**  
283, W. G. C. Road, Tuticorin 1.

**UNITED PLANTERS ASSOCIATION OF SOUTHERN INDIA**

P.O. Box No. 11, "Glenview," Coonoor, Nilgiris.

*President:* M. M. Appaiya; *Vice-President:* J. B. Souther; *Secretary and Adviser:* V. I. Chacko.

**U.S. EDUCATIONAL FOUNDATION IN INDIA**

12, Halley Road, New Delhi.

*Madras Regional Office—*

158, Mount Road, Madras 2.

**VICTORIA TECHNICAL INSTITUTE**  
151-B, Mount Road, Madras 2.

**VIJAYA BHARATHA CHAMBER OF COMMERCE LTD.**

Virudhunagar.

**THE VIRUDHUNAGAR CHAMBER OF COMMERCE & INDUSTRY**

P. Box 47, Virudhunagar.

*President:* M. S. P. K. Periasamy Nadar; *Vice-President:* V. V. S. Kesavan; *Secretary:* P. K. Inbarajan.

**VIVAHA NALA SANGAM**

2713, North Raja Street, Pudukottai.

The main object of the Sangam is to eradicate the dowry system and to perform marriages under its auspices without any extravagance.

*President:* D. Srinivasan; *Vice-President:* Dr. N. Thiagarajan; *Secretary:* T. P. Jagadeesa Iyer.

**WASTE & SCRAP UTILISERS COTTAGE INDUSTRIES ASSOCIATION**

No. 1-A, Edward Elliotts Road, Mylapore, Madras 4.

**YOUNG MEN'S CHRISTIAN ASSOCIATION**  
Esplanade, Madras 1.

**YOUNG MEN'S INDIAN ASSOCIATION**  
9, Armenian Street, Madras 1.

**YOUNG WOMEN'S CHRISTIAN ASSOCIATION**

528, Poonamallee High Road, Madras 7.

## MAHARASHTRA

### TRADE & COMMERCIAL ASSOCIATIONS IN GREATER BOMBAY

**ADVERTISING AGENCIES ASSOCIATION OF INDIA**

111A, Mahatma Gandhi Road, 2nd Floor, Opp. Rajabhai Clock Tower, Bombay 1.

Estd. 1945. It is the only association of the advtg. agency business in India.

*President:* J. Chakravarty; *Vice-President:* Harish C. Jain; *Secretary:* V. S. Joshi.

**ADVERTISING COUNCIL OF INDIA**

Army and Navy Bldg., 148, Mahatma Gandhi Road, Bombay 1.

**ALKALI MANUFACTURERS' ASSOCIATION OF INDIA**

15A, Horniman Circle, Fort, Bombay 1.

*President:* Lala Charat Ram; *Secretary:* B. M. L. Moorthy.

**ALL-INDIA AUTOMOBILE AND ANCILLARY INDUSTRIES ASSOCIATION**

80, Dr. Annie Besant Road, Worli, Bombay 18.

*President:* M. K. Raju; *Vice-Pres.:* W. N. Talwar; *Hon. Secretary:* P. V. Shah; *Executive Officer:* V. S. Nair.

**ALL-INDIA BOBBIN MANUFACTURERS' ASSOCIATION**

General Assurance Bldg., 1st Floor, 232, Dr. D. Naoroji Road, Bombay 1.

*OFFICE BEARERS:—President:* V. S. Shah; *Vice-President:* P. B. Gupta; *Hon. Secretary:* K. T. Shah; *Hon. Treasurer:* L. A. Gajjar; *Ag. Secretary:* S. Peethambaram.

**ALL-INDIA COTTONSEED CRUSHERS ASSOCIATION**

Alli Chambers, Room No. 68, 6th Floor, Tamarind Lane, Fort, Bombay 1.

*Chairman:* G. V. Sirur; *Vice-Chairman:* M. P. Mansingka; *Secretary:* M. D. Mehta.

**ALL INDIA FEDERATION OF MASTER PRINTERS**

Red Building, Horniman Circle, Fort, Bombay.

*President:* N. K. Gossain; *Vice-Presidents:* B. Venkateswaran, G. C. Bay; *Hon. General Secretary:* Rustom M. Cama; *Hon. Treasurer:* Amir F. Varawala.

**ALL-INDIA FOOTWEAR AND RUBBER GOODS MANUFACTURERS' ASSOCIATION**

15A, Horniman Circle, Fort, Bombay.

**ALL-INDIA GLASS MERCHANTS' ASSOCIATION**

116, Abdul Rehman Street, Bombay 3.

**ALL-INDIA HANDLOOM FABRICS MARKETING CO-OPERATIVE SOCIETY LTD.**

Janmabhoomi Chambers, Fort Street, Bombay 1.

**ALL-INDIA IMPORTERS' ASSOCIATION**

Churchgate House, Vir Nariman Road, Bombay 1.

*President:* R. C. Shah; *Vice-President:* P. G. Vaidya; *Hon. Secretary:* K. T. Sanghvi; *C. S. Shah;* *Hon. Treasurer:* S. G. Shah.

**ALL-INDIA INSTRUMENT MANUFACTURERS' & DEALERS' ASSOCIATION**

A-82, Navyug Nivas, Lamington Road, Bombay 7 (WB).

*President:* Dr. G. R. Toshniwal; *Vice-Presidents:* J. T. Jagtiani, G. Battacharya, H. C. Verma, C. Ramanadha Babu; *Hon. Secretary:* U. V. Desai; *Hon. Treasurer:* K. Ananda Mohan.

**ALL-INDIA MANUFACTURERS' ORGANISATION**

Jeevan Sahakar, 4th Floor, Sir Pheroze Shah Mehta Road, Bombay 1.

There are State and Regional Boards in New Delhi, Calcutta, Punjab, Saurashtra, Madras, Bangalore, Ernakulam, Bombay, Ahmedabad, Indore and Hyderabad and District and City Councils in important centres of industrial activity.

*President:* B. D. Somani; *Vice-Presidents:* Dr. B. V. Bhoota, Bipinbhai V. Mehta, K. S. G. Haja Shareeff, B. P. Poddar, Rajnarain Agarwala; *Hon. Gen. Secretary:* Dr. P. A. Desai; *Hon. Secretaries:* S. K. Oza, Firoz S. Baldiwalla; *Hon. Treasurer:* Ram Agrawal; *Secretary:* P. L. Badami.

**ALL-INDIA NON-FERROUS METAL INDUSTRIES ASSOCIATION**

Liberty Building, Marine Lines, Bombay 1.

*President:* B. M. Shah; *Vice-President:* C. P. Bhatt; *Hon. Secretary:* B. B. Gupta; *Hon. Treasurer:* K. Bhambri.

**THE ALL-INDIA PLASTIC BANGLES MANUFACTURERS' ASSOCIATION**

'Shanti Nagar', Mukta Baug, Near Malad Subway, Malad (West), Bombay-64 N. B.

*President:* B. J. Gandhi; *Vice-President:* R. S. Thakur; *Treasurer:* M. M. Savala; *Hon. Secretary:* D. P. Patel.

**THE ALL-INDIA PLASTICS MANUFACTURERS' ASSOCIATION**

Jehangir Bldg., Mahatma Gandhi Road.

*President:* Kantikumar B. Podar; *Vice-Presidents:* Vadilal R. Shah, Gajanan Periwal; *Hon. Secretaries:* B. L. Boolani, G. N. Parikh; *Secretary:* A. H. Srikanta Aiyar.

**ALL-INDIA RADIO MERCHANTS' ASSOCIATION**

Fateh Manzil, Opera House, Bombay 4.

*President:* T. P. Sheth; *Vice-Presidents:* J. R. D. Bakshi, J. S. Monga; *Hon. General Secretary:* H. S. Bhatt.

**ALL-INDIA RAZOR BLADE MANUFACTURERS' ASSOCIATION**

Industrial Assurance Bldg., Opp. Churchgate Station, Bombay.

**ALL-INDIA SINDWORK MERCHANTS' ASSOCIATION**

Commissariat Bldg., 4th Floor, 231, Dr. Dadabhoy Naoroji Road, Bombay 1.

**ALL-INDIA STAINLESS STEEL IMPORTERS' ASSOCIATION**

208, Himalaya House, Palton Road, Bombay 1.

**ALL-INDIA STAINLESS STEEL INDUSTRIES ASSOCIATION**

130, Kalbadevi Road, Bombay 2.

*President:* Ramanlal M. Shah; *Vice-President:* Mulji V. Narsi; *Hon. Secretary:* P. N. S. Razdan; *Hon. Treasurer:* G. U. Shah.

**ALL-INDIA STARCH MANUFACTURERS' ASSOCIATION PRIVATE LTD.**

Pushpa Vihar No. 3, 159, Colaba Road, Bombay 5.

*President:* Chinubhai Manibhai; *Secretary:* S. B. Sethi.

**ALL-INDIA WOOL TRADE FEDERATION**  
Post Box No. 1051, Bombay.

*President:* Jayantilal K. Anjaria; *Vice-President:* Saradchandra Maheshwari; *Hon. Secretary:* Rameshchandra V. Dave.

**ALL-INDIA WOOLLEN MILLS ASSOCIATION LTD.**

"Manohar", 27, New Marine Lines, Bombay 1.



**ALL-INDIA X-RAY AND ELECTRO-MEDICAL TRADES' ASSOCIATION**

Fazalbhoy Bldg., 2nd Floor, 45, Mahatma Gandhi Road, Bombay 1.

*President* : H. J. Mody ; *Vice-President* : W. Riethmuller ; *Hon. Secretary* : A. H. Malgham.

**AMATEUR CINE SOCIETY OF INDIA**

No. 2, Rehem Mansion, Colaba Causeway, Bombay 1.

**ASSOCIATION OF ELECTRICAL UNDERTAKINGS, BOMBAY STATE**

Killick House, Home Street, Bombay 1.

**ASSOCIATION OF INDIAN AUTOMOBILE MANUFACTURERS**

Army & Navy Bldg., Third Floor, Mahatma Gandhi Road, Bombay 1.

*President* : M. A. Chidambaram ; *Deputy President* : K. V. Srinivasan ; *Secretary* : N. Balkrishna, B.Sc. (Engg.), M.I.E. (India), M.I.R.T.E. (Eng.), M.I.R.T., J.P.

**THE ASSOCIATION OF INDIAN INDUSTRIES**

4th Floor, "Co-operative Insurance Building" Sir Phirozshah Mehta Road, Fort, Bombay 1.

*President* : K. G. Thanawala ; *Vice-Presidents* : A. K. Bhimani, N. D. Dalal ; *Hon. Secretary* : K. K. Khandelwal ; *Hon. Treasurer* : Akbar Vahanvatty ; *Secretary* : S. P. Subramanian.

**ASSOCIATION OF INDIAN TRADE & INDUSTRY**

Bombay Mutual Chambers, 21, Hamam Street, Fort, Bombay 1.

*President* : Tulsi Das Kilachand ; *Secretary* : Dr. K. B. Paymaster.

**ASSOCIATION OF MERCHANTS AND MANUFACTURERS OF TEXTILE STORES AND MACHINERY, INDIA**

Sir Vithaldas Chambers, 16, Apollo Street, Bombay 1.

*President* : S. G. Shah ; *Vice-President* : J. G. Kulkarni ; *Hon. Secretary* : A. K. Bhagwati ; *Hon. Treasurer* : M. M. Gandhi.

**AUDIT BUREAU OF CIRCULATIONS LTD.**

Wakefield House, Ballard Estate, Bombay 1.

Estd. 1948 Membership comprises many leading national Advertisers, Advertising Agencies and Publishers of newspapers, periodicals and magazines. Total Membership (Sept. 1966) — 366.

*Chairman* : T. S. Krishnan ; *Dy. Chairman* : G. N. Sahi ; *Hon. Secy.* : E. J. Fielden ; *Hon. Treasurer* : A. M. Patel ; *Members of the Council of Management* : R. V. Leyden, R. Ramaswami, Upendra Acharya, Harish C. Jain, Tushar Kanti Ghosh, S. N. Banerjee, K. M. Mathew, P. K. Roy, K. A. Nettakallappa, C. Das Gupta, P. W. J. Crosland, L. S. Jayawardena, P. Nadesan, T. S. Santhanam ; *Secretary* : S. D. Kumar ; *Asst. Secy.* : B. P. Bajan.

**AUTOMOBILE DEALERS' ASSOCIATION OF WESTERN INDIA LTD.**

C/o Bombay Chamber of Commerce & Industry, Ballard Estate, Bombay 1.

*Chairman* : Dr. J. M. Rane ; *Vice-Chairman* : M. E. Chinoy ; *Secretary* : J. J. Oonwalla ; *Labour Officer* : M. S. Hathi.

**BASIC CHEMICALS, PHARMACEUTICALS & SOAPS EXPORT PROMOTION COUNCIL**

Plot No. 56, Ashok Chambers (5th Floor), Broach Street, Bombay-9 (BR).

**BOMBAY ARMS DEALERS' ASSOCIATION**

246, Abdul Rehman Street, Bombay 3.

**THE BOMBAY BOOKSELLERS AND PUBLISHERS ASSOCIATION**

C/o India Book House, Rusi Mansion, 2nd Floor, 29, Wodehouse Road, Bombay 1.

*President* : P. C. Manaktala ; *Vice-President* : G. L. Mirchandani ; *Secretary* : T. Mahadevan ; *Jt. Secretary* : C. C. Shah.

**THE BOMBAY BULLION ASSOCIATION LIMITED**

185, Sheikh Memon Street, Bombay 2.

*President* : Chandulal Kasturchand ; *Vice-President* : Dhursingh Shekhavat ; *Asst. Secretary* : Jayendra A. Mehta.

**THE BOMBAY CAMPHOR TABLETS MANUFACTURERS' AND MERCHANTS' ASSOCIATION**

218, Samuel Street, Bombay 3.

**THE BOMBAY CHARCOAL MERCHANTS' ASSOCIATION LTD.**

Coal Depot, Sewri, Bombay 15.

**BOMBAY COAL & COKE MERCHANTS' ASSOCIATION LTD.**

94, Medows Street, Fort, Bombay 1.

**BOMBAY COTTON MERCHANTS' & MUCCADUMS' ASSOCIATION LTD.**

2nd Floor, S. 72-73, Cotton Exchange, Sewree, Bombay 33 DD.

**BOMBAY CUSTOM HOUSE CLEARING AGENTS' ASSOCIATION**

Warden House, 2nd Floor, Sir P. M. Road, Bombay 1.

**BOMBAY DIAMOND MERCHANTS' ASSOCIATION**

Zaveri Bazar, 3, Dhanji Street, Bombay 3.

**THE BOMBAY ELECTRO-PLATERS' ASSOCIATION**

139, Bhendi Bazar, Bombay 3.

**THE BOMBAY EXCHANGE BANKS' ASSOCIATION**

C/o The Chartered Bank, 25, Mahatma Gandhi Road, Bombay 1.

*Chairman* : The Manager, The Chartered Bank (ex-officio) ; *Vice-Chairman* : The Manager, National and Grindlays Bank Limited (ex-officio).

**BOMBAY FLOUR MILLS OWNERS' ASSOCIATION**

Parekhwadi, V. P. Road, Bombay 4.

**BOMBAY GLASSWARE MERCHANTS' ASSOCIATION**

91, Sheriff Devji Street, Bombay 3.

**BOMBAY GOODS TRANSPORT ASSOCIATION**

416, Katha Bazar, Bombay-9.

**THE BOMBAY GRAIN DEALERS' ASSOCIATION**

Grain Dealers Building, 103, Keshavji Nalk Road, Bombay 9.

**BOMBAY GRASS MERCHANTS' ASSOCIATION**

Bombay Central Grass Yard, Jacob Circle, Bombay 11.

**THE BOMBAY HARDWARE MERCHANTS' ASSOCIATION**

Burhani Building, 57, Sarang Street, Bombay 3.

**THE BOMBAY HESSIAN & GUNNY MERCHANTS' ASSOCIATION LTD.**

895/97, Narsi Natha Street, Katha Bazar, Bombay 9.

**BOMBAY HOSIERY MERCHANTS' ASSOCIATION**

102/4, Chakla Street, Bombay 3.

**BOMBAY INDUSTRIES ASSOCIATION**

Sahakar Bhavan, Kurla Industrial Estate, Agra Road, Ghatkopar, Bombay 77AS.

This is an organisation of small, medium and big scale industries in Greater Bombay area. Membership : 450.

*President* : S. P. Zaveri ; *Vice-President* : Sardar Jagjit Singh ; *Hon. Treasurer* : D. P. Ghatila ; *Hon. Secretary* : S. K. Oza.

**BOMBAY INSURANCE BROKERS' ASSOCIATION**

Rajababadur Compound, 19, Bruce Street, Bombay 1.

**THE BOMBAY IRON MERCHANTS' ASSOCIATION**

250, Sant Tukaram Road, Latif House, Bombay 9.

**BOMBAY KARIANA, COLOUR AND CHEMICAL MERCHANTS' ASSOCIATION**

222-A, Samuel Street, Bombay 3.

**BOMBAY KHAREK BAZAR AND MEWA MERCHANTS' ASSOCIATION**

308, Kharek Bazar, Bombay 9.

**THE BOMBAY LIGHT MERCHANTS' ASSOCIATION**

Shreeji Bhuvan, Lohar Chawl, Bombay 2.

**BOMBAY LOCAL OIL MILLERS' ASSOCIATION LTD.**

Katha Bazar, Bombay 9.

**BOMBAY MARBLE & TILE MERCHANTS' ASSOCIATION**

32, Apollo Street, Bombay 1.

**BOMBAY MASTER PRINTERS' ASSOCIATION**

274, Tardeo Road, Bombay 7.

*President* : N. J. Ardeshir ; *Vice-Presidents* : J. N. Parikh, Brig. J. F. N. Vakil ; *Hon. Secy. & Treasurer* : Rev. Fr. T. A. Pereira.

**THE BOMBAY MERCURY TRADERS' ASSOCIATION LTD.**

218, Samuel Street, Bombay 3.

**BOMBAY METAL EXCHANGE LTD.,**

Gogate Mansion, Kika Street, Bombay 2.

*President* : Surendra N. Parekh ; *Sr. Vice-President* : Nandlal Chundlal Shah ; *Vice-President* : K. G. Borlikar ; *Secretary* : M. S. Mehta.

**THE BOMBAY MOTOR MERCHANTS' ASSOCIATION LTD.**

Sukh-Sagar, 3rd Floor, Sandhurst Bridge, Bombay 7.

**THE BOMBAY MUDIBAZAR KARIANA MERCHANTS' ASSOCIATION**

43, Mudibazar, Kazi Syed Street, Bombay 3.



**BOMBAY OIL MERCHANTS' ASSOCIATION**  
C/o Muljee Jaitha & Company, Katha Bazar,  
Bombay 9.

**THE BOMBAY OILSEED CRUSHERS' ASSOCIATION**  
Anna Bhavan, 5th Floor, Plot No. 87C, Broach  
Street, Bombay 9.

**BOMBAY PIECE-GOODS MERCHANTS' MAHAJAN**  
Mulji Jetha Cloth Market Hall, 250, Sheikh  
Memon Street, Bombay 2.

**BOMBAY PIPES & FITTINGS MERCHANTS' ASSOCIATION**  
84, Nagdevi Street, Bombay 3.

**BOMBAY PRESS-OWNERS' ASSOCIATION**  
196B, Gaiwadi, Girgaum, Bombay 4.

**BOMBAY PRODUCTIVITY COUNCIL**  
India House, Kemp's Corner, Bombay 26.  
*President*: Dr. C. Nanjundayya; *Vice-Presidents*: K. Ramamurthy, G. Clement; *Hon. Treasurer*: J. G. Parikh; *Hon. Secretary*: Prof. N. S. Ramaswamy; *Executive Secretary*: P. S. Easwaran.

**BOMBAY RETAILERS (GOODS SUPPLY), CO-OP. SOCIETY LTD.**  
Ahmed Mansion, Top Floor, Pinjari Street,  
Bombay 3.

Has a branch at Margret Bldg., Antop Hill,  
Wadala, Bombay 31.

**THE BOMBAY SALT MERCHANTS' AND SHILOTRIES' ASSOCIATION**  
583, Chira Bazar, Bombay 2.

**THE BOMBAY SANITARYWARE ASSOCIATION**  
8/10, Green Street, Fort, Bombay 1.

**THE BOMBAY SHAREHOLDERS ASSOCIATION**  
Agakhan Building, 3rd Floor, Dalal Street, Fort,  
Bombay.

**BOMBAY SHROFFS' ASSOCIATION**  
233A, Shroff Bazar, Bombay 2.  
*President*: Jayantilal Maneklal Shah; *Vice-President*: Hiralal Jethalal Parikh; *Hon. Secretaries*: B. K. Javeri, K. L. Desai; *Treasurer*: Mohanlal Hargovindas & Co.

**BOMBAY SMALL-SCALE INDUSTRIES ASSOCIATION**  
91/93, 1st Pathan Street, Bombay 4.

**THE BOMBAY SPORTS TRADERS' AND MANUFACTURERS' ASSOCIATION**  
C/o K. L. Malhotra Brgs., 5th Floor, Mohatta  
Market, Palton Road, Bombay 1.  
*President*: R. D. Wagle; *Vice-President*: Capt. (Retd.) D. N. Mehia; *Secretary*: S. L. Malhotra; *Treasurer*: D. M. Patel.

**THE BOMBAY STATIONERS' ASSOCIATION**  
205, Abdul Rehman Street, Bombay 3.

**THE BOMBAY STEVEDORES' ASSOCIATION LTD.**  
Janmabhoomi Chambers, Fort Street, Bombay.

**BOMBAY SUGAR MERCHANTS' ASSOCIATION LTD.**  
104/114, Frere Road, opp. Victoria Dock,  
Bombay 9.

**BOMBAY TEA MERCHANTS' ASSOCIATION**  
222-A, Samuel Street, Mandvi, Bombay 3.

**BOMBAY TEXTILE AND ENGINEERING ASSOCIATION**  
Satar Bldg., Opp. Grant Road Railway Station  
(East), Bombay 7.

**THE BOMBAY TIMBER MERCHANTS' ASSOCIATION LTD.**  
Victoria Road, Mustafa Bazar, Bombay 10.

**BOMBAY TYPE FOUNDRY OWNERS' ASSOCIATION**  
B-196, Gaiwadi, Girgaon, Bombay 4.

**BOMBAY WATCH DEALERS' SYNDICATE**  
78, Abdul Rehman Street, Bombay 3.  
*President*: H. A. Jogi; *Hon. Secy.*: H. J. Parekh; *Treasurer*: M. O. Mehta.

**BOMBAY WATCH MATERIAL MERCHANTS' ASSOCIATION**  
138, Nagdevi Street, Bombay 3.

**THE BOMBAY WOOL MERCHANTS' ASSOCIATION**  
Post Box No. 1040, Bombay 1.

**BOMBAY WOOLLEN DEALERS' CORPORATION**  
27/29, Champagalli, M. J. Market, Bombay 2.

**BOMBAY YARN MERCHANTS' ASSOCIATION & EXCHANGE LIMITED**  
Bombay Yarn House, 47/49, Nakhoda Street,  
Tambakanta, Bombay 3.  
*President*: Ravindra Maganlal; *Vice-President*: Balkrishna B. Shah; *Hon. Treasurer*: Manubhai Gokaldas Shroff; *Secretary*: D. M. Boradia.

**THE BOOK MANUFACTURERS' ASSOCIATION**  
1st floor, 23, Mirza Street, Bombay 3.  
*President*: Khimjibhai D. Shah; *Vice-President*: Natwarlal Kadakia; *Hon. Jt. Secretaries*: E. H. Roopawala, Mohanbhai Patel; *Hon. Treasurer*: Jethalal Joshi.

**BUILDERS' ASSOCIATION OF INDIA**  
United India Bldg., Sir Pherozezshah Mehta Road,  
Bombay 1.  
*President*: B. V. Apte; *Vice-President*: J. S. Ajmera; *Hon. Treasurer*: H. J. Shah; *Hon. Secretary*: James Bates; *Secretary*: R. S. Desai.  
Centres at Agra, Ahmedabad, Allahabad, Ajmer, Calcutta, Gauhati, Hyderabad, Kanpur, Madras, Poona & Ranchi.

**BUTTER MANUFACTURERS' ASSOCIATION**  
C/o Star of India Dairy Co., 112, Meadows Street,  
Fort, Bombay.

**CEMENT MANUFACTURERS' ASSOCIATION**  
Cement House, 121, Queen's Road, Bombay 1.

**CENTRAL ORGANISATION FOR OIL INDUSTRY & TRADE**  
Anna Bhavan, 5th Floor, Plot No. 87-C, Broach  
St., Bombay 9.  
*President*: Batilal M. Gandhi; *Chairman*: Maddi Sudarsanam; *Secretary*: R. C. Sheth.

**THE CHEMICAL AND ALKALI MERCHANTS' ASSOCIATION**  
5th Floor, Himalaya House, Palton Road,  
Bombay 1.  
*President*: D. G. Valia; *Vice-President*: A. A. Mehta; *Hon. Secretaries*: N. Ramamoorthy, P. C. Mehta.

**CHEMICAL PLANT MANUFACTURERS' ASSOCIATION OF INDIA**  
C/o Bombay Chamber of Commerce & Industry, Mackinnon Mackenzie Building, Ballard Road,  
Ballard Estate, Bombay 1.  
*Chairman*: J. G. Brown; *Dy. Chairman*: Dr. G. P. Kharbanda; *Secretary*: T. E. Subramaniam.

**CHEMISTS' AND DRUGGISTS' ASSOCIATION**  
Block 3, Devkaran Mansion, Princess Street,  
Bombay 2.  
*President*: N. J. Bole; *Vice-President*: S. K. Shah; *Hon. Secretary*: P. B. Oza; *Jt. Hon. Secretary*: D. V. Gandhi; *Hon. Treasurer*: R. H. Mehta.

**CINEMATOGRAPH EXHIBITORS' ASSOCIATION OF INDIA**  
Sandhurst Building, Sardar Patel Road,  
Bombay 4.  
*President*: B. D. Bharucha; *Dy. President*: I. D. Shah; *Vice-President*: G. S. Gadre; *Hon. Treasurer*: P. R. Irani; *Secretary*: I. K. Menon.

**CINEMATOGRAPHIC SUPPLIERS' ASSOCIATION**  
107, M. Gandhi Road, G.P.O. Box 311/A,  
Bombay-1.

**COMMERCIAL ARTISTS' GUILD**  
4th Floor, India House, Fort Street, Bombay 1.  
**CONCRETE ASSOCIATION OF INDIA**  
Cement House, 121, Queen's Road, Fort,  
Bombay 1.

*Chief Engineer and Editor, "Indian Concrete Journal"*: K. K. Nambiar B.E., C.E., (Hons.), M.I.E. (India), F.Inst. H.E. (England), M.I. Mun. E. (England), F.A.M. Soc. C.E.

**COPPER & BRASSWARE MANUFACTURERS' & SELLERS' ASSOCIATION LTD.**  
64, Kansara Chawl, Room No. 80, 2nd Floor,  
Bombay 2.

**COTTON BUYERS' ASSOCIATION**  
1st Floor, Great Western Bldg., 130-32, Apollo  
Street, Fort, Bombay 1.

**COTTON TEXTILES EXPORT PROMOTION COUNCIL**  
Engineering Centre, 5th Floor, 9, Mathew Road,  
Bombay 4.  
*Chairman*: Neville N. Wadia; *Ag. Secretary*: N. S. Gopalakrishnan.

**DECCAN SUGAR FACTORIES' ASSOCIATION**  
Stadium House, Block No. 2, Veer Nariman  
Road, Bombay 1.  
*President*: B. Gulabchand; *Vice-President*: S. L. Limaye; *Secretary*: R. Venkataraman.

**DYESTUFFS MANUFACTURERS' ASSOCIATION OF INDIA**  
Girton House, 177, Lamington Road, Bombay 7.

**EAST INDIA COTTON ASSOCIATION, LIMITED**  
Cotton Exchange, Marwari Bazar, Bombay 2.  
*Chairman*: Madanmohan R. Rula; *Vice-Chairman*: Ramdas Kilachand; *Secretary*: D. G. Dande.



**THE ELECTRIC MERCHANTS' ASSOCIATION**

Shreeji Bhuvan, Lohar Chawl, Bombay 2.

**ELECTRICAL CONTRACTORS' ASSOCIATION**

63, New Stock Exchange Building, Apollo Street, Bombay 1.

**EMPLOYERS' FEDERATION OF INDIA**

Army & Navy Building, 148, Mahatma Gandhi Road, Bombay 1.

*President:* Naval H. Tata; *Vice-Presidents:* C. A. Pitts, N. M. Wagle, N. S. Bhat and J. K. Srivastava; *Secretary-General:* T. S. Swaminathan; *Secretary:* N. M. Vakil.

**ENGINEERING ASSOCIATION OF INDIA (Western Region)**

87, Veer Nariman Road, Bombay 1.

**EXHIBITION SOCIETY**

Central Bank Building, D. Naoroji Road, Bombay 1.

**FEDERATION OF ASSOCIATIONS OF STEVEDORES**

Janmabhoomi Chambers, Fort Street, Bombay 1.

*President:* S. C. Sheth; *Vice-President:* K. P. Mukerjee; *Secretaries:* Bombay Stevedores' Association Ltd.

**FEDERATION OF BOMBAY RETAIL CLOTH DEALERS' ASSOCIATIONS**

24/30, 1st Marine Street, Bombay 2.

*President:* A. K. Jobanputra; *Vice-President:* M. V. Dhabliwalla; *Hon. Secretaries:* H. V. Dedhia and A. M. Kulkarni; *Treasurer:* V. G. Solanki.

**FEDERATION OF ELECTRICITY UNDERTAKINGS OF INDIA**

Killick House, Home Street, Bombay 1.

**FEDERATION OF MOTOR TRANSPORT ASSOCIATIONS**

26, P. D'Mello Road, Wadi Bunder, Bombay 9.

**FEDERATION OF PAPER TRADERS' ASSOCIATIONS OF INDIA**

401A, Commerce House, 140, Medows Street, Fort, Bombay 1.

*President:* Ved Prakash Kapur; *Vice-Presidents:* Indulal G. Lakhia, Rulia Ram Gupta, G. D. Mahajan, Kantilal M. Parikh; *Hon. Secretary:* K. C. Goel; *Hon. Treasurer:* A. K. E. Haveliwalla.

**THE FEDERATION OF PUBLISHERS AND BOOKSELLERS ASSOCIATIONS IN INDIA**

C/o India Book House, Rusi Mansion, 2nd Floor, 29 Wodehouse Road, Bombay 1.

*President:* Sadanand G. Bhatkal; *Vice-Presidents:* S. H. Primlani, P. C. Manaktala, Tridibesh Basu, and R. N. Sachdev; *Secretary:* G. L. Mirchandani; *Treasurer:* Jaman H. Shah.

**THE FERTILISER ASSOCIATION OF INDIA WESTERN REGIONAL OFFICE**

305, Neelkanth, 98, Marine Drive, Bombay 2.

*Head Office:* 85, Sundar Nagar, New Delhi 11.

*Regional Executive:* Dr. T. J. Mirchandani, *Technical Officer:* E. G. Tikhe.

**FOREIGN EXCHANGE DEALERS' ASSOCIATION OF INDIA**

C/o The Chartered Bank, 23/25, Mahatma Gandhi Road, Bombay 1.

*Chairman:* D. C. Martin; *Vice-Chairman:* T. D. Kansara; *Hon. Secretaries:* S. R. Mehta, P. M. Trilokekar.

**GHEE MERCHANTS' ASSOCIATION**

191/193, Samuel Street, Bombay 9.

**GRAIN, RICE AND OILSEEDS MERCHANTS' ASSOCIATION**

72-80, Masjid Bunder Road, Mandvi, Bombay 3.

**GREY ART SILK MANUFACTURERS' GROUP**

C/o The Central Textiles, Samraat Mill's Compound, Agra Road, Vikhroli, Bombay 79.

**HINDUSTANI MERCHANTS' & COMMISSION AGENTS' ASSOCIATION LTD.**

342, Kalbadevi Road, Bombay 2.

**HOOSHAMI OLD IRON MERCHANTS' ASSOCIATION**

Darukhana, Mazagaon, Bombay 10.

**HOTEL & RESTAURANT ASSOCIATION (W. INDIA)**

Taj Mahal Hotel, Apollo Bunder, Bombay 1.

*OFFICE-BEARERS.—President:* Maneck S. Shaw, M.H.C.I.; *Hon. Secretary:* Harish Lamba; *Hon. Treasurer:* P. K. Bhatt; *Secretary:* Shrikant Joshi.

**INDIAN BANKS ASSOCIATION**

Devkaran Nanjee Bldg., Horniman Circle, Fort, Bombay.

*Chairman:* Krishnaraj M. D. Thackersey; *Dy. Chairmen:* V. C. Patel, R. B. Shah; *Hon. Secretary:* C. E. Kamath; *Secretary:* Dr. S. G. Panandikar.

**INDIAN CHEMICAL MANUFACTURERS' ASSOCIATION**

(Bombay Regional Office)

Sir Vitthaladas Chambers, 16, Apollo Street, Bombay 1.

*Chairman:* V. N. Sardesai; *Vice-Chairman:* Dr. H. B. Shreerangachar; *Hon. Secretary & Treasurer:* Dr. T. P. S. Rajan; *Dy. Secy.:* A. M. Gadgil.

**THE INDIAN COTTON MILLS' FEDERATION**

Elphinstone Bldg., Veer Nariman Road, Bombay 1.

*Chairman:* G. K. Devarsajulu; *Dy. Chairman:* Madanmohan Mangaldas; *Vice-Chairman:* Radhakrishna R. Ruia; *Secretary-General:* Bhaskar G. Kakatkar.

**INDIAN COUNCIL OF FOREIGN TRADE**

Co-operative Insurance Bldg., 4th Floor, Sir Phirozshah Mehta Road, Bombay 1.

**OBJECTS.**—The object of the Council is to promote International trade in general with a special emphasis on boosting India's exports all over the world. The Council is also compiling a Directory of Indian Exporters.

**INDIAN ELECTRICAL MANUFACTURERS' ASSOCIATION**

54, Himgiri, Pedder Road, Bombay 26.

**INDIAN ENGINEERING ASSOCIATION (Western Region)**

C/o Bombay Chamber of Commerce & Industry, Post Box 473, Bombay 1.

*Chairman:* F. A. Jasdanwalla; *Dy. Chairman:* Gunnar Hansen; *Secretary:* Frank D'Souza.

**THE INDIAN INSURANCE COMPANIES' ASSOCIATION**

"Jeevan Sahakar", Sir Phirozshah Mehta Road, Bombay 1.

*Chairman:* H. V. Gandhi; *Secretary:* D. N. Majumdar.

**THE INDIAN LANGUAGES NEWSPAPERS' ASSOCIATION**

Janmabhoomi Bhavan, Ghogha Street, Fort, Bombay 1.

**INDIAN MACHINE TOOL MANUFACTURERS' ASSOCIATION**

12, Rampart Row, Fort, Bombay.

*President:* C. B. Saran; *Vice-President:* Jayant H. Shah; *Hon. Secretary:* H. J. Dias.

**INDIAN MANUFACTURERS' EXPORT ASSOCIATION**

121-22, St. Xavier's Street, Bombay 12.

**INDIAN MOTION PICTURE DISTRIBUTORS' ASSOCIATION**

Mogul Lane, Off Sitaladevi Temple Road, Mahim, Bombay 16.

**INDIAN MOTION PICTURE PRODUCERS' ASSOCIATION**

Sandhurst Building, Sardar Patel Road, Bombay-4.

*President:* G. P. Sippy; *Senior Vice-President:* J. B. Bakshi; *Vice-President:* B. K. Adarsh; *Hon. Treasurer:* R. H. Wadia; *Secretary:* I. K. Menon.

**INDIAN NATIONAL STEAMSHIP OWNERS' ASSOCIATION**

Scindia House, Ballard Estate, Bombay 1.

*President:* Pratapsinh S. Vallabhadas; *Vice-President:* G. T. Kamdar; *Hon. Treasurer:* J. M. Kapadia; *Hon. Secretary:* M. J. Buch; *Secretary:* S. K. Aler.

**INDIAN OIL AND PRODUCE EXPORTERS' ASSOCIATION**

Anna Bhavan, 5th Floor, Plot No. 87-C, Broach Street, Bombay 9.

*Chairman:* J. J. Tanna; *Vice-Chairman:* N. P. Nopany; *Hon. Treasurer:* C. Velji; *Hon. Secretary:* S. L. Bheda; *Secretary:* R. C. Sheth.

**INDIAN PAINT & ALLIED INDUSTRIES ASSOCIATION**

Botawala Bldg., 2nd Floor, 8, Horniman Circle, Bombay 1.

*President:* Girdharlal J. Vora; *Vice-President:* L. U. Shegaonkar; *Hon. Secretary:* G. S. Gupta; *Treasurer:* N. M. Shah.

**THE INDIAN PHARMACEUTICAL ASSOCIATION**

Kalina, Santa Cruz (East) Bombay 29-AS.

*President:* Dr. U. P. Basu; *Hon. Gen. Secretary:* Dr. J. N. Banerjee; *Editor:* Dr. G. B. Ramasarma.

**INDIAN ROADS & TRANSPORT DEVELOPMENT ASSOCIATION, LIMITED**

27, Bastion Road, Bombay 1.

The Association has its headquarters in Bombay and branches at Calcutta, Bombay, Madras, New Delhi and Gauhati.

*President:* A. B. Parakh; *Vice-President:* J. E. Richards; *Secretary:* C. S. Nair.

**INDIAN RUBBER INDUSTRIES ASSOCIATION**

12, Rampart Row, Fort, Bombay 1.

*President:* K. N. Mookerjee; *Vice-Presidents:* K. R. Sengupta, B. B. Sangtani; *Hon. Gen. Secy.:* Dr. K. N. Modak; *Hon. Treasurer:* A. J. Pandya; *Secy.:* N. K. Patel.

**INDIAN SALT MANUFACTURERS' ASSOCIATION**

C/o Tata Chemicals Ltd., Bombay House, Bruce Street, Bombay.



**INDIAN SOCIETY OF ADVERTISERS LTD.**  
Army and Navy Building, Mahatma Gandhi Road, Bombay 1.

**INDIAN STOCK EXCHANGE LTD.**  
Yusuf Building, 43, Mahatma Gandhi Road, Bombay 1.

**THE INDIAN TOBACCO MERCHANTS' ASSOCIATION LTD.**  
Clive Road, Bombay 9.

**INDIAN WOOLLEN MILLS' FEDERATION**  
G. 4 Advent Building, Foreshore Road, Bombay-1.

*Chairman* : J. L. Behal; *Deputy Chairman* : U. M. Patel; *Vice-Chairman* : L. P. Pittle; *Secretary General* : A. C. Chaudhury.

**INSURANCE ASSOCIATION OF INDIA BOMBAY REGIONAL COUNCIL**  
Radia House, 8, Rampart Row, Bombay 1.

**IRON & STEEL SCRAP ASSOCIATION OF INDIA**  
Loha Bhavan, 515/5th Floor, P. D'Mello Rd., Bombay 9 (BR).

**IRON, STEEL & HARDWARE MERCHANTS & MANUFACTURERS' CHAMBER OF INDIA**  
403, Loha Bhavan, Frere Road, Bombay-9.

*President* : H. B. Gupta; *Sr. Vice-President* : S. B. Parikh; *Vice-President* : O. P. Sehgal; *Hon. Gen. Secy.* R. M. Valia; *Secretaries* : K. L. Bawa, B. C. Shah, K. K. Khandelwal; *Secy.* : S. P. Khosla.

**LEATHER GOODS MANUFACTURERS' & DEALERS' ASSOCIATION**  
157, Princess Street, Bombay 2.

**MAGNET WIRES AND CABLE MANUFACTURERS' ASSOCIATION**  
30, Sardar Griha, Carnac Road, Bombay 2.

**THE MAHARASHTRA GRAIN & PROVISION MERCHANTS' ASSOCIATION LTD.**  
C/o G. D. Bodas & Co., 27, Zaoba Wadi, Thakurdwar, Bombay 2.

**MARITIME UNION OF INDIA**  
204, Dr. Dadabhoy Naoroji Road, Bombay 1.

The Union is recognised by the principal shipping companies and is represented on the National Shipping Board, National Welfare Board for Seafarers, Merchant Navy Training Board and on the Councils of the International Transport Workers' Federation and the Officers' (Merchant Navy) Federation Ltd., London and also on the Joint Maritime Commission of the International Labour Organisation. The Union's quarterly publication the "OCEANITE" is the only maritime magazine in India.

*President* : H. K. Varyava; *General Secretary* : J. D. Randri.

**METAL TRADE & INDUSTRIES ASSOCIATION OF INDIA LTD.**  
31, Mirza Street, Bombay 3.

**THE MILL GIN STORE MERCHANTS' ASSOCIATION**  
88/92, Nagdevi Cross Lane, Bombay 3.

*President* : Ratilal M. Mehta; *Vice-President* : Arvind G. Shah; *Treasurer* : K. B. Khatwani; *Hon. Secretaries* : Ratilal N. Mehta, K. V. Doshi.

**MILLOWNERS' ASSOCIATION, BOMBAY**  
Elphinstone Building, Veer, Nariman Road, Bombay 1.

*Office-bearers for the year 1966-67* : Radhakrishna B. Rula (*Chairman*), C. M. Khatav

(*Deputy Chairman*), R. L. N. Vijayanagar (*Secretary*), M. S. Warty (*Labour Officer*).

**MYROBALANS MERCHANTS' ASSOCIATION**  
104-108, Clive Road, Dana Bunder, Bombay 9.

**NATIVE SHARE AND STOCK BROKERS' ASSOCIATION**  
Sir Dinshaw Petit Brokers' Exchange Hall, Dalal Street, Bombay 1.

*President* : Kantilal Ishvarlal; *Chairman* : P. J. Jeejeebhoy; *Vice-President* : Dhirajlal Maganlal; *Hon. Treasurer* : Jayant Amerchand; *Secretary* : A. J. Shah.

**NON-POWER SOAP MANUFACTURERS' ASSOCIATION**  
380, Girgaum Rd., Bombay 2.

**PAPER TRADERS' ASSOCIATION**  
54, Sutar Chawl, Bombay 2.

*President* : Jayaramdas M. Patel; *Vice-President* : Rasiklal B. Parikh; *Hon. Secretaries* : Madhookant K. Shah, Anantray M. Mehta; *Hon. Treasurer* : Bhagwandas V. Shah.

**PEARLS IMPORTERS' & EXPORTERS' ASSOCIATION**  
80-A.B., Sheikh Memon Street, Bombay 2.

**PEPPER & GINGER MERCHANTS' ASSOCIATION LIMITED**  
332-34, Narsi Natha Street, Bombay 9.

**THE PERFUMERY RAW MATERIALS TRADE ASSOCIATION**  
Devkaran Mansion, 2nd Floor, 45/47, Princess Street, Bombay 2.

**THE PETROL DEALERS' ASSOCIATION**  
Tardeo Air Conditioned Market Bldg., 2nd Floor, Room No. 4, Tardeo Road, Bombay 7.

**PHARMACEUTICAL AND ALLIED MANUFACTURERS' AND DISTRIBUTORS' ASSOCIATION, LTD.**

C/o Bombay Chamber of Commerce and Industry, Mackinnon Mackenzie Building, Ballard Estate, Bombay 1.

*President* : V. A. Castellino; *Vice-President* : J. E. Moniz; *Hon. Secretary* : P. K. Kakodkar; *Hon. Treasurer* : D. L. Amore.

**THE PLASTICS AND LINOLEUMS EXPORT PROMOTION COUNCIL**  
Patel Industrial Centre, 68, Tardeo Road, Bombay 34.

*Chairman* : B. J. Gandhi; *Vice-Chairman* : K. P. Gupta, C. K. Shah; *Secretary* : D. S. Swaminathan.

**PROPERTY OWNERS' ASSOCIATION**  
Bansilal Mansion, 11, Bruce Street, Bombay 1.

**RAW SILK MERCHANTS' ASSOCIATION**  
Kilachand Bldg., 39/43 Abdul Rehman Street, Bombay.

**THE REFRIGERATION AND AIR CONDITIONING TRADES ASSOCIATION LIMITED**

C/o Bombay Cycle & Motor Agency Ltd., 534, Sardar Vallabhbhai Patel Road, Bombay 7.

*President* : Ram D. Malani; *Vice-President* : Maj. Gen. H. M. Mohite; *Hon. Treasurer* : N. K. Limji; *Hon. Secretary* : H. K. Ghose.

**THE RETAIL GRAIN DEALERS' FEDERATION**  
'Shiv Mahal', 84-86,  
Dr. Maheshwari Road, Bombay 9.

**THE SCIENTIFIC & SURGICAL INSTRUMENT MANUFACTURERS' & TRADERS' ASSOCIATION**  
2nd Floor, Devkaran Mansion, 48, Princess Street, Bombay 2.

*President* : N. J. Bole; *Vice-President* : V. Shah; *Hon. Jt. Secretaries* : N. C. Dalal, P. Y. Kalelkar; *Hon. Treasurer* : J. S. Trivedi.

**THE SHUTTLE MANUFACTURERS' ASSOCIATION**  
8, Hamam Street, Fort, Bombay.

**SILK & ART SILK MILLS' ASSOCIATION LIMITED**  
Resham Bhavan, 78, Veer Nariman Road, Bombay 1.

*Chairman* : Surendra M. Mehta; *Vice-Chairman* : Ram Parkash Mehra; *Secretary* : Zarine R. J. Taraporevala.

**THE SILK & RAYON TEXTILES EXPORT PROMOTION COUNCIL**

Resham Bhavan, 78, Veer Nariman Road, Bombay 1.

*Chairman* : D. N. Shroff; *Secretary* : O. P. Dhawan.

**SILK MERCHANTS' ASSOCIATION**  
Dahanukar Building, Kalbadevi Road, Bombay 2.

**THE SMALL SCALE COPPERWARE MANUFACTURERS' ASSOCIATION**  
37-39, Bhajipala Street, Bombay 3.

**SOCIETY OF ADVERTISING PRACTITIONERS**  
Ilaco House, Sir P. M. Road, Bombay 1.

**SOLVENT EXTRACTIONS ASSOCIATION OF INDIA**  
Bombay House, Bruce Street, Fort, Bombay 1.

**SPECIALISED PUBLICATIONS ASSOCIATION**  
235, D. N. Road, Bombay 1.

**STAINLESS STEEL MERCHANTS' ASSOCIATION**  
253, Harihar Niwas, Khetwadi 3rd Lane, Bombay 4.

**STEEL FURNACE ASSOCIATION OF INDIA**  
C/o Mukand Iron & Steel Works Ltd., Kurla, Bombay 70-AS.

**THE STOCK EXCHANGE**  
Dalal Street, Bombay 1.

*President* : Dhirajlal Maganlal; *Vice-President* : Laldas Jamnadas, *Hon. Secy.*, Mathuradas Shamaldas.

**SWADESHI MARKET TEXTILE MERCHANTS' ASSOCIATION**  
Swadeshi Market Bldg., Cavel Street, 1st Floor, B. No. 204, Bombay 2.

**TEXTILE MACHINERY MANUFACTURERS' ASSOCIATION**  
80, Dr. Annie Besant Road, 3rd Floor, Worli, Bombay-18.

*Chairman* : J. C. Agrawal; *Vice-Chairman* : H. J. Save, Atul K. Bhagwati; *Actg. Secretary* : I. I. Pandya.

**THEOSOPHY COMPANY (INDIA) PRIVATE LIMITED**  
Theosophy Hall, 40, New Marine Line, Bombay 1.



**TRACTOR EARTHMOVING AND CONSTRUCTION EQUIPMENT DISTRIBUTORS' ASSOCIATION LTD.**

C/o The Bombay Chamber of Commerce & Industry, Post Box No. 473, Bombay 1.

**TRADE & TECHNICAL PUBLICATIONS ASSOCIATION**

12, Fort Chambers, Harram Street, Bombay 1.

**THE TRAVEL AGENTS' ASSOCIATION OF INDIA LTD.**

C/o Bombay Chamber of Commerce & Industry, Mackinnon Mackenzie Bldg., Ballard Road, Ballard Estate, Bombay 1.

*President:* Inder Sharma; *Vice-President:* A. N. Parikh; *Secretary:* N. J. Katgara; *Hon. Treasurer:* V. S. Ubhayakar; *Secretary:* J. J. Oonwalla.

**UPCOUNTRY NEWSPAPER REPRESENTATIVES ASSOCIATION**

40, Police Court Lane, off Dadabhoy Naoroji Road, Bombay 1.

It is an organisation of persons working in Bombay on behalf of newspapers including magazines and periodicals, published outside Bombay. It is the only representative body of advertising-space sellers and its members

collectively represent over 400 publications from all over India, Ceylon and even U.K.

*President:* C. H. Ramnath; *Treasurer:* R. B. Khare; *Hon. Secretary:* S. P. Divan.

**VEGETABLE OILS ASSOCIATION OF INDIA**

Anand Bhavan, 5th Floor, 87-C, Broach Street, Bombay 9.

**WADI BUNDER FORWARDING AGENTS' UNION**

Down Platform No. 12, Wadi Bunder, Bombay 10.

**WATCH TRADE FEDERATION**

Ghadijali Building, 88A-90, Nagdevi Cross Lane, Bombay 3 RB.

**THE WESTSUBURBAN MANUFACTURERS' ASSOCIATION**

Orlem Post Office Bldg., 1st Floor, Off Marve Road, Malad West, Bombay 64.

**WESTERN INDIA AUTOMOBILE ASSOCIATION**

Lalji Naranji Memorial Building, Churchgate Reclamation, Bombay 1.

BRANCH OFFICES.—Ahmedabad: The Cellar,

Khanpur; Poona; 7, Moledina Road, Poona 1; Nagpur: Turabali Hassonjee, C/o K. S. M. Hassanjee & Sons, P.O. Box 312; Jaipur: S. Trivedi, Rajendra Bhuvan, Subash Marg, 'C' Scheme.

*President:* R. S. Vatcha; *Vice-Presidents:* Pravinchandra V. Gandhi and M. F. Mavji; *Secretary-General:* Jehangir J. K. Patell; *Secy.:* K. G. Subramanian.

**THE WESTERN INDIA MINERALS ASSOCIATION**

C/o Natwarlal Shamaldas & Co., 94, Nagindas Master Road, Fort, Bombay.

*Chairman:* N. S. Worah; *Vice-Chairman:* Lalbhai Patel; *Secretary:* T. K. Uchil.

**WESTERN INDIA PHOTOGRAPHIC & ALLIED TRADES ASSOCIATION LTD.**

Mangrol Mansion, 6, Gunbow Street, Bombay 1.

**WESTERN INDIA SHEET ROLLERS' ASSOCIATION**

32, Nicol Road, Ballard Estate, Bombay 1.

## CHAMBERS OF COMMERCE IN GREATER BOMBAY

**ALL INDIA EXPORTERS' CHAMBER**

2nd Floor, Janmabhoomi Chambers, Fort Street, Bombay 1.

Number of members: 330.

Activities: Exports of cotton piece-goods and cotton yarn and other commodities to any part of the world.

*President:*—Kantilal K. Sheth. *Vice-President:*—Jayant M. Shah. *Hon. Secretaries:*—Chinubhai M. Shah, K. S. Mehta. *Hon. Treasurer:*—Manharlal J. Desai.

**BELGO-INDIAN CHAMBER OF COMMERCE AND INDUSTRY**

2nd Floor, Taj Building, 210, D. Naoroji Road, Bombay-1.

*Hon. Secretary:*—V. S. Nadkarni. *Hon. Treasurer:*—H. M. Dalal. *Jt. Hon. Secretary:*—D. T. Gandhi.

**BOMBAY CHAMBER OF COMMERCE AND INDUSTRY**

Mackinnon Mackenzie's Bldg., Ballard Estate, Bombay 1.

All firms or persons engaged or interested in mercantile or industrial pursuits are eligible for election as Ordinary Members or Associate Members in their conventional or corporate name. The Chamber member's annual subscription is Ordinary Rs. 1,000, Associate Rs. 750. An Ordinary Member on election pays an entrance fee of Rs. 1,000 and an Associate Member Rs. 500.

Officials and others indirectly connected with the trade, commerce or manufactures of India, or who may have rendered distinguished service to the interests represented by the Chamber may be elected by the Committee Honorary Members of the Chamber.

*President:* J. W. Anson; *Vice-President:* J. B. Bowman, M.B.E.; *Secretary:* B. A. Tarlton.

**EAST INDIA CHAMBER OF COMMERCE LIMITED**

Patwa Chawl, Sheikh Memon Street, Bombay 2.

**INDIAN MERCHANTS' CHAMBER**

Lalji Naranji Memorial, Indian Merchants' Chamber Building, 76, Veer Nariman Road, Churchgate, Bombay 1.

The Chamber has a membership of over 1887. About 119 Industrial and Trade Associations representing various trades such as textiles, silk and art silk, engineering goods, plastics, non-ferrous metals, sugar, chemicals, paints and varnishes, grains and oilseeds, cotton, kariana and spices, bullion, indigenous banking, insurance, etc. in the City of Bombay and the States of Maharashtra and Gujarat are affiliated to the Chamber.

The Chamber is directly represented on several public bodies.

*President:* Dr. B. C. Cooper; *Vice-President:* Pratap Bhogilal; *Secretary:* C. L. Gheevala.

**INDO-GERMAN CHAMBER OF COMMERCE**

P.O. Box No. 1689.

Vulcan Insurance Bldg., Veer Nariman Road, Bombay 1.

The Chamber promotes and fosters trade and commerce of all description between the Union of India and the Federal Republic of Germany. It has also offices at Calcutta, Delhi, Madras and Dusseldorf (W. Germany).

*President:* V. C. Setalvad; *Vice-President:* U. M. Weimann; *Treasurer:* A. N. Kilachand; *Secretary:* Dr. K. Pracht.

**INTERNATIONAL SINDHI CHAMBER OF COMMERCE & INDUSTRIES**

Sheva Niketan, Top Floor, Pinjari Street, Bombay 3.

*President:* Dayaram H. Garibdas; *Vice-Presidents:* Sugnomal N. Parmani, Assandas R. Lalwani; *Chairman:* Dulahanomal J. Sadhwani; *Hon. Secretaries:* Naraindas N. Khemani, Shewaram A. Makhija.

**MAHARASHTRA CHAMBER OF COMMERCE**

12, Rampart Row, Bombay 1.

Membership of the Chamber is open to all carrying on trade, commerce and industry in Maharashtra State irrespective of caste, creed or community.

The Chamber issues a monthly magazine *Vaidhar*, as also a bulletin, which includes important trade notices.

Membership over 1,400 members: Number of Joint Stock Companies: over 350. Number of Commercial Associations: over 50 (having amongst them more than 1,000 members).

*Office-Bearers:*

*President:* Ramkrishna J. Bajaj; *Vice-Presidents:* V. D. Chowgule, S. M. Dahanukar, D. B. Sarda; *Secretary:* R. G. Mohadikar.

**MEMON CHAMBER OF COMMERCE**

Patharia Palace, Mohamedali Road, Bombay 3.

**WESTERN INDIA CHAMBER OF COMMERCE, LTD.**

232-234, Kalbadevi Road, Bombay 2.

*President:* Rameshwar Saboo; *Vice-President:* K. Qunta.



## CLUBS IN GREATER BOMBAY

**BANDRA GYMKHANA**, Perry Road, Bandra; **BOMBAY FLYING CLUB**, Juhu Aerodrome, Juhu, Bombay 54; **BOMBAY GYMKHANA, LTD.**, Waudby Road; **BOMBAY MUNICIPAL SPORTS CLUB**, Azad Maidan Siding, Fort, Bombay 1; **BOMBAY PRESIDENCY GOLF CLUB, LTD.**, Kolwada-Borla Road, Chembur, Bombay 74-AS; **BOMBAY PRESIDENCY RADIO CLUB, LTD.**, 157, Arthur Bunder Road, Colaba, Bombay; **BOMBAY RECREATION CLUB PRIVATE LIMITED**, Dady Sheth Hind Lane, Near Bombay Garage, Band Stand, Chowpatty, Bombay-7; **BURMAH-SHELL SPORTS CLUB**, Burmah-Shell House, Ballard Estate, Bombay; **THE CATHOLIC GYMKHANA LTD.**, 47-A, Netaji Subhas Road, Bombay 2; **CENTRAL RAILWAY MECHANICS INSTITUTE**, Suparibaug Road, Parel, Bombay 12; **CHESS CLUB OF INDIA**, Parisian Restaurant, Bruce Street, Bombay 1; **COLABA SAILING CLUB**, 32C, Darshan Apartments, Mount Pleasant Road, Bombay 6; **THE CRICKET CLUB OF INDIA LTD.**, Headquarters:—Brabourne Stadium,

Bombay; **DADAR PARSEE COLONY GYM-KHANA**, Vincent Road, Bombay 19; **ELPHINSTONE COLLEGE GYMKHANA**, Elphinstone College, Mahatma Gandhi Road, Bombay 1; **INDIAN GYMKHANA (MATUNGA) LTD.**, K. A. Subramanian Road, Bombay 19; **INDIAN NATIONAL KENNEL CLUB**, Belvedere Court, Backbay Reclamation, Bombay 1; **INTERNATIONAL CLUB**, Quest End, 47A, New Cuffe Parade, Bombay 5; **ISLAM CLUB**, Chowpatty, Bombay 7; **ISLAM GYMKHANA**, Kennedy Sea Face, Bombay 2; **KHAR GYM-KHANA**, 13th Road, Khar, Bombay 52; **KSHATRIYA UNION CLUB**, Vanmali Hall, 70-D, Chhabildas Road, Dadar, Bombay 28; **LIONS CLUB OF BOMBAY**, 172-174, Dr. D. Naoroji Road, Bombay 1; **President**: B. D. Motafram; **Vice-Presidents**: P. D. Kanga; M. D. Dubash; Dr. V. K. Desai; **Hon. Secretary**: M. P. Lentin; **Treasurer**: N. M. Shah.

**LIONS CLUB OF NORTH BOMBAY**, C/o The Oilseeds Trading Co., Private Ltd., 111, Mahatma Gandhi Road, Bombay 1. **President**: Lion Shafi N. Thanawalla; **Hon. Secretary**: Lion Kirit R. Gandhi.

**MATUNGA GYMKHANA**, Lakhamai Nappa Road, Matunga, Bombay 19; **THE NATIONAL SPORTS CLUB OF INDIA**, (Bombay Region), Hornby Vellard, Bombay 18; **ORIENT CLUB**, 9, Chowpatty Sea Face, Bombay 7; **PALI HILL GYMKHANA**, Pali Hill, Bandra, Bombay 50; **P. J. HINDU GYMKHANA**, Netaji Subhas Road (Marine Drive), Bombay 2; **PARSEE GYMKHANA**, Marine Lines, Bombay 2; **PRINCESS VICTORIA MARY GYMKHANA AND GYMNASIUM**, Queen's Road, Cooperage, Bombay 1; **RIPON CLUB**, 123, Mahatma Gandhi Road, Bombay 1; **ROTARY CLUB OF BOMBAY**, Green's Hotel, Bombay; **ROYAL BOMBAY YACHT CLUB**, Apollo Bunder, Bombay; **ROYAL WESTERN INDIA TURF CLUB, LTD.**, Race Course, Mahalaxmi, Bombay 34-WB; **Chairman**: R. R. Ruia; **Secretary**: N. K. Pudumjee; **SHREE KRISHNA HINDU MERCHANTS' CLUB**, Belle Vue, Chowpatty, Bombay; **UNITED SERVICES CLUB**, Colaba, Bombay 5; **WILLINGDON CATHOLIC GYM-KHANA**, Santa Cruz, **WILLINGDON SPORTS CLUB**, Bombay 34; **WODEHOUSE GYM-KHANA LTD.**, 182, Queen's Road, Bombay 1.

## BENEVOLENT INSTITUTIONS IN GREATER BOMBAY

**ACWORTH LEPROSY HOSPITAL**

Wadala, Bombay 31.

**ALL-INDIA ANIMAL WELFARE ASSOCIATION**

149, Shroff Bazar, Bombay 2.

Working Office: 16, Dadabhoi Manzil, Congress House, Bombay 4.

**ANJUMAN-E-MUFIDUL YATAMA**

Madanpura, Masjid Jamil, Bombay 8.

**ARTYTOYS INDUSTRIAL SCHEME TRUST**

Sir Ratan Tata Welfare Centre, Sir Ratan Tata Road, Tardeo, Bombay-34.

**ATHORNAN MANDAL**

Representative Body for Parsee Priests in India. Navsari Building, 240, Dr. Dadabhoi Naoroji Road, Fort.

**BAI MOTLIBAI WADAI CHARITABLE FUNDS**

22-D, Parsi Bazar Street, Fort.  
Endowments for scholarships.

**BALVIKAS KENDRA**

Tilak Vidyalaya Road, Vile Parle (East), Bombay 57.

**BAPNU GHAR**

2, Annie Besant Road, Near Vallabhbbhai Patel Stadium, Hornby Vellard, Worli.

**BEGGARS' HOME FOR FEMALES**

Chembur, Bombay 71.

**BENE-ISRAEL HOME FOR DESTITUTES AND ORPHANS**

Plot 92, Agripada, Jacob Circle, Bombay.

**BHAGINI SAMAJ**

Bhagini Samaj Maganlal Ghia Building, 225, Khetwadi Main Road, Bombay.

**BHARATIYA VANITA SAMAJ**

Nair Mahal, 1st Floor, Tulsi Pipe Road, Bombay 16.

**BILLAWAR ASSOCIATION**

17, Raghunath Dadaji Street, Fort, Bombay.

**BLIND RELIEF ASSOCIATION**

481, Botawala Building, Kalbadevi Road, Bombay 2.

**BLIND MEN'S ASSOCIATION**

(Estd. Jan. 1947.)

177-79, Lamington Cross Road, Bombay 7.

**Activities**: Strives to provide higher education to the deserving blind, helps the blind to start small industries or loan money to them for advancement in their professions and vocations, thus making them self-supporting, helps the blind during the short periods of their unemployment, sickness or other calamities and provides them with medical aid. It has affiliated associations at Poona and Ahmedabad.

The Association conducts a Central Circulating Braille Library in Gujarati, Marathi and Hindi, and has so far transcribed into Braille about 500 volumes. A special out-door recreational centre for blind children has been started at Bal-Bhavan. It has introduced a "Talking Magazine" for the blind, the first of its kind in Asia.

**THE BOMBAY CHESHIRE HOME**

Bethlehem House, Makahali Caves Road, off Mathuradas Visanji Road (Kurla Andheri Road), Andheri, Bombay 58.

The Cheshire Homes are for the incurably sick and homeless.

**BOMBAY CITY AMBULANCE CORPS**

21, Marine Lines, Bombay.

Free First Aid and Ambulance Service Station — all days, all hours.

**BOMBAY DEAF & DUMB SOCIETY**

12, Rampart Row, Bombay 1.

**President**: Navin T. Khandwalla; **Vice-President**: Dr. T. K. Mehta; **Vice-Executive President**: G. S. Pohekar; **Hon. Gen. Secy.**: I. B. Mehta; **Jt. Hon. Gen. Secy.**: Dr. (Miss) Usha Bhatt; **Hon. Treasurer**: Dinkar Sakrikar.

**BOMBAY FAMILY PENSION FUND OF GOVERNMENT SERVANTS**

Bombay Mutual Bldg., D. Naoroji Road, Fort, Bombay.

**BOMBAY INSTITUTION FOR DEAF AND MUTES**

Nesbit Road, Mazagon, Bombay 10.

**BOMBAY LEGAL AID SOCIETY**

Hamam House, Hamam Street, Bombay 1.

The object of the Society is to make justice more readily accessible to the poor.

**THE BOMBAY MOTHERS AND CHILDREN WELFARE SOCIETY**

No. 10, B.D.D. Chawl, De Lisle Road, Bombay No. 11.

**BOMBAY PINJRAPOLE**

Bhuleshwar, Post Girgaon, Bombay 4.

**BOMBAY RELIEF ASSOCIATION**

**Office**: Cook's Bldg., 2nd Floor, Dr. Dadabhoi Naoroji Road, Bombay 1; **Relief Office**: 115, Love Lane, Mazagon, Bombay 10.

The following institutions are affiliated to the Association:—

Bombay European & Eurasian Poor Fund, European Pensioners' and Widows' Home, Mazagon, Strangers' Friend Society, Mazagon, British Forces' Benevolent Fund, Sir Shapurji Broacha Trust Fund, Bombay Medical & Hospital Endowment Fund.

**BOMBAY SOCIETY FOR THE PREVENTION OF CRUELTY TO ANIMALS**

Bombay 12.

**BYRAMJEE JEEJEEBHOY PARSEE CHARITABLE INSTITUTION**

Opp. Charni Road Rly. Station, Bombay 4.

**CHILD GUIDANCE CLINIC OF THE TATA INSTITUTE OF SOCIAL SCIENCES**

Bal Jerbal Wadia Hospital for Children, Parel.

**CHILDREN'S AID SOCIETY, BOMBAY**

88, Lady Hardinge Road, Mahim, Bombay 16.

**COUNTRESS OF DUFFERIN FUND**

Raj Bhavan, Bombay 6.

**COWASJI BEHRAMJI DIVECHA TRUST**

Darya Building, 375, Dr. Dadabhoi Naoroji Road, Fort, Bombay 1.



**DADAR BHAGINI SAMAJ**

3rd Lane, Hindu Colony, Dadar, Bombay 14.  
Industrial Classes, welfare centre and family planning.

**DADAR PARSİ WELFARE CENTRE**

Munsiff Building, 635, Joshi Road, Parsi Colony  
Dadar, Bombay 14.

**DADAR SCHOOL FOR THE BLIND**

160, Dadasaheb Phalke Road, Dadar,  
Bombay 14.

**DAUGHTERS OF MARY IMMACULATE**

Regina Pacis, Seth Motishah Lane, Victoria  
Gardens, Bombay 27 DD.

1. Residential Training Centre, Club & Employment Bureau for Houseworkers. 2. Home and School for destitute children. 3. Hostel for working girls and students. 4. Regina Pacis Free Dispensary for the poor.

**THE FAMILY PLANNING ASSOCIATION OF INDIA**

1, Metropolitan House, Dadabai Naoroji Road,  
Bombay 1.

The Association was established in 1949 with Headquarters in Bombay and branches in different parts of the country. Its work proceeds on 4 main lines: (1) providing clinical service; (2) training doctors, health visitors, social workers etc.; (3) carrying out educational work to spread information about family planning and to motivate people to adopt it; and (4) providing encouragement to research work — sociological, demographic and medical. At Headquarters the Association conducts the following Family Planning Clinics: (a) a Family Welfare Centre (Kutumb Sudhar Kendra) in the Bombay Central Station Compound where birth control services are available, including vasectomy. The Centre has 3 branch clinics; (b) a Family Welfare Bureau, at premises in the New Hospital for Women, New Queen's Road, Bombay 4, where treatment for infertility and subfertility is given under a panel of specialists. Vasectomy operation, are also conducted at the Bureau; (c) family planning clinics at Ulhasnagar (Kalyan Refugee Camp); (d) clinics are also being conducted by the Association for the Reserve Bank Colonies in Byculla and Mahim. The Headquarters operate a Mobile Clinic and Education Unit in the suburbs and rural areas outside Bombay. A Supplies Department is maintained at Headquarters from where approved contraceptives at clinical rates are available to welfare clinics all over India. A free reading room and library are maintained at the Headquarters.

The Association also issues publications, reports, pamphlets etc. in various languages, including a Quarterly, the "Journal of Family Welfare" and a monthly Bulletin "Planned Parenthood" (both in English) which are widely distributed in India and abroad. It has held five All India Conferences and two International Conferences on Family Planning and two International Seminars on scientific aspects of family planning. Training facilities are available at Headquarters and several of its Branches. Many of the Association members are serving on the Government Family Planning Boards and as Hon. Family Planning Education Leaders appointed by the Union Government.

The Headquarters is affiliated to the International Planned Parenthood Federation and maintains contact with family planning associations in many countries of the world.

**President:** Smt. Avabai B. Wadia; **Vice-Presidents:** Dr. N. P. Tripathi, Smt. Premilata Gupta, B. M. Singhi; **Jt. Hon. Treasurers:** Smt. Valdehi Char, Smt. M. S. H. Jhabvala; **Hon. Gen. Secy.:** Smt. Mallika Ghosh.

**THE FAMILY WELFARE AGENCY**

209, Dadabhai Naoroji Road, Fort.

**FELLOWSHIP OF THE PHYSICALLY HANDICAPPED**

Haji Ali Park, Clerk Road, Mahalaxmi,  
Bombay 11.

**FREE OPHTHALMIC HOSPITALS' SOCIETY**

Jehangir Merwanji Road, Poibavdi, Parel,  
Bombay 12.

**GANDHI SEVA SENA**

12, Ness Baug, Nana Chowk, Bombay 7.

**GHATKOPAR BALKAN-JI-BARI**

Prafulla Nivas, Agra Road, Ghatkopar,  
Bombay 77.

**GOCULDAS TEJPAL BOARDING SCHOOL & SANSKRIT PATHSALA**

Tejpal Road, Gowalia Tank, Bombay.

**GOCULDAS TEJPAL CHARITIES**

7, Bastion Road, Fort, Bombay.

**HABONIM WORK ROOM**

55, Forbes Street, Fort.

Women and girls from all strata of society are admitted.

For deserving people, free training, free meals every afternoon; free medical attention and bus transportation fees are given.

**HAJI ALLARAKHIA RAHIMTOOLA SONAWALLA CHARITY TRUST (WAKF) FUND No. 1**

Khetwadi 9th Lane, Bombay 4.

**HAPPY HOME & SCHOOL FOR THE BLIND B. D. D. Chawl 52, 3rd Floor, Worli, Bombay 18****HIND KUSHT NIVARAN SANGH**

Maharashtra State Council, Red Cross Office,  
141, Mint Road, Bombay 1.

**HIS ROYAL HIGHNESS THE PRINCE AGAKHAN'S COUNCIL FOR BOMBAY**

Khoja Jamatkhana, Chinch Bunder, Bombay 9.

**INDIAN COUNCIL FOR MENTAL HYGIENE**

Cambatta Chambers, 42, Queen's Road,  
Bombay 1.

**INDIAN RED CROSS SOCIETY**

(Maharashtra State Branch).  
141, Mint Road, Bombay 1.

**INDIAN SAILORS' HOME SOCIETY**

Masjid Siding Road, Bombay 9.

**INDUSTRIAL HOME FOR BLIND WOMEN**

160, Dadar Main Road, Dadar, Bombay 14.

This is the first industrial home of its kind in Bombay for blind women. There are 41 inmates to present and they are given free boarding, lodging, clothing, medical aid, tuition and other amenities.

**INJUREDS' AID SOCIETY**

21, Hatim Manzil, 149, Frere Road, Bombay 1.

Renders free medical and legal aid to persons injured in road accidents within the limits of Greater Bombay.

**IRANIAN ZOROASTRIAN ANJUMAN**

Kermani Building, Sir P. M. Road, Fort.

**THE ISMAILIA HELPING SOCIETY**

C/o 'Apni Duccan', Junc. of Samuel Street and Pydhonie Road, Bombay 9.

**JAMSETJEE JEEJEEBHoy HOSPITAL NURSING ASSOCIATION**

Maneckji Wadia Bldg., Mahatma Gandhi Road,  
Bombay 1.

**JEWISH RELIEF ASSOCIATION**

Hague Building, Sprott Road, Ballard Estate,  
Post Box No. 47.

Hostel:—Habib Chambers, 324, Victoria  
Gardens Road.

**J. N. TATA ENDOWMENT**

Bombay House, Bruce Street, Fort.

**JUVENILE SERVICE BUREAU**

83, Lady Hardinge Road, Mahim, Bombay 16.

**KHOJA GIRLS' ORPHANAGE**

125, Jail Road East, Habib House, Bombay 9.

**KING GEORGE V MEMORIAL**

Infirmary and Lady Dhunbai Jehangir Home  
for the Destitute.

C/o. K. S. Sethna, Royal Insurance Bldg., 14,  
Jamshedji Tata Road, Bombay 1.

**LADY TATA MEMORIAL TRUST**

Bombay House, Bruce Street, Fort, Bombay 1.

**LEAGUE OF MERCY FOR DIOCESE OF BOMBAY**

61, Clare Road, Byculla, Bombay 8.

**LIAISON COMMITTEE FOR ORGANISATION OF PARSİ CHARITIES AND SOCIAL SERVICES**

Zor. Assn., Indust. Inst. Bldg., Chikalwadi,  
Tardeo, Bombay.

**LOKMANYA SEVA SANGH**

Tilak Mandir, Ram Mandir Road, Vile Parle,  
Bombay 57.

The Sangh runs a library, a gymnasium, tailoring and embroidery classes, Montessori School, Vocational Guidance and other educative and useful civic activities in its own premises.

**President:**—Dr. P. G. Vartak. **Secretaries:**—  
R. G. Barve, Mrs. Nalinibai Sathe.

**MAHARASHTRA STATE COUNCIL FOR CHILD WELFARE**

No. 10, B.D.D. Chawl, Delisle Road, Jacob  
Circle, Bombay 11.

**MAHARASHTRA STATE COUNCIL ON BLINDNESS**

C/o. Sir C. J. Ophthalmic Hospital, Bombay 8.

**MANGESH VISHWANATH RAJADHYAKSHA SCHOLARSHIPS AND CHARITY FUND**

Mangesh Building, New Bhatwadi, Bombay 4.

**MAZAGAON BHADKARU SANGH, "REGD."**

Room No. 21, Bombay Improvement Trust,  
Chawl No. 3, Mazagaon, Bombay 10.

**MOGAVEERA VYAVASTHAPAKA MANDALI**

Manek Mansion, 8, Nanabhai Lane, Bombay 1.

**MUNCHERJEE NOWROJEE BANAJEE INDUSTRIAL HOME FOR THE BLIND**

'Chateau Dieu', 280, Swami Vivekananda Road,  
Jogeshwari, Bombay 60.

**MUSLIM AMBULANCE SOCIETY**

154, Kambekar Street, Bombay 3.

**MUSLIM BOYS AND GIRLS ORPHANAGE**

Darul-Yatama, 69, Kambekar Street, Bombay 3.

**N. M. WADIA CHARITIES**

22-D, Parsi Bazar Street, Fort.



**N. S. D. INDUSTRIAL HOME FOR THE BLIND**

B.D.D. Chawl No. 52, Worli, Bombay 18.  
Tel. No. 75995.

**NAGPADA NEIGHBOURHOOD HOUSE**  
New Nagpada Road, Byculla, Bombay 8.

**Activities.**—Medical and Family Planning Clinics, children's welfare centre, nursery, dramas, meetings, cinemas, games, classes, clubs, athletics, night classes, lectures, Crafts Sales Centre for Village & Mission industries, employment bureau, working men's and women's hostels, libraries for adults and children, Bombay School of Social Welfare, Family Welfare Agency, Women's activities, Creche, Child Guidance Clinic.

**THE NATIONAL ASSOCIATION FOR THE BLIND**

51, Mahatma Gandhi Road, Bombay 1.

**AIMS AND OBJECTS.**—To work in the whole of India for the prevention and cure of blindness and for the welfare of the blind, to bring about co-operation among the various organisations of the blind, to co-ordinate their activities, to organise and start new organisations and institutions for various activities for the welfare of the blind and to do all such other things as may be necessary for the promotion of the interest of the blind.

**OFFICE-BEARERS:**—*President*—Smt. Queenie H. C. Captain; *Vice-Presidents*—Dr. H. N. Kunzru; M. P. Jalia; D. Edward Jonathan; Shantilal H. Shah; *Hon. Treasurers*—Smt. J. N. Gobhai, Nosir P. Dastur; *Hon. Secretaries*—Kum. N. K. Ajaonkar, Smt. R. Fazalbhoy, Smt. S. R. Potnis; Capt. H. J. M. Desai; K. N. K. Jussawala; F. F. Moos; G. L. Nardeker; *Executive Officer*—Suresh C. Ahuja; *Development Officer*—Dr. Rajendra T. Vyas, M.A., LL.B., ph.D.

**PARSI CHARITY ORGANISATION SOCIETY**

Thakur Nivas, 173, Jamshedji Tata Road, Bombay 1.

*Hon. Secretary*—Prof. P. A. Wadia, M.A.

**PARSI PUNCHAYET FUNDS AND PROPERTIES**

209, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

**POONA SCHOOL AND HOME FOR THE BLIND**

201, Khadilkar Road, Girgaum, Bombay 4.

**THE POPULAR AMBULANCE ASSOCIATION**

Talmakiwadi, Tardeo, Bombay 7.

**PROBATION AND AFTER-CARE ASSOCIATION, MAHARASHTRA STATE**  
B.I.T. Block No. 15, King's Circle, Matunga, Bombay 19.

**PROF. DATE'S CHARITABLE DEAF AND DUMB INSTITUTE**

Opp. Kalaram Mandir, Thakurdwar Road, Bombay 2.

**RASHTRA DHARMA SOCIETY**  
Ganga Nivas, 234, Walkeshwar, Bombay 6.  
(Estd. 1927)

**ROYAL BOMBAY SEAMEN'S SOCIETY**  
Nicol Road, Ballard Estate, Bombay.

**SARAIYA CHARITY TRUST**  
Swastik Court, 132, Queen's Road, Band Stand, Bombay 1.

**SETH RANCHHODDAS CHATURBHUI CUTCHI LOHANA BAL ASHRAM**  
63, Chinchpokli, Bombay.

**SEVA SADAN SOCIETY**

Gamdevi, Bombay 7.

**SHRADDHANAND MAHILASHRAM**

(Conducted by Hindu Women's Rescue Home Society).

King's Circle, Matunga, Bombay 19.

**SHREE MANAV SEVA SANGH**

Plot No. 255/257 Sion Road, Sion (West), Bombay-22.

(A foundling home for infants and orphans.)

**SHREE RAMKUNVAR CHARITABLE X-RAY INSTITUTE TRUST**

Ranade Road, Jiva Devsi Niwas, Dadar, Bombay 28.

**SHRI GIRDHARLAL DAMODAR DAFTARY EDUCATION TRUST**

Derasar Lane, Ghatkopar, Bombay 77.

**SHRI JAIN MAHILA SAMAJ**

Mangrol Mansion, Bora Bazar Street, Bombay 1.

Dadar Centre: A-36, Palanji Sojpal Bldg., Portuguese Church Street, Bombay 28.

Shanti Centre: Block No. 9, R. No. 9, Arthur Road, Bombay 11.

**SHRI MAHAVIRA JAINA VIDYALAYA**

Gowalia Tank Road, Bombay 26.

**SIR DORABJI TATA TRUST**

Bombay House, Bruce Street, Bombay 1.

**SIR JAMSETJEE JEJEEBHAY PARSSEE BENEVOLENT INSTITUTION**

209, Dr. Dadabhai Naoroji Road, Fort, Bombay.

**SIR RATAN TATA CHARITIES**

Bombay House, Bruce Street, Fort.

**SOCIETY FOR THE CARE, TREATMENT AND TRAINING OF CHILDREN IN NEED OF SPECIAL CARE**

Sewri Hill, Sewri Road, Bombay 33.

**SOCIETY FOR THE EDUCATION OF THE CRIPPLED**

Chunilal Mehta Scout-Guide Hut, Mahatma Gandhi Road, Bombay 1.

**SOCIETY FOR THE PROTECTION OF CHILDREN IN WESTERN INDIA**

The Byramjee Jeejeebhoy Home for Children, Matunga, Bombay 19.

**SOCIETY FOR THE REHABILITATION OF CRIPPLED CHILDREN**

Haji Ali Park, Clerk Road, Mahalakshmi, Bombay 11.

**ST. ANTHONY'S HOME**

Bellasis Road, Byculla, Bombay 8.

Orphanage, School and foundling home.

**ST. CATHERINE'S HOME**

Andheri, Bombay.

Home for unwanted, homeless, poor babies, children and youngsters.

**ST. FRANCIS D'ASSISI HIGH SCHOOL & ORPHANAGE**

Mount Painsur, P.O. Borivli, Bombay 92.

**ST. JOHN AMBULANCE ASSOCIATION**

MAHARASHTRA STATE CENTRE

141, Mint Road, Bombay 1.

**ST. JOHN AMBULANCE BRIGADE (INDIA)**

No. 3 District, Maharashtra.

*District Headquarters.*—Red Cross and St. John Ambulance Building, Town Hall Compound, Fort, Bombay.

**ST. JOHN AMBULANCE BRIGADE (INDIA)**

COSMOPOLITAN DIVISION

Divisional Headquarters—Sir Byramji School, opposite Charni Road Station, Bombay.

**ST. JOHN AMBULANCE BRIGADE (INDIA)**

Parsi Division

Lady Willingdon Building,  
1, Mahatma Gandhi Road, Fort, Bombay.

**ST. JOHN AMBULANCE BRIGADE (OVERSEAS)**

MUSLIM AMBULANCE DIVISION

152-154, Kambekar Street, Bombay 3.

**ST. JOHN AMBULANCE BRIGADE (OVERSEAS)**

MUSLIM NURSING DIVISION

152-154, Kambekar Street, Bombay 3.

**SWASTIK LEAGUE**

Seth Varjivandas Motilal Swastik Mandir,  
Vithalbhai Patel Road, Bombay 4.

**TAHERI SCHOLARSHIP SOCIETY**

Mohamedji Baug, 21, Sarang Street, Bombay 3.

**VANITA VISHRAM**

Sardar Vallabhbhai Patel Road, Bombay 4.

Vanita Vishram, a pioneer women institution, is a monument of Social Reform and a unique institution working in the field of education, social reform and uplift of women for the last 50 years. The institution aims at ameliorating the condition of women in the States of Maharashtra and Gujarat and also elevating their social status. It conducts Primary Teachers' Training Colleges, Primary Schools, College Hostels and Ashrams at Bombay and Surat.

*Hon. Secretary:* Mrs. Kanta Khandwala, B.A.

**VICENTA MARIA SOCIAL SERVICE SOCIETY**

Regina Pacis, Seth Motishah Lane, Victoria Gardens, Bombay 27-DD.

This Society, conducted by the Daughters of Mary Immaculate, has the following activities:—1. Residential Training Centre, Club and Employment Bureau for Houseworkers. 2. Home and School for destitute children. 3. Hostel for working girls and students. 4. Regina Pacis Free Dispensary for the poor.

**VICTORIA MEMORIAL SCHOOL FOR THE BLIND**

Tardeo Road, Bombay.

**FORT OFFICE**—C/o Jayant Trading Co., Sir Vithaldas Chambers, Apollo Street, Fort, Bombay.

**THE WORKSHOP FOR THE BLIND**

Dr. Annie Besant Road, Worli, Bombay 18.

The aim of the Workshop is to provide congenial and remunerative employment to adult blind and thereafter to place them in open industries on simple repetitive jobs.

*Chairman:* Homi J. H. Taleyarkhan. *Vice-Chairman:* Vijay M. Merchant. *Hon. Secretaries:* Capt. H. J. M. Desai, Lt. G. L. Nardekar, Prabodh B. Vaidya, M. H. Mirchandani.



## CULTURAL, POLITICAL, PROFESSIONAL, SCIENTIFIC AND SOCIAL INSTITUTIONS IN GREATER BOMBAY

### AERONAUTICAL SOCIETY OF INDIA

Room No. 221, T.H.Q. Bldg., Air India, Bombay 29.

*President* : S. G. Deshpande ; *Vice-President* : K. G. Appuswamy ; *Treasurer* : S. B. Dravid ; *Secretary* : B. A. Swamirao.

### AKHIL BHARATIYA C.K.P. HITAWARDHAK SANSTHA

C.K.P. Dnyatigraha, Ram Maruti Road, Dadar, Bombay 28.

### THE ALL BOMBAY CONSUMERS' CO-OPERATIVE SOCIETIES FEDERATION LTD.

3rd Floor, 18, Military Square Lane, Fort, Bombay 1.

### ALL-INDIA ANGLO-INDIAN ASSOCIATION

Brabourne Stadium, Vir Nariman Road, Bombay 1.

### ALL-INDIA FEDERATION OF TRANSPORT USERS' ASSOCIATIONS

196/B, Galwadi, Girgaon, Bombay 4.

### ALL-INDIA FOOTBALL FEDERATION

92, Dr. Dadabhoy Naoraji Road, Bombay 1 BR.

*President* : M. Dutta Ray ; *Vice-Presidents* : Pankaj Gupta, N. Vittal ; *Hon. Treasurer* : Capt. B. R. K. Tandon ; *Hon. Secretary* : K. Ziauddin.

### ALL-INDIA INSTITUTE OF LOCAL SELF- GOVERNMENT

Established 1951.

11, Horniman Circle, Fort, Bombay 1.

An association of Local Bodies established with a view to advancing the study and knowledge of the principles and practice of Local Self-Government.

### ALL INDIA INSURANCE AGENTS' ASSOCIATION

Rajabhdur Compound, 19, Bruce Street, Bombay 1.

### ALL-INDIA MARATHA MAHILA PARISHAD

C/o Smt. Shantabai Daundkar, Bhal Jeevanjee Lane, Thakurdwar, Bombay 2.

### ALL-INDIA OCCUPATIONAL THERAPISTS' ASSOCIATION

C/o Servants of India Society, Sardar V. Patel Road, Bombay-4.

### ALL-INDIA PRIMARY TEACHERS' FEDERATION

C/o Shri M. V. Donde, 'Tapodan', Bandra, Bombay 50.

### THE ALL INDIA STATE CO-OPERATIVE BANKS' FEDERATION LTD.

C/o The Maharashtra State Co-operative Bank Ltd., 9, Bakehouse Lane, Fort, Bombay 1.

*Chairman* : Dr. Dhananjayrao Ramachandra Gadgil ; *Vice-Chairman* : K. P. Pande ; *Hon. Gen. Secy.* : V. M. Joglekar.

### ALL-INDIA TELEPHONE ASSOCIATION LTD.

12, Fort Chambers, Hamam Street, Bombay 1.

*President* : H. H. Ismail ; *Vice-Pres.* : P. M. Shah ; *Jt. Hon. Secy.* : B. J. Nichani.

### ANTHROPOLOGICAL SOCIETY OF BOMBAY

C/o K. R. Kama Oriental Library, 136, Apollo Street, Bombay 1.

### ANTI-CORRUPTION SOCIETY

23, Bell Bldg., 2nd Floor, Sir P. M. Road, Bombay.

*Gen. Secretary* : C. B. L. Bhatnagar.

### AQUARIST SOCIETY OF INDIA

Sales Service Centre: Fish Fantasy, New Citizen Bank Bldg., Near Palton Road, Bombay 1.

### ARCHBISHOP'S EMPLOYMENT BUREAU

National Sodality Centre, Sodality House, Victoria Garden Road, Bombay 8.

### ART SOCIETY OF INDIA

Sandhurst House, Sandhurst Road, Bombay 4.

### ARUNODAYA KALA NIKETAN

34/1201, Tilak Nagar, Chembur, Bombay 71.

*Aims and Objects* : First Cultural Institution in Bombay where free tuition is given in classical and traditional dance and music for deserving students irrespective of caste and creed.

### ARYA SAMAJ

96-98, Bora Bazar Street, Fort, Bombay 1.

### THE ASIATIC SOCIETY OF BOMBAY

Town Hall, Bombay 1.

### ASSOCIATION FOR MORAL AND SOCIAL HYGIENE

Barrack No. 4, Behind 'Yeshodhan', Dinshaw Wachha Road, Bombay-1.

### THE ASSOCIATION OF THE FRIENDS OF THE MENTALLY ILL

265/266, Sahakar Nagar, M. H. Board Bldg. No. 9, Chembur, Bombay 71.

### ASSOCIATIONS OF PHYSICIANS OF INDIA

Land Mansion, 3rd Floor, 21, New Queen's Road, Bombay 4.

*President* : Dr. N. J. Modi ; *Hon. Gen. Secy.* : Dr. C. V. Talwalkar.

### AYURVED PRACHAR SANSTHA

143B, Gowalla Tank Road, Cumballa Hill, Bombay 26.

### BAL BHAVAN

Balodyan, Netaji Subhas Road, Bombay 4.

### BALKAN-JI-BARI

(THE CHILD WELFARE ASSOCIATION OF INDIA) and its Youth Section AKHIL HIND YUVAK SANGH (THE ALL-INDIA YOUTH ASSOCIATION). "Gulistan," Khar, Bombay 52 AS.

Founded in 1923. Children of its various local units all over India meet frequently for stories, songs, games, arts, handicrafts, picnics, outings, excursions, trips and tours. The Association conducts a quarterly English journal *The Home and the World* and also magazines in Indian languages.

*Founder-Director* : Dada Shewak Bhojraj ; *President* : S. K. Patil ; *Dy. President* : Achamma J. Matthal ; *Secretary-General* : G. B. Kotak ; *Treasurer* : P. G. Kher.

### BHAGINI SEVA MANDIR KUMARIKA STREE MANDAL

Sarojini Road, Vile Parle West, Bombay 56.

### BHARAT SEVAK SAMAJ

Narandas Building, Sprott Road, Ballard Estate, Fort, Bombay.

A national organisation dedicated to the task of promoting national sufficiency.

### BHARATIYA DEPRESSED CLASSES LEAGUE

112, Medows Street, Bombay 1.

### BHARATIYA MUSIC AND ARTS SOCIETY

11/138, Poornima, Wadala, Bombay 31.

Besides encouraging Carnatic music, also runs a music school.

### BOMBAY ADULT EDUCATION ASSOCIATION

136, Apollo Street, Bombay 1.

### BOMBAY ADVOCATES' ASSOCIATION

Small Causes Court, Carnac Road, Bombay.

### THE BOMBAY AMATEUR LIGHT OPERA SABHA

*Care* : The Wesley Hall, 62, The Causeway Colaba, Bombay 1.

### BOMBAY ANDHRA MAHASABHA (REGD.)

Lakhamai Nappoo Road, Hindu Colony, Dadar, Bombay 14.

### BOMBAY AQUARIUM SOCIETY

Taraporevala Aquarium, Bombay 2.

### BOMBAY ART SOCIETY

Jehangir Art Gallery, Bombay 1.

### THE BOMBAY ASSOCIATION OF HEADS OF SECONDARY SCHOOLS

C/o Bazargate High School, Gunbow Street, Bombay 1.

*President* : B. B. Desai ; *Vice-President* : N. G. Joshi ; *Secretary* : Jagdish Joshi *Treasurer* : P. C. Gadre.

### THE BOMBAY ASTROLOGICAL SOCIETY

C/o Janmabhoomi Panchang Karyalaya, 22/26, Ghoga Street, P. Box No. 62, Fort, Bombay.

### BOMBAY CHARTERED ACCOUNTANTS SOCIETY

60, Forbes Street, Fort, Bombay 1.

### BOMBAY CONTRACT BRIDGE ASSOCIATION

Brabourne Stadium (North Stand), Veer Nariman Road, Bombay 1.

### THE BOMBAY CO-OPERATIVE HOUSING FEDERATION LTD.

19, Bell Building, Sir P. M. Road, Fort, Bombay 1.

Regd. 1948, Membership : 1,109 ; *Chairman* : A. N. Samant ; *Vice-Chairman* : M. V. Thakur ; *Hon. Secy.* : G. G. Kamat ; *Jt. Hon. Secy.* : K. R. Prabhudesai ; *Hon. Treasurer* : C. Lachhmandas.

### BOMBAY CULTURE COMMUNE

21, Hatim Manzil, 149, Frere Road, Carnac Bunder, Bombay 1.

### BOMBAY GUJARATI CHRISTIAN ASSOCIATION

Gopal Bhuvan, Bapubhai Vashi Road, Vile Parle (West), Bombay 57.



**BOMBAY HALAI BHATIA MAHAJAN**  
398, Kalbadevi Road, Bombay 2.

**BOMBAY HISTORICAL RESEARCH ASSOCIATION**  
Secretariat Record Office, Elphinstone College Bldg., Bombay 1.

**BOMBAY HOMOEOPATHIC ASSOCIATION**  
311, Tardeo Road, Bombay 7.

**BOMBAY INCORPORATED LAW SOCIETY**  
High Court, New Bldg., Bombay 1.

**BOMBAY KANNADA SANGHA**  
2, Venkatesh Nivas, Bhau Daji Road, Matunga, Bombay 19.

**BOMBAY KERALA SAMA**  
Plot 16A, "Kerala Bhavanam", K. A. Subramanian Road, Matunga, Bombay 19.

**BOMBAY LABOUR BUREAU**  
Nagpada Neighbourhood House, Byculla, Bombay 8.

**BOMBAY LABOUR INSTITUTE**  
(Government of Maharashtra)  
Dadabhoy Chamarbaugwala Road, Parel, Bombay 12.

*Director* : Dr. B. S. Bhir. *Registrar* : Miss N. S. Yadav.

Since July 1959 the Institute has been recognised by the Bombay University as a post-graduate institution of specialised studies leading to 2-year University Diploma in Labour Welfare (D.L.W.). The course is open to Degree holders in B.A., LL.B., or B.Com. of Bombay University or any other recognised University. B.Sc.s, are admitted with prior approval of the University.

The Institute is now also training Government Labour Officers, in the short in-service training course of six months' duration; and the successful candidates are awarded the Labour Officers' Certificate (L.O.C.) of the State Government.

The Institute has started a full time one-year post Intermediate (relaxable to S.S.C. level) Diploma Course in Trade Unionism on behalf of the Maharashtra Government with a view to equipping workers and others concerned with the welfare of workers with adequate information and knowledge on scientific trade unionism, to encourage workers to become healthy and sound Trade Unionists, to promote better industrial relations and to strive for unity in the Trade Union movement.

The Institute operates the State Workers' Education Scheme on behalf of the Government to train and discipline the mind of the workers, to enable them to be good and efficient workers and to promote better industrial relations. The class is open to all factory workers and each session lasts for 3½ months.

On behalf of the Planning Commission the Institute conducts from time to time Case-studies of Labour-Management Relations in different units.

**THE BOMBAY MADRIGAL SINGERS' ORGANISATION**  
Oak Chambers, 9, Oak Lane, Bombay 1.

**BOMBAY MANAGEMENT ASSOCIATION**  
Army and Navy Bldg., 3rd Floor, Mahatma Gandhi Road, Bombay 1.

The aim of the Association is to promote mutual exchange of knowledge, experience and ideas on the principles and practices of Management among its members; to co-operate with educational institutions in developing schemes of instruction in Management principles and practice; to establish a Management Library in the Bombay area.

*President* : M. R. Shroff; *Executive Secy.* : V. B. Tendulkar.

**BOMBAY MEDICAL UNION**  
(Estd. 1883)

Blavatsky Lodge, French Bridge, Chowpatty, Bombay 7.

*President* : Dr. H. S. Patel; *Vice-Presidents* : Dr. Rustom Jal Vakil, Dr. N. V. Vijayakar; *Hon. Treasurer* : Dr. B. K. Vibhakar; *Jt. Hon. Secretaries* : Dr. U. N. Bastodkar; Dr. Smt. D. V. Meisheri.

**BOMBAY NATURAL HISTORY SOCIETY**  
Hornbill House, Opp. Lion Gate, Apollo Street, Bombay 1.

Founded 1883, devoted entirely to advancement of the study of natural history of the Oriental Region.

*President* : Governor of Maharashtra; *Hon. Secretary* : Zafar Futehally.

**BOMBAY PARSEE ASSOCIATION**  
Darya Building, 375, Dr. D. N. Road, Fort, Bombay 1.

*President* : Major S. R. Bamji, M.B.E.; *Vice-Presidents* : B. M. Daruwala; P. N. Gandhi; J. F. Shroff; *Hon. Joint Treasurers* : Miss B. D. Gilder, Pheroze M. Reporter; *Hon. Gen.-Secy.* : T. B. Chinoy.

**BOMBAY PHYSICAL CULTURE ASSOCIATION**  
22, Nikadwari Lane, Girgaum, Bombay 4.

**BOMBAY PRADESH CONGRESS COMMITTEE**  
Congress House, V. P. Road, Bombay 4.

**BOMBAY PRESIDENCY ASSOCIATION**  
107, Mahatma Gandhi Road, Bombay 1.

**BOMBAY PSYCHOLOGICAL ASSOCIATION**  
Department of Applied Psychology, Univ. of Bombay, Bombay 1.

**BOMBAY SANITARY ASSOCIATION**  
C/o Public Health Dept., Municipal Office Extn. Bldg., Bombay 1.

**BOMBAY SCHEDULED CASTES IMPROVEMENT TRUST**  
Buddha Bhushan Printing Press Building, Gokuldas Pasta Road, Dadar, Bombay 14.

**THE BOMBAY SHORTHAND WRITERS' ASSOCIATION**

*Regd. Office* : No. 1, Krishna Nivas, Station Road, Matunga, Bombay 19; *Branch Office* : 3/3, Kailas Kripa, Scheme, 6, Road 1, Sion (East), Bombay 22.

**BOMBAY SOCIAL HYGIENE COUNCIL**  
10, Waterloo Mansions, Apollo Bunder, Bombay 1.

**BOMBAY SOCIAL REFORM ASSOCIATION**  
Servants of India Society's Home, Sardar V. Patel Rd., Bombay 4.

**BOMBAY SOCIETY OF MODEL ENGINEERS**  
Noble Chambers, Rooms 23 and 24, Parsi Bazar Street, Bombay-1.

**BOMBAY STATE CHESS ASSOCIATION**  
C/o Parsian Restaurant, Bruce Street, Bombay 1.

**BOMBAY STATE CYCLING ASSOCIATION**  
14-A, Jamal Mansion, Sleater Road, Bombay 7.

**BOMBAY STATE VOLLEYBALL ASSOCIATION**  
Morarji Mills Ltd., Parel, Bombay 12.

**BOMBAY SUBURBAN VILLAGE INDUSTRIES ASSOCIATION**  
Basement, Khadi Emporium, 286, D. N. Road, Bombay 1.

**BOMBAY TAMIL SANGAM**  
Sion Road, Bombay 22.

**BOMBAY TENANTS' ASSOCIATION**  
17, Benham Hall Lane, Bombay 4.

**THE BOMBAY TEXTILE RESEARCH ASSOCIATION**  
Bombay-Agra Road, Ghatkopar, Bombay 77.  
*Chairman* : Krishnaraj M. D. Thackersey; *Director* : Dr. C. Nanjundayya.

**BOMBAY UNION OF JOURNALISTS**  
Prospect Chambers Annexe, 2nd Floor, Dadabhai Naoroji Road, Bombay 1.  
*Chairman* : P. K. Ravindranath; *Secretary* : F. P. Dias.

**BOMBAY VIGILANCE ASSOCIATION**  
124, Dadasaheb Phalke Road, Bombay 14.

The objects of the Association are (1) to secure recognition of the principle that the moral law is the same for both men and women; (2) to suppress and prevent the traffic in women and girls and the outrage, corruption, abduction and prostitution of persons under eighteen; (3) to do rescue and vigilance work in general; (4) to see that the provisions of the Indian Penal Code and of the Prevention of Prostitution Act of 1923, are efficiently carried out; (5) to prevent the publication and sale of indecent and obscene pictures, books and papers, and of objectionable advertisements, cinema films and theatrical performances, and (6) to carry on active propaganda work for the ultimate and complete abolition of brothels. It maintains a shelter for forsaken and destitute women of all communities.

**BOMBAY WOMEN'S HOCKEY ASSOCIATION**  
C/o Bombay Hockey Association Ltd., 'D' Road, Churchgate Reclamation, Bombay-1.

**BOMBAY WOMEN'S WORK GUILD**  
Readymoney House, Nepean Sea Road, Bombay 6.

**BOMBAY ZIONIST ASSOCIATION**  
(Central Organisation in India)  
63-67, Meadows Street, Fort, Bombay, P.O. Box 539.

**BRAHMAN SAHAYYAK SANGH**  
Ganesh Wadi, D. L. Vaidya Road, Dadar, Bombay No. 28 and Plot No. 113-115, Shivaji Park Road No. 8, Bombay 28.

**CERCLE LITTERAIRE BIBLIOTHEQUE DINSHAW PETIT—1886**  
60, Forbes Street, Bombay 1.

*Object* : To promote the study of French language, literature and civilization, Library and Reading Room.

**CHILDREN'S FILM SOCIETY (INDIA)**  
Hingorani House, Worli, Bombay 18.  
*Chairman* : Smt. Nandini Satpathy.

The following States & Union Territories are members :

Andaman & Nicobar Islands, Bihar, Gujarat, Goa, Daman and Diu, Laccadive & Minicoy Islands, Madras, Madhya Pradesh, Manipur, Mysore, Nagaland, Pondicherry, Rajasthan, Tripura, Uttar Pradesh and West Bengal.



**CITIZEN'S NATURE CURE SOCIETY**

C/o Dr. J. M. Jussawalla, 140, Cumballa Hill, Bombay 26.

**THE COLOUR SOCIETY**

C/o Blundell Eomite Paints Limited, 1st Victoria Cross Lane, Mazagon, Bombay 10.

**COMMERCE GRADUATES' ASSOCIATION**  
Wadia Bldg., Dalal Street, Fort, Bombay 1.

**COMMUNIST PARTY OF INDIA**

*Bombay Council:* Dalvi Bldg., Parel, Bombay 12.  
*Secretary:* P. B. Waidya.

**COMPANY SECRETARIES ASSOCIATION OF BOMBAY**

4th Floor, Elysium Mansion, Walton Road, Colaba Causeway, Bombay 1.

The main object is to promote and popularise the profession of Company Secretaries.

*President:* S. H. Gursahani; *Vice-President:* Mrs. Khorshed D. P. Madon, D. B. Puri, *Hon. Secretary:* A. P. S. Mani; *Hon. Treasurer:* V. Narayanan.

**COUNCIL OF INDUSTRIAL SAFETY**

Elphinstone Bldg., Veer Nariman Road, Bombay 1.

**THE CRAFTS COUNCIL OF INDIA**

Theosophy Hall, 40, New Marine Lines, Bombay 1.

The Crafts Council of India is a non-official organisation for the promotion of the cultural and creative aspects of Crafts in India. It forms a link between Craft Councils in other countries as well as in the country itself.

The work of the Crafts Council of India includes a quarterly Newsletter and an Annual, exhibitions, survey of craft education in schools, promotion of Craft Museums in the country, liaison work between craftsmen and connoisseurs and promotion of creative hobbies.

*Founder Patron:* Mme. Kamladevi Chattopadhyaya; *President:* Mme. Sophia Wadia; *Vice-Presidents:* C. Venkatachallam; Lady Ranu Mookerjee; Smt. H. J. H. Taleyarkhan; *Chairman:* Smt. Kamala S. Dongerkery; *Vice-Chairman:* Smt. Lalita Dixit; *Hon. Treasurer:* Smt. Hemlata C. Mariwala; *Hon. Secretary:* Smt. Enakshi Bhavnani.

**DEMOGRAPHIC TRAINING & RESEARCH CENTRE**

Govandi, Bombay 71.

The Government of India, in collaboration with Sir Dorabji Tata Trust and the United Nations, have established in 1957 a Demographic Training and Research Centre at Bombay. It is intended to serve the training & research needs of not only India but also other Asian countries.

Upto the session ending in June 1966, the Centre has trained 113 Indian and 74 foreign persons for the different courses. It has developed research programmes.

*Chairman:* Dr. V. K. R. V. Rao; *Director:* Dr. S. P. Jain.

**DEPRESSED CLASSES MISSION SOCIETY OF INDIA**

112, Meadows Street, Fort, Bombay.

**DEVADIGA SUDHARAKA SANGHA**  
108, Bora Bazar Street, Bombay 1.

**DIABETIC ASSOCIATION OF INDIA**

Maneckji Wadia Bldg., 1st Floor, 127, Mahatma Gandhi Road, Bombay 1.

*President:* Dr. B. V. Sathe; *Vice-President:* Dr. Mangaldas N. Verma; *Chairman:* C. E. Lalkaka; *Hon. Secretary:* Dr. S. S. Ajgaonkar;

*Hon. Jt. Secy.:* Dr. T. P. Vyas, Dr. M. K. Dhirwan; *Hon. Treasurer:* Dr. L. S. Desai; *Editor:* Dr. C. V. Talwalkar.

Publishes a Quarterly Journal 'MADHUMEHA' (A Guide for the Diabetic).

**EAST BOMBAY BHARAT SCOUTS & GUIDES DISTRICT ASSOCIATION**

*Headquarters:* The Chunilal Mehta Scout and Guide Hut, Mahatma Gandhi Road, Bombay.

**EMPIRE OF INDIA PHILATELIC SOCIETY**

C/o Dr. M. U. Mascarenhas, Victoria Garden Road, Bombay 27.

**ENGINEERING ASSOCIATION OF INDIA**

Western Region.

Brabourne Stadium, 87, Veer Nariman Road, Bombay 1.

**EX-SERVICES ASSOCIATION, INDIA BOMBAY BRANCH**

Cook's Building (2nd floor), Dr. Dadabhoy Nowroji Road, Bombay 1.

**FEDERATION OF BOMBAY MOTOR TRANSPORT OPERATORS LTD.**

26, Frere Road, Wadi Bunder, Bombay 9.

**FEDERATION OF CUSTOM HOUSE AGENTS' ASSOCIATIONS IN INDIA**

Warden House, Sir P. M. Road, Bombay 1.

**FILM FEDERATION OF INDIA**

The Central Organisation of the Indian Film Industry.

91, Walkeshwar Road, Bombay 6.

*President:* C. V. Desai; *Vice-Presidents:* Roshanlal Malhotra, Ajit Bose and Al Srinivasan; *Hon. Treasurer:* P. K. Bhandarkar.

**FIRE SALVAGE ASSOCIATION OF BOMBAY LTD.**

Radia House, 6, Rampart Row, Bombay 1.

**THE FORMANITES**

C/o National Advertising Service P. Ltd., 4th Floor, Khorshed Bldg., Sir P. M. Road, Bombay 1.

**FORUM OF FREE ENTERPRISE**

"Sohrab House", 235, Dr. Dadabhai Naoraji Road, Bombay 1.

**FRIENDS OF THE TREES**

27, Prospect Chambers Annexe, Dr. D. N. Road, Bombay-1.

(A Fellowship of tree-lovers seeking to create and foster a treesense in the country).

**GANDHI SEVAK SAMAJ**

Mani Bhavan, 19, Laburnum Road, Gamdevi, Bombay 7.

**GOAN UNION EDUCATIONAL TRUST**  
75, Princess Street (West), Bombay.

**GOREGAON MALAYALEE SAMAJ**

Topiwala Dispensary Road, Goregaon, Bombay 62.

**GOMANT BHARATI**

J. K. Building No. 4/20, Gamdevi, Bombay No. 7.

**GRAND CHAPTER OF UNITED SCOTTISH ROYAL ARCH FREEMASONRY OF INDIA & PAKISTAN**

17, Murzban Road, Fort, Bombay.

**THE GREATER BOMBAY CO-OPERATIVE BOARD, LIMITED.**

"Dhannur Building", Sir Phirozshah Mehta Road, Fort, Bombay 1.

**GUJARAT RESEARCH SOCIETY**

*The Main Office:* Samsodhana Sadan, South Avenue, Khar, Bombay-52.

*President's Office:* Lalit Kunj, 11th Road, Khar, Bombay-52.

*Branch:* Paladi (West), Ahmedabad 7.

**OBJECTS.**—(1) to promote research in all branches of knowledge, (2) to collect and publish information relating to Gujarat and city of Bombay, (3) to foster inter-relations with other parts of India and the world. Publishes a *Quarterly Journal of Research*.

*President:* Dr. H. I. Jhala; *Vice-Presidents:* P. G. Shah, Dr. M. B. Nanavati, Dr. D. T. Lakdawala, Dr. (Mrs.) M. B. Shah, Dr. K. M. Munshi, M. C. Parekh; *Hon. Treasurers:* B. D. Randeri, H. C. Khatriwala; *Hon. General Secretary:* S. P. Desai.

**GUJARATI HINDU STREE MANDAL**

123, Vithalbhai Patel Road, Bombay 4.

**HAFFKINE INSTITUTE**

Parel, Bombay 12.

Haffkine Institute is the principal State medical research institute of Western India. In addition, it carries out large-scale manufacture of plague, cholera, T.A.B. and anti-rabic vaccines; anti-toxins, sera and toxoids, vitamin and sulfa tablets, intravenous solutions, etc. It also undertakes drug testing and clinical pathological work of a higher type and of specialised nature, facilities for which do not exist elsewhere. It is recognised as a Post-Graduate Institution.

*Director:* Dr. H. I. Jhala.

**HIND MAZDOOR SABHA**

(National Headquarters)

Nagindas Chambers, 167, P. D'Mello Road, Bombay 1.

*President:* Deven Sen; *Gen. Secy.:* Manohar Kotwal; *Treasurer:* Kisan Tulpule; *Membership:* 765,000.

**INDIAN ASSOCIATION OF INDUSTRIAL EDITORS**

*Office:* Army & Navy Building (3rd Floor), Mahatma Gandhi Road, Fort, Bombay 1.

**INDIAN CANCER SOCIETY**

Tata Memorial Hospital, Parel, Bombay 12.

It is a non-Govt. and non-profit organisation and a Registered Public Trust.

Scientific investigation of the cause, prevention and control of Cancer, public education on Cancer and education of the medical profession in latest methods of detection, diagnosis and treatment of cancer; combating quackery; sponsoring of research — both fundamental and clinical on the diagnosis, treatment and cure of Cancer. Free detection centres, international co-operation in research, visiting professorships, award of scholarships and fellowships in Cytology, Chemotherapy and Rehabilitation; relief and rehabilitation of indigent Cancer patients; donation of apparatus to hospitals and research institutions; Organisation of All India Cancer Conferences, Cancer Exhibitions; Organisation of the Bombay Cancer Registry; Publication: The Indian Journal of Cancer-quarterly.

*Chairman:* N. H. Tata; *Vice-Chairman:* F. H. Kemple; *Hon. Treasurer:* P. A. Narielwala; *Hon. Secretary:* Dr. D. J. Jussawalla.

**INDIAN CHEMICAL SOCIETY**

(Bombay Branch)

Institute of Science, Mayo Road, Bombay 1.



**INDIAN COMMITTEE FOR CULTURAL FREEDOM**

148, Mahatma Gandhi Road, Bombay 1.

**INDIAN CONFERENCE OF SOCIAL WORK***Central Office* : 175, Dadabhoy Naoroji Road, Bombay 1.

The Indian Conference of Social Work is a central national organization for the promotion of social welfare in India.

*President* : Smt. M. Clubwala Jadhav; *Vice-Presidents* : Smt. Rajan Nehru, Smt. Zarina E. G. Currimbhoy, S. R. Venkataraman; *Hon. Treasurers* : P. R. Bhatt, N. C. Chaturvedi, Vasudeo K. Naik; *Hon. General Secretary* : N. F. Kaikobad; *Hon. Associate Secretaries* : Sushil Chandra, Smt. Roda Mistry, M. Jaya-seelan; *Hon. Public Relations Officer* : D. M. Tahiramani; *Executive Secretary* : S. D. Gokhale.

Indian Conference of Social Work is a National Committee of the International Conference of Social Work.

**INDIAN COUNCIL FOR CULTURAL RELATIONS***W. Regional Office* : Kimatrai Bldg., 79, Queen's Road, Bombay 2.**INDIAN COUNCIL OF MANAGEMENT EXECUTIVES**

P. Box 4586, Bombay 8.

**THE AIMS ARE** :—To promote and develop the Science of Management in Industry. To conduct short term training courses in Management. To compile a national Directory for Management Executives. To conduct Management Executive Training College.

*President* : Prof. A. R. Wadia; *Vice-President* : H. H. Ismail, J.P.; *Hon. Gen. Secretary* : K. S. Gupta; *Hon. Treasurer* : J. P. Bhardwaj.

**INDIAN DENTAL ASSOCIATION**

India House, 122, Cumballa Hill, Bombay 26.

*Hon. Gen. Secretary* : Dr. Fali S. Mehta; *Editor of the Journal of the All India Dental Association* : Dr. H. D. Merchant; *Public Relations Officer* : Col. N. N. Bery.

**INDIAN DOCUMENTARY PRODUCERS' ASSOCIATION**

National House, Tulloch Road, Bombay 1.

**INDIAN ECONOMIC ASSOCIATION**

Dept. of Economics, Univ. of Bombay, Bombay.

**INDIA FILM DIRECTORS' ASSOCIATION**

Ranjit Studios, Dadar, Bombay 14.

**INDIAN HISTORY CONGRESS**

9, New Marine Lines, Bombay 1.

**THE INDIAN INSTITUTE OF WORLD CULTURE**

(Bombay Branch)

Theosophy Hall, 40, New Marine Lines, Bombay 1.

**INDIAN MEDICAL ASSOCIATION (Bombay Branch)**

Shri Nivas, Sardar Vallabhbhai Patel Road, Bombay 4.

**INDIAN NATIONAL THEATRE**

Agakhan Building, 9, Dalal Street, Bombay 1

**INDIAN RAILWAY PASSENGERS CONFERENCE ASSOCIATION**

23, Bell Building, Sir Phirozshah Mehta Road Bombay 1.

Assistance to railway passengers in their dealings with the Railways with regard to their obligations to each other; restoration of run-away

boys to their parents; elimination of crimes on railways against the person and property of railway passengers; free legal help to railway passengers; establishment of Poor Homes to house, medically treat and otherwise rehabilitate disabled and destitute persons infesting in and around railway premises; to hold conferences and to organise exhibitions to display the progress and development of the transport industry.

*President* : C. B. L. Bhatnagar; *Vice-Presidents* : M. J. Divwala, Shankarlal N. Bajaj; *General Secretary* : Prem Bhatnagar.

**INDIAN RUBBER MANUFACTURERS' RESEARCH ASSOCIATION**

Rahimtoola House, 7, Homji Street, Fort, Bombay.

**INDIAN SOCIETY OF AGRICULTURAL ECONOMICS**

46-48, Esplanade Mansions, Mahatma Gandhi Road, Fort, Bombay.

**INDIAN SOCIETY OF RAYON TECHNOLOGISTS**

144, Dharavi Road, Bombay 17.

**THE INDO-AMERICAN SOCIETY**

Kitab Mahal, 5, Ravelin Street, Bombay 1.

**OFFICE BEARERS** : *Life President* : Sir Homi P. Mody; *Executive President* : G. L. Mehta; *Vice-Presidents* : Murarji J. Vaidya, J. V. Bhagat, Vincent Depaul Ryan; *Hony. Treasurer* : William T. Goldrick; *Hony. Secretaries* : Mrs. Lily A. Pandya, Herbert Baumgartner; *Executive Secretary* : N. Krishnan.

**INDO-ARAB SOCIETY**

12, Nagin Mahal, Veer Nariman Road, Bombay 1

**INDO-GERMAN CULTURAL SOCIETY**

127, Mahatma Gandhi Road, Bombay 1.

*President* : S. K. Patil; *Vice-President* : Dr. K. Vogl; *Gen. Secretary* : M. R. Vyas.

**INDO-GERMAN SOCIAL CENTRE**

Lansdowne House, Lansdowne Road, Bombay 1.

**INDO-JAPANESE ASSOCIATION**

12, Rampart Row, Bombay 1.

**INDO-SOVIET CULTURAL SOCIETY NATIONAL COUNCIL**

Syndicate Bank Building, 4th Floor, Phirozshah Mehta Road, Fort, Bombay 1.

**INSTITUTE OF INDUSTRIAL ENGINEERS (INDIA)**

C/o Voltas Ltd., Ballard Estate, Bombay 1.

**INSTITUTE OF SOCIAL SERVICE**

Nirmala Niketan, 38, New Marine Lines, Bombay.

**THE INSTITUTION OF ELECTRICAL ENGINEERS**

1, Forbes Street, Fort, Bombay 1.

**INSTITUTION OF ENGINEERS (INDIA) Bombay Centre.**

*Library, Reading Room and Office* : Ilaco House, Sir Pherozeshah Mehta Road, Bombay 1.

**INTERNATIONAL CONFERENCE OF SOCIAL WORK**

Regional Office for South East Asia and Western Pacific Region

175, Dadabhay Naoroji Road, Bombay 1.

A Regional Office for South East Asia & Western Pacific has been established in Bombay

to assist the Social Welfare Development work in 21 countries (15 National Committees and 6 Ad-hoc Committees). The Regional Office publishes an International Journal titled as "International Social Work". The Assistant Secretary General for the Regional Office is S. D. Gokhale.

**IRAN LEAGUE**

Navsari Building, D. Naoroji Road, Bombay 1.

**ISMAILIA ASSOCIATION**

For India.

Karimabad, Imamwada Road, Bombay 9.

The object is uplifting and elevating the poor without distinction of caste or creed.

**JAMSETJEE NESSERWANJEE PETIT INSTITUTE**

312, Dr. Dadabhoy Naoroji Road, Bombay 1.

Library and Reading Room. Established 1856. Membership about 7,000. Over 400 periodicals subscribed. Book Stock about 83,000.

*President* : Sir Dinshaw M. Petit, Bart.; *Vice-President* : Nesserwanjee H. Sethna; *Hon. Secretary* : Jehangir S. Chiniwala; *Hon. Treasurer* : Nanabhoy B. Jeejeebhoy; *Librarian* : A. F. Daboo.

**KANARA SARASWAT ASSOCIATION**

13, 1-2, Association Building, Talmakiwadi, Tardeo Road, Bombay, 7 W.B.

**KERALEEYA MAHILA SAMAJ**

Cadell Road, Shivaji Park, Bombay 6.

**KHORSHEH MANDAL**

C/o Messrs. Gagrath &amp; Co., Ali Chambers, Meadows Street, Bombay 1.

**KOLI YUVAK SANGHA**

475, Madhavrao Rokde Street, Bombay 9.

**LIBERTERRIAN SOCIAL INSTITUTE**

Sardar Vallabhbhai Patel Road, Bombay 4.

**LOK SEVA MANDAL**

Sir Vithaldas Chambers, 4th Floor, 16, Apollo Street, Fort, Bombay 1.

**LOKMANYA SEVA SANGH**

Tilak Mandir, Vile Parle (East), Bombay No. 57.

An up-to-date Library, a well-equipped gymnasium, ladies tailoring classes, Montessori School, Lecture Series, Vocational Guidance and drama festivals are some of its main features.

**MAHARASHTRA BOARD OF AYURVEDIC AND UNANI SYSTEMS OF MEDICINE**

Esplanade Mansions, 144, Mahatma Gandhi Road, Bombay 1.

**THE MAHARASHTRA CO-OPERATIVE HOUSING FINANCE SOCIETY LIMITED**

Raja Bahadur Building 1st, Floor, Flat No. 4, 20, Hamam Street, Fort, Bombay-1.

*Chairman* : A. N. Samant; *Vice-Chairman* : J. Darda.

**MAHARASHTRA FRIENDSHIP SOCIETY**

Mistry Court, 208, D. Watcha Road, Bombay 1.

**MAHARASHTRA (BOMBAY AREA) MEDICAL COUNCIL**

Swadeshi Mills Estate, Tata Road, New Queen's Road, Bombay 4.

*President* : Dr. M. D. D. Gilder; *Vice-President* : Dr. B. B. Yodh; *Registrar* : Balkrishna More-shwar Sidhaye.

**MAHARASHTRA NURSING COUNCIL**

Zoroastrian Bldg., 2nd Floor, 16, Horniman Circle, Bombay 1.



**MAHARASHTRA RAJYA SHARIRIK  
SHIKSHAN MAHAMANDAL**

B.D.D. Chawl No. 10, Delisle Road, Bombay-11.

**THE MAHARASHTRA STATE AMATEUR  
ATHLETIC ASSOCIATION**C/o Secretariat of Sporting Association,  
Brabourne Stadium, North Stand, Bombay 1.**THE MAHARASHTRA STATE AMATEUR  
BOXING ASSOCIATION**

31, Murzban Road, Bombay 1.

**MAHARASHTRA STATE ANGLING  
ASSOCIATION**C/o Baloise Marine Insurance Co. Ltd., French  
Bank Bldg., Homji St., Bombay 1.**MAHARASHTRA STATE ANTI-  
TUBERCULOSIS ASSOCIATION**

Red Cross Building, Mint Road, Fort.

**MAHARASHTRA STATE AQUATIC  
ASSOCIATION**C/o Victoria Swimming Bath, Back Bay,  
Bombay 1.**MAHARASHTRA STATE BADMINTON  
ASSOCIATION**C/o Secretariat of Bombay Sporting Assn.,  
Brabourne Stadium (North Stand), Bombay 1.**MAHARASHTRA STATE BASKETBALL  
ASSOCIATION**

4/24, Brahmanwada Road, Bombay 19.

**MAHARASHTRA STATE BHARAT SCOUTS  
& GUIDES***State Headquarters :*

Hamam House, Hamam Street, Bombay-1.

*Training Centre :*Scout/Guide Pavilion, Shivaji Park, Dadar  
Bombay 28.**MAHARASHTRA STATE BILLIARDS  
ASSOCIATION**C/o Islam Gymkhana, Kennedy Sea Face,  
Bombay 2.**MAHARASHTRA STATE CARROM  
ASSOCIATION**Nagpada Neighbourhood House, New Nagpada,  
Nagpada Road, Bombay 8.**MAHARASHTRA STATE DENTAL COUNCIL**Swadeshi Mills Estate, Near Roxy Cinema, Tata  
Road, New Queen's Road, Bombay 4.The Council is a statutory body constituted  
under the Dentists Act, 1948. The Council  
maintains the Dentists' Register for the State  
and administers the Code of Dental Ethics.*President : Dr. S. P. Kapadia ; Vice-President :*  
*Dr. B. R. Jaiswal ; Registrar : B. M. Sidhaye.***MAHARASHTRA STATE KHADI &  
VILLAGE INDUSTRIES BOARD**Bhatia, Balrakshak Vidyalaya, 19/21, Manohar-  
das Street, Fort, Bombay.**MAHARASHTRA STATE PHARMACY,  
COUNCIL**Soorya Mahal, 5, Military Square Lane Corner,  
Medows Street, Bombay 1.**MAHARASHTRA STATE TENNIS  
ASSOCIATION**C/o Secretariat of Bombay Sporting Assn.,  
Brabourne Stadium (North Stand), Church-  
gate, Bombay.**MAHARASHTRA STATE WEIGHTLIFTING  
ASSOCIATION**

16/276, Tata Society Bldg., Sion, Bombay 22.

**MAHARASHTRA STATE WOMEN'S  
COUNCIL**

Town Hall, Bombay 1.

*President : Mrs. Shyama Jaitly ; Vice-Presi-  
dent : Mrs. Irene Heredia ; Hon. Treasurer :*  
*Mrs. Padmavati R. G. Saraiya ; Executive Secy. :*  
*Miss H. M. Dadina.**Branches : Poona Women's Council, Poona,  
Samata Darshan Association, Aurangabad,  
Mahila Mandal, Matheran.**No. of Members : 1,400.***MAHILA KALA NIKETAN**

Gamdevi, Bombay 7.

This institution imparts industrial education  
to all women irrespective of caste or creed.**MAHIM ASSOCIATION**Association's Pavilion, Station Road, Mahim,  
Bombay 16.**MARATHA BHAGINI SAMAJ**

32-C Khotachi Wadi, Girgaum, Bombay 4.

**MARATHA MANDIR LTD.**

Dr. Anandrao Nair Road, Bombay 8.

The aims and objects of the Mandir are to work  
generally for the uplift of the masses in educa-  
tional, social, cultural and other fields. The  
Mandir at present conducts the following insti-  
tutions.**MARATHI SANSHODHAN MANDAL**Mumbai Marathi Granthasangrahalaya, 172,  
Nalgaum Cross Road, Dadar, Bombay 14.**MECHANICAL ENGINEERS' ASSOCIATION  
(INDIA)**Janmabhoomi Chambers, 29, Fort Street,  
Bombay 1.**MIDDLE CLASS PEOPLE'S CONVENTION**

12, Rampart Row, Bombay 1.

**MOGAVEERA YUVAK SANGHAA**

46, Vir Nariman Road, Bombay 1.

**MUMBAI MARATHI SAHITYA SANGH**  
(Sangha Mandir, Kelewadi, Girgaum, Bombay 4)**MYSORE ASSOCIATION**

393, Bhau Daji Road, Matunga, Bombay 19.

**N. C. CORPORATION PRIVATE LTD.**Stadium House, 3rd floor, Vir Nariman Road,  
Bombay 1.To spread 'God-Guided Economics', in indus-  
try, trade and administration particularly.**NATIONAL ASSOCIATION OF  
PURCHASING EXECUTIVES**Cecil Court, 5th floor, Lansdowne Road, Apollo  
Bunder, Bombay 1.*President : M. K. Mantri ; Vice-President :*  
*J. D. Lobo ; Hon. Secy. : M. Prabhakar ;*  
*Treasurer : M. G. Joshi.***NATIONAL INDIAN ASSOCIATION**

The Cliff, Ridge Road, Bombay 6.

The advancement of education of women in  
Bombay colleges by award of scholarships ; the  
promotion of friendly intercourse by social  
gathering and lectures.*President : Smt. Tara Cherian ; Vice-Presidents :*  
*Lady Byramjee Jeejeebhoy and Lady Chandavar-  
kar ; Hon. Secys. : Mrs. J. R. B. Jeejeebhoy and*  
*Mrs. L. V. Velinkar ; Hon. Treasurer : Mrs. M.*  
*B. Madgaonkar.***NATIONAL INSTITUTE OF LABOUR  
MANAGEMENT**M. G. Textile Technical School Premises,  
Parel, Bombay 12.*President : N. H. Tata ; Chairman : Y. D.*  
*Joshi ; Hon. Secy. : R. K. Khanna.***NATYA SANGH & NATYA ACADEMY**

113/115, Mahatma Gandhi Road, Bombay.

**THE NEUROLOGICAL SOCIETY OF INDIA**

534, Sandhurst Bridge, Bombay 7.

**NOISE ABATEMENT LEAGUE**

19, Pherozshah Mehta Road, Bombay 1.

**ORIENTAL INSTITUTE OF INDIAN  
LANGUAGES**32, Khorsheed Building, Sir P. M. Road,  
Bombay 1.**PARSEE LEKHAK MANDAL**

(Parsee Journalist Assn.)

C/o Jehanbax Bomanshaw Vatcha, Tafti  
Building, South Frere Bridge, Grant Road,  
Bombay 7.**PASSENGERS' AND TRAFFIC RELIEF  
ASSOCIATION**Anand Bhavan, 346, D. Naoroji Road, Fort,  
Bombay 1.**THE P. E. N. ALL-INDIA CENTRE**Theosophy Hall, 40, New Marine Lines,  
Bombay 1.Indian Branch of the International P.E.N.  
Club of leading poets, playwrights, editors,  
essayists, novelists.*President : Dr. S. Radhakrishnan ; Vice-Presi-  
dents : R. P. Masani, Masti Venkatesa Iyengar,*  
*K. M. Munshi ; Hon. Secretary-Treasurer : Anant*  
*Kanekar ; Founder and Organiser in India and*  
*Editor, THE INDIAN P.E.N. : Madame Sophia*  
*Wadia.***PHILATELIC SOCIETY OF INDIA***Hon. Secretary : D. E. Wadia, "B" Block.*  
Shireen Mansion, Tardeo Road, Bombay 7.**PHOTOGRAPHIC SOCIETY OF INDIA**

Saheb Building, 195, Dr. D. N. Road, Bombay 1.

**PORT HAJ COMMITTEE**Seth Mahomed Haji Saboo Siddick Musafir-  
khana, Carnac Road, Bombay 1.**PRESS ASSOCIATION OF INDIA**

196B, Galwadi, Girgaum, Bombay 4.

**PRESS GUILD OF INDIA**

Majestic Hotel, 3rd Floor, Bombay 1.

**PRINCE OF WALES MUSEUM OF WESTERN  
INDIA**

Bombay 1.

**PROGRESSIVE GROUP**

C/o Olympia, Metro Cinema Bldg., Bombay 1.

**RATHESTAR MANDAL**A Parsi association for upliftment of the Parsi  
community.*Hon. Secretary and Treasurer : Jehanbax*  
Bomanshaw Vatchha, Tafti Building, South  
Frere Bridge, Grant Road, Bombay 7.**REGIONAL GRAND LODGE OF WESTERN  
INDIA**Freemasons' Hall, Ravelin Street, Fort,  
Bombay.**RELIGIOUS AMITY CENTRE**

Mistry Court, 208, D. Watcha Road, Bombay 1.



### ROHIDAS (HARIJAN) EDUCATION SOCIETY

112, Meadows Street, Bombay 1.

### ROHIDAS SUDHARAK MANDAL

B.D.D. Block No. 12-B, Room No. 54, Naigaum, Bombay 14.

*President* : R. B. Chandorkar ; *Vice-President* : K. G. Ziradkar ; *Secretary* : S. K. Chandorkar.

### SAFETY FIRST ASSOCIATION OF INDIA

Stadium House, 2nd Floor, Veer Nariman Road, Bombay 1.

An all India non-official Organization established in 1932 and devoted to conservation of life and property ; acts as clearing house on accident prevention matters ; publishes a monthly magazine 'Safety News' and other safety literature, leaflets, posters, etc. ; arranges lectures, exhibitions and film shows.

*President* : A. A. Jasdenvala ; *Hon. General Secretary* : D. S. Venkatraman.

### SAHAKARI KELAVANI MANDAL

Sahakar Nivas, 20, Tardeo Road, Bombay 34.

Runs the educational institution, Shree B. P. K. Sahakari Vidya Mandir with Montessori Primary High School classes.

### THE SALES TAX PRACTITIONERS' ASSOCIATION

Mohata Market, 5th floor, Room No. 8, Palton Road, Bombay 1.

### SAMYUKTA KARNATAK SANGHA

Navsari Building, D. Naoroji Road, Bombay 1.

### SANSKRIT VISHVA PARISHAD

(World Academy of Sanskrit)

Bharatiya Vidya Bhavan, Chowpatty, Bombay 7.

### SANTA CRUZ MALAYALEE SAMAJAM

14, Air View Building, Vakola, Bombay 55.

Besides conducting a Library and Free Reading Room, the Samajam runs an Ayurvedic Dispensary.

### SANTA CRUZ WELFARE LEAGUE

"Anand Kunj", Dadabhai Road, Santa Cruz West, Bombay 54.

### THE SEA CADET CORPS

T.S. "Jawahar", Pilot Bunder Road, Bombay 5.

The Sea Cadet Corps is a Voluntary Youth Organization whose objects are to give boys and girls aged 12 to 18 sea training and such other training as will develop in them qualities of good citizenship, and to help boys wishing to make their career at sea achieve their ambition.

It had its origin in Karachi where the Movement was founded in 1938 by G. S. Ahuja who is now Captain Superintendent of the Corps in India.

There are over 600 Cadets in Bombay besides Units in Calcutta, Madras and Tiruchirappalli.

The Cadets attend instructional classes outside school hours and on Sunday mornings on board their National Headquarters T.S. 'JAWAHAR', built at the cost of a million rupees which was commissioned by the President of India recently.

The Corps is recognised by the Government of India and is controlled by the Sea Cadet Council of which the Governor of Maharashtra is the President.

*Secretary to the Sea Cadet Council and Captain Supdt. of the Sea Cadet Corps* : G. S. Ahuja.

### SERVANTS OF INDIA SOCIETY

BOMBAY BRANCH

Sardar V. Patel Road, Girgaum, Bombay.

### SEVA SADAN

Gamdevi, Bombay 7.

### SHILPI KENDRA

Majestic, Colaba Causeway  
Bombay 1.

Shilpi Kendra (meaning centre for craftsmen) was established in December 1963.

*Aims and Activities* : To promote traditional handicrafts of India and give encouragement to Indian craftsmen. Organised "Our Heritage" exhibition in Bombay in November-December 1964.

It provides information on handicrafts, their availability, their centres. It runs Shilpi Kendra Emporium at the Majestic, Colaba Causeway, to help Indian Craftsmen to their legitimate earnings.

*Chairman* : Mrs. H. J. H. Taleyarkhan ; *Vice-Chairmen* : Nawab of Palanpur, Sir Hirji Jehangir ; *Art Director* : V. N. Adarkar ; *Treasurers* : H. H. Ismail, G. K. Vora ; *Jt. Hon. Secretaries* : Mrs. Z. Jairazbhoy, Mrs. Khorshed K. D. Aga.

### SHRI BRIHAD BHARATIYA SAMAJ

N. K. M. International House, 178, Backbay Reclamation, Bombay 1.

(Transit Camp : Congress House, Vithalbhai Patel Road, Bombay 4).

A Society for the promotion of economic, social, educational and cultural interests of Indians abroad.

*S. K. Patil (Chairman)*, Babubhai M. Chinai, M.P. (*Hon. Treasurer*) ; C. L. Ghevala (*Hon. Secretary*).

### SHRI SHANMUKHANAND FINE ARTS & SANGEETHA SABHA

Flank Road, Sion East, Bombay 22.

### SILK & ART SILK MILLS' RESEARCH ASSOCIATION

"Sasmira", Dr. Annie Besant Road, Worli, Bombay 18.

*President* : Shantilal M. Mehta, M.Sc. (Tech.) (Manchester) ; *Vice-President* : Ganeshnarayan B. Podar ; *Dy. Director* : J. G. Parikh, B.Sc. (Hons.), LL.B., A.T.I. (Manch.).

### RATAN TATA INDUSTRIAL INSTITUTE

Address : Hughes Road, Bombay 7.

#### Office-bearers :

*President* : Mrs. Gulistan R. Billimoria ; *Gen. Secy.* : Miss Aloo F. Desai ; *Hon. Treasurer* : Mrs. Shirin S. Talati.

The Sir Ratan Tata Industrial Institute founded in 1928 by the Trustees of Sir Ratan Tata is a unique centre raised to the memory of an illustrious member of the famous House of Tatas.

For 38 years, this Institute has helped to partially solve the problem of poverty and distress among Parsi families from the lower income groups, by encouraging girls and women to earn a living through suitable industries.

The average number of workers employed during 1964 was 391 and the wages paid Rs. 5,08,034.

The amenities provided were :—Towards Meals—Rs. 80,327, Conveyance Rs. 15,489 ; Prize Distribution Rs. 900 ; Bonus: Rs. 1,02,227.

The departments run by the Institute are : Catering, confectionery, laundry, hand embroidery, machine embroidery, lingerie and bambino.

Total sales during 1965 amounted to Rs. 24,45,601.

### SOCIAL SERVICE LEAGUE

Servants of India Society's Building, Vallabhkhil Patel Road, Girgaon, Bombay 4.

### SOCIAL WORKERS' SOCIETY

207, Bazar Gate Street, Bombay 1.

### SOCIETY FOR THE CAUSE OF MOTHERS' LINEAGE

Plot No. B2, House No. B. 105,

Theosophical Colony, Juhu, Bombay 54.

The main aim of this society is to disseminate knowledge of matrilineal succession and to educate public opinion in favour of this fundamental human right to own the lineage of one's mother for all intents and purposes.

*Convenor* : Kailash Chand Pista Devi.

### SOCIETY FOR COMPILATION OF INDIAN BIOGRAPHIES

Congress House, V. P. Road, Bombay 4.

### SOCIETY OF GOODWILL AND CULTURE

Darya Bldg., 2nd Floor, 375, Dr. Dadabhoy Naoroji Road, Bombay 1.

### THE SOCIETY OF THE JUSTICES OF THE PEACE AND THE HONORARY PRESIDENCY MAGISTRATES OF BOMBAY

C/o Shri I. A. Makani, Consulate-General for Costa Rica, Standard Bldg., Dr. D. N. Road, Bombay 1.

### SOHRAB F. BHAROOCHA

#### ARCHITECTURAL LIBRARY

Prospect Chambers Annexe, 32-34, Dadabhoy Naoroji Road, Bombay 1.

*Patron* : Mrs. Coomi Sohrab Bharoocha ; *Ex-Officio Chairman* : K. A. Parelkar ; *Hon. Secretary* : R. B. Fernandes.

### SOUTH INDIAN CO-OPERATIVE CENTRAL WHOLESALE STORES LTD.

Telang Road, Matunga, Bombay 19.

### STATE INDUSTRIAL CO-OPERATIVE ASSOCIATION LIMITED

9, Bake House Lane, Fort, Bombay 1.

It is an apex body of the Industrial Co-operatives in the State of Maharashtra, runs handloom fabrics/Sales Depots. Footwear Production Centre at Mazgaon manufactures civilian and military boots, chappals etc.

*Membership* : 300 societies having about 30,000 artisans in its fold.

*Chairman* : J. G. Patil ; *Administrator* : P. S. Barve.

### STUDENTS' LITERARY AND SCIENTIFIC SOCIETY

24, Nowroji Sheth Street, Jagannath Sunkersett Road, Bombay 2.

### SUBURBAN FINE ARTS AND SANGEETHA SABHA

10, Radhe Nivas, 30th Road, Bandra, Bombay 50.

### THE SUBURBAN PROTESTANT CHRISTIAN ASSOCIATION

Gopal Bhuvan, Bapubhai Vashi Road, Vile Parle (West), Bombay 57.

### SUR-SINGAR SAMSAD

Arun, Narayan Dabholkar Road, Bombay 6.

1. To promote, encourage and develop the art of classical Hindustani music by organising and arranging public and private performances in Bombay and/or elsewhere. 2. To promote the Arts of Indian Dances, Sculpture, Paintings, Photography, Architecture, Handicrafts and of Theatre.

### SWADESHI LEAGUE TRUST

17, Horniman Circle, Bombay 1.



**TARAPOREVALA MARINE BIOLOGICAL RESEARCH STATION**

Taraporevala Aquarium, Bombay 2.

**TATA AGRICULTURAL AND RURAL TRAINING CENTRE FOR THE BLIND**

Jehangir Wadia Bldg., Mahatma Gandhi Road, Bombay 1.

The Centre trains every year 50 blind adults in agriculture, horticulture, animal husbandry, poultry raising and rural crafts.

**TAX-PAYERS' ASSOCIATION OF INDIA, LTD.**

Fort Chambers A, Dean Lane, Hamam Street, Fort, Bombay 1.

**TECHNOLOGICAL ASSOCIATION**

Department of Chemical Technology, Matunga Road, Bombay 19.

**TEXTILE INSTITUTE**

Bombay Section

C/o J. G. Parikh, "Sasmira",

Dr. Annie Besant Road, Worli, Bombay 18.

*Chairman* : J. G. Parikh ; *Hon. Secy.* : Dr. K. Balakrishna Iyer ; *Jt. Hon. Secy.* : S. D. Mathure.**THE THEATRE GROUP**

3rd Floor, 70, Wodehouse Road, Colaba, Bombay 5.

**THEATRE UNIT**

Vithal Court, 151, Cumballa Hill, Bombay 26.

**THEOSOPHY COMPANY (INDIA)**

PRIVATE LIMITED

40, New Marine Lines, Bombay 1.

**TOURIST COURTESY COMMITTEE**

"Mistry Court", Opp. C.C.I., 208, D. Watcha Road, Bombay 1.

**UNITED KINGDOM CITIZENS' ASSOCIATION**

[BOMBAY BRANCH]

Cook's Bldg., Dr. Dadabhai Naoroji Road, Bombay 1.

*Chairman* : A. D. R. Geddis ; *Vice-Chairman* : A. G. Reynolds ; *Hon. Secretary* : N. G. McNeill.**UNITED LODGE OF THEOSOPHISTS**

40, New Marine Lines, Bombay 1.

**UNITED SEAFARERS' FEDERATION**

235, Hussein Building, Frere Road, Fort, Bombay 1.

**VAISHYA SAMAJ**

Hanuman Bldg., 4th Floor, Kiln Lane, Bombay 7.

**VICTORIA AND ALBERT MUSEUM**Victoria Gardens, Byculla, Bombay 27.  
Founded in 1855.**VIDYADAINI SABHA**

31, Raghunath Dadaji Street, Bombay 1.

**VISVA YOGA BHARATI**

Vallabhnagar, Borivli, Bombay 92.

Visva 'Yoga' Bharati is an organisation devoted to integral victory of 'dharma' and regeneration of universal dynamic spirit force through spiritual yogic self-culture-cum-self-reformation. The institution is founded by Raj-Yogi Nathji Ananda, and sponsored by the Yogic Self-Culture Society. One of the objects is to train yogic staff to man educational institutions. There is a gurukula for boys and girls between the ages six and fourteen and an Industrial Home for the poor and inmates of the Ashram and students of the Yoga institute.

*Constituted Institutions* : Rajayoga-Vedanta Centre ; Raja-Yoga Vanaprastha Ashrama ; Dhayana Yoga Brahmachari Gurukula ; Central Yoga-Natural Therapy Training College, Clinic, Hostel & Sanatorium.

*Founder President* : Swami Rajayogi Nathji Ananda ; *Principal Secretary* : Yogiraj Anand Dhruva.

**WESTERN INDIA FOOTBALL ASSOCIATION**

Cooperage Football Ground, Bombay 1.

**WESTERN INDIA NATIONAL LIBERAL ASSOCIATION**

107, Esplanade Road, Bombay 1.

**THE YOGA INSTITUTE**

Headquarters, Santa Cruz, Bombay 55.

Founded in 1918 by Shri Yogendra, this institute is the oldest technical centre of Yoga. Its activities in U.S.A., Brazil, Australia, Japan and U.S.S.R. popularized Yoga in the East and the West. Its activities are : Academic researches, scientific investigations, training in Yoga clinics, publication of texts journal on Yoga, and cultural activities.

*Secretary* : Smt. Sitadevi.**YOGA SCIENCE UNIVERSITY**

Yogamahavidyalaya Vidjnan Vidyapeeth.

Purshottam Bldg., Opp. Royal Opera House, 3, New Queen's Road, Bombay 4.

**YOGIC ISHWARDAS CHUNILAL HEALTH CENTRE KAIVALYADHAMA**

N. Subhas Road, Bombay 2.

**YOGIC SELF-CULTURE SOCIETY**

Sadachar Jeevan Samiti

(For simultaneous and harmonious development of spirit force, intellect and health through Yoga)  
5, Vallabhnagar, Borivli, Bombay 92.

*Founder-President* : Swami Rajayogi Nathji Ananda Acharya ; *Principal Secretary* : Yogiraj Anand Dhruva.

**YOUNG MEN'S HINDU ASSOCIATION**

141, Vithalbhai Patel Road, Bombay 4.

**YOUNG WOMEN'S CHRISTIAN ASSOCIATION**

18, Madame Cama Road, Fort, Bombay 1.

**ZOROASTRIAN ASSOCIATION**

16, Horniman Circle, Bombay 1.

**ZOROASTRIAN BROTHERHOOD**

C/o Jehanbax Bomanshaw Vatcha, Tafti Building, South Frere Bridge, Grant Road, Bombay 7.

**ZOROASTRIAN PHYSICAL CULTURE AND HEALTH LEAGUE**

Central Bank Building (Dean Lane Entrance), Bombay 1.

## EDUCATIONAL INSTITUTIONS IN GREATER BOMBAY

## TECHNICAL INSTITUTIONS

**ADARSHA ART TAILORING COLLEGE** (Hanuman Road, Vile Parle).**ADARSHA KALA KENDRA** (D. L. Valdia Road, Dadar, Bombay).**ADARSHA MAHILA CLASS** (Kama Lane, Ghatkopar, Bombay).**ADVIRKAR TAILORING COLLEGE** (316A, Hemraj Wadi, Thakurdwar, Tram Naka, Bombay 2).**AMULAKH AMICHAND BHIMJI VIVIDH-LAKSHI VIDYALAYA** (Behind Aurora Cinema, King's Circle, Bombay-19).**ANJUMAN-I-ISLAM JAN MOHOMAD CAS-SUM COMMERCIAL HIGH SCHOOL** (Sandhurst Road).**ANJUMAN-I-ISLAM JAN MOHOMAD CAS-SUM COMMERCIAL NIGHT HIGH SCHOOL** (Sandhurst Road).**ANJUMAN-E-TALIMUL MUSALMAN, SEW-ING & CUTTING CLASS** (Pinjara Chawl, Clerk Road, Bombay-11).**A. S. PATEL ACADEMY FOR DOMESTIC ARTS** (Classes attached to Bal Bhikajee S. Bengalee Girls' High School, 42, New Marine Lines, Fort).**B. J. KATRAK TRAINING CLASSES** (723, Dinshaw Master Road, Parsee Colony, Dadar, Bombay 14).**B. N. GAMADIA PARSEE HUNNARSHALA** (Gamadia Parsee Colony, Tardeo, Bombay).**BENNE ISRAEL STREE MANDAL CLASSES**, Sajan Bldg., 2nd Peerkhan Street, Bombay 8.**BHAGINI SAMAJ** (Tardeo Kendra, Sonawala Building Hall, Tardeo, Bombay 7).**Y.W.C.A. COMMERCIAL SCHOOL** (18, Madame Cama Road, Bombay 1).**BHAGINI SAMAJ BHULESHWAR CENTRE** (Jai Hind Estate Building, 3 South Wing, 1st Floor, C. P. Tank, Bombay).**BHAGINI SAMAJ CHANDABEN UDYOGA MANDIR** (225, Khetwadi Main Road, Bombay).**BHAGINI SEVA MANDIR** (Sarajini Road, Vile Parle, Bombay 57).**BHARTIYA KALA KENDRA** (388, V. P. Road, Ahilya Bldg., Near Congress House, Bombay 4).**BHARTIYA KALA VIKAS** (Prashant, 17th Road, Khar, Bombay 51).**BHARTIYA STREE SEVA SAMAJ** (25, B. Sonawala Bldg., No. 8, Sleater Road, Tardeo, Bombay-7).**BHARTIYA STREE SEVA SANGH** (Bhartiya Vidya Bhuvan, Chowpatty, Bombay 7).**BHATIA STREE MANDAL** (Mangesh Shenoy Street, Fort, Bombay).**BHATIA STREE HUNNAR UDYOG GRIHA** (Kolbhat Lane, Kalbadevi, Bombay-2).**BOMBAY TECHNICAL SCHOOL** (C/o Saraswati School, Girgaum, Bombay 4).**BRAHMAN SABHA MAHILA SHAKHA** (Shankar Wadi, 190, Charni Road, Bombay 4).**CHEMBUR TAILORING COLLEGE** (Near Bus Stand, Chembur Camp, Chembur, Bombay 71).**COLLEGE OF CATERING AND INSTITU-TIONAL MANAGEMENT**, Andheri.**CUTCHI LOHANA SAHAKARI MANDAL**, Mahila Hunnar Udyog Griha, Laxmi Narayan Lane, Matunga (C.R.), Bombay.**DADAR ELECTRIC INSTITUTE** (Bole Wadi, Near Portuguese Church, Dadar, Bombay 28).**DAVID SASSOON INDUSTRIAL SCHOOL** (83, Lady Hardinge Road, Mahim).**DAWOODBHOY FAZALBHOY MUSLIM WOMEN'S HANDICRAFT INSTITUTE** (42, Pydhonie Road, Khadak, Bombay).



- DESHASTHA MARATHA DNYATI DHARMA SANSTHA SHIVAN KALA KENDRA** (6, Raghunath Maharaj St., Mandvi, Bombay-3).
- ELECTRONIC INSTITUTE** (364-C-D, Lodi-wala Joshi Compound, N. C. Kothari Road, Dadar, Bombay 28).
- ELPHINSTONE TECHNICAL HIGH SCHOOL** (Cruickshank Road, Dhobi Talao).
- GENERAL OFFICE TRAINING INSTITUTE** (371, Dr. D. N. Road, Bombay-1).
- GHATKOPAR STREE HUNNER UDYOG SHIKSHAN VARGA** (Mahatma Gandhi Road, Ghatkopar).
- GHATKOPAR STREE HUNNER UDYOG SHIVAN VARGA** (Hansraj Morarji Wadi, Mahatma Gandhi Road, Ghatkopar, Bombay).
- GHELABHAI PUNSEY MAHILA UDYOG GRIHA** (12, Dr. Maisari Road, Bombay-9).
- GOVERNMENT LEATHER WORKING SCHOOL** (Bandra).
- GOVERNMENT POLYTECHNIC** (C/o Elphinstone Technical High School Compound, Bombay-1).
- GOVERNMENT TANNING INSTITUTE** (Bandra).
- GOVT. TECHNICAL HIGH SCHOOL** (Vile Parle, Bombay 57).
- GUJARATI HINDU STREE MANDAL** (Amroli House, Vithalbhai Patel Road, Bombay 4).
- GUJARATI HINDU STREE MANDAL** (Hiravati Hall, Tagore Road, Santa Cruz, Bombay 54).
- GUJARATI MAHILA KALA KENDRA** (Bombay City Social Edn. Committees, Bhawani Shankar Road, Dadar).
- HALAI MEMON INDUSTRIAL HOME** (93, Memon Wada, Bombay-3).
- HANDICRAFTS TEACHERS TRAINING COLLEGE** (Near Worli Sports Club, Dr. Annie Besant Road, Bombay 18).
- HIND MAHILA SAMAJ**, Cutch Castle, Opp. Opera House, Bombay-4.
- HIRJI GHELABHAI SAVLA COMMERCIAL HIGH SCHOOL** (Matunga, Central Rly.).
- INDUSTRIAL ARTS SCHOOL** (262, Rane Building, Charni Road, Bombay 4).
- INDUSTRIAL TRG. INSTITUTE** (Arthur Road, Bombay 11).
- INSTITUTE OF RADIO TECHNOLOGY** (Jestharam Baug, Tram Terminus, Dadar).
- JAIN MAHILA SAMAJ** (Mangrol Mansion, Bora Bazar, Fort, Bombay 1).
- KALA MANDIR** (C/o Girgaum New English School, Mughbhat Naka, Bombay 4).
- KANDIVLI STREE MANDAL**, Ghodbunder Road, Kandivli.
- KANDIVLI TAILORING & EMBROIDERY INSTITUTE**, Dhanmal Vidya Bhavan, Mathuradas Road, Kandivli.
- KASTURBA MAHILA MANDAL**, Jivan Prakash, Tulsi Pipe Rd., Mahim, Bombay-16.
- KATCHI LOHANA MAHAJAN MAHILA MANDIR** (Narottam Road, Mulund).
- KSHATRAIKYA SAMAJ KALA KENDRA** (Vanmali Hall, Dadar, Bombay).
- KUMBARWADA SANSKAR KENDRA** (Mahila Mandal, Durgadevi Park, Bombay-4).
- LADIES INDUSTRIAL HOME** (C. K. P. Hall, Linking Road, Khar, Bombay).
- LOHANA BHAGINI UDYOG GRIHA** (286, Samuel Street, Vadgadi, Bombay 3).
- LOHANA MAHILA PARISHAD MAHILA UDYOG GRIHA** (Netaji Road, Mulund).
- LOKMANYA SEVA SANGH** (Tilak Mandir, Vile Parle, Bombay 57).
- M. G. TEXTILE TECHNICAL SCHOOL** (Damodar Thackersey Moolji Hall, Parel, Bombay 12).
- MADARASHAH TAIYABI HUSSEIN CUTTING CLASS** (Safai Masjid, Doctor Street, Bombay 3).
- MAHILA KALA BHAVAN**, Vinayak Bhavan, Opp. Diamond Talkies, Borivli.
- MAHILA KALA BHUVAN** (D. I. Vaidya Road, Rammurat Road, Dadar, Bombay 28).
- MAHILA KALA BHUVAN** (Kunte Building, Vithalbhai Patel Road, Girgaon, Bombay 4).
- MAHILA KALA KENDRA** (Tank Bldg., Bhuleshwar, Bombay-2).
- MAHILA KALA KENDRA** (Santa Cruz, Bombay 54).
- MAHILA KALA KENDRA TARABEN UDYOG GRIHA** (Sa Niketan, Chandavarkar Lane, G. B. Road, Borivli).
- MAHILA KALA MANDIR**, Brahmin Sabha Building, Underai Cross Road, Malad.
- MAHILA KALA MANDIR** (Laxmi Sadan, Vithalbhai Patel Road, Bombay 4).
- MAHILA KALA NIKETAN** (Gamdevi, Bombay 7).
- MAHILA SEVA MANDAL INDUSTRIAL CLASSES** (Jubilee Bldg., Damodar Hall, Parel).
- MAHILA SEVA SADAN**, Plot 205, Opp. Vadala Station, Vadala, Bombay-31.
- MAHILA PARISHAD, BHAIIDAS LIBRARY, SEWING CLASS** (Versova Road, Andheri).
- MAHIM HINDU MAHILA SANGH** (Amirani Mansion, Station Road, Mahim, Bombay 16).
- MALAD MAHILA SHIVAN VARGA**, Shanti Sadan, Marve Road, Malad.
- MATUNGA GUJARATI HINDU STREE MANDAL** (Near Aurora Cinema, Matunga, Bombay-19).
- MODEL INDUSTRIAL INSTITUTE** (388, Vithalbhai Patel Road, Near Congress House, Girgaon, Bombay 4).
- MODERN TAILOR & CUTTER ACADEMY** (Gool Mahal, Sleater Road, Bombay-7).
- MODERN TAILORING COLLEGE** (Central Rly. Stores Lane, Patri Chawl, Lower Parel, Bombay 13).
- MOGAVEERA FREE INDUSTRIAL SCHOOL FOR WOMEN** (46, Vir Nariman Road, Fort, Bombay).
- MOHD. HAJI SABOO SIDDIK TECHNICAL SCHOOL & INSTITUTE** (8, Shepherd Road, Byculla, Bombay 8).
- MULODYOGA SHIKSHANA KENDRA** (Lady Jamsheedji Road, Municipal Upper Primary Marathi School, Ranade Road, Dadar, Bombay).
- MULUND COLONY NARI SHALLA** (Mulund).
- NARI SHALLA** (T. 44, Chembur Camp, Chembur, Bombay 71).
- NAVABHARAT AUDYOGIK VIDYALAYA** (Girgaon Municipal Marathi Boys' School, Girgaon, Bombay 4).
- NAVA BHARAT KALA MANDIR** (336, Bhai Jivanjee Lane, Thakurdwar, Bombay 2).
- NAVYUG TAILORING COLLEGE** (Narvekar's Anant Nivas, Arthur Road, near Chinchpokli Bridge, Bombay 12).
- NEETA MAHILA TAILORING CLASS** (Shivan mahal, Near Chinchbunder, Bombay).
- NEW INDIA TAILORING COLLEGE** (Jawahar Nagar, Bandra, Bombay).
- NEW PEDNEKAR TAILORING COLLEGE** (Contractor Building, First Floor, 2nd Dubash Lane, V. P. Road, Bombay 4).
- NORTH INDIAN ASSOCIATION, LADIES SEWING CLASS** (Mann Mahal, King's Circle, Bombay 19).
- NUTAN MAHILA KALA BHUVAN** (Vishnu Sadan, Hindu Colony, 4th Road, Dadar, Bombay 14).
- PATHARE PRABHU MAHILA SAMAJ CUTTING AND SEWING CLASS** (333, Thakurdwar, Bombay).
- PATUCK POLYTECHNIC**, Nehru Road, Santa Cruz (East), Bombay-55.
- PRABHADEVI SANKAR KENDRA**, Mahila Mandal, Khed Galli, Prabhadevi Road, Bombay-28.
- PRATAPSIKH RANCHHODDAS COMMERCIAL HIGH SCHOOL** (Ghatkopar, B.S.D.).
- PREMIER INSTITUTE OF COMMERCE**, Esplanade Mansions, Mahatma Gandhi Road, Kalaghoda and Lalchand Bank Building 263, D. Naoroji Road, Fort.
- PREMIER SCHOOL OF SHORTHAND AND TYPEWRITING**, 235, Dr. Dadabhoy Naoroji Road, Fort, Bombay.
- PRIYATAM DHARMA SABHA** (Sind Seva Samiti Nagar, Kolwada, Bombay 22).
- RATAN VALAVALKAR TECHNICAL HIGH SCHOOL** (17th Road, Khar).
- R. H. PATUCK TECHNICAL HIGH SCHOOL** (Nehru Road, Santa Cruz East).
- R. V. TECH. HIGH SCHOOL**, 17th Road, Khar, Bombay 52.
- RADIO ELECTRIC INSTITUTE** (Lamington Chambers, Lamington Road, Bombay 4).
- ROBERT MONEY TECHNICAL HIGH SCHOOL** (Proctor Road).
- SARVODYA WOMEN'S CO-OPERATIVE SOCIETY**, 153-A, Jain Society, Sion, Bombay-22.
- SARASWAT BRAHMAN SAMAJ** (Nikadwari Lane, Girgaon, Bombay 4).
- SCHOOL OF PRINTING TECHNOLOGY**, J. J. SCHOOL OF ART, Bombay.
- SEVA SADAN SOCIETY** (Harvey Road, Gamdevi, Bombay 7).
- SEVA SAMAJ MARWADI BUNGALOW**, Borivli.
- SHIVAN KALA KENDRA** (Naigaon Labour Welfare Centre, Naigaon, Bombay-14).
- SHIVAN KALA MANDIR**, Jamat Khana Bldg., Kurla, Bombay-70.
- SHRI BAGNAVI PANCHAYAT NAVISHALA** (Panchayat Hall, 162B, Cadell Road, Mahim, Bombay-16).
- SHRI DHARMA SHIKSHAN & NIRASHRIST SAHAYAK MANDAL** (Shivaji Hall, Byculla, Bombay).
- SHRI JAIN MAHILA SAMAJ**, Palanji Sojpal Chawl, "A" Block, Portuguese Church St., Dadar, Bombay.
- SHRI JAIN SHWETAMBER CONFERENCE UDYOGA GRIHA**, Lotisha Jain, Lalbag, 109-117, C. P. Tank Road, Bombay 4.
- SHRI KOT HINDU STREE MANDAL**, 45, Modi Street, Fort, Bombay-1.
- SHRI LAD MAHILA MANDAL** (Lad Wadi, C. P. Tank, Bombay).
- SHRI LOHANA MANDAL** (Maha Parishad Bhavan, 10, Khetwadi, 4th St., Bombay-4).
- SHRI VANITA VIKAS MANDAL** (Sakarbai Damji Kheraj Bungalow, Trivedi Road, Mulund, Bombay).
- SIR J. J. COLLEGE OF ARCHITECTURE**, J. J. School of Art Compound, Bombay.
- SIR J. J. INSTITUTE OF APPLIED ARTS**, J. J. School of Art Compound, Bombay.
- SITA'S TAILORING INSTITUTE**, Sharda Bhuvan, 11nd Floor, Station Road, Kandivli.
- ST. XAVIER'S COLLEGE TECHNICAL INSTITUTE** (Cruickshank Road, Bombay 1).
- STRAND TAILORING COLLEGE** (Room No. 24, Abdulla Bldg., Fergusson Road, Lower Parel, Bombay 13).
- STREE MITRA MANDAL** (Aurora Vistar) (Zaveribhai Hall, B. N. Kopol Nivas, 54-55, R. A. Kidwai Road, Bombay).
- VANITA SAMAJ** (National Library Hall, Bandra, Bombay 50).
- VANITA VIKAS** (120-33, Fanaswadi, Bombay 2).
- VICTORIA JUBILEE TECHNICAL INSTITUTE** (Matunga, Bombay 19).
- VICTORIA JUBILEE TECHNICAL INSTITUTE** (Govt. Apprentices Scheme, Matunga, Bombay 19).
- VIDYUT SHIKSHAN KENDRA** (Near Ahmed Tailor Bldg., Vincent Road, Dadar, Bombay).
- VIDYUT VIDYALAYA** (C/o Ram Mohan English School, Girgaon, Bombay 4).
- VIENNA TAILORING COLLEGE** (Haroon Rangari Chawl, Opp. Vijayanagar, Dadar, Bombay 28).



**VIJAYA VIDYALAYA TAILORING CLASSES**  
(Mohd. Mansion, Dr. Maheshwari Road, Bombay 9).

**VILE PARLE GUJARATI MANDAL** (Shradhanand Road, Vile Parle (East), Bombay 57).

**VIVEKANAND EDUCATION SOCIETY** (Vivekanand Housing Society, Lady Hardinge Road, Bombay-16).

**WADALA MAHILA MANDAL** (H. No. 909, Katnak Road, Bombay-31).

**YESHWANT TAILORING AND CUTTING COLLEGE** (Opp. Post Office, Agra Road, Bhandup).

**YOUNG MEN'S HINDU ASSOCIATION** (Vithalbhai Patel Road, Bombay 4).

**Y.W.C.A. COMMERCIAL SCHOOL** (18, Madame Cama Road, Bombay 1).

**ZARAPKAR TAILORING COLLEGE** (Bhavani Shankar Road, Dadar, Bombay 28).

### MISCELLANEOUS

#### ACADEMY OF ARCHITECTURE

Javeri House, 110, Meadows Street, Fort, Bombay.

**ALEXANDRA COLLEGE OF COMMERCE**  
(Estd. 1905)

Prospect Chambers Annexe, Dr. Dadabhoy Naoroji Road, Bombay 1.

#### ALLIANCE FRANCAISE DE BOMBAY

French Bank Building, 21, Homji Street, Fort, Bombay.

Central Audio-Visual: Dhanraj Mahal, Apollo Pier Road, Bombay 1.

The aim of the Alliance Francaise is to make known French language, thought and culture.

#### ALL INDIA EDUCATIONAL & VOCATIONAL GUIDANCE ASSOCIATION

25, Souter Street, Bombay-8.

#### ALL INDIA INSTITUTE OF PHYSICAL MEDICINE AND REHABILITATION

Haji Ali Park, Clark Road, Mahalaxmi, Bombay 34.

Rehabilitation Centre for the Orthopaedically Handicapped with the following Physical Medicine Services:—

Orthopaedics, Physiotherapy, Occupational Therapy, Medical Social Work, Vocational Training and Counselling, Rehabilitation Nursing, Speech Therapy, Prosthetics and Orthotics.

#### ALL INDIA INSTITUTE OF LOCAL SELF-GOVERNMENT

(Established in 1951).

11, Horniman Circle, Bombay-1.

#### ANGLO-SCOTTISH EDUCATION SOCIETY

6, Outram Road, Fort.

#### ANJUMAN-I-ISLAM

92, Dr. Dadabhoy Naoroji Road, Bombay 1.

#### ARYAN EDUCATION SOCIETY

75, Girgaum Road, Bombay 4.

#### AYURVIDYA PRASARAK MANDAL

(Ayurvedic Hospital and College).

Near Sion Railway Station, Sion, Bombay 22.

#### BALAK MANDIR

C/o P. K. V. Samaj, Gamdevi, Bombay 7.

The Institution was founded in June 1949 by the Pathare Kahatriya Vakrutwottejak Samaj to impart education to children through Montessori methods.

#### BANKERS TRAINING COLLEGE

(Reserve Bank of India)

Cadell Road, Dadar, Bombay 28.

#### BHARTIYA VIDYA BHAVAN

Chowpatty Road, Bombay 7.

Bharatiya Vidya Bhavan, a unique institution, devoted to the promotion of education, art and culture. It conducts (i) Mumbadevi Sanskrit Mahavidyalaya for Shastric studies; (ii) Gita Vidyalaya for study of Bhagawad Gita; (iii) Mangalal Goenka Samshodhan Mandir for post-graduate studies and research in Indology; (iv) Bhavan's College, Andheri, for courses leading to M.A. and M.Sc.; (v) Bhavan's College, Chowpatty, for courses leading to M.A., Ph.D. and B.Sc.; (vi) Bhavan's Colleges at Ahmedabad and Dakor for courses leading to B.A. and B.Sc.; (vii) Sardar Patel College of Engineering, Bombay, for courses leading to B.E., (Electrical, Mechanical and Civil); (viii) Rajendra Prasad College of Mass Communications and Media; (ix) Munshi Saraswati Mandir; (x) Bhavan's Public School, New Delhi; (xi) Academy of Languages in Bombay, New Delhi and Madras; (xii) Bhavan's Mahila Mandal School, Andheri, for K. G. and Primary courses; (xiii) Bharatiya Sangit Shikshapith; (xiv) Bharatiya Nartan Shikshapith; (xv) Bharatiya Kala Kendra; (xvi) Bharatiya Itihas Vibhag which has undertaken the scheme of publication of the *History and Culture of Indian People* in 11 volumes; (xvii) Prakashan Mandir; Publishes Book University Series of paper-back books, Munshi Sahitya, "Bharatiya Vidya" (Indological Quarterly), "Samvid" (Sanskrit Quarterly), "Bhavan's Journal" (English Fortnightly), "SAMARPAN" (Gujarati Fortnightly); (xviii) Conducts Sanskrit Vikas Yatra to various pilgrim centres and places of historical interest; (xix) Samskriti Vichara Samiti; (xx) Bhavan International; Conducts examinations in easy Sanskrit on all-India basis; Research work consists of 76 volumes published, an equal number under print and more under preparation; Many Chairs and Scholarships; Many scholars of all-India reputation on the staff; Bhavan's Kendras and Branches; at Ahmedabad, Bangalore, Calcutta, Coimbatore, Dakor, Delhi, Hyderabad, Kanpur, Kashmir, Madras, Mauritius (Indian Ocean), Stuttgart (West Germany), California and Nashville (U.S.A.).

*President*: Dr. K. M. Munshi; *Vice-Presidents*: Sir H. V. Divatia, Smt. Lilavati Munshi; *Executive Secretary*: S. Ramakrishnan.

#### BOMBAY CITY SOCIAL EDUCATION COMMITTEE

Samaj Shikshan Mandir, Adarsha Nagar, Worli, Bombay 18.

The Committee imparts literacy and social education to the illiterate adults free in Greater Bombay.

*Activities*:—The Committee runs 1,300 literacy and 550 post-literacy centres per year in Marathi, Gujarati, Hindi, Urdu, Kannada and Telugu; arranges cultural programmes every week; cinema programmes every day; circulates library boxes; arranges general science and other exhibitions for the enlightenment of the illiterate masses and also organises cleanliness programmes. It conducts 8 Matru Vikas Kendras for lower middle class women.

*Finances*:—The annual expenditure is about Rs. 3,50,000. The Government of Maharashtra pays 60 per cent of the annual expenditure and the Bombay Municipal Corporation contributes about 20 per cent. The remaining amount is collected by the Committee from the public and charitable Trusts.

*Achievements*:—During the last 27 years, the Committee has made 501,322 illiterate adults literate in Greater Bombay.

*President*:—Smt. Sulochana Modi; *Secretary*:—G. K. Gaekar.

#### BOMBAY CO-OPERATIVE SCHOOL

11, Bank Street, Fort, Bombay 1.

#### BOMBAY DUMB & DEAF INSTITUTION

Kakadwadi, Girgaon, Bombay 4.

#### THE BOMBAY EDUCATION INSTITUTE

Ganga Nivas, Ranade Road,

Dadar (Western Railway), Bombay 28.

#### BOMBAY EDUCATION SOCIETY

Clare Road, Byculla, Bombay 8.

#### BOMBAY EDUCATIONAL LEAGUE

(Estd. 1933)

Shri Bhuwan, IInd Floor, 169/20, Thakurdwar Road, Bombay 2.

The League is running the Colaba Night School since 1933 through English Medium and caters to all communities and castes. Total strength is 200. Expected to open a new Night High School in Colaba Land Mill Compound shortly.

*President*: Sardar Bahadur Bakshi Dalip Singh; *General Secy.*: A. P. Pardeshi; *Treasurer*: Tukojirao S. Rane.

#### BOMBAY HIGHER EDUCATION SOCIETY

(Founded 1958)

208, Dinshaw Wacha Road, 2A, Mistry Court, Bombay 1.

*AIMS AND OBJECTS*: To provide and promote higher education by giving financial aid to the needy and deserving students belonging to the educationally-backward communities.

#### THE BOMBAY SCHOOL OF REFRACTION

(for the scientific correction of vision)

Parker Bldg., 10, Cawasji Patel Street, Bombay 1.

#### THE BRITISH COUNCIL

**BOMBAY OFFICE**.—French Bank Bldg., 4th Floor, Homji Street, Bombay 1.

*Library*:—N. K. Mehta International House, 178, Backbay Reclamation, Bombay 1.

*Branch Libraries*:—Poona: 917/1, Fergusson College Road-4; Bhopal: Tagore School of Fine Arts Building, Central T.T. Nagar.

*H.Q. in India*: 21, Jor Bagh, New Delhi-8; Other regional offices: Calcutta, Madras; Other branch libraries: Bangalore, Lucknow, Trivandrum, Patna, Ranchi.

The British Council, a body under Charter to H.M. the Queen, is the principal agent of the United Kingdom for developing cultural relations with Commonwealth and foreign countries. *Principal Activities*: English language teaching and promotion of English studies; provision of library services (over 50,000 British Council Library members in India); arranging programmes for professional men and technical experts visiting Britain by invitation, and for similar visits by British personnel to India. Also concerned with welfare of overseas students in Britain. Acts as overseas arm for Voluntary Service Overseas.

#### THE BRITISH INSTITUTE OF ENGINEERING TECHNOLOGY (INDIA) PVT. LTD.

359, D. Naoroji Road, Bombay 1.

Provides postal courses for recognised professional examinations.

*Tack Training Division*:—Provides training service for Company-sponsored candidates in Salesmanship and Human Relations, Sales Supervision and Area Management, Service Engineer, Effective Communication, etc.

*B. I. Publications*:—Publishing and wholesaling.

*Linguaphone*:—Most modern method of learning languages quickly and with the correct accent through gramophone records and rated texts.

#### CENTRAL TRAINING INSTITUTE FOR INSTRUCTORS

Sion-Chembur Road, Bombay-70.



**CHANDRASENIYA KAYASTHA PRABHU  
EDUCATION SOCIETY**

67, Vijayanagar, Dadar, Bombay 28.

**DAVAR'S COLLEGE OF COMMERCE, LAW,  
ECONOMICS AND BANKING**

(Estd. 1900)

Jehangir Wadia Building, 51, Mahatma Gandhi  
Road, Fort, Bombay.

**THE DAWOODBHOY FAZALBHOY MUSLIM  
EDUCATIONAL TRUST**

42, Pydhoni Road, Bombay 9.

**DOCKYARD APPRENTICE SCHOOL**

Naval Dockyard, Fort.

Dockyard Apprenticeships are offered to boys between 14-19 years under Apprenticeship Act 1961 twice yearly in January and July. Competitive examinations and interviews are held in various recruiting centres in India. Period of apprenticeship three years.

*Officer-in-Charge*, Commander S.D. Mazumdar.

**"DUFFERIN," TRAINING SHIP**

Off Mazagon Pier, Bombay 10.

(Under the administrative control of the Government of India, Ministry of Transport).

The "Dufferin" is a pre-sea training ship for cadets aspiring to become Navigating Officers and ultimately the Captain of a ship in the Merchant Navy. A large number of Dufferin ex-cadets are also employed as officers in the Indian Navy, Port Services, Mercantile Marine Department and other ancillary services.

The course is of 2 years duration and consists of educational and professional subjects, stress being laid upon officer-like qualities and physical proficiency. All cadets are resident on board and are required to be physically fit to take part in all ship's activities. On satisfactory completion of training, cadets are accepted in sea-going ships of the Merchant Navy for 3 years apprenticeship. After passing the Ministry of Transport Certificate of Competency they become qualified for appointment as Navigating Officers.

The age limits for admission are 15½ to 18 years on the 1st of July of the year of entry. Annually about 80 cadets who have matriculated are selected on the basis of an all-India qualifying examination, and interview. The approximate total cost to a parent is about Rs. 2,600. A large number of scholarships ranging in value from Rs. 400 to Rs. 1,800 are available.

*Captain Superintendent*.—Captain D. G. Hazari.

**FIDAI ACADEMY & GIRLS' EDUCATIONAL  
INSTITUTE**

Fidai Baug, Marzban Road, Andheri (Bombay).

**GENERAL EDUCATION ACADEMY**

65, Babu Genu Road, Bombay 2.

**THE GENERAL EDUCATION INSTITUTE**

Dadar, Bombay 28.

**GOKHALE EDUCATION SOCIETY**

Vithalbhai Patel Road, Bombay 4.

**GOLWALLA'S CLASSES**

Bombay Mutual Building, Dadabhoy Naoroji  
Road, Fort, Bombay.

**GOVERNMENT TRAINING INSTITUTE FOR  
PHYSICAL EDUCATION**

Kandivalli, Bombay 67.

**HIND EDUCATION SOCIETY**

O/o Dr. S. J. Patkar, Dossa Bldg., Nowrojee  
Hill Road No. 7, Bombay 9.

**IMC ECONOMIC RESEARCH & TRAINING  
FOUNDATION**

76, Veer Nariman Road, Churchgate, Bombay 1.

*Aims and Objects*: It is an unofficial and non-political body founded in 1959 to promote and encourage scientific research in applied economics. It arranges periodical lectures under the scheme of B.F. Madon Memorial Lectures. The Research Wing of the Foundation named after Sir Purshotamdas Thakurdas has so far released the following publications:

(a) Resources for the Third Five Year Plan  
(b) Inflation in a Developing Economy (c) National Income of India (d) Union Budgets  
(e) A Quarter Century of Direct Taxation in India. It is at present engaged in the study of Price Fixation in Indian Industries.

*Chairman*: G. P. Kapadia; *Executive Officer*: C. L. Gheevala.

**INDIAN INSTITUTE OF ARCHITECTS**

Prospect Chambers Annexe, Dr. Dadabhoy  
Naoroji Road, Fort, Bombay 1.

**INDIAN INSTITUTE OF BANKERS**

State Bank of India Building, Apollo Street,  
Bombay 1.

**THE INDIAN INSTITUTE OF EDUCATION**

"Prabhuniketan", 16th Road, Chembur,  
Bombay 71.

**INDIAN INSTITUTE OF ROAD  
TRANSPORT**

BEST House, P.O. Box No. 192, Fort, Bombay 1.

**INDIAN INSTITUTE OF TECHNOLOGY**

P.O. I. I. T. Bombay, Powai, Bombay 76.

Established in 1958. The Institute provides instruction and facilities for research in various branches of Science, Engineering and Technology and Applied Arts and for the advancement of learning and dissemination of knowledge in all such branches. It enjoys the status of university by an act of Parliament and is a member of Inter-University Board.

The Institute is fully residential and has accommodation for 21,00 students. Training is provided in Aeronautical, Chemical, Civil, Electrical, Mechanical and Metallurgical Engineering, leading to degrees of Bachelor of Technology, Master of Technology and Ph.D. in Technology, Science and Mathematics. Courses leading to degrees of Master of Science in Applied Geology (3 year course) and Physics, Chemistry, Mathematics (2 years' course) are also offered. Post-graduate Diploma courses of 1 year duration in specialised fields are also offered.

*Chairman*: G. L. Mehta. *Director*: Prof. S. K. Bose. *Registrar*: V. Nehra.

**THE INDIAN SCHOOL OF SYNTHETIC  
JURISPRUDENCE**

Sethna House, 251, Tardeo Road, Bombay 7.

**INDIAN STATISTICAL INSTITUTE**  
(Bombay Branch)

1st Floor, Nanabhay Mansion, Sir P. M. Road,  
Bombay 1.

*President*: S. K. Wankhede; *Vice-Presidents*:  
R. G. Saraiya, Prof. C. N. Vakil, Dr. N. S. R. Sastri; *Hon. Secy.*: K. A. Antony.

**THE INDIAN TECHNICAL EDUCATION  
SOCIETY'S RADIO ELECTRIC INSTITUTE**

Lamington Chambers, Opp. "The Naaz",  
Bombay 4.

**INSTITUTE OF CATERING TECHNOLOGY  
AND APPLIED NUTRITION**

Sponsored by the Min. of Food and Agri.,  
Government of India

**(TECHNICAL COLLEGE)**

Dadabhai Road, Andheri, Bombay 58.

**INSTITUTE OF SECRETARIES**

Lentin Chambers, Dalal Street, Fort.

**INSTITUTE OF SOCIAL SERVICE**

Nirmala Niketan, 38, New Marine Lines,  
Bombay 1.

**THE INSTITUTE OF VOCATIONAL  
GUIDANCE AND SELECTION**

8, Cruickshank Road, Elph. Tech. High  
School Bldg., 1st Floor, Bombay 1.

**INTERNATIONAL CORRESPONDENCE  
SCHOOLS (OVERSEAS) LTD.**

Lakshmi Building, 4th floor, Sir Phirozesab  
Mehta Road, Fort, Bombay 1.

**JAIN EDUCATION SOCIETY**

14, Marzban Road, Fort, Bombay 1.

**KISHINCHAND CHELLARAM  
EDUCATIONAL TRUST**

Gazdar House, Dhobi Talao, Bombay 2.

**K. R. CAMA ORIENTAL INSTITUTE**

136, Apollo Street, Fort, Bombay.

**LAXMI COLLEGE OF COMMERCE**

Sharadashram Vidyamandir, Dadar, Bombay 28.

**LINGUAPHONE INSTITUTE (INDIA)  
PRIVATE LTD.**

359, Dadabhoy Naoroji Road, Flora Fountain,  
Bombay 1.

**THE MAHARASHTRA STATE  
CO-OPERATIVE UNION**

9, Bakehouse Lane, Fort, Bombay 1.

Apex body for Co-operative Education, Training  
Propaganda and Publicity in the Maharashtra  
State.

**MANAGEMENT TRAINING CENTRE**

448, Sardar V. Patel Road, Bombay 4.

**THE M. F. CAMA ATHORNAN INSTITUTE**

*Office*: 24-26, Dalal Street, Fort, Bombay 1.

*Institute*: Cama Road, Andheri, Bombay 58.

**MMC SCHOOL OF MANAGEMENT**

Podar Chambers, Parsi Bazar Street, Bombay 1.

**MODEL ART EDUCATION SOCIETY'S  
MODEL ART INSTITUTE**

Noor Building, Opp. W. Rly., Dadar Station,  
Bombay 28.

**NATIONAL INSTITUTE FOR TRAINING IN  
INDUSTRIAL ENGINEERING**

Powai, Bombay 76.

This Institute is a Govt. of India Project undertaken with the assistance of the United Nations Special Fund to organise and develop in India comprehensive facilities for the training of practising industrial executives and engineers in the modern techniques of Industrial Engineering. The object of this training is to equip them with skills for raising the productivity of their plants and to train others in these skills wherever possible.

The Institute buildings include training class rooms, assembly hall, instructional cinema, library, exhibition hall, audio-visual workshops, administrative offices, residential quarters for staff, and a hostel with modern amenity blocks for 200 officer-trainees.

The Institute will conduct 21 exclusive courses of durations varying from two to twenty-two weeks in different fields of scientific management, which are classified under five principal



heads, viz. Work Study, Production Planning & Control, Personnel Administration, General Management, and Marketing & Supply. The Courses are fully residential. Modern methods of audio-visual aids will be extensively used during training.

*Director* : V. S. Vernekar.

#### NATIONAL KANNADA EDUCATION SOCIETY

Sewri-Wadala Estate, Bombay 31.

#### OCCUPATIONAL THERAPY TRAINING SCHOOL & CENTRE

K.E.M. Hospital, Parel, Bombay 12.

Opp. Tata Cancer Hospital, Parel, Bombay 12.

PARSEE GIRLS' SCHOOL ASSOCIATION  
42, New Marine Lines, Bombay 1.

#### PEOPLE'S EDUCATION SOCIETY, BOMBAY

Anand Bhavan, Near Flora Fountain,

Dr. Dadabhoy Naoroji Road, Fort, Bombay 1.

The Society was founded in 1945 by the late Dr. B. R. Ambedkar. Its object is to bring college education within the reach of the poorer classes in general and the Backward classes in particular. It gives special facilities to the Scheduled Caste Class Students.

*Chairman* : D. G. Jadhav ; *Secretary* : K. B. Taiwalkar.

The Society runs several institutions in Bombay and other places in Maharashtra.

Besides these, the Society gives annual grants-in-aid to the Backward Classes Hostels at Manmad, Nandurbar, Chalisgaon, Poona, Mahad, Nipani, Dholka and Patan.

RAO BAHADUR S. V. RAJADHYAKSHA  
G. S. B. FOREIGN EDUCATION SOCIETY

Chikitsaka Samuha Building, Kandewadi, Bombay 4.

#### SARASWAT VIDYARTHI SAHAYAK MANDALI

OFFICE.—Chikitsaka Samuha Building, Kandewadi, Bombay 4.

The Institution has advanced in all nearly Rs. 7,94,857 to 2,873 poor and deserving students of both sexes from all parts of the country to get education and has built up a Reserve and Endowment Fund of Rs. 9,28,252.

*Trustees* : Dewan Bahadur Dr. J. S. Nerurker, Y. H. Sukthankar ; Prof. L. G. Khedekar ; *Hon. Secretaries* : R. K. Patkar, V. N. Kamat.

#### SHRI MAHAVIRA JAINA VIDYALAYA

Gowalia Tank Road, Bombay 26.

#### SIR JAMSETJEE JEEJERBHOY SCHOOL OF ART

D. Naoroji Road, Fort, Bombay.

#### TATA INSTITUTE OF FUNDAMENTAL RESEARCH

Colaba, Bombay 5.

The Tata Institute of Fundamental Research was established jointly by the then Government of Bombay (now Government of Maharashtra) and the Trustees of the Sir Dorabji Tata Trust in June 1945 to carry out fundamental research in physics, mathematics and allied sciences.

In 1956 the Institute's constitution was amended, and a tripartite agreement between the Government of India, the then Government of Bombay (now Government of Maharashtra) and the Sir Dorabji Tata Trust came into force on April 1, 1956.

The Government of India has recognised the Institute as the National Centre for advanced study and fundamental research in nuclear science and mathematics. The Institute is permanently recognised by the University of Bombay as a constituent recognised institution for post-graduate research in physics and mathematics.

The Institute is managed by a Council consisting of the representatives of the three contracting parties.

#### COUNCIL

J. R. D. Tata (*Chairman*) ; Professor R. Choksi ; M. V. Deo ; S. Jagannathan ; Dr. V. A. Sarabhai ; Professor M. G. K. Menon (*Director*).

#### TATA INSTITUTE OF SOCIAL SCIENCES

Sion-Trombay Road, Chembur, Bombay 71. (AS)

Founded by the Sir Dorabji Tata Trust, in 1936, this pioneer institution, which is deemed to be a university, offers a two-year programme of training in social work and social sciences leading to the M.A. Degree in Social Work in the fields of Criminology and Correctional Administration, Family and Child Welfare, Labour Welfare and Industrial Relations, Medical and

Psychiatric Social Work, Social Research, Urban and Rural Community Development. A doctoral programme in Social Work has recently been instituted.

The Department of Social Research promotes research in Social problems. The Indian Journal of Social Work, which is a quarterly, is published in April, July, October and January. The Institute has one of the best Social Science Libraries in the country with 19,000 books in the related fields. A documentation list is published by the Library once a fortnight.

The Institute conducts a Child Guidance Clinic, a special school for bedridden hospitalised children at Parel, the World Community Centre, a Lok Karya Kshetra at Turbhe (Thana), etc.

The Institute provides accommodation for about 130 resident men and women students and some members of the staff.

*Director* : Dr. M. S. Gore ; *Registrar* : A. Subramanian.

#### TEACHERS TRAINING ACADEMY

Bharda New High School, Waudby Road, Bombay 1.

#### UNIVERSITIES INFORMATION BUREAU

Bombay Univ. Club House, 'B' Road, Churchgate, Bombay 1.

#### THE VAISHYA VIDYA VARDHAK SAMAJ, BOMBAY

33-G, Vitthal Mandir, Mugbhat Cross Lane, Bombay 4.

#### VANI VIHAR SANSKRIT MAHAVIDYALAYA

Choksey Bhavan, Bhimani Street, Opp. Nappoo Gardens, Matunga, Bombay 19.

#### VAZIFDAR COLLEGE OF BUILDING INDUSTRIES

17, Arthur Bunder Rd., Colaba, Bombay 5.

#### VICTORIA JUBILEE TECHNICAL INSTITUTE

Matunga, Bombay 19.

#### YOUNG MEN'S EDUCATION SOCIETY

Ida Mansion, 18, Karwar Street, Fort, Bombay

## HOSPITALS IN GREATER BOMBAY

### HOSPITALS

#### ADAMS-WYLIE MEMORIAL HOSPITAL

(Managed by Bombay City Red Cross)  
Wylie Road, Post Jacob Circle, Bombay 10.

#### ADATIA'S GENERAL AND MATERNITY HOSPITAL

Jai Hind Estates, Bhuleshwar, Bombay 2.

#### AJINKYA MATERNITY AND GYNAECOLOGICAL HOSPITALS

204, Charni Road, Bombay 4, Ajinkya Mansion, Hughes Road, Bombay 7 and 11th Road, Khar Extension.

#### ALBLESS OBSTETRIC HOSPITAL

Cruickshank Road, Fort.

#### AYURVED BHAVAN

(Ayurvedic Hospital)  
Matunga (W. Bly.), Bombay.

#### AYURVIDYA PRASARAK MANDAL

Sion, Bombay 22.

#### BAI JERBAI WADIA HOSPITAL FOR CHILDREN

Parel, Bombay.

#### BAI MOTLIBAI AND SIR D. M. PETIT HOSPITALS

Mazagon, Bombay 10.

#### BAI SAKARBAI DINSHAW PETIT HOSPITAL FOR ANIMALS

Govt. Gate Road, Parel, Bombay 12.

#### BAI YAMUNABAI L. NAIR CHARITABLE HOSPITAL

(Bombay Municipal Corporation)  
Dr. A. L. Nair Road, Bombay 8.

#### DR. BALABHAI NANAVATI HOSPITAL

Swami Vivekananda Road, Vile Parle West (Opp. Juhu Aerodrome), Bombay 56.

#### BHATIA GENERAL HOSPITAL

Chikalwadi, Tardeo Road, Bombay 7.

#### B. M. C. EYE HOSPITAL

Kamathipura, Bombay 8.

#### BOMANJEE DINSHAW PETIT PARSEE GENERAL HOSPITAL

Bomanji Petit Road, Cumballa Hill, Bombay 26. Erected for the use of Parsees from subscriptions by the Parsees.

#### BOMBAY HOSPITAL

12, Marine Lines, Bombay 1.

#### BOMBAY MUNICIPAL CORPORATION DR. BHAJEKAR HOSPITAL

Dr. Bhajekar Street, off Sardar Patel Road, Bombay 4.

#### BYRAMJEE JEEJEEBHOY HOSPITAL FOR CHILDREN

J. J. Hospital, Bombay 8.

#### CAMA AND ALBLESS HOSPITALS

Cruickshank Road, Bombay.



**CHILDREN'S ORTHOPAEDIC HOSPITAL**  
Haji Ali Park, Clerk Road, Bombay 11.

**CHOWPATTY MATERNITY & GYNAECOLOGICAL HOSPITAL**

4, Chowpatty, Bombay 7.

**EYE CLINIC AND HOSPITAL**  
375, D. Naoroji Road, Opp. Flora Fountain.

**FRACTURE AND ORTHOPAEDIC HOSPITAL**

395, Lamington Road, Bombay 4.

**GOCULDAS TEJPAL HOSPITAL**  
Carnac Road, Bombay 1.

**GROUP OF T.B. HOSPITALS**  
Opp. Christian Cemetery, Jerbai Wadia Road, Sewri, Bombay 15.

**J. J. GROUP OF HOSPITALS**  
Babula Tank Road, Byculla, Bombay 8.

**KANCHANGAVRI MANGALDAS PAREKH MATERNITY AND GYNAECOLOGICAL HOSPITAL AND DISPENSARY**

Dr. Bhajekar Street, Sardar Vallabhbhai Patel Road.

**KASTURBA HOSPITAL FOR INFECTIOUS DISEASES**

Sane Guruji Road, Bombay 11.

**KHAN BAHADUR HAJI BACHOOALI FREE OPHTHALMIC HOSPITAL**  
Pofbawdi, Parel, Bombay 12.

**KHAN BAHADUR HORMUSTJI BHABHA HOSPITAL**

Old Agra Road, Kurla, Bombay 70.

**KING EDWARD VII MEMORIAL HOSPITAL**  
Hospital Avenue, Parel.

**LAXMIBAI MATERNITY HOSPITAL**  
96, D'Souza Street, Vadgadl.

**LOKMANYA TILAK MUNICIPAL GENERAL HOSPITAL**

Sion Road, Bombay 22.

**MAHADEVI ANANDILAL PODAR HOSPITAL**  
Worli

**MASINA HOSPITAL**  
Victoria Road, Byculla, Bombay 27.

**DR. MEHTA H.T.'s MODERN HOSPITAL FOR WOMEN**

6, Wilson Street, Bombay 4.

**N. M. MENTAL HOSPITAL**  
Naupada, Thana, Central Railway.

**NEW HOSPITAL FOR WOMEN**  
New Queen's Road, Bombay 4.

**NORTHCOTE POLICE HOSPITAL**  
New Nagpada, Byculla.

**NOWROSJEE WADIA MATERNITY HOSPITAL**

King Edward Road, Parel, Bombay 12.

**PARSI LYING-IN HOSPITAL**  
Outram Road, Fort.

**PEOPLE'S MOBILE HOSPITALS**  
Dr. Annie Beasant Road, Worli, Bombay 18.  
Free Medical aid through Mobile Units.

**DR. PURANDARE MATERNITY, GYNAECOLOGICAL HOSPITAL AND RADIUM INSTITUTE**  
4, Chowpatty Seaface.

**RAMWADI FREE EYE HOSPITAL**  
36/69, 1st Cavel Cross Lane, Kalbadevi Road.

**SARVODAYA HOSPITAL**  
Rifle Range, Agra Road, Bombay 77.

**SIR C. J. OPHTHALMIC HOSPITAL (J. J. GROUP OF HOSPITALS)**  
Byculla, Bombay 8.

**SIR COWASJEE JEHangIR READYMONEY DISPENSARY & KERSHEDJI BEHRAMJI BHABHA HOSPITAL**  
Waterfield Road, Bandra, Bombay 50.

**SIR CURRIMBHOY EBRAHIM MEMORIAL DENTAL COLLEGE & HOSPITAL**  
J. J. Hospital Compound, Byculla, Bombay 8.

**SIR HURKISONDAS NURBOTTUMDAS HOSPITAL**  
New Charni Road, Bombay 4.

**S. K. PATIL AROGYA DHAM**  
Malad, Bombay 64.

**ST. GEORGE'S HOSPITAL**  
Frere Road, Fort.

**SUBSIDIARY POLICE HOSPITAL**  
New B. D. D. Chawl No. 6, Naigaum, Bombay 14.

**TALWALKAR NURSING HOME AND MATERNITY HOSPITAL**  
Next to Ruia College, Bombay 19.

**TATA MEMORIAL HOSPITAL**  
Hospital Avenue, Parel, Bombay 12.

**WORLI GENERAL HOSPITAL**  
Sea Face Corner, Bombay 18.

### MISSIONARY AND RELIGIOUS SOCIETIES IN GREATER BOMBAY

#### AHMADIYYA MOVEMENT

*Local Branch* : 'Alhaq', 17, Club Back Road, Bombay 8.

*Headquarters* :—Qadian, Dist. Gurdaspur, Punjab, India.

#### ANJUMAN-I-FAIZ-I PANJETANI

69, Samuel Street, Bombay 9.

The aims and objects of Anjuman-i-Faiz-i-Panjetani are to render service to pilgrims to the Hedjas, Iraq, Iran, etc.

#### ASTHIKA SAMAJ

Asthika Samaj Building, King's Circle, Matunga, Bombay 19.

**BIBLE SOCIETY OF INDIA AND CEYLON**  
India House, Opp. G.P.O. Fort Street, Bombay 1.

#### BOMBAY SPIRITUAL CENTRE

Indra Kunj,

2, Laburam Road, Gamdevi, Bombay 7.

#### BOMBAY ZOROASTRIAN JASHAN COMMITTEE

Navsari Building, Dr. Dadabhoy Naoroji Road, Bombay 1.

#### CHINMAYA MISSION

Sandupany Sadhanalaya, Powai, Bombay 70.

**CHURCH MISSIONARY SOCIETY**  
Mission House, Proctor Road, Bombay 7.

**INTER MISSION BUSINESS OFFICE**  
Financial Hqrs., American Missionary Societies, 364, Dr. Dadabhoy Naoroji Road, Bombay 1.

**MAHA BODHI SOCIETY OF INDIA (Bombay Branch)**  
Bahujan Vihar, Buddha Temple Street, Parel, Bombay 12.

**MAI ADHERENTS' INSTITUTE**  
Mai Niwas, Saraswati Road, Santacruz West, Bombay-54.

*Founder* : Late Mai Swarup Mai Markand.  
*Spiritual Successor* : Universal Religionist Mai-ism Mai's Mercy Mai, Markand C. R. Nair.

**MISSIONARY SETTLEMENT FOR UNIVERSITY WOMEN**  
Reynolds Road, Byculla, Bombay.

**PRARTHANA SAMAJ**  
Girgaum, Bombay 4.

**RAMAKRISHNA MISSION ASHRAM**  
Khar, Bombay 52.

**SHREE AYYAPPA BHAKTA SAMITI**  
Star of Cochin, Opp. Broadway Cinema, Dadar-Bombay-14.

**SOCIETY OF SERVANTS OF GOD**  
Mayfair, 34, Little Gibbs Road, Bombay 6.

**SPIRITUAL ASSEMBLY OF THE BAHAI OF THE CITY OF BOMBAY**  
Baha'is Centre, 7, Bruce Street, Bombay 1.

**SPIRITUALIST DEVELOPMENT AND HEALING CIRCLE**  
Kalam Kutir, 211/219, Frere Road, Bombay.

**THEOSOPHICAL SOCIETY**  
The Blavatsky Lodge, T.S. French Bridge, Bombay 7.

**WESTERN INDIA UNION OF SEVENTH-DAY ADVENTISTS**  
*HEADQUARTERS ADDRESS* : 16, Club Road, Byculla, Bombay 8.

**ZOROASTRIAN RADIH SOCIETY**  
Noble Chambers, No. B, Parsi Bazar Street, Bombay 1.



# ASSOCIATIONS ETC. IN MAHARASHTRA

( Ahmednagar to Yeotmal )

American Marathi Mission, Ahmednagar; Ahmednagar Education Society, Ahmednagar; Hind Seva Mandal, Ahmednagar; Ahmednagar Vachanalaya District Central Library, Ahmednagar; Ahmednagar Jilha Maratha Vidya Prasarak Samaj, Ahmednagar; Ahmednagar Jilha Saksharta Prasarak Mandal, Ahmednagar; Sanatan Dharam Sabha Ahmednagar; District Probation and Aftercare Association, Ahmednagar; Sarvodaya Centre, Rajur, Akola; Ahmednagar Pressowners' Association, Ahmednagar; Government Beggars Home, Visapur; Ahmednagar District Leprosy Relief Association, Ahmednagar; Indian Red Cross T.B. Sanatorium, Arangaon, Ahmednagar; Ahmednagar District Council for Child Welfare, Ahmednagar; Women's Rescue Home, Ahmednagar; Anath Vidyarthi Griha, Ahmednagar; Ahmednagar District Farmers' Union, Ahmednagar; Mahila Mandal, Ahmednagar; Ahmednagar Medical Association, Ahmednagar; Satya Nikaten Village Industries Association, Rajur; Jilha Vidhayak Samiti, Ahmednagar; Ahmednagar Jilha Co-operative Milk Supply Union, Ahmednagar; Ahmednagar Adat Bazar Merchants' Association, Ahmednagar; Balasaheb Deshpande Charitable Hospital, Ahmednagar.

## VIDARBHA CHAMBER OF COMMERCE, Akola.

*President* : E. B. Mahajan; *Vice-Presidents* : Natwarlal C. Chaudhary, P. R. Mehta; *Hon. Secretary* : Surendra N. Bhatia; *Jt. Hon. Secretary* : Mohanlal Khandelwal.

## SHARADA UDYOG MANDIR Near Jaystambha, Amravati.

It is a charitable industry institution to help widows and poor women by teaching handicrafts, tailoring, embroidery, etc.

The institution has been running the Badnera Bly. Canteen for the last 7 years and the profits go to the good cause of the institution.

*President* : Smt. Prabha Ben Zaveri; *Founder Secretary* : Smt. Tarabai Padhey; *Joint Secretary* : Smt. Chandrakalabai Ganorker.

## SHRI SHIVAJI LOKA VIDYAPITHA (PEOPLE'S UNIVERSITY OF LITERATURE, ARTS, CRAFT AND CULTURE) Shivaji Nagar, Morshi Road, Amravati.

## VIDARBHA MAHAROGI SEVA MANDAL Tapovan, Amravati.

A social organisation started mainly for the treatment of leprosy patients and eradication of leprosy from the State. The Mandal started a rehabilitation centre for the cured cases of leprosy. Training in various trades is imparted to the leprosy patients, with a view to rehabilitate them. Also a full fledged High School is being run for the Leprosy affected children. The Mandal publishes a paper *Jeewan* for educating the public on the subject.

*President* : Dr. S. G. Patwardhan; *Secretary* : Smt. Parwatibai Patwardhan.

## MARATHWADA SAHITYA PARISHAD Aurangpura, Aurangabad.

## INDIAN INSTITUTE OF PHILOSOPHY Amalner.

## PRINCE SHIVAJI EDUCATION SOCIETY Sykes Extension, Kolhapur.

## KOLHAPUR UDYAM COOPERATIVE SOCIETY LTD.

Shivaji Udyam Nagar, Kolhapur 2.

## SHRI MOUNI VIDYAPREETH Gargoti, Kolhapur.

It is a research and experimental centre in the field of rural education.

*Founder-President* : V. T. Patil; *Director* : A. P. Rane.

## ALTRUSA CLUB

(Assn. of Women in Profession & Business)

C/o Dr. (Miss) S. Iyengar, L.A.D. Coll. for Women, Nagpur 1.

## BLIND RELIEF ASSOCIATION South Ambazari Road, Nagpur.

## CENTRAL EMERGENCY RELIEF TRAINING INSTITUTE Nagpur.

The Institute, only one of its kind in India, was started in 1957. It trains both official and non-official nominees of the Central Ministries and various State Governments, in the techniques of Emergency Relief Operations including Civil Defence.

*Director* : Col. K. R. D. S. Rawal.

## THE CHRISTIAN MEDICAL ASSOCIATION OF INDIA

*Office* : Christian Council Lodge, Nagpur.

## INSTITUTION OF ENGINEERS (INDIA)

North Ambazari Road, Nagpur.

## MAHAVIDARBHA CHAMBER OF COMMERCE & INDUSTRIES

Vohuman Lodge, Byramji Town, Nagpur 1.

*President* : V. B. Bhawe; *Vice-President* : F. K. Mehta; *Secretary* : K. S. Aurora.

## MINERAL INDUSTRY ASSOCIATION 'Mineral House', Nagpur.

## NAG-VIDARBHA CHAMBER OF COMMERCE Surya Villas, Temple Road, Civil Lines, Post Box No. 33, Nagpur.

*President* : Vitthaladas Rathl. *Sr. Vice-President* : Abbas Ali Kamal. *Junior Vice-President* : Govindlal Agarwal. *Hon. Secretary* : K. D. Pajaj.

## THE NAGPUR CHAMBER OF COMMERCE LTD.

Cotton Market, Nagpur 2.

## NAGPUR HARDWARE & STEEL MERCHANTS' ASSOCIATION

C/o Raj Traders, Lohaoli, Itwari Bazar,  
Nagpur 2.

## THE NAGPUR ORANGE GROWERS' CO-OPERATIVE ASSOCIATION LTD.

Motibagh, Nagpur.

## NATIONAL ASSOCIATION OF PHYSICAL EDUCATION AND RECREATION, INDIA Mahal, Nagpur 2.

## NATIONAL COUNCIL OF WOMEN IN INDIA Dolly Dale, Byramji Town, Nagpur.

## SANSKRIT BHASHA PRACHARINI SABHA Mor-Hindi-Bhavan, North Ambazari Road, Nagpur 1.

## THE SOUTH INDIA ASSOCIATION (REGD.) Modi Line 1, Sitabuldi, Nagpur.

## SHRI RAMAKRISHNA ASHRAMA Dhantoli, Nagpur 1.

## SHRI SHRADHANAND ANATHALAYA Shradhanand Peth, Nagpur.

## THE TEXTILE MILLS' ASSOCIATION Subedhar's Bungalow, Road B, Street 4, P.O. No. 3, Dhantoli, Nagpur.

## VIDARBHA SAMSHODHANA MANDAL (VIDARBHA RESEARCH SOCIETY) Near Law Coll., West High Road, Nagpur 1.

## VIDARBHA SMALL SCALE INDUSTRIES ASSOCIATION Liberty Bldg., Sadar, Nagpur 1.

## YOUTH HOSTELS' ASSOCIATION OF INDIA 87, West Park Road, Dhantoli, Nagpur.

Hansraj Pragji Thackersey College, Nasik; Government Training College for Women, Nasik; Police Training College, Nasik; Sarvajnik Wachanalaya, Nasik; Convalescent Home (H. M. Phipson), Nasik Road; Yashwant Vyayam Mandir, Nasik; Niranjan Durlabhji Khetan Bal-Mandir, Panchvati; Maharshi Shinde Training College, Nasik; Radionic Institute, Main Road, Nasik; Anath Mahila Ashram, Tilabhandeshwar Lane, Nasik; Beggars' Home, Gadge Maharaja Dharmashala, Nasik; Kushta Dhama and Shishu Vihar, Panchavati, Nasik; Lokahitavadi Mandal, Arya Valbhav, Nasik; Nasik Saraf Association, Saraf Bazar, Nasik; Red Cross Society, Ambedkar Colony, Nasik; B. Y. K. College of Commerce, Nasik; Bhonsale Military School, Nasik; Hindi Madhyamik Vidyalaya, Gandhi Nagar; Adarsha Montessori School, Nasik; Khadi Gramodyog Vidyalaya, Post Trimbak Vidyamandir, Nasik; Maharashtra Engg. Research Institute, Nasik; Dr. K. N. B. Memorial Sanatorium for Parsis, Deolali; M. R. H. Sanatorium, Nasik Road; Barnes High School, Deolali.

## THE NASIK DISTRICT CHAMBER OF COMMERCE

896, Ravivar Peth, Nasik City.

## ALL INDIA NON-EDIBLE OIL INDUSTRY ASSOCIATION

'Taru Sneha', 1153, Ganeshkhind Road,  
Shivajinagar, Poona 16.

(Sponsored by Khadi & Village Industries  
Commission, Bombay).

*Chairman* : R. Srinivasan; *Secretary* : Smt. Savitri Madan.

## BHANDARKAR ORIENTAL RESEARCH INSTITUTE Poona 4.

Inaugurated on 6th July 1917. Its objects are to publish Critical Editions of texts and original works on Oriental antiquities and in general to promote the cause of Oriental studies. The Critical Edition of the Mahabharata undertaken by the Institute in 1918 is now nearing completion. It has also undertaken the Critical Edition of the Harivamsha.

*Hon. Secy.* : Dr. R. N. Dandekar; *Curator* : Dr. A. D. Pusalker; *Gen. Editor of Mahabharata* : Dr. P. L. Valdia.

## BHARATA ITIHASA SAMSHODHAKA MANDALA

1321, Sadashiva Peth, Poona 2.

Founded in 1910.

*Objects* : To collect and conserve historical material, to erect buildings for preserving and exhibiting it; to publish it and other works of



historical and cultural interest and to encourage critical study of, and research in, Indian History and Culture.

*President* : Malojirao Naik Nimbalkar ; *Vice-Presidents* : S. B. Dhavale, Sardar G. B. Patwardhan and Raja S. R. Panta Sachiva of Bhor ; *Chairman* : Mahamahopadhyaya Prof. D. V. Potdar ; *Secretaries* : Prof. G. H. Khare, V. T. Shete, Dr. B. M. Kanitkar.

**CAMP EDUCATION SOCIETY**  
Poona 1.

**CENTRAL INSTITUTE OF MANAGEMENT  
FOR CONSUMERS' BUSINESS**  
78, Koregaon Park, Poona 1.  
*Director* : Prof. P. N. Driver.

**CENTRAL MENTAL HOSPITAL**  
Yeravda, Poona 6.

**CENTRAL WATER AND POWER  
RESEARCH STATION**  
Khadakvasla South, Poona 4.

**D. V. APTE MEMORIAL INSTITUTE**  
C/o B.I.S. Mandal, 1321, Sadashiv Peth, Poona 2.

**DECCAN COLLEGE POST-GRADUATE AND  
RESEARCH INSTITUTE**  
Yeravda, Poona 6.

The Institute is a constituent recognised institute of the Poona University. It is administered by a Council of Management appointed by the State Government. It conducts post-graduate research in Linguistics, History and Anthropology-Sociology, having 40 chairs in these subjects. The Institute has undertaken a monumental project of a Dictionary of Sanskrit on Historical Principles. The Institute publishes its research in its Bulletin and in the Monograph, Dissertation and Hand-book series. *Vak*, a special bulletin of the Sanskrit Dictionary Department is published occasionally.

*Director* : Dr. S. M. Katre, M.A., Ph.D. (Lond.); *Jt. Director* : Dr. H. D. Sankalia, M.A., LL.B., Ph.D. (London).

**DECCAN EDUCATION SOCIETY**  
Fergusson College, Poona 4.

The object of the Society is to facilitate and cheapen education by conducting schools and colleges under private management. The Society conducts 5 Colleges, 8 Schools and 1 Technical Institute.

Number of students :—Over 16,000.

Number of life members :—29.

*Chairman of the Council and the Governing Body* : Prof. D. D. Kapadia ; *Secretary* : Dr. V. R. Karandikar.

**FILM INSTITUTE OF INDIA**  
Law College Road, Poona 4.

*Nature of Body* : Technical Education. The objects of the Institute have been described in the article "Film Industry."

The Govt. of India have set up a Committee to advise the Ministry of Information and Broadcasting on all matters of policy regarding the institute. The Minister for Information and Broadcasting is the Chairman of the Committee and the Principal of the Institute the Secretary.

*Principal* : Jagat Murari.

**GOKHALE INSTITUTE OF POLITICS &  
ECONOMICS**  
Poona 4.

*Aims* : Study of and research into the various economic and political problems of India and the training of workers for such study and research.

*Director* : Prof. V. M. Dandekar ; *Jt. Director* : Dr. A. R. Kamat ; *Registrar* : D. P. Apte.

**HANDLOOM PAPER RESEARCH  
INSTITUTE**  
Agricultural College Compound, Poona 5.

**HINGNE STREE-SHIKSHAN SAMSTHA**  
Karvenagar, Poona 4.

Founded in 1896 by Dr. Dhondo Keshav Karve for social and educational work.

Annual Expenditure : Rs. 6,86,900.

*Secretary* : K. R. Palkar.

**INDIA CHILD EVANGELISM FELLOWSHIP**  
2, Jubilee Road, Poona 1.

Also at 9 Bronson Garden Road, Kilpauk, Madras 10.

**INDIA FOUNDATION**  
595, Budhwar, Poona 2.

India Foundation is a public trust. Grant of scholarships and financial aid, gifts or loans, to students of outstanding merit in education, in India and abroad, irrespective of caste, creed, religion or language.

1. *For Post-Graduate Education abroad* : Scholarships, generally interest-free loans, refundable after completion of studies. The aid is further enlarged with the help of scholarships, assistantships, fellowships or grants obtained abroad for students of India Foundation from Universities, Professional Bodies, individual donors, Industries, and Institutions of higher learning.

2. *Outside Academic Field* : Aid or assistance for short-term is secured for professional men and women to acquire latest knowledge and technical know-how abroad, from institutions and sources interested in international promotion of education and understanding.

3. *Smaller Stipends* : For gifted needy students, of Rs. 10 per month for high school and Rs. 25 per month for college level.

*President* : Dr. N. B. Parulekar ; *Vice-President* : F. D. Wadia ; *Hon. Secy. & Treasurer* : Dr. Mrs. B. J. Coyaji.

**INDIAN BUDDHIST SOCIETY**  
207, Ghorpadepeeth, Poona 2.  
(*Head Office* : 7, Ferozeshah Road, New Delhi).

**INDIAN INSTITUTE OF GERMAN STUDIES**  
GOETHE INSTITUTE, BRANCH POONA  
14/3B, Boat Club Road, Poona-1.

**LINGUISTIC SOCIETY OF INDIA**  
C/o Deccan College, Poona 6.  
(*Head Office* at Ashutosh Building, Calcutta).

**KARVE INSTITUTE OF SOCIAL SERVICE**  
Karvenagar, Poona 4.

**LORD REAY MAHARASHTRA  
INDUSTRIAL MUSEUM**  
Ghole Road, Poona 5.

The Museum has collections on Industry, Agriculture, Forestry, Minerals and Handicrafts and serves as an educational institution with a view to illustrating various branches of Science and in particular their application to Agriculture, Industry and Commerce. Museum regularly conducts educational programmes like lectures, film shows, excursions, guided tours, and exhibitions. Museum's Technical Library is an inspection centre for Indian Patents.

*Curator* : G. B. Sardesai.

**MAHARASHTRA ASSOCIATION FOR THE  
CULTIVATION OF SCIENCE**  
Poona 4.

Autonomous Institution aided by the Ministries of Education, Union and State Governments and affiliated to the University of Poona as a Centre for Post-graduate research leading to M.Sc. (Agri.) and Ph.D. in Botany, Mycology, Microbiology, Zoology, Entomology, Paleontology, Biochemistry, Cytology and Genetics.

*Director* : Dr. G. B. Deodikar.

**MAHARASHTRA STATE HORTICULTURAL  
DEVELOPMENT ASSOCIATION**  
Horticultural Section, College of Agriculture,  
Poona 5.

**MAHARASHTRA KARKHANDAR SANGH**  
82/5, Sadashiv Peth, P.B. No. 532, Poona 2.

**MAHARASHTRA MUDRAN SHALA**  
1786, Sadashiv Peth, Poona 2.

**MAHARASHTRA STATE POULTRY  
ASSOCIATION**  
C/o Poultry Development Officer, Government of  
Maharashtra, Poona 3.

**MAHARASHTREEYA MANDAL**  
Tilak Road, Poona 2.

**MAHARASHTRIYA KALOPASAK, POONA**  
Appa Balawant Chowk, Poona 2.

**MAHRATTA CHAMBER OF COMMERCE  
AND INDUSTRIES**  
Tilak Road, Post Box No. 525, Poona 9.

*President* : S. L. Kirloskar ; *Chairman* : D. V. Potdar ; *Vice-Presidents* : G. P. Upadhye, M. S. Parkhe, V. N. Somvanshi ; *Treasurer* : C. V. Joag ; *Hon. Secretaries* : A. R. Bhat, V. M. Deval ; *Secretary* : B. R. Sabade ; *Assistant Secretary* : D. N. Deshpande.

**MAHILA KALA MANDIR**  
623/33, Sadashiv Peth, Deshmukh Wadi, Poona.

**PROGRESSIVE EDUCATION SOCIETY**  
Shivajinagar, Poona 5.

**POONA ANATH VIDYARTHI GRIHA**  
1786, Sadashiv, Poona 2 and Panchvati, Nasik.

**THE POONA BLIND MEN'S ASSOCIATION**  
82, Rasta Peth, Poona 2.

**THE POONA MERCHANTS' CHAMBER**  
185, Bhavani Peth, Poona 2.

*President* : U. B. Pokarna ; *Vice-President* : Narayandas Govinddas ; *Secretary* : S. R. Raval ; *Joint Secretary* : K. P. Runwal.

**POONA PAPER TRADERS' ASSOCIATION**  
495, Shanwar Peth, Poona 2.

**THE POONA PRESS OWNERS'  
ASSOCIATION LTD.**

'Mudrak Bhavan,' 1078, Sadashiv Poona, 2.

**POONA SEVA SADAN SOCIETY**  
613-614, Sadashiv Peth, Poona City.

The principal objects are :—(1) to impart to women instruction of a religious, literary, scientific, medical and industrial character and (2) to widen the range of their knowledge by various agencies and to make them self-reliant. The total number of women on the rolls at the various centres of the society is about 3,085.

*President* : Sow. Laxmidevi Naik, Ranisabeh of Phaltan ; *General Secretary* : Sow. Indumatibai Bhadbhade.

**QUEEN MARY'S TECHNICAL SCHOOL FOR  
DISABLED INDIAN SOLDIERS**  
Park Road, Kirkee, Poona 7.

**SERVANTS OF INDIA SOCIETY, POONA 4.**

Its objects are to train national missionaries for the service of India and to promote, by all constitutional means, the interests of the Indian people. Its present strength is 14. It has its headquarters in Poona. The Society's work is primarily political but it also does tribal welfare work in the Mirzapur Dist. (U.P.), Madras, Andhra Pradesh, Orissa and in Malabar on a considerable scale.



Dr. H. N. Kunzru is the President, and S. G. Gokhale, the Secretary.

**SHIKSHANA PRASARAKA MANDALI**  
S. P. College Bldgs., Poona 9.

The main object of the Society is to give education at moderate cost, by starting schools, colleges, etc. and to encourage Marathi Literature.

The Mandali (Society) now conducts several institutions.

*President* : P. B. Gajendragadkar ; *Chairman of Managing Council* : Mahamahopadhyaya D. V. Potdar ; *Secretary* : Prof. K. P. Mangalvedekar.

**SHRI SHIVAJI PREPARATORY MILITARY SCHOOL**  
Poona 5

The school is a member of the Indian Public Schools' Conference. Admission is open to boys of all castes and creeds, from the age of 5 to 13 years. It prepares the boys for the Maharashtra State's S.S.C. examination. Training is also given to prepare the boys for the U.P.S.C. examination for entry into the N.D.A. The School has 500 boys. The State Govt. have endowed three scholarships every year and six freeships. The Union Govt. merit scholarships for public schools are also tenable here. Terms begin in June and November.

The school has extensive playgrounds, a riding school, hockey, football and cricket fields, a swimming pool, tennis courts, and a miniature rifle range.

**STATIONERY, CUTLERY AND GENERAL MERCHANTS' ASSOCIATION**  
794, Sadaashiv Peth, Poona 2.

**TILAK AYURVEDA MAHAVIDYALAYA,**  
POONA  
583(2), Rasta Peth  
Poona 2.

**VAIDIKA SAMSODHANA MANDALA**  
Tilak Vidyapeeth Nagar, Poona 9.

A literary institution for the study, research and publication of Vedic and Iranian literature.

**VIRUS RESEARCH CENTRE (INDIAN COUNCIL OF MEDICAL RESEARCH)**  
20A, Wellesley Road, Poona 1.

**YOGIC RESEARCH, TRAINING AND THERAPEUTIC INSTITUTE**

Aided by the Union and State Governments, KAIVALYADHAMA S.M.Y.M. SAMITI, Lonavla (C. Ry.).

**DECCAN MANUFACTURERS' ASSOCIATION**  
"Rose Cottage", opp. Mal Bungalow, Sangli-Madhavnagar Road, Sangli.

**DISTRICT INDUSTRIAL CO-OPERATIVE ASSOCIATION LTD. SANGLI**  
**CHAMBER OF COMMERCE,**  
SANGLI

**MADHAVNAGAR POWERLOOMS OWNERS' ASSOCIATION**  
292, Main Road, Madhavnagar.

**THE SANGLI INDUSTRIAL ESTATE CO-OPERATIVE SOCIETY LTD.**  
Madhavnagar Road, Sangli.

**MIRAJ MEDICAL CENTRE, MIRAJ**  
411 beds in Hospital. Cooperating with Miraj Medical College. Teaches Nurses, Laboratory Technicians and Radiographers.

**SPICES AND OILSEEDS EXCHANGE LTD., WAKHAR BHAG, P. BAG No. 105, SANGLI**  
The only Exchange in India recognised for forward trading in Turmeric and the second one for forward trading in Groundnuts-in-Shell.

*Chairman* : B. P. Nemanl ; *Vice-Chairman* : R. K. Adke ; *Secretary* : M. R. Purandare.

**WALCHAND COLLEGE OF ENGINEERING, SANGLI**

**WILLINGDON COLLEGE, SANGLI**  
**Y.M.M.E. SOCIETY, SANGLI**

The Society conducts a full-grade High School, a Primary School, a Rifle Club and a social and cultural centre called 'Sanskar-Mandir' which publishes a monthly in Marathi called *Sanskar*.

**THE SIR WILLIAM WANLESS CHEST HOSPITAL, WANLESSWADI**

Up-to-date surgical and medical treatment, including all types of pulmonary resections, is given for all types of tuberculosis to patients irrespective of caste, creed or nationality. Open Heart Surgery and Surgery of the esophagus are also done here regularly.

*Medical Superintendent* : J. G. David ; *Director of Surgery* : Dr. R. K. Padhi ; *Secretary* : D. S. Gorde.

**RICHARDSON LEPROSY HOSPITAL**  
Miraj Mission Hospital P.O., Miraj.

**DHARMAKOSHA MANDAL**  
P.O. Wal.

To conduct research in ancient Indian religion, philosophy and culture and edit and publish

encyclopaedic works such as Dharmakosha, Mimamsakosha, etc.

**MAHARASHTRA STATE BOARD FOR LITERATURE AND CULTURE**

Vishwakosha Unit Office, C/o Prajna Pathshala, Wal, P.O.

**RAYAT SHIKSHAN SANSTHA, SATARA**  
(Educational Society for Masses)

Founded in 1919 by the late Karmveer Bhaurao Pail, D.Litt., Padma Bhushan.

*Regional Offices* : Satara, Sangli, Poona and Ahmednagar.

*Objects & Scope* : To spread education, primary, secondary, technical, and higher, among rural masses and particularly poverty stricken backward and Scheduled Class communities, on the basis of selfhelp and as far as possible free of charge.

It conducts 11 Colleges, 233 Secondary Schools, 7 Primary Teachers' Training Colleges, 82 Cosmopolitan Hostels, 5 Kindergarten Schools, 6 Sanskar Kendras, 3 Primary Schools, One Sheep Breeding Research Centre, One Panchayat Raj Training Centre, 13 other institutions in twelve districts of Maharashtra State and in one district of Mysore State.

**THE SATARA EDUCATION SOCIETY, SATARA**

**SHOLAPUR CHAMBER OF COMMERCE**  
Siddeshwar Market, W. Mangalwar Peth, Sholapur.

*President* : M. B. Kadadi ; *Vice President* : R. G. Marda ; *Secretary* : N. M. Gavli.

**THE TEXTILE ASSOCIATION (INDIA) LTD. (SHOLAPUR BRANCH)**

The Lakshmi Cotton Mfg. Co., Ltd.  
Sholapur.

**WASSODEW BABAJEE NOWRUNGAY ORPHANAGE AND FOUNDLING ASYLUM, PANDHARPUR**

*Secretary's Office* :—Prathana Samaj, Girgaum, Bombay 4.

**JAMNALAL BAJAJ CENTRAL RESEARCH INSTITUTE FOR VILLAGE INDUSTRIES**  
Maganwadi, Wardha

Estd. 1955. *Aims & Objects* : Research and investigation for the improvement of the tools and techniques of village industries.

*Director in Charge* : Dr. R. K. Shrivastava.

MYSORE

**ALL INDIA INSTITUTE OF MENTAL HEALTH**

P. Bag No. 15, Bangalore 11.

*Director* : Dr. N. C. Surya ; *Adm. Officer* : K. S. Panikkar.

**BANGALORE TRADES ASSOCIATION**  
(Founded 1899).

21A, Mahatma Gandhi Road, Bangalore 1.  
*Master* : D. N. Hosali ; *Dy. Master* : S. K. Sippy ; *Hon. Secretary* : M. Sadananda Rao ; *Hon. Treasurer* : R. Venugopal.

**CENTRAL MACHINE TOOL INSTITUTE**  
Tumkur Road, Bangalore 22.

This Institute which is established by the Government of India with the financial and technical collaboration of the Government of Czechoslovakia, has commenced its technical

activities in July 1965. The main objectives of the Institute are :—

- (1) Development of Machine Tools, (2) Research in Machine Tools and Testing, (3) Research in Metal Cutting and Technology, (4) Measurements Laboratory and (5) Informations and Documentation.

Services in many ways are being rendered to the various machine tool manufacturers.

*President* : Prof. M. S. Thacker ; *Jt. Director* : R. V. Ramiah.

**INDIAN INSTITUTE OF SCIENCE**  
Bangalore 12.

The departments of the Institute provide facilities for post-graduate research in (SCIENCE FACULTY) Inorganic and Physical Chemistry, Organic Chemistry, Biochemistry, Physics, Applied Mathematics, Pharmacology, Fermenta-

tion Technology and Industrial Management, inclusive of Economics and Industrial Psychology.

There is provision for post-graduate research and also for post-graduate instruction (M.E.) in the departments of (ENGINEERING FACULTY) Aeronautical Engineering, Internal Combustion Engineering, Metallurgy, Electrical Communication Engineering, Electrical Engineering, Mechanical Engineering, Civil and Hydraulic Engineering, High Voltage Engineering and Chemical Engineering and also for instruction in French and German. The departments are well equipped and have adequate staff.

*Conferments* : The following are the degrees that may be awarded by the Council of the Institute in the different faculties :—

1. BY RESEARCH : In the Science Faculty : Doctor of Philosophy (Ph.D.), Doctor of Science



(D.Sc.). In the Engineering Faculty: Master of Science (M.Sc.); Doctor of Philosophy (Ph.D.); Doctor of Science (D.Sc.).

2. BY EXAMINATION: Master of Engineering Degree (M.E.); in Aeronautical Engineering, Civil Engineering, Electrical Communication Engineering, Electrical Engineering, Mechanical Engineering, Chemical Engineering and Metallurgy.

Honorary Fellowships of the Institute may, on the recommendation of the Council, be conferred by the President of India who is the visitor of the Institute on persons who have attained eminence in the field of Science and Industry.

Budget estimate for 1966-67; Rs. 109.49 lakhs (Recurring) Rs. 43.29 lakhs (Non-Recurring).

Founder: J. N. Tata, President of the Court: J. R. D. Tata, Chairman of the Council, R. Choksi, Director, Satish Dhawan, Registrar, S. S. Prabhu.

#### THE INDIAN INSTITUTE OF WORLD CULTURE

6, Sri B. P. Wadia Road, Basavangudi, Bangalore 4.

London Branch: 62, Queen's Gardens, W. 2. Bombay Branch: Theosophy Hall, 40, New Marine Lines, Bombay 1.

#### INDIAN RED CROSS SOCIETY

51, Govindappa Road, Basavangudi, Bangalore 4.

#### LEPROSY RELIEF & RESEARCH INSTITUTE OF AYURVEDA

Arunodaya, Kengeri Post, Bangalore South.

The Institute is conducting research on ayurvedic drugs to cure and control leprosy exclusively on ayurvedic lines.

#### METER MANUFACTURERS' ASSOCIATION OF INDIA

Post Bag 6, Bangalore 26.

Secretary, H. S. Visweswaralah.

#### MYSORE AUTOMOBILE PARTS AND ALLIED MERCHANTS' ASSOCIATION

No. 17, 2nd Floor, Ramkrishna Bldg., Narasimharaja Road, Bangalore 2.

#### MYSORE CHAMBER OF COMMERCE

Kempegowda Road, Bangalore 9.

President: A. Krishna Murthy; Secretary: G. N. Krishna Murthy.

#### MYSORE MEDICAL ASSOCIATION

Fort, Bangalore-2.

#### MYSORE OODABATHI MANUFACTURERS ASSOCIATION

Mysore Chamber of Commerce Bldgs., Kempegowda Road, Bangalore 9.

President: T. L. Padmanabhaiah Gupta; Vice-President: B. C. S. Narayan; Secretary: A. Audiseshiah.

#### NATIONAL TUBERCULOSIS INSTITUTE OF INDIA

'Avalon', Bellary Road, Bangalore.

Established by the Govt. of India in 1959. The Institute is carrying out programmes of training and research for controlling tuberculosis on a community basis in India.

Director: Dr. D. R. Nagpaul.

#### REGIONAL INSTITUTE OF ENGLISH, SOUTH INDIA

6A, Cunningham Road, Bangalore.

Established by the Governments of the four Southern States, viz., Mysore, Andhra Pradesh, Madras and Kerala, with the co-operation of the British Council to offer intensive training to key personnel in the field of English language teaching in these States.

The Institute gives training in the teaching of English in the first six years of school to graduate teachers and Deputy Inspectors of Schools. The trainees are selected and deputed by the respective State Governments.

The Board of Governors consists among others of representatives of the Governments of the four Southern States, the Government of India and the British Council.

Other functions: Apart from its training function, the Institute provides teaching materials for English from Stds. III-VII for prescription by the Southern States.

The courses at the Institute are of 5 months' duration.

Director, M. Muhammad Ghani.

#### OTHER TRADE AND COMMERCIAL ASSOCIATIONS

All Mysore Hotels Association, Sivaji Bldgs., Mysore Road, Bangalore 2.

All Mysore Small Scale Industries Association, Prasad Mansion, Main Road, Gandhinagar, Bangalore 9.

Bangalore Commercial Association, 45, Commercial Street, Bangalore-1.

Bangalore Gold Thread Merchants' Association, 49, Jamma Masjid Road, Bangalore 2.

Bangalore Petroleum Dealers' Association, 18, St. Mark's Road, Bangalore 1.

Bangalore Tract & Book Society, 16, St. Mark's Road, Bangalore.

Bangalore Tyre Dealers' Syndicate, Ramakrishna Building, 2nd Floor, Narasimharaja Road, Bangalore 2.

Bangalore Wholesale Piecegoods Merchants Assn., Rukmini Bldg., Chickpet, Bangalore 2.

Bangalore Wine Merchants' Association, 111, Bridge Road, Bangalore-1.

Coconut Merchants' Association 33, Sithu Rao Street, Bangalore-2.

Grain Merchants' Association, 2, Hardinge Road, Bangalore 2.

The Jewellers' Association, Nagarathpeth, Bangalore 2.

The Mysore Printers' Co-operative Society Ltd., Avenue Road, Bangalore City.

The Mysore Raw Silk Merchants' Association, No. 26, Resham Mahal, Kempe Gowda Extn., Bangalore 9.

Mysore Silk Manufacturers (Powerlooms) Association, 39, Jumma Masjid Road, Bangalore 2.

Mysore Silk Throwing Factories Association, S. S. K. Sangha Buildings, Kasi Visweswara Temple St., Bangalore 2.

Mysore State Radio Merchants' Association 2-F, Mahatma Gandhi Road, Bangalore 1.

Mysore Small Scale Industries Co-operative Society Ltd., Prasad Mansion, Main Road, Gandhinagar, Bangalore 9.

Mysore State Hides & Skins Merchants' & Tanners' Association, 74, Commercial Street, Bangalore 1.

The Mysore State Mine Owner's Association, 5, Race Course Road, Bangalore 1.

Mysore State Paper Merchants' & Stationers' Association, C/o T. M. Abdul Rasheed & Co., 22/23, Malavalli Rama Rao Street, Bangalore 2.

Mysore State Trunk Manufacturers' Association, 12/1, Sri Krishnarajendra Road, Bangalore-2.

Stationery, Cutlery & General Merchants Association, C/o C. R. & Bros., 201-202, Avenue Road, Bangalore 2.

Textile Association (India) Regd., Mysore Branch, C/o S. K. S. J. Technological Institute Bangalore 1.

Electrical Merchants' Association, Shankara Bldgs., Chickpet, Bangalore 2.

Handloom Cloth Merchants' Assn., Marwadi Temple Lane, Chickpet, Bangalore 2.

Licensed Electrical Contractors' Assn. of Mysore, 528, Avenue Road, Bangalore 2.

Mysore Art Silk Yarn Merchants' Assn., 32, Jumma Masjid Road, Bangalore 2.

Mysore Film Chamber of Commerce, Movie Land Bldgs., 6th Cross, Gandhinagar, Bangalore 9.

Mysore Metal Merchants' Association, Post Box No. 556, Bangalore 2.

Mysore Oodabathi Mfrs' Association, Mysore Chamber of Commerce Bldgs., Kempegowda Road, Bangalore 9.

Mysore Prov. Silk Handloom Weavers' Co-op. Society Ltd., Jumma Masjid Road, Bangalore 2.

Mysore Silk Association, Asiatic Bldgs., Gandhinagar, Bangalore 9.

Mysore Silk Cloth Merchants' Assn., No. 6, Shivakripa Bldg., Chowdeswari Temple St., Bangalore 2.

#### OTHER SOCIAL, CULTURAL, LITERARY, RELIGIOUS, ETC. ASSOCIATIONS

All India Anglo Indian Association, 11, Stephen Road, Bangalore 5.

All India Dental Association, Dental College, Fort, Bangalore 2.

Andhra Grantha Parishat, 28, 1st Main, V. Block, Kumarapark W. Extn., Bangalore 20.

All Karnakka Children's Assn., Children's Playgrounds, Fort, Bangalore 18.

Automobile Association of South India, 18, St. Mark's Road, Bangalore 1.

Bangalore Club, Residency Road, Bangalore 1.

Bangalore Young Women's Christian Association, 9, Lady Curzon Road, Bangalore 1.

Bible Society of India and Ceylon, A/1, M. Gandhi Road, Bangalore 1.

Board of Control for Cricket in India, No. 34, 16th Cross Road, Malleswaram, Bangalore 3.

Bowring Institute, 19, St. Mark's Road, Bangalore 1.

Rotary Club of Bangalore, 36, Residency Road, Bangalore.

Shorthand Writers' Association, District Office Compound, Bangalore.

Bangalore City Institute, Fort South Gate, Bangalore.

Commonwealth Institute of Biological Control, P. Box 1403, Bangalore 6.

Central Leprosariums, Magadi Road, Bangalore 2.

Government Tuberculosis Sanatorium, Old Madras Road, Bangalore.

Indian Hockey Federation, 16/3, Infantry Road, Bangalore.

Indian Institute of Public Administration, Vidhana Soudha, Ground Floor, Bangalore 1.

United Lodge of Theosophists, Sir Krishna Rao Road, Basavanagudi, Bangalore.

Institute of Management, C/o Hindustan Aircraft Ltd., Bangalore.

Mysore State Ayurvedic Congress, Jayachamarajendra Institute of Indigenous Systems of Medicine, Bangalore.

Ex-Servicemen's Association, 9, Main Road, Munireddipalyam, Bangalore.

Family Planning Associations, 44A, Cavalry Road, Bangalore 1.

Institution of Engineers (India), Mysore Engineers Assn. Bldg. Bangalore 1.

Sri Kasturba Gandhi Hindi Shikshana Shala, III Main Road, Chamarajpet, Bangalore.

Mysore Geologists' Association, 243, Fifth Main Road, Chamarajpet, Bangalore 1.

Mysore Horticultural Society, Lalbagh, Bangalore 2.

Mysore Serum Institute, Hebbal, Bangalore 6.

The Mysore State Education Federation, Mayo Hall, Bangalore 1.

The Mysore State Journalists' Association, District Office Compound, Bangalore.

The Mysore State Non-Gazetted Officers' Association, Cubbon Park, Bangalore 1.

Mysore Hindi Sahitya Parishat, Chamarajpet, Bangalore 2.

Mysore State Branch of Red Cross Society, Bangalore 4.

Oriental Research Institute, Mysore.



Princess Krishnammanni Sanatorium, V. V. Mohalla, Mysore.  
 Seva Sadan, XIV Cross Road, Malleswara, Bangalore 3.  
 Servants of India Society, Basavanagudi, Bangalore.  
 Sangeetha Kalabhivardhini Sabha (Regd.), 1670, Hosakeri, Krishnaraj Mohalla, Mysore.  
 Sarva Sishu Poshana Saugh, 28, 1st Main, V Block, Kumarapark West Extension, Bangalore 20.  
 Shree Rama Bhajana Sabha, East Park Road, Malleswaram, Bangalore 3.  
 Shree Ramaseva Mandali, 189, 4th Main Road, Chamarajpet, Y.M.C.A., Cernofaph Road, Bangalore 2.  
 Federation of Indian Photography, 50, Sri Rama Mandir Road, Bangalore 4.  
 Gokhale Institute of Public Affairs, Narasimharaja Colony, Basavanagudi, Bangalore 4.

Home Management, 1st Main V Block, K. West Extn., Bangalore 20.  
 Indian Academy of Sciences, Hebbal P.O., Bangalore 6.  
 Indian Dairy Science Association, Hosur Road, Bangalore.  
 Indo Soviet Cultural Society, 28, 1st Main, V Block, Kumara Park W. Extn., Bangalore 20.  
 Institute of Secretaries, 28, 1st Main, V Block, K. W. Extension, Bangalore 20.  
 Institution of Engineers, No. 3, Vidhana Veehi, Bangalore 1.  
 Institution of Telecommunication Engineers, C/o Indian Telephone Industries Ltd., Bangalore 16.  
 Kannada Sahitya Parishad, Hardinge Road, Chamarajpet, Bangalore 18.  
 Sri Krishnarajandra Silver Jubilee Technological Institute, Krishnarajendra Circle, Bangalore 1.

Mysore State Adult Education Council, 1132/2, Krishnamurthipuram, Mysore.  
 Mysore State Badminton Assocn., 64, XV-A, Cross Road, Malleswaram, Bangalore 3.  
 Mysore State Sangeetha Nataka Academy, Ravindra Kalakshetra, Bangalore 2.  
 Raman Research Institute, Hebbal P.O., Bangalore 6.  
 Society of Biological Chemists, Indian Institute of Science, Bangalore 12.  
 S. India Union of Seventh-Day Adventists, P. Box No. 20, Bangalore 1.  
 Sri Bharathi Seva Mandali, E-18, 17th Cross Street, Cubbonpet, Bangalore 2.  
 Sri Varalakshmi Academies of Fine Arts, Ram Vilas, Kashipathy Agarahar, Chamaraja Road, Mysore 4.  
 Vivevaraya Industrial and Technological Museum, Kasturba Road, Bangalore 1.

## MYSORE DISTRICTS

BELGAUM VYAPARI SANGH  
 691, Raviwarpath, Belgaum.  
 BELLARY DISTRICT CHAMBER OF COMMERCE  
 Bellary.  
 DANDELI INDUSTRIES ASSOCIATION  
 Dandeli (Dt. N. Kanara).  
 THE DAVANGERE TRADES ASSOCIATION  
 Mandipet, Davangere.  
 DHARWAR CHAMBER OF COMMERCE  
 Dharwar.  
*President*: S. S. Nawari; *Vice-Presidents*: Y. L. Sangolli, G. C. Agadi; *Hon. Secretary*: S. M. Malkai; *Treasurer*: D. V. Punekar.  
 FAMILY PLANNING ASSOCIATION OF INDIA  
 South Kanara Branch, Manipal.  
 GOVERNMENT WELLESLEY TUBERCULOSIS SANATORIUM  
 Bellary.

THE KANARA CHAMBER OF COMMERCE  
 P.O. Box No. 116, Bunder, Mangalore 1.

*President*: U. Subraya Mallia; *Vice-President*: M. Janardhan Kamath; *Treasurer*: M. Baba Pai; *Hon. Secretary*: U. Rajaram Mallaya; P. Narasing Rau.

KARNATAK AYURVED VIDYAPEETH SOCIETY  
 Khasbag—Belgaum.

KARNATAK CHAMBER OF COMMERCE & INDUSTRY  
 Hubli.

*President*: G. Mahadevappa; *Vice-Presidents*: R. G. Wali; V. M. Ghigateri; C. S. Desai; *Hon. Secretary*: J. P. Javali.

THE KARNATAK HISTORICAL RESEARCH SOCIETY

College Road, Dharwar, Mysore State.

The Society has started the School of Indian Palaeography.

KARNATAK HOSIERY SAHAKARI UTPADAK SANGHA LTD.  
 Shahapur, Belgaum.

MANGALORE CASHEW MANUFACTURERS' ASSOCIATION  
 Bunder, Port Road, Mangalore 1.

THE MYSORE STATE PLANTERS' ASSOCIATION  
 Chickmagalur.

SANSKRITI PRAKASHANA  
 Malmaddi-Bellary Road, Dharwar.

SCHOOL OF CULTURE  
 Theosophical Society Belgaum Lodge, Samadevi Galli, Belgaum.

VANITA SEVA SAMAJ, PURANIK ROAD  
 Dharwar.

## ORISSA

THE BERHAMPUR CHAMBER OF COMMERCE, BERHAMPUR (Dt. Ganjam).

*President*: P. Parthasarathi *Vice-President*: V. K. Raju *Secy. Cum Treasurer*: I. Ramamurthy.

CUTTACK CHAMBER OF COMMERCE  
 Malgodown, Cuttack 3.

NATIONAL MUSIC ASSOCIATION  
 Buxi Bazar, Cuttack 1.

ORISSA CHAMBER OF COMMERCE AND INDUSTRY  
 Barbatl Stadium, Cuttack 1.

ORISSA SAHITYA AKADEMI  
 P.O. Box 56, Bhubaneswar.  
 ORISSA SMALL SCALE INDUSTRIES ASSOCIATION  
 Chaullaganj, Cuttack 3.  
 UTKAL SAHITYA SAMAJ  
 Sriramchandra Bhaban, Cuttack 1.

## HARYANA &amp; PUNJAB

EAST PUNJAB CYCLE PARTS MANUFACTURERS' ASSOCIATION  
 Gill Road, Ludhiana.  
 ENGINEERING ASSOCIATION OF INDIA  
 (Punjab Regional Office)  
 Tanda Road, Jullundur City.  
 ENGINEERING ASSOCIATION OF NORTHERN INDIA  
 G. T. Road, Batala, Dist. Gurdaspur.

THE FACTORIES' ASSOCIATION  
 Railway Road, Batala.

FARIDABAD INDUSTRIES ASSOCIATION  
 Township, Faridabad.

HOME HOSIERY MANUFACTURERS UNION  
 Chawal Bazar, Ludhiana.

HOSIERY INDUSTRY FEDERATION OF INDIA  
 Sat Sang Ghar Road, Civil Lines, Ludhiana.  
*President*: Kul Bhushan; *Vice-President*: P. L. Jain; *Gen. Secretary*: B. R. Ahluwalia.  
 HOSIERY INDUSTRY WELFARE BOARD  
 Phalahi Bazar, Ludhiana.  
 HOSIERY MACHINE MANUFACTURERS' ASSOCIATION  
 461-62, Industrial Area B, Miller Ganj, Ludhiana.



**HOSIERY MANUFACTURERS' ASSOCIATION**

Thapar Bldg., Bazaar Kharadian, Ludhiana.

**INDIAN INSTITUTE OF ADVANCED STUDY**

Rashtrapati Niwas, Simla-5.

The Institute undertakes organisation, guides and promotes research of a high order in selected subjects in humanities, Indian culture, comparative religions, social sciences, natural sciences, etc. It also assists and associates itself with the efforts made by other academic and/or governmental bodies in the dissemination of knowledge.

*Director* : Dr. Niharranjan Ray; *Registrar* : K. Venkataraman.

**INDIAN POLITICAL SCIENCE ASSOCIATION**Dept. of Political Science,  
Punjabi Univ., Patiala.**KAPURTHALA INDUSTRIES ASSOCIATION**

Factory Area, Kapurthala.

**LUDHIANA CYCLE PARTS SUPPLIERS ASSOCIATION**

Miller Ganj, Ludhiana 3.

**THE LUDHIANA MACHINE TOOLS MAKERS GUILD**

Link Road, Dholewal Chowk, Ludhiana.

**MANUFACTURERS' ASSOCIATION**

Sonapat.

**NATIONAL INSTITUTE OF ENGINEERING**

Hoshiarpur.

**NATIONAL INSTITUTE OF SPORTS**

Motibagh Palace, Patiala.

The Institute was set up by the Government of India in 1960 to produce first rate coaches in various games and sports.

*Chairman* : General K. M. Cariappa; *Member-Secretary and Director* : Major General M. S. Chopra; *Deputy Director* : A. K. Singh.

**NORTHERN INDIA CHAMBER OF COMMERCE & INDUSTRY**

Chandigarh.

**THE PUNJAB FEDERATION OF INDUSTRY & COMMERCE**

Inside Hall Gate, Amritsar.

*President* : S. Gurdial Singh Uppal; *Vice-President* : C. Constantinides; *Secretary* : S. Iqbal Singh Bindra.

**THE PUNJAB PAPER MERCHANTS' ASSOCIATION**

Guru Bazar, Amritsar.

**PUNJAB RADIO TRADE FEDERATION**

Railway Road, Jullundur City.

**PUNJAB SPINNING, WEAVING CENTRES**

Jullundur City.

(Doing Cotton & Wool hand spinning and hand weaving work in the Punjab State).

**PUNJAB STATE COUNCIL FOR CHILD WELFARE**

1/10 JC, K-Street, Sector 7-A, Chandigarh.

**SCIENTIFIC INSTRUMENTS MANUFACTURERS & DEALERS ASSOCIATION**

Hargolal Road, Ambala Cantt.

**SHIROMANI GURDWARA PARBANDHAK COMMITTEE, AMRITSAR**

(Teja Singh Samundri Hall, Amritsar)

The Shiromani Gurdwara Parbandhak Committee is constituted under the provisions of the Sikh Gurdwaras Act, 1925 (Punjab Act VIII of 1925). It consists of :

- (i) 140 elected members ;
- (ii) Head Priests of Golden Temple, Amritsar and the following four Takhats (a) Akal Takhat Sahib, Amritsar; (b) Takhat Keshgarh Sahib, Anandpur; (c) Takhat Patna Sahib, Patna; and (d) Takhat Hazur Sahib, Nanded (Maharashtra); and
- (iii) Fifteen members resident in India of whom at least ten are residents of the States other than the Punjab State Coopted by the members of the S.G.P.C., as described in clauses (i) and (ii).

Elections to the Shiromani Gurdwara Parbandhak Committee are held every five years.

The Shiromani Gurdwara Parbandhak Committee directly manages eleven of the most important and historic Gurdwara situated within the Punjab State including the historic Gurdwara at Nankana Sahib (West Pakistan).

A Judicial Commission is also constituted under the provisions of the Sikh Gurdwaras Act to settle disputes regarding the management of the Gurdwaras.

In the last Gurdwara elections held on Jan. 17, 1965, out of 138 members elected 101 members were elected on the Shiromani Akali Dal (Sant Fateh Singh's) ticket and 37 on the Master Tara Singh group ticket. The total strength of the S.G.P.C. is 160.

The S.G.P.C. manages about 700 Gurdwara in the Punjab.

The S.G.P.C. also runs Arts, Science and Engineering Colleges and several high schools, hospitals and libraries. Total Budget : Rs. 90,90,199.

**Some Important figures of Income :—**

|                  |               |
|------------------|---------------|
| A. Offerings     | Rs. 12,62,500 |
| B. Karah Parshad | Rs. 18,33,536 |
| C. Rent & Lands  | Rs. 8,95,000  |

**Some Important figures of expenditure :—**

|                  |               |
|------------------|---------------|
| A. Salary        | Rs. 10,93,300 |
| B. Karah Parshad | Rs. 7,55,462  |
| C. Free Kitchen  | Rs. 4,50,000  |

**Most Important features of Expenditure :—**

|                          |               |
|--------------------------|---------------|
| A. Education             | Rs. 21,69,966 |
| B. Preaching             | Rs. 6,66,000  |
| C. Sikh History Research | Rs. 1,10,000  |

**THE TECHNOLOGICAL INSTITUTE OF TEXTILES**

P.O. Birla Colony, Bhiwani (Hissar).

**TEXTILE MANUFACTURERS' ASSOCIATION**

4, Diwan C. Mehra Road, Amritsar.

*President* : Sardari Lal Kapur; *Vice-President* : Pyare Lal Kapur; *Financial Secretary* : Bal-kishen Arora; *Hony. General Secretary* : Bal-kishan Munjal.

**TIMBER MERCHANTS' ASSOCIATION**

Pathankot (Dt. Gurdaspur).

**UNITED LUDHIANA CYCLE MFBS. ASSOCIATION**

Miller Ganj, Gill Road, Ludhiana.

**VISHVESHVARANAND VEDIC RESEARCH INSTITUTE**

Post Office : Sadhu Ashram, Hoshiarpur.

A non-denominational centre for post-graduate teaching, research and study in Indology.

*President* : Dr. Mehr Chand Mahajan, M.A., LL.B., LL.D., Retd. Chief Justice of India; *Vice-President* : Prof. Diwan Anand Kumar, M.A. (Cantab), Bar-at-Law; *Hony Secy.* : Diwan Har Krishna Das Darhiwala, Hon. Jt. Secy. & *Director* : Acharya Vishwa Bandhu, Shastri, M.A. M.O.L. (Ph.) D. Litt (H.C.) (Kv.), O.d'A. (Fr.) Kt. CT. (It.).

**VOLLEYBALL FEDERATION OF INDIA**

12-A, Model Town, Patiala.

**WOOL MERCHANTS' ASSOCIATION**

Wool Lane, Fazilka.

**RAJASTHAN****AJMER DISTRICT SMALL INDUSTRIES & HANDICRAFTS ASSOCIATION**

Kaxhari Road, Ajmer

**ALL INDIA WOOL TRADE FEDERATION**

Beawar.

**BANASTHALI VIDYAPITH**

P.O. Banasthali Vidyapith (Jaipur).

All India residential institution imparting all-round education to girls from nursery to post-graduate stage and working through its educational effort, for a synthesis of the spiritual heritage and the scientific achievements of the East and the West.

*Adhyaksha* : Pt. Hiralal Shastri; *Upadhyaksha* (Prashasan) : Smt. Ratan Shastri; *Upadhyaksha*

(Shiksha) : P. N. Mathur and Mantri Diwaker Shastri.

**BASKETBALL FEDERATION OF INDIA**

C/o Nagina Bagh, Ajmer.

**BIKANER DISTRICT INDUSTRIES ASSOCIATION**

Binani Bldgs., Alakh Sagarwell, Bikaner.

**BIKANER VYAPAR MANDAL**

K.E.M. Road, Bikaner.

**THE BIKANER WOOL TRADERS ASSOCIATION**

Near Daga High School, Bikaner.

**CHAMBER OF COMMERCE & INDUSTRY**

Bharatpur.

**THE CHAMBER OF COMMERCE**

Sadar Bazar, Bundi.

**CHAMBER OF COMMERCE**

Bara Bazar, Udaipur.

**FEDERATION OF ASSOCIATIONS OF SMALL INDUSTRIES OF RAJASTHAN**

Near Shah Bldgs., Sawai Mansingh Highway, Jaipur.

**INDIAN SOCIETY OF HAEMATOLOGY**

Bungalow No. 13, Opp. Mental Hospital, Adarsh Nagar, Jaipur.



**JAIPUR CHAMBER OF COMMERCE AND INDUSTRY**

Johari Bazar, Jaipur City.

*President* : S. G. Sekhsaria ; *Vice-Pres.* : B. L. Ajmera ; *Hon. Secy.* : K. Patni.**JAIPUR MUDRAK SANGH**

C/o Friends Printers, Jaipur.

**JODHPUR INDUSTRIES ASSOCIATION**

Behind Power House, Jodhpur.

**MAHA BODHI ASHOKA MISSION**

Dhamma Kuti, Buddha Vihara, Mayo Link Road, Ajmer.

**MARWAR CHAMBER OF COMMERCE**

5, Halder Bldgs., Sojati Gate, Jodhpur.

*President* : N. K. Sanghi ; *Vice-Presidents* : S. R. Mohatta, M. M. Mehta ; *Hon. Secy.* : C. L. Salecha ; *Hon. Treasurer* : B. C. Jain.**PLASTIC INDUSTRIES ASSOCIATION**

Nima House, Jodhpur.

**RAIL & TRANSPORT PASSENGERS' ASSOCIATION**

Prag Bhawan, Gajner Road, Bikaner.

**RAJASTHAN ACADEMY OF SCIENCES**

Birla College, Pilani.

**RAJASTHAN CHAMBER OF COMMERCE AND INDUSTRY**

Johari Bazar, Jaipur City.

*President* : Ramnath A. Podar ; *Senior Vice-President* : Khailshanker Durlabhji ; *Vice-Presidents* : S. G. Sekhsaria, Sohanlal Singhania, N. K. Sanghi, S. K. Jain ; *Hon. Secretary* : G. S. Purohit ; *Jt. Hon. Secretary* : K. L. Jain ; *Secretary* : M. C. Gandhi.**RAJASTHAN CYCLE MANUFACTURERS' ASSOCIATION**

Behind Atish, Gangori Bazar, Jaipur.

**RAJASTHAN FARMERS FORUM**

Govind Vatika, "C" Scheme, Jaipur.

**RAJASTHAN INDUSTRIAL AND MINING ASSOCIATION**

Pusa Nivas, Bhilwara.

**RAJASTHAN LALIT KALA AKADEMI**

260-D, Bani Park, Jaipur.

**RAJASTHAN SANGEET NATAK ACADEMY**

Paota A-1 Road, Jodhpur.

**RAJASTHAN SHIKSHAK SANGH**

Janki Niwas, 1-B, Sardarpura, Jodhpur.

**THE RAJASTHAN TEXTILE MILLS' ASSOCIATION**

Durlabh Bhawan, Mirza Ismail Road, Jaipur.

**SARASWATI VIDYAPITH**

Tipta, Kotah P. O.

**STUDY CIRCLE**

Haldiyan-Ka-Rasta, Jaipur.

**UNITED CHAMBERS OF COMMERCE**

Sadul Memorial Marg, Bikaner.

## UTTAR PRADESH

**ACADEMY OF ZOOLOGY**

164, Civil Lines, Agra.

**AGRA IRON FOUNDERS' ASSOCIATION**

G. G. Industries P.O., Belanganj, Agra.

**THE AGRA MERCHANTS' CHAMBER LTD.**

Bari Kothi, Belanganj, Agra.

**AGRA PRODUCTIVITY COUNCIL**

G. G. Industries Post Office, Agra.

**AGRA SHOE MANUFACTURERS' ASSOCIATION**

1244, Pili Kothi, Shahganj, Agra.

*President* : A. N. Varma ; *Vice-President* : Nasir Ahmad Khan ; *Hon. General Secretary* : S. P. Dhir.**AKATHIT ACADEMY**

"Nand Bhavan", Gautam Budh Marg, Lucknow.

**ALIGARH LOCK MANUFACTURERS & TRADERS' ASSOCIATION**

Aligarh.

**ALL INDIA CRIME PREVENTION SOCIETY**

Behari Niwas, Kanpur and Balaganj, Lucknow.

**ALL INDIA FEDERATION OF EDUCATIONAL ASSOCIATIONS**

Jha-Seshadri-Khattry Bhawan, Post Box 52, Kanpur.

**ALL INDIA KASHIRAJ TRUST**

Fort Ramnagar, Varanasi.

*Objects* : Among others, advancement and propagation of the Sanskrit language, Sanskrit learning and Indology.

A research bulletin 'PURANA' is published by the Trust in English and Sanskrit dealing with Puranic studies.

The Trust maintains a South Indian Pilgrims Information Bureau at Varanasi to help the pilgrims from South India.

**ALL-INDIA NATURE CURE ASSOCIATION**

52, Gwynne Road, Lucknow.

**ALL INDIA SEVA SAMITI**Seva Samiti Buildings,  
Seva Samiti Road, Allahabad 8.**ALLAHABAD TRADERS' ASSOCIATION**

125, Kamta Prasad Kacker Marg, Allahabad 8.

**AMERICAN ACADEMY OF BENARES**

Rewa Palace, B2/3 Rewa Ghat, Varanasi.

**ARCHAEOLOGICAL MUSEUM**

Dampier Park, Mathura.

**BHARAT KALA BHAVAN**

(Museum of Indian Art and Archaeology).

Banaras Hindu University, Banaras 5.

**THE BHARAT SCOUTS AND GUIDES UTTAR PRADESH**

17, Katra Road, Allahabad.

**BHARATA GANITA PARISAD (FORMERLY BENARAS MATHEMATICAL SOCIETY)**

Mathematics Dept., Lucknow University, Lucknow.

**BIRBAL SAHNI INSTITUTE OF PALAEOBOTANY**

53, University Road, Lucknow (U.P.).

**THE CHAMBER OF COMMERCE Chandausi.****THE CHAMBER OF COMMERCE Hapur, Dist., Meerut.****COTTAGE INDUSTRIES DEVELOPMENT INSTITUTE**

Tilpurwa, Hussainganj, Lucknow.

Specialists in Chikan Art Industry.

**DEFENCE INSTITUTE OF WORK STUDY Landour Cant., Mussoorie.**

The Defence Institute of Work Study, set up in Mussoorie in 1962, has a three-fold function : to train officers and men from the Defence Services and the Defence Organisations in Work Study and allied Management subjects ; to render assistance to 'User' organisations in the conduct of practical projects and case studies ; to carry out applied research in Work Study. Types of Courses run : Advanced Work Study (12 weeks) ; Work Study Assistants Course (5 weeks) ; Production Planning and Control

(3 weeks) ; Organisation and Methods (3 weeks) ; Management Appreciation Course (1 week) ; Refresher Course (1 week) ; Work Study Appreciation Conference (6 hours) ; Seminar (3 days).

*Director* : Capt. H. D. Selby, I.N. Dy. *Director and Chief Instructor* : Lt.-Col. M. L. Garg.**DISTRICT CRIME PREVENTION COMMITTEE**

Midland House, Meeton Road, Kanpur.

**THE DIVINE LIFE SOCIETY**

P.O. Sivanandanagar, Dist. Tehri-Garhwal, U.P.

Founded by H. H. Swami Sivananda in 1936. The main objective is the dissemination of spiritual knowledge and spiritual awakening of modern mankind, and revival of India's ancient spiritual and moral ideals as applicable to man of the present age. Propagates Yoga and Vedanta, promotes universal love, the unity of religions, the ideal of brotherhood and the spirit of selfless service through medical work and educational help. Universal in its outlook, its activities include missionary and philanthropic work irrespective of sex, sect, caste, creed, country or colour. The Society has branches all over the World.

*President* : H. H. Swami Chidananda Saraswati ; *General Secretary* : H. H. Swami Krishnananda Saraswati ; *Treasurer* : H. H. Swami Madhavananda Saraswati ; *Secretary* : H. H. Swami Premananda Saraswati.**EMPLOYERS' ASSOCIATION OF NORTHERN INDIA**

(14-77, Civil Lines, Post Box No. 844, Kanpur.)

**ENGINEERING ASSOCIATION OF NORTHERN INDIA**

70/7, Latouche Road, Kanpur.

*President* : Lala Ram Manohar Gupta ; *Hon. Gen. Secy.* : S. Shamsheer Singh Tajula ; *Hon. Secretary* : A. D. Shukla.**ETHNOGRAPHIC AND FOLK CULTURE SOCIETY**

Lucknow University, Lucknow.

**GANGANATHA JHA RESEARCH INSTITUTE**

Motilal Nehru Park, Allahabad.



**GURUKUL KANGRI VISHWAVIDYALAYA**

P.O. Gurukul Kangri (Dt. Saharanpur).

*Chancellor* : Prof. Ram Singh, *Vice-Chancellor* :  
Mahendra Pratap Shastri, *Pro-Vice-Chancellor* :  
Acharya Priya Varta, Vedavachaspati,  
*Registrar* : Prof. Ganga Ram.

**H. B. TECHNOLOGICAL INSTITUTE**  
Company Gardens, Kanpur.**HIDE MERCHANTS' ASSOCIATION**  
Farrashkhana, Kanpur.**HIND KUSHT NIVARAN SANGH**  
(U.P. Branch).C/o Director of Medical and Health Services,  
U.P., Lucknow.**INDIA VILLAGE SERVICE**  
(Sattal, P.O. Bhowali, Dist. Naini Tal, U.P.).**INDIAN CERAMIC SOCIETY**  
Banaras Hindu University, Banaras 5.**INDIAN INSTITUTE OF TECHNOLOGY**  
I.I.T. P.O., Kanpur.

*Director*, Dr. P. K. Kelkar, *Dy. Director*, Dr. M.  
S. Muthana, *Registrar*, Ratan Swarup.

**INDIAN POLITICAL SCIENCE  
ASSOCIATION**  
Muslim University, Aligarh, U.P.**INSTITUTE OF OPHTHALMOLOGY**  
Gandhi Eye Hospital, Aligarh.**INSTITUTE OF ORIENTAL PHILOSOPHY**  
Vrindaban (Dist. Mathura).**INTERNATIONAL HUMAN REFORM  
SOCIETY**  
Manavata Bhawan, 1, Gurudwara Road,  
Lucknow.**J. K. INSTITUTE OF SOCIOLOGY,  
ECOLOGY AND HUMAN RELATIONS**  
University of Lucknow, Lucknow.**KASHI VIDYAPITH**  
Varanasi.**MAHILA ASHRAM**  
(Home for women in distress run by Municipal  
Corpn.)  
Motinagar, Lucknow.**MERCHANTS' CHAMBER OF U.P.**  
15/57, Civil Lines, Kanpur.**METROPOLITAN CHURCH ASSOCIATION**  
P.O. Siwalt (Dt. Allahabad.)**NAGARI PRACHARINI SABHA  
BANARAS****NATIONAL ACADEMY OF SCIENCES,  
INDIA**  
(Lajpat Rai Road, Allahabad 2.)

*President* : Prof. K. Banerjee; *Vice-Presidents* :  
Prof. Ram Behari, Prof. R. N. Tandon;  
*Honorary Treasurer* : Prof. S. N. Ghosh; *Foreign  
Secretary* : Prof. A. C. Banerji; *General  
Secretaries* : Prof. M. D. L. Srivastava, Dr. B.  
S. Chauhan.

**NATIONAL CHAMBER OF INDUSTRIES  
AND COMMERCE, U.P.**  
(G. G. Industries Post Office, Agra.)**NATURE CURE COUNCIL OF MEDICAL  
RESEARCH**  
52-57, Gwynne Road, Lucknow.**NORTH INDIA CHRISTIAN LITERATURE  
SOCIETY**

18, Clive Road, Allahabad.

**NUMISMATIC SOCIETY OF INDIA**  
P. O. Banaras Hindu University, Varanasi 5.**RAMAKRISHNA MISSION SEVASHRAM**  
Aminabad, Lucknow.

Has a charitable dispensary with X-Ray.  
Dentistry, Physiotherapy and T.B. Clinic.  
Treated 2,69,133 patients during 1965-66 free of  
charge, without any distinction of caste, creed or  
colour. Conducts regular religious and philoso-  
phical discourses daily. Has a library and reading  
room with over 9,500 volumes and about 30  
periodicals and 8 dailies.

**SARVA SEVA SANGH**  
Rajghat, Varanasi.  
Founded : 1948

The objects of the Sangh are as follows :

To establish a social order free from all  
exploitation and based on the principles of  
truth and non-violence, and with this object  
to foster village mindedness in the citizens of  
India.

The Programme includes various constructive  
work items like communal harmony, Khadi,  
removal of untouchability, basic education,  
relief to the poor (by securing employment,  
living wage, security and unemployment benefit,  
educational and medical facilities), research in  
hand spinning and weaving.

At present the Sangh is concentrating on the  
Gramdan, Sarvodaya Patra and Shanti Sena  
movement started by Acharya Vinoba Bhave.

Shanti Sena Mandal is doing peace work in  
the country in general and in border areas in  
particular on behalf of the Sangh. There are  
nearly 12,000 Shanti Sainiks throughout the  
country.

**SHAHJAHANPUR MERCHANTS' CHAMBER**  
Shahjahanpur.**SHEILA DHAR INSTITUTE OF SOIL  
SCIENCE**  
University of Allahabad, 2-D, Bell Road,  
Allahabad.**THE SUGAR TECHNOLOGISTS'  
ASSOCIATION OF INDIA**  
Kalyanpur, Kanpur (U.P.).**THE TANNERS' FEDERATION OF INDIA**  
14/69, Civil Lines, Kanpur.

*Chairman* : S. Nazar Mohamed; *Vice-Chairman* :  
Mohammed Yaqub; *Secretary* : R. K. Mehra.

**TEXTILE ASSOCIATION (INDIA) REGD.**  
(U.P. Branch)  
14/1, Civil Lines, Kanpur.**THEOSOPHICAL SOCIETY**  
(Indian Section)  
(Kamachha, Varanasi 1.)**TRADERS CHAMBER OF UTTAR PRADESH**  
Meston Road, Kanpur.

*President* : V. S. Rastogi. *General Secretary* :  
Umesh Chandra.

**THE U. P. AUTOMOBILE ASSOCIATION**  
32-A, M. G. Marg, Allahabad.**U.P. BARBED WIRE MANUFACTURERS'  
ASSOCIATION**  
58/4, Birhana Road, Kanpur.**U.P. BISCUIT MANUFACTURERS'  
ASSOCIATION**  
84/67, G.T. Road, Kanpur.**U. P. CHAMBER OF COMMERCE**  
15-197, Civil Lines, Kanpur.

*President* : H. K. Srivastava; *Vice-President* :  
Satyanarain Bagla, R. L. Aurora; *Honorary  
Secretary* : Stanley de Noronha.

**U.P. GLASS MANUFACTURERS'  
SYNDICATE**  
Shikohabad.**U. P. GUR AND KHANDSARI  
ASSOCIATION**  
Alamgirganj, Bareilly.**U.P. INDUSTRIAL ESTATE  
MANUFACTURERS' ASSOCIATION**  
5, Industrial Estate, Kanpur.**U.P. SMALL SCALE INDUSTRIES  
ASSOCIATION**  
106/377, 'P' Road, Kanpur.**UPPER INDIA CHAMBER OF COMMERCE**  
(Post Box No. 63, Kanpur.)

*President* : A. H. West; *Vice-President* : Y. S.  
Tayal.

**THE UPPER INDIA SUGAR EXCHANGE  
LTD.**  
51/58, Collectorganj, Kanpur.**UTTAR PRADESH PUBLISHERS'  
ASSOCIATION**

21, Sheo Charan Lal Road, Allahabad 3.

**UTTAR PRADESH TUBERCULOSIS  
ASSOCIATION**  
1, A. P. Sen Road, Lucknow.**VARANASEYA SANSKRIT VISHVA  
VIDYALAYA, VARANASI**

Teaching-cum-affiliating. Has the richest  
collection of Sanskrit Manuscripts. Has taken  
up the work of compilation of Bibliography of  
Sanskrit and allied subjects. Has started yoga  
Tantra and Suddha Ayurveda Depts.

*Chancellor* : Governor of U.P.; *Vice-Chancellor* :  
Dr. S. N. Shastri; *Registrar* : Ram Chandra  
Malaviya; *Treasurer* : Dr. Raj Govinda  
Chandra; *Director of Research Institute* : Prof.  
Bal Deva Upadhyaya.

**VIJAI BEOPAR CHAMBER LTD.**  
New Mandi, Muzaffarnagar.**THE VIJNANA PARISHAD**  
The Vijnana Parishad Bhawan, Thornhill Road,  
Muir College Buildings, Allahabad 2.

Scientific—Hindi Science Academy of India  
for Propagation of Science in Hindi.

**WESTERN U.P. CHAMBER OF COMMERCE**  
MEERUT CANTT. 17.

*President* : Ralzada Seth K. N. Modi; *Senior  
Vice-President* : Seth Sultan Singh Jaisi;  
*Junior Vice-President* : B. K. Das; *Secretary* :  
R. K. Jain.

**THE YOGA-VEDANTA FOREST  
ACADEMY**

The Divine Life Society, P.O. Sivananda Nagar  
Post (Dt. Tehri Garhwal).

The Yoga-Vedanta Forest Academy is an  
affiliated institution to the Divine Life Society.  
The Yoga-Vedanta Forest Academy constitutes  
the instructional and the research wing of the  
mother institution and is co-existent and co-  
extensive with the Society's Headquarters at  
Sivanandanagar near Rishikesh. The objective  
and function of the Academy are practical train-  
ing in Yoga, instruction on spiritual *Sadhanas*  
and *Yoga-abhyasa*, regular publication of books  
on Yoga and Vedanta, imparting knowledge of  
scriptures, research work into aspects of Yoga  
and arranging of periodical intensive courses of  
the Yogas in synthesis. The Academy has been  
functioning since 1948.

The Yoga-Vedanta Forest Academy has more  
than half a dozen Centres in countries abroad.  
The instruction and training is free and is done  
as a *Nishkama Karma Yoga Sadhana* by those  
engaged in this work of the Academy.

*President* : H. H. Swami Chidananda Saraswati;  
*Principal* : H. H. Swami Krishnananda Saras-  
wati.



## WEST BENGAL

### THE ALL BENGAL PHYSICAL CULTURE ASSOCIATION

5, Krishna Bihari Sen Street, Calcutta 7.

### ALL-BENGAL TEACHERS' ASSOCIATION

15, Bankim Chatterjee Street, Calcutta 12.

### ALL BENGAL WOMEN'S UNION

89, Elliot Road, Calcutta 16.

### ALL-INDIA ASTROLOGICAL AND ASTRONOMICAL SOCIETY

"Jyotish-Samrat Bhaban", 50/2, Dharamtala Street, Calcutta 13.

### ALL INDIA INVESTORS' ASSOCIATION

7, Lyons Range, Calcutta 1.

### ALL-INDIA JUTE MILL BOBBIN MANUFACTURERS' ASSOCIATION

P-11, Mission Row Extension, Calcutta 1.

### ALL INDIA LAWN TENNIS ASSOCIATION

90-A, Bokulbagan Road, Calcutta 25.

### ALL-INDIA MARWARI FEDERATION

152-B, Mahatma Gandhi Road, Calcutta 7.

### ALL INDIA RADIO MERCHANTS' ASSOCIATION

3/C, Madan St., Calcutta 13.

*President* : S. L. Jain ; *Vice-President* : R. V. Mehta ; *Hon. Secretary* : C. E. Caraplet

### ALL INDIA SAW MILLS ASSOCIATION

P-11, Mission Row Extension, Calcutta 1.

### ALL INDIA SHEET GLASS MANUFACTURERS' ASSOCIATION

C/o Hindustan Pilkington Glass Works Ltd., 4, Chittaranjan Avenue, Calcutta 13.

*President* : P. N. Talukdar ; *Secretaries* : T. C. Roy Choudhury, P. N. Roy.

### ALL INDIA SMALL SCALE BATTERY MANUFACTURERS ASSOCIATION

4/1B, Telipara Lane, Calcutta 4.

### ALL-INDIA S. P. C. A.

276, Bowbazar Street, Calcutta.

### ALL INDIA WOMEN'S CONFERENCE CALCUTTA BRANCH

11, Palit Street, Calcutta 19.

### ARCHBISHOP'S HOUSE

32, Park Street, Calcutta 16.

### AROMATIC TRADERS' ASSOCIATION

44/45, Ezra Street, Calcutta 1.

### ARYA SAMITY

Arya Samity Road, Behala, Calcutta 34.

### THE ASIATIC SOCIETY

1, Park Street, Calcutta 16.

### ASSOCIATED CHAMBER OF HIDES & SKINS TRADERS

*Regd. Office* : 9, Maharani Swarnamoyee Road, Calcutta 9 ; *Working Office* : 52, Narkeldanga North Road, Calcutta 11.

### THE ASSOCIATION OF ENGINEERS

24, Netaji Subhas Road, Calcutta 1.

### ASSOCIATION OF INDIAN PHARMACEUTICAL MANUFACTURERS

29/3A, Chetla Central Road, Calcutta 27.

### ASSOCIATION OF MASTER PRINTERS WEST BENGAL LTD.

32, Acharya Profulla Chandra Road, Calcutta 9.

### ASSOCIATION FOR THE PREVENTION OF BLINDNESS

94, Chittaranjan Avenue, Calcutta 12.

### ASSOCIATION OF RUBBER MANUFACTURERS IN INDIA

Dunlop House, 57-B, Free School Street, Calcutta 16.

*Chairman* : Cecil Stack ; *Secretary* : A. T. Mathyoo.

### ASSOCIATION OF SMALL SCALE BATTERY INDUSTRY

114A, Shyamaprosad Mukherjee Road, Calcutta 26.

### ASWINI KUMAR INSTITUTE

5, Janak Road, Calcutta 29.

### AUTOMOBILE ASSOCIATION OF EASTERN INDIA

13, Ballygunge Circular Road, Calcutta 19.

*President* : Justice P. B. Mukharji ; *Vice-Presidents* : N. C. Ray, R. N. Chakrabarty.

### AUTOMOTIVE MANUFACTURERS' ASSOCIATION

India Exchange, India Exchange Place, Calcutta 1.

### BALL & ROLLER BEARING MANUFACTURERS ASSOCIATION OF INDIA

49/1, Gariahat Road, Calcutta 19.

### BANGIYA BIJNAN PARISHAD

294/2/1, Acharya Prafulla Chandra Road, Calcutta 9.

### BANI MANDIR WOMEN'S EDUCATION SOCIETY

2, Williams Lane, Calcutta 9.

### BANTRA ANATH BANDHU SAMITY

31-18, Brindaban Mullick Lane, Howrah.

### THE BENGAL BONDED WAREHOUSE ASSOCIATION

25, Netaji Subas Road, Calcutta-1.

### BENGAL BRATACHARI SOCIETY

191/1, Bepin Bihari Ganguly Street, Calcutta 12.

### BENGAL BUS SYNDICATE

6, Dharamtolla Street, Calcutta 13.

### BENGAL CHEMISTS' & DRUGGISTS' ASSOCIATION

10, Bonfield Lane, Calcutta 1.

### BENGAL GALVANIZED SHEET MERCHANTS' ASSOCIATION

20, Strand Road, Calcutta.

### BENGAL GLASS MANUFACTURERS' ASSOCIATION

P-11, Mission Row Extension, Calcutta 1.

### BENGAL HOSIERY MANUFACTURERS' ASSOCIATION

219, Bepin Behari Ganguli Street, Calcutta 12.

### THE BENGAL JUTE DEALERS' ASSOCIATION

4, Commercial Buildings.

28A, Netaji Subhas Road, Calcutta.

### BENGAL LIBRARY ASSOCIATION

Central Library, Calcutta University, Cal. 12.

### BENGAL MASONIC ASSOCIATION

Freemasons' Hall, 19, Park Street, Calcutta.

### BENGAL MILLOWNERS' ASSOCIATION

2, Church Lane, Calcutta 1.

*President* : S. N. Hada, *Vice-Presidents* : D. N. Chatterjee ; Pratap Singh ; *Secretary* : S. Bhattacharjee.

### BENGAL MOTION PICTURE ASSOCIATION

2, Madan Street, Calcutta 13.

### BENGAL OIL MILLS ASSOCIATION

156, Acharya Profulla Chandra Road, Calcutta 6.

### BENGAL PHARMACEUTICAL ASSOCIATION

182, Acharya Jagdish Bose Road, Calcutta 14.

### BENGAL SILK & ART SILK MILLOWNERS' ASSOCIATION

C/o Swadeshi Industries Ltd., 33, Netaji Subhas Road, Calcutta 1.

### BENGAL SUGAR MERCHANTS' ASSOCIATION

2C, Ramkumar Rakhit Lane, Calcutta 7.

### BENGAL TABLE TENNIS ASSOCIATION

86, College Street, Calcutta 12.

### BENGAL TAXI ASSOCIATION

157B, Dharmatolla Street, Calcutta 13.

### BENGAL TEXTILE DEALERS' ASSOCIATION

30, Cotton Street, Calcutta 7.

### BENGAL THEOSOPHICAL SOCIETY

4/3A, Bankim Chatterjee Street, Calcutta 12.

### BENGAL TRADES ASSOCIATION

P-11, Mission Row Extension, Calcutta 1.

### BENGAL TUBERCULOSIS ASSOCIATION

21, Dr. Sundari Mohan Avenue, P.O. Entally, Calcutta 14.

### BHARAT CHEMICAL IMPORTERS AND DISTRIBUTORS ASSOCIATION

P-11, Mission Row Extn., Calcutta 1.

### BHARAT JUTE SELLERS' ASSOCIATION

2, India Exchange Place, Calcutta 1.

### BHARAT SCOUTS AND GUIDES

5, Government Place North, Calcutta 1.

### BHARAT TEXTILE CHAMBER

208, Jamunalal Bazaz Street, Calcutta 7.

### BIBLE SOCIETY OF INDIA AND CEYLON

23, Chowringhee, Calcutta 13.

### BILLIARDS ASSOCIATION & CONTROL COUNCIL OF INDIA

C/o Great Eastern Hotel, 1, 2 & 3, Old Court House Street, Calcutta 1.

### BLANKET AND SHAWL TRADERS' ASSOCIATION

80, Cotton Street, Calcutta 7.

### BOHURUPEE

11A, Nasiruddin Road, Calcutta 17.



**BOSE INSTITUTE**

93/1, Upper Circular Road, Calcutta 9.

**BOTANICAL SOCIETY OF BENGAL**

35, Ballygunge Circular Road, Calcutta 19.

**THE BUCKET MANUFACTURERS' ASSOCIATION OF INDIA**

Indian Exchange, 7th floor, Calcutta.

**BUDDHIST SOCIETY OF INDIA & BUDDHIST MISSION OF INDIA**

31/1, Baghbazar St., Calcutta 3.

**BUILDERS' ASSOCIATION OF INDIA (Eastern Centre)**

8, Pran Krishna Mukherjee Road, Calcutta 2.

**BUILDERS' HARDWARE INDUSTRIES ASSOCIATION OF INDIA**

India Exchange, 7th Floor, Calcutta 1.

**CALCUTTA ASSOCIATION FOR UNITED NATIONS**

62, Bowbazar Street, Calcutta 12.

**CALCUTTA BALED JUTE ASSOCIATION**

6, Netaji Subhas Road, Calcutta 1.

**CALCUTTA BIBI TOBACCO MERCHANTS' ASSOCIATION**

1, Rupchand Roy Street, Calcutta 7.

**CALCUTTA BLIND SCHOOL**

Diamond Harbour Road, Behala, Calcutta 34.

**CALCUTTA CABINET MAKERS' & FURNISHERS' ASSOCIATION**

254-K, Bipin Behari Ganguly St., Calcutta 12.

**CALCUTTA CRICKET CLUB**

19/1, Gurusaday Road, Ballygunge, Calcutta.

**CALCUTTA DEAF & DUMB SCHOOL**(Trg. College for the Teachers of the Deaf)  
293, Acharya Prafulla Ch. Road, Calcutta 9.**CALCUTTA DOCTORS' ASSOCIATION**

13-C, Jadu Pandit Road, Calcutta 6.

**CALCUTTA FLOUR MILLS ASSOCIATION**

6, Netaji Subhas Road, Calcutta 1.

**CALCUTTA GLASS, BOTTLE & CORK MERCHANTS' ASSOCIATION**

6, Ezra Street, Calcutta 1.

**CALCUTTA HARDWARE TRADERS' ASSOCIATION LTD.**

137, Canning Street, Calcutta 1.

**CALCUTTA HIDES, SKINS SHIPPERS' ASSOCIATION**

6, Netaji Subhas Road, Royal Exchange, Calcutta 1.

**CALCUTTA HYDRAULIC PRESS ASSOCIATION**

6, Netaji Subhas Road, Calcutta.

**CALCUTTA IMPORT TRADE ASSOCIATION**

Royal Exchange, Calcutta-1.

**CALCUTTA JUTE FABRICS SHIPPERS' ASSOCIATION**

Royal Exchange, Calcutta 1.

**CALCUTTA MATHEMATICAL SOCIETY**

92, Acharya Prafulla Chandra Road, Calcutta 9.

**CALCUTTA MEDICAL AID & RESEARCH SOCIETY**

Jadabpur, Calcutta 32.

Kumud Sankar Ray Tuberculosis Hospital  
Jadabpur; S. B. Dey Sanatorium, Kurseong  
(Darjeeling).**CALCUTTA METAL MERCHANTS' ASSOCIATION**

P-11, Mission Row Extension, Calcutta.

**CALCUTTA MOTOR DEALERS' ASSOCIATION**

16, Rajendranath Mukherji Road, Calcutta 1.

**CALCUTTA NATIONAL MEDICAL INSTITUTE**

32, Gorachand Road, Calcutta 14.

**CALCUTTA NURSES ASSOCIATION**

65-A, Dharamtolla Street, Calcutta 13.

*General Secretary* : H. K. Dutta.**THE CALCUTTA ORPHANAGE**

12/1, Balaram Ghosh Street, Calcutta 4.

**CALCUTTA PAPER TRADERS ASSOCIATION**

P-11, Mission Row Extension, Calcutta 1.

**CALCUTTA PINJRAPOLE SOCIETY***Head Office* : 34, Armenian Street, Calcutta.**CALCUTTA PRODUCTIVITY COUNCIL**

9, Syed Amir Ali Avenue, Calcutta-17.

**CALCUTTA RICE MILLS ASSOCIATION**P-11, Mission Row Extension,  
Calcutta 1.**CALCUTTA RIVER TRANSPORT ASSOCIATION**

Royal Exchange, Calcutta.

**CALCUTTA STATISTICAL ASSOCIATION**C/o Dept. of Statistics, Calcutta Univ.,  
New Science Bldg., 35, Ballygunge, Circular  
Road, Calcutta-19.**CALCUTTA STEVEDORES ASSOCIATION**

P-11, Mission Row Extension, Calcutta 1.

**CALCUTTA STOCK EXCHANGE ASSOCIATION LTD.**

7, Lyons Range, Calcutta 1.

*President* : C. L. Khandelwal; *Vice-President* :  
S. K. Bagla.**CALCUTTA TEA MERCHANTS' ASSOCIATION**India Exchange, 8th floor, India Exchange  
Place, Calcutta 1.**CALCUTTA TEA TRADERS' ASSOCIATION**

Royal Exchange, 6, Netaji Subhas Road, Calcutta.

*Chairman* : M. G. Patel; *Vice-Chairman* :  
R. C. N. Scott; *Secretary* : W. D. Bryden.**CALCUTTA TIMBER MERCHANTS' ASSOCIATION**

55/1, Maharshi Devendra Road, Calcutta 8.

**CALCUTTA TRADES ASSOCIATION**

18-H, Park Street, Stephen Court, Calcutta 16.

**CALCUTTA WATCH DEALERS' ASSOCIATION**

P-36, Radha Bazar St., Calcutta 1.

**THE CALCUTTA WHEAT, SEEDS AND BULLION ASSOCIATION**

149, Cotton Street, Calcutta 7.

**CALCUTTA YARN MERCHANTS' ASSOCIATION**

89, Cross Street, Calcutta 7.

**CALEDONIAN SOCIETY**

6, Netaji Subhas Road, Calcutta 1.

*President* : J. Russell; *Vice-Presidents* : D.  
Manson, J. C. Coventry; *Hon. Secy. & Treasurer* :  
W. D. Bryden.**CARDIOLOGICAL SOCIETY OF INDIA**

3, Creek Row, Calcutta 14.

**CHEMICAL PLANT MANUFACTURERS' ASSOCIATION**C/o A. P. V. Engineering Co. Ltd.,  
41, Chowringhee Road, Calcutta 16.**CHEMICALS & ALLIED PRODUCTS EXPORT PROMOTION COUNCIL**

14/1-B, Ezra Street, Calcutta 1.

*Chairman* : M. S. Judge; *Vice-Chairman* :  
G. K. Bhagat; *Secretary* : Dr. R. C. Lal.**CHESHIRE HOMES INDIA**

534, Raja Basanta Roy Road, Calcutta 29.

*Hon. Secretary* : Miss B. Coleman.*Homes* : Bangalore, Baroda, Bombay, Burn-  
pur, Calcutta, Coimbatore, Delhi, Dehra Dun,  
Jamshedpur, Katpadi, Madras, Mangalore,  
Poona, Ranchi, Trichinopoly.**CHITTARANJAN DATABYA CHIKITSHALAYA**

65/2B, Beadon Street, Calcutta 6.

*Branch* : 105/1, Raja Devindra St., Calcutta 6.**CHITTARANJAN NATIONAL CANCER RESEARCH CENTRE**

37, Syamaprasad Mukherjee Road, Calcutta 26.

**CHRISTIAN SCIENCE SOCIETY**Chowringhee Mansions, Block B, 30, Chowringhee  
Road, Calcutta.**COSSIPORE INSTITUTE**

43, Cossipore Road, Calcutta 36.

(Social Club, Library and Free Reading Room).

**DAKSHINEE**'Dakshinee-Bhaban', 1, Deshapriya Park West,  
Calcutta 26.

Tagore-Culture Society.

**THE EAST INDIA CHARITABLE TRUST**

51, Chowringhee, Calcutta 16.

**THE EAST INDIA JUTE & HESSIAN EXCHANGE LTD.**

43, Netaji Subhas Road, Calcutta 1.

*President* : S. K. Ghosh; *Vice-President* :  
S. N. Bagla; *Secretary* : K. K. Datta.**EAST INDIA OIL MILLERS' ASSOCIATION (Formerly WEST BENGAL OIL MILLERS' ASSOCIATION)**State Bank Building (Burrabazar Branch),  
195, M. Gandhi Road, Calcutta 7.**EAST INDIA PHOTOGRAPHIC TRADERS' ASSOCIATION**State Bank Bldg. (Burrabazar Branch),  
195, M. Gandhi Road, Calcutta 7.



**EASTERN REGIONAL ELECTRICAL CONTRACTORS' ASSOCIATION (INDIA) LTD.**

12/1A, Lindsay St., Calcutta 16.

**EMPLOYERS' ASSOCIATION**

India Exchange Building (Seventh Floor),  
India Exchange Extension, Calcutta 1.

**ENGINEERING ASSOCIATION OF INDIA**  
India Exchange, Calcutta 1.

*President* : Seth Bahubali Gulabchand ; *Vice-President* : G. R. Hada ; *Secretary-General* : C. S. Pande ; *Secretary* : Dr. R. D. Vidyarthi.

**ENGINEERING EXPORT PROMOTION COUNCIL**

14/1B, Ezra Street (3rd floor), Calcutta 1.

*Chairman* : R. H. Mody ; *Vice-Chairmen* : R. L. Rajgarhia, Bharat G. Doshi ; *Secretary* : Dr. R. K. Singh.

**THE FAMILY PLANNING ASSOCIATION**

Central Hospital, Bhatpara, P.O. Kalchini,  
(Dt. Jalpaiguri).

**FAN MAKERS' ASSOCIATION OF INDIA**

India Exchange, India Exchange Place,  
Calcutta 1.

*Chairman* : B. S. Agarwal ; *Vice-Chairman* : H. S. Sinha ; *Secretary-General* : C. S. Pande ; *Secretary* : Dr. R. D. Vidyarthi.

**FEDERATION OF SMALL AND MEDIUM INDUSTRIES, WEST BENGAL**

P-11, Mission Row Extension, Calcutta 1.

**GAUDIYA MISSION**

H.O. : Sri Gaudiya Math, 16A, Kali Prasad Chakravarty Street, Baghbazar, Calcutta 3.

The institution possesses Temples of Sri Gauranga Mahaprabhu and Sri Radha Krishna at its branches all over India including Bombay and London and preaches the cult of Bhakti.

**THE GEOGRAPHICAL SOCIETY OF INDIA**

Dept. of Geography, Calcutta University,  
35, Ballygunge, Circular Road, Calcutta 19.

**GEOLOGICAL, MINING AND METALLURGICAL SOCIETY OF INDIA**

Geology Dept., Calcutta University, Calcutta-19.

**GOVERNMENT INDUSTRIAL AND COMMERCIAL MUSEUM**

45, Ganesh Chandra Avenue, Calcutta-13.

**GUNNY TRADES ASSOCIATION**  
5, Clive Row, Calcutta 1.

**HARIJAN SEVAK SANGH**  
1, Dover Lane, Calcutta 29.

**HELMINTHOLOGICAL SOCIETY OF INDIA**  
34, Chittaranjan Avenue, Calcutta 12.

**HIMALAYAN MOUNTAINEERING INSTITUTE**

Jawahar Parbat, Darjeeling.

**HINDU MILAN MANDIR**

211, Rash Behari Avenue, Ballygunj, Calcutta.  
500 Branches throughout India.

**HINDU SATKAR SAMITY  
HINDU PILGRIMS' PROTECTION SOCIETY  
HIND SEVA SAMITY**

93, Mahatma Gandhi Road, Calcutta 7.

**HIRE PURCHASE ASSOCIATION**  
Royal Exchange, Calcutta 1.

**HOWRAH ASSEMBLY**  
24, Kali Kundu Lane, Howrah.

**THE HOWRAH MANUFACTURERS' ASSOCIATION**

198, Bellilos Road, Howrah.

*President* : J. K. Mondal ; *Hon. Gen. Secretary* : S. N. Paul ; *Secretary* : A. N. Das ; *Labour Adviser* : N. K. Das.

**HOWRAH SANGHA**  
24, 25 & 25/2, Nilmoni Mullick Lane, Howrah.

**HOWRAH VIVEKANANDA INSTITUTION**  
107, Netaji Subhas Road, Howrah and  
7/8, Naskarpara 1st Bye Lane, P.O. Santragachi,  
Howrah.

**INDIAN AMATEUR BOXING FEDERATION**  
131/A, Akhil Mistry Lane, Calcutta 9.

**INDIAN ARTS & CRAFTS EXPORTERS ASSOCIATION**

9B, Chowringhee Place, Calcutta 13.

*Chairman* : M. L. Shroff ; *Vice-Chairman* : Mrs. N. Ghosh.

**INDIAN ASSOCIATION**

62, Bowbazar Street, Calcutta 12.

An Association for the promotion of political, intellectual and material advancement of the people.

**INDIAN ASSOCIATION FOR THE CULTIVATION OF SCIENCE**

Jadavpur, Calcutta 32.

Dr. J. N. Mukherjee (*President*) ; Prof. B. N. Srivastava (*Ag. Director*) ; S. N. Sen (*Registrar*).

**INDIAN BOARD MILLS ASSOCIATION**  
P-11, Mission Row Extension, Calcutta 1.

**INDIAN BOLT AND NUT MANUFACTURERS' ASSOCIATION**  
India Exchange, 8th Floor, India Exchange  
Place, Calcutta.

**INDIAN CARPET MANUFACTURERS' ASSOCIATION**

9B, Chowringhee Place, Calcutta 13.

**INDIAN CHEMICAL MANUFACTURERS ASSOCIATION**

'India Exchange,' India Exchange Place,  
Calcutta 1.

*President* : P. C. Jain ; *Vice-Presidents* : R. Chakravarty, C. D. Thakkar, D. M. Trivedi.

**INDIAN CHEMICAL MERCHANTS' ASSOCIATION**

India Exchange, India Exchange Place,  
Calcutta 1.

*President* : C. D. Thakkar ; *Vice-President* : R. P. Joshi ; *Secretary* : C. S. Pande.

**INDIAN CHEMICAL SOCIETY**  
92, Acharya Prafulla Chandra Road, Calcutta 9.

**THE INDIAN CONFECTIONERY MANUFACTURERS' ASSOCIATION**

India Exchange, India Exchange Place, Calcutta.

*President* : S. K. Mukherjee ; *Vice-President* : Lala Bansidhar ; *Secretary* : J. S. Mehta.

**INDIAN CONFERENCE OF SOCIAL WORK**  
C/o Y.M.C.A., 25, Chowringhee, Calcutta.

**INDIAN CYCLE TRADERS' ASSOCIATION**  
67, Bentinck Street, Calcutta-1.

**INDIAN ELECTRICAL MANUFACTURERS' ASSOCIATION**

India Exchange, 7th floor, Calcutta.

*Chairman* : M. L. Gauba ; *Vice-Chairmen* : B. L. Kirlskar, J. H. F. Manekshaw.

**INDIAN ENGINEERING ASSOCIATION**  
6, Netaji Subhas Road, Calcutta.

*Chairman* : S. K. Datta ; *Dy. Chairman* : A. H. Sethna ; *Secretary* : W. D. Bryden.

**INDIAN FOOTBALL ASSOCIATION**  
34/A, Dharamtalla St., Calcutta 13.

**INDIAN FOUNDRY ASSOCIATION**  
India Exchange, 7th floor, India Exchange  
Place, Calcutta 1.

*Chairman* : K. Prosad ; *Vice-Chairmen* : K. L. Chowdhary, M. D. Kajaria ; *Secretary-Gen.* : C. S. Pande.

**INDIAN HEMP ASSOCIATION**

India Exchange, India Exchange Place,  
Calcutta 1.

*President* : K. Bald ; *Secretary* : C. S. Pande.

**INDIAN INSTITUTE OF CHEMICAL ENGINEERS**

Jadavpur University, Calcutta 32.

**INDIAN INSTITUTE OF MANAGEMENT**  
"Emerald Bower"  
56-A, Barrackpore Trunk Road, Calcutta 50.  
*Administrator* : M. Krishnaswamy.

**THE INDIAN INSTITUTE OF METALS**  
31, Chowringhee Road, Calcutta 16.

**INDIAN INSTITUTE OF PERSONNEL MANAGEMENT**  
Artistry House, 15, Park Street, Calcutta 16.

**INDIAN INSTITUTE OF SOCIAL WELFARE AND BUSINESS MANAGEMENT**  
College Square West, Calcutta 7.  
*Director* : Prof. D. K. Sanyal.

**INDIAN INSURANCE COMPANIES ASSOCIATION**

India Exchange, India Exchange Place,  
Calcutta 1.

*President* : K. P. Chakrabarti ; *Vice-President* : A. C. Mukherjee ; *Secretary* : C. S. Pande.

**INDIAN INSURANCE INSTITUTE**  
P-11, Mission Row Extension, Calcutta 1.

*President* : J. Banerjee ; *General Secretary* : S. Kahali.

**INDIAN JOURNALISTS' ASSOCIATION**  
249-B, Bepin Behari Ganguly Street, Calcutta 12.

**INDIAN JUTE INDUSTRIES' RESEARCH ASSOCIATION**  
17, Taratola Road, Calcutta-53

*Chairman* : Dr. B. P. Kedia ; *Vice-Chairman* : S. K. Ghosh ; *Director of Research* : Dr. T. S. Subramanian ; *Secretary* : A. B. Raychaudhuri.

**INDIAN JUTE MILLS ASSOCIATION**  
Royal Exchange, Calcutta.  
Started in 1884.

*Chairman* : R. N. Bangur ; *Dy. Chairman* : H. Singhanla.



**INDIAN KAPOK MILLS' ASSOCIATION**

16, Satyanarain Temple Road, Salkia  
(District Howrah).

**INDIAN LAC EXPORTERS ASSOCIATION**

Royal Exchange, Calcutta.

*President* : G. C. L. Joneja ; *Vice-President* :  
G. M. Russell ; *Secretary* : W. D. Bryden.

**INDIAN LAMP FACTORIES ASSOCIATION**

P-II, Mission Row Extension, Calcutta 1.

**INDIAN LEGAL AID SOCIETY**

6/1, Lindsay Street, Calcutta 16.

**INDIAN MEDICAL ASSOCIATION**

Bengal State Branch

67, Dharamtala Street, Calcutta-13.

**INDIAN MEDICAL FORUM**

13, Ezra Street, Calcutta 1.

**INDIAN MINING ASSOCIATION**

Royal Exchange, Calcutta 1.

**THE INDIAN MINING FEDERATION**  
135, Biplabi Rashbehari Basu Road, Calcutta 1.

**INDIAN MUSEUM**

27, Jawaharlal Nehru Road, Calcutta 13.

**INDIAN NON-FERROUS METAL  
MANUFACTURERS' ASSOCIATION**

India Exchange, India Exchange Place, Calcutta.

*President* : A. L. Sabharwal, *Vice-Presidents* :  
G. Binani, J. H. F. Manekshaw ; *Secretary*  
*General* : C. S. Pande.

**INDIAN OLYMPIC ASSOCIATION**

10, Talbagan Lane, Calcutta-17.

**INDIAN PAINT ASSOCIATION**

India Exchange, India Exchange Place,  
Calcutta 1.

*President* : C. P. A. Garnett ; *Vice-President* :  
A. E. Faizullahoy ; *Secretary-General* : C. S.  
Pande.

**INDIAN PAPER MAKERS' ASSOCIATION**

6, Netaji Subhas Road, Royal Exchange,  
Calcutta 1.

*Chairman* : Sankar Ghosh ; *Vice-Chairman* :  
M. L. Zutshi.

**INDIAN PAPER MILLS ASSOCIATION**

India Exchange, India Exchange Place,  
Calcutta 1.

*President* : B. P. Bangur ; *Vice-President* :  
H. S. Singhania.

**INDIAN PEDIATRIC SOCIETY**

95, Dilkhusa Street, Calcutta 17.

**INDIAN PENCIL MANUFACTURERS  
ASSOCIATION**

P-II, Mission Row Extension, Calcutta.

**INDIAN PHARMACEUTICAL CONGRESS  
ASSOCIATION**

18, Convent Road, Calcutta-14.

*President* : Dr. B. Shah ; *Hon. Gen. Secre-*  
*tary* : Dr. D. Chakravarty.

**INDIAN PHILOSOPHICAL CONGRESS**

Visva-Bharati University, Santiniketan.

Krishnagar College, Krishnagar, Nadia, West  
Bengal.

**THE INDIAN PHYSICAL SOCIETY**

2 & 3, Raja Subodh Mallik Road, Calcutta 32.

**INDIAN PIPE MANUFACTURERS'  
ASSOCIATION**

India Exchange, 7th Floor,  
India Exchange Place, Calcutta 1.

**INDIAN PLASTICS FEDERATION**

134/1, Mahatma Gandhi Road, Calcutta 7.

*President* : A. S. Judah ; *Secretary* : J. N.  
Singh.

**INDIAN PRODUCE ASSOCIATION**

402, Upper Chitpur Road (Phool Katra),  
Calcutta 7.

**INDIAN PSYCHOTHERAPEUTICAL  
SOCIETY**

P-23, C.I.T. Road, Scheme No. 49, Calcutta 14.

**INDIAN PUBLIC HEALTH ASSOCIATION**

110, Chittaranjan Avenue, Calcutta 12.

**INDIAN PUMP MANUFACTURERS'  
ASSOCIATION**

India Exchange, 7th floor, Calcutta 1.

*Chairman* : R. Mukherjee ; *Vice-Chairmen* :  
K. Asokan, A. C. Gupta.

**INDIAN RED CROSS SOCIETY**

(West Bengal State Branch)

5 & 6, Government Place North, Calcutta.

**INDIAN REFRACTORY MAKERS  
ASSOCIATION**

6, Netaji Subhas Road, Calcutta 1.

**INDIAN ROPE MANUFACTURERS'  
ASSOCIATION**

India Exchange, India Exchange Place,  
Calcutta 1.

**INDIAN SCIENCE CONGRESS  
ASSOCIATION**

64, Dilkhusa Street, Calcutta-17.

**INDIAN SOAP AND TOILETRIES  
MAKERS' ASSOCIATION**

P-11, Mission Row Extension, Calcutta 1.

**INDIAN SOCIETY FOR QUALITY  
CONTROL**

India Exchange, 7th floor, Calcutta 1.

**INDIAN SOCIETY OF ENGINEERS**

12-B, Netaji Subhas Road, Calcutta 1.

**INDIAN SOCIETY OF EQUITATION AND  
HORSEMASTERSHIP**

51, Chowringhee, Calcutta 16.

**INDIAN SOCIETY OF HAEMATOLOGY**

1/25, Prince Golan Mohammad Road,  
Calcutta 26.

**INDIAN SOCIETY OF THEORETICAL AND  
APPLIED MECHANICS**

Kharagpur.

**INDIAN STATISTICAL INSTITUTE**

203, Barrackpore Trunk Road, Calcutta 35.

*President* : Y. B. Chavan ; *Chairman* : K. P.  
S. Menon ; *Treasurer* : Dr. S. C. Law ; *Secretary* :  
Professor P. C. Mahalanobis ; *Director, Research*  
& *Training School* : Dr. C. R. Rao.

**INDIAN STRAWBOARD****MANUFACTURERS' ASSOCIATION**

State Bank Building (Burrabazar Branch),  
Calcutta 7.

**INDIAN SUGAR MILLS ASSOCIATION**

India Exchange, Calcutta 1.

**INDIAN TEA ASSOCIATION**

Royal Exchange, 6, Netaji Subhas Road,  
Calcutta 1.

*Chairman* : A. F. Macdonald ; *Vice-Chairman* :  
E. H. Hannay, O.B.E. ; *Senior Adviser* : P.  
Crombie, M.B.E. ; *Calcutta Adviser* : P. J. Parr ;  
*Economic Adviser* : D. Chakravarti.

**INDIAN TEA PLANTERS'  
ASSOCIATION**

Post Box No. 74, Jalpaiguri.

**INDIAN WIRE INDUSTRIES ASSOCIATION**

19, Maharashi Debendra Road, Calcutta 7.

**INDIAN ZINC OXIDE MANUFACTURERS'  
ASSOCIATION**

India Exchange, India Exchange Place,  
Calcutta 1.

*President* : K. C. Raghavan ; *Vice-President* :  
J. P. Narain ; *Secretary* : C. S. Pande.

**INDIGENOUS BELTING INDUSTRIES  
ASSOCIATION**

P-11, Mission Row Extension, Calcutta 1.

**INDUSTRIAL FASTENERS ASSOCIATION  
OF INDIA**

India Exchange, 7th floor, India Exchange  
Place, Calcutta 1.

**INK MANUFACTURERS' ASSOCIATION**

P-11, Mission Row Extension, Calcutta 1.

**INSTITUTE OF ASIAN-AFRICAN  
RELATIONS**

108, Raja Basanta Roy Road, Calcutta 20.

**INSTITUTE OF CATERING TECHNOLOGY  
& APPLIED NUTRITION**

21, Convent Road, Calcutta 14.

*Principal/Secretary* : P. A. Koshy.

**INSTITUTE OF CHILD HEALTH**

95, Dilkhusa Street, Calcutta 17.

**THE INSTITUTE OF COST AND WORKS  
ACCOUNTANTS OF INDIA**

12, Sudder Street, Calcutta 16.

**INSTITUTE OF INDIAN FOUNDRYMEN**

1/2, Allenby Road, Calcutta 20.

**INSTITUTE OF JUTE TECHNOLOGY**

35, Ballygunge Circular Road, Calcutta 19.

**INSTITUTE OF RADIOPHYSICS AND  
ELECTRONICS**

Univ. College of Technology,  
92, Acharya Prafulla Chandra Road, Calcutta 9.

**INSTITUTION OF CHEMISTS (INDIA)**

Chemical Dept., Medical College, Calcutta 12.

**INSTITUTION OF ENGINEERS (INDIA)**

8, Gokhale Road, Calcutta 20.

**THE INSURANCE ASSOCIATION OF INDIA  
CALCUTTA REGIONAL COUNCIL**

India Exchange, 6th Floor, India Exchange  
Place, Calcutta 1.

**IRAN SOCIETY**

12, Kyd Street, Calcutta 16.

**JUTE AGRICULTURAL RESEARCH  
INSTITUTE**

Barrackpore (W. Bengal).



**THE JUTE BALERS' ASSOCIATION**

12, India Exchange Place, Calcutta 1.

*President* : N. M. Sethi; *Vice-President* : N. C. Jhanwar; *Secretary* : R. N. Mohnot, M.Com., LL.B.**JUTE FABRIC BROKERS' ASSOCIATION**

Royal Exchange, Calcutta 1.

**LANTERN MANUFACTURERS' ASSOCIATION**

India Exchange (7th Floor), Calcutta.

**LIGHTHOUSE FOR THE BLIND**

174, Syamaprosad Mookerjee Road, Calcutta 26.

**MACHINE TOOL TRADES ASSOCIATION**

India Exchange, India Exchange Place, Calcutta 1.

*President* : D. L. Shah; *Vice-President* : J. S. Halbert; *Secretary-General* : C. S. Pande.**MAHA BODHI SOCIETY OF INDIA**

4-A, Bankim Chatterji Street, Calcutta 12.

*Centres* : Sarnath, Gaya, New Delhi, Buddhagaya, Bombay, Madras, Lucknow, Ajmer, Kalimpong, Cuttack and Sanchi.**MAHILA SEVA SAMITY**

8, Government Place, Calcutta 1.

**MANIMELA MAHAKENDRA**

Rabindra Sarobar Stadium, Block-11, Room V, Calcutta 29.

Has 300 branches.

**MARWARI ASSOCIATION**

160A, Chittaranjan Avenue, Calcutta.

**MARWARI RELIEF SOCIETY**

391, Upper Chitpur Road, Calcutta 7.

**MASTER STEVEDORES' ASSOCIATION**

Royal Exchange, Calcutta 1.

**MICA EXPORT PROMOTION COUNCIL**

14/1B, Ezra Street, Calcutta 1.

*Chairman* : G. C. L. Joneja; *Vice-Chairman* : U. C. Lal; *Secretary* : R. N. Mukherjee.**MILAN MANDIR AND RAKSHIDAL**

211, Rash Behari Avenue, Calcutta 19.

**MINING, GEOLOGICAL AND METALLURGICAL INSTITUTE OF INDIA**

29, Chowringhee Road, Calcutta 16.

*Office-Bearers* : Dr. D. P. Antia (*President*); P. K. Ghosh (*Hon. Secretary*); Dr. B. N. Sinha (*Hon. Treasurer*).**THE MOTOR INDUSTRIES ASSOCIATION**

Royal Exchange, Calcutta 1.

**THE MUSLIM INSTITUTE**

21-A, Haji Mohammad Mohsin Square, Calcutta 16.

**NARKELDANGA SIR GOORODAS INSTITUTE**15, Jay Narayan T.P. Lane, 27, Sir Gooroodas Road and 28, Sir Gooroodas Road—*Office* : 27, Sir Gooroodas Road, Narkeldanga, Calcutta 11.**NATIONAL SWIMMING ASSOCIATION**

Pavilion, Azad Hind Bagh, Calcutta 6.

**OIL PRESSURE LAMP INDUSTRIES ASSOCIATION**

138, Canning Street, Calcutta 1.

**OVERSEAS GENERAL INSURERS ASSOCIATION**

Royal Exchange, Calcutta 1.

**P. E. N. ALL-INDIA WRITERS' ASSOCIATION**

West Bengal Branch

72, Hindusthan Park, Calcutta 29.

**PASTEUR INSTITUTE, SCHOOL OF TROPICAL MEDICINE**

Chittaranjan Avenue, Calcutta 12.

**PHOTOGRAPHIC ASSOCIATION OF BENGAL**

47/2, Hazra Road, Calcutta 19.

**THE PHYSIOLOGICAL SOCIETY OF INDIA**

50/2, Dharamtolla Street, Calcutta-13.

**THE PLYWOOD MANUFACTURERS' ASSOCIATION OF INDIA**

P-11, Mission Row Extension, Calcutta 1.

**PLYWOOD MANUFACTURERS ASSOCIATION OF WEST BENGAL**

22, Strand Road, Calcutta 1.

**PUBLISHERS & BOOKSELLERS ASSOCIATION OF WEST BENGAL**

93, Harrison Road, Calcutta 7.

**RABI-BASAR BENGALI LITERATURE CLUB**

45, Amherst Street, Calcutta 9.

**RABINDRA BHARATI UNIVERSITY**

6/4, Dwarkanath Tagore Lane, Calcutta-7.

**RADIO ELECTRONIC & TELEVISION MANUFACTURERS' ASSOCIATION OF INDIA**

4, Lyons Range, Calcutta.

*Chairman* : G. R. S. Rao; *Vice-Chairman* : S. C. Israni.**RAMAKRISHNA MATH AND MISSION (P. O. Belur Math, Dt. Howrah).**

The Ramakrishna Math and Mission are Organisations, founded by Swami Vivekananda, for missionary, philanthropic and educational service of both sexes, irrespective of caste, creed or colour. It lays special emphasis on the spread of the harmonizing spiritual and cultural ideas of India.

The Ramakrishna Mission has 72 centres spread over India, Pakistan, Burma, Ceylon, Singapore, Fiji, Mauritius and France.

The Ramakrishna Math has 63 centres spread over India, Pakistan Europe, U.S.A., and Argentina.

*General Secretary* : Swami Gambhirananda.**RAMAKRISHNA MISSION ASHRAM**

37, Gopal Lal Tagore Road, Barnagore, Calcutta 26.

**RAMAKRISHNA MISSION INSTITUTE OF CULTURE**

21, Gol Park, Calcutta 29.

**RAMAKRISHNA VEDANTA MATH**

19-B, Raja Rajkrishna Street, Calcutta 6.

*President* : Swami Sadatmananda; *Secretary* : Swami Prajnanananda.**THE REFUGE**

125-A, Bowbazar Street, Calcutta 12.

**RIVER RESEARCH INSTITUTE**

11A, Free School Street, Calcutta 16.

*Central Laboratory* :—Haringhata *Central Laboratory*, P. O. Mohanpur (Dt. Nadia).**THE ROYAL AGRICULTURAL AND HORTICULTURAL SOCIETY OF INDIA**

1, Alipore Road, Calcutta 27.

**SADHARAN BRAHMA SAMAJ**

211, Cornwallis Street, Calcutta 6.

**SAFETY FIRST ASSOCIATION OF INDIA**

(Bengal Provincial Branch)

6, Dharamtolla Street, Calcutta.

**SAHA INSTITUTE OF NUCLEAR PHYSICS**

92, Acharya Prafulla Chandra Road, Calcutta 9.

**THE SALVATION ARMY***Social Service Centre* : 172, Lower Circular Road, Calcutta 14.**THE SANTI INSTITUTE**

(Estd. 1918)

26/1/A, Sasi Bhushon Dey St., Calcutta 12.

*Music—Sporting—Religious—Social Service—Cultural Sections.***SAVE THE CHILDREN COMMITTEE (INDIA)**

P. 101, Lake Terrace, Calcutta 29.

**SHELLAC EXPORT PROMOTION COUNCIL**

14/1B, Ezra Street, Calcutta 1.

*Chairman* : G. C. J. Joneja; *Secretary* : S. Majumder.**SHISHU SAHITYA PARISHAD**

16, Townsend Road, Calcutta 25.

**SHREE SHREE BALANANDA BRAHMACHARI SEBAYATAN**

105/2, Raja Dinendra Street, Calcutta 6.

**SHREE SHREE MOHANANANDA BRAHMACHARI SEBAYATAN**

22-A, Shibkristo Daw Lane, Calcutta 11.

**SOCIETY FOR THE PROTECTION OF CHILDREN IN INDIA**

2B, Camac Street, Calcutta.

**SOCIETY OF ST. VINCENT DE PAUL**

No. 3, Dhurumtolla Street, Calcutta 13.

*Particular Council***SRI RAMAKRISHNA SARADA MATH**

1, Chitpore Bridge Approach, Baghbazar, Calcutta 2.

**THE ST. JOHN AMBULANCE BRIGADE**

No. 2 (West Bengal) Dist.

5, Govt. Place North, Calcutta 1.

**STATE MEDICAL FACULTY OF WEST BENGAL**

8, Lyons Range, Calcutta.

**STATIONERY & OFFICE EQUIPMENT ASSOCIATION OF INDIA**

P-11, Mission Row Extension, Calcutta 1.

**STEEL ASSOCIATION OF INDIA**

India Exchange, India Exchange Place, Calcutta 1.

*President* : Swaraj Paul; *Sr. Vice-President* : O. N. Jajodia; *Vice-President* : S. M. Gupta



**STEEL DEALERS AIDS & INFORMATION BUREAU**

15, Pollock Street, Calcutta 1.

**STEEL EXPORTERS' ASSOCIATION**

18, Rabindra Sarani, Calcutta 1.

**STEEL IMPORTERS' ASSOCIATION OF INDIA**

India Exchange, India Exchange Place, Calcutta 1.

**STEEL RE-ROLLING MILLS ASSOCIATION OF INDIA**

2, Brabourne Road, Calcutta-1.

*Chairman*: Viren J. Shah; *Vice-Chairman*: A. K. Bhattacharya; *Hony. Treasurer*: B. N. Sharma; *Secretary*: A. C. Das Gupta; *Technical Adviser & Special Officer*: S. Banerjee.**SWADHIN BHARAT CHHATRATANTRA**

(Regd. under Act XXI of 1860).

29, Ibrahimpur Road, Jadavpur, Calcutta-32.

**TEA ASSOCIATION OF INDIA**

India Exchange, India Exchange Place, Calcutta 1.

*President*: G. Birla; *Senior Vice-President*: P. K. Kanoria; *Vice-President*: J. P. Kanoi; *Secretary-General*: C. S. Pande; *Secretary*: B. Kalyana Sundaram.**TEA CHEST FITTINGS MANUFACTURERS' ASSOCIATION OF INDIA**

9, Clive Row, Calcutta 1.

**TEA PACKETERS ASSOCIATION OF INDIA**

P. 32/33, India Exchange Place, Calcutta 1.

**TERRITORIAL ARMY INSTITUTE**

Territorial Pavillon, Outram Road, Calcutta-16.

**TEXTILE ASSOCIATION (INDIA)****WEST BENGAL BRANCH**

63, Radhabazar Street, Calcutta 1.

**TINPLATE FABRICATORS ASSOCIATION**

India Exchange, 8th Floor, India Exchange Place, Calcutta.

**TUBERCULOSIS RELIEF ASSOCIATION**

73, Dharamtola Street, Calcutta 13.

**UMBRELLA RIB MANUFACTURERS' ASSOCIATION**

India Exchange, 8th Floor, Calcutta 1.

**UNITED KINGDOM CITIZENS' ASSOCIATION**

51, Chowringhee Road, Calcutta 16.

**UNITED TRADES UNION CONGRESS**

249, Bowbazar Street, Calcutta 12.

*President*: N. Srikanthan Nair, M.P. *Vice-President*: Tridib Chaudhuri, M.P.; *General Secretary*: Miss Sudha Roy; *Secretary*: Jatin Chakravorty, M.L.C.**VICTORIA MEMORIAL**

Calcutta 16.

**VIVEKANANDA MISSION**

1, Chitpur Bridge Approach, Calcutta 3.

**VIVEKANANDA SOCIETY**

21, Brindaban Bose Lane, Calcutta 6.

**WEST BENGAL ADULT EDUCATION ASSOCIATION**

Students Hall, College Square, Calcutta 12.

**WEST BENGAL AMATEUR WRESTLERS' ASSOCIATION**

18, Raj Krishna Coomar Street, P.O. Belur Math (Howrah).

**WEST BENGAL BASKETBALL ASSOCIATION**

94, Chittaranjan Avenue, Calcutta 12.

**WEST BENGAL BUSINESS CONVENTION**

India Exchange, 7th Floor, India Exchange Place, Calcutta 1.

**WEST BENGAL COUNCIL FOR CHILD WELFARE**

P101, Lake Terrace, Calcutta 29.

**WEST BENGAL COUNCIL OF WOMEN**

C/o 1, Palace Court, Kyd Street, Calcutta 16.

**WEST BENGAL HOSIERY ASSOCIATION**

195, Mahatma Gandhi Road, Calcutta-7.

**WEST BENGAL IRON & STEEL SCRAP DEALERS ASSOCIATION**

66, Bentinck Street, Calcutta 1.

**WEST BENGAL MEDICAL COUNCIL**

8, Lyons Range, Calcutta.

**WEST BENGAL MUNICIPAL ASSOCIATION**

C-55, College Street Market, Calcutta 12.

**WEST BENGAL NURSING COUNCIL**

Mitra Building, 8, Lyons Range, Calcutta 1.

**WEST BENGAL PETROLEUM DEALERS ASSOCIATION**

16, Rajendra Nath Mukherjee Road, Calcutta 1.

**WEST BENGAL PHARMACY COUNCIL**

8, Lyons Range (3rd floor), Calcutta.

**WEST BENGAL PROBATION AND AFTER-CARE ASSOCIATION**

5B, Maharani Swarnamoyee Road, Calcutta 12.

**WEST BENGAL TEXTILE DEALERS ASSOCIATION**

P-11, Mission Row Extn., Calcutta 1.

**WEST BENGAL TOBACCO DEALERS' ASSOCIATION LIMITED**

51/3, Strand Road, Calcutta 7.

**WEST BENGAL VACCINE INSTITUTE AND LABORATORY**

2, Convent Lane, Calcutta 15.

**THE WINE, SPIRIT AND BEER ASSOCIATION OF INDIA**

Royal Exchange, Calcutta.

**Y.M.C.A. COLLEGE BRANCH**

86, College Street, Calcutta 12.

**YOUNG WOMEN'S CHRISTIAN ASSOCIATION**

124, Surendra Nath Banerjee Road, Calcutta 13.

**ZOOLOGICAL SOCIETY OF INDIA**

34, Chittaranjan Avenue, Calcutta 12.

**CHAMBERS OF COMMERCE****ASSOCIATED CHAMBERS OF COMMERCE & INDUSTRY OF INDIA**

6, Netaji Subhas Road, Calcutta 1.

*President*: J. V. Jardine Paterson; *Deputy Presidents*: A. W. Stansfeld, R. L. Jull; *Secretary*: W. D. Bryden.**BENGAL CHAMBER OF COMMERCE AND INDUSTRY**

Royal Exchange, P. Box No. 280, Calcutta 1.

*President*: J. V. J. Jardine Paterson; *Vice-President*: C. A. Pitts; *Secretary*: W. D. Bryden.**BENGAL NATIONAL CHAMBER OF COMMERCE AND INDUSTRY***Office*:—P-11, Mission Row Extension, Calcutta 1.*President*: S. C. Nawn; *Vice-Presidents*: B. K. Dutt, Asoke Sarkar; *Hon. Treasurer*: B. Maitra; *Secretary*: S. R. Biswas.**BHARAT CHAMBER OF COMMERCE***Address*: State Bank Building, 195, Mahatma Gandhi Road, Burrabazar Branch, Calcutta 7.*President*: M. K. Mookerjee; *Sr. Vice-President*: G. N. Khaitan; *Jr. Vice-President*: B. D. Kanoria; *Secretary*: L. R. Dasgupta.**EASTERN CHAMBER OF COMMERCE**

2, Dalhousie Sq. East, Calcutta 1.

**INDIAN CHAMBER OF COMMERCE CALCUTTA***Address*:—"India Exchange", India Exchange Place, Calcutta 1.*President*: S. S. Kanoria; *Senior Vice-President*: I. M. Thapar; *Vice-President*: G. K. Bhagat; *Secretary-General*: C. S. Pande.**INDO-GERMAN CHAMBER OF COMMERCE**

Ilaco House, 1/3, Brabourne Road, Calcutta 1.

**KALIMPONG CHAMBER OF COMMERCE**

Kalimpong (Darjeeling).

*President*: Onkarmull Mintri; *Vice-President*: Rambilas Agarwalla; *Hony. Genl. Secretary*: K. C. Banthia.**MERCHANTS' CHAMBER OF COMMERCE**

3/1/2, Armenian Street, Calcutta 1.

*President*: Beni Prasad Dalmia; *Hony. Secretary*: D. M. Kothari; *Hon. Treasurer*: Atmaram Kanoria.**ORIENTAL CHAMBER OF COMMERCE**

6, Clive Row, Calcutta 1.

**RANIGANJ CHAMBER OF COMMERCE**

Raniganj (Dt. Burdwan).

*President*: S. N. Daga; *Vice-Presidents*: R. K. Goenka, B. B. Roy; *Hon. Secy.*: G. B. Khaitan.



# STATES COMMERCIAL & CLASSIFIED

## ANDHRA

Allied Industries, Azamabad, Hyderabad.  
 Analysers P. Ltd., 18/3, Azamabad, Hyderabad 20.  
 Andhra Pradesh Company, Durga Bhavan, Rashtrapati Road, Secunderabad 3.  
 Andhra Sugars Ltd., 28, Sarojini Devi Road, Secunderabad 26.  
 Aryan Industries P. Ltd., 108, Walker Town, Secunderabad.  
 Associated Engg. Co., 137, Rashtrapati Road, Secunderabad.  
 Associated Industrial & Engg. Corp. Ltd., F-1-30, Begumpet, Hyderabad.  
 Associated Traders of India, 1-4-924, Bakaram, Hyderabad.  
 Automotive Manufacturers Private Ltd., 8571, Rashtrapati Road, Secunderabad.  
 Badshah & Sons, Standard Works, Station Road, Hyderabad.

# bajaj

**BAJAJ ELECTRICALS LTD.**, Electrical Engineers, Manufacturers & Contractors. Lakdi ka Pul Road, Hyderabad, A.P.  
 Telephone : 33335.  
 Telegrams : "SOFTLITE".

For details please see Commercial Firms Section BOMBAY.

Barman Brothers, Barman Building, Gunfoundry, Hyderabad.  
 Batliboi & Co., Props. : Bhogilal Leherchand P. Ltd., Rashtrapati Road, Secunderabad.  
 Biological Products Private Ltd., 18/3, Azamabad, Hyderabad 20.  
 Bombay Cycle and Motor Agency of Secunderabad Ltd., 52-53, Mahatma Gandhi Road, Secunderabad.  
 British India General Ins. Co. Ltd., Gunfoundry, Hyderabad.  
 Burmah-Shell Oil Co., 32, Sarojini Devi Road, Secunderabad.  
 Canadian & Continental Steel Agencies, 41, Sarojini Devi Road, Secunderabad 3.  
 Cement Marketing Co. of India Ltd., 66-A, Rashtrapati Road, Secunderabad.  
 Central Trading Co., Rashtrapati Road, Secunderabad.  
 Chinoy Chhailani & Co., Abid Road, Hyderabad.  
 Commercial Corp. Ltd., Tobacco Bazar, Secunderabad.  
 Commercial Industries of India Ltd., Bulletin Bldg., Secunderabad.  
 Commercial Trading Corporation, Raniganj, Secunderabad 3.  
 Dastoor & Sons, Sarojini Devi Road, Secunderabad 3.  
 Deccan Agencies, 35, Ghasmandy Road, Secunderabad.  
 Deccan Chronicle, 147, Sardar Patel Road, Secunderabad.  
 Deccan Engineering and Refrigeration Co., 13, Rashtrapati Road, Secunderabad.  
 Deccan Porcelain & Enamel Works Ltd., 2707, Bakaram, Hyderabad-DN. Phone : 2395; Grams : "ENAMEL".  
 Deccan Tyre Trading Co., Raniganj, Secunderabad 3.  
 Diesel Corp. (Secunderabad) Ltd., 148, Rashtrapati Road, Secunderabad.

Diesel Spares Corporation, 144, Rashtrapati Road, Secunderabad.  
 Dominion Engineering Corp., Rashtrapati Road, Secunderabad.  
 Eastern Federal Union Insurance Co., Bashir Bagh Road, Hyderabad.  
 Electronic & Industrial Instruments Co. Private Ltd., B-17, Industrial Estate, Hyderabad-18 (A.P.).  
 Eskay Engineering Corporation, 6, Rashtrapati Road, Secunderabad.  
 Esso Standard Eastern Inc., Rashtrapati Road, Secunderabad.  
 Frizair Corporation, B-23, Industrial Estate, Hyderabad 18.  
 General Engg. Co., 15-5-18, Afzalganj, Hyderabad.  
 General Radio & Appliances P. Ltd., Rashtrapati Road, Secunderabad.  
 Hindustan Corporation (Hyderabad) Ltd., Gaganmahal Road, Hyderabad.  
 Hyderabad Agencies P. Ltd., 6-3-656, Sanajiguda, Hyderabad.  
 Hyderabad Allwyn Metal Works Ltd., Sanatnagar, Hyderabad 18.  
 Hyderabad Asbestos Cement Products Ltd., Sanatnagar, Hyderabad 18.  
 Hyderabad Commercial Corporation Ltd., 8-4-317, Cloth Market, Secunderabad.  
 Hyderabad Dn. Engineering Co. P. Ltd., Rashtrapati Road, Secunderabad.  
 Hyderabad Industrial Corporation P. Ltd., 89, Sarojini Devi Road, Secunderabad.  
 Hyderabad Investment Syndicate Ltd., Sultan Bazar, Hyderabad.  
 Hyderabad Iron & Steel Works Ltd., Azamabad P.O., Hyderabad.  
 Hyderabad Potteries Ltd., 95, Park Lane, Secunderabad.  
 Hyderabad Roller Flour Mills Co. Ltd., Abid Road, Hyderabad.  
 Hyderabad Steel Industries, Osmanganj, Hyderabad.  
 Indian Cable Co., 144, McIntyre Road, Secunderabad.  
 Indian Commerce & Industries Co. P. Ltd., 10, Padmanagar, Secunderabad.  
 Industrial & Agricultural Engineering Co. (Hyderabad) Ltd., Gunfoundry, Hyderabad.  
 Industrial Engineering Corporation, 7953, Raniganj, Secunderabad.  
 International Equipment Corp. P. Ltd., 16, Durga Bhavan, Rashtrapati Road, Secunderabad.  
 International Ore & Fertilizer (India) Private Ltd., 66, Rashtrapati Road, Secunderabad.  
 Jay Engineering Works Ltd., Balanagar, Hyderabad.  
 J. C. Pinto & Co., 113/1, Sarojini Devi Road, Secunderabad. Branch : Abid Road, Hyderabad.  
 J. F. Baria & Sons, "Rose Castle", Sarojini Devi Street, Secunderabad.  
 J. & J. De CHANE, Residency Road, Hyderabad (Deccan); Manufacturers of Herbo-Mineral Medicines; Phone : 42298; Grams : "HERBOMINO".  
 John & Co., Abid Road, Hyderabad.  
 John Burton Ltd., Sardar Patel Road, Secunderabad.  
 Kilburn & Co. P. Ltd., Market Street, Secunderabad.  
 Kirloskar Bros. Ltd., Rashtrapati Road, Secunderabad.

Madhav Surendra & Co., 45-45A, Mahatma Gandhi Road, Secunderabad.  
 Madras Circle Pipe Dealers Assn. Ltd., Dundoo Bldg., Rashtrapati Road, Secunderabad.  
 Modern Packaging Corporation, B-42, Industrial Estate, Sanatnagar, Hyderabad 18.  
 Morinaga Traders, 15-1-553, Siddiambar Bazar, Hyderabad.  
 Mukyala Mechanical Works, 5/1/774, Sultan Bazar, Hyderabad.  
 National Traders Corp., 40, Sarojini Devi Road, Secunderabad.  
 National Trading Agencies, M. Gandhi Road, Secunderabad.  
 National Tyre & Rubber Co. of India Ltd., C-1-559, Old Feelkhana, Hyderabad 1.  
 Newland Metal Works, 14-2-179, Dhanrajgirji Bais, Sha-I-Nayat Gunj, Hyderabad.  
 Nizam Sugar Factory Ltd., Abid Road, Hyderabad.  
 Oriental Mercantile Distributors P. Ltd., 4-3-297, Bank St., Hyderabad.  
 Oriental Rubber Trading Co., 153, Kingsway, Secunderabad.  
 Pantagon Steel Industries, 108, Walker Town, Secunderabad.  
 Premier Hardware Corp., 3396, Rashtrapati Road, Secunderabad.  
**PURANDAS RANCHHODDAS & SONS**, Gulzar House, Hyderabad 2. Dealers in Perfumery.  
 Pushp Trading Co., Rashtrapati Road, Secunderabad.  
 Radiant Engineering Co. P. Ltd., B-2, Industrial Estate, Hyderabad 18.  
 Raja Industries, Abid Road, Hyderabad.  
 Republic Forge Co., Moula Ali, Hyderabad.  
 Republican Traders, 45-B, Old Lancer Lines, Secunderabad.  
 Richard & Co., Sardar Patel Road, Secunderabad.  
 Sanatnagar Polythene Industries, Osmanganj, Hyderabad (A.P.).  
 Singareni Collieries Co. Ltd., Meher Mansil, Red Hills, Hyderabad.  
 Sirpur Paper Mills Ltd., Ali Villa, Somajiguda, Hyderabad 4.  
 Sireilk Ltd., Ali Villa, Somajiguda, Hyderabad 4.  
 South India Commercial Corporation, 85-71, Rashtrapati Road, Secunderabad.  
 Super Traders, Opp. General Bazar, Secunderabad.  
 Swastik Bobbin Mfg. Co. Ltd., 32, Sarojini Devi Road, Secunderabad.  
 Synchrotronic Engineering Works, 8091, Rashtrapati Road, Secunderabad.  
 Taj Clay Works Ltd., Hussain Sagar, Tank Road, Hyderabad.  
 Tata Iron and Steel Co. Ltd., 2, Rashtrapati Road, Secunderabad.  
 Tokarshi Lalji & Co., 4/3/336, Residency Road, Hyderabad.  
 Totaram Sagarlal & Sons, Jewellers, Importers-Exporters, Handlooms, Handicrafts and Curios, Abid Road, Hyderabad A.P. (India).  
 Tungabhadra Industries Ltd., Ali Villa, Somajiguda, Hyderabad.  
 U-Foam (P) Ltd., B-15/16, Industrial Estate, Hyderabad 18.



United Engineering Corpn., 147, Rashtrapati Road, Secunderabad.  
Universal Trading Agency, 91, Sarojini Devi Road, Secunderabad.

Vidya Sewing Machine Co., Opp. Dewan Devdi, Hyderabad.  
Voltas Limited, 87/D, Rashtrapati Road, Secunderabad.

Warangal Industries Ltd., 248, Sultan Bazar, Hyderabad.  
William Jacks & Co. Ltd., Station Road, Hyderabad.

## CLASSIFIED LIST OF TRADES & PROFESSIONS

### ADVERTISING AND PUBLICITY AGENTS

Allied Publicity.—Chatta Bazar, Hyderabad.  
Associated Advertisers.—'Kumud Kunj', Sultan Bazar, Hyderabad.  
Edin & Co.—Troop Bazar, Hyderabad.  
Hyderabad Publicity.—Afzulgunj, Hyderabad.  
Kamal Publicities.—Sarojini Devi Road, Secunderabad.  
Khan & Sons.—Opp. Muzamjahi Road, Sultan Bazar, Hyderabad.  
OJO Publicity.—638, Hindustani Galli, Hyderabad.  
Paras Publicity.—Opp. Nishat Talkies, Hyderabad.  
Saba & Co. (Estd. 1930).—171, Chapel Road, Hyderabad.  
Standard Publicity.—115, Sarojini Devi Road, Secunderabad.

### AERATED WATER MANUFACTURERS

#### HYDERABAD

Dalton & Sons' Aerated Water Factory.—Troop Bazar, Hyderabad.  
Deccan Gas Corporation.—20/3, Industrial Area, Azamabad, Hyderabad.  
Taj Soda Factory.—Nampally, Hyderabad.

#### SECUNDERABAD

Gulab Aerated Water Factory.—139, Park Lane, Secunderabad.  
Ideal Aerated Water Factory.—Rashtrapathi Road, Secunderabad.  
Imperial Aerated Water Factory.—Sarojini Devi Road, Secunderabad.

### AGRICULTURAL MACHINERY AND IMPLEMENTS

Agricultural & General Engineering Works.—1-1-75, Mushirabad Road, Hyderabad.  
Belde Engineering Company.—144, Rashtrapathi Road, Secunderabad.  
Crushie & Co.—Boorugu Mansions, 62, Mahatma Gandhi Road, Secunderabad (A.P.); Manufacturers and Suppliers to all Government departments and Manufacturers' representatives.  
Deccan Metal Works.—Mahatma Gandhi Road, Secunderabad.  
Gunti & Co. Private Ltd.—128, Mahatma Gandhi Road, North, Secunderabad 3 (A.P.).  
Industrial Stores Co.—11, Durga Bhavan, Rashtrapathi Road, Secunderabad.  
Patalay Commercial Corporation.—Basheerbagh, Hyderabad.  
Pushp Trading Co.—Rashtrapathi Road, Secunderabad.  
Rayyat Commercial Corporation Ltd.—141, Rashtrapati Road, Secunderabad.  
Secunderabad Agricultural Machinery Co.—130, Rashtrapati Road, Secunderabad.  
Swastik Manufacturers Ltd.—128, Mahatma Gandhi Road, Secunderabad (A.P.).  
Voltas Limited.—87/D, Rashtrapathi Road, Secunderabad.

### AIR-CONDITIONING AND REFRIGERATION

EMSON ENGINEERING CORPORATION.—142, Rashtrapati Road, Post Box 73, Secunderabad 3. Phone: 72232.  
Frizair Corporation.—B-23, Industrial Estate, Sanatnagar, Hyderabad 18.

### ASBESTOS CEMENT

#### Complete PLANTS for

★ Asbestos Cement Corrugated Sheets  
Completely Automatic and up-to-date PLANTS

#### Manufacturers:

**HYDERABAD ASBESTOS CEMENT PRODUCTS LTD.**

(Plant Manufacturing Division)  
Hyderabad 18 (India)

### AUTOMOBILES AND AUTOMOBILE PARTS AND ACCESSORIES

#### HYDERABAD

Andhra Automobiles.—Siddiamber Bazar, Hyderabad.  
Apex Motors.—87, Rashtrapathi Road, Behind General Post Office, Secunderabad.

Auto Supplies.—Caltex Service Station, Bashir Bagh Road, Hyderabad (A.P.).  
Associated Automobiles.—Siddiamber Bazar, Hyderabad.  
Auto Emergency Service.—Opp. Leg. Assembly, Hyderabad.  
Auto Service.—Public Garden Road, Hyderabad.  
Auto Supplies.—Caltex Service Station, Bashir Bagh Road, Hyderabad.  
Azad Motor Transport Co.—Karbala, Maidan Road, Hyderabad.  
Bombay Hyderabad Motor Service.—Nizamshahi Road, Hyderabad.  
Deccan Automobiles.—Siddiamber Bazar, Hyderabad.  
Hyderabad Automobiles Co.—15-9-448, Afzalgunj, Hyderabad.  
India Leaf Spring Mfg. Co. P. Ltd.—B-33, Industrial Estate, Hyderabad 18.  
Patalay Automobiles.—Bashir Bagh, Hyderabad.  
Pioneer Automobiles.—Siddiamber Bazar, Hyderabad.  
Prabhat Automobiles.—Siddiamber Bazar, Hyderabad.  
Raj Automobiles.—Siddiamber Bazar, Hyderabad.  
Reliable Corporation P. Ltd.—15-2-410, Siddiamber Bazar, Hyderabad.  
Sevaka Automobiles.—Gouliguda Chaman, Hyderabad.  
Sri Ramdas Transport P. Ltd.—Begum Bazar, Hyderabad.  
State Automobiles.—Nizamshahi Road, Hyderabad.  
SECUNDERABAD  
Afzul Cycle & Motor Stores.—Mahatma Gandhi Road, Secunderabad.  
Arun Automobiles.—103, Sardar Patel Road, Secunderabad.  
Associated Trades.—Rashtrapati Road, Secunderabad.  
AUTO CHENOY.—62-D, Sarojini Devi Road, Secunderabad (Dn.); Phone: 74836; Grams: "AUTOCHENOY." Sole Distributors in old Hyderabad State, STANDARD & TRIUMPH Cars; Repairing of Cars of all makes undertaken.  
Autofins Ltd., 8573, Rashtrapati Road, Secunderabad.  
Bharat Motor Stores.—Ranigunj, Secunderabad.  
Bombay Cycle & Motor Agencies.—Mahatma Gandhi Road, Secunderabad.  
Defiance Automobiles.—Mehta Mahal, 49, M.G. Road, Secunderabad.  
Hind Auto Engineering Co., Rashtrapati Road, Secunderabad.  
Hyderabad Auto Service, 49, M. G. Road, Secunderabad.  
Madras Cycle & Motor Mart.—7936, Mahatma Gandhi Road, Secunderabad 3.  
Motor House.—Ranigunj, Secunderabad.  
M. S. Kalyan Setti.—Mahatma Gandhi Road, Secunderabad.  
Supreme Automobiles.—Ranigunj, Secunderabad.  
United Motor Parts Co.—Ranigunj, Secunderabad.

### AUTOMOBILE ENGINEERS

AUTO CHENOY.—62-D, Sarojini Devi Road, Secunderabad (Dn.). Phone: 74836. Grams: "AUTOCHENOY." Sole Distributors in old Hyderabad State; STANDARD & TRIUMPH Cars; Repairing of Cars of all makes undertaken.

### BATTERY MANUFACTURERS & DEALERS

#### HYDERABAD

Char Minar Battery Products.—Nizamshahi Road, Hyderabad.  
Eshwar Battery Service.—Sultan Bazar, Hyderabad.  
Reliable Corporation P. Ltd.—15-2-410, Siddiamber Bazar, Hyderabad.

#### SECUNDERABAD

Auto Electric Co.—Ranigunj, Secunderabad.  
Satyanarayana Electric Works.—Rashtrapathi Road, Secunderabad.  
Sunrise Electric Works.—Ghasmandi, Secunderabad.

### BOLTS & NUTS MFRS.

JAIRAMDAS & SONS.—7937, Raniganj, Secunderabad (A.P.). Phone: 72283. Grams: "JAIRAMSONS." Manufacturers of M. S. Hex Bolts and Nuts. Factory: Industrial Area, Hyderabad.

### BOOKSELLERS AND PUBLISHERS

#### HYDERABAD

Andhra Book House.—Sultan Bazar, Hyderabad.  
Hyderabad Publicity.—Afzal Gunj, Hyderabad.  
Joshi Bros.—Gowliguda, Hyderabad.  
J. C. Pinto & Co.—Abid Road, Hyderabad.  
Kotari Book Depot.—Bashir Bagh, Hyderabad.  
Orient Longmans P. Ltd.—Gunfoundry Road, Hyderabad.  
Oriental Publishing Co.—Nampally, Hyderabad.



**SECUNDERABAD**

Ajanta Publications & Book Sellers.—7112, Mahankali Street, Secunderabad.  
Cosmopolitan Book House.—Rashtrapathi Road, Secunderabad.  
Good News Literature Centre.—94E, Sarojini Devi Road, Secunderabad.  
Hindustan Diary Publishers.—3907, Market Street, Secunderabad.  
J. C. Pinto & Co.—Sarojini Devi Road, Secunderabad.  
Kadambi News Agents & Book Sellers.—75, Sarojini Devi Road, Secunderabad.  
Majestic Book Depot.—Sarojini Devi Road, Secunderabad.  
**MIDLAND BOOK DEPOT.**—Premier Dealers in books; 801, Kothi, (Residency Road), Hyderabad (A.P.). Phone: 41250.  
Oxford Book Depot.—Sarojini Devi Road, Secunderabad.  
Rashtrapathi Book Depot & News Agents.—Rashtrapathi Road, Secunderabad.  
Readers Corner & Co.—Sarojini Devi Road, Secunderabad.  
Sree Rama Book Depot.—Market Street, Secunderabad.

**BUILDERS & CONTRACTORS****HYDERABAD**

B. Papaiah, A-18-453, Chikkadpalli, Hyderabad.  
Dhanya Construction Co., Bharat Bldgs., Kachiguda Station Road, Hyderabad.  
D. L. Sriramulu & Co., A-10-690, Himayatnagar, Hyderabad.  
Ganesh Singh, B-5-832, Sultan Bazar, Hyderabad.  
General Construction Transport Syndicate, Abid Road, Hyderabad.  
Hyderabad Construction Co. Ltd., Abid Road, Hyderabad.  
Indian Construction Syndicate, Zenith House, Saifabad, Hyderabad.  
Master Construction Co. P. Ltd., 185, Marredpalli Road, Hyderabad.  
Siva Reddy & Sons, Lingampalli Market, Crosslane, Hyderabad.  
S. Rajeswara Rao, Kavadi guda, Hyderabad.  
Syed Hussain, A/4-523, Bholukpur, Musheerabad, Hyderabad.  
Udani Engineering Co., 3-6-698, Himayatnagar, Hyderabad.  
Yadgiriswamy Patel, Musaram Baug, Hyderabad.

**SECUNDERABAD**

Amarchand Sharma, 18, Jeera, Secunderabad.  
Ch. Yegnalath & Sons, 1/A, Rashtrapathi Road, Secunderabad.  
Jai Narayan Misra, 28-A, Sardar Patel Road, Secunderabad.  
Manicklal M. Parekh, No. 9, Jeera Compound, Secunderabad.  
Pritam Lal Parekh, 4, Jeera Compound, Secunderabad.

**CHEMICAL & PHARMACEUTICAL PRODUCTS MANUFACTURERS**

Ajanta Chemical Works (India), G-2/577, Jubilee Hills, Hyderabad.  
Biochemical & Synthetic Products Ltd., Sanatnagar, Hyderabad 18.  
Bright Chemicals and Pharmaceuticals, 1-A-23, Begumpet, Hyderabad.  
Commercial Chemical Co., B-4, Sanatnagar, Hyderabad 18.  
Dolphin Laboratories P. Ltd., 4-1-895-2, Tilak Road, Hyderabad.  
Hyderabad Chemical & Pharmaceutical Works Ltd.—Azamabad, Industrial Area, Hyderabad 20.  
Hyderabad Chemical Supplies Ltd.—Opp. Central Bank, Sultan Bazar, Hyderabad.  
Hyderabad Chemicals & Fertilizers Ltd.—Bashir Bagh, Hyderabad.  
Indian Chemical and Pharmaceutical Works, Azamabad, Hyderabad 20.  
J. & J. DeChane.—Residency Road, Hyderabad.  
Pancha Pharma Corporation.—1102, Narayanguda, Hyderabad 29.  
Standard Pharmaceutical Works Ltd., 5-8-579, Abid Road, Hyderabad.

**CHEMISTS AND DRUGGISTS****HYDERABAD**

Alemic Distributors, Sultan Bazar.  
Ananthagiri Medical Store, Mohammedi Market.  
Andhra Chemical Supplies, Nampalli Station Road.  
Andhra Medical Hall, Abid Road.  
Ayurdam Medical Hall, Sultan Bazar.  
Balaji Medical Hall, Sultan Bazar.  
Bharat Medical Hall, Afzul Gunj.  
City Medical Hall, Charkaman.  
Deccan Drug Agency, Abid Road.  
Dhootpeshwar Sales Corporation Private Ltd., Sultan Bazar.  
Elpee Medical Stores Chikad Palli.  
Gujrat Stores, Sultan Bazar.

**SECUNDERABAD**

Amar Medical Hall.—Station Road.  
Amrat Medical Stores.—Mahankali Street.  
Ananth Medical Store.—Sarojini Devi Road.  
Bhagwan Medical Store.—Station Road.  
Hebbur Pharmacy.—Station Road.  
Jyoti Medical Hall.—James Street.  
Kathliwar Stores.—Barbars Bridge.  
Kings-Way Stores.—Kingsway.

Manik Medical Stores.—Station Road.  
Rajeshwar Trading Co.—Mahankali Street.  
Republic Stores.—Kingsway Road.  
Shanti Agencies.—Kingsway.  
Shivayya & Sons.—B. Mettuguda.  
Spencer & Co.—Oxford Street.

**CIGARETTE MANUFACTURERS**

Hind Tobacco & Cigarette Co., Ltd.—Sanatnagar, Hyderabad 18.  
Hyderabad Deccan Cigarette Factory, Mushirabad, Hyderabad.  
Nizamsagar Tobacco Ltd.—Ameerpet, Hyderabad.

**THE VAZIR SULTAN TOBACCO CO. LTD.**

Azamabad—Hyderabad

Makers of "CHARMINAR"

India's Greatest Cigarette.

Phone: 36861-2-3, Grams: "CHARTOBCO"

**CINEMATOGRAPH**

**CENTRAL STUDIO.**—Bashir Bagh, Hyderabad. Phones: 32355, 32366. Grams: "CENTUDIO". By Appointment to the President of India; for everything Photographic and Cinematic.

**ELECTRICAL ENGINEERS AND CONTRACTORS**

Associated Engineering Co.—137, Kingsway, Secunderabad.  
**BAJAJ ELECTRICALS LTD.**—Lakdi-ka-Pul Road, Hyderabad; Electrical Engineers, Manufacturers and Contractors; Phone: 33335; Grams: "SOFTLITE"; Head Office at Bombay.  
Dominion Engineering Corporation.—P.O. Box No. 37, Rashtrapathi Road, Secunderabad.  
M. K. Mudalliar & Sons.—8059, Rashtrapathi Road, Secunderabad.  
Nathoo Laljee.—Gunfoundry Road, Hyderabad.  
Shanker Electric Stores.—Shanker Mahal, 31, Mahatma Gandhi Road, Secunderabad.  
Standard Radio Electronics.—Sultan Bazar, Hyderabad.

**ELECTRICAL & ENGINEERING GOODS MFRS. AND DEALERS**

Andhra Pradesh Co., The.—Durga Bhavan, Rashtrapathi Road, Secunderabad 3.  
Belde Engineering Company.—6549, Rashtrapathi Road, Secunderabad.  
Bombay Electric Stores.—121, James Street, Secunderabad.  
The Central Trading Co.—Rashtrapathi Road, Secunderabad.  
Chandra Electrics.—3121, Kingsway, Secunderabad.  
Crushie & Co.—Boorugu Mansions, 62, Mahatma Gandhi Road, Secunderabad (A.P.); Manufacturers and Suppliers to all Government departments and Manufacturers' representatives.  
Deccan Electric Stores.—10, Sultan Bazar, Hyderabad.  
Eastern Electric and Engineering Co. Ltd.—3/8, Rashtrapathi Road, Secunderabad.  
Elektra Products.—C-17, Sanatnagar, Hyderabad 18.  
Electric Transformer & Equipment Co.—5-9-10/15, Saifabad, Hyderabad 22.

**EMSON ENGINEERING CORPORATION.**—142, Rashtrapathi Road, Post Box 73, Secunderabad 3. Phone: 72232.

Hindustan Corporation Ltd.—Domalguda, Hyderabad.  
Prabhu Electric Co.—Rashtrapathi Road, Secunderabad.  
Scientific Electricals.—Shalibanda, Hyderabad.  
Shanker Electrics.—205, Yousuf Building, Abid Road, Hyderabad.  
Speedwell Electricals P. Ltd.—B-1, Sanatnagar, Hyderabad 18.  
Sun Electric & Motor Stores.—3153, Kingsway, Secunderabad.  
Switchgear Mfg. Co.—C-5, Industrial Estate, Sanatnagar, Hyderabad 18.  
Vijay Radio & Electric Service.—King's Corner, Abid Road, Hyderabad.  
V-X-L Agency.—138, Rashtrapathi Road, Secunderabad.

**FOOTWEAR MANUFACTURERS****HYDERABAD**

Ayboob Boot House.—Pathergatti, Hyderabad.  
Bata Shoe Co.—Abid Road, Hyderabad.  
Deccan Shoe & Leather Works Ltd.—Bakaram, Hyderabad.  
Hollywood Footwear.—Bakaram, Hyderabad.

**SECUNDERABAD**

Flex Footwear Co.—Opp. Chitra Talkies, Secunderabad.



## FURNITURE

Belde Engineering Co.—6549, Rashtrapathi Road, Secunderabad.  
Deccan Safe Co.—Shahrah-e-Osmani, Hyderabad.  
Hyderabad Wood Works.—8552, Mahatma Gandhi Road, Secunderabad.  
Sharda Stores.—3106, Kingsway, Secunderabad.  
Siddheshwar & Co.—Abid Road, Hyderabad.

## HOTELS AND RESTAURANTS

Everest Hotel.—Opp. Rly. Stn., Secunderabad.  
Grand Hotel.—Abid Road, Hyderabad.  
Madina Hotel.—Pathergatti, Hyderabad.  
Montgomery's Hotel.—Sarojini Devi Road, Secunderabad 3.  
New Kashmir Hotel.—Osmanganj, Hyderabad.  
New Rajkamal Hotel.—1063, Narayanguda, Hyderabad.  
New Tajmahal Hotel.—Sultan Bazar, Hyderabad.  
Orient Hotel.—Abid Road, Hyderabad.  
Percy's Hotel.—Sardar Patel Road, Secunderabad; Phone: 72106 (3 Lines). Grams: "PERCYS".

When in Hyderabad Stay at:

## THE ROYAL HOTEL

(Estd: 1929)

Opp. Nampalli Rly. Station, Hyderabad (A.P.)

Vegetarian & Non-Vegetarian Sections

Phones: 35333, 35334 Grams: "PASSENGER"

Radio Hotel.—Rashtrapathi Road, Secunderabad.  
Ritz Hotel.—Hill Fort Palace, Hyderabad.  
Rock Castle Hotel.—Jubilee Hills, Hyderabad 4. A.P.  
Royal Hotel.—Nampalli, Hyderabad.  
Taj Mahal Hotel.—King Kothi Road, Hyderabad.  
Taj Mahal Hotel.—Sarojinidevi Rd., Secunderabad.  
Welcome Hotel.—Opp. Rly. Station, Secunderabad.  
Whitehall Hotel.—Sardar Patel Road, Secunderabad 3.

## INSURANCE COMPANIES

CO-OPERATIVE GENERAL INSURANCE SOCIETY LTD.—  
H.O. Mahatma Gandhi Road, Hyderabad; Phone: 33535,  
Grams: "COOPGEN"; Transacts Fire, Marine and Miscellaneous; Branches—Bombay, Calcutta, Delhi, Lucknow, Madras, Eluru, Vizianagram, Nanded, Dhulia, Indore, Belgaum.

## IRON AND STEEL FURNITURE MANUFACTURERS

Godrej & Boyce Mfg. Co. Ltd.—Abid Road, Hyderabad.  
Hind Industrial Works.—Maharajgunj, Opp. Telephone Exchange, Hyderabad.  
Hyderabad Allwyn Metal Works Ltd.—Sanatnagar, Hyderabad 18.  
Tata Iron & Steel Co. Ltd.—2, Rashtrapathi Road, Secunderabad.

## IRON AND STEEL MERCHANTS

### HYDERABAD

Balle Lachmiah & Sons.—Siddiamber Bazar.  
Darga Tuliah.—Siddiamber Bazar.  
Darga Pandurangam Durgiah.—Siddiamber Bazar.  
Dhatrika Ramiah.—Afzal Gunj.  
Hyderabad Building Material House.—Afzal Gunj.  
Mohamed Abdul Gafoor, Afzal Gunj.  
Mohamed Nurulla Peddi Sivarajia.—Siddiamber Bazar.  
Vellore Lingayya Gari Buchayya.—Afzal Gunj.

### SECUNDERABAD

Indian Iron & Steel Corporation.—8571, Rashtrapathi Road.  
Masetty Venkanna Nalla Hanumiah.—Kanchar Bazar.  
Pannalal Narayanaswamy.—Tobacco Bazar.  
Secunderabad Iron & Steel Co.—60-A, James Street.  
Secunderabad Trading Company.—59, Mahatma Gandhi Road.  
Trivedi & Co.—149, Rashtrapathi Road.

## JEWELLERS

TOTARAM SAGARLAL & SONS.—Jewellers, Importers, Exporters, Handlooms, Handicrafts and Curios Dealers; Abid Road, Hyderabad (A.P.) India.

## MACHINERY MANUFACTURERS AND DEALERS

Andhra Foundry & Machine Co. Ltd.—28, Sarojini Devi Road, Secunderabad.  
Andhra Machinery Corporation.—8569, M. G. Road, Secunderabad.  
Andhra Pradesh Machinery Supply Corporation.—M. G. Road, Secunderabad.

Andhra Machine Tools Corporation.—Nizam Shahi Road, Hyderabad.  
Batliboi & Co. (Props. Bhogilal Leherchand P. Ltd.).—New Mody Building, Rashtrapathi Road, Secunderabad.

Belde Engineering Co.—6549, Rashtrapathi Road, Secunderabad.  
Commercial Trading Corporation.—Ranigunj, Secunderabad.  
Dominion Engineering Corporation.—P. Box 37, Secunderabad.  
Electronic & Engineering Instruments Mfrs. Corporation.—C-11, Industrial Estate, Hyderabad 18.

Ganesh Machinery Traders.—Rashtrapathi Road, Secunderabad.  
Hyderabad Engineering Corporation.—5-4-561, Narayanguda, Hyderabad.

Industrial Stores Co. Hyderabad Ltd.—11, Durga Bhavan, Rashtrapathi Road, Secunderabad.

JAYEMS ENGINEERING CO.—153, Rashtrapathi Road, Secunderabad (A.P.), Engineers, Machinery Merchants and Manufacturers' Representatives; Direct Importers of machine tools, woodworking tools, sheet metal working machinery, welding and foundry equipments; Head Office: Warden House, Sir P. Mehta Road, Bombay 1; Branches at all important centres.

Kesari Hanuman Engineering Works.—Musheerabad Road, Hyderabad.

Krishna Engineering Workshop.—Industrial Area, Azamabad, Hyderabad 20.

Murutza Mechanical Works.—350, Goal Bungalow, Hyderabad.  
Praga Tools Corp. Ltd.—15, Saifabad, Hyderabad.

Rayyat Commercial Corporation Ltd.—141, Kingsway, Secunderabad.

Sadanand Engineering Works.—19-1, Azamabad, Hyderabad 20.

Southern Engineering Works.—Station Road, Kachiguda, Hyderabad.

Sree Vishwakarma Mechanical & Engineering Works.—8555, M. G. Road, Secunderabad.

Swastik Engineering Works, M. G. Road, Secunderabad.

Textool Co., Ltd.—8668, James Street, Secunderabad.

Voltas Limited.—87/D, Rashtrapathi Road, Secunderabad.

## MILL GIN STORES SUPPLIERS

Commercial Trading Corporation.—Ranigunj, Secunderabad.

Commercial Trading Corporation.—Ranigunj, Secunderabad.

Deccan Mill Stores.—7936/A, Mahatma Gandhi Road, Secunderabad.

Industrial Stores Co. Hyderabad Ltd.—11, Durga Bhavan, Rashtrapathi Road, Secunderabad.

JAIRAMDAS & SONS.—7937, Raniganj, Secunderabad (A.P.).  
Phone: 72283. Grams: "JAIRAMSONS."

Voltas Limited.—87/D, Rashtrapathi Road, Secunderabad.

## NEWSPAPER AGENTS

Pinto & Co., J. C.—Agents for *The Times of India* & Allied Publications. Sarojinidevi Road, Secunderabad. Grams: "PINTOCO." Phone: 7372.

## PAINTS, ENAMELS AND VARNISHES

Anvesh Paint & Chemical Industries.—Vidyanagar, Hyderabad.

BLUNDELL EOMITE PAINTS LTD.—Area Sales Depot, Hyderabad.

Gujarat Paints & Hardware Mart.—Afzalganj, Hyderabad.

Hyderabad National Industries.—Sultan Bazar, Hyderabad.

The Hyderabad Oil & Paint Co., Ltd.—Industrial Area, Azamabad, Hyderabad.

Paints & General Equipment Co.—Opp. Ashok Talkies, Hyderabad.

## PAPER MERCHANTS

### HYDERABAD

Ashoka Traders.—Abid Road, Hyderabad.  
Cheelampalli Narsappa.—Afzalganj, Hyderabad.  
City Paper Mart.—Siddiamber Bazar, Hyderabad.  
Fidali Mohd. Ali.—22-7-7, Osmania Bazar, Hyderabad.  
Hyderabad Paper Syndicate.—1144, Osmania Bazar, Hyderabad.  
Kagaz Ghar.—Abid Road, Hyderabad.  
Kushalchand Pvt. Ltd., Singhvee Bhavan, Tilak Road, Hyderabad.

### SECUNDERABAD

B. V. R. Balreddy & Co.—137, Parklane, Secunderabad.  
Dachepalli Kistiah & Sons.—General Bazar, Secunderabad.  
India Paper Mar.—General Bazar, Secunderabad.  
Komma Veeriah & Sons.—Tobacco Bazar, Secunderabad.  
Mysore Paper Corporation.—6938/3-A, General Bazar, Secunderabad.  
Prabath Paper & General Stores.—Rashtrapathi Road, Secunderabad.  
Shah Brothers.—General Bazar, Secunderabad.



## PEST CONTROL

### PEST CONTROL (INDIA) PRIVATE LTD.

Consulting Entomologists — Termite

Control—Disinfestation—Fumigation Service.

Address: 6-1-1070/1, Lakdikapul, Raj Bhavan Road, Hyderabad 4.

Head Office: Yusuf Building, Mahatma Gandhi Road, Bombay-1.

(For Further details please see Bombay Commercial Firms Section.)

### PHOTOGRAPHERS & PHOTOGRAPHIC MATERIALS DEALERS

**CENTRAL STUDIO.**—Bashir Bagh, Hyderabad. Phones: 32355-32366. Grams: "CENTUDIO"; "By Appointment to the President of India"; For everything Photographic and Cinematic.

**Deccan Studio.**—Kingsway, Secunderabad.

**Hanagraph Studio.**—Abid Road, Hyderabad.

**Liberty Photo Studios.**—Liberty Buildings, Hyderabad.

**Mehta Brothers.**—Shahrah-e-Osmania, Hyderabad.

**Modern Photos.**—Abid Road, opp. Grammar School, Hyderabad.

**New Photo Stores.**—6656-4, Kingsway, Secunderabad.

**V. G. Chimalgi.**—Rashtrapathi Road, Secunderabad; Photogoods Dealer.

**Vijay Studio.**—Kingsway, Secunderabad.

### PIPES AND FITTINGS

**Commercial Trading Corporation.**—Ranigunj, Secunderabad.

**C. P. Shah & Brothers.**—Ranigunj, P.O. Box 103, Secunderabad; Nampally, Hyderabad.

**Deccan Metal Works.**—Mahatma Gandhi Road, Secunderabad.

**Indian Hume Pipe Co. Ltd.**—Industrial Area, Azamabad, Hyderabad.

**Industrial Stores.** Hyderabad Ltd.—11, Durga Bhavan, Rashtrapathi Road, Secunderabad.

**M. K. Mudliar & Sons.**—8059, Rashtrapathi Road, Secunderabad.

**National Sanitary Engineering Co.**—149, United Mansion, Rashtrapathi Road, Secunderabad.

### PLASTIC PRODUCTS MFRS. & DEALERS

**HYLAM LTD.**—Sanathnagar, Hyderabad-18. Phones: 33470, 33476, 33479; Regd. Office: 183-184, Rashtrapathi Road, Post Box 117, Secunderabad-3; Phone: 74843; Managing Agents: Best & Co. Pvt. Ltd., Madras; Manufacturers of HYLAM Laminated Sheets and Tubes for industrial applications; HYLAM Copier-clad Laminated for printed circuits; DECOLAM decorative laminated sheets for furniture surfacing and panelling; HYLAK Polyester resins for car bodies, boat hulls, corrugated roof light sheets, machine housings, helmets, chemical tanks, button making sheets, potting of electrical ballasts, embedding of botanical specimens and novelty articles, surface coating and general purpose laminating; HYLAK Phenolic moulding materials for the manufacture of telephone bodies and hand-set, radio cabinets, instrument cases and special grades for the manufacture of electrical accessories, etc; Sole Selling Agents: Bakelite (India) Pvt. Ltd., Bombay, Delhi, Calcutta; Distributors for South India: Best & Co. Pvt. Ltd., Madras, Bangalore, Coimbatore.

### SANATHNAGAR POLYTHENE INDUSTRIES

Osmangung, Hyderabad-12.

Manufacturers of Plastic Bags, Sheet, Vacuum, Blow & Injection Articles.

Phones: 44055, 39197, 41054.

Grams: "HANUMAN"

### U-FOAM PRIVATE LTD.

Sanathnagar, Hyderabad-18 (AP)

Phone: 39071, 39141.

Grams: {"URETHANE"  
SECUNDERABAD

Manufacturers of Polyurethane (Plastic) Foam, U-Foam. Products include Mattresses, Pillows, Quilts, Bamlina Baby sets, Toys, Folding Beach & Picnic cushions and Travelling Kits, Cushions, Sponges and numerous other items for Upholstery and Cushioning.

### PRINTING PRESSES

#### HYDERABAD

**Ajanta Art Press.**—Chatta Bazar, Hyderabad.

**Anand Power Press.**—Gowliguda, Hyderabad.

**Andhra Law Times.**—Near Kamal Talkies, Hyderabad.

**Andhra Printing Press.**—Gowliguda, Hyderabad.

**Bhagyanagar Press.**—Isamiah Bazar, Hyderabad.

**Chandragupta Printing Press.**—Afzalgunj, Hyderabad.

**Durga Printing Press.**—Charminar, Hyderabad.

**Hindi Prachar Press.**—Nampalli, Hyderabad.

**Hindusthan Printing Press.**—Begum Bazar, Hyderabad.

**Jyothi Printing Press.**—Mozamjahi Road, Hyderabad.

**Modern Printing House.**—Opp. Ashok Talkies, Hyderabad.

**National Fine Art Press.**—Charminar, Hyderabad.

**Sri Ganesh Press.**—Tilak Road, Hyderabad.

**Sri Krishna Printing Press.**—Afzalgunj, Hyderabad.

**Swadeshi Press.**—Afzalgunj, Hyderabad.

#### SECUNDERABAD

**Ajanta Printers.**—Mahakali Street, Secunderabad.

**Deccan Literature Printers.**—Sarojini Devi Road, Secunderabad.

**Excelsior Power Press.**—Park Lane, Secunderabad.

**Hyderabad Bulletin Press.**—Bolarum Road, Secunderabad.

**Nagendra Printing Press.**—Mahakali Street, Secunderabad.

**Osmania Printing Works.**—Rashtrapathi Road, Secunderabad.

**Pioneer Press.**—Rashtrapathi Road, Secunderabad.

**Premier Press.**—Gunj Bazar, Secunderabad.

**Sarvodaya Press.**—Hill Street, Secunderabad.

**Sree Rama Power Press.**—Subhas Road, Secunderabad.

### PUMPS & PUMPING MACHINERY

**WATER SUPPLY SPECIALISTS PRIVATE LTD.**—2670-74, Ghasmandy Road, Secunderabad (A.P.). Phone: 73889, Grams: "PUMPMEN"; H.O.: 8, Harnam Street, Bombay-1; Branches: Calcutta, Madras & New Delhi; Sole Agents for Myers Pump, Manufacturers of 'WASP' Pumping sets etc.

### RADIO, ELECTRONIC & RADIO PARTS MFRS. & DEALERS

#### HYDERABAD

**Bharat Radio Service.**—Sultan Bazar, Hyderabad.

**Hyderabad Radio House.**—Abid Road, Hyderabad.

**Modern Radio Electric House Ltd.**—Shahrah-e-Osmani, Hyderabad.

**National Radio Co.**—Sultan Bazar, Hyderabad.

**Radio Instruments Associates Private Ltd.**—1-10-84, Begumpet, Hyderabad-16.

**Radio Waves.**—4-5-493, Sultan Bazar, Hyderabad 17.

**Universal Trading & Radio Co.**—1240, Abid Road, Hyderabad.

#### SECUNDERABAD

**Bharat Trading & Radio House.**—Rashtrapathi Road, Secunderabad.

**Cine Traders.**—Ghasmandi Road, Secunderabad.

**Eastern Electric & Trading Co.**—2538, Rashtrapathi Road, Secunderabad.

**EMSON ENGINEERING CORPORATION.**—142, Rashtrapathi Road, Post Box 73, Secunderabad 3. Phone: 72232.

**General Electric Co. (India) Ltd.**—Ghasmandi Road, Secunderabad.

**General Radio & Appliances Pvt. Ltd.**—8092/1-2, Rashtrapathi Road, Secunderabad.

**Secunderabad General Radio Service.**—Rashtrapathi Road, Secunderabad.

### REFRIGERATORS (DOMESTIC)

**Belde Engineering Co.**—6549, Rashtrapathi Road, Secunderabad.

**Deccan Engineering & Refrigeration Co.**—133, Kingsway, Secunderabad.

**EMSON ENGINEERING CORPORATION.**—142, Rashtrapathi Road, Post Box 73, Secunderabad. Phone: 6232.

**Hyderabad Allwyn Metal Works Ltd.**—Sanathnagar, Hyderabad 18.

**Universal Trading & Radio House.**—1240, Abid Road, Hyderabad.

**Usha Refrigeration Industries.**—183/184, Rashtrapathi Road, Secunderabad.



## RUBBER GOODS MFRS.

## U-FOAM PRIVATE LTD.,

Sanathnagar, Hyderabad-18 (A.P.)

Phone: 39071, 39141. Grams: { "URETHANE"  
SECUNDERABAD

Manufacturers of Polyurethane (Plastic) foam, U-Foam Products include mattresses, Pillows, quilts, Bamlina Baby sets Toys, Folding beach & Picnic cushions and Travelling Kits, Cushions, Sponges and numerous other items for Upholstery and cushioning.

SANITARY ENGINEERS AND DEALERS  
IN SANITARY GOODS

Anand Sanitary Engineering Co.—4-3-01, Rashtrapati Road, Secunderabad.

Aurora Sanitary Engineering Co.—1-D, Rashtrapathi Road, Secunderabad.

Barman Brothers.—Barman Building, Gunfoundry, Hyderabad.

D. Balaram &amp; Sons.—Shahrah-e-Osmani, Hyderabad.

ITALIA MEHTA &amp; CO.—3-6-33, Bashir Bagh Road, Hyderabad 29. A.P. Sanitary Engineers and Dealers in Sanitaryware. Phone: 35127. Grams: "PLUMBERS."

K. Karunakar &amp; Sons.—Reddy Hospital Bldgs., Tilak Road, Hyderabad.

M. K. Mudaliar &amp; Sons.—8059, Rashtrapathi Road, Secunderabad.

National Sanitary Engineering Co.—149, United Mansion, Rashtrapathi Road, Secunderabad.

Pallonjee Eduljee &amp; Sons.—Gunfoundry, Hyderabad.

R. R. &amp; Sons.—Shahrah-e-Osmani, Hyderabad.

## SCIENTIFIC INSTRUMENTS

Electronic &amp; Industrial Instruments Co. Private Ltd.—B-17, Industrial Estate, Hyderabad-18 (A.P.).

Scientific Engineering House Ltd.—A-10-335, Bashir Bagh, Hyderabad.

Scientific Instrument Co.—30, Sultan Bazar, Hyderabad.

Vijaya Scientific Equipments.—Rashtrapathi Road, Secunderabad.

Zodiac Scientific Works.—Anilweld Mesh Compound, Sanatnagar, Hyderabad 18.

## SPINNING AND WEAVING MILLS

Azam Jahi Mills, Ltd.—Warangal.

Dewan Bahadur Ramgopal Mills, Ltd.—Secunderabad.

Mahaboob Shahi Kulburga Mills Co., Ltd.—Gulbarga.

Osmanshahi Mills, Ltd.—Nanded. 159, Gunfoundry Road, Hyderabad.

## TOOLS MANUFACTURERS

JAIRAMDAS & SONS, 7937, Raniganj, Secunderabad (A.P.).  
Phone: 72283; Grams: "JAIRAMSONS"; Importers & Stockists of all sorts of Engineers' Hand Tools, Precision Measuring Instruments etc.; Manufacturers of C.I. Surface Plates, Angle Plates, Straight Edges, V. Blocks etc.

## TRANSPORT COMPANIES

Azad Motor Transport Co.—Karbala Maidan, Secunderabad 3.

Bombay Hyderabad Motor Service.—116, General Bazar, Secunderabad 3.

Deccan Transport Co.—Opp. Rly. Station, Secunderabad.

General Construction and Transport Syndicate.—Abid Road, Hyderabad.

Madras Bangalore Transport Co.—8006, Ghasmandi, Secunderabad.

Savani Transport.—403, Nizamshahi Road, Hyderabad.

United Transport Co.—Mukhtarganj, Hyderabad.

## WATCHES AND CLOCKS DEALERS

## HYDERABAD

Bharat Watch Co.—4, Malipalli.

Indo Swiss Watch Co.—Abid Road.

Prince Watch Co.—Abid Road.

United Watch Co.—Abid Road.

Wheemi Watch Co.—840, Abid Road.

## SECUNDERABAD

Bombay Watch Co.—Mahatma Gandhi Road.

Kacharani Stores.—General Bazar.

Nathumal Bros.—Park Lane.

Ramesh Watch Co.—Park Lane.

## DELHI

A. B. Pandit &amp; Co., 6A, Connaught Place, New Delhi.

Abrol &amp; Co., R. C., P. Ltd., E Block, Connaught Place, New Delhi.

ACME COMPANY, Patent and Trade Mark Attorneys, Chandni Chowk, Delhi-6; Phones: 265776, 619639. Grams: "TRADE MARK" (Estd.: 1923).

Addison &amp; Co. Ltd., 16-B, Mathura Road, New Delhi 14.

Adsigns P. Ltd., 6, Jangpura Extension, New Delhi 14.

Advance Electronics, Jogdhian Colony, Chandni Chowk, Delhi 6.

A. Das &amp; Co., 74, Sadar Bazar, Delhi 6.

Advani &amp; Co. P. Ltd., Chawri Bazar, Delhi.

AFFILIATED EAST WEST PRESS PVT. LTD., C-57, Defence Colony, New Delhi-3; Phone: 76373, Grams: "BOWLINE", Chairman: W. D. Tenbroeck.

Agents &amp; Distributors P. Ltd., 13/14, Ajmeri Gate Extension, New Delhi.

Aggrellos &amp; Co., 11-B, Faiz Bazar, Delhi 7.

Ahuja &amp; Co., H.S., 10, Gurdwara Road, New Delhi 5.

Akashvani Ltd., M-53, Connaught Circus, New Delhi.

Alfred Herbert (India) Private Ltd., "Gulati Mansions", 4-10 Asaf Ali Road, Delhi-Ajmer Gate Scheme, Post Box 423, New Delhi 1. Importers and distributors of Machine Tools, Small Tools & Workshop Equipment. Also Plastic Moulding & Die Casting Machines, Steam and Pneumatic Hammers and Drop Stamps Forging Presses and Upsetting Hot

Forging Machines, Attritor Pulverizers. Grams: "Turret," Delhi, Telex: 802, TURRET DELHI, Phone No. 273120.

Allenbury &amp; Co. (Calcutta), Ltd., Connaught Circus, New Delhi.

ALLIED AGENCIES, 1399, Paharl Imli, Jama Masjid, Delhi-6; Phone: 261775; Grams: "SERVEALL"—Delhi and 9-Okhla Industrial Estate, New Delhi-20; Phone: 73279.

Allied Distributors &amp; Co., Chhuttan Manzil, Nicholson Road, Morigate, Delhi-6.

All India Film Corpn. Ltd., K. Block, Connaught Circus, New Delhi.

All India Finance &amp; Commerce Ltd., K. Block, Connaught Circus, New Delhi 1.

Amar Bharat Industries Ltd., Mantola, Paharganj, New Delhi 1.

Amar Co. P. Ltd., Katra Hussain Bux, Khari Baoli, Delhi 6.

Ambassador Travels P. Ltd., Hotel Ambassador, New Delhi 3.

American Express Co. Inc., Hamilton Bldg., Connaught Place, New Delhi.

American International Underwriters (India) Ltd., 31-K, Block, Connaught Place, New Delhi 1.

American Refrigerator Co., 4/2-B, Asaf Ali Road, New Delhi 1.

American Rubber Mills Co., G. T. Road, Delhi-Shahdara.

Anand Industries, 31/5, New Rohtak Road, New Delhi 5.

Andrew Yule &amp; Co. Ltd., 12, Pusa Road, Delhi.

Arjan Dass Kohli &amp; Co., 36-48, Chawri Bazar, Delhi 6.

Armstrong Smith P. Ltd., P. Box 676, New Delhi.

A. S. Bhatia &amp; Co., B-6, Flat No. 1, Asaf Ali Road, Delhi.

Asbestos Cement P. Ltd., 4/23-B, Asaf Ali Road, New Delhi.

Ashok Brothers, 37, Panchkuin Road, New Delhi.

Ashok Mfg. Co. P. Ltd., 37, Panchkuin Road, New Delhi.

Ashoka Finance Co. P. Ltd., 4/8, Asaf Ali Road, New Delhi.

Asiatic Syndicate, 6/5, W. E. A., Karol Bagh, New Delhi.

Assam Oil Co. Ltd., 10, Golf Link Road, New Delhi.

Associated Cement Cos. Ltd., Queensway, New Delhi.

ASSOCIATED ENGINEERING WORKS LTD., H.O. Kashmere Gate, Delhi-6; Phone: 225610. Directors: D. R. Sondhi, Phone: 74741, S.N. Sondhi, Phone: 46276. Office Manager: T. R. Chopra; Factory: G. T. Road, Delhi-32, Phone: 212523.

Associated Hotels of India Limited, Maiden's Hotel, Alipore Road, Delhi; Hoteliers.

ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LTD. Scientific Instrument Manufacturers and Manufacturers' Representatives.

New Delhi Office:—Sunlight Insurance Bldg., 26/27, Asaf Ali Road, New Delhi.

Telegrams: AIMILDEL.

Telephone: 271236.



**Manufacturers of:**—Laboratory apparatus, and Soil, Cement and Fuel Testing Equipment.

**Dealers in:**—Scientific, Surveying, Optical, Electrical, Communications Vacuum and other Types of Instruments.

**ASSOCIATED TRADERS AND ENGINEERS P. LTD.,** 20, Asaf Ali Road, New Delhi, Phone: 271664, Grams: "ATAEL".

**Associated Tube Wells India P. Ltd.,** 12, Scindia House, New Delhi.

**Asu Traders P. Ltd.,** Kashmere Gate, Delhi 6.

**Atlantis East Ltd.,** B-4/10, Asaf Ali Road, New Delhi.

**Atlas Machinery Corporation,** Charkhewalan, Delhi 6.

**AUTOMETERS LTD.,** Office: 22A, Asaf Ali Road, New Delhi-1; Phone: 277877; Factory: Mathura Road, Ballabgarh (Punjab), Phone: 370.

**Auto Spring Mfg. Co.,** Hamilton Road, Delhi 6.

**Avery Co. of India,** 1593, Akab Madrasa Road, Kashmere Gate, Delhi 6.

**Babcock & Wilcox of India P. Ltd.,** 29, Golf Link, New Delhi 3.

**Bagal & Co.,** 46, Stock Exchange Bldg., Asaf Ali Road, New Delhi 1.

## B. I. ELECTRIC CO.,

1842, Electrical Market, Delhi 6.

Phone: 263772, Res.: 263469.

For Everything in Electricals.

Prop: Inder Chand Jain.

**BAHRI & CO. PVT. LTD.,** 4/18, Asaf Ali Road, Delhi-1; Managing Director: N. C. Bahri, Phone: 274587 & 273760; Directors: C. L. Verma & S. S. Basi; Sales Manager: B. S. Roy; Branch Manager: P. C. Sareen.

**Balsiwala Brothers P. Ltd.,** 2711, Lothian Road, K. Gate, Delhi 6.

**bajaj**

**BAJAJ ELECTRICALS LTD.,** Electrical Engineers, Manufacturers & Contractors, 10/1, Asaf Ali Road, New Delhi. Telephone: 272056.

Telegrams: "SOFTLITE".

(For further details please see Commercial Firms Section BOMBAY.)

**Raj Kishan & Co.,** 1682, Nai Sarak, Delhi 6.

**Balbair Bros. Ltd.,** 1076, Pailwan, Jama Masjid, Delhi.

**Balmer Lawrie & Co. Ltd.,** Sunlight Insurance Bldg., Ajmere Gate Extension, New Delhi.

**Balussery Benefit Chit Fund P. Ltd.,** Delhi-Ajmeri Gate Scheme, New Delhi 1.

**Band Box P. Ltd.,** 18/90, Connaught Circus, New Delhi.

**Bansi Lal & Co.,** 543/544, Esplanade Road, Delhi 6.

**Barbrix Traders P. Ltd.,** 54, Janpath, New Delhi 1.

**B. CHOWDHURY & CO.,** Engineers and Manufacturers Representatives: 3 E/L Jhandewalan, New Delhi (for details, please see Commercial firms section—Bombay).

**Bata Shoe Co. P. Ltd.,** K. Gate, Delhi 6.

**Bennett, Coleman & Co. Ltd.,** 7, Bahadur Shah Zaffar Marg, New Delhi.

**Best & Co.,** Chandni Chowk, Delhi.

**Bhagwandass Labhu Ram & Co.,** 6750, Chandni Chowk, Delhi 6.

**Bhagwat Pershad & Sons,** 167, Katra Baryan, Delhi 6.

**Bharat Engineering & Mfg. Co.,** 25/2, North Rohtak Road, New Delhi 5.

**Bharat Overseas P. Ltd.,** P. N. B. Bldg., Parliament St., New Delhi 1.

**Bharat Ram Charat Ram & Co. P. Ltd.** P. Box No. 1185, Delhi.

**Bharat Wood Products Co.,** Opp. Plaza Cinema, New Delhi.

**Bird & Co., Private Ltd.,** 74, Janpath, New Delhi.

**Birla Brothers P. Ltd.,** United Commercial Bank Bldg., Parliament St., New Delhi.

**Bishamber Dass & Sons (P.) Ltd.,** Bishamber Bhavan, 54, Daryaganj, Delhi 7.

**B. Lilaram & Sons (Delhi),** 14-15F, Connaught Place, New Delhi.

**Blackwood Hodge (India) P. Ltd.,** Hamilton House, Connaught Place, New Delhi.

**Blue Star Engineering Co. (Bombay) P. Ltd.,** 1/23-B, Asaf Ali Road, New Delhi.

**Bombay Company P. Ltd.,** Chandni Chowk, Delhi 6.

**B. Panna L I Ltd.,** 14, Ajmeri Gate Extension, New Delhi 1.

**BRADMA OF INDIA LTD.,** Lok Kalyan Bhavan, 11-A, Rouse Avenue Lane, Post Box 315, New Delhi; Grams: "BRADMALT". Data writing Machines & business system.

**Brihat Varat Trading Co. Ltd.,** 3620/21, Faiz Bazar, Delhi 7.

**BRITANNIA BISCUIT CO., LIMITED,** 33, Lawrence Road, Industrial area, Delhi-35; Phone: 568361 (3 lines).

**British India Steam Navigation Co. Ltd.,** 28, Barakhamba Road, New Delhi 1.

**British Motor Car Co. Ltd.,** Connaught Circus, New Delhi.

**British Overseas Airways Corporation,** Hamilton Bldg., 1-A, Connaught Place, New Delhi.

**Brooke Bond India P. Ltd.,** Post Box No. 412, New Delhi.

**Burlap Dealers Ltd.,** N-78, Connaught Circus, New Delhi 1.

**BURMAH OIL GROUP OF COMPANIES,** THE.—17, Parliament Street, New Delhi;

Phone: 45841 & 40161; J. C. Finlay M. C., Chief Representative, The Burmah Oil Group of Companies and Managing Director; Oil India Ltd.; 10, Golf Links, New Delhi, Phone: 619218; G. N. S. Robertson, Deputy Chief Representative, The Burmah Oil Group of Companies and Director, Oil India Ltd.; 63, Friends Colony, New Delhi; Phone: 75190;

A. B. Das Gupta, Senior Technical Adviser; 30, Friends Colony, New Delhi; Phone: 77134; S. H. Utamsingh, Senior Accountant, 22, Rajdoot Marg, New Delhi; Phone: 33507; R. Ray Chandlun, Commercial Manager, 19, Golf Links, New Delhi, Phone: 617874;

A. A. Waheed, Public Relations Officer, C-587, Defence Colony, New Delhi, Phone: 76987; V. K. Sawhney, Accountant, D. 383, Defence Colony, New Delhi, Phone: 78248; G. H. Kirpalani, Senior Liaison Officer, 82, Golf Links, New Delhi, Phone: 618535; N. K. Advani, 5/19, West Patel Nagar, New Delhi, Phone: 53997; S. K. Mehra, 13, Allpur Road, Delhi; Phone: 223615;

Office: 45841 & 40161; J. C. Finlay, Chief Representative; Phone: 48788;

A. A. Waheed, Public Relations Officer, Phone: 47673.

**Burmah-Shell Oil Storage & Distributing Co. of India, Ltd.,** Burmah-Shell House, Connaught Circus, New Delhi.

**Burn & Co.,** Pearey Lal Bldg., 40-42, Janpath, New Delhi 1.

**Cadbury Fry India Ltd.,** 1, Daryaganj, Delhi 7.

**Caltex (India) Ltd.,** Queensway, Delhi.

**Cambata Industries P. Ltd.,** 56, Jor Bagh, New Delhi 3.

**Caprihans (India) P. Ltd.,** Pratap Bhavan, Mathura Road, New Delhi.

**Caxton Press P. Ltd.,** 11/90, Connaught Circus, New Delhi.

**Cement Marketing Co. of India P. Ltd.,** Bombay Mutual Bldg., Parliament St., New Delhi.

**Chahal Finance P. Ltd.,** Delite Bldg., Asaf Ali Road, New Delhi.

**Chamanlal & Bros. P. Ltd.,** 936, Tota Maina Baradari, Queen's Road, Delhi 6.

**CHANANA BROTHERS.,** Manufacturers of Grade I 'IEC' Lathes; 26, Okhla Industrial Estate, New Delhi 20. Phone: 72890, Grams: "CHANANA".

**Chaudhry Dairies & Allied Products P. Ltd.,** Jawahar Nagar, Delhi 6.

**Chetan Gupta & Co.,** 29, Najafgarh Road, New Delhi 15.

**Chika P. Ltd.,** 3/4107, Naya Bazar, Delhi 6.

**Chopra & Co.,** S. P., F. Block, Connaught Place, New Delhi.

**Chopra & Sons, S. N.,** 'Swarajya Mandir', Naiwara, Chawri Bazar, Delhi 6.

**Choudhry Trading Co.,** Bhagirath Palace, Chandni Chowk, Delhi 6.

**Ciba Pharma Private Ltd.,** 3/17A, Asaf Ali Road, New Delhi.

**Cinefones (Delhi) P. Ltd.,** Behind State Bank, Chandni Chowk, Delhi 6.

**Coca-Cola Export Corporation,** 18-A, Nizamuddin West, New Delhi 14.

**Commercial Refrigeration Corporation,** 3, Saran Bldg., Ramnagar, New Delhi.

**Concrete Tanks Mfg. Co.,** 878, East Park Road, New Delhi 5.

**Continental Commercial Co. P. Ltd.,** 43, Connaught Circus, New Delhi 1.

**CONTINENTAL CONSTRUCTION PRIVATE LTD.,** Engineers & Contractors, D-17, Defence Colony, New Delhi-3; Phone: 75525, 76463, 76468; Directors: N. C. Bahri, C. L. Verma, S. S. Basi, C. P. Misra, Basant Singh, Girdhari Singh.

**CONTINENTAL EXPORTS,** 1st floor, 18/4, Asaf Ali Road, New Delhi-1. Phone: 271359, Grams: "CONTEXPO".

**Continental Trading Co. of India,** 215, Kamla Market, New Delhi 1.

**Cox & Kings (Agents) Ltd.,** Indra Palace, Connaught Place, New Delhi.

**C. B. E. Wood & Co. P. Ltd.,** 3/13-B, D.A.G. Extension, New Delhi 1.

**Crescent Agencies P. Ltd.,** 9-N, Munshilal Bldgs., Connaught Place, New Delhi 1.

**Dalmia Cement (Bharat) Ltd.,** Scindia House, Curzon Road, New Delhi.

**Dalmia Cement and Paper Marketing Co. Ltd.,** 10, Daryaganj, New Delhi.

**DASS MOTORS PRIVATE LTD.,** H. O. Kashmere Gate, Delhi-6; Director: C. R. Dass; Managing Director: H. S. Dass, Phone: 228071 & 72. Branch Office: 21A, Windsor Place, Delhi-1, Phone: 47996.

**DAVIS & WHITE (INDIA) PVT. LTD.,** Office: "Kundan Mansion", 2A/3, Asaf Ali Road, New Delhi-1; Phone: 272048; Factory: 15, Miles Main Mathura Road, Faridabad (Punjab), Phone: 384.

**Dastur & Co. P. Ltd.,** M. N., D-421, Defence Colony, New Delhi 3.

**D. C. M. Chemical Works,** Najafgarh Road, Delhi 15.

**D. C. M. Engineering & Development Works,** P. Box 1211, New Delhi 15.

**Dgl Private Ltd.,** 14-M Block, Connaught Circus, New Delhi-1.



**DELHI AUTO & GENERAL FINANCE PRIVATE LTD.**, 3/15 A, Asaf Ali Road, New Delhi 1. Phone: 271938.

Delhi Engineering Works P. Ltd., G. T. Road, Delhi 6.

Delhi Financiers P. Ltd., 8/3, Asaf Ali Road, New Delhi 1.

Delhi Floorings P. Ltd., 71/5, Najafgarh Road, New Delhi 15.

Delhi Garage P. Ltd., Connaught Circus, New Delhi.

Delhi Gate Services P. Ltd., Mathura Road, New Delhi 1.

Delhi Hinges P. Ltd., 71/2, D. L. F. Industrial Area, New Delhi 15.

Delhi Instalment Finance & Investment P. Ltd., 1-24, Asaf Ali Road, New Delhi.

Delhi Land & Development Co., 5/A/1, Tilak Nagar, New Delhi 15.

Delhi Land & Finance P. Ltd., F. Connaught Place, New Delhi.

Delhi Metal and Electric Co., Nai Sarak, Delhi 6.

Delhi & Orient Tobacco Co. P. Ltd., 124, Janpath, New Delhi 1.

**DELHI PAINTS CORPORATION**, Office: M51, Connaught Circus, New Delhi-1; Phone: 45586; Factory: 10, N. Rtk. Road, Delhi-5; Phone: 54786; Prop.: Kulwant Singh, Phone: 55708.

Delhi Printing & Publishing Co. P. Ltd., Rani Jhansi Road, New Delhi.

Delhi Safe Deposit Co. Ltd., Oriental Buildings, 86, Janpath, New Delhi 1.



A Name to Remember in Plastic Cables

Leading Manufacturers of Cables and wires for Electrical appliances, Fans, Inter-Communication System, Radios, Telephones, Amplifiers & Public Address System etc.

**DELTON CABLE CO.**,

3457, Delhi Gate,

P. O. Box 1179, Delhi.

Phone: 272111-2, Grams:

274411. "DELTONCO"

Factory:

24, Najafgarh Road, New Delhi-15.

Phone: 51190.

Telex: 367, DELTONCODI.

Phone: { Office: 45028-29  
Factories: 561686-82240.  
Grams: 'GARAGE'.

**DGL PRIVATE LTD.**

14-M Block, Connaught Circus New Delhi-1.

Manufacturers of Fire Fighting Equipment and Appliances including Fire Engines, Centralised Lubrication Equipment, Garage Service Station Equipment, Light Engineering Stores.

**Dharam Singh & Co. P. Ltd.**, B-3/5, Asaf Ali Road, New Delhi 1.

**Dhawan & Dhawan P. Ltd.**, 3/15, Asaf Ali Road, New Delhi.

**Didwania Brothers P. Ltd.**, K. Gate, Delhi 6.

**Dilwall Traders P. Ltd.**, Chandni Chowk, Delhi 6.

**D. Minsen & Co.**, Block F, 21-B, Connaught Place, New Delhi.

**Dodsai Private Ltd.**, 31, Faiz Bazar, Delhi.

**DRUGDEAL CORPORATION**, Sales Office: Behind State Bank, Chandni Chowk, Delhi-6; Phone: 263697 & 264075, Partners: Inder Sain Jain, Subhash Chander Jain, Satya Pal Jain; Factory: Bagh Phul, Rohtak Road, Delhi-35; Phone: 54268.

**Dunlop Rubber Co. (India) Ltd.**, Asaf Ali Road, Delhi.

**Dyer Meakin Breweries Ltd.**, K. Gate, Delhi 6.

## EAST ASIATIC CO. (INDIA) PVT. LTD. THE

Delite Cinema Bldg.,

P.O. Box 656,

New Delhi.

Manufacturers, Importers, Exporters & Engineers.

Phones: Grams:  
273535, 274362, 277901 "ATLANTIC"

**Eastern Arts Corporation**, 11/B-4, Asaf Ali Road, New Delhi.

**Eastern Equipment & Sales Ltd.**, H Block, Connaught Circus, New Delhi.

**Eastern Linkers P. Ltd.**, Block A, 21-B, Connaught Place, New Delhi.

**Easun Engineering Co.**, Gobind Mansion, H. Block, C. Circus, New Delhi.

**E. D. Galgotia & Sons**, Block B, 21-B, Connaught Place, New Delhi.

**Edward Keventer (Successors)**, Private Ltd., Kitchner Road, New Delhi.

**Elcher Tractor Corporation of India Private Ltd.**, 16-A, Asaf Ali Road, New Delhi-1. Manufacturers of Tractors; Works Office and Factory: Faridabad (Punjab).

**Electromex Industries Private Ltd.**, 1903, Chandni Chowk, Delhi-6.

**ENGLISH ELECTRIC CO. OF INDIA LTD., THE**, Allahabad Bank Bldg., 17, Parliament Street, New Delhi-1; Phone: 45801; Chairman & Managing Director: Mr. N. P. Dingwall, Regional Manager (India) British Aircraft Corporation: Mr. C. L. Mollan.

**Ensa Trading Co.**, Behind Bhagirath Palace, Chandni Chowk, Delhi.

**Ericsson Telephone Sales Corp.**, 1/3, Asaf Ali Road, New Delhi 1.

**Escorts (Agents) Private Ltd.**, Pratap Bldgs., Connaught Circus, Post Box No. 187, New Delhi.

**Essex Farms P. Ltd.**, 32, Sri Ram Road, Civil Lines, Delhi.

**Express Newspapers Private Ltd.**, Mathura Road, New Delhi.

**F. & C. Osler (India) Ltd.**, Scindia House, Queensway, New Delhi.

**Favre Lenba & Co. P. Ltd.**, Chandni Chowk, Delhi 6.

**Fedder Lloyds Corp.**, P. Ltd., Punj House, M-13, Connaught Circus, New Delhi.

**Federal India Co. P. Ltd.**, 2, Tropical Bldg., Connaught Place, New Delhi 1.

**Ferguson & Co.**, A. F., Scindia House, New Delhi.

**Fertiliser Association of India**, 85, Sunder Nagra, New Delhi 11.

**Filmstan Distributors India Ltd.**, Chandni Chowk, Delhi 6.

**Firestone Tyre & Rubber Co. of India Ltd.**, Nicholson Road, Delhi 6.

**Forbes Forbes Campbell & Co. P. Ltd.**, Inderani Bldg., 5-B, Ajmere Gate Extension, Delhi 1.

**Fourbhai P. Ltd.**, 14, Faiz Bazar, Delhi 7.

**GADODIA & SON (PVT.) LTD., L. N.**, Regd. Office: Kucha Natwan, Chandni Chowk, Delhi-6; Phone: 264232; Branches: Ahmedabad, Amritsar, Bombay and Kanpur; Textile Processing Factory, 30, Loni Road, P.O. Mohan Nagar, (Ghaziabad) U.P.; Director: R. G. Gadodia; Resi. Phone: 224069.

**GAMMON INDIA LTD.**, Central Zonal Office: 74, Link Road, Lajpatnagar 111, New Delhi-14; Phone: 76281, Grams: "GAMMON"—New Delhi; Designing and Constructional Engineers and Contractors, Specialists in Bridges, Cooling Towers, Water Towers, Harbours works, Chimneys, Silos, Dams, Jetties & Airports, Hangars, Power Stations, Factories, Earth works, Foundations, Piling Works, Syphons etc., Regd. Office: Gammon House, Cadell Road, Prabhadevi, Bombay 28 DD.

**Ganesan & Sons**, P. N., K-29, Connaught Place, New Delhi 1.

**Ganesh Flour Mills Co., Ltd.**, Post Box No. 1025, Subzimandi, Delhi 6.

**Gannon Dunkerley & Co. Ltd.**, 'K' Block, Chaudhry Bldg., Connaught Circus, New Delhi.

**GARDNERS CORPORATION**, Food Machinery, Horticulture Tools and Refrigeration Specialists; 6, Doctors Lane (Near Gole Market), New Delhi-1; P. N. Narang—Food Machinery, Bakery, Canning & Bottling Equipment Dept., R. N. Narang—Refrigeration Equipment and Westinghouse Indenting Dept., S. N. Narang—Fabrication and raw materials Dept., Phone: 49350, 47770. Grams: "GARDNERS".

**Garg Armoury P. Ltd.**, Kashmere Gate, Delhi 6.

**Garlick & Co. P. Ltd.**, 18-B, Nizamuddin West, New Delhi 13.

**G. D. Selgell & Co. P. Ltd.**, Kashmere Gate, Delhi 6.

**GEDORE TOOLS (INDIA) PVT. LTD.**, 151, Golf Links, New Delhi-3; Phone: 618265-66; Mg. Director: K. K. Jhalani. Phone: 611954; Resi.: 618735.

**GENERAL ELECTRIC CO. OF (INDIA) PVT. LTD.**, Connaught House, E. Block, Connaught Place, Delhi-1; Director and Branch Manager: I. L. Dass, Phone: 44864, 45848-9.

**General Electric Co. of India P. Ltd.**, 8-E, Connaught Place, New Delhi.

**General Radio & Appliances Co. P. Ltd.**, Joghlian Colony, Chandni Chowk, Delhi.

**Genex India**, 17/60, New Rohtak Road, New Delhi 5.

**Geoffrey Manners & Co. P. Ltd.**, Lakshmi Ins. Bldg., Asaf Ali Road, New Delhi 1.

**Gestetner Duplicators Ltd.**, 9, Scindia House, Connaught Circus, New Delhi.

**Ghaziabad Engineering Co. Private Ltd.**, 42, Janpath, New Delhi.

**Gillanders Arbuthnot & Co. Ltd.**, Regal Bldgs., New Delhi 1.

**Gladstone Lyall & Co. Ltd.**, Connaught Circus, New Delhi.



**GLAXO LABORATORIES INDIA (PVT.) LTD.**, Mathura Road, Okhla, New Delhi-20; Phone: 76203; Chief Representative: H. Turnbull, Asst. Branch Manager: K. C. Dhande.

**Globe Engineering Co.**, 2524, G. B. Road, Delhi 6.

**Globe Travels P. Ltd.**, 11-H, Connaught Circus, New Delhi 1.

**Godrej & Boyce Mfg. Co. P. Ltd.**, D.A.G. Scheme, New Delhi 1.

**Goetz India Ltd.**, Block H., Connaught Circus, New Delhi.

**Goodearth Co.**, Regd. Office: 16-A, Asaf Ali Road, New Delhi-1.

**Goodearth (Agencies) Pvt. Ltd.**, Regd. Office: 16-A, Asaf Ali Road, New Delhi-1.

**Goodearth Manufacturing Corporation Pvt. Ltd.**, Regd. Office: 16-A, Asaf Ali Road, New Delhi-1.

**GOODLASS NEROLAC PAINTS PRIVATE LTD.**, 9-10-3, Asaf Ali Road, New Delhi. Manufacturers of Paints, Enamels, Lacquers, Varnishes and Pigments.

**Goodyear Tyre and Rubber Co. of India P. Ltd.**, 1, Ansari Road, Daryaganj, Delhi 7.

**Govan Bros. Ltd.**, Scindia House, New Delhi.

**Greaves Cotton & Co. Ltd.**, Thapar House, 124, Janpath, New Delhi.

**Green Finance (India) Private Ltd.**, 4/5B, Sachdeva Mansion, Asaf Ali Road, New Delhi-1.

**G. S. Kashyap & Sons**, Pataudi House, Daryaganj, Delhi 7.

**Guest, Keen, Williams Ltd.**, 10, Jor Bagh, Lodi Road, New Delhi.

**Guest Roberts & Co.**, 14, Rohtak Road, Delhi 5.

**Gulf Oil India P. Ltd.**, Chaudhry Bldg., Connaught Circus, New Delhi.

**Gupta & Co.**, D. P., 1/6-B, Ajmeri Gate Extension, New Delhi 1.

**Gupta & Co.**, R. N., 18/4, Asaf Ali Road, New Delhi 1.

**Gurdas Kapur & Sons P. Ltd.**, Chawri Bazar, Delhi 6.

**Hans Raj Gupta & Co. P. Ltd.**, Ajmere Gate, Delhi 6.

**Harbans Lal Malhotra & Sons P. Ltd.**, Delite Cinema Bldg., D.A.G. Extn., New Delhi.

**H. C. Sen & Co. (Estd. 1880)**, Dr. H. C. Sen Road, The Fountain, Delhi 6.

**Henley's W.T. Telegraph Works Co. Ltd.**, 12/3, Asaf Ali Road, New Delhi 1.

**Herman & Mohatta (India) P. Ltd.**, B. R., Minto Road, Connaught Circus, New Delhi 1.

**Himalaya Manufacturing & Sales Co.**, Park Mansions, Paharganj, New Delhi.

**Himalaya Trading Co.**, Fatehpuri, Delhi 6.

**Himco (India) P. Ltd.**, 1412, Nicholson Road, Kashmir Gate, Delhi 6.

**Hind Automobiles Corporation**, 37, Industrial Estate Okhla, New Delhi-20.

**Hind Trading Co.**, 841, Kucha Pat Rau, Delhi.

**HINDUSTAN CHAINS (PVT.) LTD.**, 20/1, Asaf Ali Road, New Delhi-1; Phone: 273142 & 273643; Managing Director: Gopal Dass Aggarwal; Director: Gopal Dass Aggarwal; Directors: Dev Kumar Aggarwal, Sham Sunder Aggarwal, Chatarbhuj Aggarwal, Raj Kumar Aggarwal.

**Hindustan Carbons P. Ltd.**, 26-F, Connaught Place, New Delhi 1.

**Hindustan Construction Co., Ltd.**, B-1, Pusa Road, New Delhi 5.

**HINDUSTAN CYCLE ACCESSORIES MFG. CO.**, Lawrence Road, Rohtak Road, P.O. Ganesh Pura, Delhi-35;

Factory: A. S. Jain, Phone: 54254 (Res.); 55898; S. P. Jain, Phone: 54254 (Res.); 51827, Sales Office: Phone: 264612.

**Hindustan Electronics**, 1801, Chandni Chowk, Delhi 6.

**Hindustan Industrial Corpn.**, K-40, Connaught Circus, New Delhi 1.

**Hindustan Industries**, Raghu Ganj, Chawri Bazar, Delhi-6.

**Hindustan Insulation P. Ltd.**, P. Box 1179, Delhi 6.

**Hindustan Lever Ltd.**, Lever House, 12/1, D.A.G. Extn., New Delhi.

**Hindustan Rollings & Wires P. Ltd.**, 16/6, Shakti Nagar, Delhi 6.

**The Hindustan Times**, Connaught Circus, New Delhi 1.

**Hindustan Transmission Products Ltd.**, Mangal Market, Chandni Chowk, Delhi 6.

**Hitkari Brothers (of Delhi)**, 9, Faiz Bazar, Delhi.

**Hoechst Dyes & Chemicals Ltd.**, 3/10 & 11, Asaf Ali Road, New Delhi.

**Hoechst Pharmaceuticals Ltd.**, 3-10 & 11, Asaf Ali Road, New Delhi.

**Housing & Construction P. Ltd.**, F, Connaught Place, New Delhi.

**Howrah Motor Co. Ltd.**, Kashmere Gate, Delhi.

**I. A. E. C. (Bombay) P. Ltd.**, K. Block, Chawdhary Bldg., C. Circus, New Delhi.

**Ice Machinery Co.**, 66/67, G. B. Road, Delhi 6.

**Ideal Traders**, 23, Okhla Industrial Estate, New Delhi-20.

**Imperial Chemical Industries India P. Ltd.**, Hamilton Bldg., Connaught Place, New Delhi.

**Import Export Sales Co.**, Chawri Bazar, Delhi 6.

**Indequip P. Ltd.**, 3792, Faiz Bazar, Delhi 7.

**India Art & Craft Corpn.**, 12, Park Area, Karol Bagh, New Delhi.

**India Insulation Co.**, 10, Daryaganj, Delhi 7.

**India Overseas Exports**, 19, Amrit Kaur Market, New Delhi 1.

**India Steamship Co. Ltd.**, 12/7, W.E.A., New Delhi 5.

**India Trading Co. P. Ltd.**, 1903, Chandni Chowk, Delhi 6.

**India Tyre & Rubber Co. of India P. Ltd.**, 3, Hamilton Road, Kashmere Gate, Delhi 6.

**India Tyre Retreading Co.**, 21-A, Najafgarh Road, New Delhi 15.

**Indian Cable Co. Ltd.**, 9-A, Connaught Place, New Delhi 1.

**Indian Detonators Ltd.**, 44, Friends Colony, New Delhi 14.



**INDIAN ENGINEERING CO.**, 18, Pusa Road, New Delhi 5; Phone: 52876. Grams: "ARGIKE". Also at Bombay, Calcutta, Madras, Bangalore; Manufacturers and Dealers of Electrical Equipment, Components and raw materials for the Electric Industry.

**Indian Foundries Co.**, New Rohtak Road, Delhi 5.

**Indian Handicrafts Co.**, 8635, Kishanganj Road, Delhi.

**Indian Iron and Steel Co. Ltd.**, 42, Janpath, New Delhi.

**Indian Landsberg Implements Corporation Pvt. Ltd.**, Manufacturers of Agricultural Implements; Regd. Office: 16-A, Asaf Ali Road, New Delhi-1; Phone: 23865. Works Office: Faridabad; Phone: 192.

## INDIAN OIL CORPORATION LTD.

Marketing Division, Northern Branch 'Children's Book Trust Building' 4, Bahadur Shah Zafar Marg, New Delhi-1.

Phone Nos.: 273881-2-3-4-5-6-7-8-274071

Branch Manager: T. Kumaran.  
Phone: 274728

Branch Sales Manager: B. M. Lal.

Branch Oprn. Manager: R. C. Jhingan.

Branch Fin. Contrlr.: S. Khurana.

Branch Lub. Eng.: B. K. Bhala.

**Indian Refrigeration Industries**, 7/15, Najafgarh Road, New Delhi 15.

**Indian Traders P. Ltd.**, Dayal Bldg., Chandni Chowk, P.B. No. 1778, Delhi 6.

**Indian Travels P. Ltd.**, 2, Scindia House, New Delhi 1.

**Indian Tube Co. (1953) Ltd.**, 15/1, Asaf Ali Road, New Delhi.

**INDIAN TYRE RETREADING CO.** Tyre Retreaders, Indian Soles, H.O. and Factory: 21-A, Najafgarh Road, Delhi-15. Phone: 52020; City Office: 1639, S. P. Mkrej. Marg, Delhi-6; Phone: 226623; Branch Office: 64/2B, Belgachia Road, Calcutta-37, Phone: 562699 & 556680.

**Indian Wireless Service P. Ltd.**, 2269, Abdul Aziz Road, Delhi 6.

**Indmag P. Ltd.**, United Commercial Bank Bldg., Parliament Street, New Delhi.

**Indo Asiatic Engineers P. Ltd.**, 32, Arakashan Road, New Delhi.

**Indo Burma Petroleum Co. Ltd.**, Indra Palace, Connaught Place, New Delhi 1.

**Indo-Europa Trading Co.**, Near Central Bank of India, Chandni Chowk, Delhi-6.

**INDO-EUROPEAN MACHINERY CO. PVT. LTD.** (Printers' Engineers); Office & Showroom, (Opp. D.C.M. Sales Depot); Chandni Chowk, Delhi-6; Phone: 268657 & 266132; Offices at Bombay, Calcutta, Madras.

**Indo Flex P. Ltd.**, 32, Golf Links, New Delhi 3.

**Indo German Engineering Co. P. Ltd.**, 97/48, Diplomatic Enclave, New Delhi 3.

**Indoimex Agencies P. Ltd.**, Sunlight Insc. Bldg., Asaf Ali Road, New Delhi.

**Indo Japan Vacuum Bottle Co. India Ltd.**, Mori Gate, Delhi 6.

**Indo Trading Co.**, Kashmere Gate, Delhi 6.

**Indra Agencies**, Gobind Mansion, H. Block, Connaught Circus, New Delhi 1.

**Indudyog P. Ltd.**, 40, Industrial Estate, Okhla, New Delhi.

**Industrial Credit Co. P. Ltd.**, 4, Scindia House, New Delhi 1.





**INDUSTRIAL GASES LTD., THE,** 3(12), Ganesh Chandra Avenue, Post Box No 853, Calcutta 1; D. B. Gupta Road, Pratap Bhawan, Post Box 622, New Delhi-1; Phone: 264728, Grams: "INDUSGASES", Head office: P.O. Box 853, Calcutta 1;

*Manufacturers of:* Industrial Gases, Pressure, Vacuum Gauges, Welding & Cutting machines, equipment & accessories, Welding Electrodes and rods, Acetylene Generators, Complete Plants for manufacture of Gases. *Distributors of:* Power Generation and Transmission plates and equipment, Haulage equipment and colliery equipment. *Factories:* Kanpur, Lucknow, Varanasi, Gauhati, Ranchi, Tollygunge and Howrah. *Offices:* Calcutta, New Delhi, Madras, Mettur, Patratu and Harduagunge. *Agents:* All important towns in India.

Industrial Products P. Ltd., 439, Esplanade Road, Delhi.

**INDUSTRIAL SEWING MACHINES PRIVATE LTD.,** 1/23-B, Asaf Ali Road, New Delhi 1; Suppliers of PFAFF Industrial Sewing Machines, Needles, Boot & Shoe Manufacturing Machinery and Eastman Cloth Cutting Machines.

Intercontinent (Travancore) P. Ltd., Connaught Circus, New Delhi.

**INTERNATIONAL COMPUTERS AND TABULATORS (INDIA) PRIVATE LIMITED,** Electronic Data Processing Equipment, National Insurance Building, 5, Parliament Street, P. O. Box 76, New Delhi 1. Telephone Nos. 45807 and 45808. Telegraphic Address: "TABULATORIAL." Northern Zone Manager: Mr. K. S. Nathan, Maintenance Manager: Mr. Durga Dutt. Head Office: Magnet House, Dougall Road, Ballard Estate, P.O. Box 516, Bombay 1.

International Equipment Corpn. P. Ltd., 32, Golf Links, New Delhi 3.

International General Electric Co. India P. Ltd., Lady Hardinge Road, New Delhi.

International Imex (Agents) P. Ltd., Asaf Ali Road, New Delhi.

International Industries, Hamilton Road, Delhi 6.

International Ore & Fertilizer (I) P. Ltd., 16B, Ganga Ram Hosp. Marg, Delhi 5.

International Sales Corpn. P. Ltd., 21B, N.E.A., New Delhi 5.

International Talkie Equipment Co. P. Ltd., 1823/IVX, Chandni Chowk, Delhi 6.

International Travel India Ltd., 25E, Connaught Place, New Delhi 1.

**ISHWAR INDUSTRIES LTD.,** Works at: P.O. Ishwar Nagar, New Delhi & P.O. Niwar, Dist. Jabalpur; Manufacturers of Fire Bricks of all grades and shapes, Fire clays, Fire Cements, Insulating Bricks & Mortars, Acid Resisting Bricks & Cements, Castable Refractories and Sillimonite Bricks & Mortars etc. Phone: 76241 (3 Lines).

Iyer & Son P. Ltd., United India Bldg., F. Block, Connaught Place, New Delhi 1.

Jagat Singh Thapar & Sons, 20-B, Thapar Bhawan, West Patel Nagar, New Delhi 12.

**JAGGOO MAL BANWARI LAL,** 1997, Gali Parathe Wali, Delhi-6; Manufacturers of Zari Laces, Cords, Badges, Flags, Buttons, Tessals, Fringes, Epau-lettes, Aiguillettes and Defence Decoration goods; Phone: 263242.

Jai Dayal Kapur & Sons P. Ltd., Chawri Bazar, Delhi 6.

James Finlay & Co. Ltd., Hamilton Bldg., C. Place, New Delhi.

Jardine Henderson Ltd., Indra Palace, Connaught Place, New Delhi.

Jarl & Co. Ltd., 61, Daryaganj, Delhi 7.

J. B. Mangaram & Co., Block F, 21-B, Connaught Place, New Delhi.

**JEENA & CO.,** "Jeena House", 50, Hanuman Road, Connaught Circus, New Delhi 1. Travel, Shipping, Clearing, Forwarding and warehousing Agents; Correspondents everywhere. Telegrams: "TRAVEL-JENA". Phones: 45821/22/23.

Jenson & Nicholson India Ltd., Church Road, Kashmere Gate, Delhi.

Jessop & Co. Ltd., Room No. 21, Indra Palace, Connaught Circus, New Delhi.

**JHALANI BROS., (PVT.) LTD.,** Lohewali Gali, Chawri Bazar, Delhi-6; Managing Director: O. P. Jhalani, Phone: 265732; Sales Manager: M. C. Jhalani; Import & Grinding Wheels Dept.: Prem Narain. Phone: 261220.

Jindal & Sons P. Ltd., Jindal House, Asaf Ali Road, New Delhi.

J. Mahabeer & Co. P. Ltd., Jama Masjid, Delhi 6.

Jogency Supply & Finance Corporation, 18/4, Asaf Ali Road, New Delhi.

Johnston Pumps India Ltd., 28, Barakhamba Road, New Delhi 1.

Johntinson & Co. P. Ltd., 54, Janpath, New Delhi 1.

Kahansons & Co., S. K., No. 41, Connaught Circus, New Delhi 1.

Kakar Finance Co., 4/5, Asaf Ali Road, New Delhi 1.

Kalsi Tyre Retreading Factory P. Ltd., 11, D.L.F. Industrial Area, Najafgarh Road, New Delhi.

Kamal & Co. (India) P. Ltd., Kashmere Gate, Delhi 6.

Kamal's Electricware P. Ltd., 6/3, Original Road, Paharganj, New Delhi.

Kamani Brothers P. Ltd., United India Life Bldg., Connaught Place, New Delhi 1.

#### KAMANI METALS & ALLOYS LTD.,

Manufacturers of Brass, Copper, Phosphor, Bronze & Zinc Sheets, Strips & Coils.

United India Bldg., F-Block, Connaught Place, New Delhi-1,

Phone: 45055.

Karriers Finance P. Ltd., Asaf Ali Road, New Delhi 1.

Kassels P. Ltd., Asaf Ali Road, New Delhi.

Kastings P. Ltd., P.O. Ajudhia Mill, Delhi 6.

Kay Bee Industries, Najafgarh Road, New Delhi 15.

#### KAYCEE INDUSTRIES LTD.,

10/1 Asaf Ali Road, New Delhi.

Electrical & Mechanical Engineers; *Agents for:* Hind Rectifiers Ltd., *Manufacturers of:*—Selenium and Silicon Semi-Conductors of Electroplating Rectifiers, Battery changers Silicon Power Plants for Electro-Chemical Industries. *Manufacturers of:* "Kaycee" Rotary, Toggle, Heat Control and Air-conditioning Switches "KAYCEES" Domestic & Bulk type water meters.

*Address:* Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1.

Telephone: 263521

Telegram address: Turnrite.

*Branches:* Calcutta, Madras & Kanpur.

Kemp & Co. Ltd., Connaught Place, New Delhi.

Kesho Ram & Sons India P. Ltd., Opp. Dariba, Chandni Chowk, Delhi 6.

Keventers P. Ltd., Edward Kitchner Road, New Delhi 1.

Key Cee Agencies (India), Katra Bathi, Nai Sarak, Delhi.

Keymer & Co. Ltd., D.J., 15/1, Asaf Ali Road, New Delhi 1.

K. G. Khosla & Co. (Private) Ltd., 1, Deshbandhu Gupta Road, New Delhi.

Khanna & Co. P. Ltd., B. K., 14-F, Connaught Place, New Delhi 1.

Khanna & Sons P. Ltd., Khanna Bldg., Rohtak Road, New Delhi 5.

Khemka & Co. (Agencies) P. Ltd., 41, Sunder Nagar, New Delhi 1.

Khosla & Co. P. Ltd., 1, D.B.G. Road, New Delhi 1.

Kiki Baba Loans P. Ltd., 9-B, Sunder Nagar Market, New Delhi.

Kilburn & Co. P. Ltd., P. Box 166, New Delhi.

Killick Caribonum Ltd., P. Box 607, New Delhi 1.

Kinoshita & Co. Ltd., United Commercial Bank Bldg., Parliament Street, New Delhi.

Kishan Chand Gupta & Co., Mehrauli, New Delhi 16.

K. K. Bubby Industries, 28, S. Thana Street, Delhi 6.

Koolaire P. Ltd., 44, Janpath, New Delhi.

Kosdrug P. Ltd., 16/4, Asaf Ali Road, New Delhi.

Krishna Goods Transport Co., 1488, S. P. Mookerjee Marg, Delhi 6.

**KULJIAN CORPORATION (INDIA) PVT. LTD., THE,** 127, Sunder Nagar, New Delhi-11; Phone: 618814; Advisor: T. N. Idnani, *Office Assistant:* P. C. Bose. Kundanlal & Brothers, 2A/3, Asaf Ali Road, New Delhi.

**LA-MEDICA,** Behind State Bank, Chandni Chowk, Delhi-6; Manufacturers of Vitamin, Hormone and Antibiotic Preparations in Capsule, Tablet and Liquid forms; Factory at: 27, DLF Industrial Area, Najafgarh Road, New Delhi-15; Managing Partner: Mr. Sarit Kumar Jain; Phones: 57780 & 263697, Grams: "LAMEDICA".

Laffans India P. Ltd., 11-N, Connaught Circus, New Delhi.

**LAKSHMI ENGINEERING WORKS, THE,** H.O. & Cable works: H. Qazi, Delhi-6; Phones: 265554 & 261904; Prop: The Dina Indust. Pvt. Ltd., Managing Director: G. S. Gupta, Secretary: G. L. Gupta; Foundry & Works: G. T. Road, Delhi-32; Phone: 212188.

Laldee P. Ltd., Vijaya Press Bldg., Naya Bazar, Delhi 6.

Larsen & Toubro Ltd., Express Bldg., Mathura Road, New Delhi.

Latham Abercrombie & Co. P. Ltd., Munshi Niketan, Asaf Ali Road, New Delhi 1.

Lawrence & Mayo (India) Ltd., 76, Queensway, New Delhi 1.

**LEPETIT RANBAXY LABORATORIES LTD.,** Okhla Industrial Area, New Delhi-20; Phone: 74971; Manufacturers and distributors of Drugs and Medicines of repute; Chairman: Bhai Mohan Singh. Director: Dr. G. Brahamsha; Branches Bombay, Calcutta, Madras and Kanpur.

Lloyd Electric Engineering Co., Punj House, M-13, Connaught Circus, New Delhi.

Lloyds Leatherites & Exporters, 90-E, Kamlanagar, Delhi.

Lock Joint Ltd., P. Box 411, New Delhi.

Lyall Finance Co., Connaught House, Connaught Place, New Delhi.



**M. C. ENGINEERING CO.**, Electronic & Radio Parts Manufacturers, 37, Okhla Industrial Estate, New Delhi-20; Phone: 78144 & 72838; Partners: C. L. Sharma and O. N. Sharma.

**Mackinnon Mackenzie & Co. P. Ltd.**, 28, Barakhamba Road, New Delhi 1.

**Macneill & Barry Ltd.**, 28, Barakhamba Road, Connaught Circus, New Delhi.

**Macropolo & Co. P. Ltd.**, 15, Regal Bldgs., New Delhi 1.

**Madan Mohan Lall Shri Ram & Co. P. Ltd.**, 18-11, Curson Road, New Delhi.

**Mahabir & Co. P. Ltd.**, J., Fais Bazar, Daryaganj, Delhi.

**Mahabir Perahad & Sons**, Chawri Bazar, Delhi 6.

**Mahalaxmi Land & Finance Co. Private Ltd.**, 8-B, Jindal Trust Bldg., Asaf Ali Road, New Delhi.

**Mahatta & Co.**, 59, M-Block, Connaught Circus, New Delhi-1.

**Malhotra & Co.**, L 2/2, Connaught Circus, New Delhi 1.

**Manmohanlal & Co.**, 16-A, Ajmere Gate Extension, New Delhi 1.

**Marconi's Wireless Telegraph Co. Ltd.**, Chaudhury Bldg., K Block, Connaught Circus, New Delhi.

**MARSHALL SONS & CO. (INDIA) LTD.**, Mechanical, Electrical & Agricultural Engineers, Marshall House, Hanuman Road, Delhi-1; Phone: 47089; Branch Manager: V. K. Sardana.

**Martin Burn Ltd.**, Pearleal Bldg., 40-42, Janpath, New Delhi.

**Marwaha Mfg. Co.**, Block 8, Plot 3, North Rohtak Road, New Delhi 5.

**Matchwel Electricals (India) Ltd.**, Ramjas Bldg., 4/11, Asaf Ali Road, New Delhi 1.

**May & Baker (India) P. Ltd.**, Chaudhary Bldg., K. Block, Connaught Circus, New Delhi.

**M. C. Dewanson & Co.**, 116/48, Diplomatic Enclave, Chanakyapuri, New Delhi 11.

**MEDI PAC**, Behind State Bank, Chandni Chowk, Delhi-6; Factory at: 0/1, Industrial Area, Sonapat (Punjab); Manufacturers of Pharmaceuticals, Tablets, Hormones, Antibiotics, Capsules etc.; Managing Partner: Shri Satya Pal Jain, Phone: 263697, Grams: "MEDIPAC".

**Mckenzie Phillip (I) P. Ltd.**, Ellison House, 9, Ram Bagh, Old Rohtak Road, Delhi 6.

**Meharban Finance & Chit Fund P. Ltd.**, 35, Panchkuin Road, New Delhi.

**Mercantile Associates P. Ltd.**, 25/34, East Patel Nagar, New Delhi 12.

**Mercantile & Industrial Development Co.**, P. Ltd., 1/8B, Asaf Ali Road, New Delhi 1.

**Mercury Travels (India) P. Ltd.**, Hotel Imperial, New Delhi 1.

**Metal & Machinery Co. P. Ltd.**, N-76 Connaught Circus, New Delhi.

**Metal Distributors P. Ltd.**, 4-D, Nizamuddin West, New Delhi 13.

**Metropol Corporation (India)**, 3647, Netaji Subhas Marg, Delhi 6.

**Metropolitan Book Co. Private Ltd.**, 1, Netaji Subhas Marg, Delhi 6.

**Metropolitan Financiers P. Ltd.**, E. Block, Connaught Place, New Delhi.

**Minimax Ltd.**, 3, Scindia House, Janpath, New Delhi 1.

**Mitco Industries P. Ltd.**, 16/B, Asaf Ali Road, New Delhi.

**Mitsubishi Shoji Kaisha Ltd.**, 4/2-B, Asaf Ali Road, New Delhi 1.

**Mittalsons Land & Finance P. Ltd.**, 1/21, Asaf Ali Road, New Delhi.

**M. Mukerjee & Sons**, R-852, New Rajendranagar, New Delhi 5.

**M. N. Dastur & Co. P. Ltd.**, 75/48, Chankapuri, New Delhi 3.

**Model Mfg. Co.**, 1, Laj Bldg., Dhariwalan, Rohtak Road, New Delhi.

**Modern Finance Ltd.**, K. Gate, Delhi 6.

**Modern India Constructions P. Ltd.**, N-78, Connaught Circus, New Delhi.

**Modern Machines P. Ltd.**, Chuna Mandi, Paharganj, New Delhi 1.

**Modern Tiles Mfg. Co.**, Sunlight Bldgs., Asaf Ali Road, New Delhi 1.

**Modern Trade Corporation**, 5180/90, Sadar Bazar, Delhi 6.

**Modern Trading Co.**, M. Block, Connaught Circus, New Delhi.

**Mody Industries (F.C.) P. Ltd.**, 117, M. Block, Connaught Circus, New Delhi.

**Mohanco Ltd.**, E. Connaught Place, New Delhi 1.

**Mohanwl Corpn. P. Ltd.**, 5/125, N.I.C. Bldg., Parliament Street, New Delhi 1.

**Mongia Bros.**, opp. Kumar Talkies, Chandni Chowk, Delhi.

**MONOTYPE CORPORATION LTD.**, THE, Vohra House, 25, Asaf Ali Road, New Delhi-1; Phone: 277821, 277822; Manager Eastern Area: L. A. Collier; Manager, Delhi Dist.: A. S. Kumaram; Res. A. S.: Kumaran. Phone: 73897.

**MOTOR & GENERAL FINANCE LTD.**, M.G.F. House, 17B, Asaf Ali Road, New Delhi; Phone: 272216, 272764; Managing Director: D. B. Gupta, General Manager: Ved Prakash, Secretary: Krishnan Mohan, Manager: J. N. Gupta, Chief Acctt.: Ramesh Khanna.

**Motor House Ltd.**, Asaf Ali Road, New Delhi.

**Motor Machinery Mfg. Co.**, 8, Sundar Nagar, New Delhi 11.

**M. R. Dawan & Co.**, 4/8, Asaf Ali Road, New Delhi.

**Muller & Phipps India P. Ltd.**, Connaught House, Connaught Place, New Delhi.

**Multiple Industries**, 31, New Rohtak Road, New Delhi 5.

**Mysore Commercial Union Ltd.**, 2, Scindia House, Janpath, New Delhi 1.

**Nahal Chand Laloo Chand P. Ltd.**, 4, Metcalf Road, Civil Lines, Delhi 8.

**Narang Brothers & Co. Pvt. Ltd.**, 3, Cavalry Lines, Delhi 6.

## NATIONAL AIR PRODUCTS LTD.

(Subsidiary of the Motor & General Finance Ltd.)

Largest Manufacturers of Oxygen and Acetylene Gases in Northern India; Regd. Office: M. G. F. House, 17-B, Asaf Ali Road, New Delhi-1; Phone: 272216; Factory: 13/1, Milestone, Delhi-Mathura Road, Faridabad (Punjab). Phone: 82247; Managing Director: Abinash Chandra. Phone: 611146.

**National Carbon Co. India Ltd.**, 15, Asaf Ali Road, New Delhi 1.

**National Cold Storage & Refrigeration Ltd.**, Subzimandi Chowk, Delhi 6.

**National Conduits Ltd.**, Kashmere Gate, Delhi.

**National Traders (Delhi) Ltd.**, 58, Janpath, New Delhi.

**National Trading Co. (Private), Ltd.**, 555, Esplanade Road, Delhi 6.

**National Tyre & Rubber Co. of India P. Ltd.**, Pawha Mansions, 14, Ajmeri Gate Extension, New Delhi 1.

**Nationale Air Products P. Ltd.**, 89, Jorbagh, New Delhi 3.

**Nav Bharat Engg. Co.**, 110, Naya Bazar, Delhi 6.

**Neo Pharma P. Ltd.**, Asaf Ali Road, New Delhi.

**NETAR KRISHNA SAHGALS (PVT.) LTD.**, 4/90, Connaught Circus, Delhi-1; Phone: 47934, 46406 & 44096; Managing Director: N. K. Sahgal, Manager: S. K. Juneja.

**New Era Steel Co.**, Opp. Mercantile Bank, Chandni Chowk, Delhi 6.

**New India Motors P. Ltd.**, Scindia House, New Delhi.

**Northern India Goods Transport Co. P. Ltd.**, Naya Bazar, Delhi 6.

**Northland (India) Private Ltd.**, N-17, Connaught Circus, opp. Scindia House, New Delhi.

**Northern India Lightweight Steel Co.**, Najafgarh Road, New Delhi.

**Northern India Tiles Corporation (Nitco Tiles)**, The, Jindal Trust Bldg., 1-8-B, Asaf Ali Road, New Delhi.

**Northlands India P. Ltd.**, Block N, 21-B, Connaught Place, New Delhi.

**Novel Finance P. Ltd.**, Union Bank Bldg., Ajmal Khan Road, New Delhi 5.

**Novelties P. Ltd.**, Scindia House, New Delhi.

**ORIENT EXPRESS CO. PRIVATE LTD.**, THE, 70, Janpath, New Delhi 1; Phones: 47178 & 42022; Grams: "OREX-PRESCO"; World-wide Travel Service; Authorised Agents for Airlines, Steamship Companies, Railways and Hotels; Offices in New Delhi, Calcutta, Bombay and Madras; Correspondents in 250 Cities throughout the World; Managing Director: S. S. Poddar.

**Orient General Agencies**, 2711, Lothian Road, K. Gate, Delhi 6.

**Orient Industries Corpn.**, 13, Okhla Industrial Estate, New Delhi 19.

**ORIENT LONGMANS LTD., PUBRS.**, Kanson House, 1/24, Asaf Ali Road, New Delhi-1; Reg. Manager: K. L. Kohli, Phone: 274654.

**Oriental Mercantile Co. Ltd.**, 1/23, Asaf Ali Road, New Delhi 1.

**Oriental Syndicate of India**, 24/2720, Beadon Pura, Karolbagh, New Delhi 5.

**Oriental Trading & Gen. Supply Co. Ltd.**, 35C, Connaught Place, New Delhi.

**Oriental Trading Society**, Asaf Ali Road, New Delhi.

**Otis Elevator Co. India P. Ltd.**, 101, Parliament St., New Delhi 1.

**Overseas Trading Corporation**, Church Mission Road, Delhi 6.

**Packwell & Co.**, Behind Regal Cinema, New Delhi 1.

**P. Ahuja Co.**, 3, Munshi Niketan, Asaf Ali Road, New Delhi.

**Palit & Co. Ltd.**, A.R., 76, Sunder Nagar, New Delhi 1.

**Pan American World Airways**, Hotel Imperial, Delhi.

**PANDIT BROTHERS**, Connaught Circus, Delhi-1; Phone: 47464; Specialists in High class Hand Woven Furnishing Fabrics, also household linen and Bombay Dyeing Fabrics.

**PAPER PRODUCTS LTD., THE**, Head Office: 13-14, Ajmeri Gate Extension, New Delhi-1; Bombay Office: Vaswani Mansions, 120, Dinshaw Vachha Road, Post Box 732, Bombay-1; Calcutta Office: Laha Paint House, 7, Chittaranjan Avenue, Calcutta-13; Madras Office:



Gaffar Mansions, 60, Chinnathambi Street, Madras-1; Delhi Office: Vohra House, 1/25, Asaf Ali Road, New Delhi; Pioneers of Flexible Packaging in India. Specialists in printing, waxing, coating, laminating and converting cellulose films, polyethylene, aluminium foils, and paper Rolls, Sheets, Bags, Pouches printed in multicolours. Also manufacturers of speciality packaging papers, marble paper, wrapping paper, waxed paper, toilet paper, graph paper, paperserviettes, Baking Cases and Cartons now in Technical collaboration with Milprint—U.S.A.

Paradise Finance Chit Fund P. Ltd., 3737, Daryaganj, Delhi 6.

Parry & Co. Ltd., Parliament St., New Delhi.

Payen Talbros P. Ltd., 5, Scindia House, New Delhi.

Pearey Lall & Sons Ltd., Queensway, New Delhi.

**PERFECT MACHINE TOOLS CO.,** Machine Tools & Industrial Plants Suppliers. 44-E, Block, Connaught Place, New Delhi. Phone: 48688. Grams: "PERMATOOL". Manager: M. L. Thukral.

Pershad Brothers, 32-N, Block, Scindia House, New Delhi.

Pest Control Corporation, 8/12, Rajpur Road, Delhi 6.

Pest Control India P. Ltd., R-543, Shanker Nagar, New Delhi 5.

Philips India Ltd., Ajmeri Gate Extension, New Delhi 1.

Phipson & Co. P. Ltd., Janpath, New Delhi.

Photophone Equipments P. Ltd., Delite Bldg., Asaf Ali Road, New Delhi 1.

**PIONEER CHEMICAL CO., THE,** Phatak Habash Khan, Delhi-6; Phone: 224597, Grams: "FINECHEM." Manufacturers of fine, laboratory and other chemicals.

Prahlad Sharan Gupta & Co., 2750, Sharan Kutir, K. Gate, Delhi 6.

Prem Brothers, 73, G.B. Road, Delhi 6.

Prem Engineering Works, 22, Industrial Estate, Okhla, New Delhi-20.

Prem Nath Motors Private Ltd., Scindia House, New Delhi-1.

Premier Automobiles Ltd., B.M. Bldg., Parliament St., New Delhi 1.

Press Trust of India Ltd., 4, Parliament St., New Delhi.

Prestige Electronics P. Ltd., 16-B, Con. Place, New Delhi.

Prestolite of India Ltd., L-4, Connaught Circus, New Delhi.

Printers House P. Ltd., Scindia House, New Delhi.

Process Engravers P. Ltd., Jogdhan Colony, Chandni Chowk, Delhi 6.

Protos Engg. Co. P. Ltd., P. Box 431, Delhi.

Punj Sons P. Ltd., Punj House, M-13, Connaught Circus, New Delhi 1.

Punjab Hardware & Mill Stores Co., Hauz Qazi, Delhi 6.

Pure Drinks (New Delhi) Private Ltd., Connaught Lane, New Delhi.

Radio Lamp Works Ltd., 10-1, Asaf Ali Road, New Delhi.

Radiovision Co., 32, Fais Bazar, Delhi 7.

Rai & Sons P. Ltd., Phelps Bldg., 9-A, Connaught Place, New Delhi.

Raj Engineering Works P. Ltd., Ajmeri Gate, New Delhi 1.

Raj Finance P. Ltd., Asaf Ali Road, New Delhi 1.

Raja Mechanical Co. P. Ltd., 8661, Old Shidi Pura, K. Bagh, New Delhi 6.

Rajasthan Trading Co., Katra Nawab, Chandni Chowk, Delhi.

Rajasthan Vinyl & Chemical Industries, 35-36, Jhandewala, Molla Khan, New Delhi 1.

Rajendra & Co., 16-E, Connaught Place, New Delhi.

Rajpal & Co., N.D., 41-E, Connaught Place, New Delhi.

Rajpal Brothers, Chandni Chowk, Delhi 6.

Raj Paul Chadha Co., Delite Cinema Bldg., Asaf Ali Road, New Delhi.

Rajsons P. Ltd., Asaf Ali Road, New Delhi 1.

Ram Company, B-10/4, D.A.G. Extension, Post Box 446, New Delhi.

Ramjas & Sons, Mahalaxmi Market, Chandni Chowk, Delhi 6.

Ram Lal Jaggi & Sons, 1/24, Kanson House, Asaf Ali Road, New Delhi.

Ram Nath Nanda & Sons, Opp. P.O., H. Qazi, Delhi 6.

Ram Prakash & Co. P. Ltd., 3, S.P. Mukerjee Marg, Delhi 6.

Rama Transport Co. P. Ltd., 1/24, Asaf Ali Road, New Delhi 1.

Ramnath & Sons, 2132, Tilak Bazar, Khari Baoli, Delhi 6.

Rana Partap & Co., 37, Hanuman Road, New Delhi.

**RANBAXY & CO. PRIVATE LTD.,** Head Office: No. 16, Marina Arcade, P.O. Box No. 104, Connaught Circus, New Delhi; Phone: Factory: 74971, Office: 43568; Branches: Bombay, Calcutta, Delhi, Madras. Manufacturers of Antibiotics, Chemotherapeutics, hormones tranquilizers, Vitamins etc.; (Managing Director: Bhai Mohan Singh); Cable Address: "RANBAXYCO"—New Delhi.

**RANBAXY LABORATORIES LTD.,** Okhla Industrial Area, New Delhi-20; Phone: 74971; Manufacturers and Distributors of drugs and Medicines of repute; Chairman: Bhai Mohan Singh; Branches: Bombay, Calcutta, Madras, New Delhi & Kanpur.

Raunaq & Co. P. Ltd., Hauz Qazi, Delhi 6.

Rashtriya Bearing Bhandar, 11070, Motia Khan, New Delhi-1; Phone: 264793; Importers, Stockists, Agents & Suppliers of Ball & Roller Bearings.

Ravi Bros. P. Ltd., Kashmir Gate, Delhi 6.

Ray & Co. India P. Ltd., P.C., 46, Pusa Road, New Delhi 5.

Reliable Finance Corpn. P. Ltd., B-6, Asaf Ali Road, New Delhi 1.

Reliance (Direction) P. Ltd., No. 76, Connaught Circus, New Delhi 1.

Remington Rand of India Ltd., Sunlight Insurance Bldg., D.A.G. Extension Scheme, New Delhi.

Reuters Ltd., Marshal House, Hanuman Road, New Delhi 1.

**REYROLLE & CO. LTD., A.,** Office: 40/42, Janpath, New Delhi-1; Phone: 43692.

R. K. Card Clothing Mfrs. P. Ltd., 31, Rajpur Road, Delhi 6.

Roadways & General Finance Private Ltd., 4/2-B, Jawala Mansion, Asaf Ali Road, New Delhi.

Roberts, Mclean & Co., Private Ltd., Head Office: 5 & 7, Netaji Subhas Road, Calcutta 1.

Robson Morrow & Co., B-6, Asaf Ali Road, New Delhi.

Rochaldas Gidoomal & Co., 161, Katra Baryan, Delhi 6.

Rochi Ram Khattar & Sons, 35, Netaji Subhas Marg, Daryaganj, Delhi 6.

Rollers Supply Co., 1/5B, Ajmere Gate Extension, New Delhi 1.

**RONEO LTD.,** Bombay Life Building, Connaught Circus, New Delhi.

Roy Brothers, N. Block, Connaught Place, New Delhi.

Rugnath Brothers, P. Box 1105, Delhi 6.

Rulia Ram Jain & Sons, 4663, Ansari Road, 21, Daryaganj, Delhi 6.

S. A. Brothers & Co., Flat 28, New Central Market, New Delhi 1.

## S. B. ELECTRIC CO.,

Electrical Market, Chandni Chowk, Delhi-6.

Phone: Office: 262098. Res: 266197

Branches: Bikaner.

Distributors: I.C.C., Nicco and Asian Wires and Cables, Elmi Lamps and Tubes, etc.

Sole Agents for Rajasthan

## HAVELL'S IRON CLAD SWITCHES & CONTROL GEARS.

## S. M. G. BEATY PRIVATE LTD.,

D-Block, Connaught Place, New Delhi 1

Phone: 48434

Furniture Mfrs. of Taste & Design and Government Auctioneers since 1931; Stockists: Modli Rayons, Prams & Steel Tubular Furniture, Everest Washing Machines; Managing Director: Balak Ram; Director: Shivraj Singh Garg.

Sahib Singh Mfg. Co. P. Ltd., Post Box 440, New Delhi.

Sahinsons P. Ltd., 4/14-A, Asaf Ali Road, New Delhi.

Sahni Bros. P. Ltd., Odeon Cinema, Connaught Place, New Delhi.

**SAHU CEMENT SERVICE, P.N.B.** House, 5, Parliament Street, New Delhi. Renders free technical advice on Cement and Concrete in all forms of Construction.

Sahu Jain Ltd., P.N.B. Bldg., Parliament Street, New Delhi 1.

Salt Ram & Co., 14/70, Kutab Road, Delhi.

Sandoz Products P. Ltd., 4/2, Asaf Ali Road, New Delhi 1.

**SANDVIK ASIA LTD.,** Indra Palace, Connaught Place, New Delhi-1; Phone: 44-127; Branch Manager: Mahabir Prasad.

Sanghi Brothers P. Ltd., 52, Janpath, New Delhi.

Santosh & Co., 69, Najafgarh Road, New Delhi 15.

Sarabhai Murali Lal & Co., 19K, Nagpurwala, Chandni Chowk, Delhi 6.

Saran Motors Private Ltd., Post Box No. 228, Janpath, New Delhi.

**SARU SMELTING & REFINING CORPORATION PVT. LTD.,** 30, Chowri Bazar, Delhi; Phone: 261865; H.O. Sardhana Road, P.O. Box 58, Meerut (U.P.), Grams: "METAL", Phone: 2942.



Manufacturers of all sorts of Non-ferrous metals and alloys, Specialists in Resin & Flux Cored Solder Wire, Metals, Type Metals, Gun Metals, Bronze, Silver Solder and Brazing Alloys, Welding Rods etc.; Approved Suppliers to Government (Central & States), Railways, etc.  
Sawhney Engineering Works, P. Ltd., 3/17-A, Asaf Ali Road, New Delhi.

**SCIENTIFIC EQUIPMENT WORKS**  
1/177, Nicholson Road, Delhi-6; Manufacturers of Microscopes, Ovens Surveying Instruments, Laboratory Apparatus, Soil, Cement Concrete, Textile, Bitumen Testing Equipment.

S. C. Sharma & Co. P. Ltd., Block D, 21-B, Connaught Place, New Delhi.

**SCIENTIFIC INSTRUMENT CO. LTD., THE,** B-7, Ajmeri Gate Extension, New Delhi; Offices also at Calcutta, Bombay, Madras & Allahabad; Importers of high quality Scientific, Optical and Photographic instruments including X-Ray Unit, Electromedical, Electronic, Radiation and Electric Measuring Instruments, apparatus and appliances for educational, research and industrial purposes. Phone: 271053. Grams: Sico-New Delhi.

S. D. Marker & Co., Ltd., 57, Panchkuin Road, New Delhi.

Sealand India P. Ltd., 2855, Sirkiwala, Delhi 6.

Sehgal Sons, A14/3, Asaf Ali Road, New Delhi.

Sen & Pandit Private Ltd., 3/8, Asaf Ali Road, New Delhi 1.

Sethbery Finance & Trading Co. Ltd., 21, Daryaganj, New Delhi 7.

Seth Hassaram & Sons India P. Ltd., 20F, Connaught Circus, New Delhi.

**SETH RAM NARAIN GUPTA & BROS.,** Offices: Naya Bazar, Delhi-6; Phone: 227832, 49, G. B. Road, Delhi-6; Phone: 262521; Managing Partners: Seth Sham Narain Gupta.

Shahani & Co., M.G. (Delhi), P. Ltd., 34-B, Connaught Place, New Delhi.

Shahji & Sons P. Ltd., 1/5B, Asaf Ali Road, New Delhi.

Shalimar Tar Products Ltd., Mercantile Bank Bldg., Connaught Place, New Delhi.

Shama Distributors P. Ltd., Moti Cinema Compound, Chandni Chowk, Delhi 6.

Shambhu Nath & Sons Ltd., Asaf Ali Road, New Delhi.

Shankar Lal & Sons P. Ltd., 487, Esplanade Road, Delhi 6.

**SHANTIVIJAY & CO.,** Leading Jewellers & Emerald Merchants; Showrooms: 1-52, Janpath, Phone: 42919; 2-Hotel Imperial, Phone: 45228; 3-Hotel Oberoi Inter Continental, Phone: 619465/454; New Delhi; Partners: Mahendra Kumar Kashmirchand, Rajendrakumar, Jinendrakumar & Bimalchand.

Sharda Machinery Corpn., 11, Pusa Road, New Delhi 5.

Sharma & Co. P. Ltd., Connaught Place, New Delhi.

Sharma & Sons, J.N., 14, Rohtak Road, New Delhi 5.

Sharpedge P. Ltd., Pratap Bldg., Connaught Circus, New Delhi.

Shashi Brothers P. Ltd., 3, Hanuman Road, New Delhi.

Sheet Metal Co. of India, Industrial Area, Najafgarh Road, New Delhi.

Shevaroy Bauxite Products Co. Ltd., 4, Scindia House, New Delhi.

Shiv Dayal Soin & Sons Private Ltd., Queen's Road & Elgin Road, Delhi-7.

Shree Hanuman Foundries Ltd., 25-H, Connaught Circus, New Delhi.

Shri Ram Associates P. Ltd., Bara Hindu Rao, Delhi.

Siemens Engineering & Mfg. Co. of India P. Ltd., 6th Radial Road, E-Block, Connaught Place, New Delhi.

Singer Sewing Machine Co. 21, Faiz Bazar, Daryaganj, Delhi 7.

Singhal Industrial Corporation, 595, Sadar Bazar, Delhi 6.

Sirdar Carbonic Gas Co. Ltd., Ram Bagh Road, Delhi.

Sir Sobha Singh & Sons P. Ltd., 1-A, Janpath, New Delhi.

**SIYARAM, KUMAR ENGINEERING WORKS PVT. LTD.,** 20B, Najafgarh Road, New Delhi-15; Phone: 53931, Managing Director: J. V. Gupta; Tech. Director: M. Kumar.

Skoda (India) Private Ltd., National Insurance Bldg., Parliament Street, New Delhi.

Skytone Electricals India, 2655, Sadar Thana Road, Delhi 6.

Smart's Private Ltd., Smarts Chit Funds, Reading Road, New Delhi; Phone: 43600.

S. M. G. Beaty P. Ltd., Block D, 21-B, Connaught Place, New Delhi.

S. N. Kohli & Co. P. Ltd., Kashmere Gate, Delhi 6.

S. Nath Kakar & Son, 41, Hanuman Road, New Delhi 1.

Sodhbans & Co., Dilbar Bldg., Paharganj, New Delhi.

Sol Brothers & Co., 8/28, W.E.A., Karol Bagh, New Delhi.

South Asia Industries P. Ltd., 10, Daryaganj, Delhi 6.

Spedding Dings Singh & Co., Mathura Road, New Delhi.

Spencer & Co., Ltd., 19A, Alipore Road, Delhi.

Spraylac Paints Corporation, 9, Faiz Bazar, Delhi.

Spun Pipe & Construction Co. of India P. Ltd., 9A/41, W.E.A., New Delhi 1.

Standard Telephones & Cables Ltd., Connaught House, E-10, Connaught Place, New Delhi.

Statesman Private Ltd., Connaught Circus, New Delhi.

Steelsons P. Ltd., 16-V, Pleasure Garden Market, Delhi 6.

**STERLING ADVERTISING (PVT.) LTD.,** Jeewan Roop Mans, L. Block, Connaught Circus, Delhi-1; Phone: 40676; Managing Director: Reyaz Ahmad; Secretary: Mrs. I. Phewali, Accts.: T. R. Bahl, Media: S. P. Singh.

Stone, J. & Co. (India) P. Ltd., Speedbird House, Connaught Circus, New Delhi 1.

Structural Fabricators P. Ltd., 67, Najafgarh Road, New Delhi 15.

Sunderson & Co., S. N., 1/1, Original Road, New Delhi.

Sunlight Chit Fund P. Ltd., 24, Beadonpura, Ajmal Khan Road, New Delhi 5.

Super Markets P. Ltd., 9A/3, Pusa Road, New Delhi 5.

Surfrige Service Refrigerators India P. Ltd., 46, Janpath, New Delhi.

Surya Trading Corpn. of India P. Ltd., 12/8, W.E.A., New Delhi 5.

Swan (India) P. Ltd., 20-F, Connaught Circus, New Delhi.

Sylvan Star Investment Co. P. Ltd., 1517, Kashmere Gate, Delhi.

Tara Industries, 13/20, W.E.A., New Delhi 5.

Tata Industries P. Ltd., United India Life Bldg., F. Block, Connaught Place, New Delhi.

Tata Iron & Steel Co. Ltd., Shyam Bhawan, 15/1, Asaf Ali Road, New Delhi.

Tayal Brothers P. Ltd., Outside Ajmeri Gate, Delhi 1.

Tej Dally Ltd., Post Box 112, Delhi.

T. Motandas & Co., Thana Sadar Road, Delhi 6.

Toyo Menka Kaisha Ltd., 10A, Indra Palace Annexe, Connaught Circus, New Delhi.

Trade Links P. Ltd., 46, Pusa Road, New Delhi 5.

Trave Aids (India), 21, Park Area, New Delhi 5.

Trilok Chand & Sons P. Ltd., Behind State Bank of India, Chandni Chowk, Delhi 6.

Tubewell Corpn., Opp. Chandni Chowk P.O., Delhi 6.

Turner Hoare & Co. P. Ltd., 10, Parliament Street, New Delhi.

Tyresoles Concessionaires P. Ltd., Najafgarh Road, New Delhi 15.

Uberol Ltd., 14/E, Connaught Place, New Delhi.

Union Carbide India Ltd., 3/1, Asaf Ali Road, New Delhi.

Union Commercial & Industrial Co. Ltd., 3/8, Asaf Ali Road, New Delhi.

Unisales Engineers P. Ltd., 9 N., Munshi Lal Bldg., Connaught Circus, New Delhi.

United Dairies Ltd., Connaught Circus, New Delhi.

United India General Finance P. Ltd., Bank St., Karol Bagh, New Delhi 5.

United Provinces Commercial Corpn. P. Ltd., Marshal House, Hanuman Road, New Delhi 1.

United Traders, Katra Neel, Chandni Chowk, Delhi.

Universal Agencies, Pan Mandi, Sadar Bazar, Delhi 6.

Universal Engineering Ltd., 12/9, Munshi Lal Bldg., Connaught Circus, New Delhi.

Universal Engineering Corpn., Najafgarh Road, New Delhi 15.

Universal Industries, 25, Industrial Estate, Okhla, New Delhi 19.

Universal Metal Industries, Rani Jhansi Road, New Delhi 1.

Universal Traders Ltd., 40, Golf Links, New Delhi 3.

Upper India Trading Co. Ltd., Kashmere Gate, Delhi.

Urban Improvement Housing & Construction Co. Ltd., 32F, Connaught Place, New Delhi 1.

Usha Sewing Machines & Electric Fans, 13-14, Ajmere Gate Extension, Delhi 1.

Uttam Singh Dugal & Co. P. Ltd., 11, Marina Arcade, New Delhi.

V. D. Swami & Co. P. Ltd., 10-A, Nizamuddin West, New Delhi.

**VICKERS INDIA PRIVATE LTD.** 136, Sundar Nagar, New Delhi 11.

Vijaya Electronics P. Ltd., 131, Connaught Circus, New Delhi.

**VIRMANI REFRIGERATION & COLD STORAGE PRIVATE LTD.,** E/2, Jhandewala Extension, New Delhi 1.

Vita P. Ltd., 9, L. Castle Road, Delhi 6.

Volts Limited, 7/1, Asaf Ali Road, New Delhi.

Vulcan Trading Co. Ltd., Indra Palace, Connaught Place, New Delhi 1.

Wakefield & Co. Ltd., C.C., 3 Block, Asaf Ali Road, New Delhi.

Walker Chandlok & Co., 41-L, Connaught Circus, New Delhi.

Wearwell Cycle Co. (India) Ltd., 46-M, Connaught Circus, New Delhi 1.

Western Mfg. Agency P. Ltd., Fountain, Delhi 6.



Western Mfg. Co. Delhi P. Ltd., 57, Jorbagh, New Delhi 3.

Western India Match Co. Ltd., Indra Palace, New Delhi.

**WESTREX CO.**, (Prop.: Cinerama Pvt. Ltd.), Brampton Road, Kashmere Gate (Near Minerva Cinema), Delhi.

White Croft Mfg. Co. P. Ltd., Thapar House, 124, Janpath, New Delhi.

**WILLCOX BUCKWELL INDIA LTD.**, (Subsidiary of Larsen & Toubro Ltd.), Regd. Office: 32, Najafgarh Road, P.O. Box 280, New Delhi-15; Phone: 53171/5, Grams: "WILLBUZ", Telex: TLX. 327. Authorised dealer in Northern India and Rajasthan for Caterpillar Overseas S.A., British Crane Corporation Ltd., Priestman Brothers Ltd., and other well-known foreign manufacturing Com-

panies. **Directors**: H. Holck-Larsen, N. M. Desai, P. G. Bhagat, B. I. Bhambhani.

**William Jacks & Co. Ltd.**, Connaught House, Connaught Place, New Delhi 1.

**Wright & Partners P. Ltd.**, B., L-11, Connaught Circus, New Delhi.

**X. A. C. A. (India) P. Ltd.**, Film Colony, Chandni Chowk, Delhi 6.

## CLASSIFIED LIST OF TRADES AND PROFESSIONS

### ABRASIVES

**CARBORUNDUM UNIVERSAL LTD.**—Manufacturers of Bonded Abrasives, Coated Abrasives, Super Refractories and Abrasive grains; Laxman House, 2nd Floor, 9-10/3, Asaf Ali Road, P.O. Box No. 185, New Delhi 1.

**EMERY (INDIA) PVT. LTD.**—P.B. No. 153, Jamnagar 2; Phone: 214; Manufacturers of Emery Grains, Powder, Valve Grinding Paste, Rubbing Bricks, Lustre Bars, Cleaning Compound, Anti-Slip Hard Wearing Tiles etc.

**Grindwell Abrasives Ltd.**—45, Indra Palace, Con. Place, New Delhi. **Hindustan Abrasives.**—100, South Avenue, New Delhi.

**JOHN OAKLEY & MOHAN LTD.**—Mohan Nagar (Ghaziabad), Manufacturers of OAKLEY'S WELLINGTON head flint, Emery, Silicon Carbide Waterproof Abrasive Papers, Emery cloth, Tapes, Endless Belts, Discs both Glue and Resin Bonded; Sole Distributors: Trade Links Private Ltd., 46, Pusa Road, New Delhi 5; Phone: 52335, 55100; Grams: "DRINKS".

**S. K. KAHANSONS & CO.**, N-41, Connaught Circus, New Delhi-1; Dealers in Sand Paper, Emery Paper, Emery Cloth, Polishing and Painting materials; Phone: 48283 & 261602.

### ACCOUNTING MACHINES

#### INTERNATIONAL COMPUTERS AND TABULATORS (INDIA) PRIVATE LTD.,

Hollerith X Powers-Samas Data Processing Equipment, Northern Zone, Jeevan Tara Bldg., 5, Parliament Street, New Delhi; Phones: 45807, 45808.

### ACETYLENE GENERATORS

**INDUSTRIAL GASES LTD., THE.**—D. B. Road, Pratap Bhawan, Post Box 622, New Delhi-1; Phone: 264728, Grams: 'INDUS-GASES'; Head Office: Post Box 853, Calcutta-1; Manufacturers of Acetylene Gas Generators, both Carbide to Water and Water to Carbide, Portable & Stationary, Trollies & Manifolds.

### ADDRESSING AND DATA WRITING MACHINES

**BRADMA OF INDIA LTD.**—Data Writing Machines and Business Systems, Lok Kalyan Bhawan, 11-Arouse Avenue Lane, Post Box No. 315, New Delhi; Grams: "BRADMALT".

### ADVERTISING AND PUBLICITY AGENTS

**Asian Advertisers.**—P.B.I. Press Bldg., Original Road, New Delhi. **Associated Advertisers & Printers.**—Bharatiya Vidya Bhawan Bldg., Curzon Road, New Delhi 1.

**Bharat Publicity Service.**—Pataudi House, Daryaganj, Delhi. **Bomas Ltd.**—1/25, Asaf Ali Road, New Delhi.

**Clarion Advertising Service P. Ltd.**—1, Jain Mandir Road, New Delhi 1.

**Delhi Publicity Corp.**—46, Janpath, New Delhi.

**DELUX PUBLICITY SERVICE.**—1795, Sohan Ganj, Delux Bldg., Subzi Mandi, Delhi-7.

**Gayways Publicity Private Ltd.**—18A/3, Rohtak Road, New Delhi 5.

**GRANT ADVERTISING, INTERNATIONAL, INC.**—22-B, Pusa Road (Bazar Marg), New Delhi 5; Phone: 566259; Grams: "GRANTCHI"; Advertising Agents & Consultants; R. S. J. Davidson, Director & Vice President, West Asia Division, Denis M. Fernandes, Manager; Offices at Bombay, Calcutta, Madras (37 Branches all over the world).

**Hamdard Advertisers.**—Hamdard Dawakhana, Lal Kuan, Delhi 6.

**HERALD ADVERTISING AGENCY.**—7/33, Ansari Road, Darya Gang, Delhi 6; Complete Advertising through Press Outdoor, Cinema etc., Efficient, Dependable & Personalised Service Assured; Phone: 272729.

**Hind Publicity Service.**—270, Kamla Market, New Delhi.

**Hindustan Publicity Corporation.**—21, Darya Gunj, Delhi 6; Phone: 273336.

**India Advertising Service,** 7/D, Bajouri Garden, Delhi.

**Indian Abrasives.**—113, Daryaganj, Delhi.

**INTERADS ADVERTISING (P) LTD.**—4/24-A, Asaf Ali Road, New Delhi-1; on the Government of India Panel, Fully recognised, Planned Advertising with up-to-date Media Selection & Marketing Research Depts. Also at Bombay, Calcutta, Madras, Jullundur and London; Associates all over the world; Phone: 272324 & 272325.

**J. WALTER THOMPSON COMPANY PRIVATE LTD.**—142, Sunder Nagar, New Delhi 11.

**Jupiter Publicity Co.**—G. B. Road, Delhi.

**Laurels Publicity Service Ltd.**—32/M, Con. Circus, New Delhi.

**Lintas Ltd.**—D.A.G. Extension, New Delhi.

**Marketing Advertising Associates P. Ltd.**—25-1, Asaf Ali Road, New Delhi.

**NATIONAL ADVERTISING SERVICE PRIVATE LTD.**—Estd.: 1931, Advertising, Market Research, Public Relations; 1st Floor, 127, Golf Links, New Delhi 3; Phone: 618230, Grams: "JEYENJEYN", Head Office: Khorshed Bldg., Sir P. Mehta Road, Bombay 1; Branch Office at Calcutta; Associates in 71 countries.

**NATIONAL PUBLICITY SERVICE** (An organisation for complete advertising) A-6, Connaught Place; P.O. Box 94, New Delhi-1; Phone: 42814; Serving for over 15 years; The Industrialists of National & International repute and Government of India Undertakings; Accredited by: The Indian & Eastern Newspaper Society, The Directorate of Advertising and Visual Publicity—Government of India, The Indian Railways; Member: The Audit Bureau of Circulations Ltd., Advertising Agencies Association of India.

**NEWFIELDS ADVERTISING PRIVATE LTD.**—3/4-A, Asaf Ali Road, New Delhi 1; Fully Accredited Advertising Agents and Publicity Consultants with Connections all over the World; Member A.B.C., A.A.A.I., I.E.N.S. and the Panel of Government of India.

**Paramount Publicity Service.**—26/A, Bazar Road, New Delhi.

**Partap Advertising Agency.**—1/8-B, Asaf Ali Road, New Delhi 1.

**Press Syndicate Ltd.**—10, Parliament Street, New Delhi.

**Prince Studio Advertising.**—Hauz Qazi, Delhi 6.

**Quality Publicity Service.**—103, M. Block, Con. Circus, New Delhi.

**Rama Publicity Service Private Ltd.**—Naj Wara Street, Delhi 6.

**Standard Publicity Service.**—Chandni Chowk, Delhi.

**S. K. Kahansons & Co.**—N-41, Connaught Circus, New Delhi.

**Surjit Advertising Service.**—41, B. Jhansi Road, New Delhi 5.

**Universal Advertisers.**—4, Jamna Bhawan, Asaf Ali Road, New Delhi.

### AERATED WATER MANUFACTURERS

**Delhi (G.B.) Ice Factory.**—Najafgarh Road, Delhi.

**Ganesh Ice Factory.**—Ajmere Gate, Delhi.

**Imperial Ice Factory.**—Punchkua Road, Delhi.

**Inderaprastha Ice & Cold Storage.**—Katra Chhajju Pandit, Shalidipura, Delhi.

**J. B. Soda Water Factory.**—Original Road, Karol Bagh, Delhi.

**Khanna Ice Factory.**—Jhandewala, Near Durga Temple, Delhi.

**Krishna Ice Factory.**—Premnagar, Subzi Mandi, Delhi.

**Kumar Ice Factory & General Mills.**—14, Bela Road, Delhi.

**Lakshmi Ice Factory.**—Kauria Paul, Delhi.

**Mahabir Ice Mills.**—20, Upper Bela Road, Delhi.

**Pratap Ice Factory.**—Factory Road, Yusuf Sarai, Delhi.



Prag Distilled Water Ice Factory & Cold Storage.—Subzimandi, Delhi.

Rajendra Ice & Cold Storage Co.—Roshanara Road, Delhi.

Ramchand Lachman Dass Ice Factory.—Paharganj, Delhi.

Shanker Ice Factory.—Birla Lines, Subzimandi, Delhi.

Taplitz Aerated Water Co.—Church Road, Kashmiri Gate, Delhi.

## AGRICULTURAL MACHINERY

**EICHER TRACTORS INDIA LTD. (Estd. 1959).**—Manufacturers of renowned "Eicher" Air-cooled Diesel Tractors in technical and financial collaboration with Messrs. GEBR EICHER TRAKTORENFABRIK-UND LANDMACHINEN WERKE, Fourteen/obb, West Germany; Factory & Office: New Industrial Town, Faridabad (Punjab), Regd. Office: 16-A, Asaf Ali Road, New Delhi 1; Phones: Faridabad: 2192; New Delhi: 272273 & 274461; Grams: "EICHERTRAC"; Managing Director: Shri M. M. Lal.

Escorts (Agents) P. Ltd.—Pratap Bldg., Connaught Circus, New Delhi.

Gardners Corporation.—25/90, Connaught Circus, New Delhi 1.

Ghaziabad Engineering Co. (P) Ltd.—42, Janpath, New Delhi.

Globe Motors Private Ltd.—1/1, Jhandewala, New Delhi.

**INDIAN LANDSBERG IMPLEMENTS CORPORATION PVT. LTD. (Estd. 1959)** Manufacturers of "LANDSBERG" Tractor-drawn, "GOODEARTH" Animal-drawn Agricultural Implements and "GOODEARTH" Tractors. Technical and financial collaboration with Messrs. BAYERISCHE PFLUG-FABRIK GmbH, Landsberg/Lech; West Germany; Works: NIT, Faridabad (Punjab); Regd. Office: 16-A, Asaf Ali Road, New Delhi-1; Phones: Faridabad—2192; New Delhi—272273 and 274461; Grams: "IMPLEMENTS"; Managing Director: M. M. Lal, Executive Director: Arun Joshi.

Janata Steel & Metal Co-op. Industrial Society Ltd.—5948, Ballmaran, Delhi.

Larsen & Tourbro Ltd.—Express Bldg., Mathura Road, New Delhi.

Mohanwari Corporation P. Ltd.—26K, Connaught Circus, New Delhi.

Pashabhai Patel & Co. Ltd.—28, Indra Palace, Con. Circus, New Delhi.

Raj Engg. Works P. Ltd.—Ajmeri Gate, Delhi 6.

Saraf Industries.—Saraf Bhawan, 34, Pusa Road, New Delhi 5.

Tractor & Equipment Corp. P. Ltd.—88, Secretary Line, New Delhi 3.

United Provincial Commercial Corporation P. Ltd.—Marshall House, Hanuman Square, New Delhi.

Verma Trading Co.—Queen's Road, Delhi 6.

## AIR COMPRESSORS

Brady, W. H. & Co., Ltd.—Indra Palace, Connaught Place, New Delhi.

Consolidated Pneumatic Tool Co. Ltd.—8-A/29, W.E.A., New Delhi.

DGL Private Ltd.—Connaught Circus, New Delhi-1.

**DID WANIA BROTHERS PVT. LTD.**—Kashmere Gate, Delhi-6; Manufacturers of "HUMBER" Air Compressors, Car Washers, Car/Truck Hoists, Air Tower gauges and spray painting machines; Grams: "DIDWANIA"; Factory: 33, Okhla Industrial Estate, New Delhi-20; Phone: 222081, 222082, 72833.

East Asiatic Co., India (Private) Ltd.—Delite Cinema Bldg., D.A.G. Extension, New Delhi.

Eastern Commodities Private Ltd.—5-A/8, Ansari Road, Daryaganj, Delhi 6.

Khosla, K. G. & Co. Private Ltd.—1, Doshbandhu Gupta Road, New Delhi.

Manjeet Engineering Industries.—71/1, Najafgarh Road, New Delhi 15.

Marshall Sons & Co. (India) Ltd.—Marshall House, Connaught Circus, New Delhi.

Tecalemit (India) Ltd.—L/13, Connaught Circus, New Delhi.

## AIR-CONDITIONING AND REFRIGERATION

Ahuja (Refrigeration) Private Ltd.—Lakshmi Insurance Bldg., Asaf Ali Road, New Delhi 1.

Air Conditioning Corporation Ltd.—N. Block, Connaught Circus, New Delhi 1.

Airtemp Corporation.—12, J. Bagh, New Delhi 3.

American Refrigerator Co. P. Ltd.—4/2B, Asaf Ali Road, New Delhi.

Arya Refrigeration & Air Conditioning Co.—Nirula Bldgs., Con. Place, New Delhi.

Associated Electrical Industries (India) Private Ltd.—United India Life Bldg., Connaught Place, New Delhi.

Bansal Brothers.—Pili Kothi, Bazar Sita Ram, Delhi 6.

Best & Co.—Connaught Circus, New Delhi 1.

Bhagatjee & Co.—5, Daryaganj, Delhi.

Bharat Air Conditioning Corporation.—12/3B, Connaught Place, New Delhi 1.

Blue Star Engineering Co. P. Ltd.—1/23B, Asaf Ali Road, New Delhi 1.

Bombay Ammonia & Refg. Co. (Private) Ltd.—24, Asaf Ali Road, New Delhi 1.

Capital Refrigeration Co.—B-7, Asaf Ali Road, New Delhi 1.

Commercial Refrigeration Corp.—3, Saran Bldg., Ram Nagar, Delhi 1.

Cooling Machinery Stores.—B16/7, Connaught Place, New Delhi 1.

Crystal Refrigeration Corp.—Dufferin Bridge, M. Gate, Delhi 6.

Eastern Electric & Trading Co.—17E, Connaught Place, New Delhi 1.

Electronics Ltd.—A Block, Connaught Place, New Delhi.

Friends & Co.—959, Kucha Ruhalla Khan, Daryaganj, Delhi 6.

Frigsales (India)—9B, Jindal House, Asaf Ali Road, New Delhi 1.

Hindustan Airconditioning Corporation.—Asaf Ali Road, New Delhi.

Hindustan Cold Stores & Refrigeration P. Ltd.—1, Dufferin Bridge, Delhi 6.

Hindustan Refrigeration Stores.—2, Netaji Subhas Marg, Delhi 6.

Ice Machinery Co.—66/67, G. B. Road, Delhi 6.

Indian Refrigeration Industries.—51, Najafgarh Road, New Delhi 15.

Kamal & Co. (Jaipur) Private Ltd.—Post Box 1301, Kashmere Gate, Delhi 6.

Kanwar Refrigerators (India)—M-45/1, Connaught Circus, New Delhi 1.

Kapsons Refrigeration & Air Conditioning Engineers.—Asaf Ali Road, New Delhi 1.

Kalvinator of India Ltd.—19-A, Alipore Road, Delhi 6.

Kooler's Refrigeration & Air Conditioning Co.—1/21, Block, Connaught Circus, New Delhi 1.

Koolaire Private Ltd.—44, Janpath, New Delhi.

Litts' Refrigerations Corporation.—18-G, South Extension, Ring Road, New Delhi.

Lloyd Electric & Engineering Co.—Punj House, M-13, Connaught Circus, New Delhi 1.

Mittersons Refrigeration & Mfg. Co.—7/22, Daryaganj, Delhi 6.

Modern Air-Conditioning Co.—34, Sunder Nagar Market, New Delhi 11.

Modern Electro-Mechanical Works.—25/8, Prem House, Connaught Place, New Delhi 1.

National Refrigeration Works.—2, Netaji Subhas Marg, Daryaganj, Delhi 7.

New India Motors Ltd.—Connaught Circus, New Delhi 1.

Oriental Radio Corporation.—1214, Asaf Ali Road, New Delhi 1.

R. C. Durant & Co.—M Block, Connaught Circus, New Delhi.

Refrigerators (India) P. Ltd.—46, Janpath, New Delhi 1.

Refrigerator Service Corporation.—2, Regal Building, Connaught Circus, New Delhi 1.

Simplex Mfg. Co. Private Ltd.—23-25, Faiz Bazar, Daryaganj, Delhi 6.

Standard Radio & Electric Co.—Opp. Scindia House, New Delhi 1.

Surfrige Service Refrigerations P. Ltd.—46, Janpath, New Delhi.

Tranga Engineering Works.—349-A, Lajpat Rai Market, Delhi 6.

Upkari P. Ltd.—1/4, New Link Road, Jhandewalan Extn., New Delhi 1.

Veer Refrigerating & Air Conditioning Co.—X1/3485, Daryaganj, Delhi 7.

Veer Refrigerators India.—Paliwal Building, Ajmeri Gate, Delhi.

**VIRMANI REFRIGERATION & COLD STORAGE P. LTD.**—Jhandewala Extension, New Delhi-1.

Voltes Ltd.—7/1, Ajmeri Gate Extn., New Delhi 1.

**FRIENDS & CO.**—959, Kucha Rohalla Khan, Darya Ganj, Delhi-6; Manufacturers of Room Coolers, Fluorescent Fixtures and Steel Racks, Room Coolers available on hire; Phone: 271488.

Pind Automobiles Corporation.—37, Industria Estate, Okhla, New Delhi 20.

**NATIONAL REFRIGERATION WORKS.**—3, Netaji Subhas Marg, Delhi-6; Importers & Stockists of: Refrigeration and Air Conditioning Machinery, Copper Tubing, Sealed-in Compressors, Refrigerants and Spares, Manufacturers of Cold Storage, Room Coolers and all types of Cooling Cabinets etc., Phone: 274041-42; Resi: Mr. Ratan Lal 70844, Mr. K. Kumar 74460.

## ALUMINIUM

**MAHAVIR METAL WORKS (Regd.).** 477, Bartaan Market, Sadar Bazar, Delhi-6; Manufacturers & Stockists of Aluminium Sheets, Coils, Circles, Extruded Sections, Foil, Strips, Wire, Utensils and for everything in Aluminium; Phone: 229885, Resi: 74490.

## ARMATURE WINDING WIRES & STRIPS

**HINDUSTAN WIRE PRODUCTS LTD.**—New Delhi Office: 1774, Vishnu Bhavan, Bhagirath Place, Chandni Chowk, Delhi-6; Manufacturers of Super Enamelled and Cotton Covered Copper wires; Bombay Office: Sardar Griha Bldg., Carnac Road, Bombay-2; Calcutta Office: 14, Netaji Subhas Road, Calcutta; Factory: Factory area, Patiala (Punjab).



## ASBESTOS PRODUCTS

**ASBESTOS MAGNESIA & FRICTION MATERIALS LTD.**—(Incorporated with limited liability in England); New Delhi Sales Office: 65, Friends Colony, New Delhi 14; Phone: 275436; Grams: "ASMAFRIC"; Bombay Office: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391; Grams: "ASMAFRIC"; Sales Offices at Calcutta & Madras.

**DELHI BUILDERS' STORES (DELHI MARBLE EMPORIUM)**, —G. B. Road, Delhi-6; Authorised stockists of Asbestos Cement Sheets & Pipes, Snowcem, Impermo & Colorcrete; Tarfelts, Satna Lime, Goodlass Nerolac Paints etc., Phone: 262515, Resi: 224841.

**HINDUSTAN FERODO LTD.**—A member of the Turnen & Newall Group; New Delhi Sales Office: 65, Friends Colony, New Delhi 14; Phone: 275436; Grams: "FERODOSTAN." Head Office and Factory: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391; Grams: "FERODOSTAN." Sales Offices: Calcutta & Madras; Manufacturers of "FIRE-FLY" Asbestos Textiles, Compressed Asbestos Fibre Jointings & "LIMPET" Asbestos Sheets.

## AUTOMOBILES, AUTOMOBILE PARTS AND ACCESSORIES MFRS. & DEALERS

Acme Batteries Private Ltd.—G. T. Road, Delhi-Shadara.  
Aggarwal Motor Co.—Gandhi Motor Market, Kashmere Gate, Delhi.  
Aggarwala Automobiles.—Queen's Road, Delhi.  
Aggarwal Motor Stores.—12/1, M. Connaught Circus, New Delhi 1.  
Allied Auto Agencies.—28/M, Connaught Circus, New Delhi.  
Allied Auto Stores.—Gandhi Motor Market, Kashmere Gate, Delhi.  
Allied Engg. & Trading Co. Ltd.—Kashmere Gate, Delhi.  
Allied Motors P. Ltd.—Scindia House, New Delhi.  
American Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi.  
American Radio & Automobile Co.—Queen's Road, Delhi.  
Anand Motors.—Opp. Minerva Cinema, Kashmere Gate, Delhi.  
Anand Automobiles.—Queen's Road, Delhi.  
Anand Traders.—15, Hamilton Road, Kashmere Gate, Delhi.  
Aryavarta Auto Supply Co.—698, Hamilton Road, Kashmere Gate, Delhi.

**ASBESTOS MAGNESIA & FRICTION MATERIALS LTD.**—(Incorporated with limited liability in England); New Delhi Sales Office: 65, Friends Colony, New Delhi 14; Phone: 275436; Grams: "ASMAFRIC"; Bombay Office: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391; Grams: "ASMAFRIC"; Sales Offices at Calcutta & Madras.

Asiatic Automobiles.—859, Queen's Road, Delhi.  
Asiatic Automotive Engg. Co.—23, Najafgarh Road, New Delhi 15.  
Asiatic Traders.—Peareylal Motor Market, Kashmere Gate, Delhi.  
Asoka Traders.—Peareylal Motor Market, Kashmere Gate, Delhi.  
Associated Engg. Works.—Kashmere Gate, Delhi.  
Asu Traders Pvt. Ltd.—P. Box No. 1130, Kashmere Gate, Delhi.  
Attock Motors (India).—55, Gokhale Market, Delhi.  
Auto Diesel Agency.—Hamilton Road, Kashmere Gate, Delhi 6.  
Autodeals.—33H, Connaught Circus, New Delhi 1.  
Auto Diesel House.—Nehru Motor Market, Kashmere Gate, Delhi.  
Auto Distributors (India).—Gandhi Motor Market, Kashmere Gate, Delhi.  
Auto Electric Agency.—33, Gokhale Market, Delhi.  
Auto Friends (India).—Kashmere Gate, Delhi.  
Auto Importers.—Hamilton Road, Kashmere Gate, Delhi.  
Auto Lamps Ltd.—P. Box 1741, New Delhi.  
Auto Lines (India).—Peareylal Market, Kashmere Gate, Delhi 6.

**AUTOMOTIVE MANUFACTURERS' AGENCIES.**—Automobiles, Automobile Parts & Accessories Dealers; 2610, Hamilton Road, Delhi 6. Head Office: White House, 41, Walkeshwar Road, Bombay-6. Branches: 6, Saklat Place, Calcutta-13, and 42-E, General Patters Road, Madras 2.

Auto Pins (India) Regd.—Kashmere Gate, Delhi.  
Auto Spares (India).—Kashmere Gate, Delhi.  
Auto Spring Mfg. Co.—2781, Hamilton Road, Kashmere Gate, Delhi.  
Auto Supply Co.—8, P. Mukherjee Marg, Delhi 6.  
Auto Trading Co. of Lahore.—Sardari Mal Mansion, Chandni Chowk, Delhi.  
Auto & Tractor Traders.—Kashmere Gate, Delhi.  
Autolines (India).—8, Peareylal Motor Market, Kashmere Gate, Delhi.  
Automachines & Spare Co.—2707, Lothian Road, Nehru Motor Market, Kashmere Gate, Delhi.  
Automobile Machine Tools & Appliances.—1/602, Hamilton Road, Delhi 6.

Automobile Traders.—3263, D. B. Gupta Road, Paharganj, New Delhi 1.

Azad Motor Stores.—Ram Singh Motor Market, Kashmere Gate, Delhi.

Bahl Motor Stores.—Queen's Road, Delhi.

Bajaj Motors (India).—Kashmere Gate, Delhi.

Bansal & Co.—Hamilton Road, Kashmere Gate, Delhi.

Basant Trading Co.—13, Gokhale Market, Delhi.

Bat-Bro Engineering & General Manufacturers.—69, Najafgarh Road, New Delhi.

B. C. Aggarwal & Co.—Queen's Road, Delhi.

B. Asa Singh & Sons.—33, Motia Khan, New Delhi 1.

Bedi Engineering Works.—G.T. Road, Near Partap Bagh, Delhi 6.

Benz Spares (India).—2659, Gandhi Motor Market, Kashmere Gate, Delhi 6.

Beri Motors.—Peareylal Motor Market, Kashmere Gate, Delhi.

Bharat Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi.

Bharat Auto Stores.—P.B. No. 1492, Kashmere Gate, Delhi.

Bharat Motor Co.—Queen's Road, Delhi.

Bharat Sales Corporation.—Kashmere Gate, Delhi.

Bhasin Motor Stores.—28, Gokhale Market, Delhi.

Bir Brothers.—1/2639, Hamilton Road, Kashmere Gate, Delhi.

Blue Star Auto Stores.—Gandhi Motor Market, Kashmere Gate, Delhi.

B. N. Dheer & Sons.—Peareylal Motor Market, P. B. No. 1686, Delhi.

Bombay Motors.—750, Church Mission Road, Delhi 6.

Bombay Sales Corporation.—Peareylal Motor Market, Kashmere Gate, Delhi.

British Motor Car Co. P. Ltd.—Connaught Circus, New Delhi.

British Springs Co.—41, U.A. Bungalow Road, Kashmere Gate, Delhi.

Capital Motor Stores.—1633, Queen's Road, Delhi.

Car Lines (India).—Peareylal Motor Market, Kashmere Gate, Delhi 6.

Central Automobiles.—2638, Hamilton Road, Kashmere Gate, Delhi.

Central Sales Agency.—617/2, Hamilton Road, Kashmere Gate, Delhi 6.

Chimanlal Desai & Co.—72, Queensway, Delhi.

Chopra Auto Stores.—Gandhi Motor Market, Kashmere Gate, Delhi.

Civil Engineering Co.—Arya Samaj Road, K. Bagh, New Delhi.

Combined Traders.—Gandhi Motor Market, Kashmere Gate, Delhi.

Commercial Auto Stores.—Kashmere Gate, Delhi.

Continental Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi.

Continental & Eastern Agencies.—965, Hamilton Road, Delhi 6.

Conwest Private Ltd.—Lothian Road, Kashmere Gate, Delhi.

Davis & White India P. Ltd.—M-132, Connaught Circus, New Delhi.

Delhi Motor Co.—Kashmere Gate, Delhi 6.

Daryaganj Auto-Master.—3478, Faiz Bazar, Delhi 7.

D. B. Dass & Sons.—Gandhi Motor Market, Kashmere Gate, Delhi.

Delhi Automobiles.—Queen's Road, Delhi.

Delhi Garage Pvt. Ltd.—M Block, Connaught Circus, New Delhi.

Delhi Motor Co.—Kashmere Gate, Delhi.

Development Industrial Corpn.—73, Ansari Market, Daryaganj, Delhi 7.

Diamond Industries.—2254, Fountain Road, Delhi.

Diesel Spares (India).—Patel M. Market, Kashmere Gate, Delhi 6.

Doaba Motor Stores.—14, Gokhale Market, Delhi 6.

Doon Motors P. Ltd.—Scindia House, New Delhi.

Elofic Industries (India).—Patel Motor Market, Delhi 6.

Empire Automobiles.—27, Gokhale Market, Delhi.

Evergreen Automobiles.—2841, Hamilton Road, Kashmere Gate, Delhi.

Express Vulcanizing Works.—Queen's Road, Delhi.

**FEDERAL AUTO STORES**—Lothian Road, Kashmere Gate, Delhi-6; Leading Importers and Stockists of quality parts for European vehicles.

Fine Auto Stores.—4719, Cloth Market, Queen's Road, Delhi.

Forward Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi 6.

Friends Auto Corpn.—Nehru Motor Market, Kashmere Gate, Delhi.

Friends (M. & T.) Parts Supply Co.—Peareylal Motor Market, Kashmere Gate, Delhi.

Friends United Co.—11-12-12A, Bhagirath Place, Chandni Chowk, Delhi.

General Auto Parts Co.—2708/1, Lothian Road, Kashmere Gate, Delhi 6.

General Automobiles.—D 14, A/1, Model Town, Kashmere Gate, Delhi.

General Marketing Co.—984, Hamilton Road, Kashmere Gate, Delhi.

General Motor Stores.—Queen's Road, Delhi.

George Vint Bhalla (I) Ltd.—9/2, Delhi Ajmere Gate, Delhi.



**GLOBE AUTO INDUSTRIES.**—1500/1, Aziz Ganj, Bahadurgarh Road, Delhi 6. Manufacturers of Sealed Beams, Tail lights, Roof Lamps, Parking Lamps, Head Light Glasses, Rear View Mirrors, Hub Caps, Door Locks and Handles, Window Catches, Radiator Caps, Engine Mountings, Oil Seals, Plastic and Rubber Moulded parts for Automobiles. Phone: 224647.

Globe Automobiles.—Queen's Road, Delhi.

Globe Motors P. Ltd.—1/1, Jhandewalan, New Delhi.

Globe Sales Corp.—Gandhi Motor Market, Kashmere Gate, Delhi.

Goodwill Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi.

Gosain Bros.—969, Hamilton Road, Kashmere Gate, Delhi.

**GOODEARTH CO., THE (Estd. 1943).**—Specialists in Manufacture and Import of Agricultural Machinery; Sponsors of Eicher Tractors India Ltd., Goodearth Manufacturing Corporation Private Ltd., and Indian Landsberg Implements Corporation Private Ltd., Head Office: 16-A, Asaf Ali Road, New Delhi; Phone: 272273. Grams: "GOODEARTH". Works: Faridabad; Managing Proprietor: Shri M. M. Lal.

Goyal Automobiles.—Queen's Road, Delhi.

Grand Motors.—Opp. Minerva Cinema, Kashmere Gate, Delhi.

Gupta Bros.—Church Road, P.B. No. 1163, Kashmere Gate, Delhi.

Gurbachan Singh & Sons.—43, Gokhale Market, Delhi 6.

Guru Nanak Motor Accessories.—Peareylal Motor Market, Delhi.

Hans Motors.—Gandhi Motor Market, Kashmere Gate, Delhi.

Hardayal Motor Stores.—Kashmere Gate, Delhi.

Harrison Motor Co.—Kashmere Gate, Delhi 6.

Hazari Motor Spring Corp.—761, Queen's Road, Delhi.

Himalaya Auto Store.—Kashmere Gate, Delhi.

Himco (India) Pvt. Ltd.—1412, Nicholson Road, Delhi.

Hind Automobiles.—Kashmere Gate, Delhi.

Hindusthan Automobiles.—22, Gokhale Market, Delhi.

**HINDUSTAN FERODO LTD.**—A member of the Turnen & Newall Group; New Delhi Sales Office: 65, Friends Colony, New Delhi 14; Phone: 275436; Grams: "FERODOSTAN". Head Office and Factory: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391; Grams: "FERODOSTAN". Sales Offices: Calcutta & Madras; Manufacturers of "FERODO" Brake & Clutch Linings.

Honest Auto Traders.—Ram Singh Motor Market, Kashmere Gate, Delhi.

H. B. Sangar & Sons.—Peareylal Motor Market, Kashmere Gate, Delhi 6.

India Automobiles.—2710, Lothian Road, Kashmere Gate, Delhi.

Indian Auto Mfg. Co.—Hamilton Road, Delhi 6.

Indian Auto Supply Co.—73-B, Gokhale Market, Delhi 6.

Indian General Corp.—Gandhi Motor Market, Kashmere Gate, Delhi.

Indo-Auto Glass Industries.—69, Deshbandhu Gupta Road, New Delhi 1.

Indo Trading Co.—Kashmere Gate, Delhi.

Indraprastha Traders.—Kashmere Gate, Delhi.

**INTERNATIONAL AGENCIES.**—1/1278, Sultan Singh Bldg., Kashmere Gate, Opp. Bus Stand, Delhi 6. Phone: 227759. Grams: "AGENCIES." Proprietor: Mr. K. L. Jain.

International Industries.—Opp. Gandhi Motor Market, Kashmere Gate, Delhi.

International Trades & Agencies.—(I) Mahalaxmi Market, Flat No. 6, Chandni Chowk, Delhi.

**JAI BHARAT AUTO INDUSTRIES.**—605, Hamilton Road, Delhi-6; H.O. Chaurabazar, Karnal; Manufacturers of Rooflamps, Taillamps, Parking and Mudguard Lights, Learview Mirrors Screen & Mudguard Mirrors; Plastic Glasses; Phone: 224500, Karnal: 205.

**JAI BHARAT TRADING CO.**—Naya Bazar & Mori Gate, Delhi 6. Phone: 224686. Grams: "ENGPURZA."

Jain Automobiles.—Kashmere Gate, Delhi.

Jain Motor Car Co.—Queen's Road, Delhi.

Jangpura Motor Stores.—131, Saman Bazar, Jangpura, New Delhi 14.

J. N. Motor Stores.—1630, Queen's Road, Delhi.

Jolly Auto Industries.—82, Gokhale Market, Delhi 6.

Jolly Automobiles Co.—2603, Hamilton Road, Kashmere Gate, Delhi.

J. S. Harikishan Singh & Co.—2855-D, Hamilton Road, Kashmere Gate, Delhi.

Jullundur Motor Agency (Delhi) Pvt. Ltd.—Kashmere Gate, Delhi.

Jupiter Motors.—Kashmere Gate, Delhi 6.

Kamal & Co. (Jaipur) Pvt. Ltd.—Gandhi Motor Market, Kashmere Gate, Delhi.

Kapoor Motor Co.—Kashmere Gate, Delhi.

Kartar Automobiles.—Kashmere Gate, Delhi.

Kartar Singh & Co.—78, Church Road, Jangpura, New Delhi 14.

Kashmir Motors.—Queen's Road, Delhi.

Kashyap & Co.—12, Scindia House, New Delhi.

Katyal Auto & Gasket Corp.—Queen's Road, Delhi.

Kaycee Motors.—Kashmere Gate, Delhi.

K. C. Uppal & Co.—Gandhi Motor Market, Kashmere Gate, Delhi.

Khalsa Auto Stores.—26-A.R.P. Motia Khan, Delhi.

Khalsa Traders.—7, Naseem Bldg., Doriwalan, Shidipura, Delhi.

Khosla Automobiles Co.—14, Ramsingh Motor Market, Kashmere Gate, Delhi.

Kohinoor Motors.—Gandhi Motor Market, Kashmere Gate, Delhi.

Kohl Motor Store.—Hamilton Road, Kashmere Gate, Delhi.

**KOSMO MOTORS.**—1687, Arya Samaj Road, Karol Bagh, New Delhi 5; Car Parts Specialists (Hindustan, Fiat—Standard Herald); Mfrs. of quality K. M. Products and Kosmo Bushing Kits (Sunday Open), Phone: 55843, Resl.: 51388.

Krishna Motor Cycle Co.—Kashmere Gate, Delhi 6.

K. S. Sahni & Co.—Gandhi Motor Market, Kashmere Gate, Delhi.

Kumar Motors.—1648, Queen's Road, Delhi 6.

Kundan Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi.

Lakshmi Motor Co.—Queen's Road, Delhi.

Lakshmi Trading Agency.—Queen's Road, Delhi.

Leading Automobiles.—Kashmere Gate, Delhi.

Liberty Auto Stores.—1/998, Hamilton Road, Kashmere Gate, Delhi.

London Automobiles.—Kashmere Gate, Delhi.

Machine Tools Corp.—Kashmere Gate, Delhi.

Mahabir Auto Agency.—Ram Singh Motor Market, Delhi.

**MANOHAR MOTORS.**—P.O. Box 1217, Kashmere Gate, Delhi 6, Phones: 223031 & 220901; Authorised Distributors for Spare Parts for Messrs. Hindustan Motors Ltd., Goetze Piston Rings, Cylinder Liners, Mahle Pistons, 'OBLW' Shama Engine Valves, Reliance Cam Bushes; Stockists for Ferguson Tractor Parts, Payen Talbors Gaskets, Super Scals, Super Brake Parts etc.

Metro Auto Supply Co.—18, Gokhale Market, Delhi.

Midland Traders.—Kashmere Gate, Delhi.

Modern Automobiles.—Kashmere Gate, Delhi.

Modern Auto Stores.—Queen's Road, Delhi.

Modern Ball Bearing Co.—5, Ram Singh Motor Market, Delhi.

Modern Metal Works.—Bhagat Singh Street, No. 1, opp. Police Station, Pahar Ganj, New Delhi 1.

Modern Sales & Services.—3A, Asafali Road, D.A.G. Extension, Delhi.

Mohindra Motor Agency.—Kashmere Gate, Delhi.

Motor Cyclists.—Hamilton Road, Kashmere Gate, Delhi 6.

Motor Replacement Co.—Kashmere Gate, Delhi.

Motor Sales Co.—Gandhi Motor Market, Kashmere Gate, Delhi.

Murarka Engineering Works.—28, Najafgarh Road, New Delhi.

Narankari Automobiles.—Peareylal Motor Market, Kashmere Gate, Delhi.

Narula Motor Works.—Queen's Road, Delhi.

National Automobiles.—Kashmere Gate, Delhi.

National Motor Stores.—Queen's Road, Delhi.

Naveen Bharat Motor Stores.—Kashmere Gate, Delhi.

New Central Automobiles.—2600, Hamilton Road, Kashmere Gate, Delhi.

New India Motors Private Ltd.—Scindia House, New Delhi 1.

New Lakshmi Automobiles.—Kashmere Gate, Delhi.

New Standard Automobiles.—Queen's Road, Delhi.

N. I. M. Industries.—Scindia House, New Delhi.

Northern India Motor Co.—M/10, Connaught Circus, New Delhi.

O. K. Corporation.—Kashmere Gate, Delhi.

Onkar Automobiles.—Hamilton Road, Kashmere Gate, Delhi.

Oriental Stores.—Kashmere Gate, Delhi.

Overseas Manufacturers Sales Co.—23, Rohtak Road, New Delhi.

Overseas Trading Corp. P. Ltd.—Church Mission Road, Delhi 6.

Paramount Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi.

Parbat Mfg. Co-op. Industrial Society.—2939, Hamilton Road, Delhi 6.

Parkash Automobiles.—Hamilton Road, Kashmere Gate, Delhi 6.

Parmodh Kumar Brothers P. Ltd.—106-108, Bhogal Road, Jangpura, New Delhi 14.

Path Darshak Industries P. Ltd.—8222, Roshanara Road, Delhi 6.

P. D. Gupta Pvt. Ltd.—Church Road, Kashmere Gate, Delhi.

Pearl Automobiles.—1801, Wazir Singh Street, Paharganj, New Delhi.

Pearl Scooters.—1/14, Jhandewalan Extn., New Delhi 1.

Pioneer Automobiles Co.—Kashmere Gate, Delhi.

Pioneer Motors.—35, Gokhale Market, Delhi.

Popular Automobiles.—995, Hamilton Road, Kashmere Gate, Delhi.

Power Tools & Appliances Co.—Kashmere Gate, Delhi.

Prabhat Motor Store.—Hamilton Road, Kashmere Gate, Delhi.

Prefect Motor Stores.—Nehru Motor Market, Kashmere Gate, Delhi 6.

Prem Motor Store.—Queen's Road, Delhi.

Premier Automobile Co.—Peareylal Market, Kashmere Gate, Delhi 6.

Premier Motor P. Ltd.—Delite Bldg., Asaf Ali Road, New Delhi.

Premnath Motors P. Ltd.—Scindia House, New Delhi.



**PRESTOLITE OF INDIA LTD.****In**

Collaboration with Prestolite International Co.,  
(Division of Eltra Corporation Toledo, Ohio, U.S.A.)  
Manufacturers of Prestolite Automotive Electrical  
Components  
Kundan Mansion, 2 A-3, Asaf Ali Road, New Delhi.  
Phones: 271934-35-36.

Prominent Motors (India).—708, Chhota Bazar, Kashmere Gate, Delhi.  
P. R. Bhalla & Co.—16/1605, Hardhian Singh Road, Karol Bagh, Delhi.  
P. S. Jain Motor Co. Pvt. Ltd.—Queen's Road, Delhi.  
P. Sharan & Co.—Kashmere Gate, Delhi 6.  
Punjab Auto Stores.—856, Queen's Road, Delhi.  
Punjab Motor Store.—Queen's Road, Delhi.  
Raghbir Singh Anokh Singh.—Motia Khan, New Delhi.  
Raj Motors.—Gandhi Motor Market, Kashmere Gate, Delhi.  
Rajindar Nath Sekhri & Sons.—Church Road, Kashmere Gate, Delhi.  
Rama Motor Stores.—Queen's Road, Delhi.  
Raman Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi.  
Ramjidas & Sons.—Queen's Road, Delhi 6.  
Rane Private Ltd.—Kashmere Gate, Delhi.  
Rattan Motor Store.—Peareylal Motor Market, Kashmere Gate, Delhi.  
Ravi Motors.—Gandhi Motor Market, Kashmere Gate, Delhi 6.  
Rawalpindi Automobiles.—1156, Bara Bazar, Kashmere Gate, Delhi 6.  
Reliable Auto Stores.—24, Gokhale Market, Delhi.  
Republic Auto Traders.—51, Gokhale Market, Delhi.  
Rex Automobiles.—Peareylal Motor Market, Kashmere Gate, Delhi.  
Royal Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi.  
Ruby Automobiles.—617, Hamilton Road, Kashmere Gate, Delhi 6.  
Sabharwal Brothers.—992, Hamilton Road, Kashmere Gate, Delhi.  
Sachdeva Brothers.—10-L, Connaught Circus, New Delhi.  
Sahney Automobiles.—Gandhi Motor Market, Kashmere Gate, Delhi.  
Saini Motor Co.—Ram Singh Motor Market, Kashmere Gate, Delhi.  
Saini Rubber Industries.—20-C, Adarsh Nagar, Azadpur, Delhi 33.  
Manufacturers of 'Schier' Brand Synthetic Rubber Oil Seals 'Sri' Brand Brake Service Parts and all kinds of Moulded and Extruded Rubber goods.  
Sanghi Brothers P. Ltd.—52, Janpath, New Delhi.  
Saran Motors P. Ltd.—Peareylal Bldg., Keeling Road, New Delhi.  
Seth & Sons Pvt. Ltd.—Queen's Road, Delhi.  
Sethi & Co.—Queen's Road, Delhi 6.  
Sethi Rubber Co.—709, Chhota Bazar, Kashmere Gate, Delhi.  
Sethi Welding & Radiator Works.—2762-64, Hamilton Road, Delhi.  
Shiv Dayal Soin & Sons Pvt. Ltd.—Queen's Road, Delhi.  
Sikand & Co.—50, Janpath, New Delhi.  
Silverline Motors.—Nicholson Road, Delhi 6.  
Siyaram Bros.—Kashmere Gate, Delhi.  
S. Krishna & Co.—Peareylal Motor Market, Kashmere Gate, Delhi.  
S. N. Kohli & Co., Pvt. Ltd.—Kashmere Gate, Delhi.  
S. Narinder Singh & Co.—18-B, Ansari Road, Delhi 7.  
Sondhi Motors Pvt. Ltd.—Connaught Place, New Delhi.  
Speed & Power Corporation.—25, Gokhale Market, Mori Gate, Delhi 6.  
S. R. Auto Industries.—824/1, Chota Bazar, Kashmere Gate, Delhi 6.  
S. Ranjit Singh Sahni.—4/32, Western Extn., Delhi.  
Standard Auto Traders.—62, Back Side, Gokhale Market, Delhi 6.  
Standard Automobiles.—Kashmere Gate, Delhi.  
Standard Garage.—Ram Singh Motor Market, Kashmere Gate, Delhi.  
Standard Sales Corporation.—Gandhi Motor Market, Kashmere Gate, Delhi.  
Subash Motors.—Gandhi Motor Market, Kashmere Gate, Delhi 6.  
Subash Spare Parts.—10, Faiz Bazar, Delhi 7.  
Sunshine Industries.—602, Hamilton Road, K. Gate, Delhi 6.  
Suraj Auto Stores.—Kashmere Gate, Delhi.  
Supreme Auto Agency.—5, Gokhale Market, Delhi.  
Supreme Motors P. Ltd.—Asaf Ali Road, New Delhi.  
Swadesh Automobiles.—Kashmere Gate, Delhi.  
Talwar Bearing Co.—1/633, Hamilton Road, Kashmere Gate, Delhi.  
Tirath Singh Kohli & Sons.—1632, Queen's Road, Delhi.  
Tropical Commercial Co. Ltd.—4, Shankar Market, Con. Circus, New Delhi.  
United Auto Corporation.—1/635, Hamilton Road, Delhi 7.  
Unique Automobiles.—30-Gokhale Market, Kashmere Gate, Delhi.  
United Automobiles.—Queen's Road, Delhi.  
United Trading Co.—Kashmere Gate, Delhi.  
Usa Steel Casting Industries.—21, Gokhale Market, Delhi.  
Varma Trading Co.—Queen's Road, Delhi.  
Vidya Parkash & Sons.—Kashmere Gate, Delhi.  
Vlr India Motor Co.—Kashmere Gate, Delhi.  
Virendra & Co.—70, Todarmal Road, New Delhi.  
Vohra Automobiles.—Patel Motor Market, Kashmere Gate, Delhi 6.  
Wazir Singh & Sons.—Faiz Bazar, Delhi.

Western Automobiles (India).—Gandhi Motor Market, Kashmere Gate, Delhi.  
Young India Auto Stores.—Queen's Road, Delhi.

**AUTOMOBILE & ANCILLARY INDUSTRIES**

Associated Engg. Works Ltd.—Kashmere Gate, Delhi 6.  
Auto Lamps Ltd.—P. B. No. 1741, 6, Alipur Road, Delhi 8.  
Auto Pins (India) Regd.—Kashmere Gate, Delhi.  
Goetze (India) Pvt. Ltd.—H. Block, Connaught Circus, New Delhi 1.  
New India Motors Private Ltd.—Scindia House, P.B. No. 298, New Delhi.  
N. I. M. Industries.—Scindia House, New Delhi 1.  
Payen-Talbro Private Ltd.—71/3, Najafgarh Industrial Area, New Delhi 15.

**BALL AND ROLLER BEARINGS**

BEARING SALES CORPORATION.—1/603-605, Hamilton Road, Kashmere Gate, Post Box No. 1625, Delhi-6; Approved Stockists of R. & M, SKF & FAG Ball & Roller Bearings; Authorised for accepting Indents for direct import of these bearings; Phone: 225128.  
Bharat Ball Bearing Co. Ltd.—DCM Premises, Bara Hindu Rao, Delhi 6.  
EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.—Delite Cinema Bldg., New Delhi; Importers, Exporters, Engineers and Manufacturers. Phone: 277901.  
Indento P. Ltd.—3778, Faiz Bazar, Delhi 6.  
Orient General Agencies.—Kashmere Gate, Delhi 6.  
Modern Ball Bearing Co.—4, Kashmere Gate, Delhi 6.  
RASHTRIYA BEARING BHANDAR.—11070, Motia Khan, New Delhi 1. Phone: 264793; Importers, Agents, Stockists & Suppliers of Ball, Roller, Taper Roller, Spherical Roller and Thurst Bearings of all popular and Famous makes and size.  
S. O. Kumar & Co.—59, G. B. Road, Delhi.

**BATTERY MANUFACTURERS & DEALERS**

ACME BATTERIES PVT. LTD.—1/485, G. T. Road, Delhi Shahdara, Leading Manufacturers of ACME Batteries and Electric Horns; Phone: 212272 & 212730; Sales Depot—Kashmere Gate, Delhi; Phone: 223437; Resi: Shri A. R. Suri, Phone: 212272 & 212851, Shri R. G. Suri, Phone: 75282.  
Battery Separators P. Ltd.—Kashmere Gate, Delhi 6.  
Battery Supplying Co.—20, Gokhale Market, Delhi 6.  
Leela Separators. P. Ltd.—Kashmere Gate, Delhi 6.  
Spartan Batteries P. Ltd.—Queen's Road, Delhi 6.

**BISCUIT MFRS.**

BRITANNIA BISCUIT CO. LTD.—Ram Bagh Road, Delhi 6.  
Phone: 223251.

**BOLTS, NUTS AND SCREWS**

Allied Metal Engineering Works.—10, Church Road, Kashmere Gate, Delhi.  
Delhi Engg. Works P. Ltd.—Azadpur, Delhi.  
Mohindra Brothers.—Chawli Bazar, Delhi 6.  
Usha Bolts & Nuts Co.—3380, Bank Street, Hauz Qazi, Delhi 6.

**BOOKSELLERS, PUBLISHERS AND STATIONERS**

ALLIED PUBLISHERS PRIVATE LTD.—13/14, Asaf Ali Road, New Delhi. Phone: 26354. Grams: "FOLIO". Head Office: 15, Graham Road, Ballard Estate, Bombay 1. Branch: 17, Chittaranjan Avenue, Calcutta 13 and Mohan Mansions, 38/C, Mount Road, Madras 6.  
Amrit Book Depot.—Bombay Life Building, Connaught Circus, New Delhi.  
Atma Ram & Sons.—Kashmere Gate, Delhi 6.  
Bahri Brothers.—243, Lajpat Rai Market, Delhi 6. Phone: 220797.  
Beecham's Press Ltd.—M Block, M-6, Connaught Circus, New Delhi 1.  
Bhagwan Das Balj Nath (School Books).—Esplanade Road, Delhi.  
Bhatia Book Depot.—Pahargunj, New Delhi.  
Bhawnani & Sons.—8-F, Connaught Place, New Delhi-1.  
Cambridge Book Depot.—Regal Building, Connaught Circus, New Delhi.  
Capital Book Depot.—Nai Sarak, Delhi.

CENTRAL NEWS AGENCY.—23/90, Connaught Circus, New Delhi-1 (Branch: 15A/55, W. E. Area, Karol Bagh, New Delhi-5); Grams: "AKHBARGHAR", Booksellers, Subscription Agents and Suppliers of Indian and Foreign Newspapers, Periodicals and Books; Phone: 44762, Branch: 57340.



Chander Shikhar & Bros.—Esplanade Road, Delhi.  
 Clifton & Co.—D. B. Gupta Road, Delhi 5.  
 Dayal Bros.—Lady Hardinge Road, New Delhi.  
 Deenl Book Depot.—Machhliwalan, near Jama Masjid, Delhi.  
 Dehati Pushtak Bhandar.—Chawri Bazar, Delhi 6.  
 Delhi Book Co.—M/12, Connaught Circus, Opp. Fire Brigade, New Delhi.  
 D. R. Suraj Balram.—Esplanade Road, Delhi.  
 Dutt & Co.—A. Samaj Road, Kashmere Bagh, Delhi 5.  
 Dutta Stationery Mart.—Esplanade Road, Delhi.  
 Eurasia Publishing House P. Ltd.—Ravindra Mansions, Ramnagar, New Delhi 1.  
 Faqir Chand & Sons.—15A, Khan Market, New Delhi 11.  
 Federal Law Depot.—Kashmere Gate, Delhi.  
 Gupta & Co.—60/13, Prabhat Road, Delhi 5.  
 General Book Depot.—Nai Sarak, Delhi.  
 Gobind Ram Nangla & Sons.—Sadar Bazar, Delhi.  
 Goyal & Co.—Dariba Kalan, Delhi.  
 Grandway Printers.—2322, Taliwara, Sadar Bazar, Delhi 6.  
 Gulab Chand Kapoor & Sons.—Lalton Gate, G. B. Road, Delhi.  
 Gur Das Kapur & Sons P. Ltd.—Chawri Bazar, Delhi 6.  
 Haji Publishing House.—Machhliwalan, near Jama Masjid, Delhi.  
 Hanif Book Depot.—Machhliwalan, near Jama Masjid, Delhi.  
 Hem Kunt Press.—E1/15, Pate Road, E. Patel Nagar, New Delhi 2.

**HIND POCKET BOOKS PVT. LTD.**—Publishers of Paperbacks, in Hindi, Urdu & English, G. T. Road, Shahdara, Delhi-32; Phone: 212046.  
 Hindi Pustak Agency.—Dariba Kalan, Delhi.  
**HINDI BOOK CENTRE.**—2715, Darya Ganj (Behind Moti Mahal), Delhi-6; Largest Stockists of Hindi Library Books; Also dealing in Sanskrit, Urdu, Punjabi Books, A Punjabi Pustak Bhandar, Enterprise; Phone: 274874, 263134.  
 Hindustan Book Agency (India).—17, U. B. Jawahar Nagar, Delhi 6.  
 Hindustan Kitab Ghar.—Esplanade Road, Delhi.  
 Idandas Book Co.—Opp. Scindia House, Connaught Circus, New Delhi.  
 Imperial Book Depot.—Nai Sarak, Delhi.  
 Imperial Stationery Mart.—Chawri Bazar, Delhi.  
 India Book House.—United India Assurance Building, Connaught Place, New Delhi 1.  
 Indian Book Depot.—Baird Road, New Delhi.  
 Indian Publishing House.—Agents: India Press Ltd., Nai Sarak, Delhi.  
 Indian University Publishers.—Kashmere Gate, Delhi.  
 Jai Hind Book Palace.—Nai Sarak, Delhi.  
 Jaico Publishing House.—Gobind Mansion, "H" Block, Connaught Circus, New Delhi.

**JAIN BOOK AGENCY.**—Authorised Dealers, Government Publications, State Govt. Publications and other Allied Publications; C-9, Connaught Place, P.O. Box 113, New Delhi-1. Phone: 40925. Partners: S. P. Jain and Vimal Vahan Jain.  
 J. M. Jaina & Bros.—Mori Gate, Delhi 6.  
 J. S. Sant Singh & Sons.—Dariba Kalan, Delhi.  
 Kalckers.—Connaught Place, New Delhi.  
 Kitab Mahals.—Queensway, New Delhi 1.  
 Kutab Khana Kadeemi.—Machhliwalan, opp. Jama Masjid, Delhi.  
 L. R. Bhandari & Sons (Homoeopathic Books).—Hanging Bridge Bldg., 3892, Chowk, Daryaganj, Delhi 6.  
 Lakshmi Book Store.—42-M. M., Queensway, New Delhi.  
 Maktaba Jalma Ltd.—Jama Masjid, Delhi 6.  
 Mehta Bros.—Esplanade Road, Delhi.  
 Metropolitan Book Co., Ltd.—Faiz Bazar, Delhi.  
 Modern Book Depot.—Nai Sarak, Delhi.  
 Narain Das Jangli Mal.—Dariba Kalan, Delhi.  
 Nath & Co.—Connaught Place, New Delhi.  
 Navajivan Trust.—Communication Theatre Bldg., Room No. 1, Connaught Circus, New Delhi.  
 Navayug Traders.—D. B. Gupta Road, Devnagar, Delhi 5.  
 Naya Kitab Ghar.—Machhliwalan, opp. Jama Masjid, Delhi.  
 N. C. Kansil & Co.—40, Model Basti, Delhi 5.  
 New Book Depot.—Connaught Place, New Delhi.  
 New Imperial Book Depot.—Nai Sarak, Delhi.  
 N. D. Sahgal & Sons.—Fatehpuri, Delhi 6.  
 Oxford Book Depot.—Kashmere Gate, Delhi.  
 Oxford Book & Stationery Co.—Scindia House, Connaught Circus, New Delhi.  
 Parkash and Co.—Dariba Kalan, Delhi.  
 Peoples' Publishing House P. Ltd.—1, Jhande-Walan, Rani Jhansi Road, New Delhi 1.

**PRABHAT PRAKASHAN.**—205, Chawri Bazar, Delhi-6; Leading Publishers and Sellers of Hindi Books; Specialised in Library Supply; Phone: 264676.  
 Preetnagar Shop.—Esplanade Road, Delhi.  
 Premier Book Co.—Nai Sarak, Delhi 6.  
 Punjabi Pustak Bhandar.—Dareeba Kalan, Delhi 6.

## PRENTICE-HALL OF INDIA PVT. LTD.,

M-87, Aggarwal Bldgs., Connaught Circus, New Delhi-1.

Publishers of Eastern Economy Editions of University and College Text Books

Phone: 48350.

Grams: "PRENHALL"

Punjab Publishers.—Fatehpuri, Delhi.  
 Pustak Mandir.—347 Chawri Bazar, Delhi 6.  
 Radiance Weekly.—36, Katra Gokal Shah, Near Jama Masjid, Delhi.  
 Raj Book Depot.—Nai Sarak, Delhi.  
 Rajkamal Prakashan Private Ltd.—8, Faiz Bazar, Delhi.

**RAJPAL & SONS.**—Leading Publishers and Booksellers and largest Stockists of Hindi Books; Showroom: Kashmere Gate, Delhi-6; Phone: 226201; Office & Works: 18, G. T. Road, Shahdara, Delhi-32; Phone: 212046 & 212212.

Rama Krishna & Sons.—16-B, Connaught Place, New Delhi 1.  
 Ramchandra & Sons.—Connaught Place, New Delhi.

Regal Book Depot.—Nai Sarak, Delhi.  
 S. A. Brothers & Co.—Flat No. 28, New Central Market, Connaught Circus, New Delhi.

**S. CHAND & CO.**—P. B. 1613, Fountain, Delhi-6; Head Office: Ram Nagar, New Delhi; Allied Firms—Eurasia Publishing House Pvt. Ltd., Niraj Prakashan; Branches: Bombay, Calcutta, Madras, Delhi, Jullundur, Lucknow.

S. Garg & Co.—Nai Sarak, Delhi.  
 Sangam Kitab Ghar.—Jamianagar, New Delhi.

**SASTA SAHITYA MANDAL.**—Bombay Life Bldg., Conn. Circus, New Delhi-1; Leading Hindi Publishers of **GANDHIAN** and allied healthy and nation building Literature; Branch: 126, Zero Road, Allahabad; Phone: 40505.

Saraswati Book Depot.—Lady Hardinge Road, New Delhi.

Sat-dev & Co.—Esplanade Road, Delhi.

Sharda Mandir.—Nai Sarak, Delhi.

Shakuntla Kala Niketan.—2588, Subzimandi (opp. Robin Talkies), Delhi 6.

Sharma Book Depot.—Nai Sarak, Delhi.

**SHIKSHA BHARATI.**—Publishers of Educational and Children's Books in Hindi, G. T. Road, Shahdara, Delhi-32; Phone: 212046.

Sikh Publishing House Ltd.—7C, Prem House, Connaught Place, New Delhi. Agents for Govt. Publications.

Standard Book Depot.—Opp. Scindia House, Connaught Circus.

**STUDENTS' STORES.**—Kashmere Gate, Delhi 6.

Student Mart.—Main Bazar, Pahargunj, New Delhi.

Suraj Balram Sahwney & Sons.—57, Esplanade Road, Delhi 6.

Suri Brothers (Hindi Rattan Books).—Esplanade Road, Delhi.

Taxation.—3, Daryaganj, Delhi.

Technical & Commercial Book Co.—75, Gokhale Market, Delhi 6.

Thakar Das Anand & Sons.—Esplanade Road, Delhi.

UBS Publishers Distributors.—P. Box 1882, Delhi 6.

**UNIVERSAL BOOK & STATIONERY CO.**—16, Netaji Subash Marg (Faiz Bazar), P.O. Box No. 1092, Delhi.

Universal Book Traders.—80, Gokhale Market, Delhi 6.

Unique Stationery Depot.—Chawri Bazar, Delhi.

Universal Publishing Co.—Esplanade Road, Delhi.

Uttam Chand Kapur & Sons.—Kashmere Gate, Delhi 6.

U.P. Malhotra & Co.—11-B, Prahalad Market, Karol Bagh, Delhi 5.

Vidya Mandir Ltd.—9/12, Connaught Circus, New Delhi 1.

Yogendra Paul Khanna & Sons Ltd.—M-27, Connaught Circus, New Delhi 1.

Youngman & Co.—Nai Sarak, Delhi.

## BRUSH MANUFACTURERS

Army Brush Factory.—457, New Sadar Bazar, Delhi.  
 Jaison Brushwares.—554, Vishwas Nagar, Delhi-Shahdara.  
 New Brush Industry.—G. T. Road, Shahdara, Delhi 32.  
 Prem Brush Factory.—415, Sadar Bazar, Delhi 6.

## BUCKET MANUFACTURERS

Bharat Brass & Metal Industries.—3618, Chawri Bazar, Delhi.  
 Hindustan Industries.—4031, Chawri Bazar, Delhi 6.  
 Saraf Industries.—Raghuganj, Chawri Bazar, Delhi 6.

**SHREE BHARAT INDUSTRIES.**—Manufacturers and Galvanisers, 3, Darya Ganj, Delhi 6.

## BUILDERS AND BUILDING MATERIALS

Amrit Engineering Corporation.—28/2, East Patel Nagar, New Delhi 12.  
 Ashoka Builders P. Ltd.—14A/41, W.E.A., New Delhi 5.



Bhai Sundar Dass Sardar Singh (P) Ltd.—30-B, Pusa Road, New Delhi.

### CAPITAL INDUSTRIES (P) LTD.,

"Bhaskar Bhavan"

Serai Rohilla, Delhi-6; Mfrs. of Plaster of Paris, Chalk Powder; Also Manufacture all types of Pencils, Crayons & other stationery items; Grams: "CAPINDUS", Phone: 223211 (Two Lines) 226033, 55630.

**CAPITAL INDUSTRIES PRIVATE LTD.—Bhaskar Bhavan, Serai Rohilla, Delhi-6.**

**DELHI BUILDERS' STORES (DELHI MARBLE EMPORIUM).—G. B. Road, Delhi-6; Authorised Stockists of Satna Lime, Asbestos Cement Sheets, Snowcem, Impermo & Colorcrete, Porbandar Whiting, Tarfelts, Marble chips, Goodlass Nerolac Paints etc., Phone: 262515, Resi.: 224841.**

Dewan Chand & Co.—27, Hanuman Road, New Delhi.

Dewan Construction Co.—27, Curzon Road, New Delhi 1.

Dipson & Co.—93, Jor Bagh Nursery, New Delhi.

Engineering & Industrial Corporation.—29, South Patel Nagar, New Delhi 12.

Gurdial Singh & Sons.—2157, Original Road, Paharganj, New Delhi.

Hind Constructions Ltd.—N-78, Connaught Circus, New Delhi.

Jiwan Builders.—17, Rohtak Road, New Delhi.

Lachhman Singh Gill & Co.—C-12 & 13, Rajouri Gardens, Najafgarh Road, New Delhi 15.

**MAHABIR PERSHAD & SONS.—Chawri Bazar, Delhi 6; Phones: 262735, 264854, 265307 & 212407. Grams: "PIPES."**

Mahavir Construction Co. P. Ltd.—1/1E, Patel Nagar, New Delhi 12.

Mehta Teja Singh & Co.—63, Cornwallis Road, New Delhi 3.

M. R. Salwan & Sons.—10, Marine Arcade, New Delhi 1.

Oriental Building & Furnishing Co. P. Ltd.—Opp. Fire Brigade, Connaught Place, New Delhi.

Oriental Construction (Delhi) Ltd.—24, Alipur Road, Delhi 8.

Pandit Thakurdas Sharma & Sons.—22, Ragharpura, Karol Bagh, New Delhi 5.

Parameswardass Shanti Sarup.—29/53, W.E.A., Karol Bagh, New Delhi 5.

Parkash & Co.—4/23, W.E.A., Karol Bagh, New Delhi 5.

Partap & Co.—18, Faiz Bazar, Daryaganj, Delhi 6.

Prem Construction Co.—30/20E, Patel Nagar, New Delhi 12.

R. B. Basakha Singh & Sons (Cont) Private Ltd.—5, Jantar Manta Road, New Delhi.

**S. K. KAHANSONS & CO.—G. B. Road, Outside Ajmer Gate, Delhi; Premier Manufacturers of Satna, Maihar & Katni Lime, Cement; Stockists & Suppliers of Paints, Varnishes, Oxide and all kinds of flooring materials; Phone: 261602, 48283.**

Rakeshwar Nath & Co.—26, Hanuman Road, New Delhi.

Rameshwar Dass & Co.—25-D, Kamla Nagar, Delhi 6.

Ram Nath Mehra & Sons.—W-1/11, W. Patel Nagar, New Delhi 12.

Rattan Singh & Sons.—5/8, Deshbandhu Gupta Road, New Delhi 1.

Rup Lal Makkar & Sons.—16, Todar Mal Road, New Delhi 1.

Shah Construction Co. Ltd.—Mathura Road, New Delhi 1.

Sir Sobha Singh & Co.—40, Regal Building, Connaught Place, New Delhi.

Suri Brothers.—5-C/17, Rohtak Road, Karol Bagh, New Delhi 12.

Tirath Ram Ahuja (P) Ltd.—16, Fire Brigade Lane, New Delhi.

Walia Brothers.—7-B, Pusa Road, Rajinder Park, New Delhi 5.

### CABLE & WIRE MANUFACTURERS & DEALERS

Aggarwal Cable Works.—Bazar Sita Ram, Delhi.

**ALLIED AGENCIES.—1399, Pahari Imli, Jama Masjid, Delhi-6; Phone: 261775, Grams: "SERVEALL"—Delhi; Manufacturers of High Class PVC Radio & Electric Wires, Cables.**

Babu Lal Rajendra Kumar.—1109, Matia Mahal, Jama Masjid, Delhi.

B. L. & Sons.—3677, Mori Gate, Delhi.

**BRIJBASI INSULATED CABLE CO.—Fatehpuri, Delhi. Factory at Bhuteshwar Road, Mathura (U.P.); Manufacturers of V.I.R., C.T.S. Weather Proof, Flexibles of Rubber and P.V.C. Insulation.**

Chandra Electrical Industries.—33, Chandni Chowk, Delhi 6.

**DELTON CABLE COMPANY.—3455/3457, Delhi Gate, P.O. Box 1179, Delhi 6. Telephone: 272111/12, TELEX DELTONCO DELHI 367.**

Durga Cable Mfg. Co.—Kucha Harjasmal, Bazar Sitaram, Delhi.

Everlight Electrical Industries.—Bhagirath Palace, Chandni Chowk, Delhi 6.

Fleming John & Co., Private Ltd.—Chowdhary Bldg., Connaught Circus, New Delhi.

G. S. Sales Corporation.—Hauz Qazi, Delhi.

Harswaroop Gupta & Co.—1602, Madrasa Road, Kashmere Gate, Delhi.

Hind Cable Mfg. Co.—1208, Gali Kashmirian, Mohalla Imli, Delhi.

India Cable Co. Ltd.—9-A, Connaught Place, New Delhi.

Indian Traders P. Ltd.—P. Box 1778, Chandni Chowk, Delhi 6.

Industrial Cables (I) Ltd.—National Insurance Bldg., Parliament Street, New Delhi.

Industrial Enterprises P. Ltd.—P. Box 468, New Delhi.

Jenson Insulators.—3297, Aryapuri, Subzimandi, Delhi.

Lakshmi Cable Co.—1553, Bhagirath Palace, behind State Bank, Chandni Chowk, Delhi 6.

Lakshmi Engineering Works.—Hauz Qazi, Delhi.

Meryfur Industries.—Amar Bhawan, Behind State Bank, Delhi 6.

Milton Cable Co.—Hauz Suiwalan, Chitli Qabar, Delhi.

National Conductors.—1400, Pahari Imli, Delhi.

National Insulated Cable Co. of India, Ltd.—1664, Lothian Road, Kashmere Gate, Delhi 6.

Power Cables P. Ltd.—184, Golf Links Area, New Delhi 3.

Ram Sarup Rameshwar Dass.—2545, Tiraha Behram Khan, Delhi 6.

Reliable Electric & Cable Co.—3181, Sarak Prem Narain, Bazar Sita Ram, Delhi 6.

Skytone Electricals (India).—2655, Sadar Thana Road, Delhi 6.

Standard Insulated Cable Co.—3, Pusa Road, New Delhi.

Tara Electric Co.—777, Kundeywalan, Delhi.

United Cable Industries Ltd.—1405, Bazar Sitaram, Delhi 6.

Universal Cable Mfg. Co.—3302, Bazar Sita Ram, Delhi.

Victor Cables Corporation.—5776, Sadar Bazar, Delhi.

Vinod Metal Industries.—3766, Chawri Bazar, Delhi 6.

### CALENDAR MANUFACTURERS

Calendar Makers Corporation.—16, Sadar Thana Road, Delhi 6.

Capital Calendar Corporation.—Fort View, Chandni Chowk, Delhi.

Chanson Calendar Co.—21/24, Shakti Nagar, Delhi.

Delhi Calendar Mfg. Co.—1530, Nai Sarak, Delhi 6.

**DIAMOND CALENDAR MFG. CO., & PUNJABI PRESS.—Sadar Bazar, Delhi-6; Mfrs. of Artistic Calendars Printed by Photo Offset & Halfstone Tricolour; Latest designs; Most Competitive Prices; Phones: 226876 & 223563.**

Fine Calendar Mfg. Co.—3601/11, Reghapura, New Delhi.

Goodluck Calendar Corporation.—30, Chawri Bazar, Delhi 6.

Gulabson Calendar Mfg. Co.—4/9, Asaf Ali Road, New Delhi.

Hindustan Calendar Corporation.—2, Chatta Lal Mian, Daryaganj, Delhi.

Kay Cee Calendar Mfg. Co.—3542, Gali Hakim Baqa, Chawri Bazar, Delhi 6.

Lakshmi Calendar Corporation.—62, Chandni Chowk, Delhi 6.

Mittal Calendar Mfg. Corp.—3-E, Kamla Nagar, Delhi.

National Calendars & Plastic Novelties.—16/300, Reghapura, Gali No. 12, New Delhi 6.

Orient Calendar Mfg. Co.—8/4, Nai Sarak, Delhi 6.

Orris Calendar Corporation.—Bhagirath Palace, Ch. Chowk, Delhi 6.

Rohit Calendar Mfg. Corporation.—1600, Dariba Kalan, Delhi.

Vijay Calendar Corporation.—1021, Kucha Natwan, Chandni Chowk, Delhi.

Wing Calendar Co.—17, Reghapura, Karol Bagh, New Delhi 5.

### CANNING AND CONDIMENT WORKS

Empire Food Supply Co.—5, Model Basti, Delhi 6.

Excelsior Food & Chemical Industries.—4, Paharganj Lane, New Delhi.

Harnarayan Gopinath.—Khari Baoli, Delhi.

Kashmir Fruit Products Laboratory.—Qutab Road, Delhi 1.

Nirula & Co. Ltd.—Connaught Circus, New Delhi.

**NORTHLAND INDUSTRIES.—Chunamandi, New Delhi 1. Makers of Fruit Cocktail, Red Cherries, Peaches, Green Peas, Jams, Marmalade, Tomato Products etc. Phone: 277123.**

Wahi Canneries.—J-181, Rajhori Garden, New Delhi 15.

### CARD BOARD BOX MANUFACTURERS

Ganga Saran & Sons P. Ltd.—Chawri Bazar, Delhi 6.

India Box & Carton Makers.—Bahadurgarh Road, Delhi.

**INDIA BOX & CARTON MAKERS.—2322, Bahadur Garh Road, Sadar Bazar, Delhi-6; Tin & Offset Printers, Manufacturers of Tin Containers plain as well as decorated, Card-Board Boxes, Cartons and Tin Advertisement Plates and Pilfer Proof Caps; Phones: 223635, Resi.: 222661.**

Kay-Emm & Co.—Mohd. Hussain Road, Karolbagh, New Delhi.

P. L. Bhasin & Co.—Krishna Lodge, Joshi Road, Karol Bagh, New Delhi.



**CARPET MFRS. & EXPORTERS**

**BEHARAT KALA KENDRA PRIVATE LTD.—28-B, Connaught Place, New Delhi 1.**

Central Cottage Industries Emporium.—Janpath, New Delhi.

The East India Carpet Co., Private Ltd.—Connaught Place, New Delhi.

Guptajee.—Connaught Place, New Delhi.

Handicrafts.—10F, Connaught Place, New Delhi 1.

Imperial Traders.—Sadar Bazar, Delhi 6.

Mills & Mines P. Ltd.—8-3, Asaf Ali Road, New Delhi.

Oriental Carpet Mfrs. (India), Ltd.—Connaught Place, New Delhi.

Oriental Sales Corporation.—Connaught Circus, New Delhi.

**CAST IRON PIPES AND SPECIALS**

**MAHABIR PERSHAD & SONS.—Chawri Bazar, Delhi 6;**  
Phones : 262735, 264854, 265307 & 212407. Grams : "PIPES."

**CEMENT AND SOIL TESTING EQUIPMENTS**

**ASSOCIATED INSTRUMENTS MANUFACTURERS (INDIA) PRIVATE LTD.—Sun Light Insurance Bldg., 26/27, Asaf Ali Road, New Delhi; Grams : "AJMILDEL." Phone : 271236.**

**CHEMICALS**

Arjan Dass Gupta & Bros.—25, Fatehpuri, Delhi.

**CHEMICALS de UNIVERSE PVT. LTD.—Tilak Bazar, Delhi-6;**  
For all sorts of organic & Inorganic, Industrial, Laboratory & Pharmaceutical, Agricultural, Aromatic & Photographic Chemicals and allied items from world over; Sole Agents for USSR Fine Chemicals & Technological Raw Material; Bombay Office : 92/98, Reay Road, Bombay-33 ; Phone : 378117, Grams : "CHEMDEUNI", 2133, Tilak Bazar, Delhi-6; Phones : 222035, 222036, 222037.

Doctor Beli Ram & Sons.—Mahalakshmi Market, Chandni Chowk, Delhi 6.

Dwarka Prasad Goel & Co.—Kharibaoli, Delhi.

Hardcastle Waud & Co., Ltd.—D.A.G. Extension, New Delhi.

Imperial Chemical Industries (India) Private Ltd.—Malhotra Bldg., Janpath, New Delhi.

Kamani Metallic Oxides Ltd.—United India Life Bldg., New Delhi.

K. C. Bhargava & Co.—P.O. Box No. 1247, Delhi.

Kohinoor Chemical Works.—Atta Manjil, Paharganj, New Delhi.

Mahalaxmi Chemical Works.—Savai Phus, Delhi.

Metro Paint Industries.—Qutab Road, Delhi 6.

Process Chemical Co.—Fatehpuri, Delhi.

P. L. Tandon & Co.—Bhagirath Palace, Ch. Chowk, Delhi 6.

Sagar Chemicals.—Fountain, Delhi.

United Chemical & Soap Mills.—Phatak Habash Khan, Delhi.

**CHEMICALS, DYES AND PHARMACEUTICAL PRODUCT MANUFACTURERS & DEALERS**

Albert David Ltd.—262, G. T. Road, Delhi.

Alembic Chemical Works Co., Ltd.—D. A. G. Extn., New Delhi.

Ayurvedic Pharmaceutical Co. Ltd.—264, Kamla Market, Ajmere Gate, New Delhi.

Bharat Chemical Works.—Farash Khana, Delhi.

Bharat Pharmaceutical Works.—Bharat House, 5, Model Basti, New Delhi 5.

B. I. Drug Co.—1444, Chandney Chowk, Delhi.

Capital Industries Pvt. Ltd.—Seral Rohilla, Delhi 6.

Cipla Laboratories.—Connaught Place, New Delhi.

Dakora Laboratories Ltd.—Satnarin Bldg., Chandni Chowk, Delhi.

Dawakhana Unani.—Ballimaran Street, Delhi.

D. C. M. Chemical Works, D. C. M. Vanaspati Works.—P.B. No. 1211, Delhi.

Delhi Acid & Chemical Works.—53, Industrial Area, Najafgarh Road, New Delhi.

Delhi Chemicals.—4, Daryaganj, Delhi 7.

Domestic Chemical Works.—27, Mata Sundari Road, New Delhi.

Drug Research Laboratory.—8, Prithvi Raj Road, New Delhi.

East India Pharmaceutical Work Ltd.—Fair Bazar, Delhi.

Gurco Pharma Private Ltd.—Registered Office : 35, M-Block, Connaught Circus, New Delhi 1.

Hamdard Dawakhana (Wakf).—Lal Kuan, Delhi 6.

Hindustan Chemical & Industrial Corp.—Bajaj Bldg., Original Road, New Delhi.

Hindustan Insecticides Pvt. Ltd.—Industrial Area, Rohtak Road, P.B. No. 632, New Delhi.

Hoechst Pharmaceuticals Ltd.—3/10 & 11, Asaf Ali Road, New Delhi 1.

Hoeschst-Fedco Pharma P. Ltd.—15/1, Asaf Ali Road, New Delhi.

I. C. I. India Private Ltd.—Hamilton House, C. Place, New Delhi.

Inda Dyechem Industries Ltd.—Tobacco Katra, Delhi 6.

Indo Genuine Chemical Works.—Jama Masjid, Delhi.

Jayna Pharma P. Ltd.—29, Najafgarh Road, New Delhi.

Lister Antiseptics & Dressings Co. Ltd.—Nai Sarak & V/2632, Roshanara Road, Delhi.

Mac Laboratories Ltd.—69, Daryaganj, Delhi.

Martin & Harris Ltd.—22-A, Mahants Bldg., Near Kamla Market, New Delhi.

May & Baker (India) Ltd.—Chaudhury Bldg., K-Block, Connaught Circus, New Delhi.

Modern Chemical Works Pvt. Ltd.—Kashmere Gate, Delhi 6.

Monsanto Chemicals of India Ltd.—Ajmeri Gate Extn., New Delhi 1.

Multani Ayurvedic Pharmacy.—36-H, Connaught Circus, New Delhi.

National Chemical Industries.—26, Najafgarh Road, Industrial Area, New Delhi 15.

Neyer Chemical Works & Lab. (India) Ltd.—Daryaganj, Delhi.

Organo Chemical Industries.—Sonapat (Near Delhi).

**PIONEER CHEMICAL CO., THE.—Manufacturing Division : E/20, Industrial Estate, Bahadurgarh; Manufacturers of Fine Laboratory and other chemicals; Showroom : Phatak Habash Khan, Delhi-6; Phone : 224597, Grams : "FINE-CHEM."**

Premier Ashoka Laboratories, Ltd.—5, Model Basti, Delhi 5.

Punjab Chemical Mfg. Co.—52, Najafgarh Road, New Delhi 15.

Punjab Toilet & Chemical Works Ltd.—26B, Pusa Road, Delhi.

Radium Chemical Works Ltd.—2563, Daryaganj, Delhi 7.

Raja Jupiter & Co.—Rani Bagh, Delhi.

Rampur Distillery & Chemical Co. Ltd.—4, Scindia House, New Delhi 1.

Ranbaxy & Co., P. Ltd.—16, Marine Arcade, Connaught Place, New Delhi.

**SALOOJA BROTHERS PVT. LTD.—175-E, Kamla Nagar, Delhi-7; Manufacturers of Laboratory and Research Chemicals.**

Sarabhai Chemicals.—D.A.G. Extn., New Delhi.

Saraswati Chemical Works.—Bahadurgarh Road, Delhi.

Sulphur Chemicals Private Ltd.—21B, Northern Extn. Area, New Delhi.

**UNITED FARMA ENTERPRISERS.—28, Netaji Subhas Marg, Daryaganj, Delhi.**

Zona Chemical & Pharmaceutical Works.—Zona Chowk, Karolbagh, New Delhi.

**CHEMICAL IMPORTERS AND DEALERS**

Ajudhiya Nath Surindra Nath.—Tilak Bazar, Kharibaoli, Delhi.

Amar Nath Vijay Kumar.—Katra Hussain Bux, Kharibaoli, Delhi.

Anant Ram Hari Ram.—Katra Tabacoo, Kharibaoli, Delhi.

Anantram Jagan Nath Aggerwal.—Katra Tabacoo, Kharibaoli, Delhi.

Ashanand Radhey Shyam.—Tilak Bazar, Kharibaoli, Delhi.

Asiatic Chemical Co.—Delhi; Head Office : 18/B, Sukeas Lane, Post Box 2101, Calcutta-1; Other Offices : Masjid Siding Road, Opp. Prince's Docks, Bombay 9; 26/46, Birhana Road, P.O. Box 189, Kanpur.

B. M. Ahuja & Co.—Katra Ishwarbhawan, Kharibaoli, Delhi.

Babuna Brothers.—Katra Tabacoo, Kharibaoli, Delhi.

Bakhtawarmal Ramkishan Das.—Katra Tobacco, Kharibaoli, Delhi 6.

Bangali Bhushan Bansal & Co.—116, Chandni Chowk, G.P.O. Box No. 1391, Delhi 6.

Bansal Trading Co.—Tilakbazar, Kharibaoli, Delhi.

Bansidhar Behari Lal.—Gadodia Market, Kharibaoli, Delhi.

Banwari Lal Mool Chand.—Tilakbazar, Kharibaoli, Delhi.

Banwari Lal Shri Ram.—Katra Ishwarbhawan, Delhi.

Bhagwan Das Hari Ram.—Katra Peran, Kharibaoli, Delhi.

Bharat Kirayana Co.—Tilak Bazar, Kharibaoli, Delhi.

Bhatnagar & Co. (P) Ltd.—Post Box No. 1421, 7/26, Daryaganj, Delhi.

Bicha Lal Ranjit Singh.—Katra Ishwarbhawan, Delhi.

Bulaqi Das Madan Mohan.—Tilak Bazar, Kharibaoli, Delhi.

Central Chemicals.—Katra Ishwarbhawan, Kharibaoli, Delhi.

Chuni Lal Ramjas Lal.—Katra Tabacoo, Kharibaoli, Delhi.

Daniram Durga Pershad.—Katra Tabacoo, Kharibaoli, Delhi.

Das & Co.—Katra Ishwarbhawan, Kharibaoli, Delhi.

Devisahai Prabhulal.—Katra Tabacoo, Kharibaoli, Delhi.

Dwarka Pershad Goyal & Co.—Kharibaoli, Delhi.

Fateh Chand Shrikishan.—Tilak Bazar, Kharibaoli, Delhi.

General Chemical Industries.—Tilak Bazar, Kharibaoli, Delhi.

Ghasi Ram Laxmi Narain & Co.—Katra Ishwarbhawan, Kharibaoli, Delhi.

Gian Chand Banwari Lal.—Katra Peran, Kharibaoli, Delhi.

Gopi Ram Jagdish Pershad.—Gali Saraswadi, Naya-Bans, Delhi.

Gulab Singh Gopi Lal.—Katra Tabacoo, Kharibaoli, Delhi.

Gulab Lal Kishori Lal.—Katra Ishwarbhawan, Kharibaoli, Delhi.

Gutti Ram Sukka Nand.—Katra Peran, Kharibaoli, Delhi.

Harbans Singh Om Prakash.—Kharibaoli, Delhi.

Hardwari Lal Amernath.—Katra Ishwarbhawan, Kharibaoli, Delhi.

Hazari Lal Ghasi Ram.—Katra Peran, Kharibaoli, Delhi.

Hindustan Chemical & Industrial Corporation.—Deshbandhugupta Road, Delhi.

Hukam Chand Durga Pershad.—Katra Peran, Kharibaoli, Delhi.

Indo Chemical Co.—Tilak Bazar, Delhi.



Indra Agencies.—H. Block, Connaught Circus, New Delhi.  
 International Chemical Co.—Tilak Bazar, Kharibaoli, Delhi.  
 Inter Trade Corporation.—116, Chandni Chowk, Delhi 6.  
 Jagjit Singh Kuldip Singh.—Gali Chawal-Wali, Kharibaoli, Delhi.  
 Jugal Kishor Mool Chand.—Katra Pedan, Kharibaoli, Delhi. Kirana Merchants & Commission Agents.  
 Kanhaiya Lal & Sons.—Gadodia Market, Kharibaoli, Delhi.  
 Kanhaiya Lal Ram Bilas.—Gadodia Market, Kharibaoli, Delhi.  
 Kanhaiya Lal Ratan Lal.—Tilak Bazar, Kharibaoli, Delhi.  
 Kanwal Trading Co.—Tilak Bazar, Kharibaoli, Delhi.  
 Kanwar Brothers.—Behind State Bank Ltd.—Chandni Chowk, Delhi.  
 Kishan Lal Kuria Mal.—Gadodia Market, Kharibaoli, Delhi.  
 Kora Lal Madan Lal.—Kharibaoli, Delhi.  
 Lota Singh Harnam Singh.—Naya Bans, Kharibaoli, Delhi.  
 Madan Mahan Gulab Chand.—Gadodia Market, Kharibaoli, Delhi.  
 Mannu Lal Narinjan Lal.—Katra Peran, Kharibaoli, Delhi.  
 Manohar Paint Co.—152, Inside Ajmeri Gate, Delhi.  
 Mittal Trading Co.—Tilak Bazar, Kharibaoli, Delhi.  
 Nanak Chand Sita Ram.—Gadodia Market, Kharibaoli, Delhi.  
 Nath Trading Co.—5234, Bara Tooti, Sadar Bazar, Delhi.  
 Niamat Rai Hukam Chand.—Nayabans, Kharibaoli, Delhi.

**PIONEER CHEMICAL CO., THE.—Phatak Habash Khan, Delhi-6; Phone: 224597, Grams: "FINECHEM", Manufacturers & Suppliers of Industrial, Fine & Laboratory Chemicals.**

Prabhat Chemical Co.—Gali Batashan, Kharibaoli, Delhi.  
 Ram Chand Kura Mal.—Katra Tabacoo, Kharibaoli, Delhi.  
 Ram Dhan Mitthan Lal.—Kharibaoli, Delhi.  
 Ram Dhan Yash Pal.—Kharibaoli, Delhi.  
 Ram Lal Ram Narain.—Naya Bans, Delhi.  
 Ram Nath & Sons.—2132, Tilak Bazar, Kharibaoli, Delhi.  
 Ram Rachpal Jai Gopal.—Gadodia Market, Kharibaoli, Delhi.  
 Ram Pratap Suraj Bux.—Katra Tabacoo, Kharibaoli, Delhi.  
 Real Chemical Co.—Kharibaoli, Delhi.  
 Sardari Lal Satpal & Co.—Katra Peran, Kharibaoli, Delhi.

**SCIENTIFIC SUPPLIERS CORPORATION.—Metro Bldg., Mori Gate, Delhi-6; Manufacturers and Dealers in all sorts of Chemicals, Tech. Pure & A. R. Grade, Stains & Solutions; Stockists for BDH, S. Merck, H.P.C. Imported and "Labche" Chemicals; Phone: 223226.**

Sohan Lal Sewa Ram Jaggi.—Gali Hinga Beg, Tilak Bazar, Kharibaoli, Delhi.  
 Suraj Bhan Sultan Chand.—Katra Ishwar Bhawan, Delhi.  
 Suraj Prakash Omprakash.—Gadodia Market, Delhi.

**THREE SONS.—559, Karta Ishwar Bhawan, Kharibaoli, Delhi 6; Dealers in all kinds of Heavy, Light, Fine & Industrial Chemicals used in Sugar, Textile, Paper, Paint & Plastic Industries; Phone: 224326, Resi.: 222724.**

Udho Ram Balkishan Das.—Katra Ishwar Bhawan, Kharibaoli, Delhi.

Vijay Chemical Co.—Tilak Bazar, Kharibaoli, Delhi.  
 Vinodi Lal Gupta.—Katra Ishwar Bhawan, Kharibaoli, Delhi.

Vishwa Nath Krishan Lal.—Katra Ishwar Bhawan, Kharibaoli, Delhi.

## CHEMISTS AND DRUGGISTS

Alemic Distributors (P) Ltd.—Asaf Ali Road, New Delhi.  
 Anand Medicine Co.—Bhagirath Palace, Chandni Chowk, Delhi.  
 Arora & Co.—Mangal Mkt., Bhagirath Palace, Ch. Chowk, Delhi.  
 Ashok Pharmacy.—Prahald Mkt., K. Bagh, New Delhi.

Associated Agencies.—Surgical Mkt., Bhagirath Palace, Ch. Chowk, Delhi.

A. W. & Co.—Chawri Bazar, Delhi.  
 Badhwar & Co.—Bhagirath Palace, Chandni Chowk, Delhi.  
 B. Gopal & Co.—Chandni Chowk, Delhi.  
 Balkishan Kapoor & Co. Ltd.—36, Netaji Subhas Marg, Delhi 6.  
 Bhagwant Singh & Co.—Ajmal Khan Road, Karol Bagh, Delhi.  
 Bhandari Homoeo Stores.—10, Netaji Subhas Marg, Delhi 6.  
 Bharadwaj Medical Stores.—Behind Kumar Talkies, Chandni Chowk, Delhi.

B. J. Madan & Co.—Bhagirath Palace, Ch. Chowk, Delhi.  
 B. Lal & Co.—Bhagirath Palace, Chandni Chowk, Delhi.  
 Blue Bird & Co.—Kashmere Gate, Delhi.  
 British Medical Hall.—Baird Road, New Delhi.  
 British Medical Stores.—Chandni Chowk, Delhi.  
 Budhraj Medical Hall.—Kamala Mkt., Near Ajmeri Gate, New Delhi.

Cauckers.—Daryaganj, Delhi.  
 Chand & Co.—20-A, Bhagirath Palace, Chandni Chowk, Delhi.  
 Chaturbhuj Bros.—45-G, Con. Place, New Delhi.  
 Chawdhary Bros.—Bhagirath Palace, Chandni Chowk, Delhi.  
 Chawla Stores (Regd.).—Sujan Singh Park, New Delhi.  
 Chemico.—Con. Circus, New Delhi.  
 Choir Medical Hall.—Bhagirath Palace, Ch. Chowk, Delhi.

Continental Surgical Emporium.—Bhagirath Palace, Ch. Chowk, Delhi.

Cosmetic Stores P. Ltd.—62, Janpath, New Delhi.

**C. LAL & SONS.—Kashmere Gate, Delhi; also at Jorbagh, and Defence Colony, New Delhi.**

Damodar Singh & Co.—Bhagirath Palace, Chandni Chowk, Delhi.

Dee Jee Stores.—Daryaganj, Delhi.

Delhi Medical Stores.—Fatehpuri, Delhi.

Delhi Pharmaceutical Distributors (P) Ltd.—Bhagirath Palace, Delhi.

Delhi Surgical & Dressings.—Bhagirath Palace, Chandni Chowk, Delhi.

Dey's Medical Stores (P) Ltd.—Faiz Bazar, Daryaganj, Delhi.

Dixit Brother.—Chandni Chowk, Delhi.

Dr. Beli Ram & Sons.—Bhagirath Palace, Chandni Chowk, Delhi.

Dr. Chunilal & Sons.—Baird Road, New Delhi.

Dr. Jai Singh's Sons & Co.—Asaf Ali Road, New Delhi.

Dr. Krishan Chand & Co.—Con. Circus, New Delhi.

Dr. Manghu Lal & Sons.—Paharganj, New Delhi.

Dr. Pritam Singh & Sons.—Subzi Mandi, Delhi.

Dr. Sahib Singh & Sons.—Con. Place, New Delhi.

Dr. Sahib Singh (Agencies).—Asaf Ali Road, New Delhi.

Drug Deal Corporation.—Bhagirath Palace, Chandni Chowk, Delhi.

E. Plomer & Co.—Kashmere Gate, Delhi.

Emarsons.—Kashmere Gate, Delhi.

English Medicine Co.—Subzi Mandi, Delhi.

Gaında Mull Hem Raj.—Parliament Street, New Delhi.

Gaında Mull Walayti Ram.—Con. Circus, New Delhi.

Gora Mal Hari Ram.—Sadar Bazar, Delhi.

Gripo Laboratories.—Bhagirath Palace, Chandni Chowk, Delhi.

Hari Brothers.—Faiz Bazar, Daryaganj, Delhi.

**H. C. SEN & CO.—Dr. H. C. Sen Road, The Fountain, Delhi 6.**

Hero Bros.—Bhagirath Palace, Chandni Chowk, Delhi.

Herbertson (P) Ltd.—Ansari Road, Daryaganj, Delhi.

Hindustan Chemical & Industrial Corpn.—Bajaj Bldg., D. B. Gupta Road, Paharganj, Delhi 1.

Hindustan Trust (P) Ltd.—68, Daryaganj, Delhi.

Indra Trade Agencies.—Connaught Circus, New Delhi.

Industrial Research Laboratories.—14, Mangal Bldg., Bhagirath Palace, Chandni Chowk, Delhi.

Jagjit Brothers.—Salam Bldg., Sadar Bazar, Delhi.

Jagson Pal (P) Ltd.—Raja Akbar Ali Bldg., B-Block, Con. Place, Delhi.

Jamna Das & Co.—Chandni Chowk, Delhi.

J. Mittra & Bros.—Bhagirath Palace, Chandni Chowk, Delhi.

Kaisons.—Chandni Chowk, Delhi.

Kanhyalal Ratan Lal.—Tilak Bazar, Kharibaoli, Delhi.

Kantilal R. Parekh.—Chandni Chowk, Delhi.

Kanwar Bhan & Sons.—Chandni Chowk, Delhi.

Kemp & Co. Ltd.—Kashmere Gate, Delhi.

K. Lal & Co.—Mangal Bldg., Bhagirath Palace, Chandni Chowk, Delhi.

K. Tirath & Co.—Behind State Bank of India, Chandni Chowk, Delhi.

Kumar Brothers.—Bhagirath Palace, Chandni Chowk, Delhi.

Medical Bureau.—Chandni Chowk, Delhi.

Medicine Traders.—Chandni Chowk, Delhi.

Medicura.—Bank St., Karol Bagh, Delhi 5.

Mittra Pharmacy.—Billimaran, Chandni Chowk, Delhi.

M. L. Chopra & Co.—10/B, Bhagirath Palace, Chandni Chowk, Delhi.

M. S. Lakshmi & Sons.—Chandni Chowk, Delhi.

Mohanco Homoeo Optical & Scientific Stores.—D. B. Gupta Road, Delhi 5.

Nand Lal Kohli & Sons.—Karol Bagh, New Delhi.

Narang Medicine Co.—Bhagirath Palace, Chandni Chowk, Delhi.

Narain Dass Bhagwan Dass.—Bhagirath Palace, Delhi.

National Pharmacy.—Bhagirath Palace, Chandni Chowk, Delhi.

National Trade Agency, 5.—Old Hudson Lines, Kingsway, Delhi.

Nayyar & Co.—16, Faiz Bazar, Delhi.

Nectrine Pharmacy.—Bhagirath Palace, Chandni Chowk, Delhi.

Northern Pharmaceutical Agencies.—Asaf Ali Road, New Delhi.

Oberoi Med. & Gen. Stores.—14A/22, W. E. A. Channa Market, Karol Bagh, Delhi 5.

Oriental Surgical Works.—Behind Bhagirath Palace, Chandni Chowk, Delhi.

Pesco.—2962, Gandanala, Mori Gate, Delhi.

Pharmaceutical Agencies.—Behind State Bank of India, Chandni Chowk, Delhi.

Pharmed (P) Ltd.—Mehta Bldg., Asaf Ali Road, New Delhi.

Pioneer Chemical & Biological Agency.—Behind Bhagirath Palace, Chandni Chowk, Delhi 6.

Plomer & Co.—Kashmere Gate, Delhi 6.

Popular Chemists.—2-3, Bengali Market, New Delhi.

Pritam & Co.—Bhagirath Palace, Chandni Chowk, Delhi.

Public Medical Stores.—Bank Street, Karol Bagh, New Delhi.

Punjab Drug House.—62, Punchkuin Road, New Delhi.

R. Chandra & Co.—Mahalaxmi Market, Bhagirath Palace, Delhi.

Radicura & Co.—Fatehpuri, Chandni Chowk, Delhi.

Rajaram & Co.—22A, Khan Market, Delhi 11.

Rama Medical Stores.—Shankar Market, Con. Place, New Delhi.



Reliance Surgical Emporium Mangal Bldg.—Bhagirath Palace, Delhi.  
 Ram Nath & Sons.—Tilak Bazar, Khari Baoli, Delhi.  
 Rameshwar Das Rattan Lal.—Bajaj Bldg., D. B. Gupta Road, Delhi 1.

Ratan Lal & Co.—Chandni Chowk, Delhi.  
 Ravison Pharmaceutical (I) Pvt. Ltd.—Asaf Ali Road, New Delhi.  
 Rose & Co.—Mori Gate, Delhi.

Sabharwal Medical Stores.—Bhagirath Place, Delhi.  
 Sandersons.—17-A, Khan Mkt., New Delhi.  
 Sales Promoters.—2190, Masjid Khajur, Delhi.  
 Satish & Co.—Chawri Bazar, Delhi.  
 Sawhney Brothers.—5-East Patel Nagar, New Delhi.

S. L. Bali & Sons.—Fatehpuri, Chandni Chowk, Delhi.

Sohan Lal & Sons.—Bhagirath Palace, Delhi.

Standard Pharmacy.—Bhagirath Palace, Delhi.

Subhash Trading Co.—Bhagirath Palace, Delhi.

Sukh Dayal Hanam Das.—Subzi Mandi, Delhi.

Swastik Pharmacy.—13/18, Afzal Khan Road, Delhi 5.

Twin Brothers.—Bhagirath Palace, Delhi.

Union Products Corporation.—Behind Bhagirath Palace, Delhi.

United Pharmacy.—55, P. Kuin Road, Delhi 1.

Universal Medicine Co.—Hauz Qazi, Delhi.

V. Sharma & Co.—Bhagirath Palace, Delhi.

Vohra Medicines.—Mahalaxmi Mkt., Bhagirath Palace, Delhi.

Wadhawan Brothers.—Bhagirath Palace, Delhi.

Western Health Stores.—7A/5, Kanshiram Market, Delhi 5.

Yamuna Chemists.—Lodi Road, New Delhi.

Young Friends & Co.—Con. Place, New Delhi.

### CINEMA MACHINERY

WESTREX CO.—(Prop.) Cinerama Pvt. Ltd., Brampton Road, Kashmere Gate (Near Minerva Cinema), Delhi.

### CLEARING & FORWARDING AGENTS

OTA INDIA.—Clearing, Shipping & Stevedoring, K/36, Connaught Circus, New Delhi. Phone: 43799, Grams: "OTAIND".  
 Central Office: 159, Colaba Road, Bombay 5 (Phone: 212602).  
 Grams: "CENOTA"; Branches: Bombay (Phone: 254772, 256592), Calcutta (Phone: 236781-2), Kandla (Phone: 2145—Gandhidham).

### COAL

ALLIED COAL AGENCY.—Coal Merchants and Colliery Agents, Suppliers of Steam Coal, Slack Coal, Soft-Coke & Hard-Coke; 1, Rani Jhansi Road, New Delhi-1; Offices at Calcutta, Jharla, Kanpur; Phone: 275171, 277645, 77427; Grams: "COLINK".

S. K. KAHANSONS & CO.—N-41, Connaught Circus, New Delhi-1; Coal Merchants and Colliery owners; Suppliers of Steam Coal, Dust Coal, Soft Coke, Hard Coke etc.; Grams: "KAHANSONS", Phone: 48283, 261602.

### COMMUNICATIONS TEST EQUIPMENTS

ASSOCIATED INSTRUMENTS MANUFACTURERS (INDIA) PRIVATE LTD.—Sun Light Insurance Bldg., 26-27, Asaf Ali Road, New Delhi; Grams: "AIMILDEL." Phone: 271236.

### CONDUIT PIPES

G. F. R. Co.—Bara Hindu Rao Road, Delhi.  
 Hindustan Industries.—4031, Chawri Bazar, Delhi 6.  
 Kumar Bros., Sheet & Metal Works.—13, Hathi Khanna, Bahadurgarh Road, Delhi.  
 National Conduits Ltd.—Kashmere Gate, Delhi.

### CONFECTIONERY MFRS. & DEALERS

Ahuja Brothers.—Gondhi Wali Gate, Fatehpuri Masjid, Delhi.  
 B. R. Prakash Confectionery Works.—Katra Bariyan, Delhi.  
 Britannia Biscuit Co.—Rambagh Road, Delhi 6.  
 Calcutta Confectionery Works.—Mohalla Dhotram, Farash Khana, Delhi.  
 Cheap Biscuit Manufacturing Co.—Lajpat Rai Market, Delhi.  
 Delhi Biscuit Co., Ltd.—Ram Bagh Road, Delhi.  
 Fancy Biscuit Co.—Subzi Mandi, Delhi.  
 Gupta Biscuit Factory.—Kingsway Camp, Delhi.  
 Hindustan Confectionery Works.—Lal Kuan, Delhi.  
 J. B. Mangharam & Co.—Fatehpuri, Delhi 6.  
 National Peppermint Products.—Original Road, Paharganj, New Delhi.  
 Punjab Biscuit Factory.—Bahadurgarh Road, Delhi.  
 Punjab Confectionery Works.—Motla Khan, Delhi.  
 Reliance Confectionery Works.—Bazar Churiwalan, Delhi.  
 Shakti Confectionery Works.—Phatak Habash Khan, Delhi.  
 Sunlight Confectionery Works.—Roshanara Road, Delhi.

### CONSTRUCTION EQUIPMENTS

PREM NATH DIESELS PRIVATE LTD.—8, Scindia House, New Delhi. Phone: 45891, Grams: "PREMDIESEL."

### CORRUGATED BOX MFRS.

INDIA BOX & CARTON MAKERS.—2322, Teliwara (Rui Mandi), Delhi-6; Phone: Office: 223635, Resl.: 222661.

### COSMETIC MANUFACTURERS

Calcutta Perfumery Works.—Chandni Chowk, Delhi.  
 Cupid Chemical & Toilet Products (India).—P. Box 2519, New Delhi 5.  
 DELUX PUBLICITY SERVICE.—1795, Sohan Ganj, Delux Building, Subzi Mandi, Delhi-7.  
 Dulax Mfg. Corp.—Block 15-K, Shorakothi, Subzimandi, Delhi 6.  
 Frontier Perfumery Works (Regd.).—Bartan Market, Sadar Bazar, Delhi 6.  
 Harnarain Gopinath.—Khari Baoli, Delhi.  
 Kashmir Perfumery Works.—Qutab Road, Delhi 6.  
 Neece Perfumery Works.—Vishnu Bazar, Cloth Market, Delhi 6.  
 Selco Chemicals.—3, Jailal Bldg., Paharganj Lane, New Delhi.  
 Sham Perfumery Works.—37, Rajinder Market, Tis Hazari, Delhi.  
 Universal Perfumery Co.—Nai Basti, Bara Hindu Rao, Delhi 6.  
 Veena Perfumery Co.—Fatehpuri, Delhi 6.  
 Virmani Industries Ltd.—Najafgarh Road, New Delhi 20.

### CROCKERY

Bawa Glass & Crockerles Private Ltd.—Chandni Chowk, Delhi 6.  
 Hitkari Brothers.—3, N. Subhas Marg, Delhi 6.  
 Sri Krishna Engineering Works.—5037, Paharganj, 6, Tooti, New Delhi.

### CYCLE & CYCLE ACCESSORIES MFRS. & DEALERS

Accurate Cycle Industries.—284, New Lajpat Rai Market, Delhi.  
 Ahuja Cycle Mart.—Esplanade Road, Delhi.  
 Airfly Cycle Industries.—New Lajpat Rai Market, Delhi.  
 Airlite Industries.—35/4, Shankar Road, New Delhi 5.  
 A. K. Cycle Industries.—84, Chandni Chowk, Delhi 6.  
 Armour Cycle Industries.—47, Ram Nagar, Delhi 1.  
 Ashoka Trading Co.—392, Esplanade Road, Delhi 6.  
 Associated Agencies.—George Bldg., Qutab Road, Delhi 6.  
 Arora Brothers.—178-D, Kamla Nagar, Delhi 6.  
 Bal Cycle Stores.—465, Esplanade Road, Delhi 6.  
 Bestways & Co.—Outside Moti Cinema, Chandni Chowk, Delhi.  
 Bhai Dipchand & Sons.—24, Esplanade Road, Delhi 6.  
 Bhalla Cycle Co.—Esplanade Road, Delhi.  
 Bhandari & Bros.—B. N., Esplanade Road, Delhi 6.  
 Bhatia Bros.—54, Esplanade Road, Delhi 6.  
 Bhatia & Co.—20, Esplanade Road, Delhi 6.  
 Bindra Cycle Co.—7A, Esplanade Road, Delhi 6.  
 Bombay & Calcutta Cycle Co.—278, Esplanade Road, Delhi.  
 Champion Industries (India), 46/47, Esplanade Road, Delhi 6.  
 Chhani Industries.—48, Najafgarh Road, New Delhi.  
 Chopra Industries.—Katra Burhailan, Delhi.  
 Chuni Lal & Co.—470, Esplanade Road, Delhi 6.  
 C. L. Sachdev & Co.—Esplanade Road, Delhi 6.  
 Continental Cycle Importing Co.—Esplanade Road, Delhi.  
 Cycle & Gramophone Stores.—47, Esplanade Road, Delhi 6.  
 Dass & Co.—26, Esplanade Road, Delhi 6.  
 Delhi Cycle Importing Co.—272, Esplanade Road, Delhi 6.  
 Delhi Motor & Cycle Co.—48, Queensway, New Delhi.  
 Desh Brothers.—Esplanade Road, Delhi 6.  
 Elite Cycle Industries.—57, Amrit Kaur Market, Paharganj, New Delhi.  
 Gorick Cycle Agency.—479, Esplanade Road, Delhi 6.  
 H. D. Kapoor & Sons.—3556, Qutab Road, Delhi 6.  
 H. P. Bhalla & Co.—Esplanade Road, Delhi 6.  
 H. R. Bhalla & Sons.—Netaji Subhas Marg, Delhi 6.  
 H. S. Ahuja & Co.—10 Gurdwara Road, Delhi 5.  
 Hans Raj & Sons.—28, Esplanade Road, Delhi 6.  
 Hansraj Gupta & Co. P. Ltd.—69, Chawri Bazar, Delhi.  
 Hemchand & Sons.—Jama Masjid Area, Delhi.  
 Hindustan Chains (Pvt.) Ltd.—20/1, Asaf Ali Road, New Delhi 1; Phones: 273142, 273643; Grams: "DEECHAINS"—Ghaziabad; Manufacturers of Bicycle Chains, Parts and Aluminium Utensils; Head Office & Factory: G. T. Road, P. O. Pasaulunda, Ghaziabad (U.P.), India; Managing Director Gopal Dass Aggarwal.  
 Hindustan Cycle Accessories Mfg. Co.—12, Fort View Hotel, Esplanade Road, Delhi 6.  
 Imperial Cycle Mart.—Esplanade Road, Delhi.  
 Imperial Cycle & Motor Co.—Fountain Area, Chandni Chowk, Delhi.  
 Indian Cycle & Wire Industries.—30, D.L.F., Industrial Area, New Delhi 15.  
 Indian Trading Corporation.—69, Najafgarh Road, Industrial Area, New Delhi 15.  
 Jagat Ram & Sons.—Qutab Road, Delhi 6.  
 Jankidas & Co.—23F, Connaught Place, New Delhi.  
 Janta Industries.—Ansari Road, Daryaganj, Delhi 7.  
 Jaranwala Electric & Cycle Works.—Esplanade Road, Delhi 6.



Jiwanlal & Co.—Dariba Kurd, Chandni Chowk, Pharutawall Gali, Delhi.

Kallash Stores.—Punchquin Road, Bhagirath Malls Building, New Delhi.

Kalaso & Co., P. D.—47, Chandni Chowk, Delhi 6.

Kalian Singh Nayar & Sons.—Ara Kashan Road, Ram Nagar, Delhi 1.

Kanahal Cycle Trading Co.—Esplanade Road, Delhi.

Kapur Brothers.—Behind State Bank, Chandni Chowk, Delhi.

Karam Chand & Sons.—355, N. Lajpat Rai Market, Delhi 6.

Kathuria Brothers.—33, Esplanade Road, Delhi 6.

Khanna Cycle Co.—Raj Guru Road, Paharganj, New Delhi.

Kohli Brothers.—Esplanade Road, Delhi.

Khyber Cycle Mart.—Esplanade Road, Delhi.

Krishna & Co.—19, Esplanade Road, Delhi 6.

Krishna Padcover Industries.—783/7, Gandhi Nagar, Delhi.

Kumar Cycle Works.—Esplanade Road, Delhi.

Loco Cycle Industries.—Pleasure Garden Road, Delhi 6.

Malhotra Bros.—Esplanade Road, Delhi 6.

Matchless Industries of India.—8/A, Esplanade Road, Delhi 6.

Mehta Motor and Cycle Works.—407, Esplanade Road, Delhi.

Metro Cycle Co.—21A, Esplanade Road, Delhi 6.

M. R. Malhotra & Co. of Jhelum.—Fountain Area, Chandni Chowk, Delhi.

Munjal Brothers.—Esplanade Road, Delhi.

N. M. Kishan & Co.—Esplanade Road, Delhi 6.

Narayan Behari & Co.—696, Nanghara, Kinari Bazar, Delhi 6.

National Cycle & Motor Co.—21, Esplanade Road, Delhi 6.

National Cycle Co.—Subzi Mandi, Delhi.

National Cycle Mart.—Esplanade Road, Delhi.

National Cycle Works.—Esplanade Road, Delhi.

National Trading Co. of Delhi.—Kutab Road, Delhi 6.

Navrang Trading Corp.—New Lajpat Rai Market, Delhi.

Nawal Kishore & Son.—9, Esplanade Road, Delhi.

Nawalon Industries.—Najafgarh Road, New Delhi 15.

New Capital Traders.—1/E/1893, Chandni Chowk, Opp. Dariba Kalan, Delhi 6.

New Delhi Cycle Mart.—Connaught Place, New Delhi.

New Era Engineering Co.—26, D.L.F. Indtl. Coly., Najafgarh Road, New Delhi 15.

New India Cycle Industries.—38, Esplanade Road, Delhi 6.

Northern India Cycle Agency.—1477, Chandni Chowk, Delhi 6.

N. Kishore & Co.—Esplanade Road, Delhi 6.

Ojas Industries.—690, Fatehpuri, Delhi.

Oriental Industries Corp.—XV-10-59, Original Road, Delhi 6.

Overland Cycle Industries.—78/78, Qutab Road, Delhi.

Paramount Industries Corp.—Radio Colony, Delhi.

Pearl Cycle Industries Ltd.—11/3, Asaf Ali Road, New Delhi.

Pindi Cycle Agency.—Esplanade Road, Delhi.

Premier Industries.—New Lajpat Rai Market, Delhi.

Punjab Cycle Parts Co.—18, Esplanade Road, Delhi 6.

Puri Brothers.—498, Bulaqi Begum, Esplanade Road, Delhi 6.

Racmann Koshatkinn Ltd.—3429, Hakim Baqa Street, Hauz Qazi, Delhi.

Rajdhani Traders.—New Lajpat Rai Market, Delhi.

Rama Cycle Stores.—Ram Dawara Road, Paharganj, New Delhi.

Ram Eashwar & Co.—11, Esplanade Road, Delhi 6.

Ramji Dass Sharma & Bros.—Qutab Road, Delhi 6.

Ram Kumar & Co.—27A, Esplanade Road, Delhi 6.

Rampur Engineering Co. Ltd.—Ajmeri Gate, Delhi 6.

Republic Cycle Industries.—17/19, N. Rohtak Road, Delhi 5.

Royal Cycle Industries.—Esplanade Road, Delhi.

Rubber India Corporation.—16, Daryaganj, Delhi 6.

Ruby Cycle & Accessories Mfg. Co.—36, D.L.F. Indtl. Area, Najafgarh Road, New Delhi 15.

Sardar Cycle & Motor Co.—Chandni Chowk, Delhi 6.

Satish Cycle Industries.—Kucha Bulaqi Begum, Delhi.

Sethi & Co.—Queen's Road, Nahar Sadat Khan, Delhi.

Sham Lal & Sons.—33B, Pleasure Garden Market, Delhi 6.

Shankerlal & Sons P. Ltd.—487, Esplanade Road, Delhi 6.

Sharma Motor Cycle Co.—Hamilton Road, Delhi.

Simplex Trading Corp.—25, Esplanade Road, Delhi 6.

S. S. Cycle Industries.—69, Najafgarh Road, New Delhi 15.

S. S. Trading Corp.—Lajpat Rai Market, Delhi.

Star Cycle Co.—2737, W. Patel Nagar, New Delhi 12.

Surisons Industries.—Esplanade Road, Delhi.

T. C. Khosla & Co.—Esplanade Road, Delhi.

T. I. Cycles of India Ltd.—9-10/3, Asaf Ali Road, New Delhi.

United Traders.—Esplanade Road, Delhi.

Universal Cycle Industry.—24, Industrial Estate, Okhla, New Delhi 19.

Venus Cycle Industries.—M. M. Road, New Delhi.

Virmani Cycle House.—Clock Tower, S. Mandi, Delhi 6.

Vijay Traders.—533/39 Esplanade Road, Delhi.

Vohra Cycle Industries.—New Lajpat Rai Market, Delhi.

Wearwell Cycle Co. (I) Ltd., The.—46M, Connaught Circus, New Delhi. Factory : Faridabad (PL). Phone : 57.

Zenith Cycle Industries.—9, Faiz Bazar, Delhi 7.

## DATA PROCESSING EQUIPMENTS

### INTERNATIONAL COMPUTERS AND TABULATORS (INDIA) PRIVATE LTD.,

Jeevan Tara Bldg., 5, Parliament Street, New Delhi;  
Hollerith and Powers Samas Punched Card Equipment  
and Electronic Computers.  
Phones: 48807, 48808.

## DIESEL ENGINES & SPARE PARTS

Hind Engineering Co.—57, G. B. Road, Delhi 1.

JAI BHARAT TRADING CO.—Naya Bazar & Mori Gate,  
Delhi 6. Phone : 224686. Grams : "ENGPURZA."

Kriros P. Ltd.—173, Kamla Market, New Delhi.

Larsen & Toubro Ltd.—Express Bldg., Mathura Road, New Delhi.  
Machines & Spares (India) Ltd.—73, G. B. Road, Delhi.

Nav Bharat Engineering Co.—110, Naya Bazar, Delhi 6.

PREM NATH DIESELS PRIVATE LTD.—8, Scindia House, New  
Delhi. Phone: 45891. Grams: "PREMDIESEL".

S. D. Nanda & Sons.—Japan Building, 56, G. B. Road, Delhi 6.

Shiv Narain Sawhney.—53, Japan Building, (5407-8) G. B. Road,  
Delhi 6.

## DRUMS AND CONTAINER MANUFACTURERS

G.M.C. HIMCO INDUSTRIES LTD.—Regd. Office: Tin Print-  
ing Bldg., Subzi Mandi, Delhi-7; Phone: 225645, Grams:  
"GEMHIMCO." Manufacturers of Plain & Decorated Tin  
Containers, Tin Posters, Drums, Steel Kegs, Light Sheet  
Metal goods, Pilferproof Caps, Founders and Makers of  
Agricultural and other industrial Machinery; Branches:  
Delhi & Faridabad.

## DYES & CHEMICALS DEALERS, AGENTS & DISTRIBUTORS

Ambapershad Jadavji & Co.—Tobacco Katra, Delhi.

Amritlal & Co. (P) Ltd.—Jamna Bldg., D. A. G. Extension, Delhi.

Anant Bhandar.—Tilak Bazar, Delhi.

Bakhtawarmal Ramkishan Dass.—Tobacco Katra, Delhi 6.

Bhagwanlal Tejaaji Kharawala & Co.—Katra Ishwar Bhawan, Delhi.

Bhatia Colour Co.—Tilak Bazar, Delhi.

Bombay Trading Co.—Tilak Bazar, Delhi.

Chandra Bhan Dwarkadas.—Tis Hazari, Delhi.

Chimanlal M. Shah.—Tilak Bazar, Delhi.

Chunilal & Sons.—Tilak Bazar, Delhi.

D. B. Kapoor & Co.—Tilak Bazar, Delhi.

D. Bagga & Co.—Tilak Bazar, Delhi 6.

Dwarkadas Laxminarain.—Tobacco Katra, Delhi.

Fedco. P. Ltd.—3711-14, N. Subhas Marg, Delhi 6.

Gulabrai Keshoram & Co.—Katra Ishwar Bhawan, Delhi.

Harbhagwan Rangwala.—Tobacco Katra, Delhi.

Harjimal Ramdas.—Tilak Bazar, Delhi.

Harshad & Co.—Katra Lachhusingh, Fountain, Delhi.

Hind Dyes Sales Corporation.—Tobacco Katra, Delhi.

Jagannath Rangwala.—Tilak Bazar, Delhi.

Jagdamba Industrial Corporation.—Tobacco Katra, Delhi.

Kanihyalal Omperkash.—Tilak Bazar, Delhi.

Khatau Vallabhdas & Co.—Tobacco Katra, Delhi.

Krishna Colour Co.—Tilak Bazar, Delhi.

Nathumal Desraj.—Tobacco Katra, Delhi.

National Colour Co.—Tilak Bazar, Delhi.

NORTHERN INDIA COLOUR CO.—Selling Agents, The Atul  
Products Ltd., Bulsar for Northern India, 199/200, Cloth  
Market, Delhi; Branches: Amritsar, Kanpur, Ludhiana.

Omperkash & Sons.—Tilak Bazar, Delhi.

Ramdhani & Sons.—Tilak Bazar, Delhi.

Ratilal Naraindas Gami.—Tobacco Katra, Delhi.

Salekchand Balak Ram.—Sadar Bazar, Delhi.

Shuganchand Murarilal.—Tobacco Katra, Delhi.

Sindh Colour Mart.—Sadar Bazar, Delhi.

S. S. Jain & Co. Pvt. Ltd.—Tilak Bazar, Delhi.

TRIVEDI & CO.—Kashmiri Gate, Delhi 6; Dealers in German  
Dyes, heavy chemicals and Electrical goods.

Union Products Corporation.—1704, Yogdhyan Colony, Chandni  
Chowk, Delhi 6.

V. W. Khatawaley & Sons.—Naya Bazar, Delhi.



**DYE-STUFF MANUFACTURERS**

Anant Chemical Industries.—Tilak Bazar, Delhi 6.  
 Bhatia Industries.—Tilak Bazar, Delhi 6.  
 Ciba Dyes P. Ltd.—D.A.G. Extension, New Delhi.  
 Jagdamba Industrial Corporation.—Tobacco Katra, Delhi 6.  
 National Chemical Industries.—26, Najafgarh Road, New Delhi.  
 Sukhanand Shankerlal Jain & Co. P. Ltd.—Tilak Bazar, Delhi 6.

**EARTHMOVING & MATERIAL HANDLING EQUIPMENTS**

JAI BHARAT TRADING CO.—Naya Bazar & Mori Gate, Delhi 6. Phone : 224686. Grams : "ENGPURZA."

**EDUCATIONAL APPARATUS & TEACHING AIDS**

NURSERY SCHOOL & HOME EQUIPMENT CO., THE.—Gandhi Motor Market, Opp. Minerva Cinema, Kashmere Gate, P.O. Box No. 1419, Delhi 6. Phone : 226118 & 261775.

**ELECTRIC FANS**

Central India Electric Works.—Ajmal Khan Road, Karolbagh, New Delhi 5.  
 Ditz Electricals (India) Ltd.—Roopnagar, Subzimandi, Delhi.  
**GANESH FLOUR MILLS CO. LTD.**—(Unit: Ganesh Electricals), 64-65, Industrial Area, Najafgarh Road, New Delhi 15. Phone : 57181-57185.  
 Hansraj Gupta & Co. Pvt. Ltd.—69, Chawri Bazar, Delhi.  
 Hari Trading Corpn.—1369, Kashmere Gate, Delhi 6.  
 Himalaya Electric Fan Mfg. Co.—Mori Gate, Delhi.  
 Kassels Ltd.—Subzimandi, Delhi 6.  
 Matchwel Electricals (India) Ltd.—4/11, Asaf Ali Road, Post Box No. 156, New Delhi.  
 Raghu Engineering Works, Ltd.—5, Daryaganj, Delhi.  
 Rampur Engineering Works Ltd.—Ajmeri Gate, Delhi 6.

**ELECTRIC HEATING ELEMENTS**

**BHARAT ELECTRICAL (SALES)**—9, Netaji Subhas Marg, Delhi-6; All India Distributors for Escorts Eltra Tubular Heating Elements Oil, Water, Acids and Chemicals; Made in Collaboration with Eltra K. G. of Germany; Phone : 274353.

**ELECTRIC HORNS**

**ACME BATTERIES PVT. LTD.**—1/485 G. T. Road, Delhi Shahdara, Leading Manufacturers of ACME Electric Horns and Motor Batteries; Phone : 212272 & 212730. Sales Depot—Kashmere Gate, Delhi; Phone : 223437; Resl.: Shri A. R. Suri, Phone : 212272 & 212851, Shri R. G. Suri, Phone : 75282.

**ELECTRIC MOTORS**

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Delite Cinema Bldg., New Delhi; Importers, Exporters, Engineers and Manufacturers. Phone : 277901.

**GAUTAM ELECTRIC MOTORS P. LTD.**—42, Okhla Indl. Estate, New Delhi-20; Mfrs. of 'GEM' A. C. Electric Motors from Fractional to 50 H.P., Grinders, Monoblock Pumps. Grams : "GEMELECT"; Selling Agents : Phone : 74236/7 for Northern India—The East Asiatic Co. (I) Pvt. Ltd., New Delhi; Phone : 277901 for West Bengal—Francis Klein & Co. (P) Ltd., Calcutta; Phone : 224621/32 for South & Western India—East Asiatic Co. (I) Pvt. Ltd., Bombay, Phone : 262711.

**JYOTI CALOR-EMAG LIMITED**—Baroda-3; Phone : 8238, Grams : 'JYOTICALOR'; Sole Selling Agents of Jyoti Electric Motors and Jyoti Calor-Emag Starters, Circuit Breakers, Switchboards and Power Control Gear Other Branches : Bombay, Calcutta, Madras, Secunderabad, Jaipur.

Kartar Singh & Co.—Paharganj Road, New Delhi.  
 Pearey Lal & Sons (East Punjab) P. Ltd.—21-A, Windsor Place, Janpath, New Delhi 1.  
 Rampur Engineering Co., Ltd.—Ajmeri Gate, Delhi 6.

**ELECTRIC MOTORS, GENERATORS & SETS**

**JYOTI LTD.**—Baroda-3; Phone : 8352-3-4, Grams : "JYOTI-PUMPS"; 50, Hanuman Road, New Delhi; Mfrs. of Vertical Turbine Pumps, Centrifugal Pumps, Chemical Pumps, Electric Motors, Synchronous Generators, Hydro-Electric Generating Units, Starters, Circuit Breakers and Switchboards; Other Branches : Bombay, New Delhi, Calcutta, Madras, Secunderabad, Jaipur.

**ELECTRIC SWITCHBOARD MFRS.**

**JYOTI CALOR-EMAG LTD.**—Baroda-3; Phone : 8238, Grams : 'JYOTICALOR'; Sole Selling Agents for Jyoti Electric Motors and Jyoti Calor-Emag Starters, Circuit Breakers, Switchboards and Power Control gear; Other Branches : Bombay, Calcutta, Madras, Secunderabad, Jaipur.

**ELECTRIC WIRES & CABLES**

**B. I. ELECTRIC CO.**—1842, Electrical Market, Delhi-6; Authorised Stockists, "SIEMENS". Tropodur Wires, Electric Motors, Switchgears & Starters, I.C.C., Nicco, Henley Wires & Cables, H.T./L.T. Cables, Fans, Lamps, Tubes & Fittings, Power Correction Capacitors, Measuring & Testing equipments, Cable glands, Welding Cable & other Electrical goods of Domestic & Industrial use; Phone : Office : 263772, Resl. : 263469.

**G. S. SALES CORPORATION.**—Hauz Qazi, Delhi-6; "Britex" & "Rekord" Brands PVC Insulated Wires and Cables; Flexibles, House Wirings, Auto Cables, Aerial Wire; Phone : 261904, 265554.

**ELECTRICAL AND MECHANICAL ENGINEERS AND DEALERS IN ELECTRIC GOODS**

Acme Electric Co.—24, Prem House, Connaught Place, New Delhi.  
 A. N. Ramji Dass & Co.—7/36, Daryaganj, Delhi 6.  
 Agarwal Traders.—2304, Tram Terminus, Subzimandi, Delhi 6.  
 Aggarwal Electric Works.—3337 Bank St., Karol Bagh, Delhi 5.  
 Allianz Elec. & Radio Co.—Chandni Chowk, Delhi 6.  
 Arora Electric Co.—209, Dariba Kalan, Delhi 6.  
 Associated Electrical Industries India Pvt. Ltd.—United India Bldg., Connaught Place, New Delhi.  
 B. Datt & Sons.—4356, Main Bazar, Paharganj, New Delhi 1.  
 B. Pannalal P. Ltd.—13/14, Asaf Ali Road, New Delhi 1.

**BAJAJ ELECTRICALS LTD.**—10/1, Asaf Ali Road, New Delhi; Electrical Engineers, Manufacturers and Contractors. Phone: 272056. Grams: "SOFTLITE". Head Office at Bombay.

Balbir Bros., H. S.—A-14, Partap Bagh, Delhi 6.  
 Balmer Lawrie & Co. Ltd.—1/5-B, Asaf Ali Road, New Delhi.  
 Banarsi Dass Engg. Co.—4124, Naya Bazar, Delhi 6.  
 Basant Pran & Co.—6, East S. Thana Road, Delhi 6.  
 Best Electric Co.—Connaught Circus, New Delhi 1.  
 Bhagwan Singh & Sons.—Connaught Place, New Delhi 1.  
 Bhalla Electric Co.—Palvarganj, New Delhi.  
 Bhim Sain Sapra & Sons.—7728, New Market, Karol Bagh, Delhi 6.  
 Bhushan Brothers.—Krishna Niwas, S. Thana Road, Delhi 6.  
 Brady, W. H. & Co., Ltd.—Indra Palace, Connaught Circus, New Delhi.  
 C. R. E. Wood & Co. Ltd.—5/13B, Asaf Ali Road, New Delhi 1.  
 Central Electric Stores.—298, Dariba Kalan, Delhi 6.  
 Champion Electric Engg. Works.—Chandni Chowk, Delhi 6.  
 Commercial Electric Works.—Chandni Chowk, Delhi.

Dass & Co.—Chandni Chowk, Delhi 6.  
 Eastern Electric & Trading Co.—17E, Connaught Place, New Delhi 1.  
 Electrical Equipment Co.—113, G. Links, New Delhi 3.  
 Electrical Machines Corpn. Ltd.—4/11, Asaf Ali Road, New Delhi 1.  
 Electric Trading Co. P. Ltd.—1831, Chandni Chowk, Delhi 6.  
 Expert Electric & Radio Co.—Chandni Chowk, Delhi 6.  
 F. & C. Osler (India) Ltd.—Scindia House, Queensway, New Delhi.  
 Friends & Co.—959 Kucha Ruhalla Khan, Daryaganj, Delhi 6.  
 G. E. C. (India) Pvt. Ltd.—Connaught House, Connaught Place, New Delhi.  
 G. D. Seigell & Co. P. Ltd.—Church Road, Kashmere Gate, Delhi 6.  
 General Electric Works.—17, Faiz Bazar, Delhi 7.  
 Globe Engineering Corpn.—1697, A. Samaj Road, Karol Bagh, Delhi 5.  
 Gupta Electric Co.—4/1, Regal Bldgs., New Delhi 1.  
 Havell's Electrical (Sales) Corpn.—1/21, Asaf Ali Road, New Delhi.  
 Hindustan Electric Co., Ltd.—78, Sunder Nagar, New Delhi 1.  
 Indian Cable Co., Ltd.—9-A, Connaught Place, New Delhi.

**INDIAN ENGINEERING CO.**—18, Pusa Road, New Delhi 5. Phone: 52876; Grams: "ARGIKE", also at Bombay, Calcutta, Madras and Bangalore.

Indian Trading Co. P. Ltd.—1903, Chandni Chowk, Delhi 6.  
 Jindal & Sons P. Ltd.—9B, Asaf Ali Road, New Delhi.

**JYOTI LTD.**—Baroda-3; Phone : 8352-3-4; Grams : "JYOTI-PUMPS"; 50, Hanuman Road, New Delhi; Mfrs. of Vertical Turbine Pumps, Centrifugal Pumps, Chemical Pumps, Electric Motors, Synchronous Generators, Hydro-Electric Generating Units, Starters, Circuit Breakers and Switchboards; other Branches : Bombay, New Delhi, Calcutta, Madras, Secunderabad, Jaipur.

Joti Sarup Goela & Son.—15-L, Connaught Circus, New Delhi.



### Kamanis in the Service of the Nation.

Transmission Line Towers, Track Structures, Sub-Station Structures, Aerial Masts, Kamani-Twose 'Tractamount' Road Rollers and 'Jaipur' House Service Meters.

**KAMANI ENGINEERING CORPORATION LTD.,  
JAIPUR METALS & ELECTRICALS LTD.,**

United India Bldg., F-Block, Connaught Place, New Delhi-1.

Phone: 45055.

Kanwar Refrigerators (India).—M45/1, Connaught Circus, New Delhi 1.

**KAYCEE INDUSTRIES LTD.**—10/1, Asaf Ali Road, New Delhi; Agents for Hind Rectifiers Ltd., Mfrs. of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-chemical Industries; "Kaycee" Rotary, Toggle, Heat Control and Airconditioner Switches, "Kaycee" Domestic and bulk type water meters. H.O. Kamani Chambers, Nicol Road, Ballard Estate, Bombay, Phone: 263521, Grams: "TURNRITE"; Branches: Calcutta, Madras & Kanpur.

**KAYDEE ELECTRIC TRADING CO.**—Nicholson Road, Delhi 6. Phone: 227640; Grams: "KETCO-DELHI"; Approved Suppliers of all kinds of Electrical and Hardware goods; Specialists in Porcelain High Tension and Low Tension Insulators.

Kehar Singh & Sons.—21-A, Connaught Place, New Delhi 1.

Matchwel Electrics (India) Ltd.—Ramjas Building, 4/11, Asaf Ali Road, P.O. Box No. 156, New Delhi.

Mechelec Suppliers.—A-14/3, Asaf Ali Road, New Delhi 1.

Metro Electric & Radio Corp.—12-A, Khan Market, New Delhi 11.

Modi & Co.—Dariba Kalan, Delhi 6.

Moti Electric Industries.—15A, Najafgarh Road, New Delhi 15.

Motwane P. Ltd.—68, Janpath, New Delhi 1.

National Conduits P. Ltd.—Kashmere Gate, Delhi 6.

Paragon Electric Co.—6/90, Connaught Circus, New Delhi 1.

Parkash Electricals.—91H, Connaught Circus, New Delhi 1.

Partap Chand & Co.—14A/41, W.E.A., New Delhi 5.

Paul Radio & Electric Corporation.—132, Sadar Bazar, Delhi 6.

Prem Brothers.—73, G. B. Road, Delhi 6.

Prem Electric Co.—Chowk Multani Dhanda, Paharganj, Delhi 1.

Rampur Engg. Co. Ltd.—Ajmeri Gate, Delhi 6.

S. K. Singh & Co.—25/41A, Connaught, Place, New Delhi.

Sachdev Bros.—10L, Connaught Circus, New Delhi 1.

Shalamar Electric Co.—Chandni Chowk, Delhi 6.

Sharma Sharma & Sons.—Naya Bazar, Delhi 6.

Shree Nursingsahay Mudan Gopal Electric Co. P. Ltd.—Behind Kumar Talkies, Chandni Chowk, Delhi 6.

Sohanson Electric Co.—1072, Patharwala Kuan, Karol Bagh, Delhi 5.

Standard Electric Trading Co.—Chandni Chowk, Delhi 6.

Standard Radio & Elec. Co.—Opp. Scindia House, Connaught Circus, New Delhi 1.

Sterling Electrical Traders Corp. P. Ltd.—1/8B, Jindal Trust Bldg., Asaf Ali Road, New Delhi 1.

Superior Electric Co.—17, Netaji Subhash Marg, Delhi 6.

Swastik Cables.—2545, Tiraha Behram Khan, Delhi 6.

Telefute Radio Electronics.—4/19, E. Patel Nagar, New Delhi 12.

Television Radio Elec. Co.—Main Bazar, Paharganj, New Delhi 1.

Tranga Engg. Works.—K. 156, Lajpat Rai Market, Delhi 6.

United Electric & Radio Co.—Chandni Chowk, Delhi 6.

Ved Brothers.—5/67, W.E.A., New Delhi 5.

Vishu Karma Elec. Co.—9, Tropical Bldgs., Connaught Circus, New Delhi 1.

Watta Electronics.—265, Kamal Market, Delhi 1.

### ELECTRICAL GOODS & APPLIANCES

**ADARSH ELECTRICALS.**—1782, Electrical Market, Behind State Bank, Chandni Chowk, Delhi 6; Authorised Distributors: Henley's Paramite, Nicco, Devidayal's Usha Wires & Cables, Osram Lamps & Tubes, Sunlam Bakelite & P.V.C. Sheet, Orient-Hitachi Empire Cloth, Tape & Sleeving, Accessories, Appliances, Fancy Fittings and Fans, Jayna Parc. Beads.

Aerco.—Behind Khanna Talkies, Paharganj, New Delhi.

Allians Electric & Radio Co.—Chandni Chowk, Delhi 6.

Allied Agencies.—1339, Pahari Imli, Delhi.

Amar Singh & Co.—116, Bhagat Singh Market, New Delhi.

Ambassador Electric Co.—3911, Chowk Kasseroowala, Paharganj, New Delhi.

Ashoka Transformer Corporation.—30/9, Shakti Nagar, Delhi 6.

Associated Instruments Mfrs. (I) P. Ltd.—Sunlight Insurance Bldg., Asaf Ali Road, New Delhi.

Auto Lamps Ltd.—6, Alipur Road, Delhi 8.

Bajaj Electricals P. Ltd.—10/1, Asaf Ali Road, New Delhi.

Bhagwan Singh & Sons.—20-C, Connaught Place, New Delhi.

Boota Singh & Brothers.—31, Panchkuin Road, New Delhi.

British Insulated Callender's Cables Ltd.—Connaught Circus, New Delhi.

B. S. Virdhi Electric Works.—1, Ravi Nagar, New Delhi 16.

C. A. Sumair & Co.—G. T. Road, Azadpur, Delhi.

Central India Electric Works.—Ajmal Khan Road, New Delhi 5.

Chopra & Co.—Behind Reserve Bank, Chandni Chowk, Delhi 6.

Continental Electric & Radio House.—17, East Patel Nagar Market, New Delhi 12.

**COMMERCIAL ELECTRIC WORKS, THE.**—1815, Chandni Chowk, Delhi-6; Authorised Stockists for LT/LK Motor Starters & Switch Fuse Units manufactured by the Switchgear Division of Larsen & Toubro Ltd., Bombay; Phone: 265491.

**D.C. KRISHNA & CO.**—1563-A, Isvar Nivas, Electrical Market, Behind State Bank, Chandni Chowk, Delhi 6. Specialists in Winding Wires, Insulating Materials, Distributors: Henley's, G.E.C., I.C.C., Nicco, E.I.C., H.W.P., Devidayal's Products.

Electrical & Mechanical Equipment Co.—5/1, Jhandewalan, New Delhi.

Electrical Mfg. Co. Ltd.—4/11, Asaf Ali Road, New Delhi.

Electro Equipments Corp. Ltd.—Speedbird House, Con. Circus, New Delhi.

Empire Electric & Engineering Works.—73, Shanker Market, New Delhi.

Grandlay Electricals (I).—2656, Sadar Thana Road, Delhi.

Hardit Singh & Co.—152, Panchkuin Road, New Delhi.

Himalaya Electrical Industries (I) P. Ltd.—8711, Roshanara Road, Delhi 6.

Hitakri Bros. of Delhi.—9, Faiz Bazar, Delhi 7.

India Electric Industries.—1903, Chandni Chowk, Delhi 6.

Janta Electric Works.—Mohalla Mantola, XV/978, Gali Kumharan, Paharganj, New Delhi.

J. M. A. Industries P. Ltd.—Kashmere Gate, Delhi 6.

Kundal Lal & Brothers.—Asaf Ali Road, New Delhi.

Laxma Engineering Industries.—15/1, Asaf Ali Road, New Delhi.

Laro Engineering Co.—6-A, Connaught Place, New Delhi.

Maha Maya Electric Co.—1681/33, Mangal Market, Chandni Chowk, Delhi 6.

Mapas & Co.—H/35, Connaught Circus, New Delhi.

Meters & Instruments P. Ltd.—4/90, Connaught Circus, New Delhi.

Metro Electric Co.—Paharganj Lane, Krishna Market, New Delhi.

Moti Electrical Industries.—15-A, Najafgarh Road, New Delhi 15.

M. T. Electric Co.—Chuna Mandi, Paharganj, Delhi.

Nagi Electric Works.—2690, Multani Danda, Paharganj, New Delhi.

National Electrical Industries P. Ltd.—United India Life Bldg., Con. Circus, New Delhi.

Oriental Radio & Electric Stores.—17C, Prem House, Connaught Circus, New Delhi.

Oriental Radio Corporation.—12/4, Asaf Ali Road, New Delhi.

Paragon Electric Co.—6/90, Connaught Circus, New Delhi.

Patni Electric Co.—Flat No. 27A, Shanker Market, New Delhi.

Popular Electric Works.—19, Municipal Market, Connaught Circus, New Delhi.

Ram Electric Works.—290, Jheel Kuranja, Gandhinagar, Delhi.

Saney Electric Co.—984, Shivaji Street, Karolbagh, New Delhi.

Sardul Singh & Sons.—T-19, I. N. A. Colony, Meherauli Road, New Delhi 3.

Sigma Electric Works.—Sadar Bazar, Delhi.

Skytone Electricals (I).—Sadar Thana Road, Delhi 6.

Sokhi Electric Works.—2691, Multani Dhanda, Paharganj, New Delhi.

S. S. Sodhey Electric Works.—13, Krishna Market, Paharganj, New Delhi.

S. Wahid Ali & Sons.—Bara Dara Darl, Ballimaran, Delhi.

Striplux Industries.—P. Box 599, New Delhi 1.

**TRICOLITE ELECTRICAL INDUSTRIES.**—70, Najafgarh Road, New Delhi 15.

Uday Electrical Equipment Co.—K Block, Connaught Circus, New Delhi.

Vir Bharat Electric Co.—Paharganj Lane, Krishna Market, New Delhi.

Virdi & Co.—1882, Chuna Mandi, Paharganj, New Delhi.

Western India Electrical Corporation.—36, Faiz Bazar, Delhi.

### ELECTRICAL TRADERS

Electrical Market, Behind State Bank, Chandni Chowk, Delhi 6.

Abinash Radio & Electric Corporation.

Amar Electric Company.

Ashoka Electricals.



Associated Radio & Electric Company.  
 Attar Chand & Co.  
 Avon Electric Company.  
 Balak Ram Banarsi Dass.  
 Basant Parkash Electric Company.  
 Bombay Electric & Radio Corporation.  
 Capital Electric Company.  
 Chopra & Company.  
 Chopra Electrical Sales Corporation.  
 C. H. Singh & Sons.  
 Commar Electric Company.  
 Commercial Sale Corporation.  
 D. C. Krishna & Company.  
 Delco Traders.  
 Delhi Electric Company.  
 Delhi Electric Company.  
 Electrical Traders.  
 Electroline Sale Corporation.  
 Everlight Electrical Industries.  
 Friends United Co.  
 Globe Trading Corporation.  
 Guptajee & Co.—Bhagirath Palace, Chandni Chowk, Delhi 6.  
 Gupta Trading Company.  
 Hansa Electricals.  
 Harbans Electric Trading Company.  
 Hind Electric Stores.  
 Indian Traders (P) Ltd.  
 Jain Electric Stores.  
 Karachi Electric & Trading Company.  
 K. B. Electric Agencies.  
 Krishna Electricals.  
 K. T. Rajan.  
 Lahore Electric Trading Company.  
 Lakshmi Cable Company.  
 Lakshmi Electric Company.  
 Midland Electric Corporation.  
 M. Lal & Company.  
 M. M. Sharma Electric Company.  
 M. P. Electric Company.  
 Nath Trading Corporation.  
 National Electric Trading Company.  
 Nav Bharat Electric Agencies.  
 Navin Agencies.  
 New India Electric Company.  
 Newton Electrical.  
 North India Trading Corporation.  
 Oriental Electric Company.  
 Oriental Electric Trading Company.  
 Paul & Kajriwal Electric Company.  
 Punjab Electric & Construction Company.

**PUSHAP TRADING COMPANY.—Behind State Bank of India, Chandni Chowk, Delhi-6.**

Raj Electric & Trading Company.  
 Raj Kamal Electricals.  
 Raja Electric Stores.  
 Rajendra Electric Company.  
 Ramjas & Sons.  
 Ravi Electric Company.  
 R. L. Kanhaya Lal.  
 Satya Paul & Company.  
 S. B. Electric Company.  
 Sehgal Trading Agencies.  
 Shree Ganesh Electric Company.  
 Shree Gopal Electric Stores.  
 Shree Nursing Electric Company.  
 Shree Nursing Sahay Madan Gopal Electric Co. Private Ltd.  
 Sunder Electric Stores.  
 Supreme Electric Company.  
 Supreme Radio & Electric Corporation.  
 Terra Trading Corporation.  
 Tirlok Chand & Sons P. Ltd.  
 Union Electric Company.  
 Upper India Electric Company.

**ELECTRODES**

**INDUSTRIAL GASES LTD., THE.—D. B. Road, Pratap Bhawan, Post Box 622, New Delhi-1; Phone: 264728, Grams: "INDUSGASES"; Head Office: P.O. Box 853, Calcutta-1; Manufacturers & Distributors of all kinds of Welding Electrodes, Welding Rods & Fluxes; Agents for Lincoln Electric Co. Ltd., U.K. Suffolk Iron foundry, U.K. & Unitor A. S. Norway.**

**ELECTRONIC EQUIPMENT AND DEVICES**

**PREM NATH DIESELS PRIVATE LTD.—8, Scindia House, New Delhi; Phone: 45891, Grams: "PREMDIESEL".**

**ELECTROPLATING MACHINERY & MATERIAL**

Bharat Trading Co.—5262, Sadar Thana Road, Delhi.  
 Fancy Copper & Metal Works.—407, Chitla Darwaja, Chawri Bazar, Delhi 6.

**KAYCEE INDUSTRIES LTD.—10/1, Asaf Ali Road, New Delhi; Agents for Hind Rectifiers Ltd., Mfrs. of Selenium & Silicon Semiconductors, Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-chemical Industries; "Kaycee" Rotary, Toggle, Heat Control and Air-Conditioner Switches, "Kaycee" domestic and bulk type water Meters; H.O. Kamani Chambers, Nicol Road, Ballard Estate, Bombay; Phone: 263521, Grams: "TURNRITE"; Branches: Calcutta, Madras & Kanpur.**

Krishan C. Arora & Co.—Post Box 2570, New Delhi 5.

Oswal Metal Works.—G.T. Road, Delhi-Shahdara.

P. C. Girdharilal Jain.—9, Deputyganj Sadar Bazar, Delhi 6.

**SHANKER & CO. (Regd.).—200, Chawri Bazar, Phone: 264038 and Branch: 1083, Pal Walan, Delhi-6; Dealers in Electroplating & Polishing material of C.M.P., Ronuk, Electro & Shining; Graphite crucibles; Phone (Resi.): 222160 and Branch: 263158.**

**EMBROIDERY MFRS. & MERCHANTS**

**HINDUSTAN EMBROIDERY MILLS PRIVATE LTD. (Estd. 1940).—A-14-3, Jamna Bhuvan, D.A.G. Extension, New Delhi.**

**ENAMELLED WARE MANUFACTURERS**

Delhi Rajkot Enamel Works.—1187, Kucha Mahajani, Delhi 6.

Raj Enamel Works.—G.T. Road, Delhi-Shahdara.

**ENGINEERING EQUIPMENTS**

**PREM NATH DIESELS PRIVATE LTD.—8, Scindia House, New Delhi. Phone: 45891, Grams: "PREMDIESEL".**

**ENGINEERS AND CONTRACTORS**

Abrol & Co. P. Ltd.—E Block, Connaught Place, New Delhi 1.  
 A. E. I. (India) Private Ltd.—United India Bldg., Connaught Place, New Delhi.  
 Ahuja & Co.—D. B. Gupta Road, Paharganj, New Delhi 1.  
 Allied Engineering Co.—Kashmere Gate, Delhi 6.  
 Amar Nath Charanji Lal.—5/8, D. B. Gupta Road, Paharganj, New Delhi 1.  
 Amrit Lal Nayar & Co.—879, E. Park Road, New Delhi 5.  
 Arora Furnishers.—15A/3, E. Patel Nagar, New Delhi 12.  
 Asia Construction Co.—K-55, Connaught Circus, New Delhi 1.  
 Associated Engineering Works Ltd.—Kashmere Gate, Delhi 6.  
 Balmer Lawrie & Co., Ltd.—Sunlight Insurance Bldg., Ajmeri Gate Extn., New Delhi.  
 Banarsidass Engineering Co.—Naya Bazar, Delhi 6.  
 Bery Engineering Co.—Naya Bazar, Delhi.  
 Bhai Sunderdass Sardar Singh P. Ltd.—4/23, Asaf Ali Road, New Delhi.  
 Bhalla Engineering Corpn.—66, G. B. Road, Delhi 6.  
 Bharat Electrico.—22-E, Kamal Nagar, Delhi 6.  
 Bharat Engineering & Mfg. Co.—55/2, New Rohtak Road, New Delhi.  
 Brady, W. H. & Co., Ltd.—44, Indra Palace, Connaught Place, New Delhi.  
 B. R. Herman & Mohatta & Co., Ltd.—Connaught Place, New Delhi.  
 Civil Engineering Co.—Samaj Road, Karolbagh, New Delhi 5.  
 Crompton Engineering Co. (Madras) Ltd.—P. B. No. 529, New Delhi.  
 Duggal Engineering Co.—33, Kabul Lines, Delhi Cantt.-10.  
 Empire Electric & Engineering Works.—73, New Central Market, New Delhi.  
 Engineering & Industrial Corpn. P. Ltd.—29, South Patel Nagar, New Delhi 12.  
 Hardayal & Brothers.—11-H, Connaught Circus, New Delhi.  
 H. Lal & Brothers.—8, D. B. Gupta Road, New Delhi 1.  
 Imperial Engineering Co.—B. B. Road, New Delhi.  
 Jain Engineering Works.—13, Sadar Thana Road, Delhi 6.  
 K. R. Gupta & Sons.—10, Beadon Pura, Karolbagh, Delhi 5.  
 Kumar Engineering Works.—3837, Daryaganj, Delhi 6.  
 Kundan Lal & Brothers.—Asaf Ali Road, New Delhi.  
 Lakshmi Ratan Engineering Works.—New Delhi.  
 Marshal Sons & Co. Ltd.—Regal Bldgs., New Delhi.  
 Mehta Teja Singh & Co.—63, Golf Links, New Delhi 3.  
 Modern Tiles Mfg. Co.—Sunlight Bldg., Asaf Ali Road, New Delhi.  
 National Tile Works.—39, G. B. Road, Delhi 6.  
 Nava Bharat Engineering Co.—110, Naya Bazar, Delhi.  
 Northern India Tiles Corporation.—Tilak Nagar, New Delhi 15.  
 O. P. Oberoi & Co.—1/9, E. Patel Nagar, New Delhi 12.  
 Oriental Engineering Works Ltd.—78, G. B. Road, Delhi 6.  
 Parkash Chandar P. Ltd.—T-20, Sanyat Lines, Delhi Cantt.  
 Partap & Co.—17, Netaji Subhas Marg, Daryaganj, Delhi.  
 Prakash & Co.—4/23, W.E.A., New Delhi 5.  
 Prem Raj & Sons.—Prem Bhawan, Pahari Dhiraj, Sadar Bazar, Delhi 6.  
 Protos Engineering Co., Ltd.—Connaught Circus, New Delhi.  
 Punjab Traders Syndicate.—A-17, Prahlad Market, New Delhi 5.  
 Punn Gurdial Singh.—6-5, S. Patel Nagar, New Delhi 12.  
 R. B. Basakha Singh & Sons.—5, Jantar Mantar Road, New Delhi 1.  
 Ram Nath Mehra & Sons.—W1/11, Patel Road, New Delhi 12.



Roxy Building & Furnishing Co.—6/5266, Krishan Nagar, New Pusa Road, New Delhi 5.

Sethi Shankar Dass & Sons.—R-563, Shankar Road, New Delhi 5.

Sharma Engineering Co.—G. B. Road, Delhi 6.

Shinghal Brothers.—Delhi Cantt.

Sudershan Engineering Works.—Motia Khan, Delhi 6.

Surat Singh & Sons.—4/5847, Dev Nagar, Delhi 5.

Uttam Singh Dugal & Co. P. Ltd.—11, Marina Arcade, New Delhi 1.

V. H. Shah & Brothers.—Chawri Bazar, Delhi 6.

Victory Engineering & Metal Works.—G. B. Road, Paharganj, New Delhi.

William Jacks & Co. Ltd.—Connaught Place, New Delhi.

W. S. Bhag Singh & Sons.—Fatehpuri, Delhi 6.

## EXHAUST FANS

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Delite Cinema Bldg., New Delhi; Importers, Exporters, Engineers and Manufacturers. Phone: 27790.

## EXPORT HOUSES

**NAVA BHARAT ENTERPRISES PVT. LTD.**—(An Export House recognized by the Government of India); 22, Ring Road, Lajpat Nagar IV, New Delhi-14, Offices at: Calcutta, Madras, Hyderabad, Cochin, Guntur, Rotterdam; Phone: 72509, 77171, 76815, Grams: NAVENTER; Exports—Brassware, Bone Artware, Canned Food Products, Cardamoms, Chemicals, Coffee, Coir Yarn and Products, Engineering goods, Essential Oils, Horn Artware, Handicrafts, Hides & Skins, Indian Paintings, Ivory Artware, Jewellery, Ladies' Leather Chappals and other Leather goods, Pepper, Precious and Semi-Precious stones, Readymade garments, Silk and Scarves, Shirts, Tea, Textiles, Tobacco, Turmeric, Tassar, Wooden artware; Imports: Ball Bearings, Dyes & Chemicals, Synthetic Yarn, Non-Ferrous Metals, Ivory.

## EYELETS, SNAP FASTENERS, BUTTONS & METAL COMPONENTS MFRS.

**S. MOHD. SHAFFI PEETALWALA.**—Sadar Bazar, Delhi-6; Oldest Supplier and manufacturer of Eyelets, Groomets, Hooks & Eyes, Webends (Tips) Buckles, Turn Buttons, Badges, Tents Metal Fittings, Radio Eyelets, Measuring Tape Fittings etc.; Phone: 222768; Resi.: 220780.

## FANCY GOODS DEALERS

Anand Toy Industries.—107/95, Jhandewala Road, Delhi 1.

Bholanath & Sons.—Chandni Chowk, Delhi.

Gauri Prasad & Sons.—Chandni Chowk, Delhi.

Hind Toys.—841, Kucha Patiram, Delhi 6. Phone: 28684. Grams: "KALPURJA."

Kapurchand & Brothers.—5805, Sadar Bazar, Delhi.

Raja Toys Co.—33, Daryaganj, Delhi 6.

## FILM PRODUCERS

**RANGOON STUDIO.**—58, Janpath, New Delhi-1; Estd. 1939, Television, Newsreel, Documentary and Short Film Producers & Exporters; Representatives in Principal Cities throughout India and Nepal; Phone: 47861, Grams: "PHOTO-CINE".

## FIRE BRICKS AND REFRACTORIES

**AMAR NATH BHASKAR SONS.**—H.O. Ishwar Nagar, New Delhi-1; Works at Anwar Nagar (Faridabad); Manufacturers of Stoneware Pipes and Fittings, Fire Bricks, Fire Cements, Insulating Bricks and Cements, Acid Resisting Bricks and Cements, Puzzolanic Mortars & Building materials etc. Phone: 72345, 76243, 82331.

**ISHWAR INDUSTRIES LTD., THE.**—P.O. Ishwar Nagar, New Delhi. Manufacturers of Fire Bricks of all grades and shapes, Fire clays & Fire Cements, Insulating Compounds, Castable Refractories, Acid Resisting Bricks, and Cements, Sillimanite Bricks & Mortars, etc. Phone: 76241 (3 lines).

## FIRE FIGHTING APPLIANCES

DGL Private Ltd.—Connaught Circus, New Delhi-1; Fire Engines, Trailer Pumps, Extinguishers, Refills, Flex Canvas Hoses, Itone Cuplings, Hose Binding Machines, Hose Vulcanising Machines. Other Fire Brigade Sundries.

Minimax Ltd.—3, Seindia House, Janpath, New Delhi.

## FOOD AND FRUIT PRODUCTS MANUFACTURERS AND DEALERS

Ambroisa Food and Canning Industries.—23, S. C. Rohtak Road, New Delhi 5.

Bawa Fruit Products.—46, G. B. Road, Delhi.

Excelsior Food & Chemical Industries.—Paharganj Lane, New Delhi 1.

Food Kings.—65/11, Rohtak Road, K. Bagh, New Delhi 5.

Healthways Food Products Co.—5-E, Sadar Thana Road, Delhi.

Hindustan Breakfast Food Mfg. Factory.—63-64, Industrial Area, Najafgarh Road, New Delhi 15.

Miller Food & Canning Industries.—Tis Hazari, Delhi 6.

Nestle's Products (I) Ltd.—Link House, Mathura Road, New Delhi.

Rela Food Products P. Ltd.—4/8, Asaf Ali Road, New Delhi.

Shamrock Food Products Ltd.—Seberwal Maniwala Bagh, Azadpur, Delhi.

Weldon Chemical & Food Products.—59/37, Rohtak Road, New Delhi 5.

## FOUNDERS AND FOUNDRY EQUIPMENTS

**SHRI VISHNU METAL FOUNDRY.**—Phatak Nanvak, Hauz Qazi, Delhi 6; Manufacturers of Hand (Fly) Presses, Sugarcane Crushers, Sanitary & Electrical goods; Specialists in graded heavy and light Cast Iron and other non-ferrous metal Casting; Phone: 261854.

## FOUNDRY FLUXES & CHEMICALS

**GLOBAL LINKERS.**—3992, Ajmeri Gate, Delhi-6; Graphite Powder/Flakes, Ferro-Silicon, Ferro-Manganese, Ferro-Chrome, Bentonite, Soap Stone Powder, Casting Powder, Iron Cement, Ferro-Hardening Powder (Surface Hardening), Asbestos Magnesia 85 per cent, Hard Setting Comp., Fire Cement (Mortar), Steam & Hydraulic Packings (Asbestos, Cotton, Hemp, Jute) etc.; Phone: Office: 262296, Resi.: 54986.

## FOUNTAIN PENS & BALL PENS

**AMBITIOUS GOLD NIB MFG. CO. (P) LTD.**—27/7, Shakti Nagar, Delhi-7; Manufacturers of Alloy Iridium and Platinum tipped Nibs for Fountain Pens; Phone: 221111.

Asian Pen Co.—Gur Ki Mandi, G. T. Karnal Road, Delhi.

Bholaram Rangulal Jain.—Sadar Bazar, Delhi.

Friends Pen Stores.—Sadar Bazar, Delhi 6.

**GENERAL PEN AGENCIES.**—Sales Office: 41, Kaushalya Bhawan, Sadar Bazar, Delhi; Sole Distributors for Planet and Ambassador Pens and Ball Pens; Gold Medal Latex & Dry Rubber Bands; Sole Agents—Sevika Fountain Pens; Stockists—Best Ball Pen refills; Phone: 220493, Resi.: 229612.

Jain Plastic Industries.—Jawaharnagar, Subzimandi, Delhi.

Kashyap Trading Co.—50, Kaushalya Bhawan, Sadar Bazar, Delhi.

Latham Abercrombie & Co., Private Ltd.—Ajmere Gate, Delhi.

Pilot Pen Co., Ltd.—D.A.G. Extension, New Delhi.

Radha Fancy Stores.—Near Moti Bazar, Chandni Chowk, Delhi.

Rajpal & Co.—3, Shivnagar, Karolbagh, New Delhi.

Royal Fountain Pen Co.—1458, Fountain, Chandni Chowk, Delhi 6.

Solar Pen Industries.—Delhi-Shahdara.

Sunview Industries.—Panmandi, Sadar Bazar, Delhi.

Violet Industries.—8210, Chimni Mill, Bara Hindu Rao, Delhi.

## FUEL INJECTION EQUIPMENTS

**JAI BHARAT TRADING CO.**—Naya Bazar & Mori Gate, Delhi 6. Phone: 224686. Grams: "ENGPURZA."

## FUEL TESTING EQUIPMENTS

**ASSOCIATED INSTRUMENTS MANUFACTURERS (INDIA) PRIVATE LTD.**—Sun Light Insurance Bldg., 26/27, Asaf Ali Road, New Delhi; Grams: "AIMILDEL." Phone: 271236.

## FURNISHING FABRICS

**GUPTAJEE.**—28B, Connaught Place, New Delhi-1; wide range in furnishing fabrics, curtain materials, Bed spreads, Table Covers, Embroideries, Towels, Woollen Pile Carpets, Woollen Druggets, Cotton Rugs etc., Phone: 47323.



## FURNITURE AND FITTINGS MANUFACTURERS AND DEALERS

Ahluwalia & Sons.—16/3, W.E.A., New Delhi 5.  
 Ahuja & Co.—D. B. Gupta Road, Paharganj, New Delhi.  
 Airy Brothers.—S. Bazar, Delhi Cantt.  
 American Furnishing House.—39-G, Connaught Circus, New Delhi.  
 A. N. Ramji Dass & Co.—7/36, Daryaganj, Delhi 6.  
 A. S. & Sons.—63, Naiwala, Delhi 5.  
 Banerjee Brothers.—8C/12, Pusa Road, New Delhi 5.  
 Basant Ram & Sons.—Connaught Circus, New Delhi.  
 Bharat Wood Products Co.—Opp. Plaza, New Delhi 1.  
 British Furniture Manufacturing Co.—42-G, Connaught Circus, New Delhi.  
 Delhi Tent & Furniture House.—99, Baird Road, New Delhi 1.  
 Globe Motors Private Ltd.—1/1, Jhandewala, New Delhi.  
 Godrej & Boyce Mfg. Co., Ltd.—168, Chandni Chowk, Delhi.  
 Hind Furniture & Timber Trading Co.—39, Rani Jhansi Road, New Delhi.  
 House Decorating Co.—7A/1, W.E.A., New Delhi 5.  
 Imperial Wood Works.—Pul Bangash, Delhi.  
 Kartar Singh & Brothers.—259, Kamala Market, New Delhi 1.  
 Khanna & Co.—Kashmere Gate, Delhi.  
 Khosla Bros.—Regal Building, Punchkuin Road, New Delhi.  
 Kumar Furnishers.—785, East Tank Road, Karolbagh, New Delhi.  
 Model Furnishers.—39, Fais Bazar, Delhi 7.  
 Mohan Singh & Sons.—64, Rani Jhansi Road, New Delhi 1.  
 Oriental Bldg. & Furnishing Co.—M. Block, Connaught Circus, New Delhi.  
 Rajendra Brothers.—Falz Road, Delhi 5.  
 Ram Kishen & Sons.—18, Marina Arcade, New Delhi.  
 Ramji Dass & Co., A. N.—17/36, Daryaganj, Delhi 6.  
 Rattan Furniture Store.—Kashmere Gate, Delhi 6.  
 Reliance Trading Co.—Kashmere Gate, Delhi 6.  
 Roxy Building & Furnishing Co.—6/5266, Krishan Nagar, New Pusa Road, New Delhi 5.  
 Sabharwals.—51, Punchkuin Road, New Delhi.  
 Seth Brothers.—Kashmere Gate, Delhi 6.  
 S. M. G. Beaty P. Ltd.—Connaught Place, New Delhi 1.  
 Sutherland Furnishing Co.—74, Janpath, New Delhi.  
 Trilok Nath Hoora & Sons.—Regal Building, Punchkuin Road, New Delhi.  
 Vijay Furniture Mart.—Karolbagh, New Delhi.

## GASES—INDUSTRIAL, RARE, MEDICAL & REFRIGERANT

**INDUSTRIAL GASES LTD., THE.**—D. B. Road, Pratap Bhawan, Post Box 622, New Delhi-1; Phone: 264728, Grams: "INDUS-GASES", Head Office: P.O. Box 853, Calcutta-1. Manufacturers & Suppliers of Oxygen, Liquid Oxygen, Acetylene, Nitrogen, Argon, Neon & Helium, Xenon, Methyl Chloride, Cyclopropane, Ethylene etc.

## GAS MANUFACTURING PLANTS

**INDUSTRIAL GASES LTD., THE.**—D. B. Road, Pratap Bhawan, Post Box 622, New Delhi-1; Phone: 264728, Grams: "INDUS-GASES", Head Office: P. O. Box 853, Calcutta-1. Design Supply & Erection of Complete Plants for manufacture and Distribution of Oxygen, Nitrogen, Carbon dioxide, Acetylene and other Gases.

## GENERATING SETS

**PREM NATH DIESELS PRIVATE LTD.**—8, Scindia House, New Delhi; Phone: 45891, Grams: "PREMDIESEL".

## GLASS

A. Das & Co.—14/74, Sadar Bazar, Delhi 6.  
 A. Dugal & Co.—Fatehpuri, Delhi.  
 Atul Glass Industries.—P. Box 1479, Delhi 6.  
 Baluja Glass Co.—Fatehpuri, Delhi.  
 Belgium Glass House.—Fatehpuri, Delhi.  
 Bhalla Sales Corpn.—49-M. Block, Connaught Circus, New Delhi.  
 Bharat Glass Co.—Sadar Bazar, Delhi 6.  
 Delhi Glass House.—Chandni Chowk, Delhi.  
 Duggal & Co.—Fatehpuri, Delhi 6.  
 Himalaya Trading Co.—Fatehpuri, Chandni Chowk, Delhi.  
 Hindustan Bottle Co.—114, Tilak Bazar, Delhi 6.  
 Hindustan Glass Agency.—Qutab Road, Delhi 6.  
 Imperial Glass Co.—Fatehpuri, Chandni Chowk, Delhi.  
 Jawahar Glass Co.—Near Multani Bldg., Qutab Road, Delhi.  
 Jolly Glass Co.—Katra Barien, Delhi.  
 Om Prakash & Bros.—Katra Barien, Delhi.

## GLUE MANUFACTURERS

H. B. Industries.—Nangloi, Delhi.  
 Sunlight Glue Mfg. Co.—Chandni Chowk, Delhi 6.

## HANDICRAFTS MANUFACTURERS, DEALERS AND EXPORTERS

Arjan Das Gupta & Brothers.—E-1/9, East Patel Nagar, New Delhi.  
 Central Traders.—Crockery Market, Sadar Bazar, Delhi.

**DATTA COTTAGE INDUSTRIES OF INDIA.**—P.O. Box 2513, New Delhi 5.

Eastern Arts Corporation.—11/B-4, Asaf Ali Road, New Delhi.  
 Eastern Linkers P. Ltd.—Odeon Bldg., Connaught Place, New Delhi.  
 Hira Lal & Sons.—20, E. P. Avenue, Karol Bagh, New Delhi.  
 Indiacraft Export Private Ltd.—8/40, W.E.A., Karol Bagh, New Delhi. Phone: 57617. Director: K. S. Bawa.  
 Indian Arts & Crafts Syndicate.—2666, Ballimaran, Delhi.  
 Narnag & Co.—17, Sundernagar Market, New Delhi.  
 Nath Brothers.—50/2-3, Hanuman Road, New Delhi 1.  
 New India Trading Syndicate.—132, Kamal Market, New Delhi.  
 Oriental Syndicate of India.—24/2729, Beadonpura, New Delhi.  
 Oriental Trading Society.—1/11B, Asaf Ali Road, New Delhi.  
 Paramount Traders.—4/47, W.E.A., Karol Bagh, New Delhi.  
 P. & S. (India) Corporation.—Jindal Trust Bldg., Asaf Ali Road, New Delhi 1 (India).  
 Pickwich Exports P. Ltd.—4/9, Asaf Ali Road, New Delhi.

**R. D. RAMNATH & CO.**—Jama Masjid, Delhi 6.

Sarna Brothers.—5B-4, Poorvi Marg, New Delhi.  
 S. Nath Kakar & Sons.—41, Hanuman Road, New Delhi.  
 Surya Trading Corpn. of India P. Ltd.—12/8, W.E.A., Karol Bagh, New Delhi.  
 United Overseas Trading Corporation.—Asaf Ali Road, New Delhi.  
 Wellworth Trading Corporation.—Post Box 2528, New Delhi.  
 Yadav & Co.—2886, Tantwalli Street, Daryaganj, Delhi 7.

## HARDWARE MERCHANTS AND IRONMONGERS

Aggarwal Hardware Co.—Chawri Bazar, Delhi 6.  
 Agla Ram & Sons.—Sirkiwala, Delhi.  
 Alamchand Khanduja & Sons.—5110-11, Sirkiwala, Delhi.  
 Arjan Dass Kohli & Co.—Chawri Bazar, Delhi 6.  
 Ashok Kumar & Brothers.—1944, Lalkuan, Delhi.  
 Associated Textile Engineers.—Chawri Bazar, Delhi 6.  
 Atma Ram & Sons.—1900, Sirkiwala, Delhi.  
 A. Worah & Co.—Chawri Bazar, Delhi 6.  
 Badami Bagh Agency.—Naya Bazar, Delhi 6.  
 Badri Das & Sons.—3602, Chawri Bazar, Delhi 6.  
 Bansil Brothers.—Chawri Bazar, Delhi 6.  
 Behari Lal & Co.—Hauz Qazi, Delhi.  
 Benarshi Shah & Co.—Hauz Qazi, Delhi.  
 Bhanomal Gulzarimal, P. Ltd.—Chawri Bazar, Delhi 6.  
 Bharat Hardware Trading Co.—Hauz Qazi, Delhi 6.  
 Bharat Machine Tools and Hardware Co.—Naya Bazar, Delhi 6.  
 Bharat Wood Products Co.—K-22, Opp. Plaza Cinema, Delhi 1.  
 Bishamber Dass Jain & Co.—Chawri Bazar, Delhi 6.  
 Brijmohan & Sons.—4920, Hauz Qazi, Delhi.  
 Chand & Co.—Hauz Qazi, Delhi.

Shop: 262734

Phone: Factory: 261083. Grams: "MACHINERY"  
 (Estd.: 1901)

## CHHUTTAN LALL MATTUMAL

Chawri Bazar, Delhi-6.  
 Mill Stores Dealers.

Importers and Stockists: Steel Files, Beltings, Shaftings, Pulleys, Iron Tools, Asbestos Packing Materials and Joining Sheets, Crucibles, Pipes and Measuring Instruments etc.

Manufacturers: Bandsaw Blades

Branch: 37, Bibijan Street, Barbhai Mohalla, Bombay-3.

Crystal Company.—Parliament Street, New Delhi.  
 Daulat Rai & Brothers.—Hauz Qazi, Delhi.  
 Delhi Iron Syndicate Ltd.—Sirkiwala, Delhi.  
 Delhi Machinery Stores.—Chawri Bazar, Delhi 6.  
 Delhi Mill Stores.—Chawri Bazar, Delhi 6.  
 Devindra & Co.—Katra Raji, G. B. Road, Delhi.  
 Dewanchand Madanlal & Sons.—4920, Chawri Bazar, Delhi 6.  
 Dhani Ram & Sons.—Hauz Qazi, Delhi.  
 Dherumal Kapur & Sons.—Lahori Gate, G. B. Road, Delhi.  
 D. P. Gupta & Co.—Asaf Ali Road, New Delhi.  
 D. S. Dewanchand & Co.—1, Manohar Mart, Delhi.



Phones : { Office : 265671  
Res. : 264991

Grams: "IRONDEAL"

## FAKIR CHAND MOHANLAL

Chawri Bazar, Delhi 6.

Importers, Iron & Hardware Merchants, Government Regd.  
Dealers for Weights & Measures.

Garg Trading Co.—Hauz Kazi, Delhi 6.  
General Engineering Co.—Katra Raji, G. B. Road, Delhi.  
Goel Brothers.—5067, Sirkiwalan, Delhi.  
Golden Iron & Hardware Store.—5059, Sirkiwalan, Delhi.  
Gopinath Ltd.—Chawri Bazar, Delhi 6.  
Gordhandas Khandelwal & Sons.—3598, Bazar Sitaram, Delhi 6.  
G. R. Das Mill & Brother.—10188-A, Loha Mandi, Motia Khan, New Delhi 1.  
Gupta Iron & Brass Works P. Ltd.—29, Najafgarh Road, New Delhi 18.  
Guran Das & Co.—Lahori Gate, G. B. Road, Delhi.  
Harichand Sethi & Co.—3516, Sirkiwalan, Delhi.  
Hazuramall Kundan Lal.—Lahori Gate, G. B. Road, Delhi.  
Hind Steel Co.—421, G. T. Road, Delhi Shahdara.  
Hindustan Industries.—Hauz Qazi, Delhi.  
Hindustan Metal Industries.—3483, Sirkiwalan, Delhi.  
H. M. Doyal & Co.—Hauz Qazi, Delhi.  
H. M. Kapoor & Sons.—4897, Hauz Qazi, Delhi.  
India Steel Corporation.—Sirkiwalan, Delhi.  
Indian Hardware Co.—31, Manohar Mart, Delhi.  
Indian Hardware Industries Ltd.—58, Janpath, New Delhi.

**JAIRAMDAS & SONS.**—Chawri Bazar, Delhi-6. Importers & Merchants : Precision Measuring Tools, Garage Tools and all sorts of Hand Tools. Sole Selling Agents for 'JESONS' Cutting Tools, Nicholson's Metal Cutting Bandsaw Blades and Industrial Tools. Sanderson Bros. & Newbould, Sheffield's Tool, Alloy Steel etc. Machine Knives etc. Holland & Blair, London, Hardware Tools. Penens Tools Corp. (U.S.A.) for Garage Tools.

Jay Dee Brothers.—Lahori Gate, G. B. Road, Delhi.

**JEYAM'S HARDWARE & MACHINERY STORES.**—Nicholson Road, Delhi 6. Phone : 227640. All kinds of Electrical Materials, Engineering Tools and Hardware Materials.

Jhalani Brothers.—Gali Lohe Wali, Chawri Bazar, Delhi.  
Jindal & Sons Ltd.—Sirkiwalan, Delhi.  
J. M. Chamanlal Agarwal & Co.—Chawri Bazar, Delhi 6.  
J. M. Ramchandra & Sons.—Chawri Bazar, Delhi 6.  
J. M. Suraj Bhan Aggarwal & Sons.—Hauz Qazi, Delhi.  
J. M. Bodiwala & Sons.—Chawri Bazar, Delhi 6.  
J. M. Chimanlal Aggarwal & Co.—Chawri Bazar, Delhi 6.  
Kashmiri Lal & Co.—5119, Sirkiwalan, Delhi.  
K. C. Chopra & Brothers P. Ltd.—Manohar Mart, Delhi.  
K. T. Steel Industries Ltd.—Narendra Place, New Delhi.  
Kedawat Traders.—12-20, Shakti Nagar, Delhi 6.  
Kishan Chand Khanna & Sons.—Hauz Qazi, Delhi.  
Kishan Chand Khanna & Co.—328, Hauz Qazi, Delhi.  
Kishan Sarup Agarwal & Co.—11, Manohar Mart, Delhi.  
Kumar Brothers.—1948, Lal Kuan, Delhi.  
Lachmandass Ramchand.—Chawri Bazar, Delhi.  
Madan Lal Bajaj & Co.—Hauz Qazi, Delhi.  
Madanlal Nanda & Sons.—3692, Chawri Bazar, Delhi 6.  
Mahabir Pershad & Sons.—Chawri Bazar, Delhi 6.  
Milford & Co.—4780, Hauz Qazi, Delhi.  
Milhard & Co.—Hauz Qazi, Delhi.  
Mills Store Co.—Naya Bazar ; 62, G. B. Road ; Hauz Qazi, Delhi 6.  
Milstock & Co.—Hauz Qazi, Delhi.  
Mittal Brothers.—Chawri Bazar, Delhi 6.  
M. B. Malhotra & Co.—Hauz Qazi, Delhi.  
M. Sain Agarwal & Co.—3638, Chawri, Delhi 6.  
Munni Lal Bajaj & Co.—Sirkiwalan, Delhi.  
Nanda & Sons, S. D.—Lahori Gate, G. B. Road, Delhi.  
Nandkishore Malhotra & Co.—4777, Hauz Qazi, Delhi.  
National Hardware Syndicate.—Hauz Qazi, Delhi.  
New India Metal Industries.—Panwali Gali, Chawri Bazar, Delhi 6.

**OMPARKASH GOYAL & SONS.**—Hardware Merchants, 3657, Chawri Bazar, Delhi-6; House of Steel Files, Small Tools and Wood Screws.

P. Ahuja & Co.—Ajmeri Gate Extn., Delhi.  
P. G. Bansal & Co.—68, G. B. Road, Delhi.  
Pindi Dass & Co. P. Ltd.—81, G. B. Road, Delhi 6.  
P. Madanlal & Co.—Chawri Bazar, Delhi 6.  
Prakash Iron & Steel Co.—Hauz Qazi, Delhi.  
Prakash Traders.—7, Manohar Mart, Delhi.  
Prem Nath & Sons.—4904, Hauz Qazi, Delhi.  
Punjab Hardware & Mill Stores.—Hauz Qazi, Delhi.  
Punjab Steel Works.—Naya Bazar, G. B. Road, Delhi.  
Ram Nath Nanda & Sons.—Hauz Qazi, Delhi.  
Rameswar Dass & Co.—Chawri Bazar, Delhi 6.

Rameswar Dass Dwarkadass Private Ltd.—Chawri Bazar, Delhi 6.  
Ratanji Bhagwanji & Co.—3760, Chawri Bazar, Delhi 6.  
Rati Ram Gupta & Co.—Chawri Bazar, Delhi 6.  
Roshan Lal Jain & Co.—Chawri Bazar, Delhi 6.  
R. S. Aggarwal & Co.—3484, Sirkiwalan, Delhi.  
R. S. Dass & Sons.—Chawri Bazar, Delhi 6.  
Sain Dass Aggarwal & Co.—10, Manohar Mart, Delhi.  
Saraf Industries.—Chawri Bazar, Delhi 6.  
Seth & Co., A. N.—Katra Raji, G. B. Road, Delhi.  
Shri Ram & Sons.—Chawri Bazar, Delhi 6.  
S. N. Nigam & Sons.—Hauz Qazi, Delhi.  
Tayal Brothers P. Ltd.—G. B. Road, Delhi.  
Tej Bhan Sethi & Sons.—5097, Sirkiwalan, Delhi.  
United Steel Industries.—Naya Bazar, G. B. Road, Delhi.  
Universal Agencies (India).—Gali Hakim Baqa, Hauz Qazi, Delhi.  
Universal Trading Co.—Sirkiwalan, Delhi.  
Uttamchand Bansilal.—Katra Raji, G. B. Road, Delhi.  
V. H. Shah & Brothers.—Chawri Bazar, Delhi 6.  
Wazir Chand & Brothers.—Hauz Qazi, Delhi.

## HOSIERY MANUFACTURERS

Aggarwal Jain Hosiery Factory.—6, Model Basti, New Delhi.  
Arun Hosiery Mills.—12/8, W. E. A., Karolbagh, Delhi.  
Ashok Hosiery Works.—4, Malik Bldgs., Chuna Mandi, Paharganj, New Delhi.  
Azad Hosiery Factory.—41, Beadonpura, Karolbagh, Delhi.  
Bhalla Hosiery Factory.—992, Pan Mandi, Sadar Bazar, Delhi.  
Bharat Hosiery Factory.—Teliwara, Sadar Bazar, Delhi.  
Caltek Hosiery.—Bara Hindu Rao, Ahata Kidara, Delhi.  
Choudhry Hosiery.—2892, Qutab Road, Delhi.  
Delhi Hosiery Mills.—4, Racquet Court Road, Delhi 8.  
Dinbandhu Hosiery Mills, Ltd.—Joshi Road, Karolbagh, Delhi.  
Duni Chand Gulati Hosiery Works.—867, Joshi Road, Karolbagh, Delhi.  
Fair Knitting Industries.—20/21, Basti Harphool Singh, Sadar Bazar, Delhi.  
Garg Hosiery.—4294, Aryapura, Subzimandi, Delhi.  
Golden Hosiery Mills.—Rui-ki-Mandi, Sadar Bazar, Delhi.  
Gorakh Hosiery Factory.—Chandi Mahal, Daryaganj, Delhi 7.  
Goyal Hosiery Factory.—108, Khurshid Market, Sadar Bazar, Delhi.  
Haryana Hosiery and General Mills.—88, Model Basti, New Delhi 6.  
Hero Knitting Works.—240, Post Office Street, Sadar Bazar, Delhi.  
Indra Hosiery Industries.—3-4, Basti Harphool Singh, Sadar Bazar, Delhi.  
Jainico Hosiery Mills.—5633, Qutab Road, New Delhi.  
Jeevan Hosiery Industries.—70, Khurshid Market, Sadar Bazar, Delhi.  
Jeydamba Hosiery Factory.—3620, East Park Road, New Delhi.  
Kabir Hosiery Works.—Bazar Billimaran, Delhi.  
Kallash Hosiery Factory.—4361/1, Gali Bahuji, Pahari Dhiraaj, Delhi.  
Kanodia Hosiery Mills.—Sadar Bazar, Delhi; Works at : 35, Basti Harphool Singh, Delhi.  
Kapur Hosiery Factory.—B-15, Jhandewalan Road, Delhi.  
Kapur Knitting and Woollen Hosiery Works.—Hauz Qazi, Delhi.  
Kartaram Hosiery Factory.—85, Khurshid Market, Sadar Bazar, Delhi.  
Kaushik Hosiery.—Gali Bagachi Abdul Karim, House Nos. 569-574, Teliwara, Delhi.  
Lakshmi Knitting Co.—Desbandhu Gupta Road, Karolbagh, Delhi.  
Lion Industries.—55, Model Basti, New Delhi.  
Madhav Hosiery Mills.—38, Naiwala, Karolbagh, Delhi.  
Mahabir Hosiery Factory.—Katra Chajju Pandit, Delhi.  
Midland Hosiery Works.—7440, Mohalla Kanhara, Ramnagar, New Delhi.  
Modern Hosiery and General Mills.—11705/6, Sakti Nagar, Delhi.  
Mohan Hosiery.—10/24, Katra Pandit Chajju, Shidipur, Delhi.  
Narendra Hosiery Agency.—592, Sadar Bazar, Katra Mithan Lal, Delhi.  
National Hosiery Factory.—Manakpura, Mandir Wall Gali, Delhi.  
New India Hosiery Factory.—Near Hamdard Dawakhana, Lal Kuan, Delhi.

**NEHRU HOSIERY MILLS.**—Sadarthana Road (Basti Harphool Singh), Delhi 6.

Neo Hosiery Mills.—155-D, Kamla Nagar, Delhi.  
Olympic Hosiery Factory.—Matkewall Gali, Sadar Bazar, Delhi.  
Om Parkash Jain Hosiery Factory.—10044-45, Manakpura, Delhi.  
Padam Hosiery Mills.—Katra Chajju Pandit, Model Basti, Delhi.  
Parkash Hosiery Mills.—1122, Gali Samosan, Lal Kuan, Delhi.  
Popular Hosiery Factory.—10155, Katra Chajju Pandit, Delhi.  
Popular Hosiery Mills.—Model Basti, New Delhi 5.  
Prabhat Hosiery Works.—27, DLF, Industrial Area, Najafgarh Road, Delhi.  
Prakash Industries.—10, Esplanade Road, Delhi 6.  
Punjab Hosiery Works.—14-G, Jawahar Nagar, Delhi.  
Puri Hosiery Factory.—800, Joshi Road, Karolbagh, Delhi.  
Rajasthan Knitting Co.—Hamilton Road, Gali Moghlan, Delhi.  
Rajpal Hosiery Factory.—8687, Model Basti, New Delhi 5.



**Rath Brand Candle and Hosiery Works.**—Gali Bahuji, Pahari Dhiraj, Delhi.

**Ravindra Hosiery Factory.**—60/6, Basti Harphool Singh, Sadar Bazar, Delhi.

**Rawat Hosiery.**—Gali No. 17, Ragharhpura, Karolbagh, Delhi.

**Republic Hosiery Factory.**—Aryapura, Subzimandi, Delhi.

**Rakesh Hosiery Factory.**—Prem Sadan, Chamelian Road, Bara Hindu Rao, Delhi.

**Rita Hosiery Products.**—1-C/47, Rohtak Road, New Delhi 5.

**S. Bahadur & Bros.**—4116, Roshanpura, Nai Sarak, Delhi.

**Shikhar Hosiery Factory.**—Gali Bahuji, Pahari Dhiraj, Delhi.

**Shri Krishan Hosiery Mills.**—1534, Gali Kasim Jan, Ballimaran, Delhi.

**Shushheel Hosiery Mills.**—Manakpura, Model Basti, New Delhi.

**Standard Hosiery Works (Regd.).**—309, Main Sadar Bazar, Delhi 6.

**Subhas Hosiery Mills.**—10125, Opp. Filmistan Cinema, Model Basti, Delhi.

**Sudhir Hosiery Factory.**—1064, Bahadurgarh Road, Delhi.

**Surinder Hosiery Factory.**—1055, Katra Pandit Chajju Ram, Model Basti, Delhi.

**Swadeshi Hosiery Factory.**—F. 14/14, Model Town, Delhi 9.

**Universal Knitting.**—Chamelian Road, Bara Hindu Rao, Delhi.

**Usha Hosiery Works.**—790, Chammawala Peach, Sadar Bazar, Delhi.

**Vimla Hosiery.**—10154, Katra Chajju Pandit, Model Basti, Delhi.

**Wilco Hosiery Works.**—2, Basti Harphool Singh, Delhi.

**Yogindra Knitting Mills.**—Industrial Area, Najafgarh Road, New Delhi.

### HOSPITALS

**ARYAVARTA POLIO ASHRAM.**—Aryavarta Bhavan, 79E, Kirti Nagar, New Delhi-15; Treats "POLIO, PARALYSIS", Muscular Dystrophy, High Blood Pressure, (Ear-Eye and Speech Defects), Mental Disorder; Polio guide Rs. 8-50; Phone: 54344, 54564.

### HOSPITAL EQUIPMENTS

**Gordhandas Desai Private Ltd.**—4/2-B, Jawala Mansion, Asaf Ali Road, New Delhi. H. O. Kermani Bldg., Sir P. Mehta Road, Fort, Bombay; Phone: 251418.

**Naranga Corporation.**—25/90, Connaught Circus, below Madras Hotel, New Delhi 1.

**SAHNISONS PVT. LTD.**—4/14-A, Asaf Ali Road New Delhi 1; Importers and manufacturers of Surgical Instruments and Hospital Furnishers; Approved Government Contractors; Trade mark "ESPLI", serving since 1939; Phone: 274361, Grams: "SURCEX".

### HOTELS

**Agra Hotel.**—16, Daryaganj, Delhi 6.

**Amrit Hotel.**—Queen's Road, Delhi 6.

**Apollo Hotel.**—Nicholson Road, Kashmere Gate, Delhi.

**Ashoka Hotel.**—Chanakyapuri, New Delhi 21.

**Astoria Hotel.**—733, Church Mission Road, Delhi.

**Associated Hotels of India Limited.**—Simla: Cecil & Clarke's, Delhi.

**Central Court Hotel.**—Connaught Circus, New Delhi.

**CLARIDGE'S HOTEL.**—12, Aurangzeb Road, New Delhi 11. Phone: 619411.

**Coronation Hotel.**—Fatehpuri, Delhi.

**Crown Hotel.**—Katra Baryan, Fatehpuri, Delhi.

**Fort View.**—Chandni Chowk, Delhi 6.

**Frontier Hotel.**—S. P. Mukerjee Marg, Fatehpuri, Near Novelty Cinema, Delhi 6.

**Grand Hotel.**—Civil Lines, Delhi 6.

**Green.**—Church Mission Road, Delhi 6.

**Grover Hotel.**—Karol Bagh, New Delhi 5.

**Hotel Ambassador.**—8. S. Park, New Delhi 8.

**HOTEL BROADWAY.**—Asaf Ali Road, New Delhi 1. Phone: 273821 (5 lines) PBX. Grams: "LUXURY." Tariff: Single Bed-breakfast Rs. 26 to Rs. 35; Double Rs. 50; Full Board Single Rs. 36 to Rs. 45; Double Rs. 70. Fully Air Conditioned—Centrally Located—all Modern amenities.

**Hotel Flora.**—Dayanand Road, Daryaganj, Delhi 6.

**Hotel Imperial.**—Janpath, New Delhi.

**Hotel India.**—Queen's Garden, Opp. Rly. Stn., Delhi 6.

**HOTEL REGAL.**—S. P. Mukerjee Marg, Delhi. Phone: 228371, 225836. Grams: "HOTEL REGAL". Provides Homely Comforts and Dishes of Provincial tastes. Moderate Rates.

**Hotel Shakahar.**—1, Daryaganj, Delhi 6.

**India Hotel.**—Connaught Place, New Delhi.

**Imperial Hotel.**—Church Mission Road, Fatehpuri, Delhi.

**Lakshmi Hotel.**—Chandni Chowk, Delhi.

**Madras Boarding House.**—Connaught Circus, New Delhi.

**Maidens Hotel.**—Civil Lines, Delhi.

**Maharaja Hotel.**—S. P. Mukerjee Marg, Delhi 6.

**Marina Hotel.**—Connaught Circus, New Delhi.

**Metro.**—Janpath, New Delhi 1.

**New Empress Hotel.**—Fatehpuri, Delhi.

**New India Hotel & Restaurant.**—Katra Baryan, Fatehpuri, Delhi.

**Nirula's Hotel.**—L. Block, Connaught Circus, New Delhi 1.

**Oberoi Imperial.**—New Delhi.

**Oberoi Maidens.**—2, Alipur Road, Delhi 8.

**Park-View Hotel.**—Fatehpuri, Delhi.

**Pink Hotel.**—Queen's Gardens, opp. Rly. Station, Delhi.

**Prabhat Hotel.**—Connaught Circus, New Delhi.

**Prince Hotel.**—Queen's Road, New Delhi.

**Punjab Hotel.**—Fatehpuri, Delhi.

**Raj Hotel.**—Subzimandi, Delhi 6.

**Regal Hotel.**—Queen's Road, Delhi.

**River Hotel.**—Faiz Bazar, Daryaganj, Delhi.

**Royal Hotel.**—Queen's Road, New Delhi.

**Swiss Hotel.**—Delhi 6.

**United Hotels Ltd.**—Sujan Singh Park, New Delhi.

### IMPORTERS, EXPORTERS AND STOCKISTS

**Ahuja & Co.**—P-3, Munshi Niketan, Asaf Ali Road, New Delhi 1.

**Amrit Wool Co.**—Amrit Market, Sadar Bazar, Delhi 6.

**Arjan Dass Gupta & Bros.**—25, Fatehpuri, Delhi 6.

**Arjan Dass Kohli & Co.**—Chawri Bazar, Delhi 6.

**Arora Brothers.**—Kucha Mahajani, Chandni Chowk, Delhi.

**Asanand & Co.**—Ph. Habas Khan, Khari Bapli, Delhi.

**Baldev Raj & Co.**—2887, Sirkiwala, Hauz Kazi, Delhi 6.

**Bestways & Co.**—Outside Moti Cinema, Chandni Chowk, Delhi.

### BHARAT VANIDHYA PVT. LTD.

22, Ring Road, Lajpatnagar iv, New Delhi-14.  
Offices at: Calcutta, Bombay, Hyderabad, Jaipur.  
Phone: 77171, 76815

**Importers:** Woodpulp, Tool and Alloy Steel, Medical Equipment, Electrical, Geophysical, Geodetic, Optical and Radio Instruments.

**Exporters:** Handicrafts, Precious & Semiprecious Stones, Knitwear.

**Bhola Ram Rikhab Dass Jain.**—Sadar Bazar, Delhi 6.

**Brentford James & Co. (India).**—6, Pearyal Bldg., Janpath, New Delhi 1.

**Bulakhidas Ramchander.**—2104/1, Katra Tobacco, Delhi 6.

**CHEMICALS de UNIVERSE PVT. LTD.**—Tilak Bazar, Delhi-6. For all sorts of Organic and Inorganic, Laboratory, Industrial, Pharmaceutical, Agricultural, Aromatic and Photographic Chemicals from ready stock; Sole Agents for USSR Fine Chemicals and Technological Raw-material; Bombay Office: 92/98, Reay Road, Bombay-33; Phone: 378117, Grams: "CHENDEUNI"; 2133, Tilak Bazar, Delhi-6; Phone: 222035, 222036, 222037.

**Chinnu Bhai Vadilal & Co.**—Cloth Market, Delhi.

**Chunilal Bhatia & Co.**—Sadar Bazar, Delhi.

**Coxwell & Company.**—2, Faiz Bazar, Delhi.

**Dewan & Co.**—6634, Kothi Man, Rani Jhansi Road, New Delhi.

**Foster Bell & Company.**—P.B. No. 406, New Delhi 1.

**Fourbhai Ltd.**—14, Faiz Bazar (Daryaganj), Delhi 7.

**Fakir Chand Mohanlal (Estd. 1840).**—Chawri Bazar, Delhi.

**Frontier Hosiery Stores.**—5742/43, Gandhi Market, Sadar Bazar, Delhi 6.

**Gora Mal Hari Ram.**—Sadar Bazar, Delhi 6.

**G. T. Mehra & Co.**—Chawri Bazar, Delhi.

**Gulzarilal Suri & Co.**—764, Katra Neel, Chandni Chowk, Delhi.

**Gurprasad Kapoor & Bros.**—534, Katra Neel, Chandni Chowk, Delhi.

**Handicrafts.**—10F, Connaught Place, New Delhi 1.

**Hari Chand Jain & Sons.**—20, Daryaganj, Delhi 7.

**Harish C. Khosla & Co.**—Zinat Mahal, Lal Kuan, Delhi 6.

**Himalaya Manufacturing & Sales Co.**—Park Mansions, Daryaganj, Delhi.

**Himalaya Trading Co.**—Fatehpuri, Delhi 6.

**Hind Overseas Trading Co.**—Amar Bhawan, Behind State Bank, Delhi.

**Hirdaynath Bhargava & Co.**—Ganesh Bazar, Cloth Market, Delhi.

**International Importers.**—1909, Chandni Chowk, Delhi 6.

**Jhalani Brothers P. Ltd.**—Gali Lohe Wali, Chawri Bazar, Delhi 6.

**Kalicharan & Co.**—Chatta Pratapsingh, Kinari Bazar, Delhi.

**Kapurchand & Brothers.**—5805, Sadar Bazar, Delhi.

**Kantilal & Co.**—Ganesh Bazar, Cloth Market, Delhi.

**Kunjilal Sital Pershad Oswal.**—Sadar Bazar, Delhi.

**L. N. Gadodia & Son Ltd.**—Kucha Natwan, Chandni Chowk, Delhi.

**Modern Trade Corpn.**—5189/9, Sadar Bazar, Delhi 6.

**Mongia Bros.**—Opp. Kumar Talkies, Chandni Chowk, Delhi.

**Nemchand Narinder Kumar Jain.**—216, Chauri Bazar, Delhi 6.

**Nirula Brothers.**—L. Block, Connaught Circus, New Delhi 1.



Oriental General Agencies.—Hamilton Road, Delhi 6.  
 Pohoomal Bros. (India).—Chandni Chowk, Delhi.  
 Ram Eashwar & Co.—11, Esplanade Road, Delhi.  
 Ram Kishen Sethi & Sons.—537 (283), Chandni Chowk, Delhi 6.  
 Sarna Brothers.—5B/4, Poorvi Marg, New Delhi 5.  
 Suraj Bhan Agrawal.—Chawri Bazar, Delhi 6.  
 Swadeshi Kapra Co.—4056, Ajmeri Gate, Delhi 1.  
 Trevillion & Clark.—21-B, Connaught Place, New Delhi.  
 United Commercial Co.—Gali Qasimjan, Chandni Chowk, Delhi.  
 Victo.—Esplanade Road, Delhi.  
 Wood & Co. Ltd., R. J.—Imperial Bank Bldg., Ch. Chowk, Delhi 6.

## INDUSTRIAL AIR HANDLING EQUIPMENTS

**INDUSTRIAL AIR CONTROL (I) PVT. LTD.**—Chopra Mansion, Jhandewalan Extn., New Delhi-1; Mfrs. of Humidification, Ventilation & Industrial Dust extraction plants, THOMA Waste Collecting Equipment for Textile Mills, Yarn Conditioning Machines, Oil Spraying, Lye Cooling Plants; Phone : 566642.

## INDUSTRIAL & COMMERCIAL MANAGEMENT & COST CONSULTANTS

**IBCON PRIVATE LTD.**—Industrial and Management Consultants; Regd. Office: Adelphi House, 119, Queen's Road, Bombay-1; Consultancy Services for Development of New Industries, Market Survey and Feasibility Studies, Project Reports, Planning for Modernization and Expansion of Industries in respect of Paper, Chemicals, Rayons, Sugar, Cement, Textiles and Engineering etc., Building and Factory Design; Supervision of Civil Engineering Construction and Erection of Equipment and Commissioning and help in obtaining Optimum results in output and costs; Offices: 5, Russell Street, Calcutta-16; 18, Palace Road, Bangalore; Brady's Building, Mahatma Gandhi Road, Kanpur; D-24, Defence Colony, New Delhi-3; 14, Shivaganga Road, Madras-34; 7, Sukhastan Gardens, Colombo-7; Grams: "IBCO", Bombay, "IBCO", Calcutta, Bangalore, Kanpur, Colombo; Phone: 242052/3 (Bombay); 23-8891/2 (Calcutta); 24470 (Bangalore); 32961 (Kanpur); 75202 (New Delhi); 88126 (Madras).

## INK MANUFACTURERS AND DEALERS

Jain Ink Mfg. Co.—Sadar Bazar, Delhi 6.  
 Kapur & Co.—Roshanara Road, Subzi Mandi, Delhi.  
 Kores (India) Limited.—D.A.G. Extension, New Delhi.  
 Modern Printers Stores.—2420, Chawri Bazar, Delhi 6.  
 S. N. Chatterjee & Co.—Behari Lal Kartra, Ganda Nala, Delhi.  
 Sun Ink Factory.—Delhi-Shahdara.  
 Technical Graphs Corporation (India).—Bara Ramdwara, New Delhi 1.

## INSULATION MATERIALS

**AMAR NATH BHASKAR SONS.**—H.O. Ishwar Nagar, New Delhi-1; Works at Amar Nagar (Faridabad); Manufacturers of Stoneware Pipes and Fittings, Fire Bricks, Fire Cements, Insulating Bricks and Cements, Acid Resisting Bricks and Cements, Puzzolanic Mortars & Building Materials, etc. Phone : 72345, 76243, 82331.

## IRON AND STEEL MERCHANTS

Amin Chand Payarelal.—8, Scindia House, New Delhi.  
 Ananthrai Steel Industries.—2069, Katra Tobacco, Khari Baoli, Delhi 6.  
 Arjandas Kohli & Co.—Chawri Bazar, Delhi 6.  
 Bhagirathmal Govind Persad.—Chawri Bazar, Delhi 6.  
 Bhagwan Sahai & Co.—Chawri Bazar, Delhi.  
**BISHAMBER DAYAL BADRI PERSHAD.**—3693, Chawri Bazar, Delhi-6; Phone : 262870, Grams: "HAMMER".  
 Delhi Iron Syndicate Pvt. Ltd.—Ajmeri Gate, Delhi 6.  
 Dewanchand Pannalal.—Chawri Bazar, Delhi 6.  
 Fakir Chand Mohanlal.—Chawri Bazar, Delhi.  
 Gangabishan Aggarwal.—Chawri Bazar, Delhi.  
 Godrej & Boyce Mfg. Co., Ltd.—168, Chandni Chowk, Delhi.  
 Haveli Ram & Sons.—4971, Sirkiwalan, Delhi.  
 Iron Traders P. Ltd.—Bazar Sirkiwalan, Delhi.  
 Jagannath & Co.—Naya Bazar, G. B. Road, Delhi.  
 Jaimdas & Sons.—3584, Chawri Bazar, Delhi 6.  
 Jawaharlal Jain & Co.—3580, Chawri Bazar, Delhi 6.  
 Jwalanath Bhagwandas.—Chawri Bazar, Delhi.  
 Khandelwal Bros. Pvt. Ltd.—Hauz Qazi, Delhi 6.  
 K. Krishna & Co.—Chawri Bazar, Delhi 6.  
 Lachmandas Jaldyal.—Chawri Bazar, Delhi.  
 Lachmandas Ramchand.—Chawri Bazar, Delhi.  
 Manilal & Co.—Chawri Bazar, Delhi.  
 Manoharlal Tirlokchand Jain.—New Rohtak Road, Anand Parbat, New Delhi.  
 Metal Industries.—28/E/8, East Patel Nagar, New Delhi.

Munatal Ramdayal.—Chawri Bazar, Delhi 6.  
 Munshilal Omprakash.—Chawri Bazar, Delhi 6.  
 Parkash Iron & Steel Co.—Hauz Qazi, Delhi.  
 Pearey Lal Kannumal.—3686, Chawri Bazar, Delhi 6.  
 Ramchand Bengalimal.—Chawri Bazar, Delhi.  
 Ram Lal Ascharaj Lal Kapoor.—3499, Sirkiwalan, Delhi.  
 Ram Lal Grover & Sons.—39, G.B. Road, Delhi.  
 Rattanlal Rajkishan.—Chawri Bazar, Delhi.  
 Sumerchand Laxmichand Jain.—Chawri Bazar, Delhi 6.  
 Tata Industries Ltd.—Connaught Circus, New Delhi.

## LABORATORY CHEMICALS

**BRITISH DRUG HOUSE (INDIA) PRIVATE LTD.**—Harbans Singh Street, 24, Daryaganj, Delhi-6; H.O. 8, Graham Road, Bombay 1.

**SALOOJA BROTHERS PVT. LTD.**—175-E, Kamla Nagar, Delhi-7; Manufacturers of Laboratory and Research Chemicals.

## LABORATORY INSTRUMENTS MFRS. & DEALERS

**ASSOCIATED INSTRUMENT MFRS. (INDIA) PVT. LTD.**—Sun Light Insurance Bldg., 26-27, Asaf Ali Road, New Delhi-1; Grams: "AIMILDEL", Phone : 271236.

Kailash Brothers P. Ltd.—Chandni Chowk, Delhi 6.

**SALOOJA BROTHERS PVT. LTD.**—175-E, Kamla Nagar, Delhi-7; Exporters, Manufacturers and Wholesale dealers in Scientific Instruments and Chemicals; Regd. Trade Mark "PARCO", Estd. 1938.

**SCIENTIFIC EQUIPMENT WORKS.**—1/777, Nicholson Road, Delhi 6. Mfrs. of Microscopes, Ovens, Surveying Instruments, Laboratory Apparatus, Soil-Cement, Concrete, Textile, Bitumen Testing Equipment.

**WIDSONS SCIENTIFIC WORKS.**—10, West Sadar Thana Road, Delhi-6; Importers of: Scientific Instruments, Glassware, Procelainware & Chemicals; Manufacturers of: Scientific & Surgical Instruments of every description; Phone : 226051.

## LEATHER GOODS MANUFACTURERS

**BHARAT KALA KENDRA PRIVATE LTD.**—28-B, Connaught Place, New Delhi 1.

## LIME MFRS. & MERCHANTS

**S. K. KAHANSONS & CO.**—N-41, Connaught Circus, New Delhi-1; Mfrs. of Satna, Maihar, Katni & Jukehi Limes and Suppliers to Government, Paper Mills, Sugar Mills & other Industries; Grams: 'KAHANSONS.' Phone : 48283, 261602.

## LOCK & SAFE MANUFACTURERS

Allgarh Metal Mart.—284, Aliganj, New Delhi.  
 Godrej & Boyce Mfg. Co. Pvt. Ltd.—Ajmeri Gate Extn., New Delhi.  
 New Rattan Safe Factory.—70, Gokhale Market, Delhi.  
**R. P. LOCKS CO.**—Manufacturers of HARRISON LOCKS; XIII/5612, Gandhi Market, Sardar Bazar, Delhi-6; Phone : 223005; Works: Lock Market, Madar Gate, Aligarh (U.P.). Phone : 741.  
 Royal Safe Co.—13/39, Arya Samaj Road, Karol Bagh, New Delhi.  
 Western Engineering Co.—Library Road, Delhi 6.

## MACHINE TOOLS

**G. M. C. HIMCO INDUSTRIES LTD.**—Regd. office: Tin Printing Bldg., Subzi Mandi, Delhi-7; Phone: 225645, Grams: "GEMHIMCO"; Manufacturers of Plain and Decorated Tin Containers, Tin Posters, Drums, Steel Keys, Light Sheet Metal goods, Pillferproof Caps, Founders and Makers of Agricultural and other Industrial Machinery; Branches: Delhi & Faridabad.  
 Gedore Tools (I) P. Ltd.—P. Box 3027, New Delhi.  
 Jeet Machine Tools.—Shahzada Bagh, Old Rohtak Road, Delhi 6.  
 Kundli Engineering Industries P. Ltd.—72, Janpath, New Delhi.  
 Machine Tools Manufacturers.—Teliwara, Delhi-Shahdara.  
 Madan Machine Tools.—17, DLF Industrial Area, New Delhi 15.  
 Metal Specialities Co.—Lothian Road, Delhi 6.  
 Tool Makers of India.—J-2/16, Rajourie Gardens, New Delhi 15.

## MACHINERY MANUFACTURERS AND DEALERS

Agarwal Pumps & Machinery Corporation.—Naya Bazar, Delhi 6.  
 Agricultural Engineering Co.—Naya Bazar, Delhi 6.  
 Ambee Machinery Mart.—Naya Bazar, Delhi.  
 A. N. Seth & Company.—53, G. B. Road, Delhi 6.  
 Anand Iron & Steel Industries.—29, Najafgarh Road, New Delhi 15.  
 Arjan Singh Khem Chand.—8-B, Jindal Trust Bldg., Ajmeri Gate Extension, New Delhi.  
 Arya Manufacturing Co.—69, G. B. Road, Delhi 6.



Ashok Engg. Works.—18, DLF Industrial Area, New Delhi 15.  
 Ashoka Machinery Stores.—65, G. B. Road, Delhi 6.  
 Aster Engineering Co. (Regd.).—Queen's Road, Delhi.  
 A-Z Electrical Corporation.—49, G. B. Road, Delhi 6.  
 Auto Industrial Bearing Co.—Naya Bazar, Delhi 6.  
 Azad Engineering Co.—Naya Bazar, Delhi 6.  
 B. K. Khanna & Co. Private Ltd.—H.O.: 14-F, Connaught Place, New Delhi.  
 Bajaj Machinery Store.—42, G. B. Road, Delhi 6.  
 Balbir Bros. Pvt. Ltd.—47, Lekh Ram Road, Daryaganj, Delhi.  
 Ball Bearing & Machinery Stores.—2571, G. B. Road, Delhi 6.  
 Banwari Lal Sham Lal.—60, G. B. Road, Delhi 6.  
 Banarsidas Engineering Co.—Naya Bazar, Delhi 6.  
 Barmi Engineering Works.—Qabool Nagar Shahdara, Delhi 32.  
 Batliboi & Co.—G. B. Road, Delhi 6.  
 Benlaks (India) House.—71, G. B. Road, Delhi 6.  
 Bery Engineering Co.—Naya Bazar, Delhi.  
 Bhagwandas & Sons.—Naya Bazar, Delhi.  
 Bhandari Machinery Co., Ltd.—Naya Bazar, Delhi 6.  
 Bharat Engineering Corporation.—33, Kamla Market, New Delhi.  
 Bharat Engineering Corp. (of Lahore).—Naya Bazar, G. B. Road, Delhi.  
 Bharat Engineering & Mfg. Co.—New Rohtak Road, New Delhi.  
 Bharat Imports & Exports.—57, G. B. Road, Delhi 6.  
 Bharat National Foundry.—Motia Khan, New Delhi.  
 Bharatiya Machines Corporation.—72, G. B. Road, Delhi 6.  
 Bombay Machinery Co.—Lahori Gate, G. B. Road, Delhi.  
 British Machinery Supplies Co., The.—Nai Sarak, Delhi 6.  
 Central Engineering Co.—Mohalla Niyaryan Chowk, G. B. Road, Delhi 6.  
 Chopra & Company.—150, Kamla Market, New Delhi.  
 Components & Machinery Corp.—Odeon Bldg., Connaught Place, New Delhi.  
 Construction Machines.—234, Kamala Market, New Delhi.  
 C. B. Mehra & Co.—62, G. B. Road, Delhi 6.  
 Crewco Work P. Ltd.—8/41, Kirtinagar, Industrial Area, New Delhi 15.  
 Dadala Engineering Works.—27, D.L.F., Najafgarh Road, New Delhi 15.  
 Delhi Engineering Co.—Naya Bazar, Delhi 6.  
 Delhi Garage Pvt. Ltd.—Connaught Circus, New Delhi.  
 Delhi Machinery Store.—Chawri Bazar, Delhi 6.  
 Dheru Mal Kapur & Sons.—66, G. B. Road, Delhi 6.  
 Diwan Chand & Co.—74, G. B. Road, Delhi 6.  
 Doyal & Co., H. M.—Lahori Gate, G. B. Road, Delhi.  
 "Escorts" (Agents) Private Ltd.—Pratap Building, Connaught Circus, Post Box No. 187, New Delhi.  
**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.—Delite Cinema Bldg., New Delhi; Importers, Exporters, Engineers and Manufacturers. Phone: 277901.**  
 Expert Electric Works.—45, G. B. Road, Delhi 6.  
 Freewheels (India) Ltd.—1/2, Jhandewala New Link Road, New Delhi.  
 Ganesons Machinery Corporation.—Naya Bazar, G. B. Road, Delhi.  
 G. D. Slegell & Pvt. Co.—Church Road, Kashmere Gate, Delhi 6.  
 General Electric & Machinery Stores.—42, G. B. Road, Delhi 6.  
 G. J. Bros. & Sons.—Lahori Gate, G. B. Road, Delhi.  
 G. L. Khanna & Sons.—65, G. B. Road, Delhi.  
 Globe Engineering Co.—2524, G. B. Road, Delhi 6.  
 Gobind Bearing & Mill Stores.—11, Taj Bldg., G. B. Road, Delhi 6.  
 Golden Machinery Store Co.—61, G. B. Road, Delhi 6.  
 Goodluck Foundry & Workshop.—Old Rohtak Road, Sarai Rohilla, Delhi.  
 Gupta Electric & Machinery Stores.—51, G. B. Road, Delhi 6.  
 Guran Das & Co.—Lahori Gate, G. B. Road, Delhi.  
 Handa Ice & General Machinery Supply Corporation.—66, G. B. Road, Delhi 6.  
 Hans Raj & Co., J. R.—Naya Bazar, Delhi.  
 Hari Sales Agency.—39, G. B. Road, Delhi 6.  
 Harischandra & Co.—Naya Bazar, G. B. Road, Delhi.  
 Harish Bros. (Regd.).—Naya Bazar, Delhi.  
 Hazura Mall Kundan Lall.—63, G. B. Road, Delhi 6.  
 Hind Engineering Company.—57, G. B. Road, Delhi 6.  
 Hindustan Electric & Mill Store Co.—68, G. B. Road, Delhi 6.  
 Hindustan Engineering & Mfg. Co.—34, D. L. F.'s Industrial Area, Motinagar, New Delhi 15.  
 Hindustan Machinery Store.—Naya Bazar, G. B. Road, Delhi.  
 Hindustan Tools Mfg. Co.—1503, Daryaganj, Delhi 7.  
 H. M. Doyal & Co.—55, G. B. Road, Delhi 6.  
 Ice Machinery Co.—66-67, G. B. Road, Delhi 6.  
 Ideal Piston Mfg. Co.—Old Rohtak Road, Delhi 6.  
 Imperial Engineering Co.—Naya Bazar, Delhi.  
 Indo-Europa Trading Co.—1390, Chandni Chowk, Delhi.  
 International Electric & Machinery Stores.—5387, Light Bldg., G. B. Road, Delhi 6.  
**JAI BHARAT TRADING CO.—Naya Bazar & Mori Gate, Delhi 6. Phone: 224686. Grams: "ENGPURZA."**  
 J. Mahabeer & Co. Private Ltd.—Falz Bazar, Daryaganj, Delhi 7.  
 Jakson & Co.—29, Kamla Market, New Delhi.

Jangbahadur Singh & Sons.—Kanson House, Asaf Ali Road, New Delhi.  
 Jansevak Machinery Store.—71, G. B. Road, Delhi 6.  
 Janta Machine Co.—Naya Bazar, Delhi 6.  
**JAY DEE BROTHERS.—63, G. B. Road, Delhi-6; Sole Distributors for "JAY DESH" Tools.**  
 Jaycee Machinery Mart.—52, G. B. Road, Delhi 6.  
**JAYEMS ENGINEERING CO.—39-M, Opp. Telephone Exchange, Connaught Circus, New Delhi; Engineers, Machinery Merchants & Manufacturers' representatives; Direct importers of machine tools, Wood-working Machinery, Welding Equipments, foundry equipments etc. Head Office: Warden House, Sir P. Mehta Road, Bombay 1; Branches at all important centres.**  
 Jee Machinery Corporation.—66/67, G. B. Road, Delhi 6.  
 Kabra House of Modern Machinery.—78, G. B. Road, Delhi 6.  
 Kalpurja Company.—72, G. B. Road, Delhi 6.  
 Kapila Brothers.—Naya Bazar, Delhi 6.  
 Karam Singh Gian Singh Chhabra.—Naya Bazar, Delhi.  
 K. B. Sons.—Naya Bazar, G. B. Road, Delhi.  
 Khattar Hardware Mfg. & Machinery Store.—65, G. B. Road, Delhi 6.  
 Khemchand Bahadarchand Ahuja.—Ahuja Mansion, 67, G.B. Road, Delhi 6.  
 Kriros P. Ltd.—173, Kamla Market, New Delhi.  
 Krishna Water Supply Co.—G. B. Road, Delhi 6.  
 Lahore Machinery Corporation.—Katra Raji, G. B. Road, Delhi.  
 Lakshmi Engineering Works.—Hauz Kazi, Delhi 6.  
 Lal Sons & Co.—1663/1, Queen's Road, Delhi 6.  
 Laldee P. Ltd.—Naya Bazar, Delhi 6.  
 Lyallpur Machinery Co.—69, G. B. Road, Delhi 6.  
 Machinery & Allied Stores.—77, G. B. Road, Delhi 6.  
 Machinery & Oil Store Co.—Naya Bazar, Delhi.  
 Machinery & Tools Co.—Sadar Bazar, Delhi 6.  
 Machines & Spares (India) Ltd.—24, Daryaganj, Delhi 7.  
 Mahalaxmi Machinery Stores.—72, G. B. Road, Delhi 6.  
 Makhan Singh Amar Nath.—77, G. B. Road, Delhi 6.  
 Manilal & Brothers.—Chawri Bazar, Delhi 6.  
 Manjeet Engineering Industries.—71/1, Nanjafgarh Road, New Delhi 15.  
 Mans Ramesh & Co.—Lahori Gate, G. B. Road, Delhi.  
 Mans Ramesh & Co.—12, Taj Building, G. B. Road, Delhi 6.  
 Mediratta Engineering Corporation.—80, G. B. Road, Delhi 6.  
 Metal & Machinery Corp. P. Ltd.—N-76, Connaught Circus, New Delhi 1.  
 Milhard & Co.—Hauz Kazi, Post Office Building, Delhi 6.  
 Mills Store Co. (Delhi) P. Ltd.—62, G. B. Road, Delhi 6.  
 Modern Machinery Store Co.—Naya Bazar, Delhi.  
 Moti Ram & Sons.—65, G. B. Road, Delhi 6.  
 National Electrical & Engg. Corp.—169, Kamla Market, New Delhi.  
 National Electric & Machinery Stores.—5386, Light Bldg., G. B. Road, Delhi 6.  
 National Engineering Co.—Naya Bazar, Delhi.  
 National Machinery Stores.—79, G.B. Road, Delhi 6.  
 Nav Bharat Engineering Co.—Naya Bazar, Delhi 6.  
 New India Mfg. Co.—Chowk Niarlan, 2851, G. B. Road, Delhi 6.  
 Oriental Engineering Works P. Ltd.—78, G. B. Road, Delhi 6.  
 Parbhat Mill Stores.—69, G. B. Road, Delhi 6.  
 Parhawk Co.—11, Esplanade Road, Delhi.  
 P. G. Bansil & Co.—69, G. B. Road, Delhi 6.  
 Pindi Das & Co., P. Ltd.—81, G. B. Road, Delhi 6.  
 Planners & Engineers (Hind) P. Ltd.—42, G. B. Road, Delhi 6.  
 PMCO Printing Machine Co.—9-M, Ramjas Industrial Estate, New Rohtak Road, New Delhi 5.  
 Popular Machinery Store.—2449, Behind G. B. Road, Delhi 6.  
 Power Tools & Appliances Co.—Kashmere Gate, Delhi 6.  
 P. Ratilal & Co.—7/9, Singhsabha Road, Near Clock Tower, Subzi Mandi, Delhi.  
 Precision Machinery Co.—51, G. B. Road, Delhi 6.  
 Prem Brothers.—73, G. B. Road, Delhi 6.  
 Prem Engineering Works.—22, Okhla Industrial Estate, New Delhi 20.  
 Premier Machines P. Ltd.—39, Najafgarh Road, New Delhi 15.  
 Punjab Steel Works.—Naya Bazar, G. B. Road, Delhi.  
 Raghunath Brothers, Naya Bazar, Delhi 6.  
 Raj Engineering Works Ltd.—8/32, Ajmeri Gate, Delhi.  
 Ram Krishna Kulwant Rai.—50, G. B. Road, Delhi 6.  
 Ram Narain Gupta & Bros.—Lahori Gate, G. B. Road, Delhi.  
 Rama Machinery Store Co.—61, G. B. Road, Delhi 6.  
 Rameshwar Dass Dwarkadass P. Ltd.—Chawri Bazar, Delhi 6.  
 Raunaq & Co. P. Ltd.—Hauz Kazi, Delhi 6.  
 R. D. Sehgal & Sons.—79, G. B. Road, Delhi 6.  
 Refrigerators (India) Ltd.—Scindia House, Connaught Circus, New Delhi.  
 Reliable Machinery Supply Co.—Katra Raji, G. B. Road, Delhi.  
 Reliance Agencies.—2517, Chowk Niarlan, G. B. Road, Delhi 6.  
 Royal Mills Store Co.—61, G. B. Road, Delhi 6.  
 S. C. Kumar & Co.—59, G. B. Road, Delhi 6.  
 S. D. Nanda & Sons.—56, G. B. Road, Delhi 6.  
 S. D. Sharma & Co.—58, G. B. Road, Delhi 6.  
 Seth & Co., A. N.—53, G. B. Road, Delhi 6.  
 Seth & Sons, S. R.—Naya Bazar, G. B. Road, Delhi.



Shakti Pulley Manufacturing Co.—5391-92, Light Building, G. B. Road, Delhi 6.  
 Shiv Narain Sawhney.—53, Japan Bldg., 5307-8, G. B. Road, Delhi 6.  
 Sharda Machinery Corpn.—11, Pusa Road, New Delhi 5.  
 Sharma Engineering Co.—Naya Bazar, Delhi.  
 Sharma, Sharma & Sons.—Naya Bazar, Delhi 6.  
 Skoda (I) P. Ltd.—1/25, Asaf Ali Road, New Delhi.  
 S. M. Singh & Co.—71, G. B. Road, Delhi 6.  
 S. N. Mechanical Engg. Works.—2860/5, Mohalla Shahganj, G. B. Road, Delhi 6.  
 S. R. & Company.—5339/52, G. B. Road, Delhi 6.  
 S. R. Seth & Sons.—170, Kamla Market, New Delhi.  
 Sri Krishna Engineering Works.—5037, Paharganj, 6, Tooti, New Delhi.  
 Sri Krishna Machinery Mfg. Co.—VII/5055, Sirkiwala Bazar, Delhi 6.  
 Standard Spares & Mechanical Works.—2443, G. B. Road, Delhi 6.  
 Star Engineering Co.—Naya Bazar, Delhi 6.  
 Supreme (India) Trading Co.—77, G. B. Road, Delhi 6.  
 Supreme Trading Corporation.—2877, Shah Ganj, G. B. Road, Delhi 6.  
 Talwar & Co.—Lahori Gate, G. B. Road, Delhi.  
 Trading Engineers.—50, G. B. Road, Delhi 6.  
 Triveni Engineering Works Ltd.—National Ins. Bldg., Parliament Street, New Delhi.  
 Universal Engg. Corpn.—Najafgarh Road, New Delhi 15.  
 United Engineering Corpn.—XV/10159, D. B. Gupta Road, New Delhi 1.  
 United India Machinery Agencies.—47, G. B. Road, Delhi 6.  
 United Steel Industries.—Naya Bazar, G. B. Road, Delhi.  
 Universal Engineering Corpn.—Najafgarh Road, New Delhi 15.  
 Vijay Kumar & Co.—Lahori Gate, G. B. Road, Delhi.  
 Vijay Machinery Corpn.—9-B, Jindal House, Asaf Ali Road, New Delhi.  
 Western Manufacturing Co. (Delhi) Private Ltd.—57, Jor Bagh, New Delhi 3.  
 Widge & Co.—Naya Bazar, Delhi 6.  
 Wilson Engineering Co.—67, G. B. Road, Delhi 6.  
 Worthington Simpson Ltd.—123, Baird Road, New Delhi.

### MACHINERY AND PRECISION TOOLS MANUFACTURERS

#### GLOBE ENGINEERING CO.

2524, G. B. Road, Delhi 6. Manufacturers of Grade I Heavy duty Pedestal grinders and Revolving Centres. Other Products: Gear cutting and Dividing Attachment, Test Bars, Plug & Ring Gauges, Arbors Knurling Holders, Knurls, Drill Sleeves etc., are on the Rate Contract with D.G.S. & D. for 10", 12", 14" and 18", 20", 24" and 30" Heavy Duty Pedestal Grinders.

#### MARINE ENGINES

PREM NATH DIESELS PRIVATE LTD.—8, Scindia House, New Delhi; Phone: 45891; Grams: "PREMDIESEL".

#### MATHEMATICAL & SCIENTIFIC INSTRUMENTS

G. S. Kashyap & Sons.—Pataudi House, Daryaganj, Delhi.  
 National Trading Co. Ltd.—555, Esplanade Road, Delhi.  
 Rekha Industries.—30, Okhla Industrial Estate, New Delhi 20.

#### METAL LABELS

EXCEL PROCESS PVT. LTD.—117, Andheri Kurla Road, Bombay 69; Manufacturers of Metal labels, Dials, Scales, Badges, Advtg. Novelties in Anodised Alum., Brass, Sp. Steel etc., Rep.: Narendra Agencies, 2E/22, Jhandewalan, New Delhi-1; Phone: 568452.

#### METAL MFRS. AND MERCHANTS

Manufacturers of Sheets, Strips and Coils, Non-Ferrous Tubes, Rods and Sections, Zinc Oxide, Red Lead and Litharge

**KAMANI TUBES PVT. LTD., KAMANI METALLIC OXIDES PVT. LTD., KAMANI METALS & ALLOYS LTD.**

United India Bldg., F-Block, Connaught Place, New Delhi-1  
 Phone: 48058.

### MILL GIN STORES SUPPLIERS

Associated Textile Engineers.—Chawri Bazar, Delhi.  
**CHHUTTAN LALL MATTUMAK.**—Chawri Bazar, Delhi-6.  
 Delhi Machinery Stores.—Chawri Bazar, Delhi.  
 Delhi Mill Stores.—Chawri Bazar, Delhi.  
 Hindustan Mill Stores Co.—3232, Chomukha Mandir Street, Hauz Kazi, Delhi 6.  
 Jhalani Brothers.—Gali Lohe Wali, Chawri Bazar, Delhi.  
 J. M. Bodiwala & Sons.—Chawri Bazar, Delhi.  
 Khanna & Sons, G. L.—Lahori Gate, G. B. Road, Delhi.  
 Seth & Co., A. N.—Katra Raji, G. B. Road, Delhi.  
 Textile Stores & General Supply Agency.—Chawri Bazar, Delhi 6.

### NEWSPAPERS AND PERIODICALS

Agricultural Situation in India (Monthly).—Civil Lines, Delhi.  
 All-India Motorist (Monthly).—D-24, Odeon Bldg., New Delhi.  
 Beecham's India Air Guide (Monthly).—M. Block, M-6, Radial Road, No. 7, New Delhi.  
**CENTRAL NEWS AGENCY.**—23/90, Connaught Circus, New Delhi-1 (Branch: 15A/55, W.E.A., Karol Bagh, New Delhi-5); Grams: "AKHBARGHAR"; Booksellers, Subscription Agents & Suppliers of Indian and Foreign Newspapers, Periodicals and Books; Phone: 44762, Branch: 57340.  
 Chitra (Weekly).—Bhagirath Palace, Chandni Chowk, Delhi 6.  
 Commerce & Industry (Weekly).—Prabhudayal Bldg., Connaught Circus, New Delhi.  
 Congress Bulletin (Monthly).—7, Jantar Mantar Road, New Delhi.  
 Congress Sandesh (Weekly).—Jantar Mantar Road, New Delhi.  
 Daily Pratap (Daily).—Mathura Road, New Delhi.  
 Daily Watan (Daily).—Chandni Chowk, Delhi.  
 Eastern Economist (Weekly).—52, Queensway, New Delhi.  
 Food & Farming (Monthly).—D-24, Odeon Bldg., P.O. Box 540, New Delhi.  
 Hindustan (Daily).—Connaught Circus, New Delhi.  
 Hindustan Standard (Daily).—Qutab Road, Delhi.  
 Hindustan Saptahik (Weekly).—Connaught Circus, New Delhi.  
 Hindustan Times (Daily).—Connaught Circus, New Delhi.  
 Indian Express (Daily).—Mori Gate, Delhi.  
 Indian Farming (Monthly).—I.C.A.R., Queen Victoria Road, New Delhi.  
 Indian Labour Gazette (Monthly).—Civil Lines, Delhi.  
 Indian Listener (Weekly).—Curzon Road, New Delhi.  
 Jan Kalayan (Quarterly).—Lakshmi Insurance Bldg., New Delhi.  
 Journal of the United Service Institution of India (Quarterly).—Kashmir House, New Delhi.  
 Journal of Industry & Trade (Monthly).—Civil Lines, Delhi.  
 Kurukshetra (Monthly).—CPA., Rashtrapati Bhavan, New Delhi.  
 Medical Review of Reviews (Monthly).—Post Box 1160, Burn Bastion Road, Delhi.  
**NAVBHARAT TIMES (Daily).**—7, Bahadur Shah Zaffar Marg, Delhi.  
 Overseas Hindustan Times (Weekly).—Connaught Circus, New Delhi.  
 People (Weekly).—19-C Block, Connaught Place, New Delhi.  
 Picturegoer (Monthly).—92, Daryaganj, Delhi.  
 Prasrika (Quarterly).—Post Box 2011, Delhi.  
**RADIANCE VIEWSWEEKLY.**—36, Katra Gokal Shah, Near Jama Masjid, Delhi-6. Phone: 264843, Grams: "KHULOOS"—Delhi.  
 Sainik Samachar (Weekly).—F-Block, D.H.P.Q., New Delhi.  
 Statesman (Daily).—Connaught Circus, New Delhi.  
 Swarajya (Daily).—Dharam Nagar, Naiwara, Chawri Bazar, Delhi.  
 Tax & Commercial Reports (Monthly).—M-27, Connaught Circus, New Delhi.  
 Taxation.—3, Daryaganj, Delhi 7.  
**TIMES OF INDIA (Daily).**—7, Bahadur Shah Zaffar Marg, Delhi

### OFFICE EQUIPMENT

Adrema Ltd.—Lakshmi Insee. Bldg., Asaf Ali Road, New Delhi.  
 Bharat Carbon & Ribbon Mfg. Co. Ltd.—Bombay Life Bldg., Connaught Circus, New Delhi.  
 Blackwoods India Ltd.—D.A.G. Extension, New Delhi.  
 General Equipment Merchants Ltd.—2/90, Connaught Circus, New Delhi.  
 Gestetner Duplicators Pvt. Ltd.—9, Scindia House, New Delhi.  
 Godrej & Boyce Mfg. Co., Private Ltd.—Lakshmi Insurance Bldg., Asaf Ali Road, New Delhi.  
 Kilburn & Co., Private Ltd.—28, Barakhamba Road, New Delhi.  
 Kores (India) Pvt. Ltd.—22-A, Asaf Ali Road, New Delhi.  
**REMINGTON RAND OF INDIA LTD.**—Manufacturers of Remington Rand Business Equipment; Jivan Vihar, 3, Parliament Street, New Delhi; Phone: 46419. Grams: "REMINGTONS."  
 Boneo Ltd.—Bombay Life Bldg., Connaught Circus, New Delhi.



## OIL &amp; LUBRICANTS

**BENGAL LUBRICANTS CO.**—C. 3/4, Rana Partap Bagh, Delhi-7; Manufacturers of all grades of Lubricating Greases and Coal Tar; Phone: 229017.

## OIL WELL DRILLING &amp; PRODUCTION EQUIPMENTS

**PREM NATH DIESELS PRIVATE LTD.**—8, Scindia House, New Delhi. Phone: 45891, Grams: "PREMDIESEL".

## OPTICIANS &amp; OPTICAL GOODS MANUFACTURERS

Accurate Opticians.—67/1, Rohtak Road, New Delhi 5.  
British Optical Co.—Ch. Chowk, Delhi 6.

C. N. Harison Ltd.—C. Block, Connaught Place, New Delhi 1.  
Capital Optical Co.—1391, Chandni Chowk, Delhi 6.  
Charandas Khanna & Sons.—1, Ch. Chowk, Delhi 6.  
Combined Services P. Ltd.—4-C, Connaught Place, New Delhi.  
Comrades Optical Co.—5245, Ballimaran St., Delhi 6.  
Comrades Spectacles Mart.—162, Qutab Road, Delhi 6.  
Delhi Optical Co.—Ch. Chowk, Delhi 6.

Dhawan Optical Industries.—19, Beadonpura, Karol Bagh, New Delhi 5.

Everest Optician.—Chowk Gurdwara Road, Karol Bagh, New Delhi 5.

Grover Sons.—Post Box 1665, Fountain, Delhi 6.

Imperial Optical Works.—K. Baryan, Fatehpuri, Delhi 6.

International Industries.—132, Park Road, Karol Bagh, New Delhi 5.

Karachi Optical Co.—Ch. Chowk, Delhi 6.

Kataria Optical Co.—Fatehpuri, Delhi 6.

Kay Kay Optical Industries.—Mehrauli P.O., Delhi.

Kirparam & Sons.—Connaught Circus, New Delhi.

Kumar & Co., M. M.—Fatehpuri, Delhi 6.

Lawrence & Mayo (India) Ltd.—76, Janpath, New Delhi 1.

Laxmi Opticians.—Hardhyan Singh Road, Delhi 5.

Marshal Optical Co.—Krishna Market, Karol Bagh, New Delhi 5.

Modern Optical Co. P. Ltd.—Ch. Chowk, Delhi 6.

Mumick Ltd.—12-B, Connaught Place, New Delhi.

Nagpal, G. R., & Sons.—Near Fountain, Ch. Chowk, Delhi 6.

Nagpal Optical Co.—Industrial Area, Najafgarh Road, New Delhi 15.

New Optical House.—124, M. Market, Connaught Circus, New Delhi 1.

Onilco Opticians.—112, Baird Road, Delhi 1.

Optical Corner of India.—D 26, Connaught Place, New Delhi 1.

Optiko Industries.—10980, Sat Nagar, Karol Bagh, New Delhi 5.

Punjab Optical House.—1816, Ch. Chowk, Delhi 6.

President Optical Co.—Fountain, Delhi 6.

**PUNJAB SPECTACLES CO.**—1458, Fountain, Chandni Chowk, Delhi 6.

Rama Opticians.—Gurdwara Road, Karol Bagh, New Delhi 5.

Rashtriya Optical Traders.—4, Daryaganj, Post Box 1154, Delhi 6.

Rup Basant Bros.—629, Chandni Chowk, Delhi 6.

Sabharwal Opticians.—Ajmal Khan Road, Delhi 5.

Shri Kishan & Sons P. Ltd.—7/90, Connaught Circus, New Delhi.

Sushil Opticians.—5/38, W.E.A., New Delhi 5.

Uberoi Opticians.—Opp. Marina Hotel, Connaught Circus, New Delhi.

Up-to-date Optical Works (Regd.).—21, Beadon Pura, Karol Bagh, New Delhi 5.

## PACKAGING

**PAPER PRODUCTS LTD., THE.**—Head Office: 13-14, Ajmeri Gate Extension, New Delhi 1. Phone: 271324. Grams: "PRINTPAK." Delhi Office: Vohra House, 1/25, Asaf Ali Road, New Delhi. Phone: 273059. (For details, please see Commercial Firms section).

**PACKWAYS.** (Professional Packers), 3 A/3, Asaf Ali Road, New Delhi-1; Solve all your packing problems and ensure safe transit to any part of the world; Phone: 272787; Resl.: 54096.

## PAINTS, ENAMELS AND VARNISHES

Abrol & Co. P. Ltd., R. C.—E. Block, Connaught Place, New Delhi.  
Anand Brothers.—Pahar Ganj Road, New Delhi 1.  
Bawa Paints (Private) Ltd.—Katra Barien, Delhi.  
B. Harnam Singh & Sons.—Chandni Chowk, Delhi.

**B. KESAR SINGH & SONS.**—Katra Baryan, Fatehpuri, Delhi-6; Phone 268980; Grams: "RANGWALA".

Bharat Chemical Works.—Katra Barien, Delhi.

B. Keser Singh & Sons.—Katra Barien, Delhi.

**BLUNDELL EOMITE PAINTS LTD.**—Northern Sales Division, Jindal House, 9/1, Asaf Ali Road, New Delhi-1; Phone: 271951-52, Grams: "BLUNPAINTS".

Calcutta Paint Mart.—Katra Barien, Delhi.

Delhi Colour Paint Mart.—Fatehpuri, Delhi.

Dewan Chand & Sons.—41, G. B. Road, Delhi 6.

Duarka Dass & Sons.—Katra Barien, Delhi.

Duelac Paints Corporation.—Katra Barien, Delhi.

Ford Paint Co.—B, Lal Kuan, Delhi.

G. S. Harnam Singh.—Fatehpuri, Delhi.

Harish C. Khosla & Co.—Zinat Mahal, Lal Kuan, Delhi 6.

Himalaya Trading Co.—Fatehpuri, Delhi 6.

## HOYLES PAINTS LTD.

1-6 B, Asaf Ali Road, New Delhi-1.

Phone: 28484

Regd. Office: 7, Council House Street, Calcutta-1

Head Office: 18, Rabindra Sarani, Calcutta-1

Phone: 348881 (6 Lines), 348823 (Factory) Konnagar (W.B.)

Manufacturers of Paints, Enamels and Varnishes.

India Trading House.—Fatehpuri, Delhi.

Jain Chemical Works.—Katra Barien, Delhi.

Kailash Bros. Ltd.—Chandni Chowk, Delhi 6.

Khalsa Bros.—Roshanara Road, Delhi 6.

Khurana Bros.—1742, Nai Baoli, Delhi 6.

Lakshmi Paint House.—Katra Barien, Delhi.

Lalit & Co.—Fatehpuri, Delhi.

Mehra Paint Mart.—B. Katra Barien, Delhi.

**N. S. SOBHA SINGH & SONS.**—Fatehpuri, Chandni Chowk, Delhi. Head Office: Old Misri Bazar, Amritsar.

Parkash Brothers.—Katra Barien, Delhi.

Punjab Colour Paint Mart Co.—B. Katra Barien, Delhi.

E. S. Chaudhry Ramjilal & Sons.—B. Katra Barien, Delhi.

Rabbi Paint Colour & Varnish Co.—Kabli Attar, Chandni Chowk, Delhi 6.

Ramakrishna Paint & Hardware Mart.—3404/8-H, Haus Qazi, Delhi 6.

Saluja & Co.—Katra Barien, Delhi.

Sant Ram Parmanand.—1/21, Asaf Ali Road, New Delhi.

Santram Nikkamal.—Fatehpuri, Delhi.

Shadi & Co.—Fatehpuri, Delhi.

Shakti Paint House.—Katra Barien, Delhi.

Suresh Brothers.—64, G. B. Road, Delhi 6.

Thakkar Trading Co.—7/2, Raj Nagar, Delhi 5.

United Building Stores.—Siddiq Building, G. B. Road, Delhi 6.

United Commercial Syndicate.—Fatehpuri, Delhi.

W. S. Bhag Singh & Sons.—Katra Barien, Delhi.

## PAINT &amp; VARNISH MANUFACTURERS

Anglo Dutch Paint Colour & Varnish Works (Pvt.) Ltd.—50, Najafgarh Road, New Delhi 15.

Ashoka Paint & Chemical Works.—4411, Nai Sarak, Delhi 6.

Asia Chemicals Ltd.—E. Park Road, Delhi 5.

Asian Oil Paints Co. (I) P. Ltd.—6/9, E. Patel Nagar, New Delhi 12.

Bhagsons Paint Industries.—Katra Barien, Fatehpuri, Delhi.

Bharat Paint House.—Chandni Chowk, Delhi.

Blundell Eomite Paints Ltd.—9/1, Asaf Ali Road, New Delhi.

British Paint (India) Ltd.—12/3, Asaf Ali Road, New Delhi.

**DELHI PAINTS CORPN.**—M-51, Connaught Circus, New Delhi-1; Pencil Lacquers, Roller Coating Finishes & Spray Painting equipments; Phone: 45586; Resl.: 55708, Factory: 54786.

Elephant Oil Mills P. Ltd.—9/1, Asaf Ali Road, New Delhi.

Fleming, John & Co. Pvt. Ltd.—Choudhury Bldg., Connaught Circus, New Delhi.

**GOODLASS NEROLAC PAINTS PRIVATE LTD.**—9-10-3, Asafali Road, New Delhi.

Hoyle Robson, Barnett & Co. Ltd.—1-6B, Ajmeri Gate Extn., New Delhi.

Imperial Paint & Varnish Works.—Motia Khan, Nawabganj, Delhi.

Jallo Subsidiary Industries Co. India Ltd.—7/33, Daryaganj, Delhi 6.

Jayana Fine Colour & General Works.—Raghunath Nagar, Bela Road, Delhi.

Jenson & Nicholson India Ltd.—Kashmere Gate, Delhi.

Jessop & Co. Ltd.—Indra Palace, Connaught Circus, New Delhi.

Jumna Paint, Colour & Varnish Works.—Faiz Bazar, Delhi.

Kailash Brothers Pvt. Ltd.—Near Grindlay's Bank, Chandni Chowk, Delhi.

**KOHINOOR PAINT, COLOUR & VARNISH WORKS.**—Head Office: 13, R. B. Rattan Chand Road, The Mall, Amritsar; Branch Office: 155, Katra Baryan, Delhi 6.

Manohar Paint Co.—3011, G. B. Road, Delhi.

**MERA CHEMICALS.**—Ajit Mansions, Outside Ajmere Gate, Delhi 6.

Metro Paint Industries.—260, Kamla Market, New Delhi.

Nagarth Paints P. Ltd.—2, Keeling Road, New Delhi.

Northern India Paint, Colour & Varnish Co. Pvt. Ltd.—P.O. Box No. 379, New Delhi.



Ram Parkash & Sons.—6490, Fatehpuri, Delhi 6.  
 Ravi Paint, Colour & Varnish Works.—Choudhury Lodge, Illahibux Road, Karol Bagh, New Delhi.  
 Roshanara Paints & Varnish Works.—P.B. No. 1587, Roop Nagar, Subzi Mandi, Delhi 6.  
 Shalimar Paint, Colour & Varnish Co. Ltd.—9A, Connaught Place, New Delhi.  
 Spraylac Paint Corporation.—9, Faiz Bazar, Delhi.  
 Sunlight Paints Mfg. Co.—Fatehpuri, Delhi.  
 Swastik Colour & Paint Industries.—10, Sham Bhawan, Faiz Bazar, Delhi.

### PAINTING CONTRACTORS

**MAKHIJA & CO.**—96, Kamla Market, New Delhi-1; Specialists in Plastic Emulsion Painting, Synthetic enamel painting, Distemping, Spray painting, Acid proof painting for Factories etc., Phone: 274820, Resi.: 53618.

### PENCIL MANUFACTURERS

Capital Industries Private Ltd.—Bhakar Bhavan, Serai Rohilla, Delhi 6.  
 Jupiter Industries.—5, Chamellon Road, Delhi.

**MOONLIGHT INDUSTRIES.**—Manufacturers of quality pencils, 14-A, DLF Industrial Area, Najafgarh Road, New Delhi 15.

Universal Lead Pencil Works.—857, Gali Berwali, Delhi.

### PERAMBULATORS

B. L. Ramrichpal.—Lothian Road, Kashmere Gate, Delhi.  
 Bestways & Co.—Outside Moti Cinema, Chandni Chowk, Delhi.  
 British Perambulator Manufacturing Co.—Qutab Road, Delhi.  
 Madan Brothers.—IV/86, Chandni Chowk, near Dariba, Delhi 6.  
 N. Kishore & Co.—Esplanade Road, Delhi 6.  
 Raja Lal & Sons.—1476-1, Chandni Chowk, Delhi 6.

### PEST CONTROL (INDIA) PRIVATE LTD.

Consulting Entomologists—Termite Control—Disinfestation—Fumigation Service.

Address:—B/5, Defence Colony, New Delhi 3.

Head Office:—Yusuf Building, Mahatma Gandhi Road, Bombay 1.

(For further details please see Bombay Commercial Firms Section.)

### PHARMACEUTICALS

**BRITISH DRUG HOUSE (INDIA) PRIVATE LTD.**—Harbans Singh Street, 24, Daryaganj, Delhi 6; H.O. 8, Graham Road, Bombay 1.

**RANBAXY LABORATORIES LTD.**—Okhla Industrial Area, New Delhi 20; Phone: 74971; Manufacturers and Distributors of Drugs & Medicines of repute; Chairman: Bhai Mohan Singh; Branches: Bombay, Calcutta, Madras, New Delhi & Kanpur.

### PHOTOGRAPHERS, PHOTOGRAPHIC MATERIAL DEALERS & IMPORTERS

Ajanta Photo Studio.—72, Janpath, New Delhi 1.  
 Ama P. Ltd.—Plaza Bldg., New Delhi 1.  
 Anand Studio.—2212, Gurdwara Road, Karol Bagh, Delhi 5.  
 A. R. Dutt.—Alipore Road, near Ludlow Castle, Delhi.  
 Artland Studio.—Chawri Bazar, Delhi.  
 Asia Photo Studio.—J. Masjid, Delhi 6.  
 Associated Press Photos.—M. Gate, Delhi 6.  
 Awtar Studios.—Chandni Chowk, Delhi.  
 Bashimber Dayal & Sons.—Dariba Kalan, Delhi.  
 Berry Studio.—Kashmere Gate, Delhi.  
 Capital Studio.—Connaught Place, New Delhi.  
 Dasa & Sons.—Connaught Circus, New Delhi.  
 Desh Photo Studio.—Esplanade Road, Delhi.  
 Electric Photo Studio.—Chandni Chowk, Delhi.  
 Eurasia Trading Co.—Chawri Bazar, Delhi 6.  
 Foto-centre.—17, Faiz Bazar, Daryaganj, Delhi.  
 Gandhi Studio.—13/2, W. E. A., Ajmal Khan Road, Karol Bagh, Delhi 5.  
 Globe Studio.—Paharganj, New Delhi 1.  
 Gopal Chitra Kuteer.—73, Ansari Road, Daryaganj, Delhi.  
 G. S. Virdee Lal Chand.—Kutab Road, Delhi.

Hora Art Studio.—Delite Cinema Bldg., New Delhi 1.  
 Imperial Photo Stores.—10, Ch. Chowk, Delhi 6.  
 Imperial Photo Studio.—Connaught Place, near Post Office, New Delhi.  
 Inder Jit Rallia Ram & Co.—Connaught Circus, New Delhi.  
 India Photos Camerarts.—53, Panchquin Road, New Delhi.  
 Indraprastha Photographics.—4/76, W.E.A., Delhi 5.  
 International Photo Product P. Ltd., Moti Cinema Compound, Chandni Chowk, Delhi 6.  
 Jain Photo Service.—Bazar Subzi Mandi, Delhi.  
 Jasbir & Co.—293, Azad Market, Delhi 6.  
 Kanwal Bros.—Esplanade Road, Delhi.  
 Karachi Photo House.—Subzi Mandi Tower, Delhi.

**KESHO RAM & SONS (INDIA) PRIVATE LTD.**, Chandni Chowk, Opp. Dariba, Delhi 6; Phone: 228818, Grams: "ZENO-FLEX"; 314, Commerce House, Medows Street, Fort, Bombay; Grams: "PHOTOPAPER".

Kinsey Bros.—Connaught Place, New Delhi.  
 K. L. Arora & Sons.—Baird Road, New Delhi.  
 Kumar Bros.—Esplanade Road, Delhi.  
 Lakshmi Photo Co.—Chandni Chowk, opp. Imperial Bank, Delhi.  
 L. Dasa & Sons.—Connaught Place, New Delhi.  
 Mangal & Co.—Chandni Chowk, near Dewan Hall, Delhi.  
 Metro & Co.—Chandni Chowk, near Imperial Bank, Delhi.  
 Metro Studio.—Connaught Circus, New Delhi.  
 Mulk Raj & Son.—Nai Sarak, Delhi.  
 Nice Photo Studio.—Chandni Chowk, Delhi.  
 Oriental Art Studio.—Esplanade Road, Delhi.  
 Paperware (India) P. Ltd.—30, D. B. Gupta Road, New Delhi 1.  
 Photo Service Co.—Connaught Place, New Delhi.  
**PHOTO STUDIOS.**—12-N, Connaught Circus, New Delhi 1, and 24, Lajpatrai Road, Simla-1.  
 Prabhat Studio.—53/4, D. B. Gupta Road, Delhi 5.  
 Punjab Photo Service.—N. Central Market, Flat No. 5, Con. Circus, New Delhi 1.  
 Radha Fancy Stores.—Near Moti Bazar, Chandni Chowk, Delhi 6.  
**RANGOON STUDIO (TALREJA BROS.)**—58, Janpath, New Delhi-1; Estd. 1939, Importers, Exporters, Retailers and Wholesalers for Still and Movie Equipments, Colour and Black/White Developing & Printing Service, Photographers and Film Producers (Documentary and Television); Phone: 47861.

B. R. Gupta & Sons.—Baird Road, New Delhi.  
 Republic News Pictures.—14, Shankar Market, Connaught Circus, New Delhi 1.  
 Rup Basant Bros.—629, Ch. Chowk, Delhi 6.  
 Royal Photos Co.—Connaught Circus, New Delhi.  
 Royal Studios.—B-Block, Connaught Place, New Delhi.  
 Sagar Studio.—54, Sarojini Market, Delhi 3.  
 Simla Studios.—Regal Building, Connaught Circus, New Delhi.  
 Soni Studio.—Esplanade Road, Delhi.  
 Star Photo House.—Esplanade Road, Delhi.  
 Statfotos Photostaf Department.—22A, Asaf Ali Road, New Delhi.  
 Studio India.—49G, Connaught Circus, New Delhi 1.  
 Studio Newlight.—4, Sundar Nagar Market, Delhi 1.  
 Talreja Bros. (Rangoon Studio).—56, Queensway, New Delhi.  
 United Photo Co.—Ch. Chowk, Delhi 6.  
 Ved & Co.—72, Janpath, New Delhi 1.

### PIPES AND FITTINGS MFRS. & MERCHANTS

**AMAR NATH BHASKAR SONS.**—H.O., Ishwar Nagar, New Delhi-1; Works at Amar Nagar (Faridabad); Manufacturers of Stoneware, Pipes and Fittings, Fire Bricks, Fire cements, Insulating Bricks and Cements, Acid Resisting Bricks and Cements, Pozzolanic Mortars & Building material etc., Phone: 73345, 76243, 82331.  
 Agiaram & Sons.—5002, Sirkiwala, Delhi.  
 Anand Pump Water Supply Co.—4958, Hauz Kazi, Delhi.  
 A. S. Shamsar Singh & Co.—15, Rupnagar, Subzi Mandi, Delhi.

### ASSOCIATED TUBE WELLS (INDIA) PRIVATE LTD.

12, Scindia House, New Delhi.

Phone: 46546, 46547

Underground Water Specialists & Tubewell Engineers, Mfrs. of Pipes Structural Material, Railway Signalling Equipment (Mechanical & Electrical), Bench Vices, Chain Pulley Blocks, 'VERSHA' High Level Cast Iron Cisterns with I.S.I. quality Marking.

Grams: "TUBEWELLS"



A. Worah & Co.—Chawri Bazar, Delhi 6.  
 Banwari Lal Radha Kishan.—Chawri Bazar, Delhi 6.  
 Bhagat Singh & Son.—Sirkiwala, Delhi.  
 Bhanamal Gulzarimal P. Ltd.—Chawri Bazar, Delhi 6.  
 Banarshi Shah & Co.—4921, Hauz Qazi, Delhi.  
 Behari Lal & Co.—Hauz Kazi, Delhi.  
 B. R. Bwasheswarnath.—452, Queen's Road, Delhi.  
 Chand & Co.—P.O. Bldg., Hauz Kazi, Delhi.  
 Crown Trading Co.—Hauz Kazi, Delhi.  
 Dakhanimal Melaram.—52/52, W.E.A., Karol Bagh, New Delhi.  
 Dakhnimal Balmukand.—Inside Ajmeri Gate, Delhi 6.  
 Delhi Hardware Store.—Hauz Kazi, Delhi.  
 Delhi Pipe Stores.—2868, Sirkiwala, Delhi.  
 Dunichand Kesho Ram.—Inside Ajmere Gate, Delhi 6.  
 Dunichand Ramnath.—Hauz Kazi, Delhi.  
 Fakirchand & Sons.—Hauz Qazi, P.O. Bldg., Delhi.  
 Gayfield & Co.—Chawri Bazar, Delhi.  
 Gobind Ram & Sons.—Bazar Sirkiwala, Delhi 6.  
 Harbans Singh & Mehta & Co.—Maula Bux Bldg., Roshanara Road, Delhi.  
 Hindustan Trading Co.—4957, H. Kazi, Delhi.  
 Indian Hume Pipe Co., Ltd.—Sarai Rohilla, Delhi 6.  
 Iron Traders P. Ltd.—Sirkiwala, Delhi.  
 Jain Brothers.—3272-73, Hauz Kazi, Delhi.  
 J. B. Norton & Sons, Ltd.—Kashmere Gate, Delhi.  
 John Tinson & Co. Pvt. Ltd.—Queensway, New Delhi.  
 Krishna Pipe Stores.—3369, Hauz Kazi, Delhi.  
 Krishna Water Supply Co.—Taj Bldgs., G. B. Road, Delhi 6.  
 Kuldip Singh & Bros.—Gali Hakim Baqa, Delhi 6.  
 Lall & Co.—Hauz Kazi, Delhi.  
 Madanlal Bajaj & Co.—3368, Hauz Kazi, Delhi.  
 Mahabir Pershad & Sons.—Chawri Bazar, Delhi 6.  
 Manilal & Bros.—Chawri Bazar, Delhi.  
 Melaram Charandass.—Hauz Kazi Bldg., Delhi.  
**METALITE INDUSTRIES.—Manufacturers & Engineers, 7, Darya Ganj, Delhi 6.**  
 Metal Tube & Allied Works.—18/90, Connaught Place, New Delhi.  
 Modern Machinery Traders.—Flat 9, Single Krishna Market, Lajpat Nagar, New Delhi.  
 Munni Lal Bajaj & Co.—2387, Sirkiwala, Delhi.  
 Narinjan Das Anand & Sons.—4966, Hauz Kazi, Delhi.  
 P. Madanlal & Co.—Chawri Bazar, Delhi 6.  
 Prem Nath & Sons.—4904, Hauz Kazi, Delhi.  
 Prem Vijay & Co.—3594, Chawri Bazar, Delhi 6.  
 R. K. Anand & Co.—3535, Gali Hakim Baqa, Delhi.  
 Ratanji Bhagwanji & Co.—3760, Chawri Bazar, Delhi 6.  
 Raunaq & Co., Private Ltd.—Church Bldg., Hauz Qazi, Delhi 6.  
 S. D. Marker & Co.—57, Panchkuin Road, New Delhi.  
 Sardari Lal & Co.—Hauz Qazi, Delhi.  
 Spunpipe & Construction Co. of India Ltd.—9-A/41, W.E.A., Karol Bagh, New Delhi 5.  
 Standard Tube & Hardware Mart.—Lahori Gate, G. B. Road, Delhi.  
 Surendra Singh Obrai.—Kundan Kutia, Karol Bagh, New Delhi.  
 Vinod Metal Industries.—3766, Chawri Bazar, Delhi 6.

### PLASTIC MANUFACTURERS

**CAPRIHANS (INDIA) PVT. LTD.—7/7, Desh Bandhu Gupta Road, Paharganj, New Delhi; Phone : 271673; H.O. Janma-bhoomi Chambers, Fort Street, Bombay 1.**

### PLASTIC PRODUCTS MANUFACTURERS & DEALERS

Bharat Leather Works.—3380, Bagichi Achheji, Bara Hindu Rao, Delhi.  
 Bombay Bag Factory.—3377, Bagichi Achheji, Bara Hindu Rao, Delhi.  
 C. K. Plastics.—20, Connaught Place, New Delhi.  
 DCM Chemical Works.—Najafgarh Road, P.B. No. 1211, New Delhi.  
**FANCY PLASTIC MOULDERS.—Mandi Rui, Sadar Bazar, Delhi 6; Manufacturers of Polythene Films, Tubes and Bags; Nylon Fancy Buttons, Election Badges and Plastic Novelties; Phone : Office : 229450, 226435; Polythene Factory: 566962; Button Factory: 566029; Resin: 566187.**  
 Hindustan Plastics Ltd.—5530, Gandhi Market, Sadar Bazar, Delhi 6.  
 Jain Plastic Co.—3760, Gali Barnewala, Sadar Bazar, Delhi 6.  
 Kamal Plastic Industries.—3518, Subzi Mandi (opp. Post Office), Delhi.  
 K. K. Barbb Industries.—28, Sadar Thana Street, Delhi.  
 Leather & Artistic Craft Ltd.—Faiz Bazar, Daryaganj, Delhi 6.  
 Maidan Brothers.—277, Sadar Bazar, Delhi 6.  
 Metro Plastic Stores.—5469/4, Gandhi Market, Dhanvir Ashram, Sadar Bazar, Delhi 6.  
 Minocha Button Stores.—Swadeshi Market, Sadar Bazar, Delhi 6.  
 Novel Plastics.—32, Ansari Market, Daryaganj, Delhi 6.  
 Pheyroomal Mangalsain Kapur.—199/516, Sadar Bazar, Delhi 6.  
 Plastic Stores.—591, Gali Bajajan, Sadar Bazar, Delhi 6.  
 Prem Plastic Stores.—14/890, Kutub Road Jn., Sadar Bazar, Delhi 6.  
 Ragisons.—5552, Gandhi Market, Sadar Bazar, Delhi 6.

### PLASTIC RAW MATERIALS

**MAIDAN BROTHERS.—277, Sadar Bazar, (Post Office Street), Delhi 6; Suppliers of all sorts of Plastic Raw Materials and Pigment Dyes for Plastics; Phone : 223727; Grams : "RAWPLASTIC".**

### POTTERIES

Bawa Potteries.—6, Halley Road, New Delhi.  
 Gwalior Potteries (Delhi) Ltd.—Factory Road, New Delhi.  
 Indian Potteries Ltd.—18-L, Con. Place, New Delhi.  
 Ishwar Industries Ltd.—P.O. Ishwarnagar, New Delhi.  
 Kesar Pottery Works.—Factory Road, New Delhi.  
 Lajpat Potteries P. Ltd.—G. T. Road, Delhi-Shahdara.  
 National Pottery Works.—Masjid Moth, New Delhi.  
 Popular Pottery Works.—P.O. Yousaf Sarai, New Delhi 16.  
 Standard Potteries P. Ltd.—Ghaziabad Road, Delhi.

### POWER CONTROL GEAR

**JYOTI CALOR-EMAG LTD.—Baroda-3; Phone : 8238, Grams : 'JYOTICALOR'; Sole Selling Agents of Jyoti Electric Motors and Jyoti Calor-Emag Starters, Circuit Breakers, Switchboards and Power Control Gear; Other Branches : Bombay, Calcutta, Madras, Secunderabad, Jaipur.**

### POWER GENERATION & TRANSMISSION EQUIPMENT

**INDUSTRIAL GASES LTD., THE.—D. B. Road, Pratap Bhawan, Post Box 622, New Delhi-1; Phone : 264728, Grams : "INDUS-GASES"; Head Office : Post Box No. 853, Calcutta-1; Design, Supply and Erection of Complete Power Stations, Turbines, Generators, Motors, Diesel Generating Sets, Transformers, Switchgears, Lighting Arrestores, Voltage Regulators, Relays, etc.**

### PRESSURE COOKERS

**CONTINENTAL TRADING CO. OF INDIA.—E-2/22, Jhaud-walan, New Delhi for TEMPO Pressure Cookers; Now available in Six Sizes to suit everybody's requirements; Bigger Size Suitable for Hotels, Restaurants etc., Phone : 568541, 271541.**

### PRINTING PRESSES

Albion Press.—Kashmere Gate, Delhi.  
 Arun & Rajiv Press.—C. Block, Connaught Circus, New Delhi.  
**ASIA PRESS.—19, Netaji Subhas Marg, Delhi-6; Photo Offset & Art Printers; Specialists in Books for Tourists; Pictorial Diaries and Picture Post Cards etc., Phone: 271931, 271932.**  
 Asian Printers P. Ltd.—Original Road, Paharganj, New Delhi.  
 Automobile India Press, C/o Garg Publishing House.—Nicholson Road, Mori Gate, Delhi.  
 Baluja Press, C/o Baluja Type Foundry.—Chawri Bazar, Delhi.  
 Beechams' Press Pvt. Ltd.—M-Block, Connaught Circus, New Delhi.  
 Behari Printing Press.—Lal Kuan, Delhi.  
 British India Press.—Connaught Circus, New Delhi.  
 Calcutta Art Press.—Katra Baryan, Fatehpuri, Delhi.  
 Cambridge Printing Works.—Kashmere Gate, Delhi.  
 Carton Press.—11/90, Connaught Circus, New Delhi.  
 Chitrakala Printing Press.—327, Press St., Sadar Bazar, Delhi.  
 Colour Printing Works.—Gali No. 11, Sadar Bazar, Delhi.  
 Coronation Printing Works.—Katra Baryan, Fatehpuri, Delhi.  
 Daily Pratap Press.—Mathura Road, New Delhi.  
 Dayal Printing Press.—Fountain, Chandni Chowk, Delhi.  
 Delhi Press.—Jhandewalan, M. M. Road, New Delhi.  
 Delhi Printers.—Sedhumal Bldgs., 21, Daryaganj, Delhi.  
 Dominion Press.—2, Gokhale Market, Mori Gate, Delhi.  
 Durga Art Press.—Nicholson Road, Mori Gate, Delhi.  
 Express Newspapers Ltd.—Mathura Road, New Delhi.  
 Fakirson's Press.—7130, Berrywala Bagh, Pull Bangash, Delhi.  
 Ganesh Electric Press.—Gali Old Post Office, Sadar Bazar, Delhi.  
 Gopal Press C/o Kishori Lal & Sons.—73, Chawri Bazar, Delhi.  
 Graphic Art & Kackers' Press.—Jama Masjid, West, Delhi.  
 Gulabchand Kapur & Sons.—9/4, Asaf Ali Road, New Delhi.  
 Hind Union Press.—K-Block, Connaught Circus, New Delhi.  
 Hindi Printing Press.—27, Shiv Ashram, Queen's Road, Delhi.  
 Hindustan Times.—Connaught Circus, New Delhi.  
 Hira Art Press.—Sadar Bazar, Delhi 6.  
 I. M. H. Press.—Fountain, Chandni Chowk, Delhi.  
 India Box & Carton Makers.—2322, Bahadurgarh Road, Delhi.  
 Indian Book Depot Press.—Bahadurgarh Road, Delhi.  
 Indian Printing Works.—Jhandewalan, M-M. Road, New Delhi.  
 Jai Bharat Printing Works.—2962, Bahadurgarh Road, Delhi.  
 Janta Press.—H-Block, Connaught Circus, New Delhi.  
 Jugdish Fine Art Press.—1008, Pan Mandi, Sadar Bazar, Delhi.  
 Kapur Electric Press.—Gali Bisan Shah, Faiz Road, Karol Bagh, New Delhi.  
 Khannah Printing Press.—Near Fountain, Chandni Chowk, Delhi.  
 Krishna Brothers' Printing Press.—Burn Bastion Road, Delhi.



Kuldip Press.—Shidipura, East Park Road, Karol Bagh, New Delhi.  
 Label Art Press.—Frashkhana, G. B. Road, Delhi.  
 Lahore Kallash Press.—Municipal Market, Connaught Circus, New Delhi.  
 Laxmi Press.—Faiz Bazar, Daryaganj, Delhi.  
 Laxmi Printing Works.—Lal Kuan, Delhi.  
 Lion Press.—Chawri Bazar, Delhi.  
 Mehta Art Press.—Sadar Thana Road, Delhi.  
 Mehta Offset Works.—16, Sadar Thana Road, Delhi.  
 Murari Fine Art Works.—4, Daryaganj, Delhi.  
 National Offset Works.—Opp. Faiz Bazar Police Station, Faiz Bazar, Daryaganj, Delhi.  
 Nav Yug Press.—Pleasure Garden, Chandni Chowk, Delhi.  
 Navin Press.—Faiz Bazar, Daryaganj, Delhi.  
 New Age Printing Press.—Jhandewalan, M. M. Road, New Delhi.  
 New India Press.—K-Block, Connaught Circus, New Delhi.  
 New Print.—294, Faiz Road, Karol Bagh, New Delhi.  
 Oxford Printing Works.—Scindia House, Con. Circus, New Delhi.  
 Parkson Printing Press.—Gall Bazazan, Sadar Bazar, Delhi.  
 P. B. I. Press.—Original Road, Paharganj, New Delhi.  
 Print Art—C/o Raj Pal & Sons.—Kashmere Gate, Delhi.  
 Punjabi Press.—Bara Tooti, Sadar Bazar, Delhi.  
 Raj Hans Press.—Rool Ki Mandi, Sadar Bazar, Delhi.  
 Rajal Press.—313, Kucha Mir Ashiq, Chawri Bazar, Delhi.  
 Rakesh Press.—1575, Aziz Ganj, Pull Bangash, Delhi.  
 Rama Electric Press.—1008, Pan Mandi, Sadar Bazar, Delhi.  
 Rama Printing Works.—Chooriwalan, Chawri Bazar, Delhi.  
 Rashtriya Printing Press.—78, G. B. Road, Delhi.  
 Ratan Press.—Kucha Ghasi Ram, Chandni Chowk, Delhi.  
 Republic Press.—34, Municipal Market, Con. Circus, New Delhi.  
 Roxy Press.—H. Block, Con. Circus, New Delhi.  
 Sehgal Puri Private Ltd.—Opp. Paharganj Police Station, Paharganj, New Delhi.  
 Seth Printing Press.—Katra Neel, Chandni Chowk, Delhi.  
 Sindhu Art Press.—Katra Baryan, Fatehpuri, Delhi.  
 Star Half Tone Press.—Katra Baryan, Fatehpuri, Delhi.  
 Sun Process.—Jatwara, Faiz Bazar, Daryaganj, Delhi.  
 Super Press.—Chooni Mandi, Pharganj, Delhi.  
 Supreme Press.—A-Block, Con. Place, New Delhi.  
 Surendra Printers P. Ltd.—Deputy Ganj, Sadar Bazar, Delhi.  
 Times of India Press.—10, Daryaganj, Delhi.  
 Tizarti Press.—Pan Mandi, Sadar Bazar, Delhi.  
 Vlr Millap Press.—Asaf Ali Road, New Delhi.

### PRINTING PRESS MATERIAL & MACHINERY

Indo-Europa Trading Co.—1390, Chandni Chowk, Delhi 6.  
**KAMLA TYPE FOUNDRY & EXPORTERS REGD.**—1686, Sohanganj, Sabzimandi, Delhi-7; Manufacturers of Hindi, English, Gurmukhi Types & Printing Material; Dealers in Printing Paper Cutting Machines etc.; Phone: 223776, 228359.

### PUBLIC ADDRESS EQUIPMENTS

**AHUJA RADIOS.**—3778, Netaji Subhash Marg, Darya Ganj, Delhi-6; Phone: 273711.

### PUMPS & PUMPING SETS MANUFACTURERS & DEALERS

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Delite Cinema Bldg., New Delhi; Importers, Exporters, Engineers and Manufacturers; Phone: 277901.

Hindustan Industrial Corpn.—K-40, Connaught Circus, New Delhi.  
 Hindustan Trading Co.—Sarai Rohilla, Delhi.  
 Johnston Pumps (I) Ltd.—28, Barakhamba Road, New Delhi.

**JYOTI LTD.**—Baroda-3; Phone: 8352-3-4; Grams: 'JYOTI-PUMPS'; 50, Hanuman Road, New Delhi; Mfrs. of Vertical Turbine Pumps, Centrifugal Pumps, Chemical Pumps, Electric Motors, Synchronous Generators, Hydro-Electric Generating Units, Starters, Circuit-Breakers and Switchboards; Other Branches: Bombay, New Delhi, Calcutta, Madras, Secunderabad, Jaipur.

Kirloskar Brothers Ltd.—3/15A, Asaf Ali Road, New Delhi.  
 Modi Industries.—117-84, Connaught Circus, New Delhi.  
 Raj Engineering Works P. Ltd.—3, Ajmeri Gate, Delhi.  
 Trading Engineers.—3/4-A, Asaf Ali Road, New Delhi 1.

**WATER SUPPLY SPECIALISTS PRIVATE LTD.**—60/31, New Rohtak Road, New Delhi 5; Phone: 57914. Grams: "MY-ERSPUMP"; H.O. 8, Hamam Street, Bombay 1. Branches: Calcutta, Madras and Secunderabad. Sole Agents for Myers Pumps; Manufacturers of WASP Pumping Sets, etc.

### RADIO MFRS., REPAIRERS, DEALERS AND PARTS SUPPLIERS

Advance Electronics.—Bhagirath Palace, Delhi.  
 Ahuja Electronics & Transformer Industries.—3778, Faiz Bazar, Delhi 7.  
 Airmaster Radios.—Bhagirath Palace, Delhi.  
 Alliance Electric & Radio Co.—P. Box 1104, Chandni Chowk, Delhi 6.

Allied Agencies.—1390, Pahari Imli, Jama Masjid, Delhi.  
 Allied Radio Corpn.—2192, Sita Ram Bazar, Delhi.  
 Alpha Radio & Novelties Pvt. Ltd.—1900, Chandni Chowk, Delhi.  
 Anritsar Radio Co.—148-D, Kamalnagar, Delhi 6.  
 Anand Radios.—701, Lajpat Rai Market, Chandni Chowk, Delhi.  
 Anand Radio & Elect. Co.—Chowk Naya Bans (Katra Baryan), Delhi.  
 Aneja Radios.—Bhagirath Palace, Chandni Chowk, Delhi 6.  
 A. N. Ramji Dass & Co.—7/36, Daryaganj, Delhi 6.  
 Anil Industries.—1781, Hauz Suiwalan, Daryaganj, Delhi.  
 Arun Electronic Industries.—6-B, Bhagirath Palace, Chandni Chowk, Delhi.  
 Aruna Trading Co.—10 E, Connaught Place, New Delhi.  
 Ashoka Electric & Radio Co.—57, Arya Samaj Road, Delhi 5.  
 Ashoka Transformer Corporation.—30-9, Shaktinagar, Delhi 6.  
 Asian Radios.—Bhagirath Palace, Delhi.  
 Associated Radio & Elec. Co.—Bhagirath Palace, Chandni Chowk, Delhi 6.  
 Atlas Electric & Radio Co.—Masjid Road, Jangpura, New Delhi 14.  
 Atlas Electronics.—Bhagirath Palace, Delhi.  
 Bangsons Electronic Industries.—65/64, Rohtak Road, New Delhi 5.  
 Bansal Radio Corpn.—30/8, Shakti Nagar, Delhi.  
 Beat & Co.—53-M, Connaught Circus, New Delhi.  
 Bhargava Trading Co.—11, Netaji Subhas Marg, Delhi 6.  
 Bhatnagar's Agencies.—60-M, Connaught Circus, New Delhi.  
 B. Gupta & Co.—2525, Behind Asaf Ali Road, Near Lakshmi Insurance Bldg., Delhi.  
 Bombay Electric Radio Corpn.—Bhagirath Palace, Delhi.  
 British Radio & General Supply Co.—Chandni Chowk, Delhi.  
 Calcutta Gramophone Agency.—1423, Chandni Chowk, Delhi.  
 Capital Music Works.—Aram Nagar, Qutab Road, New Delhi.  
 Capital Radio Co.—Chandni Chowk, Delhi.

**CHANDIRAM & CO.**—Radios, Transistors & Components, Factory & Despatch Dept.: 51/2-3, New Market, Rohtak Road, New Delhi-5; Phone: 54633; Show Room: 1681/9-10 & 32, Behind State Bank of India, Chandni Chowk, Delhi-6; Phone: 265708. Factory also at 28, Pusa Road, New Delhi 5; Phone: 51283.

Chawla Radios.—410, Lajpat Rai Market, Chandni Chowk, Delhi.  
 Chiman Lal Desai & Co.—72, Janpath, New Delhi.

**CHOUDHARY TRADING CO.**—Radio Place, Chandni Chowk, Delhi-6 and 428, Lamington Road, Bombay-4. Factory: 9F, Kamla Nagar, Delhi-7. Transformers, Chokes, I.F. and Radio Coils Winding Machines hand/power driven. Several in use with Central & State Govts., Phones: Delhi, 265575, Factory: 226349; Bombay: 353762.

C. P. Radio Corpn.—Bhagirath Palace, Delhi.  
 Delhi Gramophone Co.—Chandni Chowk, Delhi.  
 Delhi Radio Co.—Chandni Chowk, Delhi 6.  
 Delton Cable Co.—3457, Delhi Gate, Delhi.  
 Dewan Radios.—351, Lajpat Rai Market, Chandni Chowk, Delhi.  
 Dilwali Traders P. Ltd.—1490, Chandni Chowk, Delhi 6.  
 Eastern Electric & Trading Co.—23/E, Connaught Place, New Delhi.  
 Eastern Electronics.—New Industrial Area, Faridabad, Delhi.  
 Eastern Radio & General Supply Co.—10-E, Connaught Place, New Delhi.

Eastern Radio & Electric Co.—Bhagirath Palace, Delhi.  
 Eclipse Radio Industries.—4618, Aryapura, Sabzi Mandi, Delhi 6.  
 Electronic Traders.—1527, Bhagirath Palace, Delhi.  
 Electronics Ltd.—A-Block, Connaught Place, New Delhi.  
 Electronics & Phonographic Industries Pvt. Ltd.—Chandni Chowk, Delhi.

Empire Trading Co.—3778, Faiz Bazar, Daryaganj, Delhi.  
 Eta Radio Industries.—4491, Patnamal Street, S. Bazar, Delhi 6.  
 General Radio & Appliances Pvt. Ltd.—Bhagirath Palace, Delhi.  
 General Radio & Electric Co.—Arya Samaj Road, New Delhi.  
 Hamara Radio & General Industries Ltd.—Alipore Road, Delhi.  
 Harkrishan Lal & Bros.—7, Ansari Road, Daryaganj, Delhi.  
 Hind Electronics.—9-B, Bhagirath Palace, Delhi.  
 Hindustan Radio Corpn.—Netaji Subhash Marg, Delhi 6.  
 Hindustan Radios.—1456, Chandni Chowk, Delhi 6.  
 Hindustan Electronics P. Ltd.—1001, Chandni Chowk, Delhi 6.  
 Howard Radio & General Supply Co.—Opp. Plaza, New Delhi.  
 Hygrade Radios.—Opp. Plaza, Connaught Circus, New Delhi 1.  
 Imperial Radio Corpn.—18 Gokle Market, Delhi 1.  
 India Radio Co.—26, Bara Khamba Road, New Delhi 1.  
 India Radio & Elect. Corpn.—Ajmal Khan Road, New Delhi.  
 Indian Radio Corporation Private Ltd.—Roshanara Mansion, Roshanara Road, Delhi 6.

Indo British Corpn.—26F, Connaught Place, New Delhi 1.  
 Ipsons Industries P. Ltd.—Rangilal Bldg., Kashmere Gate, Delhi 6.  
 Jai Kishan Dass & Bros.—525, Bhagirath Palace, Delhi.  
 Jeewan Radios.—Radio Place, Chandni Chowk, Delhi.  
 Kapoor Electronics.—Bhagirath Palace, Delhi.  
 Kaybee Electrical Industries.—8-B, Bhagirath Palace, Delhi.  
 Khanna Cycle Co.—Raj Guru Road, Paharganj, New Delhi.  
 Kidarnath Mehra & Sons.—Chandni Chowk, Delhi.  
 Krishna Radios.—Lajpat Rai Market, Delhi.  
 K. Goodman & Co.—9, Bhagirath Palace, Delhi.  
 Lakhnau Pvt. Ltd.—Industrial & Prudential Bldg., Asaf Ali Road, New Delhi.



Lalwani Radio Corpn.—Radio Palace, Chandni Chowk, Delhi 6.  
 Luthra Electronics.—Mangal Market, Chandni Chowk, Delhi.  
 Maharaja Lal & Sons.—Chandni Chowk, Delhi.  
 McKenzie Phillips (India) Pvt. Ltd.—Ellison House, 9, Ram Bagh, Old Rohtak Road, Delhi 6.  
 Minocha Radios.—Bhagirath Palace, Delhi.  
 Modern Trading Co. (Delhi).—M. Block, Connaught Circus, New Delhi.  
 M. C. Engineering Co.—38, Industrial Estate, P. O. Kalkaji, New Delhi.  
 M. L. Ahuja & Co.—3, Desh Bandhu Gupta Road, Pahar Ganj, New Delhi.  
 National Radio Corpn.—2, D.L.F. Industrial Area, Najafgarh Road, New Delhi.  
 National Radio Co.—Bhagirath Palace, Delhi.  
 Navbharat Radio Agencies.—8, Bhagirath Palace, Delhi.  
 Omega Radio Corpn.—Bhagirath Palace, Delhi.  
 Oriental Radio Appliances.—6/78, Ajmal Khan Road, Karol Bagh, New Delhi.  
 Oriental Radio Corporation.—12/4, Asaf Ali Road, New Delhi 1.  
 Parco.—16B, Connaught Place, New Delhi.  
 Parkash Radios.—Bhagirath Palace, Delhi.  
 Peerless Industries Corpn. P. Ltd.—K-40, Connaught Circus, New Delhi.  
 Paul Radios.—5A/15, Rangbhum, Darya Ganj, Delhi.  
 Phillips India Ltd.—3/1, D.A.G. Extension Scheme, Asaf Ali Road, New Delhi.  
 Phoenix Radios.—Bhagirath Palace, Delhi.  
 Physical Electronics.—24, Sri Ram Road, Delhi 6.  
 Prem's.—IIE/33, Lajpat Nagar, New Delhi.  
 Prestige Electronics P. Ltd.—16/B, Connaught Place, New Delhi.  
 Radio Centre.—Chandni Chowk, Delhi.  
 Radio Electronics Corpn. Pvt. Ltd.—56-M, Connaught Circus, New Delhi.  
 Radio Spares.—Bhagirath Palace, Delhi.  
 Radio Sound Engineers.—65/64, Rohtak Road, New Delhi.  
**RADIOLA CORPORATION.—18-A, Najafgarh Road, Industrial Area, New Delhi 15.**  
 Radionic Corpn.—Mangal Market, Chandni Chowk, Delhi.  
 Railton Electronics.—895, Kacha Patiram, Bazar Sitaram, Delhi 6.  
 Rajpal P. Ltd.—12, Rambagh, Delhi 6.  
 Rattanchand Mehra & Sons.—Chandni Chowk, Delhi.  
 R. C. Radio Corpn.—Bhagirath Palace, Delhi.  
 Reed Electronic Industries.—New Rohtak Road, Karol Bagh, New Delhi.  
 Reliable Electric & Cable Co.—3881, Sarak Prem Narain, Bazar Sita Ram, Delhi 6.  
**ETA RADIO INDUSTRIES.—Manufacturers of Roxy & Ajanta Amplifiers, NEW VOICE Transistor Radios; 4491, Pahari Dhiraaj, opp. Jain Nursing Home, Sadar Bazar, Delhi 6; we can manufacture in other Trade name or name also; Phone: 220667.**  
 Sachdeva Bros.—10-L, Connaught Circus, New Delhi.  
 Saigal Radios.—Jogdhian Colony, Chandni Chowk, Delhi 6.  
 Sagar Industries.—17, Jawahar Nagar, Delhi.  
 Sen Radio Co.—413, Lajpat Rai Market, Chandni Chowk, Delhi.  
 Shankar Dass & Co.—11B, Asaf Ali Road, New Delhi.  
 Singhbro Radio Co.—Plaza Buildings, New Delhi.  
 Singhson Radio Co.—8380/6, Roshanara Road, Delhi 6.  
 Standard Radio & Electric Co.—Block N-16, opp. Scindia House, New Delhi.  
 Telecommunication Equipment Mfg. Co.—E-6/3, Kishannagar, Delhi 31.  
 Union Radio & Appliances P. Ltd.—72, Janpath, New Delhi 1.  
 United National Agencies.—United India Building, F. Block, Connaught Place, New Delhi.  
 United Radio Agencies.—1681/5, Jogdhian Building, Delhi 6.  
 Universal Radio Co.—Chandni Chowk, Delhi.  
 Veer Radios.—1681/7, Radio Place, Chandni Chowk, Delhi.  
 Vinod Radios.—1681/3, Mangal Market, Chandni Chowk, Delhi.  
 Wireless Equipment Stores.—Chandni Chowk, Delhi.

## RAILWAY SIGNALLING EQUIPMENT

### ASSOCIATED TUBEWELLS (INDIA) PVT. LTD.,

12, Scindia House, New Delhi-1  
 Phone: 46546 & 46547.

We undertake manufacture of :

Railway Signalling material (Mechanical) such as key locks of all denominations, Lever Frames, Signal Posts etc. and Electrical Signalling Equipment such as long range Colour light Signals, repeaters, indicators etc.

## REFRACTORIES

Dayal Pottery Works.—Chandni Chowk, Near Gurdwara, Delhi.  
**ISHWAR INDUSTRIES LTD., THE.—P.O. Ishwar Nagar, New Delhi. Manufacturers of Fire Bricks, B. F. C. High Temp. Fire Cements, Castable Refractories, Insulating Bricks & Cements, Acid Resisting Bricks & Cements, Sillimanite Bricks & Motors etc. Phones: 76241 (3 Lines).**  
 Shivraj Pottery Works.—Near Gurdwara, Chandni Chowk, Delhi.  
 S. N. Sunderson & Co.—Original Road, New Delhi.

## RUBBER PRODUCTS MANUFACTURERS

American Rubber Mills Co.—G.T. Road, Delhi-Shahdara.  
 Bharat Rubber Mills.—Original Road, New Delhi.  
 B. N. Rubber Works.—15, Barakhamba Road, New Delhi.  
 Chawala Industries.—Chawala Estate, Delhi-Shahdara.  
 Delhi Rubber Corporation.—Behind Police Station, New Delhi.  
 East India Rubber Works Ltd.—Asaf Ali Road, New Delhi.  
 Firestone Tyre & Rubber Co. of India Ltd.—Nicholson Road, Delhi 6.  
 Indian Tyre Retreading Co.—21-A, Najafgarh Road, New Delhi 15.  
 India Tyre & Rubber Co. of India Ltd.—3, Hamilton Road, Delhi 6.  
 National Tyre & Rubber Co. of India Ltd.—11B, Ajmeri Gate Extn., New Delhi 1.  
 National Rubber Manufacturers Ltd.—4/23B, Asaf Ali Road, New Delhi.  
 New Era Rubber Mills Ltd.—Lawrence Road, Delhi.

Phones: { Sonpet: 111 & 170 Grams: "ORGOCHEM"  
 Delhi: 276039 & 222726.  
 For Reclaimed Rubber & Factices  
 Please Contact

Pioneer Manufacturers in India

## ORGANO CHEMICAL INDUSTRIES & ORGANO RUBBER RECLAIMING CO. PVT. LTD.

H.O. 1/10-B, Asaf Ali Road, New Delhi-1.

Bombay Office: 160, Dadabhoy Naoroji Road, Bombay-1.  
 Phone: 265216

Saini Rubber Industries.—20-C, Adarsh Nagar, Azadpur, Delhi 33.  
 Manufacturers of "Schler" Brand Synthetic Rubber Oil Seals, 'SRI' Brand Brake Scrubers Parts and all kinds of Moulded and Extruded Rubber Goods.  
 Soni Rubber & Chemicals Ltd.—Khajur Road, Karol Bagh, New Delhi.  
 Vinod Rubber Industries.—12, Taj Building, G. B. Road, Delhi.

## SANITARY ENGINEERS & SANITARY GOODS MFRS. & DEALERS

A. Kumar & Co.—23A, Kamal Nagar, Delhi 6.  
 Amar Nath Nayar & Sons.—VI/170, K. Baryan, Fatehpuri, Delhi 6.  
 Arall Brothers.—Chawri Bazar, Delhi 6.  
 Balmukund Gupta & Sons.—30/1, E. Patel Nagar, New Delhi 12.  
 Bansil Brothers.—Lal Darwaza, Bazar Sita Ram, Delhi 6.  
 Bashista Brothers.—Bazar Sitaram, Delhi 6.  
 Bhagwan Sahai & Co.—Chawri Bazar, Delhi 6.  
 Delhi Plumbers & Sanitary Engineers.—3380-81, Baqa Street, Delhi 6.  
 Delhi Sanitary and Water Supply Co.—Sirkiwala, Delhi 6.  
 D. P. Lal & Co.—75, Daryaganj, Delhi 6.  
 D. P. Gupta & Co.—1/6-B, Ajmeri Gate Extn., New Delhi 1.  
 D. S. Bawa & Co.—14, Barakhamba Road, New Delhi.  
 Gayfield & Co.—Chawri Bazar, Delhi 6.  
 Gaylord & Co.—Chawri Bazar, Delhi 6.  
 Gupta & Co., D. P.—1/6B, Asaf Ali Road, New Delhi.  
 Himalaya Trading Co.—Fatehpuri, Delhi 6.  
 International Sanitary Engineers.—50, G. B. Road, Delhi 6.  
 Jindal & Sons Ltd.—Bazar Sirkiwala, Delhi 6.  
 John Tinson & Co., Pvt. Ltd.—54, Queensway, New Delhi.  
 M. J. Engineering Works.—1327, Katra Hiralal, Faseel Road, Ajmeri Gate, Delhi.  
**MAHABIR PERSHAD & SONS.—Chawri Bazar, Delhi 6. Phones: 262735, 264854, 265307 & 212407. Grams: "PIPES."**  
 Modern Engineering Co.—Factories: 17, Okla Industrial Estate, New Delhi 20.  
 Nigam Brothers.—Chawri Bazar, Delhi 6.  
 Prem Vijay & Co.—3594, Chawri Bazar, Delhi 6.  
 Sanitary Goods Manufacturers.—27, Najafgarh Road, New Delhi.



S. D. Marker & Co. Pvt. Ltd.—57, Punchkuin Road, New Delhi 2.  
 Sharma & Co.—R. P. Sultan Singh Bldg., Kashmere Gate, Delhi 6.  
 Sunderson & Co., S. N.—Naya Bazar, G. B. Road, Delhi.  
 Tayal Bros. P. Ltd.—Outside Ajmeri Gate, Delhi 6.  
 Udyogi Karan P. Ltd.—5, Sant Nagar, Delhi 5.  
 Verma Bros.—18/90, Connaught Circus, New Delhi.  
 Vinod Metal Industries.—3766, Chawri Bazar, Delhi 6.  
 Worth & Co., A.—Chawri Bazar, Delhi 6.

### SANITARYWARES, PIPES AND FITTINGS

**MAHABIR PERSHAD & SONS.**—Chawri Bazar, Delhi 6;  
 Phones: 262735, 264854, 265307 & 212407. Grams: "PIPES."

### SCIENTIFIC & ELECTRONIC INSTRUMENTS

#### ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LIMITED

Registered Office: B5 Gillander House, Calcutta.

Phone: 223304.

Grams: AIMIL.

**Branches:** BOMBAY at India House, Fort Street.  
 Phone: 261658. Grams: AIMILBOM. NEW DELHI at  
 Sunlight Insurance Buildings, 26/27, Asaf Ali Road.  
 Phone: 271236. Grams: AIMILDEL.

Factory and Marconi Instruments Calibration Centre: 35,  
 Najafgarh Road, New Delhi 15. Phones: 568281 and 568282.  
 Manufacturers of Sampling and Testing Instruments for  
 Soil Mechanics, Surveying, Highway Engineering, Cement  
 and Concrete Testing, Fuel and Bitumen Testing Instru-  
 ments, Marconi Tele-communication Test Instruments,  
 Visual and Photoelectric Colorimeters and Specialised  
 Research Equipment. Staffed by Highly Trained  
 Technologists and Technicians for Sales, Service and  
 Installation.

#### SCIENTIFIC INSTRUMENTS MANUFACTURERS & DEALERS

Adair, Dutt & Co. (India) Pvt. Ltd.—21, Asaf Ali Road, New Delhi.  
 Apothecaries' Sundries Mfg. Co.—P.O. Box No. 1, New Delhi 1.

**ASSOCIATED INSTRUMENTS MANUFACTURERS (INDIA)  
PRIVATE LTD.**—Sun Light Insurance Bldg., 26/27, Asaf Ali  
 Road, New Delhi; Grams: "AIMILDEL." Phone: 271236.

A. W. & Co.—3499, Chawri Bazar, Delhi 6.

Bharat Scientific Instruments Co.—6, Netaji Subhash Marg, Delhi 6.

Capital Scientific Instruments Co., P. Ltd.—Faiz Bazar, Daryaganj,  
 Delhi 7.

Darbara Singh & Sons.—P.O. Street, Sadar Bazar, Delhi.

Delhi Scientific Works.—Outside Ajmere Gate, Delhi 6.

**DUTTA SCIENTIFIC WORKS.**—10-A, Jawahar Nagar, Delhi-7;  
 Manufacturers of D-SIL Brand Laboratory Glass Apparatus  
 and Thermometers; Phone: 70850, Resi.: 220383.

Electronic (Sales) Corporation.—Electrical Market, Chandni Chowk,  
 Delhi 6.

Empire Scientific & Surgical Co.—Naya Bazar, Delhi 6.

Friends Surgical Co.—Mangal Market, Chandni Chowk, Delhi 6.

Hindustan Syringes P. Ltd.—2, Marina Arcade, Connaught Place,  
 New Delhi.

Industrial Electronics.—5, U-A, Jawaharnagar, Delhi 6.

International Equipment Corporation P. Ltd.—21, Sundar Nagar,  
 New Delhi.

International Traders.—Basti Harphool Singh, Sadar Thana, Delhi 6.  
 Kallash Bros. Pvt. Ltd.—Chandni Chowk, Delhi.

M. Mukerjee & Sons.—R-852, New Rajendra Nagar, New Delhi 5.

Modern Scientific Instruments Co.—463, Chandni Chowk, Delhi 6.

National Scientific Instrument Co.—37/38, U.B. Block, Jawahar  
 Nagar, Delhi.

Physical Electronics.—24, Sri Ram Road, Delhi 6.

P. L. Tandon & Co.—Bhagirath Palace, Chandni Chowk, Delhi 6.

Precision Scientific Equipment Corpn.—9A/36, W.E. Area, Karol  
 Bagh, New Delhi.

Premier Industrial Corpn.—Bhagirath Palace, Delhi 6.

**REPUBLIC SCIENTIFIC SUPPLY CO.**—Munshi Niketan, Asaf  
 Ali Road, New Delhi. Phone: 272832 & 273029. Grams:  
 "FILTERGLAS."

Royal Rubber Works.—1580, Bhagirath Palace, Chandni Chowk,  
 Delhi 6.

Salooja Brothers.—175-E, Kamal Nagar, Delhi 6.

S. Paul & Co.—Harphool Singh Basti, Delhi 6.

Scientific & Allied Industries Corporation.—5-E, Sadar Thana  
 Road, Delhi 6.

Scientific Balance Works P. Ltd.—51, Jogdhian Building, Chandni  
 Chowk, Delhi.

**SALOOJA BROTHERS PVT. LTD.**—175-E, Kamla Nagar,  
 Delhi-7; Exporters, Manufacturers and Wholesale Dealers

in Scientific Instruments & Chemicals; Regd. Trade Mark  
 "PARCO"; Estd.: 1938.

**SCIENTIFIC EQUIPMENT WORKS.**—Scientific Instruments  
 Manufacturers and Dealers, 1/777, Nicholson Road, Delhi 6.  
 Phone: 227029. Grams: "CHEMBIO."

Scientific Instrument Co., Ltd.—B/7, Ajmeri Gate Extn., New Delhi.

**SCIENTIFIC SUPPLIERS CORPORATION.**—Metro Building,  
 Mori Gate, Delhi-6; Manufacturers and Dealers in all sorts  
 of Lab. requisites, Ovens, Incubators, Muffle Furnace;  
 Agents for 'NIPPON' Microscopes, 'EXACTA' Instru-  
 ments, Banaras S. Balance Works and Vacuum Apptt.;  
 Phone: 223226.

Sehgal Sons.—Jamna Bhavan, A-14/3, Asaf Ali Road, New Delhi.

Sindsagar Scientific Industries.—Daryaganj, Delhi 7.

Surgico Pharmaceuticals Co.—10B, Netaji Subhas Marg, Delhi 6.

Swan Surgico Dressings.—2/25F, Model Town, Delhi.

Toshniwal Bros. Pvt. Ltd.—14-B/4, N.E.A., Uttari Marg., New  
 Delhi.

**TOWA OPTICS (INDIA) PVT. LTD.**—Regd. Office: 4, Darya  
 Ganj, Delhi 6; Factory: 51, Industrial Area, Najafgarh Road,  
 New Delhi-15; Grams: "VISION"; Manufacturers of all  
 types of Microscopes in active collaboration with 'TOWA',  
 Japan; Phones: 271497 (Office), 568269 (Factory).

United Technicians Corpn.—Masjid Rangraizan, Bara Hindu Rao,  
 Delhi.

Up-To-Date Optical Works (Regd.).—21, Beaden Pura, Karol  
 Bagh, New Delhi 5.

Upper India Scientific Works.—1720, Mori Gate, Delhi.

**WIDSONS SCIENTIFIC WORKS.**—10, West Sadar Thana Road,  
 Delhi-6; Importers of: Scientific Instruments, Glassware,  
 Porcelainware & Chemicals; Manufacturers of: Scientific &  
 Surgical Instruments of every description; Phone: 226051.

### SEWING MACHINES

Bombay Sewing Machine Co.—Nai Sarak, Delhi.

Delco Sewing Machine Co.—1533, Nai Sarak, Delhi.

Delhi Sewing Machine Co. P. Ltd.—Chandni Chowk, Delhi.

Harichand Anand & Co.—"Harry House," 2, E/8, New Link Road,  
 Jhandewala Colony, New Delhi 1.

Leader Sewing Machine Co. (Regd.).—49, Esplanade Road, Delhi.

Mahabir Manufacturing Co.—7-33, Daryaganj, Delhi.

Mitco Industries P. Ltd.—16-B, Asaf Ali Road, New Delhi.

Para Sewing Machine Co.—Krishna Market, Paharganj, New Delhi 1.

Peter Sewing Machine Co.—Gali No. 29, Beadon Para, K. Bagh,  
 New Delhi 5.

P. Narain Singh & Co. P. Ltd.—M. J. Bldgs., Chandni Chowk, Delhi 6.

Rama Sewing Machine Co.—4168, Nai Sarak, Delhi.

Sharda Machinery Corporation.—11, Pusa Road, New Delhi 5.

Sigma Industries.—630, Juma Masjid, Delhi.

**SINGER SEWING MACHINE CO.**—21, Netaji Subhash Marg  
 (Daryaganj), Delhi-6. Sellers of SINGER\* Industrial & MER-  
 RITT\* Domestic Sewing Machines, SIMAC ART KNITTERS  
 & MERRITT\* FANS, FRIDEN Adding & Calculating  
 machines, Computers & Graphic Art Products etc. and C-  
 Block, Connaught Place, New Delhi-1, MERRITT\* Domestic  
 Sewing Machines, SIMAC ART KNITTERS & MERRITT\*  
 FANS. Also at Chunna Mal Building, Chandni Chowk, Delhi-  
 6. ALL MERRITT\* PRODUCTS available at all Singer Shops  
 and authorised Singer Dealers in India.

\* A trademark of The Singer Company. Phones: 271453,  
 40539.

Venus Sewing Machine Co.—26-E, Connaught Place, New Delhi.

### SOAP FACTORIES

Ajmer Soap Works.—Khari Baoli, Delhi.

Bharat Soap Works.—Gali Bahuji, Sadar Bazar, Delhi.

Crown Soap Co.—Chapparwala Kuan, Karolbagh, New Delhi.

D. C. M. Chemical Works.—Najafgarh Road, New Delhi.

Godrej Soaps Pvt. Ltd.—Chandni Chowk, New Delhi.

Hindustan Levers Ltd.—D.A.G. Extn., New Delhi.

Jubilee Soap Works.—Mohalla Nabi Karim, Delhi.

Krishna Soap Factory.—Ahata Kidera, Sadar Bazar, Delhi.

Manohar Soap Works.—Karol Bagh, Delhi.

Punjab Soap Factory.—2659, Basti Punjabi, Subzimandi, Delhi.

Virmani Industries.—Najafgarh Road, New Delhi.

### SOUND RECORDING EQUIPMENTS

**AHUJA RADIOS.**—3778, Netaji Subhash Marg, Darya Ganj,  
 Delhi-6; Phone: 273711.

### SPORTS GOODS

Anand Industries.—564, Kucha Natwan, Chandni Chowk, Delhi.

Bestways & Co.—Outside Moti Cinema, Chandni Chowk, Delhi.

British Sports Works.—4086, Sir Syed Ahmad Road, behind P.O.,  
 Daryaganj, Delhi.



B. T. Shuttle Cock House.—Thana Street, Subzimandi, Delhi.  
 "Harisons Uppal".—9577, Bhargarh-Roshanara Road, Subzimandi, Delhi.  
 Job & Co.—Gali Tantawall, Faiz Bazar, Daryaganj, Delhi.  
 Khosla Sports Industries.—28, Barakhamba Road, New Delhi.  
 Light Way Sports.—52, Municipal Market, Connaught Place, New Delhi.  
 Mongia Bros.—Opp. Kumar Talkies, Chandni Chowk, Delhi.  
 Norfolk Syndicate (India) Ltd.—Scindia House, Connaught Circus, New Delhi.  
 Northland (India) Ltd.—Opp. Scindia House, Connaught Circus, New Delhi.  
 Ojhason.—Near Clock Tower, Subzimandi, Delhi.  
 Pioneer Sports I. Ltd.—21-F, Connaught Place, New Delhi.  
 Rattan & Co.—Gali Abdulla Beg, Roshanara Road, Subzimandi, Delhi.  
 S. S. Balbir & Co. (Regd.).—Bhargarh, Roshanara Road, Delhi 6.  
 United Sports Traders (Delhi) Ltd.—5838, Khaliq Manzil, Thana Street, Subzimandi, Delhi.  
 Uppal & Co.—Gali Abdulla Beg, Roshanara Road, Subzimandi, Delhi.  
 Uppal Sports Ltd.—5838, Khaliq Manzil, Thana Street, Subzimandi, Delhi.

### STATIONERY MANUFACTURERS & DEALERS

Anand Brothers.—Chawri Bazar, Delhi 6.  
 Atma Ram & Sons.—Kashmere Gate, Delhi 6.  
 B. N. Mehra & Sons.—Sadar Bazar, Delhi 6.  
 Bharat Carbon & Ribbon Mfg. Co. Ltd.—N-75, Bombay Life Bldg., Connaught Circus, New Delhi.  
 Bharat Sales Ltd.—2/90, Connaught Circus, New Delhi 1.  
 Bhawnani & Sons.—8F, Connaught Place, New Delhi.  
 Capital Industries Pvt. Ltd.—Bhaskar Bhavan, Seral Rohilla, Delhi 6.  
 Continental Commercial Co. P. Ltd.—43-M, Connaught Circus, New Delhi.  
 Dwarka Nath Tara & Co.—Nai Sarak, Delhi 6.  
 Faquir Chand & Sons.—15-A, Khan Market, New Delhi 11.  
 G. S. Kashyap & Sons.—Daryaganj, Delhi 6.  
 G. T. Mehra & Co.—66, Chawri Bazar, Delhi 6.  
 General Equipment Merchants Ltd.—19-K, Connaught Place, New Delhi.  
 Govil & Co.—207, Chawri Bazar, Delhi 6.  
 Indian Glass Agency.—Opp. J. Masjid Dispensary, Delhi 6.  
 Kalckers Industries P. Ltd.—9, Marina Arcade, New Delhi 1.  
 Kirpa Ram Sethi & Sons.—89, Chawri Bazar, Delhi 6.  
 Kishori Lal & Sons.—Chawri Bazar, Delhi 6.  
 Mehar Chand & Sons.—Khari Bhaoli, Delhi 6.  
 National Stationers P. Ltd.—Chawri Bazar, Delhi 6.  
 Nem Chand Narinder Kumar.—216, Chawri Bazar, Delhi 6.  
 Novex Traders.—J-20, W. Patel Nagar, New Delhi 12.  
 Oxford Book & Stationery Co.—Scindia House, New Delhi 1.  
 Ramchander & Sons.—Odeon Building, New Delhi 1.  
 Shankar Metal File Works.—4556, Kucha Bibi Gohar, Nai Sarak, Delhi 6.  
 Vijay Universal Agency.—Chawri Bazar, Delhi 6.

### STEEL FURNITURE & FITTINGS

Amarnath Charanjilal (Agencies) Corpn.—5/8, Deshbandhu Gupta Road, New Delhi.  
 Delhi Steel Works.—Qutab Road, Delhi.  
 Delux Steel Industry.—A/360, Amarpuri, Qutab Road, New Delhi.  
 Hindustan General Industries Ltd.—Kutab Road, Nabikarim, Delhi.  
 Model Industries.—M-30, New Rohtak Road, New Delhi 5.  
 Royal Safe Co.—53, M. M. Road, Paharganj, New Delhi.  
 Simplex Mfg. Co. Private Ltd.—23-25, Faiz Bazar, Daryaganj, Delhi.  
 Style Steel Mfg. Co.—12, Roshanara Road, Delhi 6.  
 Universal Industries.—25, Okhla Industrial Estate, New Delhi 20.

### SURGICAL INSTRUMENTS

Friends Surgical Co.—Mangal Market, Chandni Chowk, Delhi 6.  
 J. Mitra & Bros.—Bhagirath Palace, Chandni Chowk, Delhi 6.  
 Pearl Surgical Works.—Opp. Railway Station, New Delhi 1.  
 SAHNISONS PVT. LTD.—4/14-A, Asaf Ali Road, New Delhi-1;  
 Importers and Manufacturers of Surgical Instruments and Hospital Equipment; Approved Government Contractors; Trade mark "ESPLI"; Serving since 1939; Phone: 274361; Grams: SURCEX."  
 Surgical Mfg. Co.—150, Amrit Kaur Market, Paharganj, New Delhi.

### SURVEYING INSTRUMENTS

Gordhandas Desai Private Ltd.—4/2-B, Jawala Mansion, Asaf Ali Road, New Delhi.  
 Mercury Survey Instruments Mfg. Co.—New Delhi 15.  
 Rekha Industries.—30, Okhla Industrial Estate, New Delhi 20.

SCIENTIFIC EQUIPMENT WORKS.—1/777, Nicholson Road, Delhi 6. Phone: 227029. Grams: "CHEMBIO."

### TAPE & NIWAR MANUFACTURERS

Aggrellos & Co.—11-B, Faiz Bazar, Delhi.  
 Bengal Laco Factory.—Rui-ki-Mandi, Sadar Bazar, Delhi.  
 Bengal Weaving Factory.—Pulbangash, Delhi.  
 Bhagwandas Permanand.—Library Road, Pulbangash, Delhi.  
 B. R. Ram Niwar Factory.—Roshanara Road, Delhi.  
 Delhi Lace Mills.—Beri Wala Bagh, Pulbangash, Delhi.  
 Delhi Niwar & Lace Factory.—Daryaganj, Delhi.  
 Krishna Niwar Factory.—Shidi Pura, Delhi.  
 National Embroidery.—Pulbangash, Delhi.  
 Phoenix Cotton Tape Factory.—Opp. Sadar Bazar Police Station, Idgah Road, Delhi.  
 Sadhu Ram & Sons.—Roshanara Road, Delhi.  
 Sehgal Textile Factory.—Pulbangash, Delhi.  
 Shri Mahabir Jain Niwar Factory.—Shidipura, Delhi.  
 S. H. Attaullah & Saifullah.—Beriwala Bagh, Pulbangash, Delhi.  
 S. M. Saleh & Bros.—Sheesh Mahal, Delhi.  
 Sudarshan Lace Mills.—Gandhi Cloth Market, Chandni Chowk, Delhi.  
 United Embroidery.—Sadar Bazar, Delhi.

### TEXTILE MILLS

Ajudhia Textile Mills Ltd.—53, Regal Bldgs., Parliament Street, New Delhi.  
 Birla Cotton Spg. & Wvg. Mills Ltd.—P.O. Birla Lines, Delhi.  
 Delhi Cloth & General Mills Co. Ltd.—Bara Hindu Rao, Delhi.  
 Punjab Cloth Mills Ltd.—Pull Bangshah, Delhi.

### TIN PRINTERS AND CONTAINER MANUFACTURERS

G.M.C. HIMCO INDUSTRIES LTD.—Registered Office: Tin Printing Bldg., Subzimandi, Delhi 7; Phones: 225645; Grams: "GEMHIMCO". Manufacturers of Plain and Decorated Tin Containers, Tin Posters, Drums, Steel Kegs, Light Sheet Metal goods, Pufferproof Caps, Founders and Makers of Agricultural and other Industrial Machinery. Branches: Delhi & Faridabad.

HINDUSTAN TIN WORKS PVT. LTD.—Regd. Office: 2512, Masjid Khajur, Dharampura, Delhi-6; Factory at G.T. Road, P. B. No. 1, Ghaziabad; Manufacturers of Plain and Printed Containers of Confectionary, Paints & Varnish, Sewing Machine Accessories; Sardine Key Opening Cans (1/4 Dingley), Key Opening round Cans), P.P. Caps, Ribs, Spools & ISI Marked Containers etc. Phones: 853128, 853129.

INDIA BOX & CARTON MAKERS.—2322, Teliwara (Rui Mandi), Delhi 6. Telephone Office: 223635, Resi.: 222661.

METAL PRINTERS CO., THE.—Manufacturers of Metal Posters, Calendars, Decorated Containers, Trays, Toys, Clock Dials etc., 2-B, Jangpura, Mathura Road, Delhi; Phone: 74587.

Tin Can Mfg. Co.—Qutab Road, Sadar, Delhi.

TIN PRINTERS PRIVATE LTD.—3539, Qutab Road, Sadar, Delhi 6.

Tin Printing & Metal Works Ltd.—Kamia Nagar, Subzi Mandi, Delhi 6.

United Sheet Metal Industries.—Gali Lallu Misar, Delhi.

### TINPLATE DEALERS

Bhartumal Ram Kishan.—Sirkiwala, Delhi.  
 Chhoteylal Sanwal Dass.—5008, Bazar Sirkiwala, Delhi.  
 H. K. Gupta.—5008, Bazar Sirkiwala, Delhi.  
 Jugal Kishore Baburam.—Sirkiwala, Delhi.  
 Jugal Kishore Chiranjilal.—Sirkiwala, Delhi.  
 Lala Premnath.—4-U/B, Jawahar Nagar, Subzimandi, Delhi.  
 Lala Sanwal Dass Gupta.—5008, Bazar Sirkiwala, Delhi.  
 Tinplate Dealers' Association P. Ltd.—5008, Bazar Sirkiwala, Delhi.

### TRACTORS AND SPARES

ORIENT GENERAL AGENCIES, PROPS.: Beisiwala Bros. (PVT.) LTD.—For Auto Parts, Accessories, Garage Tools & Tractor Parts, 2711, Lothian Road, Kashmir Gate, Delhi-6.

Tractors and Bulldozers Ltd.—28, Indira Palace, Connaught Circus, New Delhi.

### TRANSFERS MFRS.

GOOD WORK CO.—3024, Bahadurgarh Road, Delhi-6; Manufacturers of all kinds of Transfer Labels—Potteries Acid Proof, Water Slider and Varnished Transfer Labels; Metal Labels—Emboss, Brass and Printed Anodised.

INDIAN TRANSFERS PRODUCTS.—25/110, Aggarwal Bhawan Marg, Shakti Nagar, Delhi-7; Manufacturers of High class Transfers for every Trade and every surface including Ceramic Transfers and Anodised and Embossed Labels; Phone: 229106.



## TRANSPORT COMPANIES

Ajit Goods Transport Co.—Lahori Gate, Delhi 6.  
All India General Transport Corpn. P. Ltd.—3/A, Asaf Ali Road, New Delhi 1.

**ASSOCIATED TRADERS & ENGINEERS PRIVATE LTD.—20, Asaf Ali Road, New Delhi.** Branches: Amritsar, Kanpur, Bombay and Calcutta and other important places throughout India. Approved by Indian Banks; Phones: 271664, 274821.

Bharat Transport Co.—Naya Bazar, Delhi.  
Chadha Motor Transport Co. P. Ltd.—Naya Bazar, Delhi 6.  
Delhi Milap Transport Co. Ltd.—Naya Bazar, Delhi 6.  
Delhi Ferozepur Goods Carriers P. Ltd.—Naya Bazar, Delhi 6.  
Delhi Ghaziabad Transport Co.—4001, Naya Bazar, Delhi 6.  
Delhi, Jaipur, Indore Goods Carriers P. Ltd.—Naya Bazar, Delhi 6.  
Delhi Okara Goods Transport Co.—Chandi Mall Bldg., Roshanara Road, Delhi 6.  
Delhi Sonapat Goods Transport Co.—Naya Bazar, Delhi 6.  
First National Transport Co.—Naya Bazar, Delhi.  
Girdher & Co. P. Ltd.—M-76, Connaught Circus, New Delhi.  
Goods Transport Co.—Naya Bazar, Delhi.  
Green Bus Service.—3/726, Church Mission Road, Fatehpuri, Delhi.  
Ithad Motor Transport Ltd.—Fatehpuri, Delhi.  
Jaggi Oberoi Transport Corpn. of India.—Naya Bazar, Delhi 6.  
Jai Motor Transport Co.—Naya Bazar, Delhi 6.  
Jaipur Golden Transport Co. Private Ltd.—Lahori Gate, Delhi.  
Khosla Goods Carriers P. Ltd.—4718, Roshanara Road, Delhi 6.  
Krishna Goods Transport Co.—1488, S. P. Mookerjee Marg, Delhi 6.  
Krishna Goods Carriers Ltd.—81, G. B. Road, Delhi 6.

## LAKSHMI TRANSPORT CO. (REGD.), THE

Naya Bazar, Delhi-6; Biggest Carriers to Bareilly, Haldwani, Nainital, Pilibhit, Rampur, Moradabad, Badaun, Kotdwar, Bijnor, Ramnagar; Phone: 227091, Resi.: 228904, Delivery: 221863.

Lyallpur Doabi Transport Co.—Naya Bazar, Delhi 6.  
Mahal Transport Co. P. Ltd.—41, Naiwala, Delhi 5.  
Mehta Goods Carriers P. Ltd.—8380/6, Roshanara Road, Delhi 6.  
Mewat Transport Co.—733, Church Mission, Hindu Sarai, Delhi 6.  
Moradabad Rohilkhand Transport Co.—Naya Bazar, Delhi 6.  
Nagpal Transport Co. P. Ltd.—10253, Motla Khan Delhi 1.  
New Golden Transport Co. Ltd.—Roshanara Road, Delhi.  
New India Transport Co. Private Ltd.—Roshanara Road, Delhi.

## NORTHERN INDIA GOODS TRANSPORT CO. PVT. LTD.,

Regd. Office: 1, Gokhale Market, Delhi-6.

Connects 12 State Capitals and Towns by regular Daily Parcel Services; Exclusive Carriage Contractors to big Manufacturers.

Phones: 223261, 223262, 229773, 221841, 229668 & 224492.

Prem Nath Transport Co. Ltd.—Connaught Circus, New Delhi.  
Punjab Goods Carriers Ltd.—Roshanara Road, Delhi 6.  
Rajasthan Golden Transport Co. Ltd.—Naya Bazar, Delhi 6.  
Rama Transport Co. P. Ltd.—1/24, Asaf Ali Road, New Delhi 1.  
Ravi Goods Transport Co.—Naya Bazar, Delhi.  
Royal Goods Transport Co.—Naya Bazar, Delhi.  
Simla Hills Transport & Service Ltd.—Connaught Circus, New Delhi.  
South Eastern Roadways.—B4/10, Asaf Ali Road, New Delhi.  
Vir Bharat Motor Transport Co.—Naya Bazar, Delhi.

## TRAVEL AGENTS

**AMERICAN EXPRESS CO. INC., THE.**—Hamilton House, Block-A, Connaught Place, New Delhi-1; Phone: 43551.

**ASIATIC TRAVEL SERVICE.**—1/9, Connaught Circus, New Delhi. Phone: 45366. Grams: "AIRASIA." H.O. 12, Marzban Road, Bombay 1.

**MERCURY TRAVELS (INDIA) PRIVATE LTD.**—Oberoi Imperial Hotel, New Delhi. Phone: 43001 (3 lines). Head Office: Oberoi Grand Hotel, Chowringhee, Calcutta 13. Phone: 236051 (8 lines). Branches at 70, Forbes Street, Ram-part Row Corner, Fort, Bombay 1. Phone: 235948 (3 lines); Ashoka Hotel, Patheon Road, Egmore, Madras 8. Phone: 85095; Oberoi Palace Hotel, Srinagar, Kashmir. Phone: 1045. Srinagar-19; National Motors Building, Mirza Ismail Road, Jaipur. Phone: 77284, Grams: "MERCOTRAVEL".

**N. JAMNADAS & CO.**—Hotel Metro, Janpath, New Delhi. Phone: 44255. Grams: "ENJAYTOURS." Head Office: Bombay, Branch Calcutta; Travel Agents and Tour operators Recognised by the Government of India, Reservation by Air—Sea—Rail.

**ORIENT EXPRESS CO. PRIVATE LTD., THE.**—70, Janpath, New Delhi 1. Phones: 47178 & 42022; Grams: "OREXPRESO."

**SITAWORLD TRAVEL (INDIA) PVT. LTD.**—F-12-13, Connaught Place, New Delhi; Travel Agents and International Tour Operators; Phone: 40041 (3 Lines), Grams: "SITA-TRAVEL".

Trade Wings Pr. Ltd.—60, Janpath, Queen's Way, New Delhi.

**TRAVEL CORPORATION (INDIA) PRIVATE LTD.**—C-35, Connaught Place, New Delhi-1; Phones: 45101, 45102, 45103, Grams: "TRAVELAIDS".

**UNITED TRAVELS.**—General Sales-Agents: Kuwait Airways Corporation, 5-L, Connaught Circus, New Delhi-1; Specialists in International Travel; Phone: 48968, 48612; Grams: "UNITRAFFIC".

## TYPEWRITERS AND ACCESSORIES

Bharat Carbon & Ribbon Mfg. Co. Ltd.—N-75, Bombay Life Bldg., Connaught Circus, New Delhi.

Hindustan Carbons P. Ltd.—26-F, Connaught Place, New Delhi.

National Carbon Co. of India Ltd.—15, Asaf Ali Road, New Delhi.

**REMINGTON RAND OF INDIA LTD.**—Manufacturers of Remington Rand Business Equipment; Jivan Vihar, 3, Parliament Street, New Delhi. Phone: 46419. Grams: "REMINGTONS."

Universal Machinery Mart.—6398, Katra Barien, Delhi 6.

Universal Typewriter Co.—(Estd.: 1938); 253, Kamla Market, Asaf Ali Road, New Delhi.

## TYRE RETREADING MACHINERY MFRS.

**MODERN METAL WORKS.**—1, Bhag. t Singh Street, Opp. Police Station, Phar Ganj, New Delhi-1; Phone—Office: 277041, Factory: 568584, Resi.: 566964, Grams: "TYRE-MOULDS." New Delhi; Manufacturers of full circle tyre Retreading & Resoling Machines.

## VACUUM EQUIPMENT

**ASSOCIATED INSTRUMENTS MANUFACTURERS (INDIA) PRIVATE LTD.,** Sun Light Insurance Bldg., 26/27, Asaf Ali Road, New Delhi; Grams: "AIMILDEL." Phone: 271236. Gardners Corporation.—25/90, Connaught Circus, New Delhi 1.

## VACUUM FLASKS

**NATIONAL MARKETING CO.**—4500, Dan Bazar, Cloth Market, Delhi-6; Sole Selling Agents for Delhi State for Hammer Master Vacuum Flasks; Agents for D.C.M. Cotton Yarn and A.C.C. Cement; Phone: 221048, Resi.: 223581; Grams: "COTTONYARN".

## VISUAL EDUCATION

**N. C. KANSIL & CO.**—Publishers of Maps and Charts and Visual Educational Aids and Nursery School Equipment; 40, Model Basti, Delhi 5. Phone: 55918.

## WATCHES, TIMEPIECES, CLOCKS AND SPARE PARTS

Amarson Watch Co.—10-C, Connaught Place, New Delhi.

American Watch Co.—Fountain, Chandni Chowk, Delhi.

Awtar Watch Co.—Chandni Chowk, Delhi.

B. Aggarwal Watch Co.—Chandni Chowk, Delhi.

Bakshi Ram & Sons.—Chandni Chowk, Delhi 6.

Baldev Raj and Co.—2887, Sirkiwala, Haus Qazi, Delhi 6.

Balkrishnan Dass and Sons.—Watch Dealers, Chandni Chowk, Delhi.

Banarsi Dass & Bros.—Katra Subhash, Chandni Chowk, Delhi 6.

Bertane & Co.—Near Dena Bank, Chandni Chowk, Delhi.

Central Watch Co.—Chandni Chowk, Delhi.

Cooke & Kelvey Ltd.—Scindia House, New Delhi.

Corona Watch Co.—Chandni Chowk, Delhi.

D. N. Sondhi & Co.—Fountain, Chandni Chowk, Delhi.

English Watch Co.—Bhagirath Palace, Ch. Chowk, Delhi 6.

Fine Watch Co.—Opp. Central Bank, Chandni Chowk, Delhi 6.

G. C. Chawla Watch Co.—Fatehpuri, Delhi.

Great Bharat Stores.—Near Fatehpuri, Chandni Chowk, Delhi.

Hind Watch Co.—New Lajpat Rai Market, Chandni Chowk, Delhi.

Imperial Watch House.—Chandni Chowk, Delhi.

Inderjit Jitendra Kumar.—802-2, Gandhi Street, Fatehpuri, Delhi 6.

Jayna Time Industries Private Ltd.—7/32, Daryaganj, Delhi 6.

Jayna Watch Co.—Sadar Bazar, Delhi.

Kahan Chaud Satya Pal.—Near Dena Bank, Chandni Chowk, Delhi.

Kanhaya Watch Co.—Chandni Chowk, Delhi.

K. C. Raj & Co.—Chandni Chowk, Delhi.



Krishna Watch Co.—Main Bazar, Paharganj, New Delhi.  
 Ladli Prasad & Sons.—Chandni Chowk, Delhi.  
 Lakshmi Narain & Co.—Chandni Chowk, Delhi.  
 Lucky Clock Supply Corp.—12/20, Shakti Nagar, Sabzmandi, Delhi 6.  
 Modern Jewellers.—Regal Bldgs., New Delhi.  
 Modern Watch House.—Fountain, Chandni Chowk, Delhi.  
 Mutreja Watch Co.—New Lajpat Rai Market, Chandni Chowk, Delhi.  
 New Era Watch Co.—25/B, Pleasure Garden Market, Chandni Chowk, Delhi.  
 New India Watch Co.—Fountain, Chandni Chowk, Delhi.  
 Packard Watch Co.—Chandni Chowk, Delhi 6.  
 Partap Chand & Sons.—1853, Fountain, Chandni Chowk, Delhi.  
 Phoenix Watch Co.—Chandni Chowk, Delhi.  
 Premier Watch Co.—Chandni Chowk, Delhi.  
 Punkaj Traders.—Chandni Chowk, Delhi.  
 Purnan Chand & Co.—Fatehpuri, Delhi.  
 Ram Kishan Dass & Sons.—202, Fatehpuri, Delhi 6.  
 Regal Watch Co.—Chandni Chowk, Delhi.  
 R. S. Umrao Singh & Sons.—Near State Bank, Chandni Chowk, Delhi.  
 Swastik Watch Co.—Chandni Chowk, Delhi.  
 Swisco.—P.O. Box 1512, Delhi.  
 Standard Trading Co.—16-E, Kamla Nagar, Delhi 6.  
 Time Centre.—140, New Lajpat Rai Market, Delhi 6.  
 Time Corporation.—Clock Tower, Chandni Chowk, Delhi 6.  
 Union Watch Co.—Chandni Chowk, Delhi.  
 Vasani Watch Co.—Gali Haidar Kuli, Chandni Chowk, Delhi.

### WATER METERS

KAYCEE INDUSTRIES LTD.—10/1, Asaf Ali Road, New Delhi.  
 Agents for Hind Rectifiers Ltd. Manufacturers of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery chargers, Silicon Power Plants for Electro-chemical Industries; "Kaycee" Rotary, Toggle, Heat Control and Airconditioner Switches, "Kaycee" Domestic and bulk type water meters; H.O.: Kamani Chambers, Nicol Road, Ballard Estate, Bombay; Phone: 263521, Grams: "TURN-RITE"; Branches: Calcutta, Madras and Kanpur.

### WELDING SETS & MATERIAL DEALERS

G. M. C. Himco Industries Ltd.—Tin Printing Bldg., Subzimandi, Delhi 6; Phone: 225645 & 225928. Modern Weld Craft.—Bari Market, Sadar Bazar, Delhi 6.

Ananta Narcinva Naik.—General Merchant, Morgao, Goa (India).  
 Anant Pandurang Walavalkar.—Steamship Agents, P.O. Box 27, Vasco Da Gama, Goa (India).  
 Armazem Pradip.—Electrical Materials, Vasco Da Gama, Goa (India).  
 Auto Service Ltd.—Automobile Dealers, Post Box 30, Vasco Da Gama, Goa (India).  
 Casa Commercial Goa.—Laboratory Supplies, Vasco Da Gama, Goa (India).

## DAMODAR MANGALJI & CO. (PVT). LTD.,

Afonso de Albuquerque Road,  
 Panaji, Goa

Mine-Owners, Exporters & Importers

Tel : { Grams: "RAJANI"      Post Box No. 32  
       Phone: 382 (3 Lines)

### ENVOYS (INDIA) PRIVATE LTD.

B-24, Defence Colony, New Delhi-3  
 Distributors for Northern India—'Rocketarc' Welding Transformer, Spot Welding Machines, Dieselarc DW-320 Diesel Welding sets and Triodyn E. 320 D.C. Welding Sets; India's most popular Welding Machines.  
 Phone: 78510, Grams: LIVEWIRE.

INDUSTRIAL GASES LTD., THE.—D. B. Road, Pratap Bhawan, Post Box 622, New Delhi-1; Phone: 264726, Grams: "INDUS-GASES"; Head Office: P.O. Box 853, Calcutta-1; Manufacturers & Suppliers of all kinds of Welding & Cutting machines and equipment; Automatic, Resistance, Spot, Seam, Stud & Flash, Inert Gas shielded Arc, Submerged arc, Cutting machines, Blowpipes, Regulators, Acetylene generators, Electrodes, Rods, Wires, Electro-Holders etc.

### WINE & SPIRIT MERCHANTS

Bhola Ram Sons P. Ltd.—Mori Gate, Delhi 6.  
 Empire Stores.—Connaught Place, New Delhi.  
 Gaindamull Hem Raj.—11, Regal Bldgs., Parliament Street, New Delhi.  
 Ghala Mall & Sons.—32-H, Connaught Circus, New Delhi.  
 Herbertsons P. Ltd.—2, Daryaganj, Delhi 6.  
 J. Dishes & Co.—Baird Road, New Delhi.  
 Mohan Brothers.—3, Sadar Thana Road, Delhi 6.  
 Motandas & Co., T.—4E, Thana Sadar Road, Delhi 6.  
 Phipson & Co. Ltd.—Connaught Circus, New Delhi.  
 Spencer & Co. Ltd.—Connaught Circus, New Delhi.

### WIRE & CABLE PRODUCTS

Aggarwal Cable Works.—Bazar Sitaram, Delhi.  
 Delton Cable Co.—1400, Pahari Imli, Delhi.  
 Indian Steel & Wire Products, Ltd.—17, Tuglaq Road, New Delhi 11.  
 National Screw & Wire Products Ltd.—90, Sunder Nagar, New Delhi 11.

### YARN MERCHANTS

NATIONAL MARKETING CO., 4500, Dan Bazar, Cloth Market, Delhi-6; Agents for D.C.M. Cotton yarn and A.C.C. Cement; Sole Selling Agents for Delhi State for Hammer Master Vacuum Flasks; Phone: 221048. Res.: 223581, Grams: "COTTONYARN"

## GOA

In Goa

### HIRALAL & COMPANY,

Vasco Da Gama, Goa

Serving Shipowners, Attending Clearing, Forwarding. Shipping work for over 30 years at Marma Goa Harbour.  
 Phone: 23,153 Res: 74 & 124 Grams: "THAKKER".



### ITALAB (GOA) PRIVATE LTD.,

Industrial Testing and Analytical Laboratories, Surveyors, Samplers, Analysts; Regd. Office: Lolitkar Bldg., Margao, Goa; Phone: 436, Grams: "MINEROLAB".

M. S. B. CACULO—P.O. Box 88, Panjim, Goa.



**MENEZES & CIA.,**

Estd. in 1910,

Head Office: Panaji;

Branches:

Margao, Mapuca, Vasco da Gama; Associates at Hubli; Importers & Distributors of Pharmaceuticals, Chemicals, Hospital & Laboratory Equipments, Food Products, Cosmetics etc.

Narendra M. Kamat.—P.O. Box 16, Vasco Da Gama, Goa (India).

**PANDURONGA TIMBLO INDUSTRIES.**—Caixa Postal No. 242, Margao, Goa; Importers, Manufacturers Representatives, Mine Owners, Producers & Exporters of Iron & Mangane Ores.

For all your requirements in Timber, granite-metal, Laterite Stones, River Sand, Tiles, Furniture & other Building materials Contact:—

**MOHIDIN INDUSTRIES**

For Building and all sorts of constructions contact our Sister Concern "Goa Constructors". For your transport arrangements of Petroleum Products contact our Tanker Fleet Dept. "Mohidin Transport" Casa Mohidin, P.O. Box 12, Vasco da Gama. Phone: 118, Grams: "MISAN".

**GUJARAT****Ahmedabad**

Ahmedabad Manufacturing & Calico Printing Co., Ltd., The Post Box No. 12, Ahmedabad.

Ahmedabad Chrome Tanning Co., Peer-mohamedshah Road, Ahmedabad.

Ahmedabad Ice & Cold Storage P. Ltd., 42, Parmal Society, Ellis Bridge, Ahmedabad 6.

Ahmedabad Star Engineering Works P. Ltd., 1730, Haribhai Dehla, Outside Prem Darwaja, Ahmedabad 1.

Ahmedabad Victoria Iron Works Co., Ltd., Dudheshwar Road, Ahmedabad 1.

Alkemi Private Ltd., Opp. Potaliya Talao, Saraspur, Ahmedabad 2.

Anil P. Ltd., Manekchowk, Ahmedabad.

Anil Starch Products Ltd., Anil Road, Railwaypura P.O., Ahmedabad 2.

Aruna Traders, Vora's Bldg., Kapasia Bazar, Ahmedabad 2.

Avery Co. Ltd., 2069, Raikhad, Ahmedabad.

Bakubhai Ambalal P. Ltd., Bank of India Bldg., Bhadra, Ahmedabad.

Baldevdas Manilal & Co., Gandhi Road, opp. Mahavir Swami's Temple, Ahmedabad.

Bansidhar P. Ltd., Opp. City Mill, Kankaria Road, Ahmedabad.

Batliloi & Co., Reid Road, Ahmedabad.

Beltex Private Ltd., Ellis Bridge, Ahmedabad 6.

**BHALAKIA MILLS CO., LTD.,** Cotton Cloth Manufacturers, P. B. No. 29, Khokhra Mehmedabad Road, Ahmedabad 8. Phone: 52361 & 52362.

Bharat Metal Industries, Ramkrishna Colony Sarkhej Road, Ahmedabad 7.

Bharat Products Mfg. Co., Vallabhwad, Ellis Bridge, Ahmedabad.

Bharat Textile Industries, Ramkumar Mills Compound, Saraspur, Ahmedabad.

Bharat Traders, 572-A, Reid Road, Railwaypura, Ahmedabad 2.

Bhow & Co., S. P., Jumma Masjid, Pankore Naka, Ahmedabad.

Bhulabhai Narandas & Co., Danapith Lat, Kalupur, Ahmedabad 2.

**BOMBAY GARAGE (AHMEDABAD) LTD.,** Shahibag Road, Ahmedabad 4 (Gujarat State); Estd.: November 16, 1939; Phones: 24615, 24616 & 24213. Grams: "PARKCHIN". Dealings: Sales and Repairs in Motor Cars, Trucks, Scooters, Air Conditioners, Water Coolers, Refrigerators and Sales of relevant Spare Parts. Gen. Manager: Aziz B. Chinoy.

**BRADMA OF INDIA LTD.,** 9, Mill Officers Co. Housing Colony, opp. Mill Owners' Association Bldg., Ashram Road, Navrangpura, Ahmedabad 9; Grams:

"BRADMALT" Data writing Machines and Business Systems.

Brady & Co., Ltd., W. H., Railwaypura Post, Reid Road, Ahmedabad.

Brooke Bond India P. Ltd., Bungalow No. 1054, Near Rly. Crossing, Shahibaug, Ahmedabad.

C. A. Galiakotwalla & Co. P. Ltd., Kapasia Bazar, Railwaypura, Ahmedabad.

Caltex (India) Ltd., Asarwa Station Yard, Ahmedabad.

**CAMA HOTELS LTD.,** Khanpur Road, Ahmedabad; Finest Hotel in Gujarat.

C. B. Sataria Bros., Cross Lane, opp. Railway Station, Ahmedabad.

Cellulose Products of India Ltd., P.O. Kathwada Maize Products, Ahmedabad.

Cement Marketing Co. of India P. Ltd., Bombay Mutual Bldg., Tilak Road, Ahmedabad.

Cimco Traders, 1027, Totalajini Pole, Raja Mehta's Pole, Ahmedabad 1.

Comet Dye Stuff P. Ltd., Naroda Road, Ahmedabad 2.

Continental Trading Syndicate, 649-1, Kapasia Bazar, Ahmedabad.

Dashrathlal Chimanlal & Bros., 647/23, Motilal Mansion, Kapasia Bazar, Ahmedabad 2.

Diamond Silk & Rayon Mill, Opp. Thakkar Bapanagar, Nikol Road, Ahmedabad 2. Silk & Art Silk Cloth Manufacturers.

Dominant Textile and Industrial Co., 780, Ramji Mandir's Pole, Patel's Pole, Ahmedabad 1.

Dye Stuffs & Chemicals P. Ltd., Reid Road, Ahmedabad 2.

Eagle Engineering Enterprises, Naroda Road, Ahmedabad.

Embee Commercial Corp., Jivan Nivas, Opp. Madhav Baug, Ahmedabad.

Express Traders P. Ltd., Vora's Bldg., Kapasia Bazar, Ahmedabad 2.

Fibrex P. Ltd., Bharatkhand Mill Compound, Asarva Road, Ahmedabad 11.

Firestone Tyre & Rubber Co., of India P. Ltd., P. O. Box 272, Ahmedabad.

Gajjar Industries, Near Potaliya Talav, Saraspur, Ahmedabad.

Gannon Dunkerley & Co., Ltd., Railwaypura Post, Ahmedabad.

General Commercial Agency, Cross Lane, Railwaypura Post, Ahmedabad 2.

General Electric Co. of India Private Ltd., The Magnet House, Tilak Road, P.O. Box No. 224, Ahmedabad.

General Industries, 2751, Tilak Road, Ahmedabad.

General Trading Co., Khodi Ambli, Near Chhipa Pole, Ahmedabad.

Girdharilal Damoderdas Ltd., 691, Reid Road, Railwaypura Post, Ahmedabad.

**GREAVES COTTON & CO., LTD.,** Mumtaz Mahal, Relief Road, Ahmedabad.

Gujarat Corporation (India) Ltd., Harisadan, Char Rasta, Ahmedabad.

Gujarat Electric Co. P. Ltd., Opp. Mahavir Jain's Temple, Gandhi Road, Ahmedabad.

Gujarat Nets Ltd., P. Box 243, Ahmedabad.

Gujarat Paper Mills Ltd., 653, Sakar, Bazar, Ahmedabad 2.

Gujarat Textile Co. P. Ltd., Manekchowk, Ahmedabad.

Gujarat Trading Corporation, Narottam Bldg., K. Bazar, Ahmedabad 2.

Gujarat Wood Works P. Ltd., Astodia, Lal Kagadapith, Ahmedabad.

Gujrat Automobiles, Motilal Hirabhai Market, Ahmedabad.

Gujrat Oil Mills and Manufacturing Co., Ltd., Asarva, Ahmedabad 11.

Gunvantray Graphic Industries, Near Railway Crossing, Naroda, Ahmedabad 2.

Hindustan Wired Glass Mfg. Co. Ltd., Ideal Motor Premises, Lal Darwaja, Ahmedabad.

H. Chokshi & Co., Kapasia Bazar, Ahmedabad 2.

H. K. (Investment) Co. P. Ltd., Shri Ambica Mills Premises, Ahmedabad 8.

Imperial Chemical Industries (India) Ltd., Dyes Dept., Girdharilal's Mangaldas Bungalow, Lal Darwaja, Ahmedabad.

Imperial Tobacco Co. of India Ltd., North End Hotel, Shahibaug, Ahmedabad 4.

Indequip P. Ltd., Reid Road, Ahmedabad.

Indian Cable Co. Ltd., Gandhi Road, Ahmedabad.

Indian Oxygen Ltd., Rakhial Road, Ahmedabad.

Indo Belga Engineering Co. Ltd., Dudheshwar Road, Ahmedabad.

Indo-British Chemical Co., Astodia Chakla, Ahmedabad.

Indo-Swiss Textile Machinery Mfg. Co., C/o Ideal Motors Ltd., Lal Darwaja, Ahmedabad.

**INDUSTRIAL HIRE PURCHASE CORPORATION PRIVATE LTD.,** Opp. Krishna Cinema, Anand Bhuvan, Relief Road, Ahmedabad. Financiers, Merchants & Agents. Phone: 22982; Grams: "PIAMINSON".

Industrial Spare Parts Co., Relief Road, Ahmedabad.

International Traders P. Ltd., Narottam Bldg., Kapasia Bazar, Ahmedabad.

J. K. Brothers, Eranda Hall, Kapasia Bazar, Ahmedabad. Phone: 2764.



Jaishree Traders P. Ltd., Hathika, Opp. Bagich, Rakhial Road, Ahmedabad 10.  
 Jayant Rasiwalla P. Ltd., Outside Prem Darwaja, Gujarat Ginning Mills Compound, Ahmedabad 11.  
 Jayems Engineering Co., Lal Darwaja, Ahmedabad.  
 Jones Textilates Export Co., Ltd., Kapasia Bazar, Ahmedabad.  
 K. C. Mashruwala & Co., Reid Road, Ahmedabad.  
 K. Damodardas & Co., Singapurwalla Building, Khadia, Char Rasta, Ahmedabad.  
 Kilachand Devchand & Co., Ltd., Manek Chowk, Ahmedabad.  
 Kilburn & Co. P. Ltd., P.Box 1065, Ahmedabad.  
 Kumud Trading Co., Tagara Mill's Compound, Near Vora Roja, Kankaria Road, Ahmedabad.  
 Leophone Talking Machine Co., Gandhi Road, Ahmedabad.  
 L. N. Gadodia & Sons Ltd., opp. Maskati Market, Sakar Bazar, Ahmedabad.  
 Machine Products India P. Ltd., Reid Road, Ahmedabad.  
 Machine Tools and Hardware Corporation, Reid Road, Railwaypur Post, Ahmedabad.  
 Maize Products Ltd., Kathwada, Ahmedabad 2.  
 Metal Moulders Ltd., Dudheshwar Road, Ahmedabad.  
 Metro Industries, Chhinkin Kuliwala Estate, Outside Gomtipur Darwaja, Ahmedabad 10.  
 Metro Wood & Engg. Works P. Ltd., Dudeshwar Road, Ahmedabad 1.  
 Mistry and Gajjar (India) Ltd., Sarkigaran Wadi, Outside Sarangpur Gate, Ahmedabad.  
 Model Machineries P. Ltd., Kapasia Bazar, Ahmedabad.  
 Modern Engineering & Moulding Co., Shahpur Mills Compound, Ahmedabad.

Morris Transport Service Ltd., Biradar Compound, Lal Darwaja, Ahmedabad.  
 Nanavati & Co., Ltd., Maskati Market, Ahmedabad.  
 Nanavaty Narendra P. Ltd., Sakar Bazar, Vakharia Dehla, Ahmedabad 2.  
**NANIKRAM SOBHRAJ MILLS PRIVATE LTD.**, Madhowlal Ranchhodlal Colony, Railwaypur, Ahmedabad 2. Post Box No. 1041, Phone : 24266 & 20789; Grams : "KINCHICRAP." Silk, Rayon & Synthetic Fabrics Manufacturers.  
 New Make Industries, Opp. Arun Society, Ellis Bridge, Ahmedabad 7.  
 Newkem Products Corp., 527/4, Panchkuva, Ahmedabad.  
 Nima Trading Company, Cross Lane, Ahmedabad 2.  
 N. Mansukhrum & Co. (Estd. 1923), Opp. Maskati Market, Ahmedabad 2.  
 Pargans (I) P. Ltd., 571, Reid Road, Ahmedabad 2.  
 Pearl Cottage Industries, Patadi State Bldg., Bhadra, Ahmedabad 1.  
 Pest Control (I) P. Ltd., Anand Bhuvan, Relief Road, Ahmedabad.  
**PIONEER ENGINEERING WORKS, THE**, Prop.: C. C. Ranchhodlal & Co., Manufacturers of Textile Machinery, C. I. Pipes & Specials, V. Grooved Pulleys, Cocks, Valves, Vacuum Pumps, Electric Hoist, Flooring Tiles making machines etc., Naroda Road, Ahmedabad 2. Phone: 26171; Grams: "MOULDING".  
 Pioneer Mfg. Co., Haripura Road, Asarwa, Ahmedabad 11.  
 Prakash Mill Stores Trading Co., Seeds Merchants' Association, Kapasia Bazar, Ahmedabad 2.  
 Ramnarayan Sona P. Ltd., 437, Manekchowk, Ahmedabad.  
 Ramvijay Iron Works, 664, Ghee Kanta Road, Shamal Bechar Chawl, Ahmedabad.  
 Regal Trading Co., Mehbub Society Bldg., Tilak Road, Ahmedabad 1.

R. J. Kama & Co. P. Ltd., Lal Darwaja, Ahmedabad.  
 Sales & Service Corp., Motilal Mansion, Kapasia Bazar, Ahmedabad 2.  
 Sarvodaya Rolling Shutters & Engineering Works, Industrial Estate, Rakhial, Ahmedabad 10.  
 Scientific Printers' Materials Manufacturing Co., Ltd., Mirzapur Road, Ahmedabad.  
**SHRI VIVEKANAND MILLS LTD.**, Rakhial Road, P.O. Rajpur-Gomtipur, Ahmedabad 21. Phones: 51188 & 51189; Grams: "VIVEK".  
 Shubhdwar Rolling Shutters Engg. Co., 567-2, Reid Road, Ahmedabad.  
 Singer Sewing Machine Co., Relief Road, Ahmedabad 1.  
 Spencer & Co., Ltd., Relief Road, Next to Electricity House, Ahmedabad 1.  
 Steel-O-Style, Bansidhar House, Kankaria Road, Ahmedabad.  
 Swastik Textile Trading Co., Ltd., Motilal Hirabhai Market, Ahmedabad 2.  
 Tata Iron and Steel Co., Ltd. (Sales Branch Office), Relief Road, Ahmedabad 1.  
 Testeels Limited, The Commercial Ahmedabad Mills Premises, Near Idgah Gate, Asarwa, Ahmedabad 11.  
 Turner Hoare & Co. Ltd., Kapasia Bazar, Ahmedabad 2.  
 United Dyestuff Industries Ltd., Harisadan, Khadia, Char Rasta, Ahmedabad.  
 United Textile Industries, H. Achratia Market, K. Bazar, Ahmedabad 2.  
 Vinima Corporation, Nima House, Relief Road, Ahmedabad 1.  
 Voltas Limited, Navroz Villa, Ahmedabad 1.  
 Vrajesh P. Ltd., 696, Reid Road, Ahmedabad.  
 Weltex Industrial Trading Co., 633, Companywala Market, K. Bazar, Ahmedabad.  
 Western India Prospecting Syndicate P. Ltd., Calico Mills Premises, Ahmedabad.  
 Williamsons (I) P. Ltd., 670-22, M. Hirabhai Market, Ahmedabad 2.

## CLASSIFIED LIST OF TRADES & PROFESSIONS

### ACID & ALKALI RESISTING CEMENTS MFRS.

#### ARCOY INDUSTRIES

CORROSION ENGINEERS

137, New Cloth Market, Ahmedabad-2.

*Manufacturers of:* Acid & Alkali Resisting Cements, tanks & Vessels lining materials, Pipe Jointing Compounds used in Chemical Plants, Dairies, Refineries, Textile Mills, Canning Industries, Pharmaceutical firms, Pickling Plants etc.

*We also offer:* ARCONETE Concrete floor-hardener and water proofer to provide heavy wear and tear Resistance for industrial flooring. Ferrum Iron and Aluminium Cements for repair of defective Castings; REFCRETE heat resisting refractory mortar for jointing fire-bricks etc. ARCOSET the quick Setting liquid for cement Concrete; ARCOY Water proofing Compound which guarantees safety against water seepage.

### ADDRESSING & DATA WRITING MACHINES

**BRADMA OF INDIA LTD.**, Data Writing Machines and Business Systems, 9, Mill Officers Co-op. Housing Colony, Opp. Mill Owners Association Bldg., Ashram Road, Navrangpura, Ahmedabad-9; Grams: "BRADMALT."

### ADVERTISING & PUBLICITY AGENTS

B. Shah & Co., Nisha Pole Naka, Relief Road, Ahmedabad 1.

**CHITRA PUBLICITY CO.**—1916, Gandhi Road, Ahmedabad. Grams: "HOARDSITES." Leading Hoarding Publicity

Agents in Gujarat, Maharashtra and Rajasthan States  
 Phone: Office: 22831, Resi: 7509.

Dilip Advertisers, Behind Pushpkunj Society Kankaria, Ahmedabad.  
 General Agency & Exchange Co., Near Jain Temple, 45, Gandhi Road, Ahmedabad.

K. Shah & Co., 91, Ratan Pole, Ahmedabad, Phone: 3350.

Modern Publicity Co., 91, Ratan Pole, Ahmedabad.

Navnitlal & Co., 1161, Bhadra, opp. C.T.O., Ahmedabad.

New General Publicity P. Ltd., 1899/4, Gandhi Road, Ahmedabad.

Newway Publicity Co., Mirzapur Road Ahmedabad 1.

**PARAMOUNT PUBLICITY CO.**, Outdoor Advertising Agents & Hoarding Contractors. Jain Wadi, Manek Chowk, Ahmedabad. Phone: 52148.

Publicity Parlour, Khadia Char Rasta, Ahmedabad.

Panch Advertisers, Near Model Talkies, Gandhi Road, Ahmedabad.

Siddharth Advertising Agency, 6, Siddharth Society, Faldi, Ahmedabad 7.

Two Sisters, 91, Ratan Pole, Ahmedabad.

### AERATED WATER

Emjee Soda Factory, Opp. R. C. High School, Mirzapur Road, Ahmedabad.

Ghandhi Soda Factory, Panchkuva, Navi Moholat, Ahmedabad.

J. P. Soda Factory, Kankaria, Opp. Ambica Mills, Ahmedabad.

M.G. Soda Factory, Mirzapur Road, Ahmedabad.

P. Dhanjibhoy & Sons, Badra, Ahmedabad 1.

Patel Soda Factory, Shahpur, Navi Pole, Ahmedabad.

Shahco Soda Factory, Potalia Talav, Saraspur, Ahmedabad.

Tajmahal Trading Co., Mirzapur, Ahmedabad 1.

Thakker Soda Factory, Danapith, Ahmedabad 1.



**AIR-CONDITIONING ENGINEERS**

Bombay Garage (Ahmedabad) Ltd., Shahibaug Road, Ahmedabad 4.  
C. Doctor & Co. Private Ltd. (Estd. 1915).—Bank of Baroda Bldg., Gandhi Road, Ahmedabad 1.  
Electro Airconditioning Corporation, 1754, Mirzapur Road, Ahmedabad.

**ATTAR & OIL MANUFACTURERS**

Babu Chemical Works, Asarva, Ahmedabad.  
C. P. M. Mohena, Dhanasutar Pole, Daropole, Ahmedabad.  
Delhiwala Lala Bishandayal Dharamdas, Opp. Jumma Masjid, Ahmedabad.  
Delhiwala Lala Parmanand & Sons, Opp. Jumma Masjid, Ahmedabad.  
Delhiwala Lala Prahladdas Banarasidas, Opp. Jumma Masjid, Ahmedabad.  
H. K. Dyer, Raipur, Badwa Pole, Ahmedabad.  
Kanojwala Swadeshi Attar Bhandar, Three Gates, Ahmedabad.  
K. Mehta & Co., Opp. Mansukhabai's Pole, Kalupur, Ahmedabad.  
M. M. Khambhatwala, Akashethkuwas Pole, Raipur, Ahmedabad.  
Nerol Agency, Three Gates, Ahmedabad.  
Parimal Perfumery Works, Near Khadia Gate, Ahmedabad.  
Rohit Industries, Near Bala Hanuman, Gandhi Road, Ahmedabad.  
Ruby Perfumery Works, Dandigara's Pole, Kalupur, Ahmedabad.

**AUTOMOBILE ENGINEERS**

**BOMBAY GARAGE (AHMEDABAD) LTD.**, Shahibag Road, Ahmedabad 4. Grams: "PARKCHIN." Phone: 24615, 24616 & 24213.

Gujarat Motor Repowering Service, Old Bombay Shop Bldg., Railway-pura, Ahmedabad.

**MODERN AUTOMOBILES (GUJARAT) PRIVATE LTD.**—Automobile Engineers, Distributors of Standard Batteries, Dealers in Cars, Motor Parts and Automobile Accessories with a Service Station and Petrol Filling Station at Nehru Bridge Road, Lal Darwaja, Ahmedabad.

**AUTOMOBILES, AUTOMOBILE PARTS AND ACCESSORIES**

Ajit Automobiles, Station Road, Ahmedabad.  
Alliance Motor Co., Mirzapur Road, Ahmedabad.  
Ashok Automobiles, Station Road, Ahmedabad.  
Associated Auto Parts Ltd., Relief Road, Kadia Kuin, Ahmedabad.

**ASSOCIATED MOTORS (PRIVATE) LTD.**—Mirzapur Road, Ahmedabad; Dealers of Motor Car, Motor cycle and Scooter parts and accessories and allied automobiles; Sole distributors of Royal Enfield Motor cycles, Scooters and Three Wheeler chassis for Gujarat; Repairs of all kinds are undertaken; Phone: 22444; Grams: "DEMAND."

Auto Service, Surkhej Road, Ahmedabad.  
Battery Charging & Rep. Works, Station Road, Ahmedabad.

**BOMBAY GARAGE (AHMEDABAD) LTD.**, Shahibag Road, Ahmedabad 4. Grams: "PARKCHIN." Phone: 24615, 24616 & 24213.

Bombay Motor Stores, Kapasia Bazar, Ahmedabad.  
Eastern Automobiles, Reid Road, Ahmedabad.  
Franklin Brothers, Mirzapur Road, Ahmedabad.  
G. M. Patel & Sons, Kapasia Bazar, Ahmedabad.  
Gujarat Automobiles, Station Road, Ahmedabad.  
Gujarat Motor Stores, Reid Road, Ahmedabad.  
Hind Auto Service, Mirzapur Road, Ahmedabad.  
Indo-American Trading Co., 159, Sindhi Market, Railway-pura, Ahmedabad.  
Janta Motor Stores, Lal Darwaja, Ahmedabad.  
Jashbhai Patel & Co., Shahpur Bridge Road, Ahmedabad.  
Jaybharat Motor Stores, Bhadra Mission Road, Ahmedabad.  
Jayhind Motor Stores, Kapasia Bazar, Ahmedabad.  
Krishna Automobiles, Kapasia Bazar, Ahmedabad.  
Lakhia Brothers, Lal Darwaja, Ahmedabad.  
Mahendra & Bros., Near Relief Cinema, Salapose Road, Ahmedabad.  
Maniar Automobiles, Relief Road, Kadia Kuin, Ahmedabad.  
Metro Motors (Ahd.) Ltd., Mirzapur Road, Ahmedabad.

**MODERN AUTOMOBILES (GUJARAT) PRIVATE LTD.**, Automobile Engineers, Distributors of Standard Batteries, Dealers in Cars, Motor parts and Automobile Accessories with a Service Station and Petrol Filling Station at Nehru Bridge Road, Lal Darwaja, Ahmedabad.

Mody Automobiles, Akhansud Road, Bhadra, Ahmedabad.  
Motor Sales & Service, Lal Darwaja, Ahmedabad.  
National Motor Accessories Agency, 1819 Three Gates, Ahmedabad 1.  
Neon Motor Stores, Station Road, Ahmedabad.  
New International Motors Ltd., Mirzapur Road & Station Road, Ahmedabad.  
New Motor House, Station Road, Ahmedabad.  
Nirupam Automobiles, Kapasia Bazar, Ahmedabad.  
Patel Automobiles, Salapose Road, Ahmedabad.

Prabhat Motor Stores, Station Road, Ahmedabad.  
Rama Automobiles, Outside Raipur Gate, Ahmedabad.  
R. Ramanlal & Co., Station Road, Ahmedabad.

**S. D. PATEL & CO. Dealers in Automobile Spare Parts, Bhadra, Ahmedabad.** Phone: 22473; Grams: "PERFECTION."

Shantilal & Co., Kalupur Pachpatti, Near Navgajapir, Ahmedabad.  
Sharma & Co., Sukhlalpur, Naroda Road, Ahmedabad.

Thakore Motors, Gujarat Samachar's Compound, Khanpur, Ahmedabad.

**UNITED ENGINEERING WORKS, Manufacturers of Cylinder Liners Valve guides, V. Seat Bars.** P.O. Box No. 1023, Ramkumar Mills Compound, Saraspur, Ahmedabad 2.

United Service Association, Relief Road, Ahmedabad.  
Western Motor Repowering Service, Reid Road, Ahmedabad.

**BALL AND ROLLER BEARINGS**

A. Raman & Co., Kapasia Bazar, Ahmedabad 2.  
Babu & Co., Gheekanta Road, Ahmedabad.  
Ball Bearing & Machinery Syndicate, Kapasia Bazar, Ahmedabad 2.  
C. Das & Sons.—Near Central Telegraph Office, Bhadra, Ahmedabad 1.  
Heeri Engineering Corporation, Danapith, Ahmedabad.  
Hutheesing Engineering Co., Gheekanta Road, Ahmedabad.  
Kant Engineering Co., Kapasia Bazar, Ahmedabad 2.  
National Ball Bearing Stores, Kapasia Bazar, Ahmedabad 2.  
Regal Trading Co., Mehboob Society Bldg., Khadia Kuin, Ahmedabad.  
Shah Patel & Co., Kapasia Bazar, Ahmedabad 2.

On Approved List of Government & Railways  
**SHETH STORES TRADING CO.,**

Specialists in: Ball & Roller Bearings

Authorised Stockists in SKF, NBC, NORMA Bearings.

Distributors: ARJUN & ASHOK Plumbers Blocks

Ahmedabad Office: Deepak Chambers, Station Rd., Ahmedabad  
Phone: 23470 Grams: "LUCID"

Bombay Office: 238, Masjid Bunder Road, Bombay-3  
Phone 322757 Grams: "TROLIEY"

Standard Materials, Narottam Building, Cross Lane, Ahmedabad.

**BATTERIES**

**BOMBAY GARAGE (Ahmedabad) LTD.**—Shahibag Road, Ahmedabad 4; Grams: "PARKCHIN"; Phones: 24615, 24616 and 24213.

General Electric & Optical Stores, Khadia Char Rasta, Ahmedabad.  
Hiralal & Sons, Near Pada Pole, Gandhi Road, Ahmedabad.  
Pathic Evans & Co., Gopal Krishna Flour Mills Compound, Outside Raipur Gate, Ahmedabad.  
P. Liladhar & Co., Khadia Char Rasta, Ahmedabad.  
P. Mangaldas & Co., Bala Hanuman, Ahmedabad.

**BOBBINS & SHUTTLES**

Arun Textile Wood Works, Behind Vikram Mills, Saraspur, Ahmedabad.  
Asarva Bobbin Works, Asarva Road, Ahmedabad 11.  
Ashok Textile Industries, Road 3, East Potalia Lake, Saraspur, Ahmedabad.  
Asian Textile Engg. Corp., Opp. Madhav Baug, Ahmedabad.

**BHARAT BOBBINS PRIVATE LTD.**

Manufacturers of

All kinds of Bobbins from

Imported Timber, All Metal Heald Frames and Leno frames from imported parts and Bharat Cement flooring and wall tiles.

Office and Factory: Rakhial Road, Gontipur — Ahmedabad.

Phone: 81101 81729

Grams: "MAYFAIR"

Diamond Bobbins Factory, Khanpur Road, Ahmedabad.  
Frion & Co., Reid Road, Ahmedabad 2.  
Gujarat Wood Works (P) Ltd., Astodia Rati, Kagdapith, Ahmedabad.  
Hind Wood Works & Bobbin Factory, Bhau's Pole, Raipur, Ahmedabad.  
Indian Bobbin Mfg. Co., Dahyabhai Colony, Anil Road, Ahmedabad 2.  
Laxmi Vijay Bobbin Factory, Ramnagar, Sabarmati, Ahmedabad.  
Masfial K. Patel & Co., 1234, Hanuman Street, Dariapur, Ahmedabad.



Metro Wood & Eng. Works (P) Ltd., Victoria Iron Works Compound, Dudheshwar Road, Ahmedabad.  
National Bobbin Co., 456, Panch Kuva, Ahmedabad 2.  
New Quality Bobbin Works, New Cotton Mills Compound, Kankaria Road, Ahmedabad.  
Nutan Bobbin Works, Anil Road, Ahmedabad.

**RAJESH WOOD & ENGINEERING WORKS, THE.**—Naroda Road, Opp. Kalyan Mills, Near Electric grid Power Station, Ahmedabad-2; Manufacturers of Textile Wooden & Metal Requisites; Specialists: Auto-loom Pirns, Bobbins of all types, Dobby Lattices & Pegs; Bombay Representatives: Prakash Trading Co., 69, Mody Street, Bombay-1; Phone: 264639, 256054 & 573475.

Rajnagar Bobbin Works, Gitamandir Road, Ahmedabad.  
Rajnikant Bobbin Factory, Near Bechar Laskari Hospital, Aunsawad, Ahmedabad.  
Shree Krishna Textile Works, Behind General Post Office, Salapose Road, Ahmedabad.  
Shree Sharda Bobbin Works, Ambaji Mata's Mandir, Hathibhai Wadi, Ahmedabad.  
Shree Swastik Textile Wood Works, Parmanand Chawl, Dudheshwar Road, Ahmedabad.  
Shri Maheshwari Bobbin Factory, Anil Road, Ahmedabad.  
Victory Wood Works, Khanpur Road, Ahmedabad.  
Welspun Bobbin Company, Reid Road, Ahmedabad 2.

### BOLTS, NUTS & SCREWS

**MOHANLAL & CO.**—1092-B, Lambeshwar Naka, Relief Road, Ahmedabad; 144, Diamond Bldg., Lohar Street, Bombay; Bolts, Nuts and Screws and everything hardware.  
**B. Vadilal & Co.**—Kansara Belha, Railwaypur Post, Ahmedabad 2.

### CAST IRON PIPES

Neo, Engineering Works, Near Indian Air Lines Office, Mizapur Road, Ahmedabad 1.  
**PIONEER ENGINEERING WORKS, THE, Prop. : C. C. Ranchhodlal & Co.,** Naroda Road, Ahmedabad 2; Phone: 26171, Grams: "MOULDING".  
**R. M. ENGINEERING WORKS,** Ahmedabad 8; Manufacturers of 'R' Brand High grade Malleable Iron Castings and Pipe Fittings—A Rohit group Enterprise.  
Venus Engineering Co., Kankaria Road, Ahmedabad.

### CEMENT, CEMENT AND CONCRETE PRODUCTS MANUFACTURERS

Alcock Cement Pipes & Concrete Works, Khadia Char Rasta, Ahmedabad.  
Bharat Cement Pipe Mills, Guptanagar, Ahmedabad 7.  
Hindustan Cement Pipes & Concrete Construction Co., Next to Calico Mills, Ahmedabad.

### CHEMICAL & PHARMACEUTICAL PRODUCTS MANUFACTURERS

Advance Chemical and Pharmaceutical Works, Lambeswar, Ahmedabad 1.  
Alchemic P. Ltd., Opp. Potalia Tank, Saraspur, Ahmedabad 2.  
Amrit Chemical Works, Naroda Road, Ahmedabad.  
Asiatic Chemical Co., Ahmedabad; H.O. 18/B, Sukeas Lane, Post Box 2101, Calcutta 1; other offices: Masjid Siding Road, opp. Prince's Docks, Bombay 9; 26/46, Birhana Road, Post Box 189, Kanpur.  
Blue Star Pharmaceutical Laboratories, Jain Wadi, Manek Chowk, Ahmedabad 1.  
Cadilla Laboratories, Azad Society, Ahmedabad 6.  
Chemical Textiles, Reid Road, Ahmedabad 2.  
Chemico Textile Industries, Tagara Mill's Compound, Kankaria, Ahmedabad 1.  
Commercial Chemical Industries, Gheekanta Road, Ahmedabad 1.  
Davey Chemical & Pharmaceutical Works, Richey Road, Ahmedabad.  
Gordon Mfg. Co., Mandvis Street, Lalbhai's Pole, Ahmedabad.  
Gujarat Pharmaceutical & Chemical Works, Asarva, Ahmedabad.  
Honest Dyes & Chemicals Ltd., People's Bank Bldg., Bhadra, Ahmedabad.  
Hygienic Pharmaceutical Products Supply Co., Patherkuva, Salapose Road, Ahmedabad.  
Indo Drug Chemical Works, 7, Patidar Society, Ellis Bridge, Ahmedabad.  
International Traders Private Ltd., P.O. Box No. 1059, Narottam Bldg., Kapasia Bazar, Ahmedabad.  
Prakash Chemical Industries, Girdhar Master's Compound, Ahmedabad 2.  
Purgostone Products Co., Char Rasta, 653/2, Naya Darwaja, Ahmedabad.

Ramco Chemical Works, 661, Kanuga Mansion, Kapasia Bazar, Ahmedabad 2.  
Santosh Chemical Works, Opp. Potalia Talav, Ahmedabad 2.  
Swarajya Pharmaceutical Works, Jethabhai's Pole, Khadia, Ahmedabad.  
Sweetolax Mfg. Co., 2223, Bena's Pole, Raipur, Ahmedabad.  
Vishnu Chemical Works, Delhi Darwaja, Ahmedabad 1.

### CHEMISTS AND DRUGGISTS

Ahmedabad Alembic Depot, Lal Darwaja, Ahmedabad.  
All Traders, Ellis Bridge, Ahmedabad.  
Ashok Medical Stores, Opp. New Civil Hospital, Asarva, Ahmedabad.  
B. C. Saraiya & Co., Three Gates, Ahmedabad.  
Bhanuprasad & S. S. Co., Three Gates, Ahmedabad.  
Bharat Medical Stores, Gandhi Road, Ahmedabad.  
Bhikhalal Chhaganlal Desai, Three Gates, Ahmedabad.  
Bhogilal & Bros., Gandhi Road, Ahmedabad.  
Chandulal Premchand, Three Gates, Ahmedabad.  
Chimanlal Kuberdas Modi, Three Gates, Ahmedabad.  
Chimanlal Sankalchand, Pankore Naka, Ahmedabad.  
Chaturbhai S. Patel, Ramakada Market, Ahmedabad.  
Chimanlal Madhavilal & Co., Three Gates, Ahmedabad.  
**CHUNILAL MAYACHAND MEHTA (Chasmawala),** Three Gates, Ahmedabad. Chemist, Druggist & Optician. Phone: 52863. Grams: 'EYEDROPS'. Wholesale Depot: Mehta Building, Biscuit Gally, Pankore Naka, Ahmedabad; Up-country wholesale Dept., Fakhri Building, opp. Noor Chawl, Biscuit Gally, Pankorenaka, Ahmedabad.  
Civil Chemists, Opp. New Civil Hosp., Asarva, Ahmedabad.  
C. R. Balkrishna & Co., Three Gates, Ahmedabad.  
C. S. Patel & Co., Three Gates, Ahmedabad.  
Dahyabhai Nansa & Co., Three Gates, Ahmedabad.  
Dahyabhai Sankalchand & Bros., Three Gates, Ahmedabad.  
D. P. Dave & Co., Raipur Chakla, Ahmedabad.  
Gujarat Medical Agencies, Biscuit Gally, Ahmedabad.  
Hiralal Bhagwandas Saraiya, Three Gates, Ahmedabad.  
H. Pandit & Co., Three Gates, Ahmedabad.  
H. T. S. Attarwala, Three Gates, Ahmedabad.  
Janta Medical Stores, Saraspur, Ahmedabad.  
Jayant Medical Stores, Biscuit Gally, Ahmedabad.  
J. B. Shah & Co., Pankore Naka, Ahmedabad.  
Jiwanlal T. Bhatia, Dhikawa Choki, Ahmedabad.  
J. J. Parikh & Brothers, Three Gates, Ahmedabad.  
J. N. Patel & Co., Gandhi Road, Ahmedabad.  
J. S. Brothers, Delhi Chakla, Ahmedabad.  
Kantilal Jesinghbhai & Co., Three Gates, Ahmedabad.  
K. Chimanlal & Co., Three Gates, Ahmedabad.  
Krishna Medical Stores, Sarangpur Chakla, Ahmedabad.  
Krishna Stores, Asarva Chakla, Asarva, Ahmedabad.  
L. K. Trivedi & Sons, 4020/14, Astodia Road, Ahmedabad.  
Mahesh Medical Stores, Raipur Chakla, Ahmedabad.  
Manubhai & Co., Relief Road, Ahmedabad.  
Mehta Medical Stores, Delhi Chakla, Ahmedabad.  
M. Narandas & Co., Raipur Chakla, Ahmedabad.  
Mohanlal & Co., Pankore Naka, Ahmedabad.  
Mohanlal Shankerlal & Co., Three Gates, Ahmedabad.  
Nagindas Dahyabhai & Co., Near Tankeshal, Kalupur, Ahmedabad.  
National Drug Agency, Gandhi Road, Ahmedabad.  
Natalral C. Desai, Near Pada Pole, Ahmedabad.  
Nerol Agency, Three Gates, Ahmedabad.  
New Medical Stores, Relief Road, Ahmedabad.  
New National Medical Stores, Pankore Naka, Ahmedabad.  
Orient Medical Agencies, Fuwara, Ahmedabad.  
Pandit Shah & Co., Three Gates, Ahmedabad.  
P. Chhotalal Shah & Co., Three Gates, Ahmedabad.  
Panvel Pharmacy, Gandhi Road, Ahmedabad.  
Paramand Sheth & Co., Gandhi Road, Ahmedabad.  
Parekh Brothers, Gandhi Road, Ahmedabad.  
Parekh Medical Stores, Gandhi Road, Ahmedabad.  
Parekh Dinesh & Co., Three Gates, Ahmedabad.  
Patel Brothers, Gandhi Road, Ahmedabad.  
Patel Medical Stores, Relief Road, Ahmedabad.  
Popatlal Manilal, Delhi Chakla, Ahmedabad.  
Pranod Medical Stores, Maninagar, Char Rasta, Ahmedabad.  
R. Amratlal & Co., Biscuit Gally, Ahmedabad.  
Ramanlal Bhagat & Bros., Raipur Chakla, Ahmedabad.  
Rasik Stores, Three Gates, Ahmedabad.  
Rasiklal Mulshanker & Co., Chanla Ol, Ahmedabad.  
Reliable Chemists, Relief Road, Ahmedabad.  
R. Vadilal & Co., Relief Road, Ahmedabad.  
Sankalchand Chunilal Gandhi, Three Gates, Ahmedabad.  
Saurashtra Medical Stores, Saraspur, Ahmedabad.  
Shah & Kothari Brothers, Gandhi Road, Ahmedabad.  
Shah Medical Stores, Relief Road, Ahmedabad.  
Shantilal Ambalal, Gandhi Road, Ahmedabad.  
Surendra Jayantilal & Bros., Three Gates, Ahmedabad.  
Swaminarayan Medical Stores, Pankore Naka, Ahmedabad.  
Thakore Stores, Khadia, Char Rasta, Ahmedabad.  
Trikamlal Mohanlal & Co., Three Gates, Ahmedabad.  
Union Traders, Three Gates, Ahmedabad.  
Universal Pharmacy, Gandhi Road, Ahmedabad.  
Vora Brothers, Relief Road, Ahmedabad.



## CLEARING & FORWARDING AGENTS

Bapalal Kilabhai, Kadaya Pole, Dariapur, Ahmedabad.  
Chimanlal Chhaganlal Shah, Rajamanta's Pole, Ahmedabad.  
Dadubhai Muljibhai Amin, Patel Society, Ellis Bridge, Ahmedabad.  
Dhulji Champalal Shah, Opp. New Swadeshi Mills, Naroda Road, Ahmedabad.  
Eastern Stores Co., Kerosene Bazar, Ahmedabad.  
Fulchand Mulchand, Vasan Sheri, Saraspur, Ahmedabad.  
Hiralal Hargovandas Desai, Opp. Municipal Corpn., Ahmedabad.  
J. M. Rao & Co., Lodhavad, Mirzapur Road, Ahmedabad 1.  
Kashinath Mankanji Joshi, Maninagar, Ahmedabad.  
Lallubhai Somnath & Bros., Kerosene Bazar, Ahmedabad 2.  
M. F. Moonshi & Co., Opp. Madhav Bag, Ahmedabad 2.  
Maneklal Keshavlal, Vinchhini Pole, Mandvi's Pole, Ahmedabad.  
Nanlal Karsandas, Kapasia Bazar, Ahmedabad 2.  
Narandas Mulchand, Kerosene Bazar, Ahmedabad 2.  
Narrotandas Lilachand, Kerosene Bazar, Ahmedabad 2.  
Nathalal Ratnabhai, Maninagar, Ahmedabad.

**OTA INDIA.—Clearing, Shipping and Stevedoring Agents ;**  
Central Office: 159, Colaba Road, Bombay-5 ; Grams:  
"CENOTA". Phone: 212602. Branches: Bombay (Phone:  
256592), Calcutta (Phone: 236781), Kandla (Phone: 2145-  
Gandhidham) & New Delhi (Phone: 43799).

Ramanlal Lallubhai Shah, Chang Pole, Varai Pada, Ahmedabad.  
Ratilal Vadilal & Bros., 482, Revdi Bazar, Ahmedabad 2.  
S. K. Ghose & Co., Opp. Municipal Corporation, Ahmedabad.  
Sankalchand Lilachand, Kerosene Bazar, Ahmedabad 2.  
Shakarabhai Ramdas, Kerosene Bazar, Ahmedabad 2.  
Sorabkhan Rustomkhan, Bhistiwad, Khanpur, Ahmedabad.  
Thakorlal Vrijlal Chokshi, Opp. Sevaka's Vadi, Khadia, Ahmedabad.  
Vadilal Chhaganlal, Kerosene Bazar, Ahmedabad 2.

## COCKS AND VALVES MFRS.

**ABDUL SAMAD ABDUL KADAR & SONS.—1839, Panchpatti,**  
Kalupur, Ahmedabad 1; Phone: 24543; Grams: "FOOT-  
VALVE." Manufacturers of Gun-metal and Cast Iron Valves  
& Cocks for Water, Steam, Oil, Chemicals and Boiler  
Mountings, Pipes Fittings, Sanitary Fittings, Fire Fighting  
Appliances, Hose Fittings, Agricultural Implements and  
Textile Machinery Spares.

**PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranch-**  
hodlal & Co., Naroda Road, Ahmedabad 2; Phone: 26171;  
Grams: "MOULDING".

Star Metal Industries, 1769-1, Kalupur Road, Ahmedabad 1.

## COLOUR MERCHANTS

Ahmedabad Colour Company, Astodia Road, Rang Bazar,  
Ahmedabad.  
A. Hasamukh & Company, L. K. Trust Bldg., Ahmedabad.  
Alarakha Isaji & Co., Panch Pipli, Opp. Post Office, Ahmedabad.  
Bhagwanlal Tejaji Kharewala P. Ltd., Astodia Road, Ahmedabad.  
Bombay Colour & Chemical Co., Panch Pipli, Near Gate,  
Ahmedabad.  
C. Bapalal & Co., Kapasia Bazar, Haridas Achratlal Market, Ahmed-  
abad.  
Chandrakant & Company, Kasumbawad, Doshiwada's Pole, Ahmed-  
abad.  
Continental Trading Syndicate, Kapasia Bazar, Near Motilal Mansion,  
Ahmedabad.  
C. N. Mehta & Co., Manek Chawki, Ahmedabad.  
Dahyabhai & Co., Astodia Road, Rang Bazar, Ahmedabad.  
D. V. Colour & Co., Astodia Road, Rang Bazar, Ahmedabad.  
Eastern Traders, Kapasia Bazar, Motilal Mansion, Ahmedabad.  
G. A. Hawkabaj & Co., Astodia Road, Rang Bazar, Ahmedabad.  
G. Kishorilal & Sons, Astodia Road, Rang Bazar, Ahmedabad.  
Haji Mahamad Yusuf & Co., Jamalpur, Kaji's Dhaba, Moti Vahorwad,  
Ahmedabad.  
Harsadrai Trivedi & Co., Astodia Road, Rang Bazar, Ahmedabad.  
Interseas Trading Co., Outside Panchkuva Cloth Market, Patdi  
State Bldg., Ahmedabad.  
Kamlesh Corporation, 696/A/2, Reid Road, Ahmedabad.  
Kalsoomal Shorimal Sachdev Rangwala P. Ltd., Astodia Road,  
Rang Bazar, Ahmedabad.  
Kasam Haji Karimbax Rangwala, Jamalpur, Kaji's Dhaba, Ahmed-  
abad.  
Laxmiprasad Koderlal Trivedi & Co., Astodia Road, Rang Bazar,  
Ahmedabad.  
Laxmiprasad Trivedi & Co., Astodia Road, Rang Bazar, Ahmedabad.  
Madhavlal Manilal & Co., Astodia Road, Rang Bazar, Ahmedabad.  
Moolchand Jeykishandas & Co., Reid Road, Ahmedabad.  
Nanlal & Co., Astodia Road, Rang Bazar, Ahmedabad.  
Neodyes Products, Sardar Vallabhbhai Road, Ahmedabad.  
New National Colour & Chemical Co., Outside Raipur Gate, Near  
Bansi Flour Mill, Ahmedabad.  
Oriental Dyestuff Corporation, Astodia Road, Rang Bazar,  
Ahmedabad.  
P. G. Shah & Co., Astodia Road, Rang Bazar, Ahmedabad.

Phoenix Colour Co., Dalal Wada, Opp. Electricity House, Relief  
Road, Lal Darwaja, Ahmedabad.

Popular Dyestuff & Chemical Co., Astodia Road, Rang Bazar,  
Ahmedabad.

P. R. Dyeing & Printing Works, Astodia Road, Rang Bazar, Ahmed-  
abad.

Ramesh Brothers, Sarangpur, Lati Bazar, Ahmedabad.

S. R. Jasani & Co., Astodia Road, Rang Bazar, Ahmedabad.

S. Vinod & Co., Raipur, Haveli's Pole, Ahmedabad.

Spectrum Dyes, Sankdi Sheri, Lakhapatel's Pole, Ahmedabad.

Texdyes Corporation, Rang Bazar, Astodia Road, Ahmedabad.

Textile Aniline & Co., C/o Anandlal N. Shah, Astodia Chakla,  
Ahmedabad.

Textile Dyechem Corporation, Astodia Road, Rang Bazar,  
Ahmedabad.

Union Colour & Chemical Co., Devkinandan Market, Railway Cross  
Lane, Ahmedabad.

Vega Dyestuff Corporation, Astodia Road, Ahmedabad.

Vibgyor Trading Corporation, Astodia Road, Rang Bazar,  
Ahmedabad.

Yashvant & Co., Kapasia Bazar, Motilal Mansion, Ahmedabad 2.

## CONFECTIONERY MANUFACTURERS

Arvind Food Products, Panch Patti, Kalupur, Ahmedabad.

Asian Food Industries, Kadaka Mills Compound, Gomtipur,  
Ahmedabad.

Bhagdev Confectionery Works, Kanshara Wadi, Panch Kuva,  
Ahmedabad 1.

Bitco Confectionery Works, Juna Madhavpura, Ahmedabad 1.

Indian Food Industries, Kot ki Rang, Sarangpur, Ahmedabad 1.

Kashmir Confectionery Works, Kot ki Rang, Kalupur, Ahmedabad 1.

Krishna Confectionery Works, Sodagar Pole, Kalupur, Ahmedabad 1.

Mahadev Confectionery Works, Makeri Wad, Near Zakaria Mosque,  
Relief Road, Ahmedabad 1.

Nashir Confectionery Works, Navi Milat, Panch Kuva,  
Ahmedabad 1.

Punjab Confectionery Works, Opp. Maninagar Station, Maninagar,  
Ahmedabad 8.

Raj Confectionery Works, Krishkola Pole, Kalupur, Ahmedabad 1.

Rajan Confectionery Works, Sodagar Pole, Kalupur, Ahmedabad.

Rama Confectionery Works, Kalupur Chakla, Kalupur, Ahmedabad.

## COTTON TEXTILE MILLS

Ahmedabad Advance Mills Ltd., Mill at Shahibag Road, Outside  
Delhi Gate, Ahmedabad.

Ahmedabad Jaybharat Cotton Mills Ltd. (formerly Bharat Laxmi  
Cotton Mills Ltd.), Mill beyond Kankaria Railway Siding, Mithipur,  
Ahmedabad.

**AHMEDABAD JUPITER SPINNING, WEAVING & MANU-**  
**FACTURING CO. LTD., THE,** Dudheshwar Road, Ahmed-  
abad. Products of Mill No. 1: Medium, Fine and Superfine  
Cotton Textiles viz. Poplins, Twill and Long Cloth, Dobby  
Dropbox Sues, Lawns and Dorias, Butta and Blouse Cloth,  
Jacquard Table Cloth and Servettes, 2 x 2 Cambrics, Full  
Voiles and Lenos, 67 per cent TERENE/33 per cent Cotton  
Shirtings and Suitings. Available in Bleached, Dyed, Screen  
Printed, Mercerised and SANFORIZED varieties. (Their  
Bombay Unit Mill No. 2 is situated at Carroll Road, Parel,  
Bombay, 13, and Office at Indu House, 15, Dougall Road,  
Ballard Estate, Bombay-1). Managing Agents: Messrs. M.  
Parakh & Co. Private Ltd.

Ahmedabad Kaiser-i-Hind Mills Co., Ltd., Outside Raipur Gate,  
Ahmedabad.

Ahmedabad Laxmi Cotton Mills Co., Ltd., Outside Raipur Gate,  
Ahmedabad.

Ahmedabad Manufacturing and Calico Printing Co., Ltd., Post Box  
No. 12, Ahmedabad.

Ahmedabad New Cotton Mills Co., Ltd., Khokhra Mehmedabad,  
Ahmedabad.

Ahmedabad New Textile Mills Co., Ltd., Nos. 1 & 2, Outside Raipur  
Gate, Ahmedabad.

**AHMEDABAD SARANGPUR MILLS CO., LTD.,** Outside  
Raipur Gate, Ahmedabad. Manufacturers of grey and  
bleached dhoties, long cloth, shirtings, sarees, jeans, over  
dyed poplins, sushis, chaddars, mulls, dories, twills,  
mosquito nettings, crepes, towels, napkins, fancy bedsheets  
and gauge, prints, voiles, disegarge khadi & resist prints;  
Also bleaching, dyeing and Calendaring. Managing Directors:  
Shri Ambalal Himatlal and Shri Amritbhai Ambalal.

Ahmedabad Shri Rama Krishna Mills Co., Ltd., Gomtipur Road,  
Ahmedabad.

Ajit Mills Ltd., Rakhial Road, Ahmedabad.

Ananta Mills Ltd., Rakhial Road, Ahmedabad.

Aruna Mills Ltd., Naroda Road, Ahmedabad.

Arvind Mills Ltd., Naroda Road, Ahmedabad.



**ARYODAYA GINNING MILLS**, Asarva, Post Box No. 175, Ahmedabad; Manufacturers of Sanforised and Trionised fabrics Screen and Machine Prints, Fine & Superfine Poplins, Dhories, Sarees, Dyed and Bleached Coatings, Drills Mulls Long Cloths Striped and Check Shirtings, Sushis etc.

Aryodaya Spinning and Weaving Co., Ltd. (Nos. 1 & 2), Asarva Road, Ahmedabad.

Asoka Mills Ltd., Naroda Road, Ahmedabad.

**BHALAKIA MILLS CO., LTD.**, Mg. Agents: Narottamdas Jethalal & Co. (Abd.) Private Ltd., Kankaria Road, Ahmedabad.

Bharat Suryodaya Mills Co., Ltd., Post Box No. 125, Ahmedabad.

Bharatkhand Textile Mfg. Co., Ltd., Nos. 1 & 2, Post Box No. 30, Ahmedabad. Mills at Camp Road, Ahmedabad.

Bihari Mills Ltd., Mills near Khokra Mehmedabad, Ahmedabad.

City of Ahmedabad Spg. & Mfg. Co., Ltd., Kankaria Road, Ahmedabad.

Commercial Ahmedabad Mills Co., Ltd., Near Idgah Chowki, Asarva, Ahmedabad.

Girdhardas Harivallabhdas Mills Ltd., near Idga Gate, Ahmedabad. Harivallabhdas Mulchand Mills Co., Ltd., Outside Dariapur Gate, Ahmedabad.

Hathisingh Mfg. Co., Ltd., Near Saraspur Gate, Ahmedabad.

Himabhai Mfg. Co., Ltd., No. 1, Near Saraspur Gate, Ahmedabad.

Jehangir Vakil Mills Co., Ltd., Outside Delhi Gate, Ahmedabad.

Maheshwari Mills Ltd., Shahibaugh Road, Ahmedabad.

**MANEKLAL HARILAL SPINNING & MANUFACTURING CO. LTD.**, Saraspur Road, Post Box No. 1047, Ahmedabad-18; Manufacturers of Mercerised, Sanforised, Dyed and Printed Poplins, Coatings, Shirtings, Mercerised Lawn, Mulls and Voiles, Dhories, Sarees and Long Cloth; Managing Directors: Shri Navanilal Ranchhodlal; Chairman: Deepakbhai Navanilal, B. Com.

Manekchowk & Ahmedabad Mfg. Co., Ltd., Nos. 1 & 2, Outside Dariapur Gate, Ahmedabad.

Marsden Spg. & Mfg. Co., Ltd., Rakhial Road, Ahmedabad.

Monogram Mills Co., Ltd., Rakhial Road, Ahmedabad 10.

Nagri Mills Co. Ltd., Rajpur, Gomtipur Road, Ahmedabad.

Nanikram Sobhraj Mills Ltd., The, Madhowial Ranchhodlal Colony, Ahmedabad 2.

New Asarva Mills Private Ltd., P.O. Railwayपुरa, Ahmedabad 2.

New Commercial Mills Co. Ltd., No. 1, Naroda Road, Railwayपुरa Post, Ahmedabad-2.

New Gujarat Cotton Mills Ltd., Railwayपुरa Post, Naroda Road, Ahmedabad-2.

New Manekchowk Spinning & Weaving, Co. Ltd., Post Asarva, Near Idga Gate, Ahmedabad-16.

New National Mills Ltd., Rakhial Road, Ahmedabad.

New Rajpur Mills Co. Ltd., Gomtipur Road, Ahmedabad-21.

**NEW SHORROCK SPINNING & MANUFACTURING CO. LTD.**, THE, Asarva Road, Ahmedabad-16; Manufacturers of Bleached Dhories, Long Cloth, Mulls, Voiles, Crepes, Poplins, fancy Shirtings, Dyed Poplins, Voiles, Coatings, Long Cloth, also bleaching, dyeing and Calendering and yarn dyers; President: Shri R. N. Mafatlal, Executive Vice-President: Shri L. D. Vasa, Engineer: Shri D. B. Rawal, Manager: Shri V. P. Bhatt, Secretary: Shri B. K. Joshi, Spg. Supdt.: Shri S. D. Patel, Wvg. Master: H. D. Patel, Processing Master Shri K. K. Parikh, Salesman: Shri N. N. Shah.

Nutan Mills Ltd., Anil Road, Railwayपुरa Post, Ahmedabad.

Patell Mills Co., Ltd., Gomtipur Road, Ahmedabad.

Raipur Mfg. Co., Ltd., Outside Saraspur Gate, Ahmedabad.

Rohit Mills Ltd., Khokhra Mehmedabad, Ahmedabad.

Rustom Jehangir Vakil Mills Co., Ltd., outside Delhi Gate, Ahmedabad.

The Sarangpur Cotton Mfg. Co., Ltd., No. 1 & No. 2 Mills—Ahmedabad.

Saraspur Mills, Ltd., Saraspur Road, Ahmedabad 2.

Shorrocks Spg. & Mfg. Co., Ltd., Asarva Road, Ahmedabad.

Shri Ambica Mills Ltd., Nos. 1 & 2, Kankaria Loco Siding, Ahmedabad.

Shri Arbuda Mills Ltd., Rakhial Road, Ahmedabad 10.

Silver Cotton Mills Co., Ltd., Kankaria Loco Siding, Ahmedabad.

**SRI VIVEKANAND MILLS LTD.**, Rakhial Road, Ahmedabad 21. Managing Directors: Shri C. N. Munshaw and Shri B. N. Munshaw; Spindles: 28,788; Looms: Ordinary 526, Automatic 52. Manager: I. S. Devashrayee.

Vijay Weaving Works (Vijay Fabrics), 676/12, Railwayपुरa, Ahmedabad.

Vijaya Mills Co., Ltd., Naroda Road, Ahmedabad.

Vikram Mills, Ltd., Outside Saraspur Gate, Post Railwayपुरa, Ahmedabad.

## CYCLES AND CYCLE ACCESSORIES

Ahmedabad Cycle and Motor Trading Co., P. Ltd., Gandhi Road, Ahmedabad.

Allies Cycle & Motor Co., Inside Panchkuva, Ahmedabad.

All India Cycle & Motor Co., Inside Panchkuva, Ahmedabad.

Bhallal & Co., Khadia Char Rasta, Ahmedabad.

Bhagwati Cycle Stores, Inside Panchkuva, Ahmedabad.

Bharat Cycle & Motor Co., Richey Road, Ahmedabad.

Goodluck Cycle Co., Outside Panchkuva, Ahmedabad.

Gujarat Cycle & Motor Co., Richey Road, Ahmedabad.

H. Parikh & Co., Char Rasta, Ahmedabad.

Jain Brothers, Outside Panchkuva, Ahmedabad.

Jitendra Trading Co., Khadia Char Rasta, Near Jethabhai Pole, Ahmedabad.

K. B. Modi & Co., Khadia Char Rasta, Ahmedabad.

Krishna Cycle & Motor Co., Old Mahajanwada, Ahmedabad.

Manubhai Patel & Co., Inside Panchkuva, Ahmedabad.

Metro Cycle Co., Panchkuva, Ahmedabad.

Model Cycle Co., Khadia Char Rasta, Ahmedabad.

Modern Cycle Stores, Relief Road, Ahmedabad.

National Cycle & Motor Co., Khadia, Char Rasta, Ahmedabad.

Natwerlal B. Dave & Co., Ltd., Khadia, Char Rasta, Ahmedabad.

**NEW IMPERIAL CYCLE WORKS**, Inside Panchkuva, near English Cinema, Ahmedabad 1. Phone: 20633; Leading Wholesale and retail dealers in Cycles, Tricycles, Prams, Scooters, Push chairs, Baby-cars & Parts thereof.

Niranjan Cycle Co., Richey Road, Ahmedabad.

Popular Trading Co., Inside Panchkuva, Ahmedabad.

Rajnagar Cycle Stores, Reid Road, Ahmedabad.

Reliable Cycle & Motor Co., Khadia, Char Rasta, Ahmedabad.

R. M. Engineering Works, Khokra Mehmedabad, Maninagar, Ahmedabad 8.

Royal Cycle Importing Co., Pankore Naka, Ahmedabad.

Sarabhai & Co., Richey Road, Ahmedabad.

Sarabhai, C. & Co., Richey Road, Ahmedabad.

Senior Cycle Trading Co., Panchkuva, Ahmedabad.

Shah Brothers, Pankore Naka, Ramakada Market, Ahmedabad.

Shah Cycle Stores, Richey Road, Ahmedabad.

Shah Trading Co., Ltd., Khadia, Char Rasta, Ahmedabad.

Shilpi Cycle Agency, Panchkuva, Khadia, Char Rasta, Ahmedabad.

Sun Saddle Cover Works, Khadia Char Rasta, Ahmedabad.

United Cycle & Motor Co., 1962/1 & 4, Panchkuva Road, Ahmedabad 1.

Vijay Cycle Co., Richey Road, Ahmedabad.

Western India Cycle Agency, Near Pada Pole, Ahmedabad.

## DAMPCOURSING

**GLADSTONE LYALL & CO., LTD.**—Agency Office, Textile & General Engineering Stores, Prajapati Laladas Bldg., Khadia, Char Rasta, Ahmedabad Bombay Manager: Cmdr. L. N. DEEFHOLTS. Head Office: 4, Fairlie Place, Calcutta.

## DIESEL ENGINES

**FEROZE P. CHAHEWALLA**, Kastoorbhai Blocks, Lal Darwaja, Ahmedabad. Phone: 23082, Grams: "UPRIGHT"—Ahmedabad; Distributors for Gujarat for Genuine Spare Parts of Armstrong Siddeley Diesel Oil Engines.

Gujarat Engineering Co., Saraspur, Ahmedabad.

Hind Hardware Stores, Kadla Building, Relief Road, Ahmedabad.

Modern Engineering & Moulding Co., Near Kalyan Mills, Naroda Road, Ahmedabad 2.

Moulding Engineering Co., Shahpur Mills Compound, Ahmedabad.

Nagardas Becharadas & Brothers, Naroda Road, Ahmedabad.

Nima Trading Co., Cross Lane, Ahmedabad.

Ranjit Electric and Engineering Corporation, Madina House, Near Jakaria Masjid, Relief Road, Ahmedabad.

S. Kumar & Co., Kutub Manzil, Relief Road, Ahmedabad.

S. Sutarla & Co., 697/32-6, Reid Road, Ahmedabad.

Volta Limited, Mirzapur, Ahmedabad 1.

## DYEING AND PRINTING COMPANIES

Ahmedabad Dyeing and Printing Ltd., Dudeshwar Road, Ahmedabad.

Ahmedabad Textile Engraving Works, New Cotton Mills Compound, Ahmedabad.

Hindustan Calico Engraving Works, 1332, Tajpur, Nadlawad, Ahmedabad.

Honesty Calico Printers, New Cotton Mills No. 1, Kankaria Road, Ahmedabad.

Mehta Dyeing & Printing Works, New Cotton Mills No. 1, Raipur Gali, Ahmedabad.

## THE TARUN COMMERCIAL MILLS LTD.,

Outside Kalupur Gate,  
Railwayपुरa Post, Ahmedabad-2.

Manufacturers of Cotton Piecegoods. Directors: Chairman: Seth Pranlal Bhikhbhai, Managing Directors: Seth Indravadan Pranlal, Seth Madhukant Pranlal.



P. R. Dyeing and Printing Works, Dasha Disha Wadi, Astodia Chakla, Ahmedabad.  
 Rajendra Dyeing and Printing Mills, Madhubhai Colony, Saraspur, Ahmedabad.  
 Shree Laxmi Vijay Dye Works, 196, Gallar's Street, Raipur, Ahmedabad.  
 Shri Arunodaya Dyeing Works, Dudeswar Road, Ahmedabad.

### DYESTUFFS

## VEGA DYESTUFF CORPORATION

Nagri Bldg., Astodia Road,  
 Ahmedabad-1.

Phone: 52960 Grams: VEGADYES.  
 Stockists of Dyes, Chemicals and Resins for Textile and Allied Industries.

### ELECTRIC HOIST

PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranchhodlal & Co., Naroda Road, Ahmedabad 2; Phone: 26171; Grams: "MOULDING".

### ELECTRICAL ENGINEERS, CONTRACTORS AND ELECTRIC GOODS DEALERS

Ashara Electric Co., 5130, Gandhi Road, opp. Cinema De Franco, Ahmedabad 1.  
 A. B. H. Traders Agency, Bala Hanuman, Gandhi Road, Ahmedabad.  
 Ahmedabad Electric Stores, Patasa Pole, Gandhi Road, Ahmedabad.  
 Ambica Agency, Bala Hanuman, Khadia, Ahmedabad.  
 Amers Engineers, Relief Road, Zakaria Masjid, Ahmedabad.  
 A. Patel & Bros., Pada Pole, 1st Floor, Ahmedabad.  
 Bhagyodaya Electric Co., Gandhi Road, Ahmedabad.  
 Bharat Electric Co., Deepak Chambers Cross Lane, Ahmedabad 2.  
 Bharati Electric Stores, Mandvi's Pole, Ahmedabad.  
 Bhupendra Bros., Bala Hanuman, Khadia, Ahmedabad.  
 Bodiwalla Bros., Opp. Pada Pole, Ahmedabad.  
 British Insulated Callenders Cable Co. Ltd., Khadia, Char Rasta, Ahmedabad.  
 Electro Tactics & Engineering Co., Opp. Madhav Baugh, Ahmedabad.  
 Empire Electric Co., Pada Pole, Gandhi Road, Ahmedabad.  
 Empire Electric Stores, Model Cinema, Gandhi Road, Ahmedabad.  
 Electric Mechanical Industries, Opp. Model Talkies, Gandhi Road, Ahmedabad.  
 Expert Electric Co., Dhana Sutar Pole, Saraya Pole, Ahmedabad.  
 Fine Electric Co., Pada Pole, Gandhi Road, Ahmedabad.  
 Forin & Co., Reid Road, Ahmedabad 2.  
 Gujarat Electric Co. (Private) Ltd., Patasa Pole, Gandhi Road, Ahmedabad.  
 Gautam Electric Co., Khadiya, Sevakani Wadi, Ahmedabad.  
 G. E. C. India Ltd., Relief Road, Opp. Relief Cinema, Ahmedabad.  
 Gopani & Co., Char Rasta, Khadia, Ahmedabad.  
 Jawahar Electric Stores, Kalapur, Dhikva Chouki, Ahmedabad.  
 Jayant Electric Machinery Co., Hajapatel's Pole, Ahmedabad.  
 Jaybharat Electric Syndicate, Relief Road, Opp. Krishna Cinema, Ahmedabad.  
 Jayhind Electric Stores, Manek Chowk, Mandvi Pole, Ahmedabad.  
 Jayendra Electric Stores, Gheekanta Road, Ahmedabad.  
 Jayshree Trading Co., Khadia, Char Rasta, Ahmedabad.  
 Jupiter Electric Mart, Bala Hanuman, 1st Floor, Ahmedabad.  
 Jyoti Electric Trading Co., Patasa Pole, Gandhi Road, Ahmedabad.  
 Kalpana Electric Stores, Gheekanta Road, Ahmedabad.  
 Kapadia Electric Works, Bala Hanuman, Gandhi Road, Ahmedabad.  
 Khoala Sales Corporation, Near Kothi Pole, 705/3, Gandhi Road, Ahmedabad.  
 K. M. Engineering Co., Fuwara, 1st Floor, Ahmedabad.  
 Krishna Electric Stores, Raipur Chakla, Ahmedabad.  
 Krishna Kumar & Co., 1092-2, Tilak Road, Gundi's Pole, Tarkas Bldg., Ahmedabad.  
 Kumar Trading Co., Dhudhia Buildings, 2nd Floor, Ahmedabad.  
 Lucent Traders, Anand Bhuvan, Relief Road, Ahmedabad.  
 Madan Electric Co., Gheekanta Road, Delhi Chakla, Ahmedabad.  
 Mahalaxmi Electric Stores, Sarangpur, Bukharas' Pole, Ahmedabad.  
 Shakti Electric Industries, Gita Mandir Road, Ahmedabad.  
 Sanghvi Electric Stores, Bala Hanuman, Khadia, Ahmedabad.  
 Shakti Electric Stores, Dariyapur, Chippa Pole, Ahmedabad.  
 Somchand D. Shah, Manek Chowk, Madangopal Haveli, Ahmedabad.  
 S. P. Bhow & Co., Near Jumma Masjid, Gandhi Road, Ahmedabad.  
 Standard Electric Co., Three Darwaja, Bawa Latiff Gully, Ahmedabad.  
 Star Radio Electric Co., Relief Road, Opp. Relief Cinema, Ahmedabad.  
 Star Electric Co., Patasa Pole, Gandhi Road, Ahmedabad.  
 Star Radio Electric Co., Star House, Relief Road, Ahmedabad.

Sun Electric & Motor Stores, Near Model Cinema, Ahmedabad.  
 Sun Electric Stores, Patasa Pole, Gandhi Road, Ahmedabad.  
 Suren & Co., Opp. Mahavir Temple, Gandhi Road, Ahmedabad.  
 Swastic Mfg. Co., Near English Cinema, Ahmedabad.  
 Swastik Electric Corporation, Opp. Gundi's Pole, Relief Road, Ahmedabad 1.  
 Swastik Engg. Co., Kanti Bhuvan, Inside Panchkuva, Ahmedabad.  
 Taroon Electric Industries, Pada Pole, Ahmedabad.  
 Thaker Electric Stores, Fuwara, Gandhi Road, Ahmedabad.  
 Uma Electric Co., Raja Mehta's Pole, 1068, Totlaji's Pole, Ahmedabad.

### ELECTRICAL AND MECHANICAL GOODS MERCHANTS

Hutheesing Engineering Co., Lal Darwaja, Ahmedabad.  
 Jal Hind Radio Corporation, Near Lighthouse, Gheekanta Road, Ahmedabad.  
 T. G. Mankodi, 1957, Mandvi St., Ahmedabad 1.

### ELECTRICAL INDUSTRIES

#### THE AHMEDABAD ELECTRICITY COMPANY, LTD.

Managing Agents, Messrs. Killick Industries Ltd., Home Street, Fort, Bombay 1 (B.R.)  
 Office: "Electricity House", Lal Darwaja, Post Box No. 57, Ahmedabad 1.  
 J. C. Shah, B.Sc., M.S., Chief Executive.  
 D. C. Bhardwaj, B.Sc., (Eng.), M.I.E. (India), Administration & Personnel Superintendent.  
 V. B. Shah, B.Sc., D.I.I.Sc., A.M.I.E.E., Development & Control Superintendent.  
 R. L. Kelkar — Mains Superintendent.  
 S. L. Sheth, D.F.H. (Lond.), A.M.I.E.E., A.M.I.E. (India), Power Station Superintendent.  
 G. V. Kamat, Chief Accounts Officer.  
 S. R. Vijayakar, B.E. (Hons.), Mech. & Elec. grad. I.E.E. (Lond.), Commercial Superintendent.  
 Power House: Sabarmati, Ahmedabad 8.  
 Head Office Administration Dept.: 5, Graham Rd. (4th floor), Ballard Estate, Post Box No. 109, Bombay 1 (B.R.)  
 Regd. Office: Killick House, Home Street, Fort, Bombay-1 (B.R.)

Baroda Electric Meters Ltd., 535, Tilak Road, Ahmedabad.  
 Patni Engineering Works, 5/15, Industrial Estate, Behind Vikram Mills, Ahmedabad.  
 Vinod Electrical Industries, Sahakari Lati Bazar No. 2, Jaganaath Road, Ahmedabad 1.

### ENGINEERS AND CONTRACTORS

A. B. BROTHERS, 129, Gheekanta Road, Pitalia Bamba, Ahmedabad 1.  
 C. B. Sutaria Brothers, Motilal Hirabhai Market, Cross Lane, Lal Darwaja, Ahmedabad.  
 Bhagavati Construction Co., Astodia Chakla, Ahmedabad.  
 G. S. Gupta & Sons, Raipur, Ahmedabad 1.  
 Jagdish Engineering Works, Behind Dariapur Tower, Ahmedabad 1.  
 Radiant Electric & Machinery Co., Mangal Bhavan, 2750, Relief Road, Ahmedabad.  
 Shri Mahalaxmi Engineering Works, Outside Delhi Gate, Opp. Painter Garden, Ahmedabad 1.  
 United Engineering Works, P. Box 1023, Ahmedabad 2.

### FIRE BRICKS & REFRACTORIES

#### NOWROJI N. VAKIL & CO.,

Pottery Works.  
 Naroda Road, Ahmedabad.

Manufacturers of Stoneware Drainage Pipes, Fire Bricks and Clay Refractoryware, Rasching Rings etc. Bombay  
 Office: Sharu Castle, Mohamedally Road, Bombay-3;  
 Phone: 322803.

### FIRE FIGHTING EQUIPMENTS

ABDUL SAMAD ABDUL KADAR & SONS, 1839, Panchpatti, Kalapur, Ahmedabad 1. Phone: 24543; Grams: "FOOTVALVE." Manufacturers of Gun-Metal and Cast Iron Valves & Cocks for Water, Steam, Oil, Chemicals & Boiler Mountings, Pipe Fittings, Sanitary Fittings, Fire Fighting Appliances, Hose Fittings, Agricultural Implements and Textile Machinery Spares.  
 Star Metal Industries, 1769-1, Kalapur Road, Ahmedabad 1.



**FLOORING TILES & COMPOSITION MFRS.****SOLANKI & SONS,**

Tagara Mill Compound,  
Outside Raipur Gate,  
Ahmedabad-17.

Manufacturers of Oxy-Chloride Flooring  
In Charming Shades.

**FLOUR MILLS (DOMESTIC)**

**PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranchhodlal & Co.,** Naroda Road, Ahmedabad 2. Phone: 26171, Grams: "MOULDING".

**FOUNDERS AND ENGINEERS**

**PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranchhodlal & Co.,** Naroda Road, Ahmedabad 2. Phone: 26171, Grams: "MOULDING".

**FOUNDRY EQUIPMENTS**

**PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranchhodlal & Co.,** Naroda Road, Ahmedabad 2. Phone: 26171, Grams: "MOULDING".

**GLOVES MFRS.**

Available from Ready Stock Industrial Rubber Gloves  
Acid and Alkali Proof from Colloid Dripping Tank.

Manufacturers :

**S. THAKOR & CO.,**

Khadia, Char Rasta,  
Ahmedabad-1.

**GRAMOPHONE DEALERS**

Gandhi & Sons, Pankore Naka, Ahmedabad.  
Hiralal B. Trivedi & Co., Relief Road, Ahmedabad.  
K. B. Vakil & Co., Gandhi Road, Ahmedabad.  
Leophone Talking Machine Co., The, 46, Gandhi Road, Ahmedabad 1.  
Mehta Phone Talking & Machine Co., Gandhi Road, Ahmedabad.  
M. J. Vakil & Co., Gandhi Road, Ahmedabad.  
New Bharat Phone Co., Pankore Naka, Ahmedabad.  
Rajnagar Gramophone & Radio Co., Gandhi Road, Ahmedabad.  
Royal Harmonium & Gramophone Co., Gandhi Road, Ahmedabad.  
V. Bright & Co., Gandhi Road, Ahmedabad.

**HAIR OILS**

Manufacturers of

Loma Hair Oil, Loma Hair Pomade In Tube, Packing,  
Kesha and Duabraham Hair Oil.

**LOMA PRODUCTS (INDIA)**

1134, Akaseth Kuva's Pole, Raipur,  
Ahmedabad-1.

Manufacturers and Exporters of

Agarbatis, well-known Loma Hair Darkner and Loma Hair Pomade in Tube Packing, Hair Oil Viz. Brahmi and Dudhi, Masala Pudles (Packets of Indian Herbs to prepare hair oil at home, Viz. Amla, Brahmi, etc. and Perfumes.

**M. M. KHAMBHATWALA**

Ahmedabad-1 (India).

**HOTELS & RESTAURANTS**

Bombay Hotel, Shahibaug, Ahmedabad.

**CAMA HOTEL,** Khanpur Road, Ahmedabad. Phones: 26281-82-83-84-85; Grams: "HOTELCAMA". Managing Directors: Minnie R. Cama, J. R. J. Cama. Only Hotel of Recognised

Western Standard with all modern amenities situated on river Sabarmati. (Rooms from Rs. 30 and onwards inclusive of all meals.)

Capital Hotel, Khanpur, Ahmedabad.  
Grand Hotel, Lal Darwaja, Ahmedabad.

WHEN  
IN

AHMEDABAD

VISIT

**HAYMOR RESTAURANT**

Kalyan Bhuvan, Tilak Road.

Phones: 3364, 20050

Grams : "HAYMOR "

Ritz Hotel, Lal Darwaja, Ahmedabad.

**HUMIDIFICATION—VENTILATION**

**C. DOCTOR & CO. PRIVATE LTD.—(Estd. 1915),** Bank of Baroda Bldg., Gandhi Road, Ahmedabad 1. Phone: 51238; Grams: "DOCTORCO"; Industrial Air-Conditioning and Textile Engineers.

**INK MANUFACTURERS**

Harihar Research Works, Mandvi's Street, Ahmedabad.  
Navyug Book Depot, Balahanuman, Gandhi Road, Ahmedabad.  
Ojas Corporation, New Cotton Mill Compound, Outside Raipur Gate, Ahmedabad.  
Parikh & Parikh, Opp. Purnima Restaurant, Gandhi Road, Ahmedabad.

**IRON, STEEL AND BRASS WORKS****MALHOTRA IRON & STEEL INDUSTRIES**

Near Odhav Village,  
Ahmedabad.

Phones: 53453 & 52088 Grams : "LOHAMILL "

Re-rollers, Fabricators & Founders.

**PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranchhodlal & Co.,** Naroda Road, Ahmedabad 2. Phone: 26171. Grams : "MOULDING".

**IRON & STEEL MERCHANTS**

Ahmedabad Iron & Hardware Mart, Below Fernandez Bridge, Ahmedabad.  
Becharadas Hargovandas Patel, 2724, Lokhand Bazar, Ahmedabad.  
C. K. Vohora & Co., Revdi Bazar, Ahmedabad.  
C. Laxmichand & Co., Maskati Market, Ahmedabad.  
C. Prabhudas & Co., Revdi Bazar, Ahmedabad.  
Dahyabhai Nanlal & Co., Kapasia Bazar, Ahmedabad.  
Eastern Iron & Steel Traders, Relief Road, Ahmedabad.  
Eastern Trading Agency, Kapasia Bazar, Ahmedabad.  
Gokaldas & Sons, Balahanuman, Kaveswar's Pole, Ahmedabad.  
Jayantilal Pranlal & Co., Sarangpur, Karnamukteshwar Mahadev, Ahmedabad.  
Kashiparekh Bros., Reid Road, Ahmedabad.  
K. S. Lokhandwala & Co., Outside Prem Gate, Ahmedabad 11.  
M.A. Tinwala & Sons, Relief Road, Near Zakaria Masjid, Ahmedabad.  
Mansukhlal Nathubhai Mehta, 520, Lokhand Bazar, Fernandez Bridge, Ahmedabad.  
B. Nagindas & Co., Mirzapur Road, Near Sales Tax Office, Ahmedabad.

**SIRHIND STEEL ROLLING MILLS**

Near Odhav Village, Ahmedabad.

Phone (PP) : 53453

Grams : "BARSTEEL"—Ahmedabad

Specialists in Re-rolled Steel Sections  
(Bars & Light Structurals)



Sorabji Hormasji Vakharia & Sons, Sahakari Latf Bazar, Ahmedabad.  
S. Shantilal & Co., Pankore Naka, Ahmedabad.  
Tata Iron & Steel Co. Ltd., Co-operative Bank Bldg., Near Relief Cinema, Ahmedabad.

### LACE MANUFACTURERS

Ahmedabad Lace Works, Madhubhai Mills Compound, Ahmedabad.  
Ambalal Lalubhai Trimming & Lace Works, Hathibhai's Wadi, Ahmedabad.  
Ambica Lace Works, Ghanchi's Wadi, Dabgharwada, Ahmedabad.  
Bhagvandas Maneckchand Lace Factory, Kadva Pole, Dariapur, Ahmedabad.  
Bharat Rope & Lace Mfg. Co., Kapasia Bazar, Ahmedabad.  
Bipin Border Mfg. Co., Ramkumar Mill Compound, Saraspur, Ahmedabad.  
Gujarat Trimming & Lace Works, Astodia Mill Compound, Ahmedabad.  
Laxmi Trimming & Lace Works, Madhubhai Mills Compound, Ahmedabad.  
Mahendra Lace Works, Jamalpur, Ahmedabad.  
National Border Mfg. Co., Madhubhai Mills Compound, Ahmedabad.  
Prabhat Lace Works, Dariapur Chakla, Ahmedabad.  
Rajkamal Lace Industries, Swaminarayan's Godown, Outside Dariapur Gate, Ahmedabad.  
Rajnagar Lace Factory, Next to Prem Darwaja Police Chowky, Ahmedabad.  
Sabarmati Lace Works, Outside Dariapur Gate, Ahmedabad.  
Sharda Lace Works, Ghanchi's Wadi, Dabgharwada, Ahmedabad.  
Star Lace Works, Madhubhai Mills Compound, Ahmedabad.

### LEATHER GOODS

Beltex Pvt. Ltd., Ellis Bridge, Ahmedabad.  
Frion & Co., Reid Road, Ahmedabad 2.  
Goldfield Leather Works, 666/2, Chatra Bhuj Bhavan, Gandhi Road, Ahmedabad.  
H. Mansuri & Sons, Post Box 84, Ahmedabad.  
Jaihind Leather Industries Private Ltd., Reid Road, Railwayपुरा Post, Ahmedabad 2.  
Leather Textiles Ltd., Ellis Bridge, Ahmedabad.  
Manoi Kumar & Co., Opp. Oriental Bldg., Relief Road, Ahmedabad.

### LUBRICATING OILS AND GREASES

Ahmedabad Hardware Stores, Relief Road, Ahmedabad.  
American Oil and Trading Co., Revdi Bazar, Ahmedabad 2.  
Bihari Bros., Outside Panchkuva, Ahmedabad.  
Burmah-Shell Oil Co., Bhadra, Ahmedabad.  
Caltex India Ltd., Lal Darwaja, Ahmedabad.  
Girdharlal Damodardas & Co., P. Ltd., Opp. Shakerkotda Police Station, Ahmedabad.  
Gulf Oil Co. Ltd., Co-operative Bank Bldg., Relief Road, Ahmedabad.  
Karmali Janmohamed & Co., Kapasia Bazar, Ahmedabad 2.  
National Oil & Trading Co., Kapasia Bazar, Ahmedabad 2.  
Nima Trading Co., Cross Lane, Ahmedabad.  
Shripat Gordhandas & Sons, Reid Road, Ahmedabad 2.  
Standard Vacuum Oil Co., Oriental Bldg., Relief Road, Ahmedabad.

### MACHINERY MANUFACTURERS AND DEALERS

A. B. Engineers, Kapasia Bazar, Ahmedabad.  
A. Bhuderbhai Kishor & Sons, Gheekanta Road, Ahmedabad.  
Acme Agencies (Pencil Factory), Jagannath Road, Ahmedabad.  
Ahmedabad Hardware Stores, Relief Road, Ahmedabad.  
Ahmedabad Iron & Brass Factory, Bharatkhand Mills Compound, Ahmedabad.  
Ahmedabad Victoria Iron Works & Co., Ltd., The, Dudheswar Road, Ahmedabad.  
Allied Engineers, Reid Road, Ahmedabad.  
A. Raman & Co., Kapasia Bazar, Ahmedabad.  
A. B. Engineering Works, Near Munshi Soda Factory, Mirzapur, Ahmedabad.  
Ashok Vijay Engineering Works, Delhi Darwaja, Ahmedabad.  
Asiatic Bolt & Engineering Co., Lokhand Bazar, Ahmedabad.  
A. Star Engineering Works P. Ltd., 1730, Haribhai's Dehla, Outside Prem Gate, Ahmedabad 11.  
Baboo & Co., Gheekanta Road, Ahmedabad.  
Ball Bearing & Machinery Syndicate, Kapasia Bazar, Ahmedabad.  
Batliboi & Co., Reid Road, Ahmedabad.  
Bharat Iron & Brass Factory, Sarva, Haripur Road, Ahmedabad.  
Bihari Brothers, Panchkuva, Ahmedabad.  
B. Kapasi & Co., Khodi Ambli, Harmanwalli Pole, Ahmedabad.  
B. M. Panchal & Co., Gheekanta Road, opp. Masjid, Ahmedabad.  
B. P. Engineering Works, Gheekanta Road, Ahmedabad.  
Brass & Iron Works, Sarangpur, Madhubhai Colony, Ahmedabad.  
C. B. Sutar Brothers, Motilal Hirabhai Market, Cross Lane, Ahmedabad 2.

C. C. Ranchhodlal & Co., Chamunda Road, Naroda, Ahmedabad.  
C. Mehta & Co., Gandhi Road, Ahmedabad.  
C. Vadilal & Co., Reid Road, Ahmedabad.  
Dalpatram Girdharlal & Co., Lunsawad Nariawad, Ahmedabad.  
D. Shantilal & Co., Gheekanta Road, Bhutni Ambli, Ahmedabad.  
Eastern Hardware & Mill Stores Co., Reid Road, Ahmedabad.  
Engineer & Sons, Dariapur, Char Rasta, Ahmedabad.  
Forge & Blower Co., Under Sarangpur Bridge, Ahmedabad.  
Frion & Co., Reid Road, Ahmedabad 2.  
G. A. Latif & Sons, Latif Bldg., Revdi Bazar, Ahmedabad.  
General Commercial Agency, Crosslane, Ahmedabad.  
Gopaldas Khemchand Tijoriwala, Delhi Darwaja, P. G., Ahmedabad.  
Govindlal Keshavlal, Gheekanta Road, Bhutni Ambli, Ahmedabad.  
Gujarat Corp'n. (I) P. Ltd., Khadia, Ahmedabad.  
Gujarat Engineering Co., Jayabharat Ranghshala Compound, Saraspur, Ahmedabad.  
Gujarat Iron Works, Gheekanta Road, Ahmedabad.  
H. Chokshi & Co., Kapasia Bazar, Ahmedabad 2. Phone: 22919, Grams: "SANDOW".  
Harry Engineering Corporation, Danapith, Ahmedabad.  
Harshad Iron & Brass Factory, Dariapur, Changi's Pole, Ahmedabad.  
Herold Metal Corporation, Salapose Road, Near G.P.O., Ahmedabad.  
Hind Hardware Stores, Kadia Bldg., Relief Road, Ahmedabad.  
Hind Sewing Machine Works, Salapose Road, Corner Lane, Ahmedabad.  
Honesty Engineering Works, Dariapur, Char Rasta, Ahmedabad.  
Hutheasing Engineering Co., Gheekanta Road, Ahmedabad.  
India Metal Works, Mirzapur Road, near I.T.O., Ahmedabad.  
Indian Engineering Works, Astodia, near Anjuman H. S., Ahmedabad.  
Indian Iron & Brass Works, City Danapith, Ahmedabad.  
Indian Textile Works, Sarangpur, Madhubhai Colony, Ahmedabad.  
Industrial Engineering Works, The, Sarangpur, Madhubhai Colony, Ahmedabad.  
Industrial Machinery Mfrs. Pvt. Ltd., Ahmedabad 8.  
Industrial Spare Parts Co., Relief Road, Ahmedabad.  
Jagdishchandra & Brothers, Delhi Chakla, Shak Market, Ahmedabad.  
Jagdish Engineering Works, Dariapur, behind Tower, Ahmedabad.  
Jagdish Industrial Works, outside D. G. Chhotalal's Chali, Ahmedabad.  
Jagdish Iron & Brass Factory, Pankore Naka, Ahmedabad.  
Janta Engineering Co., Cross Lane, Ahmedabad.  
**JAYEMS ENGINEERING CO., Rangwalla Building, Relief Road, Ahmedabad, Engineers, Machinery Merchants and Manufacturers' Representatives, Direct Importers of Machine Tools, Wood Working Machinery, Welding Equipment, etc. Head Office: Warden House, Sir P. M. Road, Bombay 1; Branches at all important Centres.**  
Jotaram Becharadas & Co., Saraspur, Ambliwada, Ahmedabad.  
Jubilee Iron Works, Dariapur, Rupapari, Ahmedabad.  
Kant Engineering Co., Kapasia Bazar, Ahmedabad.  
Kantilal & Co., Gheekanta Road, Ahmedabad.  
Karsandas Becharadas & Sons, Amdupura, Saraspur, Vora's Road, Ahmedabad.  
Kashyap Brothers, Crosslane, Ahmedabad.  
Kasturbhai Ramchand & Bros., Ghanchi's Wadi, Pankore Naka, Ahmedabad.  
Keshavlal Ambaram & Brothers, Gosaiji's Wada, Gheekanta Road, Ahmedabad.  
Kirtilal Nanalal & Company, Reid Road, Railwayपुरा Post, Ahmedabad.  
K. K. Engineering Works, Shahibaug Small Scale Industrial Society, Shahibaug, Ahmedabad 4.  
Kohinoor Engineering Works, 39, Bharat-Khand Cotton Mills Compound, Naroda, Ahmedabad.  
Kothari Brothers Syndicate, Reid Road, Ahmedabad 2.  
Krishna Sahay Brass Factory, Delhi Chakla, Bhojwada, Ahmedabad.  
Kumarpal Kantilal & Co., Kapasia Bazar, Ahmedabad.  
K. Vadilal & Co., Near Haji Bldg., Mirzapur Road, Ahmedabad.  
Large Engineering Corporation, Revdi Bazar, Ahmedabad.  
Lavjibhai Mavjibhai & Sons, City Danapith, Ahmedabad.  
Laxmandas Vithaldas, Mandvi's Pole, Ahmedabad.  
Laxmi Moulding Works, Asarva, Haripur Road, Ahmedabad.  
Laxminarayan Sharma & Co., Lunsawada, Kumbharwada, Ahmedabad.  
Laxmi Vijay Iron & Brass Works, The, Gheekanta Road, Pitalla Bumba, Ahmedabad.  
Machine Products (I) P. Ltd., Reid Road, Ahmedabad.  
Machine Tools & Hardware Corporation, Reid Road, Ahmedabad.  
Machinery Manufacturing Works, The, Khodi Ambli, Ahmedabad.  
Machinery Stores Traders, 661, Kapasia Bazar, Ahmedabad.  
Machinery Supplying Co., The, Kankaria Road, Ahmedabad.  
Machine Tools & Hardware Corporation, Reid Road, Railwayपुरा Post Box No. 1002, Ahmedabad.  
M. D. Shah & Co., 570/1, Reid Road, Railwayपुरा Post, Ahmedabad.  
Mahavir Iron & Brass Factory, Dariapur, near Ghanchi's Wadi, Ahmedabad.  
Mahendra & Co., Pittalla Bamba, Gheekanta Road, Ahmedabad.  
Manilal & Brothers, 626, Reid Road, Ahmedabad 2.



Manu Engineering Works, Ramkumar Mills Compound, Saraspur, Ahmedabad 2.

Metropolitan Engineering Works, Delhi Chakla, Gheekanta Road, Ahmedabad.

Mistry, Ambalal Jetharam, Gheekanta Road, Ahmedabad.

Mistry, Chhaganlal Govindlal, Lunsawada, Kumbharwada, Ahmedabad.

Mistry, Damodardas Himatlal & Co., Kalupur, Panchpati, Ahmedabad.

Mistry, Jivanlal Dhanjibhai, Gheekanta Road, opp. Masjid, Ahmedabad.

Mistry, Khodidas Motiram, Mirzapur, Rentiawadi, Ahmedabad.

Mistry, Mangaldas Jethabhai I. & B. F., Dariapur, Char Rasta, Ahmedabad.

Mistry, Mohanlal Veldas & Co., Sankadi Sheri, Dedka's Galli, Ahmedabad.

Mistry, Popatlal Narsibhai, Gheekanta Road, Bhutni Ambli, Ahmedabad.

Mistry, Shivram Ganesh & Sons, Astodia Chakla, Ahmedabad.

Mistry, Somnath Girdhardas, Tajpur, Tadni Sheri, Ahmedabad.

Mistry, Zaverbhai Rudabhai, Khadia, Wada Pole, Ahmedabad.

M. M. Panchal, City Danapith, Ahmedabad.

Model Machineries P. Ltd., Kapasia Bazar, Ahmedabad.

Modern Engineering & Moulding Co., Shahpur Mills Compound, Ahmedabad.

National Engineering Works, Ramkumar Mills Compound, Saraspur, Ahmedabad 2.

Natvar Engineering Works, Sarangpur, Ahmedabad.

Natverlal M. Fadia & Co., Kapasia Bazar, Ahmedabad.

Natverlal Shamaldas Shah, Sakar Bazar, Ahmedabad.

Nima Trading Co., Cross Lane, Ahmedabad.

N. K. Fadia & Co., Kapasia Bazar, Ahmedabad.

N. Mohanlal & Co., Pankore Naka, Ahmedabad.

Novatsing Rupram I. & B. F., opp. R. C. High School, Ahmedabad.

Omkar Iron & Brass Factory, Dariapur, Char Rasta, Ahmedabad.

Oriental Engineering Works, Sarangpur, Madhubhai Colony, Ahmedabad.

Oriental Mill Stores Agency, Relief Road, Ahmedabad.

Padshah Brothers, Khodi Ambli, Harmanwali Pole, Ahmedabad.

Pahelwan Rustamkhan Nawabkhan, Gheekanta Road, Bhutni Ambli, Ahmedabad.

Panchal Atmaram Ishwardas, Dariapur, Rupapari, Ahmedabad.

Panchal Atmaram Mohanlal, Mirzapur, Rentiawadi, Ahmedabad.

Panchal Banulal & Brothers, Dariapur, Rupapari, Ahmedabad.

Panchal Engineering Works, Dariapur, Char Rasta, Ahmedabad.

Panchal Fakirchand Hirachand, Gheekanta Road, opp. Masjid, Ahmedabad.

Panchal Hirachand Revandas, Gheekanta Road, Bhutni Ambli, Ahmedabad.

Panchal Iswardas Harjivandas, Dudheshwar Road, Ahmedabad.

Panchal Jivanlal Mepabhai, Gosaiji's Wada, Gheekanta Road, Ahmedabad.

Panchal Kalidas Ranchhoddas, Gheekanta Road, Hargovan Keval Street, Ahmedabad.

Panchal Kalidas Rughnath, near Munshi Soda Factory, Mirzapur, Ahmedabad.

Panchal Keshavlal Laxmichand, Dariapur, Ghanchi's Wadi, Ahmedabad.

Panchal Lalubhai Hirabhai, Gheekanta Road, Bhutni Ambli, Ahmedabad.

Panchal, Manilal Maganlal, Rentiawadi, Mirzapur Road, Ahmedabad.

Panchal, Mathurdas Shankarlal & Bros., Gheekanta Road, Ahmedabad.

Panchal, Shivram Bhuderdas, Gheekanta Road, Dabhadia Kuva, Ahmedabad.

Panchal, Somnath Kalidas, Gheekanta Road, Ahmedabad.

Panchal, Somnath Ranchhoddas, Gheekanta Road, Bhutni Ambli, Ahmedabad.

Panchal, Trikamlal Maganlal, Gheekanta Road, Bhutni Ambli, Ahmedabad.

P. A. Panchal, Dariapur, Chagis Pole, Ahmedabad.

Patel, Ambalal Narottamdas, Shahpur, Nagoriwad, Ahmedabad.

**PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranchhodlal & Co., Naroda Road, Ahmedabad 2. Phone: 26171. Grams: "MOULDING".**

Popular Textile Company, Bharatkhand Mills Compound, Ahmedabad.

Prabhudas & Co., Rentiawadi, Mirzapur Road, Ahmedabad.

Prem Roy Bros., L. K. Trust Bldg., Panchkuva, Ahmedabad 7.

Punjabhai Vanmalidas & Sons, Gheekanta Road, Mendi's Khancha, Ahmedabad.

R. Vadilal & Co., Kansara Dehla, Railwaypura Post, Ahmedabad 2.

Radiant Electric & Machinery Co., Mangal Bhavan, 2750, Relief Road, Ahmedabad.

Rally Metal Works, Patthar Kuva, Relief Road, Ahmedabad.

Ramanlal P. Shah, Relief Road, Ahmedabad.

Ramchandra Iron & Brass Works, Lunsawada, Golwad, Ahmedabad.

Ramvijay Iron Works, 664, Gheekanta Road, Ahmedabad.

Ranjeet Electric & Engineering Corporation, Relief Road, Near Jakaria Masjid, Ahmedabad.

Rastriya Iron Works, outside Dariapur Darwaja, Ahmedabad.

Regal Trading Co., Relief Road, Ahmedabad.

R. Keshavlal & Bros., Lunsawada, Kumbharwada, Ahmedabad.

R. M. Brothers, Kapasia Bazar, Ahmedabad.

R. Maganlal & Co., Kapasia Bazar, Ahmedabad.

Rohit Iron & Brass Factory, Delhi Chakla, Gheekanta Road, Ahmedabad.

Royal Iron Works, Kankaria Road, N. C. Mills, Ahmedabad.

Sabarmati Engineering Works, Sabarmati Railway Oil Mills, Sabarmati.

Sanchal Kalidas Ranchhoddas, Gheekanta Road, Hargovan Keval Street, Ahmedabad.

Saraswati Moulding Works, Shahpur Darwaja, Marwadi Chai, Ahmedabad.

Sattle Trunk Workshop, outside Prem Darwaja, Ahmedabad.

Shah Patel & Co., Kapasia Bazar, Ahmedabad.

Shantilal & Co., Kalupur, Panchpati, Navgaja Pir, Ahmedabad.

Sheth Stores Trading Co., Deepak Chambers, Station Road, Ahmedabad 2.

Shetna Iron Works & Co., Kankaria Road, N. C. Mills, Ahmedabad.

Shivlal Virchand Contractor, Gheekanta Road, Ahmedabad.

Shree Ambika Vijay & Co., Gheekanta, Gosaiji's Ullada, Ahmedabad.

Shree Ambika Vijay Iron & Brass Factory, Opp. Dariakhan Ghumat, Shahibag, Ahmedabad 4.

Shree Hanumant Vijay Iron & Brass Factory, Dariapur, Ghanchi's Wadi, Ahmedabad.

Shree Jagdish Rajnagar Iron & Brass Factory, City Danapith, Ahmedabad.

Shree Krishna Iron & Brass Factory, Lunsawada, Kumbharwada, Ahmedabad.

Shree, Lokmanya Engineering Works, 26, Bharatkhand Cotton Mills Compound, Saraspur, Ahmedabad 2.

Shree Ramkrishna Engineering Works, Outside Dariapur Gate, Ahmedabad.

Shree Satyanarayan Iron & Brass Factory, Dariapur, Ahmedabad.

Shree Shakti Iron Works, Delhi Darwaja, Hathibhai's Wadi, Ahmedabad.

Shree Shakti Vijay Brass & Iron Works, Lunsawada, Kumbharwada, Ahmedabad.

Sitaram Iron & Brass Works, Lunsawada, Golwad, Ahmedabad.

S. Kumar & Co., Mandvi's Street, 1529, Gatrada's Pole, Ahmedabad.

Smith Engineering Works, Dariapur Rupapari, Ahmedabad.

S. Sutaria & Co., Reid Road, Ahmedabad.

Standard Materials Co., Kapasia Bazar, Ahmedabad.

Star Engineering Works, outside Prem Darwaja, Ahmedabad.

Star Radio Electric Co., Relief Road, Ahmedabad.

Surendra Kumar & Bros., Relief Road, Ahmedabad.

Surendra & Co., Lunsawada, Harmanwali Pole, Ahmedabad.

Swastik Engineering Works, Gheekanta, near Dudhwali Pole, Ahmedabad.

Tankalchand Rughunath Iron & Brass Factory, Gheekanta Road, Ahmedabad.

U. D. Dave & Co., Chhotalal Building No. 1, Relief Road, Ahmedabad 1.

Umedram K. Mistry, City Danapith, Ahmedabad.

Unique Swastik Agency, Dhariapur, Ahmedabad.

Uno Engineering Works, Kankaria Road, Opp. Sarangpur Cotton Mills No. 1, Ahmedabad.

Vinay Engineering Co., Kankaria Road, opp. Laxmi C. Mills, Ahmedabad.

Zenith Engineering Works, Kulupur Tankshal, Ahmedabad.

### MARBLE AND TILES MERCHANTS

Ahmedabad Stone Supplying Co., 995, Khadia, Char Rasta, Ahmedabad.

Gupta Tiles & Marble, Guptanagar, Ahmedabad.

Jayantilal & Co., Khadia, Char Rasta, Ahmedabad 7.

Ramanlal Motilal Shah, inside Panchkuva, Ahmedabad.

Sompura & Co., 1956, Panchkuva Road, Ahmedabad.

Swastika Flooring Tiles Co., Panchkuva Road, Ahmedabad.

### MATERIALS HANDLING & CONVEYORS

**TEXTILE MACHINERY MFG. CO., Engineers and Merchants, Near Kamdar Maldan, Gomtipur Road, Ahmedabad 21. Phone: 52061; Grams: "TRUCKMAN."**



**METAL (NON-FERROUS) MANUFACTURERS**

Madhusudan & Brothers, Ramkumar Mill Compound, Saraspur, Ahmedabad.  
 Mahendra Metal Industries, Jay Bharat, Rangshalla Compound, Saraspur, Ahmedabad.  
 Saraswati Metal Works, Outside Delhi Gate, Opp. Painter's Garden Ahmedabad.  
 Satyanarayan Vijay Rolling Factory, Dariakhan Ghumat, Dudheswar Road, Ahmedabad.

**METAL MERCHANTS**

Amarchand Parthiraj, Chotalal Chawl, Outside Delhi Darwaja, Ahmedabad.  
 Ambalal Keshavlal Patel, Kansara Bazar, Manek Chawk, Ahmedabad.  
 Ambica Metal Works, Sankdi Sheri, Manek Chawk, Ahmedabad.  
 Amir Metal Syndicate, Kansara Dehla, Railwaypura Post, Ahmedabad.  
 Amrit Metal Works, Wania Sheri, Bhanderi Pole, Kalupura, Ahmedabad.  
 Babulal Karsandas & Co., Mandvi Pole, Kansara Pole, Ahmedabad.  
 Bhartiya Wasan Bhandar, Kansara Bazar, Manek Chawk, Ahmedabad.  
 Bhogilal Chotalal & Co., Mandvi Pole, Kansara Pole, Ahmedabad.  
 Bhogilal Devchand, New Wasan Market, Manek Chawk, Ahmedabad.  
 Bhimaji Hansraj, Kalupura, Bhanderi Pole, Ahmedabad.  
 Chandulal Kalidas, Kansara Dehla, Railwaypura Post, Ahmedabad.  
 Chinubhai Dawoodji, Kansara Dehla, Railwaypura Post, Ahmedabad.  
 Chotalal Vithaldas, Gandhi Chawk, Saraspur, Ahmedabad.  
 Chunilal Kalidas & Co., Kansara Dehla, Railwaypura Post, Ahmedabad.  
 Dahyalal Chotalal, Madhupura Dhal, Outside Delhi Darwaja, Ahmedabad.  
 Dhanjibhai Kalidas, Kansara Bazar, Manek Chawk, Ahmedabad.  
 Ghanshyam Metal Rolling Works, Ghee Kanta, Ghanja Wadi, Ahmedabad.  
 Harichand Zaverdas, Kansara Dehla, Railwaypura Post, Ahmedabad.  
 Harilal Sunderji, Kansara Mandvi Pole, Ahmedabad.  
 Hasmukhlal Jayantilal, New Wasan Market, Manek Chawk, Ahmedabad.  
 Hiralal Raichand, Kansara Bazar, Manek Chawk, Ahmedabad.  
 Jayantilal Chimanlal, Kansara Bazar, Manek Chawk, Ahmedabad.  
 Jethabhai Shivchand, Kansara Bazar, Manek Chawk, Ahmedabad.  
 Jijibhai Jesinghbhai Patel, Tumba Pole, Near Swami Narayan Mandir, Ahmedabad.  
 Jivanlal Sankalchand Kansara, Mandvi Pole, Mahajanwadi, Ahmedabad.  
 Kajodimal Amarchand, Chotalal Chawl, Outside Delhi Darwaja, Ahmedabad.  
 Kanayalal Navnitlal Parikh, Kansara Dehla, Railwaypura Post, Ahmedabad.  
 Kantilal Panachand, Mandvi's Pole, Kansara Pole, Ahmedabad.  
 Keshavlal Devchand, Kansara Bazar, Manek Chawk, Ahmedabad.  
 Lalji Dayalji, Panchkuva, Kadiawadi, Ahmedabad.  
 Madhavlal & Co., Chotalal Chawl, Outside Delhi Darwaja, Ahmedabad.  
 Mahalaxmi Vijay Rolling Factory, Chotalal Chawl, Outside Delhi Darwaja, Ahmedabad.  
 Mahendra Metal Works Industries, Rangshala Compound, Saraspur, Ahmedabad.  
 Mansukhran Chaganlal & Co., Mandvi Pole, Kansara Pole, Ahmedabad.  
 Mohanlal Kajodimal, Lunsawada, Kumbhar Dehla, Ahmedabad.  
 Mohanlal Rambilas, Chotalal Chawl, Outside Delhi Darwaja, Ahmedabad.  
 Nagardas Motichand, Kansara Dehla, Railwaypura Post, Ahmedabad.  
 Nathalal Baxiram, Chotalal Chawl, Outside Delhi Darwaja, Ahmedabad.  
 New Malwa Metal Stores, Chotalal Chawl, Outside Delhi Darwaja, Ahmedabad.  
 Prabhulal Daulatram, Chotalal Chawl, Outside Delhi Darwaja, Ahmedabad.  
 Ramkunvar Jagdish Chandra, Ravalia Khancha, Mandvi Pole, Ahmedabad.  
 Shri Mahalaxi Wasan Mart, Kansara Bazar, Manek Chawk, Ahmedabad.  
 Shri Saraswat Metal Works, Opp. Painter Garden, Outside Delhi Darwaja, Ahmedabad.  
 Vadilal Devchand, Kansara Bazar, Manek Chawk, Ahmedabad.

**MILL GIN STORES SUPPLIERS**

Agarwal Bros., Haridas Acharatlal Cloth Market, Kapasia Bazar, Ahmedabad-2.  
 A. H. & Co., Reid Road, Ahmedabad-2.  
 A. Hasmukh & Co., L. K. Trust Building, Revdi Bazar, Ahmedabad-2.

A. H. Rolwala & Co., Patel Market, Kapasia Bazar, Ahmedabad-2.  
 Ahmedabad Hardware Stores, Menit House, Relief Road, Ahmedabad-2.  
 Ahmedabad Wood Works, Haridas Acharatlal Cloth Market, Kapasia Bazar, Ahmedabad-2.  
 Akha Stores Trading Co., Gayatri Sadan, Audichya Nagar, Kankaria, Ahmedabad.  
 A. K. Shah & Co., Revdi Bazar, Ahmedabad-2.  
 Alliance Stores Trading Co., Private Ltd., Station Road, Ahmedabad-2.  
 Allied Engineers, Reid Road, Ahmedabad-2.  
 Altex Private Ltd., Ramolia Building, Relief Road, Ahmedabad-1.  
 Ambalal F. Patel, Devjisaraiya's Pole, Sankdi Sheri, Ahmedabad.  
 Ambalal Kothari & Co., 659/16, Kapasia Bazar, Ahmedabad-2.  
 Ambica Textile Traders, Opp. Aranda Hall, Kapasia Bazar, Ahmedabad-2.  
 A. M. Shaw & Co., Kapasia Bazar, Ahmedabad-2.  
 Anal Jitendra & Co., Amrat Park, Saurashtra Society, Ellis Bridge, Ahmedabad.  
 Anglo American Trading Corporation, Motilal Mansion, Kapasia Bazar, Ahmedabad-2.  
 Anglo British Trading Co., 1393, Naniali Street, Ahmedabad.  
 Anubhai & Co., Jeshingbhai's Wadi, Gheekanta Road, Ahmedabad.  
 Anankumar & Co., 1279, Rajamehta's Pole, Kalupur, Ahmedabad-1.  
 Anilkant & Co., Jivan Nivas, Opp. Madhav Baug, Ahmedabad-2.  
 A. R. K. Traders, C/o K. P. Parikh, Devni Sheri, Mandvi's Pole, Ahmedabad.  
 A. Ratilal Nathalal & Co., 635, Companywala Market, Kapasia Bazar, Ahmedabad-2.  
 Arun Textile Wood Works, Saraspur, Behind Vikram Mill, Ahmedabad-2.  
 Arvind Gunvant & Co., Motilal Hirabhai Market, Kapasia Bazar, Ahmedabad-2.  
 Arvind Hiralal, Laxmi Villa, Opp. Mithakhali, Ahmedabad-6.  
 Asarva Bobbin Works, Asarva Road, Behind Nilkanth Mahadev, Ahmedabad-11.  
 Ashok Traders, Deepak Chambers, Station Road, Ahmedabad-2.  
 Ashwin & Co., 535, Relief Road, Ahmedabad-1.  
 Asian Textile Engineering Corporation, Opp. Madhav Baug, Ahmedabad-2.  
 Atul Trading Co., 66-Pritamnagar, Ellis Bridge, Ahmedabad-6.  
 A. V. Nawab & Co., 2088, Nagjibhudar's Pole, Mandvi Street, Ahmedabad.  
 Babu & Co., Gheekanta Road, Ahmedabad.  
 Babubhai Chunilal Shah, Laxminarayan Pole, Rajamehta Pole, Kalupur, Ahmedabad-1.  
 Bahechardas Hargovandas Patel, 2724, Lokhand Bazar, Ahmedabad.  
 Barrels & Machinery Supplying Co., Kapasia Bazar, Ahmedabad-2.  
 B. C. Mashruwala & Bros., Kapasia Bazar, Ahmedabad-2.  
 Bepco (India), Kapasia Bazar, Ahmedabad-2.  
 Bhagubhai M. Shah, Behind Parimal Soc., Tulsibag Colony, Ellis Bridge, Ahmedabad.  
 Bhagubhai Shambhunath Garekhan, Kapasia Bazar, Ahmedabad-2.  
 Bharat Chemical Agency, Vohra's Dehla, Kapasia Bazar, Ahmedabad-2.  
 Bharat Leather Co., 1680/1, Khiskola's Pole, Kalupur Road, Ahmedabad-1.  
 Bharat Rope & Lace Mfg. Co., Kapasia Bazar, Ahmedabad-2.  
 Bharat Traders, 572/A, Reid Road, Ahmedabad-2.  
 Bhogilal & Co., 673, Cross Lane, Ahmedabad-2.  
 Bhogilal K. Shah & Co., Cotton West Merchant Assoc. Building, Relief Road, Ahmedabad.  
 Bihari Brothers, Reid Road, Ahmedabad 2.  
 Bipin & Co., Kapasia Bazar, Ahmedabad-2.  
 Bitex Corporation, 2088, Nagjibhuder's Pole, Mandvi St., Ahmedabad.  
 Bombay Mill Gin Stores, Ashok Nivas Bldg., Relief Road, Ahmedabad 1.  
 B. S. Banker & Co., 656, Kapasia Bazar, Ahmedabad-2.  
 B. Trikamlal & Co., Gheekanta Road, Bhut's Ambli, Ahmedabad.  
 C. A. Galiakotwala & Co. Private Ltd., Kapasia Bazar, Ahmedabad-2.  
 Card Clothing & Comber Re-needling Works, Govind Bhuvan, Opp. Raman Nagar Society, Maninagar, Ahmedabad-8.  
 C. B. Mehta & Co., Reid Road, Ahmedabad-2.  
 C. B. Sutaria Bros., Cross Lane, Ahmedabad-2.  
 C. Bangadiwala & Co., Kapasia Bazar, Ahmedabad-2.  
 C. O. Mashruwala, Kapasia Bazar, Ahmedabad-2.  
 C. Doctor & Co., Private Ltd., Khokhra Mahemdabad, Maninagar, Ahmedabad-8.  
 Central Trading Corporation, Vohra's Dehla, Kapasia Bazar, Ahmedabad-2.  
 Chandabhai Brothers & Co., Dabgarwad, Dariapur, Ahmedabad.  
 Chandulal Vadilal & Co., Reid Road, Ahmedabad-2.  
 Chandravadan Lalubhai, Near Ration Shop, Mithakhali, Ahmedabad-6.  
 Chemico Textile Industries, Tagara Mill Compound, Outside Raipur Gate, Ahmedabad.



Chetna Textile Trading Corporation Zaveriwal, Sodagar's Pole, Ahmedabad.

Chemsize Agency, 566, Reid Road, Ahmedabad-2.

Chhotalal Balabhai & Bros., Kapasia Bazar, Ahmedabad-2.

Chimanlal & Sons, Cross Lane, Revdi Bazar, Ahmedabad-2.

Chimanlal Vadilal & Co., Sankadi Sheri, Nanshajivan's Pole, Ahmedabad.

Chitaranjan Bros., 1766, Khadia, Dhobi's Pole, Ahmedabad.

Chimanlal J. Banker, Prabhu Sadan, Rambaug, Kankaria, Ahmedabad.

Chinu Vakil & Co., Railwaypur Post, No. 2, Cross Lane, Ahmedabad 2.

Chokshi Trading Co., 2754/2, Relief Road, Ahmedabad.

C. K. Vohra & Co., Revdi Bazar, Ahmedabad-2.

C. S. Thacker & Co., Khadia, Char Rasta, P.B. No. 123, Ahmedabad.

C. Vadilal & Co., Reid Road, Ahmedabad-2.

C. V. Mehta Private Ltd., Khokhara Mahemdabad, Maninagar, Ahmedabad-8.

C. U. Kapadia & Sons, Kapasia Bazar, Ahmedabad-2.

Dahyabhai Nanlal & Co., Kapasia Bazar, Ahmedabad-2.

Dashrathlal Chimanlal & Co., Sarangpur, Sarkiwal, Ahmedabad.

Dashrathlal Chimanlal & Bros., Motilal Mansion, Kapasia Bazar, Ahmedabad-2.

Das & Co., Revdi Bazar, Ahmedabad-2.

Desai Keshavlal Laljibhai, K. Bazar, Ahmedabad 2.

Dhuldhoya Sons & Co., Reid Road, Ahmedabad-2.

Dilip Electric Co., 63/H, Near Punat Ashram, Maninagar, Ahmedabad-8.

Dinubhai G. Desai & Co., Opp. Madhav Baug, Ahmedabad-2.

Dinker H. Desai & Co., Char Rasta, Khadia, Ahmedabad.

D. Lalbhai & Co., 1114, Gundli's Pole, Relief Road, Kalupur, Ahmedabad.

D. M. Patel & Co., A/8, Maskati Market, Ahmedabad-2.

Dwarkadas & Bros., Khadia Char Rasta, Ahmedabad.

Eastern Trading Agency, Haridas Acharatlal Cloth Market, Kapasia Bazar, Ahmedabad-2.

Eversharp Textile Corporation, 937, Gheekanta Road, Opp. R. C. High School, Ahmedabad.

Frion & Co., Reid Road, Ahmedabad-2.

Gauttam Textile Co., Deepak Chambers, Station Road, Ahmedabad-2.

General Commercial Agency, Cross Lane, Station Road, Ahmedabad-2.

General Engineering Stores, Kapasia Bazar, Ahmedabad-2.

General Trading Co., C/o National Trading Co., 456, Panchkuva, Ahmedabad-2.

Girdharlal Damodardas Private Ltd., Reid Road, Ahmedabad-2.

G. Narandas & Co., 442/A, Vachali Sheri, Raipur, Ahmedabad.

Gokaldas & Sons, Kaveshwar's Pole, Balahanuman, Khadia, Ahmedabad.

Gokaldas Motilal, Vohra's Dehla, Kapasia Bazar, Ahmedabad-2.

Gujarat Corporation (India) Private Ltd., Harisadan, Char Rasta, Khadia, Ahmedabad.

Haresh Chokshi & Co., 5, Arun Society, Ahmedabad-7.

H. B. Vakil & Co., Haridas Acharatlal Cloth Market, Kapasia Bazar, Ahmedabad.

Harahvadan Kalidas, 550, Doshiwada's Pole, Kalupur, Ahmedabad.

H. Mansuri & Sons, Dariapur, Dabgarwad, Khodi Amli, Ahmedabad.

Hemant Bros., Mahalaxmi Bhavan, Dhanasutar's Pole, Relief Road, Ahmedabad.

Hind Hardware Stores, Kadiakul, Relief Road, Ahmedabad-2.

Hirachand Ranchhodas Dosi, Outside Panchkuva Gate, Ahmedabad-2.

Hiralal L. Shah, Deepak Chambers, Station Road, Ahmedabad-2.

H. Tribhovandas & Co., C/o Grand Wood Works, Reid Road, Ahmedabad-2.

I. A. Shah & Co., Kapasia Bazar, Ahmedabad-2.

Imperial Trading Co., Kapasia Bazar, Ahmedabad-2.

Indequip Private Ltd., Reid Road, Ahmedabad-2.

India Mill Stores Co., Vohra's Bldg., Kapasia Bazar, Ahmedabad-2.

Indravadan Maneklal & Co., Station Road, Ahmedabad-2.

Indulal & Co., Narotam Bldg., Kapasia Bazar, Ahmedabad-2.

Industrial Engineering Corp., 622, Kapasia Bazar, Ahmedabad.

Industrial Spare Parts Co., Kadiakul, Relief Rd., Ahmedabad.

International Tape Mfg. Co., C/o Messrs. Kumar Eng. Enterprise, New Cotton (No. 1) Mill Compound, Outside Raipur Gate, Ahmedabad.

International Textile Corporation, Reid Road, Ahmedabad-2.

International Traders Private Ltd., Narotam Building, Kapasia Bazar, Ahmedabad-2.

International Trading Co., Station Road, Ahmedabad-2.

Interseas Trading Co., Outside Panchkuva Gate, Ahmedabad-2.

International Suppliers, Companywala Market, Kapasia Bazar, Ahmedabad-2.

Iron & Hardware Import Trading Co., 267, Sarangpur Chakla, Sarangpur, Ahmedabad.

Jagdish Engineering Works, Dariapur, Behind Tower, Rupapari, Ahmedabad.

Jaswantlal Popatlal & Co., 656/4/4, Kapasia Bazar, Ahmedabad-2.

Jayantilal Ambalal & Co., 675/2/9, Sir Chinubhai Bldg., Cross Lane, Ahmedabad-2.

Jayantilal & Co., Reid Road, Ahmedabad.

Jayantilal Pranlal & Co., Outside Sarangpur Gate, Karanamukteshwar Mahadev Compound, Near Bagicha Mill, Ahmedabad.

Jayantilal S. Gandhi & Co., Opp. Madhav Baug, Ahmedabad-2.

Jayabharat Trading Co., Motilal Mansion, Kapasia Bazar, Ahmedabad.

Jayhind Leather Industries Private Ltd., Station Road, Ahmedabad-2.

Jayshree Traders, Motilal Mansion, Kapasia Bazar, Ahmedabad-2.

Jitendra & Co., Relief Road, Kadiakul, Ahmedabad.

Jitendra Ramaniklal & Co., Maskati Market, Ahmedabad-2.

J. M. Chokshi, Kapasia Bazar, Ahmedabad-2.

J. Nanavati & Co., 626/32, K. Bazar, Ahmedabad 2.

Kanaiyalal Navanilal Parikh, Kansara's Dehla, Opp. Rly. Station, Ahmedabad-2.

Kantilal Chimanlal, Kapasia Bazar, Ahmedabad-2.

Kantilal H. Mehta & Co., Reid Road, Ahmedabad-2.

Kantilal Jiwanlal & Co., Reid Road, Ahmedabad-2.

Kashiparekh Bros., 584, Reid Road, Ahmedabad-2.

Kashyap Bros., Kadiakul, Relief Road, Ahmedabad.

K. C. Mashruwala & Co., Reid Road, Ahmedabad-2.

K. Damodardas & Co., L. K. Trust Building, Revdi Bazar, Ahmedabad-2.

K. H. Nawab & Co., Kapasia Bazar, Ahmedabad-2.

Kirtikant & Co., Near Government Servant Soc., Navarangpura Road No. 1, Ahmedabad-9.

Kirtilal & Co., Kadiakul, Relief Road, Ahmedabad.

Kishore Trading Corporation, Revdi Bazar, Railwaypur, Ahmedabad-2.

Kohinoor Rope & Tape Works, Kapasia Bazar, Ahmedabad-2.

K. Rasiklal & Co., Cross Lane, Revdi Bazar, Ahmedabad-2.

Kumarpal Kantilal & Co., Companywala Market, Kapasia Bazar, Ahmedabad-2.

Laxmi Commercial Ltd., Reid Road, Ahmedabad-2.

Machine Products (India) Private Ltd., Reid Road, Ahmedabad-2.

Mafatlal K. Patel & Co., 1234, Hanuman's Pole, Dariapur, Ahmedabad.

Maganlal Manilal Seth, 1062/N/16, Sahkari Lati Bazar, Gitamandir Road, Ahmedabad.

Mangaldas Jeshingbhai & Co., Cross Lane, Revdi Bazar, Ahmedabad-2.

Manilal Jambadas & Sons, Nava Madhupura, Ahmedabad.

Manubhai C. Shah, Motilal Mansion, Kapasia Bazar, Ahmedabad-2.

Manubhai Parikh & Co., Badshah Bhuvan, Kadiakul, Relief Road, Ahmedabad-2.

Master Traders, Aranda Hall, Kapasia Bazar, Ahmedabad-2.

Masturilal Chunilal & Co., Kapasia Bazar, Ahmedabad-2.

Mathurdas Odhavji & Co., Acharyaaji's Bethak, Asarva Road, Ahmedabad.

M. D. Shah & Co., Reid Road, Ahmedabad-2.

M. P. KAPADIA & CO., 957, Kapasia Bazar, Ahmedabad 2.

Mehta & Co., C/o Messrs. B. Mehta & Co., Below Fernandez Bridge, Gandhi Road, Ahmedabad.

Mehta & Sons Private Ltd., Khokhara Mahemdabad, Maninagar, Ahmedabad-8.

Mehta Mill Supply Co., 696, Reid Road, Ahmedabad 2.

Mehta Parikh & Co., Private Ltd., Kapasia Bazar, Ahmedabad-2.

Mehta Trading Co., Near Dhikawa Choki, Mali's Pole, Kalupur, Ahmedabad.

Metal Moulders Private Ltd., Dudheswar Road, Ahmedabad.

Mill Stores Co. (Bombay) Private Ltd., Kadiakul, Relief Road, Ahmedabad.

M. M. Shah & Co., 2610/Devsa's Pada, Relief Road, Ahmedabad.

Mohanlal Jambadas Patel, Revdi Bazar Ahmedabad-2.

Mohanlal Prabhudas & Co., Reid Road, Ahmedabad-2.

Motilal Harilal Jagabhaiwala, Bipinville, Ellis Bridge, Ahmedabad.

M. P. Kapadia & Co., 957, K. Bazar, Ahmedabad 2.

M. Sharma & Co., Post Box No. 71, Gandhi Road, Ahmedabad.

Mukulchandra Budhalal Teli, Devkinandan Market, Revdi Bazar, Ahmedabad-2.

Mulchand Jaikishandas & Co., Reid Road, Ahmedabad-2.

Nachmo Co., 433/17, Ashram Road, Ellis Bridge, Ahmedabad-9.

Nagindas Kilabhai, P. Ltd., Reid Road, Ahmedabad.

Nanavati & Co., Private Ltd., Kapasia Bazar, Ahmedabad 2.

Narottamdas Chunilal & Co., Kapasia Bazar, Ahmedabad 2.

National Bobbin Co., Outside Panchkuva Gate, Ahmedabad 2.

National Trading Co., Dhanlaxmi Market, Reid Road, Ahmedabad 2.

Natvarlal & Co., 656, Kapasia Bazar, Ahmedabad 2.

Natvarlal Govindlal & Co., Kapasia Bazar, Ahmedabad 2.

Natvarlal Hiralal, Kapasia Bazar, Ahmedabad 2.

Natvarlal Shamaldas Shah, C/o Jayabharat Trading Co., Motilal Mansion, Kapasia Bazar, Ahmedabad 2.

Natvarlal P. Kinariwala, 148, Garden Area, Maninagar, Ahmedabad 8.

Navinchandra C. Zaveri & Co., Fanibanda Building, Reid Road, Ahmedabad 2.

Navanilal B. Chokshi, 25, Chokshi Bhuvan, Jagabhai Park, Opp. Nagina Wadi, Kankaria, Ahmedabad.

N. C. Shah & Co., Pankore Naka, Gandhi Road, Ahmedabad.

Neo Engineering Works, Near Air India Office, Mirzapur Road, Ahmedabad 1.



New India Pickers Works, Khand Sheri, Jamalpur, Ahmedabad.  
 New India Trading Co., Vakil Building, Char Rasta, Khadia, Ahmedabad.  
 Nima Trading Co., Cross Lane, Revdi Bazar, Ahmedabad 2.  
 N. Mithabhai Lagowala, 570, Thengar Vado, Raipur, Ahmedabad.  
 Niranjan R. Shah & Co., Kapasia Bazar, Ahmedabad.  
 N. Kantilal & Co., 36, Ranchhodrai Market, Sakar Bazar, Ahmedabad 2.  
 Noble Textile Trading Co., Sundar Nivas, Opp. Kothari Pole, Gandhi Road, Ahmedabad.  
 Norman & Co., Motilal Mansion, Kapasia Bazar, Ahmedabad.  
 N. Parikh Sons, Opp. Madhav Baug, Ahmedabad 2.  
 Ochhavilal K. Trivedi, Cross Lane, Revdi Bazar, Ahmedabad 2.  
 Oriental Corporation Private Ltd., Khokhra Mahemdabad, Maninagar, Ahmedabad 8.  
 Oriental Textile Co., 637/2, Companywala Market, Kapasia Bazar, Ahmedabad 2.  
 Orient Traders (Ahmedabad) Talyab Bldg., Relief Road, Ahmedabad.  
 Overseas Mill Stores Co. (Private) Ltd., Gandhi Road, Opp. Model Talkies, Ahmedabad.  
 Panalal Umabhai, Opp. Doshiwada's Pole, Kalupur, Ahmedabad.  
 Paradise Mill Stores Co., Kapasia Bazar, Ahmedabad 2.  
 Paramount Textile Agency, Haridas Acharatlal Cloth Market, Kapasia Bazar, Ahmedabad 2.  
 Pargans (India) Private Ltd., A/416/C, Opp. Mithakhali, Ahmedabad 9.  
 Parikh Trading Co., Seth Girdharilal Balabhai Market, Cross Lane, Ahmedabad 2.  
 Patel Harjivandas Hathibhai, 2727, Lokhand Bazar, Ahmedabad.  
 P. G. Gandhi & Co., Lalabhai's Pole, Mandvi's Pole, Ahmedabad.  
 P. G. Shah & Co., Astodia Road, Near Nagri Seth's Bungalow, Ahmedabad.  
**PICKERS LIMITED, Ellis Bridge, Ahmedabad 6; Well reputed for Superb quality of all kinds of Pickers; Phones: Office: 7205; Works: 2755; Grams: "COWSIE".**  
 Pickmaco (India), 328/2, Revdi Bazar, Ahmedabad 2.  
 P. M. Hutheesing & Sons, Jesingbhai's Wadi, Gheekanta, Ahmedabad.  
 P. M. Shah & Co., Jani Wado, Gandhi Road, Ahmedabad.  
 Popatlal N. Parikh & Sons, 1295, Padi Pole, Dhanasuthar's Pole, Kalupur, Ahmedabad.  
 P. Prafulbhai & Co., Tribhovandas Market, Kapasia Bazar, Ahmedabad 2.  
 Prabhat Engineering Co., Motilal Mansion, Kapasia Bazar, Ahmedabad 2.  
 Prasant Gauttam & Co., Vohra Building, Kapasia Bazar, Ahmedabad 2.  
 Pravin M. Patel & Co., Moti Hamam, Gheekanta Road, Ahmedabad.  
 Premier Mill Stores Co., 496-A/6, Reid Road, Ahmedabad 2.  
 Prem Roy Bros., L. K. Trust Building, Revdi Bazar, Ahmedabad 2.  
 P. Vadan & Co., Lunsawad, Moti Pole, Dariapur, Ahmedabad.  
 Rajendra B. Shah, C/o Sri Bhagubhai M. Shah, Tulsibag Colony, Behind Parimal Society, Ellis Bridge, Ahmedabad.  
 Rajnagar Bobbin Works, Near Gita Mandir, Ahmedabad.  
 Rajnagar Paper Mart, Panch Pati, Kalupur, Bakarall's Pole, Ahmedabad.  
 Rajnikant Bobbin Factory, Lunsawad, Opp. Moti Pole, Dariapur, Ahmedabad.  
 Ramanlal Sankalchand & Co., Reid Road, Ahmedabad 2.  
 Ramanlal Vrijvallabhdas & Co., Cross Lane, Revdi Bazar, Ahmedabad 2.  
 Ranchhodlal Amratilal Vasa, 664/54/5, C/o Laxmanprasad Damodardas Vasa, Maskati Market, Ahmedabad 2.  
 Ramesh M. Patel & Co., 1697, Jatakan's Pole, Raipur, Ahmedabad.  
 Ramesh Brothers, 1062/N/16, Sahkari Lati Bazar, Gita Mandir Road, Ahmedabad.  
 Ramprasad Chandulal Contractor, 9, Shantinagar, Ahmedabad 18.  
 Rasiklal D. Gandhi & Co., Mangal Bhuvan, Relief Road, Ahmedabad.  
 Ratilal & Co., Cross Lane, Revdi Bazar, Ahmedabad 2.  
 Ratilal M. Shah & Co., Shamla's Pole, Raipur, Ahmedabad.  
 R. D. Shah & Co., Vohra's Dehla, Kapasia Bazar, Ahmedabad.  
 Regal Trading Co., Mahabub Bldg., Relief Road, Ahmedabad.  
 R. M. Bros., 1088/84, Chhotalal Harilal's Dehla, Kapasia Bazar, Ahmedabad.  
 R. M. Shaw & Co., Motilal Mansion, Kapasia Bazar, Ahmedabad.  
 R. N. Shah & Co., Haridas Acharatlal Cloth Market, Kapasia Bazar, Ahmedabad 2.  
 R. Vadilal & Co., Kansara's Dehla, Opp. Rly. Station, Ahmedabad 2.  
 Sales & Service Corporation, Motilal Mansion, Kapasia Bazar, Ahmedabad 2.  
 S. C. Majumdar & Co., Narottam Building, Kapasia Bazar, Ahmedabad.  
 Seth Ratilal Maganlal, 1062/N/57, Sahkari Lati Bazar, Gita Mandir Road, Ahmedabad.  
 Seth Stores Trading Co., Station Road, Ahmedabad 2.  
 Shah & Dalal Traders, C/o M/s. R. D. Shah & Co., Vohra's Dehla, Kapasia Bazar, Ahmedabad 8.

Shalimar Traders, 690/2, Reid Road, Ahmedabad 2.  
 Shah Nanavati & Co., Vohra's Dehla, Kapasia Bazar, Ahmedabad 2.  
 Shakti Mill Stores Co., Moti Hamam, Ghee-Kanta Road, Ahmedabad.  
 Shambhulal Ishwardas Panchal, Chang's Pole, Dariapur, Ahmedabad.  
 Shantilal Manilal Vakil, 37, Brahman Mitra Mandal Society, Ellis Bridge, Ahmedabad 6.  
 S. Kantilal & Co., Haridas Acharatlal Market, Kapasia Bazar, Ahmedabad 2.  
 Sri Krishna Textile Works, Salapas Cross Road, Ahmedabad.  
 Sri Swastik Textile Wood Works, Dudheswar Road, Parmanand Chawl, Ahmedabad.  
 S. Mehta & Co., Above State Bank of India, Reid Road, Ahmedabad 2.  
 S. N. Shah & Co., Hiralal Trikamlal Building, Bombay Shroff Galli, 3rd Floor, Station Road, Ahmedabad 2.  
 Spectrum Dyes, Luck-Nau Bldg., Seth's Pole, Sankadi Sheri, Ahmedabad.  
 S. Sutarla & Co., Reid Road, Ahmedabad 2.  
 Standard Materials Co., Narottam Building, Kapasia Bazar, Ahmedabad 2.  
 S. Thakore & Co., Modh Srimali's Wadi, Char Rasta, Khadia, Ahmedabad.  
 Sumatlal Popatlal & Co., 697/1, Dhanlaxmi Market, Reid Road, Ahmedabad 2.  
 Surendra & Co., 2244, Bana's Street, Raipur, Ahmedabad.  
 Surendrakumar & Bros., Reid Road, Ahmedabad 2.  
 Taheralli Sultanalli & Bros., 1475/76, New Madhupura, Ahmedabad.  
 Tarkas Engineering Works, Haridas Acharatlal Cloth Market, Kapasia Bazar, Ahmedabad 2.  
 Texind Corporation Ltd., Reid Road, Ahmedabad 2.  
 Textile Commercial Co., Haridas Acharatlal Cloth Market, Ahmedabad 2.  
 Textile Corporation, 354, Sardar Vallabhbhai Patel Road, Ahmedabad.  
 Textile Engineering Co., 637, Companywala Market, Kapasia Bazar, Ahmedabad 2.  
 Textile Stores Co., C/o N. Desai & Co., Nava Darwaja, Char Rasta, Ahmedabad.  
 Textrade Syndicate, 412, Ashram Road, Ahmedabad 9.  
 Thakarsahi Chunilal Parikh & Co., Madhupura, Ahmedabad.  
 Union Mill Stores Co., Dalal Bldg., Kapasia Bazar, Ahmedabad 2.  
 Universal Trading Corporation, A/8, Maskati Market, Ahmedabad 2.  
 Vaishwaner Trading Co., Hathipura, Opp. Nava Madhupura, Ahmedabad.  
 Vasa Bros., 626/5, Vohra's Dehla, Kapasia Bazar, Ahmedabad 2.  
 V. D. Shah & Bros., 29, Girdharnagar, Ahmedabad 4.  
 Vijay Traders, Pakhalni Pole, Mahadevvala's Khancha, Raipur, Ahmedabad.  
 Vithaldas Mankanji & Sons, Vohra's Dehla, Kapasia Bazar, Ahmedabad.  
 Welspun Bobbin Co., Gujarat Hosiery Factory Compound, Rakhia Road, Ahmedabad 10.  
 Weltex Industrial Trading Co., Companywala Market, Kapasia Bazar, Ahmedabad 2.  
 Yashwant & Co., Motilal Mansion, Kapasia Bazar, Ahmedabad 2.

### MOSAIC TILE-MAKING MACHINERY

**PIONEER ENGINEERING WORKS, Prop.: C. C. Ranchhodlal & Co., Naroda Road, Ahmedabad 2; Phone: 26171, Grams: "MOULDING".**

### MOTOR PARTS MFRS.

**UNITED ENGINEERING WORKS, THE.—Manufacturers of Cylinder Liners, Valve guides, Valve Seat Bars; P.O. Box No. 1023, Ramkumar Mills Compound, Saraspur, Ahmedabad 2.**

### PAINTS, ENAMELS AND VARNISHES

Allied Engineers, Reid Road, Ahmedabad 2.

**BLUNDELL EOMITE PAINTS LTD., Area Sales Depot, Amit Chambers, Mirzapur Road, Eal Darwaja, Ahmedabad, Grams: 'BLUNPAINTS'.**

C. S. Vohra & Co., Pankore Naka, Ahmedabad 1.  
 D. Prajapati & Co., Near Tarkos Bldg., Relief Road, Ahmedabad 1.  
 L. G. Amin & Co., Menil House, Kadia-Kui, Relief Road, Ahmedabad.  
 N. M. Shah & Co., Opp. Jumma Masjid, Ahmedabad.  
 Sultanally Gulamhussein & Sons, 289, Fernandez Bridge, Ahmedabad.  
 S. Shantilal & Co., Pankore Naka, Ahmedabad.  
 United Trading Co., 1843, Near Allahabad Bank, Pankore Naka, Ahmedabad.

### PAINT AND VARNISH MANUFACTURERS

Jayashree Industries, Bala Hanuman, Ahmedabad.  
 Mayor Paint Works, Reid Road, Railwaypur P.O., Ahmedabad 2.  
 Paradise Oil & Paints Products, Sankadisheri, Near Haribhakti's Pole, Ahmedabad.



Pioneer Mfg. Co., Haripura Road, Asarwa, Ahmedabad 11.  
Scientific Printers Materials Mfg. Co., Mirzapur Road, Ahmedabad.  
Shakti Paints Mfg. Co., Near High School, Saijpur Boga, Ahmedabad.  
Swastik City Wall Distemper Mfg. Co., Bala Hanuman, Ahmedabad.  
Valian Paints P. Ltd., 38, Madhubhai Mills Compound, Railwaypura, Ahmedabad 2.

### PENCIL MANUFACTURERS

Acme Agencies Pencil Factory, Near Gita Mandir, Char Rasta, Jagannath Road, Ahmedabad.  
Gujarat Pencil Co., Saraspur, Ahmedabad 2.

### PERFUMERS AND OIL MANUFACTURERS

Bishandayal Dharamdas, Opp. Jumma Masjid, Ahmedabad 1.  
Manilal & Sons, Gandhi Road, Opp. Jumma Masjid, Ahmedabad.  
Loma Products (India), 1134, Akaseth Kuwas Pole, Raipur, Ahmedabad.  
Mohamedbhai Usmanbhai Hakimji Attarwalla, Pir Mohamed Shah Manzil, Relief Road, Ahmedabad 1.

### PHOTOGRAPHERS

## STUDIO TECHNICA

### PHOTOGRAPHERS

TECHNICAL - INDUSTRIAL PHOTOGRAPHY  
"PHOTOSTAT" PRINTS - MICROFILMING  
FILM STRIPS - DOCUMENTARY FILMS

2489, Swami Akhandanand Marg, Ahmedabad  
Phone : 53268 Grams : "STUDIOTECH"

Associates in Bombay

PHOTO - MASTERS, 23, Hamam Street, Bombay 1.

### PICKERS AND BUFFERS

Ahmedabad Picker Works, Near Railway Lane, Nava Vada, Ahmedabad 13.  
Allied Textile Leather Industries, Outside Raipur Gate, Kot-ni-Dival, Ahmedabad.  
Beltex P. Ltd., Ellis Bridge, Ahmedabad 6.  
C. A. Galiakotwalla & Co., Kapasia Bazar, Railwaypura, Ahmedabad 2.  
Chandabhai Bros. & Co., P.O. Box No. 34, Dabgarwad, Ahmedabad-1.  
Graduate Picker Works, Dabgarwad, Ahmedabad 1.  
Hides & Leather Products Ltd., Reid Road, Railwaypura Post, Ahmedabad.  
Hides & Pickers Trading Co., Dabgarwad, Dariapur, Ahmedabad.  
H. Mansuri & Sons, P.O. Box No. 84, Dabgarwad, Ahmedabad.  
Indian Picker Mfg. Co., 328/2, Mansukhram Dharamshala, Revdi Bazar, Ahmedabad 2.  
Jai Hind Leather Industries, Reid Road, Railwaypura Post, Ahmedabad.  
J. Mansuri & Sons, P. O. Box No. 92, Dabgarwad, Ahmedabad-1.  
Loom Leather Private Ltd., Arenda Hall, Kapasia Bazar, Railwaypura, Ahmedabad-2.  
New India Picker Works, Near Khandni Sheri, Jamalpur, Ahmedabad.  
Patel & Parmar Picker Works, Nava Vada, Ahmedabad-13.  
**PICKERS LIMITED, Ellis Bridge, Ahmedabad 6. Well Reputed for Superb quality of all kinds of Pickers. Phones: Office—7205, Works—2755; Grams: "COWSIE".**  
Swastika Industries, Opp. Talao, Amraiwadi, Ahmedabad.  
Swastik Leather Mfg. Co. P. Ltd., Motilal Hirabhai Market, Railwaypura, Ahmedabad-2.

### PICKING BANDS AND BELTINGS

**BELTEX LIMITED, Ellis Bridge, Ahmedabad 6. Phone : 7205; Grams : "LEATEX"—Ahmedabad. Well reputed for superb quality of Picking Bands & Beltings.**

### PIPES AND FITTINGS MANUFACTURERS AND MERCHANTS

**ABDUL SAMAD ABDUL KADAR & SONS, 1839, Panchpatti, Kalupur, Ahmedabad 1. Phone: 24543. Grams: "FOOTVALVE."**  
Manufacturers of Gun-metal & Cast Iron Valves & Cocks for Water, Steam, Oil, Chemicals & Boiler Mountings, Pipe Fittings, Sanitary Fittings, Fire Fighting Appliances, Hose Fittings, Agricultural Implements and Textile Machinery Spares.  
Austin Trading Co., Patel Market, K. Bazar, Ahmedabad 2.  
B. C. Mashruwala & Bros., 657, Kapasia Bazar, Ahmedabad 2.  
B. Lalbhai & Co., Pankore Naka, Ahmedabad.

C. K. Vohra & Co., Revdi Bazar, Ahmedabad.  
C. Laxmichand & Co., Revdi Bazar, Ahmedabad.  
C. S. Vohra & Co., Pankore Naka, Ahmedabad.  
Dahyabhai Nanalal & Co., Kapasia Bazar, Ahmedabad.  
Eastern Trading Agency, Kapasia Bazar, Ahmedabad.  
Gokaldas & Sons, Kaveeshverni Pole, Ahmedabad.  
Indian Hume Pipe Co. Ltd., Saraspur, Ahmedabad.  
Kashiparekh Bros., 564, Reid Road, Ahmedabad.  
K. C. Mashruwala & Co., Reid Road, Ahmedabad.  
Madhavlal & Co., Pankore Naka, Ahmedabad.  
Natwarlal & Co., Kapasia Bazar, Ahmedabad.  
Navanilal Manilal Shah, Dhalnipole, Jagabhai's Street, Ahmedabad.  
Neo Engineering Works, Near Indian Air Lines Office, Mirzapur Road, Ahmedabad 1.  
Pioneer Engineering Works, Sukhlal Para, Naroda Road, Ahmedabad 2.  
Rajendrakumar Navanilal & Co., Kapasia Bazar, Ahmedabad.  
**R. M. ENGINEERING WORKS, Ahmedabad 8. Manufacturers of 'R' Brand High grade Malleable Iron Castings and Pipe Fittings—A Rohit group Enterprise.**  
Shri Ambica Tubes Ltd., Ahmedabad 8.  
Spun Pipe Co. of India Ltd., Gandhi Road, Ahmedabad.

### PLASTIC MACHINERY MFRS.

Phone: C/o 23608.

Plastic Machinery Manufacturers :

### BASANT INDUSTRIAL PLASTIC CORPORATION

Sahijpur Bogha, Ahmedabad.

Manufacturers of Extruders & Ancillary Equipments, Grinders, Injection Moulding Machines, etc.

### PLASTIC PRODUCTS

Basant Industrial Plastic Corporation, Sahijpur Bogha, Ahmedabad.  
Bharat Plastic & Bakelite Industries, Saijpur Bhoga, Ahmedabad.  
Elite Plastic Co., 12-A, Bharatkhand Mills' Compound, Ahmedabad 11.  
Unipol Plastic Industries, 649, Nanavati Bldg., Gandhi Road, Ahmedabad 1.

### PRINTING PRESS MACHINERY & MATERIALS

**GUNVANTRAY & CO., Khadia, Char Rasta, Nawa Darvaja Road, Ahmedabad and Crescent Chambers, 1st floor, Tamarind Lane, Fort, Bombay-1; Dealers in Printing Press Machinery & Material.**

### PULLEYS MANUFACTURERS

**PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranchhodlal & Co., Naroda Road, Ahmedabad 2; Phone: 26171, Grams: "MOULDING".**

### PUMP MANUFACTURERS & DEALERS

Kirloskar Brothers, Opp. Navi Mohalat, Relief Road, Ahmedabad.  
Manubhai Parikh & Co., Badshah Bhuvan, Near Kadia Kuli, Ahmedabad.  
M. H. Brothers, Kalupur Road, Ahmedabad.  
Myers Pumps, Near Ashok Nivas, Relief Road, Ahmedabad.  
U. D. Dave & Co., Near Shetia Building, Relief Road, Ahmedabad.  
Well-Known Brothers, Opp. Zakaria Masjid, Relief Road, Ahmedabad.

### RADIO MFRS., DEALERS AND PART SUPPLIERS

Ahmedabad Radio & Electric Corporation, Panchkuva, opp. School, Ahmedabad.  
Amin Gramophone Mart, Near Bridge, Gandhi Road, Ahmedabad.  
Arun Radio Electric Co., Near Dhana Suthar's Pole, Relief Road, Ahmedabad.  
Atlas Radio & Electronic Industries, Glnwalla Solicitor's Compound, Khanpur, Ahmedabad 1.  
Bharat R. Electric Co., Near Arun Society, Ellis Bridge, Ahmedabad.  
**BOMBAY GARAGE (AHMEDABAD) LTD., Shahibag Road, Ahmedabad 4; Grams: "PARKCHIN", Phones: 24615, 24616 & 24213.**  
Cine Radio Laboratory, Near Cinema, Panchkuva, Ahmedabad.  
Dalal & Co., opp. School, Panchkuva, Ahmedabad.  
Dave Radio Corporation, Near Town Hall, Ellis Bridge, Ahmedabad.  
Deepak Radio Electric Co., Panchkuva, Ahmedabad.



Draeco Electronic Corporation, Nisha Pole Corner, Relief Road, Ahmedabad.  
 Eastern Radio Service, Panchkuva, Ahmedabad.  
 Emergency Radio House, Near Model Talkies, Gandhi Road, Ahmedabad.  
 Erosa Sound, opp. Cinema-De-France, Gandhi Road, Ahmedabad.  
 Fadia Radio Crafts, opp. School, Panchkuva, Ahmedabad.  
 Gandhi & Sons, Pankore Naka, Ahmedabad.  
 Geeta Radio Corporation, Near Pada Pole, Gandhi Road, Ahmedabad.  
 Golden Radio Service, opp. Kothari Pole, Gandhi Road, Ahmedabad.  
 Gupta Radio Service, opp. Noyri Mills, Rajpur, Ahmedabad.  
 Hillmens Stores, Near Pritamnagar Dhal, Ellis Bridge, Ahmedabad.  
 Hiralal B. Trivedi & Co., Near Bridge, Gandhi Road, Ahmedabad.  
 H. V. Kumar & Co., Opp. Doshiwada Street, Kalupur, Ahmedabad.  
 Imperial Radio House, opp. School, Panchkuva, Ahmedabad.  
 International Electric Equipment Company, opp. Police Station, Reid Road, Ahmedabad.  
 Jagdish & Co., opp. Khadia Post Office, Ahmedabad.  
 Janata Radio Co., Near Grand Hotel, Khanpur, Ahmedabad.  
 Jayant Radio Corporation, Bhadra, Ahmedabad.  
 Jayshree Trading Co., Prajapati Bldg., Khadia Char Rasta, Ahmedabad.

### REFRIGERATORS (DOMESTIC)

**BOMBAY GARAGE (AHMEDABAD) LTD.**, Shahibag Road, Ahmedabad 4; Grams: "PARKCHIN"; Phones: 24615, 24616 & 24213.

### RESINS FOR TEXTILE FINISHING

**VEGA DYESTUFF CORPORATION**, Nagri Bldg., Astodia Road, Ahmedabad-1; Phone: 52960, Grams: VEGADYES; Stockists of Dyes, Chemicals & Resins for textile and Allied Industries.

### ROOF WATERPROOFING

**GLADSTONE LYALL & CO. LTD.**—Agency Office: Textile & General Engineering Stores, Prajapati Laladas Bldg., Khadia, Char Rasta, Ahmedabad. Bombay Manager: Cmdr. L. N. DeFHOITS. Head Office: 4, Fairlie Place, Calcutta.

### ROOFING MATERIALS

**TECHNICAL ENGINEERING & CHEMICAL PRODUCTS CO.**, Anand Nagar, Ellis Bridge, Ahmedabad; Branch at 42, Veer Nariman Road, Bombay 1. Manufacturers of Structural Waterproofing and Maintenance Products for Roofs, Walls, Floors, etc.

### ROPERIES

Bharat Rope & Lace Mfg. Co., Kapasia Bazar, Ahmedabad.  
 Frion & Co., Reid Road, Ahmedabad 2.  
 Nima Trading Co., Cross Lane, Ahmedabad.

### RUBBER GOODS MANUFACTURERS

Ahmedabad Hardware Stores, Relief Road, Ahmedabad.  
 Bharat Rubber Industries, Kankaria Road, Ahmedabad 1.  
 Dunlop Rubber Co. (India) Ltd., Mirzapur Road, Ahmedabad.  
 Firestone Tyre & Rubber Co. of India Ltd., Near Bagicha Mills, outside Sarangpur, Ahmedabad.  
 Free India Tyre Retreading Co., Merit House, Relief Road, Ahmedabad 1.  
 Frion & Co., Reid Road, Ahmedabad.  
 Goodyear Tyre & Rubber Co. of India P. Ltd., 19/20, Bharat Khand Mills Compound, Ahmedabad.  
 Gujarat Rubber Works Ltd., Station Road, Ahmedabad.  
 H. Chokshi & Company, Kapasia Bazar, Ahmedabad.  
 India Tyre & Rubber Co. (India) Ltd., "Patdi House", Ahmedabad.  
 Jaya Bharat Rubber Industries, Ramnagar, Sabarmati, Ahmedabad 5.

### MSM UNIVERSAL TYRE & RUBBER CO. (GUJARAT) LTD.,

Manufacturers & Exporters of Universal Bicycle Tyres & Tubes and Industrial & Domestic Rubber Goods.

**Bombay Mercantile Co-op.**, Bank Bldg., Gandhi Road, Ahmedabad 1.

Grams: "UNIVERSAL" Telex No. 012-224-Universal A.M.

Rubber Products Ltd., Dudeshwar Road, Bhadra, Ahmedabad.

### SANITARYWARE MFRS. & MERCHANTS

Ahmedabad Ceramic Industry, 710, Anli Road, Ahmedabad 2.  
 Ahmedabad Sanitary Stores, Khadia Char Rasta, Ahmedabad.  
 Ahmedabad Stone Supplying Co., Khadia Char Rasta, Ahmedabad.  
 Ambica Trading Corporation, Pankore Naka, Ahmedabad.  
 Ashwin & Co., Dariapur, Ahmedabad.  
 Bachubhai Chokshi & Co., 14, Ellis Bridge, Ahmedabad 6.  
 Bharat Sanitary Stores, Relief Road, Kadia Kui, Ahmedabad.  
 Baldevdas Chhaganlal, Astodia Chakla, Ahmedabad.  
 Chandulal & Co., Opp. Panchkuva Cinema, Ahmedabad.  
 Chimanlal Chhaganlal, Raipur, Ahmedabad.  
 Fadia Bros., 1099, Pankore Naka, Ahmedabad.  
 Gujarat Tube & Sanitary Stores, Khadia, Char Rasta, Ahmedabad.  
 H. Khericha & Co., Opp. Jumma Masjid, Ahmedabad.  
 Harilal Atmaram, Lokhand Bazar, Ahmedabad.  
 Hatim Brothers, Pankore Naka, Ahmedabad.  
 Hind Hardware & Paint Mart, Sarangpur Chakla, Ahmedabad.  
 Jayantilal & Co., Opp. Panchkuva Cinema, Ahmedabad.  
 Jayantilal Dayabhai, Saraspur Vasan Street, Ahmedabad.  
 Kantilal & Co., Pankore Naka, Ahmedabad.  
 L. G. Amin & Co., Relief Road, Kadia Kui, Ahmedabad.  
 Lachhawani & Co., Kapasia Bazar, Ahmedabad.  
 Madhavilal & Co., Pankore Naka, Ahmedabad.  
 Natvarlal Baldevdas, Dariapur, Ahmedabad.  
 Occhavilal Gordhandas Shah, Khadia Char Rasta, Ahmedabad.  
 Oghadlal Lalubhai Shah, Khadia Char Rasta, Ahmedabad.  
 Ramanlal Motilal Shah, Khadia Char Rasta, Ahmedabad.  
 R. C. Thakkar & Co., Dariapur, Ahmedabad.  
 Rupesh Trading Co., Prajapati Bldg., Khadia Char Rasta, Ahmedabad.  
 Sanitary Hardware Stores, Kapasia Bazar, Ahmedabad.  
 Shah Sanitary Stores, Kadia Char Rasta, Ahmedabad.  
 Shantilal Vadilal, Astodia Chakla, Ahmedabad.  
 Sumsh Trading Co., Pankore Naka, Ahmedabad.  
 Talib & Co., Pankore Naka, Ahmedabad.  
 Vamanbhai & Co., Khadia Char Rasta, Ahmedabad.

### SEWING MACHINES

Bombay Sewing Machine Co., Near Padshah Pole, Relief Road, Ahmedabad 1.  
 Hind Sewing Machine Works, Opp. Vijaya Mills, Naroda Road, Ahmedabad 2.  
 Singer Sewing Machine Co., Relief Road, Ahmedabad 1.

### SILK FACTORIES AND MILLS

The Crown Silk & Rayon Mill, Madhowlal Ranchhodlal Colony, Railwayapura, Ahmedabad 2.  
 The Diamond Silk & Rayon Mill, Madhowlal Ranchhodlal Colony, Railwayapura, Ahmedabad 2.  
 Patel Brothers Syndicate, opp. English Cinema, Panchkuva, Ahmedabad.  
 Vijay Weaving Works (Vijay Fabrics), 676/12, Railwayapura, Ahmedabad.

### SPORTS GOODS

Fortune & Co., Opp. Shaker Kotda Police Chowky, Gandhi Road, Ahmedabad.  
 Macwan Sports Co., Near Electricity House, Lal Darwaja, Ahmedabad.  
 New Gujarat Sports Co., Station Road, Ahmedabad.  
 Orient Sports Co., Near Vadilal Hospital, Ellis Bridge, Ahmedabad.  
 Vakil & Co., Three Gates, Ahmedabad.

### STATIONERY & OFFICE EQUIPMENT MFRS. & SUPPLIERS

Bombay Garage (Ahmedabad) Ltd., Shahibag, Ahmedabad.  
 C. Mehta & Co., Opp. Gandhi Road, Post Office, Ahmedabad.  
 C. M. Brothers, Near Fuvara, Ahmedabad.  
 C. S. Brothers, Dhal's Pol, Astodia, Ahmedabad.  
 Desai & Co., Gandhi Road, Ahmedabad.  
 General Book Depot, Below Gandhi Road Bridge, Ahmedabad.  
 Jallian Trading Co., Fuvara, Ahmedabad.  
 Jehangir Brothers, Oriental Bldgs., Relief Road, Ahmedabad.  
 Kant Desai & Co., Near Khadia Char Rasta, Ahmedabad.  
 Manubhai Lalbhai & Co., 3122, Gandhi Road, Ahmedabad.  
 Mody Brothers, Opp. Gujarat Hotel, Gandhi Road, Ahmedabad.  
 Mehta Brothers, Three Gates, Ahmedabad.  
 Navyug Book Depot, Gandhi Road, Balahanuman, Ahmedabad.  
 N. Dalinchand & Co., Gandhi Road, Ahmedabad.  
 Office Supplies Emporium, 401-1, Khadia, Ahmedabad.  
 Parekh & Co., Gandhi Road, Ahmedabad.  
 Parikh & Parikh, Gandhi Road, Ahmedabad.  
 Ravindra & Co., 3087, Gandhi Road, Ahmedabad.  
 Remington Rand Inc., Lal Darwaja Road, Ahmedabad.  
 R. Mehta & Co., Under Fernandez Bridge, Ahmedabad.  
 S. Sutarla & Co., Reid Road, Ahmedabad.



**STEVEDORES & DUBASHES**

OTA INDIA, BBZ-N-50, Clearing, Shipping and Stevedoring Agents; Central Office : 159, Colaba Road, Bombay 5; Grams : "CENOTA," Phone : 212602; Branches : Bombay (Phone : 256592), Calcutta (Phone : 236781), Kandla (Phone : 2145, Gandhidham) & New Delhi (Phone : 43799).

**STRUCTURAL WATERPROOFING**

GLADSTONE LYALL & CO. LTD.—Agency Office : Textile & General Engineering Stores, Prajapati Laladas Bldg., Khadia, Char Rasta, Ahmedabad. Bombay Manager: Cmdr. L. N. Deefuolts. Head Office : 4, Fairlie Place, Calcutta.

TECHNICAL ENGINEERING & CHEMICAL PRODUCTS CO., Anand Nagar, Ellis Bridge, Ahmedabad; Branch at 42, Veer Nariman Road, Bombay 1. Manufacturers of Structural Waterproofing & Maintenance Products for Roofs, Walls, Floors, etc.

**SURGICAL INSTRUMENTS**

Ahmedabad Surgical Co., Opp. Juma Masjid, Gandhi Road, Ahmedabad.

Jay Hind Surgical Agency, Dhalgarwad, Ahmedabad.

Patel Surgical & Medical Store, 665, Girdhar Chambers, Opp. Model Talkies, Ahmedabad.

Sudhir Labo, Surgical Depot, Opp. Bala Hanuman, Gandhi Road, Ahmedabad.

**TANK MANUFACTURERS**

TEXTILE MACHINERY MFG., CO., Engineers & Merchants, Near Kamdar Maidan, Gomtipur Road, Ahmedabad 21; Phone: 52061. Grams : "TRUCKMAN."

**TEXTILE AUXILIARIES MFRS. AND DEALERS**

C. DOCTOR & CO. PRIVATE LTD.—(Estd. 1915), Bank of Baroda Bldg., Gandhi Road, Ahmedabad 1; Phone : 51238; Grams: "DOCTORCO"; Industrial Air-conditioning and Textile Engineers.

Chemical Textillaties Reid Road, Ahmedabad.

Chemical Textile, Industries, Tagra Mills Compound, Kankaria Road, Ahmedabad.

Graduate Picker Works, 91, Dabgarwad, Ahmedabad 1.

PICKERS LIMITED, Ellis Bridge, Ahmedabad 6; well reputed for superb quality of all kinds of Pickers. Phones: Office: 7205, Works: 2755; Grams: "COWSIE".

**TEXTILE MACHINERY AND SPARE PARTS MANUFACTURERS AND DEALERS**

A. B. Brothers, 129, Gheekanta Road, Ahmedabad.

A. Bhudharbhai Kishor & Sons, Gheekanta Road, Ahmedabad.

Ahmedabad Iron & Brass Factory, Bharatkhand Cotton Mills Compound, Asarwa Road, Ahmedabad 11.

Ahmedabad Victoria Iron Works Co., Ltd., Doodhesar Road, Ahmedabad 1.

Altex Ltd., Ramolia Building, Relief Road, Ahmedabad.

Alliance Textile Agency, Near R. C. High School, Gheekanta Road, Ahmedabad 1.

Ashok Textile Industries, Road 3, East Potalla Lane, Saraspur, Ahmedabad.

Atmaram Mohanlal Panchal, Rantiwadi, Mirzapur, Ahmedabad.

BHARAT TEXTILE TRADERS, Dariapur, 713, Lunsawada, Opp. Nariawad, Ahmedabad 1; Manufacturers & Stockists of latest Winding Machinery parts suppliers to all Indian Mills; Phone : 20693; Grams : "LEESONIA."

Bracewell, J., Ltd., Haribhai Market, Ahmedabad.

Brady & Co., Ltd., W. R., Railwaypura Post, Reid Road, Ahmedabad.

Card Clothing & Belting Ltd., Kapasia Bazar, Ahmedabad.

C. Doctor & Co., Khokra Mehmedabad, Maninagar, Ahmedabad.

Chemico Textile Industries, Tagara Mills Compound, Kankaria Road, Ahmedabad.

DASHRATHLAL CHIMANLAL & BROS., 647/23, Motilal Mansion, Kapasia Bazar, Ahmedabad 2; Manufacturers of Textile Auxiliaries and Recoppering of Copper Printing Rolls.

English Card Clothing Co. Ltd., Maninagar, Ahmedabad.

Frison & Co., Reid Road, Ahmedabad 2.

Gannon Dunkerley & Co., Ltd., Railwaypura Post, Ahmedabad.

GARLICK & CO. PRIVATE LTD., Engineers and Iron Founders, Industrial Equipment Manufacturers & Machine Tool Dealers. Haines Road, Jacob Circle, Bombay 11. Estd. 1878 and Inc. 1949. Telephone : 375141 (4 lines). Also at Maskati Market, Kapasia Bazar, Ahmedabad; 42/1, Silver Jubilee Park Road, Bangalore 2; 6/365, Trichy Road, Coimbatore 1; 5, Green Gates, Saifabad, Hyderabad (A.P.); 38/3, Mount Road, Madras 6; G-4, Nizamuddin West, New Delhi 13.

Gokaldas Motilal, Vora Bldg., K. Bazar, Ahmedabad 2.

Indequip Engineering Ltd., Reid Road, Ahmedabad 2.

Indian Textile Engineers Ltd., 679/18, Station Road, Ahmedabad.

India Metal Works, 1758/1-2, Mirzapur Road, Ahmedabad.

Indo Swiss Textile Machinery Mfg. Co., C/o Ideal Motors Ltd., Lal Darwaja, Ahmedabad.

Industrial Spare-Parts Co., Relief Road, Kadia Kuin, Ahmedabad.

Jagdish Iron & Brass Factory, 1175, Pankore Naka, Ahmedabad.

Jaymes Engineering Co., Relief Road, Ahmedabad.

Mistry Ambalal Jetharam Iron & Brass Factory, Gheekanta Road, Ahmedabad.

Metal Moulders P. Ltd., Indheswar Road, Ahmedabad.

M. Kothari & Co., Kapasia Bazar, Ahmedabad 2.

National Machinery Mfg. Works, Gheekanta Road, 652-10, Panchal Blocks, Ahmedabad 1.

Nima Trading Co. Cross Lane, Ahmedabad.

Ormerods (India) Ltd., Kapasia Bazar, Ahmedabad.

Panchal Babulal & Brothers, Kashiniwas, Rupapari, Dariapur, Ahmedabad.

PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranchhodlal & Co., Naroda Road, Ahmedabad 2. Phone: 26171; Grams: "MOULDING".

**POONJABHAI VANMALI & SONS**

(Estd.: 1916)

Gheekanta Road, Ahmedabad.

Manufacturers of Textile Machinery, Spare Parts and Gears of all types.

Phone : 22565.

Grams : "TRUFIT."

Prakash Mill Stores Trading Co., Kapasia Bazar, Ahmedabad.

Sapt Textile Products (India) Ltd., Opp. Bombay Garage, Shahibang, Ahmedabad.

Shivlal Virchand Contractor, Near Potalla Talav, Saraspur, Ahmedabad.

Smith Engineering Works, Rupapari Pol, Dariapur, Ahmedabad.

Shri Bansidhar P. Ltd., Kankaria Road, Ahmedabad 1.

T. Maneklal Mfg. Co., Ltd., Reid Road, Ahmedabad.

Tex Maco, Chotley Lal Building, Kadia Kul, Relief Road, Ahmedabad.

Textile Fabrics Corporation, Devkinandan Cloth Market, Crosslane, Ahmedabad.

Textile Works Ltd., Hawa Bldg., Kapasia Bazar, Ahmedabad 2.

United Textile Industries, Haribhai Achratlal Market, Ahmedabad.

Voltas Ltd., Mirzapur, Ahmedabad.

Williamsons (India) Ltd., 670/22, Motilal Hirabhai Market, Railway-pura, Ahmedabad.

Zach Rajguru Mfg. Co., Bechardas Lashkarl Bldg., Victoria Garden Road, Ahmedabad.

**TEXTILE WOODEN ARTICLES**

RAJESH WOOD & ENGINEERING WORKS, THE, Naroda Road, opp. Kalyan Mills, Near Electric grid Power Station, Ahmedabad-2; Manufacturers of Textile Wooden & Metal requisites; Specialists: Auto-Loom Pirns, Bobbins of all types, Dobby Lattices & Pegs; Bombay Representatives: Prakash Trading Co., 69, Mody Street, Bombay-1; Phone : 264639, 256054 & 573475.

**THERMAL INSULATION ENGINEERS**

GLADSTONE LYALL & CO., LTD., Agency Office : Textile and General Engineering Stores, Prajapati Laladas Bldg., Khadia, Char Rasta, Ahmedabad. Bombay Manager: Cmdr. L. N. Deefuolts. Head Office : 4, Fairlie Place, Calcutta.



**TRANSPORT COMPANIES**

Ahmedabad Carriers Ltd., Near Purushotham Mills, Kagedapith, Ahmedabad.  
 Bagdi Transport Co., Zakaria Pol, Relief Road, Ahmedabad.  
 Bharat Service Ltd., Patel Society, Khanpur, Ahmedabad.  
 Gujarat Roadway Carriers, Reid Road, Ahmedabad 2.  
 Gujarat Transport Service, Taj Bldg., Relief Road, Ahmedabad 1.  
 Gujarat Transport Services Ltd., Raikhad, Ahmedabad.  
 Kirti Transport Co., Outside Panchkuva Gate, Ahmedabad.  
 Mahagujarat Transport Co., Near Zakaria Masjid, Tilak Road, Ahmedabad.  
 Mehta Transport Co., 329, Lakhia Street, Khadia, Ahmedabad 1.  
 Morris Transport Service Ltd., Biradar Compound, Lal Darwaja, Ahmedabad.  
 Munshi & Co., Near Zakaria Masjid, Salapore Road, Ahmedabad.  
 New Era Construction & Transport Co. Ltd., Madhavbaug, Sarangpur, Ahmedabad.  
 Parikh Transport Co., Kalupur, Danapith Khancha, Ahmedabad.  
 Patel Automobiles, Near G.P.O., Salapore Road, Ahmedabad.  
 Rajkamal Transport Co., Relief Road, Ahmedabad.  
 Rajnagar Transport Co. Ltd., Near Kagedapith Police Station, Ahmedabad 1.  
 Satnam Transport Service, Near Kalupur Gate, Ahmedabad.  
 Savani Transport P. Ltd., 507, Panchkuva, Darwaja Bahar, Ahmedabad 2.  
 Shah Transport Service Co., Sheth's Pole, Ratan Pole, Ahmedabad.  
 Shree Laxmi Transport Service, Near Ashok Nivas, Relief Road, Ahmedabad.  
 Uttam Transport Co., Relief Road, Ahmedabad.

**TYRE & TUBES MFRS.****MSM. UNIVERSAL TYRE & RUBBER CO. (GUJARAT) LTD.,**

Manufacturers of Universal Bicycle Tyres & Tubes and Industrial & Domestic Rubber Goods.

Bombay Mercantile Co-op. Bank Bldg., Gandhi Road, Ahmedabad 1.

Grams: "UNIVERSAL" Telex No. 012-224 Universal A.M.

**VACUUM VESSELS AND PUMPS MFRS.**

**PIONEER ENGINEERING WORKS, THE, Prop.: C. C. Ranchodlal & Co., Naroda Road, Ahmedabad 2. Phone: 26171; Grams: "MOULDING".**

**WATERPROOFING PRODUCTS MFRS. & DEALERS**

**GLADSTONE LYALL & CO., LTD., Agency Office: Textile & General Engineering Stores, Prajapati Laladas Bldg., Khadia, Char Rasta, Ahmedabad. Bombay Manager, Cmdr. J. B. Simmons; Head Office: 4, Fairlie Place, Calcutta.**

**AMRELI DISTRICT****BALWANT SILK WEAVING WORKS**

Manufacturers and Exporters of Art Silk Linen, Cotton Shirtings and all kinds of Textiles.  
 Tarwadi Road, Amreli (Saurashtra).

Grams: "BALWANT". Phone: { Factory: 155.  
 Office: 144.

**MOHANLAL KHIMJIBHAI & SONS**

Oil Engines, Electric Motors, Radio, Steel Furnitures, Manure Manufacturers & General Merchants, Amreli (Gujarat State).

**SHREE LAXMI SILK WEAVING FACTORY**

Manufacturers and Exporters of Art Silk Linen, Cotton Shirtings and all kinds of textiles made to order for buyers. Mehta Wadi, Jaysinghpura, Amreli. "SHREE LAXMIFEB" Trade Mark No. 195582.

Grams: "LAXMISILK." Phone: 36.  
 Sales Office (Bombay):—346, Kalbadevi Road, Bombay 2 (BR.). Phone: 39717.

**TRADES & PROFESSIONS****ACME INDUSTRIES**

Manufacturers of: Elastic Cords, Tapes, Healds, Cotton, Art Silk & Nylon Tapes, Twines Cordages etc.

Address: Old Rangshala Compound, Bahucharaji Road, Baroda.

Prop.:

**ACME MFG. AND AGENCIES (INDIA)**

P. O. Box No. 1732, BOMBAY-1.

Phone: 256311.

Adyashakti Engineering Works, M. Gandhi Road, Baroda.  
 Agro & Electro Rythum Corporation, M. G. Road, Baroda.  
 Alms Oxygen Pvt. Ltd., Padra Road, Baroda 5.  
 Alembic Chemical Works Co. Ltd., Baroda 3.  
 Alembic Glass Industries Ltd., Baroda 3.  
 Allied Electrical Engineering Co., Madan Zampa, Baroda.  
 Allied Electrical Industries, Near Bharat Metal Industries, Juni Rangshala, Bhutdi Zampa, Baroda.  
 Allied Pharmaceutical Laboratories, Jombubet, Dandia Bazar, Baroda.  
 Aikha Steel Industrial Corporation, Bank Road, Baroda.  
 Ambica Iron Works, Nagarwada, Hakim Sahib's Wada, Baroda 1.

Ambica Mills No. 3, Padra Road, Baroda.  
 Anand Niwas Ltd., Opp. Jubilee Baug, Baroda.  
 Apollo Pharmaceutical Works, Pratapnagar, Baroda.  
 Aquapura Corporation, C/o Nutan Photo Studio, Opp. Ahmedabad Pole, Baroda.  
 A. Sheth & Co., Lokmanya Tilak Road, Baroda.  
 Ashok Chemicals Ltd., Goyal Gate, Baroda.  
 Ashok Engineering Works, 2/6, Industrial Estate, Baroda 3.  
 Ashwin Industries Ltd., Office: opp. Jubilee Baug, Baroda.  
 Aelan Engineering Co., Pratapnagar, Baroda 4.  
 Atul Tiles & Marbles Pvt. Ltd., 3/16, Industrial Estate, Baroda 2.  
 Baroda Automobiles, Opp. Jubilee Baug, Baroda.  
 Baroda Box & Carton Mfg. Co., Behind Railway Station, Baroda.  
 Baroda Brush Co., Behind Rly. Station Distillery Compound, Baroda 3.  
 Baroda Commercial Corporation, Bank Building, Mandvi, Baroda.  
 Baroda Crystal Glass Works Ltd., P.O. Box 87, Pratapnagar, Baroda.  
 Baroda Distillery Co., Behind Railway Station, Distillery Compound, Baroda 3.  
 Baroda Engineering and Moulding Works, Baranpura Naka, Pratapnagar, Baroda 4.  
 Baroda Hotel and Circus House, Race Course Road, Baroda.  
 Baroda Iron and Steel Industries, Pratapnagar Road, Baroda 4.



Baroda Industrial Mills Co. Ltd., Bhutdi Zampa, Baroda.  
 Baroda Oil & Mill Store Supplying Co., opp. Suryanarayan Baug,  
 Raopura, Baroda.  
 Baroda Optical Industries, Hathikhana Road, Baroda.  
 Baroda Packagings, 3-8, Industrial Estate, Baroda 3.

## CAST IRON PIPES

**BARODA ROLLING MILLS PRIVATE LTD.,**

Chhani Road, Baroda-2.

Manufacturers of C.I.S/S and Flanged Pipes & Fittings and  
 heavy duty C. I. Sluice Valves and Concrete Mixers.

Baroda Safe Co., Gandhi Gate, Baroda.  
 Baroda Spg. & Wvg. Co. Ltd., Post Box 57, Baroda.  
 Bharat Automobiles, Behind Nyaya Mandir, Baroda.

**BHARAT CASEMENTS PRIVATE LTD.,**

P.O. Box 89, Baroda

Manufacturers of top quality BANCO SPRING BEDS ; We  
 manufacture Double Deckers and Baby Cots too.

Bharat Chemicals, Pratapnagar, Baroda.  
 Bharat Machinery Corporation, Kothi Pole, Raopura, Baroda.  
 Bharat Metal Industries, Pratapnagar Road, Baroda.  
 Bharat Pickers and Buffers Mfg. Co., Bank Road, Baroda.  
 Bharat U Staple Mfg. Works, Meera Niwas, Sayajiganj, Baroda.  
 Bicycle Manufacturing Industries Pvt. Ltd., Leedhar's House, Hath  
 Pole, Baroda.  
 Bipin Fruit Products, A-2/1, Industrial Estate, Baroda 3.  
 Blitz Products, Burhanpur, Baroda.  
 British Radio Corporation P. Ltd., Palace Road, Baroda.  
 Cambay Saw Mill Textile Accessories Co., Madan Zampa, Baroda.  
 Central Chemical Industries, Pratapnagar, Baroda 4.  
 Chandra Engineering and Steel Industries, Padi Pole, Mandvi,  
 Baroda.

**CHANDAN METAL PRODUCTS PRIVATE LIMITED**

Manufacturers of Steel Furniture & Equipment for  
 Offices, Homes, Hospitals, Canteens, Libraries etc.

Executive Office & Works : Gorwa Road,  
 Chemical Industries P.O., Baroda-3.

Chemicoat Ltd.—Lokmanya Tilak Road, Baroda 5.  
 Chemitex Industries, Bank Road, Baroda.  
 Chetan Industries.—Ramji Mandir Pole, Opp. Govt. Press, Baroda.  
 Chetan Press P. Ltd., Nava Bazar, Baroda.

**DYE-AZO PRIVATE LTD.,**

C-2/20, Industrial Estate,  
 Baroda-3.

Manufacturers of:  
 Direct & Light Fast Colours.

Chhimanlal Dalal & Sons, Padi Pole, Mandvi, Baroda.  
 Coronation Hotel, Sayajiganj, Baroda.  
 Desai Tin & Pencil Mfg. Co., 28, Alkapuri, Baroda.  
 Dhiraj Industries, Parikh Estate, Pratapnagar, Baroda 4.  
 Dinesh Mills Ltd., Padra, Baroda.  
 Electro Industries Ltd.—Industrial Area, Pratapnagar, Baroda 4.  
 Everest Industrial Corporation Private Ltd., Pratapnagar, Baroda 4.  
 Export Advertising Service, Sayajiganj, Baroda.  
 F. A. Chasmawala Optical Industries, Wadi, Opp. Masjid, Baroda.  
 G. R. Phadke & Co., Shivaji Road, Baroda.  
 Ganesh Foundry Works, Pratapnagar, Baroda 4.  
 Ganesh Machinery Traders, Laheripura, New Road, Baroda.

**GASKETS & OILSEALS PRIVATE LTD.,**

P.O. Box No. 89, Baroda.

Manufacturers of top grade Products that include BANCO-  
 ROYAL Gaskets and "BANCO"  
 Radiators.

General Electrical & Mechanical Corporation, Industrial Estate,  
 Baroda 3.  
 General Mechanical & Engineering Works, Haribhakti's Wadi,  
 Falzkhana Road, Baroda.  
 General Suppliers & Manufacturers, The, Post Box 50, Baroda.  
 G. N. Hakim & Sons, Raopura Tower, Baroda.  
 Good Luck Oil & Paint Co., Post Box 120, Baroda.  
 Graphite and Mineral Industries, Chhani Road Baroda.  
 Green Hotel, Race Course Road, Baroda.  
 Gujarat Automobiles, Jubilee Baug, Baroda.  
 Gujarat Rubber Works Ltd., Pratapnagar, Baroda 4.  
 Gujarat Safe Co., Gendi Gate, Baroda.  
 Gujarat Trading Co., Mogulwada, Baroda.  
 Gujarat Woollen Felt Mills, Ranoli (Dist. Baroda).  
 Halifax Engineering Co., Anandpura, Baroda.  
 Harihar Industries, Nagarwad, Baroda.  
 Hari Om Agricultural Tools Mfg. Co., Koyli, Baroda.  
 Havmor, Opp. Baroda College, Baroda.  
 Hindustan Electric Motor Co. Ltd., Industrial Area, Baroda 3.  
 Hindustan Ophthalmic Lens Manufacturers, Opp. Kothi Bus Stop,  
 Baroda.  
 Indian Export Trade Journal, Sayajiganj, Baroda.  
 Indian Hume Pipe Co. Ltd., Pratapnagar, Baroda.  
 Jasmann Machine Tool Corporation, Anandpura, Baroda.  
 Jawahar Hotel, Palace Road, Baroda.  
 Jaihind Optical Industries, Pratapnagar, Baroda 4.  
 Jay Hind Safe & Mechanical Works, Gendi Gate Road, Baroda.  
 Janata Optical Industries, Rajmahal Road, Baroda.  
 Jayendra Metal Industries Ltd., Sayajiganj, Baroda.  
 Jopcos Mfg. Co. Ltd., Sayajiganj, Baroda.  
 Joshi, Pandit & Co., Ltd., Sayajiganj, Baroda.  
 Kamala Soap Ltd., Sayajiganj, Baroda.  
 Krishna Niwas Hotel, Behind Nyayamandir, Baroda.  
 Laxmi Engineering & Mfg. Co., Bhutdi Zampa, Baroda.  
 Laxmi Optical Industries, Rang Mahal, Opp. Ramji Mandir, Baroda.  
 Laxmi Safe & Engineering Co., Sayajiganj, Baroda.  
 Laxmi Steel Industries, Opp. Baroda College, Sayajiganj, Baroda.  
 Laxmi Vijay Brass & Iron Works, Pratapnagar Road, Baroda 4.  
 Liberty Motors, Near Jubilee Baug, Baroda.  
 Liberty Optical Traders, Rajpura Street, Opp. Nazar Baug, Baroda.  
 M. Amin & Co., Distributors : Burshane Gas, Godrej Steel Products,  
 Fans, Air Conditioners, Refrigerators, Baroda.  
 Mahagujarat Engineering Industries, Mahavirswamy's Pole, Rao-  
 pura, Baroda.  
 Mahalaxmi Brass and Iron Foundry, Padi Pole, Mandvi, Baroda.  
 Mahalaxmi Iron & Engg. Works, Bahucharaji Road, Baroda.  
 Mahendrakumar & Co.—Laheripura New Road, Baroda.  
 M. C. Kothari, Booksellers, Publishers & Newspaper Agents (Times  
 of India), Raopura Road, Baroda.  
 Meghraj Machines, 2/9, Industrial Estate, Baroda 3.  
 Mercury Pharmaceuticals, 2/B & 2/14, Industrial Estate, Baroda 3.  
 Merit Oil & Trading Co., Ltd., Mehta Road, Baroda.  
 Mistry Engineering Works, Shankar Tekri, Kala Bhavan, Baroda.



M. J. Tiles Industries, C/o Manubhai & Co., Opp. Baroda College, Baroda.

Modern Engineering Co., Laheripura New Road, Baroda.

Narayan Chemical Industries, Ganpule Building, Raopura, Baroda.

## N. J. METAL SCREENS MANUFACTURERS PRIVATE LTD.

*Manufacturers of :*

**Industrial Perforated screens in  
STAINLESS STEEL, BRASS & COPPER,  
MILDSTEEL, ALUMINIUM ZINC P.V.C. etc.**

*Regd. Office :*

**Ram Niwas, Race Course Road, Baroda 5.**

**Phone : 4261, Grams : 'SCREENS'—Baroda-5.**

**Bombay address : 134, Meadows St., Bombay-1.**

**Phone : 255488**

## THE NEW GREAT INSURANCE COMPANY OF INDIA LTD.

**Registered Office : Bank Building, Mandvi, Baroda.**

**Chairman :—Shri Tulsidas Kilachand**

**General Manager :—Shri M. G. Mody**

**Business Transacted: Fire, Marine, Accident and  
Miscellaneous insurance.**

## NEW INDIA INDUSTRIES LTD.,

H.O. & Works : Jetalpur Road, Baroda ; Formost Manufacturers of 'INDIA' brand best Egyptian Cotton Healds, Steel Reeds, Brass Reeds, Striking Combs, Dobby Harness etc., CYCLE brand wire Healds, All Metal Reeds, Jute Combs, Jute Reeds ; SWAR brand Egyptian Cotton Yarn and Staple fibre yarn AGFA Photo Paper and AGFA brand Camera ; Bombay office : Industrial Assurance Bldg., 5th floor, Churchgate, Bombay-1 ; Phone : 243660, 243667.

**Naz Box Mfg. Co., Vorwad, Gendi Gate, Baroda.**

**New Gujrat Trading Co., Raopura, Baroda.**

**Olympic Chemical Industries Ltd., Nagarwada, Baroda.**

**Orient Chemical Co., Modikhana Road, Baroda.**

**Paramount Insurance Co., Ltd., Raopura, Baroda.**

**Parikh Transport Co., Behind Jubilee Baug, Baroda.**

**Patel Tacks Factory, Paramount Industrial Compound, Pratapnagar Road, Baroda.**

**People's Co-operative Industries Ltd., Madan Zampa, Baroda.**

## PEST CONTROL (INDIA) PRIVATE LTD.,

**Consulting Entomologists — Termite Control — Disinfestation  
— Fumigation Service**

**198, Sardar Nagar Society,  
Chhani Road, Baroda-2.**

**Head Office: Yusuf Bldg., Mahatma Gandhi Road, Bombay-1.  
(For further details please see Bombay Commercial Firms  
section.)**

**Pioneer Equipment Co. Pvt. Ltd., A 1-5/6, Industrial Estate,  
Baroda 3.**

**Poornima Industrial Works, Pratapnagar Road, Baroda 4.**

**Power Cables Pvt. Ltd., 40, Alkapuri, Baroda 5.**

**Prakash Food Industries, Behranpura, Baroda.**

## PROJECT ENGINEERS

**Phone : 8394**

**Grams : "SARAPROJECT"**

## SARABHAI ENGINEERING GROUP (KARAMCHAND PREMCHAND PRIVATE LTD.)

*Divisions:*

**Project Planning, Project Construction and  
Machinery Fabrication.**

**Wadi Wadi, Post Box No. 77,  
BARODA-5.**

*Offering:*

**Project Planning, Project Constructions &  
Machinery Fabrication Services, Independ-  
ently or a Complete range of Engineering  
Services from feasibility reports through  
completion and start up of the Plant on  
operational/non-operational turn-key basis,  
including controls of budgets and schedules  
to pharmaceuticals, chemicals, dyestuffs  
and other allied industries.**

**Progress Industries, Madan Zampa Road, Baroda.**

**Punjab Steel Rolling Mills, Baroda 2.**

**Quality Engineering Works, Behind Chokhandi Vegetable Market  
Pratapnagar Road, Baroda 4.**

## RAINBOW TEXTDYES CORPORATION

**Pratapnagar Road,  
Baroda-4.**

**Phone: 3036/3762. Grams: "RAINBOW".**

**Manufacturers of Flower Fresh, Fast & Stable "RAINBOW"  
Textile Dyes.**

**Sole Selling Agents: Rainbow Textdyes Pvt. Ltd., Baroda.**

**Ramanco Pvt. Ltd., Bajwada, Baroda.**

**Ravi Engineering Works, Nagarwada, Baroda.**

## ROYAL INDIA INDUSTRIES

**Manufacturers of Inks, Royal Writing Inks, Fountain Pen Ink,  
Rubber Stamp Pad Ink, Sealing Wax, Stencil Marking Ink i.e.  
Marking Ink on Cases and Bags etc., Magic Marker Pen, Magic  
Stencil Marking Brush Comp, Magic Felt Tips for Marker Pen,  
Stencil Brush Tips and Kalyan Cheque Perforating Machine.  
Mandvi Road, Zaverchand Laxmichand Street, Baroda.**

**Ruby General Insurance Co., Ltd., Diwall Bhuvan, Raopura,  
Baroda.**

**Sakti Files Co., Radhakrishna's Pole, Palace Road, Baroda.**

**Samrat Hotel, Near Railway Station, Baroda.**

**Sanitex Chemical Industries P. Ltd., Baroda 3.**

**Sarabhai Chemicals, Wadi Wadi, Baroda.**

**Sarabhai Merck Ltd., Post Box No. 80, Baroda 5.**

**Sarita Soap Works, Wadi Chokhandi, Baroda.**



Machinery for Chemical, Pharmaceutical, Textile and Glass Industries. Manufacturers :

### **SARABHAI MACHINERY**

(Karamchand Premchand Pr. Ltd.)

P.O. Box No. 72

Baroda

Phone: 8389

Grams: "SARAYANTRA"

Sayaji Iron and Engineering Co., Ltd., Chhani Road, Baroda.  
Sayaji Mills Ltd., Baroda 3.  
Shakti Engg. Works P. Ltd., New Khanderao Road, Baroda.  
Shakti Packing Industries, Laheripura New Road, Baroda.

### **SATYADEV CHEMICALS PVT. LTD.,**

P. O. Box 101, Pratapnagar Road,

BARODA.

Manufacturers of Fine Chemicals, Hydroquinons and its derivatives, Metal, Sodium Sulphate, Sodium Metasilphate, Sodium Acetate, Colour Film Processing Chemicals etc.

Shree Dinesh Tiles Factory, Alembic Road, Baroda 3.  
Shree Krishna Industries, Chowkhandi, Sahid Market, Pratapnagar Road, Baroda 4.  
Shree Ram Engineering & Mfg. Industries, Pratapnagar, Baroda 4.  
Shree Shakti P. Ltd., Bapu Sadan, Sayajiganj, Baroda.  
Shree Yamuna Mills Co. Ltd., Pratapnagar, Baroda 4.  
Shree Uma Transport Co., near Baroda Talkies, Baroda.

### **SHREYAS CHEMICALS**

Dandia Bazar,

Baroda-I.

Grams: "CHETAN." Phone: 4941.

Manufacturers of Commercial, Pure & A.R. Grade Acids and Fine Chemicals.

Shri Adyashakti Engineering Works, Mahatma Gandhi Road, Karolia-pole, Baroda.  
Shri Suryodaya Transport Co., Near Tarkeshwar, Baroda.  
Shroff Chemical Works, The, Raopura Tower, Baroda.  
Sigil India Service P. Ltd., New Laheripura Road, Baroda.  
S. I. Works Pvt. Ltd., Chhani Road, Baroda.  
Spunpipe & Construction Co. (Baroda) P. Ltd., Jamuna Bag, Behind Rly. Station, Baroda.

Radiator Manufacturers

### **STANDARD RADIATORS PVT. LTD.,**

Industrial Estate, Baroda-3.

Manufacturers of Radiators of British "Crusader Mark III" Plant in a factory equipped with Wind Tunnel Testing Facilities, used in Contractors Plants, Compressors, Automobile and Industrial Engines.

Star Chemical Works, Pratapnagar, Baroda.  
Star Industries, Dandia Bazar, Baroda.  
Sterling Surgical & Industrial Corporation, Keshav Bhuvan, Kothi Pole, Baroda.  
Suhrid Gelgy Ltd., P. Box No. 48, Wadi Wadi, Baroda.

**SWASTIK ENGINEERING & MANUFACTURING CO. PRIVATE LTD.,** Bahucharaji Road, Baroda; Structural Engineers and Contractors, Engineering Workshop & Foundry; Manufacturers of Textile Machineries, viz., Double Folding & Plaiting Machines, Single Folding Machines, Double Folding, Rolling and Plaiting Machines, Single & Double Rolling Machines, Cloth Stamping Machines, Selvedge Printing Device, Cloth Inspecting Machines; Building Construction machinery; 'Harihar' Tilting and Non-Tilting Drum Type concrete Mixers, other machineries: Flour Mills, Industrial and Domestic, Rotary Oil Mill, Rice Mills, Rice Hullers, Sugarcane Crushers, Building Materials; Municipal Drainage & Water Works accessories; Engineering and Machinery spare parts etc. Phone: 4101; Grams: "SEMCO"—Baroda.

Swastik Trading Co., Behind Jubilee Baug, Baroda.

Tarun Industrial Corporation, Pratapnagar Road, Baroda 3.

Tensile Steel Ltd., 60, Alkapuri, Baroda.

Textile Aniline & Chemical Co. P. Ltd., Pratapnagar Road, Baroda 4.

Textile Appliances & Instruments Co. P. Ltd., 81, Alkapuri, Baroda.

### **TEXTILE MACHINERY MFRS.**

Phone: 8389. Grams: "SARAYANTRA".

### **SARABHAI MACHINERY**

(Karamchand Premchand Pr. Ltd.)

Post Box No. 72, Baroda.

Manufacturers of Equipment for Textile Industry, e.g. Size Storage Vessels, Size Pressure Cooking Vessels, etc. Cloth Guiders—Mechanical and Electromagnetic (in Collaboration with Messrs. Erhardt & Leimer, West Germany).

United India Medical Stores, opp. Secretariat, Baroda.

Vajresh P. Ltd., Kantawalla Bldg., Limdapole, Baroda.

Vannit Industries, A-2/7, Industrial Estate, Baroda 3.

Vasant Engineering Ltd., Pratapnagar, Baroda 4.

Venus Textiles Corporation, Nagarwada, Baroda.

Vishnu Engineering Works, Behind Jubilee Gardens, Kumbarwada, Baroda.

Vishnu Industrial Works, Pratapnagar, Baroda 4.

Vishwakarma Engineering Works, Nagarwada, Baroda.

Vishwakarma Pen Co., Kharivav Road, Baroda.

### **VITHAL OIL MILLS**

(Estd.: 1922)

Chokhandi, Baroda

Manufacturers of Groundnut Oil, Castor Oil & Cakes.

Phone: 4570.

Grams: "FREEDOM"

### **VOLTAMP CORPORATION**

5/3, Industrial Estate,

Baroda-3.

Phone: 8227. Grams: "VOLTAMP."

Manufacturers of 'VOLTAMP' brand Transformers upto 1000 KVA 22 KV.

Western India Engineering Co., Padl Pole, Baroda.

Western India Motor Car Co., Salatwada, Baroda.

**ZAVERCHAND GAEKWAD PVT. LTD.,** Post Box, No. 95, Padra Road, Baroda; Phone: 4328 and 5477, Grams: "FLEXICAN"; Manufacturers of world famous Interlock—Flexible Hoses in collaboration with Messrs. Compoflex Co. Ltd., England suitable for conveying Liquids, Gases and steam under pressure at temperature up to 400°C; Manufacturers of Pliable Tubing for electrical cable armouring and also used for conveying liquids and gases at low pressures in Collaboration with Aeroquip Corporation, Jackson, U.S.A.; we also manufacture Squirelock Steel Flexible Tubing for Electrical Cable armouring.



## SURAT DISTRICT

### BARODA RAYON CORPORATION LTD.

P.O. Baroda Rayon, Udhna  
(Surat)

Manufacturers of Rayon Yarn, Sulphuric Acid,  
Anhydrous Sodium Sulphate and Carbon-di-  
Sulphide.

### METAL PERFORATORS PRIVATE LTD.

All Sheet Metals Perforated on latest German  
Plant, Large Job orders Solicited  
Udyognagar, Udhna.

Phone : 310.

Dist. Surat.

*Bombay Office:* Annes Chambers, Carnac Road,  
Bombay I.

Phone : 263001.



### THE SURAT ELECTRICITY COMPANY, LTD.

Agents: Messrs. Killick Industries Ltd., Bombay.  
Office & Power House: Tilak Maidan, P.O. Box 20,  
Surat. Tel. No. 3434.  
B. M. Desai, B.Sc., B.Sc. (Eng.), Resident Engineer.  
J. T. Modi, B.Sc. (Eng.), Sr. M.I.E.E.E., M.I.E.,  
A.M.I.E.E., Deputy Resident Engineer.  
M. C. Desai, B.E., M.I.E.E.E., Mem. A.S.M.E.,  
A.M.I.E.E., Assistant Resident Engineer.  
W. Jacob, Station Superintendent.  
R. P. Kinariwala, D.M.E., D.E.E., Commercial  
Engineer.  
Central Administration Department: 5, Graharn Road,  
4th floor, Ballard Estate, P.O. Box No. 109, Bombay I.



## MADRAS

Aarnad Commercial Co. Ltd., 330, Thambu  
Chetty Street, Madras 1.

A. Boake Roberts & Co. (India) P. Ltd.—  
St. Thomas Mount, Madras 16.

A. Praboo & Co.—No. 3, Mailai Ranga-  
natha Mudaliar Street, T. Nagar, Madras  
17.

Abdul Rahim & Bros.—13, Evening Bazar  
Road, Madras 3.

Abdullah Fidaali & Co., 16, Periana  
Mestri St., Madras 1.

A. C. E. C. (India) Ltd.—19/21, Muker  
Nallamuthu St., Madras 1.

Addison & Co., P. Ltd.—158, Mount Road,  
Madras 2.

Agents & Distributors P. Ltd., 120,  
Armenian Street, Madras.

Ahamed & Co., A.M.—255, Linghi Chetty  
St., Madras 1.

Ahmedally Hassanally & Co., 4-153D,  
Broadway, Madras 1.

Airlines Hoteliers & Caterers (M) P. Ltd.—  
177/79, Mount Road, Madras 2.

A. J. & Sons P. Ltd., 16, Audiappa Naik St.,  
Madras 1.

Ajanta Art Calendar Mfg. Co., 17, Godown  
Street, Madras 1.

Ajitbhai Jayantilal Somabhai Patel & Co.—  
5, Godown St., Madras 1.

Akbarali Haiderali & Co., 27, Linghi  
Chetty St., Madras 1.

Albert David Ltd.—14, Sembudoss Street,  
Madras 1.

Alex Miller (Madras) P. Ltd.—128, Nyniappa  
Naick St., Madras 3.

Alfred Herbert India P. Ltd., 1st Line  
Beach, Madras.

Allied Industrial Distributors Ltd.—7, 2nd  
Line Beach, Madras 1.

All India Clearing & Trading Co.—310/311,  
Linghi Chetty St., Madras 1.

A. M. HASSANALLY & CO.—Hardware,  
Machinery, Tools & Pipes fittings. Post  
Box No. 2037, 34, Linghi Chetty Street,  
Madras 1. (Estd. : 1910), Phone : 21752,  
Grams : "BRILLIANT".

Amalgamations Private Ltd.—202, Mount  
Road, Madras 2.

Amarchand Sobachand.—95, Nyniappa  
Naick St., Madras 3.

Ambadi Enterprises P. Ltd., 52/53, Jehangir  
St., Madras 1.

Ambalavana Chettiar & Co., P. Ltd.—P. S.  
N. S.—14, Mint Street, Madras 3.

Amco Engg. Corp.—C10 & 11, Industrial  
Estate, Guindy, Madras 32.

Aminchand Nagindas & Co.—198, Netaji  
Subhas Road, Madras 1.

Aminchand Payarelal—27, Sembudoss  
Street, Madras 1.

AMRUTANJAN LTD.—14/15, Luz Church  
Road, Madras 4. Manufacturers of Amru-  
tanjan Pain Balm, Anoleum, Dermal  
Ointment, Inhaler and Gripe Mixture.

Andhra Cement Co., Ltd.—337, Thambu  
Chetty St., Madras 1.

Armstrong Smith P. Ltd., Post Box 1618,  
Madras.

Asbestos Cement P. Ltd., 202, Mount Road,  
Madras 2.

Asbestos Magnesia & Friction Materials  
Ltd.—202, Mount Road, Madras 2.

Ashland Oil Co. (India)—1/6, Second Line,  
Beach, Madras 1.

Ashok Leyland Ltd.—Bank of Mysore  
Bldgs., Madras 1.

Asiatic Commercial Corporation, 48, Basullah  
Road, Madras 17.

Associated Agencies.—271, Angappa Naick  
Street, Madras 1.

Associated Distributors, 271, Angappa  
Naick Street, Madras 1.

Auto & Diesel Co. Ltd.—1/155, Mount Road,  
Madras 2.

Avery Co., Ltd.—16/17, Armenian Street,  
Madras 1.

A.V.M. Ltd., 481, Royapettah High Road,  
Mylapore, Madras 4.

Ayurvedashramam Ltd.—79, G. N. Chetty  
Road, T. Nagar, Madras 17.

B. CHOWDHURY & CO., Engineers and  
Manufacturers' Representatives; 11-A/35,  
Mount Road, Madras 2.

(For details please see Commercial Firms  
section—Bombay).

Badrudin, A. M. & Co., 23, Linghi Chetty  
St., Madras 1.

Bahri & Co. Ltd.—8, Imperial Bank St.,  
Madras 2.

**bajaj**

BAJAJ ELECTRICALS LTD., Electrical  
Engineers, Manufacturers & Contractors,  
3/33 Mount Road, Madras 2.

Telephone : 83969.

Telegrams : "SOFTLITE".

For further details please see Commercial  
Firms Section BOMBAY.

Balakrishnan & Co., K.S.P.—38, Armenian  
St., Madras 1.

Balaram Chetty & Sons, P.V.—74, Acharap-  
pan St., Madras 1.



Baliga Lighting Equipment Private Ltd.—C-39-40, Industrial Estate, Guindy, Madras-32.

Balussey Benefit Chit Fund P. Ltd., 3, Singarachari Street, Madras 5.

Batlibhoy & Co.—3/153, Broadway, Madras 1.

Beardsell & Co. (Private) Ltd., W.A.—8, Second Line Beach, Madras 1.

Best & Co., P. Ltd.—First Line Beach, Madras 1.

Bharat Pulverising Mills P. Ltd.—589, Thiruvottiyur High Road, Madras 19.

Bhawoo Kashinath & Co. (Madras).—Dents Gardens, 4, Patullo Road, Madras-2.

Beehive Benefit Chit Fund, 128, Mount Road, Madras 1.

Belson & Co., 834, Thambu Chetty St. Madras 1.

Bimetal Bearings Ltd., Huzar Gardens, Sembiam, Madras 11.

Binny & Co. Ltd.—7, Armenian Street, Madras 1. Post Box No. 68. Phone: 29171 (6 Lines); Grams: "BINNY"; Telex: TLXMS. 302; Agents for English Electric Co. Ltd., and for a number of Engineering Commodities and dealers in a variety of Handloom Textiles; Agents for Steamer Passages and Air Travel, Shippers, Freight Brokers, Stevedores and Insurance Agents and also Principal Agents for P. & O. Steam Navigation Co. and British India Steam Navigation Co. Ltd.; The Buckingham & Carnatic Co. Ltd., Madras, The Bangalore Woollen, Cotton & Silk Mills Co. Ltd., Bangalore, Binny's Engineering Works Ltd., Madras and Giovanola—Binny Ltd., Cochin, are subsidiary companies.

Blackwood Hodge (India) Ltd.—150-B, Mount Road, Madras 2.

Blue Mountain Estates Ltd.—Oriental Bldgs., Armenian St., Madras.

Blue Star Engg. Co., (Madras) P. Ltd.—23/24, Second Line Beach, Madras 1.

Bob Corporation—20, Anderson Street, Madras 1.

Bombay Co., Ltd.—169, Broadway, Madras 1.

Brady, W. H., & Co. Ltd.—Engineering and Sundries, 154/155, Pophams, Broadway, Madras 1.

BRADMA OF INDIA LTD.—Data writing Machines and Business Systems, 1/18, Mount Road, Madras 2. Phone: 85326. Grams: "BRADMALT".

Brilliant Trading Corp., Ltd., 4-A, Basni Bridge Road, Madras 1.

British Insulated Callender's Cables Ltd.—37, Second Line Beach, Madras 1.

British Machinery Supply Co.—136, Mount Road, Madras 6.

British Overseas Airways Corporation.—35/4, Mount Road, Madras 2.

Brunnschweller, A., & Co.—104, Armenian Street, Madras 1.

Buckingham & Carnatic Co. Ltd.—7, Armenian Street, Madras.

Burmah-Shell Oil Storage & Distributing Co. of India Ltd.—Burmah-Shell House, Esplanade, Madras 1.

Calamee South Traders.—116, Linghi Chetty St., Madras 1.

Calcutta Chemical Co. Ltd., 5/149, Broadway, Madras.

Caltex (India) Ltd.—202, Mount Road, Madras 2.

Canara Workshops Ltd.—40, General Patters Road, Madras 2.

Capco Private Ltd.—16, Armenian Street, Madras 1.

CARBORUNDUM UNIVERSAL LTD.—Manufacturers of Bonded Abrasives, Coated Abrasives, Super Refractories and Abrasive Grains. Head Office: 11-12, North Beach Road, Post Box No. 1677, Madras 1. Phone: 29141 (8 lines). Grams: "CUMI".

Branch Offices: United India Buildings, 3rd Floor, Sir Phirozshah Mehta Road, P. B. No. 962, Bombay 1. Phone: 254658. Grams: "CUMIBOMB"; 7, Second Line Beach, P. B. No. 1997, Madras-1; Phone: 21437, Grams: "CARBORUND"; 56-D, Free School Street, P. B. No. 9058, Calcutta-16; Phone: 23-9765, Grams: "CUMICAL"; Laxman House, 2nd Floor, 9-10/3, Asaf Ali Road, P.O. Box No. 185, New Delhi-1. Phone: 273640, Grams: "CUMIDE".

CASTROL LTD.—58/59, North Beach Road, Madras-1; Manager: G. W. Denby. Central Agency Ltd.—19, Vaniar Street, Madras 1.

Century Flour Mills Ltd., 330, Thambu Chetty St., Madras 1.

Chambers, K. H., Ltd.—Lecots Bldg., Madras 1.

Chandra Foundries Ltd.—55, Basin Bridge Road, Washermanpet, Madras 21.

Chandrie & Co. Private Ltd.—P. Box 156, Madras 1.

Chandrakant & Co. Private Ltd.—36, Kandappa Chetty St., Madras 1.

Chari & Chari P. Ltd.—2/7, Second Line Beach, Madras.

Charles Morgan & Co., Ltd.—314/315, Linghi Chetty Street, Madras 1.

Chelpark Co., Ltd.—37-L, Mount Road, Guindy, Madras 32.

Chemical Enterprises P. Ltd.—Madras 6.

Chermaraja Nadar & Co., K.S.A.—70, Govindappa Naick St., Madras 1.

Chhotabhai Jhaverbhai & Co., Ltd.—463, Mint St., Madras 3.

Chimnani Desai & Co.—6, Sunkarama Chetty St., Madras 1.

Chitra & Co.—Bombay Mutual Bldg. Annex, Linghi Chetty St., Madras 1.

Chitram & Co.—Main Road, Royapuram, Madras 12.

Chokshi Bros. Private Ltd.—Dinroze Estate, 5/17, Mount Road, Madras 2.

Chowgule & Co. (Hind) P. Ltd.—7/90, Wallajah Road, Mount Road, Madras 2.

City Motor Service P. Ltd., 1/163, Mount Road, Madras 2.

C. J. Hewlett & Son India P. Ltd., Nynlappa Naick Street, Madras.

Colgate-Palmolive (India) Private Ltd., 7, Second Line Beach, Madras 1.

Commercial Credit Corp., P. Ltd., Finance House, Pattolos Road, Madras 2.

Consolidated Importers & Exporters Private Ltd.—2/21, First Line Beach, Madras.

Consolidated Pneumatic Tool Co. Ltd.—Finance House, Pattulos Road, Madras 2.

Coogans.—31, Mount Road, Madras 2.

Coromandel Produce Corporation.—17/337, Thambu Chetty Street, Madras 1.

Coronet (Arts & Crafts).—"Icon House", 1/155, Mount Road, Madras 2.

Curzon & Co.—97, Wallajah Road, Madras 2.

Danis Malcolm & Co.—204, Anna Pillai St., Madras 1.

Dawood Haneef & Co., S.G.—4, Anna Pillai St., Madras 1.

Deeth & Co., W. H.—14-15, Second Line Beach, Madras.

Dhruva & Co., A.H.—21, Sembudoss St., Madras.

Dickinson, John & Co., Ltd.—Hakim Mansions, Loane Square, Madras 1.

Dipak Industrial Associates, C-29, Industrial Estate, Madras 32.

Doraiswamy Chetty & Co., A.S.—55, Govindappa Naick St., Madras 1.

Dunlop Rubber Co. India Ltd.—3-29, Mount Road, Madras 2.

Duraiswamy Mudalliar & Sons, C.A.—19, Sunkurama Chetty St., Madras 1.

East India Industries (M) Ltd.—498, Mint Street, Madras 3.

## EAST ASIATIC CO. (INDIA) PVT. LTD., THE

Mercantile Bank Bldg., 1st Line Beach, Madras 1.

Phone: 29341.

Importers, Exporters, Engineers & Oil Mill owners (Manufacturers of Vanaspathi, Refined Oil, Soap, Cattle-feed and Crushers of Groundnut and Cottonseed); Phone: 29341; Grams: "MANDARIN"; P.O. Box No. 146; Machinery & Engineering Dept., Bharat Bldg., Mount Road, Madras 2; Phone: 86021/2; Oils & Soap Industries, Senniamman Koil St., Madras 21.

Phone: 51021.

Eastern United Trading Co. Ltd., 54-C, Usman Road, T. Nagar, Madras 17.

Easun Engineering Company Limited.—6-7, Second Line Beach, Madras 1.

Ebrahim Currim & Sons—251-256, N. Subhas Road, Madras 1.

E. G. S. C.—Post Box 1807, Madras.

Electronic Service Company.—17/35, Mount Road, Madras 2.

Ellore Engineering Co. Ltd., 20, Second Line Beach, Madras 1.

Empee Corp., Private Ltd.—20, Venkatachala Mudali Street, Madras 3.

Empire Vermicelli Co., The.—52, Choolai High Road, P. B. No. 481, Madras 7.

Enfield India Ltd.—Thiruvottiyur, Madras 19.

English Electric Co., of India Private Ltd.—P. Box No. 2392, Pallavaram, Madras 27.

Escorts (Agents) Ltd.—9/10, Second Line Beach, Madras 1.

Escrde Industrials.—79/11, Sembudoss St., Madras 1.

ESOOFALY MAHOMEDALY & CO.—Dealers in Aerated water requisites; Sole Selling Agents Indian Carbon Dioxide Industries (Bombay & Madras) 12,

Walltax Road, Madras-3; Phone: 33400, Grams: "HARMLESS", H.O.: 102/4, Sarang Street, Bombay-3; Grams:

"PUBIFIED", Phone: 326516; Branches: 13-11-233, Convent Street, Park Road,

Vijayawada-1; Phone: 1004, Grams: "PUBIFIED"—Vijayawada and Shivaji

Road, Kolhapur.

Essestee (Private) Ltd.—362-C, N.S.C. Bose Road, Madras 1.

Eswaran & Sons (Agencies) P. Ltd., 5/7, Second Line Beach, Madras 1.

## EVERGREEN WIRECLOTH FACTORY

Leading Manufacturers of:

Welded Wire Mesh, High Tensile Spring Steel Wire Screens, Wire Gauze, Hex. Wire Nettings, Chain-link Fencing, Crimped Wire net, Barbed Wire, Panel Pins and other Wire Products. Largest Stockists of Expanded Metal

★

182, Nainappa Naick Street, MADRAS 3.

Phone: 32846.

Grams: "WIRECLOTH".

★

Head Office: Bhabha Bldg., 151-155, Princess Street, Bombay 2.

Phone: 22461.

Grams: "WIREMESH".



Exinjal & Co.—Post Box 401, Madras 5.  
 Fakrudeen & Co.—307, Linghi Chetty St., Madras 1.  
 Famous Engineering Corpn.—27, Periana Maistry St., Madras 1.  
 Firestone Tyre & Rubber Co. of India Private Ltd.—Woods Road, Madras 2.  
 Food, Fats & Fertilisers P. Ltd.—67, Godown Street, Madras 1.  
 Fraser & Ross—12, Mcleod Street, Madras 1.  
 Fruitnik Products.—1, Poonamallee High Road, Madras.  
 F. X. Pereira & Sons (Estd. 1889)—H. O., Post Box No. 1532, 2/21, First Line Beach, Madras 1.  
 G. Janshi & Co.—2/163, Mount Road, Madras-2.  
 Galiakotwala, C. A., & Co., Ltd.—18, Armenian Street, Madras 1.  
 Gally & Co.—28, General Patters Road, Madras 2.  
 Gandavadi Sreeramulu Chetty & Sons—207/208, N. S. C. Bose Road, Madras 1.  
 Ganesan & Sons, P. N.—12/13, Angappa Naick St., Madras 1.  
 Ganga & Co.—Andhra Chamber Bldgs., Angappa Naick St., Madras.  
 Gannon Dunkerley & Co., (Madras) Private Ltd.—14, Boag Road, Madras 17.  
 Garlick & Co., Ltd.—26, Errabalu Chetty St., Madras 1.  
 Gaumant Kelly P. Ltd.—36, Mount Road, Madras 2.  
 Gem & Co.—325/6, Netaji Subhas Chandra Bose Road, Madras 1.  
 General Electric Co. of India Ltd.—Magnet House, Mount Road, Madras 2.  
 General Produce Dealers (M) Ltd.—2/25, P. Mudali Street, Madras 1.  
 General Radio & Appliances Private Ltd.—1/18, Mount Road, Madras 2.  
 Geoffrey Manners & Co., Private Ltd.—43, Moore Street, Madras 1.  
 George Oakes Private Limited.—36/D, Mount Road, Madras 1.  
 George Vint & Bhalla (India) Ltd.—7, Woods Road, Mount Road, Madras 2.  
 Gillanders Arbuthnot & Co., Ltd.—1st Line Beach, Madras 1.  
 G. K. Syndicate Ltd.—119, Armenian Street, Madras 1.  
 Gladstone Lyall & Co. Ltd.—Connemara Hotel Annexe, Madras.  
 Glaxo Laboratories (India) Ltd.—Woods Road, Madras 2.  
 Godrej & Boyce Mfg. Co., Ltd.—163-D, Broadway, Madras 1.  
 Golden Industries, Madras 5.  
 Goodyear Tyre & Rubber Co. of India Private Ltd.—2, Patullo Road, Madras 2.  
 Gordon Woodroffe & Co. (Madras) Ltd.—1/21, North Beach Road, Madras 1.  
 Govindaraj & Sons Ltd., P.—44, Theagaraja Road, Madras 1.  
 Govindaraju Chetty & Co., Ltd., T. N. K.—3, Dr. Nair Road, Madras 17.  
 Grahams Trading Co. (India) Ltd.—310/311, Linghi Chetty Street, Madras 1.  
 Grand Trunk Roadways Ltd.—337, Thambu St., Madras 1.  
**GREAVES COTTON & CO., LTD.**, 19, Second Line Beach, Post Box No. 207, Madras 1. *Head Office*: 1, Forbes Street, Post Box No. 91, Bombay. *Merchants, Engineers & Contractors*; *Regional Manager*: V. Venkataraman; *Engineers*: S. Krishnan, U. R. Rao, U. Bhaskar Rao, L. Theodore, V. R. Swaminathan, S. Sethuraman, P. K. Krishnamoorthy, H. W. East, S. R. Sampath, V. S. Narayanan, C. B. Kulasekharam, R. B. Thandava-krishnan, E. S. Kumar, V. J. Joseph, S.

S. Iyengar; Administrative & Accounts Officer: P. Ramaswamy Iyer.  
 Guest, Keen, Williams, Ltd., 202, Mount Road, Madras 1.  
 Gulamali Abdul Husein & Co.—28 & 29, Linghi Chetty St., Madras 1.  
 H. Chandanmal & Co.—97, Nyniappa Naick Street, Madras 3.  
 H. A. Taiyebali & Co.—294, Linghi Chetty St., Madras 1.  
 Hackbridge-Hewitt & Easun Private Ltd.—5-7, Second Line Beach, Madras 1.  
 Harbour Engineering Private Ltd.—322, Linghi Chetty St., Madras 1.  
 Hargolal & Sons—27-A & B, Linghi Chetty St., Madras 1.  
 Harrison & Co. (Drug Section), 167, Broadway, Madras.  
 Heatly & Gresham Ltd.—Bombay Mutual Bldgs., Madras 1.  
**HIGGINBOTHAMS (PRIVATE) LTD.**—(Estd.: 1844), Book-Sellers & Publishers, 165, Mount Road, Madras 2; Phone: 86556; Grams: "BOOKLOVER".  
 Hind Industrial Corpn.—79/11, Sembudoss St., Madras 1.  
 Hind Mercantile Corporation Ltd., 308, Linghi Chetty Street, Madras 1.  
 Hindu Office and National Press, The, "Kasturi Buildings", Mount Road, Madras 2.  
 Hindustan Lever Ltd.—11-14, Armenian Street, Madras 1.  
 Hindwire Metal Industries.—36, Sembudoss St., Madras 1.  
 Hivelm Industries P. Ltd., A. 5 & 6, Industrial Estate, Madras 32.  
 Hoe & Co.—31, Stringer's Street, Madras 1.  
 Hoechst Dyes & Chemicals Ltd.—67, Dr. Alagappa Chettiar Road, Madras 7.  
 Hope Prudhomme & Co., Private Ltd.—271, Angappa Naick St., Madras 1.  
 Husein Ali & Co., A.—287, Linghi Chetty St., Madras 1.  
 Hydraulics P. Ltd.—M. Road, Madras.  
 Ilford-Selo (India) Private Ltd., 2/3, Woods Road, Madras 2.  
 Imperial Chemical Industries (India) Private Ltd., Bombay Mutual Buildings, Netaji Subhas Chandra Bose Road, Madras 1.  
 Imperial Tobacco Co. of India Ltd.—Bombay Mutual Bldgs., 2nd Floor, Netaji Subhas Chandra Bose Road, George Town, Madras 1.  
 India Cements Ltd., 11-12, Second Line Beach, Madras.  
 India Company Private Ltd.—Oriental Bldgs., Armenian St., Madras 1.  
 India Forge & Drop Stampings Ltd., 21, Sunkurama Chetty Street, Madras 1.  
 India Manufacturers (Madras) Private Ltd.—313, Linghi Chetty St., Madras 1.  
 India Pistons Private Ltd., Huzur Gardens, Sembiam, Madras 11.  
 India Tyre & Rubber Co. (India) Ltd., 150-B, Mount Road, Madras.  
 Indian Alloy Metal Works, 43, Spur Tank Road, Madras 31.  
 Indian Aluminium Co. Ltd.—Agurchand Mansions, Mount Road, Madras.  
 Indian Biselers, P. Box 1595, Madras 1.  
 Indian Cable Co. Ltd.—37, Second Line Beach, Madras.  
 Indian Cable & Wire Industries, 310/311, Linghi Chetty St., Madras 1.  
 Indian Chemical & Therapeutical Works Ltd., 14/15, Second Line Beach, Madras 1.  
 Indian Commerce & Industries Co. Private Ltd.—95, Broadway, Madras 1.  
 Indian Craft & Industries, 3, Valmiki Street, Madras 17.



**INDIAN ENGINEERING CO.**, 29/2, Periana Maistry St., Broadway, Madras-1; Phone: 22786; Grams: "IECARG", Bangalore: 68, Silver Jubilee Park Road, Phone: 29054 (Also at Bombay, Calcutta and New Delhi); Manufacturers and Dealers of Electrical Equipment, Components and raw materials for the Elec. Industry.

Indian Hume Pipe Co. Ltd., 9, Bishop Waller Avenue, Edward Elliotts Road, Madras 4.  
 Indian Marketing Distributing Co., Ltd., 193, Mount Road, Madras 2.  
 Indian Metal and Metallurgical Corpn., 498, Mint St., Madras.  
 Indian Oxygen & Acetylene Co., Ltd., 7/A, Vaithianatha Mudali Street, Tondiarpet, Madras 21.  
 Indian Potash Supply Agency P. Ltd.—8/9, Thambu Chetty St., Madras.  
 Indo-Ceylon Dental & Surgical Co. Ltd., 288, Esplanade, Madras 1.  
 Indo-German Engineering Co. Private Ltd.—120, Armenian Street, Madras 1.  
 Indo-Malayan Trading Co., 125, Audiappa Naick St., Madras.  
 Indo-Metal Industries, 23, Errabalu Chetty St., Madras 1.  
 Industrial Engineers (I) P. Ltd., A-9 & 10, D. U. Estate, Madras 32.



**INDUSTRIAL GASES LTD., THE.** 1/33, Mount Road, Madras. Phone: 81626, Telex: 138, Grams: "INDUS-GASES" *Head Office*: P.O. Box 853, Calcutta-1. *Manufacturers of Industrial Gases, Pressure, Vacuum, Gauges, Welding and cutting machines, equipment and accessories, Welding Electrodes and rods, Acetylene Generators, complete Plants for manufacture of Gases; Distributors of Power Generation and Transmission Plates and Equipment, Haulage equipment and Colliery equipment; Factories*: Kanpur, Lucknow, Varanasi, Gauhati, Ranchi, Tollygunge and Howrah; *Offices*: Calcutta, New Delhi, Madras, Mettur, Patratu and Hatduagunge; *Agents*: All Important Towns in India.

Industrial Rubber Products, A-21 & 22, Industrial Estate, Madras 32.  
 Industrial and Agricultural Engg. Co. (M) P. Ltd.—2/17-G, Mount Road, Madras 2.  
 Inland Agencies Ltd., 30, Koral Merchant St., G.T., Madras.  
 International Clearing & Shipping Agency, 20-B, 2nd Line Beach, Madras.  
**INTERNATIONAL COMPUTERS AND TABULATORS (INDIA) PRIVATE LTD.**, Electronic Data Processing Equipment, L. I. C. Building, 3/18, Mount Road, P.O. Box 2437, Madras 2. Telephone No. 86496-97. Telegraphic Address: "TABULORIAL", Southern Zone Manager: Mr. H. L. Shahani; Maintenance Manager: Mr. P. K. Nair; *Head Office*: Magnet House, Dougall Road, Ballard Estate; P.O. Box 516, Bombay 1.  
 International Equipment Corpn. P. Ltd.—Caithness Hall, 310-311, Linghi Chetty St., Madras 1.  
 International General Electric Co. (India) Private Ltd., 36-B, Mount Road, Madras 2.



Italab P. Ltd., 19, Govindappa Nalcken St., Madras 1.  
 Jairamdas & Sons, 33, Sambudoss Street, Madras-1. Road Building Machinery, Hardware, Metals etc.  
 Jammi Venkataramanayya & Sons, 48/1, Royapettah High Road, Madras 4.  
 Jayant Packaging P. Ltd., Super A-12 & 13, Industrial Estate, Madras 32.  
 J. B. Advani & Co. Ltd., Loane Square, Broadway, Madras.  
 J. B. Mangharam & Co., 35/37, Thambu Chetty St., Madras 1.  
 J. & J. DeChane (Depot), 153, Nainiappa Naick Street, P.T. Madras.  
 Jeewanlal (1929) Ltd., 127, Mint Street, Madras 1.  
 Jemco P. Ltd., Super B-3, Industrial Estate, Madras 32.  
 Johnson & Co. (India), 18, Andhra Insurance Bldgs., Thambu Chetty St., Madras 1.  
 Jones & Co. P. Ltd., J. D., 30, Broadway, Madras.  
 Jupiter General Insurance Co., Ltd., Jupiter House, 167, Broadway, Madras 1.  
 K. C. P. LTD.—38, Mount Road, Madras-6. Phone: 84442, Grams: "KACEPE".  
 Kartik & Co., Feroze Mahal, Linghi Chetty St., Madras 1.  
 Karamchand Thapar & Bros., Salfya Chambers, 7, Second Line Beach, Madras 1.  
 Kasimari Industrial Corporation.—295, T. H. Road, Madras 21.  
 Kemp & Co. Ltd., 27/28, Armenian Street, Madras 1.

### KAYCEE INDUSTRIES LIMITED

Electrical & Mechanical Engineers  
 3/33, Mount Road, Madras

Agents for:

#### Hind Rectifiers Ltd.,

Manufacturers of:—

Selenium and Silicon Semi-conductors, of Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-chemical Industries, Manufacturers of 'Kaycee' Rotary, Toggle, Heat Control and Air-conditioning Switches "KAYCESS" Domestic & Bulk type water Meters.

Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1.

Telephone: 263521

Telegram address: "TURNRITE"

Branches: Delhi, Calcutta & Kanpur.

Kesari Kuteeram Ltd., 15, Wescott Road, Madras 14.  
 Keshavil Talakchand Private Ltd., 63, Mint St., Madras 3.  
 Khemka & Co. (Agencies) P. Ltd., Indian Chamber Bldgs., Esplanade, Madras 1.  
 Kilachand Devchand & Co., Ltd., 310/311, Linghi Chetty Street, Madras 1.  
 Kilburn & Co. Ltd., 32/33, Linghi Chetty Street, Madras 1.  
 Kishinchand Chellaram (India) Private Ltd., —3/4, Godown Street, Post Box No. 165, Madras 1.  
 K. Orr & Co., 40, Chinnathambi St., Madras 1.  
 Kothandaraman & Co., K. R., 13/B, Second Line Beach, Madras 1.  
 Kothari Textiles Ltd., Oriental Bldgs., Armenian Street, Madras 1.  
 Kowtha Business Syndicate P. Ltd., 95, Broadway, Madras 1.  
 K. P. V. Sheikh Mohamed Rowther & Co., 41, Linghi Chetty St., Madras.  
 Krishna & Co.—No. 10, First Line Beach, Madras 1; Agents—India Steamship Co.

Ltd., Clearing and Forwarding Agents; Phone: 21638/21648; Grams: "INDA-WARDS".  
 Krishna Industrial Corporation Ltd., 33, Mount Road, Madras 6.  
 Krishnamachari & Co., T. T., 331/333, Thambu Chetty St., Madras 1.  
 Kubera Enterprises Private Ltd., 21, Sunkurama Chetty St., Madras 1.  
 Kuppaswami Naicker & Co. Private Ltd., 15, Sembudoss St., Madras 1.  
 Kutty Flushdoors & Furniture Co. P. Ltd., Poonamallee High Road, Madras 49.  
 Lakshmi Paper Industries, 5/22, Broadway, Madras 1.  
 Lakshmidas Dwarkadas & Co., 35, Govindappa Naik Street, Madras 1.  
 Lala Gopikrishna Gokuldas.—114, Mint St., Madras.  
 Laljee Godhoo & Co., 8, Perumal Mudali St., Sowcarpet, Madras.  
 Larsen & Toubro Ltd., Engineers, 4/5, Club House Road, Mount Road, Madras 2.  
 Laxmi Industrial Corporation, Super B-6, Industrial Estate, Madras 32.  
 Leos Mercantile Corporation, B-20, Industrial Estate, Madras 32.  
 Liharam Shewaram (India) P. Ltd., Post Box 1368, Madras 1.  
 Lipton Ltd., 129, Moore Street, Madras.  
 Little's Oriental Balm & Pharmaceuticals Ltd., Express Estates, Mount Road, Madras 2.  
 Lloyd Insulations, 10, Victoria Crescent, Madras 8.  
 Louis Dreyfus & Co., Ltd., 310-311, Linghi Chetty Street, Madras 1.  
 Lotus Industries Ltd., 16, Coral Merchant Street, Madras 1.  
 Lovelock & Lewes, Mercantile Bank Bldgs., 1st Line Beach, Madras 1.  
 Lucas Indian Service Private Ltd.—10, Patullo Road, Madras 2.  
 MBT Biggest Cargo Movers, H.O. 1/235, Angappa Nalcken Street, Madras 1.  
 M. R. Electronic Components (P) Ltd., C-24-25, Industrial Estate, Guindy, Madras-32.  
 Maconochie & Co.—Mercantile Bank Bldgs., Madras 1.  
 Madras Commercial Corporation Ltd., 27, Moore Street, Madras 1.  
 Madras Commercial Trust Ltd., 5, Linghi Chetty Street, Madras 1.  
 Madras Enamel Works Ltd., 65, Sydenham's Road, Madras 7.  
 Madras Engineering Agencies Private Ltd.—11, Linghi Chetty St., Madras 1.  
 Madras Food Products Co. Ltd.—48, Anderson St., Madras 1.  
 Madras Light Casting Co.—4th Kathbada Lane, Washermanpet, Madras 21.  
**MADRAS MOTORS PRIVATE LTD., THE,** Motor Cycle Specialists; 36-C, Mount Road, Madras 2; Phones: 86031 (5 Lines); Grams: "MOTOGLYDE"; Sole Selling Agents for Royal Enfield Motor Cycles, Three Wheelers and Fantabulus Scooters manufactured by the Enfield India Limited, Madras 19.  
 Madras Palayakat Co. Ltd.—31, Armenian Street, Madras 1.  
 Madras Safe Deposit Co., Ltd., P. Box 267, Madras 1.  
 Madras South India Corpn. P. Ltd.—Post Box 1823, Madras 1.  
 Mahindra & Mahindra Ltd., 175/1, Mount Road, Madras 2.  
 Mahomed Ebrahim & Co. Private Ltd.—7/8, Mount Road, Madras 2.  
 "Mail", The, Mount Road, Madras.  
 Mansfield Oil Gas Co. Ltd., 301, Linghi Chetty St., Madras.

Marshall Sons & Co. (India) Ltd., Marshall Building, Second Line Beach, Madras 1.  
 May & Baker (India) Ltd., Purshothamdas Bldg., 193, Mount Road, Madras 2.  
 Mayer & Co.—16, Ayya Pillai St., P. T., Madras 3.  
 McDowell & Co., Ltd., 1-6, Second Line Beach, Madras 1.  
 McRennett & Co., Bakers, Mount Road, Madras 6.  
 Meccano Floorings P. Ltd., 533, Poonamallee High Road, Madras 7.  
 Mechelec Engineering Co., Ltd., 21, Sunkurama Chetty Street, Madras 1.  
 Mercantile Corpn. (India).—15/16, Angappa Naick St., Madras 1.  
 Messageries Maritimes Co., 6-20, North Beach Road, Madras 1.  
 Metal Box Co. of India Ltd., Elaya Mudali Street, Tondiarpet, Madras 21.  
 Metallizers P. Ltd., C-28, Industrial Estate, Madras 32.  
 Metalware Co., 425, Mint Street, Madras 1.  
 Mettur Industries Ltd.—Second Line Beach, Madras.  
 Microtee Castings P. Ltd., 11/12, Second Line Beach, Madras 1.  
 Mills Stores Limited, 24, Errabalu Chetty Street, Madras 1.  
 Modern Housing Construction & Properties Ltd.—13, West Cott Road, Royapettah, Madras.  
 Modi & Modi, P.B. No. 293, Madras 1.  
 Mohamedaly Sarafaly & Co., 10, Sembudoss St., Madras 1.  
 Mohan Industries, 470, T. H. Road, Madras 21.  
 Motor India.—5/A 147, Mount Road, Madras 6.  
 M. R. Electronic Components P. Ltd., C-24 & 25, Industrial Estate, Madras 32.  
 Murcott, A., & Co. (India) Ltd., 28, Stringer's Street, Madras 1.  
 Murlay Industries.—2/153, Broadway, Madras 1.  
 My Coffee Co., 84, Sydenham's Road, Madras 7.  
 Mysindia Tiles & Eng. Co.—1 & 2, Poonamallee High Road, Madras 3.  
 Mysore Insecticides Co.—31-A, North Beach Road, Madras 1.  
 Narayanan & Co. Private Ltd.—26, Mount Road, Madras 2.  
 Natesan & Co., Private Ltd., 10, Mount Road, Madras 2.  
 National Carbon Co. (India) Ltd.—590, Tiruvottiyur High Road, Madras 19.  
 National Cork Products Industries, D-1, Industrial Estate, Madras 32.  
 National Engineering Co., (M) Private Ltd., 379, Netaji Road, Madras 1.  
 National Fasteners P. Ltd., Super B-1, Industrial Estate, Madras 32.  
 National Insulated Cable Co. of India Ltd.—10, Mount Road, Madras 2.  
 National Products Corpn. Private Ltd.—10, Vlavaswarapuram St., Madras 4.  
 National Tobacco Co. of India Ltd.—145, Angappa Naick St., Madras 1.  
 National Trading Co.—391, Mint Road, Madras 1.  
 National Tyre & Rubber Co. of India Ltd.—28, Peters Road, Royapettah, Madras 14.  
 Natural Slabs & Floorings Co., 58, Thambu Chetty Street, Madras 1.  
 Navita P. Ltd., 331/332, Thambu Chetty Street, Madras 1.  
 Nestle's Products (India) Ltd.—30, Second Line Beach, Madras 1.  
 Newton & Co.—80, Wallajah Road, Mount Road, Madras 2.



Norton & Co.—1/16, Thiruvengada Mudali St., Madras 7.

Oakley Bowden & Co. (Madras) Ltd.—Express Estates, Mount Road, Madras 2.

Oldham & Son (India) Private Ltd.—P. Box 2635, Madras 32.

Omega Insulated Cable Co. of India Ltd., 122/2, Mount Road, Madras 6.

Orient Credit Corporation.—26, Errabalu Chetty St., Madras 1.

**ORIENT EXPRESS CO. PRIVATE LTD., THE**, Agurchand Mansion, 35, Mount Road, Madras-2; Phone: 86260; Grams: "OREXPRESKO"; World Wide Travel Service; Authorised Agents for Airlines, Steamship Companies, Railways and Hotels; Offices in New Delhi, Calcutta, Bombay and Madras; Correspondence in 350 cities throughout the world; Managing Director: S. S. Poddar.

Orient Pharma P. Ltd.—Old Trunk Road, Pallavaram, Madras.

Oriental Mercantile Agency—99-A, Armenian Street, Madras 1.

Orr, P., & Sons Pt. Ltd.—Mount Road, Madras 2.

Osler, F. & C. (India) Ltd.—1st Line Beach, Madras.

P. Govindaraj & Sons Private Ltd., 44, Thyagaraya Road, Madras 17.

Pagoda Metal Industries, 19-B, Industrial Estate, Madras 32.

Palghat Chit Funds P. Ltd., 331/332, Thambu Chetty Street, Madras 1.

Palmer Leetz Chemical Co.—22, Royapettah High Road, Madras 14.

Parry & Co., Ltd.—"Dare House", First Line Beach, Madras 1.

Paterson & Co.—Errabalu Chetty St., Madras 1.

Perkins, F. Ltd.—2-C, Kilpauk Garden Road, Madras 10.

Pest Control Service Co.—193, Mount Road, Madras 2.

Phillips India Private Ltd.—Indian Chamber Bldgs., Esplanade, Madras 1.

Pilco Mirror Industries, C-14, Industrial Estate, Madras 32.

**PILMEN AGENTS PRIVATE LTD.**—13, Second Line Beach, Post Box 1928, Madras 1. Shipping, clearing & Transport Contractors.

Pilot Pen Co. (India) Private Ltd.—Catholic Centre, Armenian St., Madras 1.

Pioneer Equipment Co. P. Ltd.—193, Mount Road, Madras.

Pioneer Sports (India) Private Ltd.—199, Mount Road, Madras 2.

Polson Ltd.—17, Angappa Naick St., Madras 1.

Polyene General Industries, Industrial Estate, Madras 32.

Poppat Jamal & Sons—182, Broadway, Madras 1.

Power Tools & Appliances Co.—327, Thambu Chetty St., Madras.

Precision Products Co., C-45, Industrial Estate, Madras 32.

Prem Industrial Corporation, B-10 & 11, Industrial Estate, Madras 32.

Premier Suppliers P. Ltd.—9, Stringers Street, Madras 1.

Premier Trading Co.—31, Ekambareswarar Agharam, Madras 3.

Printers House Ltd.—177, Mount Road, Madras 2.

Protos Engineering Co. P. Ltd.—Post Box 375, Madras.

Prynn, Abbot & Davis.—13, College Road, Madras 6.

Racek & Co. P. Ltd.—F-2, Singanna Naick Street, Madras.

Rajagopalan & Co. Ltd., V.S.—24, Wallers Road, Madras 2.

Raka Chemicals & Food Products Ltd., 138, Moore Street, Madras 1.

Raka Corporation P. Ltd.—138, Moore Street, Madras 1.

Ralli Brothers Ltd.—Dare House, 1st Line Beach, Madras 1.

Rallis India Ltd.—Ralli House, 320, Linghi Chetty Street, Madras 1.

Ramabrahman & Sons (Madras), K.—31-A, North Beach Road, Madras 1.

Rambal Private Ltd.—Lattice Bridge Road, Adyan, Madras-20.

Ram Mohan & Co., Ltd.—Travel Agents, 362, N. S. C. Bose Road, Madras 1.

Rama Vilas Service Private Ltd.—Mount Road, Madras 2.

Ramson Export (I) P. Ltd.—226, Poona-mallee High Road, Madras 3.

Ranbaxy Private Ltd.—Ebrahim Bldgs., 3, Errabalu Chetty St., Madras.

Rane (Madras) Ltd.—7, Velacheri Road, Madras 32.

Ranganatham & Sons Private Ltd., A. K.—"Kumara Vijayam", Royapettah High Road, Madras 4.

Raptakos Brett & Co., Ltd.—52/53, Thambu Chetty Street, Madras 1.

Rattan and Cane Industries.—31, Purasawalkam High Road, Madras 10.

Rayala Corporation (Madras) P. Ltd.—L-25, Mount Road, Madras 2.

Rayon Traders Private Ltd.—61, Sembudoss St., Madras 1.

Refrigerators & Home Appliances Private Ltd.—36, Mount Road, Madras 2.

Remington Rand of India Ltd.—Agurchand Mansion, Mount Road, Madras 2.

Richardson & Cruddas Ltd.—First Line Beach, Madras 1.

Rightaids Orient P. Ltd., Super A-7, Industrial Estate, Madras 32.

Road Transport Corporation P. Ltd., Fatema Manzil, 302, Linghi Chetty Street, Madras 1.

R. Subbaraman & Co. P. Ltd.—11/12, Second Line Beach, Madras 1.

Sahib Singh Mfg. Co. P. Ltd.—Post Box 129, Madras.

Salt Roadline, 4, Sunkurama Chetty Street, Madras 1.

Sami Venkatachalam Chetty & Co., Burmah Shell Agents & Stockists for Cement Marketing Co. of India, Dealers in Coal, Chemicals and Tyres; 58, Theagaraya Road, T. Nagar, Madras 17.

Sanghvi Brothers.—310-311, Linghi Chetty Street, Madras 1.

Scindia Steam Navigation Co. Ltd.—109, Angappa Naick St., Madras 1.

Scott & Pickstock Private Ltd.—Catholic Centre, Armenian St., Madras 1.

Seashore Traders, 20, Kasi Chetty St., Madras 1.

Seeyensee & Co.—55, Anderson Street, Madras 1.

Sen & Pandit Private Ltd.—1, Phillips St., Madras 1.

Sepulchre Bros. (India) Ltd.—11/12, Second Line Beach, Madras 1.

Sethuram Thiagarajan & Co.—272/73, Angappa Naick Street, Madras 1.

Shahani & Co. Private Ltd., M. G.—62, Malaisperumal St., Madras 1.

Shah Metographic Industries, 3/2, Audlappa Naicken Street, Madras 1.

Shaik Mohamed Rowther & Co.—K. P. V., 41, Linghi Chetty Street, Madras 1.

Shanti Agencies.—28, Stringer Street, Madras 1.

**SHAW WALLACE & CO., LTD.**, 8/9, Thambu Chetty Street, Madras 1, Phone: 29301; Grams: "SHAWLACE"; P.O. Box No. 14. Registered Office: Calcutta. Manufacturers: Fertilisers and Fertiliser Mixtures, Superphosphate, Sulphuric Acid, Sodium Silicofluoride, Animal Feeds, Glue Roller Composition, Power & Hand Sprayers and Spraying equipment. Secretaries: Indian Potash Supply Agency Ltd. Agents: Sandoz (India) Ltd., American Cyanamid Company, New York; British Ropes Ltd., London; Celotex Ltd., London; The Micon Sprayers Ltd., London; Steel worth Pvt. Ltd., Calcutta (C.T.C. Machines); Hellenic Lines, New York, D.D.G. Hanna, Bremen; Queensland Insurance Co., Ltd., Sydney; Agents in Mysore & Andhra Pradesh for the Jaipur Mineral Development Syndicate Private Ltd., and The Associated Soapstone Distributing Co., Private Ltd., Distributors: Tower Brand Yeast, Distillers: Haywad's Products. Stocks: Imported Wines, Spirits & Beer. Manufacturers, Engineers, Importers and General Merchants. London Correspondents: R. G. Shaw & Co., Ltd., 19, Leadenhall Street, London, E.C. 3. Associate Companies: Shaw Wallace Pakistan Ltd., Karachi & Chittagong, Shaw Wallace & Hedges Ltd., Colombo.

Sherif Travel and Cargo Service Private Ltd.—34, Second Line Beach, Madras 1.

Shimoda Glass & Flask Factory P. Ltd.—Madras 23.

Siemens Engineering & Manufacturing Co. of India Ltd., 122, Mount Road, Madras.

Simpson & Co., Ltd.—202/203, Mount Road, Madras 2.

Simson & McConechy—22, Errabalu Chetty Street, Madras 1.

Singer Sewing Machine Co.—12, Mount Road, Madras 2.

Singson & Co. (India).—1/2, State Bank St., Madras 2.

Snow White Industrial Corp.—Manufacturers of Supercem Water Repellent Cement Paint—109, Netaji Subhas Road, Madras 1.

Soundararajan & Co., V.—"Catholic Centre", Armenian Street, Madras 1.

Soundararajan & Co. Ltd.—221, Govindappa Naick St., Madras 1.

South India Automotive Corp. P. Ltd.—24, Whites Road, Madras 14.

South India Corporation (Madras) Ltd.—2, Armenian Street, Madras 1.

South India Export Co. Ltd., 5, McLean Street, Madras 1.

South India Trade Expansion Co.—109, Sydenham's Garden Road, Madras 7.

South India Trading Co.—204/5, Govindappa Naick St., Madras 1.

South Indian Export Co., Ltd.—5, McLean Street, Madras 1.

South Indian Products Ltd.—95, Munda-kanniamman Koil St., Madras 4.

Southern Agencies—7, Kondi Chetty Street, Madras 1.

Southern Automatic Industries, B-2, Industrial Estate, Madras 32.

Southern Conduits.—C-16 & C-17, Industrial Estate, Madras 16.

Southern Constructions Private Ltd.—Lux Avenue, Madras 4.

Southern Forgings P. Ltd. A-17 & 19, Industrial Estate, Madras 32.

Southern India Trading Corp.—3, H.D. Rajah Nagar, Eldams Road, Madras 18.

Southern Industrial Corp. P. Ltd.—6, Armenian St., Madras.

Southern Languages Book Trust, 3, Wheatcroft Road, Nungambakkam, Madras 31.



Southern Roadways Private Ltd.—28, Broadway, Madras.  
 Southern Structurals Ltd.—GDC Bldg., Cathedral Road, Madras 6.  
 Speed-A-Way Private Ltd., 35/5, Mount Road, Madras 2.  
 Spence Ltd.—24, General Patters Road, Madras 2.  
 Spencer & Co., Ltd., Mount Road, Madras 2.  
 Sri Jothi Waste Paper Co.—21, Anna Pillai St., Madras 1.  
 Sri Rama Machinery Corpn. Private Ltd.—5/6, Armenian St., Madras 1.  
 Standard Motor Products of India Ltd.—29, Mount Road, Madras 2.  
 Standard Printing Machinery Co.—12/81, Sembudoss St., G. T., Madras 1.  
 Steel & General Traders, 19, Sembudoss St., Madras.  
 Sunderdas Trading & Mfg. Co.—150A, Mount Road, Madras 2.  
 Surajmall Lalubhai & Co.—313, Esplanade, Madras 1.  
 Swastik Agency, 165, G. Nalck Street, Madras 1.  
 Swastik & Co.—7, Second Line Beach, Madras 1.  
 T. A. Taylor & Co. Madras Private Ltd.—(Estd. : 1878), 100, Armenian Street, Post Box No. 51, Madras-1.  
 T. A. S. Ratnam Brothers, Post Box 1151, Madras 21.  
 Tarapore & Co., 175/1, Mount Road, Madras 2.  
 Tecalemit (India) Ltd., Bombay Mutual Building, Esplanade, Madras 1.  
 Technical Engineering Products Co.—C-22, Industrial Estate, Madras 16.  
 Thomas & Co. (India) Ltd., A. V.—2/21, First Line Beach, Madras.  
 Thos. Cook & Son (Continental and Overseas) Ltd., 4/5, First Line Beach, George Town, Madras.  
 T. L. Cycles of India Ltd.—Ambattur, Madras.

Tiffin Barytes Asbestos & Paints Ltd.—322/23, Linghi Chetty St., Madras 1.  
 Tinplate Dealers' Association P. Ltd.—9, Sembudoss Street, Madras.  
 T. O. A. P. Ltd., Avadi, Madras 54.  
 Travancore Cements Ltd.—10, Mount Road, Madras 2.  
 Travancore Rayons Ltd.—216, Second Line Beach, Madras.  
 Tube Investments of India Ltd.—52/53, Jehangir St., Madras 1.  
 Tube Products of India, Avadi, Madras 54.  
 Tube Suppliers Ltd.—6, Armenian Street, Madras 1.  
 Tullis Woodroffe & Co. P. Ltd., 1/21, North Beach Road, Madras.  
 Turner Hoare & Co. Ltd.—3/33, Mount Road, Madras 2.

#### TYPEWRITER & OFFICE APPLIANCES (INDIA) CO. PRIVATE LTD.—17, Armenian St., Madras 1. *Sole Agents*—Rataprint offset Printing Machines.

Uberoi Ltd., 22, Mount Road, Madras.  
 Union Carbide (I) P. Ltd.—Hakim Mansion, Loane Square, 14, Stringers St., Madras 1.  
 United Concerns, 54, Bunder Street, Madras.  
 United Liner Agencies of India Ltd.—7, 2nd Line Beach, Madras 1.  
 United Printers Syndicate P. Ltd., 42, Broadway, Madras 1.  
 United Steel Companies India P. Ltd., 19, Agurchand Mansion, Mount Road, Madras.  
 Upper India Berrings P. Ltd., 1/18, Mount Road, Madras 2.  
 Upper India Trading Co. P. Ltd.—1/18, Mount Road, Madras 2.  
 Varul Industrial, Corporation, B-12 & 13, Industrial Estate, Madras 32.  
 Vasant Electronic Co.—1/34, Mint St., Madras 3.  
 V. D. Swami & Co. P. Ltd.—3/1, Cathedral Road, Madras 6.  
 Vaman Bros.—39, Spurtank Road, Chetput, Madras 31.

Venkataraman & Co. Private Ltd., K. 8.—5, Dr. Thomas Road, Madras 17.  
 Vernon & Co., Ltd., 36, Second Line Beach, Madras 1.  
 Vikas Industries, C-23, Industrial Estate, Madras 32.  
 Vikrama Engineering Co. (Agencies), P.O. Box 909, Adyar, Madras 20.  
 Volkart Brothers.—5/6, Armenian Street, Madras.  
 Voltas Limited, 115/116, Armenian Street, Madras 1.  
 Vulcan Trading Co. Private Ltd.—38-C, Mount Road, Madras 6.  
 Vummidiars Manufacturers Private Ltd.—Mfrs. of stainless steel utensils, 162, Mount Road, Madras 2.  
 Wakefield & Co. Ltd., C. C.—58/59, North Beach Road, Madras 1.  
 Water Supply Specialists P. Ltd.—330, Thambu Chetty Street, Madras 1.  
 Western India Match Co., Ltd., Manufacturers of Matches, 38-C, Mount Road, Madras 6.  
 Western India Plastic Trading Co.—7, Narayana Mudali St., Madras 1.  
 Wheatley & Yate.—Hakim House, 11/12, Jaffar Syrang Street, Madras 1.  
 W. I. Oil Distributing Co. Ltd.—310/311, Linghi Chetty St., Madras 1.  
 Wheel & Rim Co. of India Private Ltd., Sembiam, Madras 11.  
 Wilfred Pereira Private Ltd.—Vepery, Madras 7.  
 William Jacks & Co., Ltd., National Bank Building, First Line Beach, Madras 1.  
 Wilson & Co., North Railway Terminus Road, Royapuram, Madras 1.  
 Wirenetting Industries Corpn.—17, Rundalls Road, Vepery, Madras 7.  
 World Trade Agencies.—4, Bunder Street, Madras 1.  
 Wren, Bennett & Co. India Ltd., 34, Mount Road, Madras 2.

## CLASSIFIED LIST OF TRADES & PROFESSIONS

### ABRASIVES

Ambadi Enterprises P. Ltd.—52/53, Jehangir Street, Madras 1.  
 Ajax Products Ltd.—106, Armenian Street, Madras.  
 Best & Co. Ltd.—First Line Beach, Madras 1.  
**CARBORUNDUM UNIVERSAL LTD.—Manufacturers of Bonded Abrasives, Coated Abrasives, Super Refractories and Abrasive Grains ; 7, Second Line Beach, P.B. No. 1997, Madras 1.**  
 East Asiatic Co. (India) Ltd., The.—Mercantile Bank Bldg., First Line Beach, Madras 1.  
 Gillanders Arbuthnot & Co., Ltd.—3, North Beach Road, Madras 14.  
 Gordon Woodroffe & Co. (Madras), Ltd.—1/21, North Beach Road, Madras 1.  
 Grindwell Abrasives Ltd.—27/28, Armenian Street, Madras.  
 Roberts McLean & Co., Ltd.—200, Mount Road, Madras 2.  
 R. Subbaraman & Co. P. Ltd.—11/12, Second Line Beach, Madras 1.  
 Verma & Co., Ltd.—36, Second Line Beach, Madras 1.  
 William Jacks & Co., Ltd.—National Bank of India Bldg., First Line Beach, Madras 1.  
 Wilson & Co.—North Railway Terminus Road, Royapuram, Madras.

### ACETYLENE GENERATORS

**INDUSTRIAL GASES LTD., THE.—1/33, Mount Road, Madras; Phone : 81626, Telex : 138, Grams : "INDUSGASES"; Head Office : Post Box 853, Calcutta-1; Manufacturers of Acetylene Gas generators both Carbide to Water and Water to Carbide, portable and Stationary, Trolleys & Manifolds.**

### ADDING, CALCULATING AND ACCOUNTING MACHINES

Facit Asia Ltd.—6-A, Woods Road, Madras 2.  
 Gillanders Arbuthnot & Co., Ltd.—3, North Beach Road, Madras 1.

Indian Manufacturers (M) P. Ltd.—35, Mount Road, Madras 2.  
 International Computers & Tabulators (I) P. Ltd.—L.I.C. Bldgs. 3/18, Mount Road, Madras 2.  
 Kilburn & Co., Ltd.—32/33, Linghi Chetty Street, Madras 1.  
 Powers-Samas Accounting Machines (Sales) Ltd.—150B, Mount Road, Madras 2.

### ADDRESSING & DATAWRITING MACHINES

**BRADMA OF INDIA LTD.—Data Writing Machines and Business Systems; Bharat Insurance Building, 1/18, Mount Road, Madras 2. Phone : 85326. Grams : "BRADMALT."**  
 P. N. Ganesan P. Ltd.—7, Judge Jambu Linga Mudaliar Road, Mylapore, Madras 4.

### ADVERTISING AGENTS AND CONSULTANTS

**AJANTA ADVERTISING.—35, Mount Road, Madras 2. Phone : 88479, Grams : "ADINFER"; Head office at Bombay, Branch at Calcutta.**  
 Anar Advertising Corporation.—255, Thambu Chetty Street, Madras 1.  
 Anuradha Advertising Service.—Lattice Bridge Road, Adyar, Madras 20.  
 Aruna & Co.—36-B1, Mount Road, Madras 1.  
 Associated Advertisers & Printers.—83, Gopathy Narayanaswamy Chetty Road, T. Nagar, Madras 17.  
 Beebees, C/o Balu Bros.—2, Thayar Sahib Street, Madras 2.  
 Bomas Ltd.—3/18, Mount Road, Madras 2.  
 Central Publicities Ltd.—Arcot Road, Vadapalani, Madras 26.  
 Chari Advertising.—174, Broadway, Madras 1.  
 Clarion Advertising Service P. Ltd.—150A/2, Mount Road, Madras 2.  
 Criterion Publicity Ltd.—19, Woods Road, Madras 2.  
 D. V. Advertising.—50, Mount Road, Madras 8.



Eastern Advertising Consultants.—2/16, Mount Road, Madras 1.  
Efficient Publicities P. Ltd.—Dinroze Estate, Mount Road, Madras 2.  
Elegant Publicities.—77, General Patters Road, Madras 2.  
Everest Advertising P. Ltd.—Airlines Hotel, Mount Road, Madras 2.  
Ganesh Publicities.—8, Bells Road, Triplicane, Madras 5.

**GRANT ADVERTISING INTERNATIONAL INC.**—4, High Road, Egmore, Madras 8; Phone: 87351; Grams: "GRANTCHI," Advertising Agents & Consultants; R. S. J. Davidson, Director & Vice-President, West Asia Division; Hope S. Willis, Manager; Offices at Bombay, Calcutta, Delhi (37 Branches all over the World).

Hindustan Publicity Bureau.—57, Audiappa Naick Street, Madras 1.  
Jupiter Advertisers.—6, Deenadayalu Street, Madras 17.  
Kayorcee Advertising.—54, Bunder Street, Madras 1.  
Krishnaswami & Co., V.S.—106, Armenian Street, Madras 1.  
L. A. Stronach & Co. (India) Ltd.—193, Mount Road, Madras 2.

**L. R. SWAMI.**—96-A, Mount Road, Teynampet, Madras 18; Anything in Advertising; Specialists in Newspapers, Radio and Railway Advertising; Bus and Railway Carriages Advt. a Speciality; Specialists in Producing and exhibiting advertisement films and slides in Cinemas; Consult for Outdoor Publicity; Phone: 72629, Madras; Grams: "ADVERTISE," Madras.

**MADRAS ADVERTISING CO., PRIVATE LTD.**—200, Mount Road, Madras 2. Phones: 85537 and 85035. Branch: George Oakes Building, Narasimharaja Square, Bangalore 2. Phone: 26939.

Madras Booklet Match Co.—10, Perianaikaran Street, Madras 1.  
Mani & Co., P.S.—2/4, Mount Road, Madras 2.  
Modern Ads. P. Ltd.—44, Nellamma Mudali Street, Madras.  
Moulvi Advertising Service.—No. 42, Whites Road, Madras 14.  
Nalin Publicity Bureau.—Vanguard House, Second Line Beach Madras 1.  
National Publicity Co.—28, Burkitt Road, Madras 28.  
Neena Publicities, C/o Bharat Studios.—Opp. Mount P.O., Madras 2.

**PARAMOUNT PUBLICITIES.**—96-A, Mount Road, Teynampet, Madras 18; Specialists in Newspaper Publicity all over India and abroad; Fully equipped to provide complete advertising Services; Recognised by Newspapers all over India; Consul, for anything and everything in advertising; Phone: 72509, Madras.

P. S. Mani & Co.—2/4, Mount Road, Madras 2.  
Ravi Publicity Service.—186, Mount Road, Madras 2.  
Sastry's Advertising.—Indian Chamber Buildings, Esplanade, Madras 1.

**SWASTIK ADVERTISING.**—2, Thambu Chetty Street, Madras 1. Proprietor: V. Pandu Ranga Rao, Phone: 29569.

United India Publicity Corp.—337, Thambu Chetty Street, Madras 1.  
Vijaya Publicities.—Vijaya Gardens, Vadapalani, Madras 26.  
Walter Thompson & Co. P. Ltd., J.—38-C, Mount Road, Madras 6.

### AERATED WATER

A. G. Raju & Sons.—Chintadripet, Madras.  
A. M. Rajam & Co.—G. T. Road, Madras.  
Baby Aerated Water Works.—Royapuram, Madras.  
City Ice & Cold Storage Co.—12, General Patters Road, Madras 2.  
Gemini Soda Factory.—Royapettah, Madras.  
Indian Herald Aerated Water Works.—Waitax Road, Madras.  
J. James & Co.—Soda Factory, Park Town, Madras.  
Labour Soda Factory.—Seven Wells Street, Madras.  
Mazda Ice Mfg. Co.—1-22A, Vepery High Road, Madras 7.  
Mc. Dowells Aerated Water Works.—2nd Line Beach, Madras.  
New Elphinstone Soda Fountain.—Mount Road, Madras 2.  
Phoenix Aerated Water Works.—10, General Patters Road, Mount Road, Madras.  
R. Maclure Aerated Works.—Mount Road, Madras.  
South Indian Royal Ice Factory.—Egmore, Madras 8.  
Star Aerated Water Works.—Chintadripet, Madras.

### AERATED WATER REQUISITES

**ESOOFALY MAHOMEDALY & CO.**—12, Walltax Road, Madras 3. Phone: 33400. Grams: "HARMLESS." H.O. 102/4, Sarang Street, Bombay 3. Grams: "PURIFIED." Phone: 22516. Dealers in Aerated Water Requisites. Sole Selling Agents for Indian Carbon Dioxide Industries (Bombay & Madras) Branches: 13-11 233, Convent Street, Park Road, Vijayawada 1. Phone: 1004. Grams: "PURIFIED" Vijayawada and Shivaji Road, Kolhapur.

### AGRICULTURAL IMPLEMENTS

Agricultural Equipment Co., Ltd.—235, Poonamallee High Road, Madras 3.  
Amalgamations Ltd.—202, Mount Road, Madras 2.  
Easun Engineering Co. Ltd.—5/7, Second Line Beach, Madras 1.  
Gillander's Arbuthnot & Co., Ltd.—North Beach Road, Madras 1.  
Gordon Woodroffe & Co. (Madras) Ltd.—1/21, North Beach Road, Madras 1.

Larsen & Toubro Ltd.—4/5, Club House Road, Mount Road, Madras 2.  
Marshall Sons & Co. (India) Ltd.—Marshall Building, Second Line Beach, Madras 1.  
Modern Machine Works.—5, Errabalu Chetty Street, Madras 1.  
National Engineering Co. (Madras) Ltd.—379, Netaji Subhas Chandra Bose Road, Madras 1.  
Rallis (India) Ltd.—Ralli House, 320, Linghi Chetty Street, Madras 1.  
Shaw Wallace & Co., Ltd.—8/9, Thambu Chetty Street, Madras 1.  
S. Jagannatham & Co.—84, Nyniappa Naick Street, Madras 8.  
South Indian Export Co., Ltd.—5, McLean Street, Madras 1.  
Tecalomit (India) Ltd.—Bombay Mutual Bldg., Esplanade, Madras.  
Voltas Ltd.—115/116, Armenian Street, Madras 1.  
V. Venugopal Pillai & Co.—2/27, Broadway, Madras 1.  
William Jacks & Co., Ltd.—National Bank of India Building, First Line Beach, Madras 1.

### AIR-CONDITIONING AND REFRIGERATION

Blue Star Engineering Co. (M) P. Ltd.—23/24, Second Line Beach, Madras.  
General Radio & Appliances Ltd.—1/18, Mount Road, Madras 2.  
Kundlia Brothers.—296, Lingha Chetty Street, Madras 1.  
Mohamed Ibrahim & Co. Ltd.—7/8, Mount Road, Madras 2.  
Standard Electric Co.—27, General Patters Road, Madras 2.  
W. A. Beardsell & Co. (Private) Ltd.—8, Second Line Beach, Post Box No. 8, Madras-1.

### AIR-CONDITIONING AND VENTILATING PLANT EQUIPMENT

Andhra Electric Co.—115-A, China Bazar, Madras 1.  
Best & Co., Ltd.—First Line Beach, Madras 1.  
Gillander's Arbuthnot & Co., Ltd.—North Beach Road, Madras 1.  
Lloydaire.—No. 10, Victoria Crescent, Madras 8.  
Marshall Sons & Co. (India) Ltd.—Marshall Building, Second Line Beach, Madras 1.  
Refrigerators & Home Appliances Ltd.—36, Mount Road, Madras 2.  
Richardson & Cruddas Ltd.—First Line Beach, Madras 1.  
Spencer & Co., Ltd.—Mount Road, Madras 2.  
Voltas Ltd.—115/116, Armenian Street, Madras 1.

### ALUMINIUM PRODUCTS

Amalgamations Private Ltd.—202, Mount Road, Madras 1.  
India Foils Ltd.—Agurchand Mansion, 35, Mount Road, Madras.  
Indian Aluminium Co. Ltd.—36, Mount Road, Madras 2.  
Grahams Trading Co. (India) Ltd.—311, Linghi Chetty Street, Madras 1.  
Imperial Chemical Industries (India) Ltd.—Spring Haven Road, "The Harbour", Madras 1.  
Jeewanlal (1929) Ltd.—127, Mint Street, Madras 3.  
McDowell & Co., Ltd.—Second Line Beach, Madras 1.  
Mysore Premier Metal Factory.—124, Mint Street, Madras 1.  
Prem Industrial Corporation.—10/11B, Industrial Estate, Guindy, Madras 32.  
Voltas Ltd.—115/116, Armenian Street, Madras 1.

### ANALYSTS

**ITALAB PRIVATE LTD.**—19, Govindappa Naicken Street, Madras. Assayers. Samplers, Surveyors, Geologists, Consultants and Public Analysts; Head Office: 15, Cawasji Patel Street, Bombay 1. Phone: 25-3882/83; Grams: "ITALABO". Chain of Laboratories at: Calcutta, Visakhapatnam and Kandla.

### ANIMAL FEEDS

**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.**—Animal feeds Department, Mercantile Bank Bldg., First Line Beach, Madras-1; Phone: 29341, Grams: "MANDARIN"; P.O. Box No. 146.

### ARC WELDING EQUIPMENT AND ELECTRODES

**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.**—Machinery & Engineering Dept., Bharat Bldg., Mount Road, Madras 2; Phone: 86021; Grams: "MANDARIN"; P.O. Box No. 2235.  
Easun Engineering Co., Ltd.—5/7, Second Line Beach, Madras 1.  
GUEST, KEEN, WILLIAMS, LTD.—202, Mount Road, Madras 2.  
Indian Oxygen and Acetylene Co., Ltd.—7/A, Vaithianatha Mudali Street, Tondiarpet, Madras 21.  
Larsen & Toubro Ltd.—4/5, Club House Road, Mount Road, Madras 2.  
Marshall Sons & Co. (India) Ltd.—Marshall Building, Second Line Beach, Madras 1.  
Rallis India Ltd.—Ralli House, 320, Linghi Chetty Street, Madras 1.  
Robert McLean & Co., Ltd.—200, Mount Road, Madras 2.  
Vernon & Co., Ltd.—36, Second Line Beach, Madras 1.  
Voltas Ltd.—115/116, Armenian Street, Madras 1.  
William Jacks & Co., Ltd.—National Bank of India Building, First Line Beach, Madras 1.



## ASBESTOS PRODUCTS

**ASBESTOS, MAGNESIA & FRICTION MATERIALS LTD.,** (Incorporated with limited liability in England); A member of Turner & Newall group; Madras Sales Office: 202, Mount Road, Madras; Phone: 85610, Grams: "ASMAFRIC"; Bombay office: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391, Grams: "ASMAFRIC"; Sales Offices at Calcutta & New Delhi.

**HINDUSTAN FERODO LTD.**—A member of the Turner & Newall Group, 202, Mount Road, Madras; Phone: 85610; Grams: "FERODOSTAN"; Regd. Office & Factory: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391 (5 lines); Grams: "FERODOSTAN"; Manufacturers of "FIREFLY" asbestos textiles, Compressed Asbestos Fibre jointings and "Limpet" asbestos sheet.

## AUTOMOBILES (TRUCKS, MOTORCARS & MOTORCYCLES)

George Oakes Ltd.—36-D, Mount Road, Madras.

**MADRAS MOTORS PRIVATE LTD., THE.**—Motorcycle Specialists, 36-C, Mount Road, Madras 2. Phones: 86031, (5 Lines), Grams: "MOTOGLYDE." Sole Selling Agents for Royal Enfield Motor Cycles, Three Wheelers and Fantabulous Scooters manufactured by the Enfield India Ltd., Madras 19.

## AUTOMOBILE & ANCILLARY INDUSTRIES

Best & Co. Pvt. Ltd.—13/15, North Beach Road, P.B. No. 63, Madras 1.

Enfield India Ltd.—"Royal Enfield" Bldgs., P.B. No. 5284, Tiruvottiyur, Madras.

Engine Valves Ltd.—No. 5, Patullos Road, Mount Road, Madras 2.

Hydraulics Pvt. Ltd.—P.B. No. 331, 29, Mount Road, Madras 2.

India Pistons Pvt. Ltd.—"Huzur Gardens", Sembiam, Madras 11.

India Radiators Ltd.—6, Armenian Street, Madras 1.

Simpson & Co., Ltd.—202/203, Mount Road, Madras 2.

## AUTOMOBILES, AUTOMOBILE PARTS AND ACCESSORIES

Abdulla & Brothers.—20, Harris Road, Mount Road, Madras.

Abdul Rahim—14-A, General Patters Road, Mount Road, Madras.

Accurate Products Corpn. P. Ltd.—23, Mount Road, Madras 2.

Addison & Co. P. Ltd.—158, Mount Road, Madras 2.

Anand Automobiles—24, General Patters Road, Mount Road, Madras.

Annamalai Trading Co.—82, Harris Road, Mount Road, Madras.

**ASBESTOS, MAGNESIA & FRICTION MATERIALS LTD.** (Incorporated with limited liability in England); A member of Turner & Newall group; Madras Sales Office: 202, Mount Road, Madras; Phone: 85610, Grams: "ASMAFRIC"; Bombay office: Bombay Agra Road, Ghatkopar, Bombay 77. Phone: 582391 Grams: "ASMAFRIC" Sales Offices at Calcutta & New Delhi.

Ashok Automobiles—44 General Patters Road, Mount Road, Madras.

Associated Trades.—Tool House, Pattulos Road, Madras 2.

Auto & General Supplies Co.—Bharath Insurance Bldg., 1/18, Mount Road, Madras.

Autoliners (Madras) P. Ltd.—202, Mount Road, Madras.

Automobiles Components—7, Imperial Bank Street, Mount Road, Madras.

Automotive Agencies (P) Ltd.—12, Smith Road, Mount Road, Madras.

Automotive & Allied Industries (P) Ltd.—52, General Patters Road, Mount Road, Madras.

**AUTOMOTIVE MANUFACTURERS' AGENCIES.**—Automobiles, Automobile Parts & Accessories Dealers; 42-E, General Patters Road, Madras 2; Head Office: White House, 91, Walkeshwar Road, Bombay 6. Branches: 6, Saklat Place, Calcutta-13 and 2610, Hamilton Road, Delhi 6.

Automotive Traders.—48, Bobegun Street, General Patters Road, Madras 2.

Auto Parts Trading Co.—22, General Patters Road, Mount Road, Madras.

Auto Sales Co.—2, Imperial Bank Street, Mount Road, Madras.

Auto Tool.—23, General Patters Road, Madras 2.

Bawa Motors.—10, Imperial Bank Lane, Mount Road, Madras 2.

**BEHARAT MOTORS.**—(Proprietors: N. R. Private Ltd.), 35, Mount Road, Madras 2. Phones: 86203 & 86204. Grams: "BEHARATCARS." Head Office: Modi Chambers, Sandhurst Bridge Corner, Bombay 4. Showroom: 144, Mount Road, Madras 6. Service Station: 5, Greaves Road, Madras 6. Factory: Manufacturing Rubberised Fibre Mattresses, Cushions, Upholstery—Industrial Colony, Tirunelveli 4.

Bombay Motor House—28-A, General Patters Road, Mount Road, Madras.

Central Auto Agencies.—192, Walltax Road, Madras 1.

Central Automobiles—7-A, Imperial Bank Street, Mount Road, Madras.

Central Auto Parts Co.—75, Apparswamy Koil Street, Mylapore, Madras 4.

Ceylon Agencies—17, Mount Road, Madras.

Chimanlal Desai & Co.—6, Sunkurama Chetty Street, Madras.

City Auto Stores.—No. 41, G. P. Road, Madras 2.

Continental Distributing Co.—Post Box No. 2223, Madras.

Continental Parts Co.—3, State Bank Street, Madras 2.

D. V. Grover—5, Imperial Bank Street, Mount Road, Madras.

Deens Garage—14, Imperial Bank Street, Madras.

Eastern Automobile & Engineering Co., (P) Ltd.—24, General Patters Road, Mount Road, Madras.

Engines Valves Ltd.—Madras 16.

Foreign Agencies.—Woods Road, Mount Road, Madras.

Garage P. Ltd.—Armenian Street, Madras 1.

Gemini Automobiles—12-A, Imperial Bank Street, Mount Road, Madras.

General Automobiles—18, General Patters Road, Mount Road, Madras.

George Vint Bhalla (P) Ltd.—7, Woods Road, Mount Road, Madras.

G. M. Automobiles (Jeep Centre).—41, General Patters Road, Mount Road, Madras 2.

Globe Traders.—7-B, Imperial Bank Street, Madras 2.

Hercules Automobiles.—Express Estates, Woods Road, Madras 2.

Himco Batteries (Madras) Pvt. Ltd.—144, Mount Road, Madras 6.

**HINDUSTAN FERODO LTD.**—A member of the Turner & Newall Group, 202, Mount Road, Madras; Phone: 85610; Grams: "FERODOSTAN"; Regd. Office & Factory: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391 (5 lines); Grams: "FERODOSTAN"; Manufacturers of "FERODO" Brake & clutch linings.

Hindustan Motors Ltd.—83, Peters Road, Madras 14.

Hindustan Pistons (P) Ltd.—52, Dams Road, Mount Road, Madras 2.

India Motor Parts & Accessories P. Ltd.—1/115, Mount Road, Madras 2.

India Pistons P. Ltd.—Sembiam, Madras 11.

India Radiators Ltd.—6, Armenian Street, Madras.

Indian Engineering & Trading Co.—26, Wallers Road, Mount Road, Madras.

Inland Agencies—153, Ramakrishna Mutt Road, Mylapore, Madras.

Jupiter Agencies—1, Motilal Street, T. Nagar, Madras.

Kannappan Motor Stores—34, General Patters Road, Mount Road, Madras.

Kapur Auto Agencies—41, General Patters Road, Mount Road, Madras.

Khalik Automobiles—12, State Bank Street, Mount Road, Madras.

Khanna Auto Corpn.—18, General Patters Road, Mount Road, Madras.

Khivraj Motors P. Ltd.—150/A, Mount Road, Madras 2.

Kishore Automobiles—22, General Patters Road, Mount Road, Madras.

Lakshmi Motors—35, General Patters Road, Mount Road, Madras.

Laxmi Traders—15, Stringer Street, Madras.

Madras Auto Service Pvt. Ltd.—37, Mount Road, Madras.

Madras Auto Diesel House.—8-A, Pattulos Road, Madras 2.

Madras Auto Service P. Ltd.—37, Mount Road, Madras 6.

Madras Ball Bearing House—17-A, General Patters Road, Mount Road, Madras.

Madras Mercantile Agencies (P) Ltd.—1/18, Mount Road, Madras.

Madras Motors P. Ltd.—36C, Mount Road, Madras 2.

Madras Rubber Factory Ltd.—175/1, Mount Road, Madras 2.

Madras Sales Corporation—22, General Patters Road, Madras.

Majestic Motor—15, General Patters Road, Madras.

Mani's Modern Mart—35, General Patters Road, Mount Road, Madras.

Marikar (Motors) Ltd.—18, General Patters Road, Mount Road, Madras.

Modern Automobiles—4/17-A, Mount Road, Madras.

Modern Distributing Co.—65, Singanna Chetty Street, Mount Road, Madras.

Modern Motors—16, General Patters Road, Mount Road, Madras.

Motor & Allied Agencies—1/17-H, Mount Road, Madras.

**MOTOR INDUSTRIES CO., LTD.**—Manufacturers of Mico-Licence-Bosch Diesel Fuel Injection Equipment & Spark Plugs; Distributors of Bosch Automobile parts & Accessories; 1/155, Mount Road, Madras 2, Phones: 83581 (3 Lines), Grams: "MICODIESEL" Madras; Head Office: Post Box No. 93, Bangalore; Branches: 79, Dr. Annie Besant Road, Worli, Bombay 18 (WB) and 91-A, Park Street, Calcutta 16.

Motor & General Trading Co.—P. B. No. 361, Mount Road, Madras.

M. M. Kasim Bros.—14 & 15, Harris Road, Mount Road, Madras.

M. P. Narayanan—81 & 82, Harris Road, Mount Road, Madras.

Narayan Automobiles—8, Imperial Bank Street, Mount Road, Madras.

Narayan Trading Co.—P. B. No. 2245, Madras.



Nathan Trading Co.—99, Poonamallee High Road, Madras.  
 National Products Corporation P. Ltd.—22, General Patters Road, Madras 2.  
 National Automobiles—15, Imperial Bank Street, Mount Road, Madras.  
 New Motor House—16, General Patters Road, Mount Road, Madras.  
 Neson's—48, General Patters Road, Mount Road, Madras.  
 Nishat Trading Co.—52, General Patters Road, Mount Road, Madras.  
 Odeon Automobiles—82A, General Patters Road, Madras 2.  
 Oil Seal Traders—24, Wallers Road, Mount Road, Madras 2.  
 Overseas Manufacturers Sales Co.—22, General Patters Road, Mount Road, Madras.  
 Pai & Co., G.N.—28-A, General Patters Road, Madras 2.  
 Pioneer (Madras) Pvt. Ltd.—23, Mount Road, Madras.  
 Premier Auto-Electric P. Ltd.—4, Pattulos Road, Madras 2.  
 Presidency Motors—33, General Patters Road, Mount Road, Madras.  
 Radhakrishna Motor Stores—17, Mount Road, Madras.  
 Ram Motors—4/30, Mount Road, Madras 2.  
 Rapid Industries.—No. 8, Broadway, Madras 1.  
 Ravindra Trading Co.—43-A, General Patters Road, Mount Road, Madras.  
 Rayala Corpn. (Madras) Pvt. Ltd.—1/155, Mount Road, Madras.  
 Reliance Motor Co. P. Ltd.—160, Mount Road, Madras 2.  
 Reliance Trading Co.—3, General Patters Road, Madras.  
 Royal Cycle & Motor Co.—13/14, Broadway, Madras 1.  
 Rudolphus & Co.—51-4 General Patters Road, Mount Road, Madras.  
 Sat Pal Bros.—53/1, General Patters Road, Mount Road, Madras.  
 Scott & Pickstock Pvt. Ltd.—Catholic Centre, Armenian Street, Madras.  
 Singson & Co. (India)—1/2, Imperial Bank Street, Mount Road, Madras.  
 Solar Auto Agencies.—13, Begum Sahib 4th Lane, General Patters Road, Madras 2.  
 South India Automobile Corpn. P. Ltd.—24, Whites Road, Madras 1.  
 South India Automotive Corporation Private Ltd.—24, Whites Road, Madras 14.  
 South India Motor Co.—36B, Mount Road, Madras 2.  
 Southern India Trading Corporation.—4, Westcott Road, Madras 14.  
 Southern Mercantile Corporation.—19, Woods Road, Madras 2.  
 Spence Ltd.—24, General Patters Road, Madras 2.  
 Standard Auto Parts Co.—2/30, Mount Road, Madras 2.  
 T. V. Sundaram Iyengar & Sons P. Ltd.—37, Mount Road, Madras 6.  
 Union Com. (Accessories) P. Ltd.—29, Mount Road, Madras 2.  
 United Auto Supplies Co.—62, G. Patters Road, Madras 2.  
 United Motors.—49-A, General Patters Road, Madras 2.  
 Upper India Trading Co. (P) Ltd.—1/18, Mount Road, Madras.  
 Vijay Trading Co.—8, Imperial Bank Street, Madras.  
 Visram Motors—38-C, Mount Road, Madras 6.  
 V. S. T. Motors P. Ltd.—34, Mount Road, Madras 2.  
 V.T.C. Automobiles.—Post Box 2720, Madras 2.  
 VV-6 India Corporation (Madras).—85, Mount Road, Madras 18.

### AUTOMOBILE MANUFACTURERS

Ashok Leyland Ltd.—Bank of Mysore Bldgs., N. S. C. Bose Road, Madras.  
 Standard Motor Products of India Ltd.—29, Mount Road, Madras.

### BATTERIES

Amalgamations Private Ltd.—202, Mount Road, Madras 2.  
 Associated Electrical Industries (India) Ltd.—11/12, First Line Beach, Madras 1.  
 Chloride & Exide Batteries (Eastern) P. Ltd.—Exide House, 150-B, Mount Road, Madras.  
 General Electric Co. of India Ltd.—Magnet House, Mount Road, Madras 2.  
 Gordon Woodroffe & Co. (Madras) Ltd.—1/21, North Beach Road, Madras 1.  
 Heatly & Gresham Ltd.—United India Life Building, Esplanade, Madras 1.  
 Himco Batteries Madras Private Ltd.—144, Mount Road, Madras 6.  
 Lucas Indian Service P. Ltd.—Patullos Road, Madras 2.  
 Oldham & Sons (India) P. Ltd.—P. Box 2635, Madras 32.  
 South India Export Co., Ltd.—5, McLean Street, Madras 1.  
 Sridhar & Co.—11-B, Mount Road, Madras 2.  
 Swami & Co.—35, General Patters Road, Madras 2.  
 Taylor, T. A. & Co. (Madras) Ltd.—100, Armenian Street, Madras 1.  
 Vernon & Co., Ltd.—36, Second Line Beach, Madras 1.  
 Wilson & Co.—North Railway Terminus Road, Royapuram, Madras.

### BEARINGS (BALL AND ROLLER)

Binny & Co. (Madras) Ltd.—7, Armenian Street, Madras 1.  
 Bombay Co., Ltd.—169, Broadway, Madras 1.  
**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE,**  
 Machinery & Engineering Dept., Bharat Bldg., Mount Road, Madras-2; Phone: 86021, Grams: 'MANDARIN'; P.O. Box No. 2235.  
 Eastern Importers Syndicate.—76, Thambu Chetty Street, Madras.

Guest, Keen, Williams, Ltd.—202, Mount Road, Madras 2.  
 Heatly & Gresham Ltd.—United India Life Building, Esplanade, Madras 1.  
 H. M. Brothers.—80/81, Sembudoss Street, Madras 1.  
 Jairamdas & Sons, 33, Sambhudoss Street, Madras 1.  
 Kilburn & Co., Ltd.—32/33, Linghi Chetty Street, Madras 1.  
 Malhotra Mill Store Co.—33, Mooker Nallamuttu Street, Madras 1.  
 Marshall Sons & Co. (India) Ltd.—Marshall Building, Second Line Beach, Madras 1.  
 Narayan Automobiles.—8, State Bank Street, Mount Road, Madras 2.  
 Robert Mclean & Co., Ltd.—200, Mount Road, Madras 2.  
 Sachdev Trading Co.—P. Box 54, Madras 1.  
 Taylor, T. A. & Co. (Madras) Ltd.—100, Armenian Street, Madras.  
 United Bearing Co.—45, Thambu Chetty Street, Madras 1.  
 William Jacks & Co., Ltd.—National Bank Building, First Line Beach, Madras 1.

### BOLTS, NUTS AND SCREWS

Bombay Co., Ltd.—169, Broadway, Madras 1.  
 Gordon Woodroffe & Co. (Madras) Ltd.—1/21, North Beach Road, Madras 1.  
**GUEST, KEEN, WILLIAMS, LTD.—202, Mount Road, Madras 2.**  
**JAIRAMDAS & SONS.—23, Errabalu Chetty Street, Madras 1;**  
**Manufacturers of M.S. Bolts and Nuts; Factory: Industrial Area, Azamabad, Hyderabad. Phone: 21510, Grams: 'WATERMETER'.**  
 McDowells & Co. Ltd.—Second Line Beach, Madras 1.  
 P. A. Govardhan Das.—13/81, Sembudoss Street, Madras 1.  
 Rambal Private Ltd.—Lattice Bridge Road, Adyar, Madras 20.  
 Southern Industrial Corporation Ltd.—6, Armenian Street, Madras 1.  
 Taylor, T. A., & Co. (Madras) Ltd.—100, Armenian Street, Madras 1.  
 Wilson & Co.—North Railway Terminus Road, Royapuram, Madras.

### BOOKSELLERS AND PUBLISHERS

**ALLIED PUBLISHERS PRIVATE LTD.—Mohan Mansions,**  
**38/C, Mount Road, Madras 6; Head Office: 15, Graham**  
**Road, Ballard Estate, Bombay 1; Branches: 17, Chittaranjan**  
**Avenue, Calcutta 13 and 13/14, Asaf Ali Road, New Delhi.**  
 Amudha Nilayam P. Ltd.—91, Mount Road, Madras 18.  
 Ananda Vikatan—Mount Road, Madras 2.  
 Aruna Publications.—23, G. N. Chetty Road, Thyagarayanagar, Madras 17.  
 Arunodayam Publications—Royapettah, Madras.  
 Asia Publishing House—99, Mount Road, Madras 2.  
 Avvai Noolagam—4/41, Broadway, Madras 1.  
 B. G. Paul & Co.—4, Francis Joseph Street, Madras.  
 Balasaraswathi Book Depot—6, Sunkurama Chetty Street, Madras.  
 Balkumar & Co.—Appah Buildings, Esplanade, Madras 1.  
 Basuram & Co.—2/27, Meeran Sahib Street, Mount Road, Madras.  
 Bharathi Pathippagam—14, Usman Road, T'Nagar, Madras 17.  
 Bible Society of India & Ceylon—P.B. No. 502, Park Town, Madras 3.  
 Blackie & Sons—3, Rajamannar Street, Madras 17.  
 Book Centre, The.—Publishers, 8, Kondi Chetty Street, Madras 1.  
 Book Distribution Service—7, Imperial Bank Lane, Mount Road, Madras.  
 Books India (Private) Ltd.—135, Coral Merchant Street, Madras.  
 C. Subbiah Chetty & Co.—62, Big Street, Triplicane, Madras 5.  
 Central Art Press—11, McNichol Road, Chetput, Madras 31.  
 Central Book Depot—B1, Pycrofts Road, Triplicane, Madras 5.  
 Chandamama Publications—2 & 3, Arcot Road, Madras 26.  
 Christian Literature Society—Post Box No. 501, Madras 3.  
 Coomaraswamy & Sons—N.S.C. Bose Road, Madras 1.  
 Cultural Books P. Ltd.—31, Meerasahib Street, Madras 2.  
 Damodaram & Co., M.—Appah Bldgs., Esplanade, Madras 1.  
 Express Newspapers (P) Ltd.—P. B. No. 333, Madras 2.  
 Ganesh & Co. (Private) Ltd.—Madras 17.  
 Grama Jothi Noolagam—1, Robertson Lane, Madras 28.  
**HIGGINBOTHAMS (PRIVATE) LTD. (ESTD. 1844).—Post Box**  
**No. 311, Madras. Phone: 86556. Grams: "BOOKLOVER".**  
**Booksellers, Publishers, Stationers, etc. Branches at:**  
**Bangalore, Ootacamund and Trivandrum. Bookstalls on all**  
**important Rly. Stations, Aerodromes and Harbours in**  
**S. India.**  
 Himalaya Publications—14, Warren Road, Madras 4.  
 Inba Nilayam—34, Kutchery Road, Mylapore, Madras 4.  
 India Book House—Purushotham Bldgs., 193, Mount Road, Madras 2.  
 Indian Publishing House Ltd.—14, Sunkurama Chetty Street, Madras.  
 International Publishing Co.—12, North Tank Square, Nungambakkam, Madras.  
 Jaico Publishing House—7 State Bank Lane, Mount Road, Madras 2.  
 Jayam & Co.—Nungambakkam, Madras 6.  
 Jyothi Nilayam—Muslim High School Compound, Triplicane, Madras 5.  
 Kalaignan Pathippagam—T'Nagar, Madras 17.  
 Kalaimagal Publications.—55/56, M. K. Amman Koil Street, Post Box No. 604, Mylapore, Madras 4.



Kapali Book Centre—61, Kutchery Road, Madras.  
 Kaviya Kazhagam—4, Rajagopala Naicken Lane, Chintadripet, Madras 2.  
 Little Flower Co.—8, Ranganathan Road, Thyagarayanagar, Madras 17.  
 Macmillan & Co. Ltd.—6, Patullo Road, Mount Road, Madras 2.  
 Madras Premier Co.—33, Broadway, Madras 1.  
 The Malar Nilayam—133, Broadway, Madras 1.  
 Mangala Noolagam—2, Josier Street, Nungambakkam, Madras 6.  
 Mercury Publishing House—38, Sambanda Mudallar Street, Madras 28.  
 N.C.B.H. (Private) Ltd.—6, Nallathambi Chetty Street, Ellis Road, Mount Road, Madras 2.  
 New Century Book House P. Ltd.—6, Nallathambi Chetty Street, Madras 2.  
 N. V. Gopal & Co.—63, Krishnappa Naick Tank Street, Madras.  
 Natesan & Co., G. A.—3, Sunkurama Chetty Street, Madras 1.  
 National Publishing Co.—6, Kondi Chetty Street, Madras 1.  
 Orient Longmans (P) Ltd.—36-A, Mount Road, Madras.  
 Oriental Publishing House—286, Esplanade, Madras.  
 Ottrunil Office—8, Vyasarao Street, T'Nagar, Madras 17.  
 Our India Directories & Publications (P) Ltd.—11, 2nd Main Road, Madras 28.  
 Oxford University Press—Mount Road, Madras 2.  
 P. L. Arunachalam—70, Padavathamman Koll Street, Madras 12.  
 Paari Nilayam—59, Broadway, Madras 1.  
 Palani Prachuram—3, Pycrofts Road, Triplicane, Madras 5.  
 Palaniappa Bros.—4, Venkatesanaicken Street, Madras 5.  
 Paul & Co., B.G.—4, Francis Joseph Street, Madras 1.  
 Pearl Publications—Purushotham Bldgs., 193, Mount Road, Madras 2.  
 Presidency Book Supplies—8-C, Pycrofts Road, Madras 5.  
 Protima Books—49, Mukathal Street, Madras 7.  
 Rajeswari Book House—28, V. S. V. Koll Street, Mylapore, Madras 4.  
 Rayalu & Co.—32, Narayanamudali Street, Madras 1.  
 Sakthi Karyalayam—1/142, Mount Road, Madras 6.  
 Samskriti Nilayam—88, Kutcheri Road, Mylapore, Madras 4.  
 South India Saiva Siddhantha Works Publishing Society—1-140, Broadway, Madras.  
 Southern Languages Book Trust.—3, Wheat Croft Road, Madras 31.  
 Srimagal Co.—122, Varada Muthiappan Street, Madras.  
 Star Publications—Big Street, P.B. No. 423, Triplicane, Madras 5.  
 T. N. Jayavelu—49, Venkatachala Mudali Street, Choolai, Madras 7.  
 T. V. Chellappa Sastry & Sons—No. 2, Phillips Street, Madras 1.  
 The Teachers' Publishing House—53-56, Coral Merchant Street, Madras.  
 Thyagaraja Vilasam: Dr. Swaminatha Ayyar's Publications—53, Pillaiyar Koll Street, Madras.  
 Union Publishing House—286, Esplanade, Madras.  
 Valluvar Pannal—137, Broadway, Madras.  
 Vanathi Pathippagam—82/1, Pandy Bazaar, T'Nagar, Madras 17.  
 Varadachary & Co., P.—8, Linghi Chetty Street, Madras 1.  
 Vidya Sagar Corpn. (P) Ltd.—35, Katchaleswaran Agraharam, Madras 5.  
 Vindhya Publications—19, Stringers Street, Madras.  
 V. Sadanand—Post Box No. 2447, Madras 2.

### BRASS & COPPER PRODUCTS

Hindusthan Metal Refinery & Rolling Mills Ltd.—124, Mint Street, Madras.  
 Mardi & Co.—28, Mooker Nallamuthu Street, Madras 1.  
 S. D. Rangwalla & Co.—289, Linghi Chetty Street, Madras 1.

### BROKERS (STOCK AND SHARE)

B. N. Viswanathan & Co.—310/311, Linghi Chetty Street, G. T., Madras 1.  
 Chitra & Co.—110/111, Armenian Street, Madras 1.  
 Dalal & Co.—National Insurance Building, Esplanade, Madras 1.  
 Kothari & Sons—Oriental Building, Armenian Street, Madras 1.  
 Maconochie & Co.—Mercantile Bank Building, Madras 1.  
 Paterson & Co.—22, Errabalu Chetty Street, Madras 1.  
 Raj & Co.—107/B, Armenian Street, Madras 1.  
 Ramlal & Co.—17, Angappa Naick Street, Madras 1.  
 Somayajulu & Co.—Andhra Insurance Buildings, 337, Thambu Chetty Street, Madras 1.  
 Trojan & Co.—New India Buildings, 13/14, Second Line Beach, Madras 1.  
 Venkataraman & Co.—Bombay Mutual Building Annexe, 322/32, Linghi Chetty Street, Madras 1.  
 V. S. Krishnaswami & Co.—106, Armenian Street, Post Box 265, Madras 1.

### BUILDING ENGINEERS AND CONTRACTORS

Associated Constructions.—Venkatachala Mudali Street, Madras.  
 Associated Industrial & Engg. Corpn. Ltd.—14, Boag Road, Madras 17.  
 Brilliant Building Corpn.—20, McNichol Road, Madras 31.  
 British & Eastern Engineering Co.—16, General Patters Road, Madras 2.  
 Builders Industries.—33, Walltax Road, Madras 3.

Construction Engineering Corpn.—1, Club House Road, Madras 2.  
 Coromandel Engineering Co., Ltd.—106, Armenian Street, Madras 1.  
 Dural Bros.—1/11, Umpherson Street, Madras 1.  
 Eastern Construction Co.—323, Linghi Chetty Street, Madras.  
 Gajendra Prasad, B.—48, Venkatrangam Pillai Street, Madras 5.  
 Gally & Co.—28, General Patters Road, Madras 2.  
 Gannon Dunkerley & Co.—14, Boag Road, T. Nagar, Madras 17.  
 General Engineering Co.—27, Narasingapuram Street, Mount Road, Madras 2.  
 Harold & Co.—57, General Patters Road, Madras 2.  
 India Construction Co.—16/3A, Sterling Road, Madras 31.  
 Joshi & Co.—24, Thambu Chetty Street, Madras 1.  
 Kesari Construction Co.—5, Burkitt Road, Madras 17.  
 King & Co.—321, Thambu Chetty Street, Madras 1.  
 K. S. Venkataraman & Co.—4, Dr. Thomas Road, Madras 17.  
 Krishna & Co.—25, Thambu Chetty Street, Madras 1.  
 Kutti & Rao.—1/95, Broadway, Madras 1.  
 M. Arunachalam & Co.—34, Lloyds Road, Mylapore, Madras 4.  
 Madras Builders.—15-C, Vijayaraghavachari Road, Madras 17.  
 Madras Engineering Syndicate.—83 Poonamallee High Road, Madras 10.  
 Massey Engineers.—4-B, North Rly. Terminus Road, Madras 13.  
 Minerva Trading Co.—Andhra Insurance Bldg., Thambu Chetty Street, Madras 1.  
 Modern Construction Co.—14, Srinivasa Iyengar Road, Alwarpet, Madras.  
 Modern Housing Construction & Properties Ltd.—13, Westcott Road, Madras 14.  
 Murali Construction Co. P. Ltd.—9/62, Royapettah High Road, Madras 14.  
 Nathan & Co.—42, Harrington Road, Chetpet, Madras 31.  
 National Co.—Dr. Besant Road, Madras 5.  
 National Engineering Co. (M.) P. Ltd.—379, N.S.C. Bose Road, Madras 1.  
 Pathy & Co.—186, Triplicane High Road, Madras 5.  
 Rathnam & Co.—311, Thambu Chetty Street, Madras 1.  
 Satyanarayana Brothers.—25, Edward Elliot Road, Madras 4.  
 Simplex Concrete Piles (India) Ltd.—Casamajor Road, Madras 8.  
 South India Corporation (Madras) Ltd.—Catholic Centre, Armenian Street, Madras 1.  
 Southern Constructions P. Ltd.—Luz Avenue, Madras 4.  
 Tarapore & Co.—175/1, Mount Road, Madras 2.  
 Techno Engineering Co.—14-D, Sterling Road, Nungambakkam, Madras 31.  
 William Jacks & Co., Ltd.—National Bank of India Building, First Line Beach, Madras 1.

### CARBONIC ACID GAS MFRS.

ESOOFALY MAHOMEDALY & CO.—12, Waltax Road, Madras-3; Phone: 33400, Grams: "HARMLESS"; H. O. 102/A, Sarang Street, Bombay-3; Grams: "PURIFIED"; Phone: 22516; Dealers in Aerated Water Requisites, Sole Selling Agents for Indian Carbon Dioxide Industries (Bombay & Madras); Branches—13-11-233, Convent Street, Park Road, Vijayawada 1; Phone: 1004, Grams: "PURIFIED"—Vijayawada and Shivaji Road, Kolhapur.

### CEMENT & CONCRETE

Andhra Cement Co. Ltd.—38, Mount Road, Madras.  
 Asbestos Cement Ltd.—202, Mount Road, Madras 2.  
 Associated Cement Companies Ltd.—Mount Road, Madras 2.  
 Cementation Construction Co. P. Ltd.—16/3-A, Sterling Road, Madras.

## CHETTINAD CEMENT CORPORATION LTD.,

"Catholic Centre", 6, Armenian Street, Madras-1.

Manufacturers of Portland Cement.

Board of Directors: Dr. Rajah Sir M. A. Muthiah Chettiar of Chettinad, B.A., Kt. (Chairman), Dr. P. V. Rajamannar, D. Litt., L.L.D., Dr. B. Gopala Reddi, M.P., Shri Chatrabhuj Narsee Thacker, Shri L. Alagusundaram Chettiar, Kumara-rajah M. A., M. Muthiah Chettiar of Chettinad, B.A. (Managing Director), Shri M. A. Ramaswami Chettiar, B.A. (Managing Director), Maharajakumari Shrimati Gayatri Deviavaru, Shri V. Vaidyasubramanya Iyer.

Coromandel Prodorite P. Ltd., 52/53, Jehangir St., Madras 1.  
 Greaynol Chemical Corporation, 180, Lloyds Road, Madras 14.  
 Hyderabad Asbestos Cement Products Ltd.—4, Stringers St., Madras.  
 India Cements Ltd.—175/1, Mount Road, Madras 2.



## CHEMICAL DEALERS

Al. Sp. Pl. Subramanyam Chettiar.—Govindappa Naik Street, Madras 1.  
 Amritlal & Co., Ltd.—Linghi Chetty Street, Madras 1.  
 Beacon Chemicals.—149, Nyniappa Naick Street, Madras 3.  
 Capco Private Ltd.—16, Armenian Street, Madras 1.  
 Carl & Co.—44, Purasawalkam High Road, Madras 7.  
 Chandra Veerabhadrapa & Bros.—Govindappa Naik Street, Madras 1.  
 Chowgule & Co. (Hind) P. Ltd.—7/90, Wallajah Road, Madras 2.  
 C. J. Seth.—Bunder Street, Madras 1.  
 Dadajee Dhackjee & Co., Ltd.—Govindappa Naik Street, Madras 1.  
 Ganga Dyes & Chemicals.—Nyniappa Naik Street, Madras 3.  
 Indira Chemical Agency.—208, Govindappa Naik Street, Madras 1.  
 Indo-German Agencies Ltd.—67, Dr. Alagappa Chettiar Road, Madras 7.  
 International Trading Corp.—Mint Street, Madras 3.  
**K. MOHAN & CO.—163, Nyniappa Naick Street, Madras 3.**  
 Khatau Vallabhdas & Co.—Govindappa Naik Street, Madras 1.  
 Lakshmi Colour Co.—Govindappa Naik Street, Madras 1.  
 Lashmidas Dwarakadas & Co.—Govindappa Naik Street, Madras 1.  
 Madras Colour Co.—Govindappa Naik Street, Madras 1.  
 Modern Chemical Co.—3/3, Veeraraghavan Road, Madras 21.  
 M. Mohanlal & Co.—Mint Street, Madras 3.  
 Nanavati & Co., Ltd.—Govindappa Naik Street, Madras 1.  
 Narandas Pramanandas.—Govindappa Naik Street, Madras 1.  
 N. K. Ramamoorthy.—Devaraja Mudali Street, Madras 1.  
 N. V. Kuppuswamy Iyer.—Pilliar Coll Street, Madras 3.  
 Oriental Mercantile Agency.—99, Armenian Street, Madras 1.  
 Paul's Chemical Corporation.—75, General Patters Road, Madras 2.  
 P. K. Japee & Co.—99, Nyniappa Naick Street, Madras 3.  
 Seamers Chemical Corporation.—2/8, Lloyds Road, Madras 6.  
 Seth Sheonarain & Sons.—3/202, Govindappa Naick Street, Madras 1.  
 South India Dyes Co.—Govindappa Naik Street, Madras 1.  
 Union Colour Co.—Thiruvottiyoor High Road, Madras.  
 Vattson Corporation.—56, Gengu Reddy Road, Madras 8.  
 Vijaya Chemical & Toilet Works.—'Vijaya Mansions', 15, Clements Road, Madras 7.

## CHEMICALS IMPORTERS &amp; STOCKISTS.

Best & Co., Ltd.—First Line Beach, Madras 1.  
 East Asiatic Co. (India) Ltd.—Mercantile Bank Building, First Line Beach, Madras 1.  
 Gillanders Arbuthnot & Co., Ltd.—First Line Beach, Madras 1.  
 Grahams Trading Co. (India) Ltd.—311, Linghi Chetty Street, Madras 1.  
 H. Chandanmal & Co.—97, Nyniappa Naick Street, Madras 3.  
 Imperial Chemical Industries (India) Private Ltd.—Bombay Mutual Bldg., N. S. C. Bose Road, Madras 1.  
 McDowell & Co., Ltd.—Second Line Beach, Madras 1.  
 Parry & Co., Ltd.—Dare House, First Line Beach, Madras 1.  
 Rallis India Ltd.—Ralli House, 320, Linghi Chetty Street, Madras 1.  
 Sanghavi & Co.—90, Nyniappa Naick Street, Madras 3.  
 Shaw Wallace & Co., Ltd.—8/9, Thambu Chetty Street, Madras 1.  
 Spencer & Co., Ltd.—Mount Road, Madras 2.  
 Voltas Ltd.—115/116, Armenian Street, Madras 1.  
 Wilson & Co.—North Rly. Terminus Road, Royapuram, Madras.

## CHEMICAL &amp; PHARMACEUTICAL PRODUCTS MANUFACTURERS &amp; DEALERS

Abbot Laboratories (I) Ltd.—3, Errabalu Chetty Street, Madras 1.  
 Alfred Berg & Co. (I) Ltd.—246-47, Poonamallee High Road, Madras 29.  
 Alvitone Laboratories.—8, Trunk Road, Madras 16.  
 Amrutnanjan Ltd.—Luz Church Road, Mylapore, Madras 4.  
 Arvind Laboratories.—Arcot Road, Madras 26.  
 Asco Pharmaceuticals.—13, Errabalu Chetty Street, Madras.  
 Asiatic Chemical Co.—Madras; 18/B, Sukeas Lane, P.O. Box 2101, Calcutta; Offices: Masjid Siding, Opp. Prince's Dock, Bombay 9; 26/46, Birhand Road, P.O. Box 189, Kanpur.  
 Associated Pharmaceutical Industries Pvt. Ltd.—10, Boag Road, Madras 17.  
 Ayurvedashram Ltd.—29, Gopathi Narayanaswamy Road, T. Nagar, Madras.  
 Bapuchi Pharmaceuticals.—Linghi Chetty Street, Madras 1.  
 Bharath Laboratories.—No. 1, Pilliar Koll Street, Arumbakkam, P. O. Box 2471, Madras 21.  
 Biological Laboratories.—Props.: Hahnemann Homœo Institute, P. B. No. 19, Tiruvarur.  
**BRITISH DRUG HOUSES (INDIA) PRIVATE LTD.—99, Nyniappa Naick Street, Park Town, Madras 3; P.O. Box 3201; H.O.: 8, Graham Road, Bombay 1.**  
 Buckingham & Carnatic Co.—P.O. Box No. 1966, Madras.  
 Chemical Engg. Corp. Ltd.—7-A, Sriganna Naick Street, Madras 1.  
 Chemo Pharma Laboratories Ltd.—Purushotam Bldg., 162, Mount Road, Madras.

Dollar Co.—337, Thambu Chetty Street, Madras 1.  
 East India Pharmaceutical Works Ltd.—22, Second Line Beach, Madras 1.  
 Ehrlich Laboratories.—Vasudeva Balaji Nagar, Royapettah, Madras.  
 Fairdeal Corporation P. Ltd.—2, Errabalu Chetty Street, Madras.  
 Glaxo Laboratories (I) Ltd.—Woods Road, Madras 2.  
 Hall Mark Pharmaceuticals.—Khaleeli Mansions, Mount Road, Madras 2.  
 Herts Pharmaceuticals Ltd.—First Line Beach, Madras 1.  
 Indian Chemicals & Therapeutical Works Ltd.—14-15, Second Line Beach, Madras.  
 Indian Health Institute Laboratory Ltd.—Broadway, Madras.  
 Indo Agencies Pharma P. Ltd.—67, Dr. Alagappa Chettiar Road, Madras 7.  
 Indo Ceylon Dental and Surgical Co. Ltd.—288, Esplanade, Madras 1.  
 Indo French Pharmaceutical Co.—Tondiarpet 1st Dn., Madras.  
 Intrac Pharmaceuticals P. Ltd.—3, Ashoka Road, Alwarpet, Madras 18.  
 Jammi Venkatramanayya & Sons.—1/1, Brodies Road, Mylapore, Madras.  
 Jeevanjan Laboratories.—15, Westcott Road, Royapettah, Madras.  
**K. MOHAN & CO.—163, Nyniappa Naick Street, Madras-3;** Chemicals for all types of Industry; Manufacturers of AR Acids, Phosphates, Copper Sulphate, Magnesium Sulphate, Lead Borax Frit, Sodium Silicate etc.  
 Kanara Pharmaceutical Works.—44, Purasawalkam High Road, Madras.  
 Kesari Kuteeram Ltd.—15, Westcott Road, Royapettah, Madras.  
 Little's Oriental Balm & Pharmaceuticals Ltd.—11-12, First Line Beach, Madras.  
 Luxonal.—17/1, Ramakrishna Mutt Road, Madras 4.  
 Madras Alkali & Chemical Works, Ltd.—13, Kondi Chetty Street, George Town, Madras.  
 Martin & Harris Ltd.—4, Sunkurama Chetty Street, Madras 1.  
 May & Baker (I) Ltd.—193, Mount Road, Madras 2.  
 Meclec Nutriments & Pharmaceuticals Ltd.—26, Errabalu Chetty St., G. T. Madras.  
 Mount Mettur Pharmaceuticals P. Ltd.—3, Greenways Road, Madras 28.  
 Neo Remedies Mfg. Co.—613-H, Palm Grove, Royapettah High Road, Madras.  
 New Premier Chemical Industries P. Ltd.—3/10, Kalingaraya Mudali Street, Madras 21.  
 Oriental Research Laboratory.—147, Purasawalkam High Road, Vepery, Madras.  
 Pfizer Private Ltd.—Akber Chambers, 85-87, Armenian Street, Madras 1.  
 Pharmaceutical & Research Laboratories.—19, Dr. Guruswami Mudaliar Road, Madras 10.  
 Primco Ltd.—Thambu Chetty Street, Madras.  
 Raka Corporation P. Ltd.—138, Moore Street, Madras 1.  
 Rangto Laboratories.—161, Purasawalkam High Road, Vepery, Madras.  
 Santha Chemicals Ltd.—147, Poonamallee High Road, Madras 10.  
 Smith Stanistreet & Co. Ltd.—101/102, Armenian Street, Madras 1.  
 South Indian Products Ltd.—55, Bunder Street, George Town, Madras.  
 Sreevatsa Chemicals & Drugs Ltd.—72, Govindappa Naick Street, Madras.  
 Standard Drugs & Chemicals Co.—131, Nyniappa Naick Street, Madras 3.  
 Standard Pharmaceutical Works Ltd.—19, Sembudoss Street, Madras.  
 Standard Products & Chemical Co.—131, Nyniappa Naick Street, Madras 3.  
 Tablets P. Ltd.—Express Estates, Mount Road, Madras 2.  
 Teddington Chemical Factory Ltd.—113, Arcot Road, Vadapalani, Madras 26.  
 Thirumal Industrial & Chemical Works.—73-74, Gollawar Agharam Road, Madras 21.  
 United Pharma (I) Ltd.—P. Box 21, Madras 3.  
 Vitalone Research Institute P. Ltd.—220, T. H. Road, Tondiarpet, Madras 21.  
 Voltas Ltd.—115/116, Armenian Street, Madras 1.  
 Wilfred Pereira Ltd.—2, Hunters Road, Vepery, Madras.

## CINEMA MACHINERY &amp; EQUIPMENTS

Ama P. Ltd.—159, Mount Road, Madras 2.  
 Cine Agency (India)—9, Mount Road, Madras 2.  
 Cine Crafts.—11, United India Colony, Madras 24.  
 Cinema Kadir.—19, Catchery Road, Madras 4.  
 Devi Cine Projector Mfg. Co.—B-7, Industrial Estate, Madras 32.  
**WESTREX COMPANY (Prop: Cinerama Pvt. Ltd.)—Agurchand Mansion, 35, Mount Road, Madras-2.**



**CLEARING & FORWARDING AGENTS**

- Asiatic Shipping & Clearing Agency.—39, Second Line Beach, Madras 1.  
 A. M. Ahamed & Co.—255, Linghi Chetty Street, Madras 1.  
 A. V. Kanniah Naidu.—260B, N.S.C. Bose Road, Madras 1.  
 International Clearing and Shipping Agency.—20-B, 2nd Line Beach, Madras 1.  
 Krishna & Co.—16, 1st Line Beach Madras 1.  
 K. Ramabrahman & Sons.—31-A, North Beach Road, Madras.  
 M. Sheriff & Sons.—34, Second Line Beach, Madras.  
 Renown Trading & Shipping Agency.—1/22, Iyyaswami Mudali Lane, Madras.  
 Shaikh Mohamed Roather & Co., K. P. V.—41, Linghi Chetty, Madras 1.

**CONFECTIONERY & ALLIED PRODUCTS**

- Bab Confectionery Works.—Madras 21.  
 Bosotto Hotel Confectionery.—Mount Road, Madras.  
 Deccan Sugar & Abkhari Co. Ltd.—P. B. No. 12, Madras.  
 Devi Confectionery Works.—George Town, Madras.  
 Eveready Confectionery Works.—Thyagaraja Nagar, Madras.  
 J. B. Mangharam & Co.—35/37, Thambu Chetty Street, Madras.  
 K. G. P. Confectionery.—Tondiarpet, Madras.  
 Kohinoor Confectionery Product Co. Ltd.—Arcot Road, Kodambakkam, Madras 34.  
 Krishna Confectionery Works.—G. T. Madras.  
 M. A. P. Industries.—362/364, T. M. Road, Tondiarpet, Madras.  
 National Confectionery.—Alandur, Madras 16.  
 Nutrine Confectionery Co. Ltd.—254, Linghi Chetty Street, Madras 1.  
 Parry's Confectionery Ltd.—Dare House, 1st Line Beach, Madras.  
 Sankara Confectionery Works.—Madras 21.  
 Spencer & Co.—Mount Road, Madras.  
 Universal Biscuit Factory.—115/116, Pycrofts Road, Madras 5.

**COTTON MERCHANTS**

- GILL & Co., PRIVATE LTD.—8, Armenian Street, P.O. Box No. 215, Madras 1. H.O. Indu House, Dougall Road, Ballard Estate, Bombay-1.

**CROCKERY MERCHANTS**

- Abdul Rahim & Bros.—13, Evening Bazar Road, Madras 3.  
 A. K. Shah & Co.—28/29, Evening Bazar, Madras 3.  
 Aluminium Glassware Emporium.—289, China Bazar Road, Madras.  
 E. M. Abdulla & Co.—315/318, Netaji S. C. Bose Road, Madras 1.  
 Indian Glassware Depot.—29, Stringers Street, Madras 1.  
 Jamal's Corner Shop.—Evening Bazar Road, Madras 3.  
 J. M. Jamal & Bros.—289, Netaji S. C. Bose Road, Madras 1.  
 Kassam Chocku & Co.—288, China Bazar Road, Madras 3.  
 K. S. Shivji & Co.—178/179, Broadway, Madras 1.  
 Madras Glassware House.—Evening Bazar, Madras 3.  
 Mohamed Hussain & Bros.—Rattan Bazar, Madras 3.  
 Noor Mohamed & Co.—288, China Bazar Road, Madras 3.  
 P. Alli Mohamed Zinna & Co.—67/68, Rattan Bazar, Madras 3.  
 Peer Mohamed & Co.—287, Netaji S. C. Bose Road, Madras 1.  
 Poppat Jamal & Sons.—182, Broadway, Madras 1.  
 S. Ibrahim & Co.—10, Jones Street, Madras.

**CUTLERY MERCHANTS**

- Abdulla & Co., E. M.—315/318, Netaji Subhash Chandra Bose Road, Madras 1.  
 Abdul Rahim & Bros.—13, Evening Bazar Road, Madras 3.  
 A. K. Shah & Co.—28/29, Evening Bazar, Madras 3.  
 Aluminium Glassware Emporium.—289, China Bazar, Madras 3.  
 Indian Glassware Depot.—29, Stringer Street, Madras 1.  
 Jamal's Corner Shop.—Evening Bazar Road, Madras 3.  
 J. M. Jamal & Bros.—289, Netaji Bose Road, Madras 1.  
 Kassam Chocku & Co.—288, China Bazar, Madras 3.  
 K. Rajaram & Co.—8, Bunder Street, Madras.  
 Madras Glassware House.—Evening Bazar, Madras 3.  
 Mohamed Hussain & Bros.—Rattan Bazar, Madras 3.  
 Noor Mohamed & Co.—288, China Bazar, Madras 3.  
 P. Alli Mohamed Zinna & Co.—67/68, Rattan Bazar, Madras 3.  
 Peer Mohamed & Co.—3/287, Netaji Bose Road, Madras 3.  
 Poppat Jamal & Sons.—Broadway, Madras 1.  
 S. Ibrahim & Co.—10, Jones Street, Madras.

**ELECTRICAL ENGINEERS, MFRS. & DEALERS IN ELEC. GOODS**

- BAJAJ ELECTRICALS LTD.—3/33, Mount Road, Madras-2; Phone: 83969; Head Office at Bombay; Electrical Engineers, Manufacturers and Contractors.  
 INDIAN ENGINEERING CO.—29/2, Periana Maistry St., Broadway, Madras 1; Phone: 22186; Grams: "IECARG", also at Bombay, Calcutta, New Delhi and Bangalore.

KAYCEE INDUSTRIES LTD.—3/33, Mount Road, Madras; Agents for Hind Rectifiers Ltd., Manufacturers of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-Chemical Industries, "Kaycee" Rotary, Toggle, Heat Control and Airconditioner Switches, "Kaycee" Domestic and Bulk type Water meters. Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay; Phone: 263521, Grams: "TURNRITE" Branches: Delhi, Calcutta & Kanpur.

**ELECTRICAL GOODS (ALTERNATORS, MOTORS, GENERATORS AND SETS)**

- All India Electric Co.—93, Perumal Mudali Street, Sowcarpet, Madras 1.  
 Amalgamations Private Ltd.—202, Mount Road, Madras 2.  
 Andhra Electric Co.—Andhra House, N.S.C. Bose Road, Madras 1.  
 Associated Electrical Industries (India) Ltd.—11/12, First Line Beach, Madras 1.  
 Bliga Lighting Equipment P. Ltd., C-39-40, Industrial Estate, Madras 32.  
 EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.—Machinery & Engineering Dept., Bharat Bldg., Mount Road, Madras 2; Phone: 86021; Grams: "MANDARIN"; P.O. Box No. 2235.  
 Electrical Accessories P. Ltd.—C-5 & 6, Industrial Estate, Madras 32.  
 Hackbridge Hewitt & Easun Private Ltd.—5/7, Second Line Beach, Madras 1.  
 General Electric Co. of India Private Ltd.—Magnet House, Mount Road, Madras 2.  
 Imperial Electric & Radio Mart.—111, Mount Road, Madras 6.  
 Industrial Stores Company, The.—2, Errabalu Chetty Street, Madras 1.  
 Jemco P. Ltd.—Super B-3, Industrial Estate, Guindy, Madras 32.  
 K. R. Kothandaraman & Co. P. Ltd.—P. B. No. 1555, Madras 1.  
 Manohar Brothers.—37, Errabalu Chetty Street, Madras.  
 Marshall Sons & Co. (India) Ltd.—Marshall Bldg., Second Line Beach, Madras 1.  
 Modi & Modi.—11, Linghi Chetty Street, Madras 1.  
 Modern Engineering Co.—2/27, Broadway, Madras 1.  
 National Electricals, Industrial Estate, Madras 32.  
 P. Natesan (Industries) Ltd.—101, Triplicane High Road, Madras 5.  
 Premier Auto Electric Ltd.—4, Patullo Road, Madras 2.  
 Rallis India Ltd.—Ralli House, 320, Linghi Chetty Street, Madras 1.  
 South India Export Co., Ltd.—5, Mclean Street, Madras 1.  
 Swastik Electric Co.—2/105, Armenian Street, Madras 1.  
 Transformer & Switchgear Ltd.—Indian Chamber Bldgs., Esplanade, Madras 1.  
 Tube Lights P. Ltd.—3, Stringers St., Madras.

**ELECTRICAL GOODS AND APPLIANCES**

- Asea Electric India P. Ltd.—Mercantile Bank Bldg., 1st Line Beach, Madras 1.  
 Ashok Electric Co.—8/2, Govindappa Naick Street, Madras 1.  
 Associated Electricals Ltd.—12/A, Linghi Chetty Street, Madras 1.  
 Auto & Electric Co.—57, Venkatesapuram Colony, Madras 23.  
 Bajaj Electricals P. Ltd.—3/33, Mount Road, Madras 2.  
 Bharat Electricals, 17, Thambu Chetty Street, Madras 1.  
 Chicago Telephone & Radio Co., Ltd.—196, Mount Road, Madras 2.  
 Eastern Electric Co., 11/12, 2nd Line Beach, Madras 1.  
 Electrical Accessories P. Ltd.—C-5 & 6, Industrial Estate, Madras 32.  
 Electrical Engineering Equipment Co.—4, Errabalu Chetty Street, Madras 1.  
 Electrical & General Supply Co.—17-C, Broadway, Madras 1.  
 Electro Industries.—39, North Mada Street, Madras 4.  
 Esplanade Electric Co.—5-A, Sembudoss Street, Madras 1.  
 Fomra Brothers.—392, Mint Street, Madras 1.  
 Ganesh Flour Mills Co. Ltd.—2, Thambu Chetty Street, Madras 1.  
 Govindarai & Sons Ltd.—P-21, Errabalu Chetty Street, Madras 1.  
 Hindustan Electrical Co. Ltd.—35, Mount Road, Madras 2.  
 HIVELE INDUSTRIES PRIVATE LTD.—A-5 & 6, Industrial Estate, Guindy, Madras 32. Phone: 80504. Grams: "HIVELE." Manufacturers of High Voltage and extra High Voltage Disconnecting Switches from 11 kv to 220 kv with current ratings upto 1,200 amps.  
 Imperial Electric & Radio Mart.—Congress Buildings, 111, Mount Road, Madras 6.  
 India Electric Works Ltd.—101/102, Armenian Street, Madras 1.  
 International General Electric Co., Ltd.—36B, Mount Road, Madras 2.  
 K. S. Shivji & Co.—178-79, Broadway, Madras 1.  
 Kumar Brothers.—61, Netaji Subhas Chandra Bose Road, Madras 1.  
 Leo Enterprises.—96, Narayana Mudali Bazar, Madras 1.  
 Madras Electricals Ltd.—55/57, Rattan Bazar, Madras 3.  
 Madras Electric Trades and Agencies.—80/3, Lloyds Road, Madras 6.  
 Mahaveer Electric Corporation.—24, Govindappa Naick Street, Madras 1.  
 Modern Electric Co.—301, Linghi Chetty Street, Madras 1.



**MODI & MODI.**—11, Linghi Chetty Street, P. B. No. 293, Madras 1. Phones: 23096 & 23892. Grams: "HIGHSPEED." Electrical Merchants and Engineers. Branches: Madurai, Vijayawada.

National Electrical Industries.—Industrial Estate, Madras 32.  
Neo Hindustan Electricals.—Mowbrays Road, Madras 18.  
P. Allimahomed Zinna & Co.—67/68, Rattan Bazar, Madras 3.  
Patel Electric Company Private Ltd.—18, Govindappa Naik Street, Madras 1.  
Premier Auto Electric P. Ltd.—4, Pattulos Road, Madras 2.  
Rm. S. & Co. P. Ltd.—16, Broadway, Madras 1.  
Revathi Agencies.—4, Stringers Street, Madras 1.  
S. B. Electric Mart Ltd.—175, Netaji Subhas Road, Madras 1.  
Scott & Pickstock P. Ltd.—Catholic Centre, Armenian Street, Madras 1.  
Seeyensee & Co.—55, Anderson Street, Madras 1.  
Sethuram Thiagarajan & Co.—Angappa Naicken Street, Madras 1.  
S. N. M. Electric P. Ltd.—108, Mint Street, Madras 1.  
Shenoy Electrical Industries.—138, Wall Tax Road, Madras.  
Shree Nursinghay Mudungopal Electric Co. P. Ltd.—108, Mint Street, Madras 1.  
Standard Electric Co.—27, General Patters Road, Madras 2.  
Swastik Electric Co.—33, Ratan Bazar, Madras 3.  
T. Nagar Electrical Supplies Co.—5011, General Patters Road, Madras 2.  
Westrex Company India (formerly Western Electric Co. of India).—35, Mount Road, Madras 2.

### ELECTRODES

**INDUSTRIAL GASES LTD., THE.**—1/33, Mount Road, Madras. Phone: 81626. Telex: 138, Grams: "INLUSGASES", Head Office: P. O. Box 853, Calcutta-1. Manufacturers & Distributors of all kinds of Welding Electrodes, Welding Rods & Fluxes; Agents for Lincoln Electric Co. Ltd., U.K.. Suffolk Iron Foundry U.K. & Unitor A. S. Norway.

### ELECTROPLATING MATERIAL & MACHINERY

**KAYCEE INDUSTRIES LTD.**—3/33, Mount Road, Madras. Agents for Hind Rectifiers, Ltd., Manufacturers of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery charges, Silicon Power Plants for Electro-Chemical Industries; 'Kaycee' Rotary, Toggle, Heat Control and Air conditioner Switches 'Kaycee' Domestic and Bulk type Water Meters; Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay; Phone: 263521, Grams: "TURNRITE"; Branches: Delhi Calcutta & Kanpur.

### ENGINEERING

Ace Engineering Corporation.—Super B-4, Industrial Estate, Madras 32.  
Addison & Co. Ltd.—158, Mount Road, Madras.  
Amalgamations Private Ltd.—202, Mount Road, Madras.  
Amco Engg. Corp.—A-3, Industrial Estate, Madras 32.  
Armcess Engineers P. Ltd.—A-8, Industrial Estate, Madras 32.  
Bharat Engg. Works.—C-20, Industrial Estate, Madras 32.  
Binny's Engineering Works Pvt. Ltd.—Meenambakkam, Madras 27.  
Carborundum Universal Ltd.—52/53, Jehangir St., Madras.  
Chitrom & Co. (Structural Engineers).—Main Road, Royapuram, Madras-31.  
Easun Engineering Co., Ltd.—5/7, Second Line Beach, Madras 1.  
Foundry & Engineering Services.—Super A-16 & 17, Industrial Estate, Madras 32.  
Gannon Dunkerley & Co. Ltd.—14, Boag Road, Madras 17.  
General Electric Co. of India Pvt. Ltd.—Magnet House, 202, Mount Rd., Madras.  
Grahams Trading Co. (India) Ltd.—311, Linghi Chetty Street, Madras 1.  
Hassanally, A. M., & Co.—34, Linghi Chetty Street, Madras 1.  
Heatly & Gresham Ltd.—United India Bldg., Esplanade, Madras 1.  
Indian Commerce & Industries Co. Private Ltd.—95, Broadway, Madras.  
Jairamdas & Sons, 33, Sambudoss Street, Madras 1.  
Kilburn & Co., Ltd.—32/33, Linghi Chetty Street, Madras 1.  
Marshall Sons & Co. (India) Ltd.—Marshall Bldg. Second Line Beach, Madras 1.  
Metal Box Co. of India Ltd.—Elaiya Mudali Street, Tondiarpet, Madras.  
Richardson & Cruddas Ltd.—First Line Beach, Madras.  
Roberts Mclean & Co., Ltd.—200, Mount Road, Madras 2.  
Simpson & Co. (India) Ltd.—202-203, Mount Road, Madras.  
South India Export Co. Ltd.—5, Mclean Street, Madras 1.  
Sreenivasa Engineering Co.—A-7, Industrial Estate, Madras 32.  
Standard Motor Products of India Ltd.—29, Mount Road, Madras.  
Sundaram Motors Pvt. Ltd.—37, Mount Road, Madras.  
T.I. Cycles of India Ltd.—Ambattur, Near Madras.

Universal Engg. Works.—D-3, Industrial Estate, Madras 32.  
Voltas Ltd.—115/116, Armenian Street, Madras 1.  
William Jacks & Co., Ltd.—National Bank of India Bldg., First Line Beach, Madras 1.

### ENGINEERS—ELECTRICAL AND MECHANICAL

A.C.E.C. India P. Ltd.—19/21, Muker Nallamuthu St., Madras 1.  
Acme & Co.—61, G. N. Chetty Road, Madras 17.  
Allied Engineering Works.—43, West Cocum River Road, Madras 2.  
Associated Electricals Private Ltd.—12-A, Linghi Chetty Street, Madras 1.  
British & Eastern Engineering Co.—16, General Patters Road, Madras 2.  
Calcutta Electrical Mfg. Co. Ltd.—27, Vaidyaramier St., Madras 17.  
Daga Commercial Corp. P. Ltd.—433, Mint St., Madras.  
Easun Engineering Co. Ltd.—5/7, Second Line Beach, Madras 1.  
Electrical Engineering Equipment Co.—4, Errabalu Chetty St., Madras 1.  
Electronic Service Co.—17/35, Mount Road, Madras 2.  
F. & C. Osler (India) Ltd.—Post Box No. 1276, 1st Line Beach, Madras.  
Fomra Brothers—"Fomra House", 392, Mint Street, Madras.  
India Electric Works, Ltd.—Chatnath Buildings, 19/29, Mount Road, Madras 2.  
Jaigopal & Co.—119, Mount Road, Madras 2.  
Jayems Engineering Co.—317, Thambu Chetty Street, Madras 1.  
Hillal Engineering Works.—50, Mir Bakshi Ali Street, Madras 14.  
K. R. Kothandaraman & Co. (Private) Ltd.—Indian Chamber Bldg., Esplanade, P. O. Box 1555, Madras 1.  
Kumar Brothers—61, N. S. C. Bose Road, Madras 1.  
Lucas Electrical Tractor Service P. Ltd.—9, Patullo Road, Madras 2.  
Madras Electricals Ltd.—55/57, Rattan Bazar, Madras 3.  
Mahomed Ebrahim & Co. P. Ltd.—7/8, Mount Road, Madras 2.  
Marshall Sons & Co. (India) Ltd.—Marshall Bldg., Second Line Beach, Madras 1.  
Massey's.—P. Box 554, Royapuram, Madras 13.

**MODI & MODI.**—11, Linghi Chetty Street, P. B. No. 293, Madras 1. Phones: 23096 & 23892. Grams: "HIGHSPEED." Electrical Merchants and Engineers. Branches: Madurai, Vijayawada.

National Engineering Co. (Madras) Ltd.—379, Netaji Subhas Chandra Bose Road, Madras 1.  
Orient Distributors.—26, Errabalu Chetty St., Madras 1.  
Radio & Electricals Ltd.—38, Mount Road, Madras 6.  
Richardson & Cruddas Ltd.—First Line Beach, Madras 1.  
R.M. S. & Co. Private Ltd.—16, Broadway, Madras 1.  
R. S. M. & Co.—236/237, Devaraja Mudali St., Madras 1.  
Seeyensee & Co.—55, Anderson St., Madras 1.  
Sethuram Thiagarajan & Co.—272/273, Angappa Naicken Street, Madras 1.

### ENGINES (DIESEL AND OIL)

Amalgamations Private Ltd.—202, Mount Road, Madras 2.  
Best & Co., Ltd.—First Line Beach, Madras 1.  
Bharat Motors.—35, Mount Road, Madras 2.  
Binny & Co., Ltd.—7, Armenian Street, Madras 1.  
Bombay Co., Ltd.—169, Broadway, Madras 1.  
Brady, W. H., & Co., Ltd.—154/155, Pophams, Broadway, Madras 1.  
**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.**—Machinery & Engineering Dept., Bharat Bldg., Mount Road, Madras 2; Phone: 86021; Grams: "MANDARIN"; P.O. Box No. 2235.  
Easun Engineering Co., Ltd.—5/7, Second Line Beach, Madras 1.  
Gordon Woodroffe & Co. (Madras) Ltd.—1/21, North Beach Road, Madras 1.  
Greaves Cotton & Co., Ltd.—19, Second Line Beach, Madras 1.  
Guest, Keen, Williams, Ltd.—202, Mount Road, Madras 2.  
Industrial Stores Co.—318, Linghi Chetty Street, Madras 1.  
Larsen & Toubro Ltd.—4/5, Club House Road, Mount Road, Madras 2.  
Marshall Sons & Co. (India) Ltd.—Marshall Bldg., Second Line Beach, Madras 1.  
National Engineering Co. (Madras) Ltd., The.—379, Netaji Subhas Chandra Road, Madras 1.  
Parry & Co., Ltd.—"Dare House", First Line Beach, Madras 1.  
Rallis India Ltd.—Ralli House, 320, Linghi Chetty Street, Madras 1.  
South India Export Co., Ltd.—5, Mclean Street, Madras 1.  
Taylor, T. A., & Co. (Madras) Ltd.—100, Armenian Street, Madras 1.  
Voltas Ltd.—115/116, Armenian Street, Madras 1.

### FERTILISERS

Imperial Chemical Industries (India) Private Ltd.—Bombay Mutual Bldg., N. S. Bose Road, Madras 1.  
Louis Dreyfus & Co., Ltd.—310/311, Linghi Chetty Street, Madras 1.  
Madras Oils & Fertilisers P. Ltd.—Villivakam, Madras.



Mysore Fertiliser Co.—31/A, North Beach Road, Madras 1.  
 Parry & Co., Ltd.—“Dare House”, First Line Beach, Madras 1.  
 Premier Fertilisers Ltd.—150-A, Mount Road, Madras 2.  
 Rallis India Ltd.—Ralli House, 320, Linghi Chetty Street, Madras 1.  
 Scientific Fertiliser Co., Ltd.—13/14, Second Line Beach, Madras 1.  
 Shaw Wallace & Co., Ltd.—8/9, Thambu Chetty Street, Madras 1.

### FINANCIERS & FINANCE BROKERS

Associated Finance Co. Ltd.—10, Perianalkaran Street, Madras 1.  
 Bharat Finance Corporation—101, Mint Street, Madras 1.  
 Chordia General Finance Co.—38-C, Mount Road, Madras 6.  
 Commercial Credit Corporation Ltd.—Pattulos Road, Madras 2.  
 Commercial Financial Corporation, 1/65, Mount Road, Madras 2.  
 General Credit Corporation India P. Ltd.—11-D, Mowbrays Road, Madras 18.  
 Ganali Credit Corporation P. Ltd.—36-B, Mount Road, Madras 2.  
 G. A. Vasant.—17-A, Armenian Street, Madras 1.  
 Sundaram Finance Ltd.—52, Peters Road, Madras 14.

### FIRE EXTINGUISHERS AND FIRE FIGHTING EQUIPMENT

Anur Agencies.—3, Malaiperumal Street, Madras 1.  
 Best & Co., Ltd.—First Line Beach, Madras 1.  
 Binny & Co., Ltd.—7, Armenian Street, Madras 1.  
 Parry & Co., Ltd.—“Dare House”, First Line Beach, Madras 1.  
 Roberts Mclean & Co., Ltd.—200, Mount Road, Madras 2.  
 South India Export Co., Ltd.—5, Mclean Street, Madras.  
 William Jacks & Co., Ltd.—National Bank of India Bldg., First Line Beach, Madras 1.

### FLOUR MILLS

Century Flour Mills.—330, Thambu Chetty Street, Madras 1.  
 Madras Flour Mills.—196, Govindappa Naick St., Madras.  
 Sahuwala Flour Mills.—38, Strotten Muthiah Mudali St., Madras 1.  
 United India Roller Flour Mills P. Ltd.—1, Anna Pillai St., Madras 1.

### FOUNTAIN PENS, NIBS & SPARES MANUFACTURERS AND DEALERS

Bharathi Agencies—307-308, Netaji Subhas Road, Madras 1.  
 Gem & Co.—225-226, Netaji Subhas Chandra Bose Road, Madras 1.  
 Geneve Pen Industries—4/441, Mint Street, Madras 3.  
 Globe Industries.—6, Gopal Das Road, Madras 2.  
 Gujarat Industries P. Ltd.—20, Kasi Chetty Street, Madras 1.  
**LOYAL PEN COMPANY.—23, Errabalu Chetty Street, Madras 1. Dealers in Pen and Spares—Rates reasonable—Enquiries solicited.**  
 Pen Corner.—Netaji Subhas Chandra Bose Road, Madras 1.  
 Pen Spares Mfg. Co.—A-12, Industrial Estate, Madras 32.  
 Pens & Products.—11, Mount Road, Madras 2.  
 The Pilot Pen Co. (India) Private Ltd.—Catholic Centre, Armenian Street, Madras 1.  
 Rada Pen Co.—Mint Street, Madras 3.  
 Radhakrishna & Co.—No. 28, Arani Rangan Street, Madras 21.  
 Rance Pen Co.—29, Sunkurama Chetty Street, Madras 1.  
 Regal Products P. Ltd.—186, Royapettah High Road, Madras 14.  
 Shelat Brothers.—8, Lakmudas Street, Madras.  
 W. L. Marrian (I) P. Ltd.—162, Mount Road, Madras 2.

### FUEL INJECTION EQUIPMENT MFRS.

**MOTOR INDUSTRIES CO. LTD.—Manufacturers of Mico-Licence-Bosch Diesel Fuel Injection Equipment and Spark Plugs; Distributors of Bosch Automobile Parts & Accessories; 1/155, Mount Road, Madras 2; Phone: 83581 (3 Lines), Grams: “MICODIESEL”, Madras; H.O. Post Box No. 93, Bangalore; Branches: 79, Dr. Annie Besant Road, Worli, Bombay-18 (WB), and 91-A, Park Street, Calcutta 16.**

### GASES

**INDUSTRIAL GASES LTD., THE.—1/33, Mount Road, Madras. Phone: 81626, Telex: 138. Grams: “INDUSGASES”. Head Office: P. O. Box 853, Calcutta-1. Manufacturers and Suppliers of Oxygen, Liquid Oxygen Acetylene, Nitrogen, Argon, Neon & Helium Keyton, Xeonon Methyl Chloride, Cyclopropane, Ethylene etc.**

### GAS MANUFACTURING PLANTS

**INDUSTRIAL GASES LTD., THE.—1/33, Mount Road, Madras. Phone: 81626, Telex: 138. Grams: “INDUSGASES”. Head Office: P. O. Box 853, Calcutta-1. Design Supply & Erection of complete plants for manufacture and distribution of Oxygen, Nitrogen, Carbondioxide, Acetylene and other Gases.**

### GLASS AND GLASSWARE MERCHANTS

Akbarally Allibhoy.—201-202, Devaraja Mudali Street, Madras 3.  
 A. N. Mani & Co.—126, Devaraja Mudali Street, Madras.  
 Ashok Glass Works.—23, Gantz Road, Perambur Barrack, Madras.  
 Bawa Glass & Crockerles (P) Ltd.—52, Devaraja Mudali St., Madras.  
 C. Cunniha & Co.—248-249, Devaraja Mudali St., Madras.  
 C. Cunniha & Bros.—58-59, Devaraja Mudali St., Madras.  
 Central Glass Works.—Tiruvottiyur, Madras.  
 Chithapuram Rajamannar Chetty & Sons.—143, Devaraja Mudali St., Madras.  
 C. S. Anjaneylu & Co.—100, Devaraja Mudali Street, Madras.  
 D. Namburumaliah.—54/57, Devaraja Mudali Street, Madras.  
 D. Ramiah Chetty & Sons.—230, Devaraja Mudali St., Madras.  
 E. Ethirajah & Sons.—103, Devaraja Mudali Street, Madras 23.  
 Glass Corporation P. Ltd.—119, Nyniappa Naick Street, Madras 3.  
 Industrial & Engg. Apparatus Co. P. Ltd.—23/24, Second Line Beach, Madras 1.  
 Kannan & Co.—63/68, Devaraja Mudali Street, Madras.  
 K. Manavalliah.—3, Subramaniam Lane, Madras.  
 K. Radhakrishniah.—24, Devaraja Mudali Street, Madras.  
 K. Rajaram & Co.—8, Bunder St., Madras 1.  
 K. R. S. Sreenivasiah & Sons.—169, Devaraja Street, Madras.  
 Krishna Glass Works.—26, Venkatachala Mudali Lane, Madras.  
 K. Ramalinga Mudaliar.—148/149, Devaraja Mudali Street, Madras.  
 K. Singapermaliah.—151/152, Devaraja Mudali Street, Madras.  
 Maddhali Radhakrishniah & Sons.—16/110, Devaraja Mudali Street, Madras.  
 Madras Glass & Plywood Depot.—172/176, Devaraja Mudali Street, Madras.  
 M. Ramakrishna.—200, Devaraja Mudali Street, Madras.  
 M. Radhakrishniah & Co.—184-185, Devaraja Mudali St., Madras.  
 M. Seethamma & Co.—33, Devaraja Mudali Street, Madras.  
 M. Sampathiah.—17, Venkatachala Mudali Lane, Madras.  
 M. S. P. Balakrishna Chetty & Co.—221-222, Devaraja Mudali St., Madras.  
 N. Ranganathiah & Sons.—71/72, Devaraja Mudali St., Madras.  
 N. Sreemannarayana & Co.—147, Devaraja Mudali St., Madras.  
 Oriental Glass Works.—25, Gandhi Road, Madras 12.  
 Popat Jamal & Sons.—55/58, Konnur High Road, Madras 23.  
 P. N. Balu Chetty & Sons.—237-239, Devaraja Mudali St., Madras.  
 P. Thiruvarangiah & Son.—3/5, Ayya Pillai Street, Madras.  
 Peermohamed & Co.—287, China Bazar Road, G.T., Madras 1.  
 R. Ethirajah & Sons.—103, Devaraja Mudali Street, Madras 3.  
 Raja Brothers.—29, Devaraja Mudali Street, Madras.  
 Ramakrishna Frame Works.—230, Devaraja Mudali St., Madras.  
 R. Ethirajah & Sons.—103, Devaraja Mudali St., Madras.  
 Ranga & Co.—2, Ayya Pillai Street, Madras.  
 R. Ramanujiah & Son.—87, 191, Devaraja Mudali Street, Madras.  
 Sayani Glass Factory.—Ainavaram, Madras.  
 S. Gulam Ghouse.—133, Devaraja Mudali Street, Madras.  
 Sekar & Soumya.—10/14, Ayya Pillai Street, Madras.  
 Selvam & Co.—192-193, Devaraja Mudali Street, Madras.  
 Shimada Glass Works.—Ainavaram, Madras.  
 Soumya General Traders.—144-145, Devaraja Mudali St., Madras.  
 S. M. Yousuff.—37, Devaraja Mudali Street, Madras.  
 Sri Balaji & Co.—212/214, Devaraja Mudali Street, Madras.  
 S. V. M. Mohamed Jamaludeen & Co.—207-208, Devaraja Mudali St., Madras.  
 T. Janakiramliah.—105/107, Devaraja Mudali Street, Madras.  
 V. Panduranga Chetty.—187-188, Devaraja Mudali Street, Madras.  
 V. Poongavanam & Bros.—134, Devaraja Mudali Street, Madras.  
 Venkateswara Frame Works.—247, Devaraja Mudali Street, Madras.

### GLYCERINE

**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.—Glycerine Dept., Mercantile Bank Bldg., First Line Beach, Madras—1; Phone: 29341, Grams: “MANDARIN”; P. O. Box No. 146.**

### HANDLOOM MERCHANTS & EXPORTERS

Adhithan Palayakat Co.—25, Mallan Ponnappa Mudali Street, Triplicane, Madras 5.  
 Aiyasamu Mudaliar Son.—11, East Mada St., Mylapore, Madras 4.  
 Amin & Co.—233, Angappa Naick Street, G. T., Madras 1.  
 A. M. Ahmed & Co.—255, Linghi Chetty St., G. T., Madras 1.  
 A. V. Malliah Chettiar & Sons.—5, Ramaswamy Street, Madras 1.  
 A. R. Panchatchara Mudaliar & Bro.—13, Karpavinayagar Street, Alandur Street, St. Thomas Mount, Madras 16.  
 Asoka Palayakat Co.—253, Thambu Chetty Street, Madras 1.  
 Bharat Handloom Textiles.—92, Gafoor Street, Triplicane, Madras 5.  
 B. Appavoo & Bros.—59, Sadayappa Mudaliar St., Saidapet, Madras 15.  
 Bismillah Palayakat Co.—72, Angappa Naick Street, Madras 1.  
 Chanral Uttamchand.—20, Wallajah Road, Mount Road, Madras 2.  
**CHELLARAM GIANCHAND.—Manufacturers, Dealers & Exporters, 86, Wallajah Road, Mount Road, Madras-2; Manufacturers of Handwoven Woolen Ellore Carpets and Rugs; Phone: 86929, Grams: “SILVER”.**



Chettyzons.—28, Mint Subraylulu Naidu Street, Washermanpet, Madras-21.  
 City Palayakat Co.—25, Muthumari Chetty Street, Madras.  
 G. Ramachand (Madras).—16, Arunachala Naicken Street, Chindatripet, Madras.  
 G. R. K. Radharam & Co.—1/54, Armenian Street, Madras.  
 Gemini Lunghi Co.—1/15, Ramaswamy Street, Madras.  
 Golden Palayakat Co.—26, Coral Merchant Street, Madras.  
 Good Luck Palayakat Co.—43, Linghi Chetty Street, Madras.  
 Govindaswamy Chettiar S. & Co.—52, Ayyappa Chetty Street, Madras.  
 Gudyatham Lunghi Co.—47, Coral Merchant Street, Madras.  
 Hadri V. Perumal Chetty & Sons.—15/16, Mangammal Lane, Mint Post, Madras.  
 Hajee M. A. Shahul Hammed & Sons, Hameedia Palayakat Kally Co.—23, Pallappan St., Triplicane, Madras.  
 Hajee S. M. Syed Abdul Rahman Sahib & Co.—111, Moore St., Madras.  
 Hameedia Lunghi Co.—Royapettah, Madras.  
 Hindusthan Colour Dyeing Co.—2/20, Sura Mudali Street, Triplicane, Madras.  
 Hope Prudhomme & Co. Ltd.—271, Angappa Naick Street, Madras.  
 H. Imperial Palayakat.—8, Jayaram Chetty Street, Saidapet, Madras 15.  
 India Famous Pulicat Co.—29, Armenian Street, Madras.  
 Indolanka Traders.—38, Linghi Chetty Street, Madras.  
 International Import Corp'n. (Private) Ltd.—3, Asok Road, Alwarpet, Madras.  
 K. Abdul Razack Sahib & Co.—44, Angappa Naick Street, G.T., Madras.  
 K. M. K. Annamalai Chetty & Sons.—27, Mint Street, P.T. Madras.  
 K. S. P. Balakrishnan & Co.—38, Armenian Street, Madras.  
 K. V. Subbaraya Chetty Sons.—96, Linghi Chetty Street, G.T., Madras.  
 Kaithari Lunghi Stores.—287, Thambu Chetty Street, Madras.  
 Kasimari Stores.—2/28, Jones Street, Madras.  
 Kasthuri Palayakat Co.—25, Ramaswamy Street, Madras.

**KISHINCHAND CHELLARAM.—Exporters & Importers, 11, Navasingapuram St., Mount Road, Madras-2; Exporters of Handloom Real Madras Handkerchiefs (West African Varieties), Bleeding Madras, Woollen Carpets, Furnishings, Bedspreads, Table Covers, Towellings, Dress Materials, All Varieties Handwoven Fabrics also Gray, Bleached and Coloured Cotton Yarn, Phone: 84697, Grams: "EVERYTHING".**

M. A. B. Abumuhamed Sahib & Bros.—70, Armenian Street, Madras.  
 M. H. Abdul Gafoor & Co.—No. 204, Angappa Naick Street, Madras 1.  
 M. M. Mohamed & Co.—32, Angappa Naick Street, Madras.  
 M. M. Naina & Co.—251, Linghi Chetty Street, Madras.  
 M. N. M. A. Calendar Lebbai & Bros.—2/235, Surappa Mudali Street, Triplicane, Madras.  
 M. Naraindas.—16, Arunachala Naicken Street, Chindatripet, Madras.  
 M. Raju Mudaliar.—9, Karpaga Vinayagar Koil Street, Alandur, Madras.  
 M. Thulasi Mudaliar.—8, Visagathottam Street, Saidapet, Madras.  
 Madras Handloom Coy.—94, Thambu Chetty Street, Madras.  
 Madras Lunghi Corp'n.—35, Angappa Naicken Street, Madras.  
 Madras Pulicat Textiles, Co.—1/36, Venkatamaistry Street, Madras.  
 Madras State Handloom Weavers' Co-operative Society Ltd.—Balasundara Bldgs., 34/A-1, Pantheon Road, Egmore, Madras.  
 Madras Textile P. Ltd.—19/20, Arumuga Mudali St., Madras 21.  
 Madariya Lungi Co.—34, Surappa Mudaliar Street, Triplicane, Madras.  
 Malabar Handloom Textiles.—24, Godown Street, Madras.  
 Mani & Co.—243, Linghi Chetty Street, G.T., Madras.  
 Modern Palayakat Co.—12, New Street, Madras.  
 Mohamed Aboobacker & Co.—95, Thambu Chetty Street, Madras.  
 Moulana Co. (Private) Ltd.—52, Angappa Naick Street, Madras.  
 N. K. Aiyasami Mudaliar.—7, South Mada Street, Mylapore, Madras.  
 Nagavedu Lunghi Co.—34, Sengalaner Pillayar Koil Street, Madras.  
 Nataraja Lungi Co.—117-118, Ramaswamy Street, Madras.  
 Natarajan & Co.—251, Linghi Chetty Street, Madras.  
 Oriental Lunghi Co.—3, Arumuga Achari Street, Triplicane, Madras.  
 Original Pulicat Co.—1/28, Godown Street, Madras.  
 Overseas Trading Corp'n.—94, Linghi Chetty Street, G.T., Madras.  
 P. A. Mohamed Yusuf & Sons.—333-334, High Road, Triplicane, Madras.  
 P. G. Ekambara Mudaliar, P. G. Murugess Mudaliar.—47, Coral Merchants St., Madras.  
 P. Sriramulu Chetty & Co.—138, T.H. Road, Washermanpet, Madras.  
 P. Subbaraya Mudaliar.—55, V. S. Mudali Street, Saidapet, Madras.  
 P. T. Siramulu Chetty & Bros.—36, Arumuga Mudali St., Washermanpet, Madras-21.  
 Panchaksharam Lungi Co.—19, Jones Road, Saidapet, Madras-15.  
 Parvathi Palayakat Co.—110, Coral Merchant Street, G.T. Road, Madras.  
 Rayon Traders (Private) Ltd.—61, Sembudoss Street, Madras.  
 Royal Textiles.—42, Tippu Sahib Street, Royapettah, Madras.

S. B. S. Trading Co.—8, Ramanuja Iyer Street, Washermanpet, Madras.  
 S. M. Akbar & Co.—12, Surappa Mudali Street, Triplicane, Madras.  
 S. M. Syed Ali & Co.—35, Angappa Naick Street, Madras.  
 S. R. K. Bapu Ismail Sahib & Co.—70, Armenian Street, Madras.  
 S. Thiruvengadam.—15, Mavadi Vinayakar Koil Street, Kozapettai, Royapetta, Madras.  
 Samuel Co.—7, New Street, Madras.  
 Samy Iyer Palayakat Co.—66, Armenian Street, Madras.  
 Saraswathi & Co.—148, Coral Merchant Street, Madras.  
 Saraswathi Palayakat Co.—116, Ramaswamy Street, G.T. Madras.  
 Scissors Palayakat Co.—Triplicane High Road, Madras.  
 Sell Abubacker & Co.—62, Angappa Naick Street, Madras.  
 Sellamuthu Sivanadhan & Co., Ltd.—224, Angappa Naick Street, Madras.  
 Selvam Lungi Co.—59, Old Mambalam Road, Saidapet, Madras-15.  
 Shunmuga & Co.—21, Kuthadum Pillayar Koil Street, Saidapet, Madras.  
 Simons & Co.—3, Somasundara Devar 6th Street, Ayanavaram Post, Madras.  
 Superior Palayakat Co.—116, Ramaswamy Street, Madras.  
 Swarnambika Lungi Co.—38, Visagatttam Street, Saidapet, Madras.  
 Tamilnad Handloom Weavers' Co-operative Society Ltd.—34/1-A, Pantheon Road, Egmore, Madras 8.  
 T. Duraiswamy Mudaliar.—30, Post Office Street, G.T. Madras.  
 V. A. Khaja Lunghi Co.—62/63, Shaik Dawood Street, Royapettah, Madras.  
 V. Govinda Mudaliar Sons.—23, Jones Street, Madras.  
 V. M. Iungi Emporium.—96, Thambu Chetty Street, Madras.  
 V. N. K. Textiles.—216, T.H. Road, Tondiarpet Post, Madras.  
 Velavar Palayakat Co. Ltd.—46, Linghi Chetty Street, Madras.  
 Wassiamull Assomull & Co.—7, Mohamed Abdullah Street, Chepauk, Madras.  
 Western Palayakat Co.—20/21, Ramaswamy Street, G.T. Madras.  
 Yousuff Lunghi Co.—32, Jawahar Hussainkhan 1st Street, Royapettah, Madras.  
 Yusuf Lungi Co.—13, Shaik Dawood Street, Triplicane, Madras.

## HARDWARE DEALERS AND IRONMONGERS

Abdool Hoossain Jeevajee & Co.—21, Linghi Chetty St., Madras.  
 Abdul Hussain Salebhoy & Co.—29, Periyanna Maistry St., Madras.  
 Abdul Kader & Sons.—7, Angappa Naick Street, Madras 1.  
 A. Alimohamed & Co.—26, Light Chetty St., Madras.  
 A. K. Abdullabhoj & Co.—316, Linghi Chetty St., Madras.  
 A. K. Muthukumaraswami Chetty.—268, Rasappa Chetty St., Madras.  
 A. Kunnan Chetty.—40/41, Venkatachala Mudali Street, P. T., Madras 3.  
 A. L. Natesan Chettiar.—200/201, Rasappa Chetty St., Madras 3.  
 A. M. Goolamali & Co.—20, Errabalu Chetty St., Madras 1.  
 A. Mohamed & Co.—313, Linghi Chetty St., Madras.  
 Aminchand Payare Lal.—27, Sembudoss Street, Madras.  
 Anuradha Private Ltd.—53, Peter's Road, Madras 6.  
 A. Radhakrishna Chetty.—265, Rasappa Chetty St., Madras.  
 A. T. Khorakiwala & Co.—11, Vaniar St., Madras.  
 C. A. Galiakotwala & Co., Pvt. Ltd.—18, Armenian St., Madras.  
 C. Natesa Chetty.—276, Rasappa Chetty St., Madras.  
 C. R. Muthukumaraswami Chetty.—256, Rasappa Chetty St., Madras.  
 C. Senjoo Chetty.—86, Rasappa Chetty St., Madras.  
 C. Thirunavukarasu Shetty.—267, Rasappa Chetty St., Madras 3.  
 Emcete & Sons, Pvt. Ltd.—Sembudoss St., Madras.  
 Fakruddeen & Co.—307, Linghi Chetty Street, Madras.  
 G. R. Datchanamurthy Chetty & Son.—215, Rasappa Chetty St., Madras.  
 G. Suryanarayana Chetty & Co.—65, Govindappa Naicken St., Madras.  
 Gulamali Abdul Hussain & Co.—28/29, Linghi Shetty St., Madras.  
 H. A. Taiyebali & Co.—294, Linghi Chetty St., Madras.  
 H. Abbasbhoy Ahmedaly & Co.—288, Linghi Chetty St., Madras.  
 Hind Hardware Co.—20, Venkatachala Mudali Street, Madras 3.  
 Hind Industrial Corp'n. Ltd.—79, Sembudoss St., Madras 1.  
 India Co., Ltd.—108, Armenian Street, Madras.  
 Iron & Metal Traders P. Ltd.—8, Sembudoss Street, Madras 1.  
 Jairamdas & Sons, 33, Sambudoss Street, Madras-1.  
 Kall Natesa Chetty.—260, Rasappa Chetty St., Madras.  
 Khanderia P. Ltd.—1, Tucker's Lane, Madras 1.  
 Khandhalwal Bros., Ltd.—82, Sembudoss St., Madras.  
 K. N. Chari & Co.—144, Nynappa Naick Street, Madras.  
 K. Sreenivasa Chari.—277, Rasappa Chetty St., Madras.  
 K. Thangavelu Chetty.—88, Rasappa Chetty St., Madras.  
 K. Thiruvengadam Chetty & Co.—93, Rasappa Chetty St., Madras.  
 K. V. Seshiah Chetty & Co.—44, Thathamuthiyappan St., Madras.  
 M. Arumuga Chetty.—269, Rasappa Chetty St., Madras.  
 M. A. Chindambaram.—6, Armenian Street, Madras.  
 Madras Circle Pipe Dealers' Assn. Ltd.—6, Armenian St., Madras 1.  
 Madras Circle Regd. Stockholders' Assn. Ltd.—6, Armenian St., Madras 1.



Madras Circle Scrap Dealers' Assen. Ltd.—6, Armenian St., Madras 1.  
 Madura South India Corpn., Ltd.—80, Sembudoss St., Madras.  
 Mayuranatham & Co.—271, Rasappa Chetty St., Madras.  
 M. C. S. Rajan & Co.—155, Nyniappa Naick Street, Madras.  
 M. C. Sundara Rajan & Co.—290, Linghi Chetty St., Madras.  
 Metro Hardware Mart.—15/16, Rasappa Chetty Street, Madras 3.  
 M. Kuppuswami Naicker.—15, Sembudoss Street, Madras.  
 M. M. Abbas & Bros.—7, Sembudoss St., Madras.  
 Mohamedaly Sarafaly & Co.—10, Sembudoss St., Madras.  
 Murlimal Santram & Co.—13, Sembudoss Street, Madras.  
 Muruga & Co.—253/254, Rasappa Chetty St., Madras 3.  
 P. K. Vaduvammal.—258, Rasappa Chetty St., Madras.  
 P. M. Kalathi Chetty, P. M. Muthumanickam Chetty.—151, Nyniappa Naick St., Madras.  
 P. M. Ramanjulu Chetty.—172/3, Nyniappa Naick St., Madras.  
 P. Natesa Chetty.—102, Rasappa Chetty St., Madras.  
 P. R. Desikan & Sons.—75, Govindappa Naick St., Madras.  
 P. V. Rathakrishna Chetty & Bros.—45, Venkatachala Mudal Street, Madras 3.  
 S. Akbarali Haidarali & Co.—27, Linghi Chetty St., Madras.  
 S. A. Bhagat & Co.—26, Periyanna Maistry St., Madras.  
 Saleh Bros.—6, Sembudoss Street, Madras.  
 Scott & Pickstock P. Ltd.—Catholic Centre, Armenian Street, Madras 1.  
 South India Corn. (A) Pvt. Ltd.—6, Armenian St., Madras.  
 Sree Ramachandra & Co.—8/11, Rasappa Chetty Street, Madras 3.  
 T. H. Shamsudin & Co.—12 & 13, Devaraja Mudali Street, Madras 3.  
 T. M. Radhakrishna Chetty & Co.—261, Rasappa Chetty St., Madras.  
 T. T. Yagappa Chetty & Son.—116, Nyniappa Naick St., Madras.  
 V. Elumalai Chetty.—259, Rasappa Chetty St., Madras.  
 V. Kanakiah Chetty & Co.—148, Nyniappa Naick St., Madras.  
 V. Kuppuswami Chetty & Co.—262, Rasappa Chetty St., Madras.  
 V. M. Periyaswami Chetty & Co.—89, Rasappa Chetty St., Madras.  
 V. M. K. Pillai.—263, Rasappa Chetty St., Madras.  
 V. Venugopal Pillai & Co.—2/27, Broadway, Madras.  
 Vazirbun Trading.—A-29, Parianna Maistry Street, Madras 1.

### HIDES AND SKIN MERCHANTS

A. Abdul Shukoor & Co.—8, Sydenhams Road, Madras 3.  
 Abdul Azeer & Co., P.—9, Kattur Sadayappan St., Periamet, Madras 3.  
 A. T. B. Mehtab Majid & Co.—4, Ramapillai Street, Madras 3.  
 B. A. Ahmed Pasha & Co.—5, V. V. Koll Street, Madras 3.  
 C. Kalyanam & Co.—2, Muthugrammi Street, Madras 3.  
 C. L. Abdus Subhan & Co.—45, Vepery High Road, Madras 3.  
 Dharmasee Parpia.—62/63, Sembudoss St., Madras 1.  
**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.**  
 Hides & Skins Department, 4/8, Naval Hospital Road, Madras 3; Phone: 31336, Grams: 'HUDSKIND'.  
 E. K. Hajee Mohamed Meera Sahib & Sons—10, Vepery High Road, Madras 3.  
 E. K. Mohamed Abdul Sahib & Sons—18, Kumarappa Chetty Street, Madras 3.  
 F. K. Haseeb & Co.—40, Sydenhams Road, Madras 3.  
 G. Govindarajulu Naidu & Co.—2, Ramapillai Street, Madras 3.  
 Gordon Woodroffe Leather Mfg. Co. P. Ltd.—1/21, North Beach Road, Madras 1.  
 G. Sreenivas & Co.—10, Sydenhams Road, Madras 3.  
 Habib & Co.—22, Sydenhams Road, Madras 3.  
 Hajee Mohamed Meera Sahib & Co., E.K.—13/A, Sydenhams Road, Madras 3.  
 H. H. Naeem & Co.—9, Ramopillai Street, Madras 3.  
 India Leather Corpn. P. Ltd.—9, Davidson St., Madras 1.  
 Khandelwal Bros. Ltd.—82, Sembudoss St., Madras 1.  
 K. M. Adam.—9, Periyanna Maistry Street, Madras 3.  
 K. O. Mohamed Sulaiman & Co.—11, Vepery High Road, Madras 3.  
 Kothwal Hajee A. R. Mohamed Obaidulla & Co.—5/6, Nabl Khan Subedar Street, Madras 3.  
 K. T. Basha Rasheed & Co.—18, Sydenhams Road, Madras 3.  
 Light Leathers P. Ltd.—161, Mount Road, Madras 2.  
 Maija Hajee Ismail Sahib & Co.—15, V. V. Koll Street, Madras 3.  
 Merit, M. E. Ibrahim & Co.—12, Vepery High Road, Madras 3.  
 M. Hajee Mohamed Ismail Sahib & Co.—17, Sydenhams Road, Madras 3.  
 M. K. S. Mohamed Labbai & Co.—234 Angappa Naick Street, Madras 1.  
 M. L. Abdul Rasheed & Co.—12/A, Vepery High Road, Madras 3.  
 M. M. Mohideen Thumbay & Co.—228, Angappa Naick Street, Madras 1.  
 Mohideen Thumbay & Co., M.M.—228, Angappa Naick St., Madras 1.  
 P. Krishnaswamy & Co.—17, Vepery High Road, Madras 3.  
 P. M. Batcha & Co.—Kumarappa Chetty Street, Madras 3.  
 Simpson & McConechy Ltd.—Badsha Bldgs., 22, Errabalu Chetty St., Madras 1.  
 Southern India Skins Corpn.—7, V. V. Koll St., Madras 3.  
 Sreenivas & Co.—19, Sydenhams Road, Madras 3.  
 T. Abdul Wahid & Co.—19, Vepery High Road, Periamet, Madras 3.  
 T. K. Fazal Habib & Co.—7B, Nabikhan Subedar Street, Madras 3.  
 V. Sreenivas & Co.—10, V. V. Street, Madras 3.

### HOTELS & RESTAURANTS

Airlines Hotels & Caterers Private Ltd.—177-179, Mount Road, Madras 2.  
 Connemara Hotel—Benny's Road, Madras 2.  
 Gupta's Ajanta Hotel—32, Royapettah High Road, Madras 32.  
**GUPTA'S STATES HOTEL.—Boarding, Lodging & Restaurant,**  
 Kutchery Road, Mylapore, Madras 4.  
 Hotel Ashoka—Pantheon Road, Madras 8.  
 Hotel Connemara.—Binnay's Road, Madras.  
 Hotel Everest—Poonamallee High Road, Madras 3.  
 Hotel India—39, Mount Road, Madras 6.  
 Hotel Oceanic.—San Thome High Road, Madras 28.  
 Hotel Romana—110, Mount Road, Madras 18.  
 Hotel Select—9, Linghi Chetty Street, Madras.  
 Savoy Hotel & Restaurant.—39, Mount Road, Madras 6.  
 Victoria Hotel—Egmore, Madras.  
 Woodlands Hotel—1/23, Edward Elliotts Road, Madras 4.

### IMPORTERS, EXPORTERS AND GENERAL MERCHANTS

Continental Import & Export Co. Ltd.—34, Clemens Road, Madras 7.  
 Eastern Import Co.—24, Singachari Street, Madras 5.  
 Exporters Syndicate—4, Sreeman Srinivas Iyengar Road, Madras 18.  
 Indo African Exporters—114, Singanna Chetty Street, Madras 2.  
 International Import Corporation—3, Ashok Road, Alwarpet, Madras 18.  
 K. Ramson & Co.—226, Poonamallee High Road, Madras 3.  
**LOTUS INDUSTRIES LTD.—Burma House, 16, Coral Merchant Street, Madras 1; Manufacturers, Importers, Exporters and Manufacturers' Representatives. Phone: 25015 & 22380; Grams: "FULFIL".**  
 Manilal & Sons—172, Netaji Subhas Road, Madras 1.  
 Nichimen Co. Ltd.—503/A, Poonamallee High Road, Madras 7.  
 Nissar Export Corporation.—3, Ashok Road, Alwarpet, Madras 18.

### INKS

Athens Products.—Ink House, 4, Second Street, Abhirampuram, Madras-18.  
 C. N. Subramanian.—44, Bunder Street, P. B. No. 1680, Madras.  
 Chaipark Co. Ltd.—37-L, Mount Road, Gundiy, Madras 32.  
 City Co-operative Stores Ltd.—No. 2, Second Street, Gopalpuram, Madras.

For Writing Comfort use "BRIL" inks  
 Smooth flowing and non-corrosive

Manufacturers:

### INDUSTRIAL RESEARCH CORPORATION

Madras-41.

Bangalore-3.

Ero Ink Industry.—141, Singanachetty Street, Madras.  
 Ever Ready Fountain Pen Ink.—12, Bommaliar Street, G.T. Madras.  
 Everyday Ink Works.—1014, Edapalayam Street, Madras.  
 Indian Products Syndicate.—141, Govindappa Naicken Street, Madras.  
 Jaya Bharatham Co.—5, Velders Street, Mount Road, Madras-2.  
 Kala Products.—44, Bunder Street, Madras.  
 Krishnaveni Inks.—141, Govindappa Naick Street, Madras.  
 Liberty Ink Co.—16, Broadway, Madras.  
 Loyal Industries.—161, Ayah Mudali Street, Madras.  
 National Products Syndicate—292, T. H. Road, Madras 21.  
 Perumal Chetty & Sons., V.—5, Stringers Street, Madras.  
 Radio Ink Mfg. Co.—Bunder Street, Madras.  
 Raman Inks Co.—186, Royapettah High Road, Royapettah, Madras.  
 Ravi Inks, New Star & Co.—Tondiarpet, Madras.  
 Regal Products P. Ltd.—186, Royapettah High Road, Madras.  
 Research Chemical Laboratories.—Lattice Bridge Road, Adyar, Madras 20.  
 Shelat Bros.—8, Lukmudas Street, Madras.  
 South Indian Products Ltd.—55, Bunder St., G.T. Madras.  
 Toa Private Ltd.—10, Armenian Street, Madras.  
 Venus Chemicals.—11, E. Kandappan Street, Madras.  
 Vishwanatham & Co.—17, Francis Joseph Street, Madras.  
 Winstone India P. Ltd.—No. 1, Mekay's Garden, Pathari Road, Thousand Lights, Madras 6.



### LABORATORY CHEMICALS

**BRITISH DRUG HOUSES (INDIA) PRIVATE LTD.**—99, Nyniappa Naick Street, Park Town, Madras 3, P.O. Box 2301; H.O. 8, Graham Road, Bombay 1.

**Madras Enamel Works Ltd.**—65, Sydenhams Road, Madras 3.

### LEATHER GOODS MANUFACTURERS

**British Leather Works.**—17, Perianna Maistry Road, Madras.

**Coronet Plastic & Shoe Co.**—28, Davidson Street, Madras.

**Chrome Leather Co. (Private) Ltd.**—Chromepet, Madras.

**Diamond Leather Goods Co.**—20, Ramaswamy Street, Madras.

**Durable Chrome Factory.**—175, Broadway, Madras.

**Empire Leather Works.**—1-35, Mount Road, Madras.

**General & Industrial Leathers Ltd.**—21, Errabalu Chetty Street, Madras 1.

**General Leather Co.**—171, Broadway, Madras.

**Gordon Woodroffe Leather Mfg. Co. (Private) Ltd.**—1-21, North Beach Road, Madras.

**Haji Abdul Shakoor & Co.**—31, Angappa Naick Street, P. B. No. 1797, Madras.

**India Leather Corpn. P. Ltd.**—9, Davidson Street, Madras 1.

**Jai Hind Leather Products.**—60/61, Broadway, Madras.

**Janata Leather Works.**—19, Walltax Road, Madras.

**Madras Leather Goods Co.**—35, Godown Street, Madras.

**MADRAS LEATHER FACTORY.**—34, Madhavaram High Road, Perambur (North), Madras 11. **Manufacturers of Chrome Composite ginning Washers.** Branch near Railway Station, Baguwa; M. L. C. Brand.

**Nazir Hussain & Co.**—11, Perambur High Road, Madras 12.

**Shams Leather Works.**—73, Narayana Mudali Street, Madras.

**Tullis Woodroffe & Co. (Private) Ltd.**—1/21, North Beach Road, Madras.

**Vasundhara Plastic Corporation.**—61, Godown Street, Madras 1.

**Venus Leather Goods Factory.**—9, Pycrofts Road, Madras.

### MACHINERY MANUFACTURERS, IMPORTERS AND DEALERS

**Addepally P. Ltd.**—23, Errabalu Chetty Street, Madras 1.

**Armcess Engineers P. Ltd., A-Super 8/9, Industrial Estate, Madras-32.**

**Atlas Machine Tools Co.**—10, Sembudoss Street, Madras 1.

**Bombay Co., Ltd.**—169, Broadway, Madras 1.

**Brady, W. H., & Co., Ltd.**—154/155, Pophams, Broadway, Madras 1.

**British Machinery Supplies Co.**—136 Mount Road, Madras 6.

**Diamond Engineering Co.**—101, N. Subhas Road, Madras 1.

**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.**—Machinery & Engineering Dept., Bharat Bldg., Mount Road, Madras 2; Phone: 86021; Grams: "MANDARIN"; P.O. Box No. 2235.

**Eastern Machinery & Trading Co.**—193, Mount Road, Madras 2.

**Easun Engineering Co., Ltd.**—5/7, Second Line Beach, Madras 1.

**Easor Engineering Works.**—53, Sydenhams Road, Periamet, Madras 3.

**Everest Metal Industries P. Ltd.**—B-4 Industrial Estate, Guindy, Madras 32.

**Ganesh Engineering Works, Mannarswami Koil, Mount Road, Madras-2.**

**General Electric Co. of India Ltd.**—Magnet House, Mount Road, Madras 2.

**General Machinery & Spares Corporation.**—C-30, Industrial Estate, Guindy, Madras 32.

**Gordon Woodroffe & Co. (Madras) Ltd.**—1/21, North Beach Road, Madras 1.

**Greaves Cotton & Co., Ltd.**—19, Second Line Beach, Madras 1.

**Guest, Keen, Williams, Ltd.**—202, Mount Road, Madras 2.

**Grafex Mahinery Co.**—2/17, Meera Sahib Street, Madras.

**Guindy Machine Tools P. Ltd.**—B-17, Industrial Estate, Guindy, Madras 32.

**Heatly & Gresham Ltd.**—Bombay Mutual Bldg., Esplanade, Madras 1.

**Heavy Industrial Machinery Works.**—Thiruvottiyur, Madras 19.

**Indian Oxygen & Acetylene Co., Ltd.**—(Absorbent Cotton Machines), 7/A, Vaithianatha Mudali Street, Tondiarpet, Madras 21.

**JAYEMS ENGINEERING CO.**—317, Thambu Chetty Street, Madras 1; Engineers, Machinery Merchants and Manufacturers' Representatives; Direct Importers of Machine Tools, Wood working machinery, Sheet Metal working machinery, Welding & Foundry equipment; Head Office: Warden House, Sir P. M. Road, Bombay 1; Branches at all important centres.

**Kilburn & Co., Ltd.**—32/33, Linghi Chetty Street, Madras 1.

**Kothandaraman, K. R., & Co.**—2, Lattice Bridge Road, Madras 20.

Phone : 52201

Grams : "KECEPE"

## THE K. C. P. LIMITED

Central Workshops  
Madras-19

Manufacturers of  
Heavy Industrial Machinery, Sugar Plants, Cement Plants, Plateworking Machinery, Pressure Vessels and Steel Castings—Manufacturing Sugar, Denatured Spirit and Confectionery

at  
Vuyyuru, Krishna Dt., A. P.

Manufacturing Cement

at

Macherla, Guntur Dt., Andhra Pradesh.

**Larsen & Toubro Ltd.**—4/5, Club House Road, Mount Road, Madras 2.

**Marshall Sons & Co. (India) Ltd.**—Marshall Bldg., Second Line Beach, Madras 1.

**Maneckial & Sons Agency.**—55, Armenian Street, Madras.

**Maseys Engineers**—4B/4C, North Rly. Terminus Road, Royapuram, Madras 13.

**National Engineering Co. (Madras) Ltd., The.**—379, Netaaji Subhas Chandra Bose Road, Madras 1.

**Nichimen & Co. Ltd.**—503/A, Poonamallee High Road, Madras.

**Pagoda Metal Industries**—B-18, Industrial Estate, Guindy, Madras 32.

**Pressed Metals P. Ltd.**—C-8, Industrial Estate, Guindy, Madras 32.

**Rallis India Ltd.**—Ralli House, 320, Linghi Chetty Street, Madras 1.

**Saganla Engineers, 2, Lattice Bridge Road, Adyar, Madras-20.**

**South India Export Co., Ltd.**—5, Mclean Street, Madras.

**Southern Forgings P. Ltd.**—1, Mohalla Street, Madras 16.

**Sri Rama Machinery Corpn. P. Ltd.**—110, Lloyds Road, Madras.

**Standard Machine Tools.**—Arunachaleswar Koil Street, Madras.

**Taylor, T. A., & Co. (Madras) Ltd.**—100, Armenian Street, Madras 1.

**Volta Limited**—115/116, Armenian Street, Madras 1.

**William Jacks & Co., Ltd.**—National Bank of India Bldg., First Line Beach, Madras 1.

**Wilson & Co.**—North Rly. Terminus Road, Royapuram, Madras 13.

### MATERIAL HANDLING AND CONVEYORS

**Amalgamations Private Ltd.**—202, Mount Road, Madras 2.

**Brady, W. H., & Co., Ltd.**—154/155, Pophams, Broadway, Madras 1.

**British Insulated Callender's Cables Ltd.**—37, Second Line Beach, Madras 1.

**General Electric Co. of India Ltd.**—Magnet House, Mount Road, Madras 2.

**Heatly & Gresham Ltd.**—Bombay Mutual Building, Esplanade, Madras 1.

**Kilburn & Co., Ltd.**—32/33, Linghi Chetty Street, Madras 1.

**Larsen & Toubro Ltd.**—4/5, Club House Road, Mount Road, Madras 2.

**Marshall Sons & Co. (India) Ltd.**—Marshall Building, Second Line Beach, Madras 1.

**Parry & Co., Ltd.**—"Dare House", First Line Beach, Madras 1.

**Richardson & Cruddas Ltd.**—First Line Beach, Madras 1.

**William Jacks & Co., Ltd.**—National Bank of India Building, First Line Beach, Madras 1.

**Wilson & Co.**—North Railway Terminus Road, Royapuram, Madras.

### MECHANICAL & STRUCTURAL ENGINEERS

**GARLICK & CO. (PRIVATE) LTD.**—Engineers, 38/3, Mount Road, Madras 6; Phones: 86110 & 86119; Grams: "MADGAR".

### METALS (BRASS, IRON AND STEEL)

**Aruna Metal Industries**—165, Nyniappa Naicken Street, Madras 3.

**Best & Co., Ltd.**—First Line Beach, Madras 1.

**Binny & Co. (Madras) Ltd.**—7, Armenian Street, Madras 1.

**Bombay Co., Ltd.**—169, Broadway, Madras 1.

**East India Industries (Madras) Private Ltd.**—498, Mint St., Madras 3.

**General Trading Co.**—182/83, Nyniappa Naicken Street, Madras 3.

**Gordon Woodroffe & Co. (Madras), Ltd.**—1/21, North Beach Road, Madras 1.

**Greaves Cotton & Co., Ltd.**—19, Second Line Beach, Madras 1.

**Guest, Keen, Williams, Ltd.**—202, Mount Road, Madras 2.

**Heatly & Gresham Ltd.**—Bombay Mutual Building, Esplanade, Madras 1.

**Hindustan Metal Refinery & Rolling Mills.**—124, Mint St., Madras.

**Indian Metal & Metallurgical Corpn.**—498, Mint Street, Madras 3.



**JAIRAMDAS & SONS.**—23, Errabalu Chetty Street, Madras-1;  
Sole Selling Agents for Sanderson Bros. & Newbould Ltd.,  
Machine Knives, Small Tools Cutters, etc. Phone : 21510.  
Grams : "WATERMETER".

McDowell & Co., Ltd.—Second Line Beach, Madras 1.  
Metallizers P. Ltd.—C-28, Industrial Estate, Madras 32.  
Mysore Premier Metal Factory—124, Mint Street, Madras 1.  
Parry & Co., Ltd.—"Dare House", First Line Beach, Madras 1.  
Pressed Metals P. Ltd.—C-8 & 9, Industrial Estate, Madras 32.  
Richardson & Cruddas Ltd.—First Line Beach, Madras 1.  
Roberts Mclean & Co., Ltd.—200, Mount Road, Madras 2.  
Vernon & Co., Ltd.—36, Second Line Beach, Madras 1.  
William Jacks & Co., Ltd.—National Bank of India Building, First  
Line Beach, Madras 1.

### MINERAL MERCHANTS

Best & Co. Private Ltd.—First Line Beach, Madras.  
Daulatram Rameshweral.—6, Linghi Chetty St., Madras.  
Eastern Ore Corporation.—Bank of Mysore Bldg., Madras.  
Hind Mercantile Corporation P. Ltd.—308/9, Linghi Chetty St.,  
Madras.  
Indian Biselers—247, Netaji Bose Road, Madras.  
Jeypore Sugar Co., Ltd.—38, Mount Road, Madras-6.  
Khemka & Co. (Agencies) Private Ltd.—Indian Chamber Bldgs.,  
Esplanade, Madras.  
M. Akkiah Chowdary.—Bank of Mysore Bldg., Madras.  
M. Kuppuswamy Naicker.—15, Sembudoss St., Madras.  
Murlidhar Jhunjhunwala Private Ltd.—308/9, Linghi Chetty St.,  
Madras.  
Murugappa Agencies Private Ltd.—52/53, Jehangir St., P.B. No. 1356,  
Madras.  
Natwarlal Shamaldas & Co.—28, Linghi Chetty St., Madras.  
Oriental Agencies.—167, China Bazar, Madras.  
Radhakrishna Minerals.—C/o M. D. K. Prasad, 11, Ritherdon  
Road, Vepery, Madras-7.  
Sterling Construction & Trading Co.—6, Pachappa's College, Hostel  
Road, Madras-6.  
Somayajulu & Co.—337, Thambu Chetty St., Madras.  
Vishweswerdass Gokaldas.—122, Mint St., Madras.

### MOTOR (BUS & COACH) BODY BUILDING MATERIALS

**MOHAMEDALLY NOORBHAI & CO.**—105, Mannady Street,  
Madras 1; Phone : 21820; Direct Importers, Dealers in Motor  
Carriage, Bus Body Fittings and Accessories, Hood and  
Upholstery Materials, P.V.C. Leather Cloth, Aluminium  
Section and Circles, Celluloid Sheets, Rubber Matting, etc.,  
Flag Brand Cab Tyres; Branches at Calcutta & Lucknow.

### NON-FERROUS METALWARE MFRS. & IMPORTERS

Best & Co., Ltd.—First Line Beach, Madras 1.  
Bombay Co., Ltd.—169, Broadway, Madras 1.  
East Asiatic Co. (India) Ltd.—Mercantile Bank Building, First  
Line Beach, Madras 1.  
Gillander's Arbuthnot & Co., Ltd.—First Line Beach, Madras 1.  
Greaves Cotton & Co., Ltd.—19, Second Line Beach, Madras 1.  
Heatly & Gresham Ltd.—Bombay Mutual Building, Esplanade,  
Madras 1.  
Imperial Chemical Industries (India) Ltd.—Bombay Mutual Bldg.,  
N. S. C. Bose Road, Madras 1.  
Mardi & Co.—28, Mooker Nallamuthu Street, Madras 1.

**NATIONAL FASTENERS PRIVATE LTD.**—B. Super 1, Industrial  
Estate, Guindy, Madras 32; Phone : 80510; Grams : "FOR-  
GINGS"; Manufacturers of Non-ferrous Forgings/Hot  
Stampings out of Copper, Brass & Bronzes as ancillary  
Components for automotive, Electrical and Engineering  
Industries; also Manufacturing Mild Steel Nuts by the  
Automatic Hot Forging Process.

Tambawala Products Agencies P. Ltd.—13, Singanna Naick St.,  
Madras 1.  
Vernon & Co., Ltd.—36, Second Line Beach, Madras 1.  
William Jacks & Co., Ltd.—National Bank of India Building, First  
Line Beach, Madras 1.

### OFFICE EQUIPMENTS AND SUPPLIES

**REMINGTON RAND OF INDIA LTD.**—Manufacturers of  
Remington Rand Business Equipment; 38/3, Mount Road,  
Madras 6. Phone : 86484 (3 lines). Grams : "REMINGTONS".

### OIL, OIL CAKES & OIL SEEDS

**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.**—  
Oil & Oilcakes & Oilseeds Dept., Mercantile Bank Bldg.,  
First Line Beach, Madras-1; Phone : 29341, Grams : "ASIA-  
TICO". P. O. Box No. 146.

### OIL MILLS

Abbu Chetty K. M. Oil Mills.—20, Valam Bangaru Chetty Street,  
Vepery, Madras.  
Associated Oil Corpn.—118, Armenian Street, Madras.  
Coromandel Vegetables Oils Industry.—28, 2nd Line Beach, Madras.  
Mahalakshmi (OIL) Mills.—Wall Tax Road, Madras.  
Massey Oil Mills.—Main Road, Royapuram, Madras.  
Mogili Oil Mills.—15-3, Chinnathambi Mudali Street, Madras.  
Satyanarayana Oil Mills Ltd.—4-13, Adam Sahib Street, Royapuram  
Madras.  
Sri Ram Oil Mills & Refineries Ltd.—4-5, Elayamudali Street,  
Madras.  
Sundaram Oil Mills Ltd.—Linghi Chetty Street, Madras.  
Swastic Oil Mills Ltd.—14, Stringer Street, Madras.  
Swathi Oil Mills Ltd.—45, Thambu Chetty Street, Madras.

### PACKAGING

**PAPER PRODUCTS LTD., THE.** Gaffar Mansions, 1st floor,  
60, Chinnathambi Street, Madras 1. Phone : 23225. Grams :  
"PRINTPAK." (For details Please see Commercial Firms  
Section of Bombay).

### PAINTS, ENAMELS AND VARNISHES, ETC.

A. Bashyam & Co.—11, Venkatachala Mudali Street, Madras 3.  
Addisons Paints & Chemicals Ltd.—Semblam, Madras 11.  
Amalgamations Private Ltd.—202, Mount Road, Madras 2.  
Anuradha Private Ltd.—53, Peter's Road, Madras 6.  
A. S. Manickam & Co.—46, V. Mudali Street, Madras 3.  
Best & Co., Ltd.—First Line Beach, Madras 1.  
**BLUNDELL EOMITE PAINTS LTD.**—Area Sales Depot., 21,  
Tamburichetty St., George Tower, Madras-1; Phone : 21419,  
Grams : "BLUNDPAINTS".  
Bombay Co., Ltd.—169, Broadway, Madras 1.  
British Paints (I) Ltd.—23, Haddows Road, Nungambakkam,  
Madras.  
Cellulose Products Ltd.—7-A, Singanna Naick Street, Madras.  
Chemical Enterprises P. Ltd.—Madras 6.  
East India Paint & Chemical Works Ltd.—19/3, Armenian St.,  
Madras 1.  
Gillander's Arbuthnot & Co., Ltd.—First Line Beach, Madras 1.  
Goodlass Nerolac Paint P. Ltd.—29, Periana Maistry St., Madras.  
Gordon Woodroffe & Co. (Madras) Ltd.—1/21, North Beach Road,  
Madras 1.  
Handymen Industries Ltd.—161, Mount Road, Madras.  
Imperial Chemical Industries (India) Ltd.—Bombay Mutual Bldg.,  
N. S. C. Bose Road, Madras 1.  
Jenson & Nicholson (I) Ltd.—7, Armenian St., Madras 1.  
John Fleming & Co. P. Ltd.—280, Linghi Chetty Street, Madras.  
Jyoti Paint & Varnish Industries.—3, Kondi Chetty Street, Madras 1.  
Kuppuswami & Co., S.—15, Venkatachala Mudali St., Madras 3.  
London Varnish & Enamel Co. Ltd.—8/9, Thambu Chetty Street,  
Madras.  
McDowell & Co., Ltd.—Second Line Beach, Madras 1.  
Raghavulu Chetty & Sons.—13, Venkatachala Mudali St., Madras 3.  
S. D. Rangwalia & Co.—289, Linghi Chetty Street, Madras 1.  
Sekar & Co., G.D.—134, Mount Road, Madras 6.  
S. Ganesan & Sons.—1/44, Venkatachala Mudali Street, P. T.  
Madras 3.  
Shalimar Paint, Colour & Varnish Co., Ltd.—8/9, Thambu Chetty  
Street, Madras 1.  
Shaw Wallace & Co., Ltd.—8/9, Thambu Chetty Street, Madras 1.  
Snow White Industrial Corporation—109, Netaji Subhas Road,  
Madras 1.  
Spencer & Co., Ltd.—Mount Road, Madras 2.  
Star Paint & Oil Works—14-B, Venkatachala Mudali Street, Madras 1.  
Taylor, T. A., & Co. (Madras) Ltd.—100, Armenian Street, Madras 1.  
Vernon & Co., Ltd.—36, Second Line Beach, Madras 1.  
V. Raghavulu Chetty & Son—13, Venkatachala Mudali Street,  
Madras 3.  
Western India Paint & Colour Co.—19, Venkatachala Mudali St.  
Madras.  
William Jacks & Co., Ltd.—National Bank of India Building, First  
Line Beach, Madras 1.  
Wilson & Co.—North Railway Terminus Road, Royapuram, Madras.

### PAINTS AND RAW MATERIALS

**TIFFIN'S BARYTES ASBESTOS & PAINTS LTD.**—272/273,  
Angappa Naick Street, Madras 1; Phone : 24818; Grams :  
"JESMONDE." Suppliers of Barytes Powder, Red oxide  
and other raw materials for the paint industry.

### PAPER MANUFACTURERS & MERCHANTS

A. B. Parekh.—48, Bunder Street, Madras.  
A. M. Arumugam.—110/111, Armenian Street, Madras.  
Annamalai & Co.—23, Badrian Street, Madras 1.  
Anuradha Private Ltd.—53, Peter's Road, Madras 6.  
A. S. Annamalai Chettiar & Co.—56, Big Street, Triplicane, Madras.  
Burma Paper Stores.—6, Sunkurama Chetty St., Madras.



Central Paper Mart.—1/51, Badrian Street, Madras.  
 Chas. Morgan & Co. Ltd.—314/15, Linghi Chetty St., Madras 1.  
 Chettiar & Co.—1/52, Anderson Street, Madras.  
 C. J. Sheth.—Bunder Street, Madras.  
 Continental Corporation.—22, Broadway, Madras.  
 Copparram Natesa Chetty.—59, Anderson Street, Madras.  
 C. Sanjeevi Chetty Co.—56, Bunder Street, Madras.  
 East & West Trading Co.—232, Govindappa Naick St., Madras.  
 Eastern Mercantiles.—41, Anderson Street, Madras.  
 E. Subbiah Pillai Sons.—26, Sembudoss Street, Madras.  
 Ganga Paper Stores (P) Ltd.—20, Baker Street, Madras.  
 General Papers Ltd.—16, Armenian Street, Madras.  
 Indo-Burma Stationery & Paper Stores.—12, Umpherson Street, Madras.  
 International Paper Co.—1-E, Anderson Street, Madras.  
 Jai Dayal Kapur & Sons (P) Ltd.—2, Anderson Street, Madras.  
 J. B. Advani & Co. (P) Ltd.—Loane Square, Broadway, Madras.  
 Jeyam & Co.—43/44, Anderson Street, Madras.  
 K. A. Seshadri Aiyangar & Sons.—2-B, Malayaperumal St., Madras.  
 K. Jayaram Mudaliar.—4, Badrian St., Madras 1.  
 K. L. N. Paper Traders.—289, N. S. C. Bose Road, Madras 1.  
 K. Orr & Co.—40, Chinnathambi Street, Madras.  
 Lakshmiah Papers.—7/8, Audiappa Naicken St., Madras.  
 Laxmiwax Corporation.—55/57, North Beach Road, Madras 1.  
 Lala Gopikrishna Gokuldas.—119, Mint Street, Madras.  
 Lalchand Kewalram.—101, Godown Street, Madras.  
 Madras Paper Board Industries.—72, Mint Street, Madras 3.  
 Madras Paper Converters and Industries.—84, Sydenham's Road, Madras.  
 Maars Corporation.—23, Anderson Street, Madras.  
 McDowell & Co., Ltd.—6, Second Line Beach, Madras.  
 Mahalakshmi & Co.—39, Anderson St., Madras 1.  
 M. Kumber Ali & Bros.—1, Anderson Street, Madras.  
 M. Husson Ali & Sons.—50, Bunder Street, Madras.  
 M. Natesa Chetty & Co.—56, Anderson Street, Madras.  
 M. Ziaullah & Sons.—1, Anderson Street, Madras.  
 N. Padmanabh, Rooms 3 & 4.—289, Netaji Subhash Chandra Bose Road, Madras.  
 N. Varadarajulu Chetty & Bro.—5, Bunder Street, Madras 1.  
 Parsram Jethanand & Co.—3, Thambu Chetty Street, Madras.  
 Palaniappa & Co.—45, Badrian Street, Madras.  
 P. Heeralal Galada.—13, Badrian Street, Madras.  
 Phoenix Agencies.—I-A, T. P. Koil Lane, Triplicane, Madras.  
 Paper & Allied Trades, 292, N. S. C. Bose Road, Madras.  
 Paper Products Ltd.—Gaffar Mansion, 60, Chinnathambi Street, Madras 1.  
 P. Moonirathinam Naidu & Sons.—10, Stringer Street, Madras.  
 P. B. Natham & Co.—2/235, N.S.C. Bose Road, Madras 1.  
 P. S. Nanjappa Chetty & Sons.—2/34, Mint Street, Madras.  
 P. Singaravelu Chetty & Son.—54, Bunder Street, Madras.  
 P. S. N. M. Ramalingam Chettiar & Co.—46, Anderson Street, Madras.  
 Rajan & Co.—1, Goomes Street, Madras.  
 Raja Paper Co.—1-B, Anderson Street, Madras.  
 Ramakrishna & Co.—Anderson Street, Madras.  
 Rangoon Paper Stores.—4, Anderson Street, Madras.  
 Rayon Traders (P) Ltd.—61, Sembudoss Street, Madras.  
 R. B. Shivdasani & Sons.—2/51, Badrian Street, Madras.  
 R. C. & Co., Agencies.—107, N.S.C. Bose Road, Madras 1.  
 Reynolds & Co.—16, Theagaraya Gramani Street, T. Nagar, Madras 17.  
 Sayee Co.—49, Badrian Street, Madras.  
 Seshasayee Paper & Board Ltd.—173, Broadway, Madras.  
 S. O. Bhawarlal Sowcar.—432, Mint Street, Madras.  
 S. O. Panumull Sowcar.—121, Mint Street, Madras.  
 Solisar & Co.—11/285, Malayaperumal Street, Madras 1.  
 Southern Sales Corp.—2/52, Anderson Street, Madras.  
 Star Trading Co.—58, Anderson Street, Madras.  
 S. T. Jagtiani & Sons.—3/4, Thambu Chetty St., Madras.  
 Subramaniam Bros.—99, Armenian Street, Madras.  
 S. V. Mani & Co.—27, Angappa Naick Street, Madras.  
 T. Chelvaranga Mudaliar & Sons.—289, Stringer Street, Madras.  
 T. M. Abdul Azeed & Co.—10, Badrian Street, Madras 1.  
 T. M. Abdul Gaffoor & Co.—50, Badrian Street, Madras.  
 T. H. Gangappa & Sons.—11, Broadway, Madras.  
 T. M. Abdul Azeed & Co.—10, Badrian Street, Madras.  
 T. V. Subramaniam & Co.—49, Bunder Street, Madras.  
 Vasu & Co.—12, Thambu Chetty St., Madras 1.  
 Victory Corporation.—53/1, Edward Elliot Road, Madras 4.  
 Voora Audiseshu Chetty.—59, Badrian Street, Madras.  
 V. Perumal Chetty & Sons.—3, Stringer Street, Madras.  
 V. Rajagopalan.—61, Badrian Street, Madras.  
 V. V. Rao & Bros.—6-A, Warren Road, Madras 4.

### PATENT & TRADE MARK AGENTS

L. R. SWAMI.—96-A, Mount Road, Teynampet, Madras 18;  
 For Government Registration and Protection of Your Trade  
 Marks, Patents, Designs and Copyrights in India and Foreign  
 Countries, Contact Govt. Regd. Trade Marks Agent L. R.  
 Swami, Teynampet, Madras 18; Phone: 72629, Madras;  
 Grams: "ADVERTISE", Madras.

### PENCILS

Geetha Agencies.—9, Kasi Chetty Street, Madras 1.  
 Madras Pencil Factory—3, Stringer Street, Madras.  
 Standard Pencil Factory.—Super 6, Industrial Estate, Guindy,  
 Madras 32.

### PERFUMES & COSMETICS

Aromatic Oil & Chemical Co., Ltd.—Aminjekarai, Madras 10.  
 Best & Co., Ltd.—P.B. No. 53, Madras.  
 Dralle Ltd.—263, Thambu Chetty Street, Madras.  
 Ganga Works.—Lattice Bridge Road, Adyar, Madras 20.  
 James Hutton & Co.—2, Potters St., Kilpauk, Madras 10.  
 McDowell & Co., Ltd.—Second Line Beach, Madras 1.  
 National Trading Co.—391, Mint Street, Madras.  
 Orient Cosmetics P. Ltd.—C-48 & 49, Industrial Estate, Madras 32.  
 Spencer & Co., Ltd.—Mount Road, Madras 2.  
 Taylor, T. A. & Co. (Madras) Ltd.—100, Armenian Street, Madras 1.  
 Veto Co.—16, Jones Street, Madras.  
 Wilson & Co.—North Railway Terminus Road, Royapuram, Madras.

### PEST CONTROL

#### PEST CONTROL (INDIA) PRIVATE LTD.

Consulting Entomologists—Termite Control—Disinfestation—Fumigation Service  
 2, Errabalu Chetty Street  
 Madras-1.

H.O. Yusuf Bldg., Mahatma Gandhi Road,  
 Bombay-1.

(For further details please see Bombay Commercial Firms  
 Section.)

### PHOTOGRAPHIC MATERIAL DEALERS

Agfa (I) P. Ltd.—202, Mount Road, Madras 2.  
 Allied Photographics P. Ltd.—34, Mount Road, Madras 2.  
 Ama Private Ltd.—159, Mount Road, Madras 2.  
 Central Camera Co. P. Ltd.—35/4, Mount Road, Madras 2.  
 Heatly & Gresham Ltd.—Bombay Mutual Bldgs., Madras 1.  
 Ilford Selo (India) Pvt. Ltd.—Woods Road, Madras 2.  
 Klein & Peyerl—30, Mount Road, Madras 2.  
 Kodak Ltd.—2/155, Mount Road, Madras 2.  
 Photo Cine Stores.—97/98, Armenian Street, Madras 1.  
 Spencer & Co., Ltd.—Mount Road, Madras 2.  
 Vaman Brothers—39, Spurtank Road, Madras 31.

### PLASTIC MFRS.

CAPRIHANS (INDIA) PVT. LTD.—171, Broadway, Madras;  
 Phone: 25222; H.O. Janmabhoomi Chambers, Fort Street,  
 Bombay 1.

### POWER GENERATION & TRANSMISSION EQUIPMENT

INDUSTRIAL GASES LTD., THE.—1/33, Mount Road, Madras.  
 Phone: 81626, Telex: 138, Grams: "INDUSGASES". Head  
 Office: P. O. Box 853, Calcutta-1. Design, Supply & Erection  
 of complete Power Stations, Turbines, Generators, Motors,  
 Diesel Generating sets, Transformers, Switchgears, Lighting  
 Arrestors, Voltage Regulators, Relays, etc.

### PRINTERS & PUBLISHERS

Associated Printers (M) P. Ltd.—Mount Road, Madras 2.  
 Associated Publishing House.—94/95, New Street, Mannady, Madras.  
 C. Coomaraswamy Naidu & Sons.—34, Chinna Thambi Street, Madras.  
 E. M. Gopalakrishna Kone.—289, Esplanade, Madras.  
 International Publishing House.—Opp. Loyola College, Madras.  
 Madras Premier Co.—33, Broadway, Madras 1.  
 M. Seshachalam & Co.—Sunkurama Chetty St., Madras.  
 S. R. Subramanya Pillai.—9, Philip Street, Madras.  
 United Printers Syndicate P. Ltd.—48/42, North Usman Road,  
 Madras 17.  
 Venkatarama & Co.—Anderson Street, Madras.  
 V. S. Swaminathan.—15, Sunkurama Chetty St., Madras 1.  
 Wardha Publishing House.—Sami Naicken Street, Chintadripet,  
 Madras.

### PRINTING PRESS MACHINERY & MATERIALS

Amalgamations Private Ltd.—202, Mount Road, Madras 2.  
 Beardsell, W. A. & Co., Ltd.—Second Line Beach, Madras 1.  
 Charles Morgan & Co., Ltd.—314/315, Linghi Chetty Street, Madras 1.  
 EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.—  
 Machinery & Engineering Dept., Bharat Bldg., Mount Road,  
 Madras 2; Phone: 86021; Grams: "MANDARIN"; P.O.  
 Box No. 2235.



Gordon Woodroffe & Co. (Madras) Ltd.—1/21, First Line Beach, Madras 1.  
 Hoogly Ink Mfg. Co., Ltd.—Rundalls Road, Madras 7.  
 Jaya Bharatham Co.—Philips Street, Madras 1.  
 South India Export Co., Ltd.—5, Mclean Street, Madras 1.  
 Winstone India P. Ltd.—No. 1, McKay's Garden, Patharl Road, Thousand Lights, Madras 6.

## PUMPS AND PUMPING SETS MANUFACTURERS AND DEALERS

Best & Co., Ltd.—First Line Beach, Madras 1.  
 Binny & Co. (Madras) Ltd.—7, Armenian Street, Madras 1.  
 Brady, W. H. & Co., Ltd.—154/155, Pophams, Broadway, Madras 1.  
 Chandra Foundries Private Ltd.—55, Basin Bridge Road, Washermanpet, Madras 21.  
**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.—**  
**Machinery & Engineering Dept., Bharat Bldg., Mount Road, Madras-2; Phone : 86021, Grams : 'MANDRAIN'; P.O. Box No. 2235.**  
 Easun Engineering Co., Ltd.—5/7, Second Line Beach, Madras 1.  
 General Electric Co. (India) Ltd.—Magnet House, Mount Road, Madras 2.  
 Gordon Woodroffe & Co., Ltd.—1/21, North Beach Road, Madras 1.  
 Greaves Cotton & Co., Ltd.—19, Second Line Beach, Madras 1.  
 Guest, Keen, Williams, Ltd.—202, Mount Road, Madras 1.  
 Heatly & Gresham, Ltd.—Bombay Mutual Bldg., Madras 1.  
 Iac Pumps Ltd.—2/17G, Mount Road, Madras 2.  
 Jyoti Ltd.—177-79, Mount Road, Madras 2.  
 Kilburn & Co., Ltd.—32/33, Linghi Chetty Street, Madras 1.  
 Larsen & Toubro Ltd.—4/5, Club House Road, Mount Road, Madras 2.  
 Marshall Sons & Co. (India) Ltd.—Marshall Building, Second Line Beach, Madras 1.  
 Massey's Engineers—4B-4C, North Railway Terminus Road, Royapuram, Madras 13.  
 National Engineering Co. (Madras) Ltd.—379, Netaji Subhas Chandra Bose Road, Madras 1.  
 Parry & Co., Ltd.—"Dare House", First Line Beach, Madras 1.  
 P. Natesan (Industries) Ltd.—191, Triplicane High Road, Madras 5.  
 Refrigerators & Home Appliances Ltd.—36, Mount Road, Madras 2.  
 Taylor, T. A. & Co. (Madras) Ltd.—100, Armenian Street, Madras 1.  
 Vernon & Co., Ltd.—36, Second Line Beach, Madras 1.  
 Voltas Ltd.—115/116, Armenian Street, Madras 1.

**WATER SUPPLY SPECIALISTS PRIVATE LTD.—330, Thambu Chetty Street, Madras 1. H.O. 8, Hamam Street, Bombay 1; Phone : 252325; Grams : "PUMPMEN"; Branches: Calcutta, New Delhi and Secunderabad. Sole Agents for Myers Pumps, Manufacturers of "WASP" Pumping Sets, etc.**  
 W. Iliam Jacks & Co., Ltd.—National Bank of India Building, First Line Beach, Madras 1.

## RADIO & RADIO PARTS MFRS. & DEALERS

Alpha Radio & Novelties P. Ltd.—9, Mount Road, Madras 2.  
 Amson & Co.—38C, Mount Road, Madras 6.  
 Arrow Radio Co.—22, General Patters Road, Mount Road, Madras.  
 Asiatic Radio Co.—4/169, Mount Road, Madras.  
 A. V. Thomas & Co. (I) Ltd.—2/21, First Line Beach, Madras.  
 Britannia Talking Machine Co.—173, China Bazar, Madras.  
 Chimanlal Desai & Co.—6, Sunkurama Chetty St., Madras 1.  
 Conjap Electronic Industries.—64, Dr. Alagappa Chettiar Road, Vepery, Madras 7.  
 Dhanam & Co.—164, Brodies Road, Mylapore, Madras.  
 Electrical Engineering Equipment Co.—4, Errabalu Chetty Street, Madras 1.  
 Electronic Service Co.—Agurchand Mansions, 17/35, Mount Road, Madras.  
 Expert Radio Service.—Jammi Bldgs., 48/1, Royapettah H. Road, Mylapore, Madras.  
 General Agencies.—169, Mount Road, Madras.  
 General Radio & Appliances Pvt. Ltd.—1/18, Mount Road, Madras.  
 General Radio Co.—3, Ritchie St., Mount Road, Madras 2.  
 G. Janshi & Co.—2/163, Mount Road, Madras.  
 G. K. Syndicate—118, Armenian Street, Madras.  
 Green Radio Co.—Mount Road, Madras.  
 India Radio House.—9, Mount Road, Madras.  
 International Talkie Equipment Co. Pvt. Ltd.—18, Mount Road, Madras.  
 Jay-O-Phone Co.—13, Mint Street, Madras.  
 Jaypee Electronics.—1/155, Mount Road, Madras 2.  
 Jeyrad Electronic Industries—38, Thangasalai Street, Madras 3.  
 Krishna (Sales) Agency.—P.B. No. 2733, Madras 2.  
 Lalwani Radio Corporation.—180, Mount Road, Madras 2.

Mahamed Ebrahim & Co. Pvt. Ltd.—Victory House, 7/8, Mount Road, Madras.  
 Modern Trading Co. (Madras).—1/155, Rayala Bldgs., Mount Road, Madras.  
 Motwane Pvt. Ltd.—196, Mount Road, Madras.  
 National Electronics.—53-A, Usman Road, T. Nagar, Madras.  
 New Radio Home.—27, Govindappa Naicken Street, Madras.  
 Nu Wood P. Ltd.—9, Mount Road, Madras 2.  
 Obul Reddy (Madras) P. Ltd.—31, General Patters Road, Madras 2.  
 Oriental Radio Corporation.—162, Mount Road, Madras.  
 Phillips India Ltd.—35-4, Mount Road, Madras 2.  
 Poppat Jamal & Sons.—36-B, Mount Road, Madras.  
 Radio & Allied Engineering Co.—4/17-B, Mount Road, Madras.  
 Radio & Electricals Ltd.—1-29B, Mount Road, Madras 2.  
 Radio Centre P. Ltd.—193, Mount Road, Madras 2.  
 Radio Services.—10, Mount Road, Madras.  
 Rahila Traders.—28/30, Rattan Bazar, Madras 3.  
 Raj Trading Co.—No. 4, Narasingapuram Street, Madras.  
**RESA CO.—Manufacturers of Domestic, Industrial and Community Radios, Amplifiers, Transformers and Coils; Factory: B-8 & 9, Industrial Estate, Guindy, Madras-32. Office: 11, Mount Road, Madras-2.**  
 Revathi Radios.—121, Netaji Subhas Road, Madras 1.  
 R. S. M. & Co.—236/237, Devaraja Mudali Street, Madras 3.  
 Savit Electronic Corp.—1, Ritchie Street, Mount Road, Madras.  
 Singh Trading Co.—9, Blaker's Road, Mount Road, Madras.  
 South India Music Emporium.—3, Broadway, Madras.  
 Southern Agencies.—37, Waller's Road, Madras.  
 Standard Electric Co.—27, General Patters Road, Madras.  
 Standard Radio & Electric Co.—26, Pycrofts' Road, Madras 5.  
 S. Sundaramoorthy and Sons.—26, General Patters Road, Madras.  
 Tele Tape Recording Industries.—30-A, Santhome High Road, Madras 4.  
 Universal Agencies.—2/18, Mount Road, Madras.  
 Usha Radio & Electricals.—58, Mint Street, Madras.  
 Vauhini Radios.—126, Mint Street, Madras 1.  
 Veneers.—36, Mount Road, Madras.  
 Venkateswara Radio Sales, Service & Electricals.—229, Govindappa Naick Street, Madras.  
 V. G. Panneerdas & Co.—49, Jeenis Road, Madras 15.  
 V. Krishnaswami & Co.—193, Mount Road, Madras 2.  
 V. S. Rajagopalan & Co.—24, Wallers Road, Mount Road, Madras.  
 Wireless Sales & Service Co.—1/11-A, Mount Road, Madras.

## REFRIGERATION EQUIPMENT

Amalgamations Private Ltd.—202, Mount Road, Madras 2.  
 Associated Electrical Industries (India) Ltd.—11/12, First Line Beach, Madras 1.  
 Beardsell, W. A. & Co., Ltd.—Second Line Beach, Madras 1.  
 Best & Co., Ltd.—First Line Beach, Madras 1.  
 Binny & Co. (Madras) Ltd.—7, Armenian Street, Madras 1.  
 General Electric Co. of India Ltd.—Magnet House, Mount Road, Madras 2.  
 Gordon Woodroffe & Co. (Madras) Ltd.—1/21, North Beach Road, Madras 1.  
 Larsen & Toubro Ltd.—4/5, Club House Road, Mount Road, Madras 2.  
 Parry & Co., Ltd.—"Dare House," First Line Beach, Madras 1.  
 Poornima Agencies.—10, Mount Road, Madras 2.  
 Philips Electrical Co. (India) Ltd.—Mount Road, Madras 2.  
 Spencer & Co., Ltd.—Mount Road, Madras 2.  
 Voltas Ltd.—115/116, Armenian Street, Madras 1.

## ROAD BUILDING MACHINERY

**JAIRAMDAS & SONS, 23, Errabalu Chetty Street, Madras-1; Manufacturers of "JESONS" Concrete Mixers and Lime Mortar Mills; Factory: Industrial Area, Azamabad, Hyderabad, Phone : 21510. Grams : 'WATERMETER'.**

## RUBBER GOODS MANUFACTURERS AND DEALERS

Asiatic Tyres.—71, General Patters Road, Madras 2.  
 Best & Co., Ltd.—First Line Beach, Madras 1.  
 Bombay Co., Ltd.—169, Broadway, Madras.  
 Dunlop Rubber Co. (India) Ltd.—3/29, Mount Road, Madras 2.  
 East India Rubber Works Private Ltd.—24/27, Mooker Nallamuthu Street, P. O. Box No. 1926, Madras 1.  
 Firestone Tyre & Rubber Co. (India) Ltd.—Woods Road, Madras 2.  
 Gullander's Arbuthnot & Co., Ltd.—First Line Beach, Madras 1.  
 Goodyear Tyre & Rubber Co. India Ltd.—2, Patullos Road, Madras 2.  
 Heatly & Gresham Ltd.—Bombay Mutual Bldg., Esplanade, Madras 1.  
 Kilburn & Co., Ltd.—32/33, Linghi Chetty Street, Madras 1.  
 M. M. Rubber Co.—175/1, Mount Road, Madras 2.



National Rubber Mfrs. P. Ltd.—3/28, Muker Nallamuthu Street, Madras.  
 National Tyre and Rubber Co. of India Ltd.—28, Peter's Road, Madras.  
 Oriental Rubber Trading Co. (Madras) P. Ltd.—8, Greames Road, Thousand Lights, Madras 6.  
 Southern Tyre Mfrs. P. Ltd.—5/6, Mount Road, Madras 2.  
 Spencer & Co., Ltd.—Mount Road, Madras 2.

### SANITARY-WARES AND FITTINGS

Arunachalam & Co.—34, Lloyds Road, Madras 14.  
 Calcutta Light Casting Supply Co.—19, Errabalu Chetty Street, Madras 1.  
 Gillander's Arbuthnot & Co., Ltd.—First Line Beach, Madras 1.  
 Grahams Trading Co. (India) Ltd.—311, Linghi Chetty Street, Madras 1.  
 King & Company.—321, Thambu Chetty Street, Madras 1.  
 K. Rathnam & Co.—311, Thambu Chetty Street, Madras 1.  
 Murugappa Agents P. Ltd.—52/53, Jehangir Street, Madras 1.  
 P. A. Goverdhan Das—13/81, Sembudoss Street, Madras 1.  
 Raval & Co.—306, Linghi Chetty Street, Madras 1.  
 Sanitary Sales & Service.—26, Thambu Chetty Street, Madras 1.  
 Swamy & Co.—318, Thambu Chetty Street, Madras 1.  
 Vasanta Engineering Co.—9B, Prithvi Avenue, Madras 18.  
 Venus & Company.—Thambu Chetty Street, Madras 1.  
 Vijaya Trading Corporation.—320, Thambu Chetty Street, G.T., Madras 1.

### SCIENTIFIC INSTRUMENTS

Acme Trading Corp.—113, Armenian Street, Madras 1.  
 Adair, Dutt & Co. (India) Pvt. Ltd.—P.B. No. 327, 1/29, Mount Road, Madras.  
 Andhra Scientific Co. Ltd.—4, Blacker's Road, Mount Road, Madras.  
 Central Scientific Supplies Co. Ltd.—17, Stringer Street, Madras.  
 Dutta Scientific Works—5, Sunkurama Chetty Street, Madras 1.  
 Free India Scientific Co.—74/A, Kothavalchavadi St., Saidapet, Madras.  
 General Radio & Appliances Pvt. Ltd.—1/18, Mount Road, Madras.  
**HARGOLAL & SONS.**—The Science Apparatus Workshop, 27 ABC, Linghi Chetty Street, Madras; H.O. Ambala Cantt., Branches: Tilak Road, G.P.O. Lane, Hyderabad (AP), 25, Bowring Hospital Road, Bangalore-1; C-767, Mahanagar, Lucknow; Manufacturers and Dealers in Scientific Instruments, Laboratory Glassware and Chemicals, Physiology Models Charts, Engineering Models and Apparatuses.  
 Premier India Scientific Co.—1-33, Varadarajulu Naidu Road, Egmore, Madras 8.  
 Scientific Instrument Co. Ltd.—30, Mount Road, Madras.  
 Standard Scientific Instruments Co., The.—115, Ramakrishna Math Road, Madras 28.  
 Toshniwal Instruments.—C-37, Industrial Estate, Madras 32.  
 United Scientific Co.—9, Sunkurama Chetty Street, G. T., Madras.

### SNUFF MANUFACTURERS AND DEALERS

**AMBAL & CO.**—201, Mint Street, Madras 1. Phone: 32061. Grams: "BRAHMAPODI".  
 Original Shanmugham Snuff & Co.—233-34, T. H. Road, Madras.

### SOAP

All India Soap Works.—31, Hakim Makdoo Ashruff St., Madras 5.  
 Best & Co., Ltd.—First Line Beach, Madras 1.  
 Calcutta Chemical Co. Ltd.—5/149, Broadway, Madras 10.  
**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.**—Soap Department, Mercantile Bank Bldg., First Line Beach, Madras-1; Phone: 29341, Grams: 'MANDARIN'; P.O. Box No. 146.  
 Gajavalli Soap Works.—13, Muthiah Mudali St., Madras 21.  
 Ganga Works.—Lattice Bridge Road, Adyar, Madras 20.  
 Godrej Soaps Private Ltd.—164, Broadway, Madras.  
 Hindustan Lever Ltd.—11/14, Armenian Street, Madras 1.  
 Joshi Soap Works.—310, Thambu Chetty St., Madras 1.  
 Mohan Brothers.—32, Alandur Road, Saidapet, Madras.  
 Muraly Industries Ltd.—2/153, Broadway, Madras 1.  
 Parvathi Toilet Soap Factory.—31, Elakandapan St., Madras.  
 Presidency Soap Works.—6, General Swami Naicken St., Jam Bazar, Triplicane, Madras.  
 Rajkamal Industries.—167, Walltax Road, Kondithope, Madras.  
 Rathna Chemical Industries.—Saidapet, Madras.  
 Santa Soap Works.—26, Muthumary Chetty Street, Madras.  
 Season Soap Factory.—15, Oilmonger Street, Madras 5.  
 Taj Soap Works.—383-A, Thiruvottiyur High Road, Madras 21.  
**UNITED SOAP WORKS.**—68, Perambur High Road, Madras 12. Soft Soap and Washing Soap Manufacturers, Trade Mark U.S. Co. '555.'

### STAINLESS STEEL

Indo-Metal Industries—23, Errabalu Chetty Street, Madras 1.  
 Madras Stainless Steelware, Industries.—23, Errabalu Chetty St., Madras 1.  
 Metalware & Co.—425, Mint Street, Madras 1.  
 Mysore Premier Metal Factory.—124, Mint Street, Madras.  
 Nachiappa Metal Corporation.—268, Linghi Chetty Street, Madras 1.  
 S. D. & Sons.—16, Lakshmidas Street, Park Town, Madras 3.

### STEEL FURNITURE & FITTINGS

Ajax Products Co.—52/53, Jehangir Street, Madras 1.  
 Godrej & Boyce Mfg. Co. P. Ltd.—177-179, Mount Road, Madras.  
 Industrial Contemporary Furniture Works.—192, N. Bose Road, Madras 1.  
 Ravi & Co.—6/141, Broadway, Madras 1.  
 Tamilnad Thozilagam.—40, Whites Road, Madras 14.  
 Vellodi Brothers P. Ltd.—6-A, Woods Road, Mount Road, Madras 2.

### STOCKINETTE MANUFACTURERS

**LOTUS INDUSTRIES LTD.**—Burma House, 16, Coral Merchant Street, Madras 1. Manufacturers of Press Buttons (Snap Fasteners), Exporters, Importers and Manufacturers' Representatives. Phone: 25015 & 22380. Grams: "FULFIL."

### SURGICAL INSTRUMENTS AND APPLIANCES

Associated Surgicals (India).—5, Velders Street, P.B. No. 3749, Mount Road, Madras 2.  
 Bengal Surgical Co.—8/1, Semmunath Mudali St., Madras 1.  
 Becker Scientific Co.—4/14, Bakers St., Madras.  
 Bombay Surgical Equipment Co.—8, Sunkurama Chetty Street, Madras 1.  
 East Asiatic Co. of India Ltd.—Mercantile Bank Building, First Line Beach, Madras 1.  
 Forward Surgical Co.—105, Nyniappa Naick Street, Madras 1.  
 Gillanders Arbuthnot & Co., Ltd.—First Line Beach, Madras 1.  
 Hale & Co.—Hale Mansions, 192, Poonamallee High Road, Vepery, Madras 7.  
 Hospital Equipment Co.—60/1, Gangadareswar Koil St., Madras.  
 Hospital Equipment Mfg. Co.—1, Iron Monger Street, Kondithope, Madras 1.  
 Hospital Requisites Co.—14-H, Cross Road, Madras.  
 Indian Sterilizer Co.—13, Devanatha St., Madras.  
 Medical Equipment Co.—Jammi Bldgs., Royapettah High Road, Madras 4.  
 Modern Stainless Steel Hospital Requisites Industries.—6, North Wall Road, Madras.  
 Modern Surgical Co.—16, Kandappa Achari Street, Madras 7.  
 National Surgical & Eng. Works.—187, Mount Road, Madras 2.  
 Pikay's Medico Surgicals.—199, Mount Road, Madras 2.  
 South India Surgical Co.—142, Nyniappa Naick Street, Madras 3.

### SWITCH GEAR MFRS.

**MODI & MODI MANUFACTURING CO.**—11, Linghi Chetty Street, Madras-1; Phone: 23096, 23892; Grams: "HIGH-SPEED"; Factory at Vriddhachalam; Phone: 22; Manufacturers of high class electrical Porcelain fuse units and Switchgear parts and Line bricks for Ball Mills.

### TOOLS (MACHINE, ELECTRIC, DIAMOND AND PNEUMATIC)

Amalgamations Private Ltd.—202, Mount Road, Madras 2.  
 Bombay Co., Ltd.—169, Broadway, Madras 1.  
 Easun Engineering Co., Ltd.—5/7, Second Line Beach, Madras 1.  
 General Electric Co. of India Ltd.—Magnet House, Mount Road, Madras 2.  
 Greaves Cotton & Co., Ltd.—19, Second Line Beach, Madras 1.  
 Guest, Keen, Williams Ltd.—202, Mount Road, Madras 2.  
 Hassanally, A. M., & Co.—84, Linghi Chetty Street, Madras 1.  
 Heatly & Gresham Ltd.—Bombay Mutual Bldg., Esplanade, Madras 1.

### INDUSTRIAL DIAMONDS & TOOLS CO.,

47/50, Rattan Bazar,  
 Madras-3 (INDIA)

Manufacturers & Importers of Industrial Diamond Products, Dressing Tools, Boring Tools, Diamond Powders, Handness Testers, Hand Laps, Files, Wheels etc.



J. Prataprai & Co.—295, Linghi Chetty Street, Madras 1.  
 Larsen & Toubro Ltd.—4/5, Club House Rd., Mount Road, Madras 2.  
 Marshall Sons & Co. (India) Ltd.—Marshall Building, Second Line Beach, Madras 1.  
 McDowell & Co., Ltd.—Second Line Beach, Madras 1.  
 Parry & Co., Ltd.—“Dare House,” First Line Beach, Madras 1.  
 Rallis India Ltd.—Ralli House, 320, Linghi Chetty Street, Madras 1.  
 Richardson & Cruddas Ltd.—First Line Beach, Madras 1.  
 Shailendra Enterprises P. Ltd.—Ambattur Industrial Estate, Madras 50.  
 Taylor, T. A., & Co. (Madras) Ltd.—100, Armenian Street, Madras 1.  
 Voltas Ltd.—115/116, Armenian Street, Madras 1.  
 William Jacks & Co., Ltd.—National Bank of India Building, First Line Beach, Madras 1.

### TRANSPORTERS & GOODS CARRIERS

A. T. M. Ltd.—Madras 2.  
 All India General Transport Corpn. Ltd.—Davidson Street, Madras 1.  
 Andhra Pradesh Transport Co.—160, Govindappa Naik St., Madras 1.  
 Andhra Roadways—135, Walltax Road, Madras 1.  
 Associated Transport Co.—38, Errabalu Chetty Street, Madras 1.  
 Associated Transports (M) P. Ltd.—29, Bhodaperumal Mudali St., Mount Road, Madras 2.  
 City Transport Co.—2/92, Thambu Chetty Street, Madras 1.  
 Commercial Goods Transports.—6, Singanna Naicken St., Madras 1.  
 Express Carriers Ltd.—6, Armenian St., Madras 1.  
 Garage P. Ltd.—Oriental Bldgs, Armenian St., Madras 1.  
 Grand Trunk Roadways Ltd.—337, Thambu Chetty Street, Madras 1.  
 International Clearing & Shipping Agency.—20-B, Second Line Beach, Madras 1.  
 Madras Bangalore Transport Co.—1/235, Angappa Naicken St., Madras 1.  
 Madras Transport Co. Ltd.—“Greenfields”, 1, Nungambakkam High Road, Madras.  
 M. B. T. Co.—1/235, Angappa Naick Street, Madras 1.  
 M. G. Brothers Lorry Service.—3 Basin Water Works St., Madras 1.  
 Nethaji Lorry & Bus Service—33, Angappa Naicken St., Madras 1.  
 Popular Transport.—19, Stringers St., Madras 1.  
 Presidency Transport P. Ltd.—29, Walltax Road, Madras 2.  
 Provincial Transport Ltd.—5, Annaswami Naick Street, Madras.  
 Radiat Roadways.—47, Bunder St., Madras 1.  
 Road Transport Corpn. P. Ltd.—26, Errabalu Chetty Street, Madras 1.  
 South Eastern Roadways.—3/156, Broadway, Madras 1.  
 South India Bus Transport Ltd.—3-11, Mount Road, Madras.  
 Southern Roadways P. Ltd.—Express Estates, Madras 2.  
 Sree Narayana Transports.—2-C, Goomes St., Madras 1.  
 Sri Ram Vilas Service P. Ltd.—1/17, Mount Road, Madras 2.  
 Sri Vijayalakshmi Lorry Service.—35, Broadway, Madras 1.  
 Transport Ltd.—6, Harrington Road, Chetput, Madras.  
 United Transport Co.—198, Mount Road, Madras.

### TRAVEL AGENTS

Asian Travels (India) P. Ltd.—39, Mount Road, Madras 6.  
**MERCURY TRAVELS (INDIA) PRIVATE LTD.**—Ashoka Hotel, Pantheon Road, Egmore, Madras 8. Phone: 85095. Head Office: Oberoi Grand Hotel, Chowringhee, Calcutta 13. Phone: 236051 (8 lines). Branches: Oberoi Imperial Hotel, New Delhi. Phone: 43001 (3 lines). 70, Forbes Street, Rampart Row Corner, Fort, Bombay 1. Phone: 253948 (3 lines). Oberoi Palace Hotel, Srinagar, Kashmir; Phone: 1045, Srinagar 19. National Motors Building, Mirza Ismail Road, Jaipur. Phone: 77284. Grams: “MERCOTRAVEL.”  
**ORIENT EXPRESS CO. PRIVATE LTD., THE.**—Agurchand Mansion, 35, Mount Road, Madras-2. Phone: 86260; Grams: “OREXPRESO.”  
 Trade-Wings (Private) Ltd.—Purushottam Bldgs., 193, Mount Road, Madras.

### TYPEWRITERS

Amalgamations Private Ltd.—202, Mount Road, Madras 2.  
 Blackwoods (India) Ltd.—2/29, Mount Road, Madras 2.  
 Godrej & Boyce Mfg. Co., Private Ltd.—177 & 179, Mount Road, Madras.  
 Rayala Corporation (Madras) Ltd.—“Rayala Bldgs.”, 1/155, Mount Road, Madras 2.  
**REMINGTON RAND OF INDIA LTD.**—Manufacturers of Remington Rand Business Equipment; 38/3, Mount Road, Madras 6. Phone: 86484 (3 lines); Grams: “REMINGTONS.”  
 Typewriters & Office Appliances Co. (India) Ltd.—17, Armenian Street, Madras 1.

### UMBRELLAS

Champalal & Co.—20, Tholasingam St., Madras 1.  
 Dakshinabharath Umbrella Mfg. Co.—Georgetown, N. S. C. B. Road, Madras.  
 Ebrahim Currim & Sons—251/56, Netaji Subhas Road, Madras 1.  
 Modern Umbrella Mfg. Co.—111, Nyniappa Naick Street, Madras 3.

### VANASPATI AND VEGETABLE OIL MANUFACTURERS

East Asiatic Co. (India) Ltd.—P.B. No. 146, Madras.  
 East Coast Food Products Ltd.—99, Armenian Street, Madras.  
 Hindustan Lever Ltd.—11-14, Armenian Street, Madras 1.  
 Madras Vanaspati Ltd.—12/13, Angappa Naick Street, Madras.

### VEGETABLE PRODUCTS

**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.**—Vegetable Products Dept., Mercantile Bank Bldg., First Line Beach, Madras-1; Phone: 29341, Grams: “MANDARIN”, P.O. Box No. 146.

### WATER METERS

**KAYCEE INDUSTRIES LTD.**—3/33, Mount Road, Madras; Agents for Hind Rectifiers Ltd., Manufacturers of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-chemical Industries, “Kaycee” Rotary, Toggle, Heat Control and Airconditioner Switches, “Kaycee” Domestic and Bulk type Water Meters. Head Office: Kamani Chambers, Nicol Road, Bellard Estate, Bombay; Phone: 263521, Grams: “TURNRITE”; Branches: Delhi, Calcutta & Kanpur.

### WEIGHING MACHINES

Avery Co., Ltd.—16/17, Armenian Street, Madras 1.  
 Gordon Woodroffe & Co. (Madras) Ltd.—1/21, First Line Beach, Madras 1.  
 Heatly & Gresham Ltd.—Bombay Mutual Building, Esplanade, Madras 1.  
 McDowell & Co., Ltd.—Second Line Beach, Madras 1.  
 Spencer & Co., Ltd.—Mount Road, Madras 2.  
 Vernon & Co., Ltd.—36, Second Line Beach, Madras 1.

### WELDING SETS AND MATERIALS

**EAST ASIATIC COMPANY (INDIA) PRIVATE LTD., THE.**—Machinery & Engineering Dept., Bharat Bldg., Mount Road, Madras 2; Phone: 86021; Grams: “MANDARIN”, P.O. Box No. 2235.  
 General Electric Co. of India Ltd.—Magnet House, Mount Road, Madras 2.  
 Gordon Woodroffe & Co. (Madras) Ltd.—1/21, First Line Beach, Madras 1.  
 Guest, Keen, Williams, Ltd.—202, Mount Road, Madras 2.  
 Indian Oxygen & Acetylene Co., Ltd.—7, Vaithianatha Mudali Street, Tondiarpet, Madras 21.  
**INDUSTRIAL GASES LTD., THE.**—1/33, Mount Road, Madras. Phone: 81626, Telex: 138, Grams: “INDUSGASES”. Head Office: P.O. Box 853, Calcutta-1. Manufacturers & Suppliers of all kinds of Welding & Cutting Machines and equipment, Automobile, Resistance, Spot, Seam, Stud & Flash, Inert Gas Shielded Arc, Sub-merged arc, cutting machines, Blow-pipes, Regulators, Acetylene generators, Electrodes, Rods, Wires Electrode Holders etc.  
 Marshall Sons & Co. (India) Ltd.—Marshall Building, Second Line Beach, Madras 1.  
 Rallis India Ltd.—Ralli House, 320, Linghi Chetty Street, Madras 1.  
 Voltas Ltd.—115/116, Armenian Street, Madras 1.  
 William Jacks & Co., Ltd.—National Bank of India Building, First Line Beach, Madras 1.

### WIRE AND WIRE PRODUCTS

Binny & Co. (Madras) Ltd.—7, Armenian Street, Madras 1.  
 Bombay Co., Ltd.—169, Broadway, Madras.  
 Chambers, K. H., Ltd.—Lecots Building, Madras.  
 Grahams Trading Co. (India) Ltd.—311, Linghi Chetty Street, Madras 1.  
 Guest, Keen, Williams, Ltd.—202, Mount Road, Madras 1.  
 Heatly & Gresham Ltd.—Bombay Mutual Building, Esplanade, Madras 1.  
 Indian Steel & Wire Products Ltd.—19/A, Vaniar Street, Madras.  
 Indian Wire Products Industries.—B-14 & 15, Industrial Estate, Madras 32.  
 McDowell & Co., Ltd.—Second Line Beach, Madras.  
 Southern Industrial Corpn. (P) Ltd.—Polal, Red Hills, Madras.



## COIMBATORE COMMERCIAL FIRMS

- Acme Textiles, Trichy Road, Coimbatore.  
 Addisons & Co., Ltd., Avanashi Road, Coimbatore.  
 Arvind & Co., 255, Oppanakara Street, Coimbatore.  
 A. T. N. Stainless Steel Industries, 346, Raja Street, Coimbatore.  
 Avery Co., Ltd., Trichy Road, Coimbatore.  
 Batliboi & Co., Avanashi Road, Coimbatore.  
 Binny & Co. Madras Ltd., Post Box No. 69, Coimbatore.  
 Bluemount Switchgears Associates Switchgears Ltd., Patel Road, Ranganathapuram, Coimbatore 9.  
 Bradma of India P. Ltd., 109/110, Avanashi Road, Coimbatore.  
 Brady & Co., Ltd., W. H., Jail Road, Coimbatore.  
 British Insulated Callender's Cables Ltd., Race Course Road, Coimbatore.  
 Broadway Engineering & Transport Co., 5/15, Old Post Office Road, Coimbatore.  
 Brooke Bond India Ltd., Krishnaswamy Mudaliar Road, Coimbatore.  
 Caltex (India) Ltd., Avanashi Road, Coimbatore.  
 Carbon Products of India Private Ltd., Trichy Road, Coimbatore 1.  
 Cement Marketing Co. of India Ltd., Race Course Road, Coimbatore.  
 Central India Machinery Mfg. Co. Ltd., Variety Hall Road, Coimbatore.  
 Chromotan (Cbe.) Ltd., 2/249, Avanashi Road, Coimbatore.  
 Coimbatore Central Co-operative Stores Ltd., P. Bag No. 5, Coimbatore 2.  
 Coimbatore Premier Corporation P. Ltd., Patel Road, Coimbatore.  
 Cotton Textiles Ltd., Mall Mill Road, Coimbatore.  
 Diesel (India) Coimbatore, 124-B, Trichy Road, Coimbatore.  
 Electro-Diesel Equipment Co., 23, Avanashi Road, Coimbatore.  
 Ganapatty Engineering Mfrs. Private Ltd., Ganapathy, Coimbatore 6.  
 Gannon Dunkerley & Co., Ltd., Power House Road, Coimbatore.  
 Garlick & Co., Ltd., Cox Street, Coimbatore.  
 General Electric Co. of India Ltd., "Magnet House," Avanashi Road, Coimbatore.  
 George Oakes Ltd., Avanashi Road, Coimbatore.  
 Gordon Woodroffe & Co. (Madras) Ltd., Fraser Square, Coimbatore.  
 Greaves Cotton & Co. Ltd., India House, Trichy Road, Coimbatore.  
 Hindustan Carbonic Products, Podanur (Dt. Coimbatore).  
 Imperial Tobacco Co. of India Ltd., United India Bldg., Avanashi Road, Coimbatore.  
 India Silicate Industry, Fraser Square, Coimbatore.  
 Indian Cable Co. Ltd., 4/2, Race Course Road, Coimbatore.  
 Indian Cashewnuts & Plantations Ltd. (Managing Agents, T. Stanes & Co., Ltd.), Coimbatore.  
 Indian Hume Pipe Co., Ltd., Ranganathapuram, Coimbatore.  
 Indian Overseas Trading Co., Ltd., Power House Road, Coimbatore.  
 Indian Refrigeration Industries P. Ltd., Singanallur, Coimbatore 5.  
 Indo-Swiss Synthetic Gem Mfg. Co. Ltd., Mettupalayam (Dt. Coimbatore).  
 Industrial Equipment & Stores Agencies, 7/105, Jail Road, Coimbatore.  
 Jayems Engineering Co., Oppanakara Street, Coimbatore.  
 Jensen & Nicholson P. Ltd., 7/219, Avanashi Road, Coimbatore 1.  
 Kilburn & Co. P. Ltd., Post Box 763, Coimbatore 2.  
 K. N. D. Tool & Equipment Co., Lakshmi Bldg., Patel Road, Coimbatore 9.  
 Madras Circle Pipe Dealers' Assn. Ltd., 4/2, Race Course Road, Coimbatore.  
 Madras Phosphate Manufacturers P. Ltd., 51, Ponnurangam Road, Coimbatore 2.  
 Meccano Floorings Ltd., College Road, Coimbatore.  
 Mopeds (India) Ltd., No. 1, Palaniswamy Naidu Street, Avanashi Road, Coimbatore.  
 Nanco Rubber & Plastics Ltd., A.T.T. Colony, Coimbatore.  
 Needlex Industries (India) Ltd., Post Box No. 12, Coimbatore.  
 Pagefield Agencies, Coimbatore 9.  
 Parry & Co., Ltd., Fraser Square, Coimbatore.  
 Patel Cotton Co., Ltd., Avanashi Road, Coimbatore.  
 Peirce Leslie & Co., Ltd., Race Course Road, Coimbatore.  
 Praga Industries P. Ltd., Peelamedu, Coimbatore 4.  
 Rainbow Sewing Thread Co., 14/191, Lingappa Chetty Street, Coimbatore.  
 Rallis India Ltd., Avanashi Road, Coimbatore.  
 Ramu Foundry, Pappanaicken Palayam, Coimbatore.  
 Rayon Traders P. Ltd., United India Bldg., Avanashi Road, Coimbatore.  
 Remington Rand of India Ltd., 12/204, Oppanakara Street, Coimbatore.  
 South India Corporation P. Ltd., 10/25, Jail Road, Coimbatore.  
 South India Sanfits, S. M. Pudur P.O. Ondiputhur, Coimbatore.  
 Spencer & Co. Ltd., Coimbatore.  
 Stanes Amalgamated Estates Ltd. (Managing Agents: T. Stanes & Co., Ltd.), Race Course Road, Coimbatore.  
 Stanes Motors (South India) Limited, (Managing Agents & Secretaries: T. Stanes & Co., Ltd.), Post Box No. 12, Race Course Road, Coimbatore.  
 Tea Estates India P. Ltd., Race Course Road, Coimbatore.  
 Textile Machinery Manufacturers Ltd., Avanashi Road, Coimbatore 1.  
 Textool Company Limited, Ganapathy, Coimbatore 6.  
 Titan Paints and Varnishes Ltd., Podanur P. O., Coimbatore.  
 T. V. Sundaram Iyengar & Sons, P. Ltd., Mettupalayam Road, Coimbatore.  
 Uberoi Limited, 8/23, Avanashi Road, Coimbatore.  
 United Nilgiri Tea Estates Co., Ltd., The (Managing Agents: T. Stanes & Co., Ltd.), Post Box No. 12, Coimbatore.  
 Vitamin Products Co., 213, Tatabad, Coimbatore 12.  
 Voltas Ltd., Race Course Road, Coimbatore.  
 V. T. S. Castor Oil Mfg. Co., Ltd., Sastri Road, Ranganathapuram, Coimbatore.  
 Wakefield Engineering Co., Jail Road, Coimbatore.

## CLASSIFIED LIST OF TRADES & PROFESSIONS

### AIR-CONDITIONING & REFRIGERATION

- Brilliant Engg. Co., India House, Trichy Road, Coimbatore.  
 Garlick & Co.—Cox Street, Coimbatore.  
 Parry & Co. Ltd.—Fraser Square, Coimbatore.  
 Refrigeration Engineering Works.—Nawab Hakeem Road, Coimbatore.  
 Voltas Ltd.—Race Course Road, Coimbatore.

### AUTOMOBILE ENGINEERS

- Associated Automobiles Ltd.—Avanashi Road, Coimbatore.  
 Autocraft Automobile Electrical Engineers.—9/93, Dewan Bahadur Road, Coimbatore 2.  
 Auto-Reconstruction Works.—Cross Street Road, Coimbatore 1.  
 Bluemount Auto Service.—Mettupalayam, Coimbatore.  
 George Oakes Ltd.—Avanashi Road, Coimbatore.  
 Gibson's Auto Service.—Mettupalayam, Coimbatore.  
 India Services (Coimbatore) Ltd.—4/105, Trichy Road, Coimbatore.  
 Modern Motor Works.—Fraser Square, Coimbatore.  
 National Motor Works.—Trichy Road, Coimbatore.  
 Southern Motors.—Trichy Road, Coimbatore.  
 South India Corporation (Madras) Ltd.—Jail Road, Coimbatore.  
 Standard Automobiles.—Crosscut Road, Coimbatore.  
 Stanes Motors (South India) Ltd.—Trichy Road, Coimbatore.

### AUTOMOBILE PARTS & ACCESSORIES

- Associated Automobiles Ltd.—Avanashi Road, Coimbatore.  
 Central Autoparts & Co.—Avanashi Road, Coimbatore.  
 Coimbatore Automobiles.—Avanashi Road, Coimbatore.  
 Greenland Automobiles.—11/19, Arokiaswami Road, Coimbatore.  
 Malabar Modern Automobiles.—Avanashi Road, Coimbatore.  
 Pioneer Motors.—Old Post Office Road, Coimbatore.  
 Premier Agencies.—Trichy Road, Coimbatore.  
 United Motors Ltd.—Avanashi Road, Coimbatore.

### BANKS

- Adhelaksmi Bank Ltd.—Raja Street, Coimbatore.  
 Annupparpalayam Bank Ltd.—Jail Road, Coimbatore.  
 Arian Bank.—Rangal Gowder Street, Coimbatore.  
 Bank of Baroda Ltd.—Big Bazar Street, Coimbatore.  
 Bank of India Ltd.—Head Post Office Road, Coimbatore.  
 Bank of Jaipur Ltd.—Oppanakara Street, Coimbatore.  
 Bank of Madras Ltd.—Oppanakara Street, Coimbatore.  
 Bank of Mysore Ltd.—Oppanakara Street, Coimbatore.  
 Canara Banking Corporation Ltd.—Oppanakara Street, Coimbatore.  
 Canara Bank Ltd.—Edayar Street, Coimbatore.



Canara Industrial & Banking Syndicate Ltd.—Oppanakara Street, Coimbatore.  
 Central Bank of India Ltd.—Variety Hall Road, Coimbatore.  
 Chaldean Syrian Bank.—Raja Street, Coimbatore.  
 City Co-operative Bank Ltd.—Gopalapuram, Coimbatore.  
 Coimbatore Bank Ltd.—Raja Street, Coimbatore.  
 Coimbatore Bhaghyalakshmi Bank Ltd.—Oppanakara Street, Coimbatore.  
 Coimbatore Commerce Bank.—Union High School Road, Coimbatore.  
 Coimbatore Co-operative House Mortgage Bank Ltd.—Jail Road, Coimbatore.  
 Coimbatore Co-operative Stores & Bank Ltd.—Sullivan Street, Coimbatore.  
 Coimbatore District Co-operative Central Bank Ltd.—State Bank Road, Coimbatore.  
 Coimbatore Ganeshar Bank Ltd.—Jail Road, Coimbatore.  
 Coimbatore Hindu Kripakara Nidhi Ltd.—Oppanakara Street, Coimbatore.  
 Coimbatore Janopkara Bank Ltd.—Vysial Street, Coimbatore.  
 Coimbatore National Bank Ltd.—Variety Hall Road, Coimbatore.  
 Coimbatore Standard Bank Ltd.—R. S. Puram, Coimbatore.  
 Coimbatore Town Bank Ltd.—Rangal Gowder Street, Coimbatore.  
 Coimbatore Varthaka Virdhi Bank Ltd.—Rangal Gowder Street, Coimbatore.  
 Coimbatore Vasunthara Bank Ltd.—Raja Street, Coimbatore.  
 Dravya Sahaya Bank Ltd.—Oppanakara Street, Coimbatore.  
 Indian Bank Ltd.—Variety Hall Road, Coimbatore.  
 Indian Overseas Bank Ltd.—Oppanakara Street, Coimbatore.  
 Indo Commercial Bank Ltd.—Oppanakara Street, Coimbatore.  
 Indo Mercantile Bank Ltd.—Edayar Street, Coimbatore.  
 Janasahaya Bank Ltd.—Nawab Hakeem Road, Coimbatore.  
 Kamalalaya Bank.—Raja Street, Coimbatore.  
 Karpaga Nidhi Ltd.—Devangapet, Coimbatore.  
 Karur Vysia Bank Ltd.—Oppanakara Street, Coimbatore.  
 Madras City Bank Ltd.—Oppanakara Street, Coimbatore.  
 Mannar Bank Ltd.—Thomas Street, Coimbatore.  
 Modern Bank Ltd.—Oppanakara Street, Coimbatore.  
 Nedungadi Bank Ltd.—Oppanakara Street, Coimbatore.  
 New India Bank Ltd.—Vysial Street, Coimbatore.  
 Peelamedu Co-operative Land Mortgage Bank Ltd.—Avanashi Road, Coimbatore.  
 Punjab National Bank Ltd.—Oppanakara Street, Coimbatore.  
 South Indian Bank Ltd.—Raja Street, Coimbatore.  
 Srinivasaperumal Bank Ltd.—Crosscut Road, Coimbatore.  
 State Bank of India.—State Bank Road, Coimbatore.  
 Thocos Bank Ltd.—Raja Street, Coimbatore.  
 Travancore Bank Ltd.—Oppanakara Street, Coimbatore.  
 Travancore Forward Bank Ltd.—Oppanakara Street, Coimbatore.  
 United Commercial Bank Ltd.—Oppanakara Street, Coimbatore.

### BOOKSELLERS & STATIONERS

Balu Book Stall.—Crosscut Road, Coimbatore.  
 Bettal Gowder K.O.—Raja Street, Coimbatore.  
 The Bookseller.—113, Big Bazar Street, Coimbatore.  
 Chelliah Stores.—Crosscut Road, Coimbatore.  
 Christian Book Shop.—Avanashi Road, Coimbatore.  
 Coimbatore Sakthi Kariyalayam.—Variety Hall Road, Coimbatore.  
 Dinamani Stores.—Near U.M.S., Coimbatore.  
 Hindustan Traders.—Raja Street, Coimbatore.  
 Kavignar Padippakam.—Raja Street, Coimbatore.  
 Nanjappa & Co.—Raja Street, Coimbatore.  
 New Century Book House Private Ltd.—19/43, Big Bazar Street, Coimbatore.  
 Popular Hindustan Publication.—Old Post Office Road, Coimbatore.  
 Reliance General Stores.—Variety Hall Road, Coimbatore.  
 Tamil Nadu Book Sellers.—Raja Street, Coimbatore.  
 Vasantham Stores.—Crosscut Road, Coimbatore.

### BUTTON FACTORIES

Jaga Button Industries Ltd.—Post Bag No. 519, Mettupalayam Road, Coimbatore.  
 Praga Industries P. Ltd.—P. Box 161, Coimbatore.  
 Vijaya Industries.—Peelamedu, Coimbatore.

### CASTOR OIL MANUFACTURERS

K. P. Castor Oil Works.—R. S. Puram P.O., Coimbatore 2.  
 Radha Castor Oil Works.—Sukrawarpet, Coimbatore.  
 V. T. S. Castor Oil Manufacturing Co. Ltd.—Rt. Hon'ble Sastri Road, Ranganathapuram, Coimbatore.

### CENTRIFUGAL PUMPS MANUFACTURERS

Dhandayuthapani Foundry Private Ltd.—Pappanachenpalayam, Coimbatore 1; Phone: 2419; Grams: "MOTORPUMP".  
 Eastern Electrical Co. Ltd.—Singanallour, Coimbatore 5.  
 Ganapathy Engineering Manufacturers Private Ltd.—Post Box No. 6, Ganapathy, Coimbatore 6.  
 P. S. G. Industrial Institute.—Peelamedu P. O., Coimbatore 4.

### CHAIN MANUFACTURERS

#### L. G. BALAKRISHNAN & BROS. PVT. LTD.

Ganapathy, Coimbatore-6.

Manufacturers of 'ROLON' the finest Chains for Cars, Motor Cycles, Scooters etc. Made in India.

### CHEMISTS & DRUGGISTS

All Medical Stores.—Big Bazar Street, Coimbatore.  
 Arya Vaidya Pharmacy (Cbe.) P. Ltd.—Trichy Road, Coimbatore.  
 Central Pharmacy, The.—33, St. Michael's Emporium, Big Bazar Street, Coimbatore.  
 City Pharmacy.—Avanashi Road, Coimbatore.  
 Dasai Gowder & Co.—Avanashi Road, Coimbatore.  
 D. S. V. & Sons.—Avanashi Road, Coimbatore.  
 Easwar Medical Shop.—Raja Street, Coimbatore.  
 English Pharmacy.—Raja Street, Coimbatore.  
 European General Stores.—State Bank Road, Coimbatore.  
 Gurunath Medical Stores.—Nawab Hakeem Road, Coimbatore.  
 Hameed Medical Stores.—Big Bazar Street, Coimbatore.  
 Jaya Pharmacy.—Oppanakara Street, Coimbatore.  
 Kanchana Medical Store.—Rangal Gowder Street, Coimbatore.  
 Kasinath & Co.—Big Bazar Street, Coimbatore.  
 Kerala Medical Stores.—Rangal Gowder Street, Coimbatore.  
 K. P. M. Sadhu Vaidyasala.—Variety Hall Road, Coimbatore.  
 Krishnaswami & Co.—Raja Street, Coimbatore.  
 Manian & Co., E. P. B.—Avanashi Road, Coimbatore.  
 Modern Medical & General Stores.—Big Bazar Street, Coimbatore.  
 National Pharmacy.—Oppanakara Street, Coimbatore.  
 Paul & Co., V. J.—Nawab Hakeem Road, Coimbatore.  
 Ramdas Pharmacy.—Crosscut Road, Coimbatore.  
 Ramnath & Co.—State Bank Road, Coimbatore.  
 Saraswathi Medical Stores.—Edayar Street, Coimbatore.  
 Saroja Medical & General Stores.—Raja Street, Coimbatore.  
 Shivaaji Medical Hall.—Imperial Bank Road, Coimbatore.  
 South India Medical Stores.—Oppanakara Street, Coimbatore.  
 South India Medical Co. Ltd.—Big Bazar Street, Coimbatore.  
 Star Drug Co.—Raja Street, Coimbatore.  
 Subramanian & Co.—Raja Street, Coimbatore.  
 Thambi & Co.—Ukkadam, Coimbatore.  
 Thomson Medical & General Stores.—Raja Street, Coimbatore.  
 United Concerns.—Thomas Street, Coimbatore.  
 Vasan & Co.—Rangal Gowder Street, Coimbatore.  
 Veda & Co.—East Arogysamy Road, Coimbatore.  
 Wilfred Pereira Ltd.—Avanashi Road, Coimbatore.

### COFFEE & TEA MERCHANTS

Ambrosia Tea Emporium.—Trichy Road, Coimbatore.  
 Bhavani Tea Products Ltd.—R. S. Puram, Coimbatore.  
 Coimbatore Coffee Trading Co.—Variety Hall Road, Coimbatore.  
 Devarshola Tea Company Ltd.—Race Course Road, Coimbatore.  
 Famous Coffee & Tea Works.—Rangal Gowder Street, Coimbatore.  
 Gita Coffee Works.—Oppanakara Street, Coimbatore.  
 Indian Coffee Supply Co.—Big Bazar Street, Coimbatore.  
 Jain's Coffee Works.—Oppanakara Street, Coimbatore.  
 Kannan Coffee Co.—Rangal Gowder Street, Coimbatore.  
 Lakshmi Coffee Co.—Raja Street, Coimbatore.  
 Lion Brand Coffee Co.—Raja Street, Coimbatore.  
 Lipton Tea Ltd.—Edayar Street, Coimbatore.  
 Madras Tea Estates.—Race Course Road, Coimbatore.  
 Meera Coffee Works.—Rangal Gowder Street, Coimbatore.  
 Narasus Coffee Manufacturing Co.—Rangal Gowder Street, Coimbatore.  
 Neelamalal Coffee Estates.—Gandhipuram, Coimbatore.  
 Ramu Coffee Works.—Rangal Gowder Street, Coimbatore.  
 Saraswathi Coffee Trading Co.—Rangal Gowder Street, Coimbatore.  
 Sri Shanmugha Coffee Works.—Crosscut Road, Coimbatore.  
 Stanes Amalgamated Tea Estates.—Race Course Road, Coimbatore.  
 Tea Estates India Ltd.—Race Course Road, Coimbatore.  
 Thomco Tea Ltd.—Jail Road, Coimbatore.  
 United Coffee Supply Co. Ltd.—Trichy Road, Coimbatore.  
 United Nilgiris Tea Estates.—Race Course Road, Coimbatore.

### COTTON MERCHANTS

Bell & Co.—Grey Town, Coimbatore.  
 C. Jairam & Co., Syrian Church Road, Coimbatore.  
 Consolidated Cotton Corporation.—Rangal Gowder Street, Coimbatore.  
 Ganesar Ginning Co. Ltd.—Ganapathy, Coimbatore.

GILL & CO. (PRIVATE) LTD.—P.O. Box No. 272, 12/25, Syrian Church Road, 1, Coimbatore 1; H.O. Indu House, Dougall Road, Ballard Estate, Bombay 1; Phone: 265001 (5 lines); Grams: "GILLCO."



Indira & Co.—Big Bazar Street, Coimbatore.  
 Jalramdas Nanmal.—Subramanya Mudaliar Street, Coimbatore.  
 Kilachand Devchand & Co.—Grey Town, Coimbatore.  
 Kotak & Co.—R. S. Puram, Coimbatore.  
 Krishna Ginning Factory.—Pappanaickenpalayam, Coimbatore.  
 Narayana Ginning Factory.—Pappanaickenpalayam, Coimbatore.  
 Patel Cotton Co. Ltd.—Avanashi Road, Coimbatore.  
 Ballis (India) Ltd.—Avanashi Road, Coimbatore.  
 Sardar Trading Co.—3, Syrian Church Road, Coimbatore.  
 Vijayakumar Mercantile Corporation.—R. S. Puram, Coimbatore.  
 Voltas Ltd.—Race Course Road, Coimbatore.  
 Vyas & Co.—Jail Road, Coimbatore.  
 Waterfield & Co.—Edayar Street, Coimbatore.

### COTTON MILLS

The Anandakumar Mills Ltd.—Sravanampatti P.O., Coimbatore.  
 Asher Textiles Limited.—Tirupur.  
 Sri Balasubramania Mills Limited.—Singanallur P.O., Coimbatore 5.  
 The Bhavani Mills Ltd.—6/3-B, Race Course, Coimbatore 1.  
 The Cambodia Mills Limited.—P. B. No. 281, Singanallur, Coimbatore 5.  
 The Chandra Textiles Ltd.—Peelamedu, Coimbatore 4.  
 The Coimbatore Cotton Jubilee Mills.—Singanallur, Coimbatore 5.  
 The Coimbatore Kamala Mills Ltd.—Uppilipalayam, Singanallur P.O., Coimbatore 5.  
 The Coimbatore Murugan Mills Ltd.—P.B. No. 703, R. S. Puram P.O., Coimbatore 2.  
 The Coimbatore Pioneer Mills Ltd.—P.B. No. 4, Peelamedu P.O., Coimbatore 4.  
 The Coimbatore Spg. & Wvg. Co. Ltd.—P.B. No. 24, Coimbatore.  
 The Dhanalakshmi Mills Ltd.—P.B. No. 29, Tirupur.  
 The D.P.F. Textiles Ltd.—Mettupalayam Road, Gnanambikai Mills P.O., Coimbatore.  
 The Gnanambikai Mills Ltd.—Gnanambikai Mills Post, Coimbatore.  
 G. Ramaswamy & Co.—Ganga Textiles, P.B. No. 279, Pappanaickenpalayam, Coimbatore.  
 The Gobald Textiles Ltd.—Tirupur.  
 Sri Hari Mills Ltd.—P.B. No. 27, Singanallur P.O., Coimbatore 5.  
 The Janardhana Mills Ltd.—Uppilipalayam, Singanallur P.O., Coimbatore 5.  
 The Jayalakshmi Mills Ltd.—P.B. No. 10, Singanallur P.O., Coimbatore.  
 The Jothi Mills.—Perianaickenpalayam, Sri Ramakrishna Vidyalaya P.O., Coimbatore.  
 The Kadri Mills (CBE) Ltd.—P.B. No. 19, Odderpalayam, Singanallur P.O., Coimbatore 5.  
 The Kannapiran Mills Ltd.—Sowripalayam P.O., Coimbatore.  
 The Karthikeya Spg. & Wvg. Mills Ltd.—P.B. No. 18, Singanallur P.O., Coimbatore 5.  
 The Karunambikai Mills Ltd.—Somanur P.O., Coimbatore Dist.  
 The Kasthuri Mills Ltd.—Singanallur P.O., Coimbatore 5.  
 The Kothari Textiles Ltd.—Singanallur P.O., Coimbatore 5.  
 The Krishnaveni Textiles Ltd.—P.B. No. 25, Singanallur P.O., Coimbatore 5.  
 The Kumaran Mills Ltd.—Peelamedu P.O., Coimbatore 4.  
 The Kwaliti Spinning Mills Ltd.—Pollachi.  
 The Lakshmi Mills Co. Ltd.—P.B. No. 31, Pappanaickenpalayam, Coimbatore.  
 The Lakshminarayana Textiles Ltd.—Vadugapalayam, Palladam Taluk, District Coimbatore.  
 The Lotus Mills Ltd.—Sundarapuram P.O., Podanur.  
 Narasimha Mills Ltd.—Kannanpalayam, Sular P.O., Coimbatore.  
 Natesar Spg. & Wvg. Mills Ltd.—Erode.  
 Om Parasakthi Mills Ltd.—Krishnarayapuram, Ganapathy P.O., Coimbatore 6.  
 The Palamalai Ranganathar Mills Ltd.—Perianaickenpalayam, Sri Ramakrishna Vidyalaya P.O., Coimbatore.  
 The Palani Andavar Mills Ltd.—Dhalli Road, Udamalpet, Coimbatore Dist.  
 The Pankaja Mills Ltd.—P.B. No. 150, Puliakulam, Coimbatore.  
 Pioneer Textiles Ltd.—Vedapatty P.O., Coimbatore.  
 The Prakash Mills Ltd.—P.B. No. 12, Peelamedu, Coimbatore 4.  
 The Premier Mills (Coimbatore) Ltd.—Pulankinar, R. S. Udamalpet.  
 The Premier Mills (Coimbatore) Ltd.—Othakalmandapam Branch, Coimbatore.  
 The Radhakrishna Mills Ltd.—Peelamedu, Coimbatore 4.  
 The Radhika Mills Ltd.—5/179, Uppilipalayam, Coimbatore 5.  
 The Rajalakshmi Mills Ltd.—Singanallur P.O., Coimbatore 5.  
 Sri Ramakrishna Mills (CBE) Ltd.—Ganapathy P.O., Coimbatore 6.  
 The Ramalinga Choodambikai Mills Ltd.—Tirupur.  
 The Ramnarayan Mills Ltd.—Perianaickenpalayam, Coimbatore.  
 The Ranga Vilas Ginning, Spg. & Wvg. Mills Ltd.—P.B. No. 8, Peelamedu, Coimbatore 4.  
 The Ravendran Mills Ltd.—P. B. No. 26, Singanallur P.O., Coimbatore 5.  
 The Sakthi Textiles Ltd.—Post Box No. 36, Pollachi.  
 The Sarada Mills Ltd.—Loganathapuram, Podanur  
 Sarguna Textiles.—Sular P.O., Coimbatore.

The Saroja Mills Ltd.—Singanallur P.O., Coimbatore 5.  
 The Selvaraj Mills Ltd.—Singanallur P.O., Coimbatore 5.  
 The Sivananda Mills Ltd.—Ganapathy P.O., Coimbatore 6.  
 The Somasundaram Mills Ltd.—P.B. No. 134, Coimbatore.  
 The Southern Textiles Ltd.—Sular Post, Coimbatore.  
 The Sujani Textiles Ltd.—Sowripalayam P.O., Coimbatore.  
 The Suryaprabha Mills Ltd.—Kuniamuthur, Coimbatore.  
 The Tirumurthi Mills Ltd.—Udamalpet, Coimbatore District.  
 The Tirupur Cotton Spg. & Wvg. Mills Ltd.—P.B. No. 12, Tirupur.  
 United Bleachers P. Ltd.—Mettupalayam.  
 The Varadarajah Textiles Ltd.—Peelamedu P.O., Coimbatore 4.  
 The Vasantha Mills Ltd.—P.B. No. 16, Singanallur P.O., Coimbatore 5.  
 The Vasudeva Industries Ltd.—Odderpalayam, Singanallur, Coimbatore 5.  
 The Venkatesa Mills Ltd.—Venkatesa Mills Post, Udamalpet, R.S.  
 The Vijayalakshmi Mills Ltd.—Kuniamuthur Post, Coimbatore.  
 The Vijayeswari Textiles Ltd.—Pulliampatti, Pollachi.

### COTTON TEXTILE MACHINERY

**LAKSHMI MACHINE WORKS LTD.**—Factory & Administrative Office: Perianaickenpalayam, CBE Dist. Registered Office: 348, Avanashi Road, Coimbatore 1.

### COTTON WASTE MERCHANTS AND EXPORTERS

Asoka Corporation.—Ramalingam Road, R. S. Puram, Coimbatore 2.  
 C. Jairam & Co.—Syrian Church Road, Coimbatore.  
 G. M. Vyas & Co.—93, D. B. Road, R. S. Puram, Coimbatore 2.  
 Kurji Dhanjee.—Devangapet, Coimbatore.  
 M. K. Bhatt & Co.—Rangai Gounder Street, Coimbatore.  
 Narsi Thulsidas.—Ponnurangam Road, R. S. Puram, Coimbatore 2.  
 Pandya Company.—Magircar Road, R. S. Puram, Coimbatore 2.  
 Purushotam Ramjee & Co.—Sambandam Road, R. S. Puram, Coimbatore 2. Cotton, Cotton waste, Yarn & Kapok Merchants, Commission Agents and Exporters.  
 Sarada Trading Co.—Syrian Church Road, Coimbatore.  
 Thulsidas Murarji & Co.—Vysial Street, Coimbatore.

### DYEING & BLEACHING COMPANIES

Acme Textile Dyeing & Printing Industries.—Mettupalayam, Coimbatore.  
 Ananda Saya Salai.—Edayar Street, Coimbatore.  
 Balasubramaniam Dyeing & Trading Corp.—Rangai Gowder Street, Coimbatore.  
 Essorpe Saya Salai.—Rangai Gowder Street, Coimbatore.  
 Malli Saya Salai.—Rangai Gowder Street, Coimbatore.  
 Nilamegam Saya Salai.—Sukrawarpet, Coimbatore.  
 Rainbow Dyeing & Bleaching Works.—Chinnappa Chetty Street, Coimbatore.  
 Saraswathy Saya Salai.—Rangai Gowder Street, Coimbatore.  
 United Bleachers Ltd.—Mettupalayam P.O., Coimbatore.

### DYESTUFF & CHEMICAL DEALERS

Acme Textile Distributors.—Venkataswamy Road, R. S. Puram, Coimbatore.  
 Doraiswamy, P. M.—Rangai Gowder Street, Coimbatore.  
 Pattabiraman, T. K.—Rangai Gowder Street, Coimbatore.  
 Srinivasa Charlu & Co., M.—Rangai Gowder Street, Coimbatore.  
 Subburaju, R.—Sukrawarpet, Coimbatore.  
 Vasan & Co., S.—Rangai Gowder Street, Coimbatore.

### ELECTRIC MOTORS, PUMPS & PUMPING SETS

Argus Engineering Co., Ltd.—Peelamedu, Coimbatore 4.  
 Balasubramania Foundry.—Patel Road, Coimbatore.  
 Coimbatore Premier Corporation P. Ltd., Avanashi Road, Coimbatore.  
 Eastern Electrical Co., Ltd.—Singanallur, Coimbatore 5.  
 Eletex Engineering Corporation P. Ltd., 5/4, H. Q. Road, Coimbatore 1.  
 Excel Industries.—P. Box 1, Coimbatore 11.  
 Karthikeya Foundry.—Puliakulam Road, Pappanaickenpalayam, Coimbatore 1.  
 Leader Industries—8, Tarabad, Coimbatore 12.  
 Moulvi & Sons, Crosscut Road, Coimbatore 9.  
 Navamani & Co., Pappanaickenpalayam, Coimbatore 1.  
 P. S. G. Industrial Institute.—Peelamedu P.O., Coimbatore 4.  
 Sri Sakthi Engineering Works.—Avanashi Road, Coimbatore 4.  
 Texmo Industries.—Mettupalayam Road, R. S. Puram Post, Coimbatore 2.  
 T. R. Industrials.—Coimbatore 8.

### ELECTRICAL GOODS & APPLIANCES

Associated Electrical Industries (India) Ltd.—Race Course Road, Coimbatore.  
 Batliboi & Company.—Avanashi Road, Coimbatore.  
 British Insulated Callender's Cables Ltd.—Race Course Road, Coimbatore.



Coimbatore Electric & Novelty Stores.—Oppanakara Street, Coimbatore.  
 Crompton Engineering Co. (Madras) Ltd.—Arts College Road, Coimbatore.  
 Electrical & General Supply Ltd.—Avanashi Road, Coimbatore.  
 General Electric Co. of India Ltd.—Magnet House, Coimbatore.  
 Hindustan Equipment Manufacturers.—Krishnarayapuram, Coimbatore 6.  
 Industrial Engineering Co.—Fraser Square, Coimbatore.  
 Lakshmi Textile Suppliers.—5/4, Headquarters Road, Coimbatore 1.  
 Modi & Modi.—Police H.Q. Road, Coimbatore.  
 Nagindas Kilabhai (S. India) Ltd.—Cox Street, Coimbatore.  
 Pioneer Electricals.—Raja Street, Coimbatore.  
 Prabha Electricals.—Oppanakara Street, Coimbatore.  
 Ramakrishna & Co.—Avanashi Road, Coimbatore.  
 Ramu N. & Bros.—Avanashi Road, Coimbatore.  
 Shanmugham & Co.—5/106, Jail Road, Coimbatore.

**STANDARD COMMERCIAL CORPORATION.**—Avanashi Road, Coimbatore; Phone: 2518, Grams: 'STACAMCO'; G.E.C., Philips, A.E.I., Crompton Dealers.

**SWITCHES & METER INDUSTRIES.**—6/85, Trichy Road, Coimbatore; Manufacturers of Electrical Indicating Instruments, Rotary Switches and Relays.

### ENGINEERING

Arrow Industrial Works.—Krishnasami Mudallar Road, Coimbatore.  
 Cotexme Engineering Corporation.—1/19, Trichy Road, Coimbatore 5.  
 Everest Engineering Works.—Crosscut Road, Coimbatore.  
 Ganapathy Engg. Manufacturers P. Ltd.—Ganapathy, Coimbatore 6.  
 General Engineering Co.—Sardar Patel Road, Ramanathapuram, Coimbatore.  
 Govardhana Engineering Industries.—Ukkadam South, Coimbatore 1.  
 Industrial Engineering Co. (Cbe.) P. Ltd.—Fraser Square, Coimbatore.  
 Industrial & Scientific Works, Fraser Square, Coimbatore.  
 Jayachander Engineering Industries.—Mettupalayam Road, Coimbatore 2.  
 Kasturi Engineers Ltd.—P.O. Box 231, Coimbatore.  
 Lakshmi Machine Works Ltd.—348, Avanashi Road, Pappanalkenpalayam, Coimbatore 1.  
 Measureall Engineering Co. Private Ltd.—Singanallur, Coimbatore 5.  
 New City Engineering Works.—Patel Road, Coimbatore.  
 Nirmala Engineering Works.—Krishnaswamy Mudallar Road, Coimbatore.  
 P.N.B. Engineering Works.—Big Bazar Street, Coimbatore.  
 Prabhakar Industries.—100 Ft. Road, Tatabad, Coimbatore 11.

**RADHA FOUNDRY.**—5/2, Blackstone Road, Red Fields, Coimbatore 18.

Rockford Engineering Co.—1/22, Avanashi Road, Coimbatore.  
 Sivananda Metal Works.—Mill Road, Coimbatore.  
 Southern Engineering Industries.—2/242, Avanashi Road, Coimbatore 1.  
 Sreevatsa Engineering & Trading Co.—Patel Road, Coimbatore.  
 Star Electro Plating Works.—Variety Hall Road, Coimbatore.  
 United Engineering Co.—Avanashi Road, Coimbatore.  
 Vasa Engineering Industries.—Krishnaswami Mudallar Road, Coimbatore.

### FERTILISERS

Agrico Chemicals & Fertilisers.—Vazhiampalayam, Kallupatty, Coimbatore 6.  
 Coimbatore Chemicals & Fertilisers Ltd.—Vysial Street, Coimbatore.  
 Coimbatore Pioneer Fertilisers P. Ltd., Pioneer House, Pioneer Mills Road, Coimbatore 4.  
 Deccan Fertiliser Co. (Coimbatore) Ltd.—Oppanakara Street, Coimbatore.  
 Mettur Fertiliser Co. Ltd.—R. S. Puram, Coimbatore.  
 Mysore Fertiliser Co.—43, Dewan Bahadur Road, Coimbatore 2.  
 Parry & Co., Ltd.—Fraser Square, Coimbatore.  
 Radhakrishnan, C.N.—Vysial Street, Coimbatore.  
 Scientific Fertiliser Co. Ltd.—Ponnurangam Road, R. S. Puram, Coimbatore.  
 Stanes & Co., T.—Tudiyalur, Coimbatore.

### GLASS MERCHANTS

Amir Sahib.—Nawab Hakeem Road, Coimbatore.  
 Art Cottage.—Nawab Hakeem Road, Coimbatore.  
 Balajee Frame Works.—Variety Hall Road, Coimbatore.  
 Chikkiah Gowder Sons, M.—Big Bazar Street, Coimbatore.  
 Murugiah Gowder Sons, S.—Big Bazar Street, Coimbatore.  
 Palaniawamy, M.S.—Raja Street, Coimbatore.  
 Selvam Picture Framing Works.—Crosscut Road, Coimbatore.  
 Sri Ramkrishna Mart.—Raja Street, Coimbatore.

### HARDWARE, PAINT & PIPE MERCHANTS

Coimbatore Machinery & Metal Mart.—Fraser Square, Coimbatore.  
 Feroke Timber & Tile Co.—M-8, Palayam Road, Coimbatore.  
 General Industrial Corporation.—Jail Road, Coimbatore.

Hardware & Machinery Marketing (India) Co.—54, H. Q. Office Road, Coimbatore.  
 Hindustan Corporation.—Jail Road, Coimbatore.  
 Hindustan Trading Co.—Jail Road, Coimbatore.  
 India Company Pvt. Ltd.—Union High School Road, Coimbatore.  
 Industrial Engineering Stores.—Cox Street, Coimbatore.  
 Inland Commercial Corporation.—Jail Road, Coimbatore.  
 Krishna & Co.—Mill Road, Coimbatore.  
 Murugan Hardware Stores.—Jail Road, Coimbatore.  
 Pioneer Corporation.—Trichy Road, Coimbatore.  
 Radha & Chalam.—Rengal Gowder Street, Coimbatore.  
 Rainbow Trading Co.—70 Ft. Road, R. S. Puram, Coimbatore.  
 Rajendra & Co.—Mettupalayam Road, Coimbatore.  
 Rama & Co.—Mettupalayam Road, Coimbatore.

**SOUTH INDIA CORPORATION (AGENCIES) PRIVATE LTD.**—6/50, Race Course Road, Coimbatore-1.

Sri Krishna Corporation.—Mill Road, Coimbatore.  
 Swami & Co.—Mettupalayam Road, Coimbatore.  
 Titan Paint & Varnish Co., Ltd.—Podanur, Coimbatore.

### HOTELS & RESTAURANTS

C. S. Hotel.—Old Post Office Road, Coimbatore.  
 C. S. Lodge.—Off Arts College Road, Coimbatore.  
 Hotel Davey.—Imperial Bank Road, Coimbatore.  
 Hotel Majestic.—Arts College Road, Coimbatore.  
 J. M. English Hotel.—Avanashi Road, Coimbatore.  
 Kerala Hotel & Restaurant.—13/19, Periapalayam Road, Coimbatore 2.  
 Seetharam Vilas.—Rangal Gowder Street, Coimbatore.  
 Sree Seetharam Boarding & Lodging House.—State Bank Road, Coimbatore.  
 Sree Sumuka Vilas.—Big Bazar Street, Coimbatore.  
 Sree Venkatesha Lodge.—State Bank Road, Coimbatore.  
 Woodland Hotel.—Arts College Road, Coimbatore.

### LEATHER GOODS MFRS. & DEALERS

A. Abdul Azeez.—Nawab Hakeem Road, Coimbatore.  
 A. M. Kamal Batcha.—Nawab Hakeem Road, Coimbatore.  
 Carnatic Leather Industries.—Big Bazar Street, Coimbatore.  
 Crown Leather Works.—Nawab Hakeem Road, Coimbatore.  
 Hindustan Leather Mart.—Big Bazar Street, Coimbatore.  
 H.M.F.A. Batcha.—Nawab Hakeem Road, Coimbatore.  
 N. Mohamed Abdul Kader & Son.—Big Bazar Street, Coimbatore.  
 R. Venkatesalu Naidu & Bros.—Nawab Hakeem Road, Coimbatore.  
 Skins & Leathers P. Ltd.—Ganesh Mahal, Dewan Bahadur Road, Coimbatore 2.  
 S. K. Kanniah Naidu.—Nawab Hakeem Road, Coimbatore.  
 S. K. Rangasamy Naidu.—Nawab Hakeem Road, Coimbatore.  
 Taj Leather Store.—Nawab Hakeem Road, Coimbatore.  
 V. Avanasilingam.—Nawab Hakeem Road, Coimbatore.

### MACHINERY MFRS. & DEALERS

Abbot Machine Tools P. Ltd.—Singanallur, Coimbatore 5.  
 Argus Engineering Co. Ltd.—Peelamedu, Coimbatore 4.  
 Associated Electrical Industries Ltd.—Race Course Road, Coimbatore.  
 Auto Equipment Machinery Co.—8/46, Jail Road, Coimbatore.  
 Batliboi & Co.—Avanashi Road, Coimbatore.  
 Brady & Co. Ltd. (W.H.).—Jail Road, Coimbatore.  
 Central India Machinery Mfg. Co. Ltd.—Variety Hall Road, Coimbatore.  
 Coimbatore Machinery & Metal Mart.—Fraser Square, Coimbatore.  
 Crompton Engineering Co. (Madras) Ltd.—Arts College Road, Coimbatore.  
 Engineering & Industrial Foundry Co.—Coimbatore 9.  
 Galiakotwala & Co. Ltd. C. A.—Grey Town, Coimbatore.  
 Gannon Dunkerley & Co. Ltd.—Crosscut Road, Coimbatore.  
 Garlick & Co.—Cox Street, Coimbatore.  
 Gordon Woodroffe & Co. (Madras) Ltd.—Fraser Square, Coimbatore.  
**JAYEMS ENGINEERING CO.**—14/246, Oppanakara Street, Coimbatore; Engineers, Machinery Merchants, Manufacturers Representatives and Direct Importers of Machine Tools, Woodworking Machinery, Sheet Metal Working Machinery, Welding & Foundry Equipment. Head Office: Warden House, Sir P. M. Road, Bombay-1; Branches at all important centres.  
 Madras Machine Tools Manufacturers Ltd.—8/146-B, Trichy Road, Coimbatore 5.  
 Machinery Mfrs. Corporation Ltd.—Gowders Colony, Tatabad, Coimbatore 12.  
 Parry & Co. Ltd.—Fraser Square, Coimbatore.  
 Pioneer Foundry.—167, Patel Road, Coimbatore 9.  
 Revathi Machinery Traders.—Gudipudur, Coimbatore 5.  
 Sree Radhakrishna Industries.—Krishnarayapuram, Coimbatore 6.  
 Sri Venkatapathi Industries.—9/33, Patel Road, Coimbatore 9.  
 U.M.S. Machine Tools.—Avanashi Road, Coimbatore 1.



## OPTICIANS

Bangalore Optical Co.—Oppanakara Street, Coimbatore.  
Imperial Optical Co.—Big Bazar Street, Coimbatore.  
Indo-American Optical.—Big Bazar Street, Coimbatore.  
Madras Optical.—Big Bazar Street, Coimbatore.  
New Bombay Optical.—Big Bazar Street, Coimbatore.  
Pearl Optical Co.—Big Bazar Street, Coimbatore.  
Posai Rangoon Optical.—Variety Hall Road, Coimbatore.  
Star Optical.—Big Bazar Street, Coimbatore.  
Taj Optical Co.—Big Bazar Street, Coimbatore.  
Tharyan & Co.—State Bank Road, Coimbatore.  
V. Ketticaran & Co.—Big Bazar Street, Coimbatore.

## PACKING MATERIALS

**PREMIER PAPER PRODUCTS.**—Manufacturers of Flexible Packing Materials, 23, Venkataswamy Road, P.O. Box No. 747, Coimbatore 2.

## PAPER & BOARD MERCHANTS

A. P. Muthukrishnan.—1/65-A, New Siddapudur, Pappanaickenpalayan, Coimbatore 1.  
Arumugham, A. M.—Oppanakkara Street, Coimbatore.  
Asoka Book Binding Works.—Raja Street, Coimbatore.  
Bettai Gowder, K. O.—Raja Street, Coimbatore.  
Book Trading Co.—Raja Street, Coimbatore.  
Coimbatore Paper Mart.—Raja Street, Coimbatore.  
General Papers Ltd.—Thomas Street, Coimbatore.  
Hariharan & Co.—Raja Street, Coimbatore.  
Karuppanna Gowder S.—Raja Street, Coimbatore.  
Lakshmi Paper Stores.—Raja Street, Coimbatore.  
Nanjappa A., & Co.—Raja Street Coimbatore.  
Natarajan & Co., C. R.—Big Bazaar Street, Coimbatore.  
Palaniappa & Co.—Raja Street, Coimbatore.  
Pandian Paper Mart.—Oppanakkara Street, Coimbatore.  
Parameswari Paper Stores.—Raja Street, Coimbatore.  
Poulose, K. V. & Son.—Raja Street, Coimbatore.  
Premier Paper Products.—63, Dewan Bahadur Road, Coimbatore 2.  
Sai Traders.—Raja Street, Coimbatore.  
Samundeespari Binding Works.—Raja Street, Coimbatore.  
Subbu Chetty, P.—Raja Street, Coimbatore.  
Viswanatha Trading Co.—Sullivan Street, Coimbatore.

## PEST CONTROL

### PEST CONTROL (INDIA) PRIVATE LTD.

Consulting Entomologists—Termite Control—Disinfestation—Fumigation Service.

177, Jail Road, Coimbatore 1.

H. O.: Yusuf Bldg., Mahatma Gandhi Road, Bombay 1.

(For further details please see 'Bombay Commercial Firms Section'.)

## PRINTING PRESSES

Amboji & Co.—Edayar Street, Coimbatore.  
Ananda Press.—Edayar Street, Coimbatore.  
Arumugham Press.—Edayar Street, Coimbatore.  
Badrakali Press.—Subbiahmudaliar Street, Coimbatore.  
Bagyam Press.—100, Feet Road, Tatabad, Coimbatore.  
Bharathi Press.—Raja Street, Coimbatore.  
Coimbatore Printers.—Oppanakkara Street, Coimbatore.  
Co-operative Printing Press.—Trichi Road, Coimbatore.  
Daily News Press.—Edayar Street, Coimbatore.  
Dandapani Press.—Raja Street, Coimbatore.  
Devi Press.—Sathy Road, Coimbatore.  
Electrical Printing Press.—Variety Hall Road, Coimbatore.  
Jaffar Printing Press.—Nawab Hakim Road, Coimbatore.  
Jewel Press.—Oppanakkara Street, Coimbatore.  
Jupiter Press.—Raja Street, Coimbatore.  
Kalai Achagam.—Marakkara Nanjappa Gounder Street, Coimbatore.  
Kalaivani Press (Private) Ltd.—Post Box No. 542, Coimbatore.  
Kalai Kadir Achagam.—Avanashi Road, Pappanaickenpalayam, Coimbatore.  
Kammavar Achukkudam Ltd.—Big Bazaar Street, Coimbatore.  
K. R. V. & Co.—Printers, Raja Street, Coimbatore.  
Kaithari Press.—Oppanakkara Street, Coimbatore.  
Karthikeyan Press.—Oppanakkara Street, Coimbatore.  
Kasthuri Printing Press.—Jail Road, Coimbatore.  
Lakshmi Vilas Press.—Edayar Street, Coimbatore.  
L. S. Press.—K. K. Block, Rangai Gowder Street, Coimbatore.  
Manickam Press.—Nawab Hakim Road, Coimbatore.  
Mani Achagam.—Gandhipuram, Coimbatore.  
Merchant Press.—Raja Street, Coimbatore.  
Modern Press.—Trichi Road, Coimbatore.  
Mohan Press.—Raja Street, Coimbatore.

Nagu Achagam.—Subbiah Mudaliar Street, Coimbatore.  
Nanjappa Press.—Raja Street, Coimbatore.  
Nirmala Printers.—Subbiah Mudaliar Street, Coimbatore.  
Pankajam & Co.—Edayar Street, Coimbatore.  
Pioneer Press.—Big Bazaar Street, Coimbatore.  
Premier Printers.—Raja Street, Coimbatore.  
Pudumalar Press.—Trichi Road, Coimbatore.  
Rainbow Printers.—Rangai Gowder Street, Coimbatore.  
Ramakrishna Industries Press.—C/o Nava India, Peelamedu, Coimbatore.  
Ramakrishna Press.—Jewellers Market, Big Bazar Street, Coimbatore.  
Rathnam Press.—Mill Road, Coimbatore.  
Rathna Printers.—Sukrawarpet, Coimbatore.  
Sabapathi Press.—Sukrawarpet, Coimbatore.  
Saraswathi Printers.—Raja Street, Coimbatore.  
Senthamizh Achagam.—Ramanathapuram, Coimbatore.  
Shanmuganandam Press.—Raja Street, Coimbatore.  
Somasundaram Press.—Somasundaram Mills Compound, Coimbatore.  
Star Power Press.—Subbiah Mudaliar Street, Coimbatore.  
St. Joseph's Industrial Press.—Big Bazaar Street, Coimbatore.  
Subhashini Achukkudam.—Oppanakkara Street, Coimbatore.  
S. V. Press.—Variety Hall Road, Coimbatore.  
Swan & Co.—Printers, Oppanakkara Street, Coimbatore.  
Thiyagi Press.—Kattoor, Coimbatore.  
Velala Press Ltd.—Oppanakkara Street, Coimbatore.  
Victoria Press.—Big Bazaar, Coimbatore.  
Vijaya Press.—Sukrawarpet, Coimbatore.  
Workmen Press.—Avanashi Road, Pappanaickenpalayam, Coimbatore.

## PUMP MANUFACTURERS & DEALERS

Coimbatore Premier Corpn. P. Ltd.—262, Avanashi Road, Coimbatore 1.  
Dhandayudapani Foundry P. Ltd.—Pappanaickenpalayam, Coimbatore.  
Farm Equipments P. Ltd.—Ganapathy P.O., Coimbatore 6.  
Ganapathy Engg. Mfrs. P. Ltd.—Ganapathy, Coimbatore 6.  
Karthikeya Foundry.—Pulliakulam Road, Pappanaickenpalayam, Coimbatore 1.  
Kasturi Engineers Ltd.—P. Box 231, Coimbatore 1.  
Lakshmi Foundry.—Patel Road, Coimbatore.  
Murugan Foundry.—Jail Road, Gandhipuram, Coimbatore.  
P. S. G. & Sons Charity Industrial Institute.—Peelamedu, Coimbatore.  
Radha Foundry.—Trichy Road, Coimbatore.  
Ramu Foundry.—Avanashi Road, Pappanaickenpalayam, Coimbatore 1.  
Sri Ram Industrials.—Tudiyalur, Coimbatore.  
Sova Private Ltd.—Kunniyammuthur, Coimbatore 8.  
Subbiah Foundry.—Pappanaickenpalayam, Coimbatore.  
Vijaya Foundry.—Pappanaickenpalayam, Coimbatore 1.

## RADIOS & RADIO PARTS

Associated Electrical Industries (India) Ltd.—Race Course Road, Coimbatore.  
Central Radio Service.—Avanashi Road, Coimbatore.  
General Electric Co. of India Ltd.—Magnet House, Avanashi Road, Coimbatore.  
International Radio Co.—113, Big Bazar Street, Coimbatore 1.  
Modern Agencies.—Avanashi Road, Coimbatore.  
Myco Corporation.—Avanashi Road, Coimbatore.  
Radio and Talkie Combines.—Near Goods Shed, Coimbatore 1.  
Radio House.—Avanashi Road, Coimbatore.  
Rythm House.—Nawab Hakeem Road, Coimbatore.  
Shetty & Company.—Jail Road, Coimbatore.

**UNITED ENGINEERING CO.**—Radio & Sound Engineers, Avanashi Road, Coimbatore 18; Phone: 2879; Distributors for U.M.S. Radios in Coimbatore, Nilgiris, Salem, N. Arcot & Tiruchy districts.

V. Krishnaswamy & Co.—Avanashi Road, Coimbatore.  
V. S. Rajagopalan & Co.—Avanashi Road, Coimbatore.

## RICE HULLER SCREENS

Ganesar Industries.—Post Box No. 1, Ganapathy, Coimbatore 6.  
Sai Cottage Industries.—38, Jail Road, Coimbatore.  
Sri Venkatapathi Industries.—9/33, Patel Road, Coimbatore.  
Usha Screen Agencies, Ganapathy, Coimbatore 6.

## SOAP MANUFACTURERS

Arian Soap Mfg. Co.—Arian Soap Colony, Trichy Road, Coimbatore.  
Cauvery Soap Co.—Oppanakkara Street, Coimbatore 1.  
Chandrika Products, R. S. Puram, Coimbatore 2.  
Helen Soap Co.—Rangai Gowder Street, Coimbatore 1.  
Parco Soaps & Chemicals.—P.B. No. 158, Coimbatore.  
Pushpakamala Soap Works.—P.B. No. 158, Coimbatore.  
Raka Soap Mfg. Co., 26/722, Big Bazar Street, Coimbatore.  
Santhi Soap Works.—Shukrawarpet, Coimbatore.



## TEXTILE ENGINEERS & MACHINERY MFRS. & DEALERS

Altex P. Limited.—Avanashi Road, Coimbatore.  
 Argus Engineering Co. Ltd.—Avanashi Road, Coimbatore.  
 Batliboi & Co.—Avanashi Road, Coimbatore.  
 Bharat Trading Company.—Avanashi Road, Coimbatore.  
 Brady & Co. Ltd., W. H.—Jail Road, Coimbatore.  
 C. A. Galiakotwala & Co., Private Ltd.—7/47, Grey Town, Coimbatore.  
 Cotexma Engineering Corporation, 1/19, Trichy Road, Coimbatore 5.  
 Crompton Engineering Co. (Madras) Ltd.—Arts College Road, Coimbatore.  
 Eastern Electrical Co. Ltd.—Singanallur, Coimbatore 5.  
 Gannon Dunkerley & Co. Ltd.—Crosscut Road, Coimbatore.  
 Garlick & Co.—Cox Street, Coimbatore.  
 Gordon Woodroffe & Co. (Madras) Ltd.—Fraser Square, Coimbatore.  
 Hardware & Machinery Marketing (India) Co.—Police H. Q. Road, Coimbatore.  
 International Industries & Agencies Ltd.—Avanashi Road, Coimbatore.  
 Jayema Engineering Co.—Oppanakara Street, Coimbatore.  
 Kamala Industries.—Kuniamuthur, Coimbatore.  
 Kasturi Industries Ltd.—Avanashi Road, Coimbatore.  
**LAKSHMI MACHINE WORKS LTD —Factory & Administrative Office: Perianaickenpalayam, CBE Dt., Registered Office: 348, Avanashi Road, Coimbatore 1.**  
 Laxmi Recter Medine Works Ltd., Shell House, Avanashi Road, Pappanaickenpalayan, Coimbatore 1.  
 Mani & Co.—Old Post Office Road, Coimbatore.  
 Modern Sales Corporation.—Avanashi Road, Coimbatore.  
 Parry & Co. Ltd.—Fraser Square, Coimbatore.  
 Pera Naidu & Sons, A.—Avanashi Road, Coimbatore.  
 Pierce Leslie & Co. Ltd.—Race Course Road, Coimbatore.  
 P.S.G. Industrial Institute.—Peelamedu P.O., Coimbatore 4.

Radakrishna & Co.—Avanashi Road, Coimbatore.  
 Ramakrishna Industrials P. Ltd.—Peelamedu, Coimbatore 4.  
 Ramu Brothers.—Avanashi Road, Coimbatore.  
 Textile Machinery Corpn., Ltd.—Avanashi Road, Coimbatore.

## TEXTOL CO. LTD.

Coimbatore-6.

Phones: 6231, 6232, 6233. Grams: 'TEXTOLCO.'  
 Manufacturers of Carding Engine, Draw Frame, Speed Frame, Narrow Ring Frame, Textool-Kamitsu Cone Winder, Reeling Machine, Bundling Press, Baling Press, Diesel Engine, Machine Tools, Signalling Equipments (Railways & Roadways—in Collaboration with the Nippon Signal Co. Ltd., Tokyo, Japan), Special Alloy Steels etc.

Universal Sales Corp.—Avanashi Road, Coimbatore.  
 Voltas Ltd.—Race Course Road, Coimbatore.

## WATCHES & CLOCKS (IMPORTERS, DEALERS & REPAIRERS)

Abdul Watch Co., P. K.—Big Bazar Street, Coimbatore.  
 Azim & Sons.—Oppanakara Street, Coimbatore.  
 Bentex-Time House.—Oppanakara Street, Coimbatore.  
 City Watch House.—Nawab Hakeem Road, Coimbatore.  
 Expert Watch House.—Raja Street, Coimbatore.  
 Gajendra Watch Repairing House.—Sukrawarpet, Coimbatore.  
 Globe Watch Co.—Oppanakara Street, Coimbatore.  
 Meeran & Co., P. K.—Big Bazar Street, Coimbatore.  
 Mohan Watch Works.—Nawab Hakeem Road, Coimbatore.  
 National Watch Co.—Big Bazar Street, Coimbatore.  
 New Watch & Radio Co.—Oppanakara Street, Coimbatore.  
 Rajan Watch Co.—Sukrawarpet, Coimbatore.  
 Record Watch Co.—Avanashi Road, Coimbatore.  
 Swiss Watch House.—Oppanakara Street, Coimbatore.

## MAHARASHTRA

## BANKS and BANKERS

### ALLAHABAD BANK, LTD.

(Established 1865).

Affiliated to the Chartered Bank.

|                          |       |                 |
|--------------------------|-------|-----------------|
| AUTHORISED CAPITAL       | .. .. | Rs. 3,00,00,000 |
| ISSUED & PAID-UP CAPITAL | .. .. | Rs. 1,05,00,000 |
| RESERVES                 | .. .. | Rs. 1,25,32,000 |

LONDON CORRESPONDENTS:—The Chartered Bank.

REGISTERED OFFICE: 14, India Exchange Place, Calcutta 1.

Chairman: Shri S. P. Puri; General Manager: Mr. W. Smith.

### BOMBAY MAIN OFFICE

Allahabad Bank Building, 37, Apollo Street, Agent—Shri Jagat Narain Sharma; Accountant—Shri A. D. Nadkarni; Asst. Accountants: Sarvashri P. K. Ghose, C. M. Chandran, D. T. Barve, G. N. Deshpande, D. S. Vithalkar, R. C. Shukla, V. P. Shab. Tel. Address: "Allah." Phone for Office Nos. 253546, 257288, for Agent No. 251935. P.O. Box No. 282.

Safe Deposit Lockers available.

### BOMBAY CITY OFFICE (Kalbadevi)

Western India Chamber of Commerce Building, 232-34, Kalbadevi Road Agent—Shri R. L. Lewis, Assistant Agents—Sarvashri G. K. Phadke, N. C. Vaywala; P. S. Vedpathak, Tel. Address: "Allacity." Phone No. 29404.

BOMBAY DADAR OFFICE.—'Saroj' Bldg., Makarand Co-operative Housing Society Ltd., 25, Tulsi Pipe Road, Dadar, Post Box No. 7043, Bombay-28; Agent: Shri R. V. Redkar. Tel. Address: "Norallah." Phone: 454828.

Safe Deposit Lockers available.

### OTHER BRANCHES

Agra, Agra Belan Gang, Agra City, Ahmedabad Maskati Market, Akola, Aligarh, Aligarh Muslim University, Allahabad.

Allahabad City, Allahabad-Katra, Ambala Cantt., Amritsar, Auralya Banda, Bangalore, Bareilly, Bareilly City, Bareilly, Shiamganj, Batala, Bhagalpur, Bhopal, Bindki, Bombay Fort, Bombay Kalbadevi Road Bombay Dadar, Buxar, Calcutta, Calcutta B. K. Paul Avenue, Calcutta Bhowanipore, Calcutta Brabourne Road, Calcutta Burra Bazar, Calcutta College Street Market, Calcutta Dharamtolla Street, Calcutta Gariahat, Calcutta Shambazar, Calcutta South, Chandrapur, Chandausi, Chandigarh Cuttak, Dehera Dun, Delhi, Delhi Sadar Bazar, Delhi Houz quazi, Deoria, Dhanbad, Drug, Etawah, Faizabad, Fatehpur, Firozabad, Ghaziabad, Ghazipur, Gorakhpur, Gorakhpur City, Gulaothi, Hapur, Hardoi, Hathras, Howrah, Hyderabad A.P. Jabalpur, Jabalpur City, Jaipur, Jamalpur, Jhansi, Jullundur City, Jullundur Civil Lines, Kalpi, Kanpur, Kanpur City, Kanpur Swampnagar, Khandah, 24 Parganas, Laharpur, Lucknow, Lucknow Aminabad Park, Lucknow City, Ludhiana, Madhupur, Mahoba, Mathura, Meerut, Meerut City, Mirzapur, Modinagar, Morabdabad, Moradabad City, Mussoorie, Muzaffarnagar, Muzaffarpur, Nagpur, Nagpur City, Nagpur Gandhi bagh, Naini Tal, New Delhi Scindia House, New Delhi Parliament Street, New Delhi Karol Bagh, Oral, Paradeep, Patna, Patna University, Rae Bareil, Raipur, Rajnandgaon, Ranchi, Satna, Shahjahanpur, Shahjahanpur City, Sitapur, Varanasi.

### CASH OFFICES

Agra Hotel Clarks Shiraz, Agra University, Bhagalpur University.

## THE AMERICAN EXPRESS COMPANY, INC.

(Incorporated in the U.S.A. with limited liability).

International Bankers, Travel Agents.

HEAD OFFICE: 65, Broadway, New York, N.Y. CAPITAL: (Paid-up): U.S. \$6,000,000. SURPLUS and RESERVES: U. S. \$24,015,587. LONDON OFFICE: 25, Abchurch Lane, London E.C. 4. BOMBAY OFFICE: 364, Dr. Dadabhai Naoroji Road, Fort. Bombay 1. GRAMS: "AMEXCO". Phone Nos. 25-5021/4. Calcutta Office: 21, Old Court House Street. Grams: "AMEXCO". Phone No.: 236281. New Delhi Office: Hamilton House, Block A, Connaught Place, New Delhi. Grams: "AMEXCO". Phone No.: 43553. Branches in all the principal cities throughout the world.



**BANK OF BARODA LIMITED**

Registered Office : Mandvi, Baroda†

**LIST OF BRANCHES**

ANDHRA PRADESH : Guntur, \*Hyderabad, Kakinada, \* Secunderabad, Vijayawada, Visakhapatnam.

BIHAR : Dhaubad, Jamshedpur.

PUNJAB &amp; DELHI : Amritsar, \*Chandigarh (Sector 17-B), Chandigarh (Sector 22-C), Gurgaon, Jullundur City, \*Ludhiana, Delhi (Chandni Chowk), \*Delhi (Model Town), \*Delhi (Sadar Bazar), \*Delhi (Shaktinagar), New Delhi (Asaf Ali Road), New Delhi (Connaught Circus), \*New Delhi (Greater Kailash No. 1), New Delhi (Karol Bagh), New Delhi (Paharganj), New Delhi (South Extension No. 1).

GOA : Margao, Vasco-da-Gama.

GUJARAT : \*Ahmedabad (Ambawadi), \*Ahmedabad (Asarwa), \*Ahmedabad (Bhadra), Ahmedabad (Dariapur), \*Ahmedabad (Delhi Chakla), Ahmedabad (Dhanlaxmi Market), \*Ahmedabad (Ellis Bridge), \*Ahmedabad (Gandhi Road, Main Branch), Ahmedabad (Girdharnagar), \*Ahmedabad (Gita Mandir Road), Ahmedabad (Kalupur), \*Ahmedabad (Maninagar), \*Ahmedabad (Navrangpura), Ahmedabad (Panchkuva), \*Ahmedabad (Relief Road), \*Ahmedabad (Sabarmati), \*Ahmedabad (Sadar Patel Colony), Ahmedabad (University Campus), \*Amalsad, \*Amreli, Anand, Ankla, Bahadarpur, Baroda (Alkapuri), Baroda (Industrial Estate), Baroda, (Khanderao Market), Baroda (M.S. University Extn.), Baroda (Pratapnagar), Baroda (Raopura), \*Baroda (Sayaji Gunj), Bhadrachal, Bhavnagar, \*Billimora, Bodeli, Borsad, Broach, \*Bulsar, \*Cambay, Chhani, \*Chikhli, \*Dabhol, Dehgam, Dholka, Dhuvaran, \*Dwarka, Godhra, Gojaria, Harij, \*Jamnagar, Junagadh, Kadi, \*Kalol, Kandla (Free Trade Zone), \*Kapadwanj, \*Karjan (Miyagam), \*Kosamba, Koyali, \*Madhi, Mansa, \*Marol Bazar, Mehla, Mehsana, \*Mithapur, \*Nadiad†, \*Navsari, (Panch Hatdi), \*Navsari (Station Road), \*Patant, Patdi, \*Petlad, Porbander, Radhanpur, \*Rajkot, \*Rajpipla, \*Rander, Sanjan, \*Sankheda, Savli, Sayan, Shahpur, \*Sidhpur, Surat (Kanpith), Surat (Navsari Bazar), Surat (Parsi Sheri), Surat (Salabatpura), Surat (Vania Sheri), Surendranagar, Talod, Udhna, \*Umbergaon, Umreth, Unjha, Vadnagar, Vapi, Vasad, Veraval, Vijapur, \*Viramgam, Virsad, \*Visnagar, Vyara.

KERALA : Alwaye, Cochin, Irinjalakuda.

MADHYA PRADESH : Bhilai, \*Bhopal, \*Indore (Sitalamata Bazar), Indore (Siyaganj), Raipur.

MADRAS : Ambattur, Coimbatore, Lalgudi, Madras (E. C. Street), Madras (Mount Road), Madras (Mylapore), \*Madras (North Beach Road, Main Branch), Madras (Theagarayanagar), Madurai, Mannar, channallur, Tanjore, "Tiruchirapalli.

MAHARASHTRA : Ahmednagar, Akola, Amravati, \*Bombay (Andheri), \*Bombay (Backbay Reclamation), Bombay (Ballard Estate), \*Bombay (Bandra), Bombay (Bori Bunder), Bombay (Bullion Hall), Bombay (Byculla), \*Bombay (Colaba), Bombay (Crawford Market), Bombay (Dadar), \*Bombay (Fort, Main Branch), Bombay (Gamdevi), \*Bombay (Ghatkopar), Bombay (Girgaum), \*Bombay (Khand Bazar), Bombay (Khar), \*Bombay (Khar Pall Road), \*Bombay (Khetwadi), Bombay (Mandvi), Bombay (Mangaldas Market), \*Bombay (Matunga), Chandavarkar Road, Bombay (Matunga, Podar College), \*Bombay (Mulund), \*Bombay (Nepean Sea Road), \*\*Bombay (Opera House), Bombay (Princess Street), \*Bombay (Shivaji Park), \*Bombay (Sion), Bombay (Sir Pherozeshah Mehta Road), Bombay (Vile-Parle, East), \*Bombay (Vile-Parle, West), \*Bombay (Wadala), \*Bombay (Zaveri Bazar), Chandrapur, \*Deolali, Dhulia, Ichalkaranji, Jalgaon, Karanja, Kolhapur (Shahupuri), Kolhapur (Shivaji Chowk), Kopergaon, Lonand, Mahad, Malegaon, Miraj, Murtizapur, \*Nagpur (Dharampeth), \*Nagpur (Ganhi Baug), Nagpur (Sitabuldi), \*Nandurbar, Nasik City, Nasik Road, Pandharpur, \*Pen, \*Poona Camp, \*Poona City (Karve Road), \*Poona City (Laxmi Road), \*Poona (Shivajinagar), \*Sangamner, Sangli, Sholapur, Sinnar, Thana, \*Yeotmal.

MYSORE : \*Bangalore, \*Belgaum, Mangalore, Mysore.

ORISSA : Rourkela.

RAJASTHAN : \*Ajmer, \*Jaipur (M. I. Road), Jaipur (Tripolia Bazar), \*Jodhpur, \*Kota.

UTTAR PRADESH : Allahabad, Bareilly, Fatehganj (West), Kanpur (Birhana Road), Kanpur (Latouche Road), Lucknow, Varanasi.

WEST BENGAL : Asansol, Calcutta (B. K. Paul Avenue), Calcutta (Ballygunge), \*Calcutta (Bhowanipore), Calcutta (Brabourne Road), Calcutta (Burra Bazar), \*Calcutta (Dum Dum), \*Calcutta (India Exchange, Main Branch), Calcutta (Lake Market), \*Calcutta (M. G. Road), \*Calcutta (Sharan Bazar), Howrah.

**FOREIGN BRANCHES**

UNITED KINGDOM : London.

EAST AFRICA : Dar-es-Salam (Tanzania), \*Jinja (Uganda), \*Kampala (Uganda), \*Kisumu (Kenya)†, \*Mbale (Uganda), \*Mombasa (Makadara Road), (Kenya), \*Mombasa (Salim Road) (Kenya), \*Moshi (Tanzania), \*Mwanza (Tanzania), Nairobi (City Square) (Kenya), \*Nairobi (Coryndon Street) (Kenya).

EAST PAKISTAN : Narayanganj.

FIJI ISLANDS : \*Lautoka, Suva.

GUYANA : Georgetown.

MAURITIUS : Port Louis.

Agents in All Principal Countries of the World.

**THE BANK OF INDIA LIMITED**

(Established : 7th September, 1906)

Registered Office :—70/80, Mahatma Gandhi Road, Bombay 1.

|                                               |     |              |
|-----------------------------------------------|-----|--------------|
| CAPITAL—AUTHORISED .. .. .                    | Rs. | 10,00,00,000 |
| CAPITAL—ISSUED AND SUBSCRIBED .. .. .         | Rs. | 7,60,00,000  |
| CAPITAL—PAID-UP .. .. .                       | Rs. | 4,05,00,000  |
| RESERVE FUND AND OTHER RESERVES .. .. .       |     |              |
| AS AT 31ST DEC., 1966 .. .. .                 | Rs. | 5,77,50,000  |
| DEPOSITS AS AT 31ST DEC., 1966 EXCEED .. .. . | Rs. | 306 Crores   |
| WORKING FUNDS EXCEED .. .. .                  | Rs. | 390 Crores   |

**BOARD OF DIRECTORS:**

Mr. Krishnaraj M. D. Thackersey (Chairman); Mr. Ramniwas Ramnarain (Vice-Chairman); Mr. Bhagvandas C. Mehta; Mr. Madanmohan Mangaldas; Mr. N. K. Petigara; Mr. Jugmohan Prasad Goenka; Mr. Jaisinh Vithaldas; Mr. Girdharilal Mehta; Mr. Pratap Bhogilal; Mr. S. P. Godrej.

HONORARY ADVISER: MR. AMBALAL SARABHAI.

GENERAL MANAGER: MR. T. D. KANSARA.

Overseas Branches : Aden, Birmingham, Dar-es-Salaam, Hong-Kong, Jinja, Kampala, Karachi, Kisumu, Lagos, London, Manchester, Mombasa, Nairobi, Osaka, Singapore, Tokyo.

**BRANCHES IN INDIA :—**

BOMBAY :—Mahatma Gandhi Road (Main Office), Andheri, Ballard Estate, Bandra, Bombay Central, Borivli, Bullion Exchange, Chembur, Churchgate, Cotton Exchange, C. P. Tank, Cumballa Hill, Cusrow Baug, Dadar (West), Electric House, Fort, Ghatkopar, Girgaum, Goregaon, Grant Road, Kalbadevi, Khar, King's Circle, Mahalaxmi, Mahim, Malad, Mandvi, Mohamedali Road, Naigaum Cross Road, Sandhurst Road, Santa Cruz, Sion, Tardeo, Vile Parle, Walkeshwar, Wodehouse Road.

AHMEDABAD :—Bhadra (Main Office), Ambavadi, Ashram Road, Delhi-Chakla, Ellis Bridge, Gandhi Road, Mandvi Pole, Manek Chowk, Maninagar, Navrangpura, New Cloth Market, Paldi, Raipur Chakla, Relief Road, Sabarmati, Saraspur, Station.

AMRITSAR :—Hall Bazar (Main office), Golden Temple Road.

BANGALORE :—Kempegowda Road (Main Office), Malleswaram.

BARODA :—Mahatma Gandhi Road (Main Office), Alkapuri, Pratapnagar, Raopura.

BHOPAL :—Marwari Road (Main Office), Tatya Tope Nagar.

CALCUTTA :—Netaji Subhas Road (Main Office), Bara Bazar, Bhowanipur, Bow Bazar, Chowringhee Square, C.I.T. New Road, Lindsay Street, Mission Row, Sham Bazar, South Suburbs (Behala), Vivekananda Road.

COCHIN :—Mattancherry (Main Office), Willingdon Island.

DELHI :—Janpath (Main Office), Ajmere Gate Extension, Bank Street, Chandni Chowk, Connaught Circus, Connaught Place, Kamla Nagar, Karol Bagh, Khan Market, Kirti Nagar, Narela, Paharganj, Patel Nagar.

INDORE :—Santa Bazar (Main Office), Siyaganj.

JAMNAGAR :—Ranjit Road, (Main Office), Hospital Road.

JAMSHEDPUR :—Sakchi Boulevard (Main Office), Telco Town.

KANPUR :—Kasturba Gandhi Marg (Main Office), General Gunj.

MADRAS :—Armenian Street (Main Office), Mount Road, Mylapore, Sowcarpet, Theagarayanagar.

NAGPUR :—Kingsway (Main Office), Dharampeth, Gandhi Baug, Itwari Bazar.

PATNA :—Fraser Road, (Main Office), Patna City.

POONA :—Elphinstone Road (Main Office), Budhwar Peth, Hadapsar, Laxmi Road, Tilak Road.

RAJKOT :—Camp (Main Office), Lakshajiraj Road.

OTHER BRANCHES :—Anand, Asansol, Burari Thermal Power Station, Bhavnagar, Bhuj, Calicut, Chaibasa, Chakan, Chandigarh, Chas, Chikhodra, Chirkunda, Coimbatore, Coonoor, Dehu Road, Durgapur, Ernakulam, Gandhidham, Gauhati, Ghodnadi, Gwalior, Hospet, Howrah, Hyderabad, Jabalpur, Jaipur, Jamuria, Jullundur, Junagadh, Junnar, Kalol, Kalyan, Kalyani (West Bengal), Kamarhatti, Kathlal, Kolhapur, Kota, Kuvadva, Ludhiana, Madurai, Malkajgiri, Margao, Morvi, Nadiad, Naroda, Navsari, Neamatpur, Paddhari, Palanpur, Panagarh, Panaji, Pimpri, Porbandar, Porvorim (Goa), Ranchi, Rourkela, Sangner, Saswad, Secunderabad, Sholapur, South Suburbs, Surat, Thana, Tiruchirapalli, Ujjain, Vadai, Varanasi, Vasco-da-Gama, Vatva, Veraval, Visakhapatnam.

Over 1,000 correspondents in all the principal countries of the world.

\* Safe Deposit Lockers are provided.  
surrounding villages.

\*\* Safe Deposit Lockers at our Queen's Road premises.

† Mobile Bank is operated in the



**THE BANK OF TOKYO, LIMITED**

Incorporated in Japan.

Liability of Shareholders Limited.

*Head Office:* Nihombashi, Chuoku, TOKYO (Japan); 24 Overseas Offices; 22 Overseas Representative Offices; 2 Affiliate Banks; 1 Associated Bank. *Bombay Office:* "Jeevan Prakash", Sir Phirozshah Mehta Rd., Bombay-1 (BR). *Calcutta Office:* 2, Brabourne Road, Calcutta 1. *New Delhi Office:* "Jeevan Vihar," 3 Parliament Street, New Delhi 1.

**THE BOMBAY MERCANTILE CO-OPERATIVE BANK LIMITED**

ESTD. JUNE 1939.

*HEAD OFFICE:* 78, Mohamedali Road, Bombay 3.

Phone: 325961 (5 Lines)

|                                          |    |    |    |     |             |
|------------------------------------------|----|----|----|-----|-------------|
| AUTHORISED CAPITAL                       | .. | .. | .. | Rs. | 20,00,000   |
| ISSUED, SUBSCRIBED AND PAID-UP CAPITAL   | .. | .. | .. | ..  | 19,45,700   |
| RESERVE AND OTHER FUNDS                  | .. | .. | .. | ..  | 10,35,100   |
| DEPOSITS                                 | .. | .. | .. | ..  | 4,13,93,200 |
| CASH AND INVESTMENTS IN GOVT. SECURITIES | .. | .. | .. | ..  | 2,35,17,800 |
| WORKING CAPITAL                          | .. | .. | .. | ..  | 4,84,26,100 |

Annual Turnover exceeds Rupees Seventy-three Crores (Government Audit Classification "A").

*CHAIRMAN:*—Khan Bahadur Shaikh Mohamedally Allabux.*MANAGING DIRECTOR:*—Zain G. Rangoonwalla, J.P.

*Branches:*—Jariwalla Building, Null Bazar, Bombay 3. Phone: 332778. 294, Abdul Rehman Street, Bombay 3. Phone: 325961 (5 Lines).

*Seasonal Sub-Office:* Mohamed Haji Saboo Siddick Musafirkhana, Carnac Road, Bombay 1.

*Gujarat Branches:* Fuvara, Gandhi Road, Ahmedabad 1. *Sub-Office:* Tilak Road, Near Zakaria Mosque, Ahmedabad-1.

All kinds of Banking Business Transacted.

**THE BRITISH BANK OF THE MIDDLE EAST**

(Incorporated in England by Royal Charter 1889).

*HEAD OFFICE:*—7, King William Street, London E.C. 4.

|                          |    |    |    |    |            |
|--------------------------|----|----|----|----|------------|
| AUTHORISED CAPITAL       | .. | .. | .. | .. | £2,500,000 |
| ISSUED AND FULLY PAID-UP | .. | .. | .. | .. | £2,500,000 |
| RESERVE FUND             | .. | .. | .. | .. | £3,184,289 |

*BOARD OF DIRECTORS:*—Sir Michael Turner, C.B.E. (Chairman); Sir G. C. B. Eley, C.B.E. (Deputy Chairman); Sir Dallas Bernard, Bt. Sir Alec Seath Kirkbride, K.C.M.G., C.V.O., O.B.E., M.C.; C. F. Warr, O.B.E.; G. O. W. Stewart, Sir Roger Bentham Stevens, G.O.M.G.; Sir Humphrey Trevelyan, G.C.M.G., C.I.E., O.B.E.; Claude Evan Loombe, O.M.G.

*General Manager:* A. Macqueen; *Deputy General Manager:* F. J. L. Wilkes, M.B.E.

*Branches:*—ADEN — Crater; INDIA — Bombay; JORDAN — Amman, Jerusalem; LEBANON — Beirut (4 Branches), Tripoli; SAUDI ARABIA — Alkhobar (with Sub-branch Damam), Jeddah; SHEIKHDOM OF BAHRAIN — Manama, Muharraq; STATE OF KUWAIT — Kuwait (6 Branches); SULTANATE OF MUSCAT AND OMAN — Muscat, Muttrah; SHEIKHDOM OF QATAR — Doha; TRUCIAL STATES — Sheikhdom of Abu Dhabi; Abu Dhabi; Sheikhdom of Dubai; Deira, Dubai; Sheikhdom of Ras al Khaimah; Ras al Khaimah; Sheikhdom of Sharjah; Sharjah; TUNISIA — Tunis.

*Bombay Branch:*—314, Dr. Dadabhai Naoraji Road, Fort, Bombay-1. *Manager:*—K. V. R. Jefferies. *Sub-Manager:*—J. de C. Stevens. *Guille, Telephones:*—252267-8-9. *Tel. Address:*—"BACTRIA."

**SUBSIDIARY COMPANY****THE BRITISH BANK OF THE MIDDLE EAST**

(Morocco) S. A.

Capital Dirhams 1,600,000

Casablanca (Morocco)

TANGIER (DO)

**ASSOCIATED COMPANY****THE BANK OF IRAN AND THE MIDDLE EAST**

Capital Rials 250,000,000.

*Head Office:* Teheran (with 3 Sub-Branches), Iran.*Branch Office:* Khorramshahr, Iran.**BANK OF NORTH AFRICA***Head Office:* Tripoli, (Libya).*Branch Office:* Benghazi, (Libya).**CANARA BANK, LIMITED**

(Established in 1906). *HEAD OFFICE:*—Mangalore, South Kanara. *Administrative Office:* Bangalore. Foreign Departments in Bombay, Calcutta, Madras and New Delhi.

**THE CENTRAL BANK OF INDIA, LIMITED**

(Established—December, 1911)

*REGISTERED OFFICE:* Mahatma Gandhi Road, Fort, Bombay 1.

|                               |    |    |     |                |
|-------------------------------|----|----|-----|----------------|
| AUTHORISED CAPITAL            | .. | .. | Rs. | 10,00,00,000   |
| SUBSCRIBED CAPITAL            | .. | .. | ..  | 8,94,31,750    |
| PAID-UP CAPITAL               | .. | .. | ..  | 4,73,40,875    |
| RESERVE FUND & OTHER RESERVES | .. | .. | ..  | 6,74,33,209    |
| DEPOSITS AS AT 31-12-1965     | .. | .. | ..  | 3,16,35,77,094 |

**DIRECTORS:**

Sir Homi Mody, K.B.E. (Chairman); Mr. Cooverji Hormusji Bhabha (Vice-Chairman); Mr. Dharamsey Mulraj Khatau; Mr. Chimanlal Bapalal Parikh; Sir Jamsetjee Jejeebhoy (Bart); Mr. Jaykrishna Harivallabhdas; Mr. Shrivax Sorabji Khambata; Mr. Nityanand Mangesh Wagle; Nawab Prince Mukarram Jah Bahadur; Mr. Nariman Kaikhushru Karanjia; Mr. Akbar Hydari.

Branches and Pay Offices in all important Commercial Centres of India.

**LONDON BRANCH:**

Orient House, 42-45, New Broad Street, London E.C. 2.

**NEW YORK AGENTS:**

Morgan Guaranty Trust Co. of New York.

The Chase Manhattan Bank.

V. C. Patel

General Manager

**THE CHARTERED BANK**

(INCORPORATED IN ENGLAND BY ROYAL CHARTER, 1853.)

Wholly owned subsidiaries: The Eastern Bank Ltd., The Chartered Bank of London, San Francisco. Affiliated bank in India: Allahabad Bank Ltd.

Associated Companies: Commercial Bank S. A. L., Libya; Irano British Bank, Iran; Credit Corporation (Malaysia) Ltd., Singapore; The Mutual Acceptance Co. Ltd., Australia; Conrad Hinrich Donner, West Germany.

|                      |    |    |    |    |              |
|----------------------|----|----|----|----|--------------|
| AUTHORISED CAPITAL   | .. | .. | .. | .. | £ 10,000,000 |
| CAPITAL STOCK ISSUED | .. | .. | .. | .. | £ 8,470,000  |
| RESERVE FUND         | .. | .. | .. | .. | £ 9,450,000  |

*HEAD OFFICE:*—38, Bishopsgate, London, E.C. 2.

*COURT OF DIRECTORS:*—Vincent Alpe Grantham (Chairman); Sir John Tait (Deputy Chairman); Sir Paul Benthall, K.B.E.; Sir Arthur Atkinson Bruce, K.B.E., M.C.; William Ewing Eadie, C.A.; Sir Harry Greenfield, C.S.I., C.I.E.; The Rt. Hon. The Earl of Inchcape; Sir Evan Meredith Jenkins, O.C.I.E., K.C.S.I.; Ian Lilburn MacEwen; Sir Charles Watt Miles, O.B.E.; Kenneth M. Campbell, M.B.E.; Sir John Henry Swain Richardson; Clifford Waite, O.M.G.; J. M. Pattinson, C.B.E.; Derek Lister d'Anvers Willis.

*CHIEF GENERAL MANAGER:*—W. G. Pullen.

*JOINT GENERAL MANAGERS:*—David Beath, Stafford Northcote, J. Shewan, A. T. Hobbs.

*ASST. GENERAL MANAGER:*—R. A. S. Lane.*SECRETARY:*—J. A. S. L. Leighton-Boyce.*WEST END BRANCH:*—2, Regent Street, London, S.W. 1.*MANCHESTER BRANCH:*—52, Mosley Street, Manchester 2.

*LIVERPOOL BRANCH:*—23, Derby House, Exchange Buildings, Liverpool, 2.

*NEW YORK BRANCH:*—76, William Street, New York 5, N.Y., U.S.A.*HAMBURG BRANCH:*—Dornbusch 2, Hamburg 1, W. Germany.*BOMBAY BRANCH:*—25, Mahatma Gandhi Road, P.O. Box No. 558.

*Manager:*—D. C. Martin; *Deputy Manager:* [J. B. Collier; *Accountant:* P. Bolander.

*TELEGRAPHIC ADDRESS:*—"CHARTABANK", Telex. 230, Phone No. 255241 (5 Lines).



## REPRESENTATIVE OFFICE

## The Chase Manhattan Bank, N. A.

CAPITAL: \$507,086,637; SURPLUS, UNDIVIDED PROFITS and RESERVE for CONTINGENCIES: \$621,792,334; RESOURCES OVER: \$15,331 million; HEAD OFFICE: 1, Chase Manhattan Plaza, New York; 130 Offices in Greater New York. MAIN LONDON OFFICE: 6, Lombard St., E.C.3; WEST END BRANCH: 46, Berkeley Square, W.1; OTHER BRANCHES: France (Paris); Germany (Frankfurt/M); Lebanon (Beirut); Liberia (Monrovia); Japan (Tokyo, Osaka); Hong Kong; Thailand (Bangkok); Singapore; Malayasia (Kuala-Lumpur); Nigeria (Lagos); Panama (5); Canal Zone (1); Bahamas (Nassau); Puerto Rico (4); South Africa (3); Trinidad (Port-of-Spain); Virgin Islands (4); Representative Offices at Washington, D.C., Buenos Aires (Argentina), Madrid (Spain), Geneva (Switzerland), Rome (Italy), Mexico, D.F., Rio de Janeiro (Brazil), Australia (Melbourne). Correspondents throughout the commercial world. Overseas Affiliates: Banco Lar Brasileiro, S.A., Rio de Janeiro (13 Branches); Banco Mercantil Y Agricola, C.A., Caracas, Venezuela (4 Branches); Banco Continental, Peru, The Standard Bank of South Africa Ltd., Johannesburg. BOMBAY REPRESENTATIVE OFFICE: New India Assurance Building, Mahatma Gandhi Road, Post Box 1961, Telephone: 252759.

## DAXINI BRAHMAN CO-OPERATIVE BANK LTD., BOMBAY.

Jayant Nivas, 163-165, Jagannath Shankar-Sheth Road, Girgaum, Bombay-4.

Branch Office: Bhagirathi Nivas, N. C. Kelkar Road, Dadar, Bombay 28. Membership open to all above the age of 18, residing in greater Bombay and area upto and inclusive of Virar & Kalyan. Deposit account can be opened by any body. Advances are granted to members against Gold Ornaments, Silver, Government and other Trustee Securities, Life Insurance Policies, Shares of Jt. Stock Companies, Goods, Property etc. Advances against Gold & Silver only are granted to Nominal Members. Transacts all kinds of Banking business. Phone: Head Office: 355738, Branch: 451814.

## DENA BANK LIMITED

Incorporated in Bombay under the Indian Companies Act on 26th May, 1938).

|                                 |                                   |
|---------------------------------|-----------------------------------|
| AUTHORISED CAPITAL .. ..        | RS. TWO CRORES.                   |
| SUBSCRIBED & PAID-UP CAPITAL .. | RS. ONE CRORE & TWENTY-FIVE LAKHS |
| RESERVE FUNDS .. ..             | RS. ONE CRORE & FORTY LAKHS.      |
| TOTAL DEPOSITS EXCEED .. ..     | RS. NINETY CRORES.                |
| WORKING FUNDS EXCEED .. ..      | RS. ONE HUNDRED CRORES.           |
| NUMBER OF ACCOUNTS EXCEED .. .. | FOUR LAKHS & FIFTY THOUSAND.      |

## BRANCHES:

174 Offices and 49 Safe Deposit Vaults

MAHARASHTRA: (64 BRANCHES)—BOMBAY: \*Horniman Circle (H.O.), Andheri, Bandra, Ballard Estate, \*Bhandup, Bhat Bazar, Bhayander, Bhuleshwar, \*Borivli, Chembur, \*Colaba, Dada-Khodad Circle, \*Dadar-Ranade Road, \*Ghatkopar, Gol Deval, Goregaon, \*Jogeshwari, \*Juhu (Vile Parle), Kalbadevi, \*Kandivli, Khar—Ghod-bunder Road, Khar—Linking Road, Kharek Bazar, Kurla, Mahim, \*Malabar Hill, \*Malad (E), \*Malad (W), Mandvi, \*Matunga, \*Mulund, Nagdevi, Parel, \*Peddar Road, Sandhurst Bridge, \*Santacruz (E), \*Santacruz (W), \*Share Bazar, Sion, \*Tardeo, \*Thakurdwar, Thana, \*Vile Parle (E), \*Vile Parle (W), \*Versova, \*Wadala, Worli, \*Zaveri Bazar, Ahmednagar, Baramti, Kolhapur, \*Malegaon, Manmad, Nagpur, Nandurbar, NASIK: Nasik City, Nasik Road, Yeola (Nasik Dist); POONA: Burdhar Peth, \*Camp, \*Deccan Gymkhana, \*Raviwar Peth, Sholapur, Walchandnagar.

GUJARAT—AHMEDABAD—(86 Branches): Aswara, Astodia Chakla, \*Delhi Chakla, \*Ellis Bridge, \*Gandhi Road, Manek Chowk, \*Maninagar, Maskoti Market, Navrangpura, \*Relief Road, Saraspur, Adipur, Amrell, \*Anand, Ankleshwar, Bagasra, Bardoli, BARODA: Jubilee Bag, Sayaji Ganj, Barwala, \*Bhavnagar, Billimora, \*Borsad, \*Botad, Broach, \*Bulsar, Cambay, Chanasma, Chorwad, Dakor, Damnagar, Dhari, \*Dharmaj, Dhasa, Dhoraji, Dharangadhra, Gandevi, Godhra, Gondal, Jalalpore, JAMNAGAR: Cloth Market, Grain Market, Junagadh, Kadod, Kandla (Free-Trade Zone), Karamsad, Keshod, Lunawada, Mahuva, Mandvi (Surat Dist.), Mahudha, Mehmabad, Mehsana, Mendarda, Morvi, Nadiad, \*Navsari, Ode, Padra, Palanpur, Pallad, \*Palitana, Palsana, Patan, Petlad, Porbandar, \*Rajkot, Salaya (Jamnagar Dist), Savarkundla, Sevalia, Sidhpur, Sthor, Sinor, SURAT: Burhanpuri Bhagol, Nanpura, Ram-pura, \*Surendranagar, Udhna, Umreth, Unjha, Upleta, Vadnagar, Veraval, Viramgam, Visnagar, \*Wankaner.

WEST-BENGAL—(5 BRANCHES): CALCUTTA: \* Bhawanipore, Brabourne Road, Burra Bazar, Rashbehari Avenue, Shyam Bazar.

\* DELHI—(6 Branches): Chandni Chowk, Delhi, Daryaganj, Delhi, G. B. Road, Delhi, Subzi Mandi, Delhi, Connaught Place, New Delhi, \* Karol Bagh, New Delhi.

MADHYA PRADESH—(4 BRANCHES): Bhopal, Burhanpur, Indore, Ujjain.

RAJASTHAN—(1 BRANCH): \* Jaipur.

MADRAS—(2 BRANCHES)—MADRAS CITY: Mount Road, Netaji S. C. Road.

ANDHRA PRADESH — (2 BRANCHES): Hyderabad, Secunderabad.

MYSORE—(2 BRANCHES): Bangalore, Mangalore.

KERALA—(1 BRANCH): Cochin.

GOA:—(1 BRANCH): \*Panjim.

\* Has Safe Deposit Vault.

## GENERAL BANKING BUSINESS TRANSACTED AND INLAND AND FOREIGN LETTERS OF CREDIT ARRANGED

## LONDON AGENTS:

The Chase Manhattan Bank  
Bank of America N.T. & S.A.  
Midland Bank Ltd.  
Barclay's Bank

## NEW YORK AGENTS:

The Chase Manhattan Bank  
Manufacturers Hanover Trust  
Bank of America (International)

## EASTERN BANK, LIMITED

(Incorporated in England—1909, the liability of members being Limited).

(Wholly owned Subsidiary of the Chartered Bank).

(Incorporated by the Royal Charter, 1853).

HEAD OFFICE:—2 & 3 Crosby Square, London, E.C. 3.

Bombay Office:—Corner of Dr. Dadabhai Nowroji Road and Veer Nariman Road. Manager: C. Raymond. Accountant: R. H. Lincoln. Tel. Address: "EASTERTIDE." Telephone No. 255056. P.O. Box No. 219. Branches: Abu Dhabi, Aden (crater Ma'alla, Sheikh Othman), Al-Ain, Bahrian, Manama and Muharraq, Beirut (Lebanon), Bombay, Calcutta, Colombo, Doha (Qatar), Karachi, Kuala-Lumpur, Madras, Mukalla (Hadhrumaut, East Aden Protectorate), Seiyun Sharjah and Singapore.

## FIRST NATIONAL CITY BANK

(Incorporated with limited liability in the U.S.A.)

Established 1812

World wide Banking Services.

|                                                      |                   |
|------------------------------------------------------|-------------------|
| DEPOSITS .. ..                                       | \$ 11,948,884,000 |
| CAPITAL .. ..                                        | \$ 359,638,000    |
| SURPLUS & UNDIVIDED PROFITS AS ON DEC. 31, 1965.. .. | \$ 537,174,000    |

HEAD OFFICES.—55, Wall Street, and 399 Park Avenue, New York with 148 Branches in New York and 163 Branches and Affiliates in 55 countries overseas. LONDON OFFICE.—117, Old Broad Street, London, E.C. 2. Branches in Argentina, Belgium, Bolivia, Brazil, Canal Zone, Chile, Colombia, Dominican Republic, Ecuador, El Salvador, England, France, Germany, Greece, Guantanamo Bay, Hong Kong, India, Italy, Jamaica, Japan, Lebanon, Malaysia, Mexico, Netherlands, Pakistan, Panama, Paraguay, Peru, Philippines, Puerto Rico, Republic of China, Saudi Arabia, Switzerland, Trinidad, Trucial States, Uruguay, Venezuela, and affiliates in Bahamas, Cameroon, Canada, Central African Republic, Chad, Congo, Dohomey, France, Gabon, Ivory Coast, Liberia, Mali, Mauritania, Niger, Nigeria, Senegal, Union of South Africa, Togo, Upper Volta. Correspondents in every commercially important city in the world.

BOMBAY OFFICE.—293, Dr. Dadabhoy Naoroji Road, Fort. Vice-President: R. E. Grant; Manager: R. C. Bennett; Assistant Managers: W. T. Goldrick, U. S. Karant, M. M. Mistri, S. R. Tare; Accountants: I. H. Gidwani, M. C. George; Pro-Managers: M. M. Bailur, E. W. Glazier, G. J. Joshi, N. P. Korday, A. K. Varma; Assistant Accountants: H. K. Channabasappa, F. M. Irani, D. M. Shanbagh, D. R. Hoskote, S. B. Parekh, J. A. Gillespie.

Tel. Address: "CITIBANK".

Phone No. 26-3131. Telex: 288, P.O. Box No. 175.

CALCUTTA OFFICE.—9, Brabourne Road. Manager: T. G. Harding; Assistant Managers: T. R. McWeeney, T. C. Sanyal, S. N. Vittalrao; Accountant: N. Krishnan; Assistant Accountants: R. C. Dubal, H. K. Nandi, S. K. Paul, W. K. Craven.

Tel. Address: "CITIBANK".



Phone No. 22-5741. Telex : 346, P. O. Box No. 655.

**CHOWRINGHEE OFFICE** :—1 Middleton Street, Calcutta—16.  
*Manager* : B. B. L. Kapoor; *Assistant Accountant* : G. D. Bose.

Tel. Address : "CITIBANK".

Phone No. 44-7596. P.O. Box No. 9028.

**MADRAS OFFICE** :—15/16, Kondi Chetty Street (off N. S. C. Bose Road). *Manager* : H. H. Mitchell; *Assistant Accountants* : J. Amrith, P. N. S. Menon; *Per-Procuration* : H. I. Subramaniam.

Tel. Address : "CITIBANK".

Phone No. 22453. Telex 326. P.O. Box No. 1953.

**NEW DELHI OFFICE** :—3, Parliament Street, New Delhi 1. *Manager* : Peter Jefferys; *Assistant Manager* : P. Malhotra; *Pro-Manager* : K. Murari; *Assistant Accountant* : D. M. Hoopes, *Per-Procuration* : G. Natarajan.

Tel. Address : "CITIBANK".

Phone No. 44921. Telex 332. P.O. Box No. 520.

**CODES USED** : Bentley's Complete and Second Phrases; Peterson's International 3rd & 4th editions; A. B. C. 6th Edition.

## THE HONGKONG AND SHANGHAI BANKING CORPORATION

(Incorporated in Hong Kong with Limited Liability).

**HEAD OFFICE** :—Hong Kong.

**CHIEF MANAGER** :—The Hon. J. A. H. Saunders, D.S.O., M.C.

**CAPITAL AUTHORISED** .. .. . HK. \$ 200,000,000  
 (Rs. 26,25,00,262)

**CAPITAL ISSUED AND FULLY PAID-UP** .. HK. \$ 173,901,475  
 (Rs. 22,82,45,910)

**RESERVE FUND** .. .. . Stg. £ 15,000,000  
 (Rs. 31,50,00,315)

Banking and Exchange Business of every description transacted with the Principal Commercial Centres of the World.

A Comprehensive Service as Trustees and Executors is also undertaken by the Bank's Trustee Companies in Hong Kong, London & Singapore

**BOMBAY OFFICE** :  
 16, Veer Nariman Road.  
 W. C. Richardson,  
 Manager.

**CALCUTTA OFFICE** :  
 31, Dalhousie Square.  
 T. G. Mead,  
 Manager.

## INDIAN BANK, LIMITED

(ESTD. 1907.)

**MADRAS.**

**OFFICES IN BOMBAY** : 1. United India Life Assurance Bldg., Sir Phirozeshah Mehta Road, Fort. 2. Lakhamsey Napoo Road, Matunga (Central Rly.), Bombay 19. 3 "Kanmoor House", 281/87, Narsinatha Street, Mandvi, Bombay-9. 4. Shanmukhananda Sabha Bldgs., Flank Road, Sion West, Bombay 22-5. "Sunder", Plot No. 71-C, Govandi Road, Chembur, Bombay 6. Sundaram Bldg., Sion Circle, Bombay 22. and 7. Madhavnagar, 11-12, S. V. Road, Andheri. With a network of Branches and Sub-Offices in all the important places in South India and at Ahmedabad, Calcutta, New Delhi, Poona. Overseas branches at Singapore, Kuala Lumpur, Penang, Malacca, Colombo. *London Agents* : Westminster Bank Lt. *New York Agents* : First National City Bank and Chase Manhattan Bank.

## THE INDIAN OVERSEAS BANK, LIMITED

Central Office :

151, Mount Road, Madras 2.

**AUTHORISED CAPITAL** .. .. . Rs. 1,00,00,000-00

**PAID-UP CAPITAL** .. .. . " 99,99,775-00

**RESERVES** .. .. . " 1,01,92,534-50

**CHAIRMAN** :—M. CT. Muthiah, Esq.

**GENERAL MANAGER** :—K. M. Nanjappa, Esq.

*Branches at :*

Ahmedabad, Amritsar, Bombay, Calcutta, Cuttack, Ludhiana, Madras, Hyderabad, Delhi, New Delhi and throughout South India, Colombo, Singapore, Ipoh, Klang, Malacca, Penang, Kuala Lumpur, Bangkok and Hong Kong.

*Agents in all the Principal Commercial Centres of the World.*

Every description of Banking business transacted and for those who trade Overseas, The Indian Overseas Bank Ltd., is particularly well equipped to deal with their requirements.

**OFFICES AT BOMBAY** :—(1) Elphinstone Building, 2/10, Veer Nariman Road, Fort. (2) 117/119, Kazi Syed Street, Bombay 3. (3) Tajoo Kaya Park, Vincent Road, Matunga. (4) 378, Lady Jamshedji Road, Mahim, Bombay 16. (5) Opp. Town Hall, Timbi Naka, Thana. (6) 525/527, Kalbadevi Road, Bombay 2; Smirithi, Plot No. 269, Linking Road, Bandra TPS—III, Bombay 50 AS.

## JODHPUR COMMERCIAL BANK, LTD.

(Incorporated in Jodhpur State : Liability of Members is Limited).

**REGISTERED OFFICE** :—Jalori Gate, Jodhpur. **CENTRAL OFFICE** :—207, Kalbadevi Road, Bombay. **BRANCHES** : **MARWAR** :—Jalori Gate, Jodhpur; Khejarla House, Jodhpur; Kuchaman City, Nagaur; Merta City, Pali; **BOMBAY** :—53, Tamarind Lane, Fort; 207, Kalbadevi Road; 118-122, Kazi Syed Street, Mandvi; Municipal Building, Bhiwandi (Dist. Thana); Jambhali Naka, Thana; Shivaji Chowk, Kalyan.

## THE MAHARASHTRA STATE CO-OPERATIVE BANK, LTD.

(Incorporating the Vidarbha Co-op. Bank Ltd.)

*Head Office :*

9, Bakehouse Lane, Fort, Bombay-1.

*Regional Office :*

Mahal, Nagpur.

*Local Branches in Greater Bombay :*

- |             |                        |
|-------------|------------------------|
| 1. Andheri  | 8. Matunga             |
| 2. Byculla  | 9. Mulund              |
| 3. Chembur  | 10. Prabhadevi         |
| 4. Goregaon | 11. Santa Cruz         |
| 5. Khar     | 12. Sion               |
| 6. Lalbaug  | 13. Vile Parle (East)  |
| 7. Mahim    | 14. Vile Parle (West). |

*Chairman* : Dr. D. R. Gadgil.

Money deposited with the Bank helps the Indian Agriculturists and Small Industries and Sugar Factories organized on a co-operative basis.

|                               | Ra.          |
|-------------------------------|--------------|
| PAID-UP SHARE CAPITAL .. .. . | 5,78,25,000  |
| RESERVE & OTHER FUNDS .. .. . | 3,19,71,000  |
| TOTAL DEPOSITS .. .. .        | 49,58,96,000 |
| WORKING CAPITAL .. .. .       | 99,87,25,000 |

Collection arrangements in all the important cities of Indian Union. Banking business of every description transacted.

Deposits of all kinds accepted.

Shri V. M. Joglekar : General Manager.

Dr. W. C. Shrishrimal : Manager.

## MERCANTILE BANK LIMITED

(Incorporated in England.)

(Liability of Shareholders Limited.)

|                            |            |
|----------------------------|------------|
| AUTHORISED CAPITAL .. .. . | £4,000,000 |
| SUBSCRIBED CAPITAL .. .. . | £2,940,000 |
| PAID-UP CAPITAL .. .. .    | £2,940,000 |
| RESERVE FUND .. .. .       | £2,200,000 |

**HEAD OFFICE** :—1, Queen's Road, Central Hongkong.

**WEST END OFFICE** :—123, Pall Mall, London, S.W.1.

**Branches & Agencies** throughout India and the East.

**MANAGER** .. .. . F. I. C. Herridge.

**BOMBAY MANAGER** .. .. . J. A. Anderson.

**SUB-MANAGER** .. .. . S. R. Stevenson.

A member of the Hongkong Bank Group.



**THE MITSUI BANK, LIMITED**

(Incorporated in Japan.)

(Liabilities of Shareholders Limited.)

AUTHORISED CAPITAL .. .. Yen 27,000,000,000.

PAID-UP CAPITAL .. .. Yen 18,000,000,000.

HEAD OFFICE: No. 12, Yurakucho, 1-Chome, Chiyoda-Ku, Tokyo, Japan.

Branches throughout Japan.

OVERSEAS OFFICES: Bombay, London, Bangkok, New York and Singapore.

BOMBAY BRANCH AT: 6, Wallace Street, Dr. Dadabhoy Naoroji Road, Fort, Bombay. P.O. Box No. 1278.

MANAGER: r. Chushin Ota.

Telegraphic Address: "MITSUIBANK".

Telephone No. 26-4834 (3 lines).

**NATIONAL AND GRINDLAYS BANK LTD.**

(Amalgamating National Bank of India Ltd., Grindlays Bank Ltd. and the Eastern Branches of Lloyds Bank Ltd.)

Registered in London under the Companies Act of 1862 on the 23rd March 1866.

The Liability of Members is Limited.

Bankers to the Government in Aden, Kenya, Zanzibar, and Uganda.

AUTHORISED CAPITAL .. .. £9,000,000

SUBSCRIBED AND PAID-UP CAPITAL .. .. £7,604,000

RESERVE FUNDS .. .. £4,915,000

HEAD OFFICE: 26, Bishopsgate, London, E.C. 2.

LONDON BRANCHES:

13, James's Square, S.W. 1.

Branches throughout India, Pakistan, Ceylon, Aden, Somalia, Kenya, Uganda, Tanzania, Zambia and Rhodesia.

The Bank conducts all classes of Banking and Exchange Business throughout the World. Trusteeships and Executorships are undertaken.

BOMBAY BRANCHES: 90, Mahatma Gandhi Road, Mint Road (Corner of Mint Road and Sir P. M. Road); 270/272, Dr. Dadabhoy Naoroji Road (Lloyds Branch); 21/29, Princess Street (Lloyds Branch); 117-119, Kazi Syed Street, Mandvi, Bombay-3; 65F, Linking Road, Santa Cruz (West), Bombay 54; Shivaji Mandir, N. C. Kelkar Road, Dadar, Bombay 28; 2/571, Gowalia Tank Road, Cumballa Hill, Bombay 26; 24B, Club Road, Byculla (Next to Maratha Mandir), Bombay-8; Next to Castle Mills; Agra Road, Kolbad Road, Thana, N. Bombay.

ASSOCIATED BANKS: Lloyds Bank Ltd., National Provincial Bank Ltd.

**NORTH KANARA GOUD SARASWAT BRAHMIN CO-OPERATIVE BANK, LTD.**

Laxmi Sadan, 361, Vithalbhai Patel Road, Bombay.

OBJECTS:—To raise funds by Debentures, Deposits, etc., to be lent out at interest to members of the Bank against personal securities, gilt-edged securities and immovable properties and to undertake such other business on behalf of the members as is incidental to banking business.

**THE PUNJAB NATIONAL BANK, LTD.**

(Established in 1895)

Regd. Office, New Delhi.

AUTHORISED CAPITAL .. .. Rs. 2,00,00,000

Subscribed and paid-up Capital (including Bonus Issue of 3,75,000 Shares) .. .. 2,00,00,000

Reserve Fund and other Reserves .. .. 4,07,50,000

Deposits and other Accounts (as on 31st December 1965) .. .. 2,40,51,86,860.65

484 offices in India. Transacts Banking and Foreign Exchange Business of every description.

CORRESPONDENTS IN UNITED KINGDOM:—American Express Company Inc.; Bangkok Bank Ltd.; Bank of America NT. &amp; SA; Bank of New South Wales Ltd.; Continental Illinois National

Bank &amp; Trust Company; First National City Bank; Manufacturers Hanover Trust Co.; Midland Bank Ltd.; National Provincial Bank Ltd.; N. M. Rothschild &amp; Sons; Rafidain Bank; Sanwa Bank Ltd.; Westminster Bank Ltd.; Barclays Bank Ltd.

CORRESPONDENTS IN U.S.A.:—American Express Company Inc.; Bank of America NT &amp; SA; Bank of California National Association; Bank of Montreal; Bank of New York; Bankers Trust Company; Chase Manhattan Bank; Citizens &amp; Southern National Bank; Continental Illinois National Bank &amp; Trust Company of Chicago; Crocker-Citizens National Bank; Detroit Bank &amp; Trust Company; First National Bank of Arizona; First National Bank of Atlanta; First National Bank of Boston; First National Bank of Chicago; First National Bank of Hawaii; First National Bank of Oregon; First National City Bank; Industrial National Bank of Rhodes Island; Irving Trust Company; Manufacturers Hanover Trust Company; Manufacturers National Bank of Detroit; Marine Midland Grace Trust Company of New York; Marine National Exchange Bank; Morgan Guaranty Trust Company; New England Merchants National Bank of Boston; Philadelphia National Bank; Public Bank; Sanwa Bank Ltd.; Seattle First National Bank; Security First National Bank; Society National Bank of Cleveland; United California Bank; Wachovia Bank &amp; Trust Company; Western Bancorporation International Bank.

Chairman: Shri Kamalnayan Bajaj; General Manager: Shri S. C. Trikha; Deputy General Manager: Shri S. R. Mohindroo; Chief Accountant: Shri D. C. Gupta; Secretary: Shri O. P. Gupta; Chief Manager, Foreign Exchange: Shri B. K. Vora; Controller of Advances: Shri B. K. Vora; Chief Inspector: Shri A. L. Bhandari; Deputy Controller of Advances: Shri Y. Prasher; Asstt. Controller of Advances: Shri S. L. Kapur; Principal, Staff Training College: Shri A. S. Puri.

Assistant General Managers/District Managers: Shri S. L. Mehra (Bombay), Shri K. L. Bhandari (Calcutta), Shri G. R. Bamba (Madras), Shri G. D. Khanna (Indore), Shri C. S. Brara (Kanpur), Shri K. S. Sahgal (Chandigarh), Shri H. L. Malhotra (Jullunder).

**RESERVE BANK OF INDIA**

Incorporated under the Reserve Bank of India Act, 1934 (II of 1934) to regulate the issue of Bank notes and the keeping of reserves with a view to securing monetary stability in India and generally to operate the currency and credit system of the country to its advantage. Nationalised on 1st January 1949. Officers and Branches of the Banking Department—Bombay, Calcutta, Madras, New Delhi, Kanpur, Bangalore, Nagpur, Byculla (Bombay 8). Branches of the Issue Department—Bombay, Calcutta, New Delhi, Kanpur, Madras, Nagpur, Bangalore and Byculla (Bombay 8).

**STATE BANK OF HYDERABAD**

(Subsidiary of State Bank of India).

Incorporated in India under Special Statute: The Liability of the members is limited.

HEAD OFFICE: HYDERABAD (DN.) AUTHORISED CAPITAL: Rs. 1,00,00,000; ISSUED AND PAID-UP CAPITAL: Rs. 50,00,000. Offers complete Banking Service through a network of Offices spread over Andhra Pradesh, Maharashtra, Madras City and Mysore States and through its correspondents elsewhere in India. Foreign Exchange Business of all types undertaken.

BOMBAY OFFICES: 1. New India Assurance Building, Mahatma Gandhi Road Fort, Bombay.

2. 262-270, Narsi Natha Street, Bhat Bazar, Mandvi, Bombay 9.

MADRAS OFFICES: 1. 41, Linghi Chetty Street, George Town, Madras-1.

2. 84, Mint Street, Sawcarpet, Madras-3.

**STATE BANK OF INDIA**

(Constituted under the State Bank of India Act, 1955)

AUTHORISED CAPITAL .. .. Rs. 20,00,00,000

PAID-UP CAPITAL AS ON 31-12-1965 .. .. Rs. 5,02,50,000

RESERVE FUND AND OTHER RESERVES AS ON 31-12-1965 .. .. Rs. 10,56,00,000

Local Head Offices:—Ahmedabad, Bombay, Calcutta, Hyderabad, Kanpur, Madras and New Delhi.

London Office:—Clements House, 14-18, Gresham Street, London, E.C. 2.



## REPRESENTATIVE OFFICES:—

- (a) Western Europe .. .. Goethestrasse 26-28, 6,  
Frankfurt (Main),  
West Germany.
- (b) U.S.A., Canada and Latin  
America .. .. 44, Wall Street, New York,  
N.Y. 10005, U.S.A.

Principal Office in Pakistan:—Karachi.

Over 1330 offices comprising 7 Local Head Offices, the office in London, two representative offices at Frankfurt (West Germany) and New York (U.S.A.) respectively, 5 offices in Pakistan. (From about the 8th September 1965, the offices in Pakistan have been taken over by a Custodian appointed by the Pakistan Government.) One office in Ceylon and Branches and Sub-Offices in India.

All classes of Banking Business undertaken including Foreign Exchange Business.

Chairman: Shri V. T. Dehejia.

Vice-Chairman: Shri K. T. Desai.

Managing Directors:—(1) Shri R. N. Chettur.

(2) Shri N. Ramanand Rao.

Names of the Subsidiaries:—State Bank of Bikaner & Jaipur; State Bank of Hyderabad; State Bank of Indore; State Bank of Mysore; State Bank of Patiala; State Bank of Saurashtra; State Bank of Travancore.

## SYNDICATE BANK LIMITED

REGISTERED OFFICE: MANIPAL.

ESTD: 1925

|                                   |                 |
|-----------------------------------|-----------------|
| AUTHORISED CAPITAL .. ..          | Rs. 2,00,00,000 |
| ISSUED & SUBSCRIBED CAPITAL .. .. | 1,00,45,550     |
| PAID-UP CAPITAL .. ..             | 99,72,556       |
| RESERVE FUND .. ..                | 1,00,00,000     |

Board of Directors:

Dr. T. M. A. Pal, M.B.B.S., CHAIRMAN.

T. A. Pal, B.Com. (Bom.), A.L.L.B., F.R.E.S. (Lond.), MANAGING DIRECTOR.

A. Lakshminarayana Rao,  
B.A., B.L.  
M. N. Prabhu Shiroorkar  
V. V. Shanbhag  
L. H. Prabhu, B.A., LL.B.  
B. Padmanabha Pai  
K. Gururaja Rao, B.A., B.L.

Dr. K. Mohandas Pal, B.Sc., M.B.B.S.  
Dr. K. L. Althala, M.B.B.S.  
M. D. Narayan, B.Sc., M.A. (Colo.).  
Dr. B. S. Jirge, M.B.C.S. (Eng.).  
M.R.C.P. (Lond.).  
Yadalam N. Gangadhara Setty.  
K. Velayudhan Nair, B.A., LL.B.  
K. S. G. Haja Shareeff, M.L.A.

## CHIEF OFFICER:

K. K. PAI, (Bom.)

## BOMBAY OFFICES:—

Sir Phirozshah Mehta Road, Fort.

88/85, Kazi Syed Street, Mandvi.

3A, Dadar Matunga Estate, K. A. Subramanyam Road, Matunga.

543, Subhas Road, Mulund West, Mulund. Ashok Chambers, Plot No. 56, Broach Street. Foreign Exchange Department:—Rahimtoola House, Homjee Street, P.B. 614, Fort.

Over 210 Branches throughout India—States of Andhra, Delhi, Goa, Gujarat, Kerala, Madras, Maharashtra, Mysore and West Bengal and Agencies all over the world.

## UNION BANK OF INDIA, LIMITED

REGISTERED OFFICE—66/80, Apollo Street, Fort, Bombay 1.

LOCAL BRANCHES: Abdul Rehman Street, \*Bandra, Bazar Gate Street, Bhandup, \*Bhat Bazar, \*Bhuleshwar, Borivli, Byculla, Cotton Green, Dadar, Dahisar, \*Goregaon, Home Street, \*Kalbadevi, Khand Bazar, Khar, Kurla, Mahalaxmi, Malad, Mandvi, Matunga, \*Mulund, Napean Sea Road, Null Bazar, Opera House, \*Peddar Road, Princess Street, Santa Cruz, \*Sion, Veer Nariman Road, Zaveri Bazar.

UPCOUNTRY BRANCHES: Ahmedabad:—Dhanlaxmi Market, Delhi Chakla, \*Ellis Bridge, \*Gandhi Road, Gomtipur, Maneck Chowk, Relief Road, \*Vadej, Ahmednagar, Alleppey. Always:—Amritsar, Angamaly, Bajuvu, Bangalore, Bareilly, Baroda, Bhavnagar, \*Bhiwandi, Bhopal, Boisar, Burhar. Calcutta:—Clive Row, Dharamtolla, Ezra Street, Shyam Bazar, Strand Road, Cambay, Chalakudy, Cherpu, Cochin, Coimbatore. Delhi:—\*Chandni Chowk, Chawri Bazar, \*Connaught Place, \*Karol Bagh, Khari Baoli, \*Patel Nagar, Sadar Bazar, S. B. Sarafa Market, \*Subzi Mandi, Dhoraji, Gauhati. Goa:—Panjim, Guntur, Hubli, Hyderabad, Indore, Irinjalakuda. Jabalpur:—City, \*Cantonment, Jaipur, Jamnagar, Jandiala, Jetpur, Jullunder, Kalady, Kalyan, Kanpur, Katni, Kolhapur, Kothamangalam, Kottiyam, Kozhikode Landour (Mussoorie), Lucknow, Ludhiana, Madras:—Sembudoss Street, Sowcarpet, Madurai, Mala, Marthandam, Muyattupuzha, Nadiad, Nagpur, Nasik City, Neral, Nizamabad, N. Parur, Perumbavur. Poona:—\*City, \*Camp, Porbander, Raipur, \*Rajkot, Saharanpur, Salabatpura, Satpura, Shahad, Secunderabad, Sojitra, Sunav, Surat, Thana, Trichur, Trivandrum, Ullasnagar, Vallabh Vidyanagar, Valparai, Vaso, \*Veraval, Vijayawada, Varanasi, Visakhapatnam.

\*Equipped with Safe Deposit Vault.

## UNITED WESTERN BANK, LTD.

(Estd.: 1936).

SCHEDULED BANK: Regd. Office: Satara; Central Office:—Bombay; Total branches 22 at principal business Centres in Maharashtra; Authorised Capital Rs. 20,00,000; Transacts every kind of Banking business, loans, etc.



## CLASSIFIED LIST OF OVERSEAS FIRMS WITH NAMES OF BOMBAY AGENTS/REPRESENTATIVES.

### AIR-CONDITIONING, REFRIGERATION, HUMIDIFICATION UNITS AND EQUIPMENT

Carrier International Ltd., 385, Madison Avenue, New York, U.S.A. Sole Distributors: Voltas Limited.

**KELVINATOR- INTERNATIONAL CORPORATION, U.S.A. Refrigerators.** Sole Distributors: Spencer & Co., Ltd., Spencer's Building, Forjett Street, Bombay 26. Phone: 362861-62-63 Grams: "PORTEDOS."

Tempair Ltd., Maidstone, Kent, England. Manufacturers of "Rootes Tempair" self-contained packaged and window type air-conditioners. Sole Distributors & Progressive Manufacturers: Dadajee Dhackjee & Co. Private Ltd., Sandhurst Bridge, Bombay 7.

### AIR COMPRESSORS

Alexander Wilson (Aberdeen) Ltd., Ashgrove Road, Aberdeen, Scotland. Diesel Driven Portable Air Compressors. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Broom & Wade Ltd., High Wycombe, England. Sole Distributors: Voltas Limited.

De Vilbiss Company, Ohio, U.S.A. Air Compressing & Spray Painting Outfits, Hose, etc. Agents: John Fleming & Co., Private Ltd., Bastion Road, Fort, Bombay 1. Phone: 261153.

### ALUMINIUM

James Booth Aluminium Ltd., Kitts Green, Birmingham 33, U.K. Pure Aluminium and Aluminium Alloys in the form of Plate, Sheet, Strip, Tube, Extrusion, Forging, etc. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

### ANTIFRICTION METALS AND SOLDERS

Eyre Smelting Ltd., Antifriction Metals. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

### ANTI-VIBRATION BEARINGS & MOUNTINGS

Silentbloc Ltd., Manor Royal, Crawley, Sussex. Antifriction, Flexible Mounting and Couplings. Agents: Heatly and Gresham Ltd., 43, Forbes Street, Fort, Bombay 1.

### AROMATIC CHEMICALS

**ESROLKO LTD. (Formerly FLORA),** Switzerland. Manufacturers of Synthetic Essential Oils & Aromatic Chemicals. Agents: M. C. Davar & Co., 143, Princess Street, Bombay 2. Phone: 39752. Grams: "EMCIDAVAR".

Les Derives Resiniques & Terpeniques, Dax (Landes), France. Sole Distributors for India: R. K. Shapurji & Co., Prospect Chambers, 319, Dr. Dadabhoy Naoroji Road, P.B. 1065, Bombay 1.

N. V. Chemische Fabriek "Flebo" Hoogezand (Holland). Sole Agents: Aromatic Products and Chemicals Private Ltd., 42, Prospect Chambers Annexe, Dr.

Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "DISCOVERY".

Takasago Perfumery Co. Ltd., Tokyo, Japan. Sole Agents: Aromatic Products & Chemicals Private Ltd., 42, Prospect Chambers Annexe, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "DISCOVERY".

### ASBESTOS PRODUCTS

Arthur Hecker Asbest-Und Gummiwerke kg., (14a) Weil Im Schonbuch (Wurtemberg), West Germany. Sole Agents: Datson, Raviraj & Co., Private Ltd., 43, Tamarind Lane, Fort, Bombay.

Chillcotts Ltd., Newlands Park, Sydenham, London S. E. 26. Sole Agents: Datson, Raviraj & Co., Private Ltd., 43, Tamarind Lane, Fort, Bombay.

### AUTOMATIC LOOMS

British Northrop Sales Ltd., Blackburn, England. Automatic Looms. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

### AUTOMATION EQUIPMENT

Press Automation System, 3840, East Outer Drive, Detroit, U.S.A. Automatic Mechanical Handling Equipment, mostly required by Sheet Metal Working Shops. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Bombay.

### AUTOMOBILE

Bentley Motors (1931) Ltd., Conduit Street, London. Manufacturers of Bentley Motor Cars. Sole Distributors: Dadajee Dhackjee & Co. Private Ltd., Sandhurst Bridge, Bombay 7.

Rolls-Royce Ltd., Conduit Street, London. Manufacturers of Rolls-Royce Motor Cars. Sole Distributors: Dadajee Dhackjee & Co. Private Ltd., Sandhurst Bridge, Bombay 7.

Rootes Limited, Devonshire House, Piccadilly, London, W.1. Export Division of Humber, Hillman, Sunbeam, Singer Motor Cars and Commer and Karrier Commercial Vehicles. Sole Distributors: Dadajee Dhackjee & Co. Private Ltd., Sandhurst Bridge, Bombay 7.

### AVIATION

Aerojet-General Corporation, Sacramento, California, U.S.A. Rocket-assisted take off engines, for guided Missiles and Air Craft. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Aircraft-Marine Products (Great Britain) Ltd., Terminal House, Stanmore, Middlesex, England. All sizes and types of solderless terminals and crimping tools. Sole concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Auto Diesels Limited, Uxbridge, Middlesex England. Aircraft ground starting and Servicing equipment. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Avica Equipment Ltd., Mark Road, Hemel Hempstead, Herts, England. Stainless steel and rubber flexible pipe assemblies, swivel couplings. Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay 1.

Bristol Aerojet Limited, Banwell Weston-Super-Mare, Somerset, England. Rocket motor cases, pressure vessels in high tensile steel for industrial and aeronautical use, gas storage vessels, oxygen/air cylinders. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Bristol Aeroplane Plastics Ltd., Filton House, Filton, Bristol, England. High Strength reinforced corrosive resistant glass fibre piping, aircraft drop-tanks, radomes, boat hulls, and other plastic products. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Bristol Siddley Engines Ltd., Post Box 3, Filton, Bristol, England. A range of turbojet and turbofan engines to meet all Classes of modern aircraft requirements including VTOL aircraft, rocket engines and Ramjets. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Canadian Bristol Aerojet Ltd., P.O. Box 874, Winnipeg International Airport, Winnipeg, Canada. Black Brant Series of high altitude research rockets for scientific and defence space research. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Cossor Communications Ltd., The Pinnacles Elizabeth Way, Harlow, Essex, England. VHF, UHF Microwave Communication equipment. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Cossor Electronics Ltd., The Pinnacles Elizabeth Way, Harlow, Essex, England. Primary radar for early warning surveillance radar, meteorological radar, ground and airborne secondary surveillance radar, display systems. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Darchem Engineering Co., Ltd., (Refrasil Division) Stillington, County Durham, England. Thermal and Electrical Insulating materials. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Dynatron Radio Ltd., St. Peter's Road, Furze Platt, Maidenhead, Berkshire, England. Nucleonic equipment. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Dowty Exports Ltd., Cheltenham Road, Gloucester, England. Propellers, gearboxes, under carriages, fuel systems, electrohydraulic equipment for powered flying controls synthetic silicone rubber seals, switches, indicators, relays and fatigue test equipment. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Ekco Electronics Ltd., Southend-on-Sea, Essex, England. Nucleonic equipment, thickness and density gauges, airborne weather radar automatic direction finding equipment. Static Invertors. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Elliott-Automation Ltd., Abbey Road, Park Royal, London N.W.10, England. Military and civil aircraft electronic systems including auto pilots, auto stabilisation and control systems, air data computers and sensors, automatic landing devices, stable platforms and inertial navigational systems, fuel flowmeters and thrust measuring devices etc., air defence systems for ground control interception and



similar systems for air traffic control and control of armoured fighting vehicles. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

EMI Electronics Ltd., Hayes, Middlesex, England. Sideways looking radar, line scan radar for mapping at low levels, Fire control radar for use with guns and missiles, mortar locating radar, variable depth ordic and sonabuoya. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Bombay.

Hunting Surveys Ltd., 6, Elstree Way, Boreham Woods, Herts, England. Aerial photographic surveys, airborne geophysical exploration for oils and minerals. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay 1.

Raytheon Company, Lexington 73, Massachusetts, U.S.A. Radar for air traffic control, early warning, fire control and meteorological applications, semi-active homing devices, scan conversion bright display systems, Naval warfare equipment, Microwave equipment, SSB Communication transmitter/receiver, TV Relays, regulated power supplies, digital computer and accessories. Hawk and sparrow missiles. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Redifon Ltd., Gatwick Road, Crawley, Sussex, England. Digital and analogue Flight simulators, Electronic synthetic training devices, Air Traffic Control radar simulators, harbour radar simulators, tactical trainers. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Rotax Limited, Willesden Junction, London N.W. 10, England. Power generation and starting equipment for aircraft. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Slough Estates (London) Ltd., London. Agents: Killick, Nixon & Co., Ltd., Killick House, Home Street, Fort.

Selenia Industrie Electroniche Associate S.P.A., Via Tiburtina K. M. 12,400 Rome, Italy. Air traffic control and surveillance radar systems, early warning radar and associated systems, marine radar, radar for defence systems including Army use for battlefield surveillance and fire control purposes, Microwave VHF Communication equipment Data transmission systems, Digital displays. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Smiths Industries Ltd., Kelvin House, Wembley Park Drive, Wembley, Middlesex, England. Autopilots, engine control system, aircraft instruments. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Teddington Aircraft Controls Ltd., Cefn Coed, Nr Merthyr Tydfil, Glamorgan, S. Wales. Aircraft Cabin Temperature and pressurisation systems; Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Ultra Electronics Ltd., Western Avenue Acton, London W.3, England. Search rescue and homing equipment, communication control equipment, aircraft engine control systems. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

## AXLE BOX OILERS

Armstrong Oiler Co., Ltd. Lendal Bridge, York, England. Axle Box Oilers for Railway Rolling Stock. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

## BALL & ROLLER BEARINGS (MFRS.)

KUGELFISCHER GEORG SCHAFER & CO., West Germany. Mfrs. of Ball and Roller Bearings. Distributors: Messrs. B. Chowdhury & Co., Indian Globe Chambers (7th Floor), Fort Street, Fort, Bombay 1. Phone: 263479. Grams: "BISUKHI."

## BALLING PRESSES

Lindemann Kommanditgesellschaft, Dusseldorf, West Germany. Sole Distributors: Voltas Limited.

## BATTERIES

D. P. Battery Co., Ltd., Storage Batteries. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

## BEER AND STOUT

Beck & Co., Bremen. Brewers. Sole Distributors: Spencer & Co. Ltd., Spencer's Building, Forjett Street, Bombay 26.

Tennent, J. & R., Ltd., Glasgow. Brewers. Sole Distributors: Spencer & Co., Ltd., Spencer's Building, Forjett Street, Bombay 26.

## BELTING (TEXTILE) MANUFACTURERS

British Belting & Asbestos Ltd., Southwark, London. MINTEX and Halo Brake Lining and Clutch Rings, etc. Agents: Balmer Lawrie & Co. Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Fenner & Co. (Overseas) Ltd., J. H., Hull, England. Leather & Woven Belting. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Gandy Limited, Wheatland Works, Wallasey, Cheshire, England. Sole Distributors: Voltas Limited.

## BISCUIT MANUFACTURERS

Huntley & Palmers Ltd., Biscuit Manufacturers, Reading. Sole Distributors: Spencer & Co., Ltd., Spencer's Building, Forjett Street, Bombay 26.

## BOILER ACCESSORIES

Clyde Blowers, Ltd., Livingston Street, Clydebank, near Glasgow C. 2. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

DEWRANCE & CO., LTD., 165, Great Dover Street, London S.E. 1. Steam Valves, Steam Traps and Boiler Mountings. Sole Agents: Kilburn & Co., Ltd., P. O. Box No. 565, Bombay. Phone: 256845. Grams: "TASCONIUM".

Everlasting Valve Co. (Great Britain), Ltd., 125, Balham High Road, London, S.W. 12, England. Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

Gresham & Craven, Ltd., Post Box No. 4, Norfolk Street, Worsley Road, North Walkden, Manchester. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

## BOILER MANUFACTURERS

Copes Regulators Ltd., London, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Cradley Boiler Co. Ltd., Nr. Birmingham. Makers of Vertical Steam Boilers.

Agents: Richardson & Cruddas, Ltd., Byculla, Bombay 8.

Foster Wheeler Ltd., St. Catharines, Ontario, Canada. Steam Raising Plant. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Penman & Co., Ltd., Caledonian Iron Works, Glasgow. S. E. Lancashire & Cornish Boilers, Economic Boilers. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Ruston & Hornsby Ltd., Lincoln. Vertical Cross Tube and "Thermax" Boilers. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

## BOILER PRESERVATIVES AND COMPOSITIONS

Houseman & Thomson Ltd., New Castle-upon-Tyne. "D.M." Boiler Solution. Agents: Balmer Lawrie & Co. Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

## BOILER SCALE PREVENTIVE AND COMPOSITIONS

Houseman & Thompson Ltd., Newcastle-upon-Tyne. "D.M." Boiler Solution. Agents: Balmer Lawrie & Co. Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

## BOILER TUBES

Comptoir F. B. T. 23-27, Avenue de Nevilly, Paris. Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

## BOLTS, NUTS & SCREWS

G. K. N. Bolts & Nuts Ltd., Darlaston. Bolts, Nuts, etc. Representatives: Guest, Keen Williams Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

## BOOKS PUBLISHERS

Harrap & Co., Ltd., George G., 182, High Holborn, London W.C. 1. Publishers. Agents: Oxford University Press, Post Box No. 31, Bombay 1.

University Tutorial Press, Ltd., Clifton House, Euston Road, London, N.W.1. Publishers. Agents: Oxford University Press, Post Box No. 31, Bombay 1.

## BRICK-MAKING EQUIPMENT

Hebert Alexander & Co. Ltd., Leeds. Brick-making machinery & equipment. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

## BUILDERS' HOISTS

ALLOYS ZEPPENFELD, 21 b. Oberveischede, Uber Grevenbruck, West Germany. Manufacturers of Builders' Hoists and Power Winches. Agents: M/s. Gaytee & Co., Janmabhoomi Chambers, Fort Street, Fort, Bombay 1. Phone: No. 263449. Grams: "IMPENG".

## CABLES & WIRES

Aktiebolaget Sweden Lilljeholmens Kabelfabrik, Stockholm. Manufacturers of cables and wires. Representatives: Asea Electric India, Private Limited, ASEA House, Goa Street, Bombay.

John Rigby & Sons Ltd., England. Steel Wire for Springs, Planos, Stitching, Reeds, Screws, Pins, Drawn Pinion Sections & Powder Metallurgy Products, Paper Clips, etc. Agents: Armstrong Smith Ltd., 1,



Sir P. M. Road, Post Box No. 185, Bombay 1.

**SCOTTISH CABLES LIMITED**, Dean-side, Renfrew, Scotland. Power Cables. Representatives: James Finlay & Co., Limited, P.O. Box No. 73, Bombay 1.

### CANNING MACHINERY

**Fabbrica Machine Industriali**, Via E. Giannurco, 31, Casella Postale 2159, Napoli, Italy. Plant and Machinery for the manufacture of Tin cans and containers including Machines for Filling, Seaming, Sealing, Flexing, Stamping and Capping. Machinery for the Production of Bullet Assemblies: Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

### CAST IRON ROLLS

**Aktiebolaget Akers Styckebruk**, Sweden. Sole Distributors: Voltas Limited.

### CEMENT & CONCRETE

**Colcrete Ltd.**, London. Manufacturers of Colloidal Mixers and Colloidal Grouting. Sole Agents in India: Gammon India Ltd., Gammon House, Cadell Road, Prabhadevi, Bombay-28DD.

**L. G. Mouchel & Partners**, London. Cooling Towers Consultants; Agents in India: Gammon India Ltd., Gammon House, Cadell Road, Prabhadevi, Bombay-28DD.

### CEMENT TILES MANUFACTURING MACHINERY

**ENRICO Longinotti**, Firenze, Italy. Sole Agents for India: Jashvant C. Shah & Co., Navroze Baug, Navrozi Lane, Ghatkopar, Bombay-27.

### CHAIN BELTS AND CONVEYORS

**J. Collis & Sons Ltd.**, London. Sole Agents: Killick Nixon & Co., Ltd., Killick House, Home Street, Fort.

### CHEMICAL AND PHARMACEUTICAL MACHINERY AND PACKAGING EQUIPMENT MFRS.

**A. H. Bland (Engineers) Ltd.**, England. "PYRAMID" Heat Sealing Machines for Alkathene, Pliofilm, P.V.C., Cellophane, etc. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Albro Fillers & Engineering Co. Ltd.**, Middlesex, England. Filling Machines for liquid, cream chutneys, Powder, etc. Lidding and Capping Machines. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Ambeg**, Germany. Machinery for manufacture of Ampoules, Vials, Tablet and test-tubes, bulbs, etc., Glass Tubes Cutting, Sorting & Weighing Machines. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Apex Construction Co.**, London. Tablet Machines, Industrial Compressing Machinery, Pharmaceutical equipment, special process plant. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Areco Aktiebolag**, Stockholm (Sweden). Tube Filling, Folding & Crimping Machine, Jar Filling Machine. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Arthur Colton & Co.**, New York 16, N. Y. Complete range of Tablet Machinery, Filling, Closing, Crimping Machines, etc. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Autopack Ltd.**, Birmingham, England. Ampoule Cutting, Washing, Filling & Sealing Machines, Powder Ampoule Filling Machine, Vial Feeding, Filling & Capping Machines, Protamin Insulin Double Headed Filling machine, Powder, Tea Powder, Flour, Cereal, Soap Flakes Weighing & Filling Machines, Weighing, Pressing & Tin Feeding Machines, Tube Filling, Feeding and Corking Machine, Cap Spinning Unit for Vials, Screw Capping Machine with/without filling unit, Cellophane wrapping machine, Automatic film wrapping machine, Anacin type Tablet Packing Machine. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Blomquists Vertstadskebolag**, P.O. Box 2036, Sodertalje 2, Sweden. Mixing Equipment. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Bombay 1.

**C. E. King & Sons Ltd.**, England. Tablet Counting, Tablet Cleaning and Cotton Wool Inserting Machines, etc. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Bombay 1.

**Chemokomplex**, P.O. Box 141, Budapest 62, Hungary. Air Separation Plants, Oxygen Plants. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Bombay 1.

**D. Trapow & Co. (Clifford Packaging Machinery Ltd.)**, England. NEWMAN Fully and Semi-Automatic Labelling Machines for bottles, jars, ampoules, vials, torch batteries, etc. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Foster Wheeler Ltd.**, Ontario, Canada. Complete Petroleum Refineries for Gasoline, Processing & Chemical Plants, Fertiliser Plants. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Gabor Aron**, Hungary. Gas Producing Plants. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Fort, Bombay 1.

**H. Strunck & Co.**, Postfach 148, Lichstrasse 30-54, Kolb-Ehrenfeld 1, W. Germany. Ampoule Vial, Washing, Filling, Drying, Labelling machines etc. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Fort, Bombay 1.

**Hassia Verpackungsmaschinen G.m.b.H.**, Germany. Strip, Packaging Machines for Tablets, Capsules Powders and Liquids. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Bombay 1.

**J. G. Jackson & Crockatt Ltd.**, Nithill Road, Thornliebank, Glasgow, Scotland. Granulators. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Bombay 1.

**Kilian & Co.**, Germany. Prescoters and other Tabletting Machines. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**L. A. Mitchell Ltd.**, England. Heating Ovens, Mitchell Drying Equipment, Acid Pumps, Chemical Plants, etc. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**MANESTY MACHINES LTD.**, Liverpool, 19. Pharmaceutical & Tablet making Machines, Distilled Water Plants, etc. Sole Agents: Kilburn & Co., Ltd., P. O. Box 565, Bombay. Phone: 256845. Grams: "TASCONIUM."

**Medway Papersacks Ltd.**, England. Paper Sack Sealing and Shaping Machines. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Fort, Bombay.

**Metrimpex**, Budapest, Hungary. Physico-Chemical Laboratory Instruments and Equipment. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Ormerod Engineers Ltd.**, England. Homogenizers for Pharmaceutical, Textile, Jute, Foodstuffs, etc. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Associate Companies of Degna Limited**, Hongkong — Pfaudler S.A., Switzerland, Pfaudler Co. U.S.A., Pfaudler-Werke-Germany, Enamelled Metal Products Corporation (1933) Ltd., England. Shinko-Pfaudler Co. Ltd., Japan. Pfaudler Glass Enamelled Steel Storage and Mixing Vessel, Steel Chemical Process Equipment, Stainless Steel Vessel and Equipment. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay-1.

**Q. V. F. Limited**, England. Industrial Plants in Glass, "PYREX" Visible Flow Pipes Lines for Chemical, Pharmaceutical and Food Industries. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Robert Muenster Muttentz**, Bale Suisse Switzerland. Granulate Quickrail for Tablet mass. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Bombay 1.

**William Gardner & Sons (Gloucester) Ltd.**, England. Sifters & Mixers, Crushers, Grinders and Ball Mills, Essence Sprayer, Mixer. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

### CHEMICAL PUMPS

**British Labour Pump Co. Ltd.**, Blundell Street, London. N.7., Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay-1.

### CHEMICALS

**CHEMISCHE WERKE HUELS A. G.**, Germany. Manufacturers of Plastics, Solvents, and Synthetic Rubbers. Sole Distributors: Chika Limited, Mehta Chambers, 13, Mathew Road, Bombay-4. Phone: 352591-95. Grams: "DYECOLD".

**DYNAMIT NOBEL A. G.**, Germany. Manufacturers of Nitrocellulose and Chemicals. Sole Distributors: Chika Limited, Mehta Chambers, 13, Mathew Road, Bombay 4. Phone: 352591-95. Grams: "DYECOLD."

**FARBWERKE HOECHST AKTIENGESSELLSCHAFT**, Frankfurt (M) Hoechst, Germany. Manufacturers of Dyestuffs, Chemicals Organic intermediates, raw materials for the paints and plastic industries, fibres, films, Industrial gases and Welding equipment. Licence: Hoechst Dyes & Chemicals Ltd., Parekh Mahal, Vir Nariman Road, Churchgate, Bombay 1. Grams: "HOSTACHEM."

**Ford Industries Ltd.**, 89/93, New Zealand Avenue Walton-on-Thames, Surrey England. Sole Distributors for India: R. K. Shapurji & Co. Prospect Chambers, 319, Dr. Dadabhoy Naoroji Road, Fort. P.B. No. 1065, Bombay 1.

**Houghton, E. F. & Co.**, Philadelphia. Houghton's Heat Treatment Specialties. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

**Industrial Tartarica Valenciana, S.A.**, Valencia, Spain. Tartaric Acid. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort.

**Industrias Quimicas Y. Tartaricas, S.A.**, Gerona, Spain. Tartaric & Citric Acid. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort.

**M. W. Hardy & Co., Ltd.**, London. Chemicals, Pharmaceuticals, Dyes. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort.

**Societe des Usines Chimiques Rhone-Poulenc**, Paris. Sole Distributors: Voltas Limited.



**CIGARETTE LIGHTERS**

Ronson Products Ltd., London. Cigarette Lighters & Products. Sole Distributors: Spencer & Co. Ltd., Spencer's Building, Forjett Street, Bombay 26.

**CIRCLIPS**

ORBIS G.m.b.H., West Germany. Mfrs. of Circlips. Sole Agents: Messrs. B. Chowdhury & Co., Indian Globe Chambers (7th Floor), Fort Street, Fort, Bombay 1. Phone: 26-3479. Grams: "BISUKHI".

**CLEARING AND FORWARDING AGENTS**

Dean & Dawson Ltd., Passenger and Tourist Agents. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Geo. W. Wheatley & Co. Ltd., London, Liverpool, New York and Marseilles. Shipping and Forwarding Agents. Agents: Balmer Lawrie & Co. Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Gerhard & Hey Ltd., Shipping Agents, London, Liverpool, Manchester, Hull, Southampton, Glasgow. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

Gerhard & Hey Co., Inc., Shipping Agents, 44, Whitehall Street, New York 4, N. Y. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

Pitt & Scott Ltd., London, Glasgow, Liverpool, New York and Marseilles. Shipping and Forwarding Agents. Agents: Balmer Lawrie & Co. Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

**CLOSED CIRCUIT TELEVISION EQUIPMENT**

Epsylon Industries Ltd., Faggs Road, Feltham, Middlesex, England. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

**COAL CUTTING MACHINERY AND CONVEYORS**

Mayor & Coulson Ltd., 47, Broad Street, Glasgow. Coal Cutters and Conveyors. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

**COLOURS**

Blythe Colour Works Ltd., England. Sole Agents in India: Indian Furnace Co. Private Ltd., Lotus Cinema Building, Dr. Annie Besant Road, Bombay 18.

**COMMUNICATION BROADCASTING EQUIPMENT**

Gates Radio Company, U.S.A. Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

**COMMUNICATIONS TEST EQUIPMENT**

James Scott (Electronic Engineering) Ltd., Carntyne Estate, Glasgow E-2, Scotland. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

Marconi Instruments Ltd., St. Albans, Hertfordshire, England. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

**COMPUTING EQUIPMENT**

Raytheon Co., Lexington, Massachusetts, U.S.A. Digital Computers and accessories, germanium and silicon digital modules, breadboard, training kits, regulated power supplier. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Short Brothers and Harland Ltd., 7th Floor, Berkeley Square House, Berkeley Square, London W.1, England. Skyvan and Belfast aircraft, analogue computing equipment. Sea cat and Tiger cat Missiles. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

**CONCRETE MACHINERY**

Cable Covers Ltd., Sole Agents: Killick Nixon & Co., Ltd., Killick House, Home Street, Fort, Bombay.

**CONCRETE REINFORCEMENT**

McCall & Co., (Sheffield) Ltd., Templeborough, Sheffield, England. "Matobar" High Tensile Electrically Welded Steel Fabric for Reinforcement; Sole Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

**CONCRETE VIBRATORS**

Allam, E. P., & Co., Ltd., 132-135, Sloane Street, London, S.W.1. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

Johnson (Machinery) Ltd., C. H., England. Sole Agents: Killick, Nixon & Co., Ltd., Killick House, Home Street, Fort.

Wacker Gebruder, Germany. Gasoline/Electric High Frequency Internal/External Concrete Vibrators, Tampers, Tie Tampers, Plate Vibrators, etc. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**CONTRACTORS' PLANT AND MACHINERY**

Winget Construction Equipment Rochester. (Muir-Hill Loaders & Dumpers). Agents for Western India: Killick, Nixon & Co. Ltd., Killick House, Home Street, Fort, Bombay.

Cable Covers Ltd., London. Agents: Killick Nixon & Co. Ltd., Killick House, Home Street, Fort, Bombay.

Florentini & Co., Ing. F., Italy. Agents for Western India: Killick, Nixon & Co. Ltd., Killick House, Home Street, Fort.

Frederick Parker, Ltd., Leicester. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Fort.

Johnson Machinery Ltd., England. Sole Agents: Killick, Nixon & Co., Ltd., Killick House, Home Street, Fort, Bombay.

**CRANES & HOISTS**

Clyde, Crane & Booth Ltd., Rodley, Leeds, England and Mossend, Scotland and Cowans Sheldon & Co. Ltd., Carlisle, England. Electric Overhead Travelling Cranes, Electric, Steam and Diesel Dock and Wharf Cranes, Travelling Jib Cranes for Docks, Railways and Collieries, Railway Breakdown and Main Line Cranes and Deck cranes. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Fellows Brothers Ltd., Cradley Heath, England. Overhead Electric and hand Power Travelling Cranes, Pulley Blocks & Hoists. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Holland Cranes, The Hague, Holland. Agents for Western India: Killick, Nixon & Co. Ltd., Killick House, Home Street, Bombay 1.

John Smith & Sons (Keighley) Ltd., Keighley. Electric Overhead Travelling Cranes. Sole Agents: Marshall, Sons & Co. (India) Ltd., Marshall's Building, Ballard Road, Bombay 1.

Loro & Parisini, Milan. Sole Agents: Killick, Nixon & Co. Ltd., Killick House, Home Street, Fort, Bombay.

Martonair Limited, Parkshot, Richmond, Surrey, Pneumatic Hoister, Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Thomas Smith & Sons (Rodley) Ltd., Rodley. Steam and Diesel Cranes. Sole Agents: Marshall, Sons & Co. (India) Ltd., Marshall's Building, Ballard Road, Bombay 1.

**DIAMOND DRILLING RODS**

Jacques Dembitzer, Antwerp, Belgium. Sole Agents: Killick, Nixon & Co. Ltd., Killick House, Home Street, Bombay 1.

**DIES**

Jarecki Corporation, 320, Hall Street, S.W.m. Grand Rapids 2, Michigan, U.S.A. Sheet Metal Dies, Forging Dies, Precision Machinery and Electro-Mechanical Assemblies, Die aids and Die Models. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

**DIESEL ENGINES**

Davey Paxman & Co., Ltd., Standard Iron Works, Colchester. Diesel Engines for Stationary, Marine and Rail Traction Duties. Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Ruston & Hornsby Ltd., Lincoln & Grantham, England. Horizontal & Vertical Stationary Diesel Engines, also Marine, Main and Auxiliary Diesel Engines. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**DISC SPRINGS**

ADOLF SCHNORR, West Germany. Mfrs. of Disc Springs. Sole Agents: Messrs. B. Chowdhury & Co., Indian Globe Chambers (7th Floor), Fort Street, Fort, Bombay 1. Phone: 26-3479. Grams: "BISUKHI".

**DOMESTIC APPLIANCES**

Lumby's Ltd., England. Hot Water Boiler, etc. Agents: Richardson & Cruddas, Ltd., Byculla, Bombay 8.

**DRAWING OFFICE EQUIPMENT**

HALL HARDING LTD., London, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

**DRAWING AND SURVEYING EQUIPMENT**

I. H. C. Holland, The Hague, Holland. Agents for Western India: Killick, Nixon & Co. Ltd., Killick House, Home Street, Bombay 1.



**DREDGERS**

**HYMATIC DREDGERS LTD.**, Battle bridge House, Tooley Street, London S. W. 1. Representatives: James Finlay & Co., Ltd., P.O. Box No. 73, Bombay 1.

**SIMONS-LOBNITZ LTD.**, Renfrew near Glasgow. Representative: James Finlay & Co., Ltd., P.O. Box No. 73, Bombay-1.

**DRILL STEEL**

Modern Hardmetals Ltd., Holme Lane, Sheffield, England. Drilling & Boring Tools Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**DRILLING AND BORING EQUIPMENT**

English Drilling Equipment Co., Ltd., London. Sole Agents: Killick Nixon & Co. Ltd., Killick House, Home Street, Fort.

Fredk. Pollard & Co. Ltd., Leicester, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Halifax Tool Co., Ltd., Halifax. Sole Agents: Killick, Nixon & Co. Ltd., Killick House, Home Street, Fort.

Mindrill Exports Pty. Ltd., 86-106, Bell Street, Preston N-18, Victoria, Australia. Diamond Coring and blast hole drills, Grout drills and accessories. Rods, Casings and pumps. Diamond bits for Coring, non-coring, reaming and casing. Portable Rotary drills. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Mission Manufacturing Co., P.O. Box 4209, Houston, Texas, U.S.A. Hammerdrills and Hammer Bits for down-the-hole drilling. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Ruston-Bucyrus, Ltd., Lincoln, England and Bucyrus-Erie Company, South Milwaukee, Wisconsin, U.S.A. Excavating Machinery, Water Well and Blast Hole Drills Hydro Cranes Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Schramm, Inc., West Chester, Pennsylvania, U.S.A. Rota Drills for blast hold drillings in mines and quarries. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Siemens-Schuckert (G.B.) Ltd., Brentford, Middlesex. Electric Hand Drills, Gate End Panels, Wimmet Bits, etc. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

**DUMPERS**

Aveling Barford Ltd., Invicta Works, Grantham and At Newcastle. Motor Road Rollers, Diesel Road Rollers, Road Making Machinery, Dumpers, Shuttle Dumpers, Dump Trucks, Front-end Loaders, Pneumatic Tyred Rollers. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

K. W. Dart Truck Co., Kansas City, 20, Missouri, U.S.A. Dump Trucks, 13 ton 65 ton Payload end Dump Tractor Trailers. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Bombay.

Road Machines (Drayton) Ltd., The Ridgeway, Thorney Lane, Iwer, Bucks, England. Weighbatchers, Dumpers and Monorail Transporters. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**DUMPERS LOADERS**

Chaseside Engineering Co. Ltd., Blackburn, Lancashire, England. Agents: Heatly & Gresham Ltd., 43 Forbes Street, Bombay-1.

**DUST EXTRACTION EQUIPMENT**

Dallow Lambert & Co., Ltd., Thurmaston, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**DYESTUFFS**

**FARBENFABRIKEN BAYER AKTIENGESSELLSCHAFT**, Leverkusen, Germany. Manufacturers of Coal-tar Dyes. Sole Distributors: Chika Ltd., Mehta Chambers, 13, Mathew Road, Bombay 4. Phone: 352591/95. Grams: "DYECOLD".

**FARBENFABRIKEN BAYER A. G.**, Leverkusen, Germany. Manufacturers of coal-tar Dyes. Sole Distributors: Chika Ltd., Mehta Chambers, 13, Mathew Road, Bombay 4. Phone: 352591/95. Grams: "DYECOLD".

**FARBWERKE HOECHST AKTIENGESSELLSCHAFT**, Frankfurt (M)—Hoechst, Germany. Manufacturers of Dyestuffs, Chemicals, Organic intermediates, raw materials for the paint and plastic industries, fibres, films, industrial gases and welding equipment. Licensees: Hoechst Dyes & Chemicals Ltd., Parekh Mahal, Vir Nariman Road, Churchgate, Bombay 1. Grams: "HOSTACHEM".

**EARTHMOVING EQUIPMENTS**

Aveling Barford Ltd., Invicta Works, Grant-ham, England. Motor & Diesel Road Rollers, Dumper Trucks, Graders, Crushing & Screening Plant. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Blaw Knox Ltd., London. Bulldozers, Scrapers, Rooters, Tamping Rollers, Excavators. Sole Agents: Marshall, Sons & Co. (India) Ltd., Marshall's Building, Ballard Road, Bombay 1.

International Harvester Export Co., U.S.A., U.K., Australia and Associates. Sole Distributors: Voltas Limited.

Mack Trucks Worldwide Ltd., Hamilton, Bermuda. Sole Distributors: Voltas Limited.

Ruston-Bucyrus, Ltd., Lincoln, England and Bucyrus-Erie Company, South Milwaukee, Wisconsin, U.S.A. Excavating Machinery, Water Well and Blast Hole Drills, "Mobile Lifting Cranes". Hydro Cranes. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**EARTHMOVING MACHINERY, CRANES**

Florentini & Co., Ing. F., Italy. Agents for Western India: Killick, Nixon & Co. Ltd., Killick House, Home Street, Fort.

**EDUCATIONAL FILMS**

Bray Studies Inc., 729 Seventh Avenue, New York, 19, N.Y. Sole Agents: National Education & Information Films Ltd., National House, Apollo Bunder, Bombay.

Czechoslovak Films, Prague. Sole Agents: National Education & Information Films Ltd., National House, Apollo Bunder, Bombay.

Common Ground Ltd., Sydney Place, London, S.W. 7. Sole Agents: National Education and Information Films Ltd., National House, Tulloch Road, Apollo Bunder, Bombay.

Coronet Instructional Films, Coronet Building, Chicago, U.S.A. Sole Distributors: National Education & Information Films Ltd., National House, Tulloch Road, Apollo Bunder, Bombay.

Indiana University, Blomington (U.S.A.), Sole Distributors for 16 mm. films. National Education & Information Films Ltd., National House, Apollo Bunder, Bombay.

McGraw-Hill Book Co., New York. Distributors of McGraw-Hill Textfilms: National Education & Information Films Ltd., National House, Apollo Bunder, Bombay.

Moody Institute of Science, Los Angeles, Distributors: National Education & Information Films Ltd., National House, Apollo Bunder, Bombay 1.

National Film Board of Canada, Montreal (Canada). Sole Distributors for 16 mm. Films and Filmstrips: National Education & Information Films Ltd., National House, Apollo Bunder, Bombay.

United World Films Inc., New York. Distributors: National Education & Information Films Ltd., Apollo Bunder, Bombay.

**ELECTRIC THERMOSTATS**

**ROBERT MACLAREN & CO., LTD.**, Eglinton Works, Kilbirnie Street, Glasgow, C. 5. Representatives: James Finlay & Co., Ltd., P.O. Box No. 73, Bombay 1.

**ELECTRICAL GOODS & APPLIANCES**

Artic Fuse & Electrical Mfg. Co., Ltd., Birtley Co., Durham, England. Pressure Contact Self-Aligning Fuses both Semi-Enclosed (Fuse Wire) Type and H.R.C. Cartridge Fuse Type, Knife Switches, Heavy-duty Ironclad Switchgear and Fusegear. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

Belling & Co., Ltd., Southbury Road, Enfield, Middlesex, England. Electric Cookers & Heaters and Electric Domestic Appliances. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

Black & Decker Ltd., Harmondsworth, Middlesex, England. Portable Electric Drills, Grinders, Saws, Sanders and Polishers. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

Black & Decker Mfg. Co., Towson, Maryland, U.S.A. Electric Garage Equipment including Valve Refacers, Valve Seat Grinders and Electric Bench Grinders. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay-1.

Bullers Ltd., Milton, Staffs, England. Proclaim Insulators and Steelwork for Telegraph, Telephone and Electrical Power Transmission. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**CROMPTON PARKINSON LTD.**, Crompton House, Aldwych, London, W.C. 2. England. Electric Motors and Generators, Power and distribution Transformers, Switchgear, Switchboard and Control Gear, Electric Traction Equipment, Electrical Instruments, Electric Ceiling Fans, Electric Lamps, Automobile Batteries, C. M. A. Rubber Wires and Cables, Paper insulated Cables, Electric Vehicle Batteries and Fluorescent Lighting Fittings. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

Dubilier Condenser Co. (1925) Ltd., North Acton, London, W.8., England. Static Capacitors for Power Factor Improvement. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.



**DIEHL, Uhrenfabrik Stenphanstrasse 49, 8,500, Nurnberg-2, W. Germany.** Sole Agents for India:—Jashvant C. Shah & Co., Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77.

**E. D. HARTMANN, Schornbach Bei Schorndorf/Wurt, W. Germany.** Sole Agents for India:—Jashvant C. Shah & Co., Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77.

**ELECTRICAL APPARATUS CO. LTD.,** The St. Albans, England, A.C. and D.C. Motor Starting and Control of Gear, A.C. and D.C. Automatic Starters and Contractor Gear and Iron Clad Circuit Breakers. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**ELECTRONIC GERATEBAU DORN-BIRN, Ing. Dipl. Walter Rainer-Sandgasse 22, Dornbirn, Austria.** Sole Agents for India:—Jashvant C. Shah & Co., Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77.

**FRITZ KUBLER, Schwenningen/Neckar, W. Germany.** Sole Agents for India:—Jashvant C. Shah & Co., Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77.

**FUCHS-MUHLEN, Maschinenfabrik Maximilian Fuchs & Co. Wien, Westbahnstrasse 27-29, Vienna VII/62, Austria.** Sole Agents for India:—Jashvant C. Shah & Co., Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77.

**Fuller Electric Ltd., Fulgourne Road, London E. 17.** Onload tapchanging gear for Power Transformers. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**Gent & Co., Ltd., Faraday Works, Leicester, England.** Electric Pul-Syn-Etic Impulse Clocks, Electric Frequency Clocks, Electric Bells, Buzzers and Sound Signals of all types, Electric Syrens, Liquid Level Indicators and Alarms, Telephones and Telephone Switch Boards, Electrical Apparatus and Appliances. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**GRUNER & CO., G. M. B. H. Wehingen/Wittg., W. Germany.** Sole Agents for India:—Jashvant C. Shah & Co., Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77.

**H. K. PORTER COMPANY, INC. Delta-Star Electric Division, Lynchburg, va. U.S.A.:** Crystal Valve Lightning Arresters; Sole Agents: Johnson & Phillips Ltd., Kaiser-I-Hind Building, Currimbhoy Road, Ballard Estate, Bombay.

**Horstmann Gear Co., Ltd., Bath, England.** "H.B.E." Electric Time Switches. Sole Agents: Johnson & Phillips Ltd., "Kaiser-I-Hind" Building, Currimbhoy Road, Ballard Estate.

**JULIUSBAUSER, Empfinger, B. Horb, W. Germany.** Sole Agents for India:—Jashvant C. Shah & Co., Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77.

**KONTAKTWERK ENZBERG, Ing. Alfred Odenwald, Enzberg (Wurttemberg), W. Germany.** Sole Agents for India:—Jashvant C. Shah & Co., Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77.

**Landis & Gyr, S.A., Zug (Switzerland).** Sole Distributors: Voltas Limited.

**London Electric Wire Co. & Smiths Ltd., The.—London, S.W.1, England.** Sole Distributors: Voltas Limited.

**M. & C. SWITCHGEAR LTD., Kelvin-side Works, Kirkintilloch, Glasgow.** Mining Type & Flame proof Circuit breakers & Switchboards, Gate-End-boxes, Special Switch boards for Oil Refineries & Oxygen Plants. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**Morganite Exports Ltd., Battersea Church Road, London, England.** Morganite and Battersea Carbon Brushes for all Electrical Machines and Carbon Products for all Electrical and Mechanical Applications. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay-1.

**Morganite Exports Ltd., Battersea Church Road, London, S.W. 11, England.** Carbon and Morganite Brushes. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**Nalder Bros. & Thompson Ltd., England.** Electrical Measuring Instruments. Sole Agents: Johnson & Phillips Ltd., Kaiser-I-Hind Building, Currimbhoy Road, Ballard Estate.

**Beyrolle, A., & Co. Ltd., Hebburn Co., Durham, England.** Heavy-Duty, Metal-cased, Earthed (A) Sockets and Plugs (B) Switch-Socket Saw Plugs (C) Switch-Fuse Sockets and Plugs. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**Richard Johnson & Nephew Ltd., Forge Lane, Manchester 11, England.** Plain & Steel Cored Aluminium Conductor. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**Simplex Electric Co. Ltd., P.O. Box No. 8, Birmingham, England.** Ironclad Switchgear and Fusegear, Conduit and Conduit Fittings, Commercial and Industrial Lighting Equipment, Flame proof Switchgear and Fusegear Accessories. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**Switchgear & Equipment Ltd., Banbury, Oxon, England.** L. T. and H. T. Airbreak Switchgear and Fusegear, L.T. and H.T. Overhead-Line Switchgear. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**Thomas & Son (Worcester) Ltd., Worcester, England.** "Climax" Shallow and Deed Well Piston Pumps. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

**Walsall Conduits Ltd., West Bromwich, England.** Conduit. Agents: Balmer Lawrie & Co. Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 281494 (3 lines). Grams: "BALMER".

## ELECTRICAL MACHINERY

**Elektiska Sevkningskillebolaget, Esab, Export Dept., Box 850 Gotesborg 8, Sweden.** Electrodes & Welding Plants. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Bombay 1.

**Micasil S. A., Zurich, Switzerland.** Sole Distributors: Voltas Limited.

**Oerlikon Engineering Company, Zurich 50 (Switzerland).** Sole Distributors: Voltas Limited.

## ELECTRICAL MOTOR CONTROL GEAR

**BROOKHIRST IGRANIC LTD., Works at Bedford and Chester, England.** (Electric Motor Control Gear and Auxiliaries). Representatives: James Finlay & Co., Limited, P.O. Box No. 73, Bombay 1.

## ELECTRICAL PLANT

**ASEA, Vasteras, Sweden.** Manufacturers of all types of electrical machinery and apparatus for power purposes. Representatives: Asen Electric India, Private Limited, ASEA House, Goa Street, Bombay.

## ELECTRICAL & ELECTRONIC TEST INSTRUMENTS

**Avo Ltd., England.** Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

**Sangamo Weston Ltd., England.** Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

## ELECTRICAL RESISTANCE ALLOYS, NICHROME, ETC.

**British Driver-Harris Co. Ltd., England.** Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

**Driver-Harris Company, U.S.A.** Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

**Henry Wiggin & Co. Ltd., Holmer Road, Hereford, England.** "Brightway" Series of High Nickel-Chromium Alloys. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

## ELECTRICAL SYSTEMS

**Aircraft Marine Products (Great Britain) Ltd., Terminal House, Stanmore, Middlesex, England.** All sizes and types of Solderless terminals and crimping tools. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay 1.

**Cossar Electronics Ltd., The Pinnacles, Elizabeth Way, Harlow, Essex, England.** Primary radar for early warning, air surveillance radar, meteorological radar, ground and airborne secondary surveillance radar, ground and airborne navigational equipment, display systems. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Dynatron Radio Ltd., St. Peter's Road, Furze Platt, Maidenhead, Berkshire, England.** Nucleonic equipment. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Ekco Electronics Ltd., Southend-on-Sea, Essex, England.** Nucleonic equipment, thickness and density gauges, airborne weather radar, automatic direction finding equipment, Static Invertors. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Ultra Electronics Ltd., Western Avenue Acton, London W. 3, England.** Search rescue and homing equipment, communication control equipment, aircraft engine control systems. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

## ELECTRONIC APPARATUS FOR RESEARCH & INDUSTRY

**Fairchild Camera & Instrument Corp., Fairchild and Instrument Division, U.S.A.** Sales Distributors: Motwane Private Limited, 127, Mahatma Gandhi Road, Bombay 1.

## ELECTRICAL INDICATING AND RECORDING INSTRUMENTS

**Edgecumbe Peebles Ltd., Prudential House, Wellesley Road, Croydon, Surrey.** Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay-1.

## ELECTRICAL SWITCHGEAR

**Erskine Heap & Co., Ltd., Manchester, England.** Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

**Yorkshire Switchgear & Engineering Co. Limited, Meanwood, Leeds 6, England.** Manufacturers of Metalclad H. V. Switchgear. Representatives: Asen Electric India Private Limited, ASEA House, Goa Street, Bombay 1.



**ELECTRODES**

Anglo Great Lakes Corporation Ltd., Newcastle upon Tyne, England. Sole Agents in India:—Indian Furnace Co. Private Ltd., Lotus Cinema Building, Dr. Annie Besant Road, Bombay-18.

Cooper & Turner Ltd., Vulcan Works, Vulcan Road, Sheffield, England. Sole Agents: Datson, Raviraj & Co., Private Ltd., 43, Tamarind Lane, Fort, Bombay.

Great Lakes Carbon Corporation, U.S.A. Sole Agents in India:—Indian Furnace Co. Private Ltd., Lotus Cinema Building, Dr. Annie Besant Road, Bombay-18.

Murex Welding Processes Ltd., Waltham Cross, Herts. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

Union Carbide International Co., New York, U.S.A. Sole Distributors: Voltas Limited.

Weldcraft Ltd., 26, Purley Way, Croydon, England. Manufacturers of "Bronze-craft" Low Temperature Welding Rods, Sole Agents: Datson Raviraj & Co., Private Ltd., 43, Tamarind Lane, Fort.

**ELECTRONIC APPARATUS & RADIO BROADCASTING & COMMUNICATION EQUIPMENT**

Westinghouse Electric International Co., U.S.A. Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

**ELECTRONIC COUNTERS AND TIMERS**

Computer Measurements Co., 12970 Bradley Avenue, San Fernando, California, U.S.A. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay-1.

**ELECTRONIC EQUIPMENT AND INSTRUMENTS**

General Radio Company, U.S.A. Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

**ELECTRONIC VALVE MFRS.**

English Electric Valve Co., Ltd., Chelmsford, Essex, England. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

**ENGINEERING**

Aerex Ltd., 46, Rutland Park, Sheffield. Mine Ventilating Fans. Agents: Balmer Lawrie & Co. Ltd., 5, Graham Road, Ballard Estate, Fort, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Beck & Co. (Meters) Ltd., etc. Agents: Hardcastle, Waud & Co. Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

Lister & Co. (R. A.), Dursley, Glos. Auto Trucks. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Power Plant Co., Ltd., England. Agents: Balmer, Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Richard Klinger Ltd., Klinger Engineering specialities. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

Wells, A. C., & Company Ltd., Manchester, Wells Oil Filters. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

**EQUIPMENT FOR STEEL PLANTS**

Schloemann A. G., Dusseldorf, West Germany. Sole Distributors: Voltas Ltd., Ballard Estate.

**ESSENTIAL OILS**

Bruno Court, S. A. Jean Roure & Cie, Grasse (France). Agents: Aromatic Products & Chemicals Private Ltd., 42, Prospect Chambers Annexe, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "Discovery".

Citrus and Allied Essential Oils Co., 65, South Tyson Avenue, Floral Park, N.Y. 11001. Sole Distributors for India: R. K. Shapurji & Co., Prospect Chambers, 319, Dr. Dadabhoy Naoroji Road, Fort, P.B. No. 1065, Bombay-1.

Destilaciones Garcia De la Fuente S.A., Granada (Spain). Sole Agents: Aromatic Products & Chemicals Private Ltd., 42, Prospect Chambers Annexe, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "DISCOVERY".

Holland-China Trading Co. Ltd., Hongkong. Indenting Agents: Aromatic Products and Chemicals Private Ltd., 42, Prospect Chambers Annexe, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "DISCOVERY".

L. Russo & Figlio, Messina (Italy). Sole Agents: Aromatic Products & Chemicals Private Ltd., 42, Prospect Chambers Annexe, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "DISCOVERY".

M. M. Hatherbacha & Co., Penang, Malaya. Agents: M. C. Davar & Co., 143, Princess Street, Bombay 2. Phone: 39752, Grams: "EMCIDAVAR".

N. V. Chemische Fabriek "FLEBO" Hoogezand (Holland). Sole Agents: Aromatic Products & Chemicals Private Ltd., 42, Prospect Chambers Annexe, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "DISCOVERY".

Takasago Perfumery Co. Ltd., Tokyo, Japan. Sole Agents: Aromatic Products & Chemicals Private Ltd., 42, Prospect Chambers Annexe, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "DISCOVERY".

**EXCAVATING MACHINERY MANUFACTURERS**

Harnischfeger Corp., U.S.A., Germany and Japan. Sole Distributors: Voltas Limited.

**FILM BASED STAMPING FOILS**

Griffin, Campbell, Bayes, Walsh, Inc., 50 East 21st Street, New York, N.Y., U.S.A. "BRIGHTEN-GLO" Film Based STAMPING FOILS for Paper, Leather, Imitation Leather, Greeting Cards, Pens, Acetate and Butyrate, etc. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay 1.

**FIRE ENGINES AND APPLIANCES MANUFACTURERS**

Dennis Bros. Ltd., Guildford, Surrey, England. Dennis' Motor, Fire Engines and Trailer Pumps. Agents: Roberts, McLean & Co., Ltd., Ilaco House, Sir Phirozshah Mehta Road.

Merryweather & Sons, Ltd., Greenwich, London. Fire Engines & Appliances. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Walter Kidde Co., England. Fire Extinguishers and built-up systems. Agents: Roberts McLean & Co., Ltd., Ilaco House, Sir Phirozshah Mehta Road, Fort.

**FISH (PRESERVED)**

Seafood Products Ltd., Vancouver. Frozen Fish. Sole Distributors: Spencer & Co., Ltd., Spencer's Building, Forjett Street, Bombay 26.

**FLAME GUNS BURNERS AND INDUSTRIAL COMBUSTION EQUIPMENT**

Hauck Manufacturing Co., U.S.A. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate Bombay 1.

**FLOOR HARDENING COMPOUND**

Ironite Co., Ltd., 4, Holbeine Place, Sloane Square, London, S.W. 1. Sole Agents: Heatly & Gresham, Ltd., 43, Forbes Street, Bombay 1.

**FLUID HANDLING EQUIPMENT**

Emco Brass Mfg. Co., Margate, Kent, England. Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**FORGINGS & CASTINGS**

Darlington Forge Ltd., The Forge, Darlington, (Durham). Carbon and alloy Steels Ingots and forging Billets the latter "as forged" annealed, normalised or heat treated. Forgings, including Forgings for high-pressure Boilers and Super-Heater Drums. Steel Castings, including cast steel side frames, bolster, couplers and draft gear. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

**FORGINGS AND STAMPINGS FOR RAILWAYS**

COMPTOIR DES FERRURES, CHARLEVILLE (ARDENNES), France. Manufacturers of Component Parts of Machinery, Rolling Stock, etc. Agents: Gaytee & Company, Janmabhoem Chambers, Fort Street, Bombay. Phone: 263449. Grams: "IMPENG".

**FORK LIFT TRUCKS**

Automatic Transportation Company, Chicago, U.S.A. Electric Automatic Industrial Fork Lift Truck. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

Yale & Towne Manufacturing Co., U.S.A., U.K., Germany and Associates. Sole Distributors: Voltas Limited.

**FOUNDRY MATERIAL & EQUIPMENT**

Hauck Manufacturing Co., U.S.A. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

Houghton, E. F., & Co., Philadelphia. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

J. S. FRIES-SOHN, Germany. Manufacturers of "Fries" Pressure Die-Casting Machines, Continuous Billet Casting Machines, Sole Agents in India: Pioneer Equipment Co. Private Ltd., 139, Meadows Street, P.O. Box 1909, Bombay 1. (Phone: 251882). Also at Calcutta, New Delhi, Madras & Baroda.



**FRUIT JUICES AND EXTRACTS**

**E. I. Michel & Co., Ltd.**, 415, Oxford Street, London W.1. Sole Distributors: Spencer & Co., Ltd., Spencer's Building, Forjett Street, Bombay 26.

**FUEL INJECTION EQUIPMENT  
FURNACES**

**Efeo Furnaces Ltd.**, Weybridge, Surrey. Agents: Killick Nixon & Co., Ltd., Killick House, Home Street, Fort, Bombay 1.

**Foundry & Metallurgical Equipment Co. Ltd.**, 161, Queen's Road, Weybridge, Surrey. Die-Casting Equipment and Furnaces. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**G. W. B. Furnaces Ltd.**, England. Sole Agents in India: Indian Furnace Co., Private Ltd., Lotus Cinema Buildings, Dr. Annie Besant Road, Bombay 18.

**Morganite Exports Ltd.**, Battersea Church Road, London, S.W. 11. Morgan's tilting and Lift-out Furnaces, Oil and Coke-fired. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Stein Atkinson Stordy Ltd.**, Westminster House, Kew Road, Richmond, Surrey, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**Thermic Equipment and Engineering Co. Ltd.**, England. Sole Agents in India: Indian Furnace Co., Private Ltd., Lotus Cinema Buildings, Dr. Annie Besant Road, Bombay 18.

**Wildfield Ltd.**, England. Sole Agents in India: Indian Furnace Co., Private Ltd., Lotus Cinema Buildings, Dr. Annie Besant Road, Bombay 18.

**GARAGE EQUIPMENT**

**B. O. Morris Ltd.**, England. "Morrisflex" Flexible Shaft Equipment for Motor Garages, Workshops and for Boiler Descaling Agents: Armstrong Smith Ltd., Sir P. M. Road, Bombay 1.

**John Bean Eastern Division**, U.S.A. Barrett Equipment. Brake Drum Lathes, Brake Relining Machines, Hydraulic Brake Bleeder & Filler Tanks. Agents: Armstrong Smith Limited, Sir P. M. Road, Bombay-1.

**Black & Decker Mfg. Co. U.S.A.**, Black & Decker Ltd., England. "UTILITY" Portable Electric Tools, Valve Refacers, Vibro-centric Kits, Bench & Portable Grinders, etc. Agents: Armstrong Smith Ltd., 1, Sir P. Mehta Road, Bombay 1.

**Clayton Manufacturing Co.**, U.S.A. CLAYTON Engine and Chassis Dynamo meters. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**De Vilbiss Company**, Ohio, U.S.A. Air Compressing & Spray Painting Outfits, Hose, etc. Agents: John Fleming & Co., Private Ltd., Bastion Road, Fort, Bombay 1. Phone: 261153.

**Harvey Frost & Co. Ltd.**, England. Garage Tools, Jacks, Tyre Changers, Vulcanising Equipment. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Joseph Bradbury & Sons Ltd.**, England. Garage Equipment, Jacks, etc. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

**Pendleton Tool Industries International**, Terminal Annexe, Los Angeles, U.S.A. Garage Tools. Rep.: Jairamdas & Sons, 163, Narain Dhuru Street, Bombay 3.

**Van Norman Co.**, U.S.A. Cylinder Boring Bars, Crankshaft Regrinders, Horizontal Surface Grinders, Automatic Wet Honer, Super Rotary Surface Grinder, Con-Rod Boring Machine, Piston Turning & Grinding Machines, Race-way Grinding Machines, Special purpose Milling Machines. Agents: Armstrong Smith Private Ltd., 1, Sir P. M. Road, Bombay 1.

**GAS CUTTING MACHINERY**

**Esab Ltd.**, England. Electrodes and Welding Plants, Magnetic Crack Detectors and Gas Cutting Machines. Agents: Armstrong Smith Ltd., 1, Sir P. Mehta Road, Bombay 1.

**GAS TURBINES**

**Bristol Siddeley Engines Ltd.**, Post Box 3, Filton, Bristol, England. Industrial & Marine Gas Turbines. Sole Concessionaires, Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

**Ruston & Hornsby Ltd.**, Lincoln, England. Gas Turbines. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**GAUGES & INSTRUMENTS**

**Coley Thermometers Ltd.**, Brentford, Middlesex. Thermometers & Pressure Gauges. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Dobbie McInnes Ltd.**, Glasgow. Engine Indicators & Accessories. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**GEARS**

**David Brown Corporation (Sales) Ltd.**, Huddersfield, England. All types of open Gearing, Totally enclosed Gear units, Automobile Gears, Geared Motors. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Sandersons Bros. & Newbound Ltd.**, Sheffield 9, (U.K.). Meliocentric Gears. Representatives: Jairamdas & Sons, 163, Narain Dhuru Street, Bombay 3.

**GENERATING SETS**

**Austinite Ltd.**, Crawley, Sussex, England. Agents: Associated Instruments Manufacturers (India) Private Ltd., India House, Fort Street, Bombay-1.

**GLASS YARN & FABRICS**

**Fothergill & Harvey Ltd.**, Manchester. Agents: Killick Nixon & Co. Ltd., Killick House, Home Street, Fort.

**GRINDERS**

**Snow & Co., Ltd.**, Sheffield. Surface Grinders. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**HYDRAULIC JACKS**

**Epeco Ltd.**, Leeds 7, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**HYDRAULIC MACHINERY**

**Armfield Hydraulic Engineering Co. Ltd.**, Ringwood, England. Water Turbines, power house equipment, Axial flow Pumps. Sole concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

**John Blake Ltd.**, Accrington, Hydram Water Raisers. Agents: Richardson & Cruddas Ltd., Byculla, Bombay 8.

**INDUSTRIAL EQUIPMENT  
(MANUFACTURERS)**

**TEDDINGTON INDUSTRIAL EQUIPMENT LTD.**, Windmill Road, Sunbury-on-Thames, Middlesex. Manufacturers of Industrial Control Equipment. Representatives: James Finlay & Co., Ltd., P.O. Box No. 73, Bombay 1.

**INDUSTRIAL INSTRUMENTS**

**Hilger & Watts Ltd.**, 98, St. Pancras Way, Camden Road, London N.W. 1 Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

**Kappa Electronics Ltd.**, 159, Hammersmith Road, London. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

**W. & L. E. Gurley**, U.S.A. Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

**INDUSTRIAL INSTRUMENTS AND  
STEAM LINE ACCESSORIES**

**Drayton Controls Ltd.**, West Drayton Middlesex, England. Steam Traps & Steam Line Accessories, Instruments for Measuring, Regulating or Controlling Temperature, Pressure and Draught. Electrically and hydraulically operated valves, metal bellow. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

**The Tintometer Limited**, The Colour Laboratory, Waterloo Road, Salisbury England. Agents: Associated Instruments Manufacturers (India) Private Ltd., India House, Fort Street, Bombay-1.

**INDUSTRIAL PRESSES**

**Leeds Engineering & Hydraulic Co., Ltd.**, Rodley, Leeds, England. Hydraulic Presses, Benders and Transmission Systems. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Press Automation Systems Inc.**, 3840 East Outer Drive, Detroit 34, Michigan, U.S.A. Mechanical Handling Equipment for Sheet Metal Stamping Plants. Sole concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

**U. S. Industries Inc.**, Production Machine Division, Chicago 38, Illinois, U.S.A. and 1/5, New Bond Street, London, England. Mechanical and Hydraulic Power presses and Press Brakes. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Vickers Armstrong Engineers Ltd.**, Newcastle-on-Tyne, England. Hydraulic & Mechanical Press Brakes. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

**INSULATING BOARD &  
MATERIAL**

**Budd Company**, International Division, Continental Diamond Fibre Sales, Bridgeport, Pa., U.S.A. Agents: Hardcastle, Waud & Co. Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

**Diamond Fibre Co., Ltd.**, 59, Southward Street, London. Agents: Hardcastle, Waud & Co. Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

**Ioco Ltd.**, Anniesland, Glasgow. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER."



**INSULATORS (HIGH TENSION)**

Ifoverken, Bromolla, Sweden. Manufacturers of Porcelain Insulators. Representatives: Asea Electric India Private Limited, Asea House, Goa Street, Bombay.

**IRON, STEEL & BRASS**

Jessop-Saville Ltd., Sheffield. Sole Distributors: Voltas Limited.

**LABORATORY CHEMICALS & REAGENTS**

Evans Electro Selenium Ltd., 101 Leadenhall Street, London E.C.3. Mfrs. of Photo Electric Colorimeters, Flame Photometers, etc. Distributors: J. T. Jagtiani, National House, Tulloch Road, Apollo Bunder, Bombay-1.

Fine Chemicals of Canada Ltd., 124, Pharmacy Avenue, Toronto 13, Ontario Canada. Distributors for Maharashtra State: R. K. Shapurji & Co., Prospect Chambers, 319, Dr. Dadabhai Naoroji Road, P. B. No. 1065, Bombay 1.

George T. Gurr Ltd., 136/138, New King's Road, London, S.W.6, England. Distributors for Maharashtra State: R. K. Shapurji & Co., Prospect Chambers, 319, Dr. Dadabhai Naoroji Road, P. B. No. 1065, Bombay 1.

International Division Allied Chemical & Dye Corp., 40, Rector Street, New York 6, N. Y. Sole Distributors for India: R. K. Shapurji & Co., Prospect Chambers, 319, Dr. Dadabhai Naoroji Road, P. B. No. 1065, Bombay 1.

**LABORATORY EQUIPMENT**

Chr. Beck & Sohne, K. G. Kassel, Germany. Manufacturers of Microscopes. Sole Agents for India: J. T. Jagtiani, National House, 6, Tulloch Road, Apollo Bunder, Bombay 1.

Measuring & Scientific Equipment Ltd., 25-28, Buckingham Gate London S.W.1. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

Metrohm Ltd., Herisau, Switzerland. Mfrs. of pH-meters, titriscopes, polarometers. Agents for India: J. T. Jagtiani, National House, Tulloch Road, Apollo Bunder, Bombay 1.

Nederlandsche Optieken Instrumenten-fabriek, Dr. C. E. Bleaker N. V. ZEIST, Holland. Mfrs. of Phase-contrast microscopes, pocket refractometers. Sole Agents for India: J. T. Jagtiani, National House, Tulloch Road, Apollo Bunder, Bombay 1.

Plunger S.A., Wijnegem, Belgium. Mfrs. of Electrophoresis and Chromatography Apparatus. Sole Agents for India: J. T. Jagtiani, National House, Tulloch Road, Apollo Bunder, Bombay 1.

Projectina Optical Works Ltd., Heerbrugg, P.O. Box 89, Switzerland. Mfrs. of Projection Microscopes. Sole Agents for India: J. T. Jagtiani, National House, Tulloch Road, Apollo Bunder, Bombay 1.

Sanderson Bros & Newgould Ltd., Sheffield 9, (U.K.). All sorts of Tool & Alloy Steel. Representatives: Jai Ramdas & Sons, 163, Narain Dhuru Street, Bombay-3.

The Nalge Co. Inc., 75, Panorama Creek, Dr., Rochester 2, N.Y., U.S.A. Plastic Laboratoryware. Distributors: J. T. Jagtiani, National House, Tulloch Road, Apollo Bunder, Bombay 1.

Thermostatic Controls Co., Avenue Road, Hampton, Middlesex, England. Mfrs. of Thermostats. Sole Agents for India: J. T. Jagtiani, National House, Tulloch Road, Apollo Bunder, Bombay 1.

W. Memmert, Konigplatz 17 und Aussere Tittersbacher Stresse 38a Postfach 24, Schwabach Forsthoof Bayern, W. Germany. Mfrs. of Ovens and Incubators. Distributors: J. T. Jagtiani, National House, Tulloch Road, Apollo Bunder, Bombay 1.

**LAMPS AND LANTERNS MANUFACTURERS**

Tilley Lamp Co., Ltd., London. Patent Kerosene Floodlight Projectors. Agents: Roberts, McLean & Co., Ltd., Ilaco House, Sir Phirozshah Mehta Road.

**LIFTS, ELEVATORS, CONVEYORS (ELECTRIC)**

Marryat & Scott, London. Electric Passenger and Goods Lifts. Agents: John Fleming & Co. Private Ltd., Bastion Road, Fort, Bombay 1. Phone: 281153.

W. S. BARRON & SONS LTD., Gloucester, England, Manufacturers of Screw Lifts, Elevators & Conveyors. Agents: Gaytee & Co., Janmabhoomi Chambers, Fort Street, Bombay 1. Phone: 263449. Grams: "IMPENG."

**LIGHT HOUSE EQUIPMENT MFRS.**

Stone-Chance Ltd., Crawley, Sussex, England. Agents: Associated Instruments Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

**LOCOMOTIVES**

Davey Paxman & Co., Ltd., Standard Iron Works, Colchester. Vertical Diesel Oil Engines for land and marine use. Diesel Engines for Rail Traction in Locomotives and Railcars. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

DREWRY CAR COMPANY LTD.—129/139, Finsbury Pavement, London E.C. 2, England. Representations: James Finlay & Co., Ltd., P.O. Box No. 73, Bombay 1.

Ruston & Hornsby Ltd., Lincoln. Narrow & Metre Gauge Diesel Locomotives and Broad Gauge Shunting Diesel Locomotives. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**LUBRICATING OILS AND GREASES**

Acheson, Colloids Ltd., London. "Colloidal Graphite Products", "Oildag", "Aquadag", etc. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

Edgar Vaughan & Co., Ltd., Birmingham. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

Germ Lubricants Ltd., Salford, Manchester. (Mineral Oils). Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Houghton, E. F., & Co., Philadelphia. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

Ocean Oil Co. (1942) Ltd., Marine Engine Oils. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

**LUBRICATION EQUIPMENT**

Farvalube Ltd., England and The Farval Corporation, U.S.A., Lubricating System. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone No. 261494 (3 lines), Grams: "BALMER".

**MACHINE TOOLS**

Carl Hurth, West Germany. Sole Distributors: Voltas Limited.

Churchill-Redman Ltd., Parkinson Lane, Halifax. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Fort, Bombay 1.

Cincinnati Milling & Grinding Machines, Inc., Cincinnati, Ohio, U.S.A. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

Cincinnati Milling Machines Co., Ltd., Kingsbury Road, Birmingham, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

Cincinnati Nederland N. V., Vlaardingen, Holland. Agents: Heatly & Gresham Ltd., 43, Forbes Street, Fort, Bombay 1.

G.D.R., DIA Invest Export, Taubenstrasse 7-9, Berlin W8. G.D.R.—Foundry Equipment. Agents: Armstrong Smith Limited, 1, Sir Phirozshah Mehta Road, Bombay 1.

George Fischer Ltd., Switzerland. Sole Distributors: Voltas Limited.

Gildemeister & Co., A. G., West Germany. Sole Distributors: Voltas Limited.

H. A. Waldrich G. m. b. H., Siegen, W. Germany. Sole Distributors: Voltas Limited.

Hermann Pfauter, West Germany. Sole Distributors: Voltas Limited.

Kitchen & Wade Ltd., Halifax, England. Drilling Machines. Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

Maag Gear Wheel Co. Ltd., Zurich, Switzerland. Sole Distributors: Voltas Limited.

Manurhin, France. Sole Distributors: Voltas Limited.

Ormerod Shapers Ltd., Hebden Bridge, Yorks, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

Pickles, John & Son (Engineers), Ltd., Hebden Bridge, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

Praehoma-Werke Kehren & Co., West Germany. Sole Distributors: Voltas Ltd.

Schaudt Maschinenbau G.m.b.H., W. Germany. Sole Distributors: Voltas Limited.

Schiess—A. G., West Germany. Sole Distributors: Voltas Limited.

Scottish Machine Tool Corporation Ltd., Glasgow, U.K. Sole Distributors: Voltas Limited.

Societe Genevoise D'Instruments De Physique, Switzerland. Sole Distributors: Voltas Limited.

Sykes, W. E., Ltd., Manor Works, Staines, Middlesex, England. Hobbing and Gear Cutting Machine. Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

Technoimpex, Budapest, Hungary. Lathes, Drilling Machines, Punching & Shearing Machines, Plate Shears, Grinding Machines etc. Agents for Bihar, Orissa, Assam, East U.P. and West Bengal: Armstrong Smith Ltd., Sir P. Mehta Road, Bombay 1.

Vertimax Ltd., Glasgow, Scotland. Vertical Production Lathes. Sole Agents: Heatly & Gresham Ltd., 9, Forbes Street, Bombay 1.

**MACHINERY (BAG FILLING)**

Sack Fillers Ltd., London. Sole Agents: Killick Nixon & Co. Ltd., Killick House, Home Street, Fort.



**MACHINERY (ELEC. & MECH.)**

Electric Construction Co. Ltd., 9, Kingsway, London. Electric Motors and Generators. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Weston, Shipley & Western Ltd., Leicester. "Kut-Out" Machinery for cutting C. I. & Steel Pipes. Agents: Richardson & Cruddas Ltd., Byculla, Bombay 8.

**MACHINERY (STEEL MILLS)**

Distington Engineering Co., Ltd., Workington, England. Concast Continuous Casting Machines for Steel Making. Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

**MACHINERY (TEXTILE)**

ANDRE RUBBER CO., LTD., Surbiton, Surrey (U.K.). Manufacturers of Condenser Rubbers, Rubber Mountings for Machinery and Condenser Tapes, etc. for Textile mills. Sole Agents: Popular (Imp.-Exp.) Trading Co., Jhaveri House, 110, Medows Street, Bombay 1.

Artos Maschinen Bau Dr. Ing. Meier Windhorst, Hamburg; West Germany. Sole Distributors: Voltas Limited.

Benninger Engineering Co., Ltd., Uzwil, Switzerland. Sole Distributors: Voltas Ltd.

Daniel Foxwell & Son, Ltd., Cheadle Manchester. Cloth Rolling, Folding Measuring and Lapping Machinery. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Dronsfield Bros., Ltd., Atlas Works, Oldham, (Lancs). Auxiliary Machines: Card Mounting, Grinding, Flat Grinding, Traverse & Solid Grinders, Roller Grinding Machines, Stripping & Burnishing Rollers. Roller Covering Machines, etc. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay 1.

ELLERWERKE MASCHINENFABRIK, Hamburg 33, Germany. Mfrs. of Hydro Extractors. Sole Importers: Popular (Imp.-Exp.) Trading Co., Jhaveri House, 110, Medows Street, Bombay 1.

Geo Moulton Ltd., Whitley St., Rochdale Road, Manchester, (Lancs). Printing Roller, Engraving Machinery. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Bombay.

Goodbrand & Co., Ltd., Stalybridge. Yarn & Cloth Testing Machines. Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

H. Cheetham Co., Ltd., 139/141, Manchester Street, Oldham (Lancs). Yarn Conditioning Machines. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay 1.

JAMES HOLDSWORTH & SONS (H. X.) LTD., Halifax, U. K. Makers of Worsted and Woollen Spinning Machinery Spare Parts. Sole Importers: Popular (Imp.-Exp.) Trading Co., Jhaveri House, 110, Medows Street, Bombay 1.

John T. Hardaker Ltd., Bradford. Jacquards and Jacquard Sundries. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Longelose Engineering Co. Ltd., Leeds. Cheese, Cone & Beam Dyeing Plants. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Mactes, Impianti E. Macchine Tessili S.P.A. Milan, Italy. Modern High Speed Woollen, Worsted and Cotton-spinning Machinery. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Mather & Platt Ltd., Manchester. Dyeing, Bleaching, Printing and Finishing Machinery. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Muschamp Textile Machinery (Sales) Ltd., Ashton-Under-Lyne, (Lancs) Cone & Pirm Winding Machines. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

OERLIKON MACHINE TOOL WORKS, Zurich 50 Oerlikon, Switzerland. Mfrs. of Roller bearing inserts and Jockey pulleys. Sole Importers: Popular (Imp.-Exp.) Trading Co., Jhaveri House, 110, Medows Street, Bombay 1.

REINERS & FURST., M. Gladbach, Germany. Mfrs. of Spinning Rings, Ring Travellers & Automatic Winders Knotters. Sole Importers: Popular (Imp.-Exp.) Trading Co., Jhaveri House, 110, Medows Street, Bombay 1.

Rieter Machine Works Ltd., Winterthur, Switzerland. Sole Distributors: Voltas Limited.

Ruti Machinery Works Ltd., Ruti (Zeh.), Switzerland. Sole Distributors: Voltas Limited.

Scapa Engineering Ltd., Witton, Blackburn, (Lancs). Electric Baling presses for: Skins, Leather, Paper Hides Yarn Cloth and Similar Materials. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Scholl A. G., Zofingen, Switzerland. Sole Distributors: Voltas Ltd.

Schweiter Engineering Works Ltd., Horgen, (Switzerland). Sole Distributors: Voltas Limited.

Staubli Bros. & Co., Horgen, Switzerland. Sole Distributors: Voltas Limited.

Stone Wallwork Ltd., 32, Victoria Street, London S.W.1. Piece-goods Stamping Machines. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

T. W. Riley & Co., Ltd., Rochdale. Cloth Raising Machines. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Wright Hargreaves Engineering Co., Ltd., Blackburn. Vacuum Card Stripping Equipment. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Zellweger Ltd., Uster, Switzerland. Distributors: Voltas Limited.

**MARINE DIESEL ENGINES**

Gleniffer Engines Ltd., Anniesland, Glasgow, Scotland. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

**MATERIAL HANDLING EQUIPMENT**

Maschinenfabrik Esslingen, Esslingen/Neckar, West Germany. Fork Lift Trucks. Agents: John Fleming & Co. Private Ltd., Bastion Road, Fort, Bombay. Phone: 261153.

**MEASURING AND RECORDING INSTRUMENTS**

Aktiebolaget "ERMI", Karlskrona, Sweden. Manufacturers of Electricity Meters. Representatives: Asca Electric India, Private Limited, ASEA House, Goa Street, Bombay.

Esterline-Angus Instrument Co., Inc., U.S.A. Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Fort, Bombay 1.

Thomas Ashworth & Co. Ltd., England. "Speedy" Moisture Testers. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

Tylors (Division of Crane Ltd.), Burgess Hill, Sussex, England. Water Meters, Waste & Cocks Fittings. Agents: John Fleming & Co. Private Ltd., Bastion Road, Fort, Bombay 1. Phone: 261153.

**MECHANICAL HANDLING, CONVEYING & TRANSPORTING EQUIPMENT**

J. Collis & Sons, Ltd., London. Sole Agents: Killick, Nixon & Co. Ltd., Killick House, Home Street, Fort.

Lansing Bagnall Ltd., Basing Stoke, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Oliver International, S.A., Chicago, Illinois, U.S.A. Tractors, Front End Loaders. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay 1.

**METAL DOORS AND WINDOWS**

Gibbons James, Ltd., St. John's Works, Wolverhampton, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**METAL MANUFACTURERS**

Henry Wiggin & Co., Ltd., Holmer Road, Hereford, England. Nickel and Nickel Alloys. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

International Nickel Ltd. Thames House, Millbank, London. S.W. 1. Nickel. Sole Concessionaires: Greaves Cotton & Co. Ltd., Forbes Street, Fort, Bombay.

**METEOROLOGICAL AND INDUSTRIAL INSTRUMENT MFRS.**

C. F. Casella & Co., Ltd., Regent House, Britania Walk, London. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

**MILL & GIN STORE SUPPLIERS**

Haydock & Drake Ltd., Blackburn. Healds and Reeds. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Joseph Sykes Bros., Huddersfield. Card Clothing. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay 1.

Kenyon & Son, Ltd. (James) Bury, Lancs. Sole Distributors: Voltas Limited.

Lupton Bros., Accrington. Loom Sundries. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Resilla Cots & Rollers Ltd., Marfleet, Hull, (England). Cots, Aprons, Buffers, Loop Pickers, Twister Sleeves, Lug Straps, etc. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Robert Hyde & Co., Ltd., Stalybridge. Machinery Cloths for Cotton Spinning & Weaving. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

William Kenyon & Son Ltd., Dukinfield, Cheshire. P.I. Cotton Driving Rope and Banding. Spindles, Tape and Twine. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.



## MINERAL WATERS, SQUASHES CORDIALS, ETC.

E. I. Michel & Co., Ltd., 415, Oxford Street, London W.1. Sole Distributors: Spencer & Co., Ltd., Spencer's Building, Forjett Street, Bombay 26.

Societe Des Eaux Mineral Source Cachat Evian Les-Bains. Sole Distributors: Spencer & Co., Ltd., Spencer's Building, Forjett Street, Bombay 26.

## MINERS LAMPS & EQUIPMENTS

Geag Ltd., 53, Victoria Street, London, S.W. 1. Miner's Electric Safety Lamps. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Gram: "BALMER."

## MINING MACHINERY & EQUIPMENT

A. G. Wild & Co., Ltd., Sheffield, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

A. N. F. Les Ateliers de Construction du Nord de la France, S.A., Paris. Diesel Electric Mine Shuttle Cars. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Austin Hoy & Co. Ltd., High Wycombe, Buckinghamshire, England. Mfrs. of Lockfas Picks & Chains. Agents: Balmer Lawrie & Co. Ltd., 5, Graham Road, Ballard Estate, Bombay 1. Phone: 261494 (3 lines). Grams: "BALMER."

Austin Hopkinson & Co., Ltd., Manchester, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Automatic Coal Cleaning Co., Ltd., Carlisle, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Barker Davies & Co., Pontypridd, Wales. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Belmos Co., Ltd., Lanarkshire, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Bruntons (Husselburgh) Ltd., Scotland. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Dowty Mining Equipment Ltd., England. Hydraulic Props. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Etelco Ltd., London, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Head Wrightson Stockton Ltd., Stockton Works, Stockton-on-Tees, England. Mfrs. of: Safety Hooks. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay 1. Phone: 261494 (3 lines). Grams: "BALMER".

Hill Porter (Newcastle) Ltd., Alnwick, Northumberland, England. Mfrs. of Lighting, Fittings for Mines. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay 1. Phone: 261494 (3 lines). Grams: "BALMER."

Hugh Wood & Co., Ltd., Gaeshead-on-Tyne, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

J. K. Smit & Sons (Diamond Tools) Ltd., London. Sole Distributors: Voltas Limited.

James W. Smallman Ltd., Nuneaton England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

John Mills & Co. (Llanidloes) Ltd., Montgomeryshire, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Joy Manufacturing Co., Pittsburg 22, Pa., U.S.A. & Joy Sullivan Ltd., London. England. Sole Distributors: Voltas Ltd.

Oldham & Son Ltd., Denton, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Prolloy Mining Developments Ltd., Pear Tree Lane, Dudley, Worcestershire, England. Mfrs. of linked roof Roadhead & Face Bars & Rollers Brackets. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay 1. Phone: 261494 (3 lines). Grams: "BALMER".

Reliance Rope Attachment Co., Ltd., England. Winding Rope Capps, Cage suspension Equipment. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

Triefus Industries Ltd., Crawley, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

Uskside Engineering Co. Ltd., Newport, Mon. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

Varel Manufacturing Co. Dallas, Texas, U.S.A. Sole Distributors: Voltas Limited.

## MOTOR SCOOTERS

"Innocenti" Metallurgical and Mechanical General Co., Milan. Manufacturers of Lambretta Motor Scooters, 3-Wheeler Rikshaw and Dely. Van Chassis, Auto-Bikes. Sole Distributors: Dadajee Dhackjee & Co., Private Ltd., Sandhurst Bridge, Bombay 7.

## NON-FERROUS METALS

Henry Wiggin & Co., Ltd., Holmer Road, Hereford. Monel and Nickel alloys. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

International Nickel Ltd., Thames House, Millbank, London S. W. 1. Nickel. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Noranda Sales Corporation Ltd., 44, King Street West, Toronto, Ontario, Canada. Electrolytic Zinc. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

United Non-ferrous Metal Ltd., Birmingham. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

## NUCLEAR RESEARCH INSTRUMENTS

Baird Atomic Inc., U.S.A. Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay.

## NUT & BOLT MAKING MACHINES

Ethells David & Son Ltd., Bull Piece Works, Darlaston S. Staffs, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street Bombay 1.

## OFFICE APPLIANCES AND EQUIPMENT

Addressograph-Multigraph Corporation, Cleveland, Ohio, U.S.A. and London-England. Sole Distributors for India: The National Cash Register Co., Steelcrete House, Dinsha Wacha Road, Back Bay Reclamation, Bombay 1.

Block & Anderson, Ltd., London. Sole Distributors for India: The National Cash Register Co., Steelcrete House, Dinshaw Wacha Road, Back Bay Reclamation, Bombay 1.

Ozalid Co., Ltd., England. Ammonia Process Developing and Printing Machine. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Fort, Bombay 1.

PITNEY-BOWES LTD., London. Postal Franking and Stamp Cancelling Machines, Totometer-Counting & Imprinting Machines. Sole Agents: Kilburn & Co. Ltd., P.O. Box 565, Bombay; Phone: 256845. Grams: "TASCONIUM".

## OIL BURNERS

Wallsend Hubbard Combustion Ltd., Wallsend-on-Tyne, England. Sole Agents: Heatly & Gresham, Ltd., 43, Forbes Street, Bombay 1.

## OIL ENGINES

Blackstone & Co., Ltd., Dursley, England. Voltas Limited, Ballard Estate, Bombay 1.

Lister & Co., Ltd., R.A., Dursley, Gloucestershire, England. Sole Distributors: Voltas Limited.

Ruston & Hornsby Ltd., Lincoln, England. Horizontal and Vertical Diesel Engines. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

## OIL PURIFYING EQUIPMENT

Stream-Line Filters Ltd., Surrey, England. Filters for reclaiming used Engine Lubricating Oil, Transformer Oil Filters, Aviation Fuel Filters. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay 1.

## OIL SEALS

CARL FREUDENBERG, West Germany. Mfrs. of "cFw" Simmering Oil Seals. Sole Agents: Messrs. B. Chowdhury & Co., Indian Globe Chambers (7th Floor), Fort Street, Fort, Bombay 1. Phone: 26-3479. Grams: "BISUKHI."

## OIL WELL EQUIPMENTS

Baker Oil Tools Inc., Terminal Annex, Los Angeles, U.S.A. Oilwell equipment. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Byron Jackson Tools Inc., P.O. Box 2017A, Terminal Annex, Los Angeles, 54, California, U.S.A. Oil Well Tools. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

National Supply Co., The, New York. Oil Well Drilling rigs & equipment. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes St., Fort, Bombay.

Petroleum & Mining Equipment S.A., Geneva, Switzerland. Rock Bits, Tricone Roller Bits. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Smith Tool Co., P.O. Box 4549, Compton, California, U.S.A. Drilling Bits. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

## PACKING & JOINT RINGS

Walker, James & Co., Ltd., Woking, Surrey, England. 'Lion' Brand Packings and Jointings. Agents: Roberts, McLean & Co., Ltd., Ilaco House, 81 Phirozeshah Mehta Road, Fort.

## PAPER & BOARD MAKING MACHINERY

WARTSILA-KONCERNEN A/B-Export, Post Box No. 230, Helsinki (Finland) Paper Making Machinery. Representatives: James Finlay and Co. Limited, Post Box No. 73, Bombay-1.



**PAPER MFRS. & MERCHANTS**

**TERVAKOSKI OSAKEYHTIO PAPER MILLS**, Tervakoski, Finland. Representatives: James Finlay & Co., Ltd., P.O. Box No. 73, Bombay-1.

**PAPER TRANSFERS**

**Tearne & Sons Ltd.**, All Saint's Road, Birmingham England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**PATENT GLAZING BARS**

**Pennycook Patent Glazing & Engineering Co., Ltd.**, 38, Bath Street, Glasgow C.2, Scotland. Sole Agents: Heatly & Gresham, Ltd., 43, Forbes Street, Bombay 1.

**PERFORATING MACHINES**

**J. Sloper & Co., Ltd.**, London, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

**PERFUMERY RAW MATERIAL**

**ESROLKO LTD. (FORMERLY FLORA)**, Switzerland. Mfrs. of Synthetic Essential Oils & Aromatic Chemicals. Agents: M. C. Davar & Co., 143, Princess Street, Bombay 2. Phone: 39752. Grams: "EMCIDAVER".

**PETROL & DIESEL ENGINES**

**Lister & Co. Ltd. (R.A.)** Dursby, Glos., England. Distributors: Voltas Limited.

**PHARMACEUTICALS**

**C. H. Boehringer Sohn (6057)** Ingelheim Am Rhein, West Germany. Factory Representatives: German Remedies Private Ltd., "Adelphi", 119, Queen's Road, G.P.O. Box No. 1945, Bombay 1.

**Chemifa Chemische Fabriek Amsterdam N. V.**, Amsterdam—"X-Ray Contrast Mediums & Dental Anaesthetics." Agent: The Fairdeal Corporation (Private) Ltd., Lakshmi Building, Sir P. M. Road.

**Conray Products Co.**, 129, Pearl Street, New York 5, N.Y. Fine Chemicals/Pharmaceuticals. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay 1.

**Curapharm C. V. Amsterdam**—"Intravenous Solutions and Administration Sets". Agents: The Fairdeal Corporation (Private) Ltd., Lakshmi Building, Sir P. M. Road.

**Hamol Ltd.**, Zurich 38, "Pharmaceutical Specialities". Agents: Fairdeal Corporation (Private) Ltd., Lakshmi Building, Sir Phirozshah Mehta Road, Fort, Bombay.

**Homburg Chemiewerk**, Zweigniederlassung Der Degussa, Daimlerstrasse 25, Postfach 39446, Frankfurt/Main, Western Germany. Factory Representatives: German Remedies Private Ltd., "Adelphi", 119, Queen's Road, G.P.O. Box No. 1945, Bombay 1.

**Inabata & Co. Ltd.**, 40 2-Chome, Doshomachi, Higashiku, Osaka, Japan. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay.

**Industria Chimica PROFARMACO S.P.A.**, via Sissi, 7, Milano, Italy. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay 1.

**International Division, Allied Chemical Corp.**, 40, Rector Street, New York 6, N.Y. Sole Distributors for India: R. K. Shapurji & Co., Prospect Chambers, 319, Dr. Dadabhai Naorji Road, Fort, Post Box No. 1065, Bombay 1.

**Internazionale Farmaceutici S.P.A.**, via Salvini, 10, Milano, Italy. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay-1.

**Istituto Chemioterapico Italiano, Milano**—Via Crociffisso No. 12, Milano Italy. Products: Sulfa drugs and Vitamins. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay.

**M. & R., Dietetic Laboratories Inc.**, Columbus, 16, U.S.A. "Simlac", Infant Milk Food. Agents: Fairdeal Corporation (Private) Ltd., Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**Meditalia S.P.A.**, Via Paolo Da Cannobio 37, Milano, Italy. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay-1.

**Nordmark Werke G.M.B.H.**, 2082, Uetersen/Holstein, West Germany. Factory Representatives: German Remedies Private Ltd., "Adelphi", 119, Queen's Road, G.P.O. Box No. 1945, Bombay 1.

**Riedel de Haen A. G.** (Pharmaceutical Department), 3016, SEELZE, & Hannover West Germany. Factory Representatives: German Remedies Private Ltd., "Adelphi", 119, Queen's Road, G.P.O. Box No. 1945, Bombay 1.

**Schering A. G.**, Mullerstrasse, 170-172, Berlin N 65, West Germany. Sole Importers & Distributors: German Remedies Private Ltd., "Adelphi", 119, Queen's Road, G.P.O. Box No. 1945, Bombay 1.

**Spertl Faraday Inc.**, Hoboken, U.S.A. "Electro Medical Apparatus." Agents: Fairdeal Corporation (Private) Ltd., Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**Wilhelm F. Damm**, Bremer Strasse 125, Hamburg-Harburg, West Germany. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay 1.

**Wulff & Co., A., M.B.H.**, (Sanatogen-Werke Bauer & Cie, and Fabrik Pharmazeutischer Praeparate Johann A. Wulff) Klosterstrasse, 304, Dusseldorf, 1, West Germany. Factory Representatives: German Remedies Private Ltd., "Adelphi", 119, Queen's Road, G.P.O. Box No. 1945, Bombay 1.

**PHOTO COPYING MACHINES**

**American Photocopy Equipment Co.**, Chicago, U.S.A. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

**PIGMENTS**

**S.C.C. Colours Ltd.**, London. Fine Colour & Pigments. Distributors: E. Bock & Co., Shale Bldg., Bank Street, Fort, Bombay 1.

**PLASTICS**

**Dr. F. Raschig-G.m.b.H.**, Chemische Fabrik. Ludwigshafen. A. Rhein, West Germany. "DEKORIT" Phenol Formaldehyde Resinous Tubes, Rods, and Sheets. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay 1.

**Dr. F. Raschig-G.m.b.H.**, Chemische Fabrik. Ludwigshafen. A. Rhein, West Germany. "VIGOHAS" Polyester Resinous rods, sheets and Castings. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay 1.

**PLASTIC MOULDING POWDERS**

**Ampacet Corporation**, 250, South Terrace Avenue, Mount Vernon, N.Y. Eastman Products—Cellulose Acetate Tenite I, Cellulose Acetate Butyrate Tenite II. Low Density Polyethylene and High Density Polyethylene, Plasticizers, and Chemicals "TENOX" Antioxidants EPOLENES 'Master' Colour concentrates. "Kromaplast" Dry Colorants. Distributors: F. Bock & Co., Shale Building, Bank Street, Fort, Bombay 1.

**POWER PRESSES**

**Horden Mason & Edwards Ltd.**, Pye Hayes, Birmingham-24, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

**POWER TRANSMISSION EQUIPMENT**

**Fluidrive Engineering Co., Ltd.**, Isleworth Middlesex, England. Hydraulic Couplings. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**PRESENTATION ARTICLES**

**Ronson Products Ltd.**, London. Cigarette Lighters & Products. Sole Distributors: Spencer & Co., Spencer's Building, Forjett Street, Bombay 26.

**PRINTING PRESS MACHINERY MATERIAL**

**Rejafix Ltd.**, London, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565 Bombay 1.

**PROCESS ENGINEERING**

**Haver & Boecker, W. Germany.** Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Fort, P.O.B. 1312, Bombay 1.

**Karlischer Apparate-Und-Rohrle-Itungsbau W. Germany.** Sales Distributors: Motwane Private Limited, 127, Mahatma Gandhi Road, Bombay-1.

**Pintsch Bamag A.G.**, W. Germany. Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

**Polysius G.m.b.H.**, W. Germany. Sales Distributors: Motwane (Private) Ltd., 127, Mahatma Gandhi Road, Bombay 1.

**PROCESS HEATING EQUIPMENT**

**Barlow-Whitney Ltd.**, 2, Dorset Square, London N.W.1. Agents: Associated Instruments Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

**PROVISION MERCHANTS**

**Canada Packers Ltd.**, Toronto. Sole Distributors: Spencer & Co., Ltd., Spencer Building, Forjett Street, Bombay 26.

**PUMPS & PUMPING MACHINERY**

**Borg-Warner International Corporation**, Byron Jackson Division, 400, Park Avenue, New York 22, U.S.A. Deep Well Turbine Pumps, Horizontal Spindle Centrifugal Pumps, Single and Multi-stage for Water, Chemicals, Paper and Sugar Industries, Mechanical Seal for centrifugal Pumps. Vertical Spindle Pumps for all Liquids and molten metal suitable for all duties. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

**Charles S. Madan & Co. Ltd.**, Altrincham, England. Compressed Air-operated Testing Pumps, Hydraulic Pressure Pumps, Grease and Viscous Fluid Pumps. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

**Drysdale & Co., Ltd.**, Glasgow, Scotland. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

**Holden & Brooke Ltd.**, Sirius Works, Manchester, (Lancs). Steam Pumps, Belt Driven Ram Pumps, Electricity Driven Ram Pumps, Boiler Feed Pumps, Horizontal Air Compressors, Vacuum Pumps, Calorifiers. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay 1.



Lee, Howl & Co., Ltd., England. Centrifugal and Power driven reciprocating pumps. Agents: Richardson & Cruddas Ltd., Byculla, Bombay 8.

### PUNCHES & PUNCH RETAINERS

Richard Brothers Punch Division of Allied Products Corporation, 28500 Capitol Avenue, Detroit 39, Michigan, U.S.A. Punches, Die Buttons, Punch Retainers and Allied products. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

### PYROMETERS

Foster Instrument Co. Ltd., England. Sole Agents in India: Indian Furnace Co. Private Ltd., Lotus Cinema Building, Dr. Annie Besant Road, Bombay 18.

### QUARRYING EQUIPMENT

Goodwin Barsby & Co. Ltd., Leicester. Stone-breakers & Crushing Plants, Road Quarry, Gravel and Construction Plant. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

### RAW OPTICAL GLASS, COLOUR FILTERS

Chance-Pilkington Optical Works, Glascoed Road, St. Asaph, Flintshire, England. Agents: Associated Instruments Manufacturers (India) Private Ltd., India House, Fort Street, Bombay-1.

### RAIL JOINT SHIMS

Wonham Incorporated, 13, Victoria Street, London, S.W.1. Rail Joint Shims. Agents: Healy & Gresham Ltd., 43, Forbes Street, Bombay 1.

### RAILWAY ENGINEERS

P. & M. Co. (England), Ltd., London. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

### RAILWAY EQUIPMENT

English Steel Spring Corporation Ltd., Sheffield. Springs and Railway Wagon Accessories. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Steel, Peech & Tozer, Sheffield, England. Locomotive, Carriage and Wagon Tyres. Wheels, Axles and Laminated Springs, Disc Wheel Centres, Crank Axles and Forgings. Sole Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

Wm. Beardmore & Co. Ltd., Glasgow. Railway Wheels and Axles. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

Workington Iron & Steel Co., Workington, England. Steel Rails, Fish plates, Steel Sleepers and Fastenings. Sole Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

### RAILWAY EQUIPMENT & SANITARY FITTINGS

Levick John Ltd., Birmingham, England. Sole Agents: Healy & Gresham Ltd., 43, Forbes Street, Bombay 1.

### REFRACTORY CEMENTS

Furnace Linings Co., Ltd., Nursery Street, Sheffield 8. Sole Agents: Datson, Raviraj & Co. (Private) Ltd., 43, Tamarind Lane, Fort, Bombay.

Quigley Company of Canada Ltd., P. Q. Lachine, Canada. Sole Agents: Datson, Raviraj & Co. (Private) Ltd., 43, Tamarind Lane, Fort, Bombay.

### REFRIGERATORS

KELVINATOR LTD., England. Refrigerators. Sole Distributors: Spencer & Co. Ltd., Spencer's Building, Forjett Street, Bombay 26.

### ROAD BUILDING EQUIPMENT & MACHINERY

Aveling Barford Ltd., Invicta Works Grantham. Motor Road Rollers, Diesel Road Rollers, Road Making Machinery, Dumpers, Shuttle Dumpers, Dump Trucks, front-End Loaders, Pneumatic Tyred Rollers. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street Bombay 1.

Gallon Iron Works & Mfg. Co., Gallon, Ohio, U.S.A. Sole Distributors: Voltas Ltd.

Goodwin Barsby & Co. Ltd., St. Margarets Iron Works, Leicester. Stone Breakers and Crushing Plants, Road Quarry Gravel and Construction Plant. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

International Harvester Export Co., U.S.A., U.K., Australia & Associates. Sole Distributors: Voltas Limited.

Johnston Bros. (Engineering) Ltd., 284, Ixex House, Minorities, London, E.C. 3. Asphalt Mixers, Tar Boilers, Slush Removers, Suction Scavengers, Mobile Bitumen Heaters, Road Line Makers. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

### ROLLMAKERS

British Rollmakers' Corporation Ltd., Crewe. Agents: Guest, Keen, Williams Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

### ROLLS FOR PAPER & RUBBER MANUFACTURE

Miller Co. Ltd., Edinburgh. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

### ROOFING MATERIAL

D. Anderson & Sons, Manchester, England. Rok Roofing, Paints, etc. Agents: Richardson & Cruddas Ltd., Byculla, Bombay 8.

### SANITARY WARES & FITTINGS

J. & R. Howie Ltd., Hurlford. Fireclay Works, Kilmarnock, Scotland. Sole Distributors for Bombay State: R. K. Shapurji & Co., Prospect Chambers, 319, Dr. Dadabhoy Naoroji Road, Fort, P.B. No. 1065, Bombay 1.

### SCIENTIFIC INSTRUMENTS

Hilger-IRD Ltd., 98, St. Pancras Way, Camden Road, London, N.W. 1. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

Hilger-IRD Ltd., 98, St. Pancras Way, London, N.W. 1. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

Leeds & Northrup Company, Philadelphia. Indicators, Recorders, Controllers, etc. Electrical Measuring Instruments. Agents: Hardcastle, Wand & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

Metals Research Ltd., 91, King Street, Cambridge, England. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

N. V. Nederlandsche, Röntgen-Apparatenfabriek, Delft Holland. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

### SCREWS

G. K. N. Screws & Fasteners Ltd., Birmingham. Wood Screws, Machine Screws, Self-Tapping Screws, Hammer Drive Screws, Spring Washers, etc. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

### SEWAGE EQUIPMENT

Cakebread Robey & Co., England. Makers of Drain Cleaning Appliances. Agents: Richardson & Cruddas, Ltd., Byculla, Bombay 8.

### SHIPPING COMPANIES

Belships Co., Ltd., Victoria St., Westminster, London, S.W. 1. Agents: Killick Nixon & Co., Ltd., Killick House, Home Street, Fort.

Compagnie des Messageries Maritimes, Paris. Cargo Service from Antwerp, French Channel & Atlantic Ports, Casablanca, Marseilles to Karachi, Bombay, Cochín, Colombo, Rangoon, Calcutta, Madras and vice versa. Passenger service from and to Marseilles, Port Said, Aden, Bombay, Colombo, Singapore, Saigon, Hongkong and Japan. Volkart (India) Ltd., Ballard Estate, Bombay.

Ellerman's City & Hall Lines Ltd., Bankside House, 107, Leadenhall Street, London, E.C. 3. Agents: Killick Nixon & Co., Ltd., Killick House, Home Street, Fort.

Hoegh Line—Service of the Hoegh Line to and from U.S.A., Atlantic and Gulf Ports. Representatives: Volkart (India) Ltd., Ballard Estate, Bombay.

Holland-Bombay-Karachi Line and Holland-Bengal-Burma Line. Service of the United Netherlands Navigation Co., Rotterdam, to and from European, Continental and Mediterranean Ports. Representatives: Volkart (India) Ltd., Ballard Estate, Bombay.

L. Smit & Co.'s Internationale Sleepdienst, Westplein 5, P.O. Box 1042, Rotterdam. Agents: Killick Nixon & Co., Ltd., Killick House, Home Street, Fort.

Maersk Line—Service of A. P. Moller, Copenhagen, to and from the Far East. Representatives: Volkart (India) Ltd., Ballard Estate, Bombay.

Nedlloyd & Hoegh Lines—Service of Nedlloyd Lines, Rotterdam, and Leif Hoegh & Co., A/S., Oslo, to and from Colombo, Penang, Singapore, Bangkok, Manila, Hongkong and West Coast of U.S.A. and Canada. Representatives: Volkart (India) Limited, Ballard Estate, Bombay.

Nedlloyd Lines—Service of S. M. "Nederland", Amsterdam and Royal Rotterdam Lloyd, Rotterdam, from U. S. Atlantic and Gulf Ports, also U.S. and Canadian Great Lakes Ports. Representatives: Volkart (India) Ltd., Ballard Estate, Bombay.

T. & J. Harrison, Mersey Chambers, Liverpool. Agents: Killick Nixon & Co., Ltd., Killick House, Home Street, Fort.

Thos. & Jno Brocklebank Ltd., Cunard Building, Pier Head, Liverpool. Agents: Killick Nixon & Co., Ltd., Killick House, Home Street, Fort.

### SIZING MATERIAL

Houghton, E. F., & Co., Philadelphia. Agents: Hardcastle, Wand & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Fort.

### SMALL TOOLS—METAL & WOOD WORKING

Sanderson Bros. & Newbould Ltd., Sheffield 9 (U.K.). Mfrs. of all sorts of Tool & Alloy Steel. Representatives: Jairamdas & Sons, 163, Narain Dhuru Street, Bombay 3.



### SPEED INDICATORS & RECORDERS

Hasler Telegraph Works, 26, Victoria Street, Westminster, London, S.W.1. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

### SPORTS GOODS MFRS. AND DEALERS

Golf Ball Developments Ltd., Birmingham, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

### SPRAY PAINTING EQUIPMENT

De Vilbiss Co., The Ltd., Bournemouth, England. Spray Painting Equipments. Agents: John Fleming & Co. Private Ltd., Bastion Road, Fort, Bombay 1. Phone: 261153.

De Vilbiss Company, Ohio, U.S.A. Air Compressing, Spray Painting outfits and Hose, etc. Agents: John Fleming & Co., Private Ltd., Bastion Road, Fort, Bombay 1. Phone: 261153.

### STEAM & WATER TURBINES

Stal-Laval Turbin A. B. Finspong and Nacka, Sweden. Manufacturers of Steam and Gas-Turbo-Alternators. Representatives: Asea Electric India, Private Limited, ASEA House, Goa Street, Fort, Bombay 1.

### STEAM TRAPS & VALVES

Drayton Controls Ltd., W-Dryton, (Middlesex). Steam Traps, Strainers, Sight Glasses, Instruments for Measuring Temperature, Pressure & Draught, Temperature & Pressure Controlling Instruments, etc. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay 1.

Richard Klingers Ltd., Klingerit Works, Sidcup, Kent. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Dr. Dadabhoy Naoroji Road, Bombay 1.

Velam Engineering Co., Ltd., Ross Walk, Leicester, England. Agents: Hardcastle, Waud & Co., Private Ltd., Alice Buildings, Bombay 1.

### STEEL

Sanderson Bros. & Newbould Ltd., Sheffield-9, (U.K.). Manufacturers of all sorts of Tools & Alloy Steel. Representatives: Jairamdas & Sons, 163, Narain Dhuru Street, Bombay 3.

### STEEL (STAINLESS) & ALLOY

Brown Bayley Steels Ltd., "Riverdale", Riverdale Road, Sheffield 10. Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

Samuel Fox & Co. Ltd., Sheffield, England. Alloy and Stainless Steel Sheets, Bars, Strip including Razor Blade Strip and Wire. Sole Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

### STEEL CASTINGS & FORGINGS

Darlington Forge Ltd., Darlington, County Durham, England. Steel Castings and Forgings. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

English Steel Forge & Engineering Corp., Ltd., Sheffield. Forgings and Railway Wagon Accessories. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

English Steel Casting Corp., Ltd., Sheffield, Castings and Railway Wagon Accessories. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

F. H. LLYOD & CO. LTD., P.O. Box No. 5, James Bridge Steel Works, Near

Wednesburg, STAFFS. Representatives: James Finlay Co. Ltd.; P.O. Box No. 73. Bombay-1.

Klockner-Werke A.G., Osnabruck, West Germany. Sole Distributors: Voltas Limited.

USINES ET ACIERIES DE SAMBRE ET MEUSE, Paris, France. Steel Castings, Carbon Steel and Alloy Steel. Railroad Parts, Armament Products, Aircraft Bombs, Machinery, etc. Agents: Gaytee & Company, Janmabhoorn Chambers, Fort Street, Bombay. Phone: 263449. Grams: "IMPENG".

### STEEL MANUFACTURERS

Appleby-Frodingham Steel Co., Scunthorpe, England. Mild Steel Plates for Shipbuilders, Bridge builders, Structural Engineers, Boiler Makers, etc. Steel Angles, Channels, Joists, Tees, and Flats. Sole Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

ARTHUR LEE & SONS LTD., Sheffield, (Lee of Sheffield Ltd.), Sheffield, England. Manufacturers of Cold Rolled Steel Strips, Free cutting Steel, Bars, Rounds and Hexagons, Stainless Steel Strips, High Tensile Steel Wires, etc. Representatives for Bombay: Eastern Trading & Engineering Co., Alice Building, 3rd Floor, 339, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1.

Barrow Steel Works Ltd., Barrow-in-Furness, England. Rolled Sections Baling & Cable Tape. Sole Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

Dorman Long & Co. Ltd., Middlesbrough, England. Agents: Balmer Lawrie & Co., Ltd., 5, Graham Road, Ballard Estate, Bombay. Phone: 261494 (3 lines). Grams: "BALMER".

English Steel Rolling Mills Corporation Ltd., Sheffield. Tool & Alloy Steel. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort.

Exors of James Mills, Ltd., Stockport. Agents: Guest, Keen, Williams Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

Steel Company of Wales Ltd., London. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

SteelPeech & Tozer, Sheffield. Mild & Carbon Steel Bars, Strip & Sections, Forgings, Wheels, Axles & Tyres. Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

TINSLEY ROLLING MILLS CO. LTD., Tinsley, Sheffield, 9, England. Manufacturers of Hot Rolled Steel Sheets, Silico-Manganese Spring Steel Flats, etc. Representatives for India: Eastern Trading & Engineering Co., Alice Building, 3rd Floor, 339, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

United Steel Companies Ltd., Sheffield, England. Subsidiary: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

United Steel Structural Co., Ltd., Scunthorpe, England. Fabricated Structures and Beams. Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

### STEEL ROLLS

Steel Peech & Tozer, Sheffield. Forged unhardened rolls for hot re-rolling. Representatives: The United Steel

Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

### STEEL SCAFFOLDINGS

Acrow Engineers (Export) Ltd., South Wharf, London W.2. Steel Scaffolding and Formwork for Building and Road work. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

### STEEL STRIPS

Firth Cleveland Steel Ltd., Rotherham, (U.K.). Steel Strips of all sorts, Hardened & Tempered or annealed. Representatives: Jairamdas & Sons, 163, Narain Dhuru Street, Bombay 3.

Steel Peech & Tozer, Sheffield; Hot & Cold Rolled Strips. Representatives: The United Steel Companies (India) Private Ltd., Orient House, Mangalore Street, Ballard Estate, Bombay 1.

### STEEL WELDING EQUIPMENT

P. & M. Co. (England), Ltd., London. Agents: Guest, Keen Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay-1.

### SURVEYING INSTRUMENTS

Hilger & Watts Ltd., 98, St. Pancras Way, Camden Road, London, N.W. 1. Agents: Associated Instrument Manufacturers (India) Private Ltd., India House, Fort Street, Bombay 1.

### TEA MACHINERY

Russell Constructions (Export) Ltd., London, England. Agents: Kilburn & Co. Ltd., P.O. Box No. 565, Bombay 1.

### TELEPHONE, TELEGRAPH AND CARRIER COMMUNICATION APPARATUS

General Telephone & Electronics International Inc., U.S.A. Sales Distributors: Motwane Private Limited, 127, Mahatma Gandhi Road, Bombay-1.

C.E.A. Perego, S.P.A., Milano, Italy. Sole Distributors: Voltas Limited.

### TEXTILE MACHINERY & EQUIPMENT

Fritz Buser A.G., Engineering Works, Wiler, Switzerland. Sole Distributors: Voltas Limited.

Grob & Co. Ltd., Horgen, Switzerland. Sole Distributors: Voltas Limited.

Heberlein & Co. Ag., Wattwil, Switzerland. Sole Distributors: Voltas Limited.

Platt Bros. & Co., Ltd., Oldham. Cotton Gins & Openers. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Stuts & Co., Kempton, Switzerland. Sole Distributors: Voltas Limited.

### TEXTILE & TECHNICAL PUBLICATIONS

NIXON (ALFRED) SON & TURNER, Chartered and Incorporated Accountants, 40, Brzennose Street, Manchester 2, England. British Representatives for The Indian Textile Journal Private Ltd., Military Square, Fort, Bombay.

### TOOLS MFRS.

Austin, Payton & Co. Ltd., England. "WARRIOR" Taps and Dies, manufactured by Nuckey, Scott & Co. Ltd., England, and "T. & J." Expanding Reamers, manufactured by Taylor & Jones Ltd., England. Agents: Armstrong Smith Ltd., 1 Sir P. Mehta Road, Bombay 1.



English Steel Tool Corporation Ltd., Manchester, Sheffield, Engineers' Small Tools, Files, Hacksaw Blades, etc., Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Holland & Blair, Ltd., London. Mfrs. of Ratchet & Spiral Screw Drivers. Representatives: Jairamdas & Sons, 163, Narain Dhuru Street, Bombay 3.

Ideal Machine Tools & Eng. Co. Ltd., England. Precision Tools. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

Modern Hardmetals Ltd., Sheffield, England. Tungsten Carbide Tools & Tips. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

Nuckey Scott & Co., Ltd., Warrior Works, Lea Valley Road, Ponders End, Enfield, Middlesex, England. Warrior Taps and Dies Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Bombay-1.

Pendleton Tool Industries, International, Los Angeles, U.S.A., All sorts of Hand Tools. Representatives: Jairamdas & Sons, 163, Narain Dhuru Street, Bombay 3.

Peter Stubs Ltd., England. Files, Gravers, Scrapers, Tool Holder Bits, Tool Steels. Agents: Armstrong Smith Limited, 1, Sir P. M. Road, Post Box No. 185, Bombay 1.

Taylor & Jones Ltd., Hornby, Near Huddersfield, England. Expanding Reamers. Agents: Armstrong Smith Ltd., 1, Sir Phirozeshah Mehta Road, Bombay 1.

Turton Bros. & Matthews Ltd., Sheffield. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

WALTER SPENCER & CO., LTD., Sheffield, England. Manufacturers of Highspeed Steel, Alloy Tool Steel, Carbon Tool Steel, etc., etc. Milling Cutters, Twist Drills, Reamers, Slitting Saws, Files, Carbide Tipped Tools, Lathe Tools, etc. Agents: Gaytee & Co., Janmabhoomi Chambers, Fort, Bombay. Phone: 263449. Grams: "IMPENG."

## TRACTION GEARS AND UNITS

Wiseman, Alfred & Co. Ltd., Glover Street, Birmingham 9. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

## TRACTORS & PLOUGHS

International Harvester Export Co., Chicago, U.S.A. Sole Distributors: Voltas Limited.

Oliver International, S.A. Chicago, Illinois, U.S.A. Tractors, Front End Loaders. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

## TRAILERS

Cranes Fruchauf Trailers Ltd., South Green Works, Deerham, (Norfolk). Trailers of 5 to 500 tons capacity of Mechanical & Hydraulic Suspension Types. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Bombay.

## TRUCK TRAILERS

E. B. F. Ltd., Sanbach, Cheshire, England. Manufacturers of Commercial Heavy Duty Motor Vehicles. Sole Concessionaires: Greaves Cotton & Co. Ltd., 1, Forbes Street, Fort, Bombay.

Kenworth Motor Truck Co., Seattle 24, Washington, U.S.A. Manufacturers of Heavy Duty Motor Trucks. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay 1.

## VACUUM EQUIPMENT MFRS.

Edwards High Vacuum Ltd., Manor Royal, Crawley, Sussex, England. Agents: Associated Instrument Manufacturers (India)

Private Ltd., India House, Fort Street, Bombay 1.

## VALVES (WATERWORKS)

J. Blakeborough & Son, Ltd., Brighthouse. Makers of Valves all types, and other Waterworks Appliances. Agents: Richardson & Cruddas Ltd., Byoulla, Bombay 8.

## VEE ROPE MFRS.

J. H. FENNER & CO., LTD., Marfleet, Hull, England. "Fenner" V-Belts, "Fenner" V-Belt Drives, "Torque-Arm" Shaft Mounted Speed Reducers and Fenner "Automobile" Fan Belts. Agents: Crompton Greaves Ltd., 1, Forbes Street, Bombay 1.

## VIBRATORY SCREENS

Niagara Screens (Great Britain) Ltd., Middlesex. Sole Agents: Killick Nixon & Co. Ltd., Killick House, Home Street, Fort.

## WATER FILTRATION

PATERSON CANDY INTERNATIONAL LTD., London. Manufacturers of all types of Water Purification and treatment Plant. Representatives: Candy Filters (India) Private Ltd., Forbes Bldg., Home Street, Fort, Bombay.

## WATER METERS

Aquametro Water Meter Works, Ltd., Basle, Switzerland. Sole Distributors: Voltas Limited.

CONTGEA Bruxelles, Belgium. Manufacturers of Water Meters, Gas Meters and Geysers. Agents: Gaytee & Co., Janmabhoomi Chambers, Fort Street, Bombay 1. Phone: 263449. Grams: "IMPENG."

Tylors (Division of Crane Ltd.), Burgess Hill, Sussex, England. Water Meters, Waste Not and Cocks Fittings. Agents: John Fleming & Co. Private Ltd., Bastion Road, Fort, Bombay 1. Phone: 261153.

## WEIGHBRIDGES

Ashworth, E. & A. Ltd., Crown Engineering Works, Staincliffe Road, Dewsbury, Yorks, England. Scales & Weighbridges. Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

## WELDERS (ELECTRIC & GAS)

A. I. WELDERS LTD., Rose Street, Inverness, England. Representatives: James Finlay & Co. Ltd., P.O. Box No. 73, Bombay 1.

## WELDING EQUIPMENT

Donald Ross & Partners Ltd., Twinner Works, Gatwick Road, England. Holding, Positioning and other Ancillary Equipment for Arc Welding Process. Agents: Guest, Keen, Williams Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

ESAB, Goteborg, Sweden. Manufacturers of Electric Welding Equipment, Motors, Electrical Drives and Electrodes of all types. Representatives: Asea Electric India, Private Limited, ASEA House, Goa Street, Fort, Bombay 1.

Esab Ltd., England. Magnetic Crack Detectors, Welding Plants, etc. Agents: Armstrong Smith Ltd., 1 Sir P. Mehta Road, Bombay 1.

## WINCHES & HAULAGES

Clarke Chapman & Co. Ltd., Gateshead-on-Tyne, England. Capstans, Winches, Haulages, etc. Sole Concessionaires: Greaves Cotton & Co., Ltd., 1, Forbes Street, Fort, Bombay.

## WINDOW & DOOR FITTINGS (TRANSPORT)

E. Hill Aldam & Co. Ltd., Britannic Works, Red Lion Road, Tolworth, Surbiton, Surrey, England. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

## WINDOWS FOR RAIL, ROAD AND MARINE TRANSPORT

Beckett Laycock & Watkinson Ltd., Acton Lane, London, N.W. 10. Sole Agents: Heatly & Gresham Ltd., 43, Forbes Street, Bombay 1.

## WINE & SPIRITS

Drambule Liqueur Co. Ltd., 12, York Place, Edinburgh 1. Sole Distributors: Spencer & Co., Ltd., Spencer's Building, Forjett Street, Bombay 26.

## WIRE BRUSHES

Gem Brushes (Luson) Ltd., Gem Works, Minerva Road, Park Royal Road, London, N.W. 10. Sole Agents: Datson, Raviraj & Co. (Private) Ltd., 43, Tamarind Lane, Fort, Bombay.

Somerset Wire Co. Ltd., Somerset. Wire for Rope and Spring Making, Prestressed Concrete Wire. Agents: Guest, Keen, Williams, Ltd., Wakefield House, Sprott Road, Ballard Estate, Bombay 1.

## WIRE ROPE MANUFACTURERS

UNITED ROPEWORKS, Post Box No. 1143, Rotterdam, Holland. Manufacturers of Wire Ropes. Agents: M/s. Gaytee & Company, Janmabhoomi Chambers, Fort Street, Fort, Bombay 1. Phone: 263449. Grams: "IMPENG".

## WOOD PULP

FINNISH CELLULOSE ASSOCIATION, S Esplanadgatan 2, Helsinki, Finland. Representatives: James Finlay & Co., Ltd., P.O. Box No. 73, Bombay 1.

## WOODWORKING TOOLS, SAWS & FLOUR MILLING MACHINERY ETC.

ELSWORTH LTD., Sheffield, England. Manufacturers of Woodworking Saws and Woodworking Tools. Agents: Gaytee & Co., Janmabhoomi Chambers, Fort Street, Bombay. Phone: 263449. Grams: "IMPENG."

Mafell Maschinenfabrik, Germany. Powerful Portable and Stationary Woodworking Machines, like Saws, Routers, Jointers, Planers, etc. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

R. S. STOKVIS & ZONEN N. V., P.O. Box 426, Rotterdam (Holland), Manufacturers of Woodworking machinery and machine tools. Agents: Messrs. Gaytee & Company, Janmabhoomi Chambers, Fort Street, Fort, Bombay 1. Phone: 263449. Grams: "IMPENG".

## WORKSHOP MACHINES

B. O. Morris Ltd., England. "Morrisflex" Flexible Shaft Equipment for Motor Garages, Workshops and for Boiler Descaling. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.

C. & B. Fein, Germany. Heavy Duty Portable Electric Drills with Universal Motors, 440 volts AC. Drills, Slow Speed Drills, Multispeed Drills, Right Angle Drills and Attachments, Screw Drivers, Impact Wrenches, Valve Grinders, Tappers, Tool Post & Precision Lathe Grinders, Brake Drum & Journal Grinders, Shears, Nibblers, Pipe Cutting Saws, Stone (Rock) Drilling Machines, Hammers, etc. Agents: Armstrong Smith Ltd., 1, Sir P. M. Road, Bombay 1.



## COMMERCIAL FIRMS

### 'AARPEE' (RAJMAL PAHARCHAND)

*Associate Firms :*

SHIV SILK MILLS  
SHIV EMBROIDERY MANUFACTURING CO.  
SHIV LACE MANUFACTURING CO.  
ESSKAY DYEING & PRINTING WORKS

*Address :*

91, Shalimar, Opp. Marine Lines Stn.,  
Marine Drive, Bombay 2.

*Mills :*

S. V. Road,  
Mira,  
Dahisar,  
BOMBAY 68.

*Telephones :* Office : 243531 & 243480  
Mills : 661102, 661593 & 662115

*Grams :* "NYLOCREPE", Bombay.  
"RANIVOILE," Bombay.

*Managing Partner :*

Shri Shamsunder Khanna.

*Partners :*

Shri Brijmohan Khanna.

Shri Shivkumar Khanna.

**A. A. MORBIWALA & CO.,** Importers & Suppliers of Iron, Steel & Wires of all kinds. 190/111, Abdul Rehman Street, Bombay 3. Phone : 323280. Grams : "VARNISH" M.D.

**A. BOAKE, ROBERTS & CO. (INDIA) LTD.,** Manufacturers of Flavouring Essences & Aromatic compounds, & Aromatic Chemicals, Herilela House, Mint Road, Bombay-1-BR. Grams : "FLA-VAROM". Regd. Office : Madras. Branch : Calcutta.

**A. C. E. C. India Private Ltd.,** 96, Apollo St., P. B. 893, Bombay 1.

## H. & R. Johnson's Crystal Tiles

Fordham Pressings, Cisterns & Sinks.

*Apply Agents*

## A. H. Shah & Co. Pvt. Ltd.

Nanabhoy Mansion, Sir Phirozshah Mehta Road, Bombay 1.

Phone : 261930. Grams : "OCSAH".

Branch : 5, Bentinck Street, Calcutta.

**A. H. WHEELER & CO. PRIVATE LTD.** Eruchshaw Building, 249, Dr. Dadabhoy Naoroji Road, Bombay 1; 18, Netaji Subhas Road, Calcutta 1, and 15, Elgin Road, Allahabad. Railway Bookstall Proprietors, Agents for Sir Isaac Pitman & Sons Ltd., Publishers, Virol Ltd., Bovril Ltd., and The Biro Swan Ltd., Makers of "Biro" Ball Point Pens.

London Agents.—Arthur H. Wheeler & Co., St. Stephen's House, Victoria

Embankment, S.W. 1. Tel. Address.—  
"Bookstalls"—Bombay. Phone No. 26-3915, Bombay. Post Office Box 204, Bombay 1.

**A. M. Master & Co.,** Weights & Measures Merchants. 179-81, Janjkar Street, Bombay 3. Phone : 326309.

**A. M. Motiwalla & Co.,** Shipchandlers, Contractors, Engineering Tools and Hardware stores Suppliers. 213, Nagdevi Street, Bombay 3.

## A. V. JOHN & CO.

Railway Clearing & Forwarding Agents,  
Transport Contractors, Loading &  
unloading Contractors, and Claim Recovery Service.

*Address :*

Opp. Central Railway Goods Shed,  
Shivaji Path, Thana.

*Telephone :* 591176.

*Proprietor :* A. G. John.

**Abbott Laboratories (India) Private Ltd.** Manufacturing Pharmaceutical Chemists, Jehangir Building, Mahatma Gandhi Road, Fort, Bombay.

**Abdoolally Noorbhoy,** all kinds of Glass and Plywood Merchant, Govt. & Rly. Contractor, Noorbhoy House, 122-24, Abdul Rehman Street, Bombay 3. Tel. No. 327156. Works : 248-A, Duncan Road, Bombay 8. Tel. No. : 376759. Grams : "PATTYMART".

**Abdoolally Noorbhoy,** Dealers in Arms, Ammunition and Shikar requisites, 248-252, Abdul Rehman Street, Bombay 3. Tel. Address : "Guidance." Phone No. 324764.

**Abdulsein Escoofally Contractor,** Sanitary Engineer, Licensed Plumber and Building Contractor. On the list of Government, P. W. D., B. I. T., Bombay Municipality, M. E. S. Naval and Native States. Sanitary Appliances, Tin Plates and Hardware Merchant, Manufacturer of tin and other metal boxes under process of Automatic Machineries. Office : 91-93, Bapu Khote Street, Bombay 3. Phone No. 332598. Residence Phone No. 379578.

## ABDULHUSEIN PEERBHAI & SONS

*Stockists of :*

Marine Stores, Chains, Wire Ropes,  
Chain Pulley Blocks, Ship Tackles,  
Winches etc.

Peerbhai Building.

66-68/A, Bhandari St., Bombay 3.  
Phone : 323956 Grams :  
"STUDCHAIN".

## HARDWARE, BOLTS, NUTS, SCREWS & PRECISION TOOLS

## ABDULLABHAI FAIZULLABHAI PRIVATE LTD.

60/62, KHOKHA BAZAR, BOMBAY 3  
Phone : 326708 Grams : "SMILING"

## ABDULLABHAI FIDAALLI & COMPANY

Estd. 1890.

Indenting Agents & Stockists of  
All Kinds of :—Paper-Boards,  
Newsprint & Aluminium Folls.  
18, Princess Street, Bombay 2.

Phones : Grams :  
39407 & 29977 "PAPERPORT".

Branches at :  
Madras, Calcutta, Cochin & Nagpur.

**ABRAHAM, D., & SONS PRIVATE LTD.,** Shipping, Clearing, Forwarding and Commission Agents, Hague Building, Sprott Road, Ballard Estate. Tele. Address : "Helal." Phones : Office : 26-1837, 26-1838 & 26-2379. Godown : 377741 & 374097. Residence : 24-5876 & 242958.

**ABRAHAM, SHAH & SONS.** Freight Brokers & Commission Agents, Hague Building, Sprott Road, Ballard Estate. Phones : 26-1837, 26-2379 & 26-3994.

**Abrawheel Private Ltd.,** Dealers in Abrasives. 107, Sarang Street, Bombay 3.

**ACC—VICKERS—BABCOCK LIMITED.** Registered Office : 16, Queen's Road Estate, Bombay 1. Engineers and Contractors, Manufacturers of Babcock & Wilcox Patent Water Tube Boilers, Thermal Power Plant, Superheaters, Mechanical Stokers, Coal Conveyors, Electric Cranes, Cement-making Machinery, Pressure Vessels and Heavy Engineering Plant of all descriptions. All enquiries to be addressed to the Works and Administrative Office at P. O. Durgapur 6, Dist. Burdwan, W. Bengal. Calcutta Office : Ilaco House, 1 & 3, Brabourne Road, Calcutta 1. Delhi Representative : Indra Palace, Suit No. 27, Connaught Circus, New Delhi 1.

**Acme Manufacturing Co. Ltd.,** The, (A "Waichand Groups" Industry). Registered Office : Construction House, Ballard Estate, Bombay 1.

**Acme Tiles Mfg. Co.,** (Estd. 1939), 494, Duncan Road, Bombay 4. Phone Nos. 333387 & 65610. Grams : "EKMITLE."

**Adair Dutt & Co. (India), Private Ltd.,** Importers and Dealers of all kinds of Scientific Instruments; Photographic Cameras. Syndicate Bank Building, Sir Phirozshah Mehta Road, Fort. Phone : 263558. Grams : "LABORIND". Head Office : Calcutta.

**ADAMJI KADERBHOY,** 337, Katha Bazar, P.O. Box No 5046, Bombay 9. Phone : 322485. Grams : "RAJKOTWALA". Manufacturers and Stockists of Cordage Manilla & Sisal, Coir, Hemp and Cotton Ropes. Shipchandlers and approved contractors to Government, Railways and Steamship Companies. Selling Agents :—The Ganges Rope Co., Ltd., Calcutta and Agents in India (except South) for Messrs. Webster & Co. Ltd., Sunderland (England) for Wire Ropes of all kinds. Stockists : Jaya Shree Textiles & Industries Ltd., Rishra, for Flax Twines & Cords, Canvas and Tarpaulins and Jacks Marine Glue.

**ADAMJI LOOKMANJI & CO.** Head Office : Rahimtoola House, Homji Street, Fort. Steel, Tinplate, Hardware, Pipes, Tubes, Fittings, Government Contractors.

*Partners :*

Y. A. Jasdanwalla.  
A. A. Jasdenwalla



G. A. Jasdanwalla.  
F. A. Jasdanwalla.  
A. Y. Jasdanwalla.  
Abbas Y. Jasdanwalla.

**Telephone Connections :**

Head Office: 25-1144 & 25-4227.  
Residence: 372960.  
Telegraphic Address: "Steelyard."

Adding Machines (India) Private Ltd., 235, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Sole Agents and Service Representatives in India for Burroughs Corporation, Detroit, Michigan, U.S.A. **Directors:** M. M. P. De Souza, Mrs. T. M. Ball, Mrs. R. V. De Souza; **Director and General Manager:** S. H. W. Ball; **Branch Manager:** P. La Bouchardiere; **Service Manager:** P. La Bouchardiere; **Engineers:** T. K. Rakshit, P. Kolambkar, R. Rodrigues, V. G. Redkar. **Secretary:** Miss D. Billimoria. Tel. Address: "DASHPOT". Phone Nos. 261714 and 263910.

**ADDRESSOGRAPH - MULTIGRAPH CORPORATION,** Addressing-Embossing-Offset Printing Machines, Duplicating Machines and Braille Duplicators. Sole Distributors for India, National Cash Register Co., Steelcrete House, Dinsha Wacha Road, Backbay Reclamation, Bombay 1. Phone Nos. 245955, 245168.

Adverts Private Limited. (Advertising & Publicity Service). Established in 1945, Syndicate Bank Bldg., Sir Phirozshah Mehta Road, P.O. Box 1833, Bombay 1. Phone: 263374 & 265317. **Managing Director:** Mr. B. Nariman.

**ADVANI & CO., R. & G.,**

Estate Agents

Sindhu House, Nanabhoy Lane,  
Bombay 1.

Phone: 251521/22

Grams: "SATGURU"

&

Murray House, 5, Old Court House St.,  
Calcutta-1.

Phone: 231551.

Grams: "GURUBABA"

**ADVANI & CO. PRIVATE LTD., J. B.,** Distributors for Shree Gopal Paper Mills Ltd. & Ballarpur Paper and Strawboard Mills Ltd. Importers of and indentors for Paper and Boards, Machine Tools, Arc Welding machinery and equipments, Plate and Sheet metal working machineries, Ferro-alloys, all precision machines and machines to manufacture clocks, timepieces, watches and parts, bicycle parts, Refrigerator parts, Printing machinery, Printers' Sundries, Roller Composition Manufacturers of Arc Welding Transformers, Spot Welders, Rivet Heaters and Waterproof Kraft Paper and Waxed Kraft Paper. Exporters of Tea and Arc Welding Transformers and accessories.

**Head Office:** Top Floor, Advani Chambers, Sir P. Mehta Road, Fort, Bombay 1.  
**Shop:** 27, Mangaldas Road, Bombay 2.

**Branches:** P-38, Mission Row Extension, Calcutta No. 13; Sebros House, Willingdon Island, Cochin 3; Chawri Bazar, Delhi; Batliboi House, 98-A, Armenian Street, Madras; Railway Road, Jullundur City; National Buildings, Main Road, Visakhapatnam. Tel. Address: "BONDPAPER", Bombay. Phone Nos. 261061 and 261062, P.O. Box 687, Bombay 1.

**ADVANI-OERLIKON ELECTRODES PRIVATE LTD., J. B.—Makers of Arc** Welding electrodes, fluxes and equipment.

**Registered and Head Office:** Radia House, 6, Rampart Row, P.O. Box No. 1546, Bombay. Phone: 254815, 253029.

& 257307. Grams: "CITOREX",  
Bombay.

**Factories:** Agra Road, Bhandup, Bombay 78. Phones: 592566, 592567 and 592467. Grams: "CITOREX", Bhandup.

Akurdi, Chinchwad, Poona. Phone: 88351 & 88214. Grams: "CITOREX", Chinchwad. Telex: 014-231. CITODYN.

Bilaspur Road, P.O. Box No. 19/83, Raipur. Phones: 296 & 297. Grams: "CITOREX", Raipur. Melakotayur, Chingalpet Dist., Madras State.

## AEMPHICO ENGINEERING WORKS

*Manufacturers of:*

Machinery, Spares, Lubricators,  
Fabricators in Aluminium & Steel, etc.

Swadeshi Mills Estate, Opera House,  
Bombay 4 BR. Phone: 357086.  
Grams: "MOTORPOWER".

Advertising & Sales Promotion Co., Vaswani Mansion, Dinsha Vacha Road, Churchgate Reclamation, Bombay 1.

**AFCO LTD.,** (a wholly owned Subsidiary of the Bombay Burmah Trading Corporation Ltd.), Builders of Power and Sailing Craft, Naval Architects, Surveyors, Marine Engineers. Office and Boat Building Yard at Erangal, Madh Island, Post Box No. 7383, Bombay 58 AS. Phone Nos.—Office & Boat Yard: 692368, 692369 & 692276. Grams: "FEDACRETE", Bombay.

Afzal Paper Box Factory, Cardboard Box Mfrs., 43, Foras Road, Bombay 8.

A. G. Batliwala & Company, 11, BEST Printing Press Building, Morland Road, Post Box No. 4567, Bombay 8. Phone: 40850; Grams: "BOTTLEHOME."

**AGFA-GEVAERT INDIA LIMITED.,** *Head Office:* Kasturi Building, Jamshedji Tata Road, Bombay 1. Phones: 246188, & 246189. Grams: "AGFAGEVA". *Chairman:* D. M. Ghia; *Managing Director:* A. R. Leyden; *Secretary:* Manager, Administration: S. R. A. Amudhan; *Manager, Marketing:* R. L. Narayan. *Branches:* 198, Jamshedji Tata Road, Bombay 1. Phones: 246071, 245447, 245468, Tel. Address: "AGFAGEVA". *Branch Manager:* N. A. Shroff, 2A, Shakespeare Sarani, Calcutta 16, Grams: "AGFAGEVA". *Branch Manager:* B. F. Doshee, No. 34, Mount Road, Madras 2. Grams: "AGFAGEVA". *Branch Manager:* C. A. Padmanabhan, Vohra House, 1/25, Asaf Ali Road, New Delhi 1, Grams: "AGFAGEVA". *Branch Manager:* R. Sitaram.

*Sole Agents for:—*

Photographic sensitized Materials, X-ray films, Process films and plates, Aerial films etc.: Gevaert-Agfa N.V., Mortsel, Belgium. Roll films, colour films. Cameras, Projectors etc.: Agfa-Gevaert A.G. 50, Leverkusen Bayerwerk, W. Germany. Photographic chemicals and Equipment: Johnsons of Hendon Ltd., Hendon, London N.W. 4. Sub-standard cine cameras, Projectors and equipment: Paillard S. A. Ste-Croix, Switzerland, "Morganite" Photographic Carbons: Morganite Exports Ltd., Battersea Church Road, London S.W. 11. Aircraft Cameras and Equipment: Williamson Manufacturing Co. Ltd., Hawthorn Road, Willesden Green, London, N.W. 10. Radcliff Intensifying Screens: United States Radium Corporation, New York. Linhof Precision Cameras & Accessories: Linhof N. K. K. G., Munchen 25, W. Germany. Metz Electronic Flash Units:

M/s. Metz Apparatewerke, Fuerth/Bayern (W. Germany). 'NORIS' 8 mm and 16 mm slide and Sound Projectors: Noris Projektion GmbH, Nuernberg (W. Germany). 'KINDERMANN' photographic equipment: M/s. Kindermann & Co., GmbH, Ochsenfurt/Main (W. Germany). 'AUTOPHOT' Precision Photocopying and Reproduction equipment: M/s. Foto-Clark Friedrich Grun KG., Bonn 53 (W. Germany). 'KONTOPHOT' Microfilming equipment and accessories: M/s. Mikrofilm GmbH, Duesseldorf (W. Germany). 'AUER' X-ray Accessories such as Cassettes, Hangers: M/s. Auergesellschaft GmbH, Berlin 65 (W. Germany). 'MAIER' X-ray Accessories-Intensifying Screens: M/s. W. Maier Komm-Ges. 722, Schwenningen A. N. (W. Germany).

**Indigenous Products :**

Agfa Photographic papers (Brovira, Lupex and Document): New India Industries Ltd., Mulund, Bombay 80. Agfa Cameras: New India Industries Ltd., Baroda. Gevabox cameras: Aminind Private Ltd., Bombay, Johnson Photographic Chemicals for X-ray, Graphic materials, and amateur and professional use: Agfa-Gevaert India Ltd. at their chemical plant in Mulund, Bombay. K. B. Photographic equipment and accessories: K. B. Industries, Lucknow. Hindustan Photo Mounts: Hindustan Foto Mount Mfg. Co., Erode.

**AGRA ENGINEERING CO.,** 40, Bank Street, Fort, Bombay 1. Phone: Office: 256541, Res.: 532906. Grams: "RAJ-SPARES." Manufacturers of Diesel Engine Spare Parts & "ARROW" and "DISPA" Brand Liners, Pistons and "SUPERMAN" Brand Piston Rings and also "MG" Brand Automobile Pistons and other Auto Spares.

Ahmed & Co., Lohar Street, Bombay 2. Direct Importers and Stockists of all kinds of Electrical goods.

**AHMEDABAD ELECTRICITY COMPANY LIMITED, THE,** Registered Office: Killick House, Home St., Fort, Bombay 1. Managing Agents: Killick Industries Ltd. Telegraphic Address: "KINDRED". Telephone No.: 262311. Head Office Administration Department: No. 5, Graham Road (4th Floor), Ballard Estate, Bombay 1. Telegraphic Address: "ADISEBS". Telephone Nos. 261741/261742 and 266083. Local Office: Electricity House, Lal Darwaja, P.O. Box No. 37, Ahmedabad. Telegraphic Address: "Electric". Telephone No. 24261. (Ref. Ahmedabad Section).

**AHURA CHEMICAL PRODUCTS PRIVATE LTD.** 84, Sion Road, Bombay 22. Manufacturers of all textiles auxiliaries, surface-active agents, Turkey Red Oil, Synthetic anionic detergents and wetting agents, non-ionic emulsifiers for various industries, Cationic germicides and Softeners, cosmetic raw materials and other general chemical products. Managing Director: S. M. Mistry. Phones: 471394, 471911. Grams: "AHURACHEM", Bombay-Sion.

Ahura Printing Press, Lentin Chambers, Dalal Street, Fort, Bombay. Phone: 253422.

Air Conditioning Corporation Limited, Manufacturers, Engineers and Contractors, Construction House, Ballard Estate, Bombay 1.

Air Lines Hotel Private Ltd., Proprietors: Air Lines Hotel. Office: Churchgate Reclamation, Bombay-1. Phone: 249176. Grams: "AIRLINES-HOTEL."



**AJANTA ADVERTISING, Marketing & Advertising Consultants and Official Representatives in India for German Industries Fair, Hanover (West Germany).** Lakshmi Building, Sir Pherozshah Mehta Road, Bombay-1.

Phone : 26-3343/44. Grams : "ADCOUNSEL" & "HANOFAIR".

Chief Executive : Jacob Varughese.

Branches at : Calcutta & Madras. Associates throughout the world.

**Ajit Glass Works Private Ltd.,** Mfrs. of Glassware. 99, Haji Ahmed Devji Bldg., Mohamedally Road, Bombay 3.

**Akbarally & Co., F. H.,** General Hardware Merchants. Dealers in Building and Workshop Materials; Wholesale and Retail Suppliers & Commission Agents, 58, Bhajipala Lane, Bombay 3. Phone: 322421.

**Akbarallys**

**Akbarally Ebrahimji Pharmacy & Department Store.**

Drugs, Provisions, Readymades, Cosmetics, Toiletries, Travel goods, Household needs, Crockery, Presentations, Confectionery, Chandu Sweets, Eye Care, Imitation Jewellery, Mail Order Service and Cafeteria.

45-47, Veer Nariman Road, Fort, Bombay. Phones : 253921/22/23. Grams : "TUSSIBAR".

**Akbarally Mohamedally & Co.,** Importers of Hardware, Tools and Aerated Water Requisites, 316, Abdul Rehman Street, Bombay 3. Phone No. 321662. Grams : "ICECREAM".

**ALCOCK, ASHDOWN & CO., LTD.,** Defence Works, Mazagon, Bombay 10DD. Registered Office :—16, Bank Street, Fort, Bombay 1 BR. Structural, Mechanical, Marine and Electrical Engineers, Shipwrights, Launch, Tug, Barge builders and Fabricators and Galvanisers of steel structures for Transmission Line Towers, Electric Overhead, Travelling Cranes and Marine & Industrial Diesel Engines.

Chief Executive : B. V. Shah.

Telegraphic Address.—"Morrisons". Phone Nos. 372584-86 (Works) and 251321-26 (Office). P.O. Box 816.

Branch.—Ramasar Works, Bhavnagar. Telephone : 3416.

Telegraphic Address.—"Alcocks".

Codes used.—A.B.C. 4th, 5th & 6th Editions, Bae, Bentley's Complete Phrase Code and Bentley's Second Phrase Code.

Agents for :—

Small and Parkes Ltd., "Karmal" Engine Packings and "Tepco" Jointing.

British Ropes Ltd., Galvanised Flexible Steel Wire Ropes, etc.

Transport Equipment (Thornycroft), Ltd., Marine & Industrial Engines.

Edward Parker & Co., Ltd., "Tritano" and Best Oak Leather Belting.

**Alexandra Engineering Works Private Ltd.,** Engineers, Contractors & Pipe Fitting Mfrs. 29, Quay Street, Darukhana, Bombay 10.

**ALEXANDER & RAYMOND (BOMBAY),** Manufacturers of refractory materials for setting & bonding bricks, Castable Refractory Concrete for making special shapes on the spot, lining & maintenance coating. Boiler & Steam Pipe lagging. Bitumen water-proofing compounds and washers. Sitaram Building 'G', Phalton Road, Bombay 1. Phone : Office : 262150. Res. : 573040.

**Alfa Sports,** Sports goods manufacturers, Importers, Exporters and stockists of Slazenger's, Surco's and Sunder's goods. Fishing and Playground equipment, Presentation Articles, Swimmear and Athletics. Metro House, Dhobi Talao, Bombay 1. Phone : 242549. Grams : "ALFASPORTS".

**Alfred Herbert (India) Private Ltd.,** Kaiser-i-Hind Building, Sprott Road, Ballard Estate, Bombay 1. Importers and Distributors of Machine Tools, Small Tools & Workshop Equipment. Also Plastic Moulding & Die Casting Machines. Steam and Pneumatic Hammers and Drop Stamps, Forging Presses and Upsetting Hot Forging Machines, Atritor Pulverizers. Grams : "MACHINE". Bombay. Telex : 817 By Machine. Phone No. 261732.

**Alibhoy Kadibhoy Kachwala,** Sheet and Plate Glass Merchant. 84, Abdul Rehman Street, Bombay 3.

**All-India Electric Co.,** Electrical Merchants. 76-78, Dwarkadas Bldg., Mangaldas Road, Bombay 2.

**All India Glass Works Private Ltd.,** Glassware & Bottles Mfrs. 111, Bhandari Street, Bombay 3. Phone : 322381-3.

**All India Herb Supply Co. Private Ltd.,** Maskati Mahal, Ground Floor, Lohar Chawl, P.O. Box No. 2051, Bombay 2. Phone : 30982. Grams : "LIQUORICE". Crude drugs, drugs & medicines, Botanical Herbs, Pharmaceutical Chemicals, Spices, etc.

**Alliance Electric Mart,** Electrical Merchants, 67, Lohar Chawl, Bombay 2.

#### ALLENBURY ENGINEERS PVT. LTD.

15-A, Horniman Circle, Fort, Bombay.

Industrial Packing Specialists, Manufacturers of Corrugated Board, Cartons and Cardboard Boxes for Radios, Hardware, Electrical Goods, etc.

Phone : Office: 255041. Factory: 373497. Grams : "TRYSURE", Bombay.

**ALLIBHOY SHARAFALLY & CO., PRIVATE LTD.** (Established : 1878—Incorporated : 1938). Printers, Publishers, Booksellers, Book Binders, etc. Mohamadi Buildings, Mazagaon, Bombay 10 (DD). Telegraphic Address : "KORAN." Telephone Nos. 378148 & 378149.

Proprietors of :

Mohamadi Fine Art Litho Works, Lithographers. Offset & Letterpress Printers, Box makers & Cartons mfrs.

Matba-e-Mohamadi (Mohamadi Litho Press), Publishers of Holy Quran, Arabic, Persian and other calligraphed literature,

Shop : 373, Ebrahim Rahimtullah Road, Bombay 3. Telephone : 832711.

Branch : 75, Arab Street, Singapore.

Grams : "WARAWALLA," Singapore. Phone : 37639.

**Allied Drawing Stores,** Sitaram Building, 29, Hornby Road, Bombay 1. Phone : 261403. Telegrams : "ARTCORNER."

**Allied Engineers (Associates of N. Dinshaw & Co.),** Licensed Electrical Contractors & Engineers, 14, Ismail Building, Flora Fountain, Bombay-1. Phone : 263488.

**Allied Trading Co.,** Paints & Varnish Merchants, 39, Nagdevi Street, Bombay 3.

**Allenbury Engineers Pvt. Ltd.,** 15-A, Horniman Circle, Fort, Bombay. Industrial Packaging Specialists.

**ALTEX**

**PRIVATE LIMITED**

147, Mahatma Gandhi Road, Fort, Bombay.

Textile Mills Stores & Machinery Importers and Manufacturers' Representatives. P.O. Box No. 1096. Phone : 251082. Grams : "BETEX". Managing Director : Minocher Ardeshir Bharucha.

Sole Agents for :—

Fenner Woodroffe & Co. Ltd., Madras. "RAMS HEAD" Brand Leather Belting, Endless Cone Drum Belts.

Beta Picker Co. Ltd., Kanpur. "Beta" Brand No. 4 B Pickers Drop Box Pickers, Pickers for Woolen & Silk Looms, Picker Savers.

Graduate Picker Works, Ahmedabad. "INVICTA" Brand Spring Buffers Riveted and/or Lace Sewn.

Crown Spg. & Mfg. Co., Ltd., Bombay. "ASHA" Brand Cotton Healds and Steel Reeds, and also Inserted eye wire Healds.

H. D. Nariman & Son, Santa Cruz, Bombay. "NORMAN" Brand Highly Concentrated Standard Red and Blue Colour Stamping Paste, also "STAM-TEX" Brand Cloth Stamping Paste, Light Blue, Navy Blue, Royal Blue, Post Office Red and Other Colours also Fast to Bleach Black Marking Ink, Writing Ink, Selvedge Ink, etc.

Pulrose Co., Ltd., Manchester, England. "ADELPHI" Flat Cleaners Lint Raising & Bandage cutting machines.

Wallwork Gears Ltd., London S.E.7. Stamping machines, P.I.V. Gears and Metal Alloy Bobbins.

Knit Foulds Limited, Kapurthala. "Gripit" Nylon leather Sandwich, Belting & Endless Belts.

Rohtas Industries Ltd., Dalmianagar, Red Vulcanised Fibre Card Cans.

Branch Offices: Ramolla Building, 1st Floor, 2888/1, Relief Road, Ahmedabad 1. Phone No. 24760.

Also at 5/127, Avanashi Road, Coimbatore. Phone No. 8195.

Sub-Agents : K. Poddar, 15/56, Civil Lines, Kanpur; Krishna Trading Co., Ishwar Bhawan, Beawar; Allied Textiles, 24/157, Shakti Nagar G. T. Road, Delhi 7. Texind Co., 79, Rue De Cantine, Pondicherry.

**ALU CAPSULES LTD.,** (Wholly owned subsidiary of Larsen & Toubro Limited). Registered Office : L & T. House, Dougall Road, Ballard Estate, P.O. Box 278, Bombay 1. Telephone : 26-4411/9. Factory: Saki-Vihar Road, Powai, Bombay 72. Telephone : 581501/10. Managing Agents : L. & T. (Management) Private Ltd., Manufactures and Exports aluminium bottle capsules and Capsuling machines—hand operated, semi-automatic and fully automatic.

Directors : H. Holck-Larsen, S. K. Toubro, N. M. Desai, P. G. Bhagat, Gunnar Hansen.

Selling Agents : Larsen & Toubro Ltd., P.O. Box 278, Bombay 1. Telephone : 264411/9; Grams : "LARSEN-BRO." Telex : TLX 246.

Sales Office : 41, Koliwada Road, Sio East, Bombay 22. Phones : 472575/76.



**ALUMINIUM HINDUSTAN PRIVATE LTD.**, Bank of Baroda Building, Apollo Street, Bombay. Specialists in Aluminium. Branch Manager: D. D'Mello. Phone: 253479. Sole Selling Agents and the Agents for The British Aluminium Co., Ltd., London and Aluminium Wire & Cable Co. Ltd., Swansea. Accredited Agents for Canadian British Aluminium Co. Ltd., Canada, under Colombo Aid Plan. Representatives of the Aluminium Manufacturing Co. Private Ltd. of Dum Dum, Calcutta. H.O. 2, Jessore Road, Dum Dum, Calcutta 28. Phone: 57-2051/54. Grams: "ALUMIND", Bombay/Dum Dum.

**Ama Private Limited**, Canada Building, Dr. Dadabhai Naoroji Road, Bombay 1. Importers and Wholesale Dealers in Airport, Cinematographic, Photographic, Scientific Instruments, Audio-Visual Aids. Producers of Documentary and Advertising Films. Tel. Address: "Amalimited." Phone: 265271 (3-lines). P.O. Box 556.

**AMAR MINERALS (PRIVATE) LTD.**, Dealers in all kinds of Minerals such as 85% Asbestos Magnesite, Barytes, Bentonite, Red Oxide, Talc, etc. Head Office: Alice Buildings, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 255771. Factory: Kalyan (Central Rly.). Phone: Kalyan 26.

*Board of Directors:*

L. K. Rege, Smt. P. M. Kobla, N. B. Jeejeebhoy, Smt. J. A. Dhondy.

**AMAR PLASTIC INDUSTRIES**

43 Queen's Road, Bombay-2.

Manufacturers of Plastic Badges, Cinema Screens, Battery Separators and Decorative PVC Tiles. Phone: 38326. Grams: "RUMTREE."

**AMBER TIPS PRIVATE LTD.**, Tea Blenders and Package Tea Packers, 75, New Barden Lane, Mandvi, Bombay 3. Phone No.: 324684.

**AMERICAN ELECTRIC & ENGINEERING CO.**, Electrical Merchants, 11/12, Himalaya House, Palton Road, Bombay 1. Phone: 263575. Grams: "AMERICTRIC."

**AMERICAN EXPRESS CO., INC., THE**, International Bankers and Travel Agents. Oriental Building, 364, Dr. Dadabhai Naoroji Road (P.O. Box No. 507), Bombay 1. Phones: 25-5021/4. Tel. Address: "Amexco."

**AMERICAN INTERNATIONAL UNDERWRITERS (INDIA), PRIVATE LTD.**, Warden House, 4th Floor, Sir Phirozshah Mehta Road, Fort. P. O. Box 1466. Grams: "AMINTIND." Tel.: 255215.

**AMIRUDIN  
SHALEBHAY TYEBJEE  
& SONS**

'Shale' Building, Bank Street, Fort, Bombay.

Shipchangers, Government & Railway Contractors.

Residence Phone No. 521299

353831, 521299 & 367560.

Gram: "PILOTACE."

Office: Telephone Nos. 252952-254103.

**Amratlal Chaganlal & Co.**, Hardware & Wire Rope Merchants. 143, Nagdevi Street, Bombay 3.

**AMRITLAL & CO. PRIVATE LTD.**, "Rang Udyan", Sitladevi Temple Road, Mahim, Bombay 16. Importers of Aniline Dyes & Chemicals. Sole Agents for Rohm & Haas Co., Philadelphia, U.S.A., Manufacturers of Textile & Leather Chemicals and Agricultural Insecticides & Fungicides. Also Sojuzchimexport U.S.S.R. for Dyes, Intermediates and Chemicals. Managing Agents of Amar Dye-Chem. Ltd. Manufacturers of Coal Tar Dyes. Phone No. 453251 & 262291. Grams: "Rasik."

*Branches at:* Delhi & Amritsar.

**AMRUTANJAN LIMITED**, Manufacturers of Amrutnanjan Pain Balm, Anoleum, Dermal Ointment, Inhalers and Gripe Mixture. *Head Office:* 14/15, Luz Church Road, Mylapore, Madras. *Branches:* 249, P. D'Mello Road, Fort, Bombay; 5, Bentinck Street, Calcutta and 15/1, Asafali Road, New Delhi.

**AMRUTLAL BHURABHAI &  
COMPANY**

Laboratory, Industrial, Photographic Chemicals, Re-agents, Solvents & Pharmaceuticals Manufactured by British Drug Houses (India) Ltd.

Sarabhai Merck Ltd.,

"Amrut" Industrial Products & "Globe" Products.

Anand Bhuvan, Princess Street, Bombay 2 (B.R.) P. O. Box No. 2379.

Phones: 30023, 30024 & 20419.

Grams: "CHEMDRUGS".

Bombay 2 (B.R.)

**AMZEL (PRIVATE) LTD.**, Nusser House, New Queen's Road, Bombay-4. (Phone: 357511 (5 lines). Distributors of Amzel Radios, Exide Batteries, Spartan Paints, Auto-Gen-Armatures, MSP bushings, Prestolite automotive Parts, GE Lamps and Fimcorn air Filters.

**A. N KAPUR & CO.,**

Court House, Dhobi Talao, Bombay 2.

Phone: 22776.

Grams: "SANDAL".

*Manufacturers & Stockists of:*

Sports & Games, Agility & Playgorund Apparatus.

Approved Contractors to Government.

**Anandlal Podar & Co.**, Cotton Merchants, Industrialists & Bankers. Podar Chambers, Parsi Bazar Street, Fort, Bombay.

Phone: 261540. Grams: "ANINSTS."

**ANDHRA SCIENTIFIC CO., LTD.**

Janmabhomi Chambers, Fort Street, Bombay-1.

Manufacturers of Scientific, Laboratory & Surveying Instruments.

Regd. Office & Works:—Masulipatnam, (Andhra Pradesh).

**ANDHERI METAL REFINERY & FOUNDRY**, Metal Refiners—Founders—Engineers. Chandi Karkhana, Mogra, Post Box No. 7365, Andheri, Bombay 58. Phone No. 572247. Grams: "RUPAWALA".

**ANDREW YULE & CO. LTD.**, 32, Nicol Road, Ballard Estate, Post Box No. 293.

Code used: Bentley's Second Phrase Code.

Tel. Address: "YULETIDE" Bombay 1. Telephone No. 261355—Office.

" No. 263054—Personal.

Calcutta—8, Clive Row, Calcutta 1.

Telegraphic Address: "Yuletide," Calcutta.

London—Yule, Catto & Co., Ltd., Orient House, New Broad Street, London. E.C. 2.

Telegraphic Add.: "Yuletide," London.

**ANGLO-THAI CORPORATION, LTD., THE,**

Ewart House, Bruce Street, Bombay.

Branches: Bombay, Bangkok, Singapore. Penang and Kuala Lumpur.

Telegraphic Add.: "Ewart," Bombay.

Tel. No. 25-2261/2 : 25-5687/8.

Manager: A. L. Cole.

*Subsidiaries:* Herberton Ltd., Tyresoles Concessionaires Private Ltd.

*Financial Agents:*—

The Great Eastern Life Assurance Co., Ltd.

Anil Electric Co., Licensed Electrical Contractors, 125, Vithalwadi, Kalbadevi, Bombay 2.

Phone: 379412 Grams: "INFLUX"

**ANILINE DYES &  
CHEMICAL CO.**

(Estd. 1922)

**PROPS.**

**R. J. MISTRY SONS &  
CO.**

Dealers in Aniline Dyes for all Purposes.

Branches All Over India.

3, Gilder Lane,

Off Lamington Road, Bombay 8.

**Arc Brazier, The**, Welding Engineers and Contractors. 84, Foras Road, Bombay 8.

**ARDESHIR B. CURSETJEE & SONS (PRIVATE) LTD.**, Master Stevedores, Dubashes and Clearing & Forwarding Agents, 6, Rampart Row, Fort, Bombay. Tel. Address: "Greyhound". Phone Nos. 254223, 252543 & 254077.

**Arlabs Private Ltd.**, India House, Fort Street, Bombay 1.

**Aromatic Products & Chemicals Private Ltd.**, Importers of Essential Oils, Aromatic Chemicals & Perfumery Raw Materials, 42, Prospect Chambers Annexe, Dr. Dadabhai Naoroji Road, Fort, Bombay. Phone: 263151. Grams: "DISCOVERY".

**Artistic Leather Goods & Accessories**, Manufacturers of Ladies Handbags, No. 2, Phiroz Building, Apollo Pier Road, Fort, Bombay 1.



# ARMSTRONG SMITH LTD.

Gresham Assurance House, Sir Phirozshah Mehta Road, Bombay 1. Postal Address: P.O. Box 185, Bombay 1. Telegraphic Address: "ARMSMIT", BOMBAY. Telephones: 255471-2.

## Engineering Department:

Western Railway Stores Lane, Haines Road, North Mahalaxmi, Bombay 11. Telephones: 373213, 373214.

## Branches at—

Calcutta: Faraday House, P-17, Mission Row Extension, Calcutta 13. P.O. Box No. 787, Calcutta. Telegraphic Address: "ARMSMIT", CALCUTTA. Telephone Nos. 238411-2-3.

Madras: 106, Armenian Street, Madras. P.O. Box No. 1618, Madras. Telegraphic Address: "ARMSMIT", MADRAS. Telephones: 23432, 23002.

Delhi: 14/15 F Connaught Place, New Delhi. P.O. Box No. 670, Madras. Telegraphic Address: "ARMSMIT", NEW DELHI. Telephones: 40529 and 45757.

Ahmedabad: Reid Road, Railwaypure, P.O. Box 1042, Ahmedabad-2.

Bangalore: 170, Thambu Chetty Road, Vasanth Nagar, Bangalore 1.

Kanpur: Brady House, Mahatma Gandhi Road, Kanpur.

Coimbatore: 95, Jail Road, Coimbatore 1.

## Directors:

J. M. Mehta, Chairman; A. S. Nariman, P. D. Moir; J. Charanjiva.

Engineers: Manufacturers' Representatives for:—

Material & Metallurgical Testing Equipment Physico-chemical laboratory Instruments.

\* ELECTRIC MOTORS

\* "HKS" MOTOR STARTERS

\* MACHINE TOOLS

\* WORKSHOP MACHINERY

\* FLEXIBLE SHAFT MACHINES

\* ELECTRIC TOOLS

\* FOUNDRY EQUIPMENT

\* AIR COMPRESSORS

\* CONSTRUCTION MACHINERY

\* GARAGE AND AUTOMOTIVE SERVICING EQUIPMENT

\* CHEMICAL AND PHARMACEUTICAL PLANT AND EQUIPMENT

\* TAPS & DIES, EXPANDING REAMERS ETC.

\* FLEXIBLE SHAFTS.

Artytoys, Sir Ratan Tata Road, Tardeo, Bombay 34.

Arvind & Co., Insurance Agents, Bombay Mutual Building, Sir Phirozshah Mehta Road, Fort, Bombay. Agents for Indian Trade & Gen. Ins. Co., Ltd. Tel. Address: "Selection." Phone No. 263232.

Aryan Brush Co., Ltd., Manufacturers of Brushes. Lentin Chambers, Dalal Street, Fort, Bombay.

**ASBESTOS CEMENT LIMITED.** Regd. Office: Mulund, Bombay 80.

Branches: Calcutta, P.O. Box 374. Madras, P.O. Box 350, Podanur (Coimbatore Dist.). New Delhi, P.O. Box 542, Jabalpur, P.O. Box 70.

Factories: Kymore (Madhya Pradesh), Mulund (Bombay), Kidderpore (Calcutta), Podanur (Coimbatore Dist.).

Manufacturers and Distributors of "EVEREST" and "CROWNIT" Asbestos-cement Building Products, Rainwater and Soil Pipes, Pressure Pipes, Gutters and Fittings.

## Sole Agents for:

"EVERITE" Asbestos-Cement Pressure Pipes, a product of Turners Asbestos Cement Company Limited, Trafford Park, Manchester 17, England.

Eternit Granite Asbestos-Cement Decorative Flat Sheets, a product of S. A. Eternit Emaillo, Kapelle-op-den-Bos, Belgium.

Chairman: K. Neve.

Managing Director: A. D. Pandit.

Directors: S. K. Swami, W. C. Merser, K. V. Ramaseshan, Dr. B. B. Hattiangadi, H. D. S. Hardie, R. Setlur and F. C. Badhwar.

## Telephone Numbers:

Mulund — 592441.

Calcutta — 45-2001.

Madras — 86209.

Podanur — Coimbatore—24116.

New Delhi — 43197.

Jabalpur — 2125.

Kymore — Katni—12.

**ASBESTOS, MAGNESIA & FRICTION MATERIALS LTD.** (Incorporated with limited liability in England).

A Member of the Turner & Newall Group. Bombay-Agra Rd., Ghatkopar, Bombay 77.

Sales offices: Calcutta, Madras and New Delhi. Telegrams: "ASMAFRIC". Phones: Bombay 582391, Calcutta 232012, Madras 85610 and New Delhi 275436.

## Importers and Concessionaires for:—

Turner Brothers Asbestos Co. Ltd., Rochdale, England.

Ferodo Limited, Chapel-en-le-Frith, Stockport, England.

J. W. Roberts Ltd., Harwich, England.

Turners Asbestos Cement Co. Ltd. (Electrical Insulation Dept.), Manchester, England.

Newalls Insulation Co. Ltd., Washington, Co. Durham, England.

Asbestos Packings & Manufacturing Co., 15-A, Bruce Street, Fort, Bombay-1.

## ASEA ELECTRIC INDIA PRIVATE LIMITED

Mfg. Electrical Engineers and Contractors. ASEA House, Goa Street, Ballard Estate, Bombay. P.O. Box No. 941. Phone No. 264181 (4 lines). Tel. Address: "Asea-filial". Managing Director: C. G. Kjellin. Manager for Bombay, S. D. Kale. Engineers, S. S. Bapat, S. S. Bhagat, H. L. Chandramouli, S. M. Deo, N. S. Deshpande, K. Edwin, B. V. Eswar, C. P. Gajjar, S. D. Joshi, J. R. Joshi, G. M. Kamat, R. K. Kamat, M. P. Mobedjina, D. R. Parikh, D. D. Patankar, A. R. Shah, P. M. Shah, P. S. Shenoy, A. K. Sundram, P. N. Thakur, I. Udani, Accountant: S. Soderlind. Calcutta Office: 4, Lyons Range, Post Box 194. Manager for Calcutta: S. L. Parekh, Engineers: S. Banerji, S. K. Das, A. K. Gupta, S. I. Patel, A. Patranabis, R. Sarkar, F. K. Sen, S. Sen. Madras Office: Mercantile Bank Building, 10, First Line Beach, P. O. Box 123. Manager for Madras: V. A. Chandran. Engineer: R. Dorairaj. New Delhi Office: 47, New Delhi South Extension Part I, Resident Engineer: K. K. Gosain, Engineer: S. C. Kumar.

Asgarali Nuruddin & Co., 95, Nagdevi Street, Bombay 3. Phone: 322690 Off.

Ashok Brothers, Advertising Gifts, Novelties Mfrs., 187, Abdul Rehman Street, Bombay 8.

## LEAD PIPES

In wide range of sizes upto 200 mm. I.D. (8" I.D.) and to any Specifications.

Also

LEAD WOOL, WIRES,  
SECTION & SLEEVES.

## ASHOK METAL INDUSTRIES

6, Sewree Cross Road, Bombay-18  
Tele: 443964. Grams: "EXTRUDER"  
A5614

## ASIA ENGINEERING CORPORATION

13-A, Bruce Street,  
Post Box 1084, Bombay 1.

German Weighing Equipment from capacity 1 gram to 500 tons.

Phone: 59125.

Grams: "NOERROR."

## ASIAN CHEMICAL CO.

Manufacturers of:

ALL TYPES OF CHEMICALS

Chemical House, Agra Road,  
Post Box No. 2, Thana (Bombay).

Thana Phone: 591257.

Grams: "CHEMICAL".

For Details see in "CHEMICAL MFRS."



Asian Electronics Limited, Manufacturers of Electronic-Components: Carbon Film Resistors, "Styroflex" Capacitors and Ceramic Cores and Instruments in collaboration with M/s. ISKRA-KRANJ of Yugoslavia. *Registered Office*:—Handloom House, 221, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Phone: 266554 & 264309.

Asian Trading Corporation, 310, The Mirabelle, 33/A, Marine Lines, Bombay 1. Telegrams: "Ajlpas"—Bombay. Phone: 242672. Publishers' Representatives, Importers of Children's School, College, Catholic Religious Books, etc. Exporters of Cotton Piece-goods.

#### CONTACT

For all  
your Electric  
Needs !!



**ASIATIC ELECTRIC TRADING CO.**  
46-48, Lohar Chawl, Bombay 2  
Phone: 29886

#### ASIATIC ELECTRIC CORPORATION

*Importers & Stockists of:*  
Electrical Goods. Sole Agents for India HEIM Electric. Berlin C2, East Germany.

*Manufacturers of:*  
Flame & Explosion proof Electrical installation material.

*Address:* Beauman Chambers, Ground Floor, Meadows Street, Bombay-1.

Phone: 251761 Grams: "DHOOTBIJI"

Asiatic Travel Service, 12, Marzban Road, Bombay 1. Phone Nos.: 26-3581/82/83. Grams: "AIRASIA". (For details please see "Travel Agents").

### ASSOCIATED BEARING COMPANY LIMITED

*Manufacturers of:*  
Ball & Roller Bearings and Components of Textile Machinery viz. Pendulum Weighting Arms, Top Rollers, Centring Sleeve Inserts and Tape Tension Pulleys.

*Office:*  
Mahatma Gandhi Memorial Building, Netaji Subhas Road, Bombay 2.

Telephones: 38224-5-6.

Telegram Address: "PENDBALL."

*Factory:*  
Chinchwad, Poona, Maharashtra.

*Board of Directors:*  
Shri Akbar Hydarli, *Chairman*.  
Shri Nani Ardeshir Palkhivala.  
Shri Nityanand Mangesh Wagle.  
Shri Nariman Khurshedji Suntook.  
Shri Carl-Otto Blomberg, *Managing Director*.  
Shri C. G. Kjellin.  
Shri Ardeshir Burjorji Billimoria.

Askay & Co. (Private) Ltd.—279, Bazargate Street, Fort, Bombay 1. Phone: 265542. Grams: "ASKCO" Bombay. Textile Importers & Exporters. Directors: S. Gore, N. Gore and A. Hamid.

**ASOK BROTHERS PRIVATE LTD.**  
Importers of all sorts of Paper & Boards, 104, Apollo Street, Fort, Bombay. Tel. Address: "ASOKBROS". Phone No. 254329.

Associated Advertisers and Printers, Ltd., 505, Arthur Road, Tardeo, Bombay No. 7. Printers & Printing Consultants.

**ASSOCIATED AGENCIES (BOMBAY),** 47, Poddar Chambers, Parsi Bazar Street, Fort, Bombay. Phone No. 254881 and 251751. Tel. Address: "Amonsulph." Indenters, Manufacturers' Representatives. Importers: Chemicals, Pharmaceuticals, Hardware, Metals, Paper, Stationeries and Sundries, Exporters: Seeds Grains, Spices, Textiles, etc.

**ASSOCIATED CEMENT COMPANIES LTD., THE,** Cement House, 121, Queen's Road, Bombay 1. P.O. Box No. 397, Tel. Addresses: "ACCAGENCY", "ACCPURCHEZ", "ACADMIN", "ACCGEOLOGY", "ACCCOLIERY", "ACCEXPAN", "ACCPERSNEL", "ACCFINACS", "ACCFABRIK", "ACCREST", "ACCPROD", "ACCLABOUR", "ACCEXECUTE", "ACCESTAFF." Phone No. 249111 (9 Lines).

*Directors:*—Mr. Dharamsey M. Khatau (*Chairman*), Sir Chunilal V. Mehta, K.C.S.I., Sardar Barkat Hyat Khan, Mr. Pratapsinh Mathuradas, Mr. S. Moolgaokar, Mr. P. S. Mistry, Mr. K. C. Bakhle, Mr. A. N. Haksar, Mrs. C. Ammanna Raja, Mr. N. K. Suntook, Mr. Devindar Nath, Mr. L. Sawhny, Mr. Mohamed Ali, Mr. Kantilal Nahalchand, Mr. J. M. Lalvani, Mr. S. R. Vakil, Mr. K. K. Lala, Dr. Ram K. Vepa.

*Secretary:*—Mr. H. D. Unwala.

*Managing Agents:*—Cement Agencies Ltd., Cement House, 121, Queen's Road, Bombay. Tel. Address: "ACCAGENCY".

*Directors:*—Mr. A. N. Haksar (*Chairman*), Mr. Dharamsey M. Khatau, Mr. S. Moolgaokar, Mr. P. S. Mistry, Dr. R. R. Hattiangadi, Mr. P. K. Mistry, Mr. B. N. Reporter, Mr. K. R. Coorlawala, Mr. Ranvir M. Khatau.

*Managing Director:*—Dr. R. R. Hattiangadi.

*Management Advisory Committee:*—Mr. S. N. Cooper, Mr. S. R. Dolasa, Mr. M. H. Engineer, Mr. P. N. Gulati, Mr. Himmat Singh, Mr. M. M. Jayakar, Mr. K. K. Nambiar, Mr. S. N. Sopory, Mr. K. V. Talcherkar, Mr. S. V. Utamsingh.

Associated Dental & Medical Supply Co., Dental Goods Dealers. Yusuf Building, Mahatma Gandhi Road, Bombay 1.

**ASSOCIATED ELECTRICAL INDUSTRIES (INDIA) PRIVATE LTD.,** Sales Division, Indian Mercantile Chambers, Nicol Road, Ballard Estate, Post Box No. 484. Telephone Nos. 26-1231 (5 lines). Tele. Address: "MAINLAND." *Head Office:* Calcutta. *Office at:* Bombay, Bangalore, Coimbatore, Delhi, Madras and Nagpur. *Managing Director:* D. D. Young; *Manager, Bombay Office:* D. G. Goverdhan. *Engineers:* B. B. Bhathagar, T. Srihari, S. F. Mehta, S. Balagopal, S. G. Wagh & N. L. Demany.

**ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LTD.** Scientific Instrument Manufacturers & Manufacturers' Representatives.

*Bombay Office:*—India House, Fort Street, Bombay 1. P.O. Box No. 119.

Telephone: 261658.

Telegram: "AIMILBOM".

*Manufacturers of:*—Laboratory Apparatus and Soil, Cement and Fuel Testing Equipment.

*Dealers in:*—Scientific, Surveying, Optical, Electrical, Communication, Vacuum and other Types of Instruments.

Associated Steel & Tool Corporation, Steel & Alloy Tool Steel Merchants, 116, Nagdevi Street, Bombay 3.

**ASSOCIATED TEXTILE ENGINEERS,** (*Props.:*—A. T. E. Private Ltd.). Textile Machinery Merchants and Engineers, 43, Forbes Street, Fort, Bombay-1. Phone No.: 256771. Grams: "CORATEX."

**ATLAS ASSURANCE CO. LTD.,** Established 1808).

*Head Office:* Royal Exchange, London, E.C. 3.

*Bombay Branch:*—Indu House, Dougall Road, Ballard Estate, Bombay 1. Tel. Address: "ATLAS". Phone No. 26-4022. Post Box 8. Branch Manager: M. M. Chakrabarty.

Atlas Engineering Corporation, Air Conditioning & Refrigeration Engineers. Authorised dealers for 'Chrysler-Air-Temp' Equipment. Importers & Stockists of Air Conditioning and Refrigeration Equipment & Accessories, Kitab Mahal, 192, Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 265234. Grams: "ICYKOOL."

**AUDCO INDIA LIMITED.** (Larsen & Toubro Limited in Collaboration with AUDCO Limited of U.K.). *Registered Office:* L. & T. House, Ballard Estate, Dougall Road, Bombay 1. Phone: 264411/9. *Factory:* Saki-Vihar Road, Powai, P.O. Box 8901, Bombay 72 AS. Phone: 581501/10. *Managing Agents:* L. & T. (Management) Private Limited. Manufactures Lubricated taper plug valves in cast iron, semi-steel, steel, stainless steel and alloys.

*Directors:* H. Holck-Larsen, N. M. Desai, Gunnar Hansen, E. B. Leach, D. P. H. Macormack, G. M. Ranson.

*Selling Agents:* Larsen & Toubro Limited, P.O. Box 278, Bombay 1. Telephone: 264411/9. Grams: "LARSENPRO." Telex: TLX 246.

### AUTO ACCESSORIES (INDIA) LTD.

Manufacturers of K.L.G. & TAFT Spark Plugs, Bicycle Tube Valves & Components for the Automobile & Cycle Industry.

*Office:*  
Forbes Bldg., Home Street, Bombay 1.

Telephone: 268081.

Grams: "NEWPHASE" (FT), Bombay.

*Factory:*  
Masrani Estate, Old Kurla, Bombay 70.



## AUTO AGENCY

Importers and Wholesalers in Automobile Parts, Accessories and Tools.  
SAE Bolts, Nuts and Springs Centre Bolts.

Sarojini Sadan, Congress House,  
Vithalbhai Patel Road, Bombay 4.  
Grams: "RIVET" Phone: 71481.

Auto-Equipment Private Ltd., Opera House  
Tram Terminus, Bombay 4. Direct Importers of Automobile Parts and Accessories.

Autogenous Welding & Repair Co. Pvt. Ltd.  
Welding Specialists & Heavy Machinery Repairers. 63, Fergusson Road, Bombay 13.

**AUTOMATIC ELECTRIC PRIVATE LTD.**, "Rectifier House", Naigaum Cross Road, Bombay 31. Grams: "AUTOMETERS". Electrical Engineers & Manufacturers of Power Transformers—Oil & Air Cooled, Constant Voltage Transformers, Line Voltage Correctors, Automatic & Manual, Saturable Reactors, 'Dimmerstat' continuously variable Auto Transformers, Magnetic Amplifiers, SIL Metal Rectifier Tubes, AC/DC Conversion Units, Telephone Exchange Power Supplies, Cinema Arc Lamp Power Supplies, Battery Chargers, Electroplating Rectifiers, Instrument Transformers, Switchboard & Portable Voltmeters & Ammeters, Frequency meters, Synchroscopes.

## AUTOMOBILE ANCILLARIES OF INDIA PRIVATE LTD.

Manufacturers of "Matchless" Radiators, Cores and Heat Exchangers for Automobile, Industrial & Agricultural Engines.

Suppliers to the Ministry of Defence, Premier Automobiles, Bajaj Tempo Ltd., Jessops, Kirloskar Engines, Mahindra & Mahindra Ltd., & Industrial & Agricultural Engines Manufacturers.

### Office & Factory:

Kandivli Industrial Estate,  
M. G. Road, Bombay 67.

Phones: 692848, 692806.

### Managing Directors:

Mr. K. B. Patel.  
Mr. H. V. Patel.

**AUTOMOTIVE MANUFACTURERS PRIVATE LTD.**, 108, Bazaar Ward, Kuria, Bombay 70. Main Dealers for Leyland & Albion Commercial Vehicles and Diesel Engines for the States of Maharashtra, Gujarat and Andhra Pradesh.

Ayurvedashram Pharmacy Ltd., Dealers in Ayurvedic Medicines, 202, Girgaum Road, Bombay 4.

**AZAD BRUSH CO.**, Manufacturers of Industrial, Textile and Toilet Brushes, Tooth Brushes & Shaving Brushes etc. Madhavdas Pasta Road, Dadar, Bombay, 14DD. Phone: 441663. Grams: "BRUSHAZAD", Bombay 14DD.

**B. A. & BROTHERS (BOMBAY) PRIVATE LTD.**, Manufacturing Chemists, Drugs & Pharmaceutical Distributors, 98, Princess Street, Bombay 2. Phone: 22939. Grams: "BABULINE".

**B. B. ELECTRIC & AUTO STORES**, Direct Importers of Electrical and Insulating Materials, 89, Princess Street, Bombay 2. Phone: 30795. Grams: "BIBIELECT".

## B. CHOWDHURY & CO.

Engineers and Manufacturers'  
Representatives.

### Importers and Suppliers of:—

"FAG" German Ball and Roller Bearings, "CFW" Oil Seals, "SEEGER" Circlips, "SCHNORR" Disc Springs, etc.

Manufacturers of: All kinds of High Pressure Mercury Vapour Lamps including Blackwood Lamps, suitable chokes and fittings.

Address: Indian Globe Chambers,  
7th Floor, Fort Street, Fort, Bombay 1.  
Telephones: 26-3479; Telegraphic Address: "BISUKHI."

### Branches:

188, Canning Street, Calcutta; 11-A/35, Mount Road, Madras 2; 3E/4, Jhandewalan, New Delhi; G. T. Road, Opp. Jagraon Bridge, Ludhiana; Main Road, Ward 5, Ranchi.

### Distributors for:

KUGELFISCHER GEORG SCHAFER & CO., West Germany. Manufacturers of "FAG" Ball and Roller Bearings.

### Sole Agents for:

CARL FREUDENBERG, West Germany. Manufacturers of "CFW" Simmering Oil Seals.

ORBIS, G.m.b.H., West Germany. Manufacturers of "SEEGER" Circlips.

ADOLF SCHNORR, West Germany. Manufacturers of "SCHNORR" Disc Springs.

B. F. Davar & Co., Chemical Engineers.  
41, Queen's Road, Bombay 2.



Phone No. 326980. Grams: "ALERTDEAL".

B-Tex Ointment Mfg. Co. 24, Bapu Khote Street, Bombay 3.

**BABCOCK & WILCOX OF INDIA LTD.**, Head Office: Ilaco House, 1 & 3, Brabourne Road, Calcutta 1. Contractors, Erection & Service Engineers for Babcock & Wilcox Ltd. Patent Water Tube Boilers, Pressure Vessels, Thermal Power Plant equipment, Cement-making machinery and other Heavy Engineering products manufactured by ACC—Vickers—Babcock Ltd., Bombay Office: 10, Queen's Road Estate, Bombay 1.

Babulal & Bros., Millgin Stores & Pipe fittings, 26, Nagdevi Cross Lane, Bombay 3.

# bajaj

**BAJAJ ELECTRICALS LTD.**, Electrical Engineers, Manufacturers & Contractors. 45-47, Veer Nariman Road, Bombay 1. Telephone: 25-3841. Telegrams: "SOFTLITE".

### Products Handled:—

Electric Lamps, Fluorescent Tubes, Distribution Transformers, Arc Welding Transformers, Household Electrical Appliances, Scientific & Electrical Measuring Instruments, Bakelite Accessories, Plastic Lamp Shades, Electric Wires & Cables and KASSELS Fans.

### Branches at:—

Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder and Bangalore.

Bakelite (India) Private Ltd., India House, Fort Street, Bombay 1.

**BAKER, A. M., & CO.**, Hardware Tools, Mill & Engineering Stores Merchants, Govt. & Rly. Contractors, Also Fire Fighting Equipment. 218, Nagdevi Street Bombay 3. Phone: 327443. Grams: "LEADPIPES".

Baker Brothers, N. C. Lacquers, Varnishes, Enamels and Thinners for all purposes. 31, C. P. Tank Road, Bombay 4. Phone No. 334241 (Office) & 370207 (Factory). Grams: "BAKERCOLOR".

**BAKER PERKINS (EXPORTS) LTD.**, INDIA—Representing The Baker Perkins Group of Companies, England. Designers and development engineers, and manufacturers of food processing machinery, universal mixers for every industrial purpose, chemical machinery, machinery for the manufacture of man-made fibres, foundry machinery, plastics manufacturing equipment, soap making machinery, laundry machinery, wrapping and packaging machinery of all types for a variety of industries, dispersion equipment for the paint industry including ball and pebble mills, kinetic dispersion mills, mixers and porcelain pot mills, industrial and commercial refrigerating and dehumidifying plant, conveying and mechanical handling equipment, and mechanical welding shop plant, and the foremost manufacturers of rotogravure and flexographic printing presses for the packaging industry. 8, Dongersey Road, Malabar Hill, Bombay 6. Phone: 364006. Grams: "BAKEXPORT".

**BAKUBHAI AMBALAL PRIVATE LTD.**, Shashinag House, 13, Wittet Road, Ballard Estate, Bombay-1. Telegrams: "EXTENSION". Telephone: 264641. Exporters of Cotton Textiles, Handloom Silk, Handicrafts, Woollen Carpets, Gum, Spices, etc.

Bala Appaji & Son, Manufacturing Jewellers. 9A, Bruce Street, Bombay 1.

Ball Bearing & Machinery Corporation—Ball & Roller Bearings Merchants, 172/174, Nagdevi Street, Bombay 3.

**BALMER LAWRIE & CO. LTD.**, Machinery and Metal Merchants, Electrical, Civil, Mining, Mechanical and Structural Engineers, Rolling Stock and Crane Manufacturers. Shipping and Passenger Agents.

Head Office: CALCUTTA.

21, Netaji Subhas Road, Calcutta-1.

Telephone: 22-6871 (18 lines).

Telegrams: "BALMER".



**Branches : BOMBAY.**

5, Graham Road, Ballard Estate, Bombay-1.

Telephone : 26-1494-6.

Telegrams : "BALMER".

**NEW DELHI.**

Inderani Bldg., 1/5-B, Asaf Ali Road, New Delhi.

Telephone : 26084.

Telegrams : "BALMER".

**ASANSOL.**

Grand Trunk Road (West).

Telephone : 2648.

Telegrams : "BALMER".

**London Correspondents :**

ALEX LAWRIE & CO., LTD.,

Dunster House, 37, Minclag Lane, London, E.C. 3.

Codes used—A.B.C. 6th and Bentley's.

**Directors :**

D. Manson (*Mg. Director*).

N. N. Atal (*Mg. Director*).

C. G. Montgomery (*Mg. Dir.*).

**Bombay Office :**

**Bombay Manager :** C. K. Sinha.

**Managing Agents of :**

British India Elec. Con. Co., Ltd.

**Secretaries of :**

The Bengal Flour Mills Co., Ltd.

Bridge & Roof Co. (India) Ltd.

Industrial Containers Ltd.

Steel Containers Ltd.

Hope's Metal Windows (India) Ltd.

**Overseas Agencies**

A. E. I. Lamps & Lighting Ltd., England.

Aerex Ltd., England.

Alley & McLellan Ltd., England.

A. N. F. Les Ateliers De Construction Du Nord De La France, France.

Austin Hoy & Co. Ltd., England. Mfrs. of Lockfas Picks & Chains.

Blackstone & Co. Ltd., England.

British Belting & Asbestos Ltd., England.

British Iron & Steel Corporation, England.

Ceag Ltd., England.

The Cement Marketing Co. Ltd., England.

Dorman Long & Co. Ltd., England.

Dowty Mining Equipment Ltd., England.

D. P. Battery Co. Ltd., England.

Electric Construction Co. Ltd., England.

Ewart Chainbelt Co. Ltd., England.

The Farval Corporation, U.S.A.

Farvalube Ltd., England.

Head Wrightson Stockton Ltd., England. Mfrs. of Safety Hooks.

Hill Porter (Newcastle) Ltd., England. Mfrs. of Lighting fittings for Mines.

Hoyt Metal Co. of Great Britain Ltd., England.

IOCO Ltd., Scotland.

Johnson & Phillips Ltd., England.

Lister Blackstone Marine Ltd., England.

Lister Blackstone (Rail Traction) Ltd., England.

Masonite Corporation, U.S.A.

Mavor & Coulson Ltd., Scotland.

Merryweather & Sons Ltd., England.

Midland Electric Manufacturing Co. Ltd., England.

Nalder Bros. & Thompson Ltd., England.

Penman & Co. Ltd., Scotland.

The Power Plant Co. Ltd., England.

Prolley Mining Developments Ltd., England.

R. A. Lister & Co. Ltd., England.

Reliance Rope Attachment Co. Ltd., England.

Sheepbridge Equipment Ltd., England.

Hackbridge-Faraday Electrics Ltd., England.

Standall Engineering Ltd., England.

Sun Insurance Office Ltd., England.

The United Flexible Metallic Tubing Co. Ltd., England.

Walsall Conduits Ltd., England.

**Indian Agencies :**

Asbestos Cement Ltd., Bombay.

Associated Electrical Industries India (P) Ltd., Calcutta-1.

The Cement Marketing Co. of India Ltd., Bombay.

Eyre Smelting Ltd., Calcutta-23.

Fort Gloster Industries Ltd., Calcutta-1.

Goodlass Nerolac Paints (P) Ltd., Bombay-1.

Head Wrightson India Ltd., Calcutta-1.

Indian Cable Co., Ltd., Calcutta-1.

J. H. Fenner & Co. (India) Ltd., Calcutta-1.

Indian Iron & Steel Co. Ltd., Calcutta-1.

Indian Steel & Wire Products Ltd., Singbhum.

The Jeypore Timber & Veneer Mills Private Ltd., Calcutta.

Killick Nixon & Co. Ltd., Bombay-1.

The National Insulated Cable Co. of India Ltd., Calcutta-1.

Pioneer Plastic Works Private Ltd., Calcutta-1.

Plywood Products, Sitapur, U.P.

Suburban Electrical Engineering Co. Private Ltd., Calcutta-14.

Tata Iron & Steel Co., Ltd., Calcutta-1.

**Tea Companies :**

Jokal (Assam) Tea Co. Ltd.

Jhanzie Tea Association Ltd.

British India Tea Co. Ltd.

Dejoo Tea Co. Ltd.

Doolahat Tea Co. Ltd.

Harmutty Tea Co. Ltd.

Meleng Tea Estate Ltd.

Makum (Assam) Tea Co. Ltd.

Namdang Tea Co. Ltd.

Deckiajuli Tea Estate.

**Travel & Shipping Department :**

Agents for all principal Steamship Companies, Air Lines and Indian Railways.

Tourist Agents in the approved list of the Government of India.

Baloise Marine Insurance Co., Ltd., The, of Basle (Switzerland). Principal Office for India : French Bank Building, Horn Street, Bombay 1.

Balsara & Co. Private Ltd., Sanitary Engineers. 43, Meadows Street, Bombay 1.

**BASSEIN CERAMICS PRIVATE LTD.,**

324, Cook's Bldg., 2nd floor, Dr. Dadabhoy Nowroji Road, Bombay 1. Phone : 252644. Grams : "KARDWEB". Manufacturers of Chemical Stoneware, and Porcelain Tower Packings, Refractory Tubes, Titanium Thread Guides and other special Porcelain Items.

**BATLIBOI & COMPANY PRIVATE LIMITED.**

Regd. Office : P. O. Box 190A, Forbes Street, Fort, Bombay 1.

Phones : 255451 (6 lines).

Grams : "BATLIBOICO".

Telex : 011-284.

City Branch : Nagdevi Cross Lane, Bombay-3.

**Other Branches :** Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada.

**Resident Representative :** Ranchi.

**Associate :** Batliboi (Private) Ltd., Silver Jubilee Park Road, Bangalore-2.

Heavy & Light Machine tools of all descriptions, Milling Machines, Pharmaceutical machinery, Textile Machinery, Hydro Extractors, Factory Tie Saving Devices, Machines for Shoe & Leather Industries, Industrial Vacuum Cleaners, Industrial Air-Conditioning Equipment, Automatic Control & Recording Instruments, Wood Working machinery, Pulverizers, Shearing Machines, Power Presses, Flexible Grinders, Dynamo, Hammers, Sluice Valves, Concrete Mixers, Circle Cutting, Pill-making Machines, Air-compressors, chucks, Boilers, metal-cutting bandsaw machines, triple spur gear chain pulley block, furnaces, Electroplating & polishing machinery and materials, Sheet-metal working machines, Engineers' Steel Files, Vices, Hacksaw Blades, Diamond Dressers, Welding Electrodes, Electrical equipments, Diesel Engines and Pumps, Rotary pumps, Switches, Starters, Cranes, Water Heaters, Kettle Elements, Electric Hoists, Complete Hydro-electric Thermal Power Station Equipment, special alloy steel, Aluminous cement, 'Cement Fondu' (Refractory cement) etc.

**Batliboi, C. J., & Co., Manufacturers' Representatives and Commission Agents.** 319, Dr. Dadabhoy Naoroji Road, Fort, Bombay. Phone : 251167.

**BATLIVALA & KARANI, Share, Stock, Finance and Exchange Brokers, Union Bank Building, Dalal Street, Fort. Partners—B. A. Billimoria, N. H. Karani, S. B. Billimoria, P. D. Billimoria, M. A. Karanjia and S. A. Karanjia. Tel. Address : "Placidity." Phone No. 25-5401-2-3.**

**BAYER INDIA LTD.**

Nagin Mahal, Vir Nariman Road, Bombay-1.

Manufacturers of Agro-Chemicals, Rubber Chemicals, Pharmaceuticals etc.

**BEARDSSELL, W. A. COMPANY (PVT.) LIMITED,** Dhan Nur Building, 15-16, Sir P. M. Road, Post Office Box No. 432, Bombay 1.

**Head Office :** No. 8 Second Line Beach, Post Box No. 7, Madras-1.

**Branches at :** Calcutta, New Delhi, Bangalore, Coimbatore and Cochin.

**Managing Director :** M. E. Bourcier.

**Directors :** B. V. Reddy, D. Cox.

**Activities :** Airconditioning & refrigeration—all types Insulating materials (THERMOCOLE) Paper, Electric Motors, Handloom and Mill goods, Chemicals, BEADLOK aluminium grid suspension system, Textile Machinery and Textile accessories.



**BECLAWAT OF INDIA LTD.,** Manufacturers of Windows and Doors equipment for Ships, Railway rolling stock, Omnibuses, Road Transport Vehicles, etc. *Office:* Churchgate House, 32/34, Veer Nariman Road, 4th Floor, Fort, Bombay 1. Phone No. 254921. *Works:* Post Karamsad via Anand, Gujarat. Tel. 295. Grams: "BECLAWAT", Karamsad.

**BEECHAM (INDIA) PRIVATE LTD.,** Manufacturers of Pharmaceuticals and Toiletory products. Beecham House, Pitamberwadi, Off Lady Jamshedji Road, Mahim, Bombay 16. Phones: 453286 and 453287. Grams: "Beechind".

**BELL & CO. (PRIVATE) LTD.,** Agents for Indian "DAISY" Sewing Machines, Bell & Co.'s Building, Sir Pherozeshah Mehta Road, Fort, Bombay-1. Tel. Address: "BELLCOM". Phone No. 255213.

**BELLARES PRIVATE LTD.,** Cheque-writers, Office Systems & Equipment Specialists. *Sole Distributors:* AMES SUPPLY COMPANY (U.S.A.). Spare Parts, Tool & Accessories for typewriters, Adding & Calculating Machines. *Manufacturers of Heavy duty "MAGNOLIA" Paper Punch and chequewriters.* 210 A, Lamington Road, Post Box No. 4101, Bombay 7. Grams: "INSPIRON". *Factory:* A-374, Thana Industrial Estate, Thana (Maharashtra).

## BELTEX LIMITED

Managing Agents:  
**KARAKA & CO.**

Manufacturers of Leather Beltings, Picking Bands, Buffers, Picker Savers, Check Straps, Check ends, Laces and other sundry loom fittings. Manufacturers of Olive Green Picking Bands in India.

*Head Office:*

Ellis Bridge, Ahmedabad 6. Phones:  
Office: 7206, Works: 2940.

Grams: "LEATEX" Ahmedabad.

*Bombay Branch:*

43, Tamarind Lane, Bombay 1.  
Phone: 25-3707.

Grams: "RUSHNABAND"  
BOMBAY.

Bennett & Co., Govt. Auctioneers & Valuers,  
120, Apollo Street, Fort.

Bengal Chemical & Pharmaceutical Works  
Ltd., 502, Cadel Road, Bombay 28.

## BENNETT, COLEMAN & CO., LTD.

Publishers and Fine Art Printers.

Proprietors of—

*The Times of India.*

*The Illustrated Weekly of India.*

*The Evening News of India.*

*The Economic Times.*

*Filmfare.*

*Femina.*

*Navbharat Times (Hindi).*

*Maharashtra Times (Marathi).*

*Dharmayug (Hindi).*

*Parag (Hindi).*

*Sarika (Hindi).*

*Madhuri (Hindi).*

*Dinaman (Hindi).*

*Science Today.*

*Indrajai Comics (English, Hindi, Marathi, Gujarathi, Tamil & Bengali).*

*The Times of India Annual.*

*The Times of India Directory and Year Book.*

*Head Office:* The Times Building, Dr. Dadabhai Naoroji Road, Bombay 1.

Phone: 268271 (15 lines). Post Box 213.  
Telegraphic Address: "INDIANA."

### ADMINISTRATIVE:

P. K. Roy, M.Sc., M. I. Ptg. M.,

*General Manager.*

P. L. Sab, B.Com., *Secretary and Accountant.*

### EDITORIAL:

#### The Times of India.

*Editor:* N. J. Nanporia.

*Asst. Editors:* B. K. R. Kabad;  
M. V. Mathew; N. S. Muthana;  
K. R. Sundar Rajan; A. S. Abraham;  
Rahul Singh.

*News Editor:* P. Venkatram.

*Asst. Editor (Commercial):* A. S. Bhaskar.

*Asst. Editor (Sports):* K. N. Prabhu.

#### The Evening News of India.

*Editor:* N. J. Nanporia.

#### The Economic Times.

*Acting Editor:* Dr. D. K. Ranganekar.

*Asst. Editors:* T. T. Vijayaraghavan;  
N. Krishnan; A. R. Rao.

*News Editor:* T. K. Seshadri.

*Chief of Research Bureau:* K. A. Antony.

*City Editor:* P. N. Krishnaswami.

#### Navbharat Times.

*Editor:* Akshaya Kumar Jain.

*Asst. Editors:* Anand Vidyalkar; Thakur Rampal Singh.

*News Editor:* Hari Dutta Sharma.

*Resident Editor (Bombay):* Mahavir Adhikari.

#### Maharashtra Times.

*Editor:* D. B. Karnik.

*Asst. Editors:* G. S. Talwalkar; M. P. Shikhare.

*News Editor:* D. V. Gokhale.

#### The Illustrated Weekly of India.

*Editor:* A. S. Raman.

#### Filmfare.

*Editor:* B. K. Karanjia.

#### Femina.

*Editor:* Dr. K. D. Jhangiani.

#### Dharmayug.

*Editor:* Dr. Dharam Vir Bharati.

#### Parag.

*Editor:* Anand Prakash Jain.

#### Sarika.

*Editor:* Kamaleshwar,

#### Madhuri.

*Editor:* Arvind Kumar.

#### Science Today.

*Editor:* Surendr Jha.

#### Dinaman.

*Editor:* S. H. Vatsyayan.

#### The Times of India Directory & Year Book.

*Editor:* N. J. Nanporia.

*Asst.-in-charge:* K. R. Menon.

#### Advertisement Department.

*Advt. Manager:* T. S. Ramnath.

*Asst. Advt. Managers:* P. V. Neelakantan,  
Ronny D. Mistry.

*Assistants:* Prabir Roy, Nemchand Jain,  
M. R. Kothari, N. Venkatraman.

#### Representatives:

R. C. Aggarwal, Camer Saleh, J. M. Patel, N. M. Patel, R. M. Patole, M. Savara, B. M. Sharma, H. D'Souza, V. M. D'Souza, B. L. Raizada.

### Circulation Dept.

*Circulation Manager:* T. S. Subramanyan (Admn.).

*Circulation Manager:* V. S. Patil (Development).

### Personnel Dept.

*Personnel Manager:* V. G. Karnik.

*Labour & Welfare Officer:* K. A. Lalchandani.

### PRODUCTION AND COMMERCIAL PRINTING DEPT.

*Production Manager:* K. C. Raman,  
Dip. Ptg. (Leeds), M.I. Ptg. M.

*Assistant Commercial Manager (Sales):* Jal S. Cardmaster.

*Asst. Prod. Manager (Job):* A. Davidson.

#### Representatives:

G. B. Sivarama Krishnan; S. V. Raman.

### Art Department.

*Art Director:* R. Sanigiri.

### Composing Dept.

*Superintendent:* S. T. Kolte.

### Machine Dept.

*Superintendent:* M. P. Kanga.

### Binding Dept.

*Superintendent:* K. A. Valdia.

### Process Dept.

*Superintendent:* M. Brown.

### News Dept.

*Superintendent:* K. A. G. Krishnan.

### Rotary Dept.

*Superintendent:* V. K. Bhasin.

### Photogravure Dept.

*Superintendent:* R. Dango.

### Engineering Dept.

*Chief Engineer:* K. N. Iyer.

### Books Division.

*Publications Officer:* B. N. Shukla.

### Stores & Despatch Dept.

*Superintendent:* T. P. George.

### London Office.

*Manager:* G. M. Biggs.

8, Albemarle Street, W.1.

Phones: Hyde Park 0016 and 0017.

Cables: "INDTRADEX", London.

### Calcutta Office.

*Manager:* J. S. Jogi.

18/1, 18/2, Govt. Place East.

Phone: 239311 (3 lines).

### Delhi Office.

*Manager:* J. M. D'Souza.

*The Times of India (Delhi Edition).*

*Resident Editor:* Shamlal.

*Asst. Editors:* Girilal Jain, Ashok Thapar.

7, Bahadur Shah Zafar Marg,

New Delhi 1.

Phone: 274161 (8 lines).

### Madras Office.

*Manager:* K. Pattabhiraman.

42, Whites Road,

Royapettah,

Madras 14.

Phone: 82352.

### Poona Office.

*Office-in-charge:* Pitambarkumar.

407/1, Tirth Bhavan,

Quarter Gate,

Poona 2.

Phone: 25447.



**BHAGAT & SONS PRIVATE LTD.**, Managing Agents for Structural Engineering Works Ltd. Registered Office:—Maneckji Wadia Bldg., 127, Mahatma Gandhi Road, Fort, Bombay 1.

*Chairman & Managing Director*:—Mr. I. N. Bhagat.

Residential Address at Bombay: Anand Bhuwan, Carmichael Road, Bombay 26.  
Phones: Office: 255601-2-3-4. Res.: 71908. Tel. Add.: "BHAGATSON."

**Bharat Bijlee Ltd.**, Udyognagar, Near King's Circle Rly. Station, Bombay 22.

**Bharat-Chemicals Co.**, The. Textile Dyes & Chemicals, 331, Samuel St., Vadgadi, Bombay 3. (BR). Phones: 324401 (Office), 471601 (Res.). Grams: "BHARCHEM" (MD).

**Bharat Dyes & Chemical Co.**, Dyes, Chemical & Textile Auxiliaries. Merchants, 119, D'Souza Street, Bombay 3.

**Bharat Electric and Engineering Corporation**, 21, Dalal Street, Fort, Bombay. Telegram: "Godgrace." Phone 255374. Dealers in all kinds of machinery and spares.

**BHARAT ENGINEERING STORES**, Engineering Stores & Hardware Merchants. 113, Nagdevi Street, Bombay 3. Phone: 323193, Grams: "Uniontools".

**Bharat Industrial Corporation**, Oil Mill Machinery Merchants, Petit Compound, Grant Road, Bombay 7.

**Bharat Pulverising Mills Private Ltd.**, Hexamar House, 88-A, Sayani Road, Bombay 28.

**BHARAT TILES & MARBLE PRIVATE LTD.**, 32, Apollo Street, Bombay 1, India. Telegrams: ENTENTE, Bombay. Telephone: 251291/92.

*Manufacturers of*: Terrazo, marble-mosaic and plain coloured cement tiles for floors and walls. Non-slip tiles for staircase steps & footpaths. Special heavy-duty STILAN tiles for floors of factories, mills, railway platforms, etc. Suppliers of Granite and Marble in white and beautiful colours, for lining of walls, facades, columns, staircases, and for table tops, bank counters, etc.

*Suppliers of*: THERMO-LITECRETE lightweight building and insulating boards for insulating asbestos and terrace roofs; for controlling condensation and humidification loads in mills; for lightweight partitions and false ceilings in buildings, etc.

*Manufacturers of*: KIP-KLIN, cleaning powder; HANDY-SOAP, an excellent cleaning soap for grimy and greasy hands, dirty machinery parts, basins, floors, etc.; ARSHAN, a special floor cleaner for polished tile and marble floors.

Main factory at Bombay.

**Bharat Tool Manufacturing Co., Ltd.**, Swastik Mills Compound, Fergusson Road.

**Bharat Trading Company**, Ball Bearing Specialists, 71, Nagdevi Cross Lane, Bombay 3. Phones: 323250 & 324338.

**Bharat Trading Co.**, Electroplating Material Dealers. 303, Sandhurst Road, Bombay 4.

**Bharat Umbrella Mfg. Co.**, 65, New Hanuman Lane, Bombay 2.

**Bhathena & Co.**, B. N. Stockists of: Copper, Brass, Galvanised & Steam pipes & Fittings, Asbestos goods, Flax Fire Hose, G. M. and C. I. Valves and Cocks, etc., etc. 100, Nagdevi Street, Bombay 3. Phone: 323155. Grams: "TEENAZ".

**BHAVNAGAR OIL & CHEMICAL INDUSTRIES PRIVATE LTD.**, *Manufacturers of*:—Medicinal Castor Oil, Refined Groundnut Oil, Salad Oil, "CASTAROMA" Hair Oil, perfumed Castor Oil etc.

*Sales Office*:—Bombay Mutual Building, D. Naoroji Road, Bombay 1.

*H. O. & Factory*:—Mahatma Gandhi Road, Bhavnagar.

*Managing Director*:—D. M. Merchant.

**BHAWOO KASINATH & CO.**, Cloth Merchants and Uniform Clothing Contractors. 63, Bhandari Street, near Null Bazar, Bombay 4. Phone: 332149. Grams: "PROGRESS".

**Bhawsar Home Furnishers & Decorators**, Manufacturers and Dealers of furniture and interior decorators. Show-room and Office, 66, Karwar Street, Mint Road, Bombay 1. Phone: 263771.

**Bhiwandwalla & Co.**, H. M. D. H., Salt, Sugar and Sugar Factories. 583, Chira Bazar, Girgaon Road, Bombay 2.



**THE BHOR INDUSTRIES LTD.**

*Manufacturers of* "RAJA" Brand Plastikloth, Oil Cloth, Book Binding Cloth, Waterproof Cloth, Fumigation Cloth, "NATARAJ" Brand Plastic film and Sheeting & Steelgrip P.V.C. Electrical Insulation Tape. Vynatile Flooring material.

*Regd. Office*:

Sir Vithaldas Chambers,  
16, Apollo St., Bombay-1.  
Trade enquiries to Sales Department,  
392, Cadell Road, Bombay 28.  
Grams: { Phone: 451418,  
"COVERCLOTH" { 451967, 451978.

**Bijlee Products Private Ltd.**, Electric Bulbs Mfrs., Dr. A. L. Nair Road, Bombay 8.

**BIOLOGICAL EVANS LIMITED**, Das Chambers, 25, Dalal Street, Bombay 1. Phones: 256561 and 256907. Grams: "BIOEXTRACT," Bombay. *Manufacturers of* Liver extracts (oral and injectable grades), Glycerophosphates, P.A.S., I.N.H., Heparin, Bacteriological Peptone and Specialistics of Evans Medical Ltd., Liverpool, such as Rondase, Dindevan, Marevan etc.

**Billion Plastics Private Ltd.**, 101, Himalaya House, Palton Road, Bombay 1. BR. *Items Manufactured*: Billion Brand P.V.C. Transparent and opaque Tubing, Sleeving, Pipes, Enema & Stethoscope Tubing, Threads, Cords, Caer, Strips, Extrusion of shapes and sections in plastics. Phone: 265573. Grams: "BILLION".

**BIPINKUMAR ELECTRIC CORPORATION**, Importers & Stockists of Electrical Accessories. 14, Tavawala Building, Lohar Chawl, Bombay 2.

**Birkmyre Brothers Ltd.**, *Manufacturers in India of* Hair, Cotton Belting, etc. "Hastings", "Birkbelt", "Revflex" and "Laflex" Belting—Canvas—Waterproof Covers—Hood Cloths—"V" Belting—Agents for Richard Lloyd & Co., Ltd.'s Leather & Rubber Belts, etc., etc. 12, Rampart Row Fort. Tel. Address: "Birkmyre". Phone No. 255183. Head Office: 87, Stephen House, 4, Dalhousie Square, Calcutta.

**Birla Brothers Private Ltd.**, Industry House, Churchgate Reclamation, Bombay 1.

**Blackie & Son (India), Ltd.**, Publishers, 102/5, Fort Street, Bombay 1. Phone: 26-1410. Grams: "Blackie", Bombay.

**BIERI PRIVATE LTD.**, *Manufacturers of* Artificial Jewellery, Lables and Display Material and Radio Decorative Components such as Medallions, Badges, Trimmings, Headings, Styling Bars, Knob Caps etc. from Aluminium—embossed, printed, anodised in bright colours. Office & Factory: Near Bus Terminus, Sion, Bombay-22 DD. Phone: 471291, 473855, 475565.

**BLUNDELL EOMITE PAINTS LIMITED**, A member of the Blundell-Permoglaze Group, London.

*Manufacturers of* quality industrial and decorative coatings.

*Regd. Office*: 1st Victoria Cross Lane, Mazagaon, Bombay-10 DD.

Phone: 378658-59-60. Grams: "EOMITE" Bombay 10.

*Managing Director*: A. K. Gupta.

*Senior Executive (Technical)*: N. S. Bharatia.

*General Sales Manager*: M. A. Rajkumar.

*Sales Divisions*: Western Sales Division and Bombay Industrial Sales Division: Rustom Building, Veer Nariman Road, Bombay 1. Phone: 251246-47. Grams: "BLUNPAINTS".

*Area Sales Depots*: Ahmedabad & Hyderabad.

*Northern Sales Division*: Jindal House, 9/1, Asaf Ali Road, New Delhi 1.

Phone: 271951-52. Grams: "BLUNPAINTS".

*Eastern Sales Division*: 3, Chowringhee Approach, Calcutta 13.

Phone: 236792, 237216. Grams: "BLUNPAINTS".

*Southern Sales Division*: Naheed Building, 91, Jayachamarajendra Road, Bangalore 2.

Phone: 28871 Grams: "BLUNPAINTS"

*Area Sales Depots*: Madras & Cochin.

**Soehringer-Knoll Limited**, Head Office: United India Bldg., P.M. Road, Bombay-1.

**BOLTON FINE ART LITHO WORKS**, (Estd. 1909), 274 Tardeo Road, Bombay 7. Multicolour quality work of precision. Accuracy & faithful reproduction guaranteed. Winner of numerous State Awards & A.I.F.M.P. Trophies. Phones: 367411, 12-13. Grams: "BOLTONLITO", Bombay 7.

## BOMBAY ART PRINTERS

*Specialists in printing of*:

Cartons, Lables, Literature, Booklets etc.

*Address*: Near Safed Pul, Kurla Road, Bombay-72.

Phone: 553676 & 55798.

**Bombay Ball Bearings Supply Co.**, Ball Bearings Merchants, 361, Samuel Street, Bombay 3.

**Bombay Brass & Metal Works**, 2nd Panjrapole Street, Bombay 4. Mfrs. of Stainless Steel Utensils.



**Bombay Building Materials Trading Co.,**  
Dealers in Sanitaryware, Bath Room  
fittings and Tiles. 73, Meadows Street,  
Bombay 1.

**BOMBAY AMMONIA PRIVATE LTD.,**  
*Head Office:* 298, Bazargate Street, Bom-  
bay and *Branch Offices at:* New Delhi,  
Madras & Calcutta. Suppliers of Refri-  
geration & Airconditioning Equipment for  
Cold Storages, Ice Plants, Central Air-  
conditioning Plants & Commercial Refri-  
geration Equipment. Phone: H.O. 252115-  
256039.

**BOMBAY BURMAH TRADING COR-  
PORATION LTD., THE,** 9, Wallace  
Street, Fort. Merchants, Timber, Tea,  
Coffee, etc. Directors: Pratapsinh Mathu-  
radas, Sir Jamsetjee Jeejeebhoy, Bart.,  
M. G. R. Aitken, Arvind N. Mafatlal,  
C. H. Campbell, Neville N. Wadia, C. G.  
Colclough, J. M. B. Gibbons and J. R.  
Henshaw. Wallace & Co.: Correspon-  
dents in Europe: Wallace Bros. & Co.  
(Holdings), Ltd., 4, Crosby Square,  
London, E.C. 3. Code, used: 2nd Bentley's.  
Tel. Address: "Romford".  
Phone No. 263032. P. O. Box No. 10077.

## BOMBAY COMPANY (PRIVATE) LTD.

Merchants, Industrialists, Importers and  
Exporters (Engineering Goods, Machinery,  
Wool, Piecegoods, etc.)

*Head Office:*—9, Wallace Street, Fort,  
Bombay-1.

*Branches:* Calcutta, Madras, Delhi, Cochin,  
Alleppey, Coimbatore, Calicut, Tutu-  
corin, Hyderabad and Bangalore.

*Chairman:* C. G. Colclough.

*Managing Directors:* F. C. Johnston, D. A.  
Bond.

*Directors:* V. C. S. Desikan, G. V. Nath.

*Bombay Office:* Sales:—J. F. B. King.  
*Schori Metal Spraying:*—N. N.  
Thadani.

### Associated Companies:

Pyrotex India Ltd., Bombay; Dental  
Products of India Ltd., Bombay;  
Fibreglass Pilkington Ltd., Bombay.

### Agents:

Chance Pilkington Optical Works (Specta-  
cle Glass).

*Sole Agents (Engineering Equipment):*—  
Arn Jung Lokomotivfabrik GmbH.,  
(Steam & Diesel Locomotives).

Badische Maschinenfabrik A.G.,  
(Foundry & Tanning Machinery)

Blaw Knox Ltd. (Excavators)

Bohler Bros & Co. Ltd. (Pneumatic  
Tools, Special Steels & Electrodes)  
California Chemical Corporation (Oro-  
nite Chemicals)

Davy Compressor Co. (Air Compressors)  
Degussa A. G. (Heat Treatment Fur-  
naces, Cyanide Salts)

F. W. Berk (Metal Spraying Plant &  
Equipment)

Fibreglass Limited (Heat, Sound &  
Electrical Insulation)

Fort William Co. Ltd., Calcutta (Wire  
Ropes)

Gebruder Klees (Foundry Laboratory  
Equipment)

George Hermann (Annealing Furnaces)

Guest & Chrimes Ltd. (Hydraulic Equip-  
ment & Venturi Meters).

Habag Export und Import GmbH.  
(Consultants for complete Manu-  
facturing Plants)

H. R. Hilfler-Dunn (Electronic Scale  
Preventors)

Henry Berry (Hydraulic Presses &  
Equipments)

James Equipment Co. (coil Forming  
Equipment)

Jones Stroud & Co. Ltd. (Glass Tapes &  
Sleeving)

Karl Buch GmbH. (Cast Iron Rolls)

Ken Mac International (Holt Equip-  
ment)

Lindeteves N. V. (Suppliers of Machi-  
nery & Technical Equipment)

Marglass Ltd. (Industrial Glass Fabrica)  
Metal & Pipeline Endurance Ltd.

(MAPEL) England (Consultants for  
Cathodic Protection and Welding  
inspection)

Otte Boge, Bielefeld, W. Germany  
(Compressors)

Peugeot Freres (Hand Tools)

Precision Tool & Mfg. Co. (Multi-spindle  
drilling machines)

Pyrotex Ltd. (Mineral Insulated  
Cable)

Robert Broadbent & Sons Ltd., Staly-  
bridge, England (Stone Crushers)

Roperwerk (Foundry Core Shooting  
Machines)

Russell & Stoll Co. Inc. (Flame-proof  
Electrical Equipment)

Speichim (Equipments for Chemical  
Industries)

Stardrill Keystone (Drilling rigs &  
equipment)

Taylor & Hubbard (Steam and rail  
cranes)

Technocommerz (Diesel Engines)

Vinar Limited, Calcutta (Structo Slot-  
ted Angles)

### South India only:—

John Thompson Wolverhampton (India)  
Ltd., (Boilers & Plants)

Reyrolle & Co. Ltd. (Heavy Electrical  
Equipment, Switchgear)

Robert Hudson (India) Ltd. (Light  
Railway equipment)

Martin Black & Co. Ltd. (Wire Ropes)

### Representation U.S.A.—

Schield Bantam Co. (Cranes & Exca-  
vators) Foundry Equipment Co. (Core  
and Mould drying ovens) Star Machi-  
nery (General Machinery)

*U. K. Agents:*—  
Wyer & Hawke

*Corresponding* } 4, Crosby Square  
*Firm:*—Wallace } London, E.C. 3.  
Brothers & Co }  
(Holdings) Ltd. }

*Tel. Address:* "CABRONADA"

Phone No. 26-3031 (Seven Lines)

Post Box 1081, Bombay.

**BOMBAY CYCLE & MOTOR AGENCY,  
LTD.,** 534, Sardar Vallabhbhai Patel  
Road, Bombay 7. Dealers for Dodge  
Cars & Trucks, Fiat Cars, Mopar Parts  
& Accessories, Distributor for 'Airtemp'  
& 'Premair' Room Air Conditioners. Tel.  
Address: "Cyclostors." Bombay. Phones:  
Office & Showroom 352381. Service Sta-  
tions: Haines Road, Worli: 376923; J.  
Tata Road, Churchgate: 246134. Air  
Conditioning Service Station: Industry  
Manor, Chowny Gully, Worli, Bombay 28.  
Phones: 452998 & 455075.

### BOMBAY DRUMS MANUFACTURERS

Estd. 1910.

24, Calicut Street, Safa Manzil,  
Fort, Bombay.

Manufacturers of Drums, Nut  
Bolt type, seaming type screw cap  
type, and cans for paste, dyes,  
chemicals, liquid, etc. Phone: 263042.

**BOMBAY GARAGE PRIVATE LTD.,**  
(Automobile & Refrigeration Engineers)  
Meher Buildings, Chowpatty, Bombay 7.  
Tel. 357651 (4 lines)—Grams: "FRIEND-  
SHIP".

*Dealers:* Plymouth Cars, Fargo Trucks,  
Palpar, Mopar, Fiat, Parts, Perkins  
Diesel Engines & Parts, MEC Batteries,  
Tyres, Allwyn Refrigerators, Accaire  
Air-conditioners & Water Coolers.

*Overseas Representatives for:* Cadillac,  
Buick, Pontiac, Oldsmobile, Vauxhall  
and Opel Cars, Frigidaire Products.

*Airconditioning & Refrigeration Dept.:*  
Radio House, 34/38, Apollo Street,  
Bombay 1. Tel.: 256191.

**BOMBAY GAS CO., LTD.,** Adminis-  
tration & Finance Offices and Show  
Rooms: (Ground floor), Empire House,  
214, Dr. Dadabhai Naoroji Road, Fort  
and Works—Chinchpokli, Parel, Bombay  
12.

*General Mgr. & Secretary:* S. Chowdhary.

*Tel. Add.:* "CHRISTOLITE." Phones:  
Works 379521 (3 lines), Administration  
and Finance Offices and Show Room:  
No. 261271 (3 lines), P. O. Box 85.

Bombay General Agency, Regd. General Mar-  
chandise and Stores Suppliers, Jiji House,  
Ravelin Street, Fort, Bombay 1. Tel.  
Address: "Faithful."

Phones: 327153.

Grams: "SISTACAR".

### BOMBAY HARDWARE TRADERS

79, Narayan Dhuru Street,  
Musjid Bunder Road,  
Bombay 3.

Importers & Dealers in All kinds of  
Screws, Bolts & Nuts, Boot & Shoe  
Materials, Hardware, Engineering  
Steel Files, Measuring Precision  
Tools, Steel Pipes & Fittings.  
Sole Selling Agents for "Jet Brand"  
Blue Cut Wire Shoe Tacks.

Bombay Insulated Cables Wires Co., 10,  
Himalaya House, Palton Road, Bombay 1.

Bombay Letter Foundry Private Ltd., Type  
Founders & Printers' Providers, 7A,  
Nickadwary Lane, Kandewadi, Girgaum,  
Bombay 4.

Bombay Machine Tools & Hardware Corpo-  
ration, Importers & Stockists of Engineer-  
ing Small tools, Electrodes and Electric  
portable drills, grinders, etc. 103, Narayan  
Dhuru Street, Bombay 3. Phone: 322702,  
Grams: "Wiregrip".

Bombay Mercantile Corporation, Lubricat-  
ing Oils and Diesel Engines Merchants.  
211, Nagdevi Street, Bombay 3. Phone:  
325982. Grams: "CORPBOMBER."

Bombay Metal Syndicate, Metal Manufac-  
turers & Merchants, 166, Kika Street,  
Gulaiwadi, Bombay 4. Phone: 331873  
and 333601. Grams: "ABBRASIVE".



for BETTER PRINTS

BLUE OR WHITE  
Use 'TELEPHONE' BRAND

**FERRO PRUSSIAN & AMMONIA  
PAPER**

Manufacturers:—

**BOMBAY MISCELLANIES  
PRIVATE LTD.**

Khan Mansil, 28, Calicut Street,  
Fort, Bombay 1.

Phone: 266523. Grams: "FEPRU".

Bombay Pencils Private Limited, Manufacturers of High quality Pencils, Artist colours and Inks, Kamer Building, Cawasji Patel Street, Fort, Bombay 1.

Bombay Plastic Corporation, Elphinstone Building, 10, Veer Nariman Road, Bombay 1.

**BOMBAY POTTERIES & TILES LTD.**, Manufacturers of Sanitaryware, Glazed & Acid proof Tiles, Insulators, Refractories etc. Pipe Road, Kurla, Bombay 70.

Bombay Rosin & Turpentine Co., Rosin & Turpentine Mfrs., Podar Chambers, Parsee Bazar Street, Bombay 1.

Bombay Safe Manufacturing Co., Steel Furniture Mfrs., 307, Kalbadevi Road, Bombay 2.

**BOMBAY SAMACHAR, THE**, "Red House", Horniman Circle, Bombay. Proprietors: The Bombay Samachar Private Ltd. Phone No. 255531. Tel. Address: "Samachar". G.P.O. Box No. 676, Bombay.

Bombay Scientific Glass Industries Private Ltd., 29, Veer Nariman Road, Fort, Bombay. Phone: 262920. Manufacturers of Laboratory Neutral Glass apparatuses, Mainly Ampoules, Vials, Saline Bottles, Regent Bottles, etc.

**BOMBAY SCOOTER & MOTOR AGENCY**, 43, Queen's Road, Bombay 2. Phone: 20086. Grams: "SRETOOCS". Distributors for Lambretta Scooters, Three wheelers and Scooterettes.

Bombay Silk Mills Ltd., Industrial Estate, Lalbaug, Bombay 12. Manufacturers of Georgettes, Crepes, Nylon & Polyester Shirtings. Phone: 374644. Grams: "EYEDOC."

Bombay Stationery Mart. Props: Gulam-husein Ahmedally & Co. Private Ltd., 7-A, Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 253897.

**BOMBAY STEEL CORPORATION**, Importers. Agents of Deutsche Stahl Metall Handelsgesellschaft, Berlin, German Democratic Republic, H.O. 140. Regd.: 472883. Retail Shop at Meadows Street, Bombay 1. Grams: "STEELHOUSE". Phones: 264766, 265077, 241, Kumbharwada, opp. 2nd Sutar Lane, Bombay 4. Phone: 331577; Residence: 472252.

Bombay Steel Supplies Private Ltd., K. T. Bldg., Broach Street, Bombay 9.

**BOMBAY SUBURBAN ELECTRIC SUPPLY LIMITED**, Registered Office: Killick House, Home Street, Fort, Bombay 1. Telegraphic Address: "Kindred". Telephone No. 262311. Managing Agents: Killick Industries Ltd., Technical Office: Central Administration Department, No. 5, Graham Road (4th Floor), Ballard Estate, Bombay 1. Telegraphic Address: "ADISEBS". Telephone Nos. 261741/261742 and 260783. Local Office: Electricity House, Santa Cruz (East), Bombay 55.

## BOMBAY SUBURBAN ELECTRIC SUPPLY LIMITED.

Local Office: Electricity House, Santa Cruz (East), Bombay 55 AS. Tel. 532211.

Officers: R. Y. Apte, B.Sc. (Engg.), M.I.E.E. Resident Engineer; M. R. Bhat, B.Sc. (Hons.), M.A., C.I.L.Sc., A.M.I.E.E., Dy. Resident Engineer; B. C. Amin, B.E. (Elec. Mech.), Distribution Engineer.

Bombay Swadeshi Co-operative Stores Co., Ltd., Western India House, Sir Phirozshah Mehta Road, Fort.

Bombay Tablet Mfg. Co., Manufacturing Chemists, Princess Street, Bombay 2.

Bombay Typewriting Institution, opp. The General Post Office, Bhatia Mitra Mandal, Fort Street, Bombay 1. Phone: 262484.

**BOOTS PURE DRUG CO. (INDIA) LTD.** Registered Office: 17, Nicol Road, Bombay 1BR. Phone No. 261436. Tel. Address: "Drugboots", Bombay. Factory: Sion, Bombay 22DD. Telephones: 472444 & 472445. Grams: "BURNOL".

Borivli Hosiery Mills, Estd. 1926. Hosiery Manufacturers, Dahanukar Building, 480, Kalbadevi Road, Bombay 2.

## BRADMA OF INDIA LTD.

Mfrs. of: Data writing Machines & Business System.

Head Office: Lakshmi Bldg., Sir P. M. Road, Bombay 1. Phones: 262981-82.

Sales & Service: 79, Dr. Annie Besant Rd., Worli, Bombay 18. Phone: 372746.

Factory: M.I.D.C., Industrial Estate, Plots C-17 & 18, Road 16, Thana. Phone: 591536.

Branches: Calcutta, New Delhi, Madras, Ahmedabad, Coimbatore, Bangalore.

Brady, H. W. & Company Limited, Brady House, 12-14, Veer Nariman Road, Merchants, Machinery Dealers, Exporters and Importers.

**BREUL & CO.**, Cotton Merchants, Brokers, Exporters & Commission Agents. Taj Building, Dr. Dadabhai Naoroji Road, Fort, Bombay.

J. K. S. Nicholson, Proprietor.

Tel. Address: "Breul." Phone Nos. 263981/2/3 (3 lines), G.P.O. Box No. 27.

Bright & Co. (Private) Ltd., Paints, Enamels & Varnishes manufacturers, 18, Commercial Chambers, Masjid Bunder Road, Bombay 3.

Bright Brothers Private Limited



156-A, Tardeo Road, Bombay 34. Manufacturers of Quality Plastic Articles for Home, Industry, Office and Gift Advertising.

Phones: 378549, 378549, 378540. Grams: "BRINOS".

Managing Director: T. W. Bhojwani.

## BRIMCO PLASTIC MACHINERY COR.

PORATION, Plot No. 15, Govt. Industrial Estate, Kandivli (West), Bombay-67. Phone: 6925. Grams: "BRIMSEAL". Bombay, Kandivli. Machinery and Equipments for Processing Plastics, Brimo Thermoplastic Extruders and Equipments for Extrusion of Tubular Film (Layflat Tubes), Rods, Strips, Sections, Plastic Cane, Monofilament, and Covering Wires and Cables, etc. from Polyethylene, Polystyrene, PVC, Cellulose Acetate, high Density Polyethylene, Polypropylene, etc. Also Injection Moulding Machines, Granulators, Palletizing, Colouring, Reprocessing Equipments, and Automatic Bag Making Machines. Sole Selling Agents for whole of India: William Jacks & Company Limited.

## BRITANNIA BISCUIT CO., LTD.

Registered Office: Calcutta. Bombay Office and Factory: Reay Road Bridge, Bombay 10.

Telephone: 373581 (3 lines). Telegraph: "BISCUITBOX."

## BRITISH DRUG HOUSES (INDIA)

PRIVATE LTD., Manufacturers of Pharmaceuticals and Laboratory Chemicals, associated with the BDH Group Ltd., London.

Head Office:—BOMBAY: 8, Graham Road, Bombay 1. P.O. Box 1341. Phone No. 26-3138, 26-3139.

Branches at:—

CALCUTTA: 58/D, Chowringhee Road, Calcutta 16, P.O. Box 9024. Phone No. 44-5630.

DELHI: Harbans Singh Street, 24, Daryaganj, Delhi 6. P.O. Box 1150. Phone: 271272.

MADRAS: 99, Nyniappa Nalck Street, Park Town, Madras 3. P.O. Box 2861. Phone No. 32471.

GRAMS: "Tetradame", Bombay, Calcutta, Delhi & Madras.

British Electric Insulating Co., Ltd., 83, Forbes Street, Bombay No. 1.

## BRITISH ENGINEERING CO., 105,

Apollo Street, Fort, Bombay. Phone: 255045. Grams: "BUCKYFUMP". Agents for: "Elin" Heavy Electrical machines and Plants. MWM Diesel generating sets upto 1500 K.W. "Vogel" Pumps for water works and Industrial requirements and Agricultural Equipment to Engines by Bamfords, London (England).

British India General Insurance Co., Ltd., The Fire, Marine and All Classes of Accident Business. Chairman: Jai H. Mehta; General Manager: M. S. Dastur. Head Office: Mehta House, Apollo Street Fort. Tel. No. 252361. Tel. Address: "Brindia."

British India Press, 109, Love Lane, Masagon, Bombay-10. Tel. Nos. 75334-35. ESTD. 1897. Grams: "PRINTBIND".

## BRITISH INDIA STEAM NAVIGATION

CO. LTD., Agents: Mackinnon, Mackenzie & Co. Private Ltd., 4, Ballard Estate, Bombay 1.

Marine Superintendent: Capt. D. P. Whitton.

Assistant Marine Supdt.: Capt. G. H. Johnson.

Assistant Marine Department: A. A. P. Ross.

Superintending Engineer: G. T. Sim.

Assistant Superintending Engineers: A. H. Brake, G. N. Cole, J. R. Hacker.

Medical Superintendents: Dr. S. A. Ravi, M.B.B.S. (Bomb.), L.R.C.P. (Lond.), M.L.C. (Eng.), D.T.M. & H. (Lond.); Dr. A. N. Banerjee, M.B.B.S.; Dr. S. H. Dadrawalla, M.B.B.S.



Superintendent of Supply: M. P. Del Rosso.  
 Superintending Chief Stewards: A. W. Wilson; H. J. Houston.  
 Shore Superintendent: R. D. Knight.  
 Superintending Chief Steward: J. H. W. Nicholas.  
 Telegraphic Address: "MACKINNON'S", (TX).  
 Phone No. 26-8021.  
 Post Box No. 122.

British Insulated Callenders' Cables Ltd., Esplanade House, Waudby Road, Fort. Bombay-1. Electrical Engineers.  
 Representatives in India—THE INDIAN CABLE CO. LTD.

Brooke Bond India Private Ltd., Gresham Assurance House, Sir Phiroz-shah Mehta Road, P. O. Box 271, Bombay.

## BUCKAU WOLF NEW INDIA ENGINEERING WORKS LTD.

Manufacturers of Sugar Mill Machinery.

Regd. Office: 72, Meadows Street, Bombay-1.

Poona Office & Works: Pimpri, Poona-18.

Phone: 88265  
 Grams: "DEVCORP."

**BURMAH-SHELL REFINERIES LTD.**, (Incorporated in India). Administrative Office: Burmah-Shell Refineries Site, Mahul, Bombay 74. (AS). Grams: "BESREFIN" Phone No. 521421 (25 lines). Post Box No. 1725; Bombay 1 (BR).

**BURN & COMPANY, LTD.**, Esplanade House, Waudby Road, Post Box 938, Bombay-1. BR. Phone: 266115. Grams: "BURNBOM." Branch Manager: Col. G. C. Dubey. Managing Agents: Martin Burn Ltd. Registered Office: 12, Mission Row, Calcutta-1.

**BURROUGHS WELLCOME & CO. (INDIA) PRIVATE LTD.**, Manufacturers & Marketers of fine Pharmaceuticals, Chemicals & Toilettries.

Registered Office:  
 16, Bank Street.  
 P.O. Box No. 290, Bombay 1.-BR.  
 Tel. Address—"Tabloid," Bombay.  
 Telephone Nos. 255136, 255137 & 255138. Telephone No. (Cadell Road Warehouse) 451970.

Pharmaceutical Division:  
 88-C, Old Parbhadevi Road, Bombay 1.  
 28-DD. Phone No. 454279.  
 97, Haines Road, Worli, Bombay 18-WB.  
 Phone No. 79555.

Chemical Division:  
 Bombay-Agra Road, Bombay 80-NB.  
 Telephone Nos. 591711 and 591724.

**BYRAMJI & CO., T.**, Merchants and Manufacturers' Representatives. Central Bank Building, Fort, Bombay. Phone: 251406. Grams: "SWEETSMILE," Bombay. Codes: Bentley's, A.B.C. and all standard commercial codes. Partners: T. Byramji and Dhun T. Byramji.

Cadbury-Fry (India) Private Ltd., 19, Bhulabhai Desai Road, Bombay 26.



## C. ITOH & CO., LTD.

**Bombay Branch:** United Bank of India Bldg., 5th floor, Sir Phiroz-shah Mehta Road, Bombay 1. Phones: 38381 & 2. Cable: "ITOH-REP," Bombay.

**Calcutta Branch:** 7, Old Court House Corner, Calcutta 1. Phone: 227911 (3 lines). Cable: "CITOH-CAL," Calcutta.

**New Delhi Branch:** National Insurance Bldg., Ground Floor, Parliament Street, New Delhi 1. Phone: 46068. Cable "CITOH," New Delhi.

**Imports:** Yarns & Textiles in general, Iron & Steel Products, Ships, Non-ferrous Metals, Machineries, Foodstuffs, Fertilizers, Paper, Chemical, Timber Products, Agricultural & Marine Products, Cement, Sundries, etc.

**Exports:** Textile Raw Materials, Minerals, Ores, Scrap, Coal, Petroleum, Grains, Sugar, Oils & Fats, Fertilizers, Salt, Pulp, Logs & Lumber, Crude Rubber etc.

**Head Office:** 36, 2-chome, Hommachi, Higashi-ku, Osaka. Cable: "CITOH," Osaka.

**Tokyo Office:** 4, Honcho, 2-chome, Nihonbashi, Chuo-ku, Tokyo. Cable: "CITOH," Tokyo.

Calcutta Essence Supply Co., Dealers & Importers of Essential Oils, Aromatic Chemicals & perfumery compounds. Mulchand Mansion, 1st Floor, Princess Street, Bombay 2. Grams: "Supralux." Phone No. 22623.  
 Branch at: 41, Ezra Street, Calcutta-1.

Calcutta Iron & Steel Co. Private Ltd., 68/D, Mahomedalli Road, Bombay 3-BR.

C. Agrawal & Co., Ltd., Dyestuffs and Chemicals Merchants, 43-44, Lakshmi Bldg., Sir P. Mehta Road, Bombay 1. Phone: 265163, Grams: "AGRAWALCO".

**C. DOCTOR & CO. PRIVATE LTD.** 11 Bruce Street, Bombay 1. Phone: 252277-8-9. Grams: "Quality". Telex 218, Bombay. Also at: Bank of Baroda Building, Opp. Fuwara, Gandhi Road, Ahmedabad 1; Grams: "DOCTORCO." Telex: 01248, Ahmedabad. 286, Bipin Behari Ganguli Street, Calcutta 12. Grams: "DOCTORCO (C)." Humidification & Ventilation Engineers, Textile Stores Suppliers, Importers-Exporters, Sole Selling Agents for Maize Products, Ahmedabad 2 and Industrial Machinery Manufacturers Private Ltd., Ahmedabad.

**CALTEX (INDIA) LIMITED**, Distributors and Marketers of Caltex Petroleum Products—Petrol, Kerosene, Jet Fuel, Powerkero Diesel Oils, Furnace Oil, Caltex

RPM Motor Oils, the full range of Lubricating Oils and Greases, Asphalts and Road Surfacing Materials, Naphtha, L.P.G., etc.

**Sales Offices:** At Ahmedabad, Bombay, Bangalore, Bhubaneshwar, Calcutta, Chandigarh, Coimbatore, Delhi, Jaipur, Jamshedpur, Lucknow, Madras, Nagpur, Poona, Raipur, Secunderabad and Visakhapatnam.

**General Office:** Caltex House, 8, Ballard Road, Ballard Estate, Bombay 1.

**Telegrams:** "Caltex."

**Phone No.:** 26-8031 (10 lines).

**Vice-President:**—H. D. Dennis.

**General Manager:** V. P. Ryan.

**Marketing Division:**

**Dy. General Manager, Marketing:** H. R. Berry.

**Operations Department:**

**Operations Coordinator:** M. K. Goswami.

**Distribution Department:** Operations Coordinator: J. W. White.

**Accounting Division:**

**Manager, Finance and Accounting:** W. C. Johnston.

**Installations:**

Kerosene Installation, Sewree. Phone Nos. 440221-2-3. Petrol, Installation, Wadala. Phone No. 44023. Furnace Oil Installation, Hay Bunder. Phone Nos. 371693-4. Lube Oil Plant, Hay Bunder. Phone Nos. 371693-4.

**CALTEX OIL REFINING (INDIA) LTD.**, Registered Office: Caltex House, 8, Ballard Road, Ballard Estate, Bombay 1.

Refinery Address: Caltex Oil Refining (India) Ltd., Post Box No. 15, Visakhapatnam 1, Andhra Pradesh.

**Managing Director:**—H. D. Dennis, Bombay.

**Director & Refinery Manager:**—C. L. Wood, Visakhapatnam.

**Director/Secretary:**—W. C. Johnston, Bombay.

**Directors:**—H. E. Lewis, Chairman.

H. D. Dennis, Managing Director.

W. C. Johnston, Secretary.

F. A. Abbott.

C. L. Wood.

R. B. Brown.

C. J. Mathew.

(Alternate for F.A. Abbott).

**BOMBAY VISAKHAPATNAM**  
 Grams: "CORIL" "CORIL"  
 Phone: 26-8031 Caltex 301.

**CAMA, NORTON & CO.**, Importers and Manufacturers' Representatives of Pharmaceuticals and Printing Materials. Cama Chambers, 23, Meadows Street. Phone No. 255354. Telegrams: "Camanorton."

Camlin Private Ltd., Office: 210, Lady Jamshedji Road, Bombay 16. Phone: Office: 453458. Grams: "CAMELINK": Bombay-Mahim. Factory: Off Andheri, Kurla Road, Bombay 59. Phone: 572949. Branch: 12/B, Lohar Chitpore Road. F/8-28, Calcutta 1.

**CANDY FILTERS (INDIA), PRIVATE LTD.**, Forbes Building, Home Street, Fort. Hydraulic Engineers and water Purification Specialists, Gravity and Pressure Filter Installations, Chlorinators, Ammoniators, Water Softeners, Chemical Dosing Apparatus, Metering Pumps, Water Testing Equipment.

Telegrams: "Pontifex", Bombay.

Telephone No. 26-8081, Bombay.



**CAPCO PRIVATE LTD.**, Importers of and Dealers in Dyestuffs, Chemicals, Pharmaceuticals.

*Head Office*: 14, Netaji Subhas Road, P.O. Box 2301, Calcutta 1. Grams: "CAPCO-DYES". Phones: 22-2862/3.

*Managing Director*: M. C. Nigam.

*Bombay Offices*: Dyes & Chemicals Dept.: Co-operative Insc. Bldg., Sir Phirozshah Mehta Road, Bombay 1. Phone No. 255641. Chemicals Dept.: 15, Cowasji Patel Street, Bombay 1. Phone No. 255259.

*Branches*: Ahmedabad, Kanpur, Delhi, Madras, Mathurai, Salem, Secunderabad, Vijaywada, Cochin.

**CAPRIHANS (INDIA) PVT. LIMITED.**

Manufacturers of SUNGLOSS Decorative surfacing, SUNLAM Industrial Laminates, SUNVIC Rigid PVC Sheets, SUNFLEX PVC Sheeting, SUNSTRENE Polystyrene Sheets. Janmabhoomi Chambers, Fort Street, Bombay 1. Telephones: 261021-22-23. Grams: "CAPRIHANS." *Branches*: New Delhi, Calcutta & Madras.

**CARGO INSPECTORS & SUPERINTENDENCE CO., PRIVATE LTD.**

Prompt and Efficient Quality and Quantity Control sampling etc. Alice Buildings, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 256346. Cable: "CARSUP-BOM"—Bombay.

**Carls Aerating Machinery Co.**, Dealers in Aerated Water Requisite, Diamond Building, Lohar Street, Bombay 2.

**CARONA SAHU CO., LTD.**, Mfrs. of Rubber/Leather Footwear. 221, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Office Phones: 266415-6. Grams: "CARONASAHU".



**CASTOPHENE MANUFACTURING CO.**

Manufacturers of Fine Household Remedies, such as Castophene Laxative, Capirin, Gripe Mixture, Cough Syrups and Tablets, Ointments, etc., 85, Dr. Annie Besant Road, Worli, Bombay 18. Phone: 72456. Grams: "CASTOPHENE". Branch at Delhi 6, and Agencies throughout India.

**Cawasji Behramji & Co.**, Shipchangers, Dubashes, Importers, Exporters and General Merchants. City Ice Building, 298, Bazar Gate Street, Fort, Bombay. Phone No. 252497.

**CAWNPORE MILLS DEPOT.** (Departmental Stores), General Merchants and Mill Agents, "Churchgate House," Veer Nariman Road, Fort, Bombay. Telegraphic Address: "Tapestry." Phone No. 253433.

*Proprietor*: Hansraj Laxmidas.

**CASTROL LIMITED**, White House, 91, Walkeshwar Road, Bombay-6. Manufacturers of the famous "CASTROL" Motor Oils, Industrial Lubricants, Mechanical & Hydrostatic Lubricators and Castrol Garage Equipment. (Lubrication).

*General Manager for India*: V. W. Good.

*Deputy General Manager for India*: R. J. Habbick.

*P.A. to General Manager for India*: N. S. Chari.

*Manager for Bombay*: V. Y. Gupte.

*Controller of Operations*: D. G. Baijekar.

*Industrial Sales Controller (Bombay)*: P. D. Mahajan.

*Chief Chemist*: S. R. Bhatnagar.

*Chief Engineer*: D. A. Bamji.

*Controller of Central Accounts*: C. V. Deshpande.

*Branch Accountant*: S. N. Pinto.

*Assistants*: M. Y. Gaitonde and G. K. Rao.

*Sales Representatives*: B. Price, M. D. Shetye, H. G. Suri, S. P. Savant, R. G. Gupte, B. C. Sachdeva, B. N. Kataria, H. Gindill, D. B. Quinn, B. N. Aldangadi, J. Kurian and Suresh Chandra.

*Branches & Depots*: Calcutta, Madras, Cochin, New Delhi, Secunderabad, Bangalore, Mangalore, Mysore, Nagpur, Ahmedabad, Lucknow, Tezpur, Jamshedpur, Vijaywada, Coimbatore.

*Calcutta*: Castrol Ltd., 14, India Exchange Place, Calcutta-1. *Manager*: R. J. Habbick. (Also Deputy General Manager for India).

*Madras*: Castrol Ltd., 58/59, North Beach Road, Madras-1. *Manager*: G. W. Denby.

**C. Bole & Co.**, Dealers in concrete Mixers, Pumps, Boiler fittings, Jim Crows and other Machineries and Tools. Sole Agents for precision Tools and Instruments manufactured by C. Stiefelmayer, Esslingen, West Germany, Phone: 324350. Grams: "CIBOLECO." 61 Narayan Dhuru Street, Bombay 3.

**THE CEMENT MARKETING CO. OF INDIA LTD.**

*Regd. Office*: Cement House, 121, Queen's Road, P.O. Box 572, Bombay 1.

*Telegrams*: "CEMENT"

*Telephone*: 242001 (4 lines), 243793 and 244313

*Branches*: Ahmedabad, Bangalore, Calcutta, Coimbatore, New Delhi, Indore, Kanpur, Madras, Patna and Secunderabad.

*Board of Directors*:

P. K. Mistry, Esq.  
B. N. Reporter, Esq.  
Col. K. R. Coorlawala.  
Ranvir M. Khatau, Esq.

*General Manager*:

S. N. Sopory, Esq.

*Dy. General Managers*:

R. N. Haksar, Esq.  
Amarjit Singh, Esq.



*Financial Division (C.M.I.)*

*Chief Accountant*:

B. R. Kulkarny, Esq.



*Publicity & Public Relations Division and Village Improvement Section*

P.O. Box 1753

*Telegrams*: "CEMPUB"

*Publicity and Public Relations Manager*: M. H. Engineer, Esq.

**Also see the Concrete Association of India.**

**CEAT TYRES OF INDIA LTD.**, Manufacturers of Tyres and Tubes, Registered Office & Factory: Bhandup, Bombay 78. Phone: 581366 (3 lines), 581153, 581744. Grams: "CEATYRES", Bombay. Telex No. 285 and 377.

**CEMENTATION COMPANY LTD., THE**, Civil & Mining Engineers & Contractors, Steelcrete House, Dinshaw Vaccha Road, Bombay. Phones: 245068, 245069, 246044, 212636. Grams: "GROUTING".

**CENTRAL CAMERA CO., PRIVATE LTD.**, Dealers and Wholesalers in Photographic & Cinematographic goods, Photographers, Developing, Printing & Enlarging Service. Pioneers in colour photography. 195, Dr. Dadabhai Naoroji Road, Fort, Bombay. Phone: 264426. Tel. Address: "CAMERACO".

*Branches*: 448, Sandhurst Road, Bombay 4. Phone: 371263; 11, Government Place East, Calcutta. Phone: 231065 (Calcutta), 35/4, Mount Road, Madras 2. Phone: 85782; and 18/B, Asafali Road, New Delhi. Phone: 273406.



**CENTRAL BOTTLE TRADING CO.**

*Manufacturers' Representatives*

*Dealers in*:-

GLASS BOTTLES, NEUTRAL VIALS, AMPOULES, CAPS, CORK ETC.

*Address*: Green House, Green Street, Bombay 1.

*Phone*: 255008 and 256010

*Grams*: CENTBOTTLE

**CENTRAL SCIENTIFIC SYNDICATE**, 475, Jagannath Shankar Seth Road, (Chira Bazar), Bombay 2. Grams: "MAXSERVE". Dealers in Scientific and Laboratory Requirements. Suppliers of Physics and Biology Instruments.

**CENTRAL TOOL & EQUIPMENT COMPANY**

*Stockists of*:-

Engineering Stores, Tools, Pipes and Pipe Fittings, Mill and Gin Stores.

*Address*: 82, Sarang Street, Bombay 3.

*Phone*: 325984. Grams: "CENTREC".

**CHANDRODAYA ELECTRIC CO.**, Bhangwadi, Kalbadevi Road, Bombay 2. Phone: 22579. Grams: "TRICYCLE." Specialists in Pipes, Fittings, Wires & Switchgears. Stockists of Everything Electrical. Distributors for "C.T.L." Conduit Pipes, Dahisar.

**Chandulal & Co.**, Kathawala, Dealers in all kinds of Coir Ropes, Manila Ropes, Coal Tar, Pitch, Hardware, etc. General Merchants and Commission Agents. 11, Kazi Sayed Street (Shaik Gully), Bombay 9. Grams: "Cordecoir." Phone: 325598.

**Chemould-Chemical Moulding Manufacturing Co. Private Ltd.**, Manufacturers of Picture Frames and mouldings, Shapoor Baug, Marol, Bombay 59. Phone: 672345. Retail Framing Service at—271, Princess Street, Bombay 2. Gallery: 1st Floor, Jehangir Art Gallery. Phone: 252897.





## "COLD-WAVE" Home Permanent

### TYPES :

- (a) **REGULAR**  
for all types of Hair
- (b) **MILD** for dyed,  
bleached and brittle Hair
- (c) **PROFESSIONAL**  
for professional use
- (d) **SUPER** (Lanolised)
- (e) **END-CURL** (Lanolised)

★

### STRIP-CLEAN

Hair-Remover (Cold-Wax)

### CHIC-SHINE Hair-Dressing Cream

### HAIR-CONDITIONING CREAM

- (a) For very Dry Hair
- (b) For Medium Dry Hair

★

### LIQUID BRILLIANTINE

### HAIR-SPRAY (Lanolised)

### EAU-DE-QUININE

### AFTER-SHAVE LOTION

### WAVE-SETTING LOTION

### PLASTIC CURLERS

### PIN CURL CLIPS

★

## CHIC COSMETICS (Private) LTD.

Bombay 6. Phone : 358612

2-2-154, M. G. Road,  
Secunderabad (A.P.).

Grams: "TEKNIPLANT"

Selling Agents :

## M. G. SHAHANI & CO. (Private) LTD.

Bombay - Calcutta - Delhi  
Kanpur & Madras.

Chemicolour Private Limited, Kasturi Build-  
ings, Jamshedji Tata Road, Bombay 1.

Chemidye Trading Co., Ltd. Kamer Bldg.,  
Cawasji Patel Street, Fort, Bombay 1.  
Phone : 251034.

### CHEMISOL INDUSTRIES.,

Importers & Stockists of Industrial  
Organic Chemicals Solvents &  
Adhesives,

41, Princess Street, Bombay-2.

Grams : "BAYCITY". Phone : 29086.

### CHEMO-PHARMA LABORATORIES

LTD., THE, Manufacturers of Ethical  
Pharmaceuticals, and Fine Chemicals.  
Offices : 75, Dr. Annie Besant Road,  
Worli, Bombay 18. Phone : 78952.  
Regd. Office & Factory : Plot No. C.S. 215,  
Sewri, Bombay 15. Phone : 443231.  
Grams : "CHEMOLABS". Managing  
Agents : Nadkarni & Co.

### CHESEBROUGH-POND'S INC.

(Incorporated in U.S.A. with Limited  
Liability), 13, Gunbow Street, Fort,  
Bombay. "Vaseline" Brand Products,  
Pond's Creams and other famous toilet  
requisites. Phones : 261078 and 265571.  
Grams : "VASOPONDS".

Chhaganlal Keshavjee (Estd. 1913), Stationer,  
Printer, and Dealer in Loose Leaf  
Binders. 22-A, Parsee Bazar Street,  
Fort, Bombay. Phone No. 263008. Tel.  
Address : "STAPRI."

**CHIKA LIMITED**, Regd. Office : Industrial  
Assurance Building, Churchgate, Bombay  
1. Sales Dept. : Mehta Chambers, 13,  
Mathew Road, Bombay 4. Phones :  
352591/95. Grams : "DYECOLD." Supply-  
ing Dyes, Chemicals & Synthetic Fibres  
manufactured by Farbenfabriken Bayer  
A. G., Germany, Chemicals, Solvents &  
Plastic Raw Materials by Chemische  
Werke Huels A. G., Germany, Nitrocellu-  
lose and Chemicals by Dynamit Noble  
A. G., Germany.

**CHIMANLAL PAPER CO.**, Importers of  
High Grade Papers, Boards & Mill Re-  
presentatives. 1st Floor, MacMillan Bldg.,  
Dr. Dadabhoy Naoroji Road, Bombay 1.  
Tel. Add. : "SELECTION." Phone Nos.  
262041/42, 262210 and 532060 (Res.).

Chimanlal Shah & Co., 3-D, Mangaldas  
Road, Mangaldas Market, Bombay 2.  
Office : Phone : 23885. Residence : 76886.

### CHIMANLAL VRAJLAL & CO.

Govt. Appointed Regd. Stockholders  
& Importers of Iron & Steel, Hard-  
ware & Pipes, Loha Bhavan, Frere  
Road, Bombay 9. Phones : 321298 &  
329508. Sales Dept. : Latif House,  
Iron Market, Bombay 9. Phones :  
321265 & 327861.

Grams : "NICERODS".

### CHINYOY & CO. PRIVATE LTD., F. M.,

Directors of the Firm—Sir Sultan M.  
Chinoy, Kt., Chairman; Dostmahomed  
F. Chinoy; Ebrahim D. Chinoy;  
Mahommedhusain R. Chinoy, Manag-  
ing Director; Meher Building, Chow-  
patty, Bombay 7. Grams : "FRIEND-  
SHIP," Bombay. Phone No. 76029,  
Bombay, P.O. Box No. 566, Bombay 1.

Chinubhai Kalidass & Bros., Clearing, For-  
warding, Shipping Agents and Transport  
Contractors. Bombay Mutual Chambers  
(3rd floor), 19/21 Hamam St., Bombay.  
Phone : 251025.

Chloride & Exide Batteries (Eastern) Ltd.,  
Savoy Chambers, Wallace Street, Bom-  
bay-1.

### CHOKSI BROTHERS PRIVATE LTD.

Importers of Photo, Cine & Process  
Materials, Mounts & Albums Mfrs.  
Head Office : Western India House,  
Sir P. Mehta Road, Fort, Bombay 1.  
Branches : 5/17, Dinroze Estate,  
Mount Road, Madras 2.  
66, Ganesh Chandra Avenue,  
Calcutta 13.  
21, Daryaganj, Delhi 6.

## CHOTIRMALL & CO., K. A. J.

Exporters and Importers of Piece-  
goods of all descriptions. 501, Kalba-  
devi Road, Bombay-2.

Phone Nos.: 39582 (Manager), 39583  
(Office).

### SALES DEPT.

- (1) Chandra Chowk, Mulji Jetha  
Market, Bombay-2. Phone : 39504.
- (2) Navi Gully, Mulji Jetha Market,  
Bombay-2. Phone : 22173.

### CHOWGULE & CO., (HIND) PRIVATE

LTD., 5th Floor, India House, Fort Street,  
P.O. Box 1478, Bombay 1. Phone : 265301  
(4 lines). Grams : CHOWGULECO. Telex  
No. 342.

Directors : Prataprao D. Chowgule,  
Shivajirao D. Chowgule.

### Manufacturers of :

- (i) Synthetic Resins in collaboration  
with Chemische Werke Albert,  
Wiesbaden, Germany ;
- (ii) Sera and Vaccines in collabora-  
tion with Institute of Immuno-  
logy, Zagreb, Yugoslavia ;
- (iii) Pharmaceutical Specialities ;
- (iv) Glycerophosphoric Acid and its  
salts ;

Factories at : Bombay-Agra Road, Maji-  
wade, Thana.

### Sole Importers &/or Agents :

Chemische Werke Albert, Wiesbaden—  
Synthetic Resins and Pharmaceutical  
preparations ; Institute of Immuno-  
logy, Zagreb—Sera and Vaccines ;  
Pliva Pharmaceutical and Chemical  
Works, Zagreb—Pharmaceuticals and  
Chemicals ; Fuji Photo Film Co. Ltd.,  
Tokyo—Roll Films and other Sensi-  
tised Photographic materials ; Manu-  
facturers of Production Machinery  
and Machine Tools in West Germany ;  
Janata Machine Tools Ltd., Bombay  
—Woodworking Machines, Double  
Housing Planers, Single Spindle  
Automatic Lathes ; Camera Works  
Private Ltd., Bombay—Cameras,  
Enlargers and other Photo Acces-  
sories ; Distributors for water-colour  
books and photo chemicals.

### Branches :

17, Parillament Street, Allahabad Bank  
Bldg., New Delhi 1. Phones : 42325-6,  
Telex No. 860 ; 7, Chittaranjan  
Avenue, P.O. Box 8943, Calcutta 13.  
Phone : 233645, Telex No. 337 ; 8/2  
Victoria Crescent Rd., Egmore,  
Madras. Phone : 84715, Telex No. 304.



**CHRISTENSEN—LONGYEAR (INDIA)**

**LIMITED**, (Subsidiary of Larsen & Toubro Limited and in collaboration with Christensen Diamond Products Co. and E. J. Longyear Co. both of U.S.A.) Registered Office: L. & T. House, Dougall Road, Ballard Estate, P.O. Box 278, Bombay 1. Phone: 26441-9. Grams: "CHRISLONG." Factory: 41, Koliwada Road, Sion East, Bombay 22. Phone: 472575-6. Managing Agents: L. & T. (Management) Private Limited. Manufactures Longyear Diamond Core Drills and accessories and CLIL diamond Core bits and Industrial diamond bits.

**Directors:** H. Holck-Larsen, N. M. Desai, P. G. Bhagat, B. I. Bhambhani, F. L. Christensen, V. N. Burnhart, R. H. Lawe, Eugene Larsen.

**Selling Agents:** Larsen & Toubro Limited, P.O. Box 278, Bombay 1. Telephone: 264411/9. Tel. Address: "LARSEN-BRO." Telex: TLX 246.

**CHUDGOR & CO. PRIVATE LTD.,**

Anand Bhavan, Princess Street, Bombay 2 BR.

Phone: C/o 30023, 30024 & 20419

Grams: "CHUDGORECO."

Dealers in Chemicals & Solvents, etc.

**Chunilal & Co.**, Expanded Metal, Zinc Sheet, Monel Metal and Stainless Steel Merchants. Opp. State Bank, 74, Abdul Rehman Street, Bombay 3. Phone: 326710. Grams: "HIRCHUNGI".

**Chunilal & Co.**, Diamond, Pearl & Jewellery Merchants, 17-19, Dhanji Street.

**CHUNILAL KHANNA & CO.**, Govt. & Rly. Contractors. Saraswati Nivas, Thakurdwar Road, Bombay 2. Phone: 354813. Grams: "BABALALU".

**CHUNILAL MULCHAND & CO.**, Waterloo Mansion, Madame Cama Road, Fort, Bombay. Phone No. 211515. Grams: "Muircom."

**Sole Prop.:** —R. C. Kapadia.

**Manager:** J. C. D'Souza.

**Accountant:** S. C. Shah.

**CIBA**

**CIBA OF INDIA LIMITED.** Regd. Office: 14, Jamshedji Tata Road, Bombay 1. Phone Nos. 245031 (3 lines) and 246084 (3 lines). Grams: "CIBA". Bombay. **Bankers:** The National & Grindlays Bank Limited.

Particulars of Business.

**Sole Suppliers in India for:**

- (1) The products of CIBA Limited, Basle (Switzerland), manufacturers of all classes of dyestuffs, textile auxiliaries, pharmaceuticals, cosmetics, synthetic resins, pesticides, chemicals and allied products.
- (2) The products of CIBA (A.R.L.) Limited, Duxford, Cambridge (England), manufacturers of synthetic adhesives.
- (3) The products of Hardman & Holden Limited, Manchester (England), manufacturers of "Manox" sodium hydrosulphite.
- (4) The products of Societe Rapidase Seclin (France), manufacturers of "Rapidase" textile de-sizing agents.

Manufacturers of CIBA Pharmaceutical Specialities and Cosmetics.

**Plastics Division at:**

Esplanade House, Waudby Road, Bombay 1. Phone No. 264918 (2 lines).

**Factory at:**

- (1) Bombay-Agra Road, Bhandup, Bombay 78 (Pharmaceutical Factory). Phone Nos. 581681 (4 lines).
- (2) Off Dockyard Road Station, Bombay 10 (Dyes Mixing Plant). Phone No. 379520.

**Research Centre at:**

Goregaon, Bombay 62. Phone Nos. 692657 and 692697-9. Dr. T. Govindachari 692852.

**CIEM TRADING CO.**, Manufacturers & Govt. Contractors. Manufacturers of Paper Sleeves, Insulated Tubes, Centres for Reeling, Postal Tubes, Cartons, Discs, etc. 7, Cross Road, No. 3, Mamlatdar Wadi, Malad, Bombay 64. Phone: 692226, 692473, Grams: "CIEMITE".

**"CIPLA"—Chemical, Industrial & Pharmaceutical Laboratories, Ltd.**, 289, Bellasis Road, Byculla, Bombay 8. Manufacturers of fine chemicals and pharmaceutical preparations, patent medicines, steroids and Hormones.

Phones: 375211, 375212 and 375213. Tel. Address: "CIPLAB", Bombay 8.

**City Ice Supplying & Cold Storage, Ice Manufacturers and Cold Storage.** City Ice Building, 298, Bazargate Street, Fort, Bombay. Phone No. 252497.

**CLARIDGE & CO. LTD.**, Letterpress and Offset Printers specialists in Packaging, Security Printing & Silk Screen work. Caxton Works, Frere Road.

**Managing Agents:** —W. H. Brady & Co., Ltd., Veer Nariman Street, Bombay.

**Home Representatives:** —W. H. Brady & Co., Ltd., Manchester.

**General Manager:** —Brig. J. F. N. Vakil (I.A.) Retd.

**Sales Manager:** —Mr. J. E. Baptista.

**Works Manager:** —Mr. S. Gopal.

**CLUBWALA & CO.**, Manufacturers of Cooking Ranges, Hot Water Boilers, Aerated Water Machinery Accessories and Essences; Machinery, Filters, Municipal & Railway Stores; Folding Ladders and stockists of sanitarywares, etc. On Government, Railway and Municipal Lists. 27-29, Hamam Street, Fort, Bombay 1. Tel. Address: "GRAPE." Phone: No. 254217.

**COLGATE-PALMOLIVE (INDIA) PRIVATE LTD.**, Toilet Soaps, Toilet Articles, Steelcrete House, 3, Dinshaw Vachha Road, Churchgate Reclamation, Bombay 1-BR. Phones: 24-5071, 24-5072, 24-5073. P.O. Box No. 1965. Grams: "PALMOLIVE".

**COLOUR-CHEM LIMITED**, Fort House, 221, Dadabhai Naoroji Road, Fort, Bombay-1. Telegraphic address: "PIGMENTDYE." Telephone No. 265151/5, 266417 and 266418.

**Directors:**

Mr. R. R. Ruia, *Chairman*.  
Mr. D. M. Khatau.  
Mr. B. M. Ghia.  
Mr. S. P. Godrej.  
Mr. B. R. Tannan.  
Mr. W. Baelz.  
Mr. U. Weimann.  
Dr. G. Laumann.  
Mr. C. Rai, *Managing Director*.

**Manufacturers of:**

• Acramin and Imperon Pigment Emulsions; Organic Pigment Powders and Binder Materials.

• Acramin is the registered trade-mark of Farbenfabriken Bayer, A.G., Leverkusen, West Germany.

† Imperon is the registered trade-mark of Farbwerke Hoechst A.G., Frankfurt (Main) Hoechst, West Germany.

**Columbia Chemi-Colour Industries Private Ltd.**, Block No. 1 D, Dr. Annie Besant Road, Bombay 18.

**COMMERCIAL CREDIT CORPORATION (1943) PRIVATE LTD., THE**, **Head Office:** Hughes Road, Bombay No. 7. **Branches:** Hughes Road, Bombay No. 7, Finance House, Puttalao Road, Mount Road, Madras 2, St. Mark's Road, Bangalore, New Buti Building, Mount Road, Nagpur.

**Managing Director:** —R. A. Murdeswar.

**Directors:** —S. Rama Iyer, V. R. Murdeswar, U. Prabhakar Rao and R. Doraiswamy, M. S. Dastur and V. Nimbkar.

**Provides Hire Purchase Facilities for Motor Vehicles, Misc. Machinery, Radios, etc.** Tel. Address: "CECECE." Phone No. 358436.

**Commercial Art Engravers Private Ltd.**, Bombay 7. Phone: 71769.

**COMMERCIAL PRINTING PRESS LTD., THE**, 34-38, Bank Street, Fort. Phone No. 25-3891/92. Tel. Address: "TATAPRESS."

**COMMERCIAL UNION ASSURANCE CO., LTD.**, 9, Wallace Street, Fort, Bombay. Tel. Address: "Cuaco". Phone No. 264841. Post Box No. 329. Fire, Marine, Motor, Workmen's Compensation, etc. **Branch Manager:** E. H. Toovey.

**Concord Corporation Private Ltd.**, Manufacturers of "Silver Star" Brand wire heads, Sir Vithaldas Chambers, 16, Apollo Street, Fort, Phone No. 255261, Tel. Address: "Alltradeo".

**CONCORD OF INDIA INSURANCE CO., LTD., THE**, Hongkong Bank Building, 16, Veer Nariman Road, Fort. Tel. Address: "Concordia." Phone No. 255561 (3 lines). **Resident Manager:** H. M. Chawalla.

## THE CONCRETE ASSOCIATION OF INDIA

**Address:** "Cement House",  
121, Queen's Road, P. O. Box 138,  
Bombay 1

**Telegrams:** "Concrete"

**Telephone:** 242001

**REGIONAL OFFICES:** New Delhi,  
Calcutta, Secunderabad.

|                                                              |   |                       |
|--------------------------------------------------------------|---|-----------------------|
| <b>Chief Engineer and Editor, "Indian Concrete Journal."</b> | { | K. K. Namblar, B.E.   |
|                                                              |   | C.E. (Hons.), M.I.E.  |
|                                                              |   | (India), F.Inst. H.E. |
|                                                              |   | (Eng.), M.I. Mun.     |
|                                                              |   | E. (Eng.), F. Am.     |
|                                                              |   | Soc. C.E.             |

**Consolidated Engineering Equipment Co.**, Engineers, Machinery Merchants and Manufacturers' Representatives, Union Co-operative Insurance Society Building, Sir Phiroozshah Mehta Road, Bombay 1. Phone: 266888. Grams: "CONEQUIT." **Representatives in India for:**  
"SWP" Electric Hoists & Cranes.  
"PFAFF" Pulley Blocks.  
"TORTOISE" Battery Trucks.

**Consolidated Pneumatic Tool Co., Ltd.** (Incorporated in England), 301/302, Agra Road, Mulund, Bombay 60. Phone: 592274-6. Grams: "CAULKING". Mulund-Bombay; Manufacturers of Air Compressors, Pneumatic Riveting and



Chipping Hammers, Drilling Machines, Grinders, Rock Drills, Mining Equipment, Portable Electric Tools, Bicycle Electric Tools, etc. London Office: CP House, 97-107 Uxbridge Road, London, W 5, Branches at: Calcutta, Madras and New Delhi. Branch Office: Calcutta: 30, Jawaharlal Nehru Road, Calcutta 16; Madras: Finance House, Pattulos Road, Post Bag 5251, Madras 2; New Delhi: 87, Sundar Nagar, New Delhi 11.

Consolidated Pneumatic Tool Co. (India) Ltd., (Incorporated in India). 301/302, Agra Road, Mulund, Bombay 80. Phone: 592274/6, Grams: "Pneumatic" Mulund, Bombay. Manufacturers of Air Compressors, Pneumatic Riveting and Chipping Hammers, Drills, Grinders, Impact Wrenches, Rock Drills, Feed Legs, Sump Pumps, Sludge Pumps, Jacks, etc.

CONTINENTAL PHOTO STORES, Importers of Photographic and Cinematographic Materials and Photographic & Cinematographic Books. 243 45, Dr. Dadabhoi Naoroji Road, Fort, Bombay. Phone No. 262059.

COOK & SON, THOS. (CONTINENTAL AND OVERSEAS), LTD., Cooks Building, Dr. Dadabhoi Naoroji Road, Bombay 1. Phone No. 251875 (5 lines). Tel. Add. "COUPON". Travel Dept. Tickets and reservations for World-wide travel by sea, air, rail and road. Inclusive Tours. Foreign Exchange Dept.: Drafts, Letters of Credit, Travellers Cheques, Foreign currencies. Telegraphic & Mail transfers. Sub-Office in Taj Mahal Hotel. Branch Offices in Madras and Bangalore.

Cooper & Co., Paint Merchants & Painting Contractors. 53, Abdul Rehman Street, Bombay 3.

Cooper Landing Co., Dady House, Veer Nariman Street, Fort.

COORLA SPINNING & WEAVING CO., LTD., Manufacturers of Dhories, Sarries, Shirtings. Office: Udyog Bhawan, 3rd Floor, Witter Road, Ballard Estate, Bombay. Mills: Kuria, Looms 672, Spindles 32,356. Agents: K. P. Goenka & Sons Ltd.

Cooverji Hormusji & Sons N., (Estd.: 1895), Building Contractors, Plumbers & Sanitary Engineers. 508, Wadia Bldg., Chitra Bazar, Girgaum Road, Bombay 2.

CORN PRODUCTS CO. (INDIA) PRIVATE LTD., Importers, Exporters, Manufacturers: Food Products, Fruit Beverages, Specialty Starches, Industrial Adhesives etc.; Head Office: Shree Niwas House, Waudby Road, Fort, Bombay 1 (P.O. Box 994). Phones: 262321-24 (4 lines); Factory: Maniar Building, 116-118, Frere Road, Carnac Bunder, Bombay 9. Phone: 321577. Warehouse: Maniar Building Annex, 116-118, Frere Road, Carnac Bunder, Bombay 9. Phone: 323076.

Cox & Kings (Insurance) Ltd., Lloyds Bank Building, Dr. Dadabhoi Naoroji Road, Bombay 1.

Crawford & Co., Auctioneers, Estd. 1848, 132, Apollo Street, Fort.

Crown Electric Printing Works, 111-A, Mahatma Gandhi Road, Fort. Art Printers and Calendar Manufacturers.

CRESCENT IRON & STEEL CORPORATION LTD., Head Office: Industrial Estate, Lalbaug, Bombay. Tel. No. 376836, Grams: "NATELIN". Works: Goregaon, Bombay 62. Phone: 692304. Makers of Metal Cutting Hydraulic Band Saw Machines, Planitor Surface Grinders, Electric Hoists, Hydraulic Press, Universal Punching & shearing machine, Quality Ferrous & Non-Ferrous Castings. Cisco Sales Office:—Industrial Estate, Lalbaug, Bombay.

# COX & KINGS

(AGENTS), LIMITED.

(Incorporated in England.)

Lloyds Bank Building,  
Dr. Dadabhoi Naoroji Road  
(Hornby Road),

Bombay 1.

THE SHIPPING & TRAVEL PEOPLE.  
Telegrams: "Coxship". Post Box 396.  
Tel. 26-3066.

Head Office:

Walsingham House, 35, Seething Lane,  
London, E.C.3.

West End Office:

15, Charles 11 Street, Haymarket, S. W. 1.

Other Branches in India & Pakistan:  
New Delhi, Karachi.

## CROMPTON GREAVES LTD.

Electrical Engineers, Manufacturers,  
& Contractors.

REGISTERED OFFICE

1, Forbes Street, Fort, Bombay 1.

Grams: "GRECOM" Bombay.

Phone: 256263

Post Box No. 1277 Bombay.

ADMINISTRATION

CENTRAL OFFICE:

1, Forbes Street, Fort, Bombay 1.

Post Box No. 1277. Phone: 256263.

SALES DIVISION

Branch Office (Eastern Region): 21,  
Rajendra Nath Mukherjee Road,  
Calcutta 1. Post Box No. 166, Phone:  
237571.

Asansol: Apear Gardens, Asansol, Dist.  
Burdwan. Phone: 2638.

Durgapur: Durgapur Steel Project,  
P.O. Durgapur 3, Dist. Burdwan.  
Phone: PBX 81.

Gauhati: Chandra Kumar Road, Ward  
No. IV, Ranibari, Pan Bazar, Gauhati.  
Phone: 1002.

Jamshedpur: 2, Hesal Road, Jamshedpur  
5. Phone: 2822.

Branch Office (Northern Region): Thapar  
House, 124, Janpath, New Delhi 1.  
Post Box No. 197. Phone: 42281.

Jaipur: Asoka Hotel Building, Station  
Road, Jaipur. Post Box No. 173.  
Phone: 76219.

Jullundur: Viridi Building, G. T. Road,  
Jullundur City, Post Box No. 42.  
Phone: 4339.

Luknow: Sarojini Naidu Marg, Lucknow.  
Phone: 28222.

Branch Office (Western Region): 1, Forbes  
Street, Fort, Bombay 1. Post Box No.  
1277. Phone: 256263.

Ahmedabad: Hotel Roopalee Building,  
Lal Darwaja, Ahmedabad 1.  
Phone: 24450.

Madras: 19, Second Line Beach, Madras 1,  
Post Box No. 100. Phone: 21215.

Nagpur: Prabha Kunj, Temple Road,  
Civil Lines, Nagpur 1. Phone: 2488.

### MANUFACTURING DIVISION

WORLI WORKS:

Dr. E. Moses Road, Worli, Bombay 18-  
WB. Telegrams: "CROMPAEK",  
Bombay. Phone: 73361-63.

Industrial & Fractional H.P. Motors,  
Ceiling & Exhaust Fans.

KANJUR WORKS:

Kanjur, Bhandup, Bombay 78-NB.  
Grams: "CROMSTATIC", Bhandup.  
Phones: 581804, 581270-78-79.

Transformers, Switchgear, Motor Control  
Gear & Instruments.

STAFF AT BOMBAY:

Central Office: P. R. Deshpande, B.Sc.  
(Eng.), M.I.E.E., Managing Director;  
A. H. Adie, F.E.D.E.E. (Leeds),  
E.N.D.M.E. (Leeds), Sales Director;  
V. V. Dhume, A.C.C.S., A.M.B.I.M.,  
Advocate, Commercial Director & Com-  
pany Secretary; C. G. Visvanathan,  
M.A., Personnel Manager; D. V. Kham-  
bhla, B.Sc. (Eng.), A.M.I.E., Divisional  
Sales Manager (Contracts & Workshops);  
K.V. Apte, B.E., A.M.I.E., Divisional Sales  
Manager (Rotary & Supplies); R. A.  
Patil, B.E. Divisional Sales Manager  
(Plant & Publicity); V. D. Desai, M.A.,  
LL.B., Assistant Secretary; B. S. Pra-  
dhan, B.Com., Chief Accountant.

Sales Division: P. Saldanha, B.Sc., Manager  
(Western Region); S. De, M.Sc., Sales  
Manager; C. E. Barber, A.M.I. Prod. E.,  
A.M.I. Plant E., Workshop Manager;  
P. K. Oza, M.A., D.B.M., Administrative  
Officer.

Manufacturing Division: Worli Works:  
K. Worthington, B.Sc., A.Inst. P.,  
Works Director; M. J. Desai, B.E.  
(Elec.), B.E. (Mech.), Product Deve-  
lopment Manager; S. G. Padhye,  
B.E. (Mech.), B.E. (Elec.), D.I.M., Works  
Manager; G. K. O. Philips, A.M.I. Mar. E.  
(Lond.) Grad. I.E.E. (Lond.), Project  
Manager; D. P. Patel, M.Sc. (Eng.)  
(Lond.), D.I.C., Product Manager,  
(Major Motors); S. M. Nath, B.A., D.B.M.,  
Administrative Officer.

Kanjur Works: S. K. Mohile, M.Sc. Tech.  
(Mech.), B.E. (Elec.), A.M.C.T. (Mech.),  
D.I.M. (Bom.), Works Manager; M. A.  
Pandit, B.E. (Mech. & Elec.) (Hons.),  
A.M.I.E.E., Product Manager (Power  
Transformers); A. Majumdar, B.Sc.  
(Hons.), D.I.I.Sc. (Elec. Tech.), Product  
Manager (Switchgear); B. N. Dixit, M.A.,  
LL.B., D.B.M., Administrative Officer.

CRESCENT TRADING CO., 48-50, Bhaji-  
pala Street, Bombay 3. Phone: 325140,  
328944. Cable: "Watermeter". Manu-  
facturers and Dealers: Pipes, Fittings,  
Boiler Mountings, Valves, Watermeters,  
Hydraulic Test Pumps, Acid Resisting  
Valves and Pressure Gauges.

Current Technical Literature Co. Private  
Ltd., India House, opp. G.P.O., Bombay  
1. P.O. Box No. 1374. Phone: 261045.

Currim, E. A. Private Ltd., Hardware  
Dealers & Iron-mongers, 97, Apollo Street,  
Fort, Bombay. Branch at Calcutta.

CYANAMID INDIA LTD., Producers  
of Broad Spectrum antibiotics and other  
pharmaceutical products, veterinary pro-  
ducts, antibiotic feed supplements as well  
as insecticides. Registered Office: 254-D(2)  
Dr. Annie Besant Road, Worli, Bombay-  
18WB. Grams: "CYANAMID", Bombay.

Western Regional Office & City Sales  
Depot: "The International", 16,  
Queen's Road, Bombay 1 BR. Grams:  
"LEDERSALES". Factory: at P.O.  
Atul, via Bulsar. Phone: 29. Grams:  
"CYANAMID", Bulsar.



**D. A. Nadkarni & Co. Private Ltd., Medical**  
—College Booksellers, 22, Gowalia Tank  
Road, Bombay 7.

**D. C. Batliwala, Furniture Merchants, 12,**  
Bruce Street, Bombay 1.

Phone: 22055. Cubes: "FORENOON"

## D. D. SHAH & CO.

Importers of Essential Oils & Aromatic  
Chemicals & Resinoids.

Damodar Bldg., 105, Princess Street,  
Bombay 2.

**D. S. Coutinho & Co., Billiard Tables Mfrs.,**  
91-93, D'Lima Street, Mazagaon,  
Bombay 10.

**D. Shah & Co., Laboratory Equipment**  
Merchants, 24, Sardar Griha Bldg., Carnac  
Road, Bombay 2.

**D. Dahyabhai & Co., Scientific Laboratory**  
and Hospital Equipment Merchants, 79,  
Princess Street, Bombay 2.

**D. JAMNADAS & CO.,** 207, Samuel Street,  
Bombay 3. Tel. Office: 325181 & 327919;  
Resi: 472114. Gram: "VANDAN", Bom-  
bay Mandvi. Importers and Exporters of  
all Industrial Chemicals, Solvents and  
Intermediates. Exclusive agents for:  
ACETIC ACID & POLYSOL S-6. (Japan).

## D. R. PUNDOLÉ & SONS

Watch and Clock Makers

Sole Manufacturers of  
"BEAUMONT" Watches & Clocks  
and agents for "Cyma" Watches and  
"CHEMOULD" Picture Frames.  
369, Dadabhai Naoroji Road,  
Fort, Bombay.

**D. V. Industries, Manufacturers and**  
Exporters of Rayon and Synthetic Fab-  
rics, 167, Bhavanishankar Road, Dadar,  
Bombay 28. Phone: 451865. Grams:  
"TEJCHHAYA". Sales Office: 367/A,  
Kalbadevi Road, Bombay 2. Phone:  
29341.

**Dada Fireworks Private Ltd.,** 240-42,  
Juma Masjid, Bombay 2.

**Dadabhoy Hormusjee & Co., Clearing &**  
Forwarding Agents. Dady House, Veer  
Nariman Street, Fort.

**Dadabhoy Hormusjee & Sons (Private) Ltd.,**  
30, Imperial Chambers, Ballard Estate,  
Bombay.

**DADAJEE DHACKJEE & CO. PRIVATE**  
LTD., DYES DEPT. P.B. No. 3090,  
274, Samuel Street, Vadgadi, Mandvi,  
Bombay 3. Grams: "PROMPT" Bombay.  
Phone: 324161/62, Importers & Export-  
ers of and Dealers in Dyes, Chemicals  
and Intermediates for Cotton, Silk,  
Acetate Yarn & Woollen Textiles. Leather,  
Soap, Paper, Coir, Jute & Allied Indus-  
tries. Also Sulphur Black and Photines  
(Optical Whitening Agents) Liquid Toilet  
Soap, Soap Powders, Detergents, Dis-  
infectants and Insecticides. Branches:  
Cannanore, Delhi, Kanpur, Madras,  
Madura, Nagpur and Patna.

**DADAJEE DHACKJEE & CO., PRIVATE**  
LTD., Automobile & Refrigeration  
Engineers; Distributors for JEEP FC-150  
Full Forward Control chassis; LAMB-  
RETTA Scooters, Scooterettes & Three-  
Wheeler Delivery Van & Rickshaw

Chassis; HINDUSTAN Tractors, Acces-  
sories and attachments; Patentees of  
specially designed 'PR' type streamlined  
van on Lambretta Three-Wheeler Chassis;  
Distributors for Rolls-Royce, Bentley,  
Hillman, Humber & Sunbeam Cars and  
Commer & Karrier Commercial Vehicles;  
Importers & Dealers of Automobile spare  
Parts & Accessories; Distributors for  
'WOLF' Electric Tools and Equipment;  
Manufacturers of "ROOTES TEMPAIR"  
Packaged-type Room Air-conditioners  
& Distributors & Suppliers of Remote &  
Central type Air-conditioning & Cold  
Storage Plants; also Manufacturers of  
"NULIFE" Automobile Batteries, and  
Distributors for Pentol Additive, Kerosol  
Kerosene Additive and All-In-One domes-  
tic lubricating Oil. Sandhurst Bridge,  
Bombay 7. Grams: "PROMPT",  
Bombay 7. Telephone Nos. 352321/23,  
Workshops: 74629.

**DAHANUKAR, M. L., & CO. PRIVATE**  
LTD., Industrial Assurance Building,  
Churchgate, Bombay 1. *Managing Direc-  
tor:* M. L. Dahanukar. *Jt. Mg. Director:*  
D. M. Dahanukar. *Director:* Dinkar  
M. Dahanukar. *Secretary:* S. K. Gubbi,  
B.A. *Managing Agents for The Maha-  
rashtra Sugar Mills Ltd.,* P.O. Tilak-  
nagar, District Ahmednagar. Tel. Address:  
"Design", Bombay. Tel. Nos. 242261-2-3.

**Daisy Trading Corporation.**—Tarpaulins  
Dealers, 40, Commercial Chambers, Masjid  
Bunder Road, Bombay 3.

**DAHYALAL MAKANJEE ZAVERI,**  
Precious Stones & Jewellery Merchants.  
98, Sheikh Memon Street, Bombay 2.  
Phone: 23218. Grams: "JAYKUBER".

**DALI B. SHROFF & CO.,** Manufacturers,  
Representatives, Importers and Exporters,  
361, Dr. Dadabhoy Naoroji Road, Fort,  
Post Box No. 973, Bombay. Phone No.  
251765. Tel. Address: "Oldlagold."

**Damji Manji,** 208, Sandhurst Road, Bombay  
4.

## DANDEKAR COMPANY

*Stockists of:*

Chemicals, Minerals, Sizing Materials,  
Fertilizers etc.

Address: Room No. 40, 4th Floor,  
Bombay Mutual Annexe,

17, Gunbow Street, Bombay-1.

Phone: 261038 Grams: "SHEKHAR".

**DANDEKAR, G. G., MACHINE WORKS**  
LTD., Bhiwandi, Dt. Thana, Bombay.  
Tel. Address: "Dandekarco."

**DATSON, RAVIRAJ & CO. (PRIVATE)**  
LTD., 43, Tamarind Lane, Fort.  
Phone: 254433. Grams: "DATNARE."  
Importers and Exporters, Specialists  
in Foundry Supplies, Welding Rods,  
Electrodes, Equipments and Acces-  
sories, Welding Cutting & Profiling  
Machines, High Temperature Re-  
fractory Cements, Boiler Laggings, Boiler  
Fittings, Packings and Jointings, Wire  
Brushes, Casehardening Compounds,  
Industrial Protective Appliances, Motor  
driven flexible shaft tube cleaning equip-  
ment & Accessories, Cutting Oils, Wire  
drawing compounds, Rust Preventatives,  
Quenching oils, & Heat Treatment Pro-  
ducts, etc. Associates: Shetty Chemical &  
Engineering Works Private Ltd., Bombay.  
Calcutta Office: 32, Ganeshchandra  
Avenue, Calcutta-13.

**Daudbhoy M. Tayebally, Government &**  
Railway Contractors and Glass Merchants,  
110, Abdul Rehman Street, Bombay 2.

**Davar, N., & Co., Interior Decorators and**  
Painting Contractors. Syndicate Bank  
Building, Sir Phirozshah Mehta Road,  
Fort, Bombay. Phone: 261880. Show-  
room: Commerce Centre, Tardeo, Bombay  
34(34WB).

**Dave Bros., Photo-Studio and dealers in**  
Photo & Cine Materials. Shop No. 9,  
Waterloo Mansion, 170, Mahatma Gandhi  
Road, Opp. Regal Cinema, Bombay 1.  
Phone: 211158 & 214042.

**DEAN & WEBBER MILL STORES CO.,**  
Manufacturers of Quality Bobbins,  
Plastics, Metallic & Wooden; Wooden  
Spools, Beam Flanges, & Shutters, Chemi-  
cals sizing Materials, SPANTO CHEMI-  
CALS—Sodium Meta Silicate; SPANTO  
TEXTILES—Bobbins of all Sorts, Plastics  
and Metallic a speciality. 5A, Advani  
Chambers, Sir Phirozshah Mehta Road,  
Fort, Bombay. P. Box No. 1461. Phone:  
Office: 26-3848, 26-4041 and 26-4049 and  
26-3848. Factory: 691260.

**Deepak Electric Corporation, Electric Goods,**  
Stockists & Distributors, 44, Bhangwadi,  
Kalbadevi, Bombay 2.

# De-Lite

## INDUSTRIAL CORPORATION

3G, Favourite Industrial Estate, Maarani  
Lane, Kurla, Bombay 70.

Mfrs. of De-lite Bells, Buzzers, Switches,  
Bell Pushes & Sockets, Etc.  
Phone: 551349.

**Delta Products Corporation (India), Manu-  
facturers of Auto Springs & Parts, 3,**  
Modi Chambers, French Bridge, Bombay 4.  
Phone: 71083. Grams: "MOTORCYCLE".

**Desai Tube & Hardware Mart, Mill Gin &**  
Hardware Merchants. 41, Nagdevi Cross  
Lane, Bombay 3. Phone: 321606, Grams:  
"Hasty".



## Designers Private Limited

Consulting Architects and Engineers for  
buildings and Industrial Projects,  
91A, Walkeshwar Road, Bombay-6.  
Telephone: 358612. Grams: "TEKNI-  
PLANT".

**Devidas Nandlal & Co., Dealers in Cutlery,**  
Toilet goods, Stationery, etc., 241-3, Abdul  
Behman Street, Bombay 3.



**DE SMET (INDIA) PVT. LTD.,**

P.O. Box 428, Bombay-1.

Tel. No. 372231

(Indo-Belgium Collaboration)

Structural Engineers & Contractors  
Fabrication of Steel Structures for  
Factories, Residential Buildings, Ware-  
houses, Crane-bridges and Gantry  
girders, etc. Equipment Fabrication shop:  
Solvent Extraction Plants, Vegetable Oil  
Refining Plants, Cottonseed Processing  
Equipment, Sugar Plant Machineries,  
Heat Exchangers, Condensers, Coolers,  
Extractors, Driers, Accumulators, Resin-  
Reactors, Evaporators, Vessels, Kettles.  
Machine Shop: Having Modern Machine  
Tools, Stainless Steel Fabrication Shop.



**DEVIDAYAL  
CABLE INDUSTRIES LTD.**

Gupta Mills Estate, Reay Road,  
Post Box No. 16203  
Bombay 10.

*Manufacturers of :*

Super Enamelled Wires, E.S.C.C.  
Wires, Cotton Covered Wires and  
Strips, Paper Covered Wires and  
Strips, Welding Cables, P.V.C.  
Cables, V.I.R. Cables, T.R.S.  
Cables, Flexibles etc. to B. S. and  
I. S. Specifications.

*Chairman, Board of Directors :*  
Harikishandas Aggarwal

*Managing Director :*  
Kewal Aggarwal

*Technical Director :*  
Kanial Aggarwal

*Secretary :*  
D. S. Venkatraman

*Legal Advisor :*  
B. J. Kapur

*Chief Accountant :*  
K. N. Shih

*Commercial Manager :*  
R. S. Raman

*Works Manager :*  
M. B. Lodh

*Factory at :*

Pokhran Valley, Thana  
(Maharashtra)

Telegrams : "TRIMEL"

Phones : Office : 370001, 372371-72  
Factory : 591336.

*Sole Selling Agents :*

**CABLE MARKETING COMPANY**  
Gupta Mills Estate,  
Bombay 10

**D M I**

**DEVIDAYAL  
METAL INDUSTRIES**

Reay Road, Darukhana,  
Bombay 10.

Telegrams : "GINGER"

Telephone : 378561 (4 lines)

*Manufactures of :*

Sheets, Sheathings, Strips,  
Coils, Circles etc. in Alumi-  
nium, Brass and Copper.

Suppliers of Non-ferrous Semi-  
finished Raw Materials to the  
following industries:

Automobile, Telephone, Pressure  
Stove, Bicycle, Refrigeration, Air-  
conditioning, Umbrella Ribs,  
Photoengraving and Printing,  
Musical Instruments, Clock, Lock,  
Gaskets, Pen Nibs, Collapsible  
Tubes, Ordnance Factories, Alu-  
minium Kettle and Utensil  
Manufacturers.

*Importers of :*

Aluminium, Copper, Zinc,  
Bok Strapping, Machinery for  
Rolling Mills.

*Exporters of :*

Brass and Copper sheets,  
sheathings, strips, circles, etc.

*Associated Companies :*

Hindustan Chains Pvt. Ltd.  
Manufacturers of "CEJ" (Sweden)  
Cycle Chains.

United Engineering Industries  
Manufacturers of "CEJ" Free  
Wheels.

**DEVIDAYAL  
STAINLESS STEEL  
INDUSTRIES PRIVATE  
LIMITED**

*Factory and  
Registered Office :*

Tulsiram Gupta Mills, Daru-  
khana, Reay Road, Bombay 10.  
Phone : 373586, 378033

*Local Sale Office :*

39, 2nd Bhoiwada, Bombay 2.  
Phone : 373586 & 378033

*Manufacturers of*

A wide range of Kitchen utensils,  
Tableware, Electrical Kettles,  
Pocket Tiffin Carriers, Fabricat-  
ed Stainless Steel Tanks for Food  
and Chemical Industries, Wash  
Basins and Hospital Equipment  
and Railway Fittings.

**DEVIDAYAL STAINLESS  
STEEL INDUSTRIES  
PRIVATE LTD.**

**STAMPING  
DIVISION**

*Factory:—DEVIDAYAL NAGAR,*

*Office:—Kanjur, Village Road,  
Bhandup, BOMBAY 78.  
Tel. 581201, 581214,  
582017, 581155*

*H.O.:—Darukhana, Reay Road,  
BOMBAY 10  
Phone: 373586, 378033*

*Manufacturers of :*

**Quality Stampings  
for**

**Motors, Generators,  
Transformers, Meters, etc.**

Devidayal Metal Industries, Reay Road,  
Darukhana, Bombay 10. Telegrams:  
"GINGER" (VG). Telephone: 378561.



**DEVIDAYAL TUBE INDUSTRIES LTD.,**  
Regd. Office: Gupta Mills Estate, Reay Road, Bombay-10. Grams: "DEVITUBE." Phone: 70001 (4 Lines). Non-Ferrous Metal Tubes for Industries.

Dewan Raj Kumar, (Estd. 1942) Trade Marks & Patents Attorneys and Advertising Consultants, 78, Podar Chambers, Parsi Bazar Street, P.O. Box No. 711, Fort. Phone No. 252044. Tel. Address: "Rajmilap." Poona Office: 1147/B, Shivaji Nagar. Phone: 57455.

Dharamdas M. Jhaveri & Co., Tool & Alloy Merchants, 108, Jhaveri Bazar, Bombay 2, (For details see in "Tool, Alloy & Special Steel Merchants.")

### DHARAMPUR LEATHER CLOTH CO. PRIVATE LTD.

10, Chowpatty Sea Face, Bombay 7.

#### Manufacturers of:

PVC Leather Cloth, Sheetings, Oil Cloth and PVC Coated Hand Gloves  
Acid Resisting Polyester Glass Fibre Laminates—Tanks-Pipes & Fittings.

Phone: 35-5481. Grams: "PUNEN".

Dharamsi Morarji Chemical Co., Ltd., The, Regd. Office: "Prospect Chambers," 317-21, Dr. Dadabhai Naoroji Road, Fort. Manufacturers of Single, Superphosphates; Manure Mixtures. Acids, Sulphuric, and Nitric, Ferrous Sulphate, Sodium Sulphide, Alumina Sulphate Ferric and Iron Free, Alums, Laboratory Acids and Fuming Acids and Chlorosulphonic acid.

Factories at: 1. Ambarnath (Near Kalyan) C. Rly., Maharashtra State.

2. Kumhari (Near Raipur) S. E. Rly., Madhya Pradesh.

Managing Agents: Dharamsi Morarji & Co. Telegraphic Address: "Dharmajaya", Bombay. "Avantika", Raipur.

Telephone Nos.: 255581, 255582 & 255583.

**DHIRAJLAL & CO.,** 15, New Queen's Road, Bombay 4. Phone: 23112. (Res.) 473703. Grams: "RICEMILL" Importers & Distributors of Ball & Roller bearings. Stock holders of STEYR Q. INA Bearings. Authorised Stockists for NBC Bearings.

Dialdas, M., & Sons (India) Private Ltd. Haroon Building, 190, Princess Street, Bombay 2. Importers Exporters, Phone: 30124. Grams: "Emdas."

**DIAMOND RUBBER WORKS (PRIVATE) LTD.,**—276, Nagdevi Street, Bombay 3. Phone: 326719. Grams: "COMRADE". Manufacturers of Rubber Insulated & P.V.C. Electrical Wires & Cables, Rubber Hosepipes, Suction Delivery, Armoured Suction & Armoured Delivery, Cycle Tubes & Rubber Insertion Sheets.

Diamond Surgical Dressings Works, 381, Arthur Road, Bombay 11.

Dinanath Sons, Importers, Exporters & Manufacturers' Representatives, 466, Kalbadevi Road, Bombay 2. Phone: 39619.

**DINSHAW, N. & CO.,** Papers, Boards, Jute, Twine, Beltings, Industrial Rubber & Leather Goods, Pigments, General Merchants, Mill Store Suppliers, Govt. & Rly. Contractors, 14, Ismail Building, Flora Fountain, Bombay 1. Phone: 253488. Tel. Address: "DILINOL".

**DOBSON & BARLOW (RAYON PLANTS) PRIVATE LTD.,** Suppliers of plants for the production of Continuous Filament Viscose Rayon and Transparent Paper, 3rd Floor, Stadium House, Veer Nariman Road, Bombay 1. Phone: 245878.

**DODGE & SEYMOUR (INDIA) PRIVATE LTD.,** "KRUPANIDHI", 9, Wittet Road, Ballard Estate, Bombay 1 BR. Phone Nos.: 263674 & 265479. Grams: "EXIMCO."

**DONGRE & CO., PRIVATE LTD., K. T.,** Manufacturing Chemists. Manufacturers of DONGRE'S BALAMRIT. GRIPE WATER and various Ayurvedic Medicines. Chairman & Governing Director: R. V. Dongre. Managing Director: S. V. Dongre. Office: Commonwealth Bldg., 82, Nagindas Master Road (Meadows Street), Bombay 1. Tele. Add. "Balamrit" Phone Nos.: 254853 and 256460 (Office); 351270 & 351174.

**DORR-OLIVER (INDIA), LIMITED,** "The International," 18, Queen's Road Estate, Bombay 1. Engineers to the Process Industries and Public Health; Processes and Equipment for Chemicals, Sugar, Fertilizers, Minerals, Water and Sewage Treatment. Phone: 242361. Grams: "DORROLIVER."

Phone: 321330-328570. Grams: "DOSSAHCO".

### DOSSA HARJEE

257-59, Yusuf Meherally Road, Bombay 3.

Manufacturers & Exporters of Tarpaulin, Carpets & Linoleums. Agents for: Birla Jute Mfg. Co. Ltd., Calcutta; India Linoleums Ltd., Calcutta.

Dr. K. Patel & Sons, 249, Dr. Dadabhai Naoroji Road, Fort, Bombay-1-BR. Dealers in Dental Goods, Pumping and Generating Spare Parts. Phone No. 263762.

**DRENNAN & CO.,** Cotton Brokers and Controllers, Neville House, Ballard Estate. Tel. Address: "Alabaster." Phones: 264036 & 264037.

**DREWET CHOWNA & CO.,** 123, Meadows Street, Fort, Bombay.

#### Agents of:

Deming Div. Crain Co., Salem, Ohio, U.S.A. For all kinds of Water Pumps and automatic system.

Tangyes Ltd., Birmingham (U.K.). For Vertical and Horizontal 4 to 200 h.p., Diesel Engines, Centrifugal and Turbine Pumps, Steam Pumps, Hydraulic and Screw Jacks; Rly. Lathes, Power Presses, etc.

P.S.G. & Industrial Institute (Coimbatore). For Electric Motors, Pumps, 5 H.P. Diesel Engines.

Oriental Engg. Works (P.) Ltd. For KARMA, 8/9 to 33/36 H.P. Diesel Engines and 'OE' Workshop accessories.

#### Manufacturers of:—

(Under licence of U.K. Principles) Tangyes Hydraulic Jacks 12 to 200 ton capacity. Grams: "DREWET," Bombay. Telephones: 252489, 252736.

**DUBASH FRERES & CO.,** Importers, Exporters, Manufacturers' Representatives & Manufacturers of Pharmaceutical Glassware, Ampoules Vials, Tablet Tubes, Test Tubes, etc. Victoria Building, Parsee Bazar Street, Fort, Bombay 1. Phone No. 252131. Tel. Address: "Dubfreres."

**DUKE & SONS PRIVATE LTD.,** Manufacturers of Aerated Waters & Fruit Drinks like "Mangola", etc. Opp. Krishna Cinema, Tribhuwan Road, Bombay 4. Factory and Office Phones: 351347 & 351934.

Duncan Stone Co., Marble & Tile Merchants, 300, Duncan Road, Bombay 4. BR.

**DUNLOP RUBBER CO. (INDIA), LTD.,** Registered Office—"Dunlop House," 57B, Free School Street, P.O. Box No. 391, Calcutta.

Factories—Sahaganj, West Bengal; Ambattur, Madras.

Branches: Ahmedabad, Bangalore, Bombay, Calcutta, Calicut, Cuttack, Cochin, Delhi, Ernakulam, Gauhati, Hyderabad, Jabalpur, Jaipur, Jullunder, Kottayam, Lucknow, Madras, Nagpur, Patna, Poona.

Bombay Office: Dunlop House, Hughes Road, P.O. Box No. 4023, Bombay 7. Phone: 73478 (3 lines). Grams: "Dunlops", Bombay.

Manufacturers of tyres and tubes for aeroplanes, automobiles, motor cycles and scooters, tractors, earthmoving machines, animal drawn vehicles and cycles, accessories, repair and retread materials, cycle rims, conveyor and transmission belting, Vee belts, hoses, adhesives, Dunlopillo latex foam cushioning.

Durga Laboratories, Manufacturers of Textile Dyes, 71, Bhandari Street, Bombay 3.

**FOR SHELTER & SAFETY**



**100% WATER PROOF**

Phones: 324332, 323232 & 321616  
Grams: "VELTHAKKER"

### DWARKADAS VELJI TALPATRIWALA

P.B. No. 3099, 36, ESSAJI STREET BOMBAY 1

### E. PEERBHOY & SONS

(Prop.: Indian Durries Emporium)  
64, Mohomedali Road, Shahrul Castle, Bombay-3.

Stockists, Manufacturers of Carpets, Durries and Dealers in Handloom Textiles, Shoe Making Machinery & Wooden Furnitures.

**E. RUTTONSHA PRIVATE LTD.,** International House, Bombay-Agra Road, Vikhroli, Bombay 83. Phone: 581688. Grams: "LECRUT", Bombay. Manufacturers of Battery Chargers, D. C. Rectifier Units, Electroplating Rectifiers, Battery Eliminators, Fluorescent Starters, Panel Meters, Voltage Stabilisers and Power Suppliers.

Eagle Corporation, Importers & Merchants, Himalaya House, 2nd Floor, 70, Palton Road, Bombay 1.

Eagle Wire Industries, Mfrs. of Barbed Wire—Stranded Wire U Staple, etc. Himalaya House, Palton Road, Bombay 1.



# EAST ASIATIC CO. (INDIA) PRIVATE LIMITED, THE

Manufacturers, Importers, Exporters,  
Engineers & Distributors

## Offices at :

**MADRAS :** (i) Mercantile Bank Bldg., First Line Beach, P.O. Box 146; (Regd. Office & Head Office): Phone : 29341; (ii) Bharat Building, Mount Road; (iii) Senniamman Koil Street. **BOMBAY**—Wavell House, Ballard Estate, P.O. Box 639, Bombay 1; Phone : 26-2711; Machine Works, Tank Road, Bombay-33-DD; Phone : 378544. **NEW DELHI**—Delite Cinema Building, P.O. Box 656; Phone : 277901. **CALCUTTA**—P-29, Mission Row Extension, P.O. Box 364; Phone : 232114. **SECUNDERABAD**—Jeera Corner, Rashtrapathi Road. **BANGALORE CITY**—42, Silver Jubilee Park Road.

## Associated Offices at :

Copenhagen, Aba, Accra, Arusha, Awaso, Bangalore, Bandon, Bangkok, Bombay, Blantyre, Broderik Falls, Buenos Aires, Bujumbura, Bukavu, Bukoba, Cali, Calcutta, Cape Town, Chantaboon, Curitiba, Parana, Dar-es-Salaam, Dallas, Dodoma, Durban, Gala Estate, Gonoa, Guadalajara, Hamburg, Hongkong, Houston, Iacri, Ibadan, Ipoh, Jesselton, Johannesburg, Joinville, Kampala, Kano, Kanpur, Karachi, Kigali, Kinshasa, Kisumu, Kalang, Kuala Lumpur, Kuawtan, Kumaal, Kuching, Lagos, Leghorn, Lima, London, Los Angeles, Madras, Mandaguarl, Manila, Masaka, Mbale, Mbarara, Melbourne, Meru, Mexico D. F., Milan, Mombasa, Monrovia, Moshi, Mwanza, Nairobi, Naples, New Delhi, New York, Osaka, Paris, Penang, Pereira, Phnom Penh, Port Elizabeth, Portland, Ore, Porto Alegre, Port Swettenham, Rangoon, Recife, Rio De Janeiro, Saigon, Salisbury, Salvador-Bahia, San Francisco, Sadakan, Santa Rosa, De Cabal, Santos, Sao Paulo, Secunderabad, Sekondi, Shinyanga, Shanghai, Singapore, St. Thomas, Sydney, Tahsis, Taiping, Takoradi, Usumbura, Tamale, Tokyo, Tupan, Uniao Da Victoria, Vancouver, B.C.

**EASTERN BUNKERERS LTD.**, Steve-dores, Bunkerers, Dubashes, Landing, Victualling, Chipping & Painting Contractors, Clearing, Forwarding & Insurance Agents. Scindia House, Dougall Road, Ballard Estate. Tel. Address: "Vavto". Phone: 26-2461. Directors: Smt. Sumati Morarjee (Chairman), R. P. Vevaina, J. C. Nanavati, S. P. Patel, Dhirajlal Maganlal Dalal, S. C. Sheth (Mg. Director).

**EASTERN CARD CLOTHING CO., PRIVATE LTD., THE**, Importers of Card Clothing for Textile Mills. Works & Office: Lamington Road North. Lal Chimney, Bombay 11. Phone: 374673. Grams: "WIRE FILLET (J.C.)". Distributors: for Prayin de Pauw Ltd., Ghent-Belgium.

**Eastern Electric Light & Power Co., Ltd.**, Electrical & Mechanical Engineers & Contractors. All Chambers, 4, Dean Lane, Fort

**Eastern Lights Co.**, Flash Light Torches & Gas Light Merchants. 78, Lohar Chawl, Bombay 2.

**Eastern Machinery & Trading Co.**, Heavy Electrical Equipment & Machinery. Imperial Chambers, Wilson Road, Ballard Estate, Bombay 1.

**Eastern Stores & Trading Co. Private Ltd.**, The, Manufacturers' Representatives for Asbestos, Industrial Rubber Products, Steel Wire Ropes & Fire Hose Equipment. 115, Nagdevi Street, Bombay 3. Phone Nos. 322215-16. Grams: "ENERGY".

**EASTERN TRADING & ENGINEERING CO.**, Alice Building, 3rd Floor, 339, Dr. Dadabhoi Naoroji Road (Hornby Road), Fort, Bombay. Phone No. 251659. Grams: "Higstel." Manufacturers of Bright drawn Steel Bars, Rounds, Hexagons and Squares, Commercial and Free cutting Qualities.

Sole Representatives for Maharashtra & Gujarat States for :

**Indian Link Chains Manufacturers Ltd.**, Bombay. Manufacturers of "Hercules" Brand Electrically welded Steel chains. Hercules Mechanical Works, Bombay. Manufacturers of "Elephant" Brand Chain Pulley Blocks. Seshasayee Wire Ropes Ltd., Edathala (Alwaye), Kerala. Manufacturers of Steel Wire Ropes.

**Eastern Trading Co.**, 47, Mahakali Chawl, Pydhowrie, Bombay 3.

**Eastern Watch**, 231-3, Dr. Dadabhoi Naoroji Road, Watches and Clocks Manufacturers and Importers. Tower Clocks Specialists. Every type of Electric Clocks. Post Box No. 263. Phone No. 261962.

**Economy Refrigeration & Engineering Co.** Suppliers of Vilter Ammonia and Freon Compressors and manufacturers of Refrigeration and Ice Plant equipments and parts. P.O. Box 449. Forbes Street, Fort. Phone: 25-3342. Grams: "ICEMACHINES", Bombay 1.

**ELDEE WIRE ROPES PVT. LTD.**, Eldee Chambers, 3, Broach Street, Bombay-9. Grams: "ELDEEROPEs." Phone Nos: 321141, 327848 & 327689. Works: 581150. Manufacturers of Quality Steel wire Ropes & standard wire; Works at: Lekhraj Devraj Industrial Estate, Sakl Naka, Kurla-Vihar Road, Bombay-70. Registered with D.G.S. & D., Railways and State Governments.

**Elecon Engineering Co. Private Ltd.**, 125, Dinshaw Vachha Road, Churchgate Reclamation, Bombay 1; Phone: 245795; Grams: "MATHANDLE".

**Electric Construction & Equipment Co.**, Ltd., Importers and Manufacturers of Lifts and Hoists. Sole Agents in India for Messrs. Schindler & Co., Ltd. (Switzerland) Neelkanth, 98 Marine Drive, Opp. Marine Lines Station, Bombay-2.



## ECONOMIC

### ELECTRIC CO. PRIVATE LTD.

ENGINEERS, CONTRACTORS & DEALERS  
IN ELECTRICAL & RADIO GOODS

**JAIL ROAD EAST, DONGRI, BOMBAY 9.**

PHONE No. 331137  
TELEGRAM - WAVEBAND BOMBAY

**Electricals (India) Private Ltd.**, Importers & Dealers in all Electrical Goods, 24-B, Hamam Street, Fort, Bombay.

**Elliott, Waud & Hill Private Ltd.**, 1-2, Lakshmi Building, Sir P. Mehta Road, P.O. Box No. 1471, Fort, Bombay 1.

**Ellora Art Industries**, Manufacturers of Electrical Accessories, Shreejee Bhuwan, 1st Floor, Lohar Chawl, Bombay 2.

## EMMES METALS

Lead lined, P. V. C. Lined and rubber lined tank structures of all types for handling and processing corrosive liquids.

Autoclaves, Reaction, Vessels & storage Tanks, Wash Tanks & Pickling Baths.

Heating & Cooling Coils, Evaporators, Condensers & Coolers.

Steel Reinforced Wooden Vats

## EMMES METALS PRIVATE LIMITED

Post Box No. 6565

11, Worli Road, Bombay 18 W.B.

Tel. Nos. 375432-3-4.

Grams: "METAMELT"

**Elve Business Contact Corporation**, Diesel Engines Spares Importers. Elve Chambers, Green Street, Bombay 1.

**EMPLOYERS' LIABILITY ASSURANCE CORPORATION, LTD.**, The (Incorporated in England 1880), Express Building, "E" Road, Churchgate, Bombay 1. Grams: "INDEMNITY," Bombay. Phone: No. 243712. Manager: Mr. V. V. Desai.

**ENDESCO PRIVATE LIMITED**, Industrial & Management Consultants, Project Project Engineers. Registered Office: "Shivaenumh", 205, Dr. A. Besant Road, Worli, Bombay 18. Telephone: 372614. Grams: "ENDESCON". Chairman: Mr. M. R. Thadhani, Managing Director: Mr. H. N. Thadani, Directors: Mr. M. T. Mansukhani, and Mr. B. T. Sahabni.

## Foreign Associates :

**Ramseyer & Miller Inc.** New York (USA) Iron & Steel Consultants.

**Gray & Donaldson Ltd.**, Adelaide, (Australia) Vintage Plant and Brewery Consultants.



**Project Engineering :**

Planning for new projects ; modernisation and expansion of industries for agricultural machinery, Cement, Engineering, Ferrous and Non-Ferrous Plants, Forging Shops, Rolling Mills, Paper, Chipboard and Fibre Board, Sugar, Textiles, Vintage Plants and Breweries.

**Management Consultants :**

Management organisation, financial controls, cost accounting, production planning and equipment utilisation, work standards, job evaluation, piece rates and incentives, material handling and mechanisation, stores organisation and inventory control, material utilisation and waste control, operation research, Pert/CPM, valuation of plant machinery and buildings, selection of management and technical staff, market research.

Engineer Bros., Importers and Manufacturers of Textile Mill machinery Accessories, 16, Apollo Street, Fort, Bombay. Phone: 251009. Grams: "SHRIJIBAVA".

Engineer, Eruch D., & Co., Machinery, Mill and Gin Stores Suppliers and Sole Agents: Crossley Bros. Ltd., Mfg. Oil and Gas Engines, Crossley House, Apollo Street. Tel. Address: "Oilengines." Phone No. 251876.

Engineering & Agencies Private Ltd. Suppliers of German Textile and Engineering Machinery, French Bank Building, Homji Street, Fort, Bombay.

**ENGINEERING CONSTRUCTION CORPORATION LIMITED**, (Wholly owned subsidiary of Larsen & Toubro Limited). Registered Office: L. & T. House, Dougall Road, Ballard Estate, P.O. Box 278, Bombay-1. Phone: 264411/9. Grams: "LARSEN BRO." Telex: TLX 246.

Managing Agents: L. & T. (Management) Private Limited. Head Office: 41, Koliwada Road, Sion, Bombay. Phone: 472575-76. Designers, Civil Engineers & Contractors.

Directors: H. Holck-Larsen, S. K. Toubro, P. G. Bhagat, John Hover, E. B. Mogensen.

Offices at: Calcutta, Madras, Delhi, Bangalore, Ernakulam,

**ENGLISH ELECTRIC CO. OF INDIA LTD., THE**, Registered Office: D-3, Gillander House, 8, Netaji Subhas Road, Calcutta-1. Branches: New Delhi, Lucknow, Madras. Bombay Branch: 202-B, Veer Nariman Road, Churchgate, Bombay-1 (BR). Phone: 24-2061. Grams: "EN-ELECTICO," Bombay-1. Manufacturer of Fusegear, Relays and Control Panels. Agents for, The English Electric Company Limited, U.K.

Eranee Brothers, Merchants, Anand Bhavan, 346, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "COTTAGE," Bombay.

Escorts (Agents) Private Ltd., 148, Mahatma Gandhi Road, Bombay 1.

## ESOOFALL ESMAILJI KARACHIWALLA & CO.,

Shipchandlers and Wire Rope Merchants.

43-45, Bhandari Street, Bombay-3.

Phone: 321617. Grams: "SLING".

**ESSENTIAL ENGINEERING CO.**, Importers, Engineers & General Machinery Merchants, 11, Botawala Building, Horniman Circle, Fort, Bombay 1. Grams: "ESSENCE." Phone: 25-2940.

Manufacturers of "ESENPRO" Worm Gear, Heli Cal, Bevel, Spur Gears, Geared Motors, Torque Arm Shaft Mounted Gears, open and closed type variable speed drives, sprockets wheels as per B.S.S. Pin Bush Type Flexible couplings, Transformer welding sets, Motor Generator Arc Welding sets, Solari card Time Recorders.

Also ask us for: Sugar Machinery chains, conveyors, Elevators, Copper & Brass Tubes, Chlorination plants, Chemical Pumps, Surveying Instruments, etc.

## ESOOFALY MAHOMEDALY & CO.,

Dealers in: Aerated Water Requisites.

Sole Selling Agents:

INDIAN CARBON DIOXIDE INDUSTRIES (Bombay-Madras).

Head Office:

102/4, Sarang Street, Bombay 3.

Grams: "PURIFIED." Phone: 326516.

Branches:

12, Walltax Road, Madras 3.

Phone: 334400. Grams: "HARMLESS." 13-11-233, Convent Street, Park Road, Vijayavada-1.

Phone: 1004. Grams: "PURIFIED".

Also at:

Shivaji Road, Kolhapur.

Esaufally Adamji & Co. (Estd. 1885), Pipes—Fittings—Hardware—Mill Gin Stores—Shipchandlery—Sanitaryware—Agricultural Implements—Rubber Goods. 134, Nagdevi Street, Bombay 3. Phone Nos. 323775 & Res.: 212141.

Partners: N. E. Ghasletwalla, A. E. Ghasletwalla and Asgar Nurudin.

Agents to: Burmah-Shell Oil Storage and Distributing Co. of India Ltd., Petrol, Kerosene, Diesel Oils.

Branches: Akola, Karanjia, Pusad, Akot, Basim, Umerkhed (Maharashtra).

## EUTECTIC WELDING ALLOYS OF INDIA LIMITED

(Larsen & Toubro Limited in Collaboration with Eutectic Castolin of Switzerland). Registered Office: L. & T. House, Dougall Road, Ballard Estate, P.O. Box 278, Bombay 1. Phone: 264411/9; Grams: "EUTECWELD." Factory: Saki-Vihar Road, Powai, P.O. Box 8901, Bombay 72 AS. Phone: 581501/10. To manufacture EUTECTIC low temperature welding alloys, electrodes, fluxes.

Directors: H. Holck-Larsen, N. M. Desai, Gunnar Hansen, R. D. Wasserman, F. Brandenburg, M. Roth.

Selling Agents: Larsen Toubro Limited, P.O. Box 278, Bombay 1. Phone: 264411/9. Grams: "LARSEN BRO." Telex: TLX 246.

Everest Calendar Co., Manufacturers of all kinds of Calendars, 35, Prospect Chambers Annexe, 3rd floor Dadabhoy Naoroji Road, Bombay 1.

Everest Engineering Corporation, Dealers in Machinery & Spare parts. 12, Gunbow Street, Bombay 1. Phone: 26-1691. Grams: "EXPOCORP".

**EVERETT STEAMSHIP CORPORATION**, (Incorporated in the Philippines with limited liability), Shipowners, Brokers, Operators and Agents. Fort House Annexe, 221, Dr. Dadabhoy Naoroji Road (Post Box 523), Bombay 1. Telephones: 264081-3 (three lines). Telegraphic Address "STARLINER" and "EVORIENT," Bombay. Agents for American Mail Line, Everett Orient Line, Johnson Line, Keystone Shipping Co., National Shipping Corporation, Oriental Exporters Inc., Waterman Steamship Corporation and J. H. Winchester & Co.

## EVERGREEN WIRECLOTH FACTORY

Leading Manufacturers of:

Welded Wire Mesh, High Tensile Gauze, Hex. Wire Nettings, Spring Steel Wire Screens, Wires Chainlink Fencing, Crimped Wire Net, Barbed Wire, Panel-pins and other Wire Products.

Head Office: Bhabha Building, 151/155, Princess St., Bombay 2. Phone: 22461.

Grams: "WIREMESH".

Factory: Goregaon (East), Bombay 63.

Phone: 691321.

Branch: 182, Nainappa Naick Street, Madras 3.

Phone: 32846.

Grams: "WIRECLOTH".



EVEREST

ADVERTISING PRIVATE LIMITED

ADVERTISING • MARKETING

MARKET RESEARCH • PUBLIC RELATIONS

Kitab Mahal, 192, D. Naoroji Road, Bombay 1.

Tel: 26-4771 (3 lines) and 263722

Grams: "EVERESTAD", Bombay

London Office:

Mr. L. A. STRONACH,

2, Heath Close, Hanger Hill, Ealing, London W.5.

ASSOCIATES THROUGHOUT THE WORLD.

Evergreen Corporation, Stockists of Hardware Tools. 9-15, Picket Cross Road, Bombay 2.

## EXCEL PROCESS PVT. LTD.

Leading Mfrs. of excellent quality Aluminium Anodised, Etched & Embossed Metal Labels, Advtg. Novelties, Dials, Scales, Badges, Conversions & Slide Tables, Decorative Radio Trims & Panels etc. 117, Andheri-Kurla Road, Bombay 69. Phones: 572743-573327-573328.

Express Block & Engraving Studios Private Ltd., Mustafa Building, Sir Phirozshah Mehta Road, Post Box No. 1067, Bombay 1. Designs, Blocks and Cinema Slides makers. Phone Nos. 252204-252205. Grams: "EXPRESBLOCK".



# FINLAY, JAMES & CO., LIMITED

(Incorporated in Great Britain)

The Liability of the Members is Limited.  
Merchants, Chartered Bank Building,  
Mahatma Gandhi Road. Phone Nos.  
251255-59. Post Box No. 73.

James Finlay & Co., Limited, Glasgow,  
London, Calcutta, Chittagong, Visakhapatnam,  
Karachi, Colombo, Cochin,  
Narayanganj, Madras, New Delhi and  
Marmugao—Goa.

C. H. Campbell.

P. C. Kendall.

J. D. Hicks.

N. J. de Souza.

F. Jehangir.

S. F. Joshi.

A. H. Steven.

P. J. B. Carson.

## MANAGING AGENTS:

Swan Mills, Limited, Bombay.

The Finlay Mills Limited, Bombay.

The Gold Mohur Mills, Limited.

Alexander & Finlay Thread Co.

## STEAMSHIP AGENTS:

The Clan Line Steamers Limited.

Ellerman's Wilson Line, Limited.

Japan-India-Pakistan Line.

States Marine Corporation.

Global Chartering & Brokerage Co., Inc.

Shinwa Kaisha Ltd.

## REPRESENTING:

Manganese Ore (India) Ltd.

The C. P. Manganese Ore Co. Ltd.

A. I. Welders Ltd.:—Resistance Welding Machines.

Andrew Barclay, Sons & Co., Ltd.:—Locomotives.

Atlas Engineering Co.:—Wheel Profile Truing Machines.

Brookhirst Igranite Ltd.:—Electrical Control Gear.

Dass Hitachi Ltd.:—House Service Meters.

Electromech.:—Industrial Exhaust Fans, Electro-Mechanical Apparatus.

F. H. Lloyd Co. Ltd.:—P. O. Box No. 5.

James Bridge:—Steel Works, Near Wednesbury, Staffs.

Fort Gloster Industries Ltd. (Cable Division):—Electric Cables and Wires.

Hymatic Dredgers Ltd.:—Portable Dredgers.

Industrial Meters Private Ltd.:—Ammeters, Voltmeter and Watt Meters.

John Whiteley & Sons:—Card Clothing.

Robert Maclaren and Co., Ltd.:—Electric Thermostats.

Scottish Cables Limited:—Electric Cables.

Simons-Lobnitz Ltd.:—Dredgers.

Teddington Industrial Equipment Ltd.:—Industrial Control Equipment.

Vertex Manufacturing Co., Ltd.:—Switches, Switch Fuse Units and Distribution Boxes.

Enso-Gutzeit Osakeyhtio:—Kraftiner and Fluting.

Finnish Board Mills' Association:—Box Board, Chipboard, etc.

Finnish Cellulose Association:—Chemical Woodpulp and Rayon Pulp.

Finnish Paper Mills' Association, Dept. I:—Newsprint.

Finnish Paper Mills' Association Depts. II & III:—Various types of paper.

Finnish Paper & Board Converters' Association:—Corrugated Board and other Converted Products.

Finnish Woodpulp Union:—Mechanical Woodpulp.

Tervakoski Osakeyhtio Paper Mills:—Fine Papers.

Wartsila Oy A/B.:—Paper Manufacturing Machinery, Ships, Porcelain etc.

Speciality Papers Ltd.:—Fine Papers.

## LLOYD'S AGENTS

### AND AGENTS,

### SALVAGE ASSOCIATION,

### LONDON.

### AGENTS:

The Yorkshire Insurance Co. Ltd.

London & Provincial Marine & General Insurance Co. Ltd.

Commercial Union Assurance Company Ltd., London.

National Insurance Co. of Great Britain Ltd.

South India Insurance Co. Ltd.

New Great Insurance Company of India, Limited.

British India General Insurance Company Limited.

### SHIP AND CARGO SURVEY

### AND

### CLAIMS SETTLING AGENTS:

Lloyd's Underwriters, London.

Institute of London Underwriters, London.

W. K. Webster & Co., Ltd., London.

Aetna Casualty & Surety Co., Hartford, Connecticut, U.S.A.

Alpina Insurance Co., Ltd., Zurich.

Chiyoda Fire & Marine Insurance Co., Ltd., Tokyo.

Cornhill Insurance Co., Ltd., London.

Elders Insurance Co., Ltd., London.

Fylgia Insurance Co., Stockholm.

General Insurance Company Helvetia Ltd., Switzerland.

General of Berne Insurance Co., Ltd., Switzerland.

Guildhall Insurance Co., Ltd., London.

Insurance Co. of North America, Philadelphia.

Insurance Enterprise of the State, Budapest.

Koa Marine & Transit Insurance Co., Ltd., Tokyo.

London & Overseas Insurance Co. Ltd., London.

London & Provincial Marine & General Insurance Co., Ltd., London.

Wm. H. McGee & Co., Inc., New York.

Nissan Fire & Marine Insurance Co. Ltd., Tokyo.

Parcels & General Assurance Association Ltd., London.

Providence Washington Insurance Co., Providence, R.I.

Provincial Insurance Co., Ltd., London.

Royal Exchange Assurance, London.

SVEA Group, Stockholm.

Sumitomo Marine & Fire Insurance Co., Ltd., Tokyo.

Sun Insurance Office Ltd., London.

Swiss National Insurance Co., Ltd. of Basle, Basle.

Switzerland General Insurance Co., Ltd., Zurich.

Taiho Marine & Fire Insurance Co. Ltd., Tokyo.

Tokio Marine & Fire Insurance Co., Ltd., Tokyo.

Vakuutusosakeyhtio Pohjola, Helsinki.

Wiener Allianz Versicherungs-Aktiengesellschaft, Vienna.

Willis, Faber & Dumas Ltd., London.

And many other Insurance Companies in the United Kingdom, Europe, North America, Japan, Australia and New Zealand.

Also Quality Surveyors for Import & Export Cargoes and Non-Marine Assessors.

### LLOYD'S SUB-AGENCY—GOA:

Surveyor and Sub-Agency Manager:—Captain V. Pereira. Sub-Agents for Lloyd's and London Salvage Association. Surveyors for over 200 Indian and Foreign Insurance Companies.

All types of ship and cargo surveys conducted by staff.



**EXPRESS WATCH CO.,** Importers, Wholesalers and Retailers of Watches, Clocks & Timepieces, 78, Abdul Rehman Street, Bombay 3. Grams: "Primewatch." Phone: 325938.

**EXTRUSION PROCESSES PRIVATE LTD.,** Ram Baug, Swami Vivekanand Road, Malad, Bombay 64. Phone Nos. 692326 & 691785, 691203, 692868 and 692869. Grams: "COLAPSTUBE" Malad, Bombay 64. Manufacturers of Collapsible Tubes & Rigid Containers. *Managing Director:* M. I. Patel.

**FAIRFIELD MANUFACTURING COMPANY,** Hanuman Building, 4th Floor, Tambakanta, Pydhonie, Bombay-3 (B.R.). Phones: 324323 & 323758. Grams: "MASRANICOY." Manufacturers of Spring Washers, Shakeproof Washers, Circlips and Precision Strip Forms. Factory at: Masrani Estate, Halav Bridge, Kurla, Bombay-70. (A.S.).

**F. BOCK & CO.,** Shale Building, Bank Street, Post Box No. 1288, Fort, Bombay 1. Grams: "Efbock." Phone Nos.: 255033 (Office) and 61336 (Factory). Manufacturers and Importers of Plastic Moulding Powders, Dyes, Chemicals, Pharmaceuticals, Drugs & Medicines. *Managing Agents for:* Bombay Sewree Chemicals Manufacturing Co. Private Ltd.

**F. E. HARDCASTLE & CO., PRIVATE LTD.,** Alice Buildings, Dr. Dadabhai Naoroji Road, Fort, Bombay, Marine Surveyors, and Assessors. *Directors:* D. N. D. Khandalavala, B.A., LL.B., Bar-at-Law; N. D. Khandalavala, B.A., A.C.I.I.; C. H. Hardcastle, J.P., A.I. NAV. A., A.I. MAR. E., F.R.G.S., F.R.S.A.; H. A. Amos, M.I. MAR. E.; Mrs. Dina D. Khandalavala; Dr. D. T. Modi. Tel. Add.: "VERITAS". Phone Nos. 253447 and 256393. Average Agents and Claims Settling Agents for many European and American Underwriters' Associations and Companies.

*Agents and Surveyors to:*

Bureau Veritas, Norske Veritas, Registro Italiano Navale, Germanischer Lloyd-Registers of Shipping.

United States Salvage Association. Comité Central Des Assureurs Maritimes de France, Board of Underwriters of New York.

**FAIRDEAL CORPORATION (PRIVATE) LTD.,** Manufacturers & Exporters of Pharmaceutical Specialities & Antiseptic Products; Importers of Pharmaceuticals. *Regd. Office:* Lakshmi Bldg., Sir P. M. Road, Fort, Bombay 1. Phone: 263593. *Laboratory:* 142-48 Swami Vivekanand Road, Jogeshwari, Bombay-60-NB. Phone: 572408.

*Branches:* (1) Laha Paint House, 7, Chittaranjan Ave., Calcutta-13. Phone: 233157. (2) 2, Errabalu Chetty Street, Madras. Phone: 24835. Grams: "CRUSHETTES," Bombay, Jogeshwari (Bom.), Calcutta & Madras.

**Fakhruddin & Co.,** 43, Abdul Rehman Street, P. B. No. 3066, Bombay 3. Phone Nos. 325837 and 322725. Grams: "WOOD-PLY". Stockists of Okal Board "Formica" Plastic Laminated sheets, Insulating boards, "Anchor" Novateak Asbestos Electrical Insulating for Arc and heat resisting sheets, tempered press boards, Plywood block boards, Asbestos Cement Sheets, Veneer, decorative teak plywood, Expanded Metals, Perforated Metal Sheets, Welded Wire Mesh.

**FAMOUS LADDERS MANUFACTURING CO.,** Manufacturers of "Famous Ladders" for all purposes, such as folding steps and single ladders, Extension and Tower ladders, Telescopic wheeled ladders, Fire Brigade ladders and Aluminium

ladders. Office and Works: 128-130E, Victoria Road, Byculla, opp. Massina Hospita, Bombay 27. Phone: 376447. Grams: "SAFELADDER".

## FANCY CORPORATION LTD.

*Manufacturers of:*

**HAKOBA EMBROIDERED FABRICS**  
16, Apollo Street, Bombay 1.

Telephone: 251438.

Telegrams: "PEARLWHITE".

*Mills at:*

Kalachowki Road, Bombay 33 DD.

Phone: 372157.

*Directors:*—

Mr. Hakubhai Kapadia,  
Mr. Bababhai Kapadia.

*Managers:*—

Mr. T. G. Chhichhia,  
Mr. N. D. Shah (Export Dept.).

*Secretary:*—

Mr. B. R. Masurekar.

**FERESHAW, L., & CO.,** Manufacturers, Representatives, Agents & General Merchants, Shirin Mansion, Sleater Road, opp. Grant Road Station, Bombay 7. Grams: "Feresho". Sole Agents for Laboratoire du Dyspne-Inhal, Clermont Ferrand, France.

**FIDA TRADERS,** Manufacturers and Suppliers of Welding and Industrial safety equipments. Welding Helmets, Screen, Wire Brushes. All types of Gas & Electric Welding Goggles, etc. Plastic Face Shields, Plastic security Badges (Identity Badges) for labour, Plastic Letters and Sign Boards. Dealers in Plastic Acrylic Sheets and allied materials. 97, Dhaboo Street, Bombay 3 (BR). Phone: 334483. Grams: "UNIGOGGLE."

**FIDAALLY GULAMALI,** Weighing Machines Scales & General Merchants, 163, Janjkar Street, Bombay 3. Phone: 326133. Show Room: 41/A, Sarang Street, Bombay 3.

**Fidvi Printing Press,** Manufacturers of Exercise Books, Stationery, Calendars, etc. 179, Abdul Rehman Street, Bombay 3.

**FIRESTONE TYRE & RUBBER CO. OF INDIA, PRIVATE LTD.** *Regd. Office and Factory:* Hay Bunder Road, Sewree, Bombay. Telephone: 70021 (Eight lines), District Office: Swadeshi Mills Estate, New Queen's Road, Bombay. Telephone: 38224-26. District Offices & Depots also at Ahmedabad, Bangalore, Calcutta, Cochin, Delhi, Gauhati, Hyderabad, Jaipur, Jullundur, Lucknow, Madras, Nagpur and Patna.

**FITION, 211, D'Mello Road (Frere Road),** Bombay 1. Phone: 264525. Fition is a versatile slotted angle which can be put together to tailor storage racks, bins, work-tables, rest benches, trolleys, conveyors, factory equipments, ladders, machine stands, Mezzanine floors, false ceilings, lofts, factory sheds, almost anything you need and a Fition structure is usually the strongest and most versatile, and by far the effective in construction. After all that's what counts most.

**FLEMING, JOHN, & CO., PRIVATE LTD.,** Engineers & Contractors, Bastion Road, off Hornby Road, Fort, Bombay.

Tel. Address: "MORELOS." Phone Nos. 26-1153 (2 lines). Post Box No. 76.

*General Manager:*—A. B. Turner.

*Directors:* A. B. Turner; B. G. Fondecarr, M. G. R. Aitken, Shavaz P. Patel, K. M. Gherda.

*Engineers:*—J. Harris, J. J. Ollia, E. F. Dhondy, F. N. Driver, P. B. Dubash.

*Secretary:*—B. G. Fondecarr.

*Agents for:*—

ENGLISH.

Messrs. Tylors (Division of Crane Ltd.), Burgess Hill, Sussex, England.

Re: Water Meters, Waste-Water Cocks and other sanitary fittings.

The Debilbiss Co. Ltd., Bournemouth, England.

Re: Spray Painting Equipments.

Messrs. Marryat & Scott Ltd., London, England.

Re: Electric Passenger and Goods Lifts.

Messrs. Cement Gun Co., Ltd., London, England.

AMERICAN.

Messrs. DeVilbiss Co., Toledo, Ohio, U.S.A.

Re: Air Compressors, Spray Painting Outfits, Hoses, etc.

GERMAN.

Messrs. Maschinenfabrik Esslingen, Esslingen/Neckar, West Germany. Re: Fork Lift Trucks.

INDIAN.

Messrs. Noble Paint & Varnish Co., Private Ltd., Bombay.

Re: Paints, Enamels, Varnishes, Dis-tempers, etc.

CONTRACT DEPARTMENTS.

Gunit (Cement Gun).

Electric Lifts.

Electric Lighting.

Paint Decorating.

## FLEET FASTENERS (PRIVATE) LTD.

Manufacturers of



THE QUALITY ZIPPER

"Delstar", 1st Floor, 9-9/A, Hughes Road, Bombay 26-WB.

Telegrams: "FLEETFAST".

Telephone: 357971.

**FLINTROCK PRODUCTS PRIVATE LTD.,** Pesticides Paints, Varnishes, Pumice Blocks & Pumice Stone Powder, Pigment Powder, Ganister Indian Bath Bricks & Railway Flooring Compositions. Belvedere Road, Mazagaon, Bombay 10. Phone: 370304 and 321238. Tel. Address: "CLAY."

**Ford, Rhodes, Parks & Co.,** Chartered Accountants, Bank of Baroda Building, Apollo Street, Fort, Bombay. Tel. Address: "Figuro". Phone No. 253440. Post Box No. 307 and at Calcutta, Madurai, and Madras. Resident Partners: C. W. Lloyd, F.C.A., B. R. Prabhu, F.C.A., R. Vaidyanathan, F.C.A., and G. B. Pradhan, A.C.A. London Correspondents: B. S. S. Shetty A.C.A., Ford, Rhodes, Williams & Co., 4B, Fredericks Place, Old Javry, London, E.C. 2.



# FORBES FORBES CAMPBELL & COMPANY LIMITED

Founded 1767

## Registered Head Office :

Forbes Building, Home Street, Bombay 1 B.R.

Telephones : 26 8081

## Cables :

"YESTERMORN (TLX 369)" BOMBAY (General) TELEX No. 369

"COLGRAIN (TLX 369)" BOMBAY (General) Answer Back "STEAMERS (TLX 369)" By.

"STEAMERS (TLX 369)" BOMBAY (Shipping Dept., General).

"BUCANDI (TLX 369)" BOMBAY (Shipping Dept. Ellerman & Bucknall Steamship Co. Ltd.)

"JAPACKLINE (TLX 369)" BOMBAY (Shipping Dept. Royal Inter-ocean Lines).

"TANKFLEET" BOMBAY (Mobil Group of Marine Companies).

## Factory :

Industrial Estate, Saki-Powal Road, Chandivall, Bombay 70.

## Main Branch Office :

9-10/3, Asaf Ali Road, New Delhi.

Telephones : 272827 and 274784.

Telegrams : "COLGRAIN (D.I.)", New Delhi.

Calcutta Office : 6-A, Middleton Street, Calcutta 16.

Madras Office : 151, Mount Road, Madras 2.

Also, Branches and Agents at : Chandigarh, Bangalore, Nagpur, Poona and other main cities in India.

## Directors :—

F. H. Kemple (Chairman).

The Rt. Hon. Lord Colgrain, M.C.

S. K. Handoo.

N. H. Dinshaw.

A. B. Billimoria.

J. D. Smithard.

G. Khandwala.

## COMPANIES ASSOCIATED WITH FORBES FORBES CAMPBELL & CO. LTD.

Companies for which Forbes Forbes Campbell & Company Limited are :—

### Managing Agents :—

THE GOKAK MILLS LIMITED—Spinners and Manufacturers of Cotton Yarns and Cord.

GOODLASS NEROLAC PAINTS PVT. LTD.—Manufacturers of Paints, Enamels, Varnishes and Pigments.

INDIAN VEGETABLE PRODUCTS LTD.—Manufacturers of Edible Fats and Oils,

Foundry Chemicals, Plasticisers and other Industrial Chemicals for Plastics and Pharmaceuticals.

### Secretaries and Treasurers :—

AUTO ACCESSORIES (INDIA) LTD.—Manufacturers of K.L.G. and TAFF Spark Plugs, Bicycle Tube Valves and Components for the Automobile and Cycle Industries.

WARRIOR (INDIA) LTD.—Manufacturers of "Warrior" and "Totem" Brand cut-thread Taps, Dies and Diesels.

### Secretaries :—

CANDY FILTERS (INDIA) PVT. LTD.—Water Purification Specialists. THE PATERSON ENGINEERING

CO. (INDIA) PRIVATE LTD.—Specialists in all forms of Water Treatment.

MAVAG (OVERSEAS EXPORTS) PVT. LTD.—Machinery Spare Parts and Tools.

VAC-U-MATION LTD.—Discharge of Grain Tankers.

The following Company is a SUBSIDIARY of Forbes Forbes Campbell & Company Limited:

FORBES TRUSTEES LTD.—Trustees for Provident Fund and other Retirement Funds.

## DIVISIONS OF FORBES FORBES CAMPBELL & COMPANY LIMITED

### Industrial Division :

#### Manufacturers of :

Spring Washers — Square, Flat, Girder Sections and Double Coil, Industrial Flexible Shafting, Flexible Shaft Machines and attachments, Flexible Electrical Conduit, Speedometer Cables, Taximeter Cables, Special Tools, Press Tools, Jigs and Fixtures, Surface Plates, Universal Vices, Right Angle Iron Plates, Straight Edges, etc.

### Shipping Division :

#### Agents for :

American President Lines Ltd., Ellerman & Bucknall Steamship Co. Ltd., Royal Inter-ocean Lines, United States Lines, Mobil Group of Marine Companies, Grace Line, Holland Australia Line, N. V. Koninklijke Paketvaart-Maatschappij, Marine Carriers Corporation, Commodity Transportation Corporation, Transocean Petroleum Carriers Inc., Clearwater Shipping Corporation, U.S. Shipping Corporation, Pan-American Overseas Corporation, U.S. Tankers Corporation, Oceanic Petroleum Carriers Corporation, Peninsular Navigation Corporation, Bank Line Ltd. (American and Indian Line), Sir R. Ropner & Co. (Management) Ltd., Stephen Sutton & Co., Marine Transport Lines Inc., Commerce Tankers Corporation, Agenship N. V., A. S. Jensen Redrie IV, Liquid Cargo Carriers Corporation.

#### Passenger Agents for :

American President Lines Ltd., Royal Inter-ocean Lines, Ellerman & Bucknall Steamship Co. Ltd., United States Lines.

### Clearing & Forwarding Department :

All types of cargo.

### General Sales Division :

#### Distributors for :

John Walker & Sons Ltd. (Johnnie Walker Scotch Whisky), Rutherford Osborne & Perkin Ltd. (Exshaw Three Star Cognac), Tanqueray Gordon & Co. Ltd. (Gordon's Dry Gin), Ind Coope Limited (Allshop's Lager Beer), Champagne Heldsieck & Co. Monopole S. A. (Dry Monopole Champagne), Whiteways Cyder Co. Ltd. (Whiteaway's Devon Cider and "Pomona" Champagne Cider), Williams & Humbert Ltd. (Sherry), Kesarval Beverages Ltd. (Lighthouse Liquors and Beer).

#### Distributors for :

The Linen Thread Co. Ltd., N. Ireland (Linen Thread and Cord), W. & J. Knox Ltd., Scotland (Fish net twine).

#### Distributors for :

W. Weddel & Co. Ltd., London (Austrian and New Zealand Mutton Tallow).

Authorised representatives in India for : Telcon Plastics Ltd., Kent (Plastic Products).

### Engineering Sales Division :

#### Distributors for :

Daulat All-Gear Lathes and Shapers, XLO Milling Machines, Surface Grinders, Centre Lapping Machines, Saraswathi Power Presses and Shearing Machines, Macut Abrasive Cutting-Off Machines, Geeta Radial Drills, Hitachi Machine Tools, "BBBB" Spring Washers, Forbesflex Flexible and Vibrator Shafts and Machines, H.E.C. Control Panels, Switch Boards, Busbar Trunkings, Special Purpose Motor Starters, etc., Transelkro L.T. Sub-Station Equipment, Komplex Industrial Turbine Generating Sets; Varsha Boilers, Kinflow Solenoid Valves, Chemokomplex Chemical and Pharmaceutical Plants.

### Latham Abercrombie Division :

#### Distributors for :

Halda Typewriters, Facit Calculators, Marsh Stencil Equipment, De La Rue Note Counting Machines, ICC—Coin Counting Machines, Eskophot Photo Copying Machines.

Also, Dealers in Hire Purchase Financing for Machinery.

### Plastics and Chemicals Division :

#### Distributors for :

Kinvac Vacuum Forming Machines, Weldon PVC Welding and Embossing Machines, Kindip Polythene Dipcoating Machines, Thermoplastic Sheets, Atom-thene-Polythene Dipcoating Powders, High and Low Density Polythene Sheets, Polythene Layflat Tubing, Rolls and Bags, PVC Flexible Tubes and Sleeveings.

### Communications Division :

#### Distributors for :

Pye Telecommunications Ltd., Cambridge, England, Pye Television Transmission Ltd., Wayne Kerr Laboratories, Ltd., New Malden, U.K., Wandel U. Goltermann, Rutlingen, W. Germany, Telettra S.P.A., Milano, Italy, Olivetti Divisione Sistemi, Ivrea, Italy, Microwave Associates International, Burlington, Mass., U.S.A., Telonic Industries Inc., Beach Grove, Ind., U.S.A., Cambridge Thermionic Corporation, Cambridge, Mass., U.S.A., Telcon Metals Ltd., U.K.

### Insurance Division :

#### Agents for :

The New India Assurance Co. Ltd., The South India Insurance Co. Ltd., Legal and General Assurance Society Ltd., The Liverpool & London & Globe Insurance Co. Ltd., The National Provincial Bank Ltd., Coutts & Co.

### Pakistan Correspondents :

Forbes Forbes Campbell & Co. Ltd. (Incorporated in Pakistan), Ebrahim Building, 2, West Wharf Road, Post Box 4659, Karachi.

Telephone : 22-2616/18 (3 lines).

Telegrams : COLGRAIN, Karachi.

### London Correspondents :

Forbes Campbell & Co. Ltd., 51, Eastcheap, London, E.C.3, England.

Telephone : Mincing Lane 9166/9.

Telegrams : CLIVE, London.



## FRANCIS LESSLIE & CO.

105, Apollo Street, Fort, Bombay-1.  
Phones: 255224-65315.

Manufacturers of Industrial Safety Products—Goggles, Plastic Face Shields, Respirators, Helmets & Protective Clothing, for ensuring safety with maximum comfort, efficiency, economy & quality.

**FRANCO-INDIAN PHARMACEUTICALS PRIVATE LTD.**, 20, Dr. E. Moses Road, Bombay 11 B.C. Phones: 370121 & 373325. Tel. Address: "FRANCOLAB".

**Frederick Herbert**, Manufacturer of Electrical Appliances, Pharmaceutical, Scientific & Laboratory Equipment. 10, Second Pasta Lane, Colaba, Bombay. Phone No. 211876. Grams: "KEDHERBERT".

**Freezall**, Air Conditioning, Refrigeration, Electrical & Mechanical Engineers, Tribhuvan Road, Bombay 4. Phone No. 70815. Tel. Address: "FREEZALL".

**FRENCH MOTOR CAR COMPANY, LTD.**, Motor Vehicles and Accessories, Importers, Repairers, Engineers & Body-Builders. Distributors in Bombay for Hindustan Ambassador Cars and Bedford Trucks. Home Retention, Home delivery and Car Hire in U.K. can be arranged for Austin, Morris, Wolseley, Riley & M. G. cars. Distributors for Smith's Motor Accessories, S. U. Carburetors & Pumps.

**Manager:** C. Duarte. **Sales Manager (Commercial Vehicle Division):** R. M. Pochkhanavala. **Sales Manager (Cars):** P. M. Solapurkar. **Parts Manager:** G. A. Lobo. **Chief Accountant:** U. L. Deshpande. **Works Manager:** (Werli) H. L. Inwood.

**Office, Showrooms and Service Station—** 9/11, Hughes Road. **Service Station:** 42, Nicol Road, Ballard Estate. **Works and Service Station:** Annie Besant Road, Worli. **Registered Office:** 234-3, Lower Circular Road, Calcutta 20. Tel. Address: "DIAMOTO." Phones: Office & Showroom: 357361/4 & 354883. Ballard Estate: 260809. Worli Workshop: 452887, 452928.

**FREYSSINET PRE-STRESSED CONCRETE CO., LTD., THE**, Vaswani Mansion, 4th Floor, Binshaw Vachha Road, Bombay 1. Consultants and Plant Suppliers for the Freyssinet System of Prestressed Concrete and Manufacturers of Freyssinet Anchorage Cones for Pre-Stressed Concrete Works. Grams: "FREYSSI," Bombay. Phone No. 29587. **Directors:** J. C. Gammon, O.B.E., J. Bates, S. T. Beyella, T. N. S. Rao, S. D. Pinge.

**Fyrfo Private Ltd.**, "Dhan-Nur", 3rd Floor, Sir P. Mehta Road, Bombay 1. Phone: 261794.

**GAMMON INDIA LTD.**, Designing and Constructional Engineers and Contractors. Specialists in: Bridges, Cooling Towers, Water Towers, Harbour Works, Chimneys, Silos, Dams, Jetties & Airports, Hangars, Power Stations, Factories, Earth Works, Foundations, Piling, Weirs, Syphons, etc. **Registered Office:** Gammon House, Cadell Road, Prabhadevi, Bombay 28 DD. **Board of Directors:** J. C. Gammon (Chairman), James Bates, S. B. Dabke (Jt. Managing Directors), L. B. Patel, R. N. Banerjee, T. N. S. Rao, S. D. Pinge. **Secretary:** S. T. Beyella.

### Zonal Offices:

East Zonal Office, 36 Ganeshchandra Avenue, Fourth Floor, Calcutta-13. Tel: 246202. Gram: "GAAMMONCO." Calcutta.

Central Zonal Office, 74, Link Road, Lejpatnagar III, New Delhi 14. Tel: 76281. Gram: "GAMMON," New Delhi.

**Representing:** L. G. Mouchel & Partners (U.K.)—Cooling Towers Consultants. Colcrete Ltd. (U.K.)—Colcrete Grouting equipment.

**Foreign Consultants:** Gammon Engineers Ltd. (U.K.).

## G. L. NATU & SONS PRIVATE LIMITED

**Managing Agents for:—**

1. The Madhavnagar Cotton Mills Ltd.
2. Shri Shahu Chhatrapati Mills.  
(Commercial Undertaking of The State Government of Maharashtra).

**Office:**

Bank of Baroda Building, Palton Road, Bombay 1.

**Telephone Nos.:** 261649, 262205, 266347.

**Directors:**

Shri G. L. Natu.

Shri M. G. Natu.

Shri S. G. Natu.

# Gabriel

## INDIA LIMITED

**Head Office & Factory**

Agra Road, Mulund, Bombay-80.

**Telephones:** 592291 (6 Lines)  
591751, 591728

**Mg. Director's Office:**

Magnet House, Dougall Road, Ballard Estate, Bombay 1.

**Telegram:**

**GABRIEL, BOMBAY-MULUND.**

**Manufacturers of**

**SHOCK ABSORBERS**

## R. GANDHI & CO.

50, Sheriff Devji Street (Chakla) Bombay 8.

**Specializing in:—**

P.V.C. LEATHER CLOTH & BOOK BINDING CLOTH.

**Grams:** "VALIATEX" **Phone** 822897

**GANDHI LAHERCHAND NANCHAND,** Glassware Merchants and Distributors for Ogale Glass Works Ltd. for Bombay, 182, Sheriff Devji Street (Chakla Street), Bombay 8. Phone: 324695. Grams: "GLASSWARE".

## THE GANESH FLOUR MILLS CO., LTD.

**Producers of:** Atta, Maida, Rawa, Sooji, Vanaspati, Refined Oil, Oxygen Gas, Soaps, Wheat Flour, Wheat Flakes, Corn Flakes, Rice Flakes, White Oats, Pearl Barley, Oils and Oilcakes, Electric Fans, Fractional Horse Power Motors.

**Address:** 'PARIJAT', 95, N. Subhash Road, Bombay-2.

**Telephone:** 242989.

**Registered Office:**

Subzi Mandi, Delhi 7.

**Branches at:** Delhi, New Delhi, Kanpur and Lyallpur (Pak.).

**Telegraphic Address:**

"GANESHMILL" (all Offices).

**Gannon Dunkerley & Co., Ltd.,** Merchants, Engineers & Contractors. **Head Office:** Chartered Bank Building, Fort, Bombay.

**GANSONS PRIVATE LTD.,** Manufacturers of Gas Plants & Burners, Chemical & Pharmaceutical Process Plants and other stainless steel fabrications, Laboratory Equipments, Isotope Handling Equipment, ampoule cutters.

**Adm. Office:** Industry Manor, 2nd Floor, off Cadell Road, Bombay 28-DD. Phone: 45-3154. Grams: "INMAG."

**Factory 1:** Lalbaug Industrial Estate, Bombay 12 DD.

**Factory 2:** Shantinagar Industrial Estate, Vakola, Bombay 55AS. Phone: 53-1611.

**GARLICK & CO. PRIVATE LTD.,** Engineers, Iron Founders, Industrial Equipment Manufacturers & Machine Tool Dealers. Haines Road, Jacob Circle, Bombay. Tel. Address: "Garlick". Phone No. 875141 (4 lines). Estd. 1878. Inc. 1949. Also at Maskati Market, Kapasia Bazar, Ahmedabad 2; 42/1, Silver Jubilee Park Road, Bangalore 2; 6/365, Trichy Road, Coimbatore 1; 5, Green Gates, Salfabad, Hyderabad (A.P.); 88/3, Mount Road, Madras 6; G/4, Nizamuddin West, New Delhi 13.

## GARMENT CLEANING WORKS

The largest Power Laundry in India. 36 Branches in the City.

Laundry Contractors to all leading Shipping Companies, Railways and Hotels.

**Head Office & Worli Factory:** 37/43, Dr. Annie Besant Road, Worli, Bombay 18. Phones: 372790 & 374187, Malabar Hill Factory: 364110.

**GARWARE MOTORS & ENGINEERS PRIVATE LTD.,** Manufacturers of Dies, Jigs, Fixtures, Tools and Machinery for Industrial Purposes. Chowpatty Chambers, Sandhurst Bridge, Bombay 7. Phone Nos. 352491-92. Tel. Address: "GARWARECAR", Bombay.



**GAYTEE & COMPANY**, Janmabhoomi Chambers, 4th floor, Fort Street, Fort, Bombay 1. Phone: 26-3449. Grams: "IMPENG". Engineers, Merchants & Direct Importers of Industrial Machinery and Engineering Stores.

**REPRESENTING:—**

**USINES ET ACIERIES DE SAMBRE ET MEUSE**, PARIS, FRANCE, Steel Castings, Carbon Steel and Alloy Steel, Railroad Parts, Armament Products, Aircraft Bombs, Machinery, etc.

**UNITED ROPEWORKS**, Post Box No. 1143, Rotterdam, Holland. Manufacturers of Wire Ropes.

**CONTIGEA BRUXELLES**, BELGIUM, Manufacturers of Water Meters, Gas Meters and Geysers.

**R. S. STOKVIS & ZONEN N. V.**, P.O. Box 426, Rotterdam (Holland). Manufacturers of wood working machinery and machine Tools.

**ELSWORTH LIMITED**, SHEFFIELD, ENGLAND, Manufacturers of Woodworking Saws & Woodworking Tools.

**WALTER SPENCER & CO., LTD.**, SHEFFIELD, ENGLAND, Manufacturers of High Speed Steel, Alloy Tool Steel, Carbon Tool Steel, etc., etc. Milling Cutters, Twist Drills, Reamers, Slitting Saws, Files, Carbide Tipped Tools, Lathe Tools, etc.

**W. S. BARRON & SONS LTD.**, GLOUCESTER, ENGLAND. Manufacturers of Screw Lift Elevators and Conveyors.

**COMPTOIR DES FERRURES**, CHARLEVILLE (ARDENNES), FRANCE, Manufacturers of Component Parts of Machinery, Rolling Stock, etc.

**ALLOYS ZEPPEFELD**, 21 b, ober-velschede, Uber Grevenbruck, West Germany. Manufacturer of Builders' Hoists and Power Winches.

## GAZDAR PRIVATE LTD.

**JEWELLERY, PRECIOUS STONES & WORKS OF ART**  
**TAJ MAHAL HOTEL.**  
**BOMBAY.**

Phone :- 'Grams :-  
21-2477. "MANUSCRIPT."

## GENERAL ELECTRICAL INDUSTRIES

OFFICE: Hamam House, Hamam Street, Bombay 1.

Phone: 251892.

FACTORY: 113/B, New Prabhadevi Road, Bombay 28.

Phone: 452626.

Grams: "TENBYINDIA", Bombay.

Manufacturers of Bakelite "GEI" Brand Electrical Accessories.

## General Electric Company of India, Private Ltd., The

*Western Regional Office:—*"Magnet House," Dougall Road, Ballard Estate, Bombay 1.

*Director and Manager: Mr. K. J. Quick.*

*Regional Divisional Managers:*

*Engineering Divn.: Mr. A. K. Dam.*

*Installation Contracts Divn.: Mr. R. M. Surve.*

*General Products Divn.: Mr. D. N. Advani (Acting).*

*Head Office in India:—*Magnet House, 6, Chittaranjan Avenue, Calcutta 13.

*Also Offices at:—*Ahmedabad, Bangalore, Coimbatore, Kanpur, Madras, Nagpur, New Delhi, Patna and Secunderabad.

*Works:—*Paharpur (Calcutta), Naini (Allahabad).

*Subsidiary Companies:—*

Hindco Lighting Industries Ltd., Bombay. Indian Transformers Ltd., Alwaye.

*Products:—*

Power & Distribution Transformers, H.T. & L.T. Switchgear and Control Gear, Oil Circuit Breakers, H. R. C. and Drop out Fuses, Electric Motors & Starters, Monoblock Pumping Sets, House Service Meters, Radio Receivers, Ceiling Fans, Propeller Fans, Lighting Fittings, "Osram" Lamps & Tubes.

General Engineering Co., Manufacturers of Flour Mill, Spinning & Weaving Machinery spare parts. Workshop:—47, Kumbharwada, 5th Lane, Golpitha, Bombay 4.

General Import Co. (India), Aromatic Chemical dealers, 102, Princess Street, Post Box No. 2376, Bombay 2.

General Textile Stores Private Ltd., Importers of Mutton Tallow and Sizing Materials. Beaumon Chambers, 27/33, Meadows Street, Fort. Phone: 254660. Grams: "VISTRO."

General Typewriters (Bombay) Co. Private Ltd. Specialists in rebuilding and repairs of typewriters, typewriters available on hire, sale and exchange, 375, Dr. Dadabhoy Naoroji Road, Fort, Bombay. Phone No. 253258.

**GEOFFREY MANNERS & CO., LTD.**, Manufacturers, Importers & Distributors of Pharmaceuticals, Fine Chemicals, Toilet Requisites and allied products.

*Head Office:—*Magnet House, Dougall Road, Ballard Estate, Bombay. Phone Nos. 26-1361-2-3.

*Bombay Sales Office:—*Cadell Road, Dadar, Bombay. Phone No. 453428.

*Factory:—*Hattersley Mills Estate, Bombay-Agra Road, Ghatkopar, Bombay. Phone Nos. 582361-2-3-4-5.

*Sales Offices:—*Calcutta, New Delhi, Madras, Bangalore, Gauhati, Kanpur, Faridabad and Patna.

**GERMAN REMEDIES PRIVATE LTD.**, Manufacturers and Importers of Pharmaceuticals. "ADELPHI", 110, Queen's Road, G.P.O. Box No. 1945, Bombay 1. Cables: "CHEMAGENT." Phone: 242293/4. *Factory:—*Andheri Kurla Road, Bombay 69. Phone: 571660.



## George Oakes Limited

*Bombay Operations*  
Swadeshi Mills Estate,  
New Queen's Road,  
Bombay 4.

P.O. Box No. 499, Bombay.

All India Distributors for Ford Passenger Cars, Trucks and related spare parts.

All India Distributors for IP Hepolite Pistons, Rings and Liners.

All India Distributors for Perkins P6(V) Diesel Engines and Conversion Kits for all makes of vehicles and related spare parts.

"OAKES" Batteries, Brake Fluid, Sealed Beam Lamps, Filter Elements and other Accessories.

*Tel. Address: "GEORGOAKES."*

*Phone Nos.: 352391-4 (4 Lines).*

**GESTETNER DUPLICATORS PRIVATE LTD.**, Manufacturers of Rotary, Hand and Electrically Operated Duplicators. *Head Office:—*9/A, Esplanade East, Calcutta. For Gestetner Duplicators and Supplies. *Bombay Offices:—*(1) Construction House, Wittet Road, Ballard Estate, Tel. 263541 and 264154. Grams: "Gestetner". Bombay. (2) "Vandhana", Slon Circle West, Bombay. Tel. 475398 and 475304. Grams: "GESTESION", Bombay.

**GETZ BROS. & CO. INC.** (Incorporated in Switzerland), International Merchants & Steamship Agents. Manufacturers of Gas Fired Infra-Red Industrial Burners in India. Western India House, Sir Phirozshah Mehta Road, Fort, Bombay. P. O. Box No. 910. *Tel. Address: "Getz."* Phone No. 253541.

Ghansham & Co., Engineers, Building Contractors, 18, Court House, 2nd Floor, Carnac Road, Dhobitalao, Bombay 2. Phone: 22438.

Gigabhai, K., & Sons Private Ltd., Importers and Exporters of Tiles, Sanitarywares, "BESTOLITE" W. O. Seats, G. I. Flush Pipes, Water Filters, Marble, Slabs, Marble Chips, Firebricks, Fireclay, Cement Colours, Cement Mosaic Tiles, etc. 8-10, Green Street, Fort, Bombay. *Tel. Address: "Tilestone."* Phone No. 252453. Post Box No. 1180, Bombay 1.

**GILBERT LODGE & CO.**, Land & Estate Agents, Architects, Surveyors, Rating Advisers. Auctioneers & Valuers, Elphinstone Building, Veer Nariman Street, Fort, Bombay 1. Phone Nos. 251819, 252607. *Tel. Address: "Readiness,"* Bombay.

**GILL & CO. PRIVATE LTD.**, Cotton Merchants & Brokers, Indu House, Dougall Road, Ballard Estate, Post Box No. 86. *Tel. Add. "GILLCO."* Phone No. 265001 (5 Lines).



**Bombay Office :—****Board of Directors :****Chairman & Mg. Director :** Khushal Khengar.**Mg. Directors :** A. G. Reynolds, Manilal Virchand.**Directors :** H. H. Virendra Singh, Maharaja of Chhota Udepur, Shantilal Virchand.**Assistants :** A. C. B. Miller and D. V. Shah.**Secretary :** K. F. Birdy.**Brokers :** Meghji Thobhan & Co.**Offices at :** Bhatinda, Calcutta, Colmbatore, Madras, Nagpur.

G. K. Kansara, 118, Kansara Chawl, 1st Floor, Kalbadevi Road, Bombay 2. For details please see in Metal Manufacturers & Merchants.

**GLADSTONE LYALL & CO., LTD.,**

21, Lansdowne Road, Apollo Bunder, Bombay-1. Telephones : 211241 & 212805. Telegraphic Address : "GLADWYLL". **Bombay Manager :** L. N. Deefholts. Registered Office : 4, FAIRLIE PLACE, CALCUTTA. **Branches :** Ahmedabad and Hyderabad. **STRUCTURAL WATER-PROOFING and THERMAL INSULATION (HOT & COLD) CONTRACTORS.** Contracts undertake by experts anywhere in India. Specialists in Roof and Structural Waterproofing, Dampcoursing, Thermal Insulation (Hot & Cold). Bituminous Emulsions Expansion Joints.

**GLADWYN & COMPANY, 251, Dr. Dadabhoy Naoroji Road, Fort, Bombay.** Engineers, Importers and Manufacturers. Specialist Suppliers to the Food, Chemical and Pharmaceutical, Leather and allied industries.

**Sole Agents to the following :**

**BRITISH :** Howard Pneumatic Engineering Co. Ltd.; Bancroft Fillers & Appliances Ltd.; S. Briggs & Co. Ltd.; Nove-Technics Ltd.; Artifex Engineering Works Ltd.; Moritz Chemical Engineering Co., Ltd.; Chemical Engineering Construction (Pensnett) Ltd.; Premier Filter Press Co. Ltd.

**U.S.A. :** Hamilton Kettles; Chisholm-Ryder Co. Inc.; F. H. Leng senkamp Company; Vanton Pump & Equipment Corp.; Chemical & Pharmaceutical Industry Co., Planet Corporation; Columbia Machine, Inc.; Wilmot Engineering Co.; Malsbary Mfg. Co.; W. G. Runkles' Machinery Co.; Tri-Homo; Pack-Rite Machines; National Filter Corp.; F.L. Burt Co.

**SWISS :** Fluckiger & Co.; E. Friederich & Fils, H. Wismer; A. G. Fuer Chemie-Apparatebau; Fryma-Maschinen AG.

**SWEDISH :** AB Schaub & Co.

**NORWEGIAN :** A/S Myrens Verksted; Ma-Tro-Fa Agenturer A.S.

**GERMAN :** Lubecawerke, G.m.b.H.; Ganzhorn & Stirn; Josef Deckelmann; Bleck & Melzian; Probst & Class; Optima Maschinenfabrik; F. Stamp, G.m.b.H.; Carl Padberg Centrifugenbau, G.m.b.H.; Wilhelm Seidenader; Walter Brucks; Herr Hermann Scharfen; Maschinenfabrik J. A. Lanvermeyer; F. Herbst & Co. Maschinenfabrik; Gebrueder Hoeller G. m. b. H.; Julius Kugler & Co.; Gottlieb Wiedmann, Roemer & Co.; Friedrich Liebeck & Co.; Josef Uhlmann; Hamba-Maschinenfabrik Hans A. Muller; Ekato-Werk Gebr. Heine; H. Fischer & Co.; Alexander J. Hentzen G.m.b.H.; Franz Seiffert & Co. Alpine AG.; Gustav Elrich; G. W. Barth; Samesreuther & Co. G.m.b.H.; Maschinenfabrik Esslingen; Werner Kammann; Weigelwerk AG., Heinrich Frings, Paul Kaack & Co.;

Vogel & Halke, Rovema; EKS Spezialmaschinen G.m.b.H.; Eisenwerke Kaiserslautern G.m.b.H.; Allgauer-Werke G.m.b.H. Nicolai Clasen. Oxymer AG.

**DANISH :** Helmuth A. Jensen; Maskinfabriken Skandia; A/S Vesta; Hans Larsen A-S; Sonderbys Fabriker A/S; J. Hansen.

**ITALIAN :** Societa Napoletana; Soc. P.Az. Luigi Rizzi & C.; Cesare Pedini; Brizio Basi; R. Morandi; Sitol; Sacmi.

**DUTCH :** N. V. Leidsche Apparaten-fabriek; Machinefabriek "Goede".

**FRENCH :** Dewalco. A. Thonnart.

**BELGIAN :** Ed Courtoy; Ateliers Jonckheere; Ateliers Remy; Embaril; Transak & Co.

**GLAXO LABORATORIES (INDIA) PRIVATE LTD.,**

Dr. Annie Besant Road, Worli, Bombay 18-WB. Factories at Aligarh, Bombay and Thana. Branches at Calcutta, Madras and New Delhi. Depots at Bangalore, Gauhati, Patna, Vijayawada, Ernakulam, Ambala, Lucknow, Srinagar. Distributors at: Poona, Nepal, Kutch and Goa.

**Managing Director :** Iain MacKinnon.

**Directors :** Sir R. H. Hutchings, H. W. Palmer, J. Reece, A. P. Ghandy, P. E. Jones, A. M. D. Nanavati, L. D. B. Bryceson and L. J. Wyman.

**Secretary :** P. R. Choksy.

**Managers :** D. D. Banker, A. C. Brown, D. P. Chakravarty, T. P. Frewin, R. Hoon, S. C. Khanna, H. C. Manchanda, G. I. Pereira, S. K. Punshi, N. Rangaswamy, C. S. Sandys, B. Sarin, D. S. Saraswat, M. P. C. Shetty, B. S. Thacker, K. W. Thompson, H. Turnbull, S. V. Vora.

Telegrams : "Glaxolabs", Bombay, Calcutta, Madras, New Delhi. Phone Nos : Bombay 454311 (8 lines); Calcutta 45-2015 (3 lines); Madras 80944 (3 lines); New Delhi 76203 (3 lines). P.O. Box Nos. 202 (Bombay-1); 2257 (Calcutta-1); 3211 (Madras-32); 510 (New Delhi).

**GLOBE STORES CO.**

Sitaram Bldg., Dadabhoy Naoroji Road, Bombay.

**Sole Agents for :**

'GLOBE' Brand side cars for Motor cycles & Scooters.

'ULMA' Accessories for Lambretta & Vespa Scooters.

'GLOBE' Brand acccycles. for Scooters & Motor Cycles

Stockists of Imported & Indian spare parts for Lambretta & Vespa Scooters.

**GODAVARI SUGAR MILLS, LTD., THE,** Fazalbhoy Building, Mahatma Gandhi Road, Fort, Bombay 1. Phone No. 255337-8.

**GODREJ & BOYCE MFG. CO. PRIVATE LTD.,** Security Equipment, Steel Furniture for Office and Home, Typewriter, Refrigerator, Machine Tools, Fork-Lift Truck, Steel Windows, Tubing, Steel Composing Room Equipment and Locks. **Head Office & Works :** Lalbaug, Bombay-12. Phone : 370163. **Works :** Vikhroli, Bombay-79. Phone : 582621.

**GODREJ SOAPS PRIVATE LTD.,** Toilet, Washing & Shaving Soaps, Toiletries, Fractionated Fatty Acids and Industrial Chemicals. **Head Office & Chemical Factories :** Eastern Express Highway,

Vikhroli, Bombay 79. Phone : 582385. **Soaps Factory :** 316, Dellale Road, Bombay 11. Phone : 373494.

**GOKAK MILLS LIMITED, THE,****Business :** Manufacturers of Yarn.

**Directors :** F. H. Kemple Esq. (*Ex-Officio*), **Chairman :** Sir Jamsetjee Jejeebhoy, Bart.; T. V. Baddeley, Esq., C.B.E.; Bhagwandas C. Mehta, Esq.; Pratap Bhogilal, Esq.; R. F. S. Talyarkhan, Esq.; Balkrishna Harivallabhdas, Esq.; J. D. Smithard, Esq. (*Ex-Officio*).

**Managing Agents :** Forbes Forbes Campbell & Co. Ltd.

**Registered Office :** Forbes Building, Home Street, Fort, Bombay 1.

**Bombay Office Telephone :** 268081 (10 lines).

**Bombay Office Telegraphic Address :** "YESTERMORN". (T.X.).

**Mills at :** Gokak Falls, Gokak Road, Southern Railway, Belgaum Dist., Mysore State.

**Mills Telegraphic Address :** "TURBINES", Gokak Falls.

**Mills Telephone No. :** 4 (Gokak).

**Mills General Manager :** Mr. R. Murray.

**GOLDFILLED MERCANTILE CO.,**

Premier Manufacturers of Simulated Pearls, Pearl Necklaces, Glass Beads and Costume Jewellery. 13/15, Bastion Road, Fort, Bombay. Phone Nos. 261768 and 265528 (Office) and 571679 (Factory). Grams : "Goldfiller."

**Golden Dyes Corporation (India) Private Ltd.,** Mfrs. of Dyes & Chemicals. Factory at Joshi Wadi, Near Rivoli, Bombay 19. Office : Bela Court No. 2, Colaba, Bombay 5. Phone : 212458.

**GOODLASS NEROLAC PAINTS PVT. LIMITED,**

Forbes Building, Home Street, Fort, Bombay 1. Manufacturers and Importers of Paints and Enamels, Lacquers, Varnishes, Distempers, Oils, Chromes, Dry Colours, Synthetic Resins and Paint & Varnish Brushes.

**Directors :**F. H. Kemple (*Chairman*).

A. P. Low.

P. Y. Scarlett.

W. E. Norris.

J. D. Smithard.

J. Stevens.

**Administrative Executives :**

D. Ridley.

Y. G. Tiroadkar.

S. S. Hattangadi.

M. N. Nadkarni.

D. M. Kothari.

S. S. Mathur.

P. K. Bose.

A. Rohira.

P. Singh.

T. J. Mody.

A. T. Karve.

R. F. W. Antley.

A. Mathew.

H. Aaser.

**Administrative Executives (Technical) :**

M. S. Vythilingam.

R. K. Marphatia.

G. C. Desai.

H. N. Ramachar.

S. N. Gaitonde.

Lt.-Cdr. B. Motha.

**Delhi Branch Managers :**

K. Puri.

S. K. Saini.



**Madras Branch Manager:**

R. Ramachandran.

**Managing Agents:**

Forbes, Forbes Campbell & Co. Ltd.

**Telegrams:**

"GOODLASS", P.O. Box No. 699.

**Telephone:** 268088.

**Code Used:**

Bentley's.

**Factory:**

Ferguson Road, Lower Parel, Bombay.

**Telephone:**

373424/6 & 373106.

**General Manager:**

W. E. Norris.

**GOODYEAR INDIA LTD.,** Tielcon

House, 18 Haines Road, Bombay-11. Phones: 370118, 370119. Telex BY-(433) Tel. Address: "Goodyear," Bombay. Tyres, Tubes, Accessories, Batteries, Hoses, Beltings, V-Belts, Conveyor Belts.

**GOPALJEE & CO.,** Importers of Camphor, Menthol, Asafetida, Chemicals and General Merchants, 218, Samuel Street, Vadgadi, Bombay 3. Phones: 323421 and 324206 (Office) and 473346 (Res.). Grams: "HINGMAKER".

**Gore & Co.,** Great Social Building, Sir Phirozshah Mehta Road, Fort, Bombay. **Exporters:** Piecegoods and Yarns. **Importers:** Yarns, Staple Fibre, Wool Tops, Fiber Tops & Piecegoods. Phone: 265541. Grams: "Gormilla".

**Grahams Trading Co. (India) Ltd.,** Merchants & Agents, 16, Bank Street, Fort, Bombay.

**Grant Advertising, Inc.,** Lotus House, Marine Lines, Bombay 1. Phone Nos.: 241211-2-3 and 241777. Grams: "GRANTCHI".

**GRAUER & WEIL (INDIA) LTD.,** Manufacturers of Complete Plants for Electroplating, Anodising and Metal Finishing, Salts & Chemicals for Degreasing Plating, Anodising Colouring, Chromating, Phosphating & Passivating, Paint Metal Stripping and Chemical Polishing-Chemical Plating, etc., Buffing & Polishing Compositions, Mops & Wheels, etc. in Foreign Technical collaboration. Address: "Sukh Sagar", Corner of Hughes Road, Chowpatty, Bombay-7. Telephones: 357530, 356409. Telegraphic Address: "WISHWELL". Bombay. Managing Director: K. C. Shah.

**GRANT ADVERTISING INTERNATIONAL, INC.,** Advertising Agents & Consultants. Address: Lotus House, Marine Lines, Bombay 1. Telephones: 241211 & 241777, Telegrams: "GRANTCHI". Director & Vice-President: Mr. R. S. J. Davidson. Branches: Calcutta, Madras & New Delhi. (37 Branches all over the world).

**GREAT INDIA NET INDUSTRY,** Mfrs. of all kinds of wire netting, 10, Bruce Street, Bombay 1. Phone: 257206. Grams: "CRIMPNET".

**GREAT WESTERN STORES** (Proprietors: F. D. Mehta & Co.), Wine & Provision Merchants and Cold Storage Specialists. Standard Building, Dr. Dadabhai Naoroji Road, Fort, Bombay-1. Phone No. 254047.

**GREAT WESTERN ENGINEERING WORKS,** Colaba, Bombay-5. Phone: 212016 and 214026. Grams: "GREENWORK." Structural & Mechanical Engineering & Contractors, Tank & Railway Equipment Mfrs. & Suppliers.

**GREAVES COTTON & CO. LTD.,**

Registered Office: 1, Forbes Street, Bombay. Also at: Ahmedabad, Asansol, Bangalore, Bhubaneshwar, Calcutta, Coimbatore, Delhi, Gauhati, Goa, Hyderabad, Jaipur, Jorhat, Kanpur, Kurseong, Madras, and Patna.

**Board of Directors:**

L. M. Thapar, Chairman.  
N. M. Wagle, Managing Director.  
H. D. Varma.  
Surendr Lall.  
M. F. C. Elliott.  
I. M. Thapar.  
A. K. Datta.  
M. B. Bhaskare, General Sales Manager.  
R. D. Pusalkar, Company's Agent, Chinchwad Manufacturing Units.  
E. C. Pavri, Chief Accountant.  
M. N. Kapadia, Company Secretary.  
C. Fernandes, Accountant.  
L. S. Soman, Projects Manager.  
N. R. Shetty, Works Manager, Diamond Bit Manufacturing Division.  
G. T. Gokhale, Personnel Manager.

**Engineering Divisions:**

M. R. Natu, Manager, Bombay Branch & Western Regions.  
B. Saldanha, Assistant Manager; V. N. Chaudhry, D. V. Jhalam, Z. B. Patwa, Engineers.

**Ruston Paxman Sales Division of Chinchwad (Poona District):**

G. D. McCallum, Manager.  
M. S. Ahluwalia, D. K. Srinivas, Engineers.

**Aviation Division at Bangalore:**

Wg. Cdr. A. R. Hindley, Manager.  
M. V. Namjoshi, M. V. Wagle, Engineers.

**Textile Machinery & Millstores Depts.:**

M. F. Gareh, Manager.  
S. G. Dubash, Assistant Manager, Millstores Dept.

**Metals & Sundries Dept.:**

L. V. Ukidave, Manager, Western Region.  
Dr. M. R. Kalyanram, V. Chawla, Technical Assistants.

**Fosco Sales Division, Bombay:**

B. Jordan, General Manager; K. D. Vachha, Bombay Area Manager.

**Branches:**

Ahmedabad: P. N. Kotwal, Manager.  
Asansol: Y. K. Chib, Manager.  
Bangalore: Wg. Cdr. A. R. Hindley, Manager, Aviation Division, N. G. Ghorpade, Manager, MED Branch.  
Bhubaneshwar: R. N. Paul, Manager.  
Calcutta: A. K. Datta, Resident Director, M. S. Gupte, Manager.  
Coimbatore: S. Padmanabhan, Manager.  
Delhi: G. Mathrani, Regional Manager, R. Bajekal, Manager.  
Gauhati: A. K. Mitra, Manager.  
Goa: A. Mascarenhas, Manager.  
Hyderabad: R. K. Chintamani, Manager.  
Jaipur: T. P. Hajela, Manager.  
Jorhat: P. K. Sen Gupta, In-charge.  
Kanpur: S. V. Mani, Manager.  
Kurseong: M. L. Khatri, In-charge.  
Madras: V. Venkataraman, Manager.  
Patna: A. K. Sen, In-Charge.

**Telegraphic Address:**

"Greaves", Bombay, Ahmedabad, Asansol, Bangalore, Bhubaneshwar, Calcutta, Coimbatore, Delhi, Gauhati, Goa, Hyderabad, Jaipur, Jorhat, Kanpur, Kurseong, Madras and Patna.  
Bombay Telephone Nos. 259171-9.  
Post Box No. 91, Bombay.

# GUEST, KEEN, WILLIAMS, LTD.

Wakefield House, Sprott Road, Ballard Estate, Bombay 1. Post Box No. 575.

Telephone No. 261302 (3 lines).

Tel. Address: "Pointsman", Bombay.

Works: Agra Road, Bhandup.

Head Office: "Jeevan Deep" 1, Middleton Street, Calcutta 16.

Works: Andul Road, Howrah.

**Manufacturers of:**

Wood Screws, Cotter Pins, Safety Pins, Self-Tapping Screws, Timmen's Rivets, Machine Screws and Bolts, Nuts, Rivets, Spikes, Railway Track Fittings, Railway Signal Equipment, Steel Rolled Sections, Drop Stampings and Forgings, Grinding Media.

Representing Guest, Keen & Nettlefolds Ltd., England and Associated Companies.

**Agents for:-**

Automatic Transportation Company, Chicago, U.S.A. Electric Automatic Industrial Fork Lift Trucks.

Wm. Beardmore & Co., Ltd., Glasgow. Steel Forgings & Castings. Forged Steel Work Rolls & Composite Type Back-up Rolls. Railway Wheels & Axles.

British Rollmakers Corporation, Ltd., Crewe. Rolls for Rolling Mills.

Crompton Parkinson Ltd., London. Stud Welding Equipment.

Donald Ross & Partners Ltd., Twinner Works, Gatwick Road, Crawley, England. Holding, Positioning and other Ancillary Equipment for Arc Welding Process.

Exors of James Mills, Ltd., Stockport. Bright Steel Sections, Cotters, Keys, Taper Pins, Shakeproof Washers, Ledloy Free Cutting Steel.

G. K. N. Screws & Fasteners Limited, Birmingham. Wood Screws, Machine Screws, Self-Tapping Screws, Hammer Drive Screws, Spring Washers etc.

G. K. N. Bolts & Nuts Limited, Darlaston. Bolts, Nuts, etc.

G. K. N. Reinforcements Ltd., London. Steel Reinforcing Fabric.

Hauck Manufacturing Co., U.S.A. Flame Guns & Burners.

Mills Scaffold Co., Ltd., London. Steel & Aluminium Alloy, Tubular Scaffolding & Fittings.

Murex Ltd., Rainham. Metal Powders.

Murex Welding Processes Ltd., Waltham Cross, Herts. Welding Equipment, Electrodes and Welding Accessories.

P. & M. Co. (England) Ltd., London. Railway Track Equipment & Tools.

Somerset Wire Co., Bridgewater, Somerset. Wire for Rope Making, Spring Wire, Prestressed Concrete Wire.

Steel Company of Wales Ltd., London. Steel Sheets and other Semis.

Turton Bros. & Matthews Ltd., Sheffield. Tool Steels, Springs and Shear Blades.

United Non-Ferrous Metals Ltd., Birmingham. Non-ferrous Wire, Rods and Strip.

Uskside Engineering Co., Ltd., Newport. Mon. Mining Machinery.

Welsh Metal Industries, Caerphilly, Glamorgan, England. Spark Erosion Machines.



**GREENTOSE PRIVATE LTD.,** 24, Dalal Street, Fort, P.O. Box No. 1519, Bombay 1. Phones: 258077 and 268050 (Res.). Grams: "GREENTOSE". Manufacturers of Power Transmission Equipments especially Beltings of all types, Pulleys of all types, Sprockets, Chains & Boiler Insulation materials.

### GUEST, KEEN, WILLIAMS, LTD., SANKEY DIVISION

Regd. Office: 1, Middleton Street, Calcutta, 16.

Manufacturers of Precision Stampings, Laminations and Chokes for the Electrical Industry and of Light Pressings for the Electrical, Automobile and Textile Industries.

Calcutta Commercial Office: "JEEVAN DEEP", 1, Middleton Street, Calcutta, 16. Phone: 442381 (11 lines)

Calcutta Works: Currie Road, Shalimar, P.O. Howrah. Phone: 67 2026.

Bangalore Office & Works: Rajaji Nagar, Bangalore, 10. Phone: 74091.

Delhi Office: "JEEVAN VIHAR", Parliament Street, New Delhi, 1. Phone: 42136.

Delhi Retail Sales Centre: 3-13 B, Asafali Road, New Delhi. Phone: 274721

Bombay Works & Commercial Office: Azra Road, Bhandup, Bombay, 78. Phone: 581651 2 3 4 5 and 582061.

Bombay Retail Sales Centre: 653, Kailas Nagar, Tardeo, Bombay 7.

Bombay Accounts and Administrative Office:

Wakefield House, Sprott Road, Ballard Estate, Bombay 1. Phone: 261753 59 and 265515.

Magnet House, Dougal Road, Ballard Estate, Bombay 1. Phone: 261382.

Managing Director: Phone: Bombay: 261758 9 and 265515; Bhandup: 581243; Residence: 364506.

Tel. Address: "LOWLOSS", Bombay, Calcutta, Bangalore, Delhi.

### GUJARAT TRADING SYNDICATE

Importers & Manufacturers of Materials Handling Equipment and Suppliers of Printing Press Materials and Mill Stores.

India House (opp. G.P.O.), Fort 84, Bombay 1.

Grams: "GUTRASY". Phone: 261248.

**GUJARATI TYPE FOUNDRY,** Gaiwadi, Girgaum, Bombay 4. Phone No. 354332. Tel. Address: "Gutyfo", Bombay.

**GULF OIL (INDIA) PRIVATE LIMITED**  
Registered Office: Steelcrete House, 9, Dusha Wacha Road, Bombay 1 P.O. Box No. 1943. Importers and Distributors of Petroleum Products. Area Offices: Ahmedabad, Hyderabad and Indore. Director & Manager: R. B. Mistri; Asst. Manager: K. J. Lawyer; Associates: J. D. Sassoon, J. A. Meyer, B. Jaffrey, S. M. Bhambhani, A. V. Balasubramanian, R. N. Shroff and A. G. Gurte. Tel. Add.: "Gulfindia". Phone No. 245131 (3 lines).

Gupta Cycle Company, Importers of Cycles & Accessories Bharucha Building, 172, Princess Street, Bombay 2. Phone. Res.: 58118.

### GUNVANTRAY & CO.

Importers & Dealers in Letterpress, Litho, Offset and Spare Parts & Rubber Rollers.

Crescent Chambers, Tamarind Lane, Fort, Bombay.

Phone: 254684.

Grams: "GUNARAYCO."

**H. P. Modi & Co.,** (Estd. 1924) Manufacturers and Exporters of Drums, Containers, Kegs, Ghamellas, Kadais, etc. Office: Modi House, 177/79, Nagdevi St., Bombay 8. Phone: 826733. Grams: "MLXTURE". Factory: 41, Sankli St., Byculla, Bombay 8. Phone: 75847.

**H. S. COX & CO. PVT. LTD.,** 52 Forbes Street, P.B. 427, Fort, Bombay. Grams: "AMERICAN". Phone: 253133. Importers, Indentors, Patrons Non-Ferrous Metals, 'Oakeys' London Abrasive Products, Centramex Germany Surgical Instruments, Cossors, Blood Pressure Apparatus, Branon's Thermometers "Cusone" Laryngoscopes and Various Other Surgical Instruments Manufactured by us, Dealers of 'TROPIDUR' PVC Wires and Cables. Licensed Clearing & Forwarding Agents and Electrical Contractors.

**H. S. SOBHA SINGH & SONS** Importers and Indentors of Machinery and Equipment as follows: Eccentric Presses, Hydraulic Presses, Multiple Die Presses, Press Brakes, Plate Shears, Nibbling Shears, Combined Shearing and Punching Machines, Plastic Processing Machines, Sheet Metal Machinery, All types of Workshop Machinery, Wire Net Weaving Looms, Rubber Processing Machines, Continuous Cable Vulcanising Plants, Machinery for Cable Industry, Drum Manufacturing Plants, Tin Can Manufacturing Plants, Transmission Drive Elements, Clutches for Heavy Machinery, Hydraulic Pumps and Valves, Turbines.

Office: Nagin Mahal, 82, Veer Nariman Road, Bombay 1. Phone: 242774, 248257 and 243470. Grams: "DALJIT", Bombay.

Branch Office: B-6, Asaf Ali Road, New Delhi. Phone: 273756. 14, Chandni Chowk Street, Calcutta. Phone: 237036. Bank of India Bldg., Kemp Gowda Road, Bangalore, Kalsi House, Miller Ganj, G. T. Road, Lucknow.

Haldyn Industries Private Ltd., Glass & Chemicals Mfrs. 344, Cadel Road, Bombay 28.

**HALLEN, L. J., & CO.,** 275, Princess Street, Bombay 2. Tel. No. 38910. Grams: "SHARKOIL". Manufacturing Chemists and Manufacturers' Representatives. Distribution for: Toilex Manufacturing Co.

Hamilton Studios Private Ltd., Photographers, Indu House, Dougal Road, Ballard Estate, Fort, Bombay.

**HARDCASTLE & WAUD MANUFACTURING CO. PRIVATE LTD.** (Incorporating Marmat Paints Private Ltd.), Manufacturers of Heat Treatment Chemicals in India in collaboration with E. F. Houghton & Co., Philadelphia, P.A., U.S.A., (Pioneer Manufacturers of Heat Treatment Chemicals). Cutting Coolants, Foundry Products, Synthetic Resins, Fibre Sheets, Industrial Laminates, Fabric Bearings for Steel Rolling Mills, Gaskets, Silent Gears, Wire & Bristle Brushes, Paints for all purposes, Printing Inks, Varnishes, etc. Area Buildings, 889, Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 256771. Grams: "WAUDCO". Factory—Kalyan (Central Ry.). Phone: Kalyan 26.

**HARDCASTLE, WAUD & CO. PRIVATE LTD.,** Sole Selling Agents for:—(1) Hardcastle & Waud Mfg. Co. Pvt. Ltd., Mfrs. of Heat Treatment Chemicals, Paints, Enamels, Varnishes, Distempers, Synthetic Resins, Insulating Varnishes, Wire & Bristle Brushes, Gears & Gaskets of all types, Printing Compounds, Acid & Alkali Resisting Cements, Corrugated Lamps, Fibre sheets, Industrial Laminates, Fabric bearings for Steel Rolling Mills, etc. (2) Waterproof Paper Mfg. Co. Pvt. Ltd., Mfrs. of all kinds of Waterproof packing papers, (3) H. W. Wharton & Co. Pvt. Ltd., Mfrs. of Silica Gel, Iron Cement, Toilet Papers, Adding Machine Oils "Kleanwell" Brand Circular Wire Ropes & Flexible Shaft Machines and accessories. Importers of Non-Fluid Oils & Greases, Welding Rods, etc. (4) Asbest Minerals Pvt. Ltd., Asbestos & Asbestos Products, all kinds of Minerals. (5) D.C.M. Products (1937) Pvt. Ltd., Mfrs. of Brackets Casting Powder, Greases, Refractories, etc. (6) Craftsman Electronic Corp. Pvt. Ltd., Mfrs. of Laboratory Furnaces & Ovens, Indicating, Regulating & Controlling instruments, Dial, Thermometers, etc. (7) Selling Agents for:—Simota Pvt. Ltd., Mfrs. of Self Lubricating Bearings & Sintered Parts.

Surveyors, Clearing Agents, Importers of Engineering and Mill Stores, Heat Treatment Products, Electrical Indicating Recording and Controlling Equipment, Low Temp. Welding Rods, Vulcanized fibre, Insulating Materials and Laminated Plastic for Silent Gears, Adhesives Colloidal Graphite Products, Lubricants, Industrial Chemicals, Synthetic Resins etc. Head office: Alce Building, 889 Dr. Dadabhai Naoroji Road, P. B. No. 1254, Bombay 1. Tel. Address: "WAUDCO", Phone No. 256771 (3 lines). Factory: Kalyan. Branches: Calcutta, Madras, Ahmedabad. Codes Used: Bentley's A.F.C. 5th and 6th Edns. and Western Union.

**HARILAL MANILAL & CO.** (Estd. 1910). Importers, Exporters & General Merchants. Exporters of Cotton, Cotton Piece-goods, Woollens, Art Silk and Fancy Goods, Hosiery, Wearing Apparels, Glassware, Crockery, Leather Goods of all kinds, etc., 346, Kalbadevi Road, Bombay 2-B.E. Phone: 39717. Grams: "EXPORTIM."

Harchandrai Sons, Ball-Roller Bearings Merchants, 172, Nagdevi Street, Bombay 8.

### HARISHCHANDRA & CO., JALIWALA.

Perforated Metals, Sheets, Expanded Metal & Wire Nettings Manufacturers & Suppliers.

233, Abdul Rahman Street, Bombay 2. Phone Nos. 822907 & 823161.

Grams: "HARIJALI".

**HARISHANKER NARBHERAM & CO.,** D.M., Importers of Jute, Amy & Special Steel from Sanks—FN 8, 9, 818, 24 & 26, 44, Karsara Chawl, Karsara Road, Bombay 2. Phone: 886994. Codes & 531133 Res.; Grams: "BAKULLEAU-H". Sole Agents for: B. K. Martin & Co. Ltd., (Kapur Road Works), Sheffield, England; H. H. & Schmitts GmbH, Köln, W. Germany. Also contingents all over the Continent, U.S.A. and Japan.

**HARSHADRAY PRIVATE LIMITED** Merchants, Engineers & Agents. Head Office: Jiji House, Raveline Street, Bombay 1. Phones: 266281 (4 lines).



Grams: "FACTORIND". Factory: Stainless Steel Division, Pandit Jawaharlal Nehru Road, Santa Cruz, Bombay 54. Phone: 532432.

Hassamal Bros., Manufacturers' Representatives, Direct Importers & Exporters. 538, Kalbadevi Road, P. O. Box No. 2236, Bombay 2.

Imports: Art-silk yarn, watches, Coal Tar Dyes & Chemicals, Betel Nuts, Watch Parts, Motor Vehicle Parts, Piston Rings, Stainless Steel Sheets, Un-manufactured Ivory, Aromatic Chemicals, Natural Essential Oils and other general merchandise. Sole Agents for Kem Plastic Playing Cards of U.S.A.

Exports: Cotton and Art Silk piece-goods, Saris, cotton yarn, cotton & art silk hosiery, Jute & Jute Bags, Ivoryware, Brassware and other artware curios, Silver & Gold Embroidered Purse & belts, Aggarbatties, Stainless Steel Watch Straps, G. I. Buckets, Handloom Fabrics and other general merchandise.

Phone Nos. { 22001  
22002

Cable: "HASSABROS."

HATIM BROTHERS, Manufacturing Opticians & Importers of various kinds of Spectacle Lenses and different kinds of frames, Rolled Gold & Zylor, 302, Abdul Rehman Street, Bombay 3. Phone No. 324960. Tel. Address: "Opticians."

Hatimbhoy Gulamhusein & Bros., Pipes & Fittings Merchants. 193, Nagdevi Street, Bombay 3.

HEATLY & GRESHAM, LTD., Engineers and Railway Specialists, London, Calcutta, Bombay, Madras, New Delhi, Ahmedabad. Bombay Office: 43, Forbes Street, Fort, Bombay 1. Post Box No. 225. Telephones: Office: 255756 & 255757. Telegraphic Address: "Brake."

Managing Director: A. D. Dhingra, B.Sc., Hons. (Edin.), A.M. Inst. C.E., A.I. Loco. E.

Manager: M. M. Bharucha.

Assistants: L. C. P. D'Sa, V. S. Kulkarni, M. M. Karve, S. Pradhan, A. K. Bose, D. S. Gabla and C. R. Dighe.

Indigenous Manufacturers' Representatives for:

Acrow India Ltd.—Steel Shuttering, Scaffolding, Props, etc.

E. P. Allam of India Ltd.—Concrete Vibrators.

Beclawat of India Pvt. Ltd.—"Beclawat" Windows—Railways, Road Vehicles, Marine.

De's Lock Industries—Architectural Fittings.

"Swiss Welded Mesh Co. (Private) Ltd.—Welded Fabric for concrete reinforcement and Welded Mesh for Screens, Partitions and Window Guards."

Ironite Co. of India Ltd.—Concrete Floor Hardener and Waterproofers.

Oxy-Chloride Flooring Products Ltd.—Flooring for coaches and wagons.

Road Machines (Drayton) Ltd.—Concrete Weighbatching plants, Mono-Rail Transporter.

Sagar Engineering Corporation—Gear Oil Pumps, Hydraulic and Screw Jacks.

Saurashtra Engineering Works—"Gripp" Drill Chucks.

Sayaji Iron & Engineering Co. Pvt. Ltd.—"Prabhat" Stone Crushers and Granulators.

Stein Atkinson Stordy Ltd.—Furnaces.

Hemant Tools Trading Co., Engineering Tools & Hardware Merchants. 33, Bibijan Street, Bombay 3.

Hemco Corporation, Machinery dealers, 21, Forbes Street, Bombay 1.

HEPTOOLA NOORUDIN & CO. (Estd. 1900), Importers & Dealers in Marine & Mill Stores, 154, Nagdevi Street, Bombay 3. Phone: 326787. Grams: "IMMUNITY". Merchants & Shipchangers.

HERBERTSONS, LTD., Regd. Office: Ewart House, Bruce Street, Fort, Bombay. Branches at: Calcutta, Delhi, Secunderabad (A.P.) and Lucknow and Jabalpur. Wines, Spirits, Provision and Chemicals & Drug Merchants, Manufacturers' Agents, Exporters and Importers.

Directors:—D. R. P. Dryer, A. L. Cole, N. K. Suntook and V. Mallya.

General Manager:—V. A. Castellino; General Sales Manager:—S. S. Gandhi; Branch Managers:—S. K. Mitter (Calcutta), R. C. Sabharwal (Delhi); Depot Managers:—J. S. Kohli (Lucknow), P. L. Sethi (Jabalpur), N. Sengupta (Secunderabad).

Phone No. 255687 (Two Lines).

Tel. Address: "HERBERTSON."

Post Box No. 431.

Associated Company: Herbertsons (Pakistan) Ltd., Karachi & Chittagong.

HIGGINS (EASTERN) PRIVATE LTD., H. F. Manufacturers of "HFH" Automobile Parts "HFH" Wall and Pencil Type, Pressure Gauges, Importers & Distributors of Auto Parts and Garage Equipment. Janmabhoomi Chambers, opp. Alexandra Dock, Fort Street, Bombay-1. Phone: 261789. P.O. Box 1548. Grams: "HEASTERN"

Hill, Son & Dinshaw Private Ltd., Stevedors & Marine Contractors.

Managing Directors:—Dinshaw A. Dhunjibhoy, and Menos Dinshaw.

Marshall's Building, Ballard Road, Fort, Bombay. Phone Nos. (Head Office): 26-2281, 26-2282 and 266105; Sholapur Street (Godown): 333133 & 78975; Darukhana (Godown): 378975. Grams: "Hatchway", Bombay.

Himalaya Drug Co., Pharmaceutical Manufacturers. 251, Dr. Dadabhai Naoraji Road, Bombay 1. Phone Nos. 262222 and 262223. Grams: "SERPINA" and at 22-24, Mahatma Gandhi Road, Debra Dun, U.P. Phone: 339. Grams: "SERPINA".

Hind Cycles, Ltd., Pioneer Manufacturers of Bicycles and Accessories, etc., 250, Worli, Bombay 18.

HIND DYES MFG. CO., PT. LTD., Dye-stuffs & Chemical Mfrs. and Merchants, 62, Garibdas Street, Bombay 3. Phone: 322799.

HINDUSTAN BROWN BOVERI LTD., Manufacturers, Engineers, Contractors and Suppliers of Power Plant equipment for generation, distribution and utilisation of electric energy. Importers of all products of BBC and their concessionaires. Registered Office: Thackersey House, Graham Road, Ballard Estate, Bombay-1. Phones: 261121-22. Grams: "HIND-BOVERI". Sales & Engineering Division: Mahatma Gandhi Memorial Building, North Netaji Subhas Road, Bombay-2. Phones: 38221-22. Grams: "BROWN-BOVERI". Branches: all over India. Works: Baroda, Faridabad, Ghaziabad and Howrah.

HIND EQUIPMENT CORPORATION PRIVATE LTD., Manufacturers of Andre Hartford Shock Absorbers, HECO Hydraulic Shock Absorbers and Silent Blocks and Rubber-Bonded Metal Fittings for Automobiles and Railways. 24-B, Hamam

St., Raja Bahadur Compound, Fort, Bombay-1. Phone: 254309. Grams: "PILSICO", Bombay.

Directors: Mr. P. D. Sidhva, Mrs. P. D. Sidhva and Miss P. P. Sidhva.

General Manager: Mr. D. V. Karal.

Manufacturing Plant at: 183, Tokarsey Jivraj Road, Sewree, Bombay 15. Phone: 78610.

Distributors & Stockists for:

John I. Thornycroft & Co. Ltd., England.

Hind Export Corporation, Currimjee Building, 111 Mahatma Gandhi Road, Fort, Bombay 1. Phone: 259241, Tel. Address: "Highland". Exporters of all kinds of Oilseeds, Oils, Oil Cakes, Spices, Grains, Handicrafts, Engineering and Electrical Goods, Raw Cotton & Textile Piecegoods. Names of Partners: Smt. Sarla D. Sanghvi; Arun Nagardas Sanghvi; Ganrang Nagardas Sanghvi; Kirit Ratilal Gandhi; Pravin Ratilal Gandhi.

HIND RECTIFIERS LTD., Lake Road, Bhandup, Bombay 78. Grams: "HIRECT", Bombay 78. Licensees of Westinghouse Brake & Signal Co. Ltd., London, for manufacture of Rectifiers, Battery Chargers, Electroplating Sets, Silicon Power Plants.

Selling Agents:

Kaycee Industries Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1. Phone: 264030.

"Hindu, The," Office and National Press, (Estd. 1878). Kasturi Buildings, Jamshedji Tata Road, Bombay. Head Office: Mount Road, Madras 2.

HINDUSTAN ENGINEERING CO. (Machinery Dept.), Machinery Merchants & Manufacturers' Representatives. Sole Agents: "NEW HINDUSTAN" Diesel Engines. Phone: 253583. Grams: "VIDOOALL". Aban House, 25/31, Ropewalk Street, Fort, Bombay 1.

## HINDUSTAN EXPORT & IMPORT CORPORATION PRIVATE LTD.

Registered Office:—Anand Bhavan, Dr. Dadabhai Naoraji Road, Fort, Bombay. Post Bag 1091. Phone No. 253885/86. Grams: "Hinderport",

Branch Offices: Grover Mansions, 3/17, Anaf Ali Road, New Delhi, Phone No. 272967. Grams: "HINDEXPORT".

Suite No. 2, 7 Circus Avenue, Calcutta 17. Branch Manager: A. K. Bandyopadhyay. Phone No. 448005. Grams: "HINDEXPORT".

Sub Agents in Madras State: Productivity Elements Pvt. Ltd., B-14, Ambattur Industrial Estate, Madras 58. Director: R. Palaniappan. Phone No. 60275. Grams: "Protel", Ambattur.

Managing Director: Kanwal K. Grover.

Machinery & Machine Tool Dept., General Manager: P. Chopra.

Bombay Branch Manager: P. D. Hingorani.

Manager, Textile Dept.: R. D. Malhotra. Importers and Sole Agents of many manufacturers of Machine Tools and Europe, U.S.A., Japan and Australia. Exporters of Grey and Processed Cotton yarn & Textiles.



## HINDUSTAN FERODO LIMITED

A Member of the Turner & Newall, Group.

Registered Office & Factory :  
Bombay-Agra Road, Ghatkopar,  
Bombay 77.  
Tel. No. 582391.  
Grams : "FERODOSTAN".

Sales Offices :  
Calcutta, Madras and New Delhi.  
Manufacturers of "FERODO" brake  
and Clutch linings, "Firefly" asbestos  
textiles, compressed Asbestos Fibres  
Jointing, and "Limpet" Asbestos  
Sheets.

**HINDUSTAN LEVER LIMITED**, Manu-  
facturers and Sellers of Soap, Glycerine,  
Toilet preparations, Vanaspati, Ghee,  
Margarine, Baby Food, Dehydrated Vege-  
tables and animal feeding stuffs.

Head Office : Hindustan Lever House,  
Backbay Reclamation, Bombay 1.  
P. O. Box No. 409. Phone No. 246251.  
Tel. Address : "HINDLEVER". Fac-  
tories : Bombay, Calcutta, Shannagar,  
Ghaziabad, Tiruchirapalli, Etah.

Branches : Delhi, Calcutta, Bombay &  
Madras.

Hindustan Plastic Co., Plastic Sheetings  
Merchants, 95, Abdul Rehman Street,  
Bombay 3.

Hindustan Scale Co., Scales & Weights  
Merchants, 186-188, Janjkar Street,  
Bombay 3.

### HINDUSTAN STEEL CORPORATION

Importers and Indentors of Machinery &  
Equipment as follows : Machinery for the  
Cable Industry, Wire Drawing and Wire  
Stranding Machines, Extrusion Plants,  
Billet & Scrap Shears, Scrap Baling  
Presses, Draw Benches and Swaging  
Machines, Rolling Mills & Ancillary  
Equipment, Ore Dressing Machines, Pil-  
gar Mills for Tubes. Office : Nagin Mahal,  
82, Veer Nariman Road, Bombay 1.  
Phone : 242774, 243257 & 243400. Branch  
Offices : B-6, Asaf Ali Road, New Delhi.  
Phone : 273756 ; 14, Chandni Chowk Street,  
Calcutta. Phone : 237036.

### HINDUSTAN TOOLS & HARDWARE

MART, Engineering Stores & Hardware  
Merchants, 126, Lohar Chawl, Bombay 2.  
Phone : 20666, Grams : "FAKIRSAI".

Hindustan Tiles & Cement Industries, 89,  
Princess Street, Bombay 2.

### HINDUSTAN WIRE NETTING CO.,

PRIVATE LTD. Manufacturers of Wire  
Gauze, Hexagon Wire Netting, Galvanized  
Chain Link Fencing, Galvanized Stranded  
Stay Wires, Galvanized Signal Wire,  
Stranded Copper Conductors and Panel  
Pins. Works : Agra Road, Thana. City  
Office : 55/57, Nagdevi Cross Lane, Bom-  
bay 3. Telegrams : "Wiregauze," Bombay.  
Phones : 324008-327930. Works : 591898-  
591559-592637-592636.

### HINDUSTAN WIRE PRODUCTS LTD.,

Manufacturers of Super Enamelled &  
Cotton covered copper wires.

Bombay Office : Sardar Griha Building,  
Carnac Road, Bombay 2. Phone :  
22280, Grams : "HINWIREPRO".

Factory : Factory Area, Patiala (Punjab).  
Calcutta Office : 14, Netaji Subhas Road,  
Calcutta.

New Delhi Office : 1774, Vishnu Bhavan,  
Bhagirath Place, Chandni Chowk,  
Delhi-6.

### HINDUSTANTYRES PRIVATE LTD., THE

Manufacturers of all kinds of Rubber  
and Ebonite goods and Retreaders of  
Tyres, Lamington Road (North), opp.  
Agripada Police Station, Bombay-11.  
Phone No. 77476. "TYRES."

### HOARE MILLER & CO. LTD.,

Head Office : 5, Fairlie Place, P.O. Box  
No. 69, Calcutta 1.  
Phone : 22-4801-8 (8 lines).  
Grams : "HOARMILLER."

#### Branch Office :

"Readymoney Terrace", Dr. Annie  
Besant Road, Worli, Bombay 18. P.O.  
Box No. 6567.

Phones : 377421-2 (2 lines).  
Grams : "HOARMILLER."

Manager : N. O. Chokshi.

#### Madras Office :

Catholic Centre, Armenian Street,  
Madras 1.  
Phone : 22340.

Grams : "HOARMILLER".

### HOECHST DYES & CHEMICALS LTD.,

Parekh Mahal, Vir Nariman Road,  
Churchgate, Bombay 1. Phones : 242345/  
46, 242453. Grams : "HOSTACHEM".  
Branches at Ahmedabad, Bombay, Cal-  
cutta, Madras and New Delhi.

### HOECHST PHARMACEUTICALS LTD.,

Head Office : Dugal House, Backbay  
Reclamation, Bombay. Phone : 246191-2-3  
& 245059. Factory : Bombay-Agra Road,  
Mulund. Phones : 592253 & 592264. Grams :  
"HOSTAPHARM." Branches : Ahmeda-  
bad, Bombay, Calcutta, Delhi, Madras,  
Kathmandu (Nepal).

Hoosaini Co., Mount Road, near Hasanabad  
Horse Stable Compound, Mazagaon,  
Bombay 10.

Hoosain, M. A., & Bros., Agents and Im-  
porters of Iron & Steel and their products,  
Non-Ferrous Metals, Building materials,  
Papers, Chemicals, Exporters of Indian  
Cotton Piece-goods, Yarns and all sorts of  
merchandise. Lakshmi Building, Sir  
Phirozshah Mehta Road, Fort. Tel. No.  
26-2166/67. Tel. Add. : "Tropicals."  
Branch : Calcutta.

### HOOSEINI METAL ROLLING MILL

PRIVATE LTD., 66-58, Narayan Dhuru  
Street, Bombay-3. Grams : ALUBRAS.  
Phones : 376965, 323941. Manufacturers of  
Brass, Aluminium & Lead Sheets and  
Circles. Factory : Atlas Mill Compound,  
Reay Road, Bombay 10.

### HOOSEINBHAY A. LALLJEE SONS &

CO., Navsari Bldg., Dadabhoy Naoroji  
Road, Bombay 1. Phone : 262052. Grams :  
"FLOWERMEAD".

Importers of : Dyestuffs, Chemicals, Textile  
Auxiliaries etc.

Exporters of : Vegetable Oils, Oil Seeds,  
Oil cakes and miscellaneous.

Hormasji Ardeshir & Co., Proprietor, Sorab  
H. Ardeshir, A.M.S.E. (Lond.), Architects  
and Surveyors, 22-D, Parsi Bazar Street,  
Fort, Bombay 1. Phone No. 253592.

### IBCON PRIVATE LIMITED, Industrial

and Business Consultants, Registered  
Office : Adelphi House, 119, Queen's Road,  
Phone : 242052/3, Grams : "IBCO".

Offices : 5, Russell Street, Calcutta 16.  
18, Palace Road, Bangalore 1. Brady's  
Building, Mahatma Gandhi Road,  
Kanpur. D-24, Defence Colony, New  
Delhi-3. 14, Shivaganga Road, Nungam-  
bakkam, Madras 34. 7, Sukhastan  
Gardens, Off Ward Place, Colombo-7,  
Ceylon.

Managing Directors : R. R. Bajpal.

Directors : B. J. Kirpalani, J. B. Vasan-  
dani, M. C. Mitter, D. K. Basu.

Associate Cos. : In Pakistan, Mexico, Chile,  
Argentina, Brazil, United Kingdom,  
Hong Kong, Chicago, New York, Boston.

Consultancy Services for : Development of  
new industries ; market surveys and  
feasibility studies ; project reports,  
project execution, personnel training,  
designs of buildings, structures and  
heavy machine foundations ; super-  
vision of erection and commissioning of  
plant and help achieve optimum per-  
formance. Planning and execution of  
modernisation and expansion of indus-  
tries.

#### Also

Raising productivity of labour and staff,  
machines and equipment, stores and raw  
materials and of capital employed and  
improving working efficiency of an orga-  
nization by studying, recommending  
and helping implementation of recom-  
mendations on organization set-up,  
office procedures, job evaluation and  
wage and salary structures, methods  
improvements, work standards, incen-  
tives, inventory control, production  
planning, fuel, power and steam utiliza-  
tion, plant layout, staff training, mar-  
ket demand, consumer preference, etc.

### IBM WORLD TRADE CORPORATION,

Electric and Electronic Punched Card  
data Processing machines & Electronic  
Computers. India Main Office : Nehru  
House, 4 Bahadur Shah Zafar Marg,  
P.O. Box 704, New Delhi-1 ; Phone :  
277881 (10 Lines). Tel. Address :  
"INBUSMACH." Delhi Branch : Nehru  
House, 4 Bahadur Shah Zafar Marg,  
New Delhi-1. Phone : 277881 (10 Lines).  
Calcutta Branch : Mackinnon Mackenzie  
Building, 16, Strand Road, Calcutta 1.  
Phone Nos. 228135 and 225316.

Bombay Branch : Vulcan Insurance Build-  
ing, Veer Nariman Road, P.O. Box 1283,  
Bombay 1. Phone : 242386 (6 Lines).

Madras Branch : Indian Overseas Bank  
Building, 151, Mount Road, P.O. Box  
2439, Madras 2.

Ideal Motors, Distributors of Jawa Motor  
Cycles, Cycles and Spare Parts. Service  
Dept. Bombay Mutual Annexe, Cawasji  
Patel Street, Fort, Phone : 262660 and  
Head Office : Sitaram Building, Dr. Dada-  
bhoy Naoroji Road, Bombay 1. Phone :  
263485. Grams : "IDEALMOTOR."



## SPRINGS & FORMS

By

**IMANES**  
PRIVATE LIMITED

BOMBAY - 56 (AS).  
P.O.B. 8002. Tel. 571634.

Gram. "Bellibone"



**IDEAL WRAPPERS PRIVATE LTD.,**  
Manufacturers of Himalaya Drinking Straws; Paper Converters, Waterproof Kraft Paper, Waxed Paper and other Laminated Papers. Advani Chambers, Sir P. M. Road, Fort, Bombay; Phones: 261061 & 2 (Office) and 591444 (Factory). Grams: "LAMINATED"

**I.C.I (INDIA) PRIVATE LIMITED.**  
Suppliers of Dyestuffs and Auxiliary Products; Plastics, all types, including "Alkathene" brand polythene, "Alkathene" Pipe and Film; Paints and Pre-treatment Chemicals; Heat Treatment Furnaces and Salts; Metal Degreasing Plants and Trichloroethylene; Wrought non-ferrous Metals and Alloys; Rubber Chemicals Colours and Fillers; "Butakon" highstyrene Co-polymers; nitrile Rubbers and Latexes; Polyurethane Chemicals; Refrigerant Gases; Water Treatment Chemicals; Alkalies; Mineral and Organic Acids; Silicones; Emulsifying Agents; Fertilizers; Agricultural Chemicals; Insecticides; Fungicides; Weedkillers; Pharmaceutical Ethical Products; Veterinary Products; Explosives; Safety Fuses and Detonators.

**Head Office for India:**

34, Chowringhee, Calcutta-16.

Telegraphic Address: "IMPKEMIX", Calcutta.

G.P.O. Box No. 182, Calcutta-1.

Phone: No. 23-2391 (15 lines).

Technical Service Laboratory, 87, Tiljala, Calcutta-46. Phone: 44-6121 (4 lines).

**Head Office for Dyes:**

'Crescent House', 19, Wiltet Road, P.O. Box No. 287, Ballard Estate, Bombay 1.

Telegraphic Address: "ICIDYES", Bombay.

Phone: 268051 (14 lines).

Technical Service Laboratory (Dyes).

Fosbery Road, Sewri, Bombay.

Phone No. 373691.

**Branches:**

• Calcutta—P.O. Box 334. Phone No. 22-2361. Telegraphic Address: "ALKALI".

Bombay—P.O. Box 310. Phone: 268051.

Telegraphic Address: "ALKALI".

Madras—P.O. Box 130. Phone: 29351.

Telegraphic Address: "ALKALI".

Delhi—P.O. Box 107, New Delhi.

Phone: 43154. Telegraphic Address: "IMPKEMIX", Delhi.

**ILFORD SELO (INDIA) PRIVATE LTD.,**  
Registered Office: Cooks Building, Dr. Dadabhai Naoroji Road, Bombay 1. Sole Agents and Distributors: ILFORD Photographic and X-ray Materials, Cameras & Accessories. Phone No. 251284. Tel. Address: "BROMIDE." Branches: Calcutta and Madras.

Imperial Surgical Co. Private Ltd., "India House", opp. G.P.O., Fort, Bombay.

**IMPERIAL TOBACCO CO. OF INDIA LTD., THE,** Factory Address: P.O. Box No. 6002, Parel, Bombay 12-DD. Phone No. 442521 (4 lines). Tel. Address: "BACCYMAKE. (PL) Bombay."

**INDIA CROWN CORK CO. LTD.,** (Wholly owned subsidiary of Larsen & Toubro Limited). Registered Office: L. & T. House, Dougall Road, Ballard Estate, P.O. Box 278, Bombay 1. Telephone: 264411/9. Grams: "LARSEN BRO." Factory: Saki Vihar Road, Powai, P.O. Box 8901, Bombay 72 AS. Telephone: 581501/10.

Managing Agents: L & T (Management) Private Ltd.

Manufactures and exports Crown Corks and executes tinprinting job works.

Directors: H. Holck-Larsen, S. K. Toubro, N. M. Desai, P. G. Bhagat, Gunnar Hansen.

Selling Agents: Larsen & Toubro Limited, P.O. Box 278, Bombay 1. Phone: 264411/9. Grams: "LARSEN BRO." Telex: TLX 246.

Sales Office: 41, Koliwada Road, Sion East, Bombay 22. Phone: 473575/76.

India Machinery Stores, Dealers in Machinery, Flourgrinding Mills, etc., 163, Nagdevi Cross Lane, Bombay 3.

India Tube Mills & Metal Industries Private Ltd., Agra Road, Vikhroli, Bombay 83.

**INDIAN ALUMINIUM COMPANY LIMITED.**

Bombay Office: Engineering Centre, 4th Floor, 9, Mathew Road, Bombay 4.

Telephone: 353341.

Telegram: "INDALUMIN".

Head Office: 1, Middleton Street, Calcutta 16.

Branches: Bangalore, Bombay, Calcutta and Delhi.

Products: Alumina Hydrate, Calcined Alumina; Aluminium Ingots; Sheets, Strips, Coils, Circles, Slugs, Corrugated Sheet, Chequered Plate, Extruded Sections, Frameless Houses, Grain Bins; Aluminium paste and powder, Carbon paste, Aluminium Foil.

**INDIAN CABLE COMPANY LIMITED, THE,** Cable Manufacturers, Electrical Engineers and Contractors. Representatives in India for British Insulated Callender's Cables Ltd.

Bombay Office: Esplanade House, Waudby Road, Fort, Bombay 1.

Head Office: 9, Hare Street, Calcutta-1.

Factory: Tatanagar, South Eastern Railway.

**INDIAN CASABLANCAS PRIVATE LTD., THE,** Registered Office: Maneckji Wadia Building, Mahatma Gandhi Road, Fort, Bombay 1. Telephone: 255026/7 and 375056. Grams: "INCASA." Patentees and Manufacturers of the Casablanecas System of High Drafting for Cotton Spinning, "Casavon" Cots & Bands, Constant Card Stripping Apparatus and Hunt Jet-Off Motion, TAPER BOARD MACHINE for India, Burma and Ceylon.

**INDIAN CATHODIC PROTECTION CO. PRIVATE LTD.,** Corrosion Engineers, Darshan Apts., Mount Pleasant Road, Malabar Hill, Bombay 6.

Chairman: A. M. Kapadia.

Tel. No. 362257.

Telegrams: "CATHOPROT".

**INDIAN COMMERCIAL CO., PRIVATE LTD.,** 45/47, Apollo Street, Fort, Bombay. Gram: "INDCOM". Phone: 254248/256023. Sole Selling Agents for Polychem Ltd.

Exporters: Cotton, Cotton Textiles, Oilseeds, Oilcakes; PVC Leather Cloth, etc.

Importers: Chemicals, Diesel oil Engine Spare Parts. Representatives in India for Dow Chemical International Inc., U.S.A.

Indian Durries Emporium, Carpets, Durries & Colr Mats Dealers, 64, Mahomedali Road, Bombay 3.

**INDIAN DYESTUFF INDUSTRIES LTD.,** Manufacturers of "Navinon Vat Dyes", and intermediates, Mafatlal House, Backbay Reclamation, Bombay 1. Phone: 246281. Grams: "HITSAGAR".

Factory at: Shahad, near Kalyan (Thana Dist.).

Managing Agents: Messrs. Mafatlal Gagalbhai & Sons.

Indian Electric Stores, Electrical Goods, Maskati Mahal, Lohar Chawl, Bombay 2. Phone No. 31613.



**INDIAN ENGINEERING CO.,** Worli Naka, Post Box 16551, Bombay 18. Phones: 370379 & 373490. Grams: "AMPVOLT(JC)". Manufacturers & Dealers of Electrical Equipment, Components and raw materials for the Electrical Industry. Also at Calcutta, New Delhi Madras & Bangalore.

**INDIAN EXPANDED METALS, PRIVATE LTD., THE,** Manufacturers of Steel, Brass, Copper & Aluminium Expanded metal of all sizes and meshes. Chairman: A. M. Kapadia.

Works Manager: I. N. Bhagat.

Works: Bombay-Agra Road, Near Milestone No. 20, Mulund, Bombay-60.

Office: Fort Road, Wadala, Bombay 31. Phones: 442741-2. Grams: "EXPE-EYAM".

**INDIAN EXPRESS NEWSPAPERS (BOMBAY) LTD.,** Newspaper House, Sassoon Dock, Bombay 5. Telephone: 212881-87. Telegram address: "STAN-DANA".

**Publishers of:**

"The Indian Express".

"The Sunday Standard".

"The Financial Express".

"Loksatta".

"Sunday Loksatta".

"Screen".

"The Indian Express" & "The Sunday Standard".

Editor-in-Chief: Frank Moraes.

Editor: Binod Rao; News Editor: C. P. Rao; Commercial Editor: G. B. Ponshe; Sports Editor: C. S. A. Swami; Chief Reporter: B. S. V. Rao.

"The Financial Express".

Editor: G. M. Laud; News Editor: C. P. Raghavan; Chief Reporters: D. A. Nigudkar and M. D. Divani.

"Loksatta" & "Sunday Loksatta".

Editor: H. B. Mahajani; News Editor: H. G. Apte; Reporter: K. P. Samak.

"Screen".

Editor: S. S. Pillai; Reporter: M. K. Mistry.

**Administrative Depts.:**

General Manager: T. S. Krishnan.

Manager: T. M. Nayar.

Chief Public Relations Officer & Advertisement Manager: C. A. Narayan.

Assistant Advertisement Manager & Assistant Public Relations Officer: P. S. Hegde.

Media-in-Charge: S. J. Miranda.

Circulation Manager: V. Ranganathan.

Works Manager: P. M. Rajagopalan.

U. K. Representative: Sitanshu Das.

**INDIAN FURNACE CO., PRIVATE LTD.** (Formerly Indian-Wild-Barfield Co. Pvt. Ltd.), Lotus Cinema Building, Dr. Annie Beasant Road, Worli, Bombay 18. Branch Office: 27/29, Brabourne Road, Calcutta 1. Furnace Manufacturers,



Suppliers of: "WILD-BARFIELD" and "G.W.B." Electric Furnaces; "THERMIO" Fuel Fired Furnaces; "FOSTER" Pyrometers; "GRAFTON" Electric Lehrs and Pottery Kilns; Blythe Ceramic and Enamel Colours; G. L. C. Graphite Electrodes for arc furnaces and anodes for caustic soda cells and other Heat treatment Shop Supplies; "CASSEL" Heat treatment salts; "SHELL-WILDBARFIELD" Quenching Oils. Manufacturers of "IFCO" Thermic Fuel Fired furnaces, "IFCO" Electric Furnaces, "ETERNITE" Carburizing Compounds, "Carbodrip" Gas Carburizing Fluid and "FOSTER" Thermo Couples. Phone: 374687. Grams: "ELEC-FURN".

**INDIAN HOTELS CO., LTD.,** Bombay House, 24, Bruce Street, Fort, Bombay 1. Taj Mahal Hotel, Green's Hotel.

Directors:—

Sir Homi Mody (Chairman).

J. B. D. Tata.

N. H. Tata.

J. D. Choksi.

T. V. Baddeley.

D. R. D. Tata.

K. C. Bakhle.

L. Sawhny.

J. J. Bhabha.

R. D. Choksi.

Secretaries & Treasurers: Tata Industries Private Ltd.

Director-in-Charge: L. Sawhny.

Manager: A. B. Kerkar.

Tel. Address: "INHOTELS."

Phone Nos.: 214221 and 219101.

**THE INDIAN HUME PIPE CO. LTD.** are the largest manufacturers in India of R.C.C. Pipes known as "Hume Pipes", allied products, Prestressed concrete pipes, Hume steel pipes, Steel penstocks for Hydro-Electric Projects, R.C.C. Poles, Prestressed concrete poles, Welding fluxes, Welding electrodes etc.

The Company has acquired patent rights for No-Joint Pipes cast in Situ and can undertake laying of No-Joint Pipes.

Hume Pipes are very extensively used for Water Supply, Sewage, Drainage, Irrigation, Culverts, Well sinking etc. Concrete half-rounds and one-third round channels, R.C.C. Septic tanks, Telephone cabins, dust bins, Cattle troughs, Fencing posts, Latrines, Policeman Cabins, Pillars are the allied products made out of Hume Pipes. For High Pressure Mains required for water supply, the Company manufactures steel pipes, lined and outcoated with concrete, popularly known as "Hume Steel Pipes". The Company also manufactures Prestressed Concrete Pipes by Roca method for water supply schemes designed to stand pressure of 200 ft. head and above. These are found economical.

During the World War II, the Company pioneered manufacture of Welded Steel Pipes—Penstock pipes—for Hydro Electric Projects. Penstocks manufactured by the Company have been used in such important Projects as the Papanasam Hydro Electric Scheme, Madras, Mahatma Gandhi Hydro Electric Projects, Mysore, The Moyar Hydro Electric Scheme, Madras, Rihand Hydro Electric Projects, U.P., Koyna Hydro Electric Project (Maharashtra State) and 1st Stage of Sharavathi Valley Hydro Electric Project (Mysore State) which the Company have recently executed successfully. Company's Penstock factory at Hadapsar (Poona) is fully equipped with the latest machinery to cater the increasing needs of Penstocks for coming Hydro Electric Projects in the country.

Prestressed Concrete Poles for Transmission lines manufactured by the Company have very advantageously replaced the Steel Tubular Poles for both High tension and Low tension lines. Also R.C.C. Poles manufactured by the Co. are largely used as Lamp Posts in all the cities.

To complete any Storm Water or Sewerage scheme with standard precast pipes, a very long period is required as it involves manufacture of pipes, curing and laying. No-Joint Pipes are machine cast in Situ in ready trenches and this speeds up the work considerably with saving in time and money.

The Company has a large network of about 60 factories spread over India and Ceylon and one factory at Benghazi in Libya with its Registered Office at Construction House, Ballard Estate, Bombay-1. Telephone No. 268091 (13 Lines). Tel. Address: "HUMEPIPE", Bombay.

**INDIAN INDUSTRIAL ENGINEERS,** Electrical Engineers, Importers and Stockists of Electrical Measuring Instruments, 43, Tamarind Lane, Fort, Bombay 1. Phones: 254972 (Office) and 241469 (Res.) Grams: "NEWLIGHT."

Manager: I. P. Gupta, B.A., B.Com., LL.B.

**INDIAN IRON & STEEL CO., LTD., THE,** Esplanade House, Waudby Road, Post Box 922, Bombay 1 B.E. Phone: 26-6115. Gram: "INISCOBOM". Branch Manager: Col. G. C. Dubey. Martin Burn Ltd. 12, Mission Row, Calcutta 1.

## INDIAN PLASTICS LIMITED

KANDIVLI, BOMBAY 67

Telegram: "PLASTICS" KANDIVLI

Telephone Nos.: 661241-42-43

Directors: Sarvashri L. N. Birla, H. P. Barat, N. T. Shah, B. D. Sharma, B. N. Ray Chowdhury.

The Company, one of the largest of its kind in Asia, operates three active manufacturing Divisions, as under:

**PLASTICS DIVISION:** Injection and Compression moulding of various industrial items and manufactures of Perspex novelties.

**RADIO DIVISION:** Manufacture of well-known SHARP-JHANKAR Radios, in collaboration with the world-famous Japanese manufacturers Messrs. Hayakawa Electric Co. Ltd., Osaka, Japan.

**CHEMICAL DIVISION:** Manufacture of 'FLORITE' Phenolic, Urea and Melamine Moulding Powders and Resins, in collaboration with the well-known German firm, Messrs. Bakelite Gesellschaft M.B.H. Letmathe, W. Germany.

**INDIAN NATIONAL PRESS (BOMBAY) PRIVATE LTD., THE,** 21, Dalal Street, Bombay 1. Publishers of: "Free Press Journal", "Free Press Bulletin", "Bharat Jyoti", "Navshakti", "Janshakti". Managing Director & Editor: Mr. A. B. Nair.

## INDIAN OXYGEN LIMITED

GHATKOPAR  
(BOMBAY-AGRA ROAD),  
BOMBAY-77 AS

Manufacturers of:—

Industrial Oxygen (Compressed and Liquid), Medical Oxygen, High Flying Oxygen, Industrial and Marine Dissolved Acetylene, Industrial and Dry Compressed Air, Industrial (Compressed and Liquid) Nitrogen and Dry Nitrogen, Argon, Hydrogen, Nitrous Oxide, Electric Arc Welding Electrodes, Automatic Arc Welding Consumables, Oxy-Acetylene Welding Fluxes, Oxy-Acetylene Welding and Cutting Equipment and Accessories, Gas Anaesthetic, Analgesic Apparatus and Oxygen Therapy Equipment and Liquid Oxygen Explosives.

Suppliers of:—

The above mentioned items, Oxy-Acetylene Welding Rods, AGA Marine lighting equipment, Manual Arc Welding Transformers, Automatic and Semi-automatic Arc Welding Equipment, Metal Spraying Equipment and Wires, Helium, Neon and other rare gases.

Distributors of: "Burshane" for industrial uses.

Registered Office: 48/1, Diamond Harbour Road, Calcutta 27.

Managing Director: A. K. Sen.

Bombay Office and Works: Ghatkopar (Central Railway), P.O. Bag No. 7251. P.O. Rajawadi, Bombay 77-AS.

Telegrams: "INDOXCO," Ghatkopar.

Phone Nos.: 582641 (7 lines), 582648, 582649 & 582782.

Bombay City Depot: Arched Bungalow Road, Off Reay Road, P.O. Tank Road, Bombay 33-DD.

Phone Nos.: 375311 & 375312.

Goregaon Depot: 1-A, Menon Industrial Estate, 504-E, Swami Veevekanand Road, Goregaon, Bombay 62-NB.

Phone No.: 692967.

District Manager: L. M. Pasricha.

Bombay Works:—

Production and Compression of Oxygen, Production of Dissolved Acetylene, Nitrogen and Nitrous Oxide.

Districts/Branches: Asansol, Calcutta, Delhi, Jamshedpur, Kanpur, Madras.

Sub-branches: Ahmedabad, Bangalore, Gauhati, Hyderabad, Visakhapatnam.

Compressing Stations: Amritsar, Gazinabad, Howrah, Kanpur, Madras, Bishra, Tiruchirappalli.

Liquid Oxygen Depots: Barsua, Bermo, Bhurkunda, Birmittapur, Bolani, Gidi Gaa, Kathara, Kiriburu, Lohardaga, Noamundi, Purnapani.

Sales Depots: Ahmedabad City, Ambatur, Bangalore City, Barauni, Baroda, Bermo, Bhavnagar, Bhurkunda, Cochin, Coimbatore, Cuttack, Delhi City, Gauhati, Hubli, Hyderabad City, Jaipur, Jullunder, Khardah, Kolhapur, Madurai, Nagpur, Nasik, Patna, Pimpri, Poona, Rajkot, Ranchi, Rourkela, Salem, Siliguri, Surat and Vijayawada.



**IPCA Laboratories Ltd.**, Manufacturers of Pharmaceutical & Biological Products. 95, Morland Road, Byculla, Bombay 8. Phone : 374280 & 374638. Grams : "IPCA-PHARM."

**Indian Rare Earths Ltd.**, Manufacturers of rare earths and Thorium/Cerium nitrates, Ilmenite, Zircon, Rutile and Garnet, Pil Court, 111, Queen's Road, Bombay-1. Phone : 2422-14-15. Gram : "RARE-EARTH".

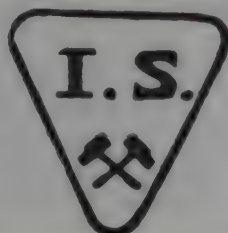
**THE INDIAN SMELTING & REFINING CO. LTD., THE**

*Mg. Agents :* Birla Bombay Pvt. Ltd.

*Regd. Office :* Industry House, 159, Churchgate Reclamation, Bombay-1.

Tel. No. 246261.

Cable : "ISARC", Bombay.



Double Hammer Brand.

Registered Trade Mark.

Cold Rolled Brass & Copper Sheets, Strips, Sheathings & Coils.

Brass & Copper Sheets (Size : 4' x 4').

Antifriction Bearing Metals.

Gunmetals & Bronzes.

Brazing Solders & Tin Solders.

Fine Zinc Die Casting Alloys—"ISMAK-3".

Aluminium Base Die Casting Alloys.

Brass & Bronze Rods—Solid & Cored.

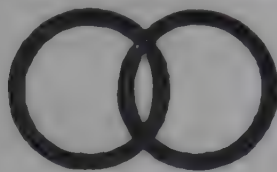
Finished Castings—Rough & Machined.

All Non-ferrous Alloys and Castings.

S.G. Iron Castings and Special Steel Castings.

Malleable Iron Castings.

**INDIAN STANDARD METAL CO., LTD., THE**, I. S. M. Estate, Chinchpokli Cross Lane, Bombay 27. Phone Nos. 42205 and 75018. Tel. Address : "ISMETCO."



**REGISTERED TRADE MARK**

Metal Smelters, Refiners and Founders.

*Manufacturers of :—*

Antifriction Bearing Metals, Copper, Brass and Gun Metal, Phosphor Bronzes, Die-Casting Alloys, Aluminium and Light Alloys, Tin and Silver Solders, Type Metal, Monel Metal and S. G. Iron Castings, Die castings in Zinc base & Aluminium alloys, Tower Bells.

Metallurgical and Foundry Engineers.

*Board of Directors :*

J. D. Choksi (Chairman), A. A. Jasdewala, D. M. Ghia, S. K. Handoo.

*Works Manager :* F. A. A. Jasdewala.

*Secretaries & Treasurers :* The Investment Corporation of India Ltd.

**INDIAN TEXTILE ENGINEERS PRIVATE LTD.**, Stadium House, 81/83, Veer Nariman Road, Bombay. Phone : 246238/9. Grams : "INTEXTILE". Importers of U.K. Textile machinery for Spinning and Doubling Cotton, Cotton waste, woollen & worsted yarns.

**THE INDIAN TEXTILE JOURNAL**

**THE INDIAN TEXTILE JOURNAL PRIVATE LTD.**, Registered Office : "Surya Mahal", Military Square, Fort. Proprietors and Publishers of "The Indian Textile Journal," a representative monthly publication for the Textile Engineering and Electrical Industries of South Asia. Founded in 1890 by the late Mr. Sorabji M. Rutnagar.

*Directors.*—Neville N. Wadia, J.P. (Chairman), Jal H. Mehta, Nityanand M. Wagle, Jimmy M. Mehta, and Jal S. Rutnagar (Managing Director)

Tel. Address : "Journal."

Phone No. 252943.

**INDIAN TOOL MANUFACTURERS LTD., THE**

101, Slon Road, Bombay 22.

Phones : 472481, 472482, 472483, 472484.

Grams : "ITOOLS", Slon, Bombay.



Manufacturers of Small Tools, particularly Twist Drills, Reamers, Cutters, Taps and Carbide Tips & Tools and also Micrometers.

**INDIAN TRADE & GENERAL INSURANCE CO., LTD.**, Business Transacted : Fire, Marine, Motor and Miscellaneous. Principal Office : Jehangir Building, Mahatma Gandhi Road, Fort, Phone : 255101 (5 lines). Grams : "ADASTRA". Regd. Office : 25, Brabourne Road, Calcutta 1.

**INDIAN VEGETABLE PRODUCTS LIMITED**, Manufacturers of Vanaspathi, Refined Oils, Hydrogenated Technical Oils, Epoxy Plasticizers, Organic Esters, Peroxides and Acid Chlorides, Foundry Products.

*Directors :* F. H. Kemple, Esq. (Ex-officio); Mathuradas Devidas Madhooji, Esq.; K. M. Antia, Esq.; Prahlad C. Mehta, Esq.; Russel Jal Taraporewala, Esq.

*Factory :* Arched Bungalow Road, Ghorupdeo, Bombay 33.

*Telegraphic Address :* "YESTERMORN".

*Factory Telephone Nos. :* 379591-2.

*Office Telephone No. :* 268081 (10 lines).

Indo-European Trading Agencies, 4th Floor, Behramji Mansion, Sir Phirozshah Mehta Road, Fort, P.O. Box 1344, Bombay. Phone : 262664. Grams : "MUSKETEERS." Specialists in Thermostats and Heating Elements and Domestic Refrigeration Spare Parts.

Indo-Pharma Pharmaceutical Works Private Ltd., Manufacturing Chemists (Pharmaceuticals), Kohinoor Road, Dadar, Bombay 14.

**INDO-BRITISH TRADING BUREAU**

(Estd. 1917)

Exporters and Stockists of Textile Mills & Handloom Stores.

7-10, Horniman Circle, Fort, Bombay.

Phone No. 252776.

Tel. Address : "Millocraft."

**INDOKEM PRIVATE LTD.**, 221, Dadabhoy Naoroji Road, Bombay 1; P.O. Box 832. Telegraphic Address : "Indokem". Phones : 265151/5.

*Directors :—*

Dharamsey M. Khatau.

Ramniwas Ramnarain.

Ratansey Mulji.

C. Rai.

*Distributors :—*

Dyes, Chemicals, Pigments, Synthetic Resins, Textile auxiliaries, Methols and Adhesives manufactured by Badische Anilin & Soda Fabrik A.G., Ludwigshafen (W. Germany); Cassella Farbwerke Mainkur A.G., Frankfurt (Main)—Fechenheim (W. Germany); Indian Dyestuff Industries Ltd., Bombay; Colour-Chem Limited, Bombay; Aniline Dyestuffs & Pharmaceuticals (P) Ltd., Bombay; Cellulose Products of India Ltd., Ahmedabad; Dai-ichi Karkaria Private Ltd., Bombay; Bhavana Chemicals Ltd., Baroda; Duro Metochem Private Ltd., Bombay.

**INDOPLAST LIMITED**, Kasturi Buildings, Jamshedji Tata Road, Bombay-1. BR. Manufacturers of Thermocole, the expanded (foam) polystyrene insulation material, ideal for low temperature insulation. INDOPLAST LIMITED also manufacture STYROPOR, the well known expandable polystyrene beads, in Collaboration with Messrs. Badische Anilin & Soda-Fabrik AG of Ludwigshafen, West Germany. Phone : 38071. Grams : "STYROPOR". Post Bag No. 10076.

**INDUS ENGINEERING COMPANY**, Office & Works : Opp. Worli D.D. Chawl, No. 114, Bombay 13. Fabricators of Chemical & Pharmaceutical Plant Equipments such as Heat exchangers, Condensers, Reaction vessels, Jacketed vessels, Autoclaves, Pressure vessels, etc. in Stainless steel and Mild Steel construction, Storage Tanks & Structural Fabrication. Phone : 379332 & 371743. Grams : "INDU-SINDH". DeLisle Road, Bombay 13.

**INDUSTRIAL AIR CONTROL (INDIA) PRIVATE LTD.**, P.N.B. House, 2nd Floor, 59, Sir Phirozshah Mehta Road, Fort, Bombay. Phone No. 262475. Grams : "Coolair." Specialists in all Air handling Equipments, Textile Dust and Fume Removal and Oil Spraying.

**INDUSTRIAL ENGINEERING COMPANY**, Direct Importers of Tool, Alloy and Special Steels, Stainless Steel Bars, Tubes, Sheets, Wires and Manufacturers of Mild Steel Commercial & Free cutting Bars. 45, Apollo Street, Fort, Bombay 1. Phones : 254072 and 325156. Grams : "CALLING".

Industrial Electrical Engineering Co., 10, Hamam Street, Fort, Bombay 1. Phone No. 252836. Specialists in Insulating Materials and Armature Wires, e.g., Bakelite, Fibre, Ebonite, Empire Cloth, Tapes, Cotton Tapes, etc. and Enamelled Copper, D.C.C., S.C. Enamelled and high Resistance Wires.





**INDUSTRIAL GASES LTD., THE, Bombay.**  
Grams: "INDUS-GASES." Head Office: P. O. Box 863. Calcutta-1. Manufacturers of: Industrial Gases, Pressure, Vacuum, Gauges, Welding and cutting machines, equipment and accessories, Welding

Electrodes and rods, Acetylene Generators, Complete Plants for manufacture of Gases. *Distributors of:* Power Generation and Transmission Plants and equipment, Haulage equipment and colliery equipment.

*Factories:* Kanpur, Lucknow, Varanasi, Gauhati, Ranchi, Tollygunge and Howrah.

*Offices:* Calcutta, New Delhi, Madras, Mettur, Patratu and Hardnagunge.

*Agents:* All important towns in India.

Industrial Mill Gln Stores, 51/53, Nagdevi Cross Lane, Bombay 3. Phone: 321246. Grams: "Wiregoods".

### INDUSTRIAL MINERALS & CHEMICAL CO.

Dealers in Minerals, Ores, Chemicals and Insecticides.

125, Narayan Dhuru Street, Nagdevi, Bombay 3.

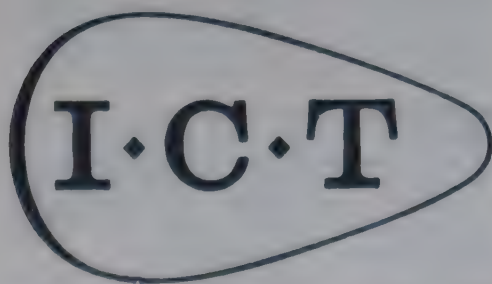
Phones: Office 323721 (3 lines)  
Grams: "IMCHEL".

**INDUSTRIAL PERFUMES LTD.,** Aromatic Chemicals & Perfumery Compounds Mfrs. Army & Navy Bldg., Mahatma Gandhi Road, Bombay 1. Phone: 255526-9.

**Industries Service Corporation, Importers, Exporters, and Commission Agents.** Service Engineers for Splicing and Maintenance of belt conveyors, power transmission belts; Splicings undertaken by both Hot & Cold Methods. Raja Bahadur Bansilal Building, 11, Bruce Street, Fort. Tel. Address: "Munpe." Phone No. 251409.

**INTER-MISSION BUSINESS OFFICE,** Financial Headquarters, American Missionary Societies, 864, Dr. Dadabhai Naoroji Road.

**International Book House Ltd., Book-sellers & Publishers,** 9, Ash Lane, Mahatma Gandhi Road.



**INTERNATIONAL COMPUTERS AND TABULATORS (INDIA) PRIVATE LIMITED,** Electronic Data Processing Equipment, and Electronic Computers. *Head Office:* Magnet House, Dougall Road, Ballard Estate, P.O. Box 516, Bombay 1. Telephone Nos. 262991-263264. *Directors:* Mr. Ramnivas B. Rula (*Chairman*); Mr. Murarji J. Vaidya (*Director*), (*Deputy Chairman*); Mr. S. P. Godrej; *Managing Director:* Mr. A. M. Richford; *Sales Director:* Mr. J. S. Bedwell; *Customer Service Manager:* Mr. B. E. Whittlasea; *Secretary and Financial Adviser:* Mr. L. O. Mehta; *Field Maintenance Manager:* Mr. M. Vincett.

*Western Zone Office (Sales), Bombay:* Liberty Building, New Marine Lines. P.O. Box 516. Telephone: 243509. *Manager,* Mr. P. C. Ramaswamy; *Maintenance Manager:* Mr. J. R. Albuquerque.

*Accounts Department:* Fazalbhoy Building, Mahatma Gandhi Road, P.O. Box 516, Bombay 1. Telephone: 252248. *Chief Accountant:* Mr. M. N. Bhagvat.

*Card Factory:* Sewri. *Manager:* Mr. D. D. Karnik.

*Also Zone Offices at:* Calcutta, Delhi and Madras.

*District Offices at:* Ahmedabad, Bangalore, Jamshedpur, Lucknow, Poona.

*Telegraphic Address:* "TABULORIAL." Bombay.

*Factory:* J. C. T. Indian Manufacturing Co. Ltd., Poona. Tel. 25317/18.

**International Dental Co., Direct Importers of Dental Goods,** Davar House, 199, Hornby Road, Fort, Bombay 1. Phone: 262829. Grams: "Acrylic."

**International Electric Trading Co., The, Importers & Dealers in Everything Electrical,** Devkarani Mansion, 63, Princess Street, Bombay 2. Phone: 20613. Grams: "Interlite", Bombay 2.

**International General Electric Co. (India) Private Ltd.,** Thackersey House, Graham Road, Ballard Estate, P.O. Box 992, Bombay 1.

**International Lubricants Private Ltd.,** Importers of Lubricating Oils & Petroleum Products. Court House. Dhobi Talao, Bombay 2.

**International Research Laboratories,** Manufacturers of Coal Tar Dyes, 349, Vadgadi, Bombay 3. Grams: "INTRA-LABS."

**International Structural Engineering Works Private Ltd.,** Structural Engineers & Contractors, Mansukh Nivas, 2nd Floor, 188, Khetwadi Back Road, Bombay 4. Grams: "STEELFRAME". Phone: 76389.

**INVESTA INDUSTRIAL CORPORATION LIMITED,** Ewart House, Bruce Street, Fort, Bombay 1.

*Business:-*

Public Limited Industrial Finance Corporation.

*Directors:-*

J. D. Choksi (Special Director), *Chairman*.

Sir Chunilal V. Mehta, K.C.S.I.

M. R. Chinoy.

R. D. Choksi.

K. C. Bakhle.

*Secretary:-* P. B. Poonjiaji.

Tel. Address: "Intacorp". Phone Nos. 251612 & 251911.

**INVESTMENT CORPORATION OF INDIA LTD.,** Ewart House, Bruce Street, Fort, Bombay 1.

*Directors:-*

J. D. Choksi (*Chairman*).

J. R. D. Tata (*Vice-Chairman*).

Sir Chunilal B. Mehta.

N. H. Tata.

C. H. Bhabha.

Pratap Bhogilal.

B. M. Ghia.

P. S. Mistry.

A. B. Billimoria (*Managing Director*).

J. N. Patuck (*Secretary*).

R. H. Colah (*Assistant Secretary and Accountant*).

Tel. Address: "Vescor." Phone Nos. 251612 & 251911.

### IRON & METAL TRADERS PRIVATE LTD.,

Mfrs. of Pneumatic and Hydraulic Cylinders & Valves.

Off Magazine Street, P.O. Box 6210, Bombay-10.

Phone: 376104/5/6.

*Branches at:*

Calcutta, New Delhi, Madras.

**IRONITE COMPANY OF INDIA LTD.,** 43, Forbes Street, Fort, Bombay 1. Phone: 255756-57. Manufacturers of "Ironite" floor Hardner and Waterproofing and "Irongrout" Non-Shrinking grouting material.

**ISHWAR INDUSTRIES LTD.,** Works at: P. O. Ishwar Nagar, New Delhi & P. O. Niwar, Distt. Jabalpur. Manufacturers of Fire Bricks of all grades and shapes, Fire Clays, Fire, Cements, Insulating Bricks & Mortars, Acid Resisting Bricks, Castable Refractories & Sillimanite Bricks & Mortars, etc. Phone: 76241 (3 lines). Sales Office: 11, Bank Street, Bombay. Phone: 251898.

**Ishwardas & Co., Mfrs.,** dealers and Exporters of all kinds of sewing embroidery and glazed threads. 2, Sutar Chawl, Bombay 2. Phones: Office: 323641 Res.: 38786. Grams: "BADMINTON". Sole Agents for The Girdhardas Harivallabhdas Mills Ltd., the Raghuvanshi Mills Ltd., for Sewing, Embroidery & Glazed Threads.

**JAL, COOPER, F.R.G.S.,** Standard Bldg., Hornby Road, Fort, Bombay 1. Phone: 252117. Dealer in Indian & States' Philatelic Auctioneer and Valuer. Editor & Publisher, "India's Stamp Journal".

**J. T. JAGTIANI,** Specialists in Hospital and Laboratory Equipment. National House, 6, Tulloch Road, Apollo Bunder, Post Box No. 332, Bombay 1. Phone: 213035. Grams: "FACMARE".

**Jacks & Company Ltd.,** William, Manufacturers' Distributors, Engineers and General Merchants, "Hamilton House", Graham Road, Ballard Estate, P.O. Box No. 335, Bombay.

**JAFFERBHAJI & CO.,** Motor Body Building Material Merchants. 106, Bhendi Bazar, Bombay 3. Phone: 333324. Grams: "NECESSITY".

**Jafferjee Hussanally & Sons,** Sanitary Goods, 259, Nagdevi Street, Bombay 3.

**Jagjivandas Nandalal & Co.,** Wholesale Stationers and Manufacturers, 237, Abdul Rehman Street, Bombay 3.

**Jagtlani Bros.,** Importers and Stockists of Electrical Goods, 53, Podar Chambers, Parsi Bazar Street, Fort.

**JAI DAYAL KAPUR** (Distributors for Shree Gopal Paper Mills Ltd., Jagadharti), and Ballarpur Paper & Straw Board Mills Ltd., 31, Sutar Chawl, Bombay 2. Phone: 325667 and 328161. Grams: "JAIKAPSO".

**Jaicos' Booksellers and Publishers,** 125, Mahatma Gandhi Road, Bell Lane, Bombay 1. Grams: "Jaicobooks". Phone Nos. 252164 & 256958.

**JAIPUR METALS AND ELECTRICALS LTD.,** Kamanl Chambers, Nicol Road, Ballard Estate, Bombay 1. Phone: 261744. Manufacturers of Arsenical Copper Rods, Copper and Cadmium Copper Conductors, Brass Rods and Wire, House Service Meters. *Head Office:* Near Railway Station, Jaipur.



**JAIRAMDAS & SONS**, 163, Narain Dhuru Street, Bombay 3. Phone: 323616. Grams: "JAIRAMSONS", Importers & Stockists of Precision Tools, Metal Cutting & Thread Forming Tools, Garage Tools and Equipment. Manufacturers of Concrete Mixers, Lime Mortar Mill, C. I. Surface Plates, Angle Plates, V Blocks, Straight Edges, M. S. Bolts & Nuts, etc.

**JAIRAMDAS UDYOG PRIVATE LTD.**, Reg. Office: 157/159, Narain Dhuru Street, Bombay 3. Mfrs. of "Jesons" Cutting Tools viz. Twist Drills, Hand Taps and Threading Dies, Tool Bits, Reamers, Cutters, etc. Factory: Jairamdas Estate, 8th Mile, Mysore Road, Bangalore.

**"JAM-E-JAMSHED"** (Established 1832), Anglo-Vernacular daily. J. B. Marsban & Co. Private Ltd., Ballard House, Mangalore Street, Fort. Tel. Address: "Jamshed", Bombay. Phone Nos. 26-2571 & 26-2572.

**James Tools & Hardware Co.**, "House of Chucks & Tools", Importers & Manufacturers. 109, Nagdevi Street, Bombay 3.

**JANAK MANUFACTURING WORKS**, Mfrs. of Steel Furniture and Hospital Equipment. Antop Hill, Wadala, Bombay 31. Phone: 440171. Grams: "Janakbed", (MT). Show Room at: Kastur Niwas, 26/B, French Road, off Hughes Road, Chowpatty, Bombay 7.

**Jankidas & Co.**, Cycle Merchants. 102, Princess Street, Bombay 2.

## JASHVANT C. SHAH & CO.

### INDIA'S FOREMOST INDENTING HOUSE,

Navroz Baug, Navrozi Lane,  
Ghatkopar, Bombay 77.

We are Sole Agents for India for the following world-famous products and invite enquiries from E.I. & A.U. Importers:—"DIEHL"—W. GERMANY. Electric Cooking Range Timers, Programme-Switches, Time-Switches.

"HARTMANN"—W. GERMANY.

Micro-Switches, Float-Switches & Room-Thermostats.

"F.K."—W. GERMANY.

Electrical Impulse Counters.

"BAUSER"—W. GERMANY.

Operating Hour Meters and Watchman's Control Clocks.

"PARATHERM"—W. GERMANY.

Overheat Protection Thermostats for Electric

Motors & any other electrical equipments.

"GRUNER"—W. GERMANY.

Small-Geared-Motors, Hour Meters, Time-Switches.

**JAYABHARAT INSURANCE CO., LTD.**, THE, Head Office: French Bank Building, Hornji Street, Fort. Phones (5 Lines) 253941/42/43/44/45.

Authorised Capital .. Rs. 50,00,000

Subscribed Capital .. .. 25,00,000

Paid-up Capital .. .. 25,00,000

Total assets exceed .. 1,92,00,000

Fire, Marine, Motor and all other General Insurance.

**JAYANT METAL MANUFACTURING CO.**, Manufacturers of Brass & Aluminium Door & Window Fittings, Copper and Aluminium Conductors, Flexible Braided Copper Strips, Paper/Cotton Covered Winding Wires & Strips, Commutator Segments, Transformer Copper Strips, Boatnails, Rivets, Tacks, Brass Bolts & Nuts, Panel Pins and Other Copper & Brass Semis.

Tel. Address: "JAYANTBABU". Head Office & Showrooms: 152, Lohar Street, P.O. Box No. 2227, Bombay-2. (Phone: 23919). Adm. Office & Factory: 16, Sayani Road, Bombay-28. Phones: 452818, 452874 & 451411.

## JAYANT DYE-CHEM CORPORATION

8, Sheriff Devji Street, Bombay 3. Direct Importers & Dealers of Heavy Industrial & Pharmaceutical Chemicals, Solvents, Dyes. Agents of Messrs. ATUL PRODUCTS LTD. for Chemicals, Acids & Intermediates. Phone: 321563.

**Jayantilal Bhagvandas & Co.**, Engineering Stores Merchants, 90, Nagdevi Cross Lane, Bombay 3.

**Jayantilal Gokaldas & Sons**, Sanitary Engineers & Pipes Fittings Merchants. 232, Masjid Bunder Road, Bombay 3.

**Jayantilal Kasturchand & Co.**—123, Janjirkar Street, Bombay 3. Crockery, Glassware and Enamelware Merchants. Grams: "GLEANAPOT". Phone: 323947.

## JAYANAND KHIRA & CO. PRIVATE LTD.,

Office & Showroom: Khira Bhavan, Sandhurst Bridge, Bombay 7. Phone: 355451-52 Grams: "SWAKALA." Manufacturers of Bus Bodies, & Bus Body kits.

**Jayantilal Keshavlal & Bros.**, Sewing Machines Mfrs. & Dealers. 232, Sardar Vallabhbhai Patel Road, Bombay 4.

**Jayantilal M. Mehta**, Dyestuffs Mfrs. 320, Samuel Street, Bombay 3. (For details see in "Dyestuffs.")



**JAYEMS ENGINEERING CO.**, Engineers, Machinery Merchants and Manufacturers' Representatives.

Direct Importers of Machine Tools, Wood Working Machinery, Sheet Metal Working Machinery, Welding Equipment, Foundry Equipment, etc.

Sole Agents for "NITU", "RUSSEL NEWBERRY" and "CLAEYS" Diesel Engines.

Head Office: Warden House, Sir Pheroze-shah Mehta Road, Bombay 1. Phone: 256251. Grams: "JAYEMS".

Branches at: Ahmedabad, Agra, Amritsar, Allahabad, Aurangabad, Bangalore, Belgaum, Bhopal, Baroda, Batala, Calcutta, Coimbatore, Cuttack, New Delhi, Ernakulam, Gauhati, Indore, Jaipur, Jamshedpur, Kanpur, Kolhapur,

Ludhiana, Madras, Nagpur, Nasik, Patna, Poona, Rajkot, Raipur, Secunderabad, Sholapur, Varanasi and Vijayawada.

**J. B. A. Printing Inks Private Ltd.**, Manufacturers of Quality Printing Inks and Varnishes under the supervision of foreign-trained technicians.

Regd. Office: Advani Chambers, Sir Pheroze-shah Mehta Road, Fort, Bombay. Phone: 261204.

Factory: Bombay-Agra Road, Bhandup, Bombay-78. Phones: 591866-67.

**J. B. Mangaram & Co.**, Biscuit Manufacturers, 12, Gunbow Street, Bombay 1.

**JEENA & CO.**, 10, Veer Nariman Road, Bombay. Travel, Shipping, Clearing, Forwarding and Warehousing Agents. Correspondents everywhere. Tel. Address: "Justitia." Phones: 251514, 251515, 251516. Post Box No. 849.

**JEewanlal (1929) LTD.** Aluminiumware Manufacturers and Dealers in everything Aluminium. Liberty Building, Marine Lines, P. O. Box No. 562, Bombay 1. Tel. Nos. 241156 & 241157. Tel. Address: "Martalumin."

**Jhaveri Bros. & Co. Private Ltd.** (Estd. 1914). Novelties and Gift Specialists. 345, Abdul Rehman Street, near Crawford Market, Bombay 3 (BR). Phone: 326196. Grams: "GIFTS".

**JIVRAJ & VRAJLAL**, Stockists and Suppliers of Gas, Water & Steam Pipes and Fittings, Boiler Mountings, G. M. Valves and Cocks and C.I.S. & S. Pipes and Specials. 122, Nagdevi Street, Bombay 3. Phone: 325138 (Shop) and 476294 (Res.). Tel. Address: "Sanipipes."

**JOHN FOWLER (INDIA) LTD.**, Regd. Office: Marshalls Building, Ballard Road, Fort, Bombay 1. Branch Office and Factories at: 136A, Rash Behari Avenue, Calcutta 29 and Sarjapur Road, Post Box No. 57, Bangalore-1. Sole Selling Concessionaires for VOKES LTD., Guildford, England, Mfrs. of 'VOKES' Filtration equipments, STREAMLINE FILTERS LTD., Mfrs. of Streamline Filters and Filter Water Separators and VOKES-CARDWELL LTD., Mfrs. of Tobacco Machinery.

Board of Directors:

Managing Director: F. C. Kraty.

Directors: N. W. Keyworth, Sir Ian Stewart-Richardson, Bt. M. R. K. Rao, J. A. Paterson, A. E. Queeney and T. Subbha Rao.

Assistant: A. J. Dias.

Telegrams: "TRACTION". Telephone: 26-3059, P.O. Box No. 654.

**JOHN T. HARDAKER (INDIA) PRIVATE LTD.**, Office and Works: Ferguson Road, Lower Parel, Bombay 13. Phone: 73469. Engineers, Iron Founders, Makers of all types of Jacquard Machines for Power & Hand Looms, Jacquard Harness Builders, Pattern Cutting Machine Makers, Designers and Card Cutters and Truck Builders. Grams: "JACQUARDS", Bombay. P.O. Box No. 742, Bombay 1.

**JOHN WYETH & BROTHER LTD.**, (Incorporated in England with Limited Liability), Steelcrete House, Dinshaw Wacha Road, Backbay Reclamation, Bombay 1. Phone: 248171 (4 lines), Grams: "Wyethical".



### JOHNSON & JOHNSON OF INDIA LIMITED

*Manufacturers and Wholesale dealers of Medical, Surgical and Hospital Supplies; Surgical Sutures, Plaster of Paris Powder, Bandages & Splints; Gynaecological Therapeutics; Adhesive Dressings and Tapes, Baby Products, Prickly Heat Products, Industrial Tapes, Tooth-brushes, Talc, Dried and Salted Casings and Sausage Casings, Personal Hygiene Products, etc.*

**Address:**

Spencer's Building, 30, Forjett Street, Bombay 26.

Telephone: 863631.

Factory: Bombay-Agra Road, Bombay.

Telephone: 592212.

Mr. S. P. Whaley, *Managing Director*.  
Mr. Kishore M. Premchand, *Director*.  
Mr. N. S. Phatarphekar, *Director*.  
Mr. A. J. North, *Chief Executive*.  
Mr. H. S. Krishnamurthy, *Chief Accountant*.

Mr. B. D. Sharma, *Personnel Manager*.

Mr. V. S. Palekar, *Plant Manager*.

Dr. S. R. Agarwal, *Research & Quality Control Administrator*.

Mr. N. S. L. Narasimhan, *Purchasing & Planning Manager*.

Mr. P. Chandrasekharan, *Production Manager*.

Mr. V. S. Shah, *Chief Engineer*.

Mr. C. E. Walker, *Maintenance Engineer*.

### J. & P. COATS (INDIA) PRIVATE LTD.,

Manufacturers and Sales Agents for sewing cotton and embroidery thread, hand knitting wool, "Phantom" knobbed Knitting Pins.

**Bombay Branch:** 81, Palton Road, P.B. No. 280, Fort, Bombay 1. Phone Nos. 261924, 261925.

**Calcutta Branch:** 27, Free School Street, Calcutta-16. Phone: 245007.

**Delhi Branch:** Garstin Bastion Road, Post Box No. 1091, Delhi 6. Phone: 269004.

**Madras Branch:** 19, Vaniar Street, Post Box 273, Madras. Phone: 23158.

**Gauhati Branch:** Assam Trunk Road, Post Box No. 40, Tokobarl, Gauhati. Phone: 883.

**Koratti Branch:** Koratti, Kerala. Phone: Chalakudi Nos. 62 and 64.

**Tel. Address for all Branches:** "SIXCORD".

**Mill:** Koratti, Kerala. Phone: Chalakudi Nos. 62 & 64. Tel. Address: "JUMNA".

# Leslico

## JOSEPH LESLIE & CO.

*Manufacturers of:*

**Safety Appliances and Welding Equipment.**

105, Apollo Street, Bombay 1.

Phone: 251608 Grams: "LEONINE".

# JSP

## JOHNSON & PHILLIPS LIMITED

(Incorporated in England with Limited Liability).

**Head Office & Works:**

CHARLTON, LONDON, S.E. 7.

**Head Office in India:**

"Kaiser-I-Hind" Building,

Currimbhoy Road, Ballard Estate,

Post Box No. 863,

Bombay 1.

**General Manager in India:**

R. E. NEGUS.

**Bombay Branch Manager:**

R. S. MANI.

**Tel. Address:** "JOHNPHIL."

**Telephone Nos.:** 262457, 265379.

**Branches at:**

Ahmedabad, Calcutta, Lucknow,

New Delhi & Madras.

**Manufacturers of:** Association (CMA) Electric Wires & Cables, P.B.J. and Signal cables, Distribution Pillars and Joint boxes, Transformers, H.V. & L.V. Switchgear, Capacitors for Power factor improvement, A.C. Arc welding equipment, Overhead Transmission and distributing materials including outdoor switch fuses.

**Agents for:**

Horstmann Gear Co. Ltd. Bath, England. (H.B.E. Time switches).

Nalder Bros. & Thompson Ltd., London, E. 8. (Electrical Measuring Instruments).

G. P. Dennis, Ltd., England. (L.V. Switch fuse gear).

**Sole Distributors for India for Switchgear manufactured by Messrs. British India Electric Construction Co. Ltd., Calcutta to J. & P. designs.**

**Distributors for:** Wires and cables Manufactured by Messrs. Mahendra Electricals Ltd., Nadiad.

Jostle Trading Corporation Private Ltd., The, Electric Goods, Maskati Mahal, Lohar Chawl, Bombay 2. Phone: 26823. Grams: "CORPJOSTLE".

J. V. MEHTA & CO., Automobile and Radio Specialists, Opera House, Bombay 4. Phone Nos. 86661 & 86662. Farmer Bldg.: 354178. Grams: "JELVMEHTA".

## JYOTI MOTOR ACCESSORIES

Importers & Stockists of Jaggers Motor Body Fittings, P.V.C. Leather Cloth, Upholstery Materials, Rubber Molding and Auto Seat Covers.

1st Floor, Contractor Building No. 1, Prarthana Samaj Corner, Bombay 4.

Gram: "JAGJYOTI" Bombay.

Phone: C/o 854150.

**K. B. MODI & COMPANY, (Estd. 1911).** Direct Importers & Cycles, Motor Cycles & Accessories. Ebrahim Mansion, 866 68, Kaitadavi Road, Bombay 2. Phone: 39068. Grams: "CYCLEBELL".

**K. Chapman & Co., Mfrs. of Deformity Appliances.** 462, Sandhurst Road, Bombay 4.

**K. MAHADEV & CO. (PRIVATE) LTD.** Chemical & Chemical Engineering Equipment Mfrs. Datta Mandir Road, Bandrup, Bombay 78.

**Kabbur, Ltd., S. K., Chemicals & Dyestuffs,** 3, Bastion Road, Fort, Bombay. Grams: "DLAZO". Phone: 26-1627.

**Kachwalla, M. A., & Sons, Glass & Plywood Merchants,** 97-99, Dhanji Street, Bombay 3.

**KADRI PAPER BOX FACTORY,** 80, Mohamedai Road, Bombay 8. Phone: 331856. Cardboard and Corrugated Board Boxes of every size and description with printing if required also Cardboard TUBES for Calendars. Grams: "BOXWORK".

**KAIKOBAD BYRAMJEE & SON,** Sole Selling and Distributing Agents for Greater Bombay up to Ambernath and Virar of:—The Times of India. The Evening News of India, The Illustrated Weekly of India, The Dhammayug, The Northstar Times, Filmfare, Panna, Parag, Economic Times, Maharashtra Times, Sarika, Indrajai Comics.

**Proprietor:** Pheroz Kalkobad Byramjee, P. O. Box 536, Bombay 1.

Grams: "INDIANA". Phone: 26-2335.

**KALVERT, L. & CO., 80/82, Maragon Road, Bombay 10.** Phone No. 87224. Tel. Address: "Currosance." Manufacturers of Mango Chutney, Pickles, Curry Powder, Condiments, Squashes, Vinegar, Sauce, Syrups, Prunes, Canned Alphonse Mango Slices and Pulp, Prawn Kachew, Jams, Canned Vegetables, Moglai Mutton Biryani & Curry.

**Kamani Engineering Corporation Ltd.,** Engineers, Kamani Chambers, Nicol Road, Ballard Estate. Phones: 26 1744 (3 lines). **Factory & Sales Office:** Agra Road, Kuria, Bombay 70. Phone: 55661.

**KAMANI METALS & ALLOYS LTD.,** Kamani Chambers, Ballard Estate, Bombay 1. Tel. Phone: 26 1744. Mfrs. of Brass, Copper, Phosphor, Bronze and Fine Sheets, Strips and Coils. **Factory and Sales Office:** Agra Road, Kuria, Bombay 70. AS. Phone: 55661.



**Kamdar Private Ltd.,** Furnishers & Decorators, Show Rooms, Industrial Building, opp. Churchgate Station, Fort, Bombay. Phones: 242347-8.

**Kamleshankar P. Joshi & Co.,** Manufacturers & Distributors of Ball Bearings, 98, Nandevi Cross Lane, Bombay 3.

**KANJI JADHAVJI & CO.,** Freight Brokers, Stevedores & Landing Contractors, Travel & Shipping Agents, Masjid Bridge, Bombay 9.

Stevedores, Freight Brokers & Landing Contractors to the Scindia Steam Navigation Co., Ltd., Agents to International Air Transport Association Passage & Cargo by AIR-SEA-RAIL. Phone: 323681 to 323687. Janmabhoomi Chambers, Opp. Red Gate, Ballard Estate, Bombay 1. Phone: 265551-52. Grams: "GITA". Branches: Karachi, Cutch-Gandhidham (Kandla), Mandvi, Porbunder, Navlakhi, New Delhi.

**KANTILAL KESHAVALAL & CO.,** Electrical Licensed Contractors, Manufacturers of Spherohot Water Heaters, 86-82, Vithalwadi, Bombay 2. Phone: 35200, Grams: "SPHERHOT".

**Kantilal Sanghvi & Co.,** Indentors, Importers, Exporters and Manufacturers' Representatives of Chemicals, Dyes, Intermediates, Solvents and Allied Products, etc. Agents, Pechiney St. Gobains Hydro-sulphite of Soda, Bongalite, etc. 23, Sir Phirozshah Mehta Road, Fort, Bombay. Tele. Nos. 253623, 255636, 358473 and 357875 (Res.). Tel. Address: "Expim".

Phone: 324108 Grams: "DECORATORS".

#### KAPADIA BROTHERS

81, Abdul Rehman Street, Bombay 3. Painting Contractors of Repute. Dealers in Paints, Enamels, Distempers, Plastic Emulsion Paints etc. Chief Stockists of Noble Paints.

**KAPADIA & CO. (Estd. 1919).** Bell Building, 19, Sir Phirozshah Mehta Road, Fort, Bombay 1. Grams: "WEDLOCK". Phone: 252942.

Partners.—Kariman Burjor Kapadia and Burjor Kariman Kapadia.

Importers of: Woollen, Cotton & Rayon Piece-goods, P.V.C. Plastic Sheetings, Leather Cloth, Oil Cloth, Essential Oils, Aromatic Chemicals "Stamping Foils", "Mylar Sheets", Sundries.

**KAYCEE INDUSTRIES LTD.,** Electrical & Mechanical Engineers. Agents for: Hind Rectifiers Ltd. Manufacturers of: Selenium and Silicon Semi-Conductors of Electroplating Rectifiers, Battery chargers, Silicon Power Plants for Electro-Chemical Industries. Manufacturers of: "Kaycee" Rotary, Toggle, Heat control and Air-conditioning Switches, "KAY-CEES" Domestic & Bulk type water meters. Address: Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1. Telephone: 263521. Telegram address: "Turnrite." Branches: Delhi, Calcutta, Madras & Kanpur.

**KEMP & CO., LTD.,** Manufacturing Chemists & Pharmaceutical Agents.

Dy. Mgr.: M. D. Chothia, B.A., LL.B. Secy.: U. S. Shah, B.Com., F.C.A. Head Office and Factory: "Elphin House," 88C, Old Prabhadevi Road, Bombay 28. Tel. Address: "Pharmacy", Dadar, Bombay.

Branches:—Sohrab House, Dr. Dada-bhoj Naoroji Road, Fort; 44, Cumballa Hill; Clare Road, Byculla; Taj Mahal Hotel; Dr. Ambedkar Road, Parel; Dr. Annie Besant Road, Worli;

Bhatia General Hospital, Tardeo; Linking Road, Khar; Kashmiri Gate, Delhi; Connaught Place, New Delhi; 32-C, Chittaranjan Avenue, Calcutta 12 and 27/25, Armenian Street, Madras 1.

**KERR, F. S., & CO. PRIVATE LTD.,** Manekji Wadia Building, 127, Mahatma Gandhi Road, Fort, Bombay. Dealers in Dyes, Chemicals, Textile Auxiliaries Water Proofing Compound. Grams: "KERINDIA". Phone: 254172.

### KERSONS MANUFACTURING CO. OF INDIA LTD.

Manufacturers of

**KERSONS**  
(REGD. TRADE MARK)

### ELECTRICAL ACCESSORIES

Also

#### MEM Switchgears & Starters

Office: Gopal Niwas, Lohar Chawl, Bombay-2

Telephone: 22347

Telegraphic Address: "SNIPE"

Factory: Bhandup, Bombay

Telephone: 581388

**KESAR SUGAR WORKS, LTD.,** 45-47, Apollo Street, Fort, Bombay. Phone: 25-1301. Tel. Address: "KESUWORKS." Sugar Factory at Baheri (U.P.). Chemical Factory: Goregaon, Bombay 62 NB.

**Kesbo (Private) Limited** (Formerly known as The Karachi Electric Stores (Bombay) Ltd. Electrical Engineers, and Importers in Electrical Goods. Sole Agents: "Burgess" Vibro Tools, Vibro Sprayers, "MK" Electric Wiring Accessories, Manufacturers of "KPLMICRO" Switches and many types and sizes of limit switches. Office: Bombay Mutual Terrace, 1st Floor, 534, Sandhurst Bridge, Bombay 7. Phone: 351643—Showrooms: Arthur Bunder Road, Colaba, Bombay 5. Phone: 213909. Grams: "Rectifiers".

**Keshavilal Talakhchand Private Ltd.,** Cloth, Yarn, Staple Fibre & Jute Merchants, Importers & Exporters, India House, opp. G.P.O., Bombay 1. Telegraphic Address: "CHANDRODAY." Phone: 262934.

Branches at: Ahmedabad, Sholapur, Coimbatore and Madras.

**Kesho Ram & Sons India Private Ltd.,** 314, Commerce House, Meadows St., Bombay 1.

**Keshowdas Hassand Karachiwalla,** Glass & Plywood Merchants, 256, Masjid Bunder Road, opp. State Bank of India, Bombay 8.

**Khanna & Co., S.,** Engineers, Builders, Quarry Owners & Decorators, Mustafa Building, Sir Phirozshah Mehta Road, Fort. Phone No. 251162. Grams: "CRETECO".

**Kharas Bros.,** Merchants, Importers and Exporters, No. 14, Hamam Street, Fort, Bombay. Phone: 251805. Grams: "KHAYA".

Sole Proprietor: Dhanjishaw B. Kharas.

**KHATAU MAKANJI SPG. & WVG. CO., LTD.,** Laxmi Bldg., Ballard Road, Bombay 1. Phone: 265411. Grams: "CRAFTSMAN".

**Khimandas Jagumal & Sons, Estd. 1910** (Sind). Engineers, Machinery Merchants, 12, Gunbow Street, Fort. Phone No. 26-1491. Grams: "EXPOCORP." Branch Office: Belan Gunj, Agra (U.P.).

**KHIRA STEEL WORKS PRIVATE LTD.** Manufacturers of fine steel furniture & equipment for homes, offices, libraries, canteens, patented 'Ajax' Aluminium Collapsible Awnings & Folding Roofs. Factory: Swami Vivekananda Road, Santa Cruz, Bombay 54. Grams: "STEEL-CASE". Phones: 533226 (4 lines). Regd. Office: Khira Bhavan, Sandhurst Bridge, Bombay 7. Grams: "SWAKALA". Phones: 355451 & 355452. Showrooms: At Khira Bhavan, Sandhurst Bridge, Bombay 7. Also at Fulchand Nivas, Chowpatty Sea Face, Bombay 7. Grams: "SWAKALA". Phone: 356108.

**Khosla & Co. Private Ltd., K. G., 83-A,** New Marine Lines, Fort, Bombay. Phone: 243744. Grams: "KEGIKHOSLA". Manufacturers of Heavy duty Air Compressors & Refrigeration Compressors & Garage Equipment.

**KIKABHOY CHANDABHOY,** Paper & Strawboard Merchants, P.B. No. 2131, 33-35, Mangaldas Road, Bombay 2. Phone Nos. 35046. Tel. Address: "Creamlaid".

**KILACHAND DEVCHAND & CO. PRIVATE LTD.** 45-47, Apollo Street, Fort. Phone No. 25-1301. Tel. Address: "Seeds".

Importers and Exporters of Raw Cotton; Oils, Oilseeds & Oilcakes; Cotton, Piecegoods and Chemicals; Selling Agents Synthetic Rubber.

**KILLICK INDUSTRIES LTD.,** Industrialists, Killick House, Home Street, Fort, Bombay 1.

Authorized Capital: Rs. 150 lakhs.

Issued and Subscribed Capital: Rs. 125 lakhs.

Subscribed and Called Up Capital: Rs. 1,24,95,600.

Directorate: A. N. Haksar, Chairman & Managing Director; C. M. Mehta; M. R. Chinoy; Manecklal Premchand Kantilal Nahalchand, L. V. Apte.

Assistants and Administrative Staff: R. P. Aiyer, B. J. Boyce, J. P. Dalal, I. M. Desai, R. N. Joshi, P. J. Kapadia, H. J. MacQueen, B. M. Maniar, L. K. Panjabi, M. P. Khambata, P. R. Saraiya, B. N. Vakil.

Agents and Registered Offices: The Kohinoor Mills Co. Ltd.; The Ahmedabad Electricity Co. Ltd.; The Surat Electricity Co. Ltd.; Bombay Suburban Electric Supply Ltd.; The Shivrajpur Syndicate Ltd.; The Hingir Rampur Coal Co. Ltd.; The Central Provinces Railways Co. Ltd., The Thana Electric Supply Company Ltd.

Manufacturers of "Light House" Brand Engineers' Steel Files.

Joint Members: Cement Agencies Ltd. (Managing Agents: The Associated Cement Cos. Ltd.).

Subsidiary Companies: Messrs. Killick Nixon & Co. Ltd., Killick Caribonum Ltd.; A. R. Haseler Ltd.; Snowcem India Ltd.; Killick Slotted Angles Ltd.; Filtrona India (Private) Ltd.; Killick Akerkar Private Ltd.

London Agents: Indian Industrial and Mercantile Agencies (London) Ltd., Norfolk House, 7, Laurence Pountney Hill, Cannon Street, London, E.C. 4.

Codes Used: A.B.C. 5th and 6th Editions, Bentley's, Scotts, Private.

Grams: "KINDRED". Phone: 26-2311. P.O. Box No. 109.



# Kilburns

REGISTERED OFFICE: 2, Fairlie Place,  
Post Box No. 61, Calcutta 1. Telephones:  
22-4301 (15 lines). Telegrams: "MAC-  
NEILLS" and "TASCONIUM"

## REGIONAL OFFICES

**CALCUTTA:** Post Box No. 61, 2, Fairlie  
Place, Calcutta-1; Phones: 22-4301  
(15 Lines); Gram: TASCONIUM.

**BOMBAY:** Post Box No. 565, Gresham  
Assurance House, Pherozshah Mehta Road,  
Bombay 1; Phone: 256845 (3 lines).  
Gram: TASCONIUM.

**MADRAS:** 153, Mount Road, Madras 2.  
Post Box No. 2416. Phone: 84822.  
Gram: TASCONIUM.

**NEW DELHI:** Post Box No. 166, Dr. Gopal  
Das Block, 28, Barakhamba Road, New  
Delhi-1. Phones: 42396 (3 lines).  
Gram: TASCONIUM.

**DISHERGARH** P.O. Dishergarh, District  
Burdwan. Phone: Barakar 188. Asansol  
2131 Extn. 18.

## BRANCH OFFICES:

**AHMEDABAD:** Post Box No. 1065,  
Phone: 3147 Gram: TASCONIUM.

**BANGALORE:** Post Box No. 10, Phone:  
25511. Gram: TASCONIUM.

**COIMBATORE:** Post Box No. 763. Phone:  
3743. Gram: TASCONIUM.

## DHANABAD:

**CUTTACK:** House of Dr. Kulamanie  
Misra, Behind Hind Cinema, Ranipet,  
Cuttack 7.

**ERNAKULAM:** Post Box No. 192, Gram:  
TASCONIUM.

**GAUHATI:**

**JAMSHEDPUR:** Phone: 2765-B. Gram:  
TASCONIUM.

**KANPUR:** Post Box No. 286, Phone:  
35454. Gram: TASCONIUM.

**NAGPUR:** Post Box No. 79, Phone: 23497.  
Gram: TASCONIUM.

**POONA:** Phone: 26265. Gram: TAS-  
CONIUM.

**RANCHI:** Post Box No. 54, Phone: 2176.  
Gram: TASCONIUM.

**SECUNDERABAD:** Post Box No. 71,  
Phone: 72577. Gram: TASCONIUM.

**TEZPUR:** Agency Office, Phone: 84.  
Grams: TASCONIUM, KILBURNS.

**CALCUTTA:** 7, Wellesley Place.

**SHOWROOM:** Phone: 23-4345.

## OUR MANUFACTURING ACTIVITIES

SENSITISED PAPERS, TRACING PA-  
PERS, PRINTING MACHINES AND  
OTHER EQUIPMENT FOR DRAWING  
OFFICES.

In collaboration with Hall Harding Ltd.,  
London.

'PIKROSE' HAULAGES. In collaboration  
with Austin Hopkinson & Co. Ltd.,  
Manchester.

'JOHN MILLS' HAULAGES. In collabo-  
ration with John Mills & Co. (Llanidloes)  
Ltd., Montgomeryshire

ELECTRICAL STARTERS AND SWITCH-  
GEAR, MOTOR CONTROL GEAR  
(INDUSTRIAL AND FLAMEPROOF).

In collaboration with Erskine Heap & Co.  
Ltd., Manchester.

**TABLET MACHINES (SINGLE PUNCH)  
AND WATER STILL.** In collaboration  
with Manesty Machines Ltd., Liverpool.

**DIAMOND DRILL BITS AND OTHER  
INDUSTRIAL TOOLS (DIAMOND  
DRESSERS AND WHEELS).**

In collaboration with Triefus Industries  
Ltd., Crawley.

**HELICAL AND WORM REDUCTION  
GEARS.** In collaboration with A. Friedr.  
Flender & Co., Ltd., Bocholt, West  
Germany.

**DEWRANCE VALVES, STEAM TRAPS,  
PRESSURE GAUGES AND INDU-  
RATED ASBESTOS PRODUCTS.**

In collaboration with Dewrance & Co.  
Ltd., London.

**'KILBURN' DRYING OVENS AND  
BOTTLE DRYERS.**

**'KILBURN' INDUSTRIAL AND LABO-  
RATORY STIRRERS.**

**'KILBURN' TARPAULINS, BULKING  
SHEETS AND HATCH TENTS.**

## INDIAN REPRESENTATIONS

**ASSOCIATED GENERAL INDUSTRIES,**  
New Delhi; Magic Ink & Water Colours.

**BOSE INDUSTRIES PRIVATE LTD.,**  
HOWRAH. Kilburn V-Belts, Cone Drum  
Belts.

**CONTAINERS & CLOSURES,** Calcutta:  
Pillar proof Clif.

**DEWRANCE MACNEILL & CO. LTD.,**  
Dewrance Yarway Steam Traps, Valves,  
Pressure Gauges, Indurated Asbestos  
Fibres, Sleeves and Hexagonal Packing  
Rings.

**FLENDER MACNEILL GEARS LTD.,**  
Helical and Worm Reduction Gears.

**GANSONS PRIVATE LTD., BOMBAY.**  
Amponle Cutters, Stainless Steel Fabrica-  
tions, Gas Plants and Laboratory Equip-  
ment.

**INDIA RUBBER MANUFACTURERS  
PRIVATE LTD., HOWRAH,** Kilcoats and  
Kilbands.

**INDUSTRIES SYNDICATE, CALCUTTA.**  
Drum Controllers.

**KENZLE ENGINEERING WORKS,**  
DELHI. Strip Packaging Machines, and  
Atla Tube Crimping and Sealing Machines.

**OLDHAM & SON (INDIA) LTD., MADRAS**  
Mine Lighting Equipment, Self-servicing  
Cap Lamps, Accessories and Storage  
Batteries.

**POLY PROFILE CORPORATION, BOM-  
BAY.** Emco Slotted Angles.

**PRECISION TOOLS INDIA LTD.** Dia-  
mond Drill Bits and Industrial Diamond  
Tools, both bonded and impregnated.

**SAPPHIRE MACHINES, BOMBAY.**  
Sapphire Muffle Furnace, Shelf Type  
Rotary and Vacuum Dryers, Continuous  
Bottle Dryers, Dust Extraction Units.

**SCIENTIFIC ENGINEERING HOUSE,**  
HYDERABAD. Parallel Motion Drawing  
Board and Ancillaries.

**TECHNO-CRAFT CORPORATION, CAL-  
CUTTA.** Filling, Sieving and Grading  
Machines.

**THE RAJA RAHADUR MOTILAL POONA  
MILLS LTD.,** Pittle Drafting Machines  
and Accessories.

## ENGINEERING SECTION

(ELECTRICAL, STEAM TEXTILE,  
MECHANICAL, CHEMICAL AND  
GENERAL ENGINEERING)

**ALAN H. REID,** Melbourne, Australia.  
(Electronic Fault Locators).

**COPE'S REGULATORS LTD.** London,  
England. (Boiler Feed Water Regulators).

**CROSSLEY BROS. LTD.** Manchester,  
England. (Diesel Engines for Marine and  
Stationary Applications).

**DEWRANCE & CO., LTD.** London,  
England. (High Pressure Valves, Fittings  
and Boiler Mountings).

**DRYSDALE & CO., LTD.** Glasgow, Scot-  
land. (Pumps).

**ERSKINE HEAP & CO. LTD.** Manchester,  
England. (Electrical Switchgear, Motor  
Control Gear—Industrial and Flameproof  
type).

**FREDK. POLLARD & CO., LTD.** Leicester,  
England. (Corona Drilling Machines).

**A. FRIEDR. FLENDER & CO.,** Bocholt,  
West Germany. (Power Transmission  
Equipment).

**P & C GARNETT LTD.,** England. (Textile  
Machinery).

**JOHN HOLBOYD & CO., LTD.** Rochdale,  
England. ('Holfos' Spunecast Phosphor  
Bronze Cored and Solid Rods).

**LANSING BAGNALL LTD.** Basingstoke,  
England. (Mechanical Handling Equip-  
ment).

**MANESTY MACHINES LTD.** Liverpool,  
England. (Tablet Making Machinery,  
Distilled Water Plant, Water Stills etc.).

**MANNING, MAXWELL & MOORE INC.**  
New York, U.S.A. (Steam Valves, Safety  
Valves, Pressure Gauges, Thermometers).

**OHIO BRASS CO.** Mansfield, U.S.A. (H. T.  
Transmission Line, Switch Insulators and  
Fittings).

**PULVERIZING MACHINERY LTD.,**  
England. (Grinders, Strainers etc.).

**RAJAFID LTD.,** London England, Writing  
& Printing Machines.

**RUSSELL CONSTRUCTIONS (EXPORT)  
LTD.** London, England. (Sieving Machines  
Teagradng Machines and Strainers).

**YARNALL WARING CO.** Philadelphia,  
U.S.A. (Steam Traps, Remote Water  
Level Indicators, Blow-off Valves, Expan-  
sion Joints).

## MINING EQUIPMENT AGENCIES

**A. G. WILD & CO. LTD.,** Sheffield, England.  
(‘Sylsester’ Pit Prop Withdrawers).

**AUSTIN HOPKINSON & CO. LTD.,**  
Manchester, England. ('Pikrosee' Haulages  
—Flameproof Electric (A.C.) and Com-  
pressed Air).

**BARKEE DAVIES & CO., PONTYPRIDD,**  
Wales. (Safety Detachable Hooks, Rope  
Cappes, Cage Chains, etc.).

**BRUNTONS (MUSSELBURGH) LTD.,**  
Scotland. (Steel Wire Ropes for all  
purposes).

**ERSKINE HEAP & CO. LTD.,** Manchester,  
England. (Electrical Switchgear, Motor  
Control Gear—Industrial and Flameproof).

**ETELCO LTD.** (Ericsson Telephones Ltd.)  
London, England. (Underground Mining  
Telephone Equipment).

**JAMES W. SMALLMAN LTD.,** Nuneaton,  
England. (Haulage Clips for Endless Rope  
Haulages).

**JOHN MILLS & CO. (LLANIDLOES),**  
Montgomeryshire, England. (Heavy duty  
Haulage Engines—Electric, Steam, Com-  
pressed Air).

**OLDHAM & SON (INDIA) LTD.,** Madras.  
(Mine Lighting Equipment—Self-servicing  
Cap Lamps and Accessories and Storage  
Batteries).

**OLDHAM & SON LTD.,** Denton, England.  
(Sole Overseas Distributors of I.G.D.  
Testing Instruments for Mines, Gas Plants,  
Oil Installations etc. Also F.L.P. Tube  
Torches).

**PRECISION TOOLS INDIA LTD.** Calcutta  
(Diamond Drill Bits; Diamond Dressers—  
Single, Multipoint and Bonded Particle;  
Diamond Wheels—Resin or Metal Bonded;  
Electro Tools; Tungsten Carbide Coring  
Bits etc.).

**TRIEFUS INDUSTRIES LTD.,** Crawley,  
England. (Industrial Diamonds, Drilling  
Bits, Diamond Tools of all kinds).



## GENERAL AND OFFICE EQUIPMENT SECTION

**AMERICAN PHOTOCOPY EQUIPMENT CO.**, Chicago, U.S.A. ('Apeco' Photocopying Equipment and Supplies).

**THE ASSAM RAILWAYS & TRADING CO. LTD.**, Margherita. (Timber Products, Blockboard, Plywood, Building Materials, Flush Doors etc.).

**BRUNTONS (MUSSELBURGH) LTD.**, Scotland. (Galvanised Wire Ropes).

**DITTO INCORPORATED**, Chicago, U.S.A.

**DITTO (BRITAIN) LTD.**, London, England (Spirit and Gelatine Process Duplicators).

**HALL HARDING LTD.**, London, England. (Drawing Office Materials and Copying Machines).

**J. SLOPER & CO., LTD.**, London, England. (Perforating Machines).

**NATIONAL TIME RECORDER CO. LTD.**, London, England. (Time and Attendance Recording Equipment).

**PITNEY BOWES LTD.**, London. (Postal Franking and Stamp Cancelling Machines, Employees' State Insurance Franking Machines).

**KILLICK, NIXON & CO. LTD.**, (A wholly owned Subsidiary of Killick Industries Ltd.), Registered Office: Killick House, Home Street, Fort, Bombay 1. General Merchants, Engineers, Steamship Agents and Exporters.

*Directors:* A. N. Haksar, M. R. Chinoy, H. J. MacQueen, Himatlal Kantilal, M. L. Apte, A. L. Apte.

*Agency Department:* N. F. C. Hilling, J. P. Antia, R. V. Kodikal, K. D. Sharma, K. Khullar, E. D'Sylva, J. R. Doornasia.

*Kilpiece Exports Dept.:* V. Paupamah.

*Caribonum Division:* J. E. Pocock, R. C. Kapur.

*Engineering Department:* M. R. Ogle, A. T. Kothavala, S. P. Chaudhry, Y. C. Khanna, R. K. Jagtiani, D. Atherley, S. Y. Khan.

*Shipping & Clearing Department:* F. Rozario, D. S. Kumana, F. H. Hirjika.

*Finances & Accounts:* P. J. Kapadia, B. N. Vakil, S. K. Shah.

*General Department:* S. S. Gangoli.

*Calcutta Office:* (D-2, Gillander House, 8, Netaji Subhas Road, Calcutta 1)—N. G. Takle, P. D. Bhattacharya. Phone: 229146.

*Delhi Office:* (10-A, Indra Palace Annexe, Connaught Circus, New Delhi)—J. S. Anand, R. K. Kapur. Phone: 40308 & 40521.

*Madras Office:* (Agurchand Mansion, 35, Mount Road, Madras 2)—T. V. M. Lingam. Phone: 83785.

*Ahmedabad Office:* (Relief House, Relief Road, Ahmedabad)—R. R. Nevrekar. Phone: 20952.

*Bangalore Office:* (33, Ulsoor Road, Bangalore 1)—D. R. Suri. Phone: 24108.

*Poona Office:* (8, Elphinstone Road)—A. K. Dhairyawan. Phone: 25015.

*Goa Office:* (Mormugao Harbour, Goa) Phone: 44.

*Attached Staff:* Ellerman's City & Hall Lines—Captain J. Mason-Price.

*Agency Department:* 31, Murzban Road, Fort, Bombay 1.

*Own Manufacture:* U. C. (Universal Cleanser) Detergents.

*Agencies:* Gulf Oil (India) Private Ltd.; Hope's Metal Windows (India) Ltd., Calcutta; Killick Slotted Angles Ltd.; Killick Caribonum Ltd.; Masonite Corporation, Chicago; Pressure Cookers & Appliances Private Ltd., Bombay; Snowcem India Ltd., Bombay. Domestic Appliances.

*Kilpiece Division:* Export of Textiles, Yarn & Sundries.

*Engineering Department:* 31, Murzban Road, Fort, Bombay 1.

*Own Manufacture:* Concrete Vibrators—Immersion, Screed, Platform and Table types; Prestressing Jacks, Pumps and accessories; Furnaces—electric and fuel fired; Drilling Equipment.

*Agencies:* Allied Electrical Corporation Private Ltd., Calcutta; J. Collis & Sons Ltd., London, Cable Covers Ltd., London; Esco Furnaces Ltd., Weybridge; English Drilling Equipment Co., Ltd., London; Failing Supply Ltd., London; Forthgill & Harvey Ltd., Lancashire; Ing. F. Fiorentini & Co., Rome; Halifax Tool Co., Ltd., Halifax; Holland Cranes, The Hague; I.H.C. Holland, The Hague; Johnson Machinery Ltd., Stockport; Jacques Dembitzer, Antwerp; K. Streetlite Electric Corporation, Faridabad; Loro & Parisini, Milan; Niagara Screens & Plant Ltd., Enfield; Slough Estates Ltd. (M. L. Aviation Co. Ltd.), London; Universal Electrics Ltd., Calcutta. Winget Construction Equipment, Rochester.

*Shipping:* The Hall Line; The City Line; T. & J. Brocklebank Ltd., Belships Co., Ltd.; T. & J. Harrison; L. Smit & Co.'s Internationale Sleepdienst, Rotterdam; Hinode Kisen Co., Ltd., Tokyo, Japan.

*Insurance:* British & Foreign Marine Insurance Co., Ltd.

*London Representatives:* Indian Industrial & Mercantile Agencies London Ltd., Norfolk House, 7, Laurence Pountney Hill, Cannon Street, E.C. 4.

*Tel. Address:* 'Killick' Bombay or 'Kilpiece' Bombay. P.O. Box No. 109. Phones: General Offices: 265201; Clearing & Forwarding Dept.: 261395; Dexion Design and Construction Services and Dexion Sales Division: Powal Road, P.O. Box No. 7165, Kurla Bombay 70.

Kiron Textile Industries, Yusuf Building, Mahatma Gandhi Road, Bombay.

Kirtikumar & Co., Chemicals and Sizing Materials Dealers, 80, Bhandari Street, Mandvi, Bombay 3.

Kirtlilal & Co., Ball Bearings & Mill Gin Store Merchants, 31, Bibijan Street, Barbhai Mohalla, Bombay 3. Phone: 23572, Grams: "PIPEWRENCH".

Kiv Trading Co., Tin Printers & Anodizing Specialists, 17/1, Parsiwada, Khetwadi, Bombay 4.

**KODAK LIMITED** (Incorporated in England with limited liability), Manufacturers and Distributors of Photographic Materials, Kodak House, Dr. Dadabhai Naoroji Road, Fort, Bombay-1-BR. Phone No. 26-2604; 17, Park Street, Calcutta-16; 33/34, Netaji Subhas Marg, Daryaganj, Delhi-6; and 150B, Mount Road, Madras-2. Tel. Add.: "Kodak."

Kohinoor Electro Gilders, Electroplaters, Barrel Platers, Electro Tanners & Galvanisers and anodising alum. Khetwadi 10th Lane, Bombay 4.

Kooverji Devshi & Co. Private Ltd., Fire Protection Engineers, 164, Lohar Chawl, Bombay 2. (Also see under Fire Fighting Equipment Section).

**KORULA RUBBER CO. PRIVATE LTD.**, Manufacturers of Latex Foam Cushions, Telecord Cables, automobile parts, Rubber lined Tanks, Industrial Rubber goods,

Gloves & Pharmaceutical Rubber goods. 249 B, Worli, Bombay 18. Phone: 451750. Grams: "ZIRCON", Worli, Bombay.

Kosmos Paper Stores, Paper & Strawboard Merchants, 87A, Khadilkar Road, Bombay 4. Phone: 71901. Grams: "KOSMOSPAP."

## KOTAK & CO.

*Head Office:*

Navsari Building, Dadabhai Naoroji Road, Fort Bombay 1.

Gram: "KOTAKANDCO".  
Phone: 263331

**EXPORTERS & IMPORTERS:** Raw Cotton, Cotton Yarn, Textiles, Silk and Art Silk Yarn, Staple Fibre and Yarn, Oils & Oilseeds etc. Also Industrial Machinery from Japan, U.K., U.S.A. and continental countries.

*Viz.:*

Textiles, Electrical Machineries & "Shimadzu" Scientific Testing Machines.

*Sole Selling Agents for*

N. G. K. Insulators Ltd., Japan,

Government Porcelain Factory, Bangalore

H.T. & L.T. Insulators & Accessories

Maharashtra, Gujarat & Goa.

Kothari Trading Corporation, Dental Goods Dealers, 38, Police Court Lane, Bombay 1.

**KOTHARI BROTHERS**, Waste Paper dealers & suppliers of Raw material to Paper Mills, 99, Samuel Street, Bombay-9. Phone: 833463. Grams: "RADDI-PAPER".

K. T. Steel Industries Ltd., Manufacturers of Wire Nettings of all types. K. J. Building, Broach Street, Bombay 9.

**KULJIAN CORPORATION (INDIA) PVT. LTD.**, THE, Consulting Engineers, 'Khetan Bhavan', 108, Jamshedji Tata Road, Bombay 1. Phone: 39342. *Resident Engineer:* Mr. T. R. Advani. *Assistant:* Mr. S. K. Sarkar.

Kumar Commercial Co., Machinery & Oil Engines Importers, Nadirshaw Sokia Street, Fort, Bombay.

Kumar Stationery Mart (Estd. 1942), Importers, Stationers, Paper Merchants and Government & Railway Contractors. Sole Distributors of "Daylight" pencils, and "Planway" Brand Ferro and Amonia Paper rolls and "Projecto" Brand Indian Tracing Cloth and "Excella" Brand Foreign Tracing Paper. "STAPCO" Brand Stapling Machine. Stockists of Gem Clips and Pins. Podar Chambers, Store Lane, Parsoo Bazar Street, Fort. Phone No. 255303. Grams: "TRADEMOTO".

**KUMUDCHANDRA & CO.**, Importers and Manufacturers of replacement parts for Textile winding machines. 29, Dalal Street, Fort, Bombay. Phone: Office: 253214. Godown: 264437. Grams: "VERYGOOD."

Kwality Tool Steel Corporation, High Speed Steel, High Carbon High Chromium Steel, Oil Hardening Non-Shrinking Steel, Carbon Steel, etc. Stainless Steel, Nickel Chrome Steel, Silver Steel, Hot-Die Steel, EN Specification Steel, etc. 24, Narayan Dhuru Street, Bombay-3. Phone: 322892.



# LAKHANPAL PRIVATE LTD.

Radio Receivers and Radio Parts Suppliers, 29, New Queen's Road, Bombay. Tel. Address: "ETHERWAVE." Phone: 22473.

L. R. Trading Company, Manufacturers of greeting cards for all occasions and 'Flash' & "BEST" zip fasteners. Navsari Chambers, Outram Road, Fort, Bombay. Phones: 263141 & 264073. Grams: 'SHAHANICO'.

Lallubhai Amichand Private Ltd., Tardeo Road, Bombay 7.

**LARSEN & TOUBRO LIMITED.** Registered Office and Head Office: L. & T. House, Dougall Road, Ballard Estate, P.O. Box 278, Bombay 1. Phone: 264411/9. Grams: "LARSENBO." Telex: TLX 246.

Works, Service Station and Stores: Saki-Vihar Road, P.O. Box 8091, Bombay 72 AS. Phone: 581501/10.

Regional Offices: P. O. Box 278, Bombay; P.O. Box 619, Calcutta; P. O. Box 323, New Delhi; Post Bag 5247, Madras.

Branch & Liaison Offices at: Ahmedabad, Bangalore, Baroda, Belgaum, Bhopal, Bhubaneswar, Chandigarh, Coimbatore, Durgapur, Ernakulam, Hyderabad, Lucknow, Panjim, Raipur, Ranchi, Rourkela, Trivandrum, Vishakapatnam.

Manufacturers and representatives of over 200 overseas and Indian manufacturers and civil, mechanical and electrical engineers. Manufacturers of plant and equipment for full range of Dairy operations; equipment for refrigeration and meat processing industries; garbage compost milling plants; pneumatic grain dischargers and bagging plants; cattle and poultry feed compounding plants; equipment for sugar, chemical, pharmaceutical, petrochemical, dye-stuffs and fertiliser industries, distilleries and breweries; complete sulphuric acid, oleum, phosphoric acid, super phosphate, triple super phosphate, phthalic anhydride plants; plant and machinery for cement industry; valves; low tension electrical switchgear including switchboards and control and relay panels, motor starters; petrol dispensing and metering pumps; pin disc grinding mills; jigs and fixtures, pressure casting dies, press tools, plastics and bakelite moulds; portable belt conveyors; cooling towers; sheeps foot tamping rollers; aluminium capsules, capsuling machines and crown corks; diamond core drills and diamond bits and industrial diamond bits.

Representatives of manufacturers of track and wheel type tractors, bulldozers, rippers, scrapers, traxcavators, motor graders for agriculture, mining and earthmoving; diesel engines for heavy duty vehicles, marine and industrial applications and power generation; grain handling equipment such as pneumatic dischargers, conveyors and silos with partly indigenous content; material handling equipment including shovels, cranes, bucket wheel excavators, conveyors, locos, prime movers, trailers and aerial ropeways; oil well, water well and core drilling, mining and processing equipment, turbine pumps and accessories; plant and equipment for dairy, food processing, chemical, fertiliser and allied industries; plants for explosives, cotton seed preparation and solvent extraction, glass lined

equipment, thin film evaporators, indirect heating units, safety fuses and detonators; plant and equipment for cement, pulp and paper, iron and steel industries; high tension and low tension switchgear, transformers, metering and protection equipment, capacitors, rectifiers, special motors and cables; refrigeration, spray drying and accelerated freeze drying plants, controls and accessories; food, confectionery and pharmaceutical packaging and bottling machines; nuclear handling equipment, electronic, telemetering, communication, process control, measurement and data handling instruments and machines; seismic instruments; flow, control and other special purpose valves; low temperature welding alloys, electrodes and fluxes; and other industrial appliances, equipment and instruments.

Subsidiaries: Alu Capsules Limited, Christensen-Longyear (India) Limited, Engineering Construction Corporation Limited, India Crown Cork Company Limited, Willcox Buckwell India Limited.

Associate Companies: Audco India Limited, Eutectic Welding Alloys of India Limited, Utkal Machinery Limited, Tractor Engineers Limited, Tractor & Equipment Corporation Limited.

Directors: H. Holck-Larsen, S. K. Toubro, Dwarkadas H. Vora, N. M. Desai, Ambalal S. Parikh, S. D. Vimaldalal, P. G. Bhagat, Chinubhai C. Chokshi, John Hover, Gunnar Hansen, N. A. Krishnan.

Managing Agents: L. & T. (Management) Private Limited.

**LAWRENCE & MAYO (INDIA) PRIVATE LTD.**, Qualified Sight-testing Opticians and Scientific Instrument Makers, 274, Dr. Dadabhai Naoroji Road, Bombay 1, Telegraphic Address: "Lynx", Bombay. Telephone No. 261827.

(ESTD. 1914)

**LAXMIDAS & DWARKADAS**  
466, Sardar V. Patel Road,  
Bombay 4 (India)

Importers of Radio Parts & Accessories.

Leading Dealers in Radio Parts & P. A. Systems.

Phone: 357392 Grams: "THYMOL"

**LAXMI ELECTRIC TRADING CO. (Estd. 1930)**, Stockists of everything Electrical including "Marlex" Appliances such as Pressure cookers, Vibro-Tods, Sirens, Musical Bells, Gong Bells, etc. 21-23, Lohar Chawl, Bombay 2. Phone: 29048. Grams: "LAXELEC."

Laxmi Playing Cards Mfrs., 30, Goa Street, Bombay 1.

Laxmi Syndicate, Machinery Importers, 4th Floor, Lentin Chambers, Dalal Street, Fort, Bombay.

Lee & Muirhead (India) Private Ltd., Clearing, Shipping, Travel, Warehousing & Insurance Agents, 12, Rampart Row, Fort. Phone: 251571 (9 lines). Grams: "LEMUIR."

**LEGAL & GENERAL ASSURANCE SOCIETY LIMITED**, (Fire, Marine & Misc.). Head Office: Temple Court, 11, Queen Victoria Street, London, E.C. 4. Chief Office for India: Madurai; Manager for India: S. Vinayakam. Bombay Office: Gresham Assurance House, Sir Phirozshah Mehta Road, Fort. Manager: J. F. S. P. Fernandes; Phone: 255088

(2 lines). Grams: "LEGRESH." Branches at: Calcutta, Madras, Delhi, Nagpur, Sholapur, Coimbatore and Cochin. Agents and Representatives throughout India.

Light House, Batteries, Torches & Bulbs, 51, Kitchen Garden Lane, Bombay 2. Phone: 30351, Grams: "GREATWALL".

**Linotype and Machinery, Ltd.** Printing Machinery Manufacturers. Head Office: 21, John Street, Holborn, London, W.C. 1. Works: Altrincham, Cheshire. Head Office for India: 14, Madan Street, Calcutta 13. Bombay Branch: 11-13, Horniman Circle. Tel. Address: "Linotype." Phone No. 251068. Madras Branch: 6, Club House Road, Mount Road, Madras 2.

**LINTAS LIMITED**, International Advertising Agency, "Hindustan Lever House", 165/166, Backbay Reclamation, P.O. Box 758, Bombay 1. Phone: 246011.

**LIONEL EDWARDS LTD.**, Nicol Road, Ballard Estate, Bombay. Head Office at Calcutta. Freight and Steamship Agents. Managing Agents: India Steamship Co., Ltd., Agents: American Export and Isbrandtsen Lines, New York. Pacific Far East Line Inc., San Francisco. Codes used: Bentley's 1st & 2nd Editions New Boe Code. (Tel. Address: "LIONWARDS" —All Offices). Phone Nos. 26-1241/43 & 262581 & 263226. Post Box 1000.

Lipton (India) Ltd., Ilaco House, Sir Phirozeshah Mehta Road, Bombay.

**Little & Co.**, Solicitors and Notaries, Central Bank Building, Fort, Bombay. N. J. Apthorpe-Webb, J. S. Bapaola, N. B. Vakil, C. J. E. Grundy, J. J. Vakil, K. J. Chokshi, S. E. Morris, S. N. Wakhariya, D. P. Mehta, J. P. Shroff. Cable Address: "Legal," Bombay. Phone: 251281/82/83.

**LIVERPOOL & LONDON & GLOBE INSURANCE CO., LTD.**, THE (Incorporated in England; Shareholders' Liability Ltd.) 12, Jamshedji Tata Road, Bombay. (Fire—Loss of Profits—Motor—Accident (all classes)—Engineering—Aviation—Marine). Branch Manager: R. A. Isaac. Tel. Address: "Globance". Phone: 246226 (5 Lines). Post Box No. 1848. Head Office:—1, Dale Street, Liverpool, England.

**LLOYD TRIESTINO**, Navigation Company, Post Box No. 1080, Neville House, Graham Road, Ballard Estate, Bombay-1. Phone: 262294. Grams: "Lloydiano."

**LONDON, EASTERN & AMERICAN TRADING CO. PRIVATE LTD.**, Sole Proprietors:—"AA," "XLN," "A-1," "AONE," Electric Lamps and Accessories. 'Premier,' 'Commander,' Cable Wires, Sole Agents for Silvery and Oosmania Clips, Splendor Lamps, 'LEA' Fans, 'Britmac', English Electrical Accessories. Dealers in Electric Fans, Fixtures, Accessories, Eveready Flashlights and Novelties. Address: 22, Hamam Street, Bombay 1. Phone: 252969. Grams: "SANGUINE."

**LONDON & LANCASHIRE INSURANCE CO., LTD.**, THE (Incorporated in England; Liability of the members of the company is limited). 12, Jamshedji Tata Road, Bombay. (Fire—Loss of Profits—Motor—Accident (all classes)—Engineering—Aviation—Marine). Branch Manager: R. A. Isaac. Tel. Address: "Londlan". Phone No. 246226 (5 lines). Post Box No. 117. Head Office: 1, North John Street, Liverpool, England.

Lookmanji Moosaji, Furniture Fittings Merchant, Diamond Building, Lohar Chawl, Bombay 2.

**Louis Dreyfus & Co., Ltd.**, Nicol Road, Ballard Estate. Tel. Address: "Dreyfus."



**LUCAS INDIAN SERVICE PRIVATE LTD.**, Dealers & Repairers of Motor Car Electrical Equipment, Diesel Fuel Injection Equipment. *Head Office*: 15, Mama Parmanand Road, Bombay 4. Phone Nos.: 354601 & 355681. Tel. Address: "LUCASIND." Branch Offices at: 46, Rafi Ahmed Kidwai Road, Calcutta 16 and Patullo Road, Mount Road, Madras 2.

**LUMMUS COMPANY (INDIA), THE**, International Engineering and Construction I.C.T. House, Link Road, Chakala, Andheri, Bombay-69 (AS).

**M. C. Mody & Bros.**, Electrical Engineers & Importers. 125A, Lohar Chawl, Bombay 2.

### M. J. PATEL & CO.,

*Direct Importers & Stockists of:—*

G. 1. & Steam Pipes, Boiler Tubes & Valves G. 1. Pipes Special, Hydraulic Pressure Tubes & Steam Flanges.  
177, Nagdevi Street, Bombay-3.  
Phone: 327931. Grams: "REDTEE"

**M. Desai & Co.**, Mill Gin Stores & Abrasive Merchants, 163, Narayan Dhuru Street, Bombay 3.

**M. C. DAVAR & CO.**, 143, Princess Street, Bombay 2. Phone: 39752. Grams: "EMCIDAVAR". Importers & Stockists of Aromatic Chemicals, Essential Oils & Perfumery Materials. Agents for Esrolko Ltd. (Formerly Flora), Switzerland; Messrs. M. M. Hatherbacha & Co., Penang. Essential Oils.

**M. M. A. RASIWALLA & CO.**, (Estd. 1910), 17, Janjkar Street, Husseinbhai Building, Mandvi, Bombay 3. Phone: 323450. Grams: "TWIST".

*Proprietors of*: Kurla Rope & Thread Factories, Pipe Road, Kurla, Bombay 70. Phone: 51312.

*Manufacturers of*: Cotton Ropes, Thread Twine and all sorts of Fishing Lines.

*Dealers in*: Fish-Hooks, Hemptwine, Plastic Fishing Lines twines, Sail needles, etc.

**M. V. Joshi & Co.**, Tarpaulins Dealers, 31, Isaji Street, Bombay 3.

**MACHINE TOOLS & IMPLEMENTS**, Engineers, Hardware Merchants and Industrial Suppliers. Approved Suppliers to D.G.S. & D. and Other Government Departments, Railways and Prominent Workshops. Stockists of Ball and Roller Bearings, Tool Steels, Hardwares and Small Tools, etc. Manufacturers of Screw Jacks (Bottle, Lifting & Cable drum types), Surface Plates, Plug, Ring & Taper Gauge & Precision Instruments. Main Office: 93-95, Narayan Dhuru St., Bombay 3. Phones: 322268 & 322269. Tel. Address: "Machtools."

*Calcutta Branch*: 53, Netaji Subhas Road, Calcutta 1. Phone: 229821. Grams: "ENGCORP."

**MACKINNON, MACKENZIE & CO., PRIVATE LTD.**

*Regd. Office*: 16, Strand Road, Calcutta.

*Head Office*: 4, Ballard Estate, Bombay 1. Merchants.

*Chairman & Managing Director*: J. W. Anson.

*Directors*: K. M. Campbell, M.B.E., N. Latif.

*Managers*: A. D. Oag, W. E. Hamilton, N. K. Sen, D. Matheson, A. Basu, R. J. G. Nicholls, R. P. Vachha, B.A., LL.M. (Bom.), LL.B. (Lond.), Barrister-at-Law.

*Secretary & Chief Accountant*: J. Sloan, C.A.

*Assistants sign Per Pro*: M. N. Alikhan, N. P. Iyengar.

*Assistants sign Pro*: S. A. H. Bilgrami, R. K. Bilimoria, L. D. Carr, S. K. Chatterjee, P. D'Souza, G. D. S. Dunlop, M. S. N. Farlie, P. D. Harrison, N. K. Jerat, M. G. Medlicott, K. D. Mehta, A. C. Perry, N. R. Sachdev, P. A. Wagle.

*Agents*: P & O Lines Management Ltd., British India Steam Navigation Co. Ltd., Hain Nourse Ltd., Frank C. Strick & Co. Ltd., Trident Tankers Ltd., Asiatic Steam Navigation Co. Ltd., General Steam Navigation Co. Ltd., New Zealand Shipping Co. Ltd., Union Steamship Co. of New Zealand Ltd., Federal Steam Navigation Co. Ltd., Eastern & Australian Steamship Co. Ltd., The Avenue Shipping Co. Ltd., Bibby Bros & Co., Ishmian Lines, Inc., Canadian Pacific Steamships Ltd., Henderson Line Ltd., Cable & Wireless Ltd., Marine Transport Lines, Inc. New York, Consonance Shipping Corporation, Cities Service Tankers Corporation, National Bulk Carriers, Inc., Damodar Bulk Carriers Ltd., Union Castle Mail Steamship Co. Ltd., Stephens Sytton Ltd., Cathay Pacific Airways Ltd., Atlas Assurance Co. Ltd., Marine Insurance Co. Ltd., J. B. Westray & Co. (N. Z.) Ltd., London & Lancashire Insurance Co. Ltd., Yasuda Fire & Marine Insurance Co. Ltd., Michido Fire & Marine Insurance Co. Ltd., East African Administrations; Clearing & Forwarding Agents, The Ganges Rope Co. Ltd.

*Telegraphic Address*: "MACKINNON'S"  
Phone No.: 26-8021. Intelix No. Bombay 70 & 307 Answer-back:

P. O. Box No. 122 MACKINNON'S Bombay.

**Macmillan & Co., Ltd.**, Publishers, 276, Dr. Dadabhai Naoroji Road, Bombay 1. Phones: 261184-261185. Tel. Address: "Biblicos."

**Macropolo, D., & Co., Ltd.**, Kermani Building, Dr. Dadabhai Naoroji Road, Fort, Cigarettes, Cigars and Tobacco Manufacturers and Importers. Tel. Address: "Macropolos." Phone Nos. 255764 and 252730. Factory at Kalachowki (Parel), Bombay. Branches at: 7B, Middleton Street, Calcutta and Connaught Circus, New Delhi.

**MADHORAM & SONS**, Forest Contractors, 136, Tank Bunder, Reay Road, Bombay 10. Stockists: Chil Pine, Fire Pine, Teak Wood, Jungle Wood, etc.

**MADHU FASTENERS CO.** (Member of Madhu Group of Industries). Manufacturers of Zip Fasteners Brass & Aluminium Strips. *Sole Distributors*: Madhu Corporation, Sanghavi Chambers, 27, Ghoga Street, Fort, Bombay 1. Phones: 253502 (Office) & 357336 (Res.). Grams: "VIRVANDAN" and "MADHUCORP". Factories at: 250/D, "Udyog Bhavan", Worli, Bombay 18; Phone: 454519 and Udyognagar, Bhaktinagar Station Road, Rajkot (Saurashtra). Phones: 201 and 943, *Proprietors*: M. K. Sanghavi; Madhu Sanghavi.

**MADHU SNAP FASTENERS MFG. CO. PVT. LTD.** (Member of Madhu Group of Industries). Manufacturers of Snap Fasteners Zip Fasteners and Component parts and Bifurcated Rivets. Sanghavi

Chambers, 27, Ghoga Street, Fort, Bombay 1. Phones: 253502 (Office) and 357336 (Res.). Grams: "VIRVANDAN" & "MADHUCORP". Factory: 250/D, Udyog Bhavan, Worli, Bombay 18. Phone: 454519. *Directors*: M. K. Sanghavi; Madhu Sanghavi.

**Madhusudan Gordhandas & Co.**, Importers and Exporters of Textiles & Yarns. P.O. Box 2110. Ganeshwadi, M. J. Market, Bombay 2.

**MAEVY & COMPANY**, Nawab Building, 4th Floor, 327, Hornby Road, Fort, Bombay. Importers & Stockists of all grades of Paper and Boards. Phone: 253235. Grams: "EDRIBAK".

**MAFATLAL GAGALBHAI & COMPANY PRIVATE LTD.**

*Directors*:

Shri Arvind Navinchandra Mafatlal.  
Shri Yogindra Navinchandra Mafatlal.  
Shri Rasesh Navinchandra Mafatlal.  
Shri Hemant Bhagubhai Mafatlal.  
Smt. Vijayalaxmi Navinchandra Mafatlal.  
Smt. Shardaben Bhagubhai Mafatlal

**MAFATLAL GAGALBHAI & SONS.**

*Partners*:

Shri Arvind Navinchandra Mafatlal.  
Shri Yogindra Navinchandra Mafatlal.  
Shri Rasesh Navinchandra Mafatlal.  
Shri Hemant Bhagubhai Mafatlal.

The Standard Mills Co. Ltd., Bombay (*Managing Agents*: Mafatlal Gagalbhai & Sons), Gagalbhai Jute Mills Private Ltd., Calcutta, New Shorrock Spg. & Mfg. Co. Ltd., Ahmedabad and Nadiad, The Sassoon Spg. & Wvg. Co. Ltd., Bombay, The Mafatlal Fine Spg. & Mfg. Co. Ltd., Navsari (*Managing Agents*: Navinchandra Purshottamdas & Co. Ltd.), Surat Cotton Spg. & Wvg. Mills Private Ltd., Surat, Nawin Glass Products, Nawin Fluorine Industries, Indian Dye-stuff Industries Ltd., Bombay (*Mg. Agents*:—Mafatlal Gagalbhai & Sons). National Organic Chemical Industries Ltd., Mafatlal Services Private Ltd., Bombay.

**POLYOLEFINS INDUSTRIES LTD.**, Bombay. Pransukhlal & Co. Private Ltd.

*Telegraphic Address*: "Hitsagar". Telephone No. 246281. P. B. No. 1038.

Mafatlal House, Back Bay Reclamation, Bombay 1.

**Maganbhai & Lalubhai**, Jewellers, Importers, Exporters of Real and Cultured Pearls, Precious and Semi Precious stones, Diamonds, Rough and Cut. 184-186 Sheikh Memon Street, Bombay 2. Phone Nos. 32785. Grams: "Motibutton".

**Maharashtra Sugar Mills Ltd.**, Industrial Assurance Building, opp. Churchgate Station, Fort, Bombay.

**Mahindra & Mahindra Ltd.**, Gateway Building, Apollo Bunder, Bombay. Telegram: "JEEPS", Bombay. Tel. No. 219131.

**MAHOMEDALI ESMAIL (Estd. 1924)**, Stock Exchange Building, Apollo Street, Bombay 1. Grams: "MERUNNISHA". Phone: 325470 (Res.).

Importers, Exporters and Tanners. Importers of raw hides and skin. Exporters of Tanned Skins and Wool.

*Bankers*: The Union Bank of India Ltd.

**Mahomedally Noorbhoy**, Estd. 1858. India's Leading Gun House, 246, Abdul Rehman Street, Bombay 3 BR. Phone: 324396. Grams: "SHOOTER."



Mahomedally Valiji Arsiwala, Direct Importer and Dealer in all kinds of Glasses, Plywoods, Picture Mouldings, etc., 76, Abdul Rehman Street, Bombay 3. Phone: 325900, and 145, Jambli Moholla, Bapu Khote Street, Bombay 3. Phone: 332467.

**MALABAR STEAMSHIP CO., LTD., THE,** Managing Agents: Shoorji Vallabhdass Private Ltd., Address: "DARABSHA HOUSE," Ballard Road, Ballard Estate, Bombay 1. Agents for: American, Chinese and other popular Cargo Lines. Branch Offices at: Calcutta, Calicut, Cochin and Alleppey. Agencies at: All important Ports, in and outside India. Cable Address: "RUBICON" at all Ports. Telephone Nos. 26-3625 26-3626 & 263627.

**MALGHAM BROS.,** 26, Old Custom House Road, Bombay. Surgical, Electro-Medical and X-ray Equipment. Principal Importers of Hanovia Ultra-Violet Ray and Infrared Ray Lamps, Fischer X-ray and Shortwave Equipment, Beck-Lee Electro-Cardiographs, Baker Platinum, and Platinumware. Phone: 252904. Grams: "MALGHAM".

**MALIK ELECTRIC WORKS,** No. 13, Victoria Road, Low Level, Reay Road, Bombay-10 DD. Manufacturers of house Service meters. AC & DC. Arc Welders, Argonarc Welding Equipment, Spo, Press, Projection, Seam, Butt & Flash Butt Welders From 3 to 500 KVA with Electronic, Controls, Furnace Transformers, Meter Testing Equipments, Electronic Coil Testers. Partners: S. K. Hari & M. L. Hari. General Manager: V. K. S. Krishnan. Phone Nos. 377904 & 379046. Grams: "MALIKTRIC." Branches at: Madras, Calcutta, New Delhi and Kanpur.

### MAMAJI INDUSTRIAL CORPORATION

Manufacturers of: "RISING SUN" Brand P.V.C. Leather Cloth.  
136-38, Sir Ibrahim Rahimtulla Road, Bombay 3.  
Phone: 332282 Grams: "MAMAJISON"

Mangaldas & Co., Importers & Exporters of Textiles, Spices & Seeds. Musjid Bunder Road, Gaya Bldg., Bombay 3. Phone: 321457.

### MANILAL MOHANLAL KARACHIWALLA

Authorised Bank's Clearing, Forwarding, Shipping & Warehousing Agents.  
Loheri House, 81/N. Mahomedali Road, Bombay 3.  
Phone: 323139 Grams: "OWNER".

Mankame Bros., Rubber Stamp Manufacturers, Engravers, & Die-Sinkers. 405, Kalbadevi Road, Bombay 2. Phone No. 23960.

**MANOHAR BROTHERS,** Engineers & Machinery Merchants. Importers of Oil Engines, Electric Motors, Switch Gears, Generating Sets, Machine Tools and dealers in Ball & Roller Bearings, Rubber Beltings & Mill Stores. Show Room: 4, Commerce House, Meadows Street, Fort, Bombay. Phone: 254496. Grams: "Locomotive." Branch: 37, Errabalu Chetty Street, Madras. Phone: 23274.

Manubhai Shah & Co., Dyestuffs, Chemicals & Colour Merchants. 297, Samuel Street, Bombay 3.

Manubhai Sons & Co., Importers and Manufacturers' Representatives. Manu Mansion, 16, Custom House Road, Fort.

**MANUFACTURERS LIFE INSURANCE COMPANY OF CANADA.** 123, Mahatma Gandhi Road, Fort, Bombay. Resident Secretary: G. R. Shroff. Phone: 253282. Grams: "MANULIFE".

**MARCAR STEEL & ENGINEERING LTD.**—India House, 4th Floor, Fort Street, Bombay 1. Grams: "MARCA-STEEL", Bombay. Steel Materials, Machine Tools & Engineering Products of all kinds. Calcutta Office: 30, Chittaranjan Avenue, Calcutta 12. Delhi Office: 7/8, Windsor Mansions, Janpath Lane, New Delhi 1.

### MARF & COMPANY

Remembrance Advertising  
Manufacturers of Diaries, Wallets, Table Pads, and all other Advertising Media in Plastic, Rexline, Leather & Metal.  
362, V. P. Rd., Bombay 4  
Phone: 353222 Grams: "ARMORIDE"

**MARINE TRANSPORT COMPANY PRIVATE, LTD.,** Steamship. Agents & operators Also chartering Agents. Wakefield House, Sprott Road, Ballard Estate, Bombay 1. Phone Nos. 264094/95. Tel. Address: "CHARITERING".

Accredited Agents for: U.S.S.R. Lines of Steamers, Veb Deutsche Seereederei of Rostock (G.D.R.), Jadranska Slobodna & Iovidba of Split (Yugoslavia).

Marshall, Sons & Co. (India) Ltd., Engineers. Marshall's Building, Ballard Road, P.O. Box No. 124, Telephone No. 261251 (two lines). Telegrams: "Steam" Bombay.

**MARTIN & HARRIS (PRIVATE) LTD.,** Manufacturing Chemists and Manufacturers' Representatives, Savoy Chambers, Wallace Street, Bombay 1.

Tel. Address: "Rowlette."  
Phone { Office: 263473-4.  
Stores: 261270.  
P. K. Asil, B.Com., A.O.A., Director.  
K. Thomas B.A. (Hons.), Zonal Manager, West Zone.

Head Office:—Mercantile Building, Lal Bazar, Calcutta 1. Factory: 182, Lower Circular Road, Calcutta. Directors: H. J. Silverston (Chairman), F. Lemmon, J. E. Lemmon, Swraj, Paul, Mr. Jit Paal, P. K. Asil and Mr. Prithviraj Singh.

Sole or Accredited Agents or Representatives for:—

Amalgamated Dairies, Ltd., Auckland N. Z.

Ames Company Inc., Elkhart, Indiana, U.S.A. and London.

A. Gallenkamp & Co., Ltd., London. Bausch & Lomb Inc., Rochester, New York, U.S.A.

Clay-Adams Inc., New York, U.S.A.

Carlson-Ford Sales Ltd., England.

Johnsons of Hendon, Ltd., Hendon, London.

Hindustan Antibiotics Ltd., Pimpri.

Organon Laboratories, Ltd., London & Holland.

Stanton Instruments Ltd., London.

A. B. I. Ltd., Instrumentation Division, Harlow, Essex.

Ward's Natural Science Establishment Inc., Rochester, N. Y.

William B. Warner Ltd., Eastleigh, Hants (England).

Warner Lambert Pharmaceutical Co., Morris Plains, N. J. (U.S.A.).

Distributors for:—

**WARNER, HINDUSTAN LTD.,** Bombay-Tata-Fison Industries Limited (Pharmaceuticals Division) Bombay.

**MARTIN BURN LTD.,** Esplanade House, Waudby Road, Post Box 276, Bombay 1. Telephone: 266115.

Gram: "Martinburn".

Branch Manager: Col. G. C. Dubey.

Registered Office: 12, Mission Row, Calcutta.

Branches at: Delhi, Kanpur, Patna.

London Office: Martin Burn Ltd. (London Agency), Martin Burn House, 12, Austin Friars, London E.C. 2.

Managing Agents:—

Burn & Co. Ltd., Indian Iron & Steel Co. Ltd., Indian Standard Wagon Co. Ltd., Hooghly Docking & Eng. Co. Ltd.

Secretaries & Treasurers: Robert Hudson (India) Ltd., Vaughan Burn Crane Co. Ltd., Reyrolle Burn Ltd., etc., etc.

**MATHER AND PLATT, LTD.,** Engineers. Head Office in India: Hamilton House, Graham Road, Ballard Estate, Bombay 1. Phone No. 263555. Calcutta Office: 7, Hare Street, Calcutta 1. Phone No. 235565-8. New Delhi Office: 25, Indra Palace, Connaught Circus, New Delhi 1. Phone No. 47936. Madras Office: 43, General Patters Road, Madras 2. Phone No. 81358. Telegraphic Address for all Offices: "SPRINKLER". Factories in Calcutta and Fire Protection Equipment, Armoured Fire Doors, Centrifugal Pumps, Flameproof Electric Motors. Machinery for the preparation of Preserved Food, Machinery for Textile Bleaching, Dyeing, Printing and Finishing.

**MATA LACHHMI COMPANY,** Importers Exporters and Manufacturers' Representatives. Pitru Smriti, Nanabhai Lane, Fort, Bombay. Tel. Address: "Lacmat." Phone: 253655.

May & Baker (India) Pvt. Ltd., Head Office: Karimjee House, Sir Pheroze Shah Mehta Road, P.O. Box 693, Bombay.

### MAZAGON DOCK LTD.

Shipbuilders, Shiprepairers & Engineers

Mazagon, Bombay 10. Branch at Goa

Telephone: 379511-4.

Cables: "MAZDOCK".

Managing Director: Rear-Admiral B. A. Samson.

Drydocks

|         | Extreme Length | Width at Entrance | Breadth of Vessel (for docking) | Depth on Sill (M.H. W.S.). |
|---------|----------------|-------------------|---------------------------------|----------------------------|
| Ritchie | 495 ft.        | 66 ft.            | 61'-4"                          | 18 ft.                     |
| Mogul   | 426 ft.        | 59'-9"            | 51 ft.                          | 16 ft.                     |
| Mazagon | 154 ft.        | 34 ft.            | 26 ft.                          | 9 ft.                      |

Building Berths: Two covered berths, capacity vessels up to 165 ft. long; two open berths, capacity vessels up to 230 ft. long; and two berths, capacity vessels up to 450 ft. long or 10,000 tons DW.

Shipbuilding: Craft up to 450 ft. in length like passenger vessels, coasters, dredgers, tugs, barges, lighters and naval vessels.

Repairs: All types of hull and engine repairs carried out to sea-going ships, both steam and diesel.

Specialized Work: Steelwork fabrications, ferrous and non-ferrous foundry work, steel forgings, electrical and refrigeration work, all types of timber construction and general mechanical engineering.



**MCKENZIES LIMITED**, Sewri, Bombay, Engineers, Contractors, Bridge Engineers, RCC and Road Specialists, Railway Carriage and Wagon Builders, Body Builders, Trailers, Vibrators and Floor Cranes.

**Managing Director** :—Purshotamal R. Jhunjhunwala.

**Secretary** :—M. J. Deshpande.

**Chief Accountant** :—S. R. Patil.

**Chief Executive** : Shriram Chokhani.

**Chief Engineer (Civil)** : B. V. Apte.

**Dy. Chief Engineer (Civil)** : C. M. Shah.

**Chief Mechanical Engineer** : Geo. De-Frescheville.

**Commercial Manager** : S. Srinivasan.

**Pile Foundations**—Vibro Concrete Piling System.

**Tel. Address** :—“Sawmills”, Bombay.  
“Structures”, Madras.

**Codes**—A.B.C. 5th Ed., Western Union (5 letter), Acme and Bentley's.  
**Phone Nos.** 441862-63-64.

### MEHTA & COMPANY

Govt. Appointed Regd. Stockholders & Importers of Iron & Steel, Hardware & Pipes.

Loha Bhavan, Frere Road, Bombay 9.

Phone: 321298 & 327508

**Sales Depot** :

Latif House, Iron Market, Bombay 9.

Phone: 321265 & 327861

Grams: “NICERODS”.

### MEHTA ENGINEERING WORKS

Structural Engineers and Contractors.

405, Loha Bhavan, P. Demello

Road, Bombay 9. Tel. 321298-327508.

Grams: “NICERODS” Works. B-40

Wagle Industrial Estate Thana. Mfrs.

of:—Industrial Structures, Storage

Tanks, Chemical—Pressure Vessels,

Chimneys, Steel Windows, Steel Pipes

etc.

**MEHTA NANAVATI & CO.**, 90, Narayan Dhuru Street, Bombay 3. Phone: 324645, Grams: “REDJOINT”.

**Menora Hosiery Works Pvt. Ltd.**, 75, Nehru Road, Bombay 57.

**Menty, S. M., & Co.**, 11-13, Horniman Circle, Fort, Bombay 1. Stockists of all kinds of canvas for all purposes, Plastic Sheetings of all kinds and varieties, Oil Cloth, Leather Cloth, Bookbinding Cloth, Waterproof Cloth, etc., and Manufacturers of Tarpaulins, Kit Bags, Sails, Awnings, etc., etc. Tel. Address: “Tarpaulin.” Phone No. 253620.

**Merchants Bros.**, Mill Gin Store, Brushes and Fire-fighting Equipments Dealers, 151, Nagdevi Street, Bombay 8. (See under “Rubber Goods Mfrs.”)

### MERCURY TRAVELS (INDIA) PRIVATE LTD.

**Travel Agents.** Bombay Office: 70, Forbes Street, Bombay 1.

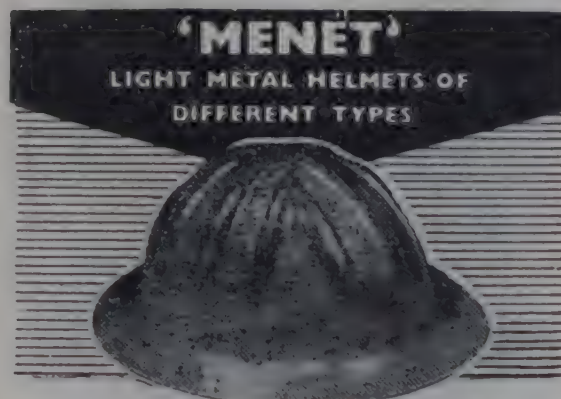
**Regd. Office**: 17, Chowringhee Road, Calcutta 13.

**Branches**: Madras, New Delhi, Srinagar & Jaipur.

**MERWANJEE BOMANJEE DALAL**, Investment Bankers and Underwriters, Stock, Share, Bullion, Exchange and Finance Brokers, Allahabad Bank Bldg., Apollo Street, Fort. Tel. Address: “Giltedged”; Phone No. 25-3981 (5 lines). Telex No. 219, Answer Back “GILTEDGED” BY 219.

**Merwanjee Poonjlajee & Sons Private Ltd.**, Manufacturers of Chutneys, Pickles, Curry-Powder, etc., Poonjlajee Building, Prince's Dock, Frere Road, Bombay 9. Phone: 332933. Grams: “CHUTNEY.”

**METAL DISTRIBUTORS LTD.**, Importers, Exporters & Indentors of all Non-Ferrous Metals. 12/18, Vithalbhai Patel Road, Bombay 4 BR. Phone: 331921 (Four lines). Grams: “DHATUBANA” Telex No. 315.



Pioneer Mfrs. in India

### METAL NET DEPOT

113, Abdul Rehman St., Bombay-3.

**METAL PRINTERS CO., THE**—Office: Aga Khan Building, 9, Dalal Street, Bombay 1 BR. Phone: 254416. Factory: Marol Naka, Andheri East, Bombay 59. Phone: 573056. Calcutta: 14, Princep Street, Calcutta 13. Delhi: 2-B, Jangpura, New Delhi.

### METALS PRIVATE LTD.

Structural Engineers & Contractors, Specialists in Steel Doors & Windows.

**Office**: 269, Dadabhoy Naoroji Road, Bombay 1. Phone: 265309.

**Factory**: Central Salsette Track (Road), Kalina, Santa Cruz (East), Bombay 29.

Phone: 534295.

### METALLICA WORKS PRIVATE LTD.

79/83, Dr. Annie Besant Road, Bombay 18.

Grams: METAMELT Bombay 18.

Phones: 375432, 375433, 375434, 371941 & 371942.



### MAKERS OF METALS

Virgin Metals—Gunmetals—Brasses—Bearing-Metals—Tinsolders—Type-metals—Non-Ferrous, Semi-Ferrous and non-Ferrous Castings, Anodes, etc. Lining and re-lining of all types of Bearings and Bushes and re-teething of worn-out Crusher jaws, Lead lining of Acid Resisting Containers, Crucibles.

**Metcalf & Hodgkinson, Private Ltd.**, Marine Surveyors and Assessors, Mackinnon Mackenzie's Building, Ballard Estate.

**Tel. Address**: “Bullwanger,” Bombay. Phone No. 26-2526.

**METRO-GOLDWYN-MAYER INDIA LTD.**, Motion Picture Distributors.

**Tel. Address**: “Metrofilms.” Phone No. 24-2108.

**Head Office**:—“Metro House,” Mahatma Gandhi Road, Bombay 1.

**Branches** at Calcutta, New Delhi and Madras.

**Metro Motors, Motor House**, Hughes Road, Bombay 7. A Private Partnership Concern. **Partners**: J. H. Mehta, H. F. Mehta, S. H. Bhedwar and D. D. Chothia. **Service Manager**: D. S. Bhedwar. Distributors of Standard Cars and Parts and Jeep Vehicles and Parts. Phone: 352751 (Office) & 355121 (Workshop). Grams: “METRO”, Bombay.

**MILAN SPRING WORKS**, Manufacturers of Automobile, Textile, Precision Springs. Also springs for use in all Industries. 43, Khandia Street, Near Two Tanks, Bombay 8. Phone: 376900 & 379159 (Office) 372640 (Factory).

**MILLARS' TIMBER & TRADING CO., LTD.** (Incorporated in England), Victoria House, Victoria Road, Bombay 27. Construction Equipment and Timber. London Office: Pinners' Hall, E.C. 2. Works: Bishop's Stortford, U.K. Agents throughout India. Tel Address: “Jarrah.” Phone Nos. 372103 & 372104, P.O. Box No. 262, Bombay 27. **Manager for India**: P. Sukumaran.

### OVER 63 YEARS SERVICE MINIMAX LIMITED

Janmabhoomi Chambers, 29, Fort Street, BOMBAY-1

Phone: 26-2879 Tel.: “MINIMAXIA”

**H. O. for INDIA** :

Mercantile Buildings, Lall Bazar Street, CALCUTTA

Phone: 22-3675

### MIRCO INDUSTRIES

**Manufacturers of** :

“ACE” Ball pens & Refills

249, Dr. Dadabhoy Naoroji Road, Bombay 1.

Phone: 354425

Grams: “MIRCHANDCO.”

**MITRA & CO., S.**, Distributors for:—Canning Mitra Phoenix Ltd., Manufacturers of Electroplating and Polishing Equipments and Materials. Bachubai Building, 187, Dadabhoy Naoroji Road, Fort, Bombay 1. Phone No. 26-2342. Grams: “Mludeshi.” **Branches at**: 30, Bentick Street, Calcutta 1. 17 Venkata Chelley Mudaly Street, Madras 3.

**MODERN MECHANICAL & MARINE WORKS**, Ship Repairers and Engineers, 93, Marine House, Dongri Bridge, Bombay 9. Telegrams: “Marineluck.” Phone Nos. 331319 and 332823.

**Modern Steel Co.**, 125/A, Altamer Street, off Banian Road, Bombay 3. Importers, Dealers and Stockists of everything in Iron, Steel and Tool and Alloy Steel. Manufacturers of Steel Shaftings according to given specifications and shapes.



**MOGUL LINE LTD.**—16, Bank Street, Fort, Bombay (A Govt. of India Undertaking Managed by its Board of Directors). Haj Pilgrim Service between Bombay and Jeddah. Regular Cargo-cum-Passenger Service between Bombay & Sea Port; also Regular Coastal Service for Transport of Coal, Salt, Cement etc. Telegraphic Address: "MOGUL", Bombay. Telephone No. 256835 (4 lines), Pilgrim Booking Office: Nos. 4 and 5, Mohamed Haji Saboo Siddick Musafirkhana, Carnac Road, Bombay 1. Phone No. 26-1868. London Correspondents, Messrs. Scindia Steamships (London) Ltd., Kempson House, Camomile Street, London E.C. 3.



### MOHAMADI FINE ART LITHO WORKS

Proprietors:  
Allibhoy Sharafally & Co. Private Ltd.,  
Bombay (DD).  
Lithographers, Offset & Letterpress  
Printers, and Carton Manufacturers.  
Mohamadi Bldg., Mazagon, Bombay 10.  
Phone: 378148 & 378149.  
Grams: "KORAN."

### MOHAMEDALLY NOORBHAI & CO.,

Motor Body Building Material Dealers.  
144/148, Ibrahim Rahimtoola Road,  
Bombay 3.  
Phone Nos. 333068 and 333763.  
Grams: "CABRUBBER".  
Branches at:  
Calcutta, Madras & Lucknow.

**MOHAN BROTHERS**, Wine Merchants and Suppliers of Imported Wines, Cigarettes, Provisions to Ships & Embassies, 9, Ismail Building, Flora Fountain, Bombay 1. Phone: 252417. Grams: "GEEALE-BEE". Branches: Delhi, Jodhpur, and Calcutta.

**PERFUMES OF 50 YEARS FAME**

- OTTO MOHINI
- PHUL-TORA
- ATTAR DILLAGI
- BAHARE BASANT
- MY LOVE

ATTARS ESSENCES & PRESENTATION BOXES Available

**MOHINI AGENCY** Perfumers

JAMNABAI BUILDING, MASJID BUNDER ROAD, BOMBAY 3

Mohanlal & Co., Marble, Tiles & Sanitary-ware Merchants, 49, Duncan Road, Bombay 4.  
Monotype Corporation Ltd., The, 1st Floor, India House, Opp. G.P.O., Bombay. Phone No. 263167. Tel. Address: "Remonotype."

### MOHANLAL AND CO., STOCKISTS & DISTRIBUTORS OF Guest, Keen, Williams, Ltd.

For Bolts, Nuts, Rivets and Fastenings.  
144, Diamond Bldg., Lohar Street, Bombay 2.

Grams: "HARDSTOCK" Phone: 30916.

Branch at:  
1092-B, Lambeshwar Naka,  
Relief Road, Ahmedabad.

**MONSANTO CHEMICALS OF INDIA PRIVATE LTD.**, Wakefield House, Sprott Road, Ballard Estate, Bombay 1. Phone: 262624/25. Grams: "MONSANTO." Importers of Industrial Chemicals and Pharmaceutical Chemicals manufactured by Associated and other Companies in U.S.A., U.K., Australia and Canada. Branch Offices: 1) 19, Rajendranath Mukherjee Road, Calcutta 1. 2) 3/8, Asaf Ali Road, Near Turkman Gate, New Delhi. 3) Caithness Hall, 310-311, Linghi Chetty Street, G. T. Madras.

**MONTANA PRIVATE LTD.**, Regd. Office: Rahimtoola House, Homji Street, Bombay 1. Tel. Address: "MONTLIT." Ferrous & Non-Ferrous Metals. Chairman: Y. A. Jasdandwalla. Phone Nos.: Head Office:—251144, Refinery:—375715.



## QUALITY Taraulins

FOR SALE  
AND ON HIRE

Specialists in Taraulin  
Shed Construction  
(BOMBAY AREA ONLY)

Trade Enquiries Invited

### MORARJI PERAJ & CO. TALPATRIWALA

138, MASJID BUNDER ROAD, BOMBAY-3.  
PHONE: 322352 GRAMS: TALPATRI

MP, 101

**MORARJEE GOCULDAS SPINNING & WEAVING CO. LTD.**, Number of Looms 2,973, Spindles 1,53,768. Directors: Gopikisan Piramal, Dr. Mohanlal Piramal, Radhakrishna R. Ruia, Lalitkumar M. Khatau, Motilal Tapuria, B. K. Kanoria.

Secretary: P. B. Modi, M.Com., LL.B.

Registered Office at: Dr. Ambedkar Road, Parel, Bombay 12. Phone No. 440021 (3 lines). Tel. Address: "MOGOCO". Mill No. 1 at: Dr. Ambedkar Road, Parel, Bombay 12. Mill No. 2 at: Planet Mill Street, Ferguson Road, Bombay 13.

Motor House Limited, Estd. 1927. Registered Office and Showrooms: "House of Mehta", Hughes Road, Bombay 7.

**MOTOR INDUSTRIES CO., LTD.**, Manufacturers of Mico-Licence—Bosch Diesel Fuel Injection Equipment & Spark Plugs. Distributors of Bosch Automobile Parts & Accessories. 79, Dr. Annie Besant Road, Worli, Bombay-18 (WB). Phone: 370567. Grams: "ELEMENT". Head Office: Post Box No. 93, Bangalore. Branches: 1/155, Mount Road, Madras 2, and 91-A, Park Street, Calcutta 16.

**MOTWANE PRIVATE LIMITED**, 127, Mahatma Gandhi Road, Fort, Bombay-1 BR. Manufacturers of: CHICAGO RADIO Public Address Systems and MOTWANE VARIACS—Variable Auto-Transformers. Suppliers of: Telecommunication Equipment, Wireless Receivers and Transmitters, Electrical Equipment for Generation, Transmission, Distribution, Measurement and Utilisation of Electrical Energy, including Hydraulic Turbines, Generators, Transformers, Rectifiers, Motors, Control Gear and Cables. Pumping Plants, Cranes, Hoists, Compressors, Mechanical handling equipment, Welding Machines, Railway Rolling Stocks and Diesel Engines. Aircraft & Aircraft Equipment, Airport Equipment, etc. INDUSTRIAL PLANTS for the production of Cement, Fertilisers, Oil, Natural Gas, Tonnage Oxygen, Nitrogen, Argon, Helium, Heavy Hydrogen and Liquid Hydrocarbons, Organic and Inorganic Chemical Products, as well as complete plants for Steel Works, Mining, Water and Sewage treatment, etc. Instruments: Electrical, Electronic, Nucleonic, Mechanical and Industrial Instruments for Education, Research and Industry etc. Telegrams: "CHIPHONE", Bombay. Phone: 252337 (3 Lines).

Mukand Iron & Steel Works Ltd., Works & Regd. Office: Agra Road, Kurla, Bombay 70.

**MULCHANDANI ELECTRICAL & RADIO INDUSTRIES LTD.**, Manufacturers of Bush Radio, Celestion Speakers, Hunts Capacitors and Me Murdo Valveholders. Sukh Sagar, Sandhurst Bridge, Hughes Road, Bombay 7. Phones: 356928 and 353246. Grams: "MULRAIN".

Mulraj Khatau & Sons Private Ltd., Laxmi Building, Ballard Road, Fort. Phone No. 265411. Directors: Dr. Dharamsey Mulraj Khatau, J.P., Chandrakant Mulraj Khatau, Lalitkumar Mulraj Khatau, Abhay Laxmidas Khatau, Ashokkumar Morarji Khatau, Ratansey Morarji Khatau, Kishore Dharamsey Khatau, Sunjt Chandrakant Khatau, Mrs. Manibai L. Khatau and Mrs. Krishnabai A. Khatau. Tel. Address: "Emandco."

**MURPHY INDIA LTD.** (Formerly M. R. Industries Ltd.), Manufacturers of Murphy Radio Receivers and Component parts. Dr. Shirodkar Road, Parel, Bombay 12. Phones: 442474 & 442475. Grams: "RADMURPHY".

M. Somnath & Co., Tools Mfrs. & Merchants, 94, Lohar Chawl, Bombay 2. (See for details in Diamond Dressing Tools & Stationery Mfrs.).

**N. MOHANLAL & CO.**, Dunlop Rubber belting, Vee Belts, Hose Pipes, Asbestos goods, Pipes & pipe fittings, warrior Taps & Dies, Boiler Tubes and Dowdatt tools. 124, Nagdevi Street, Bombay 3. Phone: 322645, Grams: "JEPBELT".



# **NAGDEVI TOOL-STEEL MART**

R. Balooobhai & Co.  
Steel Merchants,  
Government & Railway Contractors,  
186, Nagdevi Street,  
Bombay 3.  
Phone Nos. { 323023 Grams:  
{ 327058 "Tenderers".

# **"NAARDEN" CHEMICAL WORKS (INDIA) LTD.,**

Manufacturers of:  
Flavours, Perfume Compounds, Essential oils & Aromatic Chemicals.

Office:  
Plot No. 6, Saki Vihar Road, Saki-Naka,  
Bombay 72 (AS).

Telephone: 582121-582122.

Telegraphic Address: "NARDONIA",  
Kurla, Bombay 70.

Managing Director: F. J. Rauwenhoff.

N. M. Mehta & Co., Marble & Tile Merchants,  
4-10 Old Custom House Road, Bombay 1.  
(For details see in Trade Directory Section).

Naoroji N. Vakil & Co., Stoneware Pipes & Fittings Mfrs. Sharu Castle, Mohamedali Road, Bombay 3.

Narandas Rajaram & Co., Private Ltd., Cotton Merchants & Textile Exporters. Navsari Chambers, Outram Road, Fort, Phone: 261861.

Narendra Electric Stores, Electrical Goods & Appliances Merchants, 158, Lohar Chawl, Bombay 2.

Nariman B. Bharucha & Sons, Builders, Civil & Sanitary Engineers, Specialists in prestressed & Thin Shell Concrete Structures. Khalakdina Terrace "B", Gowalla Tank Road, Bombay 26. Phone No. 357914. Grams: "BARUKSONS."

**NAROTAM & PEREIRA LTD.,** Shipping and Insurance Agents, Dubashes, Colombo and Galle. Registered Office: Scindia House, Dougall Road, Ballard Estate. Tel. Address: "Jalatharg," Bombay. Phone No. 26-2461. Directors: Smt. Sumati Morarjee (Chairman), S. C. Sheth, F. X. A. Pereira, B. P. Vevalina, J. C. Nanavati, V. C. Mashruwalla and S. C. Banker.

Nasserwanji & Co., Government & Municipal Contractors, 10-10, Homji Street, Fort. Phone No. 253692.

Partners:—Jeejeebhoy N. Dubash and Rusi N. Dubash.

**NATIONAL ADVERTISING SERVICE PRIVATE LTD.,** Advertising, Market Research, Public Relations. Estd. 1931. Regd. Off.: Khorshed Building, Sir P. M. Road, Bombay-1 (BR) Also at Pharmed House, 141 Fort Street, Bombay 1(BR). Grams: "Jeyenjeyn". Bombay. Tel. Nos. 26-3023, 26-3024 and 26-1080.

New Delhi Office: 127, Golf Links, New Delhi-3. Grams: "Jeyenjeyn" New Delhi. Tel. No. 618230.

Calcutta Office: 21, Princep Street, Calcutta-13. Grams: "Jeyenjeyn" (C) Calcutta. Phone: 23-2686 and 232456. Resident Director: Kailash C. Jain, B.A.

Associates in 71 Countries.

Chairman and Managing Director: Harish C. Jain, B.A., M.Inst., M.S.M. (Lond.).

**NATIONAL ASPHALT PRODUCTS & CONSTRUCTION CO.,** Hill View, Mahul Road, Bombay 74 AS. Phone: 521637 & 521795 Contractors for Earthwork, Rock Cutting, Asphalt & Concrete Roads, and Reinforced Concrete work. Dealers in and Hirers of: Earth-moving & Construction equipment, Suppliers of Asphalt Road Accessories.

**NATIONAL CASH REGISTER CO.,** Steelcrete House, Dinsha Wacha Road, Back Bay Reclamation, Bombay 1. Phone Nos. 245955, 245168. National Cash Registers, Adding, Accounting and Analysis machines: Sole Distributors for India: "Addressograph" Addressing and Embossing machines, Multigraph and Multilith Printing machines and Banda Duplicators. Head Office: CALCUTTA.

**NATIONAL EDUCATION & INFORMATION FILMS LTD.,** National House, Tulloch Road, Apollo Bunder, Bombay. Grams: "Edufilms." Phone: 211159. Educational Films, Film Strips, Projectors and other Audio Visual Aids to Education. Producers of Documentary, Children's, Industrial & Publicity Films. Sole Distributors in India for:—National Film Board of Canada, UNO Films; Coronet Films; Bray Studios; Czechoslovak Films; Common Ground Ltd., McGrow-Hill Textfilms, Sovexportfilm, etc.

# **NATIONAL EKCO RADIO & ENG. CO. LTD.**

Ewart House, Bruce Street, Fort, Bombay 1. Phone No. 253015. Associated with Messrs. E. K. Cole Ltd., Southend-on-Sea, Essex, England.

## **Directors:**

J. D. Choksi (Chairman).

J. Corbishley.

Sir Hirji Jehangir, Bart.

Virendra Singh.

R. M. A. Jones.

P. M. Agerwala.

Russi Jal Taraporevala.

Secretaries & Treasurers: The Investment Corporation of India Ltd.

Works: Mahakali Caves Road, Chakala, Andheri (East), Bombay 69. Phone: 572256 & 573170.

**NATIONAL ELECTRICAL INDUSTRIES LTD.** Works & Offices: Industrial Estate, Lalbaug, Bombay 12. Phones: 377891 (3 lines). Grams: "Natelin." Makers of Power & Distribution Transformers, Electric Motors, Motorised Grinders, Monoblock Pumps, Current Transformers.

**NATIONAL EMPLOYERS' MUTUAL GENERAL INSURANCE ASSOCIATION LIMITED.**

Head Office: National Employers' House, Bury Street, London, E.C. 3. Business Transacted: Fire, Motor, Workmen's Compensation, etc.

Head Office for India: "Kamani Chambers," 32, Nicol Road, Ballard Estate, P.O. Box 730.

Managing for India:—M. L. Pasricha.

Branch Manager:—H. K. F. Nariman.

Office Manager:—R. Mahadev.

Telegraphic Address:

"EMPLOMUTUA."

Telephone: (2 Lines) 26-2823 & 4.

National Engineering Industries Ltd., Bombay: G/3, "Advent", 12-A, Fore-shore Road, Bombay 1.

**NATIONAL INSURANCE COMPANY OF NEW ZEALAND LIMITED, THE** (Incorporated in New Zealand with Limited Liability). Head Office: Dunedin, New Zealand. Principal Office for India: Rahimtoola House, Homji Street, Fort, Bombay 1. Transacts Fire, Marine and Miscellaneous Business. Principal Officer for India: R. W. Chidgey. Phones: 251537-38-39, Grams: "OTAGO," Bombay.

National Litho Works Private Ltd., Lithographers, 608 Haines Road, Bombay 11.

# **N. MASETA & BROTHERS.**

(Estd.: 1941)

Importers & Exporters  
Commission Agents  
General Merchants.

165, Lohar Chawl, P. O. Box 2225, Bombay 2.

Phone: 38251-2

Grams:  
"MANSETACOY"

**NATIONAL MACHINERY MANUFACTURERS LTD.,** Kalwe, Thana. Tel. No. 591875/76. Manufacturers of Textile Spinning and Weaving Machinery and Spares.

National Paper Bag Co., Manufacturers of Paper & Polythene Bags. 168, Bhimpura, Chinch Bunder, Bombay 9.

**NATIONAL PEROXIDE LTD.,** Manufacturers of Hydrogen Peroxide, Sodium Perborate. Neville House, Graham Road, Ballard Estate, Bombay 1. Phone: 268071, Grams: "NAPEROL."

**NATIONAL RAYON CORPORATION LTD., THE,** Head Office: Ewart House, Bruce Street, Fort, Bombay-1. Phone: 259291. (five lines). Grams: "NARACORP", Bombay. Regd. Office: Eros Theatre Bldg., 1, Jamshedji Tata Road, Bombay 1. Phone: 246063 (three lines): Factory: Mohone, Kalyan, C. Rly. Phones. 301, 302, 303.

Manufacturers of Rayon Yarn, Rayon Tyre Cord, Tyre Warp Sheet, Sulphuric acid, Carbon-disulphide, Caustic Soda and Chlorine, Anhydrous Sodium Sulphate, Hydrochloric Acid, Carbon Tetrachloride, Oleum, Glauber Salt and Hydrogen gas.

Directors: Shri Kasturbhai Lalbhai (Chairman)

Shri Jiwanlal C. Chinai

Shri Rasiklal J. Chinai

Shri T. V. Baddeley

Shri Mathuradas Mangaldas Parekh

Shri Krishnaraj M. D. Thackersey

Shri Arvind N. Mafatlal

Shri Naval H. Tata.

General Manager: Shri R. K. Framjee.

General Manager (Technical): Dr. M. D. Parekh.

Works Manager: Shri J. J. Mehta.

Secretary: Shri D. M. Manekji.

## **MANAGING AGENTS:**

CHINAI AND COMPANY PRIVATE LTD., 79, Masjid Bunder Road, Bombay 8.

Managing Directors: Shri Jiwanlal C. Chinai, Shri Rasiklal J. Chinai.



# NATIONAL ORGANIC CHEMICAL INDUSTRIES LIMITED

Registered Office :

Mafatal House, Backbay  
Reclamation, Bombay I (BR).

Telephone : 246281.

Telegram : "PETRONOCIL."

Manufacturers of petrochemicals in collaboration with Companies of the Royal Dutch/Shell Group (Factory under construction near Thana).

Products proposed to be manufactured: Ethylene, Propylene, Benzene, Butadiene, Methane, Dicyclopentadiene, Ethylene Oxide, Ethylene Glycol, Diethylene Glycol, Polyethylene Glycol, Ethylene Dichloride, Vinyl chloride Monomer, P.V.C., Processed P.V.C. products, Isopropanol, Methyl Isobutyl Ketone, Acetone, Diacetone Alcohol, Butanol, 2-Ethyl Hexanol.

Exclusive Distributors in India for SHELL CHEMICALS, Agricultural & Public Health Products, Industrial Products.

Central Sales Office: Neville House, Currimbhoy Road, Ballard Estate, Post Box No. 1246, Bombay 1 (BR).  
Telephone : 268281. Grams : "CENSONOCIL."

Branches at Bombay: Neville House, Currimbhoy Road, Ballard Estate, Post Box No. 1246, Bombay 1 (BR).  
Phone: 268281; Grams: "SALESNOCIL."

Calcutta: Hongkong House, Dal-houseie Square, Post Box No. 2468, Calcutta 1. Telephone: 232301. Telegram: "SALESNOCIL."

New Delhi: Burmah Shell House, Connaught Circus, Post Box No. 260, New Delhi 1. Telephone: 46891; Telegram: "SALESNOCIL."

Madras: Burmah Shell House, Esplanade, Post Box No. 1774, Madras, Telephone: 29261; Telegram: "SALESNOCIL."

## Board of Directors :—

Mr. Arvind Navinchandra Mafatlal.  
Chairman.

Mr. Yogindra Navinchandra Mafatlal.

Mr. Rasesh Navinchandra Mafatlal.

Mr. Hemant Bhagubhai Mafatlal.

Dr. Cyrus Jehangir Dadachanji, Administrative Managing Director.

Dr. Robert Geoffrey Aickin.

Mr. William Cran Thompson.

Mr. John Reginald Stephenson.

Mr. Ernest George Germin Werner.

Mr. Pieter Otto, Technical Managing Director.

Mr. Haravu Varada Raj Iengar.

Mr. Nani Ardeshir Palkhivala.

Mr. Raghavayya Setlur (alternate to Dr. R. G. Aickin).

Mr. John Anderson (alternate to Mr. W. C. Thompson).

Mr. Herbert William James Nash (alternate to Mr. R. G. G. Werner).

NATIONAL STEAMSHIP CO. LTD., THE.  
Managing Agents: Dilipsinh Private Limited, Darabsha House, Ballard Road, Ballard Estate, Bombay 1. Branches and Agencies at all Important Ports. Telegraphic Address: (Inland). 'RASH-TRA', (Foreign) 'VIJAYDHVAJ'.  
Telephone No. 26-4432.



NATIONAL STEEL EQUIPMENT CO.,  
8, Katrak Road, Wadala, Bombay-31.  
Phone: Office: 441755, 442139. Factory: 442973. Grams: "BEDLOCKER", Wadala, Bombay. Mfrs. of Hospital, Laboratory & Catering Appliances, and Packaged Boilers. Branches: Delhi, Calcutta, Madras.

NATIONAL STORES, Wine and General Merchants, Sitaram Buildings, Crawford Market, Bombay 1. Phone No. 263121. Grams: "AVIJAH".

NATIONAL WIRE HEALD WORKS (PRIVATE) LTD., Manufacturers of Wire Healds and flat Healds, Lakshmi Bldg., Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 26-2166/67.

NATURAL GAS CO., PRIVATE LTD.,  
H.O.: 53/57, Laxmi Building, Sir Phirozshah Mehta Road, Bombay 1. Phone: 265435/6. Grams: 'Naturalgas'. Branch: 2, Moledina Road, Poona.  
Sole Selling Agents for: ESSO GAS LIQUID PETROLEUM GAS.— ESSO STANDARD EASTERN, INC.

NENSHI MONJI, Contractor, Stone and Sand Supplier, 123, Mahatma Gandhi Road, Fort, Bombay 1.

|                 |               |
|-----------------|---------------|
| Head Office     | Tel. { 251054 |
| Bhoiwada Quarry | Tel. 255048   |
| Sand Dept.      | " 72626       |
| Kurla Quarry    | " 581844      |

Telegrams: "Stonesand."

Nestler Boilers Private Ltd., Manufacturers of Boilers and Oil Burners. Love Lane, Cross Lane, Byculla, Bombay 27. Phone: 376264 & 372818. Grams: "NESTLER".

## NESTLÉ'S PRODUCTS (INDIA) LTD.,

Head Office:  
New Delhi-1, (Post Box 427)

Branches:  
Bombay-1, (Post Box 315)  
Calcutta-1, (Post Box 396)  
Madras-2, (Post Box 2419)

Tele-Address: NESTBRAND

Nescafe Instant Coffee

Milkmaid Brand Full Cream  
Sweetened Condensed Milk

Lactogen Milk Food For Infants

Nestum High Protein Cereal Food

# BOOKS

And  
ART PRINTS  
THE NEW BOOK  
COMPANY PRIVATE  
LTD.

188/190, Dr. D. Naoroji Road,  
BOMBAY I.

Phone: 268544/45.

Grams: "NEWBOOK"

NEW CONSOLIDATED CONSTRUCTION CO., LTD., Engineers and Contractors, Rahimtoola House, Homji Street, Fort, Bombay. Phones: 254227/251144. Grams: "Projects." Chairman: A. A. Jadsen-vala.

NEW DHOLERA SHIPPING & TRADING CO., LTD., THE, Managing Agents: Vikramsinh Private Limited, Darabsha House, Ballard Road, Ballard Estate, Bombay 1. Branches and Agencies all over India. Telegram: "RAVASIA", Bombay. Telephone No. 263443.

NEW DHOLERA STEAMSHIPS LTD., Managing Agents: Pratapsinh Private Limited, Darabsha House, Ballard Road, Ballard Estate, Bombay 1. P. O. Box No. 1137 Bombay 1. Telegraphic Address: 'JAYSHIPS'. Telephone No. 263443.

NEW GREAT INSURANCE CO. OF INDIA LTD., THE, Regd. Office: Bank Building, Mandvi, Baroda, Principal Office: 45-47, Apollo Street, Fort, Bombay.

Paid-up Capital .. .. Rs. 20,00,000

Chairman.—Shri Tulsidas Kilachand.

General Manager.—Shri M. G. Mody.

Business Transacted.—Fire, Marine, Accident and Miscellaneous Insurance.

Branches at: Agra, Ahmedabad, Amreli, Amritsar, Bangalore, Bareilly, Bhilwara, Bijapur, Belgaum, Bellary, Bhavnagar, Calcutta, Cochin, Coimbatore, Chittagong, Dhanbad, Gauhati, Goa, Jalgaon, Hubli, Hyderabad (A.P.), Indore, Jalna, Jaipur, Jodhpur, Kanpur, Karachi, Kotah, Kolhapur, Lucknow, Ludhiana, Madras, Madurai, Mangalore, Masulipatam, Nagpur, Nairobi, New Delhi, Nizamabad, Patna, Poona, Raipur, Rajkot, Sangli-Sangor, Sholapur, Siliguri, Srigangana, gar., Surat and Udaipur.

Representatives at: Aden, Dar-es-Salaam, Kampala, Mombasa, Mwanza, and Seychelles.

## NEW HAVEN ENGINEERING COMPANY PRIVATE LTD.

Manufacturers of Automobile Parts, Machinery Spares, Bright Polished Bolts & Nuts, Socket Head Cap Screws, Precision Turned Automatic Parts, etc.

Office:

Nanjee Building, 17-B, Horniman Circle, Bombay 1.  
Phone: 257616.

Factory:

Parsi Panchayat Road, Andheri (East).  
Phone: 573039.

## NEW HAVEN STEEL BALL CORPORATION Private Ltd.

Manufacturers of:

Steel & Alloy Balls, Grinding Media & Automatic Parts. Miniature Balls.

Office: Pandyan House, 4th Floor, 309, Frere Road, Bombay 1.  
Phone: 26-1523.

Grams: "GULDASTA".

Factory: 38, Pawal Lake Road, Saki Naka, Kurla, Bombay 70.

Phone: 581185



**NEW INDIA ASSURANCE CO. LTD.,**  
THE, Head Office: New India Assce.  
Building, Mahatma Gandhi Road, Fort,  
Bombay, P.B. No. 969 Phone: 259151.  
Grams: "NIASURANCE".

**NEW INDIA PLASTICS,** Khanna Con-  
struction House, 44 A. Gaffar Khan  
Road, Worli, Bombay 18. Manufacturers  
of Plastic Items for Commercial and  
Industrial Purposes. Specific Inquiries  
Solicited.

H.O. & Factory: Industrial Estates, Lal-  
baug, Bombay 12. P.O. Box 6025.  
Phone: 41773 and 72753.

Branch Office & Factory: Simplex Estate,  
Nagpur Road, Jabalpur (M.P.).

Stockists: D. C. Kale, 280, Navi Peth,  
Jaigaon.

**NEWLOOK BRASSIERE CO.,** Manu-  
facturers and Distributors of No-Com-  
plaint Newlook Brassieres. 30 Favourite  
Styles, All Colours, All Sizes. Exports  
to all countries. For Trade Inquiries and free  
illustrated literature write to Newlook  
Brassiere Co., 204, Girgaum Road, Bom-  
bay 4, India. Grams: "NEWLOOKBRA"  
Phone: 356583.

Phone: 241711. Grams: "NUPACK".

### NEWPACK INDUSTRIES

Lotus House, 33-A, New Marine  
Lines, Bombay 1.

Manufacturers of:

"NEWPAC" Polythene Bags  
Sheetings & Rolls, Etc.

**NEW STANDARD CHEMICALS CO.,**  
**PRIVATE LTD.** (Origin 1916). Importers,  
Wholesale Dealers and Stockists of Textile  
Dyes, Industrial Chemicals and Sizing  
Materials. Suppliers to Railways, Govern-  
ment Departments and Mills. 281,  
Samuel Street, Vadgadi, Bombay 3. Tel.  
Address: "Particular." Phone Nos.  
323844, 322169, 572510. *Chairman &*  
*Managing Director:* Keshavlal Naranjee  
Bhatt. *Directors:* R. K. Bhatt, J. K. Bhatt,  
A. H. Bhatt. *Secretary:* Jayantilal S.  
Rajyagor, B.com. Branch: Gopal Bhuvan,  
Bhhrana Road, Kanpur. Phone: 32858.

**NEW SURGICAL TRADING CO., THE,**  
Direct Importers and Manufacturers'  
Representatives. Bulakhidas Building,  
Mangaldas Road, Princess Street, P. O.  
Box 2821, Bombay 2. Telegraphic  
Address: "Coworker." Phone No. 38138.  
Dealers in Surgical, Scientific and  
Laboratory Equipments, Hospital Steel  
Furniture and Sundries. Specialised in  
Soil and Cement Testing Equipment.  
Agents for Instruments & Chemical  
Private Ltd., Mfrs. of Equipment for  
Higher Research in Physiology & Pharma-  
cology. Proprietor: C. J. Patel.

N. Jamnadas & Co., Freight Brokers and  
Travel Agents, 16, Bank Street. Fort.

**N. JIVANLAL & CO. PRIVATE LTD.,**  
Nagindas Chambers, 167, P. D'Mello Road,  
Bombay-1. Phones: 266527-28-29. Grams:  
"NIRANJAN". Delhi Office: 12/90, Con-  
naught Circus, New Delhi. Phone: 44082.  
Grams: "METACHEM". Importers-Ex-  
porters—Stockists of Heavy & Light  
Chemicals, Dyes & Intermediates, Pharma-  
ceuticals, Solvents, Fertilizers, Carbon  
Blacks & Paint Raw materials, Epoxy  
Resins, Rubber Chemicals. Agents for  
Messrs. Chemapol, Praha, (Czechoslo-  
vakia).

Noble Paint & Varnish Co., Private Ltd.  
Fergusson Road, Lower Parel, Bombay 13.

### NOBLE PLASTIC WORKS

22, Mangesh Shenoy Street,  
P.O. Box No. 755, Bombay 1.

Manufacturers of "NOBLE" brand  
quality plastic Umbrella handles  
in various and fancy colours. And  
also Sole Indenting Agents of  
"ACRYLIC" Plastic Sheets.  
M.O.P. and Satin Finish.

Phone: 261172.

Grams: "ROLLEDGOLD".

Nooroodin Shalkadam & Co., Hardware,  
Merchants, 159, Nagdevi Street, Bom-  
bay 3.

### NOORMOHAMEDS

House of Fine Furniture  
(Estd. 1885)

109/A-111/B, Mohamedally Road,  
Bombay-3.

Phone: 325124.

Grams: "NOORDECOR".

Furnishers—Cabinet Markers & Interior  
Decorators, Importers & Exporters.  
Branch at Mahim Causeway.

**NORTHERN ASSURANCE COMPANY**  
**LTD., THE, (Incorporated in Great**  
**Britain),** Express Building, "E" Road,  
Churchgate, Bombay 1. Grams: "INDEM-  
NITY". Bombay. Phone No.: 243712.  
*Manager:* Mr. V. V. Desai.

**NORWICH UNION FIRE INSURANCE**  
**SOCIETY, LTD.,** 16, Bank Street, Post  
Box No. 49, Fort, Bombay. Western Zone  
Manager: K. M. Dastur. Telegraphic  
Address: "Nufam". Telephones: 251985  
and 255052.

### N. R. SHAH & CO.

Mulchand Mansion, Princess Street,  
Bombay-2.

Phone: 20093.

Grams: "WALFLOWER".

Dealers in Perfumers & Perfumery Raw  
Materials, Aromatic Chemicals, Essential  
Oils and all other chemicals.

**NUSERVANJI, RUTTONJI NAZIR &**  
**SONS,** Coal Merchants, Landing, Clearing,  
Bunkering Contractors, Stock Exchange  
Building, Rooms Nos. 141-143, Apollo  
Street, Fort. Phone Nos. Office: 253312  
and 251759. Coal Bunder: 370203—Res.  
364352.

**NUTAN TRADING CORPORATION,** 83,  
Nagdevi Cross Lane, Post Box No. 8238  
Bombay 3. BR. Grams: "Nutantrade".  
Phones: 323357 (Office) & 474485 (Res.).  
*Manufacturers of "KAUSHIK" Brand*  
*Tools—such as Reames, Callipers,*  
*Dividers, Tool Holders, Engineering*  
*Squares, etc.*

*Dealers in Tool Bits, End Mills, Centre*  
*Drills, Stotting and Side & Face cutters*  
*etc.*

*Stockists of Hardware, Bearings, etc.*

*Branch at:* 3850, People Mahadev,  
Hauz Kazi, Delhi-6.

**Nutex (India) Private Ltd.,** (Associated to  
Signograph Co., Calcutta). Specialists in  
Transfer Labels Silk Screen Printing  
Stencils and "Gummaster" Labe Gum-  
ming Machines. Devkaran Mansion, Block  
No. 1, 3rd Floor, Princess Street, Bombay 2.  
Grams: "SINONUTEX", Phone: 22860.

**Ochhavlal Chhotalal & Co.,** Manufacturers  
of Ropes, Twines, Tapes, etc. 207-209,  
Nagdevi Street, Bombay 3.

**Opil, The Oriental Pharmaceutical Indus-**  
**tries, Ltd.,** Manufacturers of Chemicals  
and Pharmaceuticals. 64/66, Tulsi Pipe  
Road, Mahim, Bombay 16.

### OPTIMOHAR INDUSTRIES PVT. LTD.

*Manufacturers of:*

Pressure Stoves, Lanterns, Blow Lamps,  
Spray Guns, Pressure Gauges & Box  
Stitching Wire Machines.

16, Custom House Road, Bombay-1.

Phone: 256871-72.

Grams: "SUNFLAMES".

**ORIENT EXPRESS CO. PRIVATE LTD.,**  
**THE,** 359, Dadabhai Naoroji Road,  
Bombay 1. Phone: 251047. Grams:  
"Orexpresso." World Wide Travel Service.  
Authorised Agents for Airlines, Steamship  
Companies, Railways and Hotels. Offices  
in New Delhi, Calcutta, Bombay and  
Madras. Correspondents in 350 cities  
throughout the world. *Managing Director:*  
Mr. S. S. Poddar.

**Orient Longmans Ltd.,** Publishers, Indian  
Mercantile Chambers, Nicol Road, Ballard  
Estate, Bombay. Offices at Calcutta,  
Madras and New Delhi.

G. D. Sthalekar, *Manager;* P. S. Warty,  
*Asst. Manager.* Tel. Address: "Long-  
mans." Phone No. 261811.

### ORIENT PAINT AND HARDWARE MART

Bolts, Nuts & Wood Screws dealers.

67, C. P. Tank Road, Bombay-4. BR.

Phone: 333768.

Grams: "ADHIKAR".

**Oriental Can Manufacturing Co.,** Tin Box  
Manufacturers. 1076, Haines Road, Worli,  
Bombay.

**Oriental Engineering Co.,** Second Hand  
Machinery Merchants. 25 Forbes Street,  
Bombay 1. Phone: 253057. Grams:  
"ADIVISHNU".

**ORIENTAL METAL PRESSING WORKS**  
**PRIVATE LTD.,** 131, Worli, Bombay 18.  
WB. The biggest pressworks in Western  
India; Undertake all kinds of presswork  
in Mild Steel, Stainless Steel, Tin Sheets,  
Aluminium, Brass, Copper, Casting and  
Machining. Manufacturers of Stainless  
Steel Tanks Household Utensils, Hospital  
Wares and Laboratory requisites and  
"Archis" Gas Stoves for use with Butane  
/Propane gas. Telegram: "HOLLOW-  
WARE." Phone No. 371187 (2 Lines).



Oriental Rubber Industries Private Ltd., Industrial Rubber Goods Manufacturers, United India Bank Bldg., Sir P. M. Road, Bombay 1.



### OTIS ELEVATOR COMPANY (INDIA) LIMITED

ZONE OFFICE: Gateway Building, Apollo Bunder, Bombay - 1.  
Telephone: 211050, 211058.

BOMBAY DISTRICT OFFICE: Sita Mahal, Bomanji Petit Road, Bombay - 26.  
Telephone: 366380, 369293.

FACTORY & FACTORY OFFICE: Kaju Tekdi, Agra Road, Bhandup, Bombay - 78.  
Telephone: (Factory): 581103; (Factory Office): 581107, 581936, 581178.

Mr. P. L. Vahi Managing Director.  
Mr. M. N. Nair Works Manager.  
Mr. N. Swaroop Bombay District Manager.

**OVERSEAS MANUFACTURERS SALES CO.,** Manufacturers' Representatives; Lines handled: Automobile replacement parts and Accessories, Garage Equipment, Steamcleaners, Diesel Engines Spares etc., India House, Fort Street, Fort, Bombay. Phone: 282129. Grams: "ALIASP". Branches: Calcutta, Madras & Delhi.

**OXFORD UNIVERSITY PRESS,** Publishers, Oxford House, Apollo Bunder, Bombay 1, Bharat Insurance Building, Mount Road, Madras 2; Faraday House, P-17 Mission Row, Extension, Calcutta 13 and London, Ely House, 37 Dover Street, W 1.

Agents in India for:—George G. Harrap & Co., Ltd., The University Tutorial Press Ltd., American University Presses, Hong Kong University Press, University of Malaya Press, Ginn & Co.'s Beacon Readers, etc.

General Manager in India:—R. E. Hawkins, M.A. (Oxon.).

Tel. Address: "Oxonian," Bombay, Madras and Calcutta.

Bombay Telephone: 213104, 213105. Post Box 31.

P. & H. Vaswani Pvt. Ltd., 496, Kalbadevi Road, Bombay 2. Phone: 38082. Cable: "VASWATRAD". Textile, Hosiery, Silk & Art Silk Piece-goods, Yarn and Adhesive Tapes, Readymade Garments, Engineering Goods Plastic & P.V.C. goods, etc.

P. Kirpalani & Co., Importers of Paper & Boards. Merchants, Bulakhidas Building, 11, Vithaldas Road, Bombay 2. Phone: 20497. Grams: "CROMOPAPER."

P. N. Joshi & Co., 141, Mahatma Gandhi Road, Fort, Bombay 1. Grams: "JOSHICO." Advertising Agents and Consultants.

P. MOHANLAL & CO., Mill & Gin Stores Suppliers, 44, Nagdevi Cross Lane, Bombay 3. Phone: 322567. Grams: "EMERYCLOTH".

P. PARBHULAL & CO., PRIVATE LTD., Metropolitan Insurance House, Dr. D. N. Road, Bombay 1. Phone: 262264 & 261157. Importers of: Rayon Yarn, Staple Fibre, Nylon Yarn, Cotton Yarn Piece-goods, Raw Silk, Leather Cloth, Cutlery etc.

Exporters of: Cotton Yarns.

P. Rai & Company, Machinery, Machinery and Automobile spare parts Importers, Exporters and Manufacturers. 121, Commerce House, Medows Street, Fort, Bombay 1. Phone: 252436. Grams: "Piraico."

**PACKING MATERIALS CORPORATION,** Manufacturers of Bituminous & Wax Papers and Waterproof Packing Hessians, Khed Gully, Gokhale Road, Bombay 28 DD. Phone: 452824. Grams: "SUNLIGHT."

Padamshi Meghji, Estd. 1931. Manufacturers & Exporters of Tarpaulin, Canvas, etc. 106, Narayan Dhuru Street, Bombay 3.

Palekar & Co., Seed Merchants, Sitaram Building, Near Crawford Market, Bombay 1.

Pallonji & Co., M. Painting Contractors. 87, Abdul Rehman Street, Bombay 3.

PANALAL MOHANLAL & CO., 89, Nagdevi Street, Bombay 3. Phone No. 323071. Direct importers of pipes, fittings and valves of all sorts.

PANDIT & CO., 15, Forbes Street, Fort. Phone No. 251770. Grams: "SPECTATION."

Controlled Stockists of Pig Iron and Steel.

Proprietors:

The Igatpuri Elec. Supply Co.

**PANDYAN INSURANCE COMPANY, LIMITED.** (Fire, Marine, Misc.). Head Office—Madurai, South India. Manager:—S. Vinayakam. Bombay Branch Tel. Address: "Legresh." Phone No. 255088 (2 lines). Gresham Assurance House, Sir Phirozshah Mehta Road, Fort. Branch Manager: J. F. S. P. Fernandes.

**PAPER PRODUCTS LTD., THE,** Head Office: 13-14, Ajmeri Gate Extension, New Delhi 1. Bombay Office: Vaswani Mansions, 120, Dinshaw Vachha Road, Post Box 732, Bombay 1. Calcutta Office: Laha Paint House, 7, Chittaranjan Avenue, Calcutta 13; Madras Office: Gaffar Mansions, 60, Chinnathambi Street, Madras 1. Delhi Office: Vohra House, 1/25, Asaf Ali Road, New Delhi. Pioneers of Flexible Packaging in India. Specialists in Printing, Waxing, Coating, Laminating and Converting Cellulose films, Polythene, Aluminium Foils and Papers Rolls Sheets, Bags Pouched printed in Multi-colours. Also manufacturers of Speciality Packing Papers, Papers, marble paper, Wrapping Paper, Waxed Paper, Toilet Paper, Graph Paper, Paper serviettes, Baking cases and Cartons. Now in Technical Collaboration with Milprint-U.S.A.

Paradise Tea Co. (Tea Merchants), Sambhava Chambers, Sir Phirozshah Mehta Road, Fort.

**PARAMOUNT DYES & CHEMICALS PRIVATE LTD.** Regd. Office:—Elphinstone Building, Veer Nariman Road, Fort. Sole Distributors of Coal-Tar Dyestuffs, Intermediates, Synthetic Detergents, etc. of International Division, Allied Chemical Corporation, New York. Phones: 252535, 256686. Grams: "Paramount."

Paramount Engineering Co., Electrical Engineers and Contractors, Fort Chambers, Hamam Street, Fort, Bombay. Phone No. 251964. Tel. Address: "Sharu."

Paramount Films of India Ltd., Hague Building, Ballard Estate, Bombay.

Paramount Hardware Mart, Registered Stockists for Iron & Steel. Authorised Stockists of Tata Agric. Tools, Carnac Siding Road, Bombay 9. Phone No. 323104. Grams: "PARAMART", Bombay 9.

Paramount Industrial Stores, Importers, Exporters & Machinery Merchants, 15, Ropewalk Street, Fort, Bombay 1.

### PARBHULAL BEIKHABHAI & COMPANY

Exporters, Importers and Cotton Synthetic Yarn Merchants

117, Mumbadevi Road, Bombay 3. Phone: 323630.

Gram: "PABHITRADE"

Parekh Brothers Private Ltd., 65, Mahatma Gandhi Road, Bombay 1. Consulting Chemical Engineers and fabricators of Chemical Plants & Equipments.

**PARKE DAVIS (INDIA) LIMITED,** Pharmaceutical Manufacturers, Saki Naka, Bombay-72-AS. Head Office for India and Ceylon.

Telegraphic Address:—"CASCARA," Bombay-1-BR, Post Box No. 88.

Factory: Saki Naka, Bombay-72-AS. Phone No. 581691 (9 lines).

**PARLE PRODUCTS MFG. CO. PRIVATE LTD.,** Manufacturers of Biscuits & Confectionery, Thackersey House, Graham Road, Ballard Estate, Bombay. Phone: 263906. Grams: "VIHARI". Factory: Vile Parle, Bombay 57. Phone: 571371.

### PARSI DAIRY FARM

H.O. 261-63, Princess Street, Bombay 2.

Branches:—(1) Lal Baug, (2) Poibavdi, (3) Dadar.

Dealers: Milk, Dairy Products and Indian Sweetmeats Manufacturers.

Tel. No. 23634.

## PARRY & CO. LTD.

Registered Office:

Dare House,

Parry's Corner,

Post Box No. 12, Madras-1.

Branches: Bombay, Calcutta, Delhi, Bangalore, Calicut, Cochin, Coimbatore, Cuddalore, Madurai, Ootacamund, Secunderabad, Tiruchirappalli, Vijayawada and Visakhapatnam.

Bombay Office: United India Building, Sir Phirozshah Mehta Road, P.O. Box 506, Fort, Bombay-1. Phone Nos. 253951-2-3-4. Telegraphic Address: "DIESEL".

Holding Company: E. I. D.-Parry Ltd. (Incorporated in England). Registered Office: Airwork House, 35, Piccadilly, London W.1. Head Office: Dare House, Parry's Corner, Madras-1.

Manufacturers of Fertilisers for various crops, Insecticides and Fungicides formulations, Sugar, Spirit, Carbonic Acid Gas, Chemicals, Sanitaryware—"Parryware"—Vitreous Chinaware in collaboration with "Doultons" U.K.

Factories at Nellikuppam, Ranipet and Ennore.

Fertiliser Mixing Centres at Cuddalore, Katpadi, Mettupalayam and Tiruchirappalli in Madras State, Kottayam in Kerala State, Hospet, Mangalore and Mysore South in Mysore State, Tadepalle in Andhra Pradesh, Shrirampur in Maharashtra and Ranoli in Gujarat.



Ranipet Fertiliser Factory manufactures Superphosphate and Insecticides and Fungicides and Sulphuric, Nitric and Hydrochloric Acids (Commercial B.P. and A.R. Grades), Epsom salt, etc.

Supplies of Fertiliser Mixtures blended to suit each crop are distributed to Agriculturists and Planters through Mixing Centres at Cuddalore, Katpadi, Tiruchirappalli, Mettupalayam and Salem in Madras State; Kottayam in Kerala State; Mysore South, Mangalore and Hospet in Mysore State; Tadepalle in Andhra Pradesh; Shrirampur in Maharashtra; and Ranoli in Gujarat State. At Tadepalle in Andhra Pradesh, Superphosphate is also manufactured through its subsidiary, the Andhra Fertilisers Private Limited.

The Company owns a Compound Fertiliser Factory at Ennore near Madras, constructed at a cost of £3,000,000 producing 50,000 tonnes of Ammonium Phosphate 16:20 which is marketed under the trade name of PARAMFOS. As part of the manufacturing process the Factory includes plants for the production of Synthetic Ammonia, Sulphuric Acid and Phosphoric Acid. This Factory is currently being expanded to produce 38,600 tonnes of Ammonium Sulphate also by end 1967.

E.I.D.-Parry Ltd., Madras, The International Minerals & Chemical Corporation, Skokie, Illinois, and the Chevron Chemical Company, San Francisco, California, U.S.A. are the promoters of the Coromandel Fertilisers Limited, Secunderabad, which was established in April 1964.

The Coromandel Fertilisers Ltd., has an authorised Share Capital of Rs. 8,50,00,000 and has been licensed to commence at Visakhapatnam, a new Industrial undertaking for the production of Complex Fertilisers and Urea with a capacity to 3,65,000 Tonnes per year in terms of 20:20:0 and 16,500 tonnes per year of prilled Urea. The Company has organised a Seeding Programme and is progressively distributing large quantities of the same product which Govt. of India have imported for creating the necessary demand before the Factory's production reaches the market in 1967.

Managing Agents for Herdillia Chemicals Ltd., Bombay.

**Subsidiary Company:** The Mofussil Warehouse & Trading Co. Ltd., Dare House, Parry's Corner, Madras—General Importers and Warehousemen.

**Fellow Subsidiary Companies:** Parry Murray & Co. Ltd. (Incorporated in England). Registered Office: Airwork House, 35, Piccadilly, London W.1. East India Merchants.

Andhra Fertilisers Private Ltd., Dare House, Parry's Corner, Madras-1.

Manufacturers of Superphosphates. Factory at Tadepalle, Andhra Pradesh.

**MANAGED COMPANIES:** Designated as Managing Agents: The Deccan Sugar & Abkhari Co. Ltd., Dare House, Parry's Corner, Madras-1.

Manufacturers of Sugars, Spirit and Carbonic Acid Gas.

Factories at Pugalur and Samalkot, South India.

Parry's Confectionery Ltd., Dare House, Parry's Corner, Madras-1.

Manufacturers of Sugar Confectionery and Vox products.

Factory at Nellikuppam, South India. The Travancore Sugars & Chemicals Ltd., Trivandrum, Kerala.

Manufacturers of Sugar, Spirit and Liquor.

Factory at Pamba River, Tiruvalla, Kerala State.

**Designated as Secretaries & Treasurers:** Cauvery Sugars & Chemicals Ltd., Dare House, Parry's Corner, Madras-1.

Manufacturers of Sugar.

Factory at Pettavayalal, South India.

**Associated Companies:** W. J. Bush Products Ltd., Dare House, Parry's Corner, Madras-1.

Manufacturers of Flavouring Essences Essential Oils, Perfumery Compounds and Aromatic Chemicals.

Factory at Nellikuppam, South India.

#### AGENCY LINES:

#### ENGINEERING DEPARTMENT

**All India:**

Hawker Siddeley International Ltd., London. Diesel Engines and Generating Sets.

Midland Silicones Ltd., London. Silicone Products.

Railway Mine and Plantation Equipment Ltd., London. Light Railway Materials and Simplex Diesel Locos.

James Warren & Co. Ltd., Calcutta. Light Railway Materials (except Eastern India).

L. Sterne & Co. Ltd., Glasgow (U.K.). Industrial Refrigerating Machinery.

Kirloskar Electric Co. Ltd., Bangalore. Electric Motors, Transformers, Alternators and D.C. Machines.

Kirloskar Oil Engines Ltd., Poona. Diesel Oil Engines.

Rex International, S. A., Milwaukee, U.S.A. Chains, Conveyors and Elevators.

Southern Switchgear Ltd., Madras. H.T. and L.T. Switchgear.

Kirloskar-Asen Ltd., Bangalore. Electric Motor Starters.

Madras Chipboards, Ltd., Rajapalayam. Chipboards Veneerboards & Insulation materials.

**South India:**

Alfred Herbert (India) Private Ltd., Calcutta. Machine Tools, and Workshop equipment.

Andrew Yule & Co. Ltd., Calcutta. Steam Coal.

Indian Aluminium Co. Ltd., Calcutta. Corrugated Aluminium Sheets.

Jessop & Co. Ltd., Calcutta. Pressed Steel Tanks, Cranes, etc.

Kirloskar Brothers Ltd., Kirloskarvadi. Pumps, Crushers, Decorticators and Agricultural Implements.

Minimax Ltd., Calcutta. Fire Extinguishers.

Reliance Firebrick & Pottery Co. Ltd., Calcutta. Firebricks and Fireclay.

Tide Water Oil Co. (India) Ltd., Calcutta. Lubricating Oils and Greases.

Henry Simon Ltd., London. Flour Milling Machinery.

British Belting & Asbestos Ltd., Yorkshire, England. Belting and Brake Lining.

Cochran & Co., Annan Ltd., Annan, Scotland. Cochran Boilers and Ruths Accumulators.

Structural Engineering Works Ltd., Bombay. SEW-Cochran Boilers—Vertical and Horizontal.

Hawker Siddeley International Ltd., Loughborough, England. Electrical Switchgear, HRC Fuses, Rotating Machines and Transformers.

Tylors (Division of Crane) Ltd., Sussex. Water Meters and Spares.

Andrew Barclay Sons & Co. Ltd., Kilmarnock. Steam Locomotives.

Fuller Electric Ltd., London. Power Transformers and on load Tap Changing Equipment.

Mirex Heat Transfer Private Ltd., Bombay. Heat Exchangers.

Designing, Supply and erection of Cold Storage and Air-conditioning Plants also undertaken.

India Waterproofing & Dyeing Works, Calcutta-1. Tarpaulins, Canvas, Bulk-ing sheets and waterproof materials of all kinds.

#### PHARMACEUTICAL DEPARTMENT:

Dragerwerk Helmr. & Bernh. Drager, Luebeck, West Germany.

(All India)—Anaesthesia apparatus and respiratory medical equipments.

Richard Wolf, GMBH, Knittlingen, West Germany.

(All India)—Genito Urinary and Endoscopic instruments.

Medicon, EgmbH, Tuttlingen, West Germany.

(All India)—General operating instruments for general, E.N.T., Thoracic and Cardiovascular Surgery.

Karlz Storz, Tuttlingen, West Germany.

(All India excepting Maharashtra, Madhya Pradesh, Rajasthan and Gujarat). Broncho Esophagoscopes, special E.N.T. instruments and apparatus.

Kerala Soaps & Oils Ltd., Oil Factory Division, Calicut, Kerala State (South India). Shark Liver Oil, Adamin etc.

Cyanamid India Ltd., Lederle Laboratories Division, Bombay-1. (South India). Broad spectrum antibiotics, Hematinics, Multivitamin and Chemotherapeutics.

#### GENERAL SALES DEPARTMENT:

Bush Boake Allen Ltd., London. Essences, Aromatic Chemicals, Natural Essential Oils, Harmless Food, Pigment Colours, Perfumery Compounds etc.,

Atlantis (East) Ltd., Calcutta. Barley, Robin Ultramarine Blue, Boot Polishes, Floor Polishes, Brasso, Silvo, Toiletries and Perfumeries etc.

Britannia Biscuit Co. Ltd., Calcutta. Biscuits.

Burmah-Shell Oil Storage & Distributing Co. of India Ltd., Match and Paraffin Wax.

Corn Products Co. (India) Private Ltd., Bombay. Glucose-D, Dextrose, Corn Flour, Fruit Squashes and Syrups etc.

C. Doctor & Co. Private Ltd., Bombay. Industrial Starch, Liquid Glucose.

Standard Chemicals & Pharmaceuticals Co., Bombay. Saccharine.

The Indo-Burma Petroleum Co. Ltd., Calcutta. Paraffin Wax.

The Metal Box Co. of India, Ltd., Madras. Crown Corks.

W. J. Bush Products Ltd., Madras. Essences, Essential Oils, Chemicals, Colours, Perfumeries, Pharmaceutical Chemicals.

Amstel Brewery, Amsterdam. Beer.

Cognac J. Godet Fils, La Rochele. Brandy.

Gippsland & Northern Co-op. Co. Ltd., Melbourne. Condensed and Powdered Milk, Skimmed and Full Cream Milk Products.

Hindustan Milkfood Manufacturers Ltd., Nabha.

Horlicks Ltd., Slough. Horlicks Milk Powder, Milkose, Baby Food, Cheese, Ghee etc.

India Paper Pulp Co. Ltd., Calcutta. Writing, Printing and other special papers.



Lamiwax Corporation, Madras. Packaging Material, Waterproof Kraft, Hessain, Polythene Liners, etc.

Scotia Distilleries Ltd., Dumbarton.

D. & C. Stern & Co. Ltd., London. Beer & Whisky.

Manjunatheswara Camphor Works, Mysore. Camphor — lump & tablets.

Bararee Coke Co. Ltd., Calcutta.

#### EXPORT DEPARTMENT :

Besides exporting Group's manufactured goods, exports of other Indian Manufacturers also undertaken. Suitable Indian Products located for foreign buyers.

#### AIRLINES AGENCIES :

Air Ceylon.

Air France.

Air India.

Alitalia Italian Airlines.

British Overseas Airways Corporation.

Cathay Pacific Airways.

Indian Airlines Corporation.

KLM Royal Dutch Airlines.

Lufthaansa German Airlines.

Middle East Airlines.

Pan American World Airways System.

Qantas Empire Airways.

Sabena Belgian World Airlines.

Scandinavian Airlines System

Swissair

Trans-World Airlines

United Arab Airlines.

#### STEAMER AGENCIES :

Hansa Line, Bremen (Agents at Kakinada, Visakhapatnam, Cuddalore, Masulipatnam and Nagapattinam).

International Chartering Services Inc., New York.

Moller Line (U.K.) Ltd., London.

Stevenson Lines T. J. New York.

Southern Steamships (London) Ltd., London

#### TRAVEL AGENTS :

Cox & Kings (Agents) Ltd.

#### EMIGRATION AGENTS :

The Government of Natal.

#### CLEARING AND FORWARDING AGENTS :

We undertake clearance from the Harbour on behalf of a number of firms who import machinery and spares.

**PATEL BROTHERS.**, Cotton Brokers and Machinery Importers, 6, Chemical Engineering Consultants, Fabricators and Erectors. Manufacturers of Kerodex Barrier Creams. Veer Nariman Road, Fort. Partners—Jehangir P. Patel and Shavak P. Patel. Telegraphic Address: "PATELBROS." Phone Nos.: 251236-9, 251072. Post Box No. 399, Bombay.

**PATEL & CO., B.C.**, Direct Importers of Essential Oils and Aromatic Chemicals, Perfumery Compounds, Food Colours, Soap Colours, Hair Oil Colours, etc. No. 1, Devkaran Mansion, 79, Princess Street, Bombay 2. Grams: "Snehalata." Phone: 20366.

#### Agents for :

1. H. Roab & Co., Holland (Aromatic Chemicals).
2. Dragoco (W. Germany) (Essential Oils and Aromatic Chemicals).

3. P. Robert & Cie., Grasse, France (Essential Oils).

4. Aceto Chemicals' Yara Yara Crystals.

**P. R. Patell & Co. Private Ltd.**, Union Co-operative Insurance Society Building, Sir Phirozshah Mehta Road, Fort, Bombay 1. Industrial Security Consultants, Public Relations Consultants, also dealing in Paper Cones & Textile Mills Accessories, Cotton piece Goods, Dog Accessories & Sundries. *Managing Director*: Sorab Patell, J.P. Phone No.: 253393. Residence Phone: 212216, Tel Address: "PILOT", Bombay.

**PATEL-VOLKART PRIVATE LIMITED**, Volkart Building, 19, Graham Road, Ballard Estate, Fort. Cotton Exporters, Importers, Merchants and Commission Agents.

*Managing Director*: Jahangir P. Patel.

*Directors*: Shavak P. Patel, Werner Holderegger, Minocher P. Dadachanji and alternate Directors—H. B. Dhondy, Ernst Thalmann.

Tel. Address:—"Patvolka".

Phone: 26-1531 (8 Lines).

Post Box No. 399, Bombay 1.

Paulsom Plant Cellulose Works, 25, Union Park, Chembur, Bombay 71. Phone: 521141. Grams: "EMBOSSD."

Pavri Sons & Co., Export-Import Merchants, P.O. Box No. 463. 93/97, Bazargate Street, Fort, Bombay.

**PAVRI & SONS, FRAMROZ HORMUSJI**, Pavri House, 20, Gunbow Street, Fort, Bombay. Phones: 264158 & 262539. Government and Municipal Contractors, Shamianas, Mandap, Stands, Exhibitions, Electric Light & Fans, Suppliers on hire of Glassware, Furniture, Crockery and Decorations of all sorts.

Payne & Co., Solicitors and Notary. Esplanade House, Waudby Road, Fort. Telephone Nos. 26-2284 and 26-2285. Telegraphic Address:—"Paynes," Bombay.

K. K. Lala, B.A., LL.B.

S. N. Vakil, B.A., LL.B.

C. R. Jussawalla, M.A., LL.B.

Mrs. Z. N. Gamadia, B.A., LL.B.

E. J. Balsara, LL.B.

K. D. Mehta, B.A., LL.B.

*Solicitors & Advocate Assistants*:

F. K. Vakil, LL.B.

N. A. Vesuvala, B.A., LL.B.

#### PEARLINE-PARIS PRIVATE LTD.,

Mfrs. of Hair & Beauty Specialities, Rahman Building, 24, Veer Nariman Road, Bombay 1.

Tel. Address: "Pearlab". Phone: 254337.

**PETROLEUM AND MINERALS PRIVATE LTD.**, Head Office: Rahimtoola House, Homji Street, Fort. Burmah-Shell Kerosene Agents. *Chairman*: A. A. Jasdenvala. *Managing Directors*: Panachand M. Vora.

Telephone Connections:—

Head Office: 251144.

States Office: 332599.

## PEST CONTROL (INDIA) PRIVATE LTD.

Consulting Entomologists — Termite Control — Disinfestation & Fumigation Service.



Member :

National Pest Control Association Inc.  
U.S.A. Entomological Society of India.

Address :

Yusuf Bldg., Mahatma Gandhi Road,  
Bombay 1.

Telephone : 251546-7.

Telegrams : "PESTCIL."

*Managing Director*: Shri N. S. Rao.

*Branches* :

New Delhi : B/5, Defence Colony, New Delhi 3; Calcutta : 10, Chowringhee Road, Calcutta 13. Phone : 235076.  
Grams : "PESTCIL."

Madras : 2, Errabalu Chetty Street, Madras 1. Phone : 24835.

Poona : Attar Bldg., Chinchwad P.O. Bombay-Poona Road, Poona 10.

Coimbatore : 177, Jail Road, Coimbatore 1. Phone : 5975. Grams : "PESTCIL."

Bangalore : 12, Saleh Ahmed Bldg., 105/1, Infantry Road, Bangalore 1.

Allahabad : 15, Pannalal Road, Allahabad 2. Phone : 3642.

Baroda : 198, Sardar Nagar Society, Chhani Road, Baroda 2.

Visakhapatnam : 25-12-46 Godeyvari Street, Visakhapatnam 1.

Hyderabad : 6-1-1070/1, Lakdika Pul, Raj Bhavan Road, Hyderabad 4.

Ernakulam : XXIII/13166-C, Mahatma Gandhi Road, Ernakulam 6.



## PFIZER LIMITED

Manufacturers and Distributors of a complete range of Pharmaceuticals, Animal Health Products, pharmaceutical chemicals, agro-chemicals and nutritional products.

### Registered Office :

163, Backbay Reclamation,  
BOMBAY I

(Phone : 246031—10 lines)

### Offices & Depots:

Ahmedabad, Ambala, Bombay, Bangalore, Calcutta, Cuttack, Ernakulam, Gauhati, Indore, Jaipur, Lucknow, Madras, New Delhi, Patna, Secunderabad and Srinagar.

### Plants:

1. Powder Works Bunder, Darukhana, BOMBAY 10  
(Phones : 376141, 374033)
2. 178, Industrial Area,  
CHANDIGARH (Punjab)  
(Phone : 995)

**PHALTAN SUGAR WORKS LTD.**, Manufacturers of Sugar, Sangli Bank Bldg., 4th Floor, 296, Bazargate Street, Bombay 1. Phone: 253339, 256866. Grams: "RISINGSUN".

**Pharmed Private Ltd.**, Manufacturers and Distributors of Biologicals & Pharmaceuticals. 25/31, Ropewalk Lane, Fort, Bombay 1.

**PHOENIX CHEMICAL WORKS PRIVATE LTD.**, Bachooabai Building, 187, Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 266409. Grams: "WATER-GLASS". Bombay. Manufacturers of Sodium and Potassium Silicates, Electroplating Chemicals & Compositions.

**PHIPSON & CO. LTD.**, No. 1, Bakehouse Cross Lane. Telegrams: "Phipson," Bombay. Tel. Nos. 253996 & 253997. Branch Manager: D. Miranda. Head Office: Calcutta. Branches in India—Delhi, Madras, Cochin, Visakhapatnam, Bangalore and Jorhat, and Cuttack.

**PHIROZ N. MOTABHOY & CO. PRIVATE LTD.** Textile Stores Specialist. Motabhoy Building, 146, Nagindas Master Road (Meadows Street), Bombay-1 BR. Phone No. 255717. Tel. Address: "Eelug", Bombay. Sole Selling Agents:—SWASTIK BOBBINS MFG. CO. PRIVATE LTD., HYDERABAD.

**Photo-Masters**, Commercial Photographers, 23, Hamam Street, Bombay 1.

**Pioneer Consolidated Company of India Ltd.**, Manufacturers' Representatives, Insurance, Shipping, Clearing & Forwarding Agents, Importers and Exporters.

Head Office: 14/64, Civil Lines, Kanpur;  
11-13, Horniman Circle, Fort, Bombay 1.  
Phone: 253326. Grams: "PIONIND".

Grams: "COWSIE" { Bombay &  
Ahmedabad.

### PICKERS LIMITED

Manufacturers of Quality Pickers of all Sizes & Descriptions for the Textile Industries.

Head Office:

Ellis Bridge, Ahmedabad 6.

Phones { Office : 7205  
Works : 2755

Branch: 43, Tamarind Lane, 4th Floor, Fort, Bombay. Phone: 25-3707.

Pioneer Enamelling Works, for Enamel Signboards and Enamelwares, 24, Laxmi Building, Sir Phirozshah Mehta Road, Fort, Bombay.

### PIONEER MAGNESIA WORKS LTD.

THE., 113/115, Mahatma Gandhi Road, Bombay-1, BR. Phone: 252843. Grams: "MAGNESIA." Manufacturers of Magnesium Chloride (ISI specifications), Calcium Chloride (technical and anhydrous), Epsom Salt and Magnesium carbonate.

### PIONEER TRADING CO. THE,

Dealers in:

Light & Heavy Industrial Chemicals & Auxiliaries.

Address:

210, Samuel Street, Vadgadi, Bombay-3.

Grams: "CHEMITRADE"

Phone: 324607

**Pitamber & Co.**, Scindia House, Ballard Estate. Freight and Chartering Brokers. Phone: 261066. Grams: "Sagarnur".

**Pitamber Laljee & Sons**, Freight Brokers, Bharat House, Apollo Street, Bombay 1.

**Pitamberdas Lallubhai & Co.**, Non-Ferrous Metalwares Mfrs., 86, Kansara Chawl, Kalbadevi Road, Bombay 2. Phone: Office: 20916. Grams: "KATORIWALA".

**Pitamberdas Mohanlal & Sons**, Precious Stones & Gems Merchants, 4, Mandlik Road, Bombay 1.

**PLAS-FAB PRIVATE LTD.**, Advent, 8th Floor, 12A, Foreshore Road, Bombay-1. Telephones: 218281 & 213282. Telegrams: "FILTERFAB". Suppliers of Textile & Printing Machine Clothing i.e. Woollen Machine clothing, Textile Printing Blankets, Offset Rubber Blankets, Moleakin, Kersey Flannel, Damping Hose, Webbing and all types of Industrial Filter-cloth, Woven and Non-Woven.

**PLASTIC & INDUSTRIAL CORP. PRIVATE LTD.**, Amar Building, Sir Phirozshah Mehta Road, Fort, Bombay 1. Manufacturers of Rotaflex Lighting Fittings, Kaycee Lamp Shades & PIC Household Ware and Picolite Containers. Also Custom Moulders to the leading manufacturers in the Country. Grams: "PICPLAST," Phones: 253263, 251027 and 62759.

**PLASTICABLES PRIVATE LTD., THE**, Manufacturers of "VINOLITE" Brand P.V.C. Insulated Wires and Cables. Auto-Cables, P.V.C. Insulation Tape, Sleeveings and Transparent Tubings and all types of Thermoplastic extruded products. Lentin Chambers, 36, Dalal Street, Fort, Bombay. Grams: "POLYPLAST." Phone: 254898.

## P. K. VELU & CO. (PVT) LTD.

111, Mahatma Gandhi Road,  
BOMBAY-1.

### Manufacturers of Industrial Chemicals

Solvents & Plasticizers, Phosphoric Acid and Industrial Phosphates, Mercuric Chloride, Oxide & Iodide, Phenyl Mercury Acetate & Mercury Seed Dressings, Cupric Chloride, Copper Oxychloride, Copper Sulphate & Zinc Phosphide.

### Agents to the Government of Maharashtra

for

Absolute Alcohol, Rectified Spirit, Industrial Alcohol and Specially Denatured Spirit

### Distributors for Esso Standard Eastern Inc.

Industrial Lubricants, Greases, Oils and Solvents

### Warehousing Department

Fully Licensed Warehousing Facilities for all types of Chemicals

### PLUCK & CO. (Estd. 1902)

Sales Office: 415, Commerce House, Meadows Street, Bombay 1.

Badges, Advertising Gifts like Key Chains, Paper Weights, Paper Cutters, Table Calendars, everything in soft plastics like Wallets, Memo Pads, Files, Diaries etc.

Phone: 251131 Grams: "INTERSEAS".

Pochee, C. S., & Son (Estd. 1884), 586, Chira Bazar, Girgaum Road, Bombay 2.

**POLSON LIMITED**, 65B, Dockyard Road, Mazagaon, Bombay 10 (D.D.). Branch: Calcutta. Butter & Casein Factory: Polson Model Dairy, Anand and Patna; Coffee Factory: Mazagaon, Bombay. Gift and Local Sales Bureau: No. 237, Frere Road, opp. G.P.O., Bombay. London Agents: Levettus Ltd., Grams: "Polson," Mazagaon, Bombay.



**POLYCHEM LIMITED**, Manufacturers of POLYSTYRENE Plastic Moulding Materials, 'Polynite' High Impact Sheets, Styrene Monomer, Toluene, Ethylbenzene, Poly Ethylbenzene, Industrial Alcohol and Fuel Oil. *Registered Office*: 45-47, Apollo Street, Fort, Bombay 1. Phones: 254259. 254752, 251301. Grams: "POLYCHEM".

*Board of Directors*: Ramdas Kilachand (Chairman), Gulabchand Hirachand, Ramnivas Ramnarain Ruia, Ambalal Kilachand, B. K. Daphtary, Ratilal K. Shah, M. et. Muthiah, E. K. Stilbert, R. W. Lundeen, R. A. Shah (Alternate Director to Mr. E. K. Stilbert) and R. W. Forsythe (Alternate Director to Mr. R. W. Lundeen).

Polymer Corporation, Manufacturers & Printers of 'HIPACK' brand Polyethylene Bags and Liners, Tubular Film, Sheeting and Cane. 70, Kansara Chawl, Kalbadevi Road, Bombay 2. Phones: Office: 334557. Grams: "WALKAL."

## POLYOLEFINS INDUSTRIES LIMITED

*Registered Office*: Mafatlal House, Backbay Reclamation, Bombay 1.

Telephone: 246281.

Telegram Address: "PILENE".

Manufacturers of High Density Polyethylene, Processed Polyethylene Products, Aluminium Organic Compounds, Technical Know-how and Financial collaboration agreement with FARBERWERKE HOECHST AG. of West Germany.

*Factory at*:

Thana-Belapur Road, Thana District, Maharashtra, India.

### BOARD OF DIRECTORS

Mr. Arvind N. Mafatlal, *Chairman*.  
Dr. R. G. Aickin.

*Alternate*: Mr. J. R. Stephenson.

Mr. W. Thies.

*Alternate*: B. R. Tannan.

Mr. R. G. Saraiya.

Mr. N. M. Wagle.

Dr. B. Storkebaum.

Mr. N. V. Vora, *Administrative Managing Director*.

Dr. A. Schmetterling, *Technical Managing Director*.

**POONAGER BILIMORIA & CO.**, Architects, Civil Engineers, Surveyors, Appraisers, Adjusters for Insurance Coys. and Rating Surveyors & Valuers, Cama Bldg., 24-26, Dalal Street, Fort. Phone Nos.: 253625 (Office) & Res. 376562 (Shri Poonager), 351796 (Shri (Billimoria), and 372329 (Shri Rao).

Poonjajee, J. M., Jehangir, J.P., The Fruit Farm Products Co. Manufacturers & Exporters of Fruit Squashes, Syrups, Jams, Jellies, Marmalades, Spices, Pickles, Curry Powder, Herb and Crude Drugs, Fresh and Dehydrated Fruits & Vegetables, Fresh & Frozen Fish & Meat. Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 262120.

**POONJAJI, M. M., & CO.**, 42, First Marine Street, Bombay 2. Manufacturers & Exporters of "SHIP BRAND", "GREEN LABEL" Indian condiments, Mango Chutneys, Pickles, Madras Curry Powder and Curry Paste, Bombay Ducks, Pappadoms and Sugar Cane Vinegar. Telegraphic Address: "Preserve." Telephone Nos. 22412, (Res.) 241846.

Popular Electric Stores, Wholesale and Retail Dealers in Everything Electrical, 414, Hararwalla Building, Golpitha Corner, Bombay 4.

Popular (Imp-Exp) Trading Co., Importers and Exporters. Javeri House, 110, Medows Street, Fort, Bombay. Phone: 255701. Grams: "PENWORK". Sole importers for products manufactured by: Oerlikon Machine Tool Works, Zurich, Switzerland, Reiners & Furst, M. Gladbach, Germany, Ellerwerke Maschinenfabrik, Hamburg, Germany, Rheydter Maschinen & Spindel-fabrik (Rhld.), Germany. (For further particulars see Bombay Agents for Overseas Firms Section).

**POWER-GAS CORPORATION LTD.**, THE (Incorporated in the U.K. with limited liability).

*Head Office*: England

(Member of the DAVY ASHMORE GROUP)

Designers and Manufacturers of Plant and Equipment for the Iron and Steel, Gas, Chemical, Oils & Fats, Petroleum and Nuclear Chemical Industries.

*Bombay Office*: Meher Chambers, Nicol Road, Ballard Estate, Post Box No. 1331, Bombay 1. Phone: 261481, 264370, Telegrams - "TETRATOMIC."

*U. K. Associates*: Ashmore, Benson, Pease & Company Limited, Davy and United Engineering Company, Limited Davy and United Instruments Limited, Davy and United Roll Foundry Limited, Davy-Ashmore International Limited, John M. Moorwood Limited, Rose, Downs & Thompson Limited.

*Overseas Associates*: Davy-Ashmore (Bahamas) Limited, Davy-Ashmore Canada Limited, Davy-Ashmore Central Africa (Pvt.) Limited, Davy-Ashmore (India) Limited, Davy-Ashmore Proprietary Limited, Davy-Ashmore South Africa (Pty.) Limited, Power-Gas France S.A.

Prabhat Electric Equipment Corp., Noble Chambers, Parsi Bazar Street, Fort, Bombay 1. Phone: 254594.

Prabhat Udyog Ltd., Manufacturers of Gas Mantles, Lanterns and Accessories, Noble Chambers, Parsee Bazar Street, Fort, Bombay.

Praffullchandra & Co., Engineering Tools Merchants, Hararwala Bldg., Lohar Street, Bombay 2.

Prahladrai Dalmia & Sons. Paper & Board Merchants, 51, Podar Chambers, Bombay 1.

Pravin & Co., Engineers & Machinery Merchants. Agents for "ASHOK" Drillings, Hacksaws, Dogchucks, Grinders, Shapers & "IEC" Grade I Lathes and Shapers. "RIBCO" truechucks; 85/92, Nagdevi St., Bombay 3; Grams: "POWERPIECE". Phones: 326451 and 324538.

**PRAVIN BROTHERS & CO.**, Chemicals Importers & Stockists, Commerce House, Medows Street, Bombay 1. Phone: 251748 & 252419. Grams: "WIDESCOPE". Importers & Stockists of Chemicals, Sulphur, Solvents, Pyridene Base, Gypsum, Polysol S. 5 & Polysol S. 6 Jute & Products, Limestone & Lime, Pharmaceuticals & Laboratory Chemicals, Fertilizers and Essential Oils, etc.

**PRAVINCHANDRA D. BROS.**, 105, Kika Street, Gulawadi, Bombay 4. Phone: 332419. Grams: "RODSBRASS". Dealers & Stockists of non-Ferrous Metals & Semi finished Products-Copper & Brass Rods, Pipes, Sheets, Sheathing, Wire Strips, etc. Phosphor Bronze, Rods & Wires. Aluminium Sheets, Rods, Wires & Tubes, Stainless Steel Sheets, Tubes & Rods.

Premier Aerated Waters Private Ltd., Mfgs. Aerated Waters. Lamington Road North, Bombay 8.

Premier Furnishing & Decorating Private Ltd., Interior Decorators, Manufacturers & Suppliers of all kinds of Furniture and Stockists of "Dunlopillo" Products. 7, Brabourne Stadium, Churchgate Street Extension, Fort. Phone: 245632.

Premier Glass Traders, Importers and Stockists of all kinds of Glass, Frames, Plywood, Mounts, Glaziers' Diamonds, etc., 76/78, Dhanji Street, Bombay 3. Grams: "Reason." Phones: 326845 (Office) and 71837 (Res.).

Grams: "RUBERGOODS."

Bombay Mandvi.

Phone: 326551.

### PREMIER RUBBER & CABLE INDUSTRIES

Jamal Building, 211, Nagdevi Street, Bombay 3.

Manufacturers of Quality Rubber Goods such as 'PREMIER' Cycle and Rickshaw Tyres and 'PREMEX' Tubes, Rubber Hose Pipes (Delivery and Suction), Petrol and Oil resisting Hose Pipes, Rubberised Texture Cloth, Rubber Beltings, Moulded and Extruded Articles.

Premier Typewriter Co., 235, Dr. Dadabhoy Naoroji Road, Above Kemp & Co., Fort, Dealers in typewriters. Phone No. 261737.

### PRESSURE PILING CO. (INDIA)

**PRIVATE LTD.**, Patent Compressed Concrete Piles. Foundation and Cementation Specialists. *Registered Office*: Savoy Chambers, West Wing, Wallace Street, Fort, Bombay. Phone Nos. 26-3941 and 26-1456. Post Box No. 319, Bombay 1. Tel. Address: "PRESUR-PILE" Bombay. Godown: 222, New Sewri Road, Cotton Green, Bombay 33.

*Managing Director*: C. V. Deshpande, B.E., M.I. Struct. E. (Lond.), F. Am. Soc. C.E.

*Directors*: G. P. Bhandarkar, M.B.E., B.A., L.C.E., M.I.E. (Ind.), I.S.E. (Retd.), P. K. Tongaonkar, B.E., M.I.E. (Ind.), Mrs. Pramila Deshpande.

Press Trust of India Limited (News Agency), Petit Building, 357, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Grams: "Press-trust," Bombay. Phone: 252371.

**PROTOS ENGINEERING CO. PRIVATE LTD.**, Consultants, Engineers and Manufacturers.

*Head Office*: 173, Jamshedji Tata Road, Churchgate, Bombay-1.

Phone: 246040, 246047-8-9. Telegrams: "PROTODYN."

*Branches*: Sixth Radial Road, Connaught Place, New Delhi-1. P-8, Mission Row Extension, Calcutta-1. 7/3, Patullos Road, Mount Road, Madras-2.

*Managing Directors*: Mr. H. Grabenhorst, Mr. N. N. Kapadia, Mr. G. Wilhelm.

*Directors*: Mr. M. E. Haskell, Mr. F. K. Heller, Mr. H. N. Kapadia, Miss S. Mansukhani; *Secretary*: Mr. U. K. Rao.

Briquetting Plants, Cables and Wire Rope Plants, Centrifugal Pumps, Chemicals, Chemical Plants, Cranes, Diesel Engines and Diesel Generating Sets, Dust Cleaning Plants, Dressing and Handling Plants for Ores, Coal and Minerals, Equipment for the Rayon and Synthetic Fibre Industry, Forgings and Castings, Foundries, Hot Blast Cupola Plants, Industrial Machinery, Locomotives, Low Temperature Carbonisation Plants, Machines for Processing Rubber and Plastics, Marine Equipment, Measuring Instruments, Oilfield Equipment, Plants for Production of Iron and



Steel Recuperators, Roller Products and Pipes made of Steel, Ferrous and Non-ferrous Alloys, Rolling Mills and Rolls, Steam, Turbines, Sugar Machinery, Tin Printing and Can Making Machinery, Tungsten Carbide Products, Water Turbines.

Pundole Watch Co., 263, Dr. Dadabhoj Nowroji Road, opp. "Lloyds Bank," Fort. Dealers in Watches, Clocks, Timepieces and Jewellery.

**PUNEGAR, N. E., & CO.,** Union Bank Building, Dalal Street, Fort, Bombay 1. Phone No. 253178. Telegrams "ACME-COMPO", Bombay "ACME". Compounds for descaling Boilers & Economiser, "Acme" Anti-Corrosive Application (Block point) for Metallic Plants.

**PURE DRINKS PRIVATE LTD.,** Worli Naka, Bombay 18. Phone: 374218-373685. Grams: "PUREDRINKS". Authorised bottlers of Coca-Cola and Fanta Orange and Manufacturers of Soda Special. General Manager: S. Charles Singh.

Purshotamdas Madhavanl & Co. Private Ltd., Stevedores, Clearing and Forwarding Agents, Botawalla Building, 8, Horniman Circle, Fort. Phones: 251687, 253159, 264558. Tel. Address: "Stevedore."

Pyrotex India Limited, 9, Wallace Street, Fort, Bombay 1. Phone: 263031. Grams: "ALPYRO". Manufacturers of: Pyrotex Mineral Insulated Copper or Aluminium covered Cables.

**R. C. EDWARDS & CO., PRIVATE LTD.,** 16, Arthur Bunder Road, Colaba, Bombay 5. Phone: 212032. Grams: "Eddicom". Manufacturers of ARGO Taximeters Kienzle Vibracorders and other Precision Instruments.

Chairman, Board of Directors: Sardar Bahadur Bakshi Dalip Singh.

Managing Director: Major Jagtar Singh. Chief Agents for the State of Maharashtra: Kanwal & Co. Private Ltd., 16, Arthur Bunder Road, Colaba, Bombay 5.

**R. C. H. BARAR & CO.,** Bazar House, 237/243, Abdul Rehman Street, Bombay 3. General Merchants, Importers, Exporters and Manufacturers' Representatives, Dealers in Pencils, Ball Pens, Stationery, Chains, Buttons, Plastic Powder, Tailoring Materials, etc. Grams: "ATAL". Phone: 326039 & 327034.

**R. Mohanlal & Co.,** Mill Gin Store Merchants, 38, Bibijan Street, Bombay 3.

**R. S. Traders,** 16, Khorshed Bldg., Sir Phirozeshah Mehta Road, Bombay 1.

## RADIANT ELECTRIC & MACHINERY CO.

Sir Vithaldas Chambers, Bruce St., G.P.O. Box 33, Bombay 1.

Phone: 255296, 370385.

Grams: "RADIANT"

Engineers & Contractors

Mfrs. of Welding Transformers, Exhaust Fans & Centrifugal Blowers, Stockists & Suppliers of Machinery & Equipments.

Branch:

Mangal Bhuvan, 2750, Relief Road, Ahmedabad.

**RADIOCRAFTERS, THE,** Radio Sound and Refrigeration Engineers, Land Mansion, opp. Charni Road Railway Station, 21, C-D, Queen's Road. Phone No. 354406 (Office) & 356003 (Works).

Radio Services:—India's oldest radio magazine—Now in the 29th year. Annual Sub. Rs. 8 (Inland), Rs. 12 foreign. 417, Lamington Road, Bombay 4. Phone No. 351801. Tel. Address: "Voltohm."

**RAJ & CO.,** Printing press material dealers. 40, Cowasji Patel Street, Bombay 1. Phone: 254455, Grams: "INKOPRINT." For details please see in Printing Press material.

**Raj-Der-Kar & Co.,** Merchants & Instrumentation Engineers, Specialists in Instruments for Research & Industry. Chemical Engineering Process Equipment. Sadhana Rayon House, Dr. D. Naoroji Road, Fort. Phone: 262304. (P. B. X 4 lines), Grams: "TECHLAB." Branch Office: 44/6, Regal Building, Connaught Place, New Delhi 1. Phone: 46761. Grams: "Rajderkar".

**RAJE INDUSTRIAL & ENGINEERING COMBINE PRIVATE LTD.,** "Commonwealth", Opp. Nariman Point, Post Box No. 1323, Bombay 1. Phone: 245650. Telegrams: "INDUSEAST". Representatives in India of Messrs. Secheron Works Co., Geneva (Switzerland) for Electrical Locomotives, Power Plants, Transformers, Motors, Rectifiers, Regulators, etc. Civil and Structural Engineers. Works at Bhandup.

## RALLIS INDIA LIMITED

Bombay Head Office: Ralli House, 21, Ravelin Street, Fort, Bombay 1. P.O. Box 166. Telephone Nos.: 26-8221 (8 lines); Pharmaceutical Division 26-2994 (2 lines). Tel. Ad. Ralli.

Calcutta Office: 16, Hare Street, Calcutta 1. Phone No. 234351 (7 lines). Tel. Ad. Ralli.

Madras Office: Ralli House, 320, Linghi Chetty Street, Madras 1. Phone No. 29281 (6 lines). Tel. Address: "RALLI."

Delhi Office: Marshall House, No. 1, Hanuman Road, New Delhi 1. Tel. No. 45811, 13. Tel. Ad. "Ralli".

Directors: Bodh Raj Tannan (Chairman), A. D. Mango (Managing Director), H. J. Kahn, C. Merriek, P. A. Narielwala, Leslie Sawhny, Kenneth Sheppard, H. J. Silverston and N. P. Vakil (alternate to Mr. Khan).

Subsidiaries: Ralliwolf Ltd. for manufacture of Wolf Electric Tools; Ralli Chemicals Ltd. for manufacture of Superphosphate, and Hemalatha Textiles Ltd. for manufacture and sale of Yarns.

Associated Company: Boehringer-Knoll Ltd. for manufacture of Pharmaceutical Products, including Antibiotics.

**Rajkamal Supplying Stores,** 295, Abdul Rehman Street, Bombay 3. Phone: 321805. Direct Importers and Stockists of Paints and Dry Colours, Brushes & Artistic Materials and Manufacturers of Chromes, Lakes, Dry Colours and Poster Colours.

## RAMCHAND MATHRADAS AGGARWAL

Agricultural Implements, Hardware, Machinery, Iron & Steel Tools, Pipe Fittings, Non-Ferrous Representatives & Manufacturers

Phone: 326075 & 328942

Grams: "PIPEDIE".

Sarang Street, 30, Khokha Bazar, Bombay-3.

Ramjanally Ebrahim Currim, Investor in Industrial Joint Stock Cos. Office: 22, Apollo Street, opp. State Bank, Fort, Bombay. Tel. Address: "Biblock." Phone Nos. 251151 & 245464.

**RAMNIKLAL MAGANLAL & CO.,** Iron, Steel and pipes Merchants. Carnac Siding Road, Bombay 9. Phone No. 325292. Grams: "TESTED". Bombay.

## RANE PVT. LIMITED

Proprietors of:

## EMPIRE AUTOMOBILES

Largest Importers of Automotive Products.

New Queen's Road, Bombay 4.

Grams:

Phone: 354275. "AUTOWORKS".

Branches:

Kashmere Gate, Delhi.

Mahatma Gandhi Road, Secunderabad.

**RANJIT SALES & PUBLICITY PRIVATE LTD.,** 111-A, Mahatma Gandhi Road, Fort, Bombay No. 1. (Advertising Service Agents.) Telegrams: "RANJITSALB". Phone: 251121. Branches: 32, Metcal Street, Calcutta-13. Telegrams: "RANJITAD (c)" Phone: 234253, 60-2, Janpath, New Delhi—Telegrams: "RANJITADV". Phone: 48876.

**RASIK PUBLICITY COMPANY,** 7/9, Bell Lane, Fort, Bombay 1. Accredited by Indian & Eastern Newspaper Society, New Delhi and Member of Advertising Agencies Association of India, Bombay; Contact for "Anything & Everything" in advertising. Phones: Office: 252930, 256529. Res. 372132; Grams: "RASIK-PUBCO".

Rasiklal & Company, Lampware Mfrs. & Dealers. Peerbhoy Building, 89, Princess Street, Bombay 2.

**Ratlal, P., & Co.,** 43, Dhanji Street, Bombay 3. V-Belts & Crucibles. Phone: 325980. Grams: "ETERNAL".

**Raval & Co.,** Electric Cables & Wires Merchants, Shreeji Bhavan, Lohar Chawl, Bombay 2. Phone: 23720. Grams: "GODSPEED".

**Ravin Trading Company,** 5, Mohatta Market Palton Road, Bombay 1. Phone: 26-4883, Grams: "BEWITCH". Dealers in Everything Electrical.

**READYMONEY PRIVATE LTD., C. R. H.,** 107, Mahatma Gandhi Road, Fort, Bombay 1. Importers, Exporters, Seed Merchants. Phone Nos. 253379 & 255348. Grams: "CRUSTREAD".

**Recondo Pvt. Ltd.,** Co-operative Insurance Building, Sir P. M. Road, Bombay 1. Road Construction Contractors. Specialists in Asphalt Surfacing. Phone: 254622. Grams: "CONDO", Bombay 1.

**Reliance Trading Co.,** Vithal Sayana Building No. 1, Lohar Street, Bombay 2. Phone: 38751, Grams: "STORETRADE".

**REMEDIOS & SONS** (Registered as Small Scale Industry No. MH/R-311 of 4-4-1962. Manufacturers of Surveying Instruments, Cama House, 255, Dadabhoj Naoroji Road, Fort, Bombay 1. Phone: 263336.



# RICHARDSON & CRUDDAS LIMITED

(Estd. 1858)

CONSTRUCTIONAL AND MECHANICAL ENGINEERS, IRON AND BRASS FOUNDERS, SANITARY AND REFRIGERATION ENGINEERS, METALS, MACHINERY AND HARDWARE MERCHANTS.

**HEAD OFFICE & WORKS:** Byculla Iron Works, Post Box 4503, Byculla, Bombay 8.

**BRANCH OFFICE & WORKS:** First Line Beach, Post Box 1276, Madras 1.

**Corresponding Firm:** S. B. Industrial Development Co. (U.K.) Ltd., 1, Mint Walk, Croydon, Surrey, England.

**Codes Used:** Western Union, 5-Letter, Bentley and A.B.C. 5th edition.

**Telegrams:** "IRONWORKS" Bombay and Madras.

**Telephone Numbers:** 370011 (Bombay), 22401 (Madras).

**HEAD OFFICE & WORKS, BOMBAY:**

**CHAIRMAN:** Sir Dhiren Mitra, C.B.E.

**MANAGING DIRECTOR:** J. B. Armstrong, A.M.I.Mech.E.

**MANAGER:** F. J. Fonseca, B.Sc., B.E., M.I.E. (India).

**Manager, Structural and Sanitary Engineering Departments:** W. Fernandes, B.Sc., B.E., M.I.E. (India).

**Structural Engineering Dept.:** P. V. Naik, B.E., A.M.I.E.; M. M. Raut; M. J. Mohini; B. R. Damania; R. D'Silva; O. D'Souza.

**Manager, Mechanical Engineering and Metals & Agencies Departments:** T. G. Share, A.M.I.E.D.

**Mechanical Engineering Dept.:** P. Simon, L.M.E.; B. A. Ghadiali; M. D'Lima; A. C. Kuriakose.

**Chief Accountant:** B. J. Suntook, A.C.A.

**Assistant Accountant:** K. J. Kamath.

**Personnel Officer:** K. P. Mahale.

**Assistant Personnel and Welfare Officer:** D. M. Patole.

**Metals & Agencies Department:** F. F. Madan.

**Sanitary Engineering Department:** R. J. Meyers.

**Works Manager:** D. H. Kale.

**Works:** B. Oliver; K. Deva Rao, B.Sc., Met.; M. J. Bilimoria; C. A. S. Sopher; P. V. Sawal; R. D'Cruz; A. Benn; B. D. LaPorte.

**BRANCH OFFICE & WORKS, MADRAS:**

**Branch Manager:** F. C. Mathias, B.E. (Civil).

**Assistants:** M. A. Krishnamurthy, B.E. (Mech.); T. C. Sundaram, B.A., A.I.C.W.A.; H. M. Sonu Rao; T. K. Rama Rao, B.E. (Mech.); R. N. Vadivel; R. C. Ramaswamy.

**REMINGTON RAND OF INDIA LTD.,** Typewriters and Supplies, Kardex, Graph-dex and Linedex visible systems for Management Controls. **Head Office:** 3, Council House Street, Calcutta. Post Box No. 188, Calcutta. Phone: 237401 (10 lines), Grams: "REMINGTONS". **Regional Office:** Thackersey House, Graham Road, Ballard Estate, Post Box No. 455, Bombay. Phone: 265591 (3 lines). Grams: "REMINGTONS". Other Regional Offices: Delhi, Madras, Lucknow, Calcutta.

**RENOWN BISCUIT CO., THE,** Biscuit Manufacturers, Connaught Road, near Victoria Gardens, Bombay 27. Tel. Address: "Rebiscuit." Phone No. 377282.

**REUNION ENGINEERING CO. PRIVATE LTD.,** Electrical & Mechanical Engineers and Contractors. **Head Office:** Amar Building, Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 251371. Grams: "RECOWIND". **Factory:** Old Atlas Mills Compound, Reay Road, Bombay 10. Phone: 378616.

**ROBERTS, McLEAN & CO., LTD.,** Engineers and Merchants, "Ilaco House," Sir Phirozshah Mehta Road, Fort. P.O. Box No. 452. Telegraphic Address: "Roblean." Phone: 26-1502. Godown: Kalachowky Road, Chinchpokli. Phone: 72805.

**Managing Director:** K. Tapuriah.

**Manager:** S. Mansukhani.

**Assistants:** M. L. Daga.

**Head Office:** 2, Brabourne Road, Calcutta-1. **Madras Office:** 24, Errabalu Chetty Street, Madras 1. **Delhi Office:** 9-B, Pusa Road, New Delhi 5.

**ROCHE PRODUCTS LIMITED,** Manufacturers of Bulk Vitamins and Roche Pharmaceutical Specialities. Registered Office: 28, Tardeo Road, Bombay-34 WB. Post Bag No. 7901. Tel. Address: "HOFROCHE". Phones: 370284/7. Roche Pharmaceutical Laboratories: 24/26, Tardeo Road, Bombay 34 WB. Phones: 370284/7. Chemical Works: Bombay-Agra Road, Village Balkum (Dist. Tbara). Phones: 591292 & 591640. Delhi Regional Office: Roche Products Ltd., 18, Bazar Marg, Rajendra Nagar, Delhi-5. Phone: 52230, Grams: "HOFROCHE", Delhi.



## WOOD & METAL WORKING POWER TOOLS

**Regd. Office & Plant:**

P. O. Baroda Rayon Udhna,  
Dist. SURAT.

Tel. 336.

**Bombay Office:**

18/20, Cawasji Patel St.  
Fort, Bombay 1 (BR)

Tel: 256830

**ROCKHARD FIRE ENGINEERS,** Fire Protection Engineers. 25, Bank Street, Bombay 1. Phone: 254292. Grams: "ROCKHOSE".

(For details see in Fire Fighting Equipment Mfrs. & Dealers).

**ROWE & ROWE** (Prop.: P. G. Bhuleskar). Importers & Dealers of Musical Instruments Parts, Drugs & Medicines, Motor Vehicle Parts, Surgical Instruments & General Merchandise etc. 381, Dr. D. Naoroji Road, Flora Fountain, Post Box 622, Bombay 1. Phone: 252369. Grams: "ROWCO".

**Rowlandson Bros.** (Estd. 1927), Importers, Exporters, Stationers, Printers, Paper Merchants, Dealers in: Drawing Materials and Artists Requisites. Manufacturers of Teleprinter Paper Rolls 1 & 4 ply. Adding Machine Paper Roll & White and Blue Cloth lined Paper rolls in required sizes. Podar Chambers, Parsi Bazar Street, Fort, Bombay 1. Phone: 251107 (Office) and 264861 (Resl.). Grams: "Telltrue."

## HOMOEOPATHY

The Leading House in Western India for genuine and reliable Homoeopathic and Biochemic medicines, globules, bottles, corks and other Physician's requisites; Books—American, English and Indian Publications.

**ROY & COMPANY,**

176, Princess Street, Bombay 2.

Phone: 20504.

Grams: "HOMOPATHS".

**Royal Drug & Pharmaceuticals Co.,** 38, Princess Street, Bombay 2.

**ROYAL EXCHANGE ASSURANCE** (Incorporated in England with Limited Liability.) Indu House, Dougal Road, Ballard Estate, Bombay 1. Fire-Motor-Marine-Accident-Workmen's Compensation, etc. Tel. Address: "Foxhound." Phone No. 264022. Post Box: 891. **Branch Manager:** M. M. Chakrabarty.

**ROYAL HARDWARE MART,** 108, Nagdevi Street, Bombay 3. Phone: 325221 and 323464. Grams: "MANILA-ROPE". All types of Hoses in Rubber, Plastic, Metallic & Canvas for Water, Air, Pneumatic, Oil etc. Rubber Belting—Vee Belts, "Wormdrive" Clip & Fittings. Distributors for Dunlop, Cosmos, Venus, Garware, Goodyear, etc.

**ROYAL INSURANCE CO., LTD.** (Incorporated in England; Stockholders' Liability Limited), 12, Jamshedji Tata Road, Bombay. (Fire—Loss of Profits—Motor—Accident (all classes)—Engineering—Aviation—Marine). **Branch Manager:** R. A. Isanc. Tel. Address: "Royal." Phone No. 246226 (5 lines). P. O. Box 1847. **Head Office:**—1, North John Street, Liverpool, England.

**Royal Paper Stores,** Importers and Stockists of Paper, Boards, etc., 187-89, Abdul Rehman Street, Bombay 3. Phone: 321103. Grams: "ROSTOPAPER".

**Royal Traders,** Dealers in Bakery & Confectionery Requisites, 283, Nagdevi Street, Bombay 3. Phone: 38133. Partner: H. N. Shah.

**RUBY INDUSTRIES,** Motor Body Builders and Sole Selling Agents for "Weston" Hydraulic Tipping Gears. (On Government and Municipal List), 75, Dr. Annie Besant Road, Worli, Bombay 18. Phones: 370588 & 370671 Grams: "MOTOR-BODY". **Associates:** Ruby Industries (Ahmedabad), P.O. Naroda (Ahmedabad).



R. R. Jinde & Co., Weaving Store Suppliers,  
14, Mohan Nivas, Chandavarkar Road,  
Bombay 19. Phone : 472267.

## "CONDUITS"

for  
Industrial & House Wiring

Approved By

- 1) National Test House ALIPUR-CALCUTTA
- 2) Fire Insurance Association of India, BOMBAY

**R. S. S. G.**  
**CONDUITS & TUBES**  
**PVT. LTD.**

Dabisar, East 123/436  
Bombay 68. \* Fazal Gunj,  
Kanpur.  
Phone : 661397 Phone : 34427

### RUPCHAND TARACHAND & CO.

Exporters, Importers & Manufacturers' Representatives for all types of Bangles, Metal Combs, Goldsmith tools, Plastic goods, Metalised articles, etc.

67-69, Bazargate Street, Fort, Bombay 1.  
Phone : 26-1430.

Tel. Add. "MERUSHIKAR".

### RUTTONSHA SIMPSON PRIVATE LTD.,

International House, Bombay-Agra Road, Vikhroli, Bombay 79. Phone : 581688. Grams : "LECRUT", Bombay. Manufacturers of Multimeters, Electronic measuring Instruments, Insulation Testers, Panel Meters, etc. in collaboration with Simpson Electric Company of Chicago, U.S.A.

### S. H. KELKAR & Co., PRIVATE LTD.

Manufacturers of :  
Aromatic Chemicals & Perfumery  
Raw Material.

Office :

36, Mangaldas Road, Bombay 2.  
Phone : 29130.

Factory :

Near Balrajeshwar Temple,  
Agra Road.

Phones : 591713 & 592498.

Managing Director :

Mr. V. G. Vage.

S. Mathuradas & Co., Industrial & Pharmaceutical Chemicals Merchants. Bode Chawl, Princess Street, Bombay 2.

S. Mehta & Co., Anees Chambers, Carnac Road, Bombay 1.

S. Ramchandra & Co., Artists' & Students' Art Materials, C/5, Sitaram Building, opp. J. J. School of Art, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone : 265344.

**SADDBHAKTI PRAKASH PRINTING PRESS PRIVATE LTD.**, Publishers & Fine Art Printers. Chairman & Managing Director : Laxmikant S. Dabholkar, J.P.

Managerial :—G. Y. Kamat, General Manager.

Head Office :—Devkaran Nanjee Buildings, 22, Horniman Circle, Fort, Bombay.

Press :—12, Homji Street, Fort, Bombay, Phones : 252955 & 251715.

### THE SAFEGLAS CORPORATION PRIVATE LTD.

Mfrs. of : "GLASEF" brand toughened Safety Glass.

Phone: 324395.

Grams : "DIADEM".

### SANDOZ (INDIA) LIMITED, Registered

Office : Shiv Sagar Estate, 'B' Block, Dr. Annie Besant Road, Worli, Bombay 18.

Manufacturers (under Licence from SANDOZ Limited, Switzerland), Importers, Exporters and Distributors of Agrochemicals, Chemicals, Dyestuffs, Pharmaceuticals and Alkaloids.

Head Office : Shiv Sagar Estate, 'B' Block, Dr. Annie Besant Road, Worli, Bombay 18. Grams : "SANDOPHARM", SANDYE.

Dyes, Chemicals & Agrochemicals Dept. : Dr. H. J. Frank, E. E. Eichenberger, S. P. Chandavarkar, S. M. Bhagwate, J. N. Billmoria, M. M. Rao.

General & Finance Dept. : K. Reiser, D. R. Gupta, N. K. Kyare, S. C. Kaji.

Pharmaceutical Dept. : Dr. J. N. Banerjee, Dr. S. K. Bhattacharya, Dr. R. Moulik, Dr. V. Vasudeviah, Dr. P. Balwani, H. A. Khan, P. D'Souza.

Factory : P. O. Sandoz Baug, Thana. Phone Nos. : 591220 - 591528 - 591938 - 591939. E. Datta, N. N. Bhattacharya, C. B. Sheth, V. Dharmaraj.

Sales Offices : Bombay, Calcutta, Delhi, Madras, Gauhati, Srinagar, Indore, Poona, Patna, Hyderabad, Vijayawada, Bangalore, Ernakulam, Jaipur, Lucknow, Ahmedabad.

**SANGHAVI & SONS**, Importers & Exporters. Sanghavi Chambers, 27, Ghoga Street, Fort, Bombay 1. Phones : 253502 (Office) and 357336 (Residence). Grams : "VIRVANDAN." Proprietors : M. K. Sanghavi ; Madhu Sanghavi.

Sanj Vartaman Printing Press & Office : Pera Building, Apollo Street, Fort. Phone No. 38709. Newspaper/Job Printers of Repute.

**Sapt Textile Products (India) Private Ltd.**, Sapt Building, Graham Road, Ballard Estate, Bombay. Merchants and Exporters : Cotton and Textile wastes. Directors : K. J. Kirpalani, W. M. Wolf, F. Vogelsang, S. Marcus. Tel. Address : "Cascam". Post Box No. 318. Phone : 262091, TELEX PR 14.

**SARDESAI BROTHERS LTD.**, Regd. & Head Office : 82, Advent, 12-A Foreshore Road, Bombay 1. Phone : 213377. Grams : "SARCELL". Factory at : Billmora (W. Rly.). Phone : 131. Grams : "SARDESAI." Manufacturers of Quality Textile Chemicals, Lubricants, Preservatives, Detergents, Resin Finishes, Carboxy Methyl Cellulose, etc.

## SARABHAI MERCK LIMITED

44, Maulana Abdul Gaffar Khan Road, Worli, Bombay 18. Phones : 379331, 374505 ; Grams : "SAMERK." Manufacturers of Vitamin C, Vitamin B<sub>6</sub>, Sorbitol, Mannitol, Guaranteed Reagents, Laboratory Reagents, Acids and Solvents, & MERCKOZONE, etc. in collaboration with E. Merck, A.G., Darmstadt, W. Germany. Sole Selling Agents for : Niacinamide, Vitamin B<sub>12</sub>, 'Madhurin' brand Saccharin, INH & Diodoquin, etc. Manufactured by Messrs. Synbiotics Limited, Baroda. Sole distributors of Pharmaceutical Specialities manufactured by : Emedia Export Co. m.b.H. under license from E. Merck, A.G., Darmstadt, W. Germany. Indenting Agents for : Fine Chemicals, Laboratory Reagents, etc. of E. Merck, A.G., Darmstadt, W. Germany. Sole Selling Agents for : Solvent Ether B.P. and Anaesthetic Ether B.P. manufactured by Messrs. Industrial Solvents & Chemicals (P) Ltd., Bombay.

**SAURASHTRA WIRE HEALDS MFG. CO. PRIVATE LTD.**, Manufacturers of Wire healds, Inserted ring wire healds, wire drawing and Flattening and tinning. Sole Selling Agents : Madhu Corporation, Sanghavi Chambers, 27, Ghoga Street, Fort, Bombay 1. Phones : 253502 (Office) and 357336 (Residence). Grams : "VIRVADAN" and "MADHU" CORP". Factory : 18, Udyognagar, Bhaktinagar Station Road, Rajkot (Saurashtra); Phone : 943. Grams : "WIREHEALDS", Rajkot. Managing Directors : M. K. Sanghavi ; Madhu Sanghavi.

### SAURASHTRA ENGINEERING CORPORATION PRIVATE LTD.

(Estd. 1948); Manufacturers of Chemical & Pharmaceutical Plant & Equipments. 106, Bazar Ward, Kurla-Bombay 70 AS. Phone : 51674 ; Factory : 51242 ; Grams : "SINSANATY."

**SAVITA CHEMICALS PVT. LTD.**, Commissariat Building, 5th Floor, 231, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone : 265446, 263807. Grams : "SOLVO." Manufacturers of : "Liquid Paraffins B.P., Snow White, Yellow Petrolatums BP/ USP, Hydraulic Brake Fluid, Soluble Cutting Oils, Petroleum Specialities, etc.

**SCHERING ASIA G.m.b.H.** Manufacturers of Pharmaceutical Specialities on behalf of Messrs. Schering Asia G.m.b.H. Berlin, West Germany, and Scientific Information Service, India Branch : Post Box 10085, Bombay 1. Phone : 245266, Grams : "SCHERASIA."

Scientific Instrument Co., Ltd., Navsari Building, 240, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Importers, Manufacturers and Stockists of Scientific Instruments, Apparatus and Appliances for Education, Research and Industry. Agents for Leica Camera and Accessories. Tel. Address : "SICO", Phone No. 26-2642. Offices also at Allahabad, Calcutta, Madras and New Delhi.



**S. H. BENSON (INDIA) LTD.,***Managing Director:* Mr. P. L. Palmer.*Bombay:* Steelcrete House, Dinsha Wacha Road, Bombay 1.*Calcutta:* Govind Bhawan, 2, Brabourne Road, Calcutta-1.*Madras:* 3/18, Mount Road, Madras 2.*Delhi:* Vohra House, 1/25, Asaf Ali Road, New Delhi 1.*London:* 215, High Holborn, London W.C.2.

**SCINDIA STEAM NAVIGATION CO. LTD.,** Scindia House, Ballard Estate, Bombay 1. Tel. 268161. Grams: "JALANATH" (for Coastal Service). "SAMU-DRAPAR" (for Overseas Service). Business: Shipping.

**BOARD OF DIRECTORS:***Chairman:* Dharamsey M. Khatau.

*Directors:* Shantikumar N. Morarjee; Mrs. Sumati Morarjee; Sir Chunilal B. Mehta; Jehangir P. Patel; Krishnaraj M. D. Thackersey; N. K. Petigara; Girdharilal Mehta; Gopaldass Tulsidas; H. M. Patel, I.C.S. (Retd.); Y. N. Sukthankar.

*Branch Offices:* Calcutta, Karachi, Chittagong, Mangalore, Kandla and Saurashtra Ports.

**SCOTTISH UNION AND NATIONAL INSURANCE CO.,** 16, Bank Street, Post Box No. 49, Fort, Bombay. Western Zone Manager: K. M. Dastur. Grams: "NUFAM." Phones: 251985 & 255052.

**SELVEL SYNDICATE,** All-India Outdoor Publicity Organisers, Hashim Building, 38, Churchgate Street, Fort, Bombay. Associated offices in Delhi, Calcutta, Madras, Bangalore and Jaipur.

**SEPULCHRE BROTHERS (INDIA) LTD.,** Importers-Exporters and Engineers, Taj Building, Dr. Dadabhoy Naoroji Road, Fort, P.O. Box No. 754, Bombay.

Tel. Nos. 261871 and 261872. Tel. Address: "Beleast".

*Managing Director:* H. M. Dalal.*Managers:* P. V. Ramanayya; D. T. Gandhi; J. C. Oonwalla; P. S. Shivram.*Secretary and Accountant:* M. G. Shah.**Branches:**

Calcutta, P.O. Box No. 2041. *Manager:* A. K. Gupta. Madras: P.O. Box No. 91. *Manager:* K. B. Chandran.

**SETHISONS PRIVATE LTD.,** Registered Office: 12, Rampart Row, Bombay 1. Phone Nos.: 254772, 256592. Administrative Office: 159, Colaba Road, Bombay 5. Phone: 212602. Grams: "SETHISON". Branches: Kandla, New Delhi and Calcutta. *Managing Director:* S. B. Sethi.

## "SEI" ELECTRICAL EQUIPMENTS

VOLTAGES TABILISERS, TRANSFORMERS, CURRENT & POTENTIAL TRANSFORMERS, RECTIFIERS, & HIGH VOLTAGE TESTERS.

*Manufacturers:*

**SHURESH ELECTRICAL INDUSTRIES**

Roshan Nagar, Chandavarkar Lane, Borivili, Bombay-92.

**SEWRI ENGINEERING CONSTRUCTION CO., PRIVATE LTD.,** Civil Engineers and Contractors, Specialists in Design & Construction of Reinforced Concrete Structures.

*Office:*—Savoy Chambers, West Wing, Wallace Street, Fort, Bombay 1.

Phone Nos. 26-3941 & 26-1456. Post Box No. 319, Bombay 1.

Tel. Address: "TIROD," Bombay.

*Godown:*—222, New Sewri Road, Cotton Green, Bombay 33. Phone No. 375818.

*Mg. Director:* C. V. Deshpande, B.E.M.I. Struct. E. (Lond.), F. Am. Soc. C.E., M.I.E. (Ind.). M.R.S.E.

*Technical Directors:* P. R. Tongaonkar, B.E., M.I.E. (India) and S. C. Deshpande, B.Sc. (Eng.) Lond., M.Phil. (Lond.).

*Engineers:* M. J. Padwal, B.E., H. J. Mantry, R. T. Pawar, B.E., E. G. Vagholikar, B.E., A. H. Supnekar, B.E., P. B. Sharma, B.Sc. (Tech.).

Shah & Bros., Files & Hardware Merchants, 234, Nagdevi Street, Bombay 3.

**SHAH & CO., PRIVATE LTD., A. H.,** Nanabhay Mansion, Sir Phirozeshah Mehta Road, Fort. Phone: 26-1930. Grams: "OCSAH." Sole Representatives: —H. & R. Johnson Ltd. (Tiles); Johnson Bros. Ltd. (Sanitarywares); Johnson Bros. (Hanley) Ltd. (Domestic Tableware); Fordham Pressing (Cisterns).

**SHAH CONSTRUCTION CO., LTD.,** Engineers and Contractors, 198, Churchgate Reclamation, Jamshedji Tata Road, Bombay 1. Specialists in Prestressed & R.C.C. Bridges, Asphalt & Cement Concrete Roads, Dams & Canals; R.C.C. Works of all types and Public Health Works undertaken with Mechanical Equipment. Experts in Gunite, Phone: 245044 (3 Lines). Grams: "SUPER-TRADE", Bombay.

Shah Patel & Co., Mill Gin & Hardware Merchants, 109-111, Nagdevi Street, Bombay 3.

Shah Tarachand Shamji, Sewing Thread Mfrs., Nagdevi Street, Bombay 3.



Manufactured by  
**SHAH INDUSTRIES**

8, Ebrahim Mansion, 866/68, Kalbadevi Road, Bombay 2.

Phone: 39038. Grams: "CYCLEBELL."

Shah Trading Corporation, Goldsmith Tools and Hardware Merchants, Oomrigar Building, Opp. Crawford Market, Bombay 3. Phone: 322873 (Office) & 691632 (Res.).

**SHALEBHOY TYEBJEE & SONS** (Est'd 1840), 12, Bruce Street, Fort, Bombay 1. Phones: 252367 & 252368; (Res.) 212151.

Grams: "ROTATOR." Agents & General Merchants, Shipchandlers and Suppliers to Mills and other industries.

Shalimar Paints Limited, Hamilton House, 1st Floor, Graham Road, Ballard Estate, P.O. Box No. 1516, Bombay 1. Telephone No. 265012.

## SHALIMAR TAR PRODUCTS 1935 LTD.

Manufacturers of Coaltar and Bitumen products. Specialists in Asphalt flooring, Roof Water-proofing, Damp-proofing, Decking, Canal linings, etc. Contracts executed under guarantee. Specialists in design and constructions of Prestressed Concrete. 16, Bank Street, Fort, Bombay 1. Phones: 251321 & 254643. Grams: "TARSTIL". H.O. 6, Lyons Range, Calcutta.

*Bombay Manager:* Shri P. Raghavan.

Shamsun & Co., Exporters of BARYTES, PAINTS, Electrical Accessories etc. 11, Bruce Street, Bombay 1. Tel. Address: "Shasun". Phone: 252167.

**SHAMSHER STERLING CABLE CORPORATION LTD.,** Regd. Office: Vaswani Mansion, Dinshaw Vaccha Road, Bombay 1. *Manufacturers of:* Electric Cables & Wires, Magnetic Wires, PVC Power Cables, in technical collaboration with Messrs. Showa Electric Wire & Cable Co. Ltd., of Japan and A.C.S.R. & A.A. Conductors. Factory: Plot No. 7, Suburban Scheme 1, Kirol, Ghatkopar, Bombay 77. *Board of Directors:* Major General Shanta Jung Bahadur Rana, *Chairman & Managing Director:* Colonel Shahi Shamsheer Jung Bahadur Rana, *Vice-Chairman & Director:* Mr. Tsunezo Ono, Mr. Toshio Kambe, Mr. S. C. Pardiwalla, Mr. M. V. Arunachalam, Mr. Chandrakant S. Kirloskar, Mr. Chandrakant S. Desai, Mr. Ganga Bahadur Khatry, Mr. Hari Ram Jaitly.

**SHANTILAL G. SHAH & CO.,** Advertising Agents, Designers & Printers, Manu Mansion, 16, Custom House Road, P.B. No. 1682, Bombay 1. Phone: 251865.

**SHAPARIA DOCK & STEEL CO. PRIVATE LTD.,** Shipbuilders, Engineers & Contractors—Suppliers to D.G.S. & D., Director of Industries & C.P.O., Railways, P.W.D., Port Trusts, Electricity Boards, Municipalities, etc., specialising—Cargo and Passenger Vessels, Tugs, Barges, Launches, Life Boats (Ordinary & Motor), Row Boats, Dinghies, Life Saving Appliances, Buoyant Apparatus, Mooring Buoys etc. Also Lighterage Contractors to Mineral Ore Exporters. Corrugated Steel Pale Fencing, Ornamental Compound Gates, Rolling Shutters (Ordinary & Fireproof), Rolling Grills, Fire Proof Steel Doors, Collapsible Gates, Tipping Wagons, Light Railway Equipments, Wheel Barrows, Refuse Hand Carts, Platform Trucks, Light Structural Steel Works, Roof Lights, Lead-Ulite (Lead Wool), Steel Rollers, Garden Benches, Tree Guards, Steel Tanks etc. Sewree Fort Road, Bombay 15. Phone: 60071-72. Gram: "SHAPARIA", Bombay.

**SHAPOORJI PALLONJI & CO. PRIVATE LTD.,** Building Contractors to Government and Railways, 70, Meadows Street, Fort, Bombay. Phone No. 251534. Grams: "GINFRAME".

Shapurji, B. K., & Co., Importers & Indentors of Aromatic & Fine Pharmaceutical Chemicals, Laboratory & Biological Reagents, Stains, Essential Oils, Solvents, Flavour & Perfumery Raw Materials, Terpeneol & Terpene Derivatives, Pressure Gauges, Sanitaryware. 819, Dr. Dadabhoy Naoroji Road, P.O. Box 1065, Fort Bombay 1. Grams: "SEVENSEAS".



### SHARDA ELECTRIC CO.,

159/63, Lohar Chawl, Bombay 2.  
Electrical Accessories, Wires & Cables,  
Conduits & Fittings, Overhead Line  
Materials, Single & Three Phase Meters,  
Exhaust Fans, Appliances etc.  
*Authorised Distributors:* Phillips' Light-  
ing Equipments, MEI, MEM Switch-  
gear, Starters, etc.  
Phone: 20478.  
Grams: "TEAKCASING."

### SHETHIA, S. D., & CO., PRIVATE LTD.

Dealers in Coal, Coke, Dyes, Chemi-  
cals, Salt, Starches, Glucose, Hes-  
sian & Gunnies, Gypsum, Colliery  
Equipment & Stores, Transport,  
C.I. Pipes, Refractories, etc.  
*Head Office:* F/2 Gillander House,  
8 Netaji Subhas Road, Calcutta-1.  
Phone: 22-9933 (5 Lines). Grams:  
"SCHETHIACO". Tele No.: 523,  
Code 021.  
Branch: Podar Chambers, Parsi  
Bazar St., Fort, Bombay-1. Phone:  
25-5505. Grams: "SHETHIACO."

Sharp, R., & Son, Ltd., Stevedores, Dubashes  
and Marine Contractors, Kaiser-I-Hind  
Building, Currimbhoy Road, Ballard  
Estate. Tel. Address: "Granite." Phone  
No. 262440.

### SHAW WALLACE & CO., LIMITED

Merchants and Agents, 3, Wittet Road,  
Ballard Estate, Fort, Bombay.

Codes Used: Acme, Bentley's Complete  
Phrase Code and Second Phrase Code.  
Tel. Address: "Shawlace". Shawport  
(For Shipping Agency). Telex No.  
359. Phone No. 264051 to 264054.  
Post Box No. 203.

*Head Office:* Calcutta. Other branches at  
Madras, Delhi.

*London Correspondents:* R. G. Shaw &  
Co., Ltd., 19, Leadenhall Street, E.C.3.  
Telegram: "AUGHT", London.

*Bombay Director:* G. Crasemann, Res.  
Tel. 212773. *Assistants:* G. Klinge,  
Res. Tel. 365770, G. P. Oommen, Res.  
Tel. 211487 (*Signs per pro*), G. M. Palekar  
*Accountant*, P. N. K. Sarma, *Wines &  
Spirits/Yeast Sales & Secretarial*. J. M.  
Mani, *Administrative Officer*.

#### Agents:

Allan Whyte & Co., Ltd., Glasgow  
(Unit, British Ropes Ltd.,) (Wire  
Ropes).

American Cyanamid Co., Inc., New  
York ("Cyanogas" Calcium Cyanide  
for plague control).

Celotex Ltd., London (Celotex board  
for heat insulation and acoustics).

Deutsche Dampfschiffahrts-Gesells-  
chaft "Hansa" Bremen.

(Cargo Service between India/North  
Continental and Red Sea Ports).

Hellenic Lines Limited, Piraeus-  
Greece, 29, Broadway, New York 6.

(Cargo Service between India/Red  
Sea/Middle East & U.S.A. Ports).

Ratnakar Shipping Co., Ltd., Calcutta  
(Cargo Service, Indian Coastal Ports).

KIE Hock Shipping Co. Ltd., Singapore  
(Cargo Service between India and Far  
East).

Passenger Agents: Norddeutscher Lloyd  
Bremen and Hamburg—Amerika  
Line, Hamburg (Passenger Service  
Continent/U.S.A.).

The Indian Yeast Co., Ltd., Calcutta  
(Tower Brand Bakers Yeast).

The Bengal Distilleries Co., Ltd.,  
Bhadrakali, Dt. Hooghly, Calcutta.  
(Haywards Liquors & Liqueurs).

The Steel Co., of Wales Ltd., London  
(Tin plates).

Jaipur Mineral Development Syndicate  
Private Ltd., Jaipur (Soapstone  
(Talcum) Powder and Lumps).

The Associated Soapstone Distributing  
Co. (Private) Ltd., Jaipur.

Udaipur Mineral Development Syndi-  
cate Private Ltd., Jaipur (Soapstone  
(Talcum) Powder and Lumps).

Commercial & General Insurance Ltd.,  
Sydney (Australia).

#### Attorneys:

Queensland Insurance Co., Ltd.

Sheraton & Co., Billiard Table and Furniture  
Makers, 131, Medows Street, Fort,  
Bombay 1. Phone: 255430.

### SHETTY CHEMICAL & ENGINEERING

**WORKS PRIVATE LTD.**, Manufacturers  
of Foundry Fluxes, Refractories, Boiler  
insulation materials, wire brushes, Motor  
Driven Flexible shaft tube cleaning  
Equipment and Accessories, Cutting Oils,  
wire drawing compounds, Rust Preventa-  
tives, Quenching Oils & Heat Treatment  
Products, etc. 43, Tamarind Lane, Fort,  
Bombay. Phone: 254433. Grams:  
"DATNARE".

*Main Works:* Saki Naka, Saki-Vihar  
Road, Bombay 72. Phone: 581536.

*Brush Works:* 12-C, I. C. Bose Road,  
Howrah, West Bengal.

*Associates:* Datson Raviraj & Co.,  
Private Ltd., Bombay.

*Tel. Address:* "Coalpits." Telephone  
No. 246291 (9 lines).

Shilpi Advertising Ltd., Shahibag House,  
13, Wittet Road, Ballard Estate, Bombay  
1.

**SHISHIR & CO.**, Importers & Stockists of  
Alloy & Tool Steel. Agents for Poldi Steel  
of Czechoslovakia. *Head Office:* 140,  
Medows Street, Bombay 1. Grams:  
"SHISHIRCO". Phones: 254756-255077.  
*Sales Office:* 62, Nagdevi Street, Phones:  
328047, 324508; Res.: 472983.

Shree Bombay Watch Co., Direct Importers  
of Watches, Clocks and Jewellery. 160,  
Dr. Dadabhai Naoroji Road, Bombay 1.

### SHREE KARNATAK ACENCIES

Foundry material, Paper merchants,  
dealers,

48, Western India House, Pherozshah  
Mehta Road, Fort, Bombay 1.

Phone: 254220.

Grams: "SACHOTI."

Shree Mahavir Electric Trading Co., Stockists  
of Electrical Goods and Appliances and  
Insulating Materials, etc. 182, Zaveri  
Bazar, Bombay 2. Phone: 38722. Grams:  
"DIPOTSAVI".

Shroff & Co., Shipping & Clearing Agents,  
Alice Building, Dr. Dadabhai Naoroji  
Road, Bombay 1.

### SHREE VALLABH GLASS WORKS LIMITED

**TUFEX**  
TOUGHENED  
VALLABH  
GLASS  
S

**Manufacturers of: "TUFEX"**  
TOUGHENED & LAMINATED Safety  
Glass, Sheet Glass, Wired Glass, Figured,  
Rolled and all other types of glasses.

**Bombay Office:** 20, Old Custom House  
Road, Sylvester Bldg., Fort, Bombay-1.

**Telephone Nos.:** 251550, 327219

**Gram:** "YASHVADHO", BOMBAY

**Works No. 1:** Andheri-Kurla Road,  
Marol Naka, Bombay-59.

**Telephone No.** 571905

**Gram:** "TUFEX", ANDHERI.

**Regd. Office & Works No. 2:** Vallabh  
Vidyanagar, Anand, Gujarat.

**Telephone Nos.:** 182 & 270  
Anand.

**Gram:** "TUFEX", Vallabh  
Vidyanagar.

**Managing Directors:** M. J. Taktawala and  
J. A. Taktawala, B.Com.

**Technical Adviser:** K. A. Taktawala, B.Sc.

**General Works Manager:** C. A.  
Taktawala.

**Secretary:** P. J. Shah.

Shroff Transport Service, Opposite Police  
Station, Palton Road, Bombay 1.

**SIDHVA, PILOO D. & CO.**, Exporters,  
Importers & Agents. 24-B, Hamam Street,  
Raja Bahadur Compound, Fort, Bombay 1.  
Phone: 254309. Grams: "PILSICO,"  
Bombay. Exporters in: Vegetable Oils,  
Soaps, Paints & Varnishes, Engineering  
Goods, Electrical Goods, Ferrous & Non-  
ferrous Metals, Food Products, Sea food,  
Handloom and other Textiles. Importers  
of Machinery, Plants & Steel.

**SIGMA LABORATORIES**, Plot No. 43  
(South), Wadala, Bombay 31. Manu-  
facturers of high quality Pharmaceutical  
preparations and specialties. Phone No.  
441458. Grams: "Signalab."

Sigman & Co., Importers & Exporters, 802,  
Himalaya House, Palton Road, Bombay 1.

### SIMPLEX MILLS COMPANY LIMITED, THE

*Manufacturers of:* Cotton Canvas, Belting  
Ducks, Bleached and Dyed Poplins,  
Long Cloth, Dobby and Check Shirting,  
Terecotton Shirting and Full volles.

*Directors:*—Surajratan Damani, Esq.,  
J. R. Motishaw, Esq.; Bhairuratan  
Damani, Esq.; Lalitchandra C. D.  
Nanjee, Esq.; Madanmohan R. Rula,  
Esq.; Ramkrishna Harivallabhdas;  
Esq.; N. K. Suntook, Esq.; O. M.  
Somany, Esq.; Shriyans Prasad Jain,  
Esq.; S. K. Somany, Esq.; Premratan  
Damani, Esq.

*Registered Office and Mills at:* 30, Clerk  
Road, Jacob Circle, Bombay 11.

*Telegraphic Address:* "SIMPLEYARN."

*Telephones:* 378617, 377481, 377903.

M. G. Damani (*Executive Officer*).

B. L. Kasliwal (*Manager*).

O. D. Purohit (*Secretary*).

A. P. Ananthkrishnan (*Spinning Master*).



M. B. Nadkarni (*Weaving Master*).

N. M. Motiwalla (*Bleaching & Finishing Master*).

K. C. Shekhar (*Engineer*).

Simplex Timber Mart, 64-66-68, Ibrahim Mohamed Merchant Road (Pydhonie Road), Khadak, Bombay 9. Phone: 331794. Grams: "LADDERMAN."

**SINDHI CLEARING AGENCY, (ESTD. 1930)**, Godown Keepers & Clearing and Forwarding Agents. 384-C, Dabholkar Wadi, Kalbadevi Road, Bombay 2. Phone: 22646.

**SIR KASTURCHAND PRIVATE LTD.**, Exporters, Importers, Financiers and Commission Agents, Kodak House, Dr. Dadabhai Naoroji Road, Fort, P.O. Box No. 53. Phone No. 263170. Tel. Address: "Dagaco."

Sirur, N., & Co. Private Ltd., 70, Forbes Street, Temple Bar Building, Fort. Managing Agents: The Mysore Spinning and Manufacturing Co., Ltd., Minerva Mills Ltd., The Modern Mills Ltd., and Secretaries & Treasurers: Sundatta Foods & Fibres Ltd. Tel. Address: "CHAMUNDI." Phone Nos.: 251067, 252962, 252903.

S. K., & Co., Dealers in Electrical Goods, Gopal Nivas, 133, Princess Street, Bombay 8.

**SKF BALL BEARING CO., PRIVATE LTD., THE**, Head Office: Mahatma Gandhi Memorial Building, Netaji Subhas Road, Near Charni Road Rly. Station, Bombay 2, P.O. Box No. 71. Branch Office: Nilhat House, 11, Rajendranath Mukherjee Road, P.O. Box No. 588, Calcutta 1; Chopra Building, 2-E/1, Jhandewala Extension, Link Road, New Delhi; Distributors of Ball and Roller Bearings, Roller Bearing Axleboxes, Plummer Blocks and Textile Machinery Components like Pendulum Weighting Arms, Top Rollers,

Tape Tension Pulleys, Centre Sleeve Inserts, etc. Managing Director: C. O. Blomberg. Tel. Address: "SKEFKO". Phone Nos.: 22049/30055/20558 Bombay and 238731/32 Calcutta and 568000 New Delhi.

**SKODA (INDIA) PRIVATE LIMITED**, Consulting Engineers and Suppliers of heavy industrial plants, such as Cement and Ceramic Factories, Steam and Hydro-Electric Power Stations, Small and Medium Scale Industries, Coal washeries, Breweries, Brick making plants, Bottling Plants, Flour Mill Equipment etc. etc. from Czechoslovakia. Consultants for Suppliers of Inorganic Chemical Products Manufacturing Plants, Paper and Glass Manufacturing Plants from German Democratic Republic, Vulcan Insurance Building, Vir Nariman Road, P.O. Box 1963, Bombay. Tel. Address: "CZECHPLANT." Branches: Calcutta, New Delhi and Madras.

**SKODA (INDIA) PRIVATE LTD.**, Consulting Engineers and Suppliers of heavy industrial plants, such as Cement and Ceramic Factories, Steam and Hydro-Electric power stations, Small and Medium scale Industries, Coal washeries, Breweries, Brick raking plants, etc., etc. from Czechoslovakia, Vulcan Insurance Building, Vir Nariman Road, P.O. Box 1963, Bombay. Tel. Address: "CZECHPLANT." Branches: Calcutta, New Delhi and Madras.

**SMIDTH, F. L., & CO. (BOMBAY) PRIVATE LTD.**, Engineers, Manufacturers and Designers of Cement factories, Eros Cinema Building, 124/D, Queen's Road, Bombay 1-Bh. Phone No. 245796. Tel. Address: "Folasmidth."

Sodder & Co., A. M. (Established 1889). Oldest Custom-House Agents, Travel & Recruiting Agents: Agents at London,

Marmagao. Bank Street Building, Top Floor (Behind State Bank of India), 11, Bank Street, Fort, P.O. Box 708, Bombay. Telegrams: "Speedy." Phone: 255683.

Solanki & Sons, 18, Maulana Azad Road, 3rd Floor, Bombay-8. Manufacturers of: Oxy-Chloride Flooring in Charming Shades.

## SOLAR PROCESS STUDIO

(Prop., Bombay Art Printers).

Specialists in:—

Line - Half-tone - Multicolours Blocks, Matrices-Stereos-Designs-Layouts etc.

Office: 22 Apollo Street, Bombay-1.

Works: Near Safed Pul, Kurla-Andheri Road, Bombay 72.

Telephones: 35367 & 55798.

**SOPHER & COMPANY**, Manufacturers of "Sopher" Brand Elec. Accessories. Buona Casa, Sir Phirozshah Mehta Road, Bombay 1. Phone: 254729. Grams: "FAREAST".

**SORABJI & CO.**, Engineers and Machinery Merchants. Distributors for Crompton Motors, Pumps, Fans, Lamps, Fenner V Belts, Ringsdorff Carbon Brushes. Sir Jamshed House, 166, Bora Bazar Street, Fort, Bombay 1. Phone: 262036. Grams: "FIELDCOIL," Bombay.



# SINGER SEWING MACHINE COMPANY

market the popular range of

## MERRITT\*

SEWING MACHINES, FANS

AND

## SIMAC ART KNITTER

SEMI-AUTOMATIC HAND KNITTING MACHINES

Available from all SINGER\* Shops and  
Authorised Dealers throughout India

Office:

Singer Bldg., 207, Dadabhoy Naoroji Rd., Bombay 1.  
Grams: "SINGER". Phone: 263187.

\* A Trade-mark of the Singer Company

AS WELL AS

## SINGER INDUSTRIAL SEWING PRODUCTS AND FRIDEN ADDING & CALCULATING MACHINES

Branches at:

**Bombay:** Singer Building, 207, Dadabhoy Naoroji Road, P.O. Box 176, Bombay 1.

**Calcutta 1:** 29, Waterloo Street, P.O. 456. Grams: "COREGNIS". Phone: 232637.

**Ahmedabad 2:** Opp. Shaher Kotda Police Station, Reid Road. Phone: 24807.

**Delhi 6:** 21, Netaji Subhas Marg. Grams: "COREGNIS". Phone: 271453.

**Madras 2:** 12, Mount Road. Phone: 83998.



## SOLID CONTAINERS LIMITED

Regd. Office : 361, Dr. Dadabhoy Naoroji Road, Bombay 1.

Tel. Address : "LAMIBOARD."

Telephone : 254319.

Manufacturers of Pulp & Solid Container Boards.

Factory : Vadavli, Kalyan.

Board of Directors :—

Mr. Jayantilal Ranchordas Mehta,  
Chairman.

Mr. Rasesh Navinchandra Mafatlal.

Mr. Arvindkumar Nandlal Kilachand.

Mr. Thomas Thomas,

Mr. Dayanand Chandulal Kothari.

Mr. Minocher Kaekobad Tata.

Mr. Damodar Maganlal Ghia.

Mr. Jayvadan Jayantilal Ghia.

Mr. Dhananjaya Ranchordas Mehta.

Mr. Pratap Ratilal Parekh, Managing Director.

Mr. Ashok Navnital.

Mr. Ashok Navnital Chokshi,  
Managing Director.

Drambule Liqueur Co. Ltd., Edinburgh.  
Wm. Gaymer & Co. Ltd., London.  
Huntley & Palmers Ltd., Reading.  
John Haig & Co. Ltd., Markinch.  
Lanson Pere et Fils, Reims.

Martell & Co., Cognac.

E. I. Michel & Co. Ltd., London.

Kelvinator International Corporation,  
U.S.A.

Kelvinator Ltd., Bromborough,  
England.

Ronson Products Ltd., London.

Sandeman, George G. & Sons & Co. Ltd.,  
London.

Sir Robert Burnett & Co. Ltd., London.  
Tennent J. & R. Ltd., Glasgow.

## SORABJI NOWROJI & CO.

16, Horniman Circle, Fort,  
Bombay 1.

Largest Stockists and Oldest  
Exporters of Sandalwood,  
Sandalwood Oil, Palmarosa  
Oil

Indentors of Umbrella Cloth,  
Umbrella Fittings, Glass  
Beads and Artists Materials  
Manufactured by

M. MYER & SON LTD.  
Birmingham, England.

Telephones : 252410, 254181

S. R. Brothers, 406, Commerce House,  
Medows Street, Bombay-1.

Standard Metal Works Private Ltd., Mfr.  
of Non-ferrous Metal Goods, Lead Sheets,  
Lead Pipes, Lead Wool, Office : 17, Tardeo  
Bridge (Low Level), Bombay 34-WR.  
Phone : 375108. Grams : "BRASSLEAD."  
Factory : Standard Metal Compound,  
Morga, old Nogardas Road, Andheri (East),  
Bombay 69 (AS).

Standard Paper Box Mfg. Co.—51, Mangal-  
das Road, Lohar Street, Bombay 2.

STANDARD ROLLING SHUTTERS &  
ENGINEERING WORKS PRIVATE  
LTD., on Government & P.W.D. List.  
Office : 101, Mahatma Gandhi Road,  
Opp. Bombay University, Fort, Bombay  
1. Grams : "ROLSHUTTER". Phone :  
251468. Manufacturers of : M. S. Rolling  
Shutters, Ventilated Rolling Grilles,  
Collapsible Gates, Patent Shutter Gates,  
Alligator Doors, all Manually and Elec-  
trically Operated, Fireproof Rolling  
Shutters and Fireproof Doors—Sliding,  
Hinged and Automatic (approved by Fire  
Sectional Committee) and also Ornamen-  
tal Grilles and Compound Gates, etc. of  
any size. Install our famous Standard  
Rolling Shutters.

Standard Spares & Machinery Co., Importers  
& Distributors of Spare Parts of Diesel  
Engines, Tractors and Earthmoving  
Equipments, Bouna Casa, Sir Phirozeshah  
Mehta Road, Fort, Bombay. Phone :  
251192. Grams : "RINGCENTRE".

STAR CHEMICALS (BOMBAY) PRI-  
VATE LTD., Manufacturers of Chemicals  
and Acid Phosphoric, Sodium Phosphates,  
Hexa Meta Phosphate, Tetra & Poly-  
phosphates, Ammonium Phosphates  
(Mono-basic and Dibasic), Calcium Phos-  
phates and Allied Phosphates, Pre-  
treatment Chemicals for rust removing  
and rust proofing. 21, Noble Chambers,  
Parsee Bazar Street, Bombay 1. Phone :  
253016. Grams : "PEACOCK."

STAR METAL REFINERY PRIVATE  
LTD. (Estd. 1940), The only smelters  
of Antimony "Starmetal" in India. 361,  
Dr. Dadabhoy Naoroji Road (Hornby  
Road), Fort, Phone : 253347. Grams :  
"Starmetal." Factory : Vikhroli (Central  
Rly.). Phone : 581327.

Managing Director : Ramanlal Parikh.

STAR PAINT & OIL INDUSTRIES  
Crescent Chambers, 56, Tamarind Lane,  
Bombay 1. Mfrs. of Industrial, Marine  
and Building Paints; Natural and  
Synthetic Enamels. Specialist in  
"SILVEX" Aluminium Paint, Multi-  
purpose & HEATEX ALUMINIUM  
PAINT, High Temperature Heat Resist-  
ing upto 1200°F. Rubberex Rubber Paint  
(For Chemical Resisting). Grams :  
"Starpaint". Phone No. 253493.

STAR TRADING CO., PRIVATE LTD.,  
THE, Importers of Textiles Machinery,  
Textiles Engineers Merchants. Export  
Division—Exporter of Light Engineering  
Goods, Bank of Baroda Bldg., 12, Apollo  
Street, Fort, Bombay-1. Phone Nos. :  
253480 & 251357; Grams : "STAR-  
TRADE".

STEAM & MINING EQUIPMENT  
(INDIA) PRIVATE LTD., Head Office :  
207-B, Park Street, Calcutta-17. Phones :  
447551-4. Grams : THERMAL—Calcutta.  
Branch Offices : Bombay Mutual Cham-  
bers, 21, Hamam Street, Fort, Bombay-1.  
Phone : 25-2061. Grams : STEAMING-  
Bombay. 1/23B, Asaf Ali Road, New  
Delhi. Phone : 272634. Grams : STEAM-  
INGCO—New Delhi, No. 150/A-3, Mount  
Road, Madras. Phone : 82464. Grams :  
THERMAL—Madras. Dak Bungalow  
Road, Ranchi. Grams : 'THERMAL',  
Ranchi.

Manufacturers of :—

L. T. Switchboards, Miniature Circuit-  
Breaker Boards for Lighting, Feeder  
Pillars, L. T. Outdoor type Kiosks, Cable  
Joint Boxes, Current & Potential Trans-  
formers, Metering Kiosks, Triple Roll  
Mills for Paint Industry.

Importers of :—

Rectifiers, Transformers, Reactors, On-  
load Tap changers, Voltage Regulators,  
Lighting Arresters, Circuit Breakers,

SORABJI D. DARUWALLA, Manufac-  
turers & Importers of all kinds of Rubber  
Goods. Round Building, Kalbadevi Road,  
Bombay 2. Phone No. 30348. Grams :  
"REDCROWN".

SOUTH BRITISH INSURANCE CO., LTD.,  
Canada Building, Dr. Dadabhoy Naoroji  
Road, Bombay. Phone No. 26-4711.  
Grams : "British". All classes of General  
Insurance.

SOUTH INDIA INSURANCE CO. LTD.,  
"Moti Mahal", Jamshedji Tata Road,  
Fort, Bombay. Phone : 211051-2-3 &  
244448-68. Grams : "COMPOSITE";  
Business transacted : Fire, Marine, Motor,  
Miscellaneous.

South India Shellac Manufacturing Co. Ltd.,  
The, Nanabhoy Mansion, Sir Phirozshah  
Mehta Road, Fort, Bombay. Phone :  
265107. Manufacturers of Shellac,  
Buttonlac, Seed (Grain) Lac, Bleachedlac,  
Shellac-Wax, Shellac-Varnish, Sealing-  
wax, French Polish, and Sandalwood Oil.

Southern India Trading Corpn., Paper  
Merchants & Commission Agents, Hima-  
laya House Hornby Road, Fort.

SPENCER & CO., LTD., Spencer's Build-  
ing, Forjett Street, Off Gowalla Tank,  
Bombay 26, Importers & Exporters,  
Cold Storage Suppliers. Wholesale Wine  
& Spirit Merchants. Tea Merchants and  
Cigar Manufacturers. Kelvinator Refri-  
gerators & Belaire Air Conditioners.

Grams : "Portedos".

Phone No. 362861.

Head Office :—Mount Road, Madras.

London Agents : Spencer & Co. (India),  
Ltd., 'U.K. Purchase Department,  
Spencer & Co. Ltd.

Bombay Manager—Dev Raj.

Assistant—J. C. R. Readymoney.

Sole Distributors :

A. & A. Crawford Ltd., Leith.

Beck & Co., Bremen.

Bollinger, J., France.

Boord & Son Ltd., London.

Canada Packers Ltd., Toronto.

Canadian Breweries Ltd., Toronto.

Carlsberg Breweries Ltd., Copenhagen.

Distillers Agency Ltd., Edinburgh.



Switchgear, Starters, Traction Switchgear, Isolators, Cables, Steam Boilers, Fuel Economisers, Soot Blowers, Steam, Liquid & Gas Flow Meters, Temperature Recorders & Indicators, Fabricated Steam Pipework, Steam valves, Boiler Mountings, Shafting, Reduction Gears. Machinery for Paint, Printing Ink, Pharmaceutical, Chemical, Cosmetic Industries.

**Suppliers of:—**

Selenium & Silicon Rectifiers, Miniature Circuit Breakers, Welding Electrodes, Vibratory Equipment, Instruments Survey Drawing Optical Meteorological, Scales, Profile Projectors, Gauges, Vacuum, Steam Pressure, Oxy-Acetylene, Combined Pressure & Vacuum Gauges, Freon Gauges, Hydrometers etc.

Steel Age Industries Private Ltd., Opp. Post Office, Mazagaon, Bombay 10.

Steelyard Private Limited, Regd. Office: Carnac Bunder, Sant Tukaram Road, Bombay 9. Steel, Hardware. *Chairman:* B. J. Maniar. *Managing Director:* C. J. Ambani J. J. Ambani. Phone: Sales Office 322643 and 39211 (Res.). Tele. Address: "Scotchiron."

terling Dyes Private Limited, Manufacturers of Textile Dyes & Chemicals. 296, Samuel Street, Vadgadi, Bombay 3. Phone: 324656. Grams: "LAXNAGAR."

Stewart's Laboratories, Mody Chambers, 319-21, Kharek Bazar, Bombay 9. Manufacturers of Inks, Ink Powders, Gum and Paste, Sealing Waxes, Loose Leaf Binders, Wooden and Metal Stationery Articles, Stockists of 'Gum Arabic.' Telephone: 321259. Grams: "INKWAXGUM."

STOESSEL, W. R., & CO., 63, New Marine Lines, Fort. Tel. Address: "Entireness." Phone Nos. 242241/2.

Designers and Manufacturers of: STOESSEL Advertising Specialities for Desk and Pocket use, made of Leather, Plastics, metal and wood.

**Sole Agents for:**

THE COTTON TRADE JOURNAL (Memphis, U.S.A.). Publishers in India for: The Association of Mouth and Foot Painting Artists—Greeting Cards and Calendars.

STONE & CO. (INDIA) PRIVATE LTD., J., 1st Floor, Tiecicon House, Dr. E. Moses Road, Post Box No. 6274, Mahalakshmi, Bombay-11-BC. Mr. J. R. Butler & Mr. K. V. S. Mani. Manufacturers of STONE'S Train Lighting Equipment, SAB Railway Brake Regulators, STONE-FAIVELEY Pantographs for Elec. Loco and EMU Stock, THE SUPERHEATER COMPANY'S Locomotive Superheater Elements, KHEOPS Intervehicle Couplers for EMU Stock, & TONUM-FHP Motors. Suppliers of STONE-CARRIER Refrigeration & Air conditioning Equipment for Road & Railway Vehicles, & STONE'S Marine Propellers & Specialities. Agents for Steatite & Porcelain Products Ltd., Pilkington Bros. Ltd., Taylor Bros. & Co. Ltd., Thos. Turton & Sons Ltd., Stone-Manganese Marine Ltd., Rail Traction Supplies Ltd., Austinlite Ltd., SteAme Usines Et Aceries Leonard Giot, Svenska Aktiebolaget Bromsregulator, Vapor International, National Electric Coil Co., Et. Pierre Carrier, and Etablissements L. Faiveley. Phone: 378081. Tel. Address: "STONECOY". Registered Office: 16, Taratalla Road, P.O. Box No. 16731, Calcutta 27.

STONOLITE MONOLYTHIC PRODUCTS, Sole Manufacturers of "STONOLITE" brand Monolythic Non-Crackable, Fireproof, Heat-resisting, Germ-proof, Compositions for Floors, Skirtings, Dadoes, Partitions, Walls and Roofs etc. Suppliers

to Railways, Factories, Residences, Textile Mills, etc. Jiji House, Grd. Floor, Ravelin Street, Fort, Bombay 1. Phone: 264296.

STRONACHS ADVERTISING, L. A. STRONACH & CO. (INDIA) PRIVATE LTD., 15, Graham Road, Ballard Estate, Bombay. Established 1923. Tel. Address: "Adservice". Phone: 26-3236. Associates throughout the World.

STRUCTURAL ENGINEERING WORKS, LTD. Managing Agents:—Bhagat & Sons Private Ltd., Engineers. Registered Office:—Maneckji Wadia Bldg., 127, Mahatma Gandhi Road, Fort, Bombay No. 1.

Works No. 1: Fort Road, Wadala, Bombay 31.

Works No. 2: Bombay-Agra Road, Near Mile Stone 20, Mulund, Bombay 80.

Works No. 3: 27, Barrackpore Trunk Road, P.O. Kamarhati, Dist. 24-Parganas, West Bengal.

**Phones:**

Office: 255601-2-3-4.

Works No. 1: 442741-2.

Works No. 2: 592257-8-9.

Works No. 3: Panihati-348.

Grams:—Office: "Bhagatson."

Works No. 1: "Structural."

Works No. 2: "Weldstruc."

Works No. 3: "Structural."

**Directors:—**

H. M. Patel, *Chairman.*

I. N. Bhagat, *Managing Director.*

A. M. Kapadia, *Technical Director.*

B. M. Ghia, *Director.*

R. J. Chinai, *Director.*

R. J. Taraporevala, *Director.*

Y. H. Malegam, *Director.*

M. N. Bhagat, *Tech. Asst.*

R. N. Bhagat, *Mgr. for Works.*

J. R. Taleyarkhan, *Commercial*

*Manager.*

A. T. Tarkas, *Secretary.*

M. T. Purohit, *Chief Accountant.*

Sudan Trading Co., Importers & Exporters, Dhan-Nur Bldg., Sir P. M. Road, Bombay 1.

SUHRID GEIGY TRADING LTD., Suppliers of Dyestuffs, Chemicals & Pharmaceuticals, Express Building, 'E' Road, Churchgate, Bombay 1. Phones: 242184, 242185, 242186. Grams: "ACEE-DEECEE."



Telephone: 351620, 356935

Telegram: SUNPROCESS

## SUN PROCESS WORKS

Specialists in advanced techniques of process engraving

3, Tata Road, off New Queen's Road, Bombay 4

SUNBEAM COLOUR WORKS, Specialists in the Manufacture of High Class Postor Colours, Paste Colours, Lakes, Chromes and other Dry Colours. Asha Studio Compound, Sion-Trombay Road, Chembur, Bombay 71. Grams: "Rajpaint". Phone: 321895; Factory: 522140.

Sunderlal & Co., Plywood & Hardboard Merchants, 121, Abdul Rehman Street, Bombay 3.

Sunshine Traders, 3, Hamam Street, Fort, Bombay. Phone: 251631. Grams: "Subhmangal". Manufacturers of Spindle Tapes, Listings, Webbing, Egyptian Cotton tapes, Venetian blind tapes, Zip Tapes, Bleached Tapes, Cotton & Manila Ropes, Cotton Bandings, Tubular bundle bandings and Sleeveings.

Superior Stationery Mart Ltd., Stationers, Printers, Direct Importers of Stationery and Paper, Examiner Building, 117, Nagindas Master Road (Medows Street), Fort, Bombay 1. Phone: 25-2398. Grams: "Loveliness."

SUPREME INDUSTRIES LTD., Wadala Bombay 31. Manufacturers of Plastics articles for household & industry—buckets, trays, commode seats, polythene films, bags, pipes—welding, spraying, coating—Industrial & Artists paints, adhesives, waterproofing compounds, etc.

Supreme Industrial Works, 196-K, Gaiwadi, Girgaum, Bombay 4. Phone: 355189.

SURAT ELECTRICITY COMPANY LIMITED, THE. Registered Office: Killick House, Home Street, Fort, Bombay 1. Telegraphic Address: "KINDRED". Telephone No. 262311. Managing Agents: Killick Industries Ltd. Technical Office: Central Administration Department, No. 5, Graham Road (4th Floor), Ballard Estate, Bombay 1. Telegraphic Address: "ADISEBS". Telephone Nos. 261741/261742 & 266083. Local Office: Tilak Maidan, Post Box No. 20, Surat (Ref. Surat Section).

Suresh Engineering Works, Bombay Cotton Mills Estate, Kalachowki Road, Bombay 33. Phone: 377887; Steel Fabrication and Sheet Metal Works. Stainless Steel Fabrication by Argon Arcwelding our Speciality.

Suresh Stationery Mart, Manufacturers of Exercise Books, Letter Books, etc. 285, Abdul Rehman Street, Bombay 3. Phone: 327397.

SUSHERA & CO., 76, Kakad Industrial Estate, P.B. No. 6484, Mahim, Bombay 16. Telephone: Works: 451984. Office: 454424. Grams: "Heatbeam". Embedded Strip heaters, Finned heaters and all other types of Industrial heaters.

SUTRAMDAS (INDIA) PRIVATE LTD., R., United India Building, 5th floor, Sir Phirozshah Mehta Road, Fort, Bombay. Phones: 252493 and 252671. Grams: "TRAVRAY." Agents: "Trayons" Rayon Yarn and Trayophane (Cellulose Film). Manufactured by the Travancore Rayons Ltd., Rayonpuram (Kerala State).

Swastik Oil Mills Ltd. Address: P. O. Box No. 362, Bombay 1. Phone: (Factory) 61707; (Office) 265361-2. Grams: "SOMUC."

SWASTIK PAPER INDUSTRIES Manufacturers of: PAGODA brand Corrugated Paper and Boards. Address: Sewri Cross Road, Bombay 15. Telephones: 445714 and 441723.

Swastik Rolling Shutters & Engineering Works, Parel Station Road, Bombay 12. Rolling Shutters Manufacturers.

### SYMOND DISTRIBUTORS PRIVATE LTD.

J. Eruchshah Bldg., 249, Dr. Dadabhoy Naoroji Road, Bombay 1; 18, Netaji Subhas Road, Calcutta 1, and 15, Elgin Road, Allahabad.

Sole Distributors in India for the

"SLAZINGER" Sports Goods, made in India.



**T. Alimahomed & Co.,** Aerated water Requisites Dealers. 144-46, Sarang Street, Bombay 3.

**T. Lakhamshi Ladha & Co. (Talpatiwala)** (Estd. 1920), Manufacturers of Waterproof tarpaulins and Dealing in Grey & Waterproof Cotton and Jute Canvas, Chemical Cloth, Cart and Wagon Covers, hessian, twine, eyelets, etc. Tarpaulins given on hire. 298, Narsi Natha Street, Bombay 9. Phones: 323428 & 321942 (Office) & 329404 and 329101 (Res.). Grams: "DUCKPROOF".

**Taj Printing Works, 46-A, Cawasji Patel Street, Fort, Bombay.**

**Talib & Company, Pipes, Fittings & General Hardware.** Talib House, 104, Nagdevi Street, Bombay 3. Phone No. 321977. Tel. Address: "Talibco."

**TALWALKER BROTHERS PRIVATE LIMITED, W. R.,** Lentin Chambers, Dalal Street, Fort, Bombay 1. Phone: 256775 & 253387. Tel. Address: "PUMP-ENAMEL."

**Distributors for:**

**KIRLOSKAR PRODUCTS:** Shallow and Deep Well Hand Pumps, Direct Coupled Engine & Motor Pumping Sets, Diesel Oil Engines, Electric Motors, Star Delta Starters, Groundnut Decorticators, Sugarcane Crushers, Agricultural Implements, Compressors and Pneumatic Tools.

**SPECIAL PUMPS FOR SUGAR FACTORIES, CHEMICALS, AIR CONDITIONING UNITS.**

**TALWALKER BROTHERS PRIVATE LIMITED, W. R.,** 122, Commerce House, Meadows Street, Fort, Bombay 1. Phone: 254710. Grams: "PUMPENAMEL". Distributors for Ogale Products, Glass Bottles, Jars, Containers, Glass Bowls for Mercury Vapour, Lanterns and Glass Shades for other Lighting fittings. Enamel Sign boards, Reflectors and Shades. Glass Lined Equipment for Chemical, Pharmaceutical and Dyestuff Industries.

**Tambawalla Metal Manufacturing Works Private Ltd.,** 66/68, Narayan Dhuru Street, Bombay 3.

**TAMBAWALLA PRODUCTS AGENCIES PRIVATE LTD.,** Importers and Dealers in all sorts of Non-Ferrous Metals and Scraps, Lead Sheets, Chemical & Antimonial also Brass, Copper, Aluminium Pattas, Lead Capsules & Tubes, etc., 66-68, Narayan Dhuru Street, Bombay 3. Tel. Address: "AXLE." Phone Nos.: 323941-42. Branches: Calcutta and Madras.

**Tambe Pt. Ltd., B.,** Vegetarian Caterer (Props. of Tambe Health Home). Head Office: Sanzgiri Sadan, Girgaum Road, Bombay 4. Phone No. 35197.

**Branches:** (1) Thakurdwar Corner; (2) Hammam Street, Fort; (3) Cona, Girgaon.

**Taraporewala, D. B., Sons & Co. Private Ltd** Booksellers and Publishers, Treasure House of Books, Taj Building, 210, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1.

**Taraporwala & Co., Architects, Engineers and Surveyors,** 7-10, Horniman Circle, Fort, Bombay 1. Phone No. 252703. Kersasp B. Taraporwala, L.R.I.B.A., etc., Chartered Architect, and Dorab V. Tarapore, A.R.I.B.A., Chartered Architect.

**Tarasingh Harbindersingh, Princess Street, Bombay 2.**

**TATA ENGINEERING & LOCOMOTIVE CO., LTD.,** Head Office: Bombay House, 24, Bruce Street, Fort, Bombay 1. Sales Office: 148, Mahatma Gandhi Road, Fort, Bombay 1. Works: Jamshedpur 10.

**Directors:—**

**J. R. D. Tata, Chairman (Special Director).**

**S. Moolgaokar, Vice-Chairman.**

**Sir Chunilal V. Mehta.**

**Khan Bahadur C. B. Taraporwala.**

**J. Zahn.**

**A. Wychodil.**

**C. H. Bhabha.**

**N. K. Suntook.**

**N. N. Wadia (Tata Iron & Steel Co.'s Director).**

**N. H. Tata.**

**Kripal Singh.**

**H. Scherenberg (Alternate Director).**

**Manufacturers of "Tata-Mercedes-Benz"** Diesel-engined truck and bus chassis, steam locomotives, steel and alloy, iron castings and special steel ingots, Tata P & H excavators, paper & pulp making machinery, industrial shunters and Machine tools.

**Subscribed Share Capital:** Rs. 16,40,00,000 (£77,59,600 or \$21,866,666).

**Debentures:** Rs. 5,00,00,000 (£23,65,760 or \$6,666,666).

**Total Annual Sales:** Rs. 79,50,00,000 (1965-66). (£376,15,500 or \$106,000,000).

**No. of Employees:** 21,000.

**Telegraphic address:—Head Office:** "TATALOCO"; (PG) **Sales Office:** "TELCOSALES".

**Telephones Nos.: Head Office:** 259141, 251501, **Sales Office:** 255262-63. **Telex No.:** PR57.

**TATA FISON INDUSTRIES LIMITED,** Regd. Office, Head Office and Spraying Service Section: Ralli House, 21, Ravelin Street, Fort, Bombay-1.

**Regional Office:** Union Bank Building, Dalal Street, Fort, Bombay 1.

**Telegraphic Address:** TATFISON, Bombay. **Telephones:** 268221 (Regd. Office & Head Office); 256284/8 (Regional Office).

**Directors:**

**L. Sawhny (Chairman).**

**A. D. Mango (Deputy Chairman).**

**C. Merrick.**

**H. J. Silverston (Alternate Director to C. Merrick).**

**D. S. Seth.**

**N. V. Khote (Managing Director).**

**Manufacturers of:** (i) agricultural chemicals and pesticides, (ii) ethical pharmaceuticals.

**Sole Distributors in India:** Pesticides: Rallis India Limited. Pharmaceuticals: Martin & Harris (India) Limited.

**TATA HYDRO-ELECTRIC AGENCIES LIMITED, Bombay House, 24, Bruce Street, Fort, Bombay-1.**

**Directors:—**

**J. R. D. Tata (Chairman).**

**Sir Chunilal V. Mehta.**

**J. D. Choksi.**

**N. H. Tata.**

**M. G. R. Aitken.**

**C. H. Campbell.**

**S. Moolgaokar.**

**B. G. Saraiya.**

**P. M. Agerwala (Managing Director).**

**Secretary:—N. K. Desai.**

**Agents for:—**

**Tata Hydro-Electric Power Supply Co., Ltd.**

**Andhra Valley Power Supply Co., Ltd.**

**Tata Power Co., Ltd.**

**Tel. Address: "THEBAMCO." Phone Nos. 259141 and 251501. Code used:** Bentley's.

**TATA INDUSTRIES PRIVATE LIMITED,** Bombay House, 24, Bruce Street, Fort, Bombay No. 1.

**Directors:—**

**J. R. D. Tata (Chairman).**

**N. H. Tata.**

**J. D. Choksi.**

**D. R. D. Tata.**

**P. A. Narielwala.**

**S. Moolgaokar.**

**R. D. Choksi.**

**L. Sawhny.**

**N. A. Palkhivala.**

**K. R. K. Menon.**

**B. Sh. Saklatwala.**

**S. K. Nanavati.**

**R. S. Pande.**

**J. J. Bhabha.**

**N. R. Mody.**

**R. F. S. Talyarkhan.**

**R. H. Mody.**

**D. S. Seth.**

**Secretary:—N. K. Desai.**

**Managing Agents for:—**

**Tata Iron & Steel Co., Ltd.**

**Tata Engineering & Locomotive Co., Ltd.**

**Svadeshi Mills Co., Ltd.**

**Tata Mills Ltd.**

**Tata Oil Mills Co., Ltd.**

**Tata Chemicals Ltd.**

**Secretaries & Treasurers for:—**

**Ahmedabad Advance Mills Ltd.**

**Central India Spg., Wvg. & Mfg. Co., Ltd.**

**Indian Hotels Co., Ltd.**

**Corresponding Firms:—**

**Tata Limited, 18, Grosvenor Place, London, S.W. 1. Tel. Address:** "TATALD."

**Tata Incorporated 425, Park Avenue, New York, 10022, N. Y. Tel. Address:** "TATAINC."

**Tata A. G. Poststrasse 20, Zug, Switzerland. Tel. Address:** "TATAG" ZUG.

**Codes used—Bentley's.**

**Telegraphic Address: "TATIND." Phone Nos. 259141 and 251501.**

**TATA OIL MILLS (ESTABLISHED IN 1917) CO., LTD.,** Head Office: Bombay House, 24, Bruce Street, Fort, Bombay 1. Mills: Bombay, Calcutta, Tatapuram (Kerala State) and Ghaziabad (U.P.). Tel. Address: "Tatolls." Phone: H. O. 259141.

**Manufacturers of:** Laundry and toilet Soaps, detergents, Glycerine, oils and oil-cakes, edible Oils, Industrial perfumes, eau-de-cologne, hair oils and other toilet products.

**TATA SONS PRIVATE LTD.,** Bombay House, 24, Bruce Street, Fort, Bombay 1.

**Directors:—**

**J. R. D. Tata (Chairman).**

**N. H. Tata.**

**J. D. Choksi.**

**D. R. D. Tata.**

**Sir Jehangir Ghandy.**

**S. Moolgaokar, R. D. Choksi.**

**Secretary—N. K. Desai.**

**Corresponding Firms:—**

**Tata Limited, 18, Grosvenor Place, London, S.W.1. Tel. Address:** "TATALD."

**Tata Incorporated 425, Park Avenue, New York, 10022, N.Y. Tel. Address:** "TATAINC."

**Tata A. G. Poststrasse 20, Zug, Switzerland. Tel. Address:** "TATAG" ZUG.

**Codes used—Bentley's.**

**Telegraphic Address: "TATASONS." Phone Nos. 259141 and 251501. P.O. Box No. 186.**



## THE TATA IRON & STEEL COMPANY LIMITED

**Managing Agents:** Messrs. Tata Industries Private Limited.

**Registered Office:** Bombay House, 24, Bruce Street, Bombay 1.

**(Telegraphic Address:** 'IRONCO', Phone: 259141 & 251501).

**CALCUTTA OFFICE:** 23-B, Netaji Subhas Road, Calcutta 1.

**(Telegraphic Address:** "TATAIRON". Phone: 22-2341).

**JAMSHEDPUR OFFICE:** (Telegraphic Address: "TATAIRON").

**STEEL WORKS:** Situated at Jamshedpur, Bihar.

**(Rly. Stn.:** Tatanagar, South Eastern Rly.)

**(Telegraphic Address:** "IRONCO").

**HEAD SALES OFFICE:** 23-B, Netaji Subhas Road, Calcutta 1.

**(Telegraphic Address:** "IRONCO", Phone: 22-2341).

### Directors:

J. B. D. Tata, (Special Director), (Chairman).

J. D. Choksi (Vice-Chairman).

S. Moolgaokar (Special Director) (Vice-Chairman).

Sir Chunilal V. Mehta

Dharamsey Mulraj Khatau

Neville N. Wadia

Sir Fazal Ibrahim Rahimtoola

Sir Jehangir Ghandy

Arvind N. Mafatlal

S. S. Khambata

H. Lal (Govt. Director).

**Head Office:** Mg. Agents' Director—J. J. Bhabha.

**JAMSHEDPUR & CALCUTTA OFFICES:—**

**Mg. Agents' Resident Director-in-charge:** S. K. Nanavati.

**Mg. Agents' Resident Director (Administration):** R. S. Pande.

**Mg. Agents' Resident Director (Raw Materials & Sales):** B. H. Mody.

**General Manager:** K. H. Kutar (Jamshedpur)

**Sales Manager:** A. H. Sethna (Calcutta).

Manufacturers of Coke, Pig Iron, Ferro Manganese, Ingots, Blooms, Billets, Slabs, Sheet Bars, Tin Bars, Rails, Wheels, Tyres and Axles, Structural Shapes, Bars, Plates, Sheets (Black and Galvanised), Skelp, Strip, Electrical Steel Sheets, Pick-axes, Powrahs, Beaters, Crow Bars, Hammers, Shovels, Ballast Rakes, etc. Sulphuric Acid, Coal Tar, Sulphate of Ammonia, Benzol, Benzene, Toluene, Crude Naphthalene, Spent Oil, Bottom Sludge, Solvent Naphtha.

Techno-Industrial Syndicate, Sole Distributors for W. Marshall (Hessle) Ltd., Through the Cement Marketing Co., Ltd., England and N. V. "Lithos." Holland. The Murarka Paint & Varnish Works Private Ltd., Calcutta. Commission Agents, Exporters, Importers and Dealers of Heavy & Industrial Chemicals, Oils, Zinc Oxide Pigments & Paint materials, and Minerals of all sorts. 19B, Noble Chambers, Parsee Bazar Street, Fort, Bombay. Phone: 251220. Tel. Address: "TEINSY"

**TEDDINGTON CHEMICAL FACTORY: A DIVISION OF RALLIS INDIA LTD.,** Manufacturers of Pharmaceutical Specialities. **Works:** Suren Road, Andheri, Bombay 69. **Office:** Rallis India Ltd., Pharmaceutical Division, 21, Ravelin Street, Bombay 1. Phone: 262994.

Tek Trading Corporation, Glass Merchants, 139, Abdul Rehman Street, Bombay 3.

**TEMPO INDUSTRIAL CORPORATION,** Manufacturers of Laboratory & Scientific Apparatus, Engg. Divn. of Primco (P) Ltd., 1st Floor, Lamington Chambers, 394, Lamington Road, Bombay-4 B.R.

## TENBY INDIA (PRIVATE) LIMITED

Hamam House, Hamam Street, Bombay 1

Registered office: Pondicherry  
Manufacturers of the well known "TENBY" electrical accessories under license from the English Company

Office Phone: 251892

Factory Phone: 574034

Grams: "TENBYINDIA"  
Bombay

**TEXTILE MACHINERY CORPORATION LIMITED,** Regd. Office & Works: Belgharia, Calcutta 56. **Sales Offices at:** (1) BOMBAY: Annie Besant Road, Worli, Bombay 18. (2) MADRAS: 19, Second Main Road, C.I.T. Colony, Mylapore, Madras 4. (3) COIMBATORE: 14, Rajaji Road, Ramnagar, Coimbatore 9. (4) KANPUR: Ashok Sadan, 15/257A, Civil Lines, Kanpur. (5) DELHI: United Commercial Bank Building, 2nd Floor, Parliament Street, New Delhi.

Manufacturers of all type of Spinning Machineries such as Ring Frames, Doubling Frames, Carding Engines, Drawing Frames, Simplex Fly Frames and Spares such as spindle, Rings, Fluted Rollers etc. and Boilers, Sugar Machinery, Rolling Stock, Heavy Structural, etc. Sole Selling Agents of Spinning Machinery for Messrs. Howa Machinery Ltd., Japan.

Thacker & Co. Ltd., Rampart Row, Fort, Bombay 1.

**THANA TEXTILE ROPE WORKS.** "Sun Brand" Pink Ply Cotton Rope Spindle Tapes, Bandings & Endless Bands. Manufacturers and Merchants, Crescent Chambers, Tamarind Lane, Fort, Bombay 1. Grams: "ROPE DRIVE." Tel. No. 257395. Works: Bombay-Agra Road, Thana (C. Rly.). Tel. No. 591889.

**THANAWALA, B., & SONS PRIVATE LTD.,** Manufacturers of "National" Cotton Driving Ropes & Spindle Tapes,

etc., 47, Tamarind Lane, Fort. Tel. No. 253735 and Factory Tel. No. 591440. Tel. Address: "Enginerope."

**THE INDIA GENERAL ENGINEERING CO., PRIVATE LTD.,** Dealing in Electrical & Mechanical Machines, Accessories and Equipment. Lathes, Drilling Machines, Welding Generators & Transformers, Electric Motors, Starters, Pumps, Diesel Engines, Diesel Generating Sets, etc. Available from stocks. 21, Forbes Street, 1st Floor, Fort, Bombay. Phone: 257482; Grams: "INDIGENE".

**THERMOMETERS & APPLIANCES PRIVATE LTD.,** Manufacturers of Clinical, Industrial, Wall (Sprit), Veterinary and School type thermometers. Sir Jamshed House, 166, Bohra Bazar Street, Fort, Bombay-1. Phone: 262036. Grams: "TRUE THERM", Bombay.

**THERAPEUTICS CHEMICAL RESEARCH CORPORATION,** Cargo Superintendents, Surveyors, Samplers and Analysts. For Quality Control and Pre-shipment-Inspection, Supervision of Weighment & Loading, Sampling, Analysis & Testing. 95, Morland Road, Bvnilla, Bombay-8. Grams: "THERASERCH". Phone: 378207/8. Branch Offices at all important ports in India. Branch laboratories at Madras, Margao (Goa), Visakhapatnam and Nagpur.

**Overseas Associates: THERAPEUTICS CHEMICAL RESEARCH GmbH (DEUTSCHLAND),** 2 Hamburg 11, Gr. Burstah 42, West Germany. Cable: "THESEARCH". Phone: 365462.

**THERAPEUTICS CHEMICAL RESEARCH GmbH (DEUTSCHLAND),** 36 Lime Street, London, E.C.3. Cable: "TRECERLON", London EC3. Phone: Mansion House 9351/4.

**THOMPSON COMPANY PRIVATE LTD.,** J. WALTER, International Advertising and Merchandising Consultants, Lakshmi Building, Sir Pherozeshah Mehta Road, Edward J. Fielden, Chairman & Managing Director. Branches at Calcutta, Delhi, Madras, Colombo and Offices throughout the world.

**Tel. Address:** "Thomertwal." Phone No. 26-4531 (10 lines), P.O. Box 541, Bombay.

Thomson & Taylor Ltd., Department Store, 117-119, Mahatma Gandhi Road, Bombay 1.

"TIMES OF INDIA," THE (See Bennett, Coleman & Company, Ltd.)

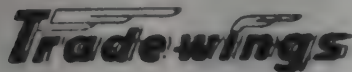
**TRACTOR ENGINEERS LIMITED,** (Larsen & Toubro Limited in collaboration with Caterpillar Overseas S.A., Geneva, a wholly owned subsidiary of Caterpillar Tractor Company, U.S.A.). **Registered Office:** L. & T. House, Dougall Road, Ballard Estate, P.O. Box 273, Bombay 1. Phone: 264411/9. Grams: TENGTRAK. Telex Tix: 246. **Factory:** Sakli-Vihar Road, Powai, P.O. Box 8913, Bombay-72 AS. Phones: 581170, 581112, 581129, 581182, 581271. **Managing Agents:** L & T (Management) Private Ltd. Manufactures replacement parts for crawler tractors.

**Directors:** H. Holck-Larsen, N. M. Desai, P. G. Bhagat, W. H. Bornholdt, D. S. Gronsdall, D. R. Lammers.

**Products distributed by:** Larsen & Toubro Limited, P.O. Box 273, Bombay 1. Tractors (India) Ltd., P.O. Box 323, Calcutta. Willcox (Buckwell-India) Limited, P.O. Box 289, New Delhi. Tractor & Equipment Corporation Limited, P.O. Box 279, New Delhi.



INDIA'S LARGEST TRAVEL NETWORK



PRIVATE LIMITED

AIR-SEA-RAIL-TOURISM

International Travel Agents,  
30/32, Rampart Row, Fort, Bombay 1.  
Phones: 255111 (7 Lines), 256471,  
256472 & 257477. Cable: "TRAVEL".  
Offices at: Delhi, Calcutta, Poona,  
Bangalore, Hyderabad, Madras &  
Baroda.  
(Managing Directors): Suman C. Sheth,  
V. S. Ubhayakar.

Tribhovandas Bhikhabhai, General Im-  
porter and Exporter, 223-25, Shroff  
Bazar, Bombay 2.

**TRINITY ELECTRIC SYNDICATE,**  
Electrical Engineers and Contractors,  
Princess Street, Bombay 2BR. Phones—  
Office: 38201. Res.: 352997. Tel. Address:  
"SOLENOID." Agents: Felton & Gull-  
leume Carlswerk, Aktiengesellschaft,  
Köln-Mulheim, Germany for Power. Tele-  
graph, Telephone & Signalling Cables.  
Distributors for Cable Corporation of  
India Ltd., Bombay, for Tropodur Wires  
& Cables and paper Cables.

**TRITON INSURANCE CO., LTD.**

Estd. 1850 (Incorporated in India),  
United India Life Building (3rd Floor),  
Sir Phirozshah Mehta Road, Fort, P.O.  
Box No. 115, Bombay 1. Phone: 251295  
(2 lines). Tel. Address: "Trident." Resi-  
dent Manager: Vinod P. Joshi, D.B.M.,  
B.A. (Hons.).

Transacts Fire, Marine, Workmen's Com-  
pensation, Burglary and Motor business.



**T. T. KRISHNAMACHARI & CO.,**

IMPORTERS, EXPORTERS AND  
MANUFACTURERS'  
REPRESENTATIVES

Bombay Office:—Vulcan Insurance Bldg.,  
Veer Nariman Road, Bombay 1.

Telephones: 242181 & 242182.

Telegram: "WATSHF".

Branches at:—

P. O. Box No. 884, Calcutta.  
P.O. Box No. 162, New Delhi.

Depots at:—Bangalore, Ernakulam,  
Vijayawada.

Head Office:—331-333, Thambuchetty  
Street, Post Box No. 200, Madras 1.

**TULSIDAS KHAMJI PRIVATE LTD.,**  
Clearing, Forwarding, Shipping, Freight,  
Insurance and Air Cargo Agents. 46, Veer  
Nariman Road, Bombay 1. Tel. No.  
255084 (4 lines). Tel. Address: "Nachi-  
keta."

Warehouse Accommodation at reasonable  
rates.

Agents:

Atlas Assurance Co., Ltd., Fire, Marine,  
Motor, Accident and Aviation.

**TULSIDAS V. PATEL,** Importer & Ex-  
porter of Textiles, Cotton, Woollen, Silk,  
Art silk, Piecegoods, Fans, Remanents.  
Importers of Electronic Measuring Instru-  
ments and Textile Testing Instruments  
from Hungary. Udyog Bhavan, Wittet  
Road, Ballard Estate, Bombay-1-BR.  
Phone: 261956, 266463, 266530. Grams:  
"VIVIDIDEA".

**TURF AERATED WATERS PRIVATE  
LTD.,** 69, Tardeo Road, Bombay 34.  
Phone: 377832. Manufacturers of High  
Class Aerated Waters.

**TURNER, HOARE & CO. LIMITED,**  
Engineers, Head Office: Gateway Building,  
Apollo Bunder, Bombay. 1

Branch Offices: Kapasia Bazar, Ahmeda-  
bad; 6A, Little Russel St., Calcutta;  
10, Parliament Street, New Delhi;  
175/1, Mount Road, Madras-2.

Directors: Mr. Keshub Mahindra (Chair-  
man), Mr. P. K. Palit, Mr. N.  
Kureishi, Mr. H. C. Mahindra, Mr. A.  
B. Bilimoria and Mr. O. Stub.

Manufacturers of: Automobile Clutch  
Assemblies in collaboration with Messrs.  
Dana Corporation, Toledo, Ohio, U.S.A.

Agents for—

Agromore Ltd., Mysore Road, Bangalore  
(Chemical Inhibitors for Steel Indus-  
try).

Arthur Balfour & Co. Ltd., Sheffield U.K.  
(Tool, Steel, Small Tools etc.).

Bilcon Machinery Co., 50, Puddapukur,  
Rd., Calcutta. (BILCON Door Closers).

Bharat Batteries Mfg. Co. Private Ltd.,  
Calcutta. (Automobile Batteries).

British Electrical & Pumps Private Ltd.,  
Calcutta (Pumps and Pumping Sets).

Burn & Co. Ltd., Calcutta (Twist Drills).

Compactors Engg. Limited, U.K. (Concrete  
Vibrators and Soil Compactors).

Concord Industries Ltd., Madras. (Hand  
Tools).

Conveyancer Fork Trucks Ltd., U.K. (Fort  
Lift Trucks).

Davies & Metcalfe Ltd., Romiley, U.K.  
(Injectors, Ejectors, Lubricators, etc.  
for Locomotives & Boilers).

Electrocrafts, Belgaum (Bench type  
Grinders and Single Phase Electric  
Motors).

Electrical Manufacturing Company, Bom-  
bay (Bench Grinders, Polishers, and  
Flexible Shaft Machines).

Elgi Equipments (Private) Ltd., Colimba-  
tore (Automobile Service Station Equip-  
ment).

Emco Elektra (P) Ltd., Bombay  
(Fractional Horse Power Motors).

F. E. Weatherill Limited, Herts, U.K.  
(Hydraulic Loading Shovels, etc.).

F. E. Hibberd & Co. Ltd., London, U.K.  
(Diesel Locomotives).

Indian National Diesel Engine Co. Ltd.,  
Calcutta (Horizontal Diesel Engines).

Jayshree Textiles Limited, Rishra (Rub-  
ber lined Hose Pipes).

Khandelwal Udyog Limited, Bombay  
(Concrete Mixers, Roller Pan Mixers,  
Tar Boilers etc.).

Lakshmiratan Engineering Works Ltd.,  
Bombay.

(Room Air-conditioners).

Leeds Meter Company Limited, Leeds, U.K.  
(Water Meters).

Leeds Meter Mfg. Co. Limited, Bombay.  
( $\frac{1}{4}$ " and  $\frac{1}{2}$ " Water Meters).

Outillage VALDOB, S. A. Paris (Small  
Electric Tools).

Mahindra Van Wijk & Visser Private  
Ltd., Pimpri, Poona.

(Polyester chokes).

Radio & Electricals Mfg. Co. Ltd., Ban-  
galore (Remco House service Meters,  
Electric Door Gongs, Extension speakers  
etc.).

Sankar Electrical (Private) Limited,  
Madurai. (Daylight and Coloured  
Fluorescent Lamps).

Beavell & Co. Limited, Ipswich, U.K.  
(Air-compressors).

Southern Industrial Corporation Limited,  
Madras (Flexible Shaft—Grinders).

Union Company (Accessories) Private  
Ltd., Madras. (Electric Horns).

Zeta Industrial Corporation Private  
Limited, Meerut (Metal Clad Switches,  
Isolators, Distribution Boards, etc.).

**TURNER, MORRISON & CO., LTD.,** 16,  
Bank Street.

Directors—Calcutta: D. M. Jaffray, Haji  
Sir Abdul Latif Haji Hazrathkhan,  
E. R. Meyer, B. P. Sinha and C. N.  
Rodewald.

Assistants, Bombay: M. V. Bhawe (Holds  
Power of Attorney), J. T. De Lorme  
and A. K. G. Unny.

Proprietors: The Malet Welding Works,  
Welding works and Tube Mill.

Agents—For numerous Shipping Com-  
panies and Shalimar Tar Products  
(1935) Ltd., Scottish Union and National  
Insurance Co. (Fire and Accident), The  
Maritime Insurance Co., Ltd. (Incor-  
porated in England).

Codes used.—A.B.C. 6th Edition, Bentley's,  
Bentley's Second, Scott's, Boe Old and  
New and Private. Tel. Address: "Mor-  
risona." Phone Nos. 251321/6 (Six  
Lines). P.O. Box No. 194.

20th Century-Fox Corp. (India), Private Ltd.,  
Metro House, Mahatma Gandhi Road.  
Tel. Address: "Centfox." Phone No.  
241221 (Two lines). Post Box No. 765.

**TYRESOLES CONCESSIONAIRES**

**PRIVATE LTD.,** Regd. Office.—Ewart  
House, Bruce Street, Bombay 1. Phone:  
252261. Factories: Bombay. Phones:  
454377, Delhi 51583, Jullunder 2830,  
Belgaum 686.

Unichem Laboratories, Manufacturers of  
Pharmaceuticals, Bombay 26.

**UNION CARBIDE INDIA LTD.,** Manu-

facturers of "Eveready" Products,  
Lakshmi Building, Sir Phirozshah Mehta  
Road, Fort, Bombay 1. Phones: 264521 &  
264522. Grams: "Eveready".

**UNION ACID & CHEMICAL CO., H. O.**

88, Jambli Mohalla, Bombay 3. Phone:  
332652. Grams: "UNIONACID". Kurla  
Branch Phone: 55464, Goregaon Branch  
692761. Stockists of Nitric, Sulphuric &  
Hydrochloric Acids, Hydrochloric & Sul-  
phuric Acids supplied to upcountry custo-  
mers by Road Tankers.

Unique Trading Corporation, 221, Sheriff  
Devji Street (Chakla), Bombay 3. Phones:  
326227-28. Grams "UNILAB". Special-  
ised in Laboratory Equipments. Author-  
ised Distributors for "WHATMAN"  
Filter Papers, "CORNING" & "BOROSIL"  
Laboratory Glasswares & "QUICO"  
Surgical and Scientific Apparatus.

**UNITED INDIA ENGINEERING CO.,**

Engineers & Machinery Dealers, Office:  
6, Commerce House, 140, Meadows Street,  
Fort, Bombay. P.O. Box 1571. Phone  
No. 251492. Tel. Address: "Uniconaram".  
Showroom: 78, Old Custom House Road,  
Fort, Bombay.

United India Fire and General Insurance Co.,  
Ltd., Head Office: 151, Mount Road,  
Madras; Regional Office: Warden House,  
Sir Phirozshah Mehta Road, Bombay.  
(Fire, Marine and Miscellaneous Insu-  
rances) Chairman: Mr. M. Ct. Muthiah;



General Manager: T. S. Muthuswamy, M.A., B.L. Regional Manager: K. K. Mehra. Phone Nos.: 256273-74-75. Grams: "UNIGEN"

## UNITED STEEL COMPANIES (INDIA) PRIVATE LIMITED

Registered Office: Orient House, P.O. Box 673, Mangalore Street, Ballard Estate, Bombay 1.

Branches: 23, Ganesh Chandra Avenue, Post Box No. 119, Calcutta 1; Chordia Mansions, 4th Floor, Post Box No. 3763, 150A Mount Road, Madras 2; P.O. Box 558, New Delhi 1.

Telegraphic Address: "UNISTEELS."

Phone No. Bombay: 262441; Calcutta: 232367; Madras: 84799; Delhi: 611994.

### DIRECTORS:

(England): H. A. A. While, G. N. F. Wingate.

(India): M. Hall, S. B. Wagh, N. S. Phatarphekar, S. Kumar.

Sole Representatives in India of The United Steel Companies Ltd., Sheffield, England, and of its associated companies including:—

Steel, Peech & Tozer, Rotherham, England.

Workington Iron & Steel Company, Workington, England.

Samuel Fox & Co. Ltd., Sheffield, England.

Appleby-Frodingham Steel Co., Scunthorpe, England.

United Steel Structural Co. Ltd., Scunthorpe, England.

McCall & Co. (Sheffield) Ltd., Sheffield, England.

Distington Engineering Co. Ltd., Workington, England.

Barrow Steel Works Ltd., Barrow-in-Furness, England.

Products: Electric, Acid and Basic Open Hearth Mild, Carbon, Alloy, Stainless and Heat Resisting Steel plates, Sections, Sheets, H.R. Strip and C.R. Strip including Razor Blade strips, Cable Tape, Baling Hoops, black and bright bar, Wire, Wire Rods, Prestressed Concrete Wire and galvanised and Plain Stranded and Core Wire, Rings and forgings, Steel Rolls for cold Rolling and alloy forgings, Locomotive, Carriage and Wagon tyres, wheels, axles, and wheelsets. Acid Bessemer Steel rails, sleepers, fishplates, bearing plates and fastenings. Matobar High Tensile electrically welded steel fabric for reinforcement. Ingot moulds, Slag ladles, bottom plates, and heavy iron castings, Iron and Steel Works Equipment, general engineering fabrication and continuous casting machines.

UNITED LINER AGENCIES OF INDIA (PRIVATE) LTD., Wavell House, Graham Road, Ballard Estate, Post Box No. 1281, Bombay and at Calcutta and Madras.

Telephones: 264596, 263542 & 266451.

Associated Companies:—UNITED LINER AGENCIES OF PAKISTAN, LTD., Karachi, Chittagong and Khulna.

UNITED LINER AGENCIES OF BURMA, LTD., Rangoon.

Agents for:—

The East Asiatic Co., Ltd., Copenhagen. Swedish East Asia Co., Ltd., Gothenburg.

With Wilhelmsen, Oslo.

Telegraphic Address:—"ULINERS" (all offices).

UNIVERSAL CALENDAR MFG. CO., Calendar Mfrs., Hamam Street, opp. Post Office, Bombay 1. Phone: 254443.

UNIVERSAL MINERALS & CHEMICAL CO., 7/10, Horniman Circle, Fort, Bombay 1. Phones: Office: 255110 and 254145. Grams: "UNIVERSAL". Dealers & Manufacturers of Minerals for Paint, Rubber, Textile, Engineering, Paper & Glass Industries.

UNIVERSAL TRADING CO. (Estd. 1947). 346, Kalbadevi Road, Bombay 2 BR. Phone: 39717. Grams: "GOLDRUSH". Importers, Exporters & Agents. Exporters of Cotton, Cotton Piecegoods, Woollen, Art Silk and Fancy Goods, Hosiery, Wearing Apparels, Glassware, Crockery, Leather goods of all kinds, etc., etc.

Universal Trading Company, Mohamedi House, 79, Mohamedali Road, Bombay 3. Phone: 322537. Grams: "IRONMART". Machinery, Mill Gin Stores, Precision Engineering Tools, General Hardware Merchants and order suppliers. Branch Office: 4, Narayan Dhuru Cross Lane, Bombay 3.

Universal Typewriter Co., Typewriter Sellers & Repairers. 31, Nawab Bldg., Dr. D. N. Road, Bombay 1.

Upadrasta & Sons, Consulting Engineers and Machinery Merchants. Bennet House, 48/50, Forbes Street, Fort, Bombay 1. Branch: 1, Durga Bhavan, Rashtrapati Road, Secunderabad. Grams: "Upadrasta". Phone: 254457. Managing Partner: U. M. Rao. Consulting Engineers: T. K. R. Ayengar, B.A., M.I.E.E. (London), U. N. Rao, B.Sc. Eng. (Glasgow).

UTKAL MACHINERY LIMITED, (Larsen & Toubro Limited in collaboration with three West German companies—Gutehoffnungshuette Sterkrade A.G., J. M. Voith GmbH and Heinrich Koppers GmbH).

Registered Office & Works: Kansbahal, P.O. Box 47, Rourkela 1, Orissa. Telephone: 2321. Grams: "UTMAPLANT." Fabricates plant and equipment for steel, mining, chemical, petroleum and paper pulp industries.

Directors: H. Holck-Larsen, John Hover, Dr. H. W. Rudhart, T. Mueller, Dr. E. Kemna, H. Pfeifer, Dr. C. Knapp, Dr. H. Koppers, Dr. K. Kuepper, L.T. Gholap.

Selling Agents: Larsen & Toubro Limited, L. & T. House, Dougall Road, Ballard Estate, P.O. Box 278, Bombay 1. Phones: 264411/9. Grams: "LARSENBO." Telex: Tlx. 246.

V. Amratlal & Co., Iron & Steel Suppliers, Carnac Bunder, Sant Tukaram Road, 261, "Giriraj", Bombay 9. Phone: 661797 (Res.). Grams: "SCOTCHIRON."

V. Chunilal & Co., 19, Bibijan Street, Bombay 3. Phone: 328370. Bolts, Nuts, Hardware, Tools Merchants.

## VAPSON PRODUCTS.

Manufacturers of Dyes, Textile Chemicals, Auxiliary Products and Cosmetics.

Rahimtoola House, Homji Street, Fort, Bombay.

Phone: Office: 255168.

Factory: 55654.

Grams: "VARIAMINE".

VAKIL & SONS (PRIVATE) LTD., Narandas Building, Sprott Road, 18, Ballard Estate, Bombay 1. Hague Building, Sprott Road, Ballard Estate, Bombay 1. Phones: 262177-78, 263204. Grams: BLADE. Industry Manor, Chowney Gully, Worli, Bombay 28. Phone: 451960. Grams: RANGOLI. Quality Printers, Greeting Card and Wedding Card Manufacturers.

Variety (Agents) Private Ltd., 15, Cawasji Patel Street, Fort, Bombay 1. Phone: 254453; Tool, Alloys & Special Steel.

VARTAK. B. B. & CO., The premier house for all Photographic requirements, Developing, Printing, Enlarging and Document Copying Studio. And Expert Camera Repairs, Portraits and Group Photo Studios, 187, Dr. Dadabhai Naorji Road (Hornby Road), Fort, Bombay 1. Phone No. 262915.

VASANT INDUSTRIAL & ENG. WORKS, 470-71, Worli Road, Bombay-18. Manufacturers of Textile Processing Machinery, Vanaspati Plants, Solvent Extraction Plants, Distillery Plants, Spinning Machines for Rayon Industries and Jute Cloth Processing Plants. Tele: 453325 & 454379. Telegrams: "ASTRONOMY".

Vasi Shums & Co., Private Ltd., 165/67, Nagdevi Street, Bombay 3. Phone: 327381. Grams: "WIREROPE". Stockists and suppliers of Wire ropes, chains, pulley blocks, water meters, pressure gauges & Microscopes. Sole Selling Agents for Maharashtra and Gujarat for "GPIF" Water Meters, Pressure Gauges, Microscopes, etc. Distributors for Western India for "Tiger" Earth Augers, "Orient" Brand Lifting & Traversing Jacks.

VAZIR GLASS WORKS LTD., Manufacturers of Superior quality glass containers in neutral and other types of glass on automatic machines. J. B. Nagar, Andheri, Bombay 59. Phones: 573335, 573336. Grams: "VAZIRGLASS."

VEEJAY'S TRADING CORPN., Ahmed Building, Room No. 5, Lohar Chawl, Bombay 2. Phone: 39637. Sole Agents For "MARLEX" Electric Appliances—Pressure Cookers, Musical Bells, Gas Lighters, Sirens, Hooters, Gong Bells, Portable Blowers cum Vacuum Cleaners, Vibro Tools, Soldering Irons, Transformers and Venture Exhaust Fans.

Vensimal Bassarmal & Bros., Travel Agents, 521, Kalbadevi Road, Opp. Edward Cinema, Bombay 2. Phones: 38233.

Vermitt Co. (India), Manufacturers and Importers of Insecticides, Disinfectants, Detergents and Polishes. 107, Wodehouse Road, Bombay 5. Phone: 211723.

VERTEX MANUFACTURING CO., LTD., 222, Sir Mathuradas Vissanji Road, Andheri (East), Bombay 69. Phone: 572433. Manufacturers of (1) "Sentinel" Metal Clad Switch & Fusegear, such as Switch-Fuses, Isolators, Changeover Switches and Distribution fuseboards (2) "Vertex" Builders' Hardware such as brass hinges, barrel bolts, Morlice locks, handles etc.

VICTOR GASKETS INDIA LTD., Head Office and Factory: Agra Road, Mulund, Bombay 80. Phones: 592291 (6 lines) 591751 & 591728. Mfg. Director's Office: Magnet House, Dougall Road, Ballard Estate, Bombay 1. Grams: "VICGASKET", Bombay-Mulund. Manufacturers of Victor Gaskets.

Victory Flask Co. Pt. Ltd., 208, Lady Jamshetji Road, Bombay 16.

Vijay Bakelite Trading Co., 8, Chakla Street, Bombay 3. Phone: 323145. Grams: "BESTCAP." Manufacturers and distributors of all kinds of caps, and stoppers made of Bakelite, Polythene and Rubber.

Vijay Engineering & Machinery Co., 9, Bombay Mutual Annexe, Cowasji Patel Street, Fort, Bombay.



**Vikram Padamsey & Co.,** (Estd. 1937), Rustom Building, 29, Veer Nariman Road, P.O. Box 818, Bombay. Tel. Address: "Vaxin." Phone No. 255227. Importers of Chemicals, Drugs, Pharmaceutical Substances, etc., Exporters of Gums, Spices and other Indian raw produce. *Head Office:* Bombay. *Depots:* Madras, Delhi, Calcutta.

**Vinay Calendar Co.,** Colour Printers, Lithographers & Packing Specialists, 104, Ardeshir Dady Street, Bombay 4.

### VISHWA BHARATI TRADING CO.,

45, Mint Road, Post Box No. 1052, Bombay 1.

Phones: 266371 (All Depts.); 264555 Sales; 263795 Purchase.  
Grams: "VIBHACO."

*Branch:*

G.P.O. Box 2628, Calcutta 1.

Phone: 336680. Grams: "ARCWELD." Manufacturers of Welding Equipments, Acetylene & Oxygen Gas Generators, Metals joining equipments, Soldering and Brazing equipments, Safety-wear for Industrial Workers, Gloves, Goggles, Dust Protection Respirators, Aprons, etc.

**Vithal Mahadeo & Co.,** Industrial Rubber Goods Mfrs. 109, Nagdevi Street, Bombay 3.

**VITRUM PRIVATE LTD.,** Leading Manufacturers of Glass Bottles and Jars for the Pharmaceutical, Cosmetic and other Industries and of Glass Mosaic Tiles. *Factory:* Bombay-Agra Road, Vikhroli, Bombay 79. Phone: 581643. *Registered Office:* 28 Sayani Road, Bombay-28. Phone: 454091. Grams: "VUTGLASS".

**VITRUM STUDIO & SHOWROOM,** Rutton Villa, 143-B, Cumballa Hill (Opp. Parsi Sanatorium), Bombay 26. Artistic ceramics (hand-painted single tiles & combinations of tiles for murals & table-tops, plates, etc.) Phone: 361826.

**Vog & Co.,** Watch Straps & Bracelets Mfrs., Empire Bldg., D. Naoroji Road, Bombay 1.

**Volkart (India) Ltd.,** Post Box No. 199, 19, Graham Road, Ballard Estate, Bombay 1.

**VOLTAS LIMITED,** 19, Graham Road, Ballard Estate, Bombay-1.

*Head Office:*—Bombay-1.

*Branches:*—Bombay, Calcutta, Madras, New Delhi, Bangalore.

*Sub-Branch:*—Lucknow.

*Offices:*—Ahmedabad, Bhopal, Bhubaneswar, Chandigarh, Cochin, Coimbatore, Cuttack, Dhanbad, Durgapur, Gauhati, Margao, Jaipur, Jamshedpur, Kanpur, Nagpur, Patna, Ranchi, Rourkela, Secunderabad, Trivandrum, Vijayawada and Visakhapatnam.

*Directors:*—Messrs. R. F. S. Talyarkhan (Chairman and Chief Executive), J. D. Choksi, B. Reinhardt, P. A. Narielwala, A. B. Parakh (Managing Director), S. K. Handoo, P. C. Cheryan (Technical Director & General Manager—Engineering), A. Hydari, H. B. Dhondy.

*General Management:* R. F. S. Talyarkhan (Chairman & Chief Executive); A. B. Parakh (Managing Director); P. C. Cheryan (Tech. Director & General Manager—Engineering); R. V. Leyden (GM—Marketing & Admn.); E. Thalmann (GM—Finance); Col. T. K. Mukerji (GM—Staff).

*Divisions:* Air Conditioning & Refrigeration; Earthmoving Mining & Agricultural; Electrical; Mechanical; Textile Machinery; Project Engineering; Machine Tool; Marketing (PCP & Chemicals).

*Codes Used:* Universal Trade Code; Bentley's Complete Phrase; Bentley's Second.

*Tel. Address:* "VOLTAS." Phone: 268131 (20 lines). P.O. Box No. 900, Bombay-1.

**Vora, J. C., & Co.,** Dealers in Hardware, Bolts, Nuts & Screws, Automobile Parts & Engineering Stores, Modi Chambers, French Bridge, Bombay 4. Tel. Address: "Godisall."

## VULCAN-LAVAL LIMITED

*Regd. Office:*

Indian Mercantile Chambers,  
Nicol Road, Ballard Estate,  
P.O. Box 735,  
BOMBAY 1-BR.

*Branches:*

Calcutta, Madras, Delhi.

Telephone: 262583.

1. Industrial Engineering Division, Mustafa Building, Sir P. M. Road, Bombay 1-BR. Telephone: 252242 & 256915.
2. Delhi Office: Allahabad Bank Building, Parliament Street, New Delhi 1. Telephone: 48718 & 42680.
3. Calcutta Office: 19/C, British Indian Street, Calcutta 1. Telephone: 235852.
4. Madras Office: 38-C, Mount Road, Madras 6. Telephone: 84061/62.
5. Factories: Bombay-Poona Road, Dapodi, Poona 12. Telephone: 88221-2 & 88271-2.

### MANUFACTURERS OF:

1. "ASTRA" Ammonia and Freon Compressors and Condensing Units manufactured under licence from Bergedorfer Eisenwerk of West Germany. Complete Ice Plants, Cold Stores, Chilled Water Plants for dairy, food, pharmaceutical, chemical and other process industries.
2. "DE LAVAL" Centrifugal Separators for clarification, purification of transformer and switch-gear oil, diesel oils, lubricating oil, cutting oil etc.
3. "ALFA-LAVAL" Stainless Steel Centrifugal Pumps for dairy, food, pharmaceutical and chemical industries.
4. "ALFA-LAVAL" Stainless Steel Sanitary Fittings for dairy, food, and other pharmaceutical industries.
5. Stainless Steel Equipment, such as storage and reaction vessels, stills, heat exchangers for dairy, food, pharmaceutical and chemical industries.
6. "ALFA-LAVAL" Plate Heat Exchangers for heating, cooling, heat regeneration and recovery, pasteurizing and sterilizing of liquids.
7. "KAMAS" Cattle and Poultry Feed Mix Plants.
8. "KAMAS" Aluminium Silos for storage, Dehumidification and Fumigation. Seed cleaning, grading and drying Equipment.

### SUPPLIERS OF:

1. Dairy Utensils, such as, tinned steel or aluminium milk cans, bottle crates, milk buckets and dairy laboratory equipment.
2. Complete plants for the production of alcohol, formaldehyde, plasticisers, acetate solvents, acetic anhydride, acetaldehyde and other chemical intermediates.
3. WINSTONE quality printing inks.

### IMPORTERS OF:

1. "ALFA-LAVAL" complete plant for milk, milk products and other food industries.
  2. "DE LAVAL" centrifugal machines for clarification, purification, separation and concentration in food, chemical, pharmaceutical and other industries.
  3. "KRUPP-DOLBERG" Centrifuges Plough-and-Pusher-type & larger horizontal conveyor machines.
  4. Heat Exchangers of plate, spiral, lamella and shell and tube type of heat exchangers in corrosion resisting alloys for heating, cooling, heat regeneration and heat recovery.
  5. "ANHYDRO" evaporating and spray drying plants for milk, pharmaceutical and chemical industries.
  6. "ARENCO" Tobacco processing Machinery, Cigar, Cigarette and Bidi Machines, Bank tobacco machines.
  7. "HOFLIGER & KARG" packaging machinery for food and pharmaceutical industries. Specializing in packaging for granular and powdery products.
  8. "KUSTNER" packaging machinery for butter, margarine, ice cream and process cheese machinery.
  9. Diamond Drilling Equipment for Mining and Geological Survey.
  10. "GRAM" ice cream making machinery of Denmark.
  11. Bottling machinery for dairy, soft-drink, brewery and other food industries.
- Ship Servicing of Centrifugal and Refrigeration Machinery.
12. "DANO" Compost making plants.

## WACO RADIO

### WACO RADIO ELECTRONIC INDUSTRIES—

Office: Sukhsagar Building, Hughes Road, Bombay 7. Phone: 352951. Showroom: 421 Lamington Road, Bombay 7. Phone: 352580. *Factory:* Ulhasnagar 4, opp. Vithalwadi, O. Rly. St., Maharashtra State. Mfrs. of Sanyo Transistor Radios, Waco Radios, Amplifiers Intercom equipments, HI-FI-amplifiers, Ampligrams, Radiograms, Transformers, Chokes, Ballasts for Fluorescent & HPMV Lamps and Wooden Radio Cabinets.

**Wadia & Co., K.—Jewellers,** Diamonds & Precious Stones. 324, Grant Road, Bombay 7. Phone: 371483. Grams: "GEMARTWORK".

**WAKEFIELD PAINTS PRIVATE LTD.,** "Dhan-Nur", 15/16, Sir Phirozshah Mehta Road, Bombay 1. Phone: 264061. Grams: "WAKEPAINT". Manufacturers of Industrial & Decorative Finishes & Painting Contractors.

**Walchandnagar Industries Ltd.,** Registered Office: Construction House, Ballard Estate, Bombay 1.

**WALLACE & CO.,** Merchants, 9, Wallace Street. Partners: Wallace Brothers & Co. Ltd., Europe; The Bombay Co., Private Ltd., Bombay. Agents for: F. F. Chrestien



& Co., Ltd., Union Insurance Society of Canton Ltd., Commercial Union Assurance Co., Ltd. Tel. Address: "ROMFORD." Phone No. 26-3032. Post Box No. 201.

Wallace Flour Mills Co., Ltd., Registered Office: 9, Wallace Street, Fort. Telephone: 26-3281.

## WANDER

### WANDER PHARMED LIMITED.

Lotus House, 33A, New Marine Lines, Bombay-1. Phone: 244030.

Manufacturers of Chemicals (Anti-T.B. Drugs) and Pharmaceuticals. Factory: Sion-Trombay Road, Deonar, Chembur, Bombay-71. Phone: 521807.

**WANDLESIDE NATIONAL CONDUCTORS LTD., H.O.:** Industrial Estate, Lalbaug, Bombay 12. Phone: 377391 (2 lines) & 376836. Works: Nagar Road, Poona 14. Phone: 25211/2, Grams: H.O. 'Netelin'. Works: "WANDLESIDE". Makers of (1) "ELECTROLYTIC PAPER"—COVERED Wires and strips from Copper/Aluminium (2) "TEMPLON" Super Enamelled Copper wires (3) Varnish Bonded Fibreglass Insulated Copper Wires.

### WARDEN & CO. PVT. LTD.,

Quay Street, Mazagon, Bombay-10 DD.

Mfrs. of:

Security Brand Waterproof and Waxed Paper, Gummed Paper, Toilet Tissue Paper, Paper Tubes, Multi-Wall Paper Bags, Hessian Lined Paper/Polythene Bags, Fibre Drums and Plastic Carboys.

## WARRIOR (INDIA) LIMITED

Manufacturers of:

WARRIOR Brand Cut Thread Taps, Dies & Hexagonal Dies.

Office:

Forbes Bldg., Home Street, Bombay 1.

Telephone: 268081.

Telegram Address: "SCRUTAKUL."

Factory:

Chandivali Estate, Saki Powai Road, Bombay 70.

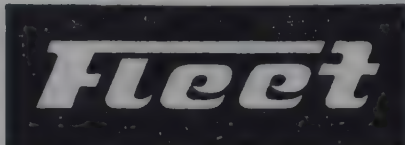
Phone Nos.: 581570, 581576 & 581583.

**WATERPROOF PAPER MANUFACTURING CO., PRIVATE LTD.,** Manufacturers of all kinds of Waterproof Paper in Rolls for packing, Textile Goods, Machinery, etc. Alice Buildings, 339, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 255771. Factory: Anjirwadi, Mazagon, Bombay 10.

Water Supply Specialists Private Ltd. Sole Agents for Myer's Pumps, 8, Hamam Street, Fort, Bombay 1.

### WATUMULL INDUSTRIES PVT. LTD.

Manufacturers of:



QUALITY REFILLS & BALL PENS "Delstar", 1st Floor, 9-9/A, Hughes Road, Bombay 26 WB. Telephone: 354425. Telegrams: "KHUBBROS".

**WEST END WATCH CO.,** 49, Mahatma Gandhi Road, P.O. Box No. 504, Bombay 1. Watch and Clock makers, Jewellers and Silversmiths. Tel. Address: "HOROLOGY," Bombay. Phone Office: 255644.



### WESTERN AGENCIES CO.

Sukh Sagar Building, Hughes Road, Bombay 7.

Phone: 352951. Showroom: 421.

Lamington Rd., Bombay 7; Tel. 352580. Grams: "WESTCOY."

Engineers, Manufacturers' Representatives for RADIO, T.V., Electronic Components, Electronic & Communication Equipments and Instruments.

**WESTERN INDIA ENGINEERING CORP. PRIVATE LTD.,** Manufacturers' Representatives, Electrical Engineers and Contractors. Registered Office: Himalaya House, 5th Floor, 79, Palton Road, Bombay 1.

Directors:—D. N. Purandare, Jayant L. Desai and N. N. Purandare.

Phone No. 266448. Tel. Address: "WIECOL" Bombay.

**WESTERN INDIA MANUFACTURERS' AGENCY PRIVATE LTD.,** Dealers in Leather Cloth, Oil Cloth and Bus Body Building Materials, Speciality Seat Covers for Motor Cars. 190, B. K. Building, Khetwadi Main Road, Bombay 4. Phone: 351615. Grams: "ARTLEATHER". P.O. Box 574, Bombay 1. Branches: Calcutta, Delhi & Madras.

**WESTERN INDIA TANNERIES LTD.,** Manufacturers of every kind of Shoe upper and sole leather. Specialists in the manufacture of Textile Leathers, Chrome Picking Bands, Leather Beltings, Buffers, Washers, Roller Skins, Pickers, Laces, etc. Address:—Dharavi, Bombay 17. Phones: 474251 & 474252. Telegrams: "Eastkip."

## WESTERN INDIA STRIP MILLS

Re-Rollers of:

M. S. Bars Flats, Squares, Angles and Steel Window Sections

Address: Agra Road, Bhandup, Bombay 78

Phone: 592244 - 592533 and 323240 Grams: "WESTSTRIP" Bombay.

**Western India Trading Co.,** Hague Building, Sprott Road, Ballard Estate. Stockists of all well-known Printers' requisites. Sole Agents for Coates of India Ltd., Lithographic and Printing Inks. American Type Founders Sales Corporation, World's Largest Manufacturers of types. Hunter Penrose Ltd., Marloni Offset Machines. Tel. Address: "Sargonco." Phone No. 26-3366.

**WESTINGHOUSE TRADING CO. (ASIA) LTD.,** "The International", 16 Queen's Road, Bombay 1; Grams: "WESTASIA," Phone: 241094/95. 43, Ring Road, Lajpatnagar III, New Delhi 14; Grams: "WEST-ASIA," Phone: 74534-76530. 8 & 12 Chittaranjan Avenue, Calcutta 13; Grams: "WESTEAST," Phone: 234875. Regional Director: Mr. V. M. White, New Delhi.

Regional Representative: Mr. G. B. Sujan, Bombay.

Regional Representative: Mr. C. L. Parks, Calcutta.

Westrex Company, (Prop.: Cinerama Private Ltd.)—Metro House, Mahatma Gandhi Road, Bombay 1. P.O. Box No. 1232, Tel. Address: "Westrex." Phone Nos. 242273 & 242274.

**WHARTON, H. W., & CO., PRIVATE LTD.,** Importers and Manufacturers of "Kleanwell" Brand Circular Wire Brushes & Shaft Machines and accessories, Lubricating Oils & Greases, Welding Rods, Toilet papers, Adding Machine Coils, Iron, Cement, "Silica Gel" etc. Alice Building, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 255771.

**WIGGINS TEAPE & ALEX PIRIE (BRANCH OF TRIBENI TISSUES PVT. LTD.),** Kamani Chambers, 32, Nicol Road, Ballard Estate, Bombay. Stockists of High Grade GATEWAY and Light Weight Tissue Papers manufactured at the Group Mills in the United Kingdom and by Tribeni Tissues Pvt. Ltd., Calcutta. Agents for Charles Morgan & Co., Ltd., London, Paper Merchants.

Telegrams: "Winchmore." Phone No. 261622.

**WILLIAMS, G. & CO. PRIVATE LTD.,** Advent, 8th Floor, 12-A, Foreshore Road, Bombay 1. Post Box No. 1736. Phone Nos. 213281 & 213282. Grams: "BLANWIRE".

Representing in:—

The Paper, Board, Asbestos, Cement Industries and Textiles, Printing and Filtration Trades.

Porritts & Spencer, Ltd., Bury, England, Haslingden Office: Broadway, Haslingden, Rossendale, Lancashire, England. Manufacturing: Paper Machine Felts, and all types of Mechanical and Filter Cloths.



United Wire Works Ltd., Granton  
Edinburgh 5, Scotland. Manufacturing:  
Machine Wires & Covers.

W. Green Son & Waite Ltd., Invicta  
Works, Chalk Pit Avenue, St. Paul's  
Cray, Kent, England. Manufacturing:  
Dandy Rolls, "Electronic" Dandy  
Drives, Cylinder Mould Covers,  
Dandy Brackets and Drives, Hand  
Moulds, Dandy Type Table Rolls.

Price & Pierce Ltd., 27, Clements Lane,  
London, E.C. 4, England; Price &  
Pierce (Canada) Ltd., 1058, Sun Life  
Building, Montreal 2, Canada; Price  
& Pierce Sales Company Inc., 60 East  
42nd Street, New York, 17, U.S.A.  
Manufacturing: Canadian, American,  
Scandinavian Wood pulp.

Vickerys Limited, 53, Norman Road,  
Greenwich, London S.E. 10, England.  
Manufacturing: Stock Cleaning  
System, Felt Conditioners, Doctor  
Blades, etc.

Spooner Dryer & Engineering Co. Ltd.,  
Ilkley, Yorkshire, England. Manufac-  
turing: Paper Machine Hoods and  
Coating Dryers.

G. Durrant & Sons Ltd., Bury Street,  
Stockport, England. Manufacturing:  
Paper Camber Rollers.

Deloro Stellite Ltd., Highlands Road,  
Shirley, Solihull, Warwickshire,  
England. Manufacturing: All kinds  
of Stellite Faced Knives & Chippers.

Asbestos Corporation Ltd., Thetford  
Mines, Quebec, Canada. Manu-  
facturing: Asbestos Fibre.

Langworthy, Bros. & Co. Ltd., 12,  
Charlotte Street, Manchester 1,  
England. Manufacturing: Moleskin  
and Blowing Wrapper Cloths &  
Cotton Twill Flannel.

Dunlop Rubber Co., Ltd., Post Office  
Box No. 151, Cambridge Street,  
Manchester 1, England. Manufac-  
turing: Offset Rubber Printers Blan-  
kets, Rubber Blankets for Controlled  
Compressive Shrinkage Machines  
(Sanforizing) and Spreading Jackets  
for proofing Industries.

Boyles Bros. Drilling Co., Ltd., 1201,  
Parker Street, Vancouver-6, B.C.  
Canada. London Office: Newcastle-  
Upon-Tyne 3, England. Manufac-  
turing: Diamond Core Drills and Operat-  
ing Equipment.

The Union Screem Plate Company of  
Canada Limited, 72, Queen Street,  
Lennoxville, Quebec, Canada. Manu-  
facturing: Phosphor Bronze, Brass  
& Copper Strainer Plates.

H. J. G. McLean Ltd., P.O. Box No. 202,  
Brantford, Ontario, Canada. Manu-  
facturing: Stainless Steel Refiners &  
Beater Bars.

Ernest Scott & Co., Ltd., Leven, Fife,  
Scotland. Manufacturing: Pulping &  
Chemical Recovery Plants.

Manning Maxwell & Moore Inc., 122E,  
42nd Street, New York, U.S.A.,  
Export Division: 802, Chrysler Bul-  
ding, New York, 17, N.Y. Canadian  
Subsidiary: Manning Maxwell &  
Moore of Canada Ltd., 200, Avenue  
Road, Galt, Ontario, Canada; Swiss  
Subsidiary: Manning Maxwell &  
Moore S.A., 18, Rue St. Pierre,  
Fribourg, Switzerland. Manufac-  
turing: Material handling equipment  
such as Show Box and Load Lifter  
E.O.T. Cranes, Budgit Electric hoists,  
Chain Blocks, etc.

The Butler-Larkin Co. Inc., P. O.  
Box 664, Wellsville, New York  
(U.S.A.). Manufacturing: Oil Well Pro-  
duction Equipment such as Packers,  
Cementing Equipment, Tubing Filling  
and production tools, etc.

**Selling Agents for:—**

Industrial Supplies Corporation, Saki-  
naka, Kurla Andheri Road, Bombay  
70. Recovering of Rubber Rolls for  
the Paper & Allied Trades.

Paper Mill Plant & Machinery  
Manufacturers Limited. Swami  
Vivekanand Road, Jogeshwari,  
Bombay-60.

**WILLIAMSON'S (INDIA) PRIVATE  
LTD.**, Textile Mill Stores & Machinery,  
Suppliers, 10, Veer Nariman Road,  
Fort, Bombay. *Directors*: K. B. Parekh  
(*Mg. Director*); L. K. Parekh, A. P.  
Williamson, C. U. N. Swami. *Phones*:  
252415 & 254243. *Tel. Address*: "BELT-  
MAKERS." *Post Box No.* 1176.  
*Secretaries*: M/s. Gillanders Arbuthnot  
& Co., Ltd., Bombay and Calcutta,  
*Branches*: 670/22, Motilal Hirabhai  
Market, Railwaypura Post, Ahmeda-  
bad. 8, Netaji Subhas Road, Calcutta,  
*Agent*: Mr. A. P. Jaganathan, Coimba-  
tore. Also M/s. Gillanders Arbuthnot  
& Co. Ltd., at New Delhi, Madras and  
Kanpur.

Wood-worths, Home and Office Furniture  
Manufacturers and Designers, Show-  
Room: Commerce Centre, Tardeo, Bom-  
bay 34 (W.B.).

**WYETH LABORATORIES LTD.**, Regd.  
Office: Steelcrete House, Dinshaw Wacha  
Road, Backbay Reclamation, Bombay 1.  
*Phone*: 246171 (4 lines), *Grams*: "WYE-  
LABS". *Factory*: Agra Road, Ghatkopar,  
Bombay 77. *Phone*: 55373, 55386 and  
51271. *Grams*: "WYELABS".

Y. A. Hazare & Bros., Silversmiths and  
Machinery Merchants. 1st, Panjrapole  
Lane, Bombay 1.

**Y. A. MAMAJI & SONS  
(PRIVATE) LTD.**

Estd. 1885.

Manufacturers' Representatives in:  
P.V.C. leather cloth.

136-38, Sir Ebrahimtulla Road,  
Bombay-3.

*Phone*: 33228.

*Grams*: "MAMAJISON".

Y. M. Pathare & Co., Engineers, 41, Meadows  
Street, Post Box No. 1428, Bombay 1.

Yusufali Goolamhoosen Arsiwalla, Dealers  
in Glasses, Plywood and Hardboard,  
Stockists of all kinds of glasses, Window  
Sheet, Plate, Wired, Ribbed, Figured,  
Opal, Vitrolite, Triplex, Mirrors, Hard-  
board, Steel Folding Chairs, etc., 105,  
Abdul Rehman Street, Bombay 3; *Grams*:  
"GLASSAGE." *Phone*: 324464.

**ZANDU PHARMACEUTI-  
CAL WORKS LIMITED**

*Manufacturers of*: Pharmaceutical Pre-  
parations.

*Office & Factory*: Gokhale Road, South,  
Bombay 28.

*Phone*: 453226/7.

*Sales Depots*: 1. Jackson Hotel Com-  
pound, Jabalpur.

2. Old Bhatia Mahjan  
Wadi, Bombay 2.  
*Phone*: 22209.

Zenith Assurance Co., Ltd. Head Office:  
Mehta House, Apollo Street, Fort,  
Bombay. Jal H. Mehta, *Chairman*; M. S.  
Dastur, *General Manager*. *Tel. Address*:  
"Zenithlife," Bombay. *Telephone No.*  
252364.

**ZENITH ELECTRIC STORES**, Electrical  
Goods Manufacturers & Stockists, 51,  
Ahmed Building, Lohar Chawl, Bombay 2.  
*Phone*: 23125.

Zenith Surgical Co., Surgical Goods  
Merchants. 206/3C, Mangaldas Road,  
Bombay 2.

**ZENITH STEEL PIPES  
LIMITED**

Manufacturers of Black & Galvanised,  
Screwed & Socketed, E.R.W. Pipes to  
ISS 1239/64 in Light Medium & Heavy  
Class from  $\frac{1}{4}$ " to 3".

*Registered Office*:

Motl Mahal, 195, Churchgate Reclama-  
tion, Bombay 1 BR.

*Telephones*: 244444, 244445, 244569.

*Telegrams*: "ZENPIPES."

*Telex No.*: 458.

**Directors**

Shri B. K. Birla (*Chairman*).

Shri S. G. Nevatia.

Shri D. M. Dalal.

Shri S. M. Mohta.

Shri A. V. Birla.

Shri C. B. Garware and

Shri Indrakishore Kejriwal.

*President*: Shri K. S. Nevatia.

*Secretary*: Shri Anil Saraf.

**ZENITH TIN WORKS PRIVATE LTD.**,  
Manufacturers of Plain & Lithographed  
Tin Containers, Sanitary Cans, Collapsible  
Tubes & Pilfer Proof Caps, Opp. Race  
Course, Clerk Road, Mahalaxmi, Bombay  
84. *Phone*: 370375. *Grams*: "ZENITH-  
TINS". *Directors*: M. S. Barodawala &  
S. S. Barodawala. *Res.*: 126, Cadell Road,  
Mahim, Bombay 16. *Phones*: 452041 &  
454692 and H. A. Barodawala. *Res.*:  
Mohamadi Chambers, Byculia Bridge,  
Bombay 8.



**ZEPHYR LEATHER WORKS**

Advertising Plastic & leather goods Mfrs.,  
1st floor, Sethna Bldg., Kitchen Garden  
Lane, Sheikh Memon Street, Bombay 2.

*Phone*: 23803. *Factory*: 373689.  
*Grams*: "LOOSELEAF".



# CLASSIFIED LIST OF TRADES AND PROFESSIONS

## ABRASIVES

Abdeally, B. M., & Co.—127, Sarang Street, Bombay 3. Phone: 29990.

ABRAWHEEL PRIVATE LTD.—107, Sarang Street, Bombay 3. Phone: 323214. Sole Distributors for States of Maharashtra & Gujarat, for coated abrasive made by Messrs. John Oakey & Mohan Ltd.; Branches: 173, Gondal Road, Rajkot & Relief Road, Ahmedabad.

BABULAL & BROS.—26, Nagdevi Cross Lane, Bombay 3. Phone: 323930. Grams: "FIREFLY." Stockists of Abrasives, Asbestos Goods, Engineering Tools, Hardware, Mill Gin Stores & Pipes—Pipe Fittings.

Bharat Engineering Stores.—113, Nagdevi Street, Bombay 3.

CARBORUNDUM UNIVERSAL LTD.—Mfrs. of Bonded Abrasives Coated Abrasives, Super Refractories and Abrasives Grains, United India Buildings, 3rd Floor, Sir Phiroze-shah Mehta Road, P. B. No. 962, Bombay 1.

Gaytee & Co.—Janmabhoomi Chambers, Fort Street, Bombay 1.

Gillanders Arbuthnot & Co., Ltd.—16, Queen's Road, Bombay 1.

Grind-Well Abrasives Limited.—Karim Chambers, 40, Hamam Street, Fort.

INDUSTRIAL ABRASIVE CO-OP. SOCIETY LTD.—Kassam Chambers, 163, Frere Road, Bombay-1. Phone: 261372. Grams: "INDABRA". Factory: Mora-Uran, District Kolaba. Manufacturers of Superior quality Grinding wheels, Blocks, Mounted Parts Etc.

Jacks, William & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Fort.

Jairamdas & Sons.—163, Narain Dhuru Street, Bombay 3.

M. DESAI & CO.—163, Narayan Dhuru Street, Bombay 3. Phone: 323248. Grams: "EMDESAICO." Authorised Stockists for Grinding Wheels by Carborundum Universal Ltd.

MODERN MACHINE TOOLS CO.—88, Nagdevi Cross Lane, Bombay 3. Grams: "MONKEYGRIP"; Phone: 322456. Stockists: Grindwell Abrasive Wheel, Dressers and Cutters.

NAGDEVI TOOL-STEEL MART.—186-88, Nagdevi Street, Bombay 3. Phones: 323023 and 327058. Grams: "TENDERERS."

## PROGRESSIVE INDUSTRIES

Manufacturers of  
"EXCELSIOR" Brand  
SAND PAPER and  
EMERY CLOTH

36, Sutar Chawl,  
Bombay-2 (BR).

Phone: 325797

Grams: "PRIMEPAPER" Kalbadevi.



P. Ratilal & Co.—43, Dhanji Street, Moti Mahal, Bombay 3.

Shah Trading Corporation.—Oomrigar Building, opp. Crawford Market, Bombay 3.

William Jacks & Co., Ltd.—Bharat House, Apollo Street, Fort, Bombay.

## ACCOUNTING MACHINES

Hollerith (India) Private Ltd.—See International Computers and Tabulators (India) Private Ltd. (Commercial Firms Section).

IRM World Trade Corporation.—Head Office: CBT Building, 4, Bahadur Shah Zafar Marg, New Delhi-1. Phone: 277881 (10 Lines). Grams: "INBUSMACH." Offices at New Delhi, Bombay, Calcutta, and Madras. IBM Electric and Electronic Data Processing Machines.

Imanes Private Limited.—94, S. V. Road, P.O. Box 8002, Bombay 56-AS. Phone: 571634, Gram: "IMANESCOL". Springs and Forms out of Spring wires and Strips for your Industry.

NATIONAL CASE REGISTER CO.—Steelcrete House, Dinsha Wacha Road, Backbay Reclamation, Bombay 1. Phone Nos. 245955, 245168.

## ACETYLENE & OXYGEN GAS GENERATOR MFRS.

INDUSTRIAL GASES LTD., THE.—Bombay. Grams: "INDUS-GASES". Head Office: Post Box 853, Calcutta-1. Manufacturers of Acetylene Gas Generators both Carbide to Water and Water to Carbide, portable & Stationary, Trolleys & Manifolds.

VISHWA BHARATI TRADING CO.—45, Mint Road, Post Box No. 1052, Bombay 1. Phones: 26631, 264555 & 263795. Grams: "VIBHACO." Branch: G.P.O. Box 2628, Calcutta 1. Phone: 336680; Manufacturers of Welding Transformers, Acetylene & Oxygen Gas Generators and Accessories.

## ACID & ALKALI RESISTING CHEMICAL STONEWARE

BASSEIN CERAMICS PVT. LTD.—Manufacturers of Chemical, Stoneware and Porcelain Tower Packings, Fire Bricks, Acid Proof Bricks & Insulation Refractories, 324, Cook's Building, 2nd Floor, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone: 252644. Grams: "KARDWEB."

## ACIDS AND ALLIED PRODUCTS

C. M. VORA & CO.—160, Dr. Dadabhoy Naoroji Road, Fort, Bombay. Phone: 261609 Office, 22572 (Res.). Importers & Stockists of Chemicals for all Industries. Approved Contractors to Defence Factories.

Pravin Brothers & Co.—501, Commerce House, Meadows Street, Bombay 1.

## UNION ACID & CHEMICAL CO.,

88, Jambli Mohalla, Bombay-3.

Stockists and Suppliers of  
Nitric, Sulphuric and Hydrochloric  
Acids.

Road Tanker facilities for upcountries

Phone: Nos. Head Office: { 332652  
333974

Kurla Branch: 55464 Gram:

Goregaon Branch: 692761 "UNIONACID"

UNION ACID & CHEMICAL CO.—H.O. 88, Jambli Mohalla, Bombay 3. Phone: 332652. Grams: "UNIONACID". Kurla Phone: 55464; Goregaon Phone No. 692761. Stockists of Nitric, Sulphuric & Hydrochloric Acids. Hydrochloric & Sulphuric Acids supplied to upcountry Customers by Road Tankers.

VELU & CO. (PRIVATE) LTD., P. K.—P.O. Box 514, 111 Mahatma Gandhi Road, Bombay 1. Phones: 253141 & 641326. Grams: "LACQUER."

VORA TRADING CO.—357-A, Samuel Street, Valil Bldg., Vadgadi, Bombay 3. Phone: 325289; Telegram: "MULTI-SALES", Bombay-Mandvi.

WHEITO Corporation (Estd. 1954).—16/A, Hansraj Lane, Light Foot Compound, Byculla Bridge, Bombay 27.

## ACID RESISTING VALVES

CRESCENT TRADING CO.—48-50, Bhajipala Street, Bombay 3. Phone: 325140 & 328944; Grams: "WATERMETER." Manufacturers and dealers: Pipes, Fittings, Boiler Mountings, Valves, Water meters, etc.

## ADDING AND CALCULATING MACHINES

Adding Machines (India) Private Ltd.—235, Hornby Road, Fort, Bombay 1.

Burroughs Corporation. See Adding Machines (India) Private Ltd.

Imanes Private Limited.—94, S. V. Road, P.O. Box 8002, Bombay 56 AS. Phone: 571634, Grams: "IMANESCOL". Springs and Forms out of Spring wires and Strips for your Industry.

LATHAM ABERCROMBIE, DIVISION OF FORBES FORBES CAMPBELL & CO., LTD.—Forbes Building, Home Street, Fort, Bombay. Phone: 268081. Grams: "LATHAM."



**NATIONAL CASH REGISTER CO.**—Steelcrete House, Dinsha Wacha Road, Backbay Reclamation, Bombay 1. Phone Nos. 245955 & 245168. Adding Machines.

**P. N. GANESAN PRIVATE LTD.**—Kitab Mahal, Dr. Dadabhoi Nowroji Road, Bombay 1. Phone : 261935. Sole Concessionaires in India for Duplex and Simplex all Electric Comptometer Adding & Calculating Machines.

### ADDRESSING & DATA WRITING MACHINES

**BRADMA OF INDIA LTD.**—Data Writing Machines and Business Systems; Head Office: Lakshmi Bldg., Sir P.M. Road, Bombay 1. Phone : 262981-262982; Grams : "DATMALT." Sales & Service : 79, Dr. Annie Besant Road, Worli, Bombay 18. Phone : 372746. Grams : "BRAOMALT." Factory : M.I.D.C., Industrial Estate, Plots-C-17, C-18, Road 16, Thana, Phone : 591536.

**NATIONAL CASH REGISTER CO.**—Steelcrete House, Dinsha Wacha Road, Backbay Reclamation, Bombay 1. Phone Nos. 245955, 245168. Agents for Addressograph, Multigraph Corporation.

### ADHESIVES MANUFACTURERS

**CHEMISOL INDUSTRIES.**—41, Princess Street, Bombay 2. Phone : 29086; Grams : "BAYCITY." Importers and Manufacturers of Industrial Organic Chemicals, Solvents & Adhesives.

**CIBA OF INDIA LIMITED.**—Royal Insurance Building, 14, Jamshedji Tata Road, Bombay-1. Phones : 245031-3 246084-6. Manufacturers and importers of synthetic resin adhesives for industrial and domestic purposes.

### ADVERTISING AGENTS AND CONSULTANTS

Advertising Agency, The.—(Estd. : 1926), 1st Floor, Peerbhoy Bldg. No. 2, 89, Princess Street, Bombay 2.

**ADVERTISING & SALES PROMOTION CO.**—Steelcrete House, Dinsha Wacha Road, Bombay 1. Phone Nos. 245839, 245482 and 212942. Grams : "SALESAID." Offices at Calcutta, Bangalore & Delhi.

Adverts Private Ltd.—(Advertising and Publicity Service), Established in 1945, Syndicate Bank Bldg., Sir Phirozshah Mehta Road, P.O. Box 1833, Bombay 1.

**AJANTA ADVERTISING.**—Marketing & Advertising Consultants and official Representatives in India for German Industries Fair, Hanover (West Germany), Lakshmi Building, Sir Phirozshah Mehta Road, Bombay-1. Phone : 26-3343/44. Grams : "ADCOUNSEL" & "HANOFAIR". Chief-Executive: Jacob Verghese. Branches at: Calcutta & Madras. Associates throughout the World.

Bomas Ltd.—Steelcrete House, Dinshaw Wacha Road, Backbay Reclamation, Bombay 1.

Bombay Advertising Society.—Commerce House, 140, Meadows Street, Fort, Bombay 1. Tel. Address : "CALADSO."

Green's Advertising Service Agents.—Rustom Building, Churchgate Street, Fort.

Gujarat Advertising Agency Ltd.—Dahanukar Building, 480, Kalbadevi Road, Bombay 2.

**HEROS' PUBLICITY SERVICE.**—4-B, Vulcan Insurance Bldg., Veer Nariman Road, Bombay 1. Phone : 242178-79, Grams : "HEROSPUB."

IND Advertising Agency (Estd. 1914).—15, Commercial Chambers, Masjid Bunder Road, Mohamedally Road corner, Bombay 3.

**INDIA ADVERTISING SERVICE.**—Western India House, Sir Phirozshah Mehta Road, Fort. Tel. : 254769. Branch Office : 7D, Rajouri Gardens, New Delhi 27. Phone : 51591.

**K. S. Kapoor & Co.**—32/33, 4th Floor, Noble Chambers, Parsi Bazar Street, Bombay 1. Phone : 254963 (Ext. 2).

Lintas Limited.—Dugal House, 169, Backbay Reclamation, Bombay 1.

LPE.—Aiyars Private Limited.—5, Convent Street, Colaba-Bombay 1.

Mahadeo, T. S.—Crescent Chambers, Tamarind Lane, Fort.

**MEDIA AGENCY PRIVATE LTD.**—Lentin Chambers, Dalal Street, Bombay. Phone : 251703. Grams : "MEDIAAD."

Modern Advertising Bureau.—Mathuradas Bhawan, Khetwadi Back Road.

**MODERN PUBLICITY SERVICE.**—339, Hind Rajasthan Commercial Building, near Dadar (Central Rly.) Station, Bombay 14. Phone : 443825.

National Ad-Sales Ltd.—Jan Mansion, 61, Sir Phirozshah Mehta Road, Fort.

**NATIONAL ADVERTISING SERVICE PRIVATE LTD.** (Estd. 1931). Advertising, Market Research, Public Relations. Head Office: Khorshed Building, Sir Phirozshah Mehta Road, Bombay 1. Grams : "JEYENJEYN"; Phone : 263023, 263024, 261060. Branch Offices at New Delhi — Calcutta. Associates in 71 countries. Chairman & Managing Director: Harish C. Jain, B.A., M.Inst. M.S.M. (London).

New India Publicity Co., The.—Podar Chambers, Parsi Bazar Street, Fort.

P. N. Joshi & Co.—2nd Floor, 147, Mahatma Gandhi Road, Fort, Bombay 1.

Press Syndicate Private Ltd.—Army & Navy Bldg., Mahatma Gandhi Road, Bombay.

**RANJIT SALES AND PUBLICITY PRIVATE LTD.**—111-A, Mahatma Gandhi Road, Fort, Bombay No. 1. Grams : "RANJITSALE." Phone : 25-1121. Branches : 32, Netcalte Street, Calcutta-13. Telegrams: RANJITAD(C), Phone : 234253 ; 60/2, Janpath, New Delhi. Telegrams : "RANJIT-ADV". Phone : 48876.

**RASIK PUBLICITY CO.**—7-9, Bell Lane, Fort, Bombay 1. Accredited by Indian & Eastern Newspapers Society, New Delhi and Member of Advertising Agencies Association of India, Bombay; Contact for "Anything and Everything" in Advertising. Phones : Offices : 252930, 256529. Residence: 372132, 372132. Grams : "RASIKPUBCO."

**RATAN BATRA PRIVATE LTD.** (ESTD. 1936).—Accredited by the Indian & Eastern Newspaper Society; Member, Audit Bureau of Circulations. Regd. Office: Ilaco House, Sir Phirozshah Mehta Road, Bombay 1. Contact and Service Departments : 9, Waudby Road, Bombay-1. Phone : 262747.

**SELVEL SYNDICATE.**—Hashim Building, 38, Churchgate Street, Fort. All-India Outdoor Publicity Organisers. Associated Offices in Delhi, Calcutta, Madras, Bangalore, Jaipur.

**SHANTILAL G. SHAH & CO.**—Advertising Agents. Manu Mansion, 16, Custom House Road, P.B. No. 1682, Bombay 1. Phone : 251865. Chief Executive : Shanti G. Shah, B.Com.

Shilpi Advertising Ltd.—Shahibag House, 18, Wittet Road, Ballard Estate, Bombay 1.

Sista's Ltd.—United Bank of India Building, Sir Phirozshah Mehta Road, Fort.

**STRONACH & CO. (INDIA), PRIVATE LTD., L. A.**—15, Graham Road, Ballard Estate. Phone : 26-3236. Established 1923; Associates throughout the world.

**THOMPSON COMPANY PRIVATE LTD., J. WALTER.**—International Advertising and Merchandising Consultants, Lakshmi Building, Sir Phirozshah Mehta Road. Edward J. Fielden, Chairman & Managing Director. Branches at Calcutta, Delhi, Madras & Colombo and Offices throughout the world. Tel. Address : "THOMERWAL." Phone No. 264531 (Ten Lines); P.O. Box 541, Bombay.

## THE MASTER KEY THAT OPENS SALES TO YOUR SATISFACTION



UNDER ONE ROOF

PHONE : ■ ADVERTISING  
OFFICE : 256463 ■ MARKETING  
251786 ■ PRINTING  
WORKS : 692403 ■ DESIGNS  
692096 ■ BLOCKS

Accredited By IENS  
Member:  
ABC, AIMO,  
BMPA, BMMS,  
AC.

### 3 Brothers & Fils

Esplanade Mansions 144, M. G. Road,  
BOMBAY 1. (BR.)

Everest Advertising Private Ltd.—Kitab Mahal, Dr. Dadabhoi Naoroji Road, Fort, Bombay 1.

**GRANT ADVERTISING INTERNATIONAL INC.**—Lotus House, Marine Lines, Bombay 1. Phone Nos. 241211-2 and 241777. Grams : "GRANTCHI"; Advertising Agents & Consultants, R. S. J. Davidson, President West Asia Division; S. Chatterji (Manager); Branch Offices at Calcutta, Madras, Delhi (37 Branches all over the World).



**P  
L  
U  
C  
K  
&  
C  
O**

Manufacturers since 1902

Our range includes —

**Badges, Key-chains,**

**Paper-weights, Pen Holders,**

**Mirrors, and everything in**

**P.V.C. Wallets, Diaries, Memo**

**Pads, Writing Sets, Files, and**

**articles to customer's speci-**

**fications.**

Telephone : 251131.

**LUCK**

415, COMMERCE HOUSE,

MEDOWS STREET, PORT, BOMBAY-2.

## AERATED WATER MANUFACTURERS

**there is no  
substitute  
for SOSYO**

WE HAVE ONLY ONE BEVERAGE  
SOSYO with a character of its own.  
It is tasty enough to excite the w  
lively light on palate! Quench yo  
thirst with the unique taste of SOSYO.

Issued By  
**SOSYO PRODUCTS**  
BOMBAY 10





## ADVERTISING GIFTS &amp; NOVELTIES

**BOMBAY PLASTIC CORPORATION.**—Elphinstone Building, 10, Veer Nariman Road, Bombay 1. Phone : 252527. Grams : "BESIEGER." Manufacturers of Plastic Advertising & Complimentary Articles.

**BRIGHT BROTHERS PRIVATE LTD.**—156/A, Tardeo Road, Bombay 34; Grams : "BRIBOS." Phones : 378548, 378549, 378540. Specialists in Plastic Gift Advertising Novelties.

**EXCEL PROCESS (P) LTD.**—Manufacturers of Anodised Aluminium Labels, Advertising Gifts, Scales, Dials, Badges, Decorative Radio Trimmings & Panels, Identity Cards & Photographs in exclusive finishes, 117, Andheri-Kurla Rd., Bombay 69; Phones : 572743, 573327.

**S. R. BROTHERS.**—406, Commerce House, Meadows Street, Bombay-1 BR. Grams : "GODMESSAGE". Phone : 256446. Advertising Gifts for Executives, Inexpensive Give-aways for mass publicity Greeting cards, cute Novelties, Pocket & Table Diaries, Novel Calendars.

**ZEPHYR LEATHER WORKS.**—1st Floor, Sethna Building, Kitchen Garden Lane, Sheikh Memon Street, Bombay 2. Phone : 23803. Grams : "LOOSELEAF." Manufacturers of Plastic and Leather Goods. Specialists in Pocket Diaries, Wallets, Note Books, Telephone Books, Loose Leaf Files, Tender Files and all sorts of Ultra-Modern Publicity-cum-Presentation Novelties. Also made to order according to specification.

## AERATED WATER MANUFACTURERS

**BRANDON & CO., PRIVATE LTD.**—Elphinstone Building, Churchgate Street, Fort, Bombay 1. Phone : 252433. Factory : Spencer's Building, Forjett Street. Phone : 364798.

## DUKE &amp; SONS (PVT.) LTD.

(Estd. 1889)

GRANT ROAD - BOMBAY 4

Phones: 351347 &amp; 351934

Manufacturers of Aerated Waters and Fruit Drinks  
"MANGOLA", "PINEOLA" and "Nu ORANGE"

Made from Fresh Fruit Juices

Bottles washed, syruped,  
filled and crowned by completely automatic machinery  
thereby ensuring absolute  
purity and cleanliness.

## UNTOUCHED BY HAND

**PARLE BOTTLING CO. PRIVATE LTD.**—Western Express Highway, Chakala, Andheri (East), Bombay 69 AS. Grams : "GOLDSPOT" Bombay-Andheri. Phone : 573481.

**PURE DRINKS PVT. LTD.**—World Naka, Bombay 18. Phone : 374218-373585. Grams : "PUREDRINKS."

**TURF AERATED WATERS PRIVATE LTD.**—69, Tardeo Road, Bombay 34. Phone : 377832.

## AERATED WATER REQUISITES AND MACHINERY

**AKBARALLY MAHOMED ALLY & CO.** (Estd. 1917).—Dealers in Aerated Water Requisites, Importers, Exporters and General Merchants, 316, Abdul Rehman Street, Dawoodi Building, Bombay 3. Grams : "ICECREAM." Phone : 321662.

**Anil Trading Co.**—Sharaf Mansion, Princess Street, Bombay 2.

**ESOOFALY MAHOMEDALY & CO.**—102/4, Sarang Street, Bombay 3. Grams : "PURIFIED." Phone : 326516. Dealers in Aerated Water Requisites. Sole Selling Agents for INDIAN CARBON DIOXIDE INDUSTRIES. Branches : 12, Walltax Road, Madras 3; Phone : 33400; Grams : "HARMLESS," Madras; 13-11-233, Convent Street, Park Road, Vijayavada 1. Phone : 1004, Grams : "PURIFIED," Vijayavada and Shivaji Road, Kolhapur.

**GENERAL IMPORT CO. (INDIA).**—Keshav Baug, 102, Princess St., Post Box No. 2376, Bombay 2. Phone : 38497. Grams : "SODALEMON." Aromatic Chemicals, Essential Oils, Aerated water requisites, Essences, Harmless Food Colours and Saccharine.

**ROSHANLAL & SONS.**—133, Princess Street, Gopal Nivas, Bombay 2. Phone : 38579. Grams : "BERGAMOT." Importers & Dealers in Essential Oils, Aromatic Chemicals, Flavouring Essences & Food Colours. Distributors for "ABRAC". Agents for "CROWN" Brand Patchouli Oil & H. Reynaud ET Fils (France).

**SIKRI BROTHERS.**—79-E, Princess Street, Bombay No. 2. Phone No. 29393. Grams : "OILMAN."

**T. ALI MAHOMED & CO.** (Estd. 1924).—Stockists of all sorts of Essences & Other Baking Requisites. 144-46, Sarang Street, Bombay 3. Phone : 327131. Grams : "AERATORS." Sole Agents for Diamond Aerating Gas Works Ltd., Bombay 3.

## AGARBATTI &amp; DHOOP (INDIAN INCENSE)

Madhavji Mavji & Co.—207, Vadgadi, Bombay 3.

**MOHINI AGENCY.**—Jakaria Building, Masjid Bunder Road, Bombay 3. Manufacturers of Perfume Compounds, "OTTO MOHINI," "PHUL-TORA," etc. and long lasting "INDIA-GATE," "MOHINI ROSE," "MISS INDIA" Agarbattis. Exporters and Importers.

*Beware of Imitation...*

*Used by Millions throughout  
The World*

**909 THREE ROSES**



**INDIAN INCENSE**

*Real Rose Scented.*

**AGARBATTI**

**LASTS 1½ HOURS**

PHONE No. 324584

**MYSORE SUGANDHI  
DHOOP FACTORY**

P.O. Box No. 3178, 13, Commercial Chamber,  
Mohamedali Road, BOMBAY-3.

Phone : 324584

AND SEVERAL

OTHER VARIETIES OF AGARBATTI & DHOOP

*Ask for Free Catalogue*

**WANTED STOCKISTS THROUGHOUT  
THE WORLD**

**TRANS-UNION COMMERCIAL CORPORATION PRIVATE LTD.**—Prospect Chambers Annexe, 319, Dr. Dadabhai Naoroji Road, Fort, Bombay. Grams : "TRANSMETER". Phones : 251610 & 355855 (Res.).

## AGENTS AND GENERAL MERCHANTS

Abdeally, B. M., & Co.—127, Sarang Street, Bombay 3. Phone : 29990.

Adamji Lookmanji & Co.—Bahimtoola House, Homji Street, Fort.

Akbarally Ebrahimji.—38/C, Cowasji Patel Street, Fort, Bombay. Grams : "Tussibar".

Batlibol, C. J., & Co.—319, Hornby Road, Fort.

Beardell, W. A., & Co., Ltd.—15-16, Sir Phirozshah Mehta Road, Fort.

Bell & Co., Ltd.—6, Sir Phirozshah Mehta Road, Fort.

Bell, Russ & Co.—Albert Building, Hornby Road, Fort.

Bhawoo Kasinath & Co.—63, Bhandari Street, near Null Bazar.

Bhiwandiwala, H. M. D. H. & Co.—538, Chira Bazar.

Birla Bros., Ltd.—Industries House, Jamshedji Tata Road, Churchgate, Bombay 1.

Bombay-Burma Trading Corporation, Ltd.—9, Wallace Street, Fort.

Bombay Co., Ltd.—9, Wallace Street, Fort.

Bombay Garage Ltd.—Bandstand, Chowpatty.

Bombay Gas Co., Ltd.—214, Hornby Road, Fort.

Brady, W. H., & Co., Ltd.—Churchgate Street, Fort.

Breul & Co.—Taj Building, Hornby Road, Fort.



Brigg Bros. & Co.—Podar Chambers, Parsee Bazar Street, Fort.  
 Brough & Philpott (India), Ltd.—Kaiser-i-Hind Building, Currimbhoy Road, Ballard Estate.  
 Byramji, T., & Co.—Central Bank Building, Mahatma Gandhi Road, Fort.  
 Cambatta, Shrivax C. & Co. Private Ltd.—42, Queen's Road, Bombay 1.  
 Candy Filters (India), Ltd.—Forbes Building, Home Street, Fort.  
 Central Agency Ltd., The.—81, Paltan Road, Fort.  
 Chimanlal Desai & Co.—Gool Mansion, Homji Street, Fort.  
 Chunilal Mehta & Co., Ltd.—Yusuf Building, 43, Mahatma Gandhi Road, Fort.  
 Collinson & Co., Ltd.—Standard Building, Hornby Road, Fort.  
 Corn Products Co. (India), Ltd.—Shree Nivas House, Waudby Road.  
 Cowasji Dinshaw & Bros.—121, Meadows Street, Fort.  
 Cox, H. S., & Co.—24, Rampart Row, Fort.  
 Cox & Kings (Agents), Ltd.—Lloyds Bank Building, Hornby Road.  
 Currim, E. A., Private Ltd.—97, Apollo Street, Fort.  
 Dadajee Dhackjee & Co., Private Ltd.—Shree Pant Bhuvan, Sandhurst Bridge.  
 Doctor, C. & Co.—Raja Bahadur Bansilal Motilal Building, 11, Bruce Street, Fort.  
 Dodge & Seymour (India) Ltd.—Laxmi Building, Ballard Road, Ballard Estate.  
 Drennan & Co.—Neville House, Currimbhoy Road, Ballard Estate.  
 Drowet Chowna & Co.—"Lentin Chambers", Meadows Street, Fort.  
 Duncan Stratton & Co. Ltd.—5, Bank Street, Fort.  
 Dwarkadas & Sons, Ltd.—Mehta House, 89, Apollo Street, Fort.  
 Eastern Electric & Engineering Co.—127, Mahatma Gandhi Road, Fort.  
 Finlay, James, & Co., Ltd.—Mahatma Gandhi Road, Fort.  
 Francis Klein & Co. (Bombay) Private Ltd.—Shale Building, Bank Street, Fort, Post Box No. 777, Bombay.  
 Frank Rose & Co.—Kalam Kutir, 211-219, Frere Road, Fort, Bombay.  
 Gammon (India) Private Ltd.—Hamilton House, Graham Road, Ballard Estate.  
 Gannon Dunkerley & Co. Ltd.—Chartered Bank Building, Mahatma Gandhi Road.  
 General Electric Co. of India Private Ltd., The.—"Magnet House," Dougall Road, Ballard Estate.  
 Gill & Co. Private Ltd.—Indu House, Dougall Road, Ballard Estate.  
 Gillanders Arbuthnot & Co., Ltd.—16, Queen's Road Estate, Bombay 1.  
 Govindjee Madhowjee & Co., Ltd.—16, Apollo Street, Fort.  
 Grahams Trading Co., Ltd.—16, Bank Street, Fort.  
 Great Western Stores.—Standard Building, Hornby Road.  
 Greaves Cotton & Co., Ltd.—1, Forbes Street, Fort.  
**GUEST KEEN, WILLIAMS, LTD.**—Wakefield House, Sprott Road, Ballard Estate, Post Box No. 575, Bombay 1.  
 Hardcastle, Waud & Co., Ltd.—Alice Building, Hornby Road, Fort.  
 Harilal Manilal & Co.—346, Kalbadevi Road, Bombay 2.  
 Hazarat & Co.—Warden House, Sir Phirozshah Mehta Road, Fort.  
 Heatly & Gresham, Ltd.—9, Forbes Street, Fort.  
 Heman & Co.—Ramchandra Building, Carnac Road.  
 Herbertsons, Ltd.—11-13, Elphinstone Circle, Fort.  
 Hooseln, M. A., & Bros.—Lakshmi Buildings, Sir Phirozshah Mehta Road, Fort.  
 Hormusji & Sons.—Arvind House, New Charni Road.  
 Indian Casablancas High Draft Co. Ltd., The.—Maneckji Wadia Building, 121, Mahatma Gandhi Road.  
 Indian Hume Pipe Co., Ltd.—Construction House, Wittet Road, Ballard Estate.  
 Indo-British Chemical Co.—Raja Bahadur Mansion, Tamarind Lane, Fort.  
 Indo-Europa Trading Co.—9, Dalal Street, Fort.  
 Indo-European Machinery Co.—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.  
 Ingersoll-Rand (India), Ltd.—Devkaran Nanjee Building, 17-B, Elphinstone Circle, Fort.  
 Jacks, William & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Fort.  
 Jairamdas & Sons.—163, Narain Dhuru Street, Bombay 3.  
 Jashwantlal Maneklal & Co.—40, Churchgate Street, Fort.  
 Jassawalla, R. M., & Co.—105, Apollo House, Apollo Street, Fort.  
 Javeri Bros. & Co.—347-349, Abdul Rehman Street, opp. Crawford Market.  
 John Fleming & Co. Private Ltd.—21, Bastion Road, Fort.  
 Jones, J. D., & Co. (Bombay) Private Ltd.—Rustom Building, Churchgate Street, Fort.  
 Kayce & Co., Ltd.—Kamani Chambers, Nicol Road, Ballard Estate.  
 Kilachand Devchand & Co., Ltd.—45-47, Apollo Street, Fort.  
 Killick Industries Ltd.—Post Box No. 109, Home Street, Fort.  
 Killick, Nixon & Co. Private Ltd.—Killick House, Home Street, Fort.  
 Kirtikumar & Co.—80, Bhandari Street, Mandvi, Bombay 3.  
 Kishinchand Chellaram.—Guzdar House, Dhobi Talao.  
 Kodak Ltd.—Kodak House, Hornby Road, Fort.  
 Kooverjee V. Curumsey & Co.—Lentin Chambers, Dalal Street, Fort.  
 Kros & Co.—Podar Chambers, Parsee Bazar Street, Fort.  
 Kumudechandra & Co.—Examiner Press Building, Dalal Street, Fort.  
 Lewis & Tylor, Ltd.—Sorab House, 237, Hornby Road, Fort.

Lipton, Ltd.—Ilaco House, Sir Phirozshah Mehta Road, Fort.  
 London, Eastern & American Trading Co.—22, Hamam Street, Fort.  
 Louis Dreyfus & Co.—82, Nicol Road, Ballard Estate.  
 Macfarlane, Bell & Co., Ltd.—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.  
 Mackinnon, Mackenzie & Co.—Ballard Road, Ballard Estate.  
 Mafatlal Gagalbhai & Co., Ltd.—Mafatlal House, 3rd Backbay Reclamation, Bombay.  
 Maganlal Pranlal & Sons.—105, Nagdevi Street, West.  
 Maigham Bros.—26, Old Custom House Road, Fort.  
 Manseta, N., & Bros.—165, Lohar Chawl.  
 Marshall Sons & Co. (India), Ltd.—Marshall's Building, Ballard Road.  
 Mayashankar Thacker & Co.—47, Apollo Street, Fort.  
 McKenzies Ltd.—Sewri.  
 Mehta & Co.—46, Cawasji Patel Street, Fort.  
 Mehta, H. M., & Co.—Mehta House, Apollo Street, Fort.  
 Milford Bros.—7-11, Elphinstone Circle, Fort.  
 Millars' Timber & Trading Co., Ltd.—Victoria House, Victoria Road, Mazagon.  
 Minerva Trading Agency.—58, Forbes Street, Fort.  
 Morison, J. L., Son & Jones (India), Ltd.—Post Box No. 268, Contractor Building, Ballard Estate.  
 Muller & Phipps (India) Ltd.—Queen's Mansions, Bastion Road, Fort.  
 Nanji V. Dossa & Co.—Jan Mansion, Sir Phirozshah Mehta Road, Fort.  
 Narielwala, B. P., & Sons.—101, Apollo Street, Fort.  
**NOWROJEE ARDASEER & SONS.**—24-26, Dalal Street, Fort, Bombay. Manufacturers' Representatives, Agents & Merchants for Foreign Liquors, Provisions and Dairy Products. Sole Agents: Dewor's Whiskies and Castillon Brandies.  
 Occidental Trading Co., Ltd.—16, Apollo Street, Fort, P.O. Box 776, Bombay.  
 Overseas Chemical & Trading Co.—Jan Mansion, Sir Phirozshah Mehta Road, Fort.  
 Pan Asiatic Overseas Co., Ltd.—Bell Building, Sir Phirozshah Mehta Road, Fort.  
 Patel Bros.—10, Veer Nariman Street, Fort.  
 Patell, P. R., & Co., Ltd.—Mherwan Building, Sir Phirozshah Mehta Road.  
 Pavri Sons & Co.—95-97, Bazargate Street, Fort.  
 Phillips & Co.—Waterloo Mansions, Mayo Road, Fort.  
 Phipps & Co. Private Ltd.—6, Apollo Street, Fort.  
 Poonjiajee, J. M. Jehangir.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay.  
 Precious Electric Co.—Yusuf Building, Churchgate Street, Fort.  
 Premchand Roychand & Sons, Ltd.—63, Apollo Street, Fort.  
 Printer Bros.—Beaumont Chambers, Meadows Street, Fort.  
 Progressive Corporation, Ltd.—Jehangir Wadia Building, 51, Mahatma Gandhi Road, Fort.  
 Rallis India Ltd.—21, Ravellin Street, Fort.  
 Ramdas Khimji Bros.—Warden House, Sir Phirozshah Mehta Road, Fort.  
 Ratilal, R., & Co.—111, Mahatma Gandhi Road, Bombay 1.  
 Richardson Cruddas & Co., Ltd.—Byculla Iron Works, Byculla.  
 Roberts, McLean & Co., Private Ltd.—Ilaco House, Sir Phirozshah Mehta Road, Fort.  
 Boneo, Ltd.—Navsari Chambers, 39, Bastion Road, Fort.  
 Sankalchand G. Shah & Co.—Hanuman Building, Tambakanta, Pydhonie.  
 Salemahomed Padamsee & Co.—141, Chuckla Street, Bombay 3.  
 Santhanam & Co.—Exporters, Importers & Commission Agents. Sri Ram Building, 2nd Floor, 195, Dr. Cowasji Hormusji Street, Bombay 2.  
 Sarabhai & Co.—Western India House, Sir Phirozshah Mehta Road, Fort.  
 Sepulchre Brothers (India) Private Ltd.—Taj Building, 210, Hornby Road.  
 Shanks & Co., Ltd.—Jaroo Building, next to Cornalia, Mahatma Gandhi Road, Fort.  
 Shapurji & Co., R. K.—319, Hornby Road, P. B. 1065, Fort.  
 Shaw, Wallace & Co. Ltd.—3, Wittet Road, Ballard Estate.  
 Shroff Bros. & Co.—4, Botawalla Building, 7-9, Elphinstone Circle, Fort.  
 Soho House.—Vithal Sayana Building, Lohar Street.  
 Sorabji Hormusji & Co.—22, Mangaldas Road, opp. P. O., Juma Masjid.  
 Sorabji Kharas & Co.—Fort Chambers, 65, Tamarind Lane, Fort.  
 Sorabji Pestonji & Co.—105, Apollo Street, Fort.  
 Spencer & Co., Ltd.—Spencer's Building, Forjett Street, Bombay 26.  
 Spinner, E., & Co.—3, Tamarind Lane, Fort.  
 Stone, J., & Co. (India), Private Ltd.—Yaffi Building, Goa Street, Ballard Estate.  
 Suren, W. T., & Co.—United India Building, Sir Phirozshah Mehta Road, Fort.  
 Tata Sons, Ltd.—Bombay House, 24, Bruce Street, Fort.  
 Textile Works, Ltd.—49-55, Apollo Street, Fort.  
 Thackersey Mooljee & Co.—Sir Vithaldas Chambers, Apollo Street, Fort.  
 Thakore, T. M., & Co.—Ready money Mansions, 41, Vlr Nariman Street.



Trading Co., Late Hegt & Co., Ltd.—Indu House, Dougall Road, Ballard Estate.  
 Turner Hoare & Co., Ltd.—Gateway Building, Apollo Bunder.  
 Turner Morrison & Co., Ltd.—16, Bank Street, Fort.  
 United Steel Companies (India), Ltd., The.—Himalaya House, Junction of Hornby Road and Palton Road, Bombay 1.  
 Valliram Sons.—Patel Building, Bomanji Master Road, Kalbadevi.  
 Vasantlal Vadilal & Co.—216-17, Samuel Street, Vadgadi.  
 Vikram Padamsey & Co.—Rustom Building, 20, Vir Nariman Street, Fort.  
 Vissanji, Sons & Co.—9, Wallace Street, Fort.  
 Vulcan Trading Co. Private Ltd.—Indian Mercantile Chambers, Nicol Road, Ballard Estate.  
 Wallace & Co.—9, Wallace Street, Fort.  
 Wheeler, A. H., & Co.—Eruchah Building, 249, Hornby Road, Fort.

### AGENTS, INSURANCE

Arvind & Co.—Bombay Mutual Building, Sir Phirozshah Mehta Road, Fort, Bombay.  
 Arvinda Trading Co., Private Ltd.—105, Apollo Street, Fort.  
 Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.  
 Bhiwandiwalla, H. M. D. H., & Co.—583, Chitra Bazar.  
 Brady, W. H., & Co., Ltd.—Veer Nariman Street, Fort.  
 Chandulal T. Shah, Hon. Presidency Magistrate and J.P.—Jehangir Bldg., 133, Mahatma Gandhi Rd., Bombay 1.  
 Chinubhai Kalidass & Bros.—20, Hamam Street, Fort.  
 Fakirchand Keshrichand Shroff.—Advan Chambers, Sir Phirozshah Mehta Road.  
**FINLAY, JAMES & CO., LTD.**—Chartered Bank Bldg., Mahatma Gandhi Road, Fort, Bombay 1. Post Box No. 73. Phone Nos. 251255-59.  
 Gillanders Arbuthnot & Co., Ltd.—16, Queen's Road Estate, Bombay 1.  
 Govindjee Madhowjee & Co., Ltd.—Sir Vitthaladas Chambers, 16, Apollo Street, Fort.  
 Hardcastle, Waud & Co., Ltd.—Alice Buildings, Hornby Road, Fort.  
 Kochikar Brothers Ltd. (Estd. 1910).—Gautam Nivas, Charni Road.  
 Kooverjee V. Curumsey & Co.—Lentin Chambers, Dalal Street, Fort.  
 Kulkarni & Company.—Navsari Building, 2nd floor, Hornby Road, Fort, Bombay.  
 Lee & Muirhead (India) Ltd.—12, Rampart Row, Fort.  
 Mohan Sons & Co.—125, Mahatma Gandhi Road, Fort, Bombay 1.  
 Motishaw, R. K.—Bhansilal Motilal Mansion, Hamam Street, Fort.  
 Nanji V. Dossa & Co.—Jan Mansion, Sir Phirozshah Mehta Road, Fort.  
**NAROTTAM & PEREIRA LTD.**—Scindia House, Dougall Road, Ballard Estate, Bombay 1. Phone: 262461. Grams: "JALATHARG." Shipping & Insurance Agents and Dubashes.  
 Purehotamdas Ishwardas & Co.—Co-operative Insurance Building, Sir Phirozshah Mehta Road, Fort.  
 Raghavji Kanji & Co.—Alli Chambers, Tamarind Lane, Fort.  
 Sarabhai & Sons.—Prospect Chambers, 321, Hornby Road, Fort.  
**SHEROFF & CO.**—Alice Bldg., Dr. Dadabhoy Naoraji Road, Bombay-1. Phone: 253254. Grams: "BONSECKS." Shipping, Clearing, Forwarding & Insurance Agents.  
 Sorabji Kharas & Co.—Fort Chambers, 65, Tamarind Lane, Fort.  
 Vasanji Khatau & Co.—Dena Bank Building, 17, Elphinstone Circle, Fort.  
 Volkart Bros.—19, Graham Road, Ballard Estate.

### AGRICULTURAL IMPLEMENTS AND REQUISITES

**ARJANSINGH KHEMCHAND.**—1st Floor, 118, Commerce House, Meadows Street, Bombay 1. Phone: 253752.  
 Bharat Electric Supply Traders.—542, Sandhurst Bridge, Chowpatty, Bombay 7.  
 Cambata Industries Private Ltd.—Cambata Building, 42, Queen's Road, Bombay 1.  
 Cooper Engineering Ltd.—Construction House, Ballard Estate, Bombay.  
 Drowet Chowna & Co.—Lentin Chambers, Meadows Street, Fort, Bombay.  
 Hindustan Engineering Co. (Machinery Dept.)—25, Ropewalk Street, Fort, Bombay.  
 Lachmandas Ramchand.—98, Nagdevi Cross Lane, Bombay 3.  
 Paramount Hardware Mart.—Carnac Bunder, Bombay 9.  
 Voltas Ltd.—19, Graham Road, Ballard Estate.  
 William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Bombay.

### AGRICULTURAL MACHINERY

**AGRA ENGINEERING CO.**—40, Bank Street, Fort, Bombay 1. Phone: Office: 266541; Res.: 532906. Grams: "RAJSPARES." Manufacturers of Diesel & Automobile Spare Parts, "ARROW" & "DISPA" Liner & Pistons for Diesel Engines "MG" Pistons for Car, Trucks, Commercial Vehicles, Motor Cycles, Scooters & Tractors.

**ARJANSINGH KHEMCHAND.**—1st Floor, 118, Commerce House, Meadows Street, Bombay-1. Phone: 253752.  
**BHARAT ELECTRIC & ENGINEERING CORPN.**—Free Press Building, Ground Floor, 21, Dalal Street, Fort, Bombay. Phone: 255374. Grams: "GODGRACE."  
 Duncan Stratton & Co., Ltd.—5, Bank Street, Bombay 1.  
 Eastern Machinery and Trading Co.—Imperial Chambers, Wilson Road, Ballard Estate, Bombay.  
 Imanes Private Limited.—94, S. V. Road, P.O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANESCOL". Springs and Forms out of Spring Wires and Strips for your Industry.  
 Jacks, William & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Fort.  
 Jagat Engineering Co.—11, Botawala Building, Horniman Circle, Bombay 1.  
 Kaman Engineering Corporation Ltd.—Kamani Chambers, Nicol Road, Fort.  
 Larsen & Toubro Ltd.—I.C.I. House, Dougall Road, Bombay 1.  
 Marshall Sons & Co. (India) Ltd.—Marshall Building, Ballard Estate, Fort.  
 P. Rai & Company.—105, Apollo Street, Fort.  
 P. Ratilal & Co.—43, Dhanji Street, Bombay 3.  
 Somani & Co. Ltd.—Mehta Building, Meadows Street, Fort, Bombay.  
**TALWARKER BROTHERS PRIVATE LTD., W. R.**—Lentin Chambers, Dalal Street, Fort, Bombay. Phones: 253367 & 256775. Grams: "PUMPENAMEL."  
 Voltas Limited.—19, Graham Road, Ballard Estate.

### AIR-COMPRESSORS & SPARE PARTS SUPPLIERS

Batliboi & Company Private Limited.—Regd. Office: Forbes Street. P.O. Box 190A, Fort, Bombay-1 (BR.). Phones: 255451 (6 lines), Grams: BATLIBOICO, Tele.: 011-284. City Branch: BATLIBOI HOUSE, 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident. Representatives: RANCHI, Bhubaneswar.  
**BHARAT ELECTRIC & ENGINEERING CORPORATION.**—Free Press Building, Ground Floor, 21, Dalal Street, Fort, Bombay. Phone: 255374. Grams: "GODGRACE."  
 Brady, W. H., & Co. Ltd.—12, Vir Nariman Street, Fort.  
**CONSOLIDATED PNEUMATIC TOOL CO., LTD.**—301/302, Agra Road, Mulund, Bombay 80. Phone: 592274/6. Grams: "CAULKING," Mulund, Bombay.  
**DODGE & SEYMOUR (INDIA) PRIVATE LTD.**—"KRUPA-NIDHI" 9, Wittet Road, Ballard Estate, Bombay-1 BR. Phone Nos.: 263674 & 385479. Grams: "EXIMCO".  
 Dodsai Limited.—Industry House, J. Tata Road Churchgate Reclamation, Bombay 1.  
 Gaytee & Co.—Janmabhoomi Chambers, Fort Street, Fort, Bombay.  
**HEMCO CORPORATION.**—308, Bazargate Street, P.B. 1645; Bombay 1. Phone: 254237; Dealers in Engraving Machines, Air Compressors, Spray Guns, Sheet Metal Machinery, Wood Working Machinery, Workshop Machinery, Flexible Shafts, Planer Blades and other Tools.  
**K. G. KHOSLA & CO. PRIVATE LTD.**—33-A, New Marine Lines, Fort, Bombay. Phone: 243744; Grams: "KEGI-KHOSLA." Manufacturers of "KHOSLA" Heavy duty Air Compressors, Stationary or Portable, Electric or Diesel driven, capacity 70, 120, 210, 250, 315, 350 & 500 cfm.  
 Larsen & Toubro Ltd.—I.C.I. House, Dougall Road, Bombay 1.  
**MACHINERY SALES CORPORATION.**—5, Tamarind Lane, Fort, Bombay-1. Grams: "ENGESPARES". Phone: 254480. Suppliers of spare parts for air compressors like BROOME-WADE, KIRLOSKAR BROOMWADE, ATLAS-CAPCO Etc.  
 Marshall Sons & Co. (India) Ltd.—Marshall Building, Ballard Estate, Fort.  
**PARKEEN BROTHERS.**—Industry House, 24, Bake House Lane, off Forbes Street, Fort, Bombay-1. Phone: 254862. Grams: "METALWARE"-1. Makers of Compressors  $\frac{1}{2}$  to 20 H.P., Compressed Air Accessories and Spray Paint equipment.  
 Voltas Limited.—19, Graham Road, Ballard Estate.  
 Ward Thos. W. (India) Ltd.—Marshall Building, Ballard Road, Fort.

### AIR-CONDITIONING AND REFRIGERATION

Ahmed A. Fazelbhoj (Private) Ltd.—Liberty Buildings, 41, Marine Lines, Bombay 1.  
**AIR CONDITIONING & REFRIGERATION CORPORATION.**—Repairs of all types of Air-Conditioners, Refrigerators, Water Coolers, Deep-Freezers, Water Coolers, Chilling Plants, X-Ray Developing Units, Industrial Air Control, Installation, Maintenance, Servicing, Dealers, Manufacturers, 297, S.V.P. Road, Bombay 3. Phone: No. 334295.



**AMERICAN REFRIGERATOR CO. LTD.**—Refrigeration and Air conditioning Engineers, Manufacturers of Famous "ARCO" window type 1 ton and 10 ton Air conditioners, Water Coolers (on rate contract with D.G.S. & D.) Packaged Air conditioners, Water Heaters, Bottle Coolers, ARCO Bush Coils, Condensers, Chillers, etc. Sole agents for Electrolux Refrigerators and "TRANE" Air conditioning and Refrigeration equipment in India. Sadhana Rayon House, Dr. D. N. Road, Bombay-1. Phone: 262916-17.

Asea Electric India (Private) Limited.—Yaffi Building, Goa Street, P.B. No. 941, Bombay 1.

**ATLAS ENGINEERING CORPORATION.**—Kitab Mahal, 192, Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 265234. Grams: "ICYCOOL." Authorised dealers for CHRYSLER Air temp. Air-Conditioners. Importers and Stockists of Air Conditioning, Refrigeration equipment & accessories.

Blue Star Engineering Co. (Bombay) Ltd.—Kasturi Bldgs., Jamshedji Tata Road, Bombay 1.

Bombay Ammonia & Refrigeration Co., (Private) Ltd.—298, Bazar-gate Street, Bombay 1.

**BOMBAY CYCLE & MOTOR AGENCY LTD.**—534, Sardar Vallabhbhai Patel Road, Bombay 7. Distributors for 'Air-temp' and 'Premair' Room Airconditioners, Airconditioning Service Station: Industry Manor, Chowny Gully, Bombay 28. Phone: 452998, 455075. Emergency Service on Saturday afternoon & Holidays. Phone: 352383.

Bombay Co. (Private) Limited.—9, Wallace Street, Bombay 1.

Bombay Garage (Private) Limited.—Meher Building, Chowpatty, Bombay 7.

Brady, W. H., & Co. Ltd.—12, Vir Nariman Street, Fort.

**BRIGHT BROTHERS PRIVATE LTD.**—156-A, Tardeo Road, Bombay 34. Grams: "BRIBOS." Phones: 378548 378549, 78540. Manufacturers of Plastic Air-Conditioner Fronts, Refrigeration Components etc. against Customer Specification.

**CALCUTTA BOMBAY TRADING CORPORATION.**—Sales & Service of Refrigerators, Airconditioners, Commercial Units & Installation and Maintenance of Cold Storage Plants of the Ships. 6, Brabourne Stadium House, Bombay 1 and Royal Opera House Building, Bombay 4. Tel. Nos. 245968 & 356732.

**CHOONILAL MOHANLAL & CO.**—Shop No. 54, Kika Street (Gulabwadi), Bombay 4. Stockists of Seamless Copper Tubes and Capillary Tubings for Air-Conditioning. Phone: 333904 & 335886 (Res.).

Crescent Agencies (Private) Ltd.—Beaumont Chambers, 2/33, Meadows Street, Fort, Bombay.

**DADAJEE DHACKJEE & CO. PRIVATE LTD.**—Refrigeration and Air-Conditioning Dept., Sandhurst Bridge, Bombay 7. Manufacturers of "ROOTES TEMPAIR" Packaged-type Room Air-Conditioners. Distributors & Suppliers of Remote & Central Type Air-Conditioning & Cold Storage Plants. Telegrams: "PROMPT," Bombay 7. Phone: 352321.

**DEVIDAYAL TUBE INDUSTRIES LTD.**—Gupta Mills Estate, Reay Road, Bombay 10. Grams: "DEVITUBE." Phone: 70001 (4 lines). Manufacturers of Seamless Solid drawn and Annealed Copper tubes and pipes for Refrigeration and Air-Conditioning Industries.

Duncan Stratton & Co. Ltd.—5, Bank Street, Fort.

**ECONOMY REFRIGERATION & ENGINEERING CO.**—Suppliers of Ammonia and Freon Compressors and Manufacturers of Refrigeration and Ice Plant equipments and parts. P.O. Box. 449, Forbes Street, Fort. Phone: 253342. Grams: "ICEMACHINE," Bombay.

Electronics Limited.—Spencers Bldg., Forjett Street, Bombay 26.

English Electric Co. Ltd.—Vulcan Insurance Building, Churchgate Reclamation, Bombay 1.

Freezall.—Tribhuvan Road, Bombay 4.

**FRIGSALES (INDIA).**—204, Commerce House, Meadows Street, Fort, Bombay. Phone: 251798. Grams: "FRIG-FROST." Dealers in 1/40, 1/20 H.P. to 3 H.P. single phase and 3 phase upto 100 H.P. Imported and Indian Motors, Starters, Switches, Condensers, O.C.B. Meters, etc., etc.

Gannon Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.

Garlick & Company (Private) Limited.—Haines Road, Jacob Circle, Bombay 11.

General Electric Co. of India (Private) Ltd.—Magnet House, Dougall Road, Ballard Estate, Bombay 1.

General Radio Appliances Ltd.—Opera House, Bombay 4.

Heatly and Gresham Ltd.—9, Forbes Street, Fort.

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Erli, P.O. Box 8002, Bombay 56 (AS). Phone: 571634. Grams: "IMANESCOL." Springs & Forms out of Spring Wires and strips for your Industry.

**INDO-EUROPEAN TRADING AGENCIES.**—4th Floor, Behramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay. P.O. Box 1344. Phone: 262664. Grams: "MUSKETEERS." Direct Importers of Tecumseh and Danfoss Compressors, Condensing Units, Thermostats and Noranda Copper Tubing.

**INDUSTRIAL AIR CONTROL (INDIA) PRIVATE LTD.**—P.N.B. House, 2nd Floor, 59, Sir Phirozshah Mehta Road, Fort, Bombay. Phone No. 262475. Grams: "COOLAIR." Specialists in all Air-Handling Equipments, Textile Dust and Fume Removal and Oil Spraying.

Industrial & Engg. Services.—Sunderbaug Estate, Agra Road, Kuria, Bombay 37.

International General Elec. Co. (India) Private Limited.—Thackersey House, Graham Road, Ballard Estate, Bombay 1.



■ AIR-CONDITIONING  
■ REFRIGERATION  
■ HUMIDIFICATION

**JAFKAY  
ENGINEERING  
CORPORATION**

Phone: 252974 □ 59, Forbes Street, Bombay-1.

Phone: 227161-62 □ 13, Brabourne Road, Calcutta-1.

**AIR-CONDITIONING BY THE PEOPLE WHO KNOW HOW**

JEC-16

Larsen & Toubro Limited.—I. C. I. House, Dougall Road, Ballard Estate, Bombay 1.

Mazagon Dock Limited.—4, Ballard Road, Ballard Estate, Bombay 1.

Modern Electric Corporation.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone: 262120.

McKenzie Ltd.—Sewri.

**MOOSA HAJI PATRAWALA.**—20, Haines Road, Mahalaxmi, Bombay 11. Phone Nos. 373201 & 378818; Grams: "TIN-SMITH". Manufacturers of "Air Conditioning & Refrigeration equipments; All kinds of Sheet metal Works; Metal Coatings with plastics; Fibre reinforced Plastics; Mouldings & Extrusions.

Pandya & Company.—Nanabhoy Mansion, 5th Floor, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone 261228. Grams: "AIR-DUCTS". Manufacturers of Sheet Steel Components for Air Conditioning, Refrigeration, Humidification and Exhaust Systems, such as Air Ducts, Air Washers, Dust Collectors, All types of adjustable Grilles, Diffusers, Dampers, Cooling Towers, Hot & Cold Insulation, etc.

Philips (India) Private Ltd.—221, D. Naoroji Road, Bombay 1.

Premier Automobiles Ltd.—Construction House, Ballard Estate, Bombay 1.

Protos Engineering Co. Ltd.—173, Jamshedji Tata Road, Churchgate, Bombay.

**RADICRAFTERS, THE.**—Air Conditioning & Refrigeration Engineers, Laud Mansion, opp. Charni Road Station, 21-C-D, Queen's Road. Phones: 354406 (Office) and 356003 (Works).

Refrigeration & Appliances Co. (Private) Ltd.—Pravin Court, 95, Queen's Road, Bombay 1.

**SPENCER & CO. LTD.**—Spencer's Building, Forjett Street, Bombay 26. Phones: 362861-62-63. Grams: "PORTEDOS." Sole Distributors throughout India for Kelvinator Refrigerators & Belaire Air Conditioners. Sales & Service.

**T. M. TYABJI & BROTHERS.**—Hamam House, 32/38, Hamam Street, Fort, Diesel Engine Spares, Hardware, Refrigeration and Electrical Specialists. Grams: "TRUEWAY". Phone: 254285.

**UNITED ENGINEERING CO., THE.**—Daya Manril, 27-A, Deorukhar Road, Bombay 14. Assemblers and Manufacturers of Air-Conditioners, Refrigerators, Water Coolers, Commercial Freezing Plants and accessories; also specialised in repairs and maintenance and undertake service contracts. Phone: 443008.

Voltas Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

Vulcan Trading Co., Private Limited.—Indian Mercantile Chambers, Nicol Road, Ballard Estate, Bombay 1.

**AIRCRAFT, AIRCRAFT PARTS & ACCESSORIES**

Imanes Private Limited.—94, S. V. Road, P.B. No. 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANESCOL." Springs & Forms out of spring wires and strips for your Industry.

Indamer Company Ltd.—Hanger 1, Near Aerodrome Office, Juhu, Bombay 23.

National Helicopters Private Ltd.—Cambata Building, 42, Queen's Road, Bombay 1.

William Jacks & Co. Ltd.—Hamilton House, Graham Road, Ballard Estate.



# SIMPLEX PRODUCT

## MARSHAL ALUMINIUM LADDERS

**LIGHT IN WEIGHT  
RUST PROOF  
ROT PROOF**

LADDER SIDES  
INTERLOCKING  
EACH OTHER  
FOR MAXIMUM  
SAFETY

FITTED WITH  
MANILA ROPES  
AND QUICK  
MOVING LOCKS

RIBBED RUNGS  
FOR SAFE  
FOOTHOLD

MANUFACTURED  
FROM  
ALUMINIUM  
ALLOY



FITTED WITH  
SOLID RUBBER  
SHOES & CAPS

### SINGLE SECTIONS

| DESIGN<br>NO. | HEIGHT<br>FT. |
|---------------|---------------|
| ALM 1         | 10            |
| ALM 2         | 12            |
| ALM 3         | 14            |
| ALM 4         | 16            |
| ALM 5         | 18            |
| ALM 6         | 20            |
| ALM 7         | 25            |

### DOUBLE SECTIONS

| DESIGN<br>NO. | HEIGHT        |                 |
|---------------|---------------|-----------------|
|               | CLOSED<br>FT. | EXTENDED<br>FT. |
| ALM 8         | 10            | 17              |
| ALM 9         | 12            | 21              |
| ALM10         | 14            | 25              |
| ALM11         | 16            | 29              |
| ALM12         | 18            | 32              |
| ALM13         | 20            | 35              |
| ALM14         | 25            | 45              |

TELE { PHONE: 331794  
GRAMS: "LADDERMAN"

## SIMPLEX TIMBER MART

64-68, IBRAHIM MOHAMED MERCHANT ROAD,

POST BOX NO. 5012

KHADAK BOMBAY-9 (INDIA)



## ALUMINIUM LADDER MFRS.



# FAMOUS

## ALUMINIUM LADDERS

Constructed throughout of high tensile Aluminium Alloy, these ladders are immensely strong and durable, extremely light in weight and proof against rust, rot, fire and splinters.

In addition, the special feature of design combines to give its unequalled simplicity and safety in operation.

Manufacturers :

### FAMOUS LADDERS MANUFACTURING CO.

128-130 E, Victoria Road, Byculla, BOMBAY-27

Grams : "SAFELADDER"

Phone : 376447.

*Illustrated Catalogue free on request.*

"Commander"

## ALUMINIUM PASTE, PAINTS &amp; MEDIUMS

**STAR PAINT & OIL INDUSTRIES.**—Crescent Chambers, 56, Tamarind Lane, Fort, Bombay 1. Phone : 253493. Grams : "STARPAINT." Manufacturers of Industrial Paints, All kinds of Aluminium Pastes, Aluminium Paints and Mediums; Specialists in HEATEX Heat Resisting 1,200°F. Aluminium Paint.

## ALUMINIUM SHEETS, RODS, ETC.

**DECCAN ALUMINIUM STORES.**—56, 1st Bhoiwada, Bombay 2. Phones : 335242 & 333820; Grams : "DECCALUMIN." Exporters and manufacturers of Non-Ferrous Export items and Industrial Equipments. Dealers in Sheets, Circles, Wires, Pipes, etc.

**EVERGREEN CORPORATION.**—9/15, Picket Cross Road, P.O. Box No. 2733, Bombay 2. Grams : "GREENLEAVE." Phone : 22162. Stockists of Aluminium Sheets, Rods, Tubes, Strips, Foils, Rivets, etc.

**GUJARAT ALUMINIUM STORE.**—85, Kansara Chawl, Bombay 2. Wholesale & Retail Dealers in Aluminium Sheets, Wire Rods, Angles, Padi, Pipes & Rivets Specialists. Grams : "YOURSHOP". Phones : 325704, 321562.

**PRAVINCHANDRA D. BROS.**—105, Kika Street, Gulawadi, Bombay 4. Phone : 332419. Grams : "RODSBRASS." Dealers & Stockists of Non-Ferrous Metals & Semi-Finished products, Copper & Brass Rods, Pipes, Sheets, Sheathing, Wire strips, etc. Phosphor, Bronze, Rods & Wires. Aluminium Sheets, Rods, Wires & Tubes, Stainless Steel Sheets, Tubes & Rods.

**PREMIER METALS & ENGG. CO.**—11-B, Ardeshir Dady X Lane, C.P. Tank, Bombay 4 BR. Stockists & Wholesalers : Aluminium Sheets, Plates, Strips, Foils, etc. EXTRUSIONS : Rods, Tubes, Architectural & Structural Sections and Electrical grade BUSBARS. Phone : 335333. Grams : "NAMRATA."

## ALUMINIUM SOLDING (ULTRASONIC UNIT)

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Fort, Bombay 1. Phones : 266371, 264555 & 263795. Grams : "VIBHACO". Branch : G.P.O. Box No. 2628, Calcutta 1. Phone : 336680. Manufacturers of Aluminium solding (Ultrasonic Unit).

## ALUMINIUM WORKS

**Amritlal Girdharlal & Co.**—71, Kansara Chawl, Bombay 2. Crown Aluminium Works.—26, Parel Tank Road, Bombay 12. Dun Aluminium Factory.—225-229, Tardeo Road, Bombay.

**INDIAN ALUMINIUM COMPANY LIMITED.**—Engineering Centre, 4th Floor, 9, Mathew Road, Bombay 4. Grams : "INDALUMIN." Phone : 353341.

**Indlan Standard Metal Co., Ltd.**—Chinchpokli Cross Lane, Bombay 27.

**KIV TRADING CO.**—17/1st Parsiwada, Khetwadi, Bombay 4. Phone : 375103. Grams : "KIVGROUP."

**Kotkar Enamel Works.**—383, Arthur Road, North Lamington Road.

**LALLUBHAI AMICHAND PRIVATE LTD.**—Proprietors : "Dun Aluminium Factory," 225-27, Tardeo Road, Bombay 7. Mfrs. of "Cycle" Brand Aluminium Wares & "Queen" Brand Stainless Steel Utensils & other non-ferrous metalware. Phone Nos. : 370996, 377175, 334049 & 331888. Grams : "CYCLEBRAND."

**LIGHT METAL WORKS.**—New Sun Mill Compound, DeLisle Road, Bombay 13. Manufacturers of Industrial Equipment and Export Articles in Stainless Steel & Aluminium and its Alloy Castings. Phone : 371817.

**Mahomedhusain & Bros.**—106, Kansara Chawl, Kalbadevi, Bombay 2.

**RAMESCHANDRA PRIVATE LTD.**—235, Kika Street, Bombay 2. Phones : 332478 & 333928; Grams : "METALHOUSE." Aluminium Taggar Foil. Also Distributors of Indian Aluminium Company Limited, for Aluminium Extruded Sections such as Rods, Tubes, Flats, Mouldings, Trimmings & Architectural & Miscellaneous Sections. Also Stockists of Aluminium Sheets, Wires & Rivets and Copper Sheets, Wires, Rivets, Strips, Rods and Lighting Arresters, etc.

**Sanghvi & Sons.**—20, Kansara Chawl, Kalbadevi Road, Bombay 2.

## AMPLIFIER MANUFACTURERS &amp; EXPORTERS

**International Trading Corporation.**—Ahmed Chambers, 386, Lamington Road, Bombay 4.

**LALLUBHAI AMICHAND PRIVATE LTD.**—Proprietors, "Dun Aluminium Factory". 225-27, Tardeo Road, Bombay 7. Leading Manufacturers of all types of Radio Horns, Chassis, Magazine Boxes, Spools & Cans, etc.

**Western Agencies' Co.**—421, Lamington Road, Bombay 4.

## ANALYSTS (ANALYTICAL CHEMISTS)

**CHEM-MED ANALYTICAL LABORATORIES.**—Office : 27, Western India House, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone : 254307. Labs. : 5-6, Kakad Estate, Seaface Road, Worli, Bombay 18. Chemical & Microbiological Biological Analysis of Pharmaceuticals, including Pyrogens and Toxicity tests, Chemicals, Drugs, Oils, Ice Creams, Cosmetics, Foodstuffs, Minerals, Ores, Metal Alloys, Fertilisers, Insecticides and other consumer products.

**ITALAB PRIVATE LTD.**—Assayers, Samplers, Surveyors, Geologists, Consultants and Public Analysts. Head Office : 15, Cawasji Patel Street, Bombay 1. Phones : 25-3882/83. Grams : "ITALABO." Laboratories at : Calcutta, Madras, Visakhapatnam and Kandla.

**THERAPEUTICS CHEMICAL RESEARCH CORPORATION.**—Cargo Superintendents, Surveyors, Samplers and Analysts. 95, Morland Road, Byculla, Bombay-8. Grams : "THERA-SEARCH". Phone : 378207/8. Principal Laboratories at Bombay; Branch Laboratories at Madras, Margao (Goa), Visakhapatnam and Nagpur.

**URALAB.**—194-A, Gaiwadi, Girgaum, Bombay 4. Consultants and Analysers for Chemicals, Drugs, Cosmetics, foods, Minerals, Ores, Oils, Oil Cakes. Undertakes research on Industrial Problems. Phone : 355776.

## ANODIZING

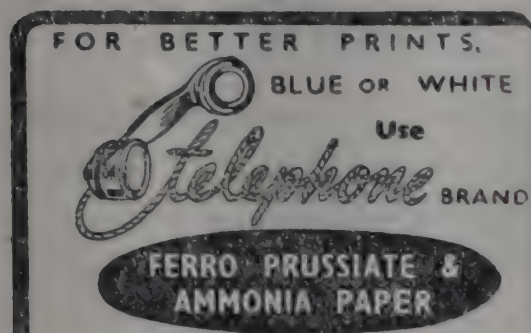
**BIERI PRIVATE LIMITED.**—Anodizing and Surface treatment of Aluminium, Office & Factory : Near Bus Terminus-Slon, Bombay 22DD. Phone : 471291, 473855 & 475565.

**EXCEL PROCESS (P.) LTD.**—Mfrs. of Anodised Aluminium Labels, Advertising Gifts, Scales, Dials, Badges, Decorative Radio Trimmed & Panels, Identity Cards & Photographs in exclusive finishes; 117, Andheri-Kurla Road, Bombay 69. Phones : 572743-573327.



**KIV TRADING COMPANY.**—17/1st Parsiwada, Khetwadi, Bombay 4. Phone: 375103. Grams: "KIVGROUP".

## ARCHITECTS & SURVEYORS REQUISITES



Enquiries to Manufacturers:-

### BOMBAY MISCELLANIES PRIVATE LTD.,

Khan Manzil, 28, Calicut Street, Fort, BOMBAY-1.

Grams: "FEPRU"

Phone: 266523

## ARCHITECTS AND SURVEYORS

- Abdulla Peermahomed & Co.—"Sardar Mansion," 22, Apollo Street, Fort.
- Ahmed Gaya & Co., Ltd.—People's Building, Sir Phirozshah Mehta Road.
- Architectural Studio.—Prospect Chambers Annexe, Hornby Road, Fort.
- Bhedwar & Bhedwar.—Cook's Building, Hornby Road, Fort.
- Bilaney, M. M., M.Sc. (Engr.) (Lond.).—Meadows House, 39, Meadows Street, Fort.
- Dalal & Mehta.—41, Meadows Street, Fort.
- Darukhanawalla, J. M., B.Sc. (Edn.).—Prospect Chambers, 317-21, Hornby Road, Fort.
- Designers Private Ltd.—91/A, Walkeshwar Road, Bombay 6.
- Desai and Kirtikar.—Laxmi Bldg., Sir Phirozshah Mehta Road, Fort, Bombay.
- Dhunjishaw Bhedwar & Co.—Behramji Mansion, Sir Phirozshah Mehta Road, Fort.
- Ditchburn & Mistri & Bhedwar.—49-51, Jehangir Wadia Building, Mahatma Gandhi Road, Fort.
- DOCTOR, B. E., F.I.I.A., F.R.I.B.A., M.R.S.H.**—Chartered Architect, "Dhannur," Sir Phirozshah Mehta Road, Fort, Bombay 1 (BR); and "BEN NEVIS," Werden Road, Bombay 26 (WB). Phone: 261671.
- Engineering Survey Corporation.—Industrial Assurance Building, Churchgate Reclamation.
- Gannon, Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.
- GILBERT LODGE & CO.**—Elphinstone Building, Veer Nariman Street, Fort, Bombay. Phones: 251819 and 252607. Grams: "READINESS."
- Gregson, Batley & King.—Chartered Bank Building, Mahatma Gandhi Road, Fort.
- Havaldar, K. G., & Co.—Kamer Building, 106, Cowasji Patel Street, Fort.
- Hormasji Ardeshir, F.I.I.A., M.I.E. (Ind.), L.C.E.—22-D, Parsi Bazar Street, Fort.
- Iyengar & Co.—Co-operative Insurance Building, Sir Phirozshah Mehta Road, Fort.
- JAMNADAS & BHIDE.**—Architects & Surveyors, 134, Meadows Street, Fort, Bombay 1. Phone: 253666.
- Kapadia & Baria.—Ballard House, Jam-e-Jamshed Office, Mangalore Street, Fort.
- Karandkar & Co.—Cama Building, 24-28, Dalal Street, Fort.
- Karim Noorani & Co.—Mustafa Bldg., Sir Phirozshah Mehta Road, Fort.
- Kora & Bhatt.—22, Apollo Street, Fort.
- Master, Sathe & Bhuta.—34-38, Hummum Street.
- Merchant, V. H. & Co.—54, 3rd Bhoiwada, Bhuleshwar, Bombay 2.
- Merwanjee Bana & Co.—Cama House, No. 24, Dalal Street, Fort.
- Metcalfe & Hodgkinson.—Mackinnon Mackenzie's Building, Ballard Road.
- MHATRE, PATIL & CO., B.**—Bombay Mutual Building, Corner of Dr. Dadabhoy Naoroji Road and Sir Phirozshah Mehta Road, Fort. Phone: 263570.
- MODI & CO., V. M.**—Nanabhai Mansion, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone: 261042. Consulting Architects, Engineers, Surveyors and Fire Loss Assessors.

Motilal & Co.—2-4, Apollo Street, Fort.

Mulvaney & Co., John L.—Bombay Mutual Building, Hornby Road, Fort.

Nemchand C. Kuvadia, B.E., A.M.I.E.—People's Building, Top Floor, Sir Phirozshah Mehta Road, Fort, Bombay.

Nadkarni & Co.—Ash Lane, Fort, Bombay 1. Architects, Engineers and Surveyors.

Pandit Bros.—Shivlal Motilal Mansion, Hamam Street, Fort.

Parekar & Dallas.—Chartered Architects, Meadows House, Meadows Street, Fort.

Pastakia & Billimoria.—42, Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**POONAGER, BILIMORIA & CO.**—Architects, Civil Engineers, Surveyors, Appraisers and Adjusters for Insurance Companies, Rating Surveyors & Valuers. Cama Building, 24-26, Dalal Street, Fort, Bombay. Phones: 253625 (Office) and (Res.), 376562 (Shri Poonager) and 351796 (Shri Bilimoria), 322329 (Shri Rao).

Rustom H. Pastakia, F.R.I.B.A.—42, Laxmi Building, Sir Phirozshah Mehta Road, Fort.

Sane & Paymaster.—Prospect Chambers Annexe, Hornby Road, Fort.

Shapoorjee N. Chandabhoy & Co.—Advani Chambers, Sir Phirozshah Mehta Road, Fort.

Sykes, Patkar & Divecha.—24-26, Dalal Street, Fort.

Taraporewala & Co.—Horniman Circle, Fort, Bombay 1. Phone: 252703.

Thacker & Co., C. R.—Advani Chambers, Sir Phirozshah Mehta Road, Fort.

## ARGON—ARC SETS MFRS.

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Bombay 1. Phones: 266371, 264555 & 263795. Grams: "VIBHACO". Branch: G.P.O. Box 2628, Calcutta 1. Phone: 336680. Manufacturers of ARGON-ARC Sets (Automatic & Semi-automatic).

## ARMATURE WINDING WIRES & STRIPS

**HINDUSTAN WIRE PRODUCTS LTD.**—Manufacturers of Super Enamelled & Cotton Covered Copper Wires. Bombay Office: Sardar Griha Building, Carnac Road, Bombay 2. Phone: 22280. Grams: "HINWIREPRO." Factory: Factory Area, Patiala (Punjab). Calcutta Office: 14, Netaji Subhas Road, Calcutta. New Delhi Office: 1774, Vishnu Bhavan, Bhagirath Place, Chandni Chowk, Delhi 6.

## ARMS AND AMMUNITION

Abdoolally Noorbhoy.—248-252, Abdul Rehman Street.

Bombay Armoury.—329-31, Abdul Rehman Street, Bombay 3.

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Erla, P.O. Box 8002, Bombay 56 AS. Phone: 511634. Grams: "IMANE-SCOL". Springs & Forms out of Wires and Strips for your Industry.

India Arms (Private) Limited.—351, Abdul Rehman Street, Bombay 3.

**MAHOMEDALLY NOORBHOY (Estd. 1858).**—246, Abdul Rehman Street, Bombay 3, BR. Phone: 324396. Grams: "SHOOTER."

New India Arms and Ammunition Stores.—39, Sitaram Building, Dr. Dadabhai Naoroji Road, Bombay 1.

Saleh, M., & Co.—337, Abdul Rehman Street.

Tahir Arms Stores.—333, Abdul Rehman Street, Bombay 3.

## AROMATIC CHEMICALS

Aromatic Products & Chemicals Ltd.—Prospect Chambers Annexe, D. Naoroji Rd., Fort.

**B. C. PATEL & CO.**—Devkaran Building, Princess Street, Bombay 2. Stockists of Aromatic Chemicals, Essential Oils and Perfumery Compounds. Phone: 20366. Grams: "SNEHALATA."

**CHUDGOR & CO. PVT. LTD.**—Regd. Office: Anand Bhuwan, Princess Street, Bombay 2 (B.R.). Phones: C/o 30023, 30024 & 20419. Grams: "CHUDGORECO", Bombay 2 (B.R.). Dealers in Chemicals, Dyes, Sizing Materials & Waxes, etc.

**M. C. DAVAR, & CO.**—143, Princess Street, Bombay 2. Phone: 39752. Grams: "EMCIDAVAR." Aromatic Chemicals, Essential Oils and Perfumery materials. Agents for:—Esrolko Ltd., (Folra) Switzerland.

D. D. Shah & Co.—Damodar Building, 105, Princess Street, Bombay 2.

**GENERAL IMPORT CO. (INDIA).**—Keshav Baugh Building, 102, Princess Street, Post Box No. 2376, Bombay 2. Phone: 38497. Grams: "SODALEMON." Aromatic Chemicals, Essential Oils, Aerated water requisites, Essences, Harmless Food Colours and Saccharine.



**GOLDENSUN MANUFACTURING CO.**—Distillers & Manufacturers of Highly Concentrated Fruit & Flower Essences & Essential Oils, Perfume, Compound, etc. Bansilal Building, 64-C, Girgaum Road, Bombay-4. Sales Office: Mulchand Mansion, Princess Street, Bombay-2.

**INDUSTRIAL PERFUMES LTD.**—Head Office: 3rd Floor, Army & Navy Building, Mahatma Gandhi Road, Bombay 1. Phone: 255526/9—Extn. 3 & 4. Factory: Hay Bunder Road (Tata Oil Mills Compound), Sewri, Bombay 33. Phone: 373331. Manufacturers of Aromatic Chemicals and Perfumery Compounds.

Kapadia & Co.—19, Sir Phirozshah Mehta Road, Fort, Bombay.  
Odhawji Lawji & Co.—Chikhal House, 144/B, Princess Street, Bombay 2.

**N. R. SHAH & COMPANY.**—Mulchand Mansion, Princess Street, Bombay 2. Phone: 20093. Grams: "WALFLOWER". Perfumers and Perfumery Raw Material Dealers Dealing in Aromatic Chemicals, B.P., Natural, Synthetic Essential Oils and Perfumery Compounds.

**ROSHANLAL & SONS.**—133, Princess Street, Gopal Nivas, Bombay 2. Phone: 38579. Grams: "BERGAMOT." Importers & Dealers in Essential Oils, Aromatic Chemicals, Flavouring Essences & Food Colours. Distributors for "ABRAC." Agents for: "CROWN" Brand Patchouli Oil & H. Reynaud ET Fils (France).

**S. H. KELKAR & CO. PRIVATE LTD.** (Estd. 1928).—36, Mangaldas Road, Bombay 2. Phone: 29130. Grams: "SACHEWORKS." Dadar, Bombay. Manufacturers of Essential oils, Aromatic Chemicals and "COBRA" Brand Perfumes.

Sikri Brothers.—79-E, Princess Street, Bombay No. 2. Phone No. 33494. Grams: "OILMAN."

**SUDAN TRADING CO.**—"Dhan Nur," Phirozshah Mehta Road, Bombay 1. Phones—Office 262788. Res.: 62089. Grams: "VANSOBHA".

**VELU & CO. (PVT.) LTD., P. K.**—P. O. Box No. 514, 111, Mahatma Gandhi Road, Bombay 1. Phone: 253141 & 641326. Grams: "LACQUER".

Voltas Ltd.—19, Graham Road, Ballard Estate.

### ARTIFICIAL SILK YARN

Arvinda Bros.—165, Vithalbhai Patel Road, Bombay 4.  
Girdharilal, Bhavani Prasad.—Jai Hind Building No. 1, Bhuleshwar, Bombay 2.  
Hazarat & Co.—Warden House, Sir Phirozshah Mehta Road, Fort.  
Hossein, M. A., & Bros.—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.  
Kapurchand Private Limited.—Roxy Chambers, New Queen's Road, Bombay 4.  
Ramkisanadas Sagarmal.—Kalyan Bhuvan, 354, Kalbadevi Road.  
Ratilal Dayabhai Shah.—Tambakanta, Pydhownie.  
Sewaram Girdharilal.—354, Kalbadevi Road.

### ASBESTOS PRODUCTS

**A. M. LAKDAWALLA.**—23, Dhaboo Street, Bombay 3. Phone: 332066. Grams: "STRONGTEAM." Authorised Stockists for "Everest" Asbestos Cement Big Six and Trafford Sheets & Accessories, Building Boards, Pipes, Gutters and fittings. Manufacturers of G.I. hook, bolts & nuts "J" & "L" type. Supply Fabrication & Erection steel for Industrial sheds and building Contractors.

**ABDEALLY, B. M., & Co.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL".

**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay 1. Phone: 25-2952, 25-4103. Grams: "PILOTACE."

**ARANHA AGENCIES.**—190, Cadell Road, Mahim, Bombay 16. Phone: 453504. Official Stockists of "Everest" Asbestos, Cement "Big Six" Corrugated Sheets & Trafford Sheets, Building Boards, Gutters, Pipes & Fittings, Mfrs. of Roof Bolts, Gutter & Pipe Clamps & Accessories, Specialists in the erection of Asbestos Cement Roofs & all Asbestos Cement Products.

**ASBESTOS, MAGNESIA & FRICTION MATERIALS LTD.** (Incorporated with Limited Liability in England).—A member of the Turner & Newall Group, Bombay-Agra Road, Ghatkopar, Bombay 77. Sales Offices: Calcutta, Madras & New Delhi. Grams: "ASMAFRIC." Phones: Bombay 582391, Calcutta 232012, Madras 85610 & New Delhi 27 5436.

**BABULAL & BROS.**—26, Nagdevi Cross Lane, Bombay 3. Phone: 323930. Grams: "FIREFLY." Stockists of Abrasives, Asbestos Goods, Engineering Tools, Hardware, Mill Gin Stores, Pipe Fittings.

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.  
Bharat Engineering Stores.—113, Nagdevi Street, Bombay 3.  
Brady, W. H. & Co., Ltd.—Veer Nariman Street, Bombay 1.



### ASBESTOS & TEFLON PACKINGS

For STEAM, HYDRAULIC ACIDS & CHEMICALS

### ASBESTOS PACKING & MFG., CO.,

15-A, Bruce Street, Bombay 1

Phone: 251605.

Grams: "FERRYLIGHT".

**CHUNILAL KHANNA & CO.**—Saraswati Niwas, Thakurdwar Road, Bombay 2. Phone: 354813. Grams: "BABALALU".

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort. Phone: 254433. Grams: "DATNARE."

**EASTERN STORES & TRADING CO. PRIVATE LTD.**—115, Nagdevi Street, Bombay 3. Phones: 322215/16. Grams: "ENERGY."

Fakhruddin & Co.—43, Abdul Rehman Street.

Hardcastle, Waud & Co., Ltd.—Alice Buildings, Hornby Road, Fort.

**HINDUSTAN FERODO LIMITED** (A member of the Turner & Newall Group).—Registered Office & Factory: Bombay-Agra Road, Ghatkopar, Bombay 77. Grams: "FERODO-STAN." Phone: Bombay 582391, Calcutta 232012, Madras 85610 and New Delhi 275436. Sales Offices: Calcutta, Madras and New Delhi. Manufacturers of "FIREFLY" Asbestos Textiles, Compressed Asbestos Fibre Jointings and Limpet Asbestos Sheets.

Hindustan Plywood & Metal Depot.—301, Shree Krishna Niwas, Corner of Abdul Rehman Street & Masjid Bunder Road, Bombay 3.

**HIRALAL GOKALDAS DALAL & CO.**—45, Nagdevi Cross Lane, Bombay 3. Phone: 321594. Grams: "HIRAGOCUL." "Firefly" Asbestos Textiles, Packings, Jointings, Millgin Stores, Engineering Hardware Tools.

Jacks, William & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Fort.

Jairamdas & Sons.—163, Narain Dhuru Street, Bombay 3.

Jaswantlal Maneklal & Co.—40, Churchgate Street, Fort.

Merchants Bros.—151, Nagdevi Street.

**MODERN MACHINE TOOLS CO.**—88, Nagdevi Cross Lane, Bombay 3. Phone: 322456. Grams: "MONKEYGRIP." Stockists: Turner Asbestos Yarn, Packings, Jointings.

**NAGDEVI TOOL-STEEL MART.**—186-88, Nagdevi Street, Bombay 3. Phones: 323023 and 327058. Grams: "TENDERERS."

P. Ratilal & Co.—43, Moti Mahal, Dhanji Street, Bombay 3. Phone: 32700.

**R. MOHANLAL & CO.**—38, Bibijan Street, Bombay 3. Phone: 324929. Grams: "HANDTAPS." Speciality: All kinds of Asbestos Packings, Jointings, Leather & Rubber Beltings, Vulcanised Fibre Sheets and allied accessories.

Roberts, McLean & Co. Private Ltd.—Ilaco House, Sir Phirozshah Mehta Road.

Shalebhoj Tyebjee & Sons.—12, Bruce Street, Bombay 1.

**SUPREME MILL STORES.**—36, Bhajipala Lane, Bombay 3. Phone: 325150. Grams: "SUPMILISTO." Manufacturers of 85 per cent A. Magnesia, Authorised Stockists of Hindustan Ferodo Fire Fly Asbestos Packings and Jointings.

### ASPHALT FLOORING

**SHALIMAR TAR PRODUCTS (1935) LTD.**—16, Bank Street, Fort, Bombay 1. Phone: 254643. Grams: "TARSTIL." Acid-Alkali resisting Asphalt Flooring, White Ant Proof Asphaltic Fibres in Floor Joints, Asphalt Caulking in Timber Floors. Contracts executed under guarantee.

### ATTORNEYS AND SOLICITORS' FIRMS

Albars & Co.—Central Bank Building, Mahatma Gandhi Road, Fort.  
Alreja & Co.—Ismael Building, Hornby Road, Fort.

Amarchand & Mangaldas.—Lentin Chambers, Junction of Dalal Street and Medows Street, Fort.

Ambubhai & Diwanji.—Lentin Chambers, Corner of Dalal Street and Medows Street, Fort.



Amin, B. & Co.—42-43, Ali Chambers, Dean Lane, Fort.  
 Amin, Desai & Nanavati.—Hummum House, Hummum Street, Fort.  
 Ardeshir, Hormasji, Dinshaw & Co.—113, Mahatma Gandhi Road, Fort.  
 Benjamin, Chhatrapati & Co.—Seksaria Chambers, 139, Medows Street, Fort.  
 Bhalsankar, Kanga & Girdarlal.—Albert Building, Hornby Road, Fort.  
 Cama & Jayakar.—Yusuf Building, Mahatma Gandhi Road, Fort.  
 Chitre & Co.—Examiner Press Building, 35, Dalal Street, Fort.  
 Choksey & Co.—Ali Chambers, Medows Street, Fort.  
 Crawford, Bayley & Co.—Imperial Bank Building, Bank Street, Fort.  
 Dabholkar & Jestaram.—Junction of Medows Street & Tamarind Lane.  
 Dady Burjor & Co.—Rustom Building, 29, Churchgate Street, Fort.  
 Dalal, N. C., & Co.—111, Mahatma Gandhi Road, Fort.  
 Dallas & Co.—Junction of Medows Street and Military Square Lane, Fort.  
 Daphtary, Ferreira & Divan.—13-19, Medows Street, Fort.  
 Dastur & Co.—Ismael Building, Hornby Road, Fort.  
 Dayaji & Dipchand.—Fort Chambers, Dean Lane, Fort.  
 Desai & Co.—70, Medows Street, Fort.  
 Dewan Raj Kumar.—78, Podar Chambers, Parsee Bazar Street, Fort.  
 Dikshit, Manecklal & Co.—23, Medows Street, Fort.  
 Eastley Lam & Co.—Jehangir Building, Mahatma Gandhi Road, Fort.  
 Gagrut & Co.—Ali Chambers, Medows Street, Fort.  
 Ghandy & Co.—Prince Building, 70, Medows Street, Fort.  
 Ghulamali Noorani & Co.—Tamarind House, Tamarind Lane, Fort.  
 Goiwala & Co.—Oriental Bank Building, 65, Mahatma Gandhi Road, Fort.  
 Haridas & Co.—35, Dalal Street, Fort.  
 Harilal Thakar & Co.—Cama Chambers, Medows Street, Fort.  
 Hasan Baxi & Co.—Lalgar Chambers, Tamarind Lane, Fort.  
 Hirailal M. Mehta & Co.—Cama Chambers, Medows Street, Fort.  
 Jamshetjee Rustomji & Devidas.—Lalgar Chambers, Junction of Dean Lane and Tamarind Lane, Fort.  
 Jehangir, Gulabbhai & Billimoria.—Solicitors, 14, Hamam Street, Fort.  
 Jehangir & Seervai.—Opp. Bombay University Building, 107, Mahatma Gandhi Road, Fort.  
 Jhaveri & Co.—40-44, Hamam Street, Fort.  
 Joshi & Co.—34-36, Ali Chambers, Medows Street, Fort.  
 Kamdar & Co.—Medows House, Medows Street, Fort.  
 Kanga & Co.—Readymoney Mansion, next to Mongini Ltd., Churchgate Street, Fort.  
 Kharas & Co.—Bansilal Building, Bruce Street, Fort.  
 Khunderao, Laud & Co.—101, Mahatma Gandhi Road, Fort. Partners: K. S. Rele, D. J. B. Kamdin. Tel.: 20947.  
 Lakhia & Co.—6, Bell Lane, Medows Street, Fort.  
 Lala & Co.—Ismael Building, Hornby Road, Fort.  
 Little & Co.—Central Bank Building, Mahatma Gandhi Road, Fort.  
 Madhavji & Co.—Examiner Press Building, 35, Dalal Street, Fort.  
 Mahimtura & Co.—60, Tamarind Lane, Fort.  
 Mahomed Ali & Co.—15, Military Square Lane, Fort.  
 Majmudar & Dalal.—Ismael Building, 381, Hornby Road.  
 Malvi, Ranchoddas & Co.—27-29, Mahatma Gandhi Road, Fort.  
 Manilal, Kher, Ambalal & Co.—Jehangir Wadia Building, 51, Mahatma Gandhi Road, Fort.  
 Mankodi & Co.—Fort Chambers, Tamarind Lane, Fort.  
 Mansukhlal, Hirailal & Co.—5, Military Square Lane, Fort.  
 Manubhai & Co.—Cama Building, 24-26, Dalal Street, Fort.  
 Matubhai, Jamietram & Madan.—Lentin Chambers, Dalal Street, Fort.  
 Mazagonwalla & Co.—Lentin Chambers, Dalal Street, Fort.  
 Mehta, Lalji & Co.—2-4, Oak Lane, Fort.  
 Merwanji, Kola & Co.—14, Hamam Street, Fort.  
 Minocheher Hirailal & Co.—41-45, Medows Street, Fort.  
 Mody & Co.—381, Ismael Building, Hornby Road, Fort, Bombay 1.  
 Mohile & Parekh.—65, Mahatma Gandhi Road, Fort.  
 Motichand & Devidas.—31, Nanabhai Lane, Fort.  
 Mulla & Mulla and Craigie Blunt & Caroe.—Jehangir Wadia Building, 51, Mahatma Gandhi Road, Bombay.  
 Nagindas, Hooselally & Co.—Yusuf Building, Churchgate Street, Fort.  
 Nanu Hormasjee & Co.—Fort Chambers, Hamam Street, Fort.  
 Narielvala & Framroze.—Central Bank Building, Mahatma Gandhi Road, Fort.  
 Pandia & Co.—Hamam House, Hamam Street, Fort.  
 Papa, R. E., & Co.—41, Hamam Street, Fort.  
 Pathare & Liladhar.—38, Tamarind Lane, Fort.  
 Pereira, Fazalbhoy & Co.—Fazalbhoy Building, 45-47, Mahatma Gandhi Road, Fort.  
 Raghavayya, Nagindas & Co.—94, Medows Street, Fort.  
 Ranchhodas & Co.—Examiner Press Building, Medows Street, Fort.  
 B. H. Dadyburjor.—Rustom Building, 29, Churchgate Street, Fort.  
 Rege, D. N., & Co.—Yusuf Building, Mahatma Gandhi Road, Fort.  
 Romer Dadachanji Sethna & Co.—1st Floor, Raja Bahadur Motilal Bansilal Mansion, 14K, Hamam Street, Fort. Solicitors and Notaries Public.

Rustomji & Ginwalla.—Old French Bank, Mahatma Gandhi Road, Fort.  
 Sabnis, Goregaoker & Rele.—11, Bruce Street, Fort.  
 Samant & Co.—381, Hornby Road, Fort.  
 Shah & Chinubhai.—Ebrahim Building, 98, Medows Street, Bel Lane, Fort.  
 Shah & Mehta.—7, 2nd Carpenter Street, Bombay 4.  
 Shah & Co.—Yusuf Building, Mahatma Gandhi Road, Fort.  
 Shastri & Co.—77, Medows Street, Fort.  
 Shroff & Co.—375, Hornby Road, Fort.  
 Smetham, Byrne & Lambert.—Jehangir Wadia Building, 51, Mahatma Gandhi Road, Fort.  
 Solomon & Co.—Spinner Building, Tamarind Lane, Fort.  
 Sukthanker & Gupte.—Yusuf Building, 35-43, Mahatma Gandhi Road, Fort.  
 Surajmal & Co.—Mahendra Mansions, Mahatma Gandhi Road, Fort.  
 Surveyor & Co.—Central Bank Building, Mahatma Gandhi Road, Fort.  
 Taher & Co.—Solicitors, Examiner Press Building, 2nd Floor, 35, Dalal Street, Fort.  
 Thakordas, Daru, Hemany & Co.—Ali Chambers, Tamarind Lane, Fort.  
 Thatte & Co.—Examiner Press Building, 33, Medows Street, Fort.  
 Tyabji, Dayabhai & Co.—Lentin Chambers, Dalal Street, Fort.  
 Vachha & Co.—Yusuf Building, Mahatma Gandhi Road, Fort.  
 Vakil, B. H., & Co.—Karim Chambers, Hamam Street, Fort.  
 Vakil, Dadabhai & Bharucha.—Cama Building, 24-26, Dalal Street, Fort.  
 Vrajilal & Co.—41, Medows Street, Fort.  
 Wadia, Ghandy & Co.—123, Mahatma Gandhi Road, Fort.  
 Wallace, J. P., & Co.—Shale Building, 28-32, Bank Street, Fort.  
 Win & Co.—Bansilal Mansions, 41A, Bruce Street, Fort.  
 Zaiwalla & Co.—Readymoney Mansion, 43, Churchgate Street, Fort.

## AUCTIONEERS

Bennett & Co.—120, Apollo Street, Fort.  
 Crawford & Co.—122, Apollo Street, Fort.  
 Eastern Auction & Co.—Babulal Mansion, Chowpatty Sea Face, Bombay 7.  
**GANDHI & CO.—72, Nagindas Master Road, Fort, Bombay 1.**  
 Phone : 254937.  
**GILBERT-LODGE & CO.—Elphinstone Building, Veer Nariman Street, Fort, Bombay. Phones : 251819 & 252607.**  
 Grams : " READINESS."  
 Menease & Co.—Great Western Building, 3, Apollo Street.  
 Mistry & Co.—75, Apollo Street, Fort.  
 Mody, J. S., & Co.—Raja Bahadur Shival Motilal Mansion, 20, Hamam Street, Fort.  
 Sorabjee Cowasjee & Co.—123, Medows Street, Fort.

## AUTOMATIC CONTROLS &amp; RECORDING INSTRUMENTS

Botlibol & Company Private Limited.—Regd. Office : Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR.). Phones : 255451 (6 lines). Grams : BATLIBOLCO. Tele. : 011-284. City Branch : BATLIBOL HOUSE, 59/61, Nagdevi Cross Lane, Bombay-3 (BR). Branches : Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate : Bangalore 2. Resident Representatives : RANCHI, Bhubaneshwar.

## AUTOMOBILE ENGINEERS

Automotive Mfrs. Ltd.—108, Bazar Ward, Kurla, Bombay 37.  
**BOMBAY CYCLE & MOTOR AGENCY LTD.—Service Stations:**  
 Haines Road, Worli, Bombay 18. Phone : 376923 and J. Tata Road, Churchgate, Bombay 1. Phone : 246134. Authorised Repairers of Dodge Cars & Trucks, and Fiat cars.  
 Bombay Garage Ltd.—Meher Building, Chowpatty, Bombay 7.  
 Car Mart Ltd.—Pratt's Building, Hughes Road.  
 French Motor Car Co. Ltd.—9-11, Hughes Road, Bombay.  
 International Motor Co.—Sandhurst Bridge.  
 Lucas Indian Service Ltd.—15, New Queen's Road, Bombay 14.  
 Metro Motors.—The Motor House, Hughes Road, Bombay.  
 National Garage Private Ltd., The.—Warden Road, Bombay 26.  
 Premier Automobiles Ltd.—H.O. Construction House, Ballard Estate, Factory :—Agra Road, Bombay 37.  
 Regal Motors.—Victoria Mill Compound, Gamdevi, Bombay 7.  
 Royal Auto Works.—Tanker Villa Estate, 200, Gowalla Tank Road, Bombay 26.  
 Sam Ruston & Company.—31-33, Mangalore Street, Ballard Estate.  
 Shanghi Motors (Bombay) Ltd.—9, Mathews Road, Bombay 4.  
 United Motors (India) Ltd.—Hughes Road, Bombay.



## AUTOMOBILE PARTS AND ACCESSORIES (MFRS.) & DEALERS

**AGRA ENGINEERING CO.**—40, Bank Street, Fort, Bombay 1  
Phone: Office: 256541. Res.: 532906. Grams: "RAJSPARES".  
Manufacturers of Diesel & Automobiles Spare Parts, "AR-  
ROW" & "DISPA," Liner & Pistons for Diesel Engines.  
"MG" Pistons for Cars, Trucks, Commercial Vehicles,  
Motor Cycles, Scooters & Tractors.

Ajay Traders.—Purshottam Bldg., Tribhuvan Road, Bombay 4.  
Allied Automobiles.—Laxmi Building, Sandhurst Road, Bombay 4.  
Allied Exporters.—Kumud House, 267, Dr. Dadabhoy Naoroji Road,  
Fort, Bombay.

American Automobile Co.—Purshottam Bldg., Opera House,  
Bombay 4.

"ARIFTA."—Die & Tool Engineers, Soho House, Lohar Street,  
Bombay 2. Phone: 20779. Die Tool & Consulting Engineers.  
Manufacturers of "Cheel" Brand Steel lorry locks.

**ASBESTOS, MAGNESIA & FRICTION MATERIALS LTD.**  
(Incorporated with Limited Liability in England).—A  
member of the Turner & Newall Group. Bombay-Agra  
Road, Ghatkoper, Bombay 77. Sales Offices: Calcutta,  
Madras & New Delhi. Grams: "ASMAFRIC." Phones:  
Bombay 582341. Calcutta 232012, Madras 85610 & New  
Delhi 275436.

Asiatic Automobiles.—1, New Bhatwadi Street, Sandhurst Road,  
Bombay 4.

**ASSOCIATED AUTO PARTS PRIVATE LTD.**—445, Lamington  
Road, Bombay 4-BR. Distributors of G.M. Parts & Accessor-  
ies, Hella Horns, Flashers & Head Lamps, Tex Wiper Arms &  
Blades, QHR Tie Rod Ends, Dunlop Wheels, Banco Royal  
Gaskets, Runwell Leyland Parts, Genuine Part for Fiat  
and Fargo, H & D Products, Brakes India Products, ABC-  
Steer Bearings, AN Fancy Wheel Covers, Stockists of Lucas—  
TVS Electric Parts and Diamond Timing Chains. Grams:  
"CHEVPARTS." Phones: 352354-352355.

Auto Equipment Ltd.—68-C, Bansi Lal Motilal Building, Opera House  
Tram Terminus, Bombay 4.

**AUTOMAT ENGINEERING PRIVATE LTD.**—Kurla Industrial  
Estate, Agra Road, Bombay 77. Phone: 51581. Manufactur-  
ers of quality metals fasteners Pcs. and Rolls. All types of  
machined parts for automobile industry in all Standards,  
Bolts, Nuts, Studs, Pins.

Auto Sales Company.—Purshottam Building, Opera House Road,  
Bombay 4.

**AUTOMOBILE & AGRICULTURAL INDUSTRIES CORP.**—  
497/3, Roop-Raj, Sardar V. Patel Road, Bombay 4. Phone:  
356847. Grams: "REACHROD." Manufacturers of "Double  
Life" Automobile and Agricultural Parts. Factory at Ghod-  
bunder Road, Borivli, Bombay 92 NB. Phone: 661173.

Automotive Corporation (India).—431, Lamington Road, Bombay 4.  
Phone: 70743. Grams: "RITESSET."

**AUTOMARK PRIVATE LTD.**—95K, Oomer Park, B. Desai  
Road, Bombay 26. Distributors for "PRESTOLITE" Auto-  
motive Electrical Parts, "DAVIS & WHITE" Brake Hoses  
and Repair Kits, "M.S.P." Bushings, "AUTOGEN"  
Armature, "FARMO" Oil Filters, "POPULAR" Sealed  
Beams, "WECOP" Starter Brushes. Branches: 5, Chow-  
ringhee Approach, Calcutta. 1-B, Commander-in-Chief  
Road, Madras. 3/4A, Asaf Ali Road, New Delhi.

**AUTOMOTIVE MANUFACTURERS' AGENCIES.**—Automobile  
Parts & Accessories Dealers. Head Office: White House,  
91, Walkeshwar Road, Bombay-6. Phone: 352634. Grams:  
"YUNKEY." Branches: 6, Saklat Place, Calcutta 13; 42-E,  
General Patters Road, Madras 2 and 2610, Hamilton Road,  
Delhi 6.

**BEHARAT ELECTRIC & ENGINEERING CORPORATION.**—  
Free Press Building, Ground Floor, 21, Dalal Street, Fort,  
Bombay. Phone: 255374. Grams: "GODGRACE."

**BOMBAY CYCLE & MOTOR AGENCY LTD.**—534, Sardar  
Vallabhbhai Patel Road, Bombay 7. Dealers for Motor Parts  
and Accessories for Dodge Cars and Trucks. Also Dealers for  
Fiat Car Genuine Spare Parts and Accessories. Phone: 352381.

Bombay Garage Private Ltd.—Meher Bldg., Chowpatty, Bombay 7.  
Bombay Motor House.—479, Banji Nivas, Sandhurst Road,  
Bombay 4. Phone: 71937. Grams: "Autoprince".

Bombay Motor Trading Co.—Cutch Castle, near Opera House,  
Bombay 4.

**C. VAKIL & CO. PRIVATE LTD.**—497/3, Roop-Raj, Sardar  
V. Patel Road, Bombay 4. Phone: 356847. Grams: "REACH-  
ROD." Dealers in Automobile Spare Parts and Genuine  
Tata Mercedes Benz Spare Parts.

Central India Trading Company.—Ramchandra Mansion, Bhatwadi  
Street, Sandhurst Road, Bombay 4.

**CHAMPION AUTO BOLT MANUFACTURING CO.**—4, Modi  
Chambers, Kennedy Bridge, Bombay 4. Phone: 72664.  
Grams: "CHAMBOLT." Factory: Plot No. 40, Road 2-B,  
Udhna (Surat), Phone: 66. Manufacturers of all kinds of Auto  
Bolts, Nuts, etc.

Champion Auto Parts Co.—Avantikabai Gokale Road, Bombay 4.  
Chandulal Mehta & Co. Private Ltd.—New Queen's Road, Bombay 4.

**CHEAP MOTOR STORES.**—Stockists of Genuine 'Ford' &  
T.M.B. Parts Accessories, Opera House Tram Terminus,  
Bombay 4. Phone: 356215. Grams: "CHEAP-MOTOR".

Chimanlal Desai & Co.—Gool Mansion, Homji Street, Fort.  
Commercial Auto Store.—Mani Bhuvan, French Bridge, Bombay 7.  
Continental Automobiles Ltd.—Luxmi Bhuvan, 466, Sandhurst  
Road, Bombay 4.

Conwest Ltd.—Opera House, Bombay 4.

Dadajee Dhackjee & Co. Private Ltd. (Motor Dept.)—Shree Pant  
Bhuvan, Sandhurst Bridge, Bombay.

D. Walker & Sons.—Prospect House, New Bhatwadi, Sandhurst  
Road, Bombay 4.

**DECCAN AUTOMOBILE CO.**—Opera House Tram Terminus,  
Bombay-4. Phone: 353324. Stockists of Genuine PERKINS  
P. G. Engine Spare Parts.

Eastern Motor Corporation.—Indra Nivas, Bhatwadi Road,  
Bombay 4.

**ECHJAY INDUSTRIES PRIVATE LTD.**—Office & Factory:  
Kanjur Village Road, Bhandup, Bombay-78. Phone: 581211  
& 581678. Grams: "ECHJAY," Bhandup. Manufacturers of  
Accessories & Equipments for Machine Tools, General steel  
Drop & Upset Forgings including Forged Flanges; Forged  
Parts of Diesel Engines & Automobiles; Forged Hand  
Tools: Hand Hammers, Chisels & Punches, Spanners,  
Hammers, Figs & Fixtures, Press Tools, Dies & Punches.

**ELVE BUSINESS CONTACTS CORPORATION.**—Elve Cham-  
bers, Green Street, Bombay 1. Phone: 252088 and 254655.  
Grams: "ELBUSCON." Importers & Dealers in Spares  
Parts for Diesel Engines, Tractors and Automobiles.

Empire Automobile.—New Queen's Road, Bombay 4.

**EXIM TRADERS.**—Manufacturers of Automobile Leaf Springs  
and Parts. Office: Minerva Mansion, 359, Sardar V. P. Road,  
Bombay 4. Phone: 352947. Factory: Ram Baug, S. V. Road,  
Malad, Bombay 64. Phone: 692531.

**FAZALBHAI & BROS.**—26, Sarang Street, Bombay 3. Direct  
Importers & Dealers in Automobile Parts. Specialists in  
"T.M.B." & "JEEP" Parts. Suppliers to various Govern-  
ment Departments. Phone: 327280. Grams: "SAZEFEM."

Fleming, John & Co., Private Ltd.—P. B. No. 76, Bombay 1. Phone:  
261153.

Foreign Products Distributing Co.—491, Sandhurst Road, Bombay 4.

**GABRIEL INDIA LTD.**—Agra Road, Mulund, Bombay 80.  
Phone Nos. 592291 (6 lines), 591751, 591728; Grams: "GAB-  
RIEL", Bombay, Mulund. Manufacturers of Shock Ab-  
sorbers for Cars, Trucks, Motor Cycles, Scooters & Three-  
Wheelers.

George Oakes Private Ltd.—Swadeshi Mills Compound, New Queen's  
Road, Bombay 4.

**GLOBE AUTO ELECTRICALS LTD.**—Mulund, Bombay 80.  
Magnet Marelli Products, Ignition Coils, Wiper Motors,  
Distributors, Regulators, Ignition Switches, Prestolite Pro-  
ducts, Alternators, Dynamos, Starting Motors.

**GREENLAND ENGINEERS.**—64, Podar Chambers, Parsi  
Bazar Street, Fort, Bombay. Phone: 252932. Grams:  
"GREND." Manufacturers of Radiator Caps, Dynamo  
Pulleys, Diaphragm, etc.

Hind Equipment Corporation Private Ltd.—24/B, Hamam Street,  
Fort, Bombay.

**HINDUSTAN FERODO LTD.** (A member of the Turner &  
Newall Group).—Registered Office & Factory: Bombay-  
Agra Road, Ghatkoper, Bombay 77. Grams: "FERODOS-  
TAN." Phone: Bombay 582391, Calcutta 232012, Madras  
85610 and New Delhi 275436. Sales Offices: Calcutta,  
Madras and New Delhi. Manufacturers of "FERODO"  
Brake & Clutch Linings.

H. S. Chaddha & Sons.—483, Sandhurst Road, Bombay 4.

Himco (India) Private Ltd.—Kurla Road, Andheri, Bombay 41.

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Eral, P.O.  
Box No. 8002, Bombay 56 AS. Phone: 571634. Grams:  
"IMANESCOL". Springs & Forms out of Spring Wires &  
Strips for your Industry.

India Electric Works Ltd.—6, Sir Phirozshah Mehta Road, Fort,  
Bombay.

**INDIA RUBBER PRODUCTS.**—Kasturchand Mills Estate,  
Dadar, Bombay-28. Tele. 454072. Manufacturers of Industrial  
& Moulded Rubber Products such as Rubber Brushes, Rings  
etc. to Drawing and Specifications.



International Motor Co.—Sandhurst Bridge.

Jay Kay Automobiles.—19, Mohanlal Mehta Market, Grant Road, Bombay.

J. V. MEHTA & CO.—Opera House, Bombay 4. Phone: 352631/32, Partner's Res. 354178. Grams: "JEVIMEHTA."

JYOTI MOTOR ACCESSORIES.—Contractor Bldg., No. 1, Opp. Prarthana Sema, Bombay 4. 138, New Charni Road, Bombay 4; 342, Sardar V.P. Road, Bombay 4; Grams: "JAGJYOTI." Phone: C/o 354150; Importers & Stockists of Jagger's Bus Body Fittings, PVC Leather Cloth, Upholstery Materials, Rubber Matings, etc.

KATARA MOTOR CO.—Modi Chambers, Bombay 4. Phone: 352097. Grams: "KATARAMOTO." Importers & Stockists of Spares for Perkins—T.M. Benz, Dodgekew Bedford—J-4, Austin—Fiat—Hillman—Hindustan Series, etc.

Kandawalla & Co.—13, Hughes Road, Bombay 7.

Kothari Brothers & Co.—Prospect House, Sandhurst Road, New Bhatwadi, Bombay 4.

KOTHARI ENGINEERING CORPORATION.—148, New Stock Exchange Bldg., 5th Floor, Fort, Bombay 1. Manufacturers of "K" Products, Automobile Parts, accessories, Bus Body Fittings, Wind Shields, Rubber Frames, Rubber Kits, Mats, Regal M/c and Handles.

MANOHAR BROTHERS.—4, Commerce House, Meadows Street, Fort, Bombay. Phone: 254496. Grams: "LOCOMOTIVE". Branch: 37, Errabalu Chetty Street, Madras. Phone: 23274.

MEHTA MOTOR STORES.—497, Sardar Vallabhbhai Patel Road, Banji Nivas, Bombay 4. Phone: 356456. Grams: "METAMOTORS." Everything in Automobiles.

Metropolitan Springs Private Ltd.—Antop Hill, Wadala, Bombay 31.

MOTOR INDUSTRIES CO., LTD.—Manufacturers of Mico-Licence-Bosch Diesel Fuel Injection Equipment and Spark Plugs, Distributors of Bosch Automobile Parts and Accessories, 79, Dr. Annie Besant Road, Worli, Bombay 18 (WB). Phone: 370567. Grams: "ELEMENT." Head Office: Post Box No. 93, Bangalore. Branches: 1/155, Mount Road, Madras 2 and 91/A Park Street, Calcutta 16.

NATIONAL AUTOMOBILE CO. (PRIVATE) LTD.—Nagindas Mansion, Opera House, Bombay 4. Phone: 351850. Grams: "NEW AUTO." Stockists of Genuine spare parts of Dodge, Leyland Trucks & TMB, TKS & Buses.

NATIONAL METAL INDUSTRIES.—15/A, Parel Village Road, Parel, Bombay 12. Phone: 442400. Grams: "MANMUL." Office: 26/A, Behind Mumbadevi Post Office, Bombay 2. Phone: 325434. Manufacturers of "NAMI" Oil-Bath, Air Cleaners, Exhaust Silencers and Fuel Filters for Oil Engines. Also for Trucks and Car Engines.

NEW HAVEN STEEL BALL CORPORATION PRIVATE LTD.—Office: Pandyan House, 309, Frere Road, Bombay-1. Phone: 261523. Grams: "GULDASTA." Factory: 38, Pawai Lake Road, Saki Naka, Kurla, Bombay-70. Phone: 581185. Manufacturers of Steel, Alloy Bolts, Grinding Media & Automobile Parts, Miniature Balls.

NEW HAVEN ENGINEERING CO. PRIVATE LTD.—Nanjee Building, 17-B, Horniman Circle, Bombay 1. Phone: 257616. Grams: "GULDASTA." Manufacturers of Automobile Parts, Machinery Spares, Bright polished bolts and nuts, Socket head cap Screws, Precision turned automatic parts, etc.

New Pioneer Trading Co.—459, Sandhurst Road, Bombay 4. Phone: 76289.

Nishat Trading Co.—461, Sandhurst Road, Bombay 4.

P. RAI & CO.—121, Commerce House, Meadows Street, Fort, Bombay 1. Phone: 252436. Grams: "PIRAICO".

Paramount (India) Ltd.—Kermani Building, Sir Phirozshah Mehta Road, Fort.

Pradeep & Co.—Kothari Mansion, Parekh Street, Bombay 4.

PREMIER AUTOMOBILES LTD.—Office: Construction House, Ballard Estate, Bombay-1. Phone: 262125-26. Grams: "PREMOBILES." Factory: Agra Road, Kurla, Bombay-70. Phone: 55111. Manufacturers of Dodge, Plymouth & Fiat Cars & Dodge & Fargo Trucks.

PRECION RUBBER CO. (INDIA).—Guaranteed Silent Block Bushes for Cars, Jeeps and Scooters. 278, Dr. Dadabhoy Naoroji Road (4th Floor), Fort, Bombay 1. Phones: 661992-262384.

Provincial Motor Car Co., Ltd.—Opp. Opera House, New Queen's Road, Bombay 4.

Regal Motors.—Old Victoria Mills Compound, Gamdevi, Bombay 7.

Reliance Automobiles.—Manu Mansion, 475, Sandhurst Road, Bombay 4.

Replacement Parts Co.—457/15, Dwarkadas Mansion, Sandhurst Road, Bombay 4.

Sethi Trading Co.—New Bhatwadi, Sandhurst Road, Bombay 4.

Shetty Automobiles.—Opera House Tram Terminus, Bombay 4.

SIGIL (INDIA) SERVICES PRIVATE LTD.—Ismail Building, 381, Dr. Dadabhoy Naoroji Road, P.O. Box 952, Bombay-1. Phones: 253688 & 254531. Grams: "SIGIL." Branch: P.O. Box 1961, Madras-1. Manufacturers, Exporters and Distributors & Diesel Engines, Diesel Pumping sets and Component Parts Thereof also Automobile Parts.

SINGH & SINGH.—Victoria Mills Estate, Gamdevi, Bombay 7. Phone: 355557. Grams: "BAKINGCO." Manufacturers of Gears, Cylinders, Liners and Spares for Cars and Diesel Engines. Specialists in Crankshaft Grinding, Roll Grinding upto 12 in. by 72 in. Branch at Shivaji Nagar, Poona 5. Phone: 57597.

Skf Ball Bearing Co. Private Ltd.—Mustafa Building, 19, Sir Phirozshah Mehta Road, Fort, P.O. Box No. 71, Bombay.

S. S. Prabhu.—Ghamat Terrace, opp. Dadar W. Rly. Station, Bombay 14.



## RADIATORS

### FUEL & OIL FLEX-HOSES

High Pressure Hoses, Brake Hoses

*Sole Selling Agents:*

## THE STANDARD GARAGE

Modi Chambers, Bombay 4

Cables: "ACCESSORIES"

Phone: 357867

Tata Locomotive & Engineering Co. Ltd.—Bombay House, 24, Bruce Street, Fort, Bombay.

Teka Hardware & Eng. Corp.—82/86, AbdulRehman Street, Bombay.

United Industries of India.—82, Opera House Tram Terminus, Bombay 4.

Universal Automobiles.—461, Sandhurst Road, Bombay 4.

VICTOR GASKETS INDIA LTD.—Agra Road, Mulund, Bombay 80. Phone Nos. 592291 (6 Lines), 591751, 591228; Grams: "VICGASKET." Bombay-Mulund; Manufacturers of Gaskets for Cars, Trucks, Motor Cycles, Scooters, Three Wheelers, Industrial Engines, etc.

### AUTOMOBILE SPRING LEAVES, 'U' BOLTS & CENTRE BOLTS MFRS.

DELTA PRODUCTS CORPORATION (INDIA).—3, Modi Chambers, French Bridge, Bombay 4. Phone: 71083. Grams: "MOTORCYCLE." Manufacturers of Laminated Road Springs for all Vehicles, Trucks, Tractors and Trailers. Suppliers to Government and States.

### AUTOMOBILE TEMPERED AND TESTED SPRINGS AND SPRING LEAVES

UNITED SPRING MANUFACTURING CO.—82, Opera House Tram Terminus, Bombay 4. Phone (Office): 356015. Grams: "MECSPARES." Girgaum, Bombay 4. Factory at: 234, Ripon Road, Bombay 8. Phone: 376707.

### AUTOMOBILE REPOWERING EQUIPMENTS

INTERSTATE ENGINEERING COMPANY.—132, Meadows Street, Fort, Bombay-1. Phone: 256469. Grams: "ANE-KANT". Importers, Exporters & Stockists of Machine Tools, Sheet Metal & Workshop Machines, Pneumatic Tools, Rock Drills, Die Filers (U.S.A. make) Automobile (Boring Box Machine etc.), and other Machineries.

### AVERAGE ADJUSTERS

V. N. C. NARICHANIA (PRIVATE) LTD.—P.O. Box 207-A, 22, Sir Phirozshah Mehta Road, Fort, Bombay (India). Phones: 265098, 212676 and 266525. Grams: "SURVEYLOSS."



## BADGES



**BADGES**

Manufacturers of Celluloid, Metal and Plastic Badges for Educational & Social Institutions, Conferences, Centenaries, Political Propaganda, Publicity, Mill Workers. Also Business Advertising Novelties like Key-Chains, Mirrors, etc.

(Estd. 1902)

Sales Office:

**PLUCK & CO.**

415, Commerce House, Meadows Street, BOMBAY 1. Phone: 251131.

**EXCEL PROCESS (P) LTD.**—Mfrs. of Anodised Aluminium Labels, Advertising Gifts, Scales, Dials, Badges, Decorative Radio Trimmings & Panels, Identity Cards & Photographs in exclusive finishes. 117, Andheri-Kurla Road, Bombay 69. Phones: 572743-573327.

## BAKELITE

**Embi Desai & Co.**—Dadyseth House, Cawasji Patel Street, Fort, Post Box No. 1116, Bombay 1.

**Hardcastle, Waud & Co., Ltd.**—Alice Buildings, Hornby Road, Fort.

**PRESTO INDUSTRIES.**—Manufacturers of Bakelite and Urea Articles. Specialists in Screw Caps for Bottles and Phials. 106, Kansara Chawl, Kalbadevi, Bombay 2. Phone: 333259.

**Rubako Industries.**—Behramji Mansion, Sir Phirozshah Mehta Road, Fort.

**VIJAY BAKELITE TRADING CO.**—8, Chalkda Street, Bombay 3. Phone: 323145. Grams: "BESTCAP." Manufacturers and distributors of all kinds of Caps, and Stoppers of Plastic Bakelite and Rubber.

## BAKERS AND CONFECTIONERS

**Akbarally Ebrahimji Pharmacy & Department Store.**—45/47, Veer Nariman Road, Fort, Bombay.

**American Express Bakery.**—A. E. B. House, Clare Road, Byculla.

**Britannia Biscuit Co., Ltd.**—Reay Road Bridge, East.

**Clare Road Bakery.**—"Win-Villa," 9, Clare Road, Byculla.

**Hiscocks, E., & Co.**—"Win-Villa," 9, Clare Road, Byculla.

**J. B. Mangharam & Co.**—12, Gunbow Street, Fort, Bombay.

**Kyani & Co.**—Jer Mahal Estate, Dhobi Talao.

**Mahajan Bros.**—Anand Nivas, Girgaum Road.

**Marosa & Co.**—18, Meadows Street, Fort.

**Pahelavi Bakery.**—101, Umerkhady.

**Palmer, A., & Co.**—C-123, Cumballa Hill.

**Parle Products Mfg. Co. (Private) Ltd.**—Thackersey House, Graham Road, Ballard Estate, Bombay.

**Raj, H., & Company.**—93, Princess Street, Bombay 2.

**Renown Biscuit Co.**—Contractor Building, Connaught Road, Byculla.

**Shaikh & Co.**—94, Ali Umar Street.

**Standard Bakery.**—62, Nizam Street, Bhendi Bazar, Bombay 3.

**Star Bakery.**—180, Naigaum Cross Road, Dadar.

## BAKERY &amp; CONFECTIONERY REQUISITES

**ROYAL TRADERS.**—283, Nagdevi Street, Bombay 3. Phone: C/o 326671. Dealers in Bakery goods & Cardboard Trays & Fancy Paper Decorations & Provisions. Paper Ice-Cream Cups, Paper Napkins, Drinking Straws & Toilet Rolls, Christmas Novelties a speciality. Partner: H. N. Shah. Phone: Res. 38133.

**T. ALIMAHOMED & CO. (Estd. 1924).**—Stockists of all Sorts of Essences & Other Baking Requisites, 144-46, Sarang Street, Bombay 3. Phone: 327131. Grams: "AERATORS." Sole Agents for Diamond Aerating Gas Works Ltd., Bombay 3.

## BALL AND ROLLER BEARINGS

**Agarwal Machine & Engineering Stores.**—55/57, Nagdevi Cross Lane, P. Box 3262, Bombay 3.

**ANIL BEARING STORES.**—163, Narayan Dhuru Street, Bombay 3. Phone: Office: 323552. Residence: 23293. Tel. Address: "CHEAPSTORE." Authorized Stockists: SKF and NBC Bearings, Ball Bearings, Taper Roller Bearings, Steel Balls.

**ANTIFRICTION BEARINGS CORPORATION LTD., THE.**—Marshall's Building, 20, Ballard Road, Bombay 1 (BR.). Phone: C/o 261647. Manufacturers of Roller Bearings in Technical Collaboration with Messrs. Steyr-Daimler-Puch AG., Austria and Ball Thrust Bearings.

**Associated Export-Import Corporation.**—381, Dr. D. N. Road, Bombay 1.

**BALL BEARINGS & MACHINERY CORPORATION.**—172-74, Nagdevi Street, Bombay 3. Grams: "BUSYAR." Stockists & Sole Agents of SEALMASTER, Federal U.S.A. and SRO Swiss bearings. Also Stockists: Precision NORMA & NBC Bearings, R & M, SKF, MAB & OVR Ball Bearings. Phones: 327377 & 326046.

**B. CHOWDHURY & CO.**—Indian Globe Chambers, Fort Street, Bombay 1. Phone: 26-3479. Grams: "BISUKHI." Distributors for Kugelfischer Georg Schafer & Co., West Germany.

**BHARAT TRADING CO.**—Importers & Stockists of Industrial & Automobile Bearing. 71, Nagdevi Cross Lane, Bombay 3. Phones: 323250, 324338.

**BOMBAY BALL BEARING SUPPLYING CO.**—349/353, Samuel Street, Bombay 3. Phone: 321151. Grams: "GOLABADAM." Bombay Bearing Co.—126-28, Nagdevi Street, Bombay 3.



MERCER

Thrust Bearings

and

MERCER

Dubi Bearings



Manufacturers:

**DEEPAK INDUSTRIES**

26B, Udyognagar, Rajkot-2.

Trade Inquiries:

88, Nagdevi Cross Lane, Bombay-3.

Phone: 322456

Grams: "MONKEYGRIP".

**DHIRAJLAL & CO.**—15, New Queen's Road, Bombay 4. Phone No. 23112, Res.: 473703. Grams: "RICEMILL." Importers and Distributors of Ball and Roller bearings, Stockholders of F.A.G. and SKF bearings and Distributors of TIMKEN & STEYR AUSTRIA Bearings.

**DHIRAJLAL MORARJI.**—37-A, Sarang Street, Bombay-3. Phone: 323283, 323985 and 323986. Grams: "SELFMADE." Stockists of Ball, Roller and Taper Roller Bearings in brands: R & M, SKF, Timken, FAG, Steyr, RIV, DURKOPP, USSR, NBC, ABC, NORMA, BBL & SKF (India).

**EAST ASIATIC CO. (INDIA) LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 262711 (8 lines). Manufacturers' Representatives and Sole Distributors for Precision Bearings India Ltd. in the States of Delhi, Jammu and Kashmir, Himachal Pradesh, Uttar Pradesh, West Bengal, Assam, Tripura, Manipur, Sikkim, Andhra Pradesh, Mysore, Madras, Kerala, Andamans, Bangalore, Secunderabad and Kanpur.

**Greentose Corporation (India).**—24-26, Dalal Street, Fort, Bombay.

**HARCHANDRAI SONS.**—172-14, Nagdevi Street, Bombay 3. Phones: 327377 & 326096. Sole Agents: Stephens Adamsons Mfg. Company (Sczalmaster Ball Bearing Pillow Block), Aurora Illinois, U.S.A.

**Heatly and Gresham Ltd.**—9, Forbes Street, Fort.

**INTERNATIONAL BALL BEARING CORPORATION.**—151, Mutton Street, Bombay 3. Phone: 335581. Grams: "ATOZ-ROLLER," Mandvi, Bombay (BR); Dealers in Ball, Roller and Thrust Bearings for Industrial & Automobile purposes.

**INTERNATIONAL BEARING CO.**—61, Commercial Chambers, Masjid Bunder Road, Bombay 3. Tel. Address: "INTERDEAL." Phone No. 324712. Importers & Stockists of all kinds of Ball, Roller, Taper Roller and Thrust Bearings.



Jairamdas & Sons.—163, Narain Dhuru Street, Bombay 3.

Jayant Engineering & Mill Stores.—39, Nagdevi Cross Lane, Bombay 3.

Jahala, R. T., & Co.—9, Forbes Street, Fort, Bombay 1.

**MACHINE TOOLS & IMPLEMENTS.**—93-95, Narayan Dhuru St., Bombay 3. Phones: 322268 & 322269; Grams: "MACHTOOLS." Telex: 292. By.

Mehta, J. V., & Co.—Opera House Tram Terminus, Bombay 4.

**MODERN MACHINE TOOLS CO.**—88, Nagdevi Cross Lane, Bombay 3. Phone: 322456. Grams: "MONKEYGRIP." Micrometers, Varnier Callipers, Dial Gauges, Feeler, Thread, Wire, Radius Gauges, etc.

**MOTOR TRADE SUPPLY CO., THE.**—Parekh Mansion, Sardar V. P. Road, Bombay-4. Telegram: "MOTRASUPCO." Stockists of Timken, SKF, RIV, R & M, Baltzer and Pollard Bearings. Phone: 351119.

**NUTAN TRADING CORPORATION.**—83, Nagdevi Cross Lane, Post Box No. 3238, Bombay-3. B.R. Grams: "NUTAN-TRADE." Phones: 323357 (Office) & 474485 (Res.). Manufacturers of "KAUSHIK" Brand Tools such as Reamers, Callipers, Dividers, Tool Holders, Engineering Squares etc. Dealers in Tool Bits, End Mills, Centre Drills, Slotting and side & Face Cutters etc. Branch at: 3350, People Mahadev, Hauz Kazi, Delhi-6.

**P. K. JOSHI & CO.**—1st Floor, 72/80, Nagdevi Cross Lane, Bombay 3. Phone: 323487; Grams: "PLAYASEAL." Consulting Bearing Engineers, Importers & Stockists of Automobile Tractor and Industrial Ball, Roller & Taper Roller Bearings.

**PRECISION BEARINGS INDIA LTD.**—Regd. Office: 15, Graham Road, Wavell House, Ballard Estate, Bombay 1. Phone No. 262711. Factory: Zambuva, P.O. Makarpura, Baroda, Gujarat State. Manufacturers & "Norma" Ball & Bearings, Licenced to manufacture 8 lakh pieces per year on single shift basis—8 mm to 100 mm internal bore diameter. Technical collaborators: Normo-Hoffmann Bearings Company, a division of Universal American Corporation, U.S.A. Sole Selling Agents: The East Asiatic Company (India) Private Limited, Delhi, Jammu & Kashmir, Himachal Pradesh, Uttar Pradesh, West Bengal, Assam, Tripura, Manipur, Sikkim, Andhra Pradesh, Mysore, Madras, Kerala, Andaman and Punjab. Universal Bearing Company Private Ltd.: Rajasthan, Gujarat, Maharashtra, Goa, Madhya Pradesh, Orissa & Bihar.

**PARRYS (EASTERN) PRIVATE LTD.**—"Amrita", Nepean Road, Bombay 6. Sole Agents for "GPZ" Ball Bearings, Roller Bearings and Taper Roller Bearings of USSR Origin. Branch Office: Standard Building, 32, Dalhousie Square South, Calcutta 1.

**PURUSHOTTAM SOMABHAI & CO.**—36, Sarang Street, Post Box No. 3014, Bombay 3. Grams: "FORESIGHT". Importers & Stockists of wide range, all brands of world renowned Ball & Roller Bearings for Automobiles, Textile & Paper Mills, Sugar Mills and all other industries.

**RAMESH TRADING CORPORATION.**—51/53, Nagdevi Cross Lane, Bombay 3. Phone: 325189 (Office) & 473862 (Res.). Grams: "RAMESHCO." Dealers in all kinds of Ball, Roller, Taper Roller Bearings & Band Saws, Authorised Stockists of ABC, NBC and BBL Bearings, "WARRIOR" Taps and Dies & "GEDORE" Hardware Tools.

Roberts McLean & Co., Private Ltd.—Ilaco House, Sir Phirozshah Mehta Road, P. O. Box 452, Fort.

*On approved list of Government & Railways*

## SANJAY BALL BEARING CENTRE

*Importers, Stockists & Dealers in  
Ball, Roller and Taper Bearings  
Authorised stockists of: BBL Bearings*

**Stockists of: NBC, SKF, NORMA, ABC,  
and IBC Bearings**

43, Bibijan Street, Bombay-3.

Phone: 322485.

Grams: "CHEERFUL"

Shah Brothers.—Sandhurst Building, 524, Sandhurst Road, Bombay 4.

**SHAH PATEL & CO.**—111, Nagdevi Street, Bombay 3. Phones: 324309 & 321377. Grams: "LUCKYCHAP." Stockists of Ball, Roller & Taper Roller Bearings of various make.

*On approved list of Government & Railways*

## SHETH STORES TRADING CO.,

*Specialists in: Ball & Roller Bearings  
Authorised stockists SKF, NBC, NORMA  
in: Bearings*

*Distributors: ARUN & ASHOK Plummer  
Blocks*

*Bombay Office: 238, Masjid Bunder Road,  
Bombay-3*

Telephone: 322757

Grams: "TROLLEY"

*Ahmedabad Office: Deepak Chambers, Station  
Road, Ahmedabad.*

Phone: 23470

Grams: "LUCID"

Skf Ball Bearing Co. Private Ltd.—Mustafa Building, 19, Sir Phirozshah Mehta Road, Fort, P.O. Box No. 71, Bombay.

## SUESSEN TEXTILE BEARINGS LTD.

*Manufacturers of*

## BALL BEARINGS & COMPONENTS

**Bombay-Ahmedabad National Highway No.8  
Near Makarpura, Baroda**

Phone: 3869

Grams: SUESSENTX

*Head Sales Office:*

Tiecicon House, Dr. E. Moses Road, Bombay 11

Phone: 371901

Grams: SUESSENTX

Trade (India) Corporation.—58, Mohamedalli Road, P.O. Box No. 3231, Bombay.

Universal Services Corporation Ltd.—457/9, Sandhurst Road, Bombay 4.

Upper India Trading Co., Ltd.—Ravel Building, Lamington Road, Bombay 4.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

## BALL PEN AND REFILLS MFRS. & PARTS SUPPLIERS

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Eria, P. O. Box 8002, Phone: 521634. Grams: "IMANESCOL". Springs & Ferns out of Spring Wires and Strips for your Industry.

**MIRCO INDUSTRIES.**—Manufacturers of "ACE" Ball Pens & Refills. 249, Dr. D. Naoroji Road, Bombay-1. Phone: 353425. Grams: "MIRCHDCO".

**WATUMULL INDUSTRIES PRIVATE LTD.**—Manufacturers of "Fleet" Quality Refills & Ball Pens in Four Ink Colours—Blue, Green, Red & Black. "Delstar," 1st Floor, 9-9A, Hughes Road, Bombay 26-WB. Phone: 74425. Grams: "KHUBBROS."

## BARRELS & CASKS (WOODEN)

Bharat Barrel & Drum Manufacturing Co. Private Ltd.—Prakash Cotton Mill's Compound, Off Fergusson Road, Bombay 13.

**COOPER & SONS, DHANJIBHAI NAOROJI.**—78/80, Kika Street (Gulalwadi), Bombay 4. Phone: 333759. Manufacturers of Wooden Casks, Barrels, Vats, Tubs, Flower Tubs, Oblong Tubs, Ice Cream Tubs of any size & shape. Regular suppliers to Chemical & Textile mills.



## BARRELS &amp; DRUMS

## Heavy duty STEEL BARRELS

200 litre capacity, 14 gauge  
plain black, epoxy-lined & galvanised  
for Packing Solvents, Liquid Chemicals and  
Oils

Manufacturers:

## HEPACK PRIVATE LIMITED

85, Dr Annie Besant Road, Worli,  
Bombay-18

Phone: 376722

## BATTERIES

**AMZEL PRIVATE LTD.**—Nusser House, New Queen's Road, Bombay 4. Main Agents for Exide Batteries for Maharashtra State. Distributors for Prestolite ignition parts and Auto-Gen. armatures and MSP bushings. Phone: 357511 (5 lines).

**Balmer Lawrie & Co. Ltd.**—5, Graham Road, Ballard Estate, Fort.

**BATTERY SERVICE PRIVATE LTD.** (Estd. 1925).—1-1/A, New Queen's Road, Bombay 4. Agents for Solar Heavy duty Batteries, Stockists for Redex Additive for oils and fuels. Phone: 356900. Grams: "FASTSPEED", Bombay.

**Bombay Garage Ltd.**—Meher Building, Chowpatty, Bombay 7.

**Boiner Battery Mfg. Co. Private Ltd.**—Shri Niwas Building, 335, Sandhurst Road, Bombay.

**C. V. SHIPPERS AND PAREKH.**—5, Bruce Street, Fort, Bombay 1. Phone: 254490. Grams: "NEWSWAVE." Distributors for Maharashtra and Gujarat for DESAPRIYA Battery with Rubber Separators. Manufactured by DESAPRIYA AUTO WORKS, Calcutta 4.

**Chloride & Exide Batteries (Eastern) Ltd.**—Savoy Chambers, Wallace Street, Bombay-1.

**Estrela Batteries Limited.**—Yusuf Building, Veer Nariman Road, Fort, Bombay 1.

**General Radio & Appliances Private Ltd.**—Opera House, Bombay 4.

**Himco (India) Private Ltd.**—Head Office: Gandhi Building, 542, Sandhurst Bridge, Bombay 7.

**Industrial Machinery & Tools Corp.**—Indira Nivas, 1st Floor, Anantikabai Gokhale Street, Bombay 4.

**Mehta Motor Stores.**—Banji Nivas, Sandhurst Road.

**Modern Electric Corporation.**—Byramji Mansion, Sir Phirozshah Mehta Road, Fort.

**Provincial Motor Car Co., Ltd.**—New Queen's Road, opp. Opera House, Bombay 4.

**Ruby Battery Corporation (Private) Ltd.**—31, French Bridge, Lila House, Chowpatty, Bombay 7.

**Sarabhai & Co.**—Western India House, Sir Phirozshah Mehta Road, Fort.

**Standard Batteries Ltd.**—Vakola, Bombay 25.

**Union Carbide India Ltd.**—Laxmi Building, Sir P. M. Road, Fort, Bombay 1.

**Universal Services Corporation Ltd.**—457/9, Sandhurst Road, Bombay 4.

## BEARINGS AND SHAFTINGS

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: 'ALERTDEAL'.

**Essential Engineering Co.**—11, Botawalla Building, Elphinstone Circle, Fort.

**Mehta Nanavati & Co.**—Barbhai Moholla, 96, Narayan Dhuru Street, Bombay 3.

**NUTAN TRADING CORPORATION.**—83, Nagdevi Cross Lane, Post Box No. 3238, Bombay-3. B.R. Grams: "NUTANTRADE." Phones: 323357 (Office) & 474485 (Res.). Manufacturers of: "KAUSHIK" Brand Tools such as Reamers, Callipers, Dividers, Tool, Holders, Engineering Squares etc. Dealers in Tool Bits, End Mills, Centre Drills, Slotting and Side & Face Cutters etc. Stockists of Hardware, Bearing etc. Branch at: 3350, People Mahadev, Haus Kazi, Delhi-6.

**P. Ratilal & Co.**—43, Dhanji Street, Moti Mahal, Bombay 3. Phone: 32700.

## BELTING (TEXTILE) MANUFACTURERS AND SUPPLIERS

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: 'ALERTDEAL'.

**Allied Exporters.**—Kumud House, 267, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

**ALTEX LIMITED.**—147, Mahatma Gandhi Road, Fort, Bombay 1. Phone: 251082, Grams: "BETEX."

**Arvinda Trading Co. Private Ltd.**—105, Apollo Street, Fort.

**Ashok Engineering Co.**—24, Noble Chambers, Parsi Bazar Street, Fort.

**Associated Machine & Tool Co.**—130, Medows Street, Fort.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate.

**Bharat Electric & Engineering Corporation.**—28, Apollo Street, Fort.

**Birkmyre Brothers.**—12, Rampart Row, Fort.

**BOMBAY MERCANTILE CORPORATION.**—211-217, Nagdevi Street, Bombay 3. Phone: 325982. Grams: "CORPBOMBER." Distributors for "STAR" Brand Transmission Beltings and Hoses. Distributors of Good Year Flat Belts and V-Belts.

**Bombay Mill Store Supply Co., Ltd.**—Western India House, Sir Phirozshah Mehta Road, Fort.

**Brady, W. H., & Co., Ltd.**—Royal Insurance Building, Vir Nariman Street, Fort.

**Card Clothing & Belting Ltd.**—J. K. Building, Graham Road, Ballard Estate, Fort.

**Edgar Handley & Co. Private Ltd.**—135, Medows Street, Fort, Bombay.

**Gannon Dunkerley & Co., Ltd.**—Chartered Bank Building, Mahatma Gandhi Road, Fort.

**General Trading Corporation.**—36-B, Tamarind House, Tamarind Lane, Fort.

**Greentose Corporation (India).**—24-26, Dalal Street, Fort, Bombay.

**Hardcastle, Waud & Co., Ltd.**—Alice Building, Hornby Road, Fort.

**Herman & Mohatta, B. R., Ltd.**—People's Building, Sir Phirozshah Mehta Road, Fort.

**Hiralal Gokaldas Dalal & Co.**—45, Nagdevi Cross Lane, Bombay 3.

**Honesty Trading Corporation.**—27, Bombay Mutual Annexe, Gunbow Street, Fort.

**Jashwantal Maneklal & Co.**—40, Veer Nariman Street, Fort.

**Jayant Engineering & Mill Stores.**—39, Nagdevi Cross Lane, Bombay 3.

**Jhala, R. T., & Co.**—9, Forbes Street, Fort, Bombay 1.

**Laxminarayan Mill Supply Co.**—Noble Chambers, 116, Parsi Bazar Street, Fort.

**Mangaldas & Sons.**—Lentin Chambers, Dalal Street, Fort, Bombay.

**Mehta & Co., S.**—Anees Chambers Annexe, Carnac Road, Bombay 1.

**Merchants Bros.**—151, Nagdevi Street.

**M. Kantilal & Co.**—70, Nagdevi Cross Lane, Bombay 3.

**Modern Machine Tools Co.**—88, Nagdevi Cross Lane.

**Modern Mill Stores.**—97, Nagdevi Street, Bombay 3.

**P. RATILAL & CO.**—43, Dhanji Street, Moti Mahal, Bombay 3. Phone: 325980. Grams: "ETERNAL." Cockills' V-Belts, Blue Star V-Link Belting, Endless Woven Belts, "GRIPIT" Chrome Leather Nylon Sandwich Belts, Vari-Speed Belts.

**R. Mohanlal & Co.**—38, Bibijan Street, Bombay 3.

**Roberts McLean & Co., Private Ltd.**—Ilaco House, Sir Phirozshah Mehta Road, Fort.

**ROYAL HARDWARE MART.**—108, Nagdevi Street, Bombay 3. Phones: 325221 & 323464. Grams: "MANILAROEPE." Distributors for Dunlop Beltings and Hoses.

**Sheth, S. C. & Co., Private Ltd.**—Raja Bahadur Mansion, 14, Hamam Street, Fort, Bombay.

**Sizing Materials Co., Ltd.**—Jeroo Building, 137, Mahatma Gandhi Road, Fort.

**Techno Industrial Co.**—107, Sir Vithaldas Chambers, 16, Apollo Street, Fort.

**Textile Supplies Syndicate (India) Private Ltd.**—India House, Fort Street, Bombay 1.

**Textile Works Ltd.**—49/55, Apollo Street, Fort.

**VIKRAM & CO.**—258, Nagdevi Street, P.O. Box No. 3266, Bombay 3 B.R. Phone: 322981. Manufacturers' Representatives, all types of Hose Fittings. Authorised distributors for "GOODYEAR" Transmission Beltings, Vee Belts, Link Belts, Hoses, etc.

**V. N. MEHTA.**—Lotus Chambers, 159, Narayan Dhuru Street, Bombay 3. Phone: 322858 and 173, V. P. Road, Bombay 4. Phone: 354429. Dunlop Vee Belts, Beltings, Water, Air & Pneumatic Hoses and Adhesives.

**Volts Limited.**—19, Graham Road, Ballard Estate, Fort.

**Western India Tanneries Ltd.**—Dharavi, Bombay 17.

## BILLIARD TABLE MANUFACTURERS

**D. S. COUTINHO.**—Billiard Table Manufacturer. 91-93, D'Lima Street, Mazagaon, Bombay 10.

**Dawson & Co.**—24, Parsi Bazar Street, Fort, Bombay 1.



**SHERATON & CO.**—Works & Office : 131, Meadows Street, Fort.  
Phone : 255430. Furniture & Billiard Table Manufacturers.

**S. GANDY & CO.**—22/D, Parsi Bazar Street, Fort, Bombay 1.  
Phone : 251657. Grams : "SEABORN." Billiard Table  
Makers and Manufacturers of Drawing Tables, Drawing  
Boards, Artist Tables, Furniture, etc.

### BISCUIT MANUFACTURERS

**Akbarally Ebrahimji Pharmacy & Department Store.**—45/47, Veer  
Nariman Road, Fort, Bombay 1.

**Britannia Biscuit Co., Ltd., The.**—Bombay Office and Factory:  
Reay Road Bridge, East.

**J. B. Mangharam & Co.**—12, Gunbow Street, Fort, Bombay.

**MONITA BAKING CORPORATION.**—66, Off Haines Road,  
Worli, Bombay 18. Grams : "MONICONES." Manufacturers  
of Ice Cream Cones and Wafer Biscuits.

**Parle Products Manufacturing Co. (Private) Ltd.**—Thackersey  
House, Graham Road, Ballard Estate, Bombay.

**Renown Biscuit Co., The.**—Connaught Road, near Victoria Gardens,  
Bombay 27.

**Shangrila Food Products Ltd.**—Great Social Building, Sir Phirozshah  
Mehta Road, Fort.

**Spencer & Co. Ltd.**—Spencer's Building, Forjett Street, Bombay 26.

### BLOCKS (PROCESS) MAKING MACHINERY SUPPLIERS

**GUNVANTRAY & CO.**—Crescent Chambers, 1st Floor, Tama-  
rind Lane, Bombay 1. Grams : "GUNARAYCO."  
Phone : 254684. H.O. Khadia, Ahmedabad 1. Phone : 4068.

### BLOWERS

**Batliboi & Company Private Limited.**—Reg. Office : Forbes Street,  
P.O. Box 190A, Fort, Bombay-1 (BR). Phones : 255451 (6 lines).  
Grams : BATLIBOICO. Tele. : 011-284. City Branch : BATLIBOI  
HOUSE, 59/61, Nagdevi Cross Lane, Bombay-3 (BR). Branches :  
Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam,  
Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secundera-  
bad, Vijayawada. Associate : Bangalore 2. Resident Representa-  
tives : RANCHI, Bhubaneswar.

**BHARAT ELECTRIC & ENGINEERING CORPORATION.**—  
Free Press Building, Ground Floor, 21, Dalal Street, Fort,  
Bombay. Phone : 255374. Grams : "GODGRACE."

**UNITED INDIA ENGINEERING CO.**—6, Commerce House,  
Meadows Street, Fort, Bombay 1. Phone : 251492. Grams :  
"UNICONARAM." Engineers and Machinery Dealers. Sales  
& Show Room : 78, Old Custom House Road, Fort, Bombay.

### BOBBINS AND SHUTTLES

**Acme Bobbins & Shuttles Private Ltd.**—Raja Bahadur Mansion, 14,  
Hamam Street, Fort.

**Allied Exporters.**—Kumud House, 267, Dr. Dadabhoy Naoroji Road,  
Fort, Bombay.

**ALTEX PRIVATE LIMITED.**—147, Mahatma Gandhi Road,  
Fort, Bombay 1. Phone : 251082. Grams : "BETEX."

**Arvinda Trading Co. Private Ltd.**—105, Apollo Street, Fort.

**Empire Trading Co.**—76-A, All Chambers, Tamarind Lane, Fort.

**Greentose Corporation (India).**—Cama Buildings, 24-26, Dalal Street,  
Fort.

**Imanes Private Limited.**—94, S. V. Road, P. O. Box 8002, Bombay  
56 AS. Phone : 571634. Grams : "IMANESCOL." Springs and  
Forms out of Spring Wires and Strips for your Industry.

**Indo-Textile Stores, The.**—16, Apollo Street, Fort, Bombay 1.

**Industrial Trading Agency.**—Tamarind House, Tamarind Lane,  
Fort, Bombay.

**Laxminarayan Mill Supply Co.**—Noble Chambers, 116, Parsi Bazar  
Street, Fort.

**Mangaldas & Sons.**—Lentin Chambers, Dalal Street, Fort.

**Mehta Parikh & Co.**—45-47, Apollo Street, Fort.

**Modern Mill Stores.**—97, Nagdevi Street, Bombay 3.

**Modern Shuttles Manufacturing Co., Ltd.**—15, Forbes Street, Fort.

**National Trading Company.**—263, Hornby Road, Fort, Bombay 1.

**N. Kishore & Co.**—39, Podar Chambers, Parsee Bazar Street, Bombay.

**Paramount Textile Agency.**—45/47, Apollo Street, Fort, Bombay.

**Piroz N. Motabhoj & Co., Ltd.**—Motabhoj Building, Corner  
of Meadows and Forbes Street, Fort, Bombay.

**R. R. JINDE & CO.**—14, Mohan Nivas, Chandavarkar Road,  
Bombay 19. Grams : "GOLDENHILL." Phone : 472267.

**Roberts McLean & Co., Private Ltd.**—Ilaco House, Sir Phirozshah  
Mehta Road, Fort.

**Sardesai & Company.**—14, Murzban Road, Fort, Bombay.

**Shah Bros. & Co.**—Raja Bahadur Compound, 24B, Hamam Street,  
Fort, Bombay 1. Phone : 254590. Grams : "MILLVEPARI."

Specialists in Bobbins, Shuttles & Textile Mill accessories and  
Yarn Merchants & Exporters. Agents for S. M. Mark Bobbin  
Holders & Tension Pulleys and Spindles of Approved quality.

**Shamsun & Co.**—11, Bruce Street, Fort.

**Sheth, S. C., & Co., Ltd.**—Raja Bahadur Mansion, 14, Hamam  
Street, Fort.

**Texmaco (Gwalior) Ltd.**—Gwalior. Sales Office : 254-A, Annie  
Besant Road, Bombay 18.

**Universal Textile Bobbin Co.**—164, Lohar Street, Bombay 2.

**Voltas Ltd.**—19, Graham Road, Ballard Estate.

**Wilson Brothers Bobbin Co., Ltd.**—Seksaria Chambers, 139, Meadows  
Street, Fort.

### BOILER MOUNTINGS & FITTINGS

**CRESCENT TRADING CO.**—48-50, Bhajipala Lane, Bombay 3.  
Phones : 325140 and 328944. Grams : "WATERMETER."  
Manufacturers and Dealers; Pipes, Fittings, Boiler Mount-  
ings, Valves, Water meters, etc.

**JIVRAJ & VRAJLAL.**—122, Nagdevi Street, Bombay 3. Phone :  
325138 (Shop) & 30932 (Res.). Grams : "SANIPIPES."

**KILBURN & CO. LTD.**—Gresham Assurance House, Phiroz  
shah Mehta Road, Fort, Bombay 1. Phone : 256845. Grams :  
"TASCONIUM."

**MEHTA NANAVATI & CO.**—96, Narayan Dhuru Street, Bombay  
3. Phone : 324645. Grams : "REDJOINT".

### BOILER TUBES & ACCESSORIES

**'ECHJAY INDUSTRIES PVT. LTD.**—Office & Factory : Kanjur  
Village Road, Bhandup, Bombay-78. Phones : 581211 &  
581628. Grams : "ECHJAY" Bhandup. Manufacturers of  
Accessories & Equipment for Machine Tools, General Steel  
Drop & Upset Forgings including Forged Flanges ; Forged  
Parts of Diesel Engines & Automobiles ; Forged Hand Tools,  
Hand Hammers, Chisels & Punches, Spanners Pliers, Jigs  
& Fixtures, Press Tools, Dies & Punches."

**Imanes Private Limited.**—94, S. V. Road, P.O. Box 8002, Bombay  
56 AS. Phone : 571634. Grams : "IMANESCOL." Springs and  
Forms out of Spring Wires and Strips for your Industry.

**GASKET CORPORATION OF INDIA.**—7/10 Botawala Building,  
Horniman Circle, Bombay-1. Phone : 256623. Grams :  
"GASKETS". All types of Gaskets for Boilers, Diesel  
Engines, Marine Engines, Motor Cars, Tractors, etc. Manu-  
factured as per Original Specifications. Manhole Gaskets a  
Speciality.

**M. J. PATEL & CO.**—177, Nagdevi Street, Bombay 3. Phone :  
327931. Grams : "REDTEE." Direct Importers & Stockists :  
C.I. & Steam Pipes, Boiler Tubes & Valves, C. I. Pipes &  
Specials, Hydraulic Pressure Tubes. Manufacturers of  
Steam Flanges.

**PATEL BROTHERS & CO.**—41, Nagdevi Cross Lane, Bombay-3.  
Phone : 321606. Grams : "HASTY." All imported and indigen-  
ous high Pressure Cocks, Valves and other boiler  
Accessories.

**P. Ratilal & Co.**—43, Dhanji Street, Moti Mahal, Bombay 3. Phone :  
32700.

**Shalebhoy Tyebjee & Sons.**—22, Bruce Street, Bombay.

### BOILERS

**NESTLER BOILERS PRIVATE LTD.**—Manufacturers of Boilers.  
Head Office & Works : Love Lane, Cross Lane, Byculia,  
Bombay 27. Phones : 376264 & 372818. Grams : "NESTLER."

**Oriental Engineering Co.**—25, Forbes Street, Fort, Bombay 1. Phone :  
253057. Grams : "ADIVISHNU."

### BOILERS—AGENTS, PRESERVATIVES AND COMPOSITIONS

**Ardeshr D. Wadia & Sons.**—93, Apollo Street, Fort.

**Autogenous Welding & Repair Co., Private Ltd.**—63, Ferguson Road,  
Bombay 13.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**Brady, W. H., & Co., Ltd.**—Royal Insurance Building, Churchgate  
Street, Fort.

**Daver, B. F., & Co.**—Appa Baug Estate, 41, Queen's Road, Bombay 4.

**Greentose Corporation (India).**—Cama Buildings, 24-26, Dalal  
Street, Fort.

**Hardcastle, Waud & Co., Ltd.**—Alice Buildings, Hornby Road, Fort.

**Heatly and Gresham Ltd.**—9, Forbes Street, Fort, Bombay.

**Koonverji Devshi & Co. Private Ltd.**—164, Lohar Street.

**Molooobhoj, Ahmed S., & Sons.**—281, Nagdevi Street.

**Pioneer Magnesia Works Ltd.**—113, Mahatma Gandhi Road,  
Fort, Bombay.



**PUNEGAR, N. E., & CO.**—Union Bank Building, Dalal Street, Fort, Bombay-1. Phone No. 253178. Telegrams: "ACME-COMPO", Bombay-1. "ACME" Compounds for descaling Boilers & Economiser "ACME" Anti-corrosive, Application (Black Paint) for Metallic Plants.

**Richardson & Cruddas.**—Byculla Ironworks, Parel Road.

**Roberts McLean & Co. Private Ltd.**—Ilaco House, Sir Phirozshah Mehta Road, Fort.

**Shalebhoj Tyebjee & Sons.**—12, Bruce Street, Bombay.

**Thos. W. Ward (India) Ltd.**—Marshall Building, Ballard Road, Ballard Estate, Fort.

### "BOLINJKAR" BELT LACINGS

**NAGDEVI TOOL-STEEL MART.**—186-88, Nagdevi Street, Bombay 3. Phones: 323023 and 327058. Grams: "TENDERERS."

### BOLTS, NUTS, SCREWS AND NAILS

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL".

**Abdulkhader Shamsuddin & Co.**—48, Khoka Bazar, Bombay 3.

**Abdullah Faizullah Ltd.**—Khoka Bazar, Bombay 3.

**Adamally Sons Ltd.**—277, Nagdevi Street, Bombay 3.

**AMIT NUT-BOLT INDUSTRIES.**—110, Narayan Dhuru Street, Bombay-3. For Hex Bolts & Nuts BSF, NC & Metric Threads, Rivets, Washers, Spring Washers, Allen Cap & Allen Grup Screws, Sheet Metal Screws, Brass Bolt. Phone: 322380 (call), 473987 (Residence).

**ARJANSINGH KHEMCHAND.**—1st Floor, 118, Commerce House, Medows Street, Bombay-1. Phone: 253752.

**AUTOMOTIVE HARDWARE CORPORATION.**—93, Narayan Dhuru Street, Bombay 3. Phone: 322507. Grams: "NUTS-AUTO." High Tensile Bolts, Nuts, SAE, BSF, BSW & MM.

**Bharat Trading Co.**—316-A, Vithalbhaj Patel Road.

**Bhutt Brothers.**—163, Nagdevi Cross Lane, Bombay 3.

**Bombay Engineering & Metal Works.**—Dehgamwalla Chambers, Nesbit Road, Bombay 10.

**BOMBAY HARDWARE TRADERS.**—79, Narayan Dhuru Street, Masjid Bunder Road, Bombay 3. Phone Nos. 327153. Grams: "SISTACHAR." Stockists of Hardware, Screws, Bolts, Nuts, Shoe Materials, Woodworking & Metal Cutting Saws, Engineering Stores & Saw Files.

**BOMBAY TOOLS & HARDWARE MART.**—123, Narayan Dhuru Street, Bombay 3. Grams: "BOTAPS." Phone: 327122.

**Brady, W. H., & Co., Ltd.**—Churchgate Street, Fort.

**C. AMICHAND & CO.**—46A, Abdul Rehman Street, Bombay-3. Dealers in Bolts Nuts, Wood Screws, Allen Screws, Hardware & Non Ferrous Metals. Phone: 323601. Grams: "SHIPCOCK" Bombay (Mandui).

**C. Parekh & Co.**—103, Bhajipala Lane, Bombay 3.

**Dhani Ram & Sons.**—236, Masjid Bunder Road, Bombay 3.

**EVERGREEN CORPORATION.**—9/15, Picket Cross Road, P.O. Box No. 2733, Bombay 2. Grams: "GREENLEAVE." Phone: 22162. Manufacturers of all shapes, sizes, bolts, nuts, rivets, screws and washers in all metals.

**Fazalbhaj & Bros.**—26, Sarang Street, Bombay 3.

**Fit-Tight Nuts And Bolts Ltd.**—Old Ashram, Andheri-Kurla Road, Andheri, Bombay 58.

**FREE INDIA METAL PRODUCTS CO.**—65-67, Bhajipala Lane, Bombay 3. Phone: 326924. Grams: "ROUNDBOLT." Manufacturers & Stockists of Bolts, Nuts, Rivets, Washers, Screws & Hardware Materials.

**Gaytee & Co.**—Janmabhoomi Chambers, Fort Street, Fort, Bombay 1.

**Great Eastern Hardware Stores Private Ltd.**—132, Sarang Street, Bombay 3. Phone: 29663. Grams: "WINGROVE."

**GUEST, KEEN, WILLIAMS, LTD.**—Wakefield House, Sprott Road, Ballard Estate, Post Box No. 575, Bombay 1. Phone: 261302 (3 Lines). Grams: "POINTS MAN."

**Harjimal Kidarnath & Co.**—87, Nagdevi Cross Lane, Bombay 3.

**Herman & Mohatta, B. R., Ltd.**—People's Building, Sir Phirozshah Mehta Road, Fort.

**JAIRAMDAS & SONS.**—163, Narayan Dhuru Street, Bombay 3. Phone: 323616. Grams: "JAIRAMDAS." Manufacturers of M. S. Bolts & Nuts. Factory: Industrial Area, Azamabad, Hyderabad.

**Jaysukhlal & Bros.**—82-86, Abdul Rehman Street, Bombay 3.

**Kadakhia Trading Corporation.**—23, Bibijan Street (Nagdevi), Bombay 3. Phone: 29493. Grams: "STEAMTRAP."

**MAHARASHTRA HARDWARE STORES.**—94, Sarang Street, Bombay 3. Phone: 327991. Grams: "BOLTARM." Stockists of/or GKW Products—Bolts, Nuts-Screws, (Sheet Metal) Screws, Quarter Pins, Washers, Rivets, Rose Nails, Wire Nails, Coach Screws, etc.

**MOHANLAL & CO.**—144, Diamond Bldg., Lohar Street, Bombay 2. Phone: 30916. Grams: "HARDSTOCK." Bolts, Nuts and Screws and Everything Hardware.

**NAGDEVI TOOL-STEEL MART.**—186-88, Nagdevi Street, Bombay 3. Phone: 323023 and 327058. Grams: "TENDERERS."

**NEW HAVEN ENGINEERING CO. PRIVATE LTD.**—Nanjee Building, 17-B, Horniman Circle, Bombay 1. Phone: 257616. Grams: "GULDASTA." Manufacturers of Automobile parts, Machinery Spares, Bright Polished bolts and nuts, Socket head Cap Screws, Precision turned automatic parts etc.

**ORIENT PAINT & HARDWARE MART.**—67, C. P. Tank Road, Bombay 4. (BR). Importers, Agents, Stockists, Suppliers. Dealers in Iron, Hardware, Bolts, Nuts & Screws. Specialists in "Steel Wood Screws." Stockists of Nettlefolds Screws, Rivets & G.K.W. Bolts & Nuts. Agents for National Screws. Specialists in manufacturing of hardware & machines parts to Customers blue Printers or samples. Phone: 333768. Grams: "ADHIKAR."

**Patel, U. D., & Co.**—11, Bank Street, Fort.

**P. Ratilal & Co.**—43, Dhanji Street, Moti Mahal, Bombay 3. Phone: 32700.

**Shah Chhaganlal Ladhuhaj.**—58, Mudi Bazar (Mandvi), Bombay 3. Phone: 34522.

**Shums Trading Agency.**—26, Tava Lane, Bombay 3. Phone: 322231.

**Siriram & Co.**—97, Narayan Dhuru Street, Bombay 3.

**S. MOHANLAL & CO.**—Tawawalla Building, 34, Pathakwadi, Bombay 2-BR. Phones: 30240, 20915. Grams: "SOCKET-REWS." Manufacturers & Suppliers of Bolts, Nuts and Screws, made from brass and steel. Sole Selling Agents for "SURE-LOCK" Superior Steel Spring Washers. Main Distributors for Maharashtra & Gujarat for "T.V.S." High Tensile Bolts, Nuts and Screws. Distributors for "UNBRAKO." Socket Head Cap, Screws and Set Screws.

**Soho House.**—Vithal Sayana Building, Lohar Street.

**Sulemanjee Valjee Kutiyawalla & Co.**—Kika Street, Null Bazar. Teka Hardware & Engineering Corp.—82/86, Abdul Rehman Street, Bombay 3.

**THE BHARAT NUT-BOLTS INDUSTRIES.**—Darukhana, Mazagon, Bombay-10.

**Tyebally Dawoodji.**—(Estd. 1865), 87, Sarang Street, Bombay 3.

**Vora Brothers.**—34, Bibijan Street, Bombay 3.

**V. CHUNILAL & CO.**—19, Bibijan Street, Bombay 3. Phone: 328370. Bolts, Nuts, Hardware & Tool Merchants.

### BOOK-BINDING MACHINERY SUPPLIERS

**GUNVANTRAY & CO.**—Crescent Chambers, 1st Floor, Tamarind Lane, Fort, Bombay 1. Phone: 254684. Grams: "GUNA-RAYCO." H.O. Khadia, Ahmedabad 1. Phone: 4068.

### BOOKBINDING CLOTH MANUFACTURERS & DEALERS

**BHOR INDUSTRIES LTD.**—Sales Department, 392, Cadell Road, Bombay 28. Phone: 451418, 451967, 451978. Grams: "COVERCLOTH." Mfrs. of "Raja" Brand Plastic Cloth & "Natraj" brand Plastic Films & Sheetings; VYNATILE Flooring Material & STEELGRIP PVC Electrical Insulation Tape.

**Gandhi Brothers.**—4th Floor, Bhatia Building, 203, Dr. Dadabhoy Naoroji Road, Bombay 1.

**GANDHI, R., & CO.**—50, Sheriff Devji Street (Chakla), Bombay 3. Wholesale Distributors of Book Binding Cloth & P.V.C. Leather Cloth. Phone: 322897.

**Leather Cloth Processors & Printers.**—Moghul Lane, Matunga, Bombay 16.

**ROYAL PAPER STORES.**—187-89, Abdul Rehman Street, Mapla Bldg., Bombay 3. Phone: 321103.

### BOOKS (ACCOUNTS & EXERCISES) MANUFACTURERS

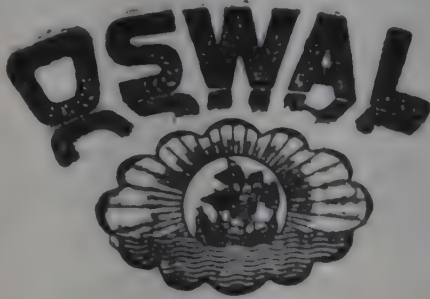
**CRYSTAL STATIONERY MART.**—Manufacturing Stationers such as Exercise Books, Note Books, Files, Account Books, etc. 146, Abdul Rehman Street, Bombay 3. Grams: "CRISMART." Phone: 324461.

**FIDVI PRINTING PRESS.**—179, Abdul Rehman St., Bombay 3. Phone: 325915. Grams: "FIDVIPRESS." Manufacturers, Dealers & Exporters of Account & Exercise Books, Files, Diaries Calendars, Desk Calendar Refills & Stands & other Advertising Novelties.



Manufacturers of :

\* Exercise Books  
\* Account Books  
\* Office Files and  
All Kinds of  
Factory & Printed  
Registers



REGD. TRADE MARK

**OSWAL BOOK MFG. DEPOT.**

193, Abdul Rehman Street, Bombay 3

Phone : 327363

Gram : "OSWALBOOK"

*Inquiries welcome for Export Markets*



TRADE

MARK

**RAJAT STATIONERY  
MART**

Manufacturers of

**EXERCISE & ACCOUNT BOOKS**

83, Abdul Rehman Street, Bombay 3

Phone : 326707

**ROTAPRESS PRIVATE LTD.**—Rahimtoola House, Hornji Street, Fort, Bombay 1. Phone : 25-1144. Grams : "TARPO." Sales Depot: 82, Bhajipala Lane, Bombay 3. Phone : 323998. Manufacturers of "Bul-Bul" & "Myna" Brand Exercise Books and Printers or Packaging Paper in Reels and Sheets.

CONTACT  
3 2 5 5 4 6



**SHAH BOOK MFG. DEPOT**

256, Abdul Rehman Street, Bombay 3

Manufacturers of :

"PRABHAT" Exercise Books, Note Books  
& Drawing Books etc.

**MADE OF BEST QUALITY GLAZE PAPER  
SOLD EVERYWHERE**

**SURESH STATIONERY MART.**—285, Abdul Rehman Street, Post Box No. 3056, Bombay 3. Phone: 327397. Grams : "SURESHBOOK." Manufacturers of "JOCKEY BRAND" Exercise Books, Letter Books, Duplicate Books, Examination Papers, Etc.

**BOOKSELLERS, PRINTERS AND PUBLISHERS**

**A. H. WHEELER & CO. PRIVATE LTD.**—Eruchshaw Building, 249, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone : 263915. Grams : "BOOKSTALLS."

**Allibhoy Shersally & Co., Ltd.**—373, Ebrahim Rahimtullah Road.

**ALLIED PUBLISHERS PRIVATE LTD.**—Head Office: 15, Graham Road, Ballard Estate, Bombay 1. Phone: 261959. Grams : "FOLIO." Branches: 17, Chittaranjan Avenue, Calcutta 13; 13/14, Asaf Ali Road, New Delhi and Mohan Mansions, 38/C, Mount Road, Madras 6.

**Allied Publishers and Stationery Manufacturers, Ltd.**—Stronach House, 15, Graham Road, Ballard Estate.

**ASIA PUBLISHING HOUSE PRIVATE LTD.**—Calicut Street, Ballard Estate, Bombay. Phones: 262831-32-33. Cables : "BOOKLORE." Branch Offices: 67, Ganesh Chandra Avenue, Calcutta 13; "East View," 199, Mount Road, Madras 2; Indra Palace, Connaught Circus, New Delhi 1; Mull Building, Ashok Marg, Lucknow; 621-622, Avenue Road, Bangalore 2; "Buena Vista," 2nd Floor, Behind Lady Hydari Club, Bashir Bagh, Hyderabad; House No. 17, Sector 15-A, Chandigarh; 447, Strand, London W.C. 2; 29, East 10th Street, New York, N.Y. 10003.

**ASIAN TRADING CORPORATION.**—P.O. Box No. 1505, 310, The Mirabelle, 33/A, Marine Lines, Bombay 1. Phone : 242672. Grams : "AJPIPAS." Importers of all types of books including children's and Religious books.

**BENNETT, COLEMAN & CO., LTD.**—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

**BHARAT BOOK CORPORATION, MEDICAL BOOKSELLERS & PUBLISHERS.**—Kitab Mahal, 190, Dadabhai Naoroji Road, Fort, Bombay 1. Importers of Medical Books from U.K. & U.S.A. Phone : 261528. Grams : "MEDIBOOK." Interested in Imports of Large Quantity, Loose Sheets of Books on Sole Agency Basis.

**BLACKIE & SON (INDIA) LTD.**—103/5, Fort Street, Bombay 1. Phone : 261410. Grams : "BLACKIE," Bombay.

**Bombay Book Depot, The.**—217 Charni Road, P.O. Girgaum, Bombay 4.

**CLARIDGE, G., & CO., LTD.**—Frere Road, Fort, Bombay 1. Phones: 263201 & 263202; Grams : "EGDIRALC." Letterpress and Offset Printers, Specialists in Packaging, Security Printing and Silk Screen Work.

**Co-operators' Book Depot (Estd. 1935).**—9, Bakehouse Lane, Fort, Bombay 1.

**Current Book House.**—Maruti Lane, Raghunath Dadaji Street, Bombay 1.

**Educational Publishing Co.**—17, Benham Hall Lane, Girgaum, Bombay 4.

**Hind Kitabs Ltd.**—261-263, Hornby Road, Fort.

**International Agencies (Regd.).**—195, Dr. Dadabhoy Naoroji Road, Bombay 1.

**International Book House Ltd.**—Ash Lane, Mahatma Gandhi Road, Fort.

**JAICO'S.**—125, Mahatma Gandhi Road, Bell Lane, Bombay 1. Phones: 252164. & 256958. Grams : "JAICOBOKS." Booksellers and Publishers.

**Karimi Litho Press.**—2nd Anjeer Wadi, Mazagaon. Sale Dept.—Karimi Book Agency, Kolsa Mohalla, Bombay 3. For all kinds of Arabic, Persian and Urdu Literature.

**Khemraj Shrikishnadass.**—7th Khetwadi, Bombay 4.

**Kitab Mahal.**—Publishers & Booksellers, Sohrab House, 235, Hornby Road, Fort.

**Lakhani Book Depot.**—Girgaum, Bombay.

**LALVANI BROTHERS.**—Taj Building, Dr. D. N. Road, Bombay 1. Largest Wholesale House in India for Children's Books, Technical, Educational and General Books. Phone : 261267. (Branches: Madras, 16, State Bank Lane, Mount Road, Madras 2. New Delhi, M-116, Connaught Circus, New Delhi 1. Calcutta, 31, College Street, Calcutta 12.)

**MACMILLAN & CO., LTD.**—"Macmillan Building," 276, Dr. Dadabhai Naoroji Road, Bombay 1. Phone Nos.: 261184 & 261185. Grams : "BIBLICOS", Bombay Publishers.

**Magazine Agency.**—4, Nanabhai Lane, Fort, Bombay 1.

**Model Art Printery Ltd.**—4, Nanabhai Lane, off Churchgate Street, Fort.

**Nadkarni, D. A., & Co., Private Ltd.**—(Incorporating Ideal Books Co.), 22, Gowalia Tank Road, Bombay 26.

**NEW BOOK CO. PRIVATE LTD.**—"Kitab Mahal," 188-190, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Phone: 263544 45.

**New India Trade Library.**—(Buying, Selling & Advertising Agents), No. 6641, P.O. Matunga, Bombay 19.

**NEW PHOTOPLAY CO.**—11, Yusuf Bldg., Mahatma Gandhi Road, Bombay-1. Phone: 256381. Grams : "NEWPHOTO." Wholesale Distributors of Books & Magazines and Subscription Agents.

**New Popular Book Shop.**—Nana's Chowk, Gowalia Tank Road, P.O. Grant Road, Bombay 7.

**Orient Longmans Ltd.**—Indian Mercantile Chambers, 53, Nicol Road, Ballard Estate.

**OXFORD UNIVERSITY PRESS.**—Oxford House, Apollo Bunder, Post Box No. 31, Bombay 1. Phones: 213104 & 213105.

**Padma Publications Ltd.**—53/55, Lakshmi Building, Sir Phiroshah Mehta Road, Fort.

**Pioneer Book Depot.**—181/3, Hornby Road, Fort.



**POPULAR BOOK DEPOT (Regd.).**—Booksellers and News Agents, Dr. Bhadkamkar Road, Bombay-7. Phone: 352456. Stockists of latest Technical, Medical, Educational, Law & General Books. Grams: "QUIXOTE."

**PROGRESSIVE CORPORATION PRIVATE LTD.**—51, Mahatma Gandhi Road, Fort, Bombay 1. Booksellers, Publishers, Stockists well known Publishing Houses of Technical, Commercial, Books. Phone: 251634.

Rajkamal Publications Ltd.—Himalaya House, Hornby Road, Bombay 1. Phone No. 20996.

Roy & Co.—176, Princess Street, Bombay 2.

S. R. Brothers.—406 & 412/A, "Commerce House", Medows Street, Fort, Bombay 1.

Taraporevala, D. B., Sons & Co.—210, Hornby Road, Fort.

Taraporevala, Phiroze & Kalkhushru, F. D. B.—Kitab Mahal, 188-190, Hornby Road, Fort.

Tripathi, Ltd., N. M.—164, Princess Street, Kalbadevi Road, Bombay 2.

Universal Book Depot.—Mohamedali Road, Bombay 3.

## UNIVERSAL BOOK CORPORATION

546, Jer Mahal, Dhobi Talao, Bombay-2.

Phone: 30526.

BOOKSELLERS, PUBLISHERS, IMPORTERS  
EXPORTERS.

*Stockists of all books on all subjects*

Arts, Science, Commerce, Medical, Technical, Law, and all other subjects. Special Export Terms.

ASSOCIATES:

New Book Centre, Kalbadevi Road, Bombay-2.

Chaturbhai Nanji, 544A, Jer Mahal, Dhobi Talao, Bombay-2.

Vora & Co. Publishers Private Ltd.—3, Round Building, Bombay 2. Phone: 22536.

Wm. Collins Sons & Co., Ltd.—Taj Mahal Hotel, Apollo Bunder.

Writers' Emporium Private Ltd.—People's Building, Sir Phirozshah Mehta Road, Fort, Bombay.

## BOOT, SHOES & LEATHER GOODS MAKING MACHINES

Batliboi & Company Private Limited.—Reg. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR). Phones: 255451 (6 lines). Grams: BATLIBOICO. Tele.: 011-284. City Branch: BATLIBOI HOUSE, 59/61, Nagdevi Cross Lane, Bombay-3 (BR). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, Bhubaneswar.

## BOOT, SHOE-MAKERS FOOTWEAR MFRS. AND DEALERS

Bata Shoe Co., Ltd.—Noble Chambers, Parsee Bazar Street, Fort, Bombay.

Bombay Swadeshi Co-operative Stores Co., Ltd.—Western India House, Sir Phirozshah Mehta Road, Fort.

Cawnpore Mills Depot.—Churchgate House, Churchgate Street, Fort.

Eastern Leather Works.—Junction of Sandhurst Road & Girgaum Back Road, Bhatia Sanitorium, Bombay 4.

Elgin Leather Wares, Ltd.—Nawab Building, 322, Hornby Road, Fort, Opp. Thomas Cook & Sons, Bombay.

General Shoe Stores.—337-43, Bhendi Bazar.

Gold Filled Leather Works.—Princess Street and Sandhurst Road, Bombay.

International Rubber & General Industries Private Ltd.—24, Argyle Road, Wadi Bunder, Bombay 9.

Jamnadas Jinabhai & Sons.—Jamnadas Building, Vithalbhai Patel Road, Kumbhar Tukda.

## BOTTLES AND CORKS

Akberally Mohamedally & Co.—Dawoodi Building, 316, Abdul Rehman Street.

Ajit Glass Works.—Ghodbunder Road, Bombay 42.

All India Glass Works Private Ltd.—326, Bail Bazar, Old Kurla, Bombay 70.

All-India Trading Corporation.—25, Bank Street, Fort.

Anant Trading Co.—89, Princess Street, Bombay 2.

BRAGWANDAS DEVSHI PRIVATE LTD.—87, Princess Street, Bombay. Importers and Dealers in Glassware, Empty Bottles, Corks and Laboratory Equipments. Phone: 30084. Grams: "EMBOT."

Bogwin & Co.—Wadia Estate Bldg. No. 8, Room 267, Old Kurla, Bombay 37.

CENTRAL BOTTLE TRADING CO.—Green House, Green Street, Fort, Bombay 1. Phone: 255008. Grams: "CENT-BOTTLE." Dealing in Glass Bottles, Neutral, Amber and White Vials, Ampoules, Bakelite Caps, etc.

Embi Desai & Co.—Office: Dadyseth House, Cawasji Patel Street, Fort, Bombay 1.

GIER TRADING (BOMBAY) AGENCY.—105, Apollo Street, Fort, Bombay. Phone: 254758. Grams: "AMBERGLASS." Manufacturers and Dealers of Quality Glass Ampoules, Tablet Tubes, all sorts of glass Bottles, Amber Neutral Glass Vials & Bakelite & Plastic Caps.

Indian Cork Mills.—Sussex Road, Bombay 27.

M. Pranjivandas & Co.—79-B, Princess Street, Bombay 2.

Noble Trading Co.—174, Abdul Rehman Street, Bombay 3.

Rubako Industries.—Behramji Mansion, Sir Phirozshah Mehta Road, Fort.

Salemahomed Padamsee & Co.—141, Chakla Street, Bombay 3.

SIKRI BROTHERS.—79-E, Princess Street, Bombay 2. Phone No. 29393. Grams: "OILMAN."

Swadeshi Glass Works Depot.—25, Bank Street, Fort, Bombay. Grams: "AUTOGLASS."

T. Alimahomed & Co.—144-46, Sarang Street, Bombay 3.

Vazir Glass Works Ltd.—Fort.

## BOX MAKING MACHINERY SUPPLIERS

GUNVANTRAY & COMPANY.—Crescent Chambers, 1st Floor, Tamarind Lane, Fort, Bombay 1. Grams: "GUNA-RAYCO." Phone: 254684. H.O. Khadia, Ahmedabad 1. Phone: 4068.

## BOX MANUFACTURERS

Apca Packaging Private Ltd.—151, Upper Duncan Road, Bombay 8.

Bharat Strawboard Mfg. Co.—12, Noble Chambers, Parsi Bazar Street, Bombay 1.

Brijmohan Banwarilal.—61, Reay Road, Bombay 10.

CLARIDGE, G., & CO., LTD.—Frere Road, Fort, Bombay 1. Phones: 263201 and 263202. Grams: "EGDIRLAC." Letterpress and offset Printers, Specialists in Packing, Security Printing and Silk Screen Work.

Crown Box Factory.—94, Dhanji Street, Bombay 3.

EVEREST PACKAGING CORPORATION.—Chopra Estate, Agra Road, Bhandup, Bombay 78. Phone: 581736 & 581909. Manufacturers of Corrugated Shipping Containers, Cartons, Corrugated paper & Boards, Outer boxes and Paper packing Requisites.

Indian Packing Materials Corporation.—Mahavir Building, Homji Street, Fort.

Jaydip & Co.—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.

KADRI PAPER BOX FACTORY.—30, Mohamedali Road, Bombay 3. Phone: 332856. Cardboard and Corrugated Board Boxes of every size and description with printing if required and Cardboard Tubes for Calendars, Grams: "BOXWORK."

Metal Box Co. of India, Ltd.—Worli Road, Worli.

Model Art Printery Ltd.—4, Nanabhai Lane, Fort, Bombay.

New Jack Printing Works, Ltd.—Seksaria Mill Compound, Globe Mills Passage, off DeLisle Road, Bombay 13. Grams: "NEW-JAPRES." Phones: 60042-43.

Standard Paper Box Manufacturing Co.—51, Mangaldas Road, Lohar Street, Bombay 2.

## BOX STRAPPING & SEALING MACHINERY

ABDEALLY, B. M., & CO.—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL."

KASHIRAM JAMNADAS.—Box Strapping all Sizes. 191, Argyle Road, Bombay-9. Phone: 324787.

## BRASSWARE

LALLUBHAI AMICHAND PRIVATE LTD.—Proprietors, "Dun Aluminium Factory." 225-27, Tardeo Road, Bombay 7. Manufacturers of "Cycle" Brand Aluminium Wares & "Queen" Brand Stainless Steel Utensils, and other non-ferrous metalware. Phone Nos. 370996, 377175, 334049 & 331888. Grams: "CYCLEBRAND."



**BRASS PRECISION TURNED PARTS**

**INDUSTRIAL MANUFACTURERS.**—Alliance Building, 94, Nagdevi Street, Bombay 3. Phone: 324745, 451998 & 452239. For Brass Turned Precision Parts & Cocks from 8" to 4" turning Rod for Radios, Transformers, Switchgears, Automobiles, etc.

**BRICK AND TILE MANUFACTURERS AND MERCHANTS**

Ahmed Noormohamed Chunawala & Co.—338, Ghodbunder Road, Andheri.  
 Albuquerque, A., & Sons.—48-B, Mazagaon.  
 Bharat Tiles & Marble Ltd.—32, Apollo Street, Fort, Bombay.  
 Bombay Potteries and Tiles Ltd.—Pipe Road, Kurla, Bombay.  
 C. Bhogilal & Co.—Hanuman Building, Behind Reserve Bank, Elphinstone Circle, Fort.  
 Chunilal Parikh & Co.—478, Duncan Road, Bombay 4.  
 Desai, Lalubhai & Co.—Duncan Road, Null Bazar.  
 Gligabhai, K., & Sons.—8-10, Green Street, Fort, Bombay.  
 Himalaya Tiles & Marbles.—Himalaya Baug, Lady Jamshedji Road, Mahim.  
 Hindustan Tiles & Cement Industries.—89, Princess Street, Bombay 2.  
 Indianite Insulation Co. of India.—139, Meadows Street, Fort.  
 Khanmahomed & Co.—508, Duncan Road.  
 Modern Concrete Art Industries.—17-19, Dalal Street, Fort.  
 Mohanlal & Co.—491, Duncan Road, Bombay 4.  
 Muraglia, F., & Co.—12, Green Street, Elphinstone Circle.  
 Raval & Co.—21, Bank Street, Fort.  
 Raval Tiles & Marble Ltd.—"Edena", Queen's Road.  
 Shivraj Kanji & Co.—21, Khetwadi 6th Lane.  
 Simplex Art Flooring Ltd.—"La-citadelle", 32, Queen's Road.  
 Tandur and Shahabad Stones Co.—Opp. Round Temple, Sandhurst Road, Bombay 4.  
 United Tile Agency.—Old P.O. Building, Mazagaon, Bombay 10.

**BRIGHT BARS MFRS.**

**INDIA TUBE MILLS & METAL INDUSTRIES PRIVATE LTD.**—126, Narayan Dhuru Street, Bombay 3. Grams: "TUBE-MILL". Phone: Office: 322142. Factory: 581541 & 581542. Leading Manufacturers of Bright Bars, Free Cutting Commercial & other Qualities.

**BROKERS**

Amratlal Kalidas.—Share, Stock and Finance Broker, 95, Stock Exchange New Building, Apollo Street, Fort.  
 Amritlal Popatbhai & Co.—11, Aga Khan Building, Dalal Street, Fort.  
 Amthalal Nanabhai Gandhi.—53, Stock Exchange New Building, Apollo Street, Fort.  
 Anandilal Podar & Co.—Podar Chambers, Parsi Bazar Street, Fort.  
 Arjan Khimji & Co.—17, Sir Phirozshah Mehta Road, Fort.  
 Arvind Chandra Ambalal Trivedi.—Lalgar Chambers, Tamarind Lane, Fort.  
 Aspinwall Lakhmidas & Co.—7-9, Elphinstone Circle, Fort.  
 Bachraj & Co., Ltd.—Jehangir Wadia Building, Mahatma Gandhi Road, Fort.  
 Batilvala & Karani.—Union Bank Building, Dalal Street, Fort, Bombay.  
 Begraj Kishandev.—207, Kalbadevi Road, Bombay 2.  
 Bhaides Goolabdas.—Share Bazar, Fort.  
 Bharucha, Homi M. P.—Karsondas Natha Building, Hamam Street, Fort.  
 Billmorla, H. R.—Karsondas Natha Building, 5-A, Hamam Street, Fort.  
 Chaitanyalal & Co.—808, Cotton Exchange Building, Kalbadevi Road.  
 Chimanlal J. Dalal & Co.—107, Stock Exchange Building, Dalal Street, Fort.  
 Chimanlal Mohanlal & Co.—Patel Building, Zaveri Bazar.  
 Chinoy & Co.—East and West Building, Apollo Street, Fort.  
 Chiranjilal & Co.—199-201, Kalbadevi Road, Bombay 2.  
 Chugondas & Co.—17-18, Elphinstone Circle, Fort.  
 Chugonlal Gandhi & Co.—Opp. Share Bazar, 6, Dalal Street, Fort.  
 Chunilal Krishnalal & Co.—608, Cotton Exchange Building, Kalbadevi Road.  
 Chunilal Mehta & Co., Ltd.—Yusuf Building, 43, Mahatma Gandhi Road, Fort.  
 Chunilal Virchand & Sons.—Stock Exchange Building, Dalal Street, Fort.  
 Cotton Information Bureau.—381, Hornby Road, Fort.  
 Darashaw & Co.—Central Bank Building, Mahatma Gandhi Road, Fort.  
 Dastur, M. B., & Sons.—Insurance Brokers, Ismail Building, Hornby Road, Fort.  
 Dhansukhlal & Co.—Patwa Chawl, Zaveri Bazar.

Dharamdas Samaldas Purbhoodas.—10, Stock Exchange, Dalal Street, Fort.  
 Dhirajlal Mohanlal & Co.—Aga Khan Building, Dalal Street, Fort.  
 Drennan & Co.—Cotton Brokers, Neville House, Currimbhoy Road, Ballard Estate, Fort.  
 Duleral & Co.—22, Apollo Street, Fort.  
 Durlabji Umedchand & Co.—Laxmi House, 177-179, Kalbadevi Road.  
 Express Corporation.—Co-operative Insurance Building, Sir Phirozshah Mehta Road, Fort.  
 Forbes & Lund.—Royal Insurance Building, Veer Nariman Street, Fort, Bombay 1.  
 Gasdar, J. S., & Sons.—Share Bazar, Dalal Street, Fort.  
 Gill & Co.—E. D. Sassoon Building, Dougall Road, Ballard Estate, Fort.  
 Goculdas Doss & Co.—Cotton Brokers, 55, Apollo Street, Fort.  
 Goel Bros. & Co., Ltd.—Navsari Chambers, Fort.  
 Gokalbhai Dolatram & Co.—Cotton Brokers, 522, Cotton Exchange Building, Kalbadevi Road.  
 Habib & Sons.—Bullion, Finance, Cotton & Produce Brokers, Laxmi Building, 177-79, Kalbadevi Road.  
 Hansraj & Co.—Seed and Myrobalan Brokers, Arya Bhuvan, Graham Road, Ballard Estate.  
 Haridas Dwarakadas & Co.—Iron & Steel Brokers, near Carnac Bridge, Argyle Road.  
 Hasanali Fatehall.—190, Nagdevi Street.  
 Jadavji Narsidas & Co.—Seeds Brokers, 713, Cotton Exchange Building, Kalbadevi Road.  
 Jadavji Premji Gandhi.—Cotton and Bullion Broker, 199-201, Kalbadevi Road.  
 Jagmohan Manilal Co.—Cotton Brokers, Cotton 505 Exchange Building, Kalbadevi Road.  
 Jagmohandas J. Kapadia.—Savoy Chambers, Dalal Street, Fort.  
 Jamnadas Lakhmidas & Co.—403, Cotton Exchange Building, Kalbadevi Road.  
 Jamnadas Morarjee & Co.—Stock Exchange Building, 8/10, Dalal Street, Fort.  
 Jehangir J. M. Poonjiajee.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort.  
 Jehangir Mehrwanji & Co.—Jehangir Wadia Building, 51, Mahatma Gandhi Road, Fort.  
 Jethalal & Co.—603, Cotton Exchange Building, Kalbadevi Road.  
 J. P. Gupta.—108, Stock Exchange New Building, Apollo Street, Fort.  
 Keshowji Mulji & Co.—283 Samuel Street.  
 Khimji Poonja & Co.—Wadia Building, 17/19, Dalal Street, Fort.  
 Kilachand Devchand & Co., Ltd.—45-47, Apollo Street, Fort.  
 Krushnaraj Dhanjibhai & Co.—612, Cotton Exchange Building, Kalbadevi Road.  
 Laljee Sajun & Co.—Lansdowne Road, Apollo Bunder, Fort.  
 Lalubhai Atmaram & Co.—Mahajan Association, Zaveri Bazar.  
 Laws, Wm., & Co.—Sorab Mansion, 35, Mursban Road, Fort.  
 Lees, H. E., & Co.—Windsor House, 138, Queen's Road.  
 Lewis & Jones.—Bank of Baroda Building, Apollo Street, Fort.  
 Lilladhar Karsandas & Co.—Aga Khan Building, Dalal Street, Fort.  
 Lister & Co., Charles.—Navsari Chambers, Hornby Road, Fort.  
 Mackintosh, James, & Co.—Darabshaw House, Ballard Estate, Fort.  
 Madon, D. S., & Son.—Karsondas Natha Building, Dalal Street, Fort.  
 Madon, P. M.—Stock Exchange Building, Apollo Street, Fort.  
 Maneklal Javerchand Dayachand Javeri.—Hindustan Press Building, 21, Dalal Street, Fort.  
 Mangaldas Hakamchand Parikh.—89, New Stock Exchange Building, Fort.  
 Mangaldas Kalidas Choksey.—Kilachand Devchand Mansion, Apollo Street, Fort.  
 Manilal Bakordas & Co.—Old Stock Exchange Building, Share Bazar, Fort.  
 Manmohandas Nemidas & Co.—5, Dalal Street, Fort.  
 Mansukhlal Sukhlal Tarwala & Co.—18-22, Marwari Bazar.  
 Mehta, Ramkrishna & Co.—Neptune Building, 166, Hornby Road, Fort.  
 Mehta, Vakil & Co.—Old Stock Exchange Building, Dalal Street, Fort.  
**MERWANJEE BOMANJEE DALAL.**—Investment Bankers, Under writers, Stock, Share, Bullion, Exchange and Finance Brokers, Allahabad Bank Buildings, Apollo Street, Fort, Bombay. Phone: 253981 (5 Lines). Grams: "GILTEDGED." Telex No. 219, Answer Back "GILTEDGED By 219."  
 Motilal K. Dalal & Co.—Old Share Bazar Building, Dalal Street, Fort.  
 Motilshaw, J. R., & Co.—32, Apollo Street, Fort.  
 Mukundray Pratapray.—36, Marwari Bazar, Bombay 2.  
 Nabar, R. R., & Co.—31, Dalal Street, Fort, Bombay 1.



Narbharam Naranji & Sons.—709, Cotton Exchange Building, Kalbadevi Road.

Parekh & Sons.—Aga Khan Building, Dalal Street, Fort.

Patel Bros.—10, Churchgate Street, Fort.

Patel Bros.—501, Cotton Exchange Building, Kalbadevi.

Patel & Ramdutt.—42-43, Stock Exchange Building, Apollo Street, Fort.

P. H. Kamdar.—19, Latif House, Lokhand Jetha, Carnac Bunder, Bombay 9.

Pitamber & Co.—Scindia House, Ballard Estate, Fort.

Pitamber Laljee & Sons.—4, Botawalla Building, 7-9, Elphinstone Circle, Fort.

Prataprai Madhavji & Co.—Gaya Building, Masjid Bunder Road.

Premchand Roychand & Sons, Ltd.—63, Apollo Street, Fort.

Purbhoo Das & Co., D. S.—Stock Exchange New Building, Apollo Street, Fort.

Pyarelal Gupta & Co.—207, Kalbadevi Road, Bombay 2.

Ramdas Doss & Co.—509, Cotton Exchange Building, Kalbadevi Road.

Ramdas Khimjee Bros.—Warden House, Sir Phirozshah Mehta Road, Fort.

Ramdas Tulsidas & Co.—610-616, Cotton Exchange Building, Kalbadevi Road.

Ramdayal Somani & Co.—158-164, Kalbadevi Road.

Ramrikdas Parasrampur & Co.—Raj Mahal, Bhuleshwar Road.

Ramsarup Gupta & Co.—705, Cotton Exchange, Kalbadevi Road, Bombay 2.

Ramsukh Karanidan & Co.—Savoy Chambers, Dalal Street, Fort.

Ranchhoddas Purshottam & Co.—39, Marwari Bazar.

Ratilal & Co.—Opp. New Cotton Exchange, 1-3, Bhuleshwar Corner.

Ravai Tiles & Marble Ltd.—97-A, Queen's Road, Bombay.

Raychand Doungershi.—32, Marwari Bazar.

Ruttonsee Ernest & Co.—Jan Manslon, Sir Phirozshah Mehta Road, Fort.

Sankalchand G. Shah & Co.—Hanuman Building, Tambakanta, Pydhownie.

Sevantilal & Co.—Marwari Chamber of Commerce Building, 232-234, Kalbadevi Road.

Shroff, Cooper & Co.—67, New Stock Exchange Building, Apollo Street, Fort.

Shroff, P. N., & Co.—House, 124, Cowasji Patel Street, Fort.

Shroff, R. P., & Sons.—6, Stock Exchange Building, Dalal Street, Fort.

Subramanyam, P. R., M.A.—70-A, Stock Exchange Building, Apollo Street, Fort.

Suntoomal Raval Das & Co.—Suntoomal Raval Das Building, Narayan Dhuru Street.

Thakordas Soorajlal & Bros.—Tanksali Bhuwan, Kalbadevi Road.

Thakorlal H. Vakil.—15, Hamam Street, Fort.

Thariany, M. S.—P.O. Box No. 3101, Bombay 3.

Vandrewalla & Dordi.—Old Share Bazar Building, Apollo Street, Fort.

Venilal & Co.—Patwa Chawl, Marwari Bazar.

Viram Ladha & Co.—228, New Cotton Exchange Building, Kalbadevi Road.

Vrajlal Thakkar & Co.—Meadows Street, Fort.

### BRUSH MANUFACTURERS

## BRUSHES

OF DEPENDABLE & DISTINCTIVE QUALITY...

#### TOILET:

Aryan Tooth Brushes in Nylon and bristles; shaving and hair brushes, etc.



#### INDUSTRIAL:

For textile and other industrial purposes, manufactured and supplied to any specifications

### THE ARYAN BRUSH CO., LTD.

INDIA'S PIONEER TOOTH BRUSH MAKERS

Office: Lentin Chambers, Dalal St., Bombay 1. Phone: 253274  
Works: Vile Parle East, Bombay 57. Phone: 571218  
Grams: "Brushco" Bombay, Vile Parle

**AZAD BRUSH CO.**—Manufacturers of Industrial, Textile, Toilet and Shaving Brushes, Tooth Brushes. Madhavdas Pasta Road, Dadar, Bombay 14. Phone: 441663. Grams: "BRUSHAZAD."

TELEPHONE  
6 1 6 6 3

TELEGRAM  
BRUSHAZAD

## AZAD BRUSH CO.

MANUFACTURERS OF INDUSTRIAL TOILET AND PAINT BRUSHES SPECIALISTS IN TEXTILE BRUSHES MAKERS OF PATENTED LIFE TIME COMBER BRUSHES

FACTORY & OFFICE:  
MADHAVDAS PASTA ROAD, DADAR, BOMBAY.

**KEWALRAJ & CO. PVT. LTD.**—Messrs. 315, Nana Shanker Seth Road, (Girgaum Road), Bombay 2. Phone: 39165 & 39709; Cable:—"KELTRAJCO." Manufacturers of Toilet, Domestic, Artist, Industrial and Paint Brushes, Cotton Waste Garments & Railway Signal Lamps, etc.

**CHUNILAL KHANNA & CO.**—Saraswati Nivas, Thakurdwar Road, Bombay 2. Phone: 354813. Grams: "BABALALU."

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort. Phone: 254433. Grams: "DATNARE."

Grand Woodworks & Saw Mills.—Connaught Cross Road, Ghorupdeo.

Great Eastern Trading Co.—107, Cawasji Patel Street, Fort.

**HARDCASTLE & WAUD MANUFACTURING CO., PRIVATE LTD.**—Alice Building, 339, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 255771. Tel. Address: "WAUDCO."

Jai Bharat Brush Co.—278, Suparibaug Road, Parel, Bombay 12.

Shah Trading Corporation.—Oomrigar Building, Opp. Crawford Market, Bombay.

### BUCKETS, BARRELS, DRUMS AND HOLLOWWARE MANUFACTURERS

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.

**BRIGHT BROTHERS PRIVATE LTD.**—156-A, Tardeo Road, Bombay 34. Grams: "BRIBOS." Phones: 378548, 378549, 378540. Manufacturers of Polythene Buckets of 2, 3 and 4 Imperial Gallons Capacity and thin wall Polythene Drum Liners.

Chandrakant Vasantlal & Co.—New Islam Mill's Compound, 38, Currey Road, Bombay 13.

Standard Drum & Bucket Factory.—232, Bellasis Road, Bombay 8.

**TAYABI BUCKET FACTORY.**—Manufacturers of Buckets, Drums, Containers and other household articles; Showroom: 174/178, Janjekar Street, Bombay 3. Phones: 323474 and 326545. Grams: "HORSEBRAND". Factory: Ripon Road, Cross Lane, Bombay 8. Phone: 377308.

### BUILDERS AND CONTRACTORS

Abdulhusain Essoofally Contractor.—91-93, Bapu Khote Street, Bombay 8.

Ahmed Noormohmed Chunawala & Co.—338, Ghodbunder Road, Andheri.

Allied Construction Co., Ltd.—Pannalal Bansilal Mansion, 24-B, Hamam Street, Fort.

Concrete Construction & Engineering Co., Ltd.—Churchgate House, Churchgate Street, Fort.

Cooverji Hormusji & Sons, N. (Estd. 1895).—598, Wadia Bldg., Chira Bazar, Girgaum Road, Bombay 2. Phone: 39919.

**GAMMON INDIA LTD.**—Civil Engineers & Contractors. Regd. Office: Gammon House, Cadell Road, Prabhadevi, Bombay-25 DD. Phone: 454261. Grams: "GAMMON", Bombay, Dadar.

Gannon Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.

Hindustan Construction Co., Ltd.—Construction House, Ballard Estate, Bombay.



**JOLLY BROTHERS PRIVATE LTD.**—Engineers & Contractors, Lakshmi Insurance Building, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phones: 263888/9. Grams: "JOLLYBROS." Other Offices: Jamnagar, Poona, Bangalore, Amravati, Hyderabad & Madras.

Kanji Govind Kerson.—Murbad Road, Kalyan.

**KHANNA & CO., S.**—Mustafa Building, Sir Phirozshah Mehta Road, Fort. Grams: "CRETECO," Bombay. Phone: 251162. Engineers, Builders and Quarry Owners.

Lallubhai & Co.—Prospect Chambers Annexe, Hornby Road, Fort.

McKenzies Ltd.—Sewri.

**MISTRY PREMJI SUNDARJI & CO.**—Ghorapdeo Cross Road No. 1, Bombay-10. Phone Nos.: Office: 376170 & 372347; Res.: 335281 & 521249. Building Contractors and Decorators.

Mohanlal & Co.—491, Duncan Road, Bombay 4.

**NATIONAL ASPHALT PRODUCTS & CONSTRUCTION CO.**—Hill View, Mahul Road, Chembur, Bombay 74 AS. Phones: 521637 & 521795. Contractors for: Earthwork, Rock Cutting, Asphalt & Concrete Roads and Reinforced Concrete Work.

**NENSHI MONJI.**—123, Mahatma Gandhi Road, Bombay 1. Contractors, Stone and Sand Suppliers. Phones H.O.: 251054 and 255048, Bhoiwada Quarry 441150, Kurla Quarry: 581844, Sand Depot: 72626.

**NEW BHARAT BUILDERS.**—Central Bank Bldg., Bruce Street, Fort, Bombay. Phone: 254122. Grams: "NISC." Engineers and Building Contractors.

Premier Construction Co., Ltd.—Construction House, Ballard Estate, Fort, Bombay.

**RAM DADLANI.**—506, Commerce House, 140, Meadows Street, Bombay 1; Builders and Estate Agents; Phones: 251508 & 256601; 365939 (Res.).

**RECONDO PRIVATE LIMITED.**—Co-operative Insurance Building, Sir P. M. Road, Bombay 1. Road Construction Contractors, Specialists in Asphalt Surfacing. Phone: 254622. Grams: "CONDO", Bombay 1. Manager: T. H. Peshori, B.E. (Mech.). Technical Adviser: N. H. Taylor, M.Sc. (Lond.), A.M.I.C.E.

**SHAH CONSTRUCTION CO. LTD.**—198, Jamshedji Tata Road, Bombay 1. Phone: 245044 (3 lines). Grams: "SUPER-TRADE." Engineers & Contractors. Specialists in Prestressed Concrete, Roads, Dams and Canals. R. C. C. Multistoreyed Buildings.

**SHALIMAR TAR PRODUCTS (1935) LTD.**—16, Bank Street, Fort, Bombay 1. Phone: 254643. Grams: "TARSTIL." Specialists in Prestressed Concrete Design and Construction.

Shapoorji Pallonji & Co.—70, Meadows Street, Fort.

**SHUBHDWAR ROLLING SHUTTERS & ENGINEERING CO.**—15, Bank Street, Fort, Bombay. Phones: 254445, 254185 & 256502. Grams: "SHUBHROLL." Manufacturers of Steel and Aluminium Rolling Shutters, Window Grills, Collapsible Gates, Fire Proof Doors, Compound Gates, Steel Doors & Windows, all types of Steel fabrication works.

Simplex Concrete Works & Construction Co.—"La Citadelle", 32, Queen's Road.

Tejoo Kaya & Co.—Tejoo Kaya Park, Vincent Road, Matunga, Bombay 19.

Timber Wood Syndicate.—Ghodbunder Road, Andheri, Bombay. Phone: 86673.

United Construction Corporation.—Shrinivas House, 3rd Floor, Waudby Road, Fort.

Victoria Sanitary Stores, 3rd Bhoiwada, 54, Bhuleshwar, Bombay 2.

**VAZIFDAR BUILDERS PRIVATE LTD.**—Designers, Builders & Promoters, Corinthian, 17, off Arthur Bunder Road, Colaba, Bombay 5.

### BUILDERS HARDWARE

**ABDEALLY, B. M. & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL".

A. K. Porbandarwalla Sons.—Ruby Mansion, 19, Parsee Bazar Street, Bombay 1.

Elliott Waud & Hill Private Ltd.—Lakshmi Bldg., Sir P. M. Road, Bombay 1.

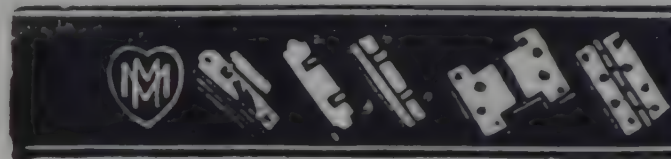
Micro Metal Works.—22, Narayan Dhuru Cross Lane, 1st Floor, Bombay 3.

**ORIENT PAINT & HARDWARE MART.**—67, C. P. Tank Road, Bombay No. 4 (BR). Importers, Agents, Stockists, Suppliers. Dealers in Iron, Hardware, Bolts, Nuts, Screws, Specialists in "Steel Wood Screws". Stockists of Nettlefolds Screws, Rivets, G.K.W. Bolts and Nuts. Agents for National Screws. Specialists in manufacturing of Hardware & machines parts to customers specification. blue print or samples. Grams: "ADHIKAR". Phone: 333768.

Stanley Works, The.—44, Lakshmi Bldg., Sir Pherozshah Mehta Road, Bombay 1. Phone: 262737. Grams: "STANLEYWORK".

Teka Hardware & Engineering Corp.—82-86, Abdul Rehman Street, Bombay 3. Phone: 326886. Grams: "TEKATOOLS", Agents for Tekrom Railing Patti (Door Tracks) in 10 ft. lengths Iron Coppered, English Heavy Type, and Brass Rod Brackets Nickel Plated for Curtain Rod, also Nickel Plated & Tubes 'Lion Brand' 12 ft. long Standard thickness.

**VERTEX MANUFACTURING CO. LTD.**—222, Sir Mathuradas Vissanji Road, Andheri (East), Bombay 69. Phone: 572438. Manufacturers of "Vertex" Builders' Hardware such as brass hinges, barrel bolts, mortice locks, handles, etc.

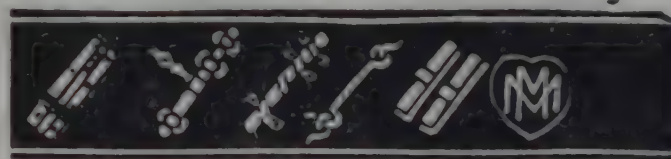


### MEHTA MANUFACTURERS

Shop No. 25-A, Sarang Street, Khokha Bazar, Bombay-3

### ALWAYS USE

M. M. BUILDING HARDWARE



### BUILDING MATERIALS

**A. M. LAKDAWALLA.**—23, Dhaboo Street, Bombay 3. Phone: 332066. Grams: "STRONGTEAM." Authorised Stockists for "Everest" Asbestos Cement Big Six and Trafford sheets and accessories, Building Boards, Pipes, Cutters & Fittings. Supply Fabrication & Erection steel for Industrial sheds and building contractors.

Abba Gani & Co.—1-2, Victoria Road, Mazgaon, Bombay 10.

**ARANHA AGENCIES.**—190, Cadell Road, Mahim, Bombay 16. Phone: 453504. Official Stockists of "EVEREST" Asbestos Cement "Big Six" Corrugated Sheets & "Trafford Sheets", Building Boards, Cutters, Pipes & Fittings. Mfrs., Roof Bolts, Cutter & Pipe Clamps & Accessories—Specialists in the erection of Asbestos Cement Roofs & all Asbestos Cement Products.

Arco Steels.—Prospect Chambers Annexe, Hornby Road, Fort.

**ASSOCIATED BUILDING MATERIALS CORPORATION, THE**—Suppliers of genuine quality Sand, Building for construction, 20-C, Dalal Street, Fort, Bombay. Phone: 253289 & 252700.

Chandulal Narandas.—96, Kika Street, Bombay 4.

**CIBA OF INDIA LIMITED.**—Royal Insurance Building, 14, Jamshedji Tata Road, Bombay-1. Phones: 245031-3, 246084-6. Manufacturers and Importers of Synthetic resin adhesives for industrial and domestic purposes.

Heatly and Gresham Ltd.—9, Forbes Street, Fort, Bombay.

**INDOPLAST LTD.**—Kasturi Buildings, Jamshedji Tata Road, Bombay 1 (Post Bag 10076). Grams: "STYROPOR." Phone: 38071. Manufacturers of Thermocole Boards for false Ceilings and Acoustical Tiles.

**INDUSTRIAL MINERALS & CHEMICAL CO.**—125, Narayan Dhuru Street, Bombay 3. Phone: 323721 (3 lines). Grams: "IMCHEL." Chemicals & Mineral Merchants and Stockists of Raw Material for all Industries.

J. N. Raja & Co.—51, C. P. Tank Road, Bombay 4. Phone: 334429.

Kanakia Corporation.—163, Nagdevi Cross Lane, Bombay 3.

Mahomed Janmahomed.—68, Pydhonie Road, Khadak, Bombay 9.

**NATSON MANUFACTURING CO. PRIVATE LTD.**—Bombay Mutual Chambers, 19, Harnam St., Fort, Bombay. Phone: 254221. Grams: "GLOBULAR". Works: Odhav, Ahmedabad. Grams: "DAMPROOF." Manufacturers of Concrete Hardener, "Rite-Sil" Waterproof Cement Paint, Natson Cement Waterproofer, Acid & Alkali Resisting Cements, 'Prontocet' Rapid Hardening & Quick Setting Liquid for Cement, Cement retarders Smooth-on-Iron & Foundry Cements & "Mineraload" pipe Jointing Compound for Bell & Spigot Type Cast Iron Pipes.



**NENSHI MONJI.**—123, Mahatma Gandhi Road, Bombay 1. Contractors, Stone and Sand Suppliers. Phone H.O.: 251054 and 255048. Bhoiwada Quarry: 441150; Kurla Quarry: 581844; Sand Dept.: 72626.

**P. Ratilal & Co.**—43, Dhanji Street, Bombay 3.

**R. Moolchand & Co.**—44, Nagdevi Cross Lane, Bombay-3. Direct Importers, Sanitarywares, Tiles, Bath Tubs, Fancy Bathroom Fittings. Grams: "POTTERY." Phone: 324207. Res.: 78837.

**Simplex Timber Mart.**—64-66-68, Ibrahim Mohd. Merchant Road, Khadak, Bombay 9 (India). Phone: 331794. Grams: "LADDER-MAN". Municipal Contractors, Dealers in Bamboos and Bamboo Mats, Mangalore Tiles, etc. Manufacturers of all kinds of Single, Folding, Sliding, Extension and wheeled tower ladders, boat oars and flag poles etc.

**Teamsan Traders.**—Post Box No. 3162, Nagdevi Street, Bombay 3.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Bombay.

### BULLION

**Bagraj Gupta.**—207, Kalbadevi Road, Bombay 2.

**Hemchand Mohanlal & Co.**—Deoki Bhuwan, Dhanji Street, Bombay 3.

**Khimji Poonja & Co.**—Wadia Building, 17/19, Dalal Street, Fort.

**Merwanjee Bomanjee Dalal.**—45-47, Apollo Street, Fort, Bombay.

**MOTILAL VIJBHUKHANDAS.**—155, Shaikh Memon Street, Bombay 2. Dealers & Refiners. Ready Gold, Silver, Sovereigns, Commission Agents. Brokers in Securities & Shares and General Merchandise. Importers of Chemicals. Exporters—Pearls—Stones and Electrical Meters, etc. Phone: 326537. Grams: "AMIABILITY".

**Pyarelal Gupta & Co.**—207, Kalbadevi Road, Bombay 2.

**Ramsarup Gupta & Co.**—705, Cotton Exchange, Kalbadevi Road, Bombay 2.

### BUS BODY EQUIPMENT & MECHANICAL WORKS

**RATTAN INDUSTRIES.**—Agra Road, Bhandup, Bombay 78. Specialists in Driver's Seat and Passenger Seat, Frames, Load Body Equipments, Carriage Window Lowers, Railway Signal Items, Factory & Building Iron Gates, Trusses, Water Tanks, Grills and Mechanical Fittings & Fixtures, Hydraulic Acrostands for Bicing Baggage Trolleys and Passenger steps, Ladders for Air India & Dredgers & Dredger equipment. Phone: 592412.

### BUTTER & GHEE (MFRS.)

**POLSON, LTD.**—65-B, Dockyard Road, Mazagaon, Bombay 10-D.D. Phone: 373245 (2 lines). Grams: "POLSON," Mazagaon, Bombay 10.

### CABLES & WIRE MFRS.

**ASIAN CABLES CORPORATION LTD.**—Manufacturers of Rubber and Plastic Insulated Electric Wires & Cables. Office: Somani Chambers, Nariman Point, Bombay-1. Grams: "DUNENFIELD". Phone: 455341-42. Factory: Pokhran Road, Thana. Products: Rubber Insulated and Plastic Insulated Wires & Cables, including Special Cables; Underground Paper/Plastic Insulated Power Cables; Super Synthetic Enamelled Wires, etc. Branches: Delhi: 56, Jor Bagh, Phone: 6183378-74; Calcutta: 31, Netaji Subhas Road. Phone: 226831; Madras: 2: 15, General Patters Road. Phone: 82224; Ahmedabad-1, Mohamadi Manzil, Tilak Road.

**B. MANIAR & CO.**—9, Mani Bhavan, 2nd floor, Lohar Chawl, Pathak Wadi, Bombay 2. Phone: 20802. Grams: "CARTFUSE." **TROPODUR, P. V. C.** Insulated Cables for Power & Control, Wires of all sizes, Frailing Flexible Cables & Stockists of Imported D.Z. and T.D.Z. Cartridge Fuse Units.

**BILLION PLASTICS PRIVATE LIMITED.**—Manufacturers of Billion Brand P.V.C. Tubing, Houses Sleaving, Gaskets, Industrial Sections, etc., 101, Himalaya House, Palton Road, Bombay 1; Phone: 265573; Grams: "BILLION."

**BIPINKUMAR ELECTRIC CORPORATION.**—14, Tavawala Building, Lohar Chawl, Bombay 2. Dealers: M.E.M. Copper-wires, Fans, Meters, Accessories & Everything Electrical. Grams: "BIPINDEV." Phones: 30684 & 22185. Sole Agents for "TROPEX CABLES," VIR-CTS and Weather Proof and Super Deluxe Plastic Cables and Philco Resin Cored Solder Wire.

**Bombay Cable Co. Private Ltd.**—United Bank of India Bldg., 6th Floor, Post Box 1859, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**Bombay Insulated Cables & Wires Co.**—10, Himalaya House, 79, Palton Road, Bombay 1.

**British Insulated Callender's Cables Ltd.**—Esplanade House, Waudby Road, Bombay 1.

**COSMIC TRADERS.**—Yusuf Bldg., Veer Nariman Road, Bombay 1; Phones: 253224 & 254768; Grams: "YANTRA-YUG." Underground Cables, Wires and Accessories.

## DEVIDAYAL CABLE INDUSTRIES LTD.

Gupta Mills Estate, Reay Road, Bombay - 10

Telegrams: "TRIMEL"

Telephones:

Office: 370001 & 372371-72 - Factory: 591336



### Manufacturers of:

Super Enamelled Copper Wires, D.C.C.  
Copper Wires and Strips, D. P. C.  
Copper Wires and Strips, H. D. B. C.  
Conductors, PVC, VIR, TRS Cables,  
Welding Cables, Flexibles etc. conforming to BSS/ISS.

**ELDE CORPORATION.**—Ismail Building, 381, Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 254661. Grams: "CAXTONE." Distributors for "TRACO" PVC Insulated Armoured & Unarmoured Cables, Control Cables and Power Cables: "CF" Brand Black Adhesive Insulating Tapes: "INELCO" Varnished Cotton Cloth & Tapes; "JOEY" Inspection Hand Lamps: "HTP" Super Enamelled Copper Wires etc.

**FINLAY, JAMES & CO., LTD.**—Chartered Bank Building, Mahatma Gandhi Road, Fort, Post Box 73, Bombay. Phone Nos. 251255-59.

**Fleming, John, & Co., Private Ltd.**—P. B. No. 76, Bombay 1. Phone: 261153.

**INDIA METAL TRADERS.**—92/94, Kilka Street (Gulabwadi), Bombay 4. Manufacturers of Copper Conductors, Copper Strips and bus bars, stranded Copper Wires, binding Copper Wires, tinned Copper Wires and Aluminium conductors. Phone: 334093. Grams: "METALDRAW." (GG).

**Indian Cable Co., Ltd.**—Esplanade House, Waudby Road, Bombay 1.

**HUTHEESING INDUSTRIAL CORPORATION (DEALERS)** **TROPODUR.**—(Power & N., Control), PVC Armoured Cables, Wires & APLSTS Underground Cables. 26, Bell Building, 1st Floor, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone: 256008.

**JOHNSON & PHILLIPS LTD.**—Kaiser-i-Hind Building, Currimbhoy Road, Ballard Estate, Bombay. Phones: 262457 & 265379. Grams: "JOHNPHIL."

**National Supply & Distributing Agency.**—Jay Mahal, 20-48, Lohar Chawl, Bombay 2.

**PLASTICABLES PRIVATE LTD., THE.**—Lentin Chambers, 34, Dalal Street, Fort, Bombay. Phone: 254893. Grams: "POLY-PLAST." Manufacturers of "VINOLITE" Brand: P.V.C. insulated wires & cables, Auto-Cables, P.V.C. Insulation tape, Sleavings and Transparent Tubings and all types of Thermo-plastic extruded products.

**Power Cables Pvt. Ltd.**—24, Brelvi Sayed Abdulla Road, Bombay 1.

**PREMIER RUBBER & CABLE INDUSTRIES.**—Jamal Building, 211, Nagdevi Street, Bombay 3. Phone: 326551. Grams: "RUBBERGOODS." Manufacturers of Rubber Insulated Cables (V.I.R.-C.T.S. and Weather Proof etc.).

**Pyrotenax India Limited.**—9, Wallace Street, Fort, Bombay 1.



**RAVAL & CO.**—Shreeji Bhavan, Lohar Chawl, Post Box No. 2279, Bombay 2. Phone: 23720. Grams: "GODSPEED." Branch Office: 12-B, Lower Chitpur Road, Calcutta. Phone: 345651. Dealers in everything electrical, stockists of I.C.C. & C.C.I. Wires, Trailing Flexibles, PILCDSTA Power & P.V.C. Tropodur Control Cables & Transformers.

**RAVIN TRADING COMPANY.**—5, Mohatta Market, Palton Road, P.O. Box No. 1969, Bombay 1. Grams: "BEWITCH." Phone: 26-4883. Specialists in HT & LT underground cables, PVC insulated cables for Power and Control, Wires of all sizes. Ravin Trading Company, Mody Chambers, Dharmendra Road, Rajkot. Regional Distributors for "TROPODUR" Wires, "TROPODUR" Cables & APLSTS Cables for Saurashtra & Kutch.

**SHAKTI INSULATED WIRES PRIVATE LTD.**—22, Apollo Street, Fort, Bombay 1. Phone: 254823, 253551. Grams: "THANK-GOD." Manufacturers of Paper/Cotton Covered Wires & Strips, Super Enamelled Wires, Hard Drawn and Bright Annealed Wires and Copper Strips.

**STANDARD ELEC. & ENGG. CO.**—"SARDAR GRIHA," 1st Floor, Lohar Chawl, Bombay 2. Grams: "SHARMDAN." Stockists of 'USHA', H.T.P.H.W.P. & DEVIDAYAL'S Super Enamelled D.C.C. & S.C.C. Copper Wires, Cables, all Sorts of insulating Materials & Dealers in other Elect. Goods. Phone: 39701.

**Thermo Plastic Industries.**—78, Kalachowkie Road, Lalbaug, Bombay 33.

**UNIQUE ELECTRO TRADERS.**—P.O. Box 2237, 97, Lohar Chawl, Bombay 2. Phone: 30407. Grams: "SOLIDDRAWN" for everything Industrial, electrical UNIK Conduits & Fittings, VIR, PVC Insulated TROPODUR Underground Cables & Wires, HDBC Wires, IC Switchgears, Winding, Insulating Materials and Power Plugs, also Industrial Transformers, H.S. Meters, H.T. Overhead Line Equipment, also Carbon-bushes.

### CALENDAR MANUFACTURING MACHINERY SUPPLIERS

**GUNVANTRAY & COMPANY.**—Crescent Chambers, 1st Floor, Tamarind Lane, Fort, Bombay 1. Phone: 254684. Grams: "GUNARAYCO." H.O. Khadia, Ahmedabad 1. Phone: 4068.

### CALENDAR MANUFACTURERS

**CROWN ELECTRIC PRINTING WORKS.**—111-A, Mahatma Gandhi Road, Fort, Bombay 1. Phone: 251437. Fine Art Printers, Calendar & Diary Manufacturers.

## EVEREST CALENDAR COMPANY

35, Prospect Chambers Annexe, 3rd floor  
Dr. Dadabhoy Naoroji Road  
BOMBAY I

Manufacturers of:  
Calendars, Perpetual  
Calendar Blocks, Monthly  
date pads and every  
sort of Offset Printing

SPECIALITY  
PHOTO OFFSET  
PICTORIAL CALENDARS



Phone: 252719  
Grams: "OFFSET CAL"

Everest Calendar Co.—45/47, Princess Street, Bombay 2.

**FIDVI PRINTING PRESS.**—179, Abdul Rehman Street, Bombay 3. Phone: 325915. Grams: "FIDVIPRESS." Manufacturers, Dealers & Exporters of Account & Exercise Books, Files, Diaries, Calendars, Desk-Calendar, Refills & Stands and other Advertising Novelties.

**S. R. Brothers.**—408 & 412/A, "Commerce House," Meadows Street, Fort, Bombay 1.

**Taj Printing Works.**—46/A, Cawasji Patel Street, Fort, Bombay 1.

**Vakil & Sons (Private) Ltd.**—Narandas Building, Sprott Road, 18, Ballard Estate, Bombay 1. Phone: 262177-78 and 263204. Grams: "BLADE".

## UNIVERSAL CALENDAR MFG. CO.

Manufacturers of:  
OFFICE CALENDARS · HANGERS  
SHOW CARDS · REFILLS  
ADVERTISING FANS

23-25, HAMAM STREET, FORT, BOMBAY I

Phone: 254443

for ★ CALENDARS  
★ FANS  
★ SHOW CARDS  
★ POSTERS  
★ LABELS  
★ BOXES

## VINAY CALENDAR CO.

Litho, Offset & Colour Printers.

104, Ardeshir Dadi Street, Vithalbhai Patel Road.

Phone No. 352293.

BOMBAY 4.

### CAMPHOR IMPORTERS AND DEALERS

**Allied Exporters.**—Kumud House, 267, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

**Bhavanidas Gangadas & Co.**—233/35, Samuel Street, Vadgadi, Bombay 3.

**Gopaljee & Co.**—218, Samuel Street, Vadgadi, Bombay 3.

**Madhavji Mavji & Co.**—207, Vadgadi, Bombay 3.

### CANNERS (FRUITS & VEGETABLES)

**Akbarally Ebrahimji Pharmacy & Department Store.**—45/47, Veer Nariman Road, Fort, Bombay.

**D. & P. Products Private Ltd.**—Bombay Agra Road, Bombay 78.

**DR. WRITER'S CHOCOLATES & CANNING CO.**—(Proprietors, F. D. Mehta & Co.), Manufacturers of High Grade Confectionery, Chocolates, Fruits in Tins, Vegetables, Jams, Food Products, etc. Bhavanishankar Road, Dadar, Bombay 28. Phone: 451403.

**Fruit Farm Products Co.**—Byramji Mansion, Sir Phirozshah Mehta Road, Fort.

**KALVERT, A., & CO.**—90/92, Maragaon Road, Bombay 10. Phone: 372444. Grams: "CURROSAUCE." Manufacturers of Mango Chutney, Pickles, Curry Powder, Condiments, Squashes, Vinegar, Sauce, Syrups, Prumto, Canned Alphonso, Mango Slices and Pulp, Prawn Balchow, Jams, Canned Vegetables, Moglai Mutton, Biryani & Curry.

**Panama Distributing Co.**—38C, Cowasji Patel Street, Fort, Bombay.

**B. N. Rustomji & Co. (Props.: James Smith & Co.).**—Office: Sreenivas House, Waudby Road, Fort. Telegrams: "HEROINE." Phone: 261334.

### CANTEEN STORES & EQUIPMENT SUPPLIERS

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL."

**Akbarally Ebrahimji.**—38/C, Cowasji Patel Street, Fort, Bombay.

**Khira Steel Works Private Ltd.**—Factory: Swami Vivekananda Road, Santa Cruz, Bombay 54.



**LALLUBHAI AMINCHAND PRIVATE LTD.**—Proprietors: Dun Aluminium Factory: 225/227, Tardeo Road, Bombay 7. Manufacturers of "Cycle" Brand Aluminium Wares & "Queen" Brand Stainless Steel Utensils & Other Non-Ferrous metalware. Phones: 370996, 377175, 334049 & 331888. Grams: "CYCLEBRAND."

**Mahemed Husain & Bros.**—106, Kansara Chawl, Kalbadevi, Bombay 2.

**NATIONAL STEEL EQUIPMENT CO.**—8, Katrak Road, Wadala, Bombay 31. Phone: Office: 441755 & 442139; Factory: 442973. Grams: "BEDLOCKER", Bombay, Wadala. Manufacturers of Pressure Steam Sterilizers & Autoclaves, Pyrogenfree Water Still, Premature Baby's Incubators, Complete Range of Industrial Heavy-duty Catering (Kitchen) Equipment and fully Automatic Packaged Boilers. Branches: Delhi, Calcutta, Madras.

**Salemahomed Padamsee & Co.**—141, Chakla Street, Bombay 3.

**Vazirmalli, Ltd.**—Prospect Chambers, Hornby Road, Fort.

### CARBON PAPER MANUFACTURERS

**JAGJIVANDAS NANDLAL & CO.**—(Golden Jubilee Year 1916-1966).—237, Abdul Rehman Street, Bombay 3. Phone: 323634. Grams: "SWANHOUSE." Sole Distributors for Electric Pen-Pencil, Wax-Backed Typewriting Carbon Papers, Electric Staples in Sizes 24/6, 26/6 and B. 8.

### CARBONIC ACID GAS DEALERS & MFRS.

**Akbarally Mahomedally & Co.**—Dawoodi Building, 316, Abdul Rehman Street.

**Eastern Bunkers, Ltd.**—Scindia House, Dougall Road, Ballard Estate, Fort.

**ESOOFALY MAHOMEDALY & CO.**—102/4, Sarang Street, Bombay 3. Grams: "PURIFIED"; Phone: 326516. Dealers in Aerated Water Requisites. Sole Selling Agents for INDIAN CARBON DIOXIDE INDUSTRIES; Branches: 12, Walltax Road, Madras 3; Phone: 33400; Grams: "HARMLESS", Madras. 13-11-233, Convent Street, Park Road, Vijayavada 1; Phone: 1004; Grams: "PURIFIED," Vijayavada and Shivaji Road, Kolhapur.

**Sirdar Carbonic Gas Co., Ltd.**—Connaught Road, Mazagaon.

### CARD BOARD & CORRUGATED BOXES MFRS. (CARTONS)

**AFZAL PAPER BOX FACTORY.**—43, Foras Road, Bombay 8. Phone: 372338. Manufacturers of Card Board Boxes and Corrugated Paper Rolls and Sheets.

**APCA PACKING PRIVATE LIMITED.**—151, Upper Duncan Road, Bombay 8. Phone: 375986. Grams: "APCAPACK". Quality Cardboard box, Corrugated box and Carton Manufacturers. Also exporters of special greeting cards.



Phone: 266233

### BOXPACK PAPER INDUSTRIES PVT. LTD.

*Specialists in*  
Heavy Duty Shipping Cartons.  
*Manufacturers of*

Corrugated and colour cartons for Pharmaceutical, Engineering and Radio Industries.

*Registered Office:*

81/83, Mint Road, Fort, BOMBAY.

**CIEM TRADING CO.**—Manufacturers & Government Contractors. Manufacturers of Paper Sleeves, Insulated Tubes, Centres for Reeling, Postal Tubes, Cartons, Discs, etc. 7, Cross Road, No. 3, Marniatdar Wadi, Malad, Bombay 64. Phone: 692226 and 692473, Grams: "CIEMITE."

**CLARIDGE, G., & CO., LTD.**—Frere Road, Fort, Bombay 1. Phones: 253201 & 263202; Grams: "EGDIRALC." Letterpress and offset Printers, Specialists in Packaging, Security Printing and Silk Screen Work.

**EVEREST PACKAGING CORPORATION.**—Chopra Estate, Agra Road, Bhandup, Bombay-78. Phone: 581736 & 581909. Manufacturers of Corrugated Shipping Containers, Cartons, Corrugated Paper & Boards, Outer boxes and Paper Packing Requisites.

### JAYANT PAPER BOX FACTORY



*Largest Manufacturers of:*

Heavy Duty Corrugated Export Containers, Printed Cartons, Boxes in various plies, Corrugated Paper Rolls, Boards, Liners and other Packaging Requisites.

*Office:* 30 Western India House, Sir Pherozeshah Mehta Road, Bombay 1. Phones: 253145, 252478. Gram: "FIBREBOX".

*Factory:* Jayant House, Bail Bazar, Andheri-Kurla Road, Kurla, Bombay 70. Phones: 55237, 55238.

**KADRI PAPER BOX FACTORY.**—30, Mohamedali Road, Bombay 3. Phone: 332856; Cardboard and Corrugated Board Boxes of every size and description with printing if required and Cardboard Tubes for Calendars. Grams: "BOXWORK."

**MOHAMADI FINE ART LITHO WORKS.**—Proprietors: Allibhoy Sharafally & Co. Private Ltd. Estd. 1876: Incorporated Lithographers, Offset and Letterpress Printers, and Carton Manufacturers; Phones: 378148 & 378149; Grams: "KORAN."

**RYLAND PAPER BOX MANUFACTURING CO.**—Box & Carton Boxes Manufacturers, Factory at: Industrial House, near Paradise Talkies, Lady Jamshedji Road, Mahim. Phone: 453020 & 451419. Manufacturers of Cardboard Cartons and Fancy Boxes, Labels, Wrappers and Packing Materials.

**Standard Paper Box Manufacturing Co.**—51, Mangaldas Road, Lohar Street, Bombay 2.

### CARDBOARD BOX MAKING MACHINERY AND MATERIAL SUPPLIERS

**A. A. MORBIWALA & CO.**—109/111, Abdul Rehman Street, Bombay 3. Phone: 323280. Grams: "VARNISH (MD)." Direct Importers & Stockists of Stitching Wires of all kinds.

**GUNVANTRAY & CO.**—Crescent Chambers, 1st Floor, Tamarind Lane, Bombay 1. Grams: "GUNARAYCO." Phone: 254684. H.O. Khadia, Ahmedabad 1. Phone: 4068.

### CARGO SUPERINTENDENT AND SURVEYORS

**THERAPEUTICS CHEMICAL RESEARCH CORPORATION.**—95, Morland Road, Byculla, Bombay 8. Grams: "THERASERCH". Phone: 378207/8. Overseas Associates: THERAPEUTICS CHEMICAL RESEARCH GmbH (DEUTSCHLAND), 2 Hamburg 11, Gr. Burstah 42, West Germany. Cable: "THESEARCH". Phone: 365462. THERAPEUTICS CHEMICAL RESEARCH GmbH (DEUTSCHLAND), 36, Time Street, London, E.C. 3. Cable: "TEECEERLON," London E.C.3. Phone: Mansion House 9351/4.

### CARPETS AND LINOLEUMS

**DOSSA HARJEE.**—257-59, Masjid Bunder Road, P.O. Box No. 3209, Bombay 3. Phones: 321330 & 328570. Grams: "DOSSAHCO." Manufacturers & Suppliers of Tarpaulins, Waterproof Canvas & Gray Canvas, Filter Cloth, Jute Carpets and Linoleums.

### CARPETS MANUFACTURERS & DEALERS

**Bombay Swadeshi Co-operative Stores Co., Ltd.**—Western India House, Sir Phirozshah Mehta Road, Fort.

**Carpets Palace.**—Opp. The Taj, Apollo Bunder, Fort, Bombay.

**E. PEERBHOY & SONS.**—Prop., Indian Durries Emporium, 64, Mohamedali Road, Sahru Castle, Bombay 3. Phone: 323806. Grams: "INDIAWEAVE."

**Hassaram, K., & Co.**—New Silk Bazar, Kalbadevi, Bombay 2. Hotchand Motumal.—331, Hornby Road, Fort.

**Indian Durries Emporium.**—64, Mahomedali Road, Bombay 3.

**Kabul and Kashmir Store.**—16, Lansdowne Road, Apollo Bunder, Fort.

**Kashmir Govt. Arts Emporium.**—Sir P. M. Road, Bombay 1.



Mirzapur Carpet Industries.—"Nishat," 24, Mangalore Street, Fort, Bombay. Phone: 27349.  
 Modern Indian Art Crafts.—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.  
 Noorbhai Jivaji.—Tyebi Manzil, Bhondy Bazar, near Tram Junction.  
 Royal Carpet & Tapestry Emporium.—Dina Buildings, 58, Queen's Road, opp. Marine Lines Station.  
 Royal Carpets & Case-Furniture Manufacturing Co.—Mani Bhuwan, Hughes Road, Bombay 7.

### CASEIN IMPORTERS

EAST ASIATIC CO. (INDIA) PRIVATE LTD.—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 262711 (8 lines). Machine Works: Tank Road, Bombay 33-DD. Phone: 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

### CASEIN MANUFACTURERS AND DEALERS

Akbarally Ebrahimji.—Kamer Building, 38-C, Cawasji Patel Street, Fort.  
 Akbarally Ebrahimji Pharmacy & Department Store.—45/47, Veer Nariman Road, Fort, Bombay.  
 CHAMPION DAIRY COMPANY (Estd. 1903).—New Petit Mansion, Sleater Road, Grant Road, Bombay 7. Phone: 373383 & 378845. Dealers in "CASEIN."  
 Latham Abercrombie & Co. Private Ltd.—Forbes Building, Home Street, Fort.  
 POLSON, LTD.—65-B, Dockyard Road, Mazagaon, Bombay 10, DD. Phone: 373245 (2 lines). Grams: "POLSON," Mazagaon, Bombay.  
 Poonjiajee, J. M. Jehangir.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay.

### CASTINGS (Ferrous & Aluminium Mfrs.)

BOMBAY ALLOYS & CASTINGS.—Office & Works: Lake Road, Bhandup, Bombay-78. Phone: 592419. Manufacturers of Ferrous & Aluminium Casting, for Automotive, Scooter, Refrigeration and Air Compressor Industries.

### CASTING & C. I. FITTINGS

SHREE RAM MILLS LIMITED.—Engineering Division, Sales Office at Fergusson Road, Lower Parel, Bombay 13. Phones: 375221-2-3. Works at Udhna, Dist. Surat, Gujarat State, Phone: 343 Udhna.

### CAST IRON PIPES & SPECIALS

JIVRAJ & VRAJLAL.—122, Nagdevi Street, Bombay 3. Phone: 325138 (Shop) & 30932 (Res.). Grams: "SANIPIPES."

### CATALYSTS

HOOSEINBHAY A. LALLJEE SONS & CO.—Navsari Bldg., Dadabhoy Naoroji Road, Bombay 1. Phone: 262052; Grams: "Flowermead." Sole Agents for:—CATALYSTS AND CHEMICALS INC., Louisville, Kentucky, U.S.A. Catalysts for Nitrogen Fertilisers, Petroleum and Petrochemical plants.

### CATERERS, PURVEYORS & BAZAR SUPPLIERS

BRANDON & CO. PRIVATE LTD.—Elphinstone Building, Churchgate Street, Fort. Phone: 252433.  
 Carim, E. A.—138-40, Samuel Street, Khoja Moholla, Bombay.  
 Pyrke's Provision Stores.—378, Hornby Road.  
 Babadi, K. N., & Sons.—19, Ropa Lane, Chandanwadi.  
 Tambe, B. Private Ltd.—Sangiri Sadan, Girgaum Road.  
 Wayside Inn.—38, Rampart Row, Fort.

### CEMENT AND CONCRETE COMPANIES

Asbestos Cement Ltd.—Mulund.  
 Associated Cement Companies, Ltd.—Opp. Churchgate Station, Fort.  
 Balmer Lawrie & Co., Ltd.—8, Graham Road, Ballard Estate, Fort.  
 Batliboi & Company Private Limited.—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR). Phones: 255451 (6 lines). Grams: "BATLIBOICO." Tele.: 011-284. City Branch: Batliboi House, 59/61, Nagdevi Cross Lane, Bombay-3 (B R). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijaywada, Associate: Bangalore 2. Resident Representatives: RANCHI, Bhubaneswar.

GAMMON INDIA LTD.—Civil Engineers & Contractors, Regd. Office: Gammon House, Cadell Road, Prabhadevi, Bombay 28 DD. Phone: 454261. Grams: "GAMMON" Bombay-Dadar.

Gannon Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.

Jacks, William & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Fort.

McKenzies Ltd.—Sewri.

Modern Concrete Art Industries.—Opp. Cave, Bombay 42.

Raval & Co.—21, Bank Street, Fort.

Simplex Concrete Works & Construction Co.—"La-Citadelle," 32, Queen's Road.

### CEMENT AND SOIL TESTING INSTRUMENTS

ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LTD.—India House, Fort Street, Bombay 1. Phone: 261658. Grams: "AIMILBOM".

Sachin & Co.—25, Bank Street, Bombay 1.

### CEMENT TILES MANUFACTURING MACHINERY

JASHVANT C. SHAH & CO.—Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77. India's Foremost Indenting House. Sole Agents for India for Messrs. Enrico Longinotti Firenze, Italy. (For details please see Commercial Firms Section.)

### CENTRIFUGES MANUFACTURERS

EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 262711 (8 lines). Machine Works: Tank Road, Bombay 33-DD. Phone: 378544-46. Offices at: Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

### CHAINS

METRO CYCLE CO.—421, Kalbadevi Road, Bombay 2. Stockists of 'Diamond' Industrial Roller Chains for Textile, Sugar, Jute, Mining & Tea Machinery, Concrete and Asphalt Mixers, Diesel Engines, etc. Phone: 38031 & 2.

### CHAIN PULLEY BLOCKS

ABDULHUSEIN PEERBHAI & SONS.—66-68/A, Peerbhai Building, Bhandari Street, Bombay 3. Phone: 323956. Grams: "STUDCHAIN". Stockists of Marine Stores, Chains, Wire Ropes, Chain Pulley Blocks, Ship Tackles, Winches, etc.

BHARAT ENGINEERING STORES.—113, Nagdevi Street, Bombay 3. Grams: "UNIONTOOLS." Phone: 323193. Stockists of Elephant Brand Chain Pulley Blocks.

ESOOFALLI ESMAILJI KARACHIWALLA & CO.—43-45, Bhandari Street, Bombay 3. Phone: 321617. Grams: "SLING". Stockists of Best Indian Make and Imported Chain Pulley Blocks of all types—Worm Gear, Triple Gear, Spur Gear. Also manufacturers of overhead "SWIFT" brand Monorail Trolleys to suit all Chain Blocks.

HEMANT TOOLS TRADING CO.—33, Bibijan Street (Barbhai Mohalla), Bombay 3. Grams: "LACING." Phone: 321174. Importers & Stockists of Chain Pulley Blocks, Garage Tools, Fibre Sheets, Rods. Diamond Dressing Tools, Precision Tools etc.

HEPTOOLA NOORUDDIN & CO. (Estd. 1910).—154, Nagdevi Street, Bombay 3. Phone: 326787. Grams: "IMMUNITY." Stockists of and dealers in Marine—Mill Gin—Industrial Stores.

Jalramdas & Sons.—163, Narain Dhuru Street, Bombay 3.

WESTERN INDIA MARINE MILLS & ENGINEERS.—185, Janjikar Street, Bombay 3. Phone: 326367. Grams: "WIRE-CHAINS". Shipchandlers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Blocks Chains, Coal Tar, Coal Pitch Felts, Marine Glue, Marine, Mill and Factory Stores. Pull lifts, Pulling lifting maxpull.

### CHAINS (POWER TRANSMISSION & CONVEYORS)

FULABHAI & CO.—134, Meadows Street, Fort, Bombay 1. Manufacturers' Representatives & Milling Engineers. Specialise in all types of Driving, Conveyor and Elevator Chains, Pinions and Wheels. Phone: 255488. Grams: "GRINDMILL."



**STANDARD MATERIALS AGENCIES.**—45/46, Podar Chambers, Parsi Bazar Street, Bombay 1. Phone : 252638. Grams : "STANSIZE", Bombay. Power Transmission Roller, Conveyor Chains and Sprockets—Specialists, Importers and largest Stockists of 'Renold,' 'Kobo,' 'Diamond' Brands. Textile Machinery Spare Parts Manufacturers, Stockists and Dealers.

### CHAINS (SHORT LINK AND CABLE)

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone : 326980. Grams : 'ALERTDEAL'.

**ABDULHUSEIN PEERBHAI & SONS.**—66-68/A, Peerbhai Building, Bhandari Street, Bombay 3. Phone : 323956. Grams : "STUDCHAIN". Stockists of Marine Stores, Chains, Wire Ropes, Chain Pulley Block, Ship Tackles, Winches, etc.

**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay 1. Phone : 25-2952, 25-4103; Grams : "PILOTACE."

**ESOOFALLI ESMAILJI KARACHIWALLA & CO.**—43-45, Bhandari Street, Bombay 3. Phone : 321617. Grams : "SLING". Stockists of Best Indian Make and Imported Chain Pulley Blocks of all types—Worm Gear, Triple Gear, Spur Gear. Also manufacturers of overhead "SWIFT" brand Monorail Trolleys to suit all Chain Blocks.

**Fleming, John & Co., Private Ltd.**—P.B. No. 76, Bombay 1. Phone : 261153.

**INDIAN LINK CHAIN MFRS. LTD.**—Bombay-Agra Road, Bhandup, Bombay 78. Manufacturers of "HERCULES" brand electrically welded mild, Higher Tensile and alloy steel chains. Chains manufactured strictly according to Indian, British and German standards. Also manufacturers of precision calibrated chains for chain pulley blocks, Hoists, and Conveyors, all types of slings, other lifting equipment and cast steel stud link anchor chains with all fittings. Phone : 581832. Grams : "INLINCH," Bhandup.

Shalebhoj Tyebjee & Sons.—12, Bruce Street, Bombay 1.

**WESTERN INDIA MARINE MILLS & ENGINEERS.**—185, Janjikan Street, Bombay 3. Phone : 326367. Grams : "WIRE-CHAINS". Shipchangers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Blocks Chains, Coal Tar, Coal Pitch Felts, Marine Glue, Marine, Mill and Factory Stores. Pull lefcs, Pulling lifting maxpull.

### CHEMICAL ENGINEERING EQUIPMENT

**ASSOCIATED ENGINEERING CO.**—Sane Building, Nanabhai Lane, Fort, Bombay-1. Telegram : "STELLIDES." Telephone : 252597 Office; 571880 Works. Manufacturers of : Glucose and Starch Plants—Pharmaceutical and Chemical Plants. Industrial Machinery—Chemical Process Equipments and Sugar Machinery.

**BASSEIN CERAMICS PVT. LTD.**—Manufacturers of Chemical Stoneware and Porcelain Tower Packings, Fire-Bricks, Acid Proof Bricks & Insulation Refractories. 324, Cooks Bldg., 2nd Floor, Dr. Dadabhai Naoroji Road, Bombay 1. Phone : 252644. Grams : "KARDWEB."

**INDIA RUBBER PRODUCTS.**—Kasturchand Mills Estate, Dadar, Bombay-28. Tele. : 454072. Manufacturers of Industrial & Moulded Rubber Products, such as Rubber Bushes, Rings, etc. to Drawing and specifications.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone : 262711 (8 lines). Machine Works : Tank Road, Bombay 33-DD. Phone : 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**ECHJAY INDUSTRIES PVT. LTD.**—Office & Factory : Kanjur Village Road, Bhandup, Bombay-78. Phones : 581211 & 581678. Grams : "ECHJAY," Bhandup. Manufacturers of Accessories & Equipment for Machine Tools, General Steel Drop & Upset Forgings—including Forged Flanges ; Forged Parts of Diesel Engines & Automobiles, Forged Hand Tools, Hand Hammers, Chisels & Punches, Spanners, Pliers, Jigs & Fixtures, Press Tools Dies & Punches.

**EMMES METALS PRIVATE LTD.**—Lead Lined/Bonded, P.V.C. Lined, Rubber Lined, Pickling Tanks, Reaction Vessels, Heating & Cooling Coils, Lead Bonded M.S., Copper and Steel Pipes and Fittings, Lead Valves, Lead Sheets and other Chemical Auxiliaries. 11, Worli Road, Bombay 18-WB. Phones : 375432-3-4. Grams : "METAMELT."

**HIND TANK MANUFACTURING CO.**—Trimbak Parsuram Street, Bombay 4. Phone : 331845. Grams : "INDUSPLANT." Designers and Fabricators of Complete Plants, Machinery and equipment for all Industries. Also manufacturers of Storage Tanks.

**INDUS ENGINEERING COMPANY.**—Office & Works : opp. Worli D.D. Chawl No. 114, Bombay 13 (B.C.). Telephone : 379332 & 371743. Grams : "INDUSINDE." Manufacturers of Pressure Vessels, Auto-claves, Reaction tanks, Vats, Kettles & Stills, Dryers—Vacuum, Tray & Rotary type, Mixers for Powders & Pastes, Heat Exchangers, Condensers—Coil & Tubular type, Steam Jacketted Evaporating pans, Sterilisers, Stainless Steel Vessels (welded by argon arc welding process), all Industrial Machinery according to customer's requirements and according to their drawings and specifications.

**ITALAB ENGINEERING PRIVATE LTD.**—Aban House, 6th Floor, 25, Rope Walk Lane, Bombay 1. Phone : 253319. Water-Water Heat Exchangers, Air-Compressors, After-coolers, Oil Heaters/Coolers, Freon Condensers, Chillers Process Vapor Condensers, Sub-Coolers, Reboilers, etc.

**K. MAHADEV & CO. PRIVATE LTD.**—Datta Mandir Road, Bhandup, Bombay-78. Phone : 581920. Manufacturers of Chemical & Pharmaceutical Machinery.

**KILBURN & CO. LTD.**—Gresham Assurance House, Phirozshah Mehta Road, Fort, Bombay 1. Phone : 256845. Grams : "TASCONIUM."

**METTALICA WORKS PRIVATE LTD.**—79/83, Dr. Annie Besant Road, Bombay 18. Phones : 75432, 75433, 75434. Makers of Non-Ferrous Metals, Alloys, Castings, Anodes, Lead linings of Acid Resisting Containers, Crucibles.

National India Engineering Co. Ltd.—7-10, Elphinstone Circle, Fort.

**RAJ-DER-KAR & CO.**—Sadhana Rayon House, Dr. Dadabhai Naoroji Road, Fort, Bombay. For Research Industries. Phone : 262304 (P.B. X—4 lines). Grams : "TECHLAB."

Regal Trading Co. (Bombay).—Rajababdur Bansilal Mansion, 11, Bruce Street, Fort, Bombay 1.

**SUMMIT ENGINEERING CO.**—4th Floor, Ismail Building, 381, D. N. Road, Bombay 1. Mfrs. of Pressure and Storage Vessels, Structural Steelworks, Tank, etc.

Techno Industrial Co.—107, Sir Vithaldas Chambers, 16, Apollo Street, Fort.

Thos. W. Ward (India) Ltd.—Marshall Building, Ballard Road, Ballard Estate, Fort.

**V. PAMLAYS PRIVATE LTD.**—Sunderbaug Estate, Agra Road, Bombay-70 (AS). Factory at : Pokharan Road, No. 2, Panchpakhi, Thana. Phone : (1) Kurla 55578; (2) Thana 591560. Grams : "VEEPAMLAYS." Manufacturers of Autoclaves, Reaction Kettles, Pressure Vessels, Mixers, Heat Exchangers, Condensers, Domestic Stoves, Special defence Equipments, etc.

**YAJNIK ENGINEERING WORKS.**—64, Podar Chambers, 3rd Floor, Parsi Bazar Street, Fort, Bombay 1. Phone : 251471. Grams : "GREND". Chemical & Mechanical Engineers. Tanks, Vessels and Industrial Equipments of Stainless Steel, Aluminium, Copper, Mild Steel, also lining of Rubber, Lead and Polyethylene for Chemicals, Pharmaceuticals, Food, Fertilizer and Dairy Industries.

### CHEMICAL & MECHANICAL ENGINEERS

**MOTWANE PRIVATE LTD.**—127, Mahatma Gandhi Road, P.O. Box No. 1312, Bombay 1-BR. Phone : 252337. Grams : "CHIPHONE," Bombay.

### CHEMICAL MANUFACTURERS

**AHURA CHEMICAL PRODUCTS PRIVATE LTD.**—84, Sion Road, Bombay 22. Manufacturers of all Textile Auxiliaries, Surface-active Agents, Turkey Red Oil, Synthetic Anionic Detergents and Wetting Agents, Non-ionic Emulsifiers for various industries, Cationic Germicides and Softeners, Cosmetic Raw Materials and other general Chemical Products. Mg. Director : S. M. Mistry. Phones : 471394, 471911. Grams : "AHURACHEM," Bombay-Sion.

Alembic Chemical Works Co. Ltd., Baroda.—Distributors in Bombay : Alembic Distributors, Ltd., Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

Amar Dye-Chem Ltd.—11, Sprott Road, Ballard Estate, Bombay 1. Arlabs Private Ltd.—6, 2nd Floor, India House, Fort Street, Bombay 1.

**ASHOK INDUSTRY.**—(Chemical Division) 62, Dondad Street, Bombay-9. Phone : 327359 (Office). Manufacturers of Chemicals for Metal Pretreatment such as Cleaning, Phosphating & Rust Preventives, Descaling & Water Softening Compounds. Works : Masrani Estate, Bombay-70. Phone : 55393 (Works).

**BAYER (INDIA) LIMITED.**—Nagin Mahal, Vir Nariman Road, Bombay-1. Manufacturers of Agro-Chemicals, Rubber Chemicals, Pharmaceuticals, etc.

Bengal Chemical & Pharmaceutical Works Ltd.—302, Cadell Road, Worli.



for

# CHEMICALS

Particularly

Ammonium Acetate, Ammonium Nitrate,  
Ammonium Oxalate, Ammonium Phosphate  
Diabasic, Ammonium Phosphate Monobasic,  
Camphor Powder, Ferric Chloride Lumps,  
Ferric Chloride Anhydrous, Ferrous Chloride,  
Mercury Salts, Calcium Formate, Sodium Formate  
Tin Chloride.

Contact :

## ASIAN CHEMICAL CO.

Manufacturers of Heavy &amp; Fine Chemicals

Chemical House, Agra Road, Post Box No. 2,  
Thana (Bombay)

Thana Phone: 591257

Grams : "CHEMICAL"

**B. F. DAVER & CO. (ESTD. 1868).**—Chemical Engineers,  
Sizing Stores Manufacturers, Pioneers in the making of  
Boiler Preservatives and Compositions and Soap Makers,  
Appa Baug Estate, 41, Queen's Road, opp. Catholic  
Gymkhana, Bombay 2.

**Bock, F., & Co.**—Shale Building, Bank Street, Fort.  
**Bombay Chemicals Private Ltd.**—129, Mahatma Gandhi Road,  
Bombay-1.

**Bombay Drug House Private Ltd.**—Tulsi Pipe Road, Mahim,  
Bombay 16.

**Bombay Gas Co., Ltd.**—214, Dr. Dadabhoy Naoroji Road, Bombay 1.  
Phone : 261271. Grams : "CRISTOLITE."

**BOMBAY SEWREE CHEMICALS MANUFACTURING CO.  
PRIVATE LTD.**—Manufacturers of Activated and Neutral  
Fuller's Earth. Managing Agents :—F. Bock & Co., P.O.  
Box 1288, Bombay 1. Phone : 255033 (Office) and 441336  
(Factory).

**BORAX MORARJI LIMITED.**—Manufacturers of "20  
MULE" and "TEAM" Borax and Boric Acid, Mahatma  
Gandhi Road, Ambarnath (C. Rly.), Dist. Thana.

**Chemical, Industrial & Pharmaceutical Laboratories Ltd.**—289,  
Bellasis Road, Byculla, Bombay-8.

**Chemo-Pharma Laboratories Ltd.**—Plot No. C.S. 215, Sewri, Bombay  
15. Phone : 63231. Grams : "CHEMOLABS."

**Dharamsi Morarji Chemical Co., Ltd.**—Prospect Chambers, Annexo,  
317-21, Dr. Dadabhoy Naoroji Road, Fort.

**Dumex Private Ltd.**—Wavell House, Graham Road, Ballard Estate,  
Bombay 1.

**Excel Industries.**—184-187, Ghodbunder Road, Jogeswari,  
Bombay 42.

**Fairdeal Corporation (Private) Ltd.**—'Lakshmi Bldg.', Sir Phiroz-  
shah Mehta Road, Post Box No. 1925, Fort, Bombay 1.

**Glaxo Laboratories (India) Private Ltd.**—Worli, Bombay 18.

**GOLDEN CHEMICALS PRIVATE LTD.**—'Tobacco House',  
Vile Parle, Bombay 56. Manufacturers of Bichromates,  
Chromates, Glauber's Salt Calcined and Chromic Acid.  
Phone : 572032. Grams : "IMPORTERS." Bombay.

**Hardcastle Waud & Co., Private Ltd.**—Allee Building, Hornby Road,  
Fort.

**Hindusthan Chemical Works Ltd.**—Advani Chambers, Sir Phirozshah  
Mehta Road, Fort, Bombay. Grams : "DICHROMATE."

**HOECHST DYES & CHEMICALS LTD.**—Parekh Mahal, Vir  
Nariman Road, Churchgate, Bombay 1. Phone : 242345/46,  
242453. Grams : "HOSTACHEM." Manufacturers of Poly-

vinyl acetate dispersions, "Mowilith," "Mowicoll,"  
"Appretan" under licence from Farbwerke Hoechst AG.,  
W. Germany.

**I.C.I. (India) Private Ltd.**—P.O. Box 310, Bombay 1.

**Indian Dyestuff Industries Ltd.**—29, Veer Nariman Road, Bombay 1.

**Indo-Pharma Pharmaceutical Works.**—Kohinoor Road, Dadar,  
Bombay 14.

**J. K. Chemicals Ltd.**—Owners of Eastern Chemicals Co. (India),  
J. K. Building, Dougall Road, Ballard Estate.

## SUPERIOR QUALITY OXALIC ACID CRYSTALS

CONTACT :

MANUFACTURERS:-

### KASHYAP CHEMICAL INDUSTRIES

517, S. V. ROAD, OPERA HOUSE, BOMBAY 4

Also dealers in:

AROMATIC CHEMICALS AND  
PHARMACEUTICAL RAW MATERIALS

Phone: 356337

Grams: "JEWELAUTO"

**Kesar Sugar Works Ltd.**—(Chemical Division), 45-47, Apollo Street,  
Bombay 1.

**Lederle Laboratories (India) Private Ltd.**—'The International',  
16, Queen's Road, Bombay 1.

**Liberty Chemical Works.**—Nagardas Road, Mogra West, Andheri  
(East), Bombay 41.

**Mira Chemical Works.**—Chinchpokli, Bombay 27.

**Morani Chemicals.**—Nagardas Road, Andheri, Bombay 58.

**NATIONAL PEROXIDE LTD.**—Neville House, Graham Road,  
Ballard Estate, Bombay 1. Phone : 268071. Grams : "NAPE-  
ROL." Manufacturers of Hydrogen Peroxide, Sodium  
Perborate.

**NATIONAL RAYON CORPORATION LTD., THE.**—Sales  
Office: Eros Theatre Building, 124, Karve Road, Fort,  
Bombay 1. Phone : 246063 (Three lines); Grams : "NARA-  
CORP," Bombay.

**New Chemicals Industries.**—Antia House, Edalji Road, Thana,  
Bombay.

**Oriental Pharmaceutical Industries Ltd.**—64-66, Tulsi Pipe Road,  
Mahim, Bombay 16.

**Pharmed Private Ltd.**—'Pharmed House', 141, Fort Street,  
Bombay 1.

**PHOENIX CHEMICAL WORKS PRIVATE LTD.**—Bachooabai  
Building, 187, Dr. Dadabhai Naoroji Road, Bombay 1. Phone :  
266409. Grams : "WATERGLASS," Bombay. Manufacturers  
of Sodium and Potassium Silicates, Electroplating Chemi-  
cals & Compositions.

**Pioneer Equipment Co. Private Ltd.**—139, Meadows Street, P.O.  
Box 1909, Bombay 1.

**Pioneer Magnesia Works, Ltd.** of Bombay & Kharaghoda.—  
113/115, Mahatma Gandhi Road, 2nd floor (opp. Rajabai Tower),  
Fort, Bombay.

**PRAKASH CHEMICAL INDUSTRIES.**—31, Duncan Causeway,  
P.B. No. 6775, Sion, Bombay 22. Cable : "MICROBE."  
Phone : 471962. Manufacturers of Fine Chemicals, Labo-  
ratory Chemicals, Mineral Supplements for Poultry &  
Animals.

**Raptakos, Brett & Co. Private Ltd.**—Dr. Annie Besant Road,  
Worli, Bombay 18.

**Ronuk Industries Ltd.**—11A, Abdul Gaffar Khan Road, Worli  
Sea Face, Bombay 18.

**Sardesai Brothers Private Ltd.**—14, Murzban Road, Fort, Bombay.  
Phone : 261206.

**SISCO-CHEM. INDUSTRIES.**—Anand Bhavan, Princess Street,  
Bombay 2. Manufacturers and Exporters of Organic, Fine  
& Research Chemicals. Phone : 244156 (Res.).

**SOMAIYA ORGANO-CHEMICALS LTD.**—Chemicals—Acetic  
Acid, 45, Mahatma Gandhi Road, Bombay-4. Phone : 255332  
& 255338.

**Sonawala Industries Private Ltd.**—137, Sheikh Memon Street,  
Bombay 2.

**Standard Chemical & Pharmaceutical Co.**—Atlas Mills, Reay Road,  
Bombay-10.

**SHAKTI CHEMICALS.**—132, Kap Kanari, Bombay-Agra Road,  
Bhiwandi, Dist. Thana. Phone : 211842. Manufacturers of  
Chemicals viz. Ammonium Acetate, Ammonium Phosphate,  
Copper Nitrate, Copper Sulphate, Nickel Sulphate, Nickel  
Nitrate, Sodium Acetate, Disodium Phosphate, Bismuth  
Nitrate, Cadmium Nitrate, Zinc Sulphate, etc.



**STAR CHEMICALS (BOMBAY) PRIVATE LTD.**—21, Noble Chambers, Parsi Bazar Street, Bombay 1. Phone: 253016. Grams: "PEACOCK." Manufacturers of Chemicals and Acid Phosphoric, Sodium Phosphates, Hexa Meta Phosphate, Tetra & Poly Phosphates, Ammonium Phosphates (monobasic and diabasic), Calcium Phosphates and Allied Phosphates. Pre-treatment chemicals for rust removing and rust proofing.

**Tata Chemicals Ltd.**—Bombay House, Bruce Street, Fort, Bombay 1.  
**Tata Oil Mills Co., Ltd.**—Bombay House, Bruce Street, Fort, Bombay.  
**Teddington Chemical Factory Private Ltd.**—United India Building, Sir Phirozshah Mehta Road, Bombay.

**Unichem Laboratories.**—22, Bhulabhai Desai Road, Bombay 1.

**Union Carbide India Limited.**—Kasturi Building, Jamshedji Tata Road, Bombay 1.

**VELU & CO. (PVT.) LTD., F. K.**—P.O. Box No. 514, 111, Mahatma Gandhi Road, Bombay 1. Phones: 253141 & 641326. Grams: "LACQUER."

**WARNER HINDUSTAN LIMITED.**—Chemical Manufacturers, Savoy Chambers, Wallace Street, Bombay 1.

**West India Chemicals Private Ltd.**—336-A, Kalbadevi Road, Bombay 2.

**Western Chemical Industries.**—Goregaon (East), Post Malad, Bombay.

**Zenith Chemical Works Private Ltd.**—French Bridge, Bombay 7.

### CHEMICALS (GLASS INDUSTRY)

**CHUDGOR & CO. PVT. LTD.**—Regd. Office: Anand Bhuvan, Princess Street, Bombay 2 (BR.). Phones: C/o 30023, 30024 & 20419. Grams: "CHUDGORECO," Bombay 2 (B.R.). Dealers in Chemicals, Dyes, Sizing materials & Waxes, etc.

**PRAVIN BROTHERS & CO.**—501, Commerce House, Meadows Street, Bombay 1. Phones: 251748, 252419. Grams: "WIDE-SCOPE." Importers, Exporters and Agents: Sulphur; Chemicals-Solvents, Pyridene Base, Fertilisers, Minerals-Lime-Jute-Products. POLYSOL S.5, POLYSOL S.6, GYPSUM.

**ROYAL DRUG & PHARMACEUTICALS CO.**—Sharaf Mansion, 38, Princess Street, Bombay 2. Phone: 38149. Grams: "RODPHAR" Whole Sale Dealers & Direct Importers of Solvents, Drugs, Pharmaceuticals, Vitamins and Laboratory Chemicals (Mostly useful in College & Research Institutes).

### CHEMICALS (IMPORTERS & STOCKISTS)

*For your requirements such as ...*

#### ● LABORATORY CHEMICALS & REAGENTS

*Manufactured by*

M/s British Drug Houses (India) Ltd. and  
M/s Sarabhai Merck Ltd.

#### ● INDUSTRIAL CHEMICALS & SOLVENTS

*Repacked by*

M/s 'AMRUT' Industrial Products

#### ● DRUGS & PHARMACEUTICAL CHEMICALS

*Repacked by*

M/s 'GLOBE' Products

#### ● Please Contact:

**AMRUTLAL BHURABHAI & CO.**

*Dealers & Direct Importers of*

Industrial, Photographic & Laboratory Chemicals, Indicators, Stains & Reagents etc.

Anand Bhuvan, Princess Street,

Phones: BOMBAY 2 (BR) Grams:  
30023 & 30024 "CHEMDRUGS"  
BOMBAY-2 (BR)

**Akbarally Mohamedally & Co.**—316, Abdul Rehman Street, Bombay 3.

**Amersey Khimjee & Co.**—Varjivan Mansion, 56, Princess Street.

**AMRITLAL & CO. PRIVATE LTD.**—"Rang Udyan," Sitladevi Temple Road, Mahim, Bombay 16. Phones: 453251 & 262291. Grams: "RASIK." Sole Agents in India for Rohm & Haas Co., Philadelphia, U.S.A.; Manufacturers of Textile & Leather Chemicals and Agricultural Insecticides & Fungicides and also for Sojuzchimexport U.S.S.R. for Dyes, Intermediates and Chemicals.

**Anglo-American Dyestuffs Corporation Ltd.**—Prospect Chambers, Hornby Road, Fort. Phone: 33993.

**Anglo-Thal Corporation, Ltd.**—Ewart House, Bruce Street, Fort. Aniline Dyes & Chemical Co. (Estd. 1922)—3, Gilder Lane, off Lamington Road, Bombay 8.

**Asiatic Dyestuff Agency.**—306, Samuel Street, Vadgadi, Bombay 3.

**Associated Agencies (Bombay).**—47, Podar Chambers, Parsi Bazar Street, Fort.

**Bengal Chemical & Pharmaceutical Works Ltd.**—502, Cadell Road, Bombay-28.

**BAKER BROTHERS.**—31, C. P. Tank Road, Bombay 4. Phone: 334421 (Office) & 370207 (Factory). Grams: "BAKER-COLOR." Paints, Enamels, Varnishes, N. C. Lacquers and Thinners for all purposes.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**Batlibol, C. J., & Co.**—319, Hornby Road, Fort.

**Bhatia Trading Co.**—1, Shree Ram Market, Vadgadi, Bombay 3.

**Begraj Gupta & Co.**—207, Kalbadevi Road, Bombay 2.

## A House for INDUSTRIAL CHEMICALS

### THE BHARAT CHEMICALS CO.

331, Samuel Street, Vadgadi, Bombay-3 (BR)

*Importers & Suppliers*

All types of Chemicals, Dyes, Fertilizers,  
Mill Stores, etc., etc.

Grams: "BHARCHEM" (MD). Phone: 324401 (Office)  
471601 (Res.)

**BHARAT CHEMICAL AGENCY.**—Asian Building, Nicol Road, Ballard Estate, Bombay 1. Phone: 265249 & 266101. Grams: "THREE-LIONS." Dealers in Chemicals, "Saukern" Brand, Soda Ash & Caustic Soda, Selling Agents for Bombay, Delhi & Madras Regions for Saurashtra Chemicals, Porbandar. Selling Agents: Century Chemicals for Liquid Chlorine.

**Bhavanidas Gangadas & Co.**—233-35 Samuel Street, Vadgadi.

**Bock, F., & Co.**—Shale Building, Bank Street, Bombay 1.

**Bombay Chemicals Ltd.**—Maneckji Wadia Building, 126, Mahatma Gandhi Road, Fort.

**BOMBAY KIRYANA INDUSTRIES.**—204, Samuel Street, Vadgadi, Bombay 3. Phone: 327466. Grams: "RAWDRUGS," Mandvi, Bombay.

### CHEMICALS & DYES

#### MANUBHAI SHAH & CO.

297, SAMUEL STREET, VADGADI  
BOMBAY 3

*Importers and Stockists of*  
**CHEMICALS - DYES**  
**STARCHES - MILLSTORE**  
**AND IRON & STEEL**

Grams: "CHAKOR" Phone: {Office: 322655  
Residence: 471884}



**C. AGRAWAL & CO., PRIVATE LTD.**—43-44, Lakshmi Building, Sir Phirozshah Mehta Road, Bombay 1. Phones : 261344, 265163. Cables : "AGRAWALCO". Importers & Stockists of Dyestuffs & Chemicals.

**C. M. VORA & CO.**—160, Dr. Dadabhoy Naoroji Road, Fort, Bombay. Phone : 261609 Office, 22572 (Res.). Importers & Stockists of Chemicals for all Industries. Approved Contractors to Defence Factory.

**Capco Private Limited.**—Co-operative Insc. Bldg., Sir Phirozshah Mehta Road, Bombay.

**Capitol Colour & Chemical Co.**—77-87, Mirchi Street, Vadgadi, Bombay 3.

**Chavannes & Co., Ltd.**—Mercantile Chambers, Graham Road, Ballard Estate.

**Chem. Col. Co.**—326, Samuel Street, Vadgadi.

**CHEMICAL INTERNATIONAL.**—3, Princess Street, Bombay 2. Grams : "CHEMINTER". Phone Nos. 23694 & 20540. Direct Importers & Stockists of Photographic, Laboratory, Industrial, Heavy & Fine Chemicals, Solvents, Pharmaceutical Drugs, Sizing Material and all sorts of Textile Requisites, Acids C.P. and A.R. Cosmetic Wax Distilled Water C.P. College Chemicals, etc.

**CHEMICOLOUR PRIVATE LIMITED.**—Manek Mahal, 6th Floor, Vir Nariman Road, Bombay 1. Representatives of Messrs. BASF Handels- und Export-Gesellschaft m.b.H., Ludwigshafen/Rhein, West Germany, and Messrs. Deutsche Commerz G.M.B.H., Frankfurt/Main, Exporters to India of the products manufactured by Messrs. Badische Anilin- & Soda-Fabrik A.G. Ludwigshafen/Rhein, and Messrs. Cassella Farbwerke Mainkur A.G. Frankfurt/Main-Fechenheim, West Germany.

**CHEMIDYE TRADING CO., PRIVATE LTD.**—Kamer Building, Cawasji Patel Street, Fort, Bombay-1. Phone : 251034.

**CHEMISOL INDUSTRIES.**—41, Princess Street, Bombay 2. Phone : 29086. Grams : "BAYCITY." Importers and Manufacturers of Industrial Organic Chemicals, Solvents and Adhesives.

**Chika Private Limited.**—Mehta Building, 13, Mathur Road, Bombay 4.

**Chokel Brothers.**—315, Sandhurst Road, Bombay 4.

**CIBA OF INDIA LTD.**—Royal Insurance Bldg., 14, Jamshedji Tata Road, Bombay 1. Phones : 245031-3; 246084-6.

**Columbia Chemi-Colour Industries Private Ltd.**—Block 1/D, Dr. Annie Besant Road, Bombay 18.

**COMMERCIAL SOLVENTS CORPORATION.**—Commissariat Building, 5th Floor, 231, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone Nos. 265446, 262762. Grams : "SOLVO". Stockists of Chemicals, Solvents etc.

**Continental Drug Co., The.**—135, Worli Road, Worli.

**Dadajee Dhackjee & Co. Private Ltd.**—Plot No. 80, Dr. Annie Besant Road, Worli.

**Dandekar Company.**—Bombay Mutual Annexe, 17, Gunbow Street, Fort, Bombay 1. Phone : 261038. Grams : "SHEKHAR".

*A Reliable House for:*

**CHEMICALS !  
SOLVENTS !!  
INTERMEDIATES !!!**

*there cannot be a better place for  
buying or selling . . .*

## **D. JAMNADAS & CO.**

(the leading house of import & export of all kinds of industrial chemicals and solvents)

207, Samuel St., Bombay 3. Tel: 325181 & 327919

Gram: VANDAN, BOMBAY Mandvi. (Res. 472114)

Also

Sole distributors of best Indian make ACETIC ACID and POLYSOL S-6 (Polyvinyl Acetate Emulsion) Japan. Enquiries solicited . . .

**Das & Company.**—Das Chambers, Dalal Street, Fort.

**Dhamdhare, K. H.**—Devkaran Mansion, 45-47, Princess Street, Bombay 2.

**Dharamchand & Co.**—349, Samuel Street, Vadgadi, Bombay 3.

**Dubash Freres & Co.**—Victoria Building, Parsi Bazar Street, Fort.

**Dulabhdas, P., & Co.**—265, Samuel Street, Vadgadi.

**Durga Laboratories.**—71, Bhandari Street, Vadgadi, Bombay 3.

**Dwarkanadas & Sons, Ltd.**—Mehta House, 89, Apollo Street, Fort.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone : 26-2711 (8 Lines). Machine Works : Tank Road, Bombay 33

**DD.** Phone : 378544-46. Grams : "SOLVO." Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**Empire Industrial Works.**—Warden House, Sir Phirozshah Mehta Road, Fort.

**FINE DYESTUFFS & CHEMICALS (INDIA) LTD.**—61, Apollo Street, Fort, Bombay. Phone : 254054. Grams : "CHEMFIND."

**Firos Trading Co. Private Ltd.**—Kamer Building, Cawasji Patel Street, Fort.

**Francis Klein Private Ltd.**—Shale Building, Bank Street, Fort, Bombay.

**GandhiSons Ltd.**—232, Samuel Street, Vadgadi, Bombay 3.

**General Import Co. (India).**—Keshav Baug, 102, Princess Street, Post Box No. 2376, Bombay 2.

**General Industrial Chemicals.**—Beaumont Chambers, 27/33, Meadows Street, Fort.

**Gets Bros. & Co.**—Western India House, Sir Phirozshah Mehta Road, Fort.

**Ghia, B. L.**—Behramji Mansion, Sir Phirozshah Mehta Road, Fort.

**Gordhandas Desai Private Ltd.**—Kermani Bldg., Sir P. M. Road, Bombay 1.

**Gulabchand Nathalal & Co.**—45E, Mirchi Lane, Bombay 3.

## **HARIBHAI JEEBHAI & CO.**

22, Princess Street, Bombay 2

*Direct Importers of:*

**Heavy & Fine Chemicals, Pharmaceutical Drugs, Sizing Materials and all sorts of Textile Requisites.**

*TRADE INQUIRIES SOLICITED*

Phone : { 22116  
23146

Grams : "SUKHNATH"

Resi. : { 572126  
572085

**Hazarat & Co.**—Warden House, Sir Phirozshah Mehta Road, Fort.

**HOECHST DYES & CHEMICALS LTD.**—Parekh Mahal, Vir Nariman Road, Churchgate, Bombay 1. Phone Nos. : 242345/46, 242453. Grams : "HOSTACHEM." Distributors of products manufactured by "FARBWERKE" Hoechst A.G., Frankfurt (M)—Hoechst, W. Germany, its subsidiaries Colour-Chem Ltd., Bombay, Sardesai Brothers Ltd., and Indian Dyestuff Industries Ltd., Bombay.

**HOOSEINBHOY A. LALLJEE SONS & CO.**—Navsari Building, Dadabhoy Naoroji Road, Bombay 1. Phone : 262052. Grams : "FLOWERMEAD." Importers : Dyestuffs, Chemicals and Textile Auxiliaries.

**Imperial Chemical Industries India (Dyes Dept.).**—Crescent House, Witley Road, Ballard Estate.

**India Textile Agencies.**—Noble Chambers, Parsi Bazar Street, Fort.

**Indian Commercial Co., Ltd.**—45-47, Apollo Street, Fort, Bombay.

**Indo-British Chemical Co.**—Raja Bahadur Mansion, Tamarind Lane, Fort.

**Indo-Colour Trading Co.**—267, Samuel Street, Vadgadi.

**INDOKEM PRIVATE LTD.**—221, Dadabhoy Naoroji Road, Fort, Bombay 1. Phone : 265151/5.

**Jadavjee Goverdhandas & Co.**—58-60, Princess Street, Bombay 2.

**JAYANT DYE-CHEM CORPORATION.**—8, Sheriff Devji Street, Bombay 3. Direct Importers and Dealers of Heavy Industrial & Pharmaceuticals Chemicals, Solvents, Dyes, Agents of Messrs. Atul Products, Ltd. for Chemicals, Acids, & Intermediates. Phone : 321563. Grams : "SHEPCHEM."

**Kabbur Ltd., S. K.**—3, Bastion Road, Fort.

**KANTILAL MANILAL & CO.**—16, Princess Street, P.B. No. 2162, Bombay 2. Phone : 38530 & 20230. Suppliers of Pharmaceuticals, Industrial & Laboratory Chemicals, Solvents, Preservatives, Fatty Acids, etc. Grams : "DAYLIGHT."

**Kerr, F. S., & Co., Ltd.**—125, Mahatma Gandhi Road, Fort.

**Khatav Valabhdas & Co.**—Indian Globe Chambers, Fort Street, Bombay 1.

**Khosla Keserwala.**—70, Masjid Bunder Road, Mandvi, Bombay 3.

**Kilburn & Co. Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort, Bombay 1.



**KIRTIKUMAR & CO.** (Estd. 1948).—80, Bhandari Street, Mandvi, Bombay 3. Grams: "LALITKIRTI." Phone: 321583. Importers & Stockists of all INDUSTRIAL chemicals, sizing materials, minerals, glues & waxes, etc. for following INDUSTRIES: Ceramics, Leather, Matches, Paints, Perfumery, Rubber, Textiles, Glass, Inks, Oils, Paper, Soap, Sugar Tiles, etc.

Phone : 322773      Grams: "CHANDUCO"

Please Contact:

## KIRTIKUMAR CHANDULAL & CO.

313, Samuel Street, Vadgadi, Bombay-3.

For your requirements of

ANGELO SHELLACS

Waxy & Dewaxed, Decolourised or Bleached  
(as per I.S.I. Specifications)

Used in

Pharmaceuticals, Varnishes, Paints, Cosmetics,  
Inks, Lacquers etc.

ANGELO SHELLAC WAX

for

Carbon Paper & Polishes

And

PURE REFINED  
BEES WAX

B. P. and I. P.

also

MICRO WAX — CARNUBA WAX  
and other WAXES

**Kros & Co.**—Podar Chambers, Parsi Bazar Street, Fort.

**Lavchand Varajdas & Co.**—64-66, Princess Street, Bombay 2.

**M. Moiz & Co.**—Nakhoda Boghay Market, 8, Nagdevi Street, Bombay 3.

**Manubhai Shah & Co.**—297, Samuel Street, Bombay 3.

**MARTIN & HARRIS (PRIVATE) LTD.**—Savoy Chambers, Wallace Street, Bombay 1. Phone Nos. Office: 263473/4, Stores: 261270. Grams: "ROWLETTE."

**Mata Lachhmi Co.**—Hussaini Chambers, Nanabhai Lane, Fort.

**May & Baker (India) Private Ltd.**—Karimjee House, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**MAYUR MERCANTILE COMPANY.**—347/49, Samuel Street, Vadgadi, Bombay 3 (BR.). Phone Office: 328673. Grams: "ENHANCE," Bombay. Stockists of Ultramarine Blue, Colours & Chemicals.

**M. H. Mehta & Sons, Ltd.**—Fort Chambers, Hamam Street, Fort.

**MOHAMEDBHAI KALIMUDDIN & CO.**—41, Old Bengalipura, Bombay 3. Phone: 323198 (Office), 369779 (Res.), 373748 (Factory) and 327909 (Godown). Grams: "DEITY." Importers and Manufacturers of Aniline Dyes & Chemicals.

**MONSANTO CHEMICALS OF INDIA PRIVATE LTD.**—Wakefield House, Sprott Road, Ballard Estate, Bombay 1. Phone: 26-2624. Grams: "MONSANTO," Bombay. Branch Offices: (1) Monsanto Chemicals of India Private Ltd., 19, Rajendranath Mukherjee Road, Calcutta 1; (2) Monsanto Chemicals of India Private Ltd., 3/8 Asaf Ali Road, Near Turkman Gate, New Delhi and (3) Monsanto Chemicals of India Private Ltd., Caithness Hall, 310-311, Linghi Chetty Street, G.T., Madras.

**MURARILAL BALKISHAN.**—30, Commercial Chambers, Masjid Bunder Road, Bombay 3. Phone: 328028 (Residence 522153). Grams: "DANVEER." Importers & Suppliers of Paint, Raw Materials, Solvents, Lubricants & Chemicals for Textile, Sugar, Glass & Ceramic Industries & Dyes Intermediates.

**N. R. SHAH & COMPANY.**—Mulchand Mansion, Princess Street, Bombay 2. Phone No.: 20093. Grams: "WALFLO-WER." Perfumers and Perfumery Raw Material Dealers. Dealing in Aromatic Chemicals, B.P., Natural, Synthetic Essential Oils and Perfumery Compounds.

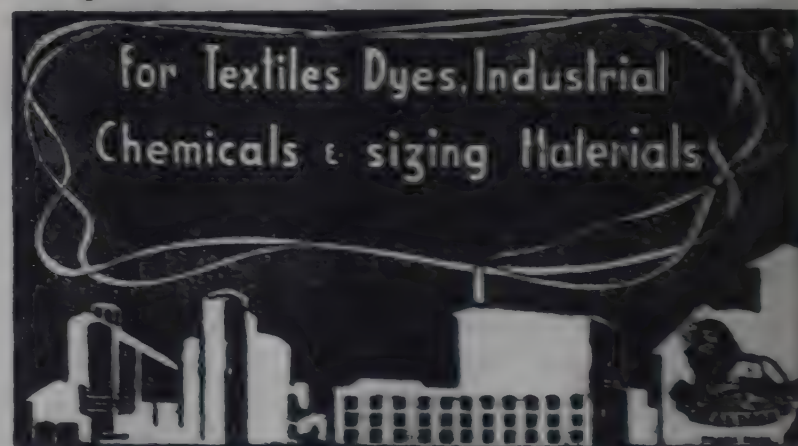
**NANAVATI & CO. PRIVATE LTD.**—16, Apollo Street, Fort, Bombay 1. Phones: 252189 & 255422; Grams: "MANIBALA." Leading Importers & Stockists of Dyeing, Bleaching & Industrial Chemicals, Sulphurs, Sizing Materials, & Dyes for Textiles.

**Narandas Pramanandas.**—231, Dr. Dadabhoy Nowroji Road, Fort. **Narayandas Jagjiwan & Co.**—80, Garibdas Street, Vadgadi, Bombay 3.

**NAROTTAMDAS KARSANDAS & CO.**—278, Dr. Dadabhoy Nowroji Road, Bombay 1. Direct Importers of Lubricating Oils & Indentor. Agents for Chemicals & General Merchandise. Phone: 262215. Grams: "NAROTTAMCO" (F.T.).

**N. Jivanlal & Co. Private Ltd.**—50, Princess Street, Bombay 2.

**New Era Agencies Private Ltd.**—32, Nicol Road, Ballard Estate, Bombay 1.



**The New Standard Chemicals Co. Private Ltd.**

281, SAMUEL STREET, VADGADI, BOMBAY 3.

PHONE: 323844 \* BRANCH AT: KANPUR \* GRAMS: "PARTICULAR."

**Odhawji Lawji & Co.**—Chikhali House, 144/B, Princess St., Bombay 2.

**OVERSEAS TRADE & AGENCIES (INDIA).**—Beaumont Chambers, Meadows Street, Fort, Bombay 1. Grams: "VISTRO." Phone: 254942.

**Parekh Bros., Ltd.**—65, Mahatma Gandhi Road, Fort.

**P. D. Vora.**—314, Samuel Street, Vadgadi, Bombay 3.

**Pioneer Chromate Works.**—Currimbhoy House, Outram Road, Fort.

**PIONEER TRADING CO.**—210, Samuel Street, Bombay 3. Phone: 324607. Grams: "CHEMITRADE." Dealers in Light and Heavy Industrial Chemicals and Auxiliaries.

**Pragjee Brothers.**—Dholy Building, Vadgadi.

**FRAVIN BROTHERS & CO.**—501, Commerce House, Meadows Street, Bombay 1. Phones: 251748, 252419. Grams: "WIDESCOPE." Importers, Exporters and Agents: Sulphur-Chemicals-Solvents, Pyridene Base, Fertilizers, Minerals-Lime-Jute Products. POLYSOL S.S, POLYSOL S.G, GYPSUM.

**Progressive Trading Co.**—50, Esaji Street, Bombay 3.

**Raj-Der-Kar & Co.**—Sadhana Rayon House, Hornby Road, Fort. For Research Industries. Phone: 27304.

**Ramdas & Co.**—327, Samuel Street, Vadgadi, Bombay 3.

**ROYAL DRUG & PHARMACEUTICALS CO.**—Sharaf Mansion, 38, Princess Street, Bombay 2. Phone: 38749. Grams: "RODPHAR." Wholesale Dealers & Direct Importers of Solvents, Drugs, Pharmaceuticals, Vitamins and Laboratory Chemicals (Mostly useful in College & Research Institutes).

**S. JAVERI & CO.**—Mangaldas Building, No. 3-A, B-361, 2nd Floor, Mangaldas Road, Bombay 2. Grams: "QUINACARE." Grant Road, Bombay. Importers and Agents for Import of Pharmaceutical Chemicals and Raw Materials, Sulpha Drugs, Vitamin Essential Oils, Gums, Crude Drugs, Waxes, Industrial Chemicals and Raw Materials for Pharmaceutical Chemicals, Dyes and Paint Industries. Foreign Connections all over the World.

**S. MATHURADAS & CO.**—P.O. Box No. 2113, Princess Street, Bombay 2. Grams: "SMATHURCO." Phone: 30273. Stockists of Laboratory & Fine Chemicals, Analytical & Laboratory Reagents, Amino-Acids, Stains, Drugs, Vitamins, etc., manufactured by E. Merck & other renowned products.



Andros Products Ltd.—2, Wiltet Road, Ballard Estate, Fort, Bombay.

**SCIENTIFIC & INDUSTRIAL SUPPLIES CORPORATION.**—Anand Bhuvan, Princess Street, Bombay 2. Manufacturers, Importers & Exporters of Fine and rare Chemicals and Biochemicals. Grams: "FURFUROL." Phone 244156 (Res.).

Repulchre Brothers (India) Ltd.—Taj Building, 210, Hornby Road.

**RAH & CO., M.**—Kanjli Mansion, Sandhurst Road, Bombay 4. Phone: 351834.

Shamsun & Co.—11, Bruce Street, Fort.

Shapurji & Co., R. K.—319, Hornby Road, P. B. 1065, Fort.

Sheth, S. C., & Co. Ltd.—Raja Bahadur Mansion, 14, Hamam Street, Fort, Bombay.

Shree Krishna Trading Co., Ltd.—58, D. Road, Bombay 1.

Shree Prabhadevi Dyes & Chemicals Co., Ltd.—287-289, Samuel Street, Vadgadi, Bombay.

Simplex Chemical Co.—108/C, Chhaktewadi, Tardeo.

Shind High Class Colour Mart.—12, Shree Ram Market, Vadgadi, Bombay 2.

Sizing Materials Co., Ltd.—Jeroo Building, 137, Mahatma Gandhi Road, Fort.

Standard Chemical & Pharmaceutical Co.—Atlas Mills, Reay Road, Bombay 10.

**SULYANCHAND BIMALPRAKASH & SONS.**—30, Commercial Chambers, Masjid Bunder Road, Bombay 3. Grams: "DELHICHEM." Importers & Suppliers of Paint, Raw Material, Solvents, Pigments & Chemicals for Textile, Sugar, Glass & Ceramics Industries & Dyes Intermediates. Phones: Office: 323425 & 327636; Res.: 522544.

Super Dyes & Chemical Co.—281-A, Samuel Street, Vadgadi, Bombay 3.

**TALATI, P. H.**—55, New Barden Lane, Vadgadi, Bombay 3. Phone: 324110 & 358393 (Res.). Importers & Stockists of Heavy & Fine Chemicals such as Caustic Soda, Ash, Hydro-sulphite of Soda, Acetic Acid, Bleaching Powder, Copper Sulphate, Rosin, Sizing Materials, etc. Selling Agents for Bleaching Powder Manufactured by D.C.M. Chemical Works.

**TECHNO-INDUSTRIAL SYNDICATE.**—Sole Distributors for W. Marshall (Hessle) Ltd., through the Cement Marketing Co., Ltd., England. N.V. "LITHOS," Holland. The Murarka Paint & Varnish Works Private Ltd., Calcutta. 19-B, Noble Chambers, Parsi Bazar Street, Fort. Importers and Dealers. Exporters of Heavy and Industrial Chemicals, Oils, Zinc Oxide, Pigments, Paint Materials and Minerals of all sorts. Phone: 251220. Grams: "TEINSY."

Textdyes Corporation.—Manekji Wadia Buildings, 127, Mahatma Gandhi Road, Fort, Bombay.

Textile Dye-Chem Corporation.—Vincent Court, 3rd floor, Vincent Road, Bombay 14.

**UNION ACID & CHEMICAL CO.**—H.O. 88, Jambli Mohalla, Bombay 3. Phone: 332652. Grams: "UNIONACID." Kuria Phone: 55464; Goregaon Phone: 692761. Stockists of Nitric, Sulphuric & Hydrochloric Acids, Hydrochloric & Sulphuric Acids supplied to upcountry customers by Road Tankers.

Union Chemical Agency.—231, Samuel Street, Vadgadi.

**VELU & CO. (PVT.) LTD., P. K.**—P.O. Box No. 514, 111, Mahatma Gandhi Road, Bombay 1. Phones: 253141 & 641326. Grams: "LACQUER."

Vijay Trading Corporation.—297-B, Old Post Office Lane, Mangaldas Market, Bombay-2.

Vikram Padamsey & Co.—Bustom Building, Vir Nariman Street, Fort.

Vinod Colour & Chemical Co.—11, Chakla Cross Lane.

Volras Ltd.—19, Graham Road, Ballard Estate, Fort.

**VORA TRADING CO.**—357-A, Samuel Street, Vakli Bldg., Vadgadi, Bombay 3. Telephone: 325289. Telegram: "MULTI-SALES," Bombay Mandvi.

Windmere (India) Ltd.—Sir Vithaldas Chambers, 16, Apollo Street, Bombay.

Yacoub Ahmed Brothers.—Topiwalla Mansion, Mahomedalli Road.

## CHEMICALS (PHARMACEUTICALS)

**M. SHAH & CO.**—40, Princess Street, Bombay 2. Phone: 29915. Grams: "BONAFIDE." Direct Importers of Drugs, Pharmaceutical & Laboratory Chemicals.

Bengal Chemical & Pharmaceutical Works Ltd.—502, Cadell Road, Bombay-28.

**CHEMICAL INTERNATIONAL.**—3, Princess Street, Bombay 24. Phone Nos. 23694 & 20540. Grams: "CHEMINTER." Direct Importers & Stockists of Photographic Laboratory, Industrial, Heavy & Fine Chemicals, Solvents, Pharmaceutical Drugs, Sizing Material and all sorts of Textile Requisites, Acids C.P. and A.R. Cosmetic Wax Distilled Water C.P. College Chemicals, etc.

**CHEMISOL INDUSTRIES.**—41, Princess Street, Bombay 2. Phone: 29086. Grams: "BAYCITY." Importers and Manufacturers of Industrial Organic Chemicals, Solvents & Adhesives.

**CHUDGOR & CO. PVT. LTD.**—Regd. Office: Anand Bhuvan, Princess Street, Bombay 2 (BR). Phones: C o 30023, 30024, 20419. Grams: "CHUDGORECO," Bombay 2 (B.R.). Dealers in Chemicals, Dyes, Sizing Materials & Waxes, etc.

**C. J. SHETH & CO.**—48, Mangaldas Road, Post Box No. 2199, Bombay 2. Phone: 38111. Grams: "PAGODA." Importers & Indenting Agents, Dealing in Chemicals & Drugs & Pharmaceuticals.

**COMMERCIAL SOLVENTS CORPORATION.**—Commissariat Building, 5th Floor, 231, Dadabhoy Naoroji Road, Bombay 1. Phones: 265446, 262762. Grams: "SOLVO." Stockists of Chemicals, Solvents etc.

I.C.I. (India) Private Ltd.—P.B. No. 310, Bombay 1.

**INDUSTRIAL SOLVENTS & CHEMICALS PRIVATE LTD.**—Manufacturers of ANAESTHETIC ETHER B.P. for safe and reliable Anaesthesia. Navpada, Bombay-Agra Road, Thana.

**KANTILAL MANILAL & CO.**—16, Princess Street, P.B. No. 2162, Bombay 2. Phones: 38530 & 20230. Suppliers of Pharmaceuticals, Industrial Laboratory Chemicals, Solvents, Preservatives, Fatty Acids, etc. Grams: "DAYLIGHT."

**LYKA LABS.**—Subhas Road—(A), Vile Parle (East), Bombay-57. Manufacturers of Pharmaceutical Specialities and Fine Chemicals. Phones: 571141 & 573211.

N. Jivanlal & Co. Private Ltd.—50, Princess Street, Bombay 2.

**NATIONAL REFINERY PRIVATE LTD.**—87, Tardeo Road, Bombay 34. Refiners and Assayers of Precious Metals, Mfrs. of Silver Solders, Silver Salts, Silver Anodes, Powder, Strips, etc.; Carat Gold in various forms and colours. Phone: 372263.

Pravin Brothers & Co.—501, Commerce House, Meadows Street, Bombay 1. Phones: 251748, Grams: "WIDESC."

Premji Vlahram & Co.—310, Sheikh Memon Street, Bombay 2. Phone: 23644. Grams: "PREMAL."

**ROYAL DRUG & PHARMACEUTICALS CO.**—Sharaf Mansion, 38, Princess Street, Bombay 2. Phone: 38749. Grams: "RODPHAR." Wholesale Dealers & Direct Importers of Solvents, Drugs, Pharmaceuticals, Vitamins & Laboratory Chemicals (Mostly useful in College & Research Institutes).

**S. JAVERI & CO.**—Mangaldas Building, No. 3-A, B-267, 2nd Floor, Mangaldas Road, Bombay 2. Grams: "QUINACRINE", Grant Road, Bombay. Indentors and Agents for Import of Pharmaceutical Chemicals and Raw Materials, Sulpha Drugs, Vitamin Essential Oils, Gums, Crude Drugs, Waxes, Industrial Chemicals and Raw Materials for the Pharmaceutical Chemicals, Dyes and Paint Industries. Foreign connections all over the world.

**S. MATHURADAS & CO.**—P.O. Box No. 2113, Princess Street, Bombay 2. Grams: "SMATHURCO." Phone: 30273. Stockists of Laboratory & Fine Chemicals, Analytical & Laboratory Re-agents, Amino-Acids, Stains, Drugs, Vitamins, etc. manufactured by E. Merck & other renowned products.

**VELU & CO. (PVT.) LTD., P. K.**—P.O. Box No. 514, 111, Mahatma Gandhi Road, Bombay 1. Phones: 253141 & 641326. Grams: "LACQUER."

**WANDER PHARMED LIMITED.**—Lotus House, 33A, New Marine Lines, Bombay-1. Phone: 244030. Manufacturers of Chemicals (Anti T. B. Drugs) and Pharmaceuticals. Factory: Sion-Trombay Road, Deonar-Chembur, Bombay-71. Phone: 521807.

Volras Ltd.—19, Graham Road, Ballard Estate.

**WYETH LABORATORIES LIMITED.**—Regd. Office: Steelcrete House, Dinshaw Watcha Road, Backbay Reclamation, Bombay 1. Phone: 246171 (4 lines), Grams: "Wyelabs." Factory: Agra Road, Ghatkopar, Bombay 77. Phones: 67271, 55373, 51271 and 55386. Grams: "WYELABS."

## CHEMISTS AND DRUGGISTS

Adani Brothers: Associated Importers.—Mulchand Mansion, Princess Street, Bombay 2.

Addy Pharmacy.—Har Ganga Mahal, Khodadad Circle, Dadar, Bombay 14.

**AKBARALLY EBRAHIMJI PHARMACY & DEPARTMENT STORE.**—45 47, Veer Nariman Road, Fort, Bombay. Phones: 253921 22 23. Grams: "TUSSIBAR."

Allied & Co.—Devkaran Mansion, Princess Street, Bombay 2.

Amersey Khimji & Co.—56, Varjivan Mansion, Princess Street, Bombay 2.



**AMRUTLAL BHURABHAI & CO.**—P.O. Box No. 2379. Anand Bhuvan, Princess Street, Bombay 2 (B.R.). Phones: 30023, 30024, 20419. Grams: "CHEMDRUGS," Bombay 2 (B.R.). Direct Importers and Dealers of all kinds of Laboratory Chemicals, Drugs & Essential Oils.

**Amulakh Kalyanji.**—14, Mangaldas Road, Princess Street, Bombay 2.  
**Anglo-French Drug Co. (Eastern) Ltd.**—Yusuf Building, Vir Nariman Street.

**Anglo-Indian Drug & Chemical Co.**—285, Jumma Masjid, Bombay 2.

**Arun & Co.**—Shop No. 5, Bulakhidas Building, Mangaldas Road, Bombay 2.

**Asian Trading Co.**—Bode Chawl, Princess Street, P.B. No. 2398, Bombay 2.

**Asiatic Stores.**—72, Churchgate Street, opp. Churchgate Station, Fort, Bombay.

**Atlantic Stores.**—Western Breeze Building, Colaba Causeway, Fort.  
**Badroodin Mohomedally & Sons.**—238, Nagdevi Street, Bombay 3.

**B. A. & BROTHERS (BOMBAY) PRIVATE LTD.**—98, Princess Street, Bombay 2. Phone: 22939. Grams: "BABULINE."

**B. Babulal & Co.**—Devkaran Mansion, Princess Street, P.B. No. 2409, Bombay 2.

**B. C. Shah & Co.**—8, Devkaran Mansion, Vithaldas Road, Bombay 2.

**B. Jayantilal & Co.**—15, Mangaldas Road, Princess Street, Bombay 2.

**B. M. Shah & Co.**—40, Princess Street, Bombay 2.

**B. Vrajilal & Co.**—28, Princess Street, Bombay 2.

**Beliram & Sons.**—306, Princess Street, Bombay 2.

**Beliram Chimanlal & Co.**—308, Princess Street, Bombay 2.

**Benjamin & Sadka.**—Anand Bhuvan, 2nd Floor, Princess Street, P.B. No. 2419, Bombay 2.

**BHAGUBHAI & BROS.**—Importers & Wholesale dealers of Drugs, Medicines & Toilets, Shuruf Mansion, 32-A, Princess Street, Bombay 2.

**Bhagwandas Maganlal & Co.**—295, Jumma Masjid, Bombay 2.

**Bharat Agencies.**—31, Forbes Street, Kirti Building, Fort, Bombay 1.

**Bharat Drug House.**—Devkaran Mansion, Mangaldas Road, Bombay 2.

**Bhogilal Premchand & Co.**—Mulchand Mansion, 24, Princess Street, Bombay 2.

**Bill & Co.**—Imperial Mahal, Tram Terminus, Dadar.

**Bimex & Co.**—43, Forbes Street, Fort, Bombay 1.

**Bole Brothers.**—P.B. No. 2072, Princess Street, Bombay 2.

**Bombay Drug Distributors.**—Chhotani Bldg., 54-B, Proctor Road, Bombay 7.

**Bombay Pharmacy, The.**—Sonawala Building No. 1, Tardeo Road, Bombay 7.

**Bombay Surgico Medical Agency, Ltd.**—P.O. Box 2093, Bharucha Building, Princess Street.

**British Drug Houses (India) Ltd.**—Imperial Chemical House, Ballard Estate.

**Burroughs Wellcome & Co.**—Cook's Building, Hornby Road.

**C. Himatlal & Co.**—89, Princess Street, Bombay 2.

**C. J. Sheth & Co.**—48 Mangaldas Road, Princess Street, Bombay 2.

**C. K. Reshamwala & Co.**—Shuruf Mansion, Princess Street, Bombay.

**C. K. Shah & Co.**—101, Princess Street, Bombay 2.

**C. P. Thakkar & Co.**—89, Peerbhai Mansion, Princess Street, Bombay.

**Champaklal D. Shah & Co.**—Devkaran Mansion, Block No. 1, Princess Street, P.B. No. 2404, Bombay 2.

**Champi Narsee & Co.**—4, Princess Street, Bombay 2.

**Chhaganlal T. Kanani & Co.**—Ruxmani Nivas, Opp. Jumma Masjid, 298, Sheikh Memon Street, Bombay 2.

**Chimanlal Chunilal & Co.**—Mangaldas Road, Princess Street, P.B. No. 2209, Bombay 2.

**Chimanlal Maganlal & Co.**—4, Mangaldas Road, Princess Street, Bombay 2.

**Chimanlal, N., & Co.**—Shroff Mansion, Princess Street.

**Chimanlal Saralal & Co.**—Mangaldas Road, Princess Street, Bombay.

**Choksey & Co., Props.**: Manilal Narbheram & Co.—Champsey Building, 78, Princess Street, Bombay 2.

**Choonilal Dahyabhai & Co. Private Ltd.**—70 Princess Street, Bombay.

**Chunilal Ootamchand & Co.**—79, Princess Street, Bombay 2.

**Continental Drug Stores.**—Damodar Building, 115, Princess Street.

**Crookes Laboratories Ltd.**—Court House, Carnac Road, Bombay 2.

**Dadha & Co.**—63, Princess Street, P.B. No. 2274, Bombay 2.

**Dawawala Brothers.**—102, Girgaum Road, Bombay 4.

**Dawawala & Co.**—Shuruf Mansion, 9, Old Hanuman Lane, Bombay 2.

**Dilip & Co.**—Devkaran Mansion, Block No. 1, Princess Street, Bombay 2.

**Dinshaw Khodad & Co.**: (Empire Stores).—Crawford Market, Fort, Bombay 1.

**Dongre, K. T., & Co.**—384, Lamington Road, Bombay 4.

**D. Macedo & Co.**—251, Budhwarpeth, Poona 2.

**D. Manilal.**—52-58, Babu Genu Road, Bombay 2.

**D. Ratilal & Co.**—Mangaldas Building, Mangaldas Road, Bombay 2.

**Empire Chemists.**—Fida Building, Princess Street, Bombay 2.

**General Drug & Chemical Co.**—Fida Building, Sheikh Memon Street, Bombay 2.

**Girdhar Javer & Co.**—Devkaran Mansion, Princess Street.

**Girdharlal & Co.**—195, Mangaldas Building, Mangaldas Road, Bombay 2.

**Globe Medicine Co.**—Bode Chawl, New Hanuman Lane, Bombay 2.

**Gopaladas Visram & Co.**—8, Fida Building, opp. Mangaldas Market, Bombay 2.

**Gujarat Essence Mart.**—Keshavbaug, 126, Princess Street, Bombay 2.

**Hardinge & Co.**—Charni Road Junction, Grant Road.

**Haribhai Jeebhai & Co.**—22, Princess Street.

**Hira, P. H., & Co.**—18-20, Princess Street.

**H. Banker & Co.**—16, Old Hanuman Lane, Bombay 2.

**H. Chandulal & Co.**—Mangaldas Building No. 1, Mangaldas Road, Princess Street, Bombay 2.

**I. G. Gajjar & Co.**—17-19, Princess Street, Bombay 2.

**Imperial Stores.**—Mahad, Dist. Kolaba.

**Jadavjee Goverdhandas & Co.**—58-60, Princess Street, Bombay 2.

**Jadavji Keshavji & Co.**—26, Princess Street, Bombay 2.

**Jagjivandas & Co.**—Keshav Baug, Princess Street, Post Box No. 2125, Bombay.

**Jayakumar Chandulal & Co.**—Mangaldas Road, Kitchen Garden Lane, P.B. No. 2337, Bombay 2.

**Jayantilal & Co., B.**—15, Mangaldas Road, Princess Street, Bombay 2.

**Jayantilal Natwarlal Vaidya & Co.**—Station Road, Petlad.

**J. & J. De Chane.**—Star Mansion, 30, Clare Road, Byculla, Bombay.

**Jitendra & Co.**—18, Fida Building, Princess Street, Bombay 2.

**Jiva Kuka & Co.**—Princess Street.

**J. Kundan & Co.**—Mulchand Mansion, Princess Street, Bombay 2.

**J. M. Sheth.**—65, Kitchen Garden Lane, Vithal Sayana Building No. 2, P.B. No. 2550, Bombay 2.

**KANCHANLAL MAGANLAL & CO.**—Bode Chawl, Princess Street, P. Box No. 2029, Bombay 2. Phone: 22392. Grams: "TABLETS." Importers & Dealers in Pharmaceutical Drugs, Medicines, Chemicals, Antibiotics, Surgical Dressings, Sera & Vaccines, Laboratory Chemicals. Scientific Apparatus for Laboratory, Hospitals & Colleges and Specialists in Surgical Instruments, Dairy Appliances.

**Kanchanlal Vadilal & Co.**—41-43, Mangaldas Road, Princess Street, Bombay 2. Phone No. 25735.

**Kantilal & Bros.**—Vithal Sayana Building, Lohar Chawl, Bombay 2.

**Kantilal Chimanlal & Co.**—Mangaldas Road, Princess Street, P.B. No. 2296, Bombay 2.

**Kantilal Manilal & Co.**—16, Princess Street.

**Karnik Bros.**—2nd Dubash Lane, Girgaum Back Road.

**K. A. Zaveri & Co.**—89, Princess Street, P.B. No. 2018, Bombay 2.

**K. F. Mody & Co.**—Oomrigar House, Mangaldas Road, Bombay 2.

**K. J. Panachand & Co.**—100, Sarang Street, P.B. No. 3264, Bhusari Moholla, Bombay 3.

**K. P. Motilal & Co. Ltd.**—Mangaldas Road, Princess Street, Bombay.

**K. Sevantilal & Co.**—Mulchand Mansion, Princess Street, P.B. No. 2553, Bombay 2.

**Kelkar, S. H., & Co.**—Devkaran Mansions, Princess Street.

**Kemp & Co., Ltd.**—Elphin House, Cadell Road, Bombay 28.

**Keshavji C. Thaker & Co.**—14, Princess Street, Bombay 2.

**Khushru & Sons.**—Sunnoo Lodge, Khodad Circle, Dadar.

**Kikani Medicine Supply Co.**—Kapol Nivas, 414, Sandhurst Road.

**Kishorchandra & Co.**—Keshav Baug, 102, Princess Street, Bombay 2.

**Komol Pharmacy.**—Commissariat Building, Dr. D. N. Road.

**Krishna Medical Stores.**—290, Sheikh Memon Street, Bombay 2.

**Kulkarni & Co.**—176, Princess Street, Bombay 2.

**Kumar & Company.**—34, Mangaldas Road, Princess Street, Bombay 2.

**Lavchand Varajdas & Co.**—Pratap Mansion, Princess Street, Bombay 2.

**Little's Oriental Balm & Pharmaceuticals, Ltd.**—Head Office: Western India House, Sir Phirozshah Mehta Road, Bombay.

**L. C. Attarwalla & Co.**—269, Sheikh Memon Street, Bombay 2.

**L. Lachhmandas & Co.**—91, Princess Street, Bombay 2.

**Lavchand Varajdas & Co.**—64-66, Princess Street, Bombay 2.

**MAC Laboratories Private Ltd.**—Great Social Building, Sir P. M. Road, G.P.O. Box No. 1831, Bombay 1.

**Madhav Agency.**—Girgaum, Bombay 4.

**Madon, M. T., & Co.**—"The Corner Shop," 346, Abdul Behman Street.

**MADON SONS & CO.**—67, Hughes Road, Bombay 7. Phone: 358508. Grams: "SQUIBB." Day & Night Dispensing Chemists.

**Mahasukhlal Chimanlal & Co.**—Mangaldas Road, Princess Street, P.B. No. 2088, Bombay 2.

**Mahendrakumar & Co.**—32, Shuruf Mansion, Princess Street, Bombay.

**Maneklal & Bros.**—61-A, Princess Street, Bombay 2.

**Maneklal & Co.**—Ramban Patent Depot, Shuruf Mansion, 32, Princess Street, Bombay 2.

**Manilal & Bros.**—Mulchand Mansions, Princess Street.

**Manohar Singh & Sons.**—Wholesale Dealers in Drugs and Medicines, 587, Chira Bazar, Bombay 2; Grams: "SINGHSONS".

**Martin & Harris Ltd.**—Savoy Chambers, Wallace Street, Fort.

**Manilal Motichand Kanani & Co.**—Dawawalla Building, 99, Princess Street, Bombay 2.

**Mansukhlal Tribhovanadas & Co.**—Princess Street, Vithaldas Road, Devkaran Mansion, Block 8, P.B. No. 2189, Bombay 2.



**Mira Chemical Works.**—Chinchpokli Cross Lane, Parel.  
**M. H. Javerian & Co.**—67, Princess Street, Bombay 2.  
**Minerva Medical Stores.**—11, Mangaldas Road, Princess Street, Bombay 2.  
**M. M. Bharwada.**—Mulchand Mansion, Princess Street, Bombay 2.  
**Model Chemists.**—Mapla Mahal, Thakurdwar, Bombay 4.  
**Mohanlal & Co.**—61, Princess Street, Bombay 2.  
**Mukundlal & Co.**—Anand Bhuvan, Princess Street, Bombay 2.  
**Narberham & Sons.**—Mangaldas Building No. 1, Princess Street, Bombay 2.  
**NATH & CO.**—Parekh Building, Old Hanuman Lane, Princess Street, Bombay 2. Wholesale Chemists, Druggists, Surgical, Sundries, Dealers and Manufacturers' Representatives.  
**Nath & Co.**—Parekh Building, Old Hanuman Lane, Bombay 2.  
**National Aniline & Chemical Co., U.S.A.**—Patel House, Churchgate Street, Fort.  
**Natvarlal & Co.**—Fida Building, Princess Street, Bombay 2.  
**N. Himatlal & Co.**—P. O. Box No. 2004, Princess Street, Bombay 2.  
**N. Sunderlal & Co.**—89, Princess Street, P.B. No. 2276, Bombay 2.  
**N. Uttamlal & Co.**—Bode Chawl, Princess Street, P.B. No. 2049, Bombay 2.  
**N. Vasantral & Co.**—55, Princess Street, Devkaran Mansion, Bombay.  
**Odhawjee Lawjee & Co.**—Chikhal House, 144-B, Princess Street, Bombay 2.  
**Orient Homoeopathic Pharmacy.**—Pannalal Terraces, Lamington Road, Bombay 7.  
**Oriental Medical & Surgical Stores, Ltd.**—Anand Bhuvan, Princess Street, Bombay 2.  
**Oriental Pharmacy.**—Kapoli Nivas, near State Bank, Sandhurst Road.  
**Pannalal Ramdayal Chindak.**—153, Princess Street.  
**Paradkar, K. A., & Co.**—Dindalsy Building, Gaiwadi, Girgaum, Bombay 4.  
**Patani Bros. & Co.**—Mangaldas Road, Princess Street.  
**Patel Ruby & Co.**—Cumballa Hill, Bombay 26.  
**Padder Brothers.**—245, Princess Street, Bombay 2.  
**Parekh & Co.**—Parekh Building, Old Hanuman Lane, Bombay 2.  
**P. C. Sheth & Co.**—Bode Chawl, New Hanuman Lane, Princess Street, Bombay 2.  
**P. D. Doshi & Co.**—38, Old Hanuman Lane, P.B. No. 2422, Bombay 2.  
**P. M. Zaveri & Co.**—10, Fida Building, Princess Street, Bombay 2.  
**P. N. Vora & Co.**—Varjivan Mansion, 1st Floor, Princess Street, Bombay, 2.  
**Phillimore & Co.**—Cumballa Hill, Bombay 6.  
**Phillips & Co.**—Waterloo Mansion, Mayo Road, Fort.  
**Pioneer Magnesia Works Ltd., The.**—Chartered Bank Building, Mahatma Gandhi Road, Fort.  
**POPULAR PHARMACY (REGD.), THE.**—Dhun Building, 310, Lamington Road, Grant Road, Bombay 7. Dispensing Chemists. Phone: 351884.  
**Poona Drug Stores.**—324, Mahatma Gandhi Road, Poona 1.  
**Prabhubdas Gulabchand Shah.**—Mulchand Mansion, Princess Street, Bombay 2.  
**Premier Chemists.**—Shuruff Mansion, Princess Street, near Juma Masjid.  
**Purshottam Laxmichand.**—Balakhidas Building, Mangaldas Road, Bombay 2.  
**"Queenie."**—11-B, Hughes Road, Bombay 7.  
**Queen's Chemists, The.**—Queen's Chambers, Queen's Road (opp. Marine Bridge), Bombay.  
**Rajnikant Brothers.**—P.B. No. 2053, Princess Street, Bombay 2.  
**Rasiklal & Co. Ltd.**—Varjivan Mansion, 60-62, Princess Street, P.B. No. 2228, Bombay 2.  
**Ratilal Hemraj.**—Mulchand Mansion, Princess Street, Bombay 2.  
**R. K. Mehta & Co.**—Champsey Building, Princess Street, Bombay 2.  
**R. Nandlal & Co. (Pharmaceuticals).**—72-A, Champsey Building, Princess Street, Bombay 2.  
**Rele, K. B., & Sons.**—Anand Bhuvan, Vithalbhai Patel Road.  
**Reshamwala, C. K., & Co.**—Shuruff Mansion, Princess Street, Bombay.  
**Rose Pharmacy.**—Anand Bhuvan, Princess Street, Bombay 2.  
**Roy & Company.**—176, Princess Street, Bombay 2.  
**Royal Chemists.**—Queen's Chambers, Queen's Road.  
**Rustom, K., & Co.**—69, Wodehouse Road, Colaba.  
**S. MATHURADAS & CO.**—P.O. Box No. 2113, Princess Street, Bombay 2. Grams: "SMATHURCO." Phone: 30273. Stockists of Laboratory & Fine Chemicals, Analytical & Laboratory Reagents, Amino-Acids, Stains, Drugs, Vitamins etc. manufactured by E. Merck & other Renowned products.  
**Scientific Chemists, The.**—105, Princess Street, Bombay 2.  
**Sevantilal Kantilal & Co.**—84, Mangaldas Building, Mangaldas Road.  
**Shah Brothers.**—32, Princess Street, "Jintan" Agency, Bombay 2.  
**Shah & Co.**—Anand Bhuvan, Princess Street.  
**Shantilal Ltd.**—Princess Street, P.B. No. 2140, Bombay 2.  
**Sheth, C. J., & Co.**—102, Mangaldas Building, Mangaldas Road, Bombay 2.

**Simplex Chemical Co.**—108-C, Chhaktewadi, Tardeo.  
**Sinora Chemical Works.**—581, Chira Bazar, Girgaum.  
**Standard Pharmacy.**—Anand Bhuvan, Princess Street, Bombay 2.  
**Stewart's Laboratories.**—327, Hornby Road, Fort.  
**S. Shantilal & Co.**—35, Kika Street, Gulawadi, Bombay 4.  
**Standard Medical Agencies.**—18, Anand Bhuvan, Princess Street, P.B. No. 2426, Bombay 2.  
**Tarachand & Co.**—5, Sleater Road, Grant Road.  
**Thakkar Bros.**—82, Princess Street, Bombay 2.

**THE BOMBAY MEDICINE SUPPLY CO.**—46, Old Hanuman Lane, Princess Street, P.B. No. 2340, Bombay 2. Dealers in Drugs and Medicines, Chemicals, Laboratories Chemicals, Surgicals, Hospital Sundries and order Suppliers, etc., etc.  
**Thomson & Taylor Ltd.**—117-119, Mahatma Gandhi Road, Bombay 1.  
**T. J. Shah & Brothers.**—Mulchand Mansion, Princess Street, P.B. No. 2180, Bombay 2.  
**Tribhovandas Khimji & Bros.**—13, Princess Street.  
**Umeshchandra Jayantilal & Co.**—Mahendra Mansion, New Hanuman Lane, Bombay 2.  
**Union Drugs & Pharmaceutical Co.**—Old Hanuman Lane, Jayabal House, Near Angania's Chawl, P.B. No. 2559, Bombay 2.  
**Vally, J. H.**—Mangaldas Road, Princess Street, Bombay 2.  
**Vanmali Bhika & Co.**—Devkaran Mansion, Princess Street, Bombay 2.  
**Vijay Trading Corporation.**—297-B, Old Post Office Lane, Mangaldas Market, Bombay 2.  
**Vinchhi Bros. & Co.**—Old Small Causes Court Building, Princess Street.  
**Vora, B. P., & Co.**—126, Princess Street.

**VORA BROTHERS.**—Chemists and Druggists, Wholesale Dealers and direct importers of Laboratory Chemicals and Glassware. 214-B, Princess Street, Bombay-2. Phone: 20256, 30204 & 39353. Grams: "BECKMAN".  
**Vora Bros.**—218, Princess Street.  
**Vora, M. J., & Co.**—423, Kalbadevi Road, Bombay 2.  
**V. Rajkotia & Co.**—Varjivan Mansion, 52, Princess Street, Bombay 2.  
**Vyas Brothers Ltd.**—Devkaran Mansion, Princess Street, Bombay 2.  
**Wagh, T. A., & Co.**—Kshatriya Dnyati Nivas, New Charni Road, Girgaum.  
**Wagh & Sons.**—Polbawdi, Parel.  
**Western Trading Corporation.**—439, Kalbadevi Road, 1st Floor, Bombay 2.  
**Zill & Co.**—Princess Street.

### CHEMISTS (MANUFACTURING)

**Abbot Laboratories (India) Ltd.**—Jehangir Building, Mahatma Gandhi Road, Fort, G.P.O. Box No. 1334, Bombay.  
**Alemble Chemical Works Co., Ltd.**—Baroda.—Lakshmi Buildings, Sir Phirozshah Mehta Road, Fort.  
**B. A. & Brothers.**—98, Princess Street, Bombay 2.  
**British Drug Houses (India) Ltd.**—Imperial Chemical House, Ballard Estate.  
**Chemical, Industrial & Pharmaceutical Laboratories, Ltd. (Cipla).**—289, Bellasis Road, Byculla, Bombay 8. Phones: 75211, 75212 and 75213.  
**Continental Drug Co. Ltd.**—135, Worli Road, Worli. Phone: 45451. Grams: "Condrugco."  
**Crookes Laboratories Ltd.**—Court House, Carnac Road, Bombay 2.  
**Dongre, K. T., & Co.**—82, Meadows Street, Fort, Bombay.  
**DR. BHALCHANDRA LABORATORY.**—215, Charni Road, Girgaum, Bombay 4. Phone: 354221. Grams: "BHALLABS". Manufacturers of High quality Pharmaceuticals and Ethical Specialities.  
**Fairdeal Corporation Ltd., The.**—Lakshmi Building, Sir Phirozshah Mehta Road, Fort, Bombay.  
**Gajjar's Standard Chemical Works, Ltd., Prof.**—New Islam Mills Compound, Currey Road, Bombay 13.  
**Holmes Laboratory.**—Upper Forjett Hill, Bombay 26.  
**J. & J. De Chane.**—Star Mansion, 30, Clare Road, Byculla, Bombay.  
**Kemp & Co., Ltd.**—Elphin House, Cadell Road, Bombay 28.  
**MAC LABORATORIES PRIVATE LTD.**—Great Social Building, Sir Phirozshah Mehta Road, G.P.O. Box No. 1831, Bombay 1. Phone: 265051. Grams: "MACLON." Manufacturing Chemists.  
**May & Baker (India) Private Ltd.**—Karimjee House, Sir Phirozshah Mehta Road, Fort, Bombay.  
**Parke, Davis & Co., Ltd.**—Canada Building, Hornby Road, Fort.  
**PHARMED PRIVATE LTD.**—25/31, Rope Walk Lane, Fort, Bombay 1. Phones: 254244, 254260. Grams: "Pharmed." Factory: Sion Trombay Road, Deonar, Chembur, Bombay 71. Phones: 521331/32/33.  
**Roy & Company.**—176, Princess Street, Bombay 2.  
**STANDARD CHEMICAL & PHARMACEUTICAL CO.**—Atlas Mills, Reay Road, Bombay 10. Phone: 373542. Grams: "GERMOL." Manufacturers of Saccharin B.P. Soluble & Insoluble.



United Pharmaceutical Co.—157-59, Girgaum Road, Bombay 4.  
Zandu Pharmaceutical Works, Ltd., The.—Gokhale Road (South).  
Zenith Chemical Works Private Ltd.—4, French Bridge, Bombay 7.

### CHINA CLAY

Apex Traders.—Advani Chambers, Sir Phirozshah Mehta Road, Fort.  
Arvinda Trading Co. Private Ltd.—105, Apollo Street, Fort.  
Chimanlal Patel & Co.—174, Hornby Road, Fort.  
Gujarat Clay Mills.—246, Reay Road, Bombay 10.  
Industrial Minerals and Chemical Co.—125, Narayan Dhuru Street, Bombay 3.  
Jashwantlal Maneklal & Co.—40, Vir Nariman Street, Fort.  
Kirtikumar & Co.—80, Bhandari Street, Mandvi, Bombay 3.  
Pannalal Ramdayal Chindak.—153, Princess Street, Bombay 2.  
S. Ratilal & Co.—268, Frere Road, Bombay 1.  
Universal Minerals & Chemical Co.—7/10, Horniman Circle, Botawala Building, Fort, Bombay.

### CHUCKS MANUFACTURERS

# JEMCO

REGD. CHUCKS



True,  
Dog,  
Magnetic  
& Drill  
CHUCKS.

WIDELY PREFERRED  
FOR PRECISION &  
DURABILITY

Mfgd. By:

JEMCO CHUCK  
MFG. WORKS  
Bombay-64  
Phone: 692612.

Accredited Dealers:  
AMES TOOLS &  
H/WARE CO.  
(House of Chucks)  
111, Nagdevi St.,  
Bombay-3  
Phone: 323839

JEMCO CHUCK MANUFACTURING WORKS.—Office: 24, Nagdevi Cross Lane, Bombay 3-BR. Phone: 32-3839. Factory: Ram Baug, Swastik Compound, G. B. Road, Malad (West), Bombay 64 NB. Phone: Factory 692612. Manufacturers of "JEMCO" Lathe Chucks and Engineering Tools.

### CIGARETTE MANUFACTURERS

GOLDEN TOBACCO CO. PRIVATE LTD.—Cigarette Manufacturers & Exporters. Tobacco House, Vile Parle, Bombay 56. Phone: 572251. Grams: "IMPORTERS," Bombay.

### CINEMA AND MOTION PICTURES

Abhaya Chitra, C/o Lewis Irani & Co.—136, Girgaum Road, Near Majestic Cinema, Bombay 4.  
Akash Chitra.—Famous Cine Building, Mahalaxmi, Bombay 11.  
Alankar Chitra.—19, Prem Court, Sir Jamshedji Tata Road, Churchgate Reclamation, Bombay 1.  
All India Pictures.—Ratan Villa, Vincent Square, Dadar, Bombay 14.  
Anand Films.—4-B, Naaz Bldg., Lamington Road, Bombay 4.  
Anupam Chitra.—Ranjit Studios, Main Road, Dadar, Bombay 14.  
Art Films of Asia Ltd.—Olympia House, Warden Road, Bombay 26.  
A. R. Films.—3rd Floor, Hasan Mansion, Dhobi Street, Corner of Masjid Bunder Road, Bombay 3.  
Ashok Pictures.—Rattan Villa, Vincent Square, Bombay 14.  
Azad Chitra.—136, Girgaum Road, Bombay 4.  
Bal Vithal Films.—4th Floor, Prabhawadi, Behind Post Office, Mahim, Bombay 16.  
Basant Pictures.—(Studio) Kolwada Borla Road, Behind Golf Club, Chembur. Office: 136, Chamarbagh Road, Parel, Bombay 12.  
Basu Chitra Mandir Private Ltd.—Shree Sound Studios, Dadar, Bombay 14.  
B. B. Cine Corporation, Ltd.—Whiteaway Building, Hornby Road, Fort.  
Bhagwan Art Productions.—Care Films, Walkar House, Lamington Road, Bombay 4.  
Bimal Roy Productions.—Mohan Studios, Andheri, Bombay.  
B. K. Patel & Co.—106, Meadows Street, Fort.  
Bombay Film Labs. (Private) Ltd.—149, Portuguese Church Street, Bombay 28.  
Bombay Studios Ltd.—736, Khar Pali Road, Khar, Bombay 21.  
Bombay Movietone Private Ltd.—2-B, Naaz Bldg., Lamington Road, Bombay 4.

B. R. Films.—4, Chinoy Colony, Juhu Road, Santa Cruz, Bombay 23.  
Central Cine Corporation.—68, Tardeo Road.  
Central Studios.—74-94, Tardeo Road, Bombay 7.  
Chandra Films.—4-G, Naaz Bldg., Lamington Road, Bombay 4.  
Chitra Bharati, C/o Shrikant Studios.—Chembur, Bombay.  
Chowdhry Art Productions.—252, Ripon Road, Byculla, Bombay 8.  
Columbia Films of India Ltd.—Imperial Chambers, Ballard Estate.  
Dawlat Corporation Ltd.—Patel Chambers, French Bridge, Bombay 7.  
De Lux Films.—103, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
Deepshikha Chitra Niketan.—59, Bhatia Bhavan, Asha Lane, Gokhale Road, Dadar, Bombay.  
Deep & Pradeep Productions.—250, Famous Cine Building, Mahalaxmi, Bombay 11.  
Desai Films.—3-F, Naaz Bldg., Lamington Road, Bombay 4.  
Diamond Pictures Ltd.—Distributions Office: Seksaria Building, Sandhurst Road, Bombay 4.  
Dinesh Films.—Prakash Studios, Andheri, Bombay.  
Dossi Films Ltd.—Manik Villa, Saraswati Road, Santa Cruz, Bombay 23.  
Eagle Lion Distributors (India) Ltd.—"Dhan Nur," Sir Phirozshah Mehta Road, Fort.  
Eagle Films.—220, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
Educational Films of India.—195, Hornby Road, Fort.  
Excelator Film Exchange.—Goverdhan Building, Parekh Street, Bombay 4.  
Excelator Movietone.—Goverdhan Building, Parekh Street, Bombay 4.  
Famous Cine Labs. & Studios Ltd.—Haines Road, Mahalaxmi, Bombay 11.  
Famous Cine Labs. & Modern Studios.—160, Tardeo Road, Bombay 7.  
Fazli Bros. Ltd.—Rattan Villa, Vincent Square, Dadar, Bombay 14.  
Filmco.—5, Habib Park, Clare Road, Byculla, Bombay 8.  
Film Arts.—9, Sobhani Road, Bombay 5.  
Film Club.—National House, Tulloch Road, Apollo Bunder, Bombay, Tel. Address: "EDUFILMS." Phone: 211159. Distributors of Full-length feature Films and Educational Films and Children's Films in 16 mm.  
Filmistan Ltd.—Botawalla Building, 11-13, Elphinstone Circle, Fort.  
Goel Cine Corporation.—207, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
Golden Movies, C/o Mohan Studios.—Kurla Road, Andheri, Bombay.  
Global Film Bureau.—245, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
Guru Dutt Films Private Ltd.—147, Famous Cine Bldg., Haines Road, Mahalaxmi, Bombay 11.  
Harish Productions.—Famous Cine Building, Mahalaxmi, Bombay 11.  
Hemen Gupta Productions.—226, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
Hemlata Pictures.—Goverdhan Bldg., Parekh Street, Bombay 4.  
Ismail Films.—223, Famous Cine Laboratory, Mahalaxmi, Bombay 11.  
J. Arthur Rank Film Distributors (India) Ltd.—Dhan-Nur, Sir Phirozshah Mehta Road, Fort, Bombay.  
J. S. Pictures.—146, Famous Cine Bldg., Mahalaxmi, Bombay.  
Kaizer Films.—109, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
Kala Kendra.—Shrikant Studios, Chembur, Bombay.  
Kalpana Pictures.—203, Famous Cine Building, Haines Road, Mahalaxmi, Bombay 11.  
Kanwar Kala Mandir, C/o T. M. Bihari.—1-A, Naaz Bldg., Lamington Road, Bombay 4.  
Kapurchand & Co.—Roxy Chambers, New Queen's Road, Bombay 4.  
Kapurchand Private Limited.—Roxy Chambers, New Queen's Road, Bombay 4.  
Kashyap Productions.—Aldina Mansions, 21, Carmichael Road, Bombay.  
Kuldip Pictures Ltd.—Sarita Villa, Seven Bungalows, Versova Road, Andheri, Bombay.  
Kwatra Art Productions.—206, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
Light & Shade.—245, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
L. M. Movies, Famous Cine Labs. & Studios Ltd.—Mahalaxmi, Bombay 11.  
Madhubala (Private) Ltd.—Arabian Villa, Pali Hill, Bandra, Bombay.  
Madhukar Pictures.—42, Bhoiwada Street, Bandra, Bombay.  
Mahesh Chitra, C/o Prakash Studio.—Andheri, Bombay.  
Mars & Movies.—549, Carnac Road, Dhobi Talao, Bombay 2.  
Meena Pictures.—Swadeshi Mills Estate, Tata Road, Bombay 4.  
METRO-GOLDWYN-MAYER INDIA LTD.—Metro House, Mahatma Gandhi Road, Bombay 1. Phone: 242108. Grams: "METROFILMS."  
Mitra Productions.—Goverdhan Bldg. No. 2, Parekh Street, Bombay.  
Mohan Pictures.—Mehta Lodge, Kurla Road, Andheri.  
Mohan Pictures, C/o Ramniklal Mohanlal & Company.—199 Khetwadi Main Road, Bombay 4.  
Movie Stars, C/o Shree Sound Studios.—Dadar, Bombay 14.  
Mukti Films.—3-D, Naaz Bldg., Lamington Road, Bombay 4.  
Narang Films.—150, Famous Cine Labs. & Studios Ltd., Mahalaxmi, Bombay 11.



Nathan Productions, C/o Raman Studios.—Dadar, Bombay 14.  
 National Education & Information Films Ltd.—National House, Tulloch Road, Apollo Bunder, Bombay. Grams: "EDUFILMS." Phone: 35159.  
 Natraja Productions.—Famous Cine Building, Mahalaxmi, Bombay 11.  
 Navketan.—Khira Kutir, Ghodbunder Road, Santa Cruz, Bombay 23.  
 Naya Films, C/o Dossi Films Private Ltd.—Raman Studios, Dadasaheb Phalke Road, Dadar, Bombay 14.  
 Neo Lite Films Ranjit Movietone.—119, Main Road, Dadar, Bombay.  
 New Oriental Pictures.—150, Famous Cine Bldg., Haines Road, Mahalaxmi, Bombay 11.  
 Noronha Private Limited.—Liberty Building, Marine Lines, Bombay 1.  
 Novel Productions.—9, Krishna Ashram, Jogeshwari East, Bombay 42.  
 Orient Film Corporation.—220, Guliswadi, Agakhan Building, Bombay 2.  
 Paul Studio.—Prospects Chambers, Hornby Road, Bombay.  
 Pancholi Productions.—217, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
 Parasia Farms (Private) Ltd.—50, Shivaji Park, Dadar, Bombay 28.  
 Pancholi Pictures.—217, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
 Paramount Films of India Ltd.—Hague Building, Ballard Estate, Fort.  
 Patel, B. K., & Co.—106, Meadows Street, Fort.  
 Peerless Pictures.—116, Charni Road.  
 P. S. Pictures.—Famous Cine Bldg., Mahalaxmi, Bombay 11.  
 P. N. Films Private Ltd.—Sagar Mandir, Shivaji Park Beach, Bombay.  
 Poonjiajee J. M. Jehangir.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay 1.  
 Pushpa Pictures.—1-E, Naaz Bldg., Lamington Road, Bombay 4.  
 Pradeep Productions.—63-B, West Avenue, Santa Cruz, Bombay.  
 Raman Productions.—Dadasaheb Phalke Road, Dadar, Bombay.  
 Ravi Kala Chitra.—Anil, Hanuman Road, Vile Parle, Bombay.  
 Republic Films Corporation.—257, Famous Cine Bldg., Haines Road, Mahalaxmi, Bombay 11.  
 B. K. O. Radio Pictures, Ltd.—Dhan-Nur, Sir Phirozshah Mehta Road, Fort, Bombay.  
 Roopkamal Chitra.—201-B, Khetwadi Main Road, Bombay 4.  
 Roop Kala Pictures.—201-B, Khetwadi Main Road, Bombay 4.  
 Roopanjali.—Central Avenue, Chembur, Bombay.  
 Roshni Films.—309-E, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
 Sadiq Productions Ltd.—Shree Sound Studios, Gokuldas Pasta Road, Dadar, Bombay.  
 Sami Pictures.—2nd Floor, No. 8, Rustom Baug, Byculla, Bombay 8.  
 Saraswati Art Films.—Famous Cine Bldg., Mahalaxmi, Bombay 11.  
 Sardar Pictures.—Jyoti Studios, Kennedy Bridge, Bombay 7.  
 Sharad Productions.—Nehru Road, Vile Parle, Bombay.  
 Sheikh Mukhtar Productions.—310, Famous Cine Bldg., Haines Road, Mahalaxmi, Bombay 11.  
 Shree Shakti Films.—204, Famous Cine Building, Mahalaxmi, Bombay 11.  
 Shree Sound Studios.—10, Goculdas Pasta Road, Dadar.  
 Sippy Films Ltd.—3-G, Naaz Bldg., Lamington Road, Bombay 4.  
 Solar Films.—Shree Sound Studios, Dadar, Bombay.  
 Sterling Investment Corp., Ltd.—169, Kurla Road, Andheri, Bombay.  
 S. P. Pictures.—205, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
 Subodh Mukerji Productions.—15, Purshottam Bldg., Tribhuvan Road, Bombay 4.  
 Sunny Art Productions Ltd.—Famous Cine Laboratories and Studios Ltd., Haines Road, Mahalaxmi, Bombay 11.  
 Super Film Circuit.—Rexy Theatre, Queen's Road.  
 Supreme Film Distributors.—55, Main Road, Dadar.  
 Swastik India Ltd.—Chowpatty Chambers, Sandhurst Road.  
 Talwar Films.—217, Famous Cine Bldg., Mahalaxmi, Bombay 11.  
 Twentieth Century-Fox Corporation (India), Ltd.—Metro House, Mahatma Gandhi Road.  
 Universal Pictures (India) Ltd.—Mustafa Building, Sir Phirozshah Mehta Road.  
 Vanguard Pictures.—365, Girgaum Road, opp. Thakurdwar P. O., Bombay 2.  
 Vakil Productions.—3-F, Naaz Bldg., Lamington Road, Bombay 4.  
 Varma Films.—4-A, Rawalpindiwalla Bldg., Tribhuvan Road, Bombay 4.  
 Variety Productions.—165-C, Vincent Road, Dadar, Bombay 14.  
 Vidyut Chitramandir.—6, Indira Niwas, Old Nagardas Road, Andheri (East), Bombay.  
 Vinod Films.—4-G, Naaz Bldg., Lamington Road, Bombay 4.  
 Wadia Movietone.—136, Chamarbaug Road, Parel, Bombay 12.

### CINEMA MACHINERY

Cine Sound Equipments.—470, Sandhurst Road, Bombay 4.  
 Cinetechs.—605, Girgaum Road, Opp. Wadia's Fire Temple, Bombay 2.

Gaumont-Kalee Limited.—Ashok Chakravati Road, Ashok Nagar, Kandivlee East, Bombay 67.  
 Imenes Private Limited.—94, S. V. Road, P. O. Box 8002, Bombay 56 AS. Phone: 571634, Grams: "IMANESCOL". Springs and Forms out of Spring Wires and Strips for your Industry.  
 National Education & Information Film, Ltd.—National House, Tulloch Road, Apollo Bunder, Fort.  
 Photo Cine Sound Private Ltd.—12, Rampart Row, Bombay 1.  
 Photophone Equipments Ltd.—9, Marine Lines, Bombay.  
**WESTREX COMPANY (Prop.: Cinerama Private Ltd.)**—Metro House, Mahatma Gandhi Road, Bombay 1. P.O. Box 1232. Tel. Address: "WESTREX." Phones: 242273 & 242274.

### CINEMATOGRAH IMPORTERS

Ama Private Ltd.—"Photo Cine Sound," Canada Building, Hornby Road, Fort.  
 Central Camera Co. Ltd.—195, Dr. Dadabhai Naoroji Road, Fort, Bombay.  
 Cine Agency (India).—Parekh Building, 18, New Queen's Road, Bombay 4.  
 Cinema Private Ltd.—532, Sandhurst Bridge, Bombay 7.  
 Cinetechs.—605, Girgaum Road, Opp. Wadia's Fire Temple, Bombay 2.  
 Dawlat Corporation Ltd.—Patel Chambers, French Bridge, Bombay 7.  
 Gaumont-Kalee Limited.—Ashok Chakravati Road, Ashok Nagar, Kandivlee East, Bombay 67.  
 General Radio & Appliances Ltd.—Opera House, Bombay 4. Phone: 26204.  
 Globe Theatres, Ltd.—Gaiety Building, opp. Victoria Terminus, Hornby Road.  
 International Talkie Equipment Co. Private Ltd.—17, New Queen's Road, Bombay 4.  
 Metro-Goldwyn-Mayer India, Ltd. (Incorporated in U.S.A.)—Metro House, Mahatma Gandhi Road.  
 Patel India Ltd.—190, Dr. Dadabhai Naoroji Road (Hornby Road), Fort, Bombay.  
**PHOTOPHONE EQUIPMENTS LTD.**—(An associate of Radio Corporation of America); Regd. Office: Sandhurst Bridge, 532, Sardar Vallabhbhai Patel Road, Bombay 7 WB.; Phone: 353421; Grams: "PHOTOPHONE", Bombay. Assembly Plant: Industry Manor, Worli & Cadell Road Junction, Worli, Bombay 28 DD. Phone: 451712; Grams: "PHOTOPHONE", Bombay; Branch Offices: Delite Cinema Building, Asaf Ali Road, New Delhi 1. Phone: 277490; Grams: "PHOTOPHONE", New Delhi; Manufacturers of RCA Photophone 16mm, 35 mm and 70 mm. Sound & Projection Equipments. Distributors of RCA Broadcasting, Television and Communication Equipment. Managing Director: M. A. Fazalbhoy.  
 Rko Radio Pictures Ltd.—Dhan-Nur Building, Sir Phirozshah Mehta Road, Fort.  
 Westrex Company India.—Metro House, Mahatma Gandhi Road, Bombay No. 1.

### CIRCLIPS

B. CHOWDHURY & CO.—Indian Globe Chambers, Fort Street, Bombay 1. Phone: 26-3479. Grams: "BISUKHI". Sole Agents for Orbis G.M.B.H., West Germany.  
**FAIRFIELD MANUFACTURING COMPANY.**—Hanuman Building, 4th Floor, Tambakanta, Pydhonie, Bombay-3. (B.R.). Phones: 324323 & 323758. Grams: "MASTRANICOY." Manufacturers of Spring Washers, Shake-proof Washers, Circlips and Precision Strip Forms. Factory at: Masrani Estate, Halav Bridge, Kurla, Bombay-70 (AS).  
 IMANES.—94, S. V. Road, Eral, P.O. Box 8002, Bombay 56. Phone: 571634. Grams: "BELLIBONE (SZ)." For Springs & Forms out of Wires and Strips for your Industry.  
 IMANES PRIVATE LIMITED.—94, S. V. Road, Eral, P.O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANESCOL." Springs & Forms out of spring Wires and Strips for your Industry.

### CLEARING AND FORWARDING AGENTS

ABRAHAM, D., & SONS PRIVATE LTD.—Hague Building, Sprott Road, Ballard Estate.  
 Amar Clearing Agency.—Dabholkar Wadi, 384M, Kalbadevi Road, Bombay 2.  
 ARDESHIR B. CURSETJEE & SONS (PRIVATE) LTD.—6, Rampart Row, Fort, Bombay. Phones: 254223, 252543 & 254077. Grams: "GREYHOUND." Master Stevedores & Dubashes, Clearing & Forwarding Agents.  
 Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.



**BHARAT SHIPPING AGENCY PRIVATE LTD.**—Ida Mansion, Karwar Street, Ballard Estate, Bombay 1. Phone: 265588. Grams: "PRIZEPURSE."

Bombay Shipping Agency.—Beaumont Building, Calicut Street, Fort.

**BUHARIWALA & SONS, B.C. (Estd. 1925).**—5, Graham Road, 1st Floor, Ballard Estate, Bombay 1. Phone Nos. 265451/53. Grams: "BECIBESONS." Licensed Clearing, Shipping & Baggage Agents. Branch Office: 3/A, Asaf Ali Road, Saraswati Devi Building, New Delhi. Phone 271796.

## CHINUBHAI KALIDASS & BROS.

CLEARING, FORWARDING, SHIPPING  
AGENTS AND TRANSPORT CONTRACTORS

Bombay Mutual Chambers, 3rd Floor,  
19/21, Hamam Street, Fort, Bombay-1

Phone: 251025

Grams: "SUDHIR"

Branch: DBZ/S-53 KANDLA, GANDHIDHAM

Daily Truck Service to Bulsar-Ahmedabad

**Cook & Son, Thos., Ltd.**—Cook's Building, Hornby Road.

**COOPER LANDING CO.**—Dady House, 50-52, Veer Nariman Street, Fort, P. O. Box No. 57, Bombay No. 1.

**COX & KINGS (AGENTS), LTD.**—Lloyds Bank Building, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 26-3065 (5 lines). Grams: "COXSHIP."

**DADABHOY HORMUSJEE & CO.**—Dady House, 50-52, Veer Nariman Street, P. O. Box No. 57, Bombay. Phone: 255628-6.

**EASTERN BUNKERERS LTD.**—Scindia House, Dougall Road, Ballard Estate, Bombay 1. Phone: 262461. Grams: "VAVTO."

Eastern Shipping Agency.—Asian Building, Nicol Road, Ballard Estate.

Engineer, S. D., & Son.—Imperial Chambers, 32, Wilson Road, Ballard Estate.

**EXPRESS TRANSPORT PRIVATE LTD.**—Western India House, Sir Phirozshah Mehta Road, Bombay 1. Phone: 253864-5. Grams: "MOVEFAST." Clearing, Forwarding & Shipping Agents. Branches at Ahmedabad & Gandhidham.

**Fakirji Rustomji & Sons.**—Carnac Bridge Goods Station.

**FREIGHT CARRIERS PRIVATE LTD.**—Clearing, Forwarding, & Travel Agents. 43, Tamarind Lane, Fort, Bombay. Phone: 253401 & 253305. Grams: "QUICKFREIT."

Girdharilal & Co.—Imperial Chambers, Ballard Estate, Fort.

**GOKALDAS & SONS.**—11-13, Mint Road, Opp. G.P.O., Bombay 1. Licensed Custom House Agents. Clearing, Forwarding, Shipping & Warehousing Agents for Industrial Concerns. Large Foreign Indian Firms and Banks. Phones: 261416 & 264582. Grams: "SONGOKAL."

Gunabdas, M., & Co.—Mubarak Manzil, 104, Apollo Street, Fort.

Hardecastle, Waud & Co., Ltd.—Alice Building, Hornby Road, Fort.

India Travel Service Ltd.—People's Building, Sir Phirozshah Mehta Road, Bombay 1.

Jeena & Co.—10, Veer Nariman Street, Fort.

**J. F. KAPADIA & CO.**—33, Khorshed Bldg., Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 261717.

**KANJI JADHAVJI & CO.**—Musjid Bridge, Mandvi, Bombay 9. Phones: 323681 & 321412. Grams: "GITA." Freight Brokers, Clearing, Forwarding, Shipping, Landing & Travel Agents.

Kokatay Brothers.—Cama Building, 9, Ash Lane, Fort.

Koorverjee V. Curumsey & Co.—Lentin Chambers, Dalal Street, Fort. Branch: Kandla Port (Kutch).

**LESLIE, E., & CO.**—Botawalla Building, 6-10, Horniman Circle, Fort. Shipping, Clearing, Forwarding, Baggage and Insurance Agents. Packers of Household Effects. Phone: 255550. Grams: "RITTA."

Manilal Mohanlal Karachiwalla.—Laheri House, 81, Mahomedalli Road, Bombay 3.

**M. Dharamdas & Co.**—Mehta House, Calicut Street, Ballard Estate, Bombay 1. Clearing, Forwarding and Shipping Agents.

Mehta & Brothers, D. M.—Eda Mansion, Karwar Street, Fort.



PHONE:  
251571  
(5 lines)  
255377

12, RAMPART ROW  
FORT - BOMBAY 1

Clearing • Forwarding  
Shipping • Insurance  
Travel • Warehousing

COMPETITIVE RATES PROMPT SERVICE

Branches: DELHI, CALCUTTA, MADRAS,  
AHMEDABAD & GOA

Mehta, Ramkrishna & Co.—Khandelwal Bhavan, 166, Dr. Dadabhai Naoroji Road, Fort.

Narottam & Pereira Ltd.—Scindia House, Dougall Road, Ballard Estate.

**NEW GLOBE SHIPPING SERVICE PRIVATE LTD.**—Khatau Building, 44, Old Custom House Road, Fort, Bombay 1. Phone: 251835 and 251456. Grams: "GLOBESHIP."

**NENSI TEJPAL & SONS.**—8, Maruti Lane, Fort, Bombay-1. (Cable: "Nentipal") Licensed Clearing, Forwarding & Shipping Agents & Banks "Muccadams". Phone: 261338.

**NUSERVANJI RUTTONJI NAZIR & SONS.**—Stock Exchange Bldg., Rooms Nos. 141/143, Apollo Street, Fort, Bombay 1. Phone Nos. Office: 253312 & 251759.

**N. S. GUZDER & CO. PRIVATE LTD.**—Head Office: Neville House, Ballard Estate. Branch: Bombay House, Bruce Street, Fort. General Shipping and Forwarding Contractors, Cotton Merchants; Phones: 263414/15 and 251501—Extn. 480.

**ODHARAM BULCHAND & CO.**—Licensed Clearing, Shipping & Travel Agents to the Government of India, 19, Bank Street, Fort, Bombay 1. Phone: 253705. Grams: "CLEAR-GOODS."

**OTA INDIA.**—Clearing, Shipping and Stevedoring Agents, 12, Rampart Row, Bombay 1. Phones: 254772, 256592. Grams: "OTAIND." Central Office: 159, Colaba Road, Bombay 5. Grams: "CENOTA". Phone: 212602. Branches: Bombay (Phones: 254712, 256592); Calcutta (Phones: 236781-2); Kandla (Phone: 2145 Gandhidham) and New Delhi (Phone: 43799).

Overseas Shipping Agency.—76, Bhandari Street, Bombay 8.

**P. CAWASJI & CO.**—18, Karwar Street, Fort, Bombay 1. Phones: 263025/261679. Grams: "PICOSJICO." Storage facilities available. Despatches by Rail, Sea and motor transport arranged.

**PARIKH & CO., K. M.**—General Assurance Bldg., 232, Dr. Dadabhai Naoroji Road (Hornby Road), Fort, Bombay. Phone: 264774.

**PIONEER CONSOLIDATED CO. OF INDIA LTD.**—11/13, Botawalla Building, Horniman Circle, Bombay 1. Phone: 253326. Grams: "PIONIND." Clearing, Forwarding, Shipping and Insurance Agents. E.O.: 14/64, Civil Lines, Kanpur.

**PURSHOTAMDAS MADHAVANI & CO., PRIVATE LTD.**—Botawalla Building, 8, Horniman Circle, Fort, Bombay. Phone Nos. 251687, 253159, 264558. Grams: "STEVEDORE". Stevedores, Clearing and Forwarding Agents. Managing Director: M. Sunder Rajan. Res. Phone: 521830.

**SHROFF & CO.**—Alice Bldg., Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 253254. Grams: "BONSECKS". Shipping, Clearing, Forwarding & Insurance Agents.

Sindhi Clearing Agency.—384-E, Dabholkar Wadi, Kalbadevi Road, Bombay 2.

**SODDER & CO., A. M. (Established 1889).**—Oldest Custom House Agents 11 1. Travel Passenger and Recruiting Agents, Agents at London, Marmagao. "Bank Street Building", Top Floor (Behind State Bank of India), 11, Bank Street, Fort. Post Box No. 708. Tel. Address: "SPEEDY," Bombay. Phone: 255683.

Thos. Cook & Son (Continental & Overseas) Ltd.—Cook's Building, Hornby Road, Fort.



**TRAVELS & SHIPPING PRIVATE LTD.**—Darabshaw House, Dougall Road, Ballard Estate, P.O. Box 1314, Bombay 1. Phone: 263548. Grams: "TAVELAGENT." Travel, Clearing, Forwarding & Shipping and Warehousing Agents.

**TULSIDAS KHEMJI PRIVATE LTD.**—46, Veer Nariman Road, Bombay No. 1, Muccadams to the leading Banks in Bombay, Phone: 255084 (4 lines). Grams: "NACHIKETA."

**UNITED TRANSPORT.**—Hague Building, Sprott Road, Ballard Estate, Bombay 1. Phone: 261552.

White & Co.—86, Mint Road, Fort.

### CLOTH MERCHANTS (WHOLESALE & RETAIL)

Acme Agencies.—20, Hamam Street, Fort.  
Adarsha Vastralaya.—7/8, Swadeshi Market, Kalbadevi Road.  
Allied Exporters.—Kumud House, 267, Dr. Dadabhoi Naoroji Road, Bombay.

Arvinda Trading Co., Ltd.—105, Apollo Street, Fort.

Bajaj Brothers Ltd.—Round Building, Kalbadevi.

Bawa Parduman Singh & Sons.—Chandra Chowk, Mulji Jetha Market, Bombay No. 2.

Bhavani Prasad Girdharilal.—Jai Hind Building No. 4, Bhuleshwar, Bombay 2. Tel. Add.: "Tandaco."

Bombay Swadeshi Co-operative Stores Co., Ltd.—Western India Building, Sir Phiroozshah Mehta Road, Fort.

Calcutta Sola Hat Agency.—Dwarkanadas Building, Mangaldas Road.

Cawnpore Mills Depot.—Churchgate Street, Fort, Bombay No. 1.

Cham, Akial & Bros.—Sayee Bhuvan, 143, Princess Street, Bombay 2.

Chimanlal Mulchand & Co.—Waterloo Mansion, Mayo Road, Fort, Bombay.

Dilaj & Co.—20, Hamam Street, Fort.

Goolamally Ha-anjee.—78, Sheriff Devjee Street, Bombay 3.

Grand Bazar.—25, Colaba Causeway, Bombay 1.

K. Metharam.—491-3, Kalbadevi Road.

Kumar & Co.—37, Swadeshi Market, Kalbadevi Road.

Maganlal Haribhai Vyas.—418, Kalbadevi Road, Bombay 2.

Maneklal G. Kapadia.—9-11, Swadeshi Market, Kalbadevi Road, Bombay No. 2.

Master Cloth Store.—5, Swadeshi Market, Kalbadevi Road, Bombay No. 2.

Mohanlal Tarachand & Co.—24-25, Swadeshi Market, Kalbadevi Road.

Morarji Vrindavan & Co.—Krishnaraj Chowk, Mulji Jetha Market, Bombay 2.

Mulchand Shyamal.—19, Swadeshi Market, Kalbadevi Road.

Nandram Jabarmal.—27, Swadeshi Market, Kalbadevi Road.

Parmanand Gordhandas & Co.—280, Carnac Road, Bombay 2.

Prakash Store.—82-83, Swadeshi Market, Kalbadevi Road, Bombay No. 2.

Rastriya Swadeshi Bhandar.—50/51, Swadeshi Market, Kalbadevi Road, Bombay No. 2.

Sampat Stores.—28-30, Swadeshi Market, Kalbadevi Road.

Shahade Athavle Ltd.—Shahade Building, Lady Jamshedji Road, Dadar, Bombay 28.

Sohani Brothers & Co.—Kale Building, Shivaji Park Road 3, Dadar, Bombay 28.

Sorabji Nowroji & Co.—16, Horniman Circle, Fort.

Thacker Ramchandras Ramdas.—14-15, Swadeshi Market, Kalbadevi Road.

Thakoral Chhotalal.—76, Swadeshi Market, Kalbadevi Road.

**VALIA & COMPANY.**—Leading Cloth Merchants, Dadar T.T. Bombay 14. Phone: 440801. Grams: "SUPERSTYLE".

Vensimal Basarmal & Bros.—Near Kalbadevi P. O., New Silk Bazar, Bombay 2.

Vijay Ready Made Cloth Store.—59, Swadeshi Market, Kalbadevi Road, Bombay No. 2.

Yacoub Ahmed Bros.—Topiwalla Mansion, Mahomedally Road.

### CLOTHING IMPORTERS AND DEALERS (SECOND-HAND)

C. P. Doshi & Co.—Bombay Mutual Building, Hornby Road, Fort.  
Hosseini, M. A., & Bros.—Lakshmi Building, Sir Phiroozshah Mehta Road, Fort.

**ISMAIL MOHAMED.**—169, Kambekar Street, Bombay 3. Second-Hand Clothing, Fents (Cut-pieces), Blankets and General Merchants. Phone No. 322952. Telegram: "FAVOURITE."

### COAL & COKE

Andrew Yule & Co., Ltd.—No. 82, Nicol Road, Ballard Estate.

Arvinda Trading Co. Private Ltd.—105, Apollo Street, Fort.

Bai Velbai Widow of Keshavji Bhimji.—Coal Depot, Byculla, Bombay.

Bhagwanlal P. Worah.—14, Hamam Street, Fort.

Bombay Gas Co., Ltd.—214, Dr. Dadabhoi Naoroji Road, Bombay 1. Phone: 261271. Grams: "CHRISTOLITE."

Chatrabhai & Co.—Coal Depot, Byculla, Bombay.

Chhaganlal Kothari.—31-35, Tribhuvan Road, Girgaum, Bombay.

Chhotalal & Co.—38, Prospect Chambers, Hornby Road, Bombay.

Chhotalal S. Joshi.—11, Bank Street, Fort, Bombay.

Chhotalal Jannadas & Co.—311, Sandhurst Road, Bombay 4.

Chhotalal Tricumji & Co.—Vithaldas Chambers, Fort, Bombay.

**CHOONILAL MANILAL PRIVATE LTD.**—Yusuf Building, Veer Nariman Road (Churchgate Street), Fort. Phone: 255161 (3 lines). Grams: "CHOONIMANI."

Coal Mining & State Minerals Ltd.—Afke Bldg., Hornby Road, Fort.

Daftari Brothers.—Manekharan Bldg., Sandhurst Road, Bombay.

Damodardas Bhagwandas & Co.—Easton Building, 29, Churchgate Street, 3rd Floor, Bombay 1.

Dhirajlal Harilal Shah.—94, Ghod Bunder Road, Borivli.

Durlabhji Dayalji.—Coal Depot, Byculla, Bombay.

**EASTERN BUNKERERS LTD.**—Scindia House, Dougall Road, Ballard Estate, Bombay 1. Phone: 262461. Grams: "VAVTO".

**EMPIRE COAL CO.**—375, Dadabhoi Naoroji Road, Fort, Bombay 1. Phone No. (Office) 253234, (Dept.) 371592. Steam Coal, Hard Coke & Charcoal, Soft Coke Merchants, Stores Depot, B.P.T. Rly., Byculla Goods Depot, Central Rly., Licensed dealers for the State of Maharashtra.

Gandhi & Co.—94, Meadows Street, Fort, Bombay.

Girdharilal & Co.—45, Podar Chambers, Parsi Bazar Street, Fort.

Gorden & Co.—Forbes Street, Fort, Bombay.

Govindjee Madhoojee & Co. Ltd.—Sir Vithaldas Chambers, 16, Apollo Street, Fort.

Jairam Keshavji.—Coal Depot, Byculla, Bombay.

Jehangir, J. M., Poonjajee.—Byramjee Mansion, Sir Phiroozshah Mehta Road, Fort.

Joshi & Co.—Kermani Building, opp. National City Bank of New York, Sir Phiroozshah Mehta Road, Fort.

Kalyanji Mavji & Co.—55, Apollo Street, Fort.

Kanji Karsandas.—Coal Depot, Byculla, Bombay.

Karamchand Thapper & Bros. Ltd.—Maher House, Fort, Bombay.

Kashi Coal Agency.—Coal Depot, Byculla, Bombay.

Khemji Dayalji.—Coal Depot, Byculla, Bombay.

Killick, Nixon & Co. Private Ltd.—Killick House, Home Street, Fort.

Krishna Coal Co.—Byculla Goods Yard, Bombay.

Laws, Wm., & Co.—Sorab Mansion, 35, Murzban Road, Fort.

Mehta, S. D., & Co., Ltd.—Rehman Building, Churchgate Street, Fort.

Mitchell Cotts & Co.'s Natal Coal.—Agents: Killick, Nixon & Co., Home Street, Fort.

Narottam & Pereira Ltd.—Scindia House, Dougall Road, Ballard Estate, Bombay 1.

Natwarlal Shamaldas & Co.—Noble Chambers, Parsi Bazar Street, Fort.

Nuservanji Ruttonji Nasir & Sons.—5, Hamam Street, Fort.

Padhar & Sons.—Vithaldas Chambers, Fort, Bombay.

Patel, M. K., & Co.—Wakefield House, 16, Sprott Road, Ballard Estate, Fort.

Patel & Co.—Byculla Goods Depot, Byculla, Bombay.

Premji Madhavji Sethia.—Coal Depot, Byculla, Bombay.

Purshotam Devchand & Co. Ltd.—Coal Depot, Byculla, Bombay.

Shah Brothers.—Tamarind Lane, Bombay 1.

**SHETHIA, S. D. & CO. PRIVATE LTD.**—Head Office: F/3 Gillander House, No. 8, Netaji Subhas Road, Calcutta. Phone: 229933 (5 lines). Grams: "SCHETHIACO." Telex No. 523, Code-021, Bombay Office: Podar Chambers, Parsi Bazar Street, Fort, Bombay. Phone: 255505/6. Gram: "SHETHIACO."

Universal Coal Co.—Coal Depot, Byculla, Bombay.

Vishnu Brothers.—Narajivas Dixit Road, Vile Parle, Bombay 24.

Yadav Brothers.—Coal Depot, Byculla, Bombay.

### COAL-TAR, PITCH, ROAD TAR, ASPHALT, BITUMEN, MARINE GLUE, NAPHTHALENE, ETC.

Bombay Gas Co., Ltd.—Empire of India Life Building, 214, Hornby Road, Fort.

**CHANDULAL & CO.**—Kathawala, 11, Kazi Syed Street, Bombay 9. Grams: "CORDCOIR." Phone: 325598.

Gulabchand Nathalal & Co.—45, Mirchi Lane, Bombay No. 3.

Jafferjee Valjee & Co.—Mirchi Lane, Mandvi, Bombay 3.

New Era Construction Co.—8, Botawala Building, Elphinstone Circle, Fort.

R. D. Sharma & Co.—14, Morchwar Building, Napoo Road, Matunga, Bombay 19.

**SHALIMAR TAR PRODUCTS (1935) LTD.**—16, Bank Street, Fort, Bombay 1. Phone: 254643. Grams: "TARSTIL." Manufacturers of Tarfelt, Tarmastic Roofing, Tarstil Tarplastic and anti-Corrosives, Wood preservatives and other Coal Tar Products.

### COCKS & VALVES

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL".

Advance Tube Co.—99, Nagdevi Street, Bombay 3.

Edgar Handley & Co. Private Ltd.—135, Meadows Street, Fort, Bombay.



Gujarat Tube & Hardware Mart, The.—24, Nagdevi Cross Lane, Bombay-3. Phone: 326616. Grams: "GAUGE COCK."

JIVRAJ & VRAJLAL.—122, Nagdevi Street, Bombay 3. Phone: 325138 (Shop) & 30932 (Res.). Grams: "SANIPIPES." Stockists of "Leader" Cocks and Valves.

INDUSTRIAL MANUFACTURERS.—Alliance Building, 94, Nagdevi Street, Bombay 3. Phones: 324745, 451998 & 452239; For Brass Turned Precision Parts & Cocks from  $\frac{1}{4}$ " to 4" Turning Rod for Radios, Transformers, Switchgears, Automobiles, etc.

KAPADVANI TRADING CORPORATION.—61, Nagdevi Street, Bombay-3. Phone: 328165. Stockists for G.I. Pipes, Fittings, Brass, Cocks, Copper Ball Cocks, C.I. Strainers; G.M. Check Valves our Speciality; Brass Cocks and Water Meters.

Kadakia Trading Corporation.—3, Bibijan Street (Nagdevi), Bombay-3. Phone: 322493. Grams: "STEAMTRAP."

Keshawlal Lalooobhai.—87-91, Dhanji Street, Bombay 3.

PATEL BROTHERS & CO.—41, Nagdevi Cross Lane, Bombay 3. Phone: 321606. Grams: "HASTY". All sorts of imported and indigenous Cast Iron, Cast Steel & Gun Metal, Valves & Cocks.

Shalebhoy Tyebjee & Sons.—12, Bruce Street, Bombay 1.

Sharman Sons (Ltd.) 1949.—10, Nagdevi Street, Bombay 3.

VASANT ENGG. & TRADING CORPORATION.—57, Bibijan Street, Bombay 3. Br. Stockists of Galvanised & Steam Pipes & their Fittings, G.M. & C.I. Valves & Cocks. Boiler Mountings, Boiler Tube & Flanges & Asbestos Goods, etc. Grams: "SURUDINU." Phone: 329002.

### COFFEE MANUFACTURERS

J. E. MODY & SONS.—164, Hornby Road, Fort, Bombay 1. Phone: 261698.

POLSON, LTD.—65, B, Dockyard Road, Mazagaon, Bombay 10. DD. Phones: 373245 (2 lines); Grams: "POLSON," Mazagaon, Bombay 10.

### COIR MATS AND FIBRE MERCHANTS

Asher & Co.—Vadgadi, Bombay 3.

Bulchand, Co., L.—Moos Building, 510, Kalbadevi.

CHANDULAL & CO.—Kathawala, 11, Kazi Syed Street, Bombay 9. Grams: "CORDCOIR." Phone: 325598.

DWARKADAS VELJI TALPATRIWALA.—36, Issaji Street, Bombay-3. Phones: 323232, 324332, 321615-6; Factory: 371271. Grams: "VELTHAKKER" Coir Mattings, Door Mats, Car Mats, Table Mats, Sisal Matting, Jute Matting etc. Indian Durries Emporium.—64, Mahomedali Road, Bombay 3.

Kaushik Trading Co.—2nd Floor, Aga Khan Building, 10, Homji Street, Fort.

### COLD STORAGES

AMBICO ICE WORKS, COLD STORAGE & REFRIGERATION.—H.O. 35-C, Jeirajbhoy Street, Bombay 8. Phone: 371692. Factory: 10-12, Cochin Street, Ballard Estate, Bombay 1. Phone: 263308.

HOMILA ICE WORKS, COLD STORAGE AND REFRIGERATION.—Manufacturers of Pure and Colourless Ice, 33-C, Jeirajbhoy Street, near Municipal Work Shop, Foras Road, Bombay 8 (India), Phone Nos. 371692 & 371314.

SUNAWALLA ICE FACTORY & COLD STORAGE (Estd. 1918).—Jeirajbhoy Street, Next to Municipal Workshop, Byculla, Bombay 8. Phone: 371692. Factory: 188, Larnington Road, Bombay 7.

VELU & CO. (PRIVATE) LTD., P. K.—P.O. Box 514, 111, Mahatma Gandhi Road, Bombay 1. Phones: 253141 & 641326. Grams: "LACQUER".

Voltas Ltd.—19, Graham Road, Ballard Estate.

### COLLAPSIBLE TUBES

Dinubhai G. Desai & Co.—86, Veer Nariman Road, Fort, Bombay.

EXTRUSION PROCESSES PRIVATE LTD.—Ram Baug, Swami Vivekananda Road, Malad, Bombay 64. Grams: "COLAPSTUBE", Malad, Bombay 64. Manufacturers of Collapsible Tubes for Packing Tooth-paste, Ointments, Adhesives, Cosmetics, etc., and of Rigid Containers for Packing Tablets, Powders, etc. Also manufacture extruded aluminium housings for radio, radar, television, telephone and other electrical industries. Phones: 692326, 691765, 691203, 692867 and 692869.

LALLUBHAI AMINCHAND PRIVATE LTD.—Tube Division, 104, Sion Matunga Estate, Sion, Bombay-22. Manufacturers of Aluminium Collapsible Tubes and Rigid Wall Containers. Phone: 471383.

ZENITH TIN WORKS PRIVATE LTD.—Opp. Race Course, Clerk Road, Mahalaxmi, Bombay 34. Phone: 370375. Grams: "ZENITHTINS." Manufacturers of Plain & Lithographed Collapsible tubes & rigid containers.

### COLOURS

Arvinda Trading Co. Private Ltd.—105, Apollo Street, Fort.

Bharat Dyes & Chemical Co.—119, D'Souza Street, Vadgadi, Bombay 3. Phone: 70974.

Bharat Pulverising Mills Private Ltd.—125, Narayan Dhuru Street, Bombay 3.

CIBA OF INDIA LTD.—Royal Insurance Bldg., 14, Jamshedji Tata Road, Bombay 1. Phones: 245031-3; 246084-6.

Dadajee Dhackjee & Co. Private Ltd.—Plot No. 8, Dr. Annie Besant Road, Worli, Bombay 18.

Dharamchand & Co.—349, Samuel Street, Vadgadi, Bombay 3.

Gandhi & Sons.—232, Vadgadi, Bombay 3.

I.C.I. (India) Private Ltd.—P.B. No. 310, Bombay 1.

Kalapi Colour Trading Co.—42, Dadysheeth Agiary Lane, near G. T. High School, Bombay 2.

Kilburn & Co. Private Ltd.—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort, Bombay.

Manubhai Shah & Co.—297, Samuel Street, Bombay 3.

Odhavji Devidas & Co.—857-A, Vakli Building, Samuel Street, Bombay 3.

Vasav & Co.—238, Samuel Street, Vadgadi, Bombay 3.

### COMMERCIAL ARTISTS

Maxarts.—1st Floor, 203, Hornby Road, Fort, Bombay.

Mitra & Co., H. P.—Krishna Cinema Building, New Charni Road.

Modern Art Salon.—Yusuf Building, 49, Churchgate Street, Fort.

Rational Art Service.—Bell Building, Sir Phirozshah Mehta Road, Fort.

Studio Ratan Batra, Ltd. (Commercial Artists & Industrial Designers).—Ilaco House, Sir Phirozshah Mehta Road, Fort.

Vaswani Art Publishers.—36-8, Dattatreya Building, Tukaram Javji Road, Grant Road, Bombay 7.

Venus Art Studio.—17, Mangalore Street, opp. Jam-e-Jamshed, Ballard Pier.

### COMMERCIAL PHOTOGRAPHY

Maxarts.—1st Floor, 203, Hornby Road, Fort, Bombay.

PHOTO-MASTERS.—23, Hamam Street, Bombay 1. Phone: 251381. Grams: "Fotomaster." Commercial-Industrial Photography, 'Photostat' Copies, Microfilming, Film Strips, Advertising & Documentary Films.

Vaswani Art Publishers.—36-8, Dattatreya Building, Tukaram Javji Road, Grant Road, Bombay 7.

### COMMUNICATION EQUIPMENT IMPORTERS

WESTREX COMPANY (Prop.: Cinerama Private Ltd.).—Metro House, Mahatma Gandhi Road, P.O. Box 1232, Bombay 1. Phones: 242273 & 242274. Grams: "WESTREX."

### COMMUNICATION TEST EQUIPMENT

ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LTD.—India House, Fort Street, Bombay 1. Phone: 261658. Grams: "AIMILBOM".

### CONDIMENT MANUFACTURERS

Bedekar, V. P., & Sons Private Ltd.—Mugbhat, Bombay No. 4.

Bombay Trading Co.—Dhan-Nur, Sir Phirozshah Mehta Road, Fort.

Fruit Farm Products Co.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort.

Gandhi Sons Ltd.—232, Samuel Street, Vadgadi.

Jussawala, N. K.—22, Arab Street, Bombay 8. Manufacturers of Indian Condiments.

K. T. KUBAL & CO., PRIVATE LTD. (Estd. 1926).—40, Foras Road, Bombay 8. Phone: 41179. Manufacturers of Electrical Welded Drums and condiments. Manufacturers and Exporters of Famous "KUBAL" Masala Curry Powder.

Kalvert, A., & Co.—128, Upper Duncan Road, Bombay 8.

MERWANJEE POONJIAJEE & SONS PRIVATE LTD. (ESTD. 1876).—Poonjiajee Building, Prince's Dock, Frere Road, Bombay 8. Manufacturers & Exporters of Sun Brand, Indian Condiments. Phone: 332933. Grams: "CMUTNEY," Bombay.

POONJIAJI, M. M., & CO.—40/42, First Marine Street, Bombay 2. Manufacturers & Exporters of "Ship Brand" Green Label Indian Condiments, Mango Chutneys, Pickles, Madras Curry Powder & Curry Paste, Bombay Ducks, Pappadams & Sugar-cane Vinegar. Grams: "PRESERVE." Phone: 22412. Res. Phone No. 241846.



R. N. Rustomji & Co. (Props.: James Smith & Co.). Office: Sreenivas House, Waudby Road, Fort, Bombay. Grams: "HEROINE." Phone: 261334.  
Universal Traders.—Krishnalaya, Slon Road, Bombay 22.

### CONDUIT TRUNKING, DUCTING & FITTINGS

JINDAL ENGINEERING WORKS.—Darikhana, Kosara Street, Bombay 10 DD. Phone: 376389 & 378120. Grams: "JINDAL-SHI". Manufacturers of Cable Carrying Trays-Barbed Wires, "U" Staples, and A.C.S.R. Accessories and Overhead transmission linetool. (viz Stringing rollers, Snatch Blocks, Sheave Pulleys, Come along clamps, "D" Shackles, "U" Bolts, Bird Guards, etc.).

### CONSTRUCTION & MINING EQUIPMENT

CONSOLIDATED PNEUMATIC TOOL CO. LTD.—301/302, Agra Road, Mulund, Bombay 80. Phone: 58-3174/6. Grams: "CAULKING", Mulund, Bombay.

PARKEEN BROTHERS.—Industry House, 24, Bake House Lane, Off Forbes Street, Fort, Bombay. Phone: 254862. Grams: "METALWARE". Makers of all types of Concrete Vibrators and grinders.

William Jacks & Co. Ltd.—Hamilton House, Graham Road, Ballard Estate.

### CONSULTING ENGINEERS

Associated Consulting Engineers (India).—Haroon House, 294, Bazargate Street, Fort.

BEACONS PRIVATE LIMITED.—United Bank of India Bldg., Sir Phirozshah Mehta Road, G.P.O. Box No. 1723, Bombay 1. Phone: 251796. Grams: Consultant Industrial, Engineering and Business Consultants; Productivity, Costing, Layouts, Procedures, Systems, Structural Design and Civil Engineering; New Projects and Expansion; Market and Project reports, Scheme Preparation, Execution.

Engineering Construction Corporation, Ltd.—Sorab Mansion, 85, Mursban Road, Fort.

Engineering Survey Corporation.—Industrial Assurance Building, Churchgate Reclamation.

IMANES PRIVATE LIMITED.—94, S. V. Road, Eral, P.O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANE-SCOL". Springs & Forms out of Spring Wires and Strips for your Industry.

Larsen & Toubro Ltd.—I. C. House, Dougall Road, Ballard Estate, Fort.

MECHE CONSULTATION & COLLABORATION PRIVATE LTD.—Consulting Engineers & Project Planners. A Consortium of Engineers with Advanced Training and Varied Experience in all Aspects of Industry offer Composite Services under one Roof including Assistance in obtaining Technical/Financial Collaboration, Assistance in obtaining Industrial License, Assistance in Selecting Technical/Management Personnel, Time & Motion Studies and Assistance in Securing Registration/Licensing of Patents and Trade Marks in India & throughout the World. Regd. Office: 39-D, Khorshed Building, Sir Phirozshah Mehta Road, Bombay-1 (BR). Phone: 265014 & 265172. Grams: "CONCOLABRO".

M. M. BILANEY & CO. Consulting Engineers & Architects, Consultation on all Engineering problems, setting up of Plants & Industries, Specialists in Civil & Structural Engineering Works. Commerce House, 140, Meadows Street, Fort, Bombay 1.

Parekh Brothers Ltd.—65, Mahatma Gandhi Road, Fort.

Phone: 242848 (Ext. 2.)

Grams: "RAJVALUER"

### RAJI CHOPRA & SONS

Consulting Engineers, Engineer-Surveyors & Valuers. ASMOPAL ENGINEERING CO., Engineers & Manufacturers of 'Raji' and 'R.C.' Electric Motors.

P. O. Box 326, Sunder Mahal, 141, Marine Drive Bombay-1. Phone: Factory 441597-98.

M. L. CHOPRA, C.Eng., M.Inst.C.E., M.I.Mech. E., M.I.E.E. (Lond.), Chartered Civil Engineer, Chartered Mechanical Engineer & Chartered Electrical Engineer.

Salem & Company.—Masatlal House, Backbay Reclamation, Bombay 1.

Universal Trading & Chemical Works.—Post Box No. 805, Bombay 1. On Government, Army & Navy Lists.

### CONVEYOR BELT FASTENERS

BHARAT ENGINEERING STORES.—113, Nagdevi Street, Bombay 3. Grams: "UNIONTOOLS." Phone: 323193. Stockists of Elephant Brand Chain Pulley Blocks.

### COPPER & BRASSWARE MFRS. & DEALERS

Amratlal & Co.—120, Kansara Chawl, Bombay 2.

Amratlal Umedlal & Co.—42, Kansara Chawl, Bombay 2.

Bhikachand Bhabutmal & Co.—217, Gulalwadi, Godiji Chawl, Bombay 2.

Chhaganlal Khemchand & Co.—Chintamani Building, 2nd Bhoiwada, Bombay 2.

Dahyabhai Mansukhram Vasaikar.—56, Kansara Chawl, Bombay 2.

Dattatraya Narayan Dere.—Mahakali Chawl, Pydhoni, Bombay 3.

Fakirchand Kankuchand.—25-26, Kansara Chawl, Bombay 2.

Fulchand Kesarimal & Co.—215, Gulalwadi, Godiji Chawl, Bombay 2.

Fulshanker Ganpatram Purohit.—234B, Kika Street, Corner of Kansara Chawl, Bombay 2.

Gopaldas Bhalkhand Shah.—32, Kansara Chawl, Bombay 2.

Gujarat Metal Works.—4A, 2nd Bhoiwada, Bombay 2.

Himatlal Bapulal & Co.—10-12, 1st Bhoiwada, Bombay 2.

Hind Metal Mart.—Behind Mumbadevi Post, Bombay 2.

Jam Metal Mart.—Behind Mumbadevi Post, Bombay 2.

Jerupji Valji.—52, Kansara Chawl, Bombay 2.

Juguraj Parasmal & Co. (Associated).—160, Jamli Moholla, Bombay 3.

Kaluram Venichand Poonawala (Associated).—98, Kika Street, Bombay 4.

Kantilal & Brothers.—Shop No. 141, Bhuleshwar Road, Bombay 2.

Lalji Vanmalidas & Co.—18, 1st Bhoiwada, Bombay 2.

Maganlal Ghelabhai & Co.—40, Kansara Chawl, Bombay 2.

Mansukhlal & Co.—22, 1st Bhoiwada, Bombay 2.

Mansukhlal Narandas.—118, Kansara Chawl, Bombay 2.

Mohanlal B.—218, Gulalwadi, Corner of 1st Bhoiwada, Bombay 2.

Mukundlal & Co.—38, Kansara Chawl, Bombay 2.

Mulchand Kachradas.—62, Kansara Chawl, Bombay 2.

Nagindas Maneklal & Co.—4, 1st Bhoiwada, Bombay 2.

Navnitlal Purushottamdas.—112, Kansara Chawl, Bombay 2.

Nyalchand Monahibhai.—34, 1st Bhoiwada, Bombay 2.

Pannalal B. Shah.—21, Kansara Chawl, Bombay 2.

Ramanlal Talakchand.—Behind Mumbadevi Post, Bombay 2.

Sanghvi & Sons.—92, Kansara Chawl, Bombay 2.

Sankalchand & Bros.—22, Kansara Chawl, Bombay 2.

Shah Chhognmal Bhutaji & Co.—Chintamani Building, 1st Bhoiwada, Bombay 2.

Shah Chhotalal Maganlal.—212, Gulalwadi, Ground Floor, Chintamani Derasar, Bombay 2.

Shah Chunilal Hakamchand.—38-40, 1st Bhoiwada, Bombay 2.

Shah Dalsukhram Bulakhidas.—100, Kansara Chawl, Bombay 2.

Shah Fojmal Kishnaji.—220, Gulalwadi, Corner of 1st Bhoiwada, Bombay 2.

Shah Gulabchand Asharam & Co.—225, Gulalwadi, Godiji Chawl, Bombay 2.

Shah Gulabchand Punamchand.—7A, 2nd Bhoiwada, Bombay 2.

Shah Jayantilal Ramanlal & Co.—39, Kansara Chawl, Bombay 2.

Shah Jayantilal Bavalal & Co.—110, Kansara Chawl, Bombay 2.

Shah Jayantilal Chunilal.—80, Kansara Chawl, Bombay 2.

Shah Jagjivandas Baldeodas.—66, Kansara Chawl, Bombay 2.

Shah Kaluram Mohanlal.—213, Gulalwadi, Godiji Chawl, Bombay 2.

Shah Kapurchand Premchand & Co.—221, Gulalwadi, Godiji Chawl, Bombay 2.

Shah Kishnaji Bhagaji & Co.—231, Gulalwadi, Godiji Chawl, Bombay 2.

Shah Kantilal Nanchand & Co.—26, 1st Bhoiwada, Bombay 2.

Shah Kesarimal Dhanraj & Co.—10/12, 1st Bhoiwada, Bombay 2.

Shah Keshavji Ladha.—44, Kansara Chawl, Bombay 2.

Shah Magilal Hajarimal & Co.—229, Gulalwadi, Godiji Chawl, Bombay 2.

Shah Mohanlal Lalubhai & Co.—36, Kansara Chawl, Bombay 2.

Shah Manrupji Kenaji & Co.—Nemani Bldg., 1st Bhoiwada, Bombay 2.

Shah Manilal Chaturdas & Co.—6/8, 1st Bhoiwada, Bombay 2.

Shah Nanchand Raychand.—202, Gulalwadi, Chintamani Building, Bombay 2.

Shah Punamchand Ramchand & Co.—223, Gulalwadi, Godiji Chawl, Bombay 2.

Shah Ratilal Mohanlal.—40, Kansara Chawl, Bombay 2.

Shah Rikhabchand Juharmal & Co.—121, Gulalwadi, Bombay 2.

Shah Sobhagchand Dipchand.—216, Kika Street, Bombay 4.

Shah Vastimal Bhabhutmal & Co.—227, Gulalwadi, Godiji Chawl, Bombay 2.

Shah Vrajlal & Co.—124/26, Kansara Chawl, Bombay 2.

Shah Vrajlal Chunilal & Co.—134, Kansara Chawl, Bombay 2.

Shivshankar Raghuram Purohit.—34, Kansara Chawl, Bombay 2.

Sureshchandra & Brothers.—84, Kansara Chawl, Bombay 2.

Swastik Metal & Engineering Works.—37, 2nd Bhoiwada, Bombay 2.



Tulsidas Vitthaladas.—36, 2nd Bhoiwada, Bombay 2.  
 Umedlal & Co., A.—Behind Mumbadevi Post, Bombay 2.  
 Vanechand & Co. S.—54, Kansara Chawl, Bombay 2.  
 Zinabhai Nathalal & Bros.—114, Kansara Chawl, Bombay 2.

### COPPERSMITHS, PLUMBERS, GASFITTERS, ETC.

Abdeally, B. M., & Co.—127, Sarang Street, Bombay No. 3.  
 Abdulhusein Escofally Contractor.—91-93, Bapu Khote Street, Bombay 3.  
 A. G. Karimji Calcuttawala.—82/84, Gulawadi, Kika Street, Bombay 4.  
 Alcock, Ashdown & Co., Ltd.—16, Bank Street, Fort.  
**B. BAMBOAT & CO. PRIVATE LTD.**—56, Gowalia Tank Road, Bombay 26. Phone: 364317. Grams: "PILLARTAP." Plumbers, Gasfitters and Sanitary Engineers.  
 Bhalechandra & Co.—62, C. P. Tank Road.  
 Bhathena, B. N., & Co.—100, Nagdevi Street.  
 Bombay Gas Co., Ltd.—Empire of India Life Building, 214, Hornby Road, Fort.  
 Burjor Framji & Co.—Marine Mansion, Marine Lines.  
 Chandulal Narandas.—96, Kika Street, Bombay 4.  
 Chimanlal Vadilal & Co.—473, Falkland Road, opp. 2nd Carpenter Lane, Bombay 4.  
 Escofally Dawoodbhoy.—18, Doctor Street, Dhanwadi Moholla.  
 Esufally Adamji & Co.—134, Nagdevi Street.  
 Fidaali Rajabali.—165, Hill Road, Bandra.  
 Fidausein Hasanali.—46-48, Gulawadi, Kika Street, Bombay 4.  
 Gagrut & Co.—160, Nagdevi Street.  
 Garlick & Co. Private Ltd.—Haines Road, Jacob Circle.  
 Hindustan Engineering Services.—Vithal Sayana Building No. 1, Lohar Street, Bombay 2.  
 Jafferjee Hussanally & Sons.—68, Nagdevi Street.  
 K. Chimanlal & Co.—107-A, Nagdevi Street, Bombay 3.  
 Marker, S. D., & Co. Ltd.—381, Hornby Road, Fort, Bombay.  
 Mohamedbhoy Escofally Nulwalla.—73, Bapu Khote Street, near Null Bazar.  
 Nanaal Pandya & Co.—302, Angrewada, Kalbadevi Road.  
 Pawar & Co., B.—Near Madhav Baug, 102, Ardeshir Dady Street.  
 Press, Cawasji Dinshaw.—Hamal Wadi, Dhobi Talao, Bombay 2.  
 Richardson & Cruddas.—Byculla Iron Works, Byculla.  
 Universal Sanitary Engineering Co.—Kitab Mahal, 190/192, Hornby Road, Fort.  
 Victoria Sanitary Stores.—54, 3rd Bhoiwada, Bhuleshwar, Bombay 2.  
 Vidy Sanitary Works.—16-24, Lohar Street, Bombay 2.

### CORROSION RESISTANT LININGS

**EMMES METALS PRIVATE LTD.**—Lead Lining/Bonding, Fusion Welding, P.V.C. or Polythene Lining, Rubber Lining, 11, Worli Road, Bombay 18 WB. Phones: 375432-3-4. Grams: "METAMELT."

### COSMETICS MANUFACTURERS

Laboratories Grimault Private Ltd.—20, Haines Road, Bombay-11.  
 Lakme Limited.—Bombay House, Bruce Street, Bombay-1.  
**PEARLINE-PARIS PRIVATE LTD.**—Rehman Building, 24, Veer Nariman Road, Bombay-1. Phone: 254337. Grams: "PEARLAB."

### COTTON CONTROLLERS

Drennan & Co.—Allahabad Bank Building, Apollo Street, Fort.  
 Mehta Ramkrishna & Co.—Khandeival Bhavan, 166, Dr. Dadabhoy Naoroji Road, Fort.  
 Robertson & Son, Edward T.—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

### COTTON IMPORTERS & EXPORTERS

Arthur Import Export Co.—166, Hornby Road, Fort, Bombay.  
**BOMBAY COTTON PRIVATE LTD.**—Bharat House, 104, Apollo Street, Fort, Bombay 1.  
 Damji Bhattani & Co.—Podar Chambers, Parai Bazar Street, Fort.  
 Devidayal Tulsiram (Cotton Department)—Darukhana, Reay Road, Bombay 10. Phones: 70558-59/73586. Grams: "Devisteel."  
 Hindustan Import & Export Corp., Ltd.—Albert Building, Hornby Road, Fort.  
 Italmidia Cotton Co., Ltd.—71-73, Apollo Street, Fort.  
 Jeramdas Naumal.—371, Hornby Road, Fort, Bombay.  
**MAHENDRA MULRAJ & CO.**—31, Forbes Street, Bombay 1.  
 Patel Bros.—6, Veer Nariman Road, Fort, Bombay.  
 Patel Cotton Company Ltd.—6, Vir Nariman Road, Fort.  
 Premji Haridas & Co.—Bhanushali Chambers, 166/170, Argyle Road, Bombay 4.  
 Raw Cotton Co. Ltd.—111, Mahatma Gandhi Road, Fort.

### COTTON DEALERS

Aboobaker Abdulrehman & Co.—Imperial Building, 360, Junction of Lamington and Vithalbhai Patel Road, Bombay.  
 Ahmedabad Advance Mills, Ltd., The.—Bombay House, 24, Bruce Street, Fort, Bombay.  
 Amersey & Sons.—Feltham House, 10, Graham Road, Ballard Estate, Bombay.  
 Amulakh Amichand & Co.—810, Cotton Exchange Building, Bombay 2.  
 Anandilal Hemraj & Co.—Marwari Bazar, Bombay No. 2.  
 Anandilal Podar & Co.—Podar Chambers, Parai Bazar Street, Bombay No. 1.  
 Anant Cotton Trading Co.—8-10, Tamarind Lane, Bombay 1.  
 Anopchand & Co.—C/o Messrs. Jagmohan Manilal Co., 505, Cotton Exchange, Marwari Bazar, Bombay 2.  
 Apollo Mills Ltd.—Standard Building, 346, Dadabhoy Naoroji Road, Fort, Bombay 1.  
 Asian Cotton & Seeds Co.—Warden House, 2nd floor, Sir P. M. Road, Bombay.  
 Ashar, R. D.—10, Bruce Street, Fort.  
 Bajaj Brothers, Ltd.—Round Building, Kalbadevi Road.  
 Bankeylal & Co., R.—2nd Floor, Ranchhodas Tribhovandas Building, Mumbadevi, Bombay.  
 Barkat Ram & Co.—5th Floor, Broacha Building, Princess Street, Bombay.  
 Begraj Gupta & Co.—1st Floor, 207, Kalbadevi Road, Bombay.  
 Begraj Kishandev.—207, Kalbadevi Road, Bombay 2.  
 Bhagwandas Harkchand & Co.—602, Cotton Exchange Building, Marwari Bazar, Bombay No. 2.  
 Bhagwati Cotton Trading Co.—Raja Bahadur Mansion, 2nd Floor, 20, Hamam Street, Fort, Bombay.  
 Bhaidas Cursodas & Co.—Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay.  
 Bharat Cotton Brokers.—Sonawala Building, 2nd Floor, 59, Apollo Street, Fort, Bombay.  
 Bhawanji Lakhmidas & Co.—72/80, Masjid Bunder Road, Bombay No. 3.  
 Bhogilal Meghraj & Co. Ltd.—Shree Ram Mills Premises, Fergusson Road, Parai, Bombay 13.  
 Billimoria & Co., H. J.—2nd Floor, Room No. 9, Kansara Chawl, 118, Kalbadevi Road, Bombay.  
 Birla Brothers Private Ltd.—Industry House, 159, Churchgate Reclamation, Bombay 1.  
 Bombay Co., Private Ltd., The.—9, Wallace Street, Fort, Bombay.  
 Bombay Uganda Co., Ltd., The.—28, Apollo Street, Fort, Bombay.  
 Bradbury Mills Ltd.—State Bank Building Annexe, Bank Street, Fort, Bombay 1.  
**BREUL & CO.**—Taj Bldg., Dr. Dadabhay Naoroji Road, Fort, Bombay 1. Phone: 263981/3 (3 Lines).  
 Central India Spg., Wvg. & Mfg. Co. Ltd., The.—24, Bruce Street, Fort, Bombay.  
 Century Spg. & Mfg. Co., Ltd., The.—Ground Floor, Queen's Mansions, Prescott Road, Fort, Bombay.  
 Chaitanyalal & Co.—808, Cotton Exchange Building, Marwari Bazar, Bombay.  
 Chandulal Kasturchand & Co.—Rooms Nos. 506-507, 2nd Floor, Cotton Exchange Building, Kalbadevi Road, Bombay 2.  
 Chimanlal & Co.—C/o Messrs. Gordhandas & Co., Marwari Bazar, Bombay No. 2.  
 Chimanlal Premchand Shah.—Chapsey Building, Princess Street, Bombay 2.  
 China Cotton Exporters.—10, Bruce Street, 2nd Floor, Fort, Bombay.  
 Chiranjilal & Co.—201, Kalbadevi Road, Bombay 2.  
 Chirawawala Co.—80B, Mahajan Assn., 2nd Floor, Sheikh Memon Street, Bombay 2.  
 Chunilal Krishnalal & Co.—608, Cotton Exchange Building, Kalbadevi Road, Bombay 2.  
 Chunilal Tribhovandas Patel.—Uma House, 2nd Fofal Wadi, Bhuleshwar, Bombay.  
 Colaba Land & Mill Co., Ltd., The.—Victoria Bunder, Colaba, Bombay.  
 Coorla Spg. & Wvg. Co. Ltd.—Readymoney Mansion, Churchgate Street, Fort, Bombay 1.  
 Cotton Agents, Private Ltd., The.—Industry House, 159, Churchgate Reclamation, Bombay 1.  
 Damji Khimji & Co.—C/o Messrs. Tulsiram Gurdasram, 312, Kalbadevi Road, Bombay 2.  
 Damji Bhattani & Co.—Podar Chambers, Parai Bazar Street, Fort.  
**DHANRAJMAL GOBINDRAM.**—8-10, Tamarind Lane, Fort, Bombay 1. Phone: 252248-49. Sewri: 376315; Grams: "GURUPEJA," Inland; "EVERFRESH," Foreign. Offices at all important centres in India.  
 Drennan & Co.—Neville House, Ballard Estate, Bombay.  
 Durlabhji Umedchand & Co.—177-79, Kalbadevi Road, 3rd Floor, Laxmi House, Bombay No. 2.  
 Dwarkadas & Co. Private Ltd.—2nd Floor, Rajmahal, Opp. Bhuleshwar Fire Brigade, Bombay.



Egyptian Cotton Agency.—10, Khatau Mansion, Cooperage, Bombay 1.

Elphinstone Spg. & Wvg. Mills Co. Ltd.—Kamani Chambers, 32, Nicoll Road, Ballard Estate, Bombay 1.

EXIMPORT TRADING CO.—Queen's Mansion, Bastion Road, Fort, Bombay 1. Phone : 263809. Grams : "OVANT." Export & Import of raw cotton from any source.

Finlay Mills, Ltd., The.—Chartered Bank Building, Fort, Bombay.

GILL & CO. (PRIVATE) LTD.—Indu House, Dougall Road, Ballard Estate, Bombay 1. Phone : 265001 (5 lines). Grams : "GILLCO." Branches: Calcutta, Coimbatore, Madras.

Girdharlal & Co.—C/o Messrs. Liladhar Karasondas & Co., 403, Cotton Exchange, Marwari Bazar, Bombay 2.

Gool Bros. & Co., Ltd.—Navsari Chambers, Fort.

Gokak Mills, Ltd., The.—C/o Messrs. F. F. Campbell & Co., Ltd., Forbes Building, Home Street, Fort, Bombay.

Gordhandas & Co.—Manekchand Kapurchand Building, Marwari Bazar, Bombay.

Hindoostan Spg. & Wvg. Mills Co., Ltd., The.—Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay.

Hirji Bharmal.—27, Chinch Bunder Road, Bombay 2.

INDIA COTTON SUPPLIES PRIVATE LTD.—Empire House, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone : 262025.

India United Mills Ltd.—Indu House, Dougall Road, Ballard Estate, Bombay 1.

Jaggiwan & Co., C. V.—C/o Mr. Champaklal Vadilal, Jagmohan Mansion, Bhatt Wadi, Sandhurst Road, Bombay No. 4.

Jaggiwandass Dossabhai & Co., C. V.—C/o Messrs. Narrondass Manordass, 135, Sheikh Memon Street, Bombay 2.

James Finlay & Co., Ltd.—Chartered Bank Buildings, Esplanade Road, Fort, Bombay.

Jamnadas Ruttonsey & Co.—Bell & Co.'s Building, Sir Phirozshah Mehta Road, Fort, Bombay.

Jivandas Ladha & Co.—Nanjee Building, 3rd Floor, 17B, Elphinstone Circle, Fort, Bombay 1.

Kamala Mills, Ltd.—Kilachand Devchand Bldg., 45-47, Apollo Street, Bombay.

Khetsey & Co. Private—C/o Shroff Cooper & Co., Bombay Stock Exchange Building, 3rd Floor.

Khimji Damji & Co.—4th Floor, Mulji Laxmidas Building, 3, Mint Road, Fort, Bombay.

Kishinchand Chellaram.—Gazdar House, Dhobi Talao, Bombay 2.

Kishor Natverlal & Co.—70, Forbes Street, Fort, Bombay 1.

Kisonlal Marfatia & Co.—38, Cawasji Patel Street, Fort, Bombay.

Kohinoor Mills Co., Ltd., The.—Home Street, Fort, Bombay.

Kooverjee V. Currumsey & Co.—Lentin Chambers, Dalal Street, Fort, Bombay.

Kothari Trading Co.—428, Kalbadevi Road, 2nd Floor, Bombay.

Lakshmichand & Co.—Neptune Building, 166, Hornby Road, Bori Bunder, Bombay.

Lalji Deokaran & Co.—Deokaran Niwas, Tulsidas Surji's House, 283, Samuel Street, Vadgadi, Bombay No. 3.

Laxmi Cotton Traders.—10, Bruce Street, 2nd Floor, Fort, Bombay 1.

Laxmidas Madhavji & Co.—Ratnagiri House, Dadyseth 2nd Cross Lane, Chowpatty, Bombay.

Lolia Sultania Company.—Anand House, 158/64, Kalbadevi Road, Bombay 2.

Loknath Tibrewala & Co.—11, Krishna Bhuvan, Bhuleshwar, Bombay 2.

Manalal Bhagirathdas & Sons.—C/o Messrs. Laxminarayan Mansukhrail & Co., Govind Chawk, Moolji Jetha Market, Bombay No. 2.

Manilal Patel & Co.—Kamer Building, Cowasji Patel Street, Fort, Bombay 1.

Mehta & Co., H. M.—Mehta House, Apollo Street, Fort, Bombay.

Mohanlal Lalubhai & Co.—C/o Mr. Hirachand Dayal, Vithal Sadan, 3rd Floor, Room No. 80/90, 342, Kalbadevi Road, Bombay 2.

Moolchand Vissonji & Co.—C/o Messrs. Liladhar Karasondas & Co., 9, Dalal Street, Agakhan Bldg., Fort, Bombay.

Nansey & Co. T. H.—7-11, Elphinstone Circle, Fort, Bombay.

Narberham Naranjee & Sons.—709, Cotton Exchange Building, 7th Floor, Kalbadevi Road, Bombay.

Narendrakumar B. Kanji & Co.—116, Keshavji Naik Road, 2nd Floor, Bombay 2.

Nathalal Becharadas & Co.—809, Cotton Exchange Building, Marwari Bazar, Bombay No. 2.

Navnital Chunitil Shah.—37, Marwari Bazar, Bombay.

New City of Bombay Mfg. Co. Ltd.—Brady House, Veer Nariman Road, Fort, Bombay 1.

New Great Eastern Spg. & Wvg. Co. Ltd.—Brady House, Veer Nariman Road, Fort, Bombay 1.

Parakh & Co. (India) Private Ltd., C.—28, Apollo Street, Fort, Bombay.

Patel Brothers.—Elphinstone Building, 10, Churchgate Street, Fort, Bombay.

Patel Cotton Co. (Private) Ltd.—Elphinstone Building, Veer Nariman Road, Fort, Bombay 1.

Patel Cotton Co., Ltd., The.—New Cotton Depot, Sewree.

Phoenix Mills Ltd.—State Bank Building Annexe, Bank Street, Fort, Bombay 1.

Podar Brothers.—384M, Kalbadevi Road, Bombay 2.

Podar Mills Ltd., The.—Podar Chambers, Parsee Bazar Street, Fort, Bombay.

Purshotam Govindji & Sons.—612, Cotton Exchange, Marwari Bazar, Bombay 2.

Raghavji Kanji & Co.—116, New Chinch Bunder Road, Bombay.

Rajnikant & Co., C.—C/o Messrs. Chaitanyalal & Co., 808, Cotton Exchange Building, Kalbadevi Road, Bombay 2.

Rallis India Limited.—21, Ravelin Street, Fort, Bombay.

Ramanlal & Sons.—Babulal Mansion, Chowpatty Sea Face, Bombay 7.

Ramiridas Nandlal.—Wakefield House, 3rd Floor, Sprott Road, Ballard Estate.

Ramchandra Satyanarain.—43, Ram Wadi, 3rd Floor, Bombay 2.

Ramchandra Hanuman & Co.—144-46, Kalbadevi Road, 3rd Floor, Bombay No. 2.

Ramdas Dossa & Co.—Cotton Exchange Building, Kalbadevi Road, Bombay No. 2.

Ramdas Khimji Brothers.—Warden House, 2nd Floor, Sir Pherozshah Mehta Road, Fort, Bombay.

Ramnarain Son, Private Ltd.—Imperial Bank Bldg., Bank St., Fort, Bombay 1.

Ratansey K. Khona.—Noble Chambers, 116, Parsee Bazar Street, Fort, Bombay.

Ratilal & Co.—1-3, Bhuleshwar Corner, Bombay.

R. Popatlal & Co.—17, Tara Mansion, opp. Rly. Station, Bombay 19.

Rustomji Framji & Co.—C/o Messrs. Chatarbhuji Piramal, 60, Marwari Bazar, Bombay.

Seksaria Cotton Mills, Ltd.—130, Meadows Street, Fort, Bombay.

Sethia R. K. (India) Private Ltd.—Himalaya House, Palton Road, Bombay 1.

Sholapur Spg. & Wvg. Co., Ltd., The.—Standard Bldg., 346, Hornby Road, Fort, Bombay.

Shree Niwas Cotton Mills, Ltd., The.—DeLisle Road, Parel, Bombay No. 13.

Shree Madhav Mills Ltd.—Foras Road, Bombay 8.

Shree Ram Mills Ltd.—Fergusson Road, Parel, Bombay 13.

Shree Sitaram Mills, Limited.—15A, Elphinstone Circle, Fort, Bombay.

SHEROFF COOPER & CO.—New Stock Exchange Building, Room No. 67, Apollo Street, Fort, Bombay 1. Phone : 251849. Grams : "SROFFCOOPER." Cotton Merchants & Commission Agents.

Sree Krishna Trading Co., Ltd.—11, Alli Chambers, Meadows Street, Fort.

Svadeshi Mills Co. Ltd.—Bombay House, Bruce Street, Fort, Bombay 1.

Tata Mills, Ltd., The.—Bombay House, 24, Bruce Street, Fort, Bombay.

Tiwari & Co.—15, Bullion Exchange, Bombay No. 2.

Trambakial Uttarwar & Co.—Bansilal Abirchand Building, 1st Floor, 18, Marwari Bazar, Bombay 2.

Universal Cotton Trading Co., The.—Bombay Mutual Building, Hornby Road, Fort, Bombay.

Vakharia Bros.—R. No. 410, CTNEXGE.

Vallabhdas Dayal & Sons.—E. D. Sassoon Building, Ballard Estate, Fort, Bombay.

Vasoojee Morarjee.—Ewart House, Bruce Street, Fort, Bombay 1.

Vasanji Mavji & Co.—27, Chinch Bunder, Bombay 9.

Vassanji Sons & Co. Private Ltd.—9, Wallace Street, Fort, Bombay.

Vasantlal & Co., C.—Commissariat Bldg., 5th Floor, 231, D. Naoroji Road, Bombay No. 1.

Vassonji Khimji & Co.—C/o Chandulal Keshavlal Shah, 88, Masjid Road, Bombay No. 9.

Vinaya Trading Co. Ltd.—State Bank Building Annexe, Bank Street, Fort, Bombay 1.

Viram Ladha & Co.—288, Narses Natha Street, Bombay 9.

Virji Ladha & Co.—57-59, Chinch Bunder Road, Mandvi, Bombay.

Vishindas Pribhdas & Co.—57-59, Madan Mansion, Marwari Bazar, 5th Floor, Bombay.

Volkart Brothers.—Volkart Building, Graham Road, Ballard Estate, Bombay 1.

Vrajilal Purshotam & Brothers.—Yusuf Bldg., 4th Floor, Mahatma Gandhi Road, Fort, Bombay 1.

Vulabhdas Narandas & Co.—C/o Messrs. Govindji Bhanji, 1st Floor, Shanti Bhuvan, Old Hanuman Lane, Bombay.

Western India Spg. & Mfg. Co., Ltd., The.—Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay.

## COTTON MILLS

THE AHMEDABAD JUPITER SPG., WVG. & MFG. CO. LTD.  
—JUPITER MILLS No. 2 : at Carrol Road, Parel, Bombay 13.  
(Formerly : Hind Mills Ltd., Bombay). Spindles 80,724;  
Looms 1,323; (including 110 Auto looms). Manufacturers of  
Shirtings, Sheetings, Longcloths, Dhoties, Sarees, Poplins,



Coatings, Furnishing Fabrics, Gaberdine and Voils in Grey, Bleached, Dyed, Printed and Mercerised in Fine and Superfine varieties. Also Cotton Yarn in Grey, Bleached and Dyed in Counts of 6s to 100s Single & Double Sewing Thread and Embroidery.

**APOLLO MILLS LTD., THE.**—Delisle Road, Chinchpokli, Bombay 11 (BC). Director, Manufacturers of Grey, Bleached, Mercerised, Dyed and Printed Poplins, Printed Superfine Voils, Mulls, Dorias, Bleached and Printed Poplins, Shirtings, Grey and Bleached Long Cloth, Sheetings; Grey Sarees, Dyed and Printed Coatings etc. Directors: (1) Shri C. P. Wadia, Chairman, (2) Shri Dwarkadas Shrinivas, (3) Shri Shantilal L. Thar, (4) Shri Keshardeo Shrinivas, (5) Shri Basantlal Ramkumar, (6) Shri Gokalchand Dwarkadas Morarka, (7) Shri Bajranglal Keshardeo Morarka. Mill Superintendent, Shri R. S. Bhotika; Manager, Shri V. Ananthan; Secretary: Shri K. K. Krishnan.

**BOMBAY DYEING & MANUFACTURING CO., LTD.** (Spring Mills).—Managing Agents, Nowrosji Wadia & Sons Private Ltd., Neville House, Graham Road, Ballard Estate, Bombay. Mills at Naigaum Road, Dadar. Manufacturers of Cotton Textiles. Office Phone: 268071. Grams: "DYEING" and "TEXTILES." Mills Phone: 441738-9; 441730.

**BOMBAY DYEING & MANUFACTURING CO., LTD.** (Textile Mills).—Managing Agents, Nowrosji Wadia & Sons Private Ltd., Neville House, Graham Road, Ballard Estate, Bombay. Mills at Elphinstone Road, Parel. Manufacturers of Cotton Textiles. Office Phone: 268071. Grams: "DYEING" and "TEXTILES." Mills Phone: 453291-2-3.

## TEXTILE DYES & CHEMICALS

|                    |                  |
|--------------------|------------------|
| Hydros             | Sizing Materials |
| Caustic            | Gums             |
| Soda Ash           | Dyes             |
| Bleaching Stearine | Fertilizers      |
| Acids              |                  |

Contact :

### THE BHARAT CHEMICALS CO.,

331, Samuel Street, Vadgadi, Bombay-3 (BR)

Phone : 324401 (Office) Grams : "BHARCHEM" (MD).  
471601 (Res.)

**Bradbury Mills, Ltd.**—Agents, Ramnarain Sons, Ltd., State Bank Bldg., Bank Street, Fort. Mills at Ripon Road, Jacob Circle.

**CENTRAL INDIA SPG., WVG. & MFG. CO. LTD.**—Regd. Office: Bombay House, 24, Bruce St., Fort, Bombay 1. Phone Nos. 259141 and 251501. Grams: Bombay Office: "CHORALTAR," Nagpur Office: "EMPRESS." Looms: 2,140 (including 164 automatics); Spindles: 1,08,688 Mills at Nagpur, known as Empress Mills. Manufacturers of Cotton Textiles, Longcloth, Drills, Mulls, Voiles, Dhoties, Sarees, Counterpanes, Prints & Cotton blankets. The Company exports cloth to Africa, U.K., U.S.A., Australia and other centres.

**Colaba Land & Mill Co., Ltd.** (Jehangir Wadia Mill).—Office on Mill premises. Mills at Victoria Bunder, Colaba.

**Coorla Spinning & Weaving Co., Ltd.**—Secretaries, Treasurers & Agents, Messrs. Cowasjee Jehangir & Co., Private Ltd., 23, Ready-money Mansion, Veer Nariman Road. Mills at Coorla.

**Crown Spinning & Manufacturing Co., Ltd.** (formerly Dhun Mills).—Secretaries, Treasurers & Agents, Purshotam Vithaldas & Co., Sir Vithaldas Chambers, Apollo Street, Fort. Mills at New Parbhadevi Road, Parel.

**DAWN MILLS CO., LTD.**—"ESPERANCA," 7th Floor, Colaba Causeway, Bombay 1. Phone: 214200/50; Grams: "DAWN-YARN," Bombay. Mfrs. of Yarn, Cotton Waste Yarn, Cotton Yarn Carded and Combed, grey, gassed, Bleached, mercerised, Sewing Thread and Embroidery yarn, Warp yarn on beams and waft yarn on pirns, Folded yarn, double and multifold in cable twist and fish net twist, count range, upto 100s singles, folded, 2/10s, 2/28s, 2/30s, 2/36s, 2/60s, 2/80s, 2/100s Staple fire yarn. Hosiery: Manufactured from Cotton, Rayon and Nylon, Vests, Drawers, Sportswear, Fancy garments, Socks, plain, printed and design, Upholstery, net cloth and stockinette. Directors: Ramnivas Ramnarain, Madanmohan Ramnarain, Radakrishna Ramnarain, Shriyens Prasad Jain, S. N. Vakil, Lalitkumar M. Khatau and Nirmal Kumar Ram Nivas.

**Dhanraj Mills, Ltd.** (formerly Assur Virji Mills, Ltd.).—Agents, Ramgopal Ganpatrai & Sons, Private Ltd. Office on Mill premises. Mills at Sun Mill Road, Lower Parel.

**Digvijaya Spinning & Weaving Co., Ltd.** (formerly Dinshaw Petit Mills).—Office on Mill premises. Mills at Lalbaug, Parel.

**Finlay Mills, Ltd.**—Agents, James Finlay & Co., Ltd., Chartered Bank Buildings, Fort. Mills at Government Gate Road, Parel.

**Gold Mohur Mills, Ltd.**—Agents, James Finlay & Co., Ltd., Chartered Bank Building, Fort. Mills at Main Road, Dadar.

**Hind Mills Ltd.** (formerly David Mills Co., Ltd.) (Mills Nos. 1 and 2).—Agents, Hind Agents Ltd., 15, Indu House, Dougall Road, Ballard Estate, Fort. Mills at Carroll Road, Parel.

**Hindeostan Spinning & Weaving Mills Co., Ltd.**—Agents, Thackersey Mooljee & Co., Sir Vithaldas Chambers, Apollo Street, Fort. Mills at Ripon Road, Jacob Circle.

**Indian Manufacturing Co., Ltd.**—Agents, Damodar Thackersey Mulji & Co., Sir Vithaldas Chambers, Apollo Street, Fort. Mills at Lamington Road, North, Jacob Circle.

**India United Mills, Ltd., Mill No. 1** (formerly Jacob Mill).—Agents, Agarwal & Co., Dougall Road, Ballard Estate, Fort. Mills at Suparibaug Road, Parel.

**India United Mills Ltd., Mill No. 2** (formerly Alexandra Mill).—Agents, Agarwal & Co., Dougall Road, Ballard Estate, Fort. Mills at Ghorupdeo Road, Chinchpokly.

**India United Mills Ltd., Mill No. 3** (formerly E. D. Mill).—Agents, Agarwal & Co., Dougall Road, Ballard Estate, Fort. Mills at Ghorupdeo Road, Chinchpokly.

**India United Mills, Ltd., Mill No. 4** (formerly Rachel Mill) (formerly Hongkong Mills).—Agents, Agarwal & Co., Dougall Road, Ballard Estate, Fort. Mills at Chinchpokly Road, Kalachowki.

**India United Mills, Ltd., Mill No. 5** (formerly Manchester Mill).—Agents, Agarwal & Co., Dougall Road, Ballard Estate, Fort. Mills at Chinchpokly Cross Lane, Kalachowki.

**Jam Mfg. Co., Ltd., Mill No. 1.**—Secretaries, Treasurers and Agents, Tricumdass Vandavan & Co. Office on Mill premises. Mills at Lalbaug, Parel.

**Jam Mfg. Co., Ltd., Mill No. 2** (formerly Birla Mills, Ltd. No. 2).—Secretaries, Treasurers & Agents, Tricumdass Vandavan & Co., Lalbaug, Parel. Mills at Tokersey Jivraj Road, Sewree.

**Jubilee Mills, Ltd.**—Secretaries, Treasurers and Agents, Chamanlal Mehta & Co. Private Ltd., Bharat House, Apollo Street, Fort. Mills at Tokersey Jivraj Road, Sewree.

**Kamala Mills, Ltd.** (formerly Ebrahimbhoy Pabaney Mills).—M. L. Tapuriah, Esq., Director. Office: Kilachand Devchand Building, Apollo Street, Fort. Mills at Tulsi Pipe Road, off DeLisle Road.

**KHATAU MAKANJI SPINNING & WEAVING CO., LTD.**—Regd. Office: Laxmi Buildings, 6, Ballard Road, Fort. Mills at Haines Road, Byculla.

**Kohinoor Mills Co., Ltd., Mills Nos. 1, 2 & 3.**—Agents, Killick Industries, Ltd., Killick Building, Home Street, Fort. Two Mills at Naigaum Cross Road, Dadar and third at Lady Jamshedji Road, Dadar.

**Modern Mills, Ltd., Mill No. 1** (formerly Mysore Spinning & Manufacturing Co., Ltd. No. 2).—Agents, N. Sirur & Co., Ltd., Temple Bar Building, 70, Forbes Street, Fort. Mills at Elphinstone Road, Parel.

**Modern Mills, Ltd., Mill No. 2** (formerly Bomanji Petit Mills).—Agents, N. Sirur & Co., Ltd., Temple Bar Building, 70, Forbes Street. Mills at Mahaluxmi.

**Moon Mills, Ltd.**—Managed by Board of Directors, General Assurance Building, Hornby Road, Fort. Mills at Tokersey Jivraj Road, Sewree.

**MORARJEE GOCULDAS SPINNING & WEAVING CO., LTD.**—Office: Mill No. 1 at Dr. Ambedkar Road, Parel, Bombay 12. Mill No. 2 at Planet Mill Street, Fergusson Road, Bombay 13. Spindles: 1,53,168 and Looms: 2,973.

**MUKESH TEXTILE MILLS PRIVATE LTD.**—Regd. Office: 6-B, Vulcan Insurance Building, Churchgate, Bombay 1. Head Office & Mills: Victoria Bunder Road, Colaba, Bombay 5. Phone Nos. 213137/38—213032. Dr. 212054. Grams: "COLA-BATEX." Products: Bleached Long Cloths, Dyed and Bleached Poplins, Striped and Check Shirtings, Pyjama Cloths, Towelling Cloth & Prints. Yarn: 10s & 80s, Board of Directors: Jayant M. Madhvani, B.Sc., LL.B., Manubhai M. Madhvani, Pratap M. Madhvani, Surendra M. Madhvani, Shivjibhai H. Suchde, Gokuldas H. Suchde, Liladhar V. Kakad and Natvarlal T. Parakh; General Manager: J. J. Gajjar; Manager & Chief Engineer: J. R. Kotwal Wvg. Master: G. R. Vyas, Spg. Master: G. D. Malshe, Dyeing Bleaching & Printing Master: B. B. Katwala; I.R.O.: H. L. Ahooja, Welfare Officer: C. S. Durve.

**New City of Bombay Manufacturing Co., Ltd.**—Agents, W. H. Brady & Co., Ltd., Brady House, 12-14, Vir Nariman Road, Fort. Mills at 63, Chinchpokly Road.

**New Great Eastern Spg. & Wvg. Co., Ltd.**—Head Office: 15/A, Horniman Circle, Bombay 1. Mills at Victoria Garden Road, Byculla.



New Kaiser-I-Hind Spinning & Weaving Co., Ltd.—Lala Kallashpat Singhania, Managing Director, J. K. Building, Dougall Road, Ballard Estate, Bombay. Mills at Gorupdeo Road, Chinchpokli.

New Pralhad Mills (formerly Planet Mills).—Proprietors, Amrit Banaspati Co., Ltd., East and West Building, Apollo Street, Fort. Mills at Ferguson Road, Lower Parel.

Phoenix Mills Ltd., The.—Tulsi Pipe Line Road, Lower Parel, Bombay 13.

Podar Mills, Ltd. (formerly Toyo Podar Cotton Mills, Ltd.).—Agents, Podar Sons Ltd., Podar Chambers, Parsee Bazar Street. Mills at DeLisle Road.

Prakash Cotton Mills Private Ltd. (formerly Seksaria Cotton Mill No. 2).—Managed by Board of Directors, Seksaria Chambers, 139, Meadows Street, Fort. Mills at Ferguson Road, Lower Parel.

RAGHUVANSHI MILLS, LTD.—11-12, Haines Road, Mahalaxmi, Bombay 13. Managing Agents, Messrs. Ravindra Maganlal & Co. Private Ltd. Office or Mill premises. Mills at Haines Road, Mahalaxmi, Bombay 13. Phone: 377425-6-7. Grams: "Raghubir," Spindles: 44,000; Art Silk Looms: 144; Manufacturers of Cotton Yarn 8s to 12 os., Terene Shirtings and Suitings, Sewing Threads and Embroidery Yarn Art Silk Fabrics.

Ruby Mills Ltd.—Lady Jamshedji Road, Dadar, Bombay 28.

SASSOON SPINNING & WEAVING CO., LTD.—Mafatlal House, Back Bay Reclamation, Bombay. Phone No. 246281. Grams: "UNISOON." Manufacturers of Cotton & Staple fibre Yarn and Textiles.

Sayaji Mills Ltd.—Props., Kathwada, Ahmedabad. Sayaji Mills No. 2 (formerly Hirjee Mills, Ltd.).—Mills at Ferguson Road, Lower Parel.

SEKSARIA COTTON MILLS LTD.—DeLisle Road, Lower Parel, Bombay 13. Phone Nos. 373811-12-13. Grams: "LABHSUBH." Manufacturers of Sheetting, Shirting, Coating, Poplin, Gadlapatt, Mulls, Flannel, Raised Malida Chaddar—in coarse and medium counts—Grey, Dyed as well as mercerised. Yarn from 10 to 100 counts—Combed as well as Carded. Processors of Power Loom Goods. Board of Directors: B. L. Bajoria, Sumat Prasad, P. C. Mogha, A. C. Fotheringham, S. C. Mitter, S. N. Bhalotia.

Shree Madhav Mills Ltd. (formerly Madhavji Dharamsi Mfg. Co., Ltd.).—Agents, Purnamal Radhakishan & Co., Office on Mill premises. Mills at Foras Road.

SHREE MADHUSUDAN MILLS LTD.—DeLisle Road, Bombay-13. Regd. Office: 31, Chowringhee Road, Calcutta-16; H.O.: Shree Niwas House, Waudby Road, Bombay-1; T. No. Office, Bombay 268241; Mill 371431-2; Telegrams: MADHUMILL; R. N. Bangur, Chairman, J. K. Somani, B. G. Bangur, M. L. Somani, S. K. Majaji and S. M. Basu, Directors; Estd. 1950; Mill's Shop at: Govind Chowk, M. J. Market, Bombay-2, T. No. 30849; Spindles: 96224; Looms: Ordinary 1532 and Automatic 48; Counts: 30s to 120s. Single or double yarn; Tex Mark No. 1592; Cloth Width from 66 mm. to 165 mm.; Varieties: Grey, Mercerised, Bleached, Dyed or Printed; Mulls, Lawns, Voils, Dress material, Dhoty, Saree, Poplin, Cambric, Shirting, Checks, Shirting, Long Cloth, Casement cloth, etc.; K. N. Shah, Gen. Manager; V. T. Chokshi, Factory-Manager; R. N. Kabra, Mill Secretary; G. D. Shirodkar, L.W.O.; R. K. Rath, Sales in Charge; Louis Fernandes, Spg. Supdt.; K. L. Phalpihar, Wvg. Supdt.; Dr. S. V. Patwardhan, Processing Consultant; B. C. Shroff, Dyg., Blg., Prtg., and Finishing Master; M. P. Dandekar, Chief Engineer.

Shree Nivas Cotton Mills, Ltd. (formerly Fazulbhoy Mills, Ltd.).—Agents, The Marwar Textiles (Agency), Ltd., Shreenivas House, Waudby Road, Fort, Bombay. Mills at DeLisle Road.

Shree Sitaram Mills Ltd.—Office: 15-A, Horniman Circle, Fort. Mills: Chinchpokli, DeLisle Road, Bombay.

Simplex Mills Company, Ltd.—Agents, Forbes, Forbes Campbell & Co., Ltd., Forbes Building, Home Street, Fort. Mills at Clerk Road, Jacob Circle, Byculla.

Standard Mills Co., Ltd.—Agents, Mafatlal Gagalbhai & Sons, Mafatlal House, Back Bay Reclamation, Bombay 1.

Swadeshi Mills Co., Ltd.—Agents, Tata Industries, Ltd., Bombay House, 24, Bruce Street, Fort. Mills at Kurla.

Swan Mills, Ltd.—Agents, James Finlay & Co., Ltd., Chartered Bank Building, Hornby Road, Fort. Mills at New Sewree Road.

Swastik Textile Mills Ltd.—Managing Agents: Messrs. P. Kashinath & Co., Dubash Market, Sheikh Memon Street, Bombay. Mills at Ferguson Road, Lower Parel.

Victoria Mills Ltd. (formerly Satya Mill, Ltd.).—Agents, Mangaldas Mehta & Co., Private Ltd., Bharat House, Apollo Street, Fort. Mills at DeLisle Road, Parel.

Western India Spinning & Manufacturing Co., Ltd.—Agents, Thackersey Moolji Sons & Co., Sir Vithaldas Chambers, Apollo Street, Fort. Mills at Kalachowki Road, Chinchpokli.

## COTTON PIECEGOODS EXPORTERS

Ahmed Ebrahim Bros.—88, Chukla Street, Bombay 8.

Allied Exporters.—Kumud House, 267, Dr. Dadabhoy Naoraji Road, Fort, Bombay.

Arvind Trading Co. Private Ltd.—105, Apollo, Street, Fort.

ASIAN TRADING CORPORATION.—P.O. Box 1505. The Mirabelle, 33/A, Marine Lines, Bombay 1. Phone: 242672. Grams: "AJPIPAS." Exporters of Cotton Piecegoods.

Askay & Co. Ltd.—Great Social Building, Sir Phirozshah Mehta Road, Fort, Bombay.

Bajaj Brothers Ltd.—Round Building, Kalbadevi Road, Bombay 2.

Beardsell, W. A., & Co., Ltd.—15-16, Sir Phirozshah Mehta Road, Fort.

Begraj Gupta & Co.—Niru Villa, 387, Linking Road, Khar.

Bhagwandas Chatrabhuj & Co.—20, Hamam Street, Fort.

B. Naraindas & Co.—Court House, Carnac Road, Bombay 2.

Bulchand, Co., L.—Moos Building, 510, Kalbadevi Road.

Chimanlal Patel & Co.—174, Hornby Road, Fort.

Chinoobhai & Bros., Ltd.—Churchgate House, Churchgate Street, Fort.

Consolidated Trading Corporation.—Advani Chambers, Sir Phirozshah Mehta Road, Bombay 1.

Devidas Mulji Kapadia.—Yusuf Building, Hornby Road, Fort.

Dilaj & Co.—20, Hamam Street, Fort.

Dinanath Sons.—466, Kalbadevi Road, Bombay 2.

D. Ram & Co.—Krishna Nivas, New Silk Bazar, P.O. Box 2376, Bombay 2.

Gore & Co.—Great Social Building, Sir Phirozshah Mehta Road, Fort.

Govias (India) Ltd.—Bombay Mutual Building, Hornby Road, Fort.

Haji Ahmed Husan & Co.—Topiwala Mansion, Mohamedally Road, Bombay 8.

Harilal Manilal & Co.—346, Kalbadevi Road, Bombay 2.

Hassaram, K., & Co.—New Silk Bazar, Kalbadevi Road.

Hazarat & Co.—Warden House, Sir Phirozshah Mehta Road, Fort.

Himatlal Manilal & Sons.—346, Kalbadevi Road, Bombay 2.

Hindustan Export & Import Corpn. Ltd.—Albert Building, Hornby Road, Fort.

Hussain, M. A., & Bros.—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

India Textile Agencies.—Noble Chambers, Parsi Bazar Street, Fort.

Italindia Cotton Co., Ltd. (Estd. 1922).—Indian Globe Chambers, Fort Street, Fort, Bombay.

Jassawala & Co., R. M.—105, Apollo House, Apollo Street, Fort.

JAYANT TRADING CO.—Sir Vithaldas Chambers, Apollo Street, Fort. Exporters & Importers and Cotton Merchants. Phone: 253018. Grams: "BEACHWAY."

Jesanglal V. Shah.—Dwarkanesh Gully, 1st Floor, Mulji Jetha Market, Bombay 2.

Kapadia & Co.—19, Sir Phirozshah Mehta Road, Fort, Bombay.

Kapadia Trading Co.—Botawalla Building, New Silk Bazar, Kalbadevi Road.

KESHAVALAL TALAKCHAND (PRIVATE) LTD.—India House, Opp. G.P.O., Fort, Bombay 1. Phone: 262934. Grams: "CHANDRODAY." Branches at Ahmedabad, Sholapur, Coimbatore and Madras.

Kimlatral & Co., G.—New Silk Bazar, Bomanji Master Road, Bombay 2.

Kishinchand Chellaram.—Guzder House, Dhobi Talao.

Kotak & Co.—Navsari Building, Dr. Dadabhoy Naoraji Road, Fort, Bombay.

Kotecha & Co.—Commissariat Building, 231, Hornby Road, Fort.

K. Metharam.—491-3, Kalbadevi Road.

Mansukhlal Kantilal & Co.—Mulji Jetha Building, 185, Princess Street, Bombay 2.

Mata Lachhmi Company.—Husseni Chambers, Nanabhai Lane, Fort.

Narandas Rajaram & Co., Ltd.—Navsari Chambers, Outram Road, Fort.

Patell, P. R., & Co., Ltd.—Mherwan Building, Sir Phirozshah Mehta Road, Fort.

Podar Trading Co., Ltd.—Podar Chambers, Parsi Bazar Street, Fort.

Poonjiajee J. M. Jehanjir, J. P.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay.

Premji Haridas & Co.—Bhanushali Chambers, Argyle Road, Bombay 9.

Ramdas Khimji Bros.—Warden House, Sir Phirozshah Mehta Road, Fort.

Ramjee Samjee Virani (India) Ltd.—185, Bazargate Street, Fort.

Ramchand Ambiram.—Above Govind Chowk, M. J. Market, Bombay 2.

Rowe & Rowe.—381, Hornby Road, Fort.

Seabee Export Import Co.—9, Waudby Road, Fort. Phone: 34678.

Shree Krishna Trading Co., Ltd.—11, All Chambers, Meadows Street, Fort.

Steel Brothers & Co., Ltd.—Allahabad Bank Building, Apollo Street, Fort.

SUDAN TRADING CO.—Dhan-Nur, Sir Phirozshah Mehta Road, Bombay 1. Phones: Office: 262788; Res.: 472089. Grams: "VANSOBHA."

Tarachand Parsram.—Court House, Carnac Road, Bombay 2.

Tavaria Brothers.—Dhan-Nur, Sir Phirozshah Mehta Road, Fort.



Trading Co., L. R.—Navsari Chambers, opp. Lloyds Bank, Fort.

**TRANS-UNION COMMERCIAL CORPORATION PRIVATE LTD.**—Prospect Chambers Annexe, 319, Dr. Dadabhai Naoroji Road, Fort, Bombay. Grams: "TRANSMETER." Phones: 251610 & 355855 (Res.).

Tulsidas V. Patel.—Morarji Goculdas Market, Kalbadevi Road, Bombay 2.

T. Vrajilal & Co.—405, Kalbadevi Road, Bombay 2.

Utoomal & Assudamal Co.—Bombay Mutual Annexe, Gunbow Street, Fort.

Vaswani (India) Ltd.—496, Kalbadevi Road, Bombay 2.

Windmere (India) Ltd.—Sir Vithaldas Chambers, 16, Apollo Street, Bombay.

Yacoob Ahmed Brothers (ESTD. 1895).—Topiwalla Mansion, Mohamedali Road.

### COTTON PIECEGOODS IMPORTERS

Allied Exporters.—Kumud House, 267, Dr. Dadabhai Naoroji Road, Fort, Bombay.

Arthur Import Export Co.—166, Hornby Road, Fort, Bombay.

Kapadia & Co.—19, Sir Phirozshah Mehta Road, Bombay 1.

Mahendralal, B.—Muljee Jetha Market, Dwarakesh Gully, Bombay 2. Cotton, Woollen and Art Silk and Piece-goods Merchants and Importers.

Windmere (India) Ltd.—Sir Vithaldas Chambers, 16, Apollo Street, Bombay.

### COTTON AND YARN MERCHANTS

Amersey & Sons.—Feltham House, Ballard Estate.

Askay & Co. Ltd.—Great Social Building, Sir Phirozshah Mehta Road, Fort, Bombay.

Associated Services, Ltd.—Alli Chambers, Meadows Street, Fort.

Bhaldas Cursonadas & Co.—Sir Vithaldas Chambers, 16, Apollo Street, Fort.

Birla Brothers Private Ltd.—Branch Office: Industry House, 159, Churchgate Reclamation, Bombay 1.

Bombay Co., Ltd.—9, Wallace Street, Fort.

Chinubhai Madhowlal & Co.—Noble Chambers, Parsi Bazar Street, Fort.

Cotton Agents Private Ltd.—Industry House, 159, Churchgate Reclamation, Bombay 1.

Drennan & Co.—Neville House, Currimbhoy Road, Ballard Estate.

Finlay, James, & Co., Ltd.—Mahatma Gandhi Road, Fort.

Hanaraj Marji & Sons.—118, Kansara Chawl.

Hirji Nensey & Co.—Horniman Circle, Fort.

Jasawalla, B. M., & Co.—105, Apollo Street, Fort.

Jaybharat Yarn Trading Co.—77, Tamba Kanta, Bombay 3.

Kooverjee V. Curumsey & Co.—Lentin Chambers, Dalal Street, Fort.

Lalji Ramji & Co.—17, Chinch Bunder, Mandvi.

Louis Dreyfus & Co.—Nicol Road, Ballard Estate.

Madhavdas Amersey & Co.—Oriental Building, Mahatma Gandhi Road.

Motabhai Gulabdas & Co.—Mubarak Mansil, 104, Apollo Street, Fort.

Nanji V. Doss & Co.—Jan Mansion, Sir Phirozshah Mehta Road.

Patel Brothers.—Elphinstone Building, 10, Churchgate Street, Fort.

Pavri Sons & Co.—95-97, Bazargate Street, Fort.

Baghavji Kanji & Co.—116, New Chinch Bunder Road.

Ralli Brothers, Ltd.—21, Ravelin Street, Fort.

Ratilal Dayabhai Shah.—Tambakanta, Pydhownie, Bombay 3.

Sankelchand G. Shah & Co.—Hanuman Building, Tamba Kanta.

Sapt Textile Products (India) Ltd.—J. K. Building, Dougall Road, Ballard Estate.

Sarupchand Prithiraj & Co.—401, Cotton Exchange Building, Kalbadevi Road.

Sassoon, E. D., & Co., Ltd.—E. D. Sassoon Building, Dougall Road, Ballard Estate.

Spinner, E., & Co.—8, Tamarind Lane, Fort.

Suleman & Co., Ltd.—27, Kolasa Moholla.

### COTTON WASTE

*For your regular requirements of*

## COTTON WASTE & RAGS

*of any type & grade*

*Please contact or send your enquiries to:*

### ABBAAS & CO.,

General Cotton Waste Merchants, Contractors, Suppliers & Exporters.

23-25, Tank Street, Near Mastan Tank,  
P.O. Box 4580, Bombay 8.

Tel. No. 373626

Grams: "WASTE-O-RAGS"  
Bombay 8.

Adamji & Co.—141, Tank Street, Bombay 8.

Adamji Lookmanji & Co.—Rahimtoola House, Homji Street, Fort.

Arvinda Trading Co. Private Ltd.—105, Apollo Street, Fort.

Bajaj Brothers Ltd.—Round Building, Kalbadevi Road, Bombay 2.

Brady, W. H. & Co., Ltd.—Churchgate Street, Fort.

Chunilal & Co.—100, Old Hanuman Lane, Bombay 2.

IF IT IS WASTE

REMEMBER

H. P. BROTHERS

IS THE NAME

**H. P. BROTHERS, Nooruddin Chamber, 2nd Floor, 87-B, Broach Street, Bombay-9 (BR).**

Biggest dealers, Merchants and Exporters of all kinds of Raw Cotton and Cotton Waste.

Branches: Ahmedabad, Coimbatore, Indore and Sholapur.

Phone: 326981-326168

Gram: "WORKING".

Hardacre & Co., J.—Himalaya House, Palton Road, Bombay 1.

Jashwantlal Maneklal & Co.—40, Churchgate Street, Fort.

Jehangir J. M. Poonjiajee.—Sir Phirozshah Mehta Road, Fort.

Kotak & Co.—Navsari Building, Dr. Dadabhai Naoroji Road, Fort, Bombay.

Kotecha & Co.—Commissariat Building, 231, Hornby Road, Fort.

Premji Haridas & Co.—Bhanushali Chambers, Argyle Road, Bombay 9.

**SAPT TEXTILE PRODUCTS (INDIA) PRIVATE LTD.**—Sapt Building, Graham Road, Ballard Estate.

Windmere (India) Ltd.—Sir Vithaldas Chambers, 16, Apollo Street, Bombay.

### CRANES AND HOISTS

**CONSOLIDATED ENGINEERING EQUIPMENT CO.**—Union Co-operative Insurance Society Building, Sir Phirozshah Mehta Road, Bombay 1. Phone: 255333. Grams: "CONE-QUIP." Direct Importers of Overhead Electric Cranes & Hoists of all types.

### CROCKERY

Akbarally Ebrahimji Pharmacy & Department Store.—45/47, Veer Nariman Road, Fort, Bombay.

Bawa Crockeries Ltd.—89, Mohamedali Road, Bombay.

Bombay Potteries & Tile Ltd.—Pipe Road, Kurla, Bombay.

**CRYSTAL HOUSE.**—99C-D, Mohamedali Road, Bombay 3. Phone: 327030. Dealers in Glasware, Crockery, Enamelware, Kitchenware, Cutlery, Plasticware, Thermos Flask, Presentation Articles, etc.

Kanthawala, N., & Co.—77, Meadows Street, Fort.

Matani Bros.—84, Mahomedally Road, Bombay 3.

Moosa Omer & Co.—Junction of Mahomedally Road & Carnac Road.

Sally Glass Palace.—Ebrahim Building, Mahomedally Road.

Salemahomed Padamsee & Co.—141, Chakla Street, Bombay 3.

Shivji, K. S., & Co.—144/146, Chakla Street, Bombay 3.

### CROWN CORKS MFRS.

**BHARAT CROWN & METAL INDUSTRIES.**—Chinchpokli Cross Lane, Behind India United Mill No. 5, Bombay 27. Phone: 373239. Grams: "KROKORK." Manufacturers of Crown Corks.

### CRUCIBLE MANUFACTURERS & DEALERS

**BOMBAY TOOLS & HARDWARE MART.**—123, Narayan Dhuru Street, Bombay 3. Grams: "BOTAPS." Phone: 327122. Chokel Brothers.—315, Sandhurst Road, Bombay 4.

**INDIAN CRUCIBLE CO., THE.**—Manufacturers of highly Refractory Graphite Crucibles and Accessories. Head Office: A/9/252, Sardar Vallabhbhai Patel Road, Bombay 4. Phone: 351538. Grams: "RUSTPROOF." Factory at 4, Ghodbunder Road, Malad. Phone: 691535.

**K. B. GANDHI & CO.**—277, Sardar Vallabhbhai Patel Road, Bombay 4. Phone: 354633 & 471303. Sole Agents in India for Famous "GLORIA" Brand German made Crucibles used in Pit & Tilling Furnaces. Largest Stockists of the Morgan's and Carborundum Crucibles, Foundry Plumbago, Polishing goods and all kinds of Heavy Chemicals, etc.



**NADIRSHAW BURJORJI & SONS.**—47, Abdul Rehman Street, Bombay 3. Phone: 321930. Dealers in Crucibles & Steel Furniture.

**P. RATILAL & CO.**—43, Dhanji Street, Moti Mahal, Bombay 3. Phone: 325980. Grams: "ETERNAL." Importers of "Morgan" English, "Colisit" German, "Comet" Indian Crucibles.

**THE LAXMI TRADING CO.**—274, Sardar Vallabhbhai Patel Road, Bombay 4. Phone: 354633 & 351203. Grams: "HANS-MOTI."

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

### CRUDE DRUGS

**BOMBAY KIRYANA INDUSTRIES.**—204, Samuel Street, Vadgadi, Bombay 3. Phone: 327466. Grams: "RAWDRUGS" (Bombay—Mandvi).

**Fruit Farm Products Co.**—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay-1. Phone: 262120.

### CURIO DEALERS

**Akbarally Ebrahimji Pharmacy & Department Store.**—45/47, Veer Nariman Road, Fort, Bombay.

**Carpets Palace.**—Opp. Tajmahal Hotel, Merewether Road, Bombay 1.

**Chinese Museum.**—Radio House, Apollo Pier Road, Fort.

**"DECORA" RAVAL TILES & MARBLE PRIVATE LTD.**—Edena, 97-A, Queen's Road. Phone: 242310.

**Eclipse Jewellery & Curio.**—Next to Regal Cinema, Museum.

**Grand Bazar.**—25, Colaba Causeway, Bombay 1.

**Hotchand Motumal.**—331, Hornby Road, Fort.

**Indian Art Museum (Regd.).**—Carnac Bridge, Bombay 3.

**Indian Arts Emporium.**—Bombay Mutual Annexe, 2-C, Cawasji Patel Street, P.O. Box No. 1716, Fort, Bombay.

**Kashmir Govt. Arts Emporium.**—Sir P. M. Road, Bombay 1.

**Maganlal N. Maniar.**—63, 3rd Bhoiwada, Bombay 2.

**M. Daldas & Sons.**—190, Princess Street.

**Purram, U. N.**—Standard Building, 336, Hornby Road, Fort.

**Salemahomed Padamsee & Co.**—141, Chakla Street, Bombay 3.

**Sharda Stores.**—104-106, Swadeshi Market, Kalbadevi Road.

### CUTLERY MFRS. & MERCHANTS

**Abdulkayum Esufally & Bros.**—193, Abdul Rehman Street.

**Akbarally Ebrahimji.**—38/C, Cawasji Patel Street, Fort, Bombay 1.

**Akbarally Ebrahimji Pharmacy & Department Store.**—45/47, Veer Nariman Road, Fort, Bombay.

**Bawa Crockeris, Ltd.**—89, Mohamedali Road, Bombay 3.

**Crystal House.**—99C/D, Mohamedali Road, Bombay 3.

**Dossa, S. R., & Co.**—186, Sheriff Devji Street (Chakla), Bombay 3.

**Esmail, M.**—Esmail Building, Sutar Chawl, Bombay 2.

**Esmail Tarmohamed & Bros.**—222, Cutlery Bazar.

**Essofally Rahimbhoy.**—205, Cutlery Bazar, Bombay 3.

**Grand Bazar.**—25, Colaba Causeway, Bombay 1.

**Haji Ahmed Mohamed & Co.**—219, Cutlery Bazar.

**Hamir Jamal & Co.**—Showroom: 14/16, Lohar Chawl, Bombay 2.

**Jafferjee Kamrudin.**—91-93, Bhusari Moholla, Bombay 3.

**Jhaveri Bros. & Co.**—345-49, Abdul Rehman Street.

**Latham Abercrombie & Co. Private Ltd.**—Forbes Building, Home Street, Fort.

**Mahomadally Essofbhoy Kaderbhoy Motiwala.**—88, Sarang Street, Bhusari Mohalla, Bombay 3.

**Manseta, N., & Bros.**—165, Lohar Chawl, Fort.

**Mansukhlal Kantilal & Co.**—185, Mulji Jetha Building, Princess Street.

**Matani Bros.**—84, Mohamedali Road, Bombay 3.

**Mohamedally Abdullaly.**—75-77, Bhusari Moholla, Bombay 3.

**Moosa Easa & Co.**—Corner, Kalbadevi Road, 6, Maniar Building, Pydhowne Tram Junction, Bombay 3.

**New India General Stores.**—33, Meadows Street, Fort, Bombay.

**Punjab Metals.**—20, Wadi Bunder Road, Mazagon, Bombay 10.

**Salemahomed Padamsee & Co.**—141, Chakla Street, Bombay 3.

**Sanghani & Co.**—178-80, Abdul Rehman Street.

**S. G. Kothari & Co.**—88-90, Abdul Rehman Street, Bombay 3.

**Shaikh & Co.**—94, All Umar Street, Bombay 3.

**Shivji, K. S., & Co.**—144-46, Sheriff Devji Street, Bombay 3.

### CYCLES AND CYCLE ACCESSORIES MFRS., DEALERS & IMPORTERS

**A. M. Daisy & Co.**—Princess Street, Bombay 2.

**Advance Trading Corporation.**—Hathi Building, Bhangwadi, Kalbadevi Road, Bombay 2.

**Agarwal Traders.**—Vasantwadi, Bombay 2.

**Allied Exporters.**—Kumud House, 267, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

**Allied Industries Producers.**—Orient Hotel Building, opp. Crawford Market, Fort.

**Ashok Overseas Trading Co. Ltd.**—543, Kalbadevi Road, Bombay 2.

**Bharat Commercial Co. of Lahore.**—103/4, Meadows Street, Bombay 1.

**Bharat Cycle Co.**—Bharucha Bldg., Princess Street, Bombay 2.

**Bharat Cycle Importing Co.**—Kalbadevi Road, Bombay 2.

**Bharat Motor Co.**—298, Vithalbhai Patel Road, Bombay.

**Bombay & Calcutta Cycle Co.**—413-G, Vasantwadi, Kalbadevi Road, Bombay 2.

**Bombay Cycle & Motor Co.**—451, Kalbadevi Road, Bombay 2.

**Bombay Cycle Trading Co.**—385, Kalbadevi Road, Bombay 2.

**Bombay Electric & Cycle Co.**—Bombay 2.

**B. Parekh & Co.**—H.O.: 383, Kalbadevi Road, Bombay.

**Capital Cycle & Motor Co.**—445-51, Kalbadevi Road, Bombay 2.

**C. Raman & Co.**—181, Princess Street, Bombay 2.

**Cycle Trading Co.**—425, Kalbadevi Road, Bombay 2.

**Dupattwala Bros.**—Bhangwadi, Kalbadevi Road, Bombay 2.

**GUPTA CYCLE COMPANY.**—Gold Mohar, 172, Princess Street, Bombay 2. Grams: "GUPTACYCLE." Phone: 38588. Stockists and Exporters of Cycles & Cycle Accessories.

**Hind Cycles Ltd.**—Factory: 250, Worli, Bombay 18.

**Hind Rubber & Cycle Co.**—Kalbadevi Road, Bombay 2.

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Eria, P.O. Box 8002, Bombay 56 AS. Phone: 521634. Grams: "IMANES-COL." Springs & Forms out of Spring wires and strips for your Industry.

**Imperial Cycle & Motor Co.**—Kalbadevi Road, Bombay 2.

**Indo Cycle Co.**—Opp. Bhangwadi, 445, Kalbadevi Road, Bombay 2.

**JANKIDAS & CO.**—192, Princess Street, Bombay 2. Phone: 22436. Grams: "WHEELBIKE." New Delhi Office: 23/F, Connaught Place, New Delhi. Phone: 42104; The Mall, Simla, Phone: 2385. Madras, Phone: 25726. Grams: "MOTORCYCLES."

**Kantilal & Company.**—170, Princess Street, Bharucha Building, Bombay No. 2.

**Kathiawar Cycle & Motor Co.**—527, Kalbadevi Road, Bombay 2.

**K. B. MODI & CO.**—8, Ebrahim Mansion, 366/68, Kalbadevi Road, Bombay 2. Phone: 39038. Grams: "CYCLEBELL." Importers of cycles, motor cycles & accessories. H. O. Ahmedabad.

**Kusumgar (Overseas) Private Ltd.**—503, Kalbadevi Road, Bombay 2.

**Mahendrakumar Ltd.**—157/61, Princess Street, Bombay 2.

**METRO CYCLE CO.**—421, Kalbadevi Road, Bombay 2. Phone Nos. 38032 & 38031. Grams: "METROCYCLE." Enquire for Hercules, Phillips, Raleigh, Atlas Group Bicycles and parts, Dunlop products, accessories, etc.

**Modern Cycle Stores.**—435, Kalbadevi Road, Bombay 2.

**Mohan & Bros., G.**—Hasan Chambers, Parsee Bazar Street, Fort, Bombay.

**Mohanlal Motilal.**—Yusuf Building, Hornby Road, Bombay 1.

**Narendraroy & Company.**—453, Kalbadevi Road, Bombay 2.

**National Electric Corporation.**—Kerawala Bldg., Lohar Chawl, Bombay 2.

**National Manufacturing Co.**—105, Bazargate Street, Fort.

**National Traders.**—345, Kalbadevi Road, Bombay 2.

**Nishat Trading Co.**—461, Sandhurst Road, Bombay.

**Oriental Import Export Co.**—441, Kalbadevi Road, Bombay 2.

**Popular Cycle Co.**—415, Kalbadevi Road, Bombay 2.

**Prem Brothers.**—Kitab Mahal, 192, Hornby Road, Fort, Bombay.

**PREMIER RUBBER & CABLE INDUSTRIES.**—Jamal Building, 211, Nagdevi Street, Bombay-3. Phone: 326551. Grams: "RUBBERGOODS." Manufacturers of "Premier" Cycle & Rickshaw Tyres.

**Primera Corporation.**—207, Sir Vithaldas Street, Fort.

**Punjab Motor Co.**—342-48, Vithalbhai Patel Road, Bombay.

**Ranjan Cycle Importing Co.**—445, Kalbadevi Road, Bombay 2.

**Rapid Cycle & Motor Co., Ltd.**—Kalbadevi Road, Bombay 2.

**Royal Cycle & Motor Co.**—Whiteaway Laidlaw Bldg., Hornby Road, Bombay 1.

**Saurashtra Cycle Co.**—Bombay 2.

**Shah Cycle Importing Co.**—Vasantwadi, Kalbadevi Road, Bombay 2.

**SHAH INDUSTRIES.**—8, Ebrahim Mansion, 366/68, Kalbadevi Road, Bombay 2. Phone: 39038. Grams: "CYCLEBELL." Manufacturers of 'DIMOND' brand Cycles and Rickshaws, Spokes, Nipples, Washers and Steel Balls.

**Shah Trading Co. Ltd.**—157-61, Princess Street, Bombay 2.

**Shamlal Ramnath.**—8, Punjab Great Hotel, Bombay.

**Sorabji D. Daruwalla.**—Round Building, Kalbadevi Road. Phone: 30348.

**Standard Cycle Co.**—420, Kalbadevi Road, Bombay 2.

**S. S. Corporation.**—Kerawala Bldg., Lohar Chawl, Bombay 2.

**Swastik Cycle Mart.**—Ground Floor, Chhotalal Bhuvan, Kalbadevi Road, Bombay 2.

**Union Cycle Co.**—Kalbadevi Road, Bombay 2.

**Upper India Cycle & Motor Co.**—New Hanuman Lane, Bombay 2.

**Victory Cycle Trading Co. Ltd.**—503, Kalbadevi Road, Bombay 2.

**V. S. Brothers & Co. Ltd.**—Bhangwadi, Kalbadevi Road, Bombay 2.



## CYCLES &amp; MOTOR CYCLES

**GLOBE STORES CO.** (Estd. 1896).—Sitaram Building, 1st Floor, Dadabhoy Naoroji Road, Bombay 1. Phone: 262502. Grams: "GLOSTOCO." Sole Agents for "GLOBE" brand side Cars for Motor Cycles & Scooter, "ULMA" Accessories for Lambretta & Vespa Scooters, "GLOBE" brand accessories for Scooters & Motor Cycles, Stockists of Imported & Indian Spare Parts for Lambretta & Vespa Scooters.

## DAIRY COMPANIES

**Baker's Dairy Farm.**—Rusikesh Bhuvan, Gell Street, Jacob Circle.  
**Champion Dairy Co.** (Estd. 1903).—New Petit Mansion, Sleater Road, Grant Road, Bombay 7.

**Clifton Dairy.**—288, Frere Road, Fort, Bombay 1.  
**Empress of India Dairy Co.**—180, Lamington Road.  
**Hiscocks, E., & Co.**—"Win-Villa," 9, Clare Road, Byculla.  
**Indian Express Dairy.**—49, Kapur Mansion, Hughes Road.  
**Infants & Public Milk Supply Co.**—11, Calicut Street, Ballard Pier.  
**Palmer, A., & Co.**—C-123, Cumballa Hill.  
**Parisian Dairy Co.**—1, Tamarind Lane, Fort.

**PARSI DAIRY FARM.**—Head Office: 261/63, Princess Street, Bombay 2. Phone: 23634. Branches: 1. Lalbaug; 2. Poibavdi; 3. Dadar. Dealers & Mfrs., Milk, Dairy Products & Sweetmeats.

**Rezashah Dairy Farm, The.**—Dubash Building, Sleater Road, Grant Road.

**Royal Hygiene Dairy Farm.**—Gool Mansion, Wadia Street, Tardeo.  
**Sarosh Dairy Farm.**—Chandavarkar Road, Borivli.

**Shapur Dairy Farm.**—Mount Road, Opp. P.O., Mazagaon.

**Victor Supply Co.**—Taher Mansion, Nepean Sea Road.

**Wiltshire Dairy Farm.**—"Win-Villa," 23, Clare Road, Byculla.

## DAIRY MACHINERY

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 26-2711 (8 lines). Machine Works: Tank Road, Bombay 33 DD. Phone: 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**Imanes Private Limited.**—94, S. V. Road, P. O. Box 8002, Bombay 56 AS. Tel. 571634. Grams: "IMANESCOL." Springs and Forms out of Springs Wires and Strips for your industry.

**Raj-Der-Kar & Co.**—Commissariat Building, Hornby Road, Fort. Phone: 27304.

## DAMP COURSING

**GLADSTONE LYALL & CO., LTD.**—21, Lansdowne Road, Apollo Bunder, Bombay 1. Phone: 212805 & 211241. Grams: "GLADSWYLL." Bombay Manager: L. N. Deefholts. Regd. Office: 4, Fairlie Place, Calcutta.

## DEAF APPLIANCES

**General Radio & Appliances Ltd.**—Opera House, Bombay.  
**Modern Electric Corporation.**—Byramji Mansion, Sir Phirozshah Mehta Road, Fort.

**Westrex Co., India.**—Metro House, Mahatma Gandhi Road, Bombay 1.

## DECORATORS (INTERIOR)

**Amzel Private Ltd.**—Lotus House, Marine Lines, Bombay 1.

**BHARAT FURNITURE WORKS (ESTD. 1921).**—Swadeshi Mills Estate, 78, Girgaum, Bombay 4. Phone: 356949. Manufacturers and Suppliers of household Office Fittings, Furniture, etc. Specialists in designing, Furnishing & Interior Decorating in the latest styles of Office, Commercial and other special purposes.

**Cooper & Co.**—53, Abdul Rehman Street.

**DAVAR, N., & CO.**—Syndicate Bank Building, Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 26-1880. Interior Decorators and Painting Contractors. Showroom: Commerce Centre, Tardeo, Bombay 34. (W.B.).

**INTERFURN.**—Interior Decorators and Furniture Manufacturers, 361, Dr. Dadabhai Naoroji Road, Fort.

**Kalabhai Karson & Sons.**—256, Sandhurst Road.

**Kamdar Ltd.**—Industrial Building, Opp. Churchgate Station, Fort.

**KANTILAL KARIA & CO.**—Furnishers & Interior Decorators, Chowpatty View, Chowpatty, Bombay 7. Phone: 352272.

**KABE ARTS.**—36B, Sleater Road, Bombay-7. Always at your service for exhibition Pavilions, Stalls, Display Decoration, Animating Publicity, Working Models and Tableaus & Floats etc. Phone: 377995.

**KHANNA & COMPANY, S.**—Mustafa Building, Sir Phirozshah Mehta Road, Fort, Bombay. Grams: "CRETECO," Bombay. Phone: 251162. Specialist in Coloured Cement Rendering, Artificial Malad Stone facing, Terrace Flooring & Victorite plastering.

**LA "DECORS" (INDIA) 1958.**—Dahanukar Building, 480, Kalbadevi Road, Bombay 2. Phone: 39936. Interior Decorators & Furnishers for Office, Residence, etc.

**McKenzies, Ltd.**—Interior Decorators, Sewri.

**MEHRE PATIL & CO., B.**—Bombay Mutual Building, Corner of Dr. Dadabhoy Naoroji Road and Sir Phirozshah Mehta Road, Fort. Phone: 263570.

**Mistry Ebrahim Suleman & Co.**—116, Esmail Curtay Road, Bombay 3.  
**Modern Furniture Works.**—141, 3rd Cross Road, Shilvaji Park Road, Bombay 28.

**New Era Paint Works.**—Opp. Byculla Station, Byculla.

**NOORMOHAMEDS.**—House of Fine Furniture—(Estd. 1885). 109/A-111/B, Mohamedally Road, Bombay 3. Phone: 325124. Grams: "NOORDECOR." Furnishers—Cabinet Makers & Interior Decorators, Importers & Exporters. Branch at Mahim Causeway.

**Premier Furnishing & Decorating Ltd.**—7, Brabourne Stadium, Churchgate Street Extension, Fort.

**Roberts, John & Co., Ltd.**—Jorawar Bhuvan, 98/B, Queen's Road.

**Simplex Art Floorings Ltd.**—"La-Citadelle," 32, Queen's Road.

**WAKEFIELD PAINTS PRIVATE LIMITED.**—"Dhan-Nur," 15/16, Sir Phirozshah Mehta Road, Fort, Bombay 1 (India). Grams: "WAKEPAINT." Phone: 264061.

**WOOD-WORTHS.**—Home and Office Furniture Manufacturers and Designers Show-Room: Commerce Centre, Tardeo, Bombay 34 (W.B.).

## DECORATORS &amp; CONTRACTORS (MANDAP, FURNITURE, CARPETS, ETC.)

**PAVRI & SONS, FRAMROZ HORMUSJI.**—Pavri House, 20, Gunbow Street, Fort, Bombay. Phones: 264158 & 262539. Government & Municipal Contractors, Shamianas, Mandap, Stands, Exhibitions, Electric Light & Fans, Suppliers on hire of glassware, Furniture, Crockery & Decorations of all Sorts.

**VIJAY DECORATORS.**—156, Chakla Street, Bombay 3. Phone: 321660. Mandap Decorators & Contractors. Hire of Sofas, Chairs, Crockery, etc. Partners: Nagardas Dipchand and Mansukhlal Dipchand.

## DENTAL GOODS

**ASSOCIATED DENTAL & MEDICAL SUPPLY CO.**—26, Yusuf Bldg., Mahatma Gandhi Road, Opp. Flora Fountain, Fort, Bombay. Wholesale & Retail dealers in Dental and Medical goods. Distributors of "PRESTIGE" Brand Dental Equipment, i.e. Chairs Units, Operating Stools, Pedestal Spit-toons, etc. Phone: 251495. Grams: "SODAWATER."

**Bharat Dental Supply Co.**—Standard Building, 346, Dr. Dadabhai Naoroji Road, Fort, Bombay 1.

**Dental Corporation of India.**—121, Esplanade Road, Fort.

**J. L. Morrison Son & Jones (India) Ltd.**—Contractor Bldg., Nico Road, Ballard Estate, Bombay 1.

**KOTHARI TRADING CORPORATION.**—Evans Fraser Annexe, 38, Police Court Lane, Bombay 1. Phone: 265174. Wholesale and Retail Distributors for every kind of Dental and Surgical Goods.

**DR. K. PATEL & SONS.**—Eruchshaw Building, 249, Dadabhoy Naoroji Road, Fort, Bombay 1 (BR). Phone: 263762. Direct Importers of Dental Equipment & Sundries.

**Mazda Dental Depot.**—Navsari Chambers, Outram Road, opp. Lloyds Bank, Fort.

**Rawal Shankarlal & Co.**—Esplanade High School Building, 1st Floor, 160, Hornby Road, Fort, Bombay 1.

## DIALS

**EXCEL PROCESS PVT. LTD.**—Leading Manufacturers of Anodised Aluminium Labels, Advertising Gifts, Scales, Dials, Badges, Decorative Radio Trimmings & Panels, Identity Cards & Photographs in exclusive finishes; 117, Andheri-Kurla Road, Bombay 69. Phones: 572743-573327.

## DIAMOND DRESSING TOOLS

**BHARAT ENGINEERING STORES.**—113, Nagdevi Street, Bombay 3. Grams: "UNIONTOOLS." Phone: 323193. Stockists of Elephant Brand Chain Pulley Blocks.

**Jairamdas & Sons.**—163, Narain Dhuru Street, Bombay 3.

**William Jacks & Co., Ltd.**—Bharat House, Apollo Street, Fort, Bombay.

**HEMATOOLS TRADING CO.**—33, Bibijan Street, (Barbhai Mohalla), Bombay-3. Grams: "LACING." Phone: 321174. Importers & Stockists of Chain Pulley Blocks, Garage Tools, Fibre Sheets, Rods, Diamond Dressing Tools, Precision Tools etc.



## DIAMOND, PRECIOUS STONE AND PEARL MERCHANTS

- Abdul Kayum Ebrahim Jhaveri & Co. (Estd. 1902).—Mama Chambers, 93, Cumballa Hill Road, Bombay 26.
- Anandlal Becharlal & Co.—177-119, Sheikh Memon Street.
- Becharadas Harichand & Co.—Poonamchand House, Kharakuvu, Marwarli Bazar.
- Bhogilal Leherchand.—134-136, Zaveri Bazar, Bombay 2.
- Bhojwani Brothers.—24, Munira Lodge, Colaba Causeway, Bombay 1.
- Chimanlal Manchand & Co.—Queen's Road, Bombay 4.
- CHANDULAL T. SHAH.—59, L. K. Market Bldg., 156, Zaveri Bazar, Bombay 2. Phone: 353269. Grams: "SHAHOITY."
- CULTURE PEARLS DEALING CO.—Madras Building, 2nd Floor, 148, Mumbadevi Road, Bombay 2. Phone: 321658. Dealers in (Real) Culture Pearls, ornaments and other Jewels.
- DAHVALAL MAKANJEE ZAVERI.—Precious Stones, Diamonds, Pearls and manufacturing Jewellers; also authorised valuers under the Estate Duty Act. 98, Sheikh Memon Street, Bombay 2. Phone: 23218. Grams: "JAYKUBER."
- Dalchharam Nanchand & Co.—7, Dhanji Street.
- Dhamanlal Isardas.—Mulji Sicea Building, China Baug, Vithalbhai Patel Road.
- Fulchand Kasturchand.—163-165, Sheikh Memon Street.
- Gasdar Ltd. (Jewellers).—Taj Mahal Hotel, Colaba.
- Godedji Doshi & Co.—10, Dhanji Street.
- Harilal Lalji & Co.—149, Sheikh Memon Street, Bombay 2.
- Hemchand Mohanlal & Co.—Devki Bhuvan, Dhanji Street, Bombay 3.
- Jhaveri Bros. & Co.—Medows Street, Fort.
- Keshavlal Dalpatbhai Zaveri.—Mumbadevi, Zaveri Bazar, Bombay 2.
- K. Wadia & Co.—324, Grant Road, Bombay 7.
- Lallubhai Gulabchand Jhaveri.—149, Shroff Bazar.
- MAGANBHAI & LALLUBHAI.—Jewellers, Direct Importers and Exporters of Real and Cultured Pearls, Precious & Semi-Precious Stones, Diamonds Rough and Cut. 184-186, Sheikh Memon Street, Bombay 2. Phones: 23785. Grams: "MOTIBUTTON."
- Nagindas Virchand Jhaveri.—44-46, Dhanji Street, Bombay 3.
- Narotandas Bhau (Estd. 1864).—Lamington Road, Bombay.
- New Pearls Trading Agency.—Patel Building, 76-A, Sheikh Memon Street, Zaveri Bazar.
- Pearls, Gems & General Agency Ltd.—General Assurance Building, Hornby Road, Fort.
- PITAMBERDASS MOHANLAL & SONS (ESTD. 1880).—4, Mandlik Road, Causeway, Opp. Colaba Police Station, Bombay 1. Phone: 212276. Grams: "GEMLEADER." Dealers and Exporters in all kinds of cut & rough Precious & Semi-Precious Stones. Also many varieties of Bead Necklaces.
- Punemchand Ghasilal.—126-128, Zaveri Bazar.
- Puraram, B. V.—Manufacturing Jewellers, Diamond and Pearl Merchants, 62, Medows Street, Fort. Phone: 24645. Grams: "FAIRVALUE."
- Roopchand Jewellers.—Sandhurst Bridge, Bombay 4.
- Ruby & Co.—Cutch Castle, opp. Opera House.
- Surajmal Lallubhai & Co.—359, Kalbadevi Road.

## DIE CASTING

- AUTO PARTS DIE-CASTING INDUSTRIES PRIVATE LTD.—82-84, Zaveri Bazar, Bombay 2. Phone: 20102; Grams: "DIECASTERS"; Factory 114A, Pokharan Road, Jekegrams P.O., Panchpakhadi, Thana; Phone: 592104; Manufacturers of Die-casting Components out of Zinc and Aluminium alloys.

## DIES & JIGS

- ARIFTA.—Die & Tool Engineers, Soho House, Lohar Street, Bombay-2. Phone: 20779. Die Tool & Consulting Engineers, Designers and Manufacturers of Follow-on Combination and Multi-operation Dies for Sheet Metal Parts.

## DIESEL ENGINES & SPARES

- AGRA ENGINEERING CO.—40, Bank Street, Fort, Bombay 1. Phone: Office: 256541; Res.: 532906. Grams: "RAJSPARES." Manufacturers of Diesel & Automobiles Spare Parts, "ARROW" & "DISPA" Liner & Pistons for Diesel Engines, "MG" Pistons for Cars, Trucks, Commercial Vehicles, Motor Cycles, Scooters & Tractors.
- ARJANSINGH KHEMCHAND.—1st Floor, 118, Commerce House, Medows Street, Bombay 1. Phone: 253752.
- APOLLO INDUSTRIAL CORPORATION.—Warden House, Basement, Sir Phirozeshah Mehta Road, Fort, Bombay 1. Manufacturers: Diesel Engine Spares, Fuel Injection Tubings, Fuel Oil Filters and M. S. Tubes in various gauges.
- Crescent Agencies (Private) Ltd.—Beaumont Chambers, 27-33, Medows Street, Fort, Bombay.

- DEELIPKUMAR & CO.—313, Commerce House, 3rd Floor, Medows Street, Bombay 1. Branch: Madras. Grams: "HITUADHIYA". Phone: 254996.

- ECHJAY INDUSTRIES PRIVATE LTD.—Office & Factory: Kanjur Village Road, Bhandup, Bombay-78. Phones: 581211 & 581678. Grams: "ECHJAY," Bhandup. Manufacturers of Accessories & Equipments for Machine Tools, General Steel Drop & Upset Forgings-including Forged Flanges; Forged Parts of Diesel Engines & Automobiles; Forged Hand Tools: Hand Hammers, Chisels & Punches, Spanners, Pliers, Jigs & Fixtures, Press Tools, Dies & Punches.

- ELVE BUSINESS CONTACTS CORPORATION.—Elve Chamber, Green Street, Fort, Bombay 1. Phones: 252088 & 254655. Grams: "ELBUSCON." Importers and Dealers in Spare Parts for Diesel Engines, Tractors and Automobiles.

- EVEREST ENGINEERING CORPORATION.—12, Hornby View Building, Gunbow Street, Fort, Bombay 1. Phone: 261691. Grams: "EXPOCORP." Specialists in Diesel Engines & Spares, Fuel Injection Equipment, Electric Motors, Small Engineering Tools, Workshops Machinery, Graphite Crucibles, Ball & Roller Bearings, Steel Shafting, Circlips, etc. (Allied concern of Messrs. Khimandas Jagumal & Sons).
- George Oakes Private Ltd.—Swadeshi Mills Compound, New Queen's Road, Bombay 4. Phone: 27061-6.

- HARRY'S TRADING CO.—Spares for Industrial Engines, "Fuel Injection Equipments," "Bryce," "Bosch," "Cav" and "FIL" Specially for Diesel and Tractor Engines. Electric Motors & Allied Machinery. 501A, Commerce House, Medows Street, Bombay-1. Phones: 256605 & 535023 (Res.).

- Hindustan Engineering Co.—(Machinery Dept.), "ABAN HOUSE", 25/31, Ropewalk Street, Fort, Bombay 1. Phone: 253583. Grams: "VIDOOALL."

- HONESTY TRADING CORPORATION.—Beaumont Chambers, Medows Street, Fort. Phones: 253534 and 252018. Grams: "HOTRACO." Sole Agents for Spare Parts for Hercules Diesel Engines fitted to Cletrac Tractors and other machineries.

- IMANES PRIVATE LIMITED.—94, S. V. Road, Erli, P.O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANES-COL." Springs & Forms out of Spring Wire and strips for your Industry.

- Khimandas Jagumal & Sons.—12, Hornby View Building, Gunbow Street, Fort, Bombay 1.
- Kumar Commercial Co.—Nadirshaw Sukhla Street, Opp. Cawasji Patel Street, G.P.O. Box No. 1525, Bombay 1.

- MACHINERY SALES CORPORATION.—5, Tamarind, House, Tamarind Lane, Fort, Bombay 1. Grams: "ENGESPARES." Phone: 254480. Stockists of Imported Spare Parts for Diesel Engines, Tractors, Road-Rollers & Spares.

- NAREN KUMAR MACHINERY CO.—9, Oak Lane, Off Medows Street, Fort, Bombay. Phone: 251868. Grams: "NEW-KUMAR," Bombay. Importers of Diesel Engine Spares & Stockists of "Vera" Engine Valves & Electric Motors.

- SIGIL (INDIA) SERVICES PRIVATE LTD.—Ismail Building, 381, Dr. Dadabhoy Naoroji Road, P.O. Box 952, Bombay-1. Phones: 253688 & 254531. Grams: "SIGIL." Branch: P.O. Box 1961, Madras-1. Manufacturers, Exporters and Distributors of Diesel Engines, Diesel Pumping Sets and Component Parts thereof, also automobile parts.

- SUPREME INDUSTRIAL WORKS.—196/K, Gaiwadi, Girgaum, Bombay 4. Manufacturers of Gears and Specialists in all kinds of Worms and Worm Wheels. Phone: 355189.

- T. M. TYABJI & BROTHERS.—Hamam House, 32/38, Hamam Street, Fort. Diesel Engine Spares, Hardware, Refrigeration and Electrical Specialists. Grams: "TRUEWAY." Phone: 254285.

- Volta Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

## DIESEL ENGINES MANUFACTURERS, IMPORTERS & DEALERS

- Batliboi & Company Private Limited.—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay 1 (BR). Phones: 255451 (6 lines). Grams: "BATLIBOICO." Tele.: 011-284. City Branch: "BATLIBOI HOUSE", 59/61, Nagdevi Cross Lane, Bombay-8 (BR). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives. RANCHI. Bhubaneswar.

- BEHARAT ELECTRIC AND ENGINEERING CORPORATION.—Free Press Building, Ground Floor, 21, Dalal Street, Fort, Bombay. Phone: 255374. Grams: "GODGRACE."

- BOMBAY MERCANTILE CORPORATION.—211-217, Nagdevi Street, Bombay 3. Phone: 325982. Grams: "CORP-BOMBER." Sole Agents for "ROOPA" Diesel Engines



British Engineering Co.—103, Apollo Street, Fort.  
Cooper Engineering Ltd.—Construction House, Ballard Estate, Bombay 1.

Drewet Chowna & Co.—Lentin Chambers, Medows Street, Fort.  
Eastern Machinery and Trading Co.—Imperial Chambers, Wilson Road, Ballard Estate, Fort.  
Greaves Cotton & Co., Ltd.—Forbes Street, Bombay 1.

H.T.C. DIESEL ENGINES PRIVATE LTD.—Beaumont Chambers, Medows Street, Fort. Phones : 253534 and 252018. Grams : "HOTRACO." Manufacturers of H.T.C. Diesel Engines.

Indian Commercial Co., Ltd.—45-47, Apollo Street, Fort, Bombay.

JAYEMS BEECHY CO. PRIVATE LTD.—Warden House, Sir Phirozshah Mehta Road, Bombay 1. Phone : 256251. Grams : "JAYEMS." Works : Near Bhandup Station. Manufacturers of "NITU", "Russel Newberry" and "Clayes" Diesel Engines.

INDO UNIVERSAL ENGINEERING CO., PRIVATE LTD.—"Shantiniketan," 95-A, Marine Drive, Bombay 2. Post Box 1615, Bombay 1. Phones : 24-1235. Grams : "NEW-POWER." Agents : General Motors Detroit Diesel Industrial Engines, Diesel Marine Engines, Diesel Generating Sets, related spare Parts and Accessories—Enfield Marine & Industrial Diesel Engines & Spare Parts, Service after Sale.

Investa Machine Tools and Engineering Co., Ltd.—Ewart House, Bruce Street, Bombay 1.

Khala, R. T., & Co.—9, Forbes Street, Fort, Bombay.

Khimandas Jagumal & Sons (Estd. 1910), Sind.—12, Hornby View Building, Gunbow Street, Fort.

Killick, Nixon & Co. Private Ltd.—Killick House, Home Street, Bombay 1.

Mahindra & Mahindra Ltd.—Gateway Building, Apollo Street, Fort.

MANOHAR BROTHERS.—4, Commerce House, Medows Street, Fort, Bombay. Phone : 254496. Grams : "LOCOMOTIVE". Branch : 37, Errabalu Chetty Street, Madras. Phone : 23274.

Marshall Sons & Co. (India) Ltd.—Marshall Bldg., Ballard Road, Bombay 1.

Paramount Industrial Stores.—15, Ropewalk Street, Bombay 1.

Power Machines Corporation.—31, Forbes Street, Fort, Bombay 1.  
Protos Engineering Co., Ltd.—173, Jamshedji Tata Road, Churchgate, Bombay.

RUSTON & HORNSBY (INDIA) LTD.—1, Forbes Street, Bombay 1. Phone : 259171. Grams : "RUSTONIND." Manufacturers of Horizontal Diesel Engines, Vertical Water-Cooled and Air-Cooled Diesel Engines, Diesel Alternator Sets' Propellers and Stern gear, Deepwell Turbine Pumps and Centrifugal Pumps. Works : Chinchwad, Poona-19. Phone : 88231. Grams : "RUSTONIND." Chinchwad.

SINGH & SINGH.—Victoria Mills Estate, Gamdevi, Bombay 7. Phone : 355557. Grams : "BAKINGCO." Manufacturers of Gears, Cylinders, Liners and Spares for Cars and Diesel Engines. Specialists in Crankshaft grinding and Rolling upto 12 in. by 72 in. Branch at Shivaji Nagar, Poona 5. Phone : 57597.

Standard Spares & Machinery Co.—105, Apollo Street, Fort, Bombay.  
William Jacks & Co. Ltd.—Hamilton House, Ballard Estate, Bombay 1.

### DIPENTINE & PINE OIL

PRABHAT GENERAL AGENCIES.—195, Kalbadevi Road, Bombay 2. Phone : 20359. Grams : "EXPANSION."

### DISC SPRINGS

B. CHOWDHURY & CO.—Indian Globe Chambers, Fort Street, Bombay 1. Phone : 26-3479. Grams : "BISUKHI." Sole Agents for : Adolf Schnorr, West Germany.

### DISINFECTANTS AND INSECTICIDES MFERS.

Akbarally Ebrahimji Pharmacy & Department Store.—45/47, Veer Nariman Road, Fort, Bombay.

All India Medical Corporation.—185, Princess Street, Bombay 2.

Amritlal & Co. Private Ltd.—Sprott Road, Ballard Estate, Fort.

Balmer Lawrie & Co., Ltd.—6, Graham Road, Ballard Estate, Fort.

Bharat Pulverising Mills Private Ltd.—38/A, Sayani Road, Parel, Bombay 28.

BOMBAY CHEMICALS PRIVATE LTD.—Maneckji Wadia Bldg., 129, Mahatma Gandhi Road, Fort, Bombay. Manufacturers of Pyrethrum extracts, Pip Insecticides & Disinfectants, Agricultural Insecticides.

Burmah-Shell Oil Storage & Distributing Co. of India Ltd.—Ballard Estate, Bombay 1.

Chimanlal Patel & Co.—174, Hornby Road, Fort.

Chlorogen Co.—Princess Street, Bombay 2.

CIBA OF INDIA LIMITED.—Royal Insurance Building, 14, Jamshedji Tata Road, Bombay-1. Phones : 245031-3; 246094-6. Manufacturers and Importers of Pesticides for Plant Protection, Public Health and Veterinary use.

Din Products Ltd.—9-A, Ash Lane, Off Medows Street, Fort, Bombay 1.

Hardcastle, Waud & Co. Private Ltd.—Alice Building, Hornby Road, Fort.

Holmes Laboratory.—Upper Forjett Hill, Bombay 26.

Industrial Minerals & Chemical Co.—125, Narayan Dhuru Street, Bombay 3.

Jones, J. D., & Co. (Bombay) Ltd.—Rustom Bldg., Veer Nariman Road, Bombay 1.

Latham Abercrombie & Co. Private Ltd.—Forbes Building, Home Street, Fort.

Pest Control (India) Private Ltd.—36, Yusuf Building, Mahatma Gandhi Road, Fort, Bombay 1.

Sardesai Brothers Private Ltd.—14, Murzban Road, Fort, Bombay.

Spencer & Co., Ltd.—Forjett Street, Bombay 26.

STANDARD CHEMICAL & PHARMACEUTICAL CO.—Atlas Mills, Reay Road, Bombay 10. Phone : 373542. Grams : "GERMOL." Manufacturers of disinfectant fluids, Household Insecticides and Pyrethrum Extract.

TATA FISON INDUSTRIES LIMITED.—Registered Office, Head Office and Spraying Service Section : Realli House, 21 Ravelin Street, Fort, Bombay-1. (Telephone : 268221) ; Regional Office : Union Bank Building, Dalal Street, Fort, Bombay-1. Telegraphic Address : "TATFISON," Bombay, (Phone : 256284/8). Manufacturers of Agricultural Chemicals. Sole Distributors in India, Pesticides - Rallis India Limited Pharmaceuticals - Martin & Harris (India) Private Limited.

VELU & CO. (PVT.) LTD., P. K.—P.O. Box No. 514, 111, Mahatma Gandhi Road, Bombay 1. Phones : 253141 & 641326. Grams : "LACQUER."

VERMIT CO. (INDIA).—107, Wodehouse Road, Bombay 5. Phone No. 211723. Manufacturers and Importers of Insecticides, Disinfectants, Detergents and Polishes.

### DOMESTIC ELECTRIC APPLIANCES

BAJAJ ELECTRICALS LTD.—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers and Contractors. Phone : 25-3841. Grams : "SOFTLITE." Branches at Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder & Bangalore.

KANTILAL KESHAVAL & CO.—80-82, Vithalwadi, Bombay 2. Phones : 38200/22043. Grams : "SPERHOT." Storage type Water Heaters, Laundry Irons, Immersion Heaters, Domestic & Industrial Heating Appliances. Agents : Battiboi & Co. at Bombay, Calcutta, Madras, Delhi, Kanpur & Coimbatore.

LIGHT-HOUSE.—51, Kitchen Garden Lane, Shrijee Bhuvan, Bombay 2. Phone : 30351. Grams : "GREATWALL". Stockists of "Prestige" Pressure Cooker.

POWER CONTROL & APPLIANCES CO.—P.O. Box 6526, Cumballa Hill, Bombay 26. Phones : 36-2137 & 592078 (PP). Manufacturers of SUMEET Multi-purpose Electric Mixer ideally suited for an Indian Kitchen.

### DRAWING OFFICE & SURVEY REQUISITES

ALLIED DRAWING STORES.—29, Hornby Road, Bombay 1. Telegrams : "ARTCORNER." Phone : 261403.

BOMBAY MISCELLANIES PRIVATE LTD.—Khan Mansil, 28, Calicut Street, Fort, Bombay 1. Phone : 266523. Grams : "FEPRU." Manufacturers of "Telephone" Brand Ferro-Prussiate and Ammonia Printing papers.

DRAWING OFFICE EQUIPMENT CO.—Himalaya House, 79-C, Palton Road, Bombay 1. Phone : 261403.

Gillanders Arbuthnot & Co., Ltd.—10, Queen's Road Estate, Bombay.

## Kilburns "VICTORY" Brand

AMMONIA PAPER  
FERROPRUSSATE PAPER  
REPRODUCTION PAPER  
TRACING PAPER

## KILBURN & CO. LTD.

Asian Building, Nicol Road,  
Ballard Estate, Bombay 1.

Phone : 264110

Gram : "TASCONIUM"



**KILBURN & CO. LTD.**—Gresham Assurance House, Phirozshah Mehta Road, Fort, Bombay 1. Phone: 256845. Grams: "TASCONIUM."

**Lawrence & Mayo (India) Ltd.**—274, Hornby Road, Fort.

**Mercantile Stationery Mart.**—261, Abdul Rehman Street, Bombay 3.

**S. GANDY & CO.**—22-D, Parsee Bazar Street, Fort, Bombay 1. Phone: 251657. Grams: "SEABORN." Stationers and Manufacturers of Drawing Tables, Drawing Boards, Artist Tables, Billiard Tables and all kinds of Engineering Papers.

### DRAWING MATERIAL DEALERS

**ALLIED DRAWING STORES.**—29, Hornby Road, Bombay 1. Telegrams: "ARTCORNER." Phone: 261403.

**Armstrong Smith Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort.

**BOMBAY MISCELLANIES PRIVATE LTD.**—Khan Manzil, 28, Calicut Street, Fort, Bombay 1. Phone: 266523. Grams: "FEPRU." Manufacturers of "Telephone" Brand Ferro Prussiate & Ammonia Printing papers.

**DRAWING OFFICE EQUIPMENT CO.**—Himalaya House, 79-C, Palton Road, Bombay 1. Phone: 261403.

**S. RAMACHANDRA & CO.**—Dealers in Artists and Students Art Materials. Office: Prospect Chambers Annexe, Dr. Dadabhai Naoroji Road, Fort, Bombay. Phone: 251867. Shop: C/5, Sitaram Building (Opp. J. J. School of Art, Dr. Dadabhai Naoroji Road), Bombay 1. Phone: 265344.

### DRILLS, TAPS & DIES

**BHARAT ENGINEERING STORES.**—113, Nagdevi Street, Bombay 3. Grams: "UNIONTOOLS." Phone: 323193. Stockists of Elephant Brand Chain Pulley Blocks.

**JAIRAMDAS UDYOG PRIVATE LTD.**—Regd. Office: 157-159, Narayan Dhuru Street, Bombay 3. Mfrs. of "Jesons" brand Twist Drills, Taps, Dies, Tool Bits etc. Factory: Jairamdas Estate, 8th Mile, Mysore Road, Kengeri, Bangalore.

Jairamdas & Sons.—163, Narain Dhuru Street, Bombay 3.

### DRUMS & CONTAINERS MFRS.

**BOMBAY DRUMS MANUFACTURERS.**—24, Calicut Street, Safia Manzil, Fort, Bombay 1. Phone: 263042. Manufacturers of Drums & Cans for Dyes, Chemical Paste and Liquids.

**H. P. MODI & CO. (Estd. 1924).**—Manufacturers and Exporters of Drums, Containers, Kegs, Ghamellas, Kadais, etc. Office: Modi House, 177-79, Nagdevi Street, Bombay 3. Grams: "MIXTURE." Phone: 326753. Factory: 41, Sankli Street, Byculla, Bombay 8. Phone: 375847.

**K. T. KUBAL & CO. (PRIVATE) LTD. (Estd. 1926).**—40, Foras Road, Bombay 8. Phone: 41179. Manufacturers of Electrical Welded Drums and Condiments. Manufacturers and Exporters of famous "Kubal" Masala Curry Powder.

**STANDARD DRUM & BUCKET FACTORY.**—232, Bellasis Road, Bombay 8. Phone: 372480. Grams: "STANDRUM." Manufacturers of Drums, Containers and Kegs for Dyes, Chemicals, Paints, Oils, etc.

**TAYABI BUCKET FACTORY.**—Manufacturers of Buckets, Drums, Containers and other household articles. Show-room: 174/178, Janjiker Street, Bombay 3. Phone: 323474 and 326545. Grams: "HORSEBRAND." Factory: Ripon Road Cross Lane, Bombay 8. Phone: 377308.

### DRY FRUIT MERCHANTS

**HIRLAL MAGANLAL & CO. (Estd. 1917).**—395-97, Narsi Natha Street, Katha Bazar, Bombay 9. Phones: 324796 & 327695. Grams: "WALNUT." Wholesale & Retail Dry Fruit Merchants, Exporters & Importers.

### DUPLICATING MACHINES

**Apex Enterprises.**—17, 5th Floor, Mohatta Market, Palton Road, Bombay 1. Grams: "APEXRISES."

**Gestetner Duplicators Ltd.**—Construction House, Ballard Estate, Bombay.

**Imanes Private Limited.**—94, S. V. Road, P. O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANESCOL." Springs and Forms out of Spring Wires and Strips for your Industry.

### DURRIES (SATRANJI)

**E. PEERBHOY & SONS.**—Prop., Indian Durries Emporium, 64, Mohamedali Road, Shahru Castle, Bombay 3. Phone: 323806. Grams: "INDIAWEAVE".

### DYEING, PRINTING & BLEACHING COMPANIES

**Hairchand Textile Mills, Ltd.**—Agra Road, Vikrolli (Central Bly.).

**NEW PRAHLAD MILLS LTD.**—Atlas Mills Compound, Reay Road, Bombay 10. Phone Office: 252888. Factory: 78230. Grams: "AMRITMILL." Bombay. Processors of Cotton Textiles & Man-made fibres, Dyers, Bleachers, Mercerisers, Printers, Finishers, etc. Director: Tulsiprasad Khaitan. Manager: J. S. Mehta.

**Prakash Dyeing, Bleaching & Printing Mills.**—Mogal Lane, Matunga (Western Bly.), Bombay 16.

**Shri Laxmi Cloth Trading Co.**—135, Zaveri Bazar, Bombay 2.

**Usha Dyeing & Printing Works.**—Sir Shapurji Bharucha's Bungalow, Khetwadi 12th Lane, Bombay No. 4.

**Vasudev Dyeing Works.**—316, Dr. Cowasji Hormusji Street, opp. Sonapur Church, New Marine Lines Railway Station, Bombay 2

**Vijay Printing Works.**—Andheri Road, Kurla, Bombay.

### DYESTUFFS

**AMAR DYE-CHEM LTD.**—(Manufacturers of Coal tar Dyes and Intermediates.) "Rang Udyan", Sitladevi Temple Road, Post Box No. 6471, Mahim, Bombay 16. Now producing the full range of Amarthols, Fast Colour Bases, Acid & Basic Dyes of the T.P.M. Series, Reactive Dyes, X Hot brands and Cold brands. Optical Whiteners, Pigments, Printing Colours with Binders for Textile Industry, Organic Pigments for the Paint Industry, and Intermediate, viz. Bon Acid and Diethyl-meta-aminophenol.

**Ameer Trading Corporation, Ltd.**—Contractor Building, Nicol Road, Ballard Estate, Bombay. Phone: 31911. Grams: "AMTRACOR."

**AMRITLAL & CO. PRIVATE LTD.**—"Rang Udyan", Sitladevi Temple Road, Mahim, Bombay 16. Phones: 453251 & 262291. Grams: "RASIK." Sole Agents in India: Rohm & Haas Co., Philadelphia, U.S.A.; Manufacturers of Textile & Leather Chemicals and Agricultural Insecticides & Fungicides. And also for Sojuzchimexport U.S.S.R. for Dyes, Intermediates and Chemicals.

**Anglo-American Dyestuffs Corporation Ltd.**—Prospect Chambers, Hornby Road, Fort. Phone: 33993.

**Anilino Dyes & Chemical Co. (Estd. 1922).**—3, Gilder Lane, Lamington Road, Bombay 8.

**Ariabs Private Ltd.**—India House, P.O. Box No. 1442, Bombay 1.

**Arvinda Bros.**—165, Vithalbhai Patel Road, Bombay 4.

**Arvinda Trading Co. Private Ltd.**—105, Apollo Street, Fort.

**Asiatic Dyestuffs Agency.**—306, Samuel Street, Vadgadi, Bombay 3.

**AZOFEN LIMITED.**—61, Apollo Street, Fort, Bombay. Phone: 254054. Manufacturers of 'SARCOSINE' 'LUMISOLS' (Optical Whitening Agents); Dyestuff intermediate and "ADI-NOLT" (Textile Auxiliary).

**Bhatla Trading Co.**—1, Shree Ram Market, Vadgadi, Bombay 3.

**Bharat Chemicals Co.**—331, Samuel Street, Vadgadi, Bombay 1. Phone: 34401.

### DYES & AUXILIARIES

#### FOR TEXTILE INDUSTRY

**We Manufacture:** Binder Special for KHARI PRINTS. Non-Dischargeable Black-Paste for Discharge Printing in Machine & Screen Printing

**We Supply:** Neo Sandye Pigment Resin Colours with Binder HL and Binder VA which gives excellent Fastness.

#### BHARAT DYES & CHEMICAL CO.,

Importers & Dealers in:

#### DYES, CHEMICALS & AUXILIARIES

119, Vir Vithaldas Chandan Street, Vadgadi, Bombay-3 BR.

Phones:

Office: 322888, 328059

Resl.: 451196, 51246, & 366518.

Grams:

"BHARATDYE"

**Bhavanidas Gangadas & Co.**—233/35, Samuel Street, Vadgadi, Bombay.

**Bock, F., & Co.**—Shale Building, Bank Street, Fort.

**C. AGRAWALA & CO., PRIVATE LTD.**—43-44, Lakshmi Building, Sir Phirozshah Mehta Road, Bombay 1. Phone: 265163 Grams: 'AGRAWALCO.' Importers & Stockists of Dyestuffs & Chemicals.

**Capital Colour & Chemical Co.**—77-78, Mirchl Street, Vadgadi, Bombay No. 3.

**Chavannes & Co., Ltd.**—Mercantile Chambers, Graham Road, Ballard Estate.

**Chem Col Co.**—345, Samuel Street, Vadgadi.

**CHEMI DYE TRADING CO., PRIVATE LTD.**—Kamder Building, Cawasji Patel Street, Fort, Bombay-1.

**Chemols Supply Co.**—6th Floor, People's Building, Sir Phirozshah Mehta Road, Fort.



Grams: "CHEMODYES"

Phone: 376370



**COLUMBIA**  
CHEMI-COLOUR INDUSTRIES (PVT.) LTD.  
(C.C.I. LTD.)



DIRECT IMPORTERS,  
PROCESSORS & DEALERS  
IN  
DYES & CHEMICALS  
and  
TEXTILE AUXILIARIES

★

*Regd. Head Office:*

Block No. 1 D, Top Floor, Plot No. 81,  
Dr. Annie Besant Road, BOMBAY 18.

*Branches:* AMRITSAR, INDORE & SHOLAPUR*Stockists & Agents:*

Delhi, Calcutta, Surat, Ahmedabad,  
Lachmangarh, Adoni, Hindupur, Madras,  
Salem, Ludhiana, Proddatur, Shahapur  
(Belgaum), Erode, Guleddu, Bangalore and  
Nepal, (Kathmandu).

CIBA OF INDIA LTD.—Royal Insurance Bldg., 14, Jamshedji  
Tata Road, Bombay 1. Phones: 245031-3; 246084-6.

COLOUR-CHEM LTD.—Fort House, 221, Dadabhoy Naoroji  
Road, Fort, Bombay 1. Grams: "PIGMENTDYE." Phones:  
255151-5; 266417 and 266418.



For TEXTILE PRINTING  
DURGAGEN COLOURS  
RECORD PRINTING COLOURS  
DURGASOL FAST SALTS  
(Developing salts)  
Fast GARNET GBC BASE  
DURGACET

*Manufactured by:***DURGA LABORATORIES** (Estd. 1947)

Office: 71, Bhandari Street, Vadgadi, Bombay 3.  
Factory: (1) 32, Versova Road, Andheri, Bombay 58.  
(2) Ram Mandir Road, Goregaon (West),  
Bombay.

Tele. Address: "DURGALAB", MANDVI.

Works: Tel. 572941

Office: Tel. 321502

Dadabhai Bhaskjee & Co. Private Ltd.—274, Samuel Street, Vadgadi,  
Bombay 3.

DYE-CHEM MANUFACTURING CO. PRIVATE LTD.—Manu-  
facturers of Coal Tar Dyes. Office: Navsari Chambers,  
Ostam Road, Fort, Bombay. Phones: 263671 & 691910 (Res.).  
Grams: "FASTDYES." Factory: Mogyre, Old Nagardass  
Cross Road, Andheri, Bombay 58. Phone: 573171 and  
573645.

FARBSTOFFE PRIVATE LTD.—327, Samuel Street, Vadgadi,  
Bombay-3. Phone: 324659 (Office) & 325291 (Res.).

FINE DYESTUFFS & CHEMICALS (INDIA) LTD.—61,  
Apollo Street, Fort, Bombay. Phone: 254064. Grams:  
"CHEMFIND".

Fires Trading Co., Ltd.—Kamar Building, Gawasji Patel Street, Fort,  
French Dyes & Chemicals (India).—"Adelphi", 3, Queen's  
Road, Bombay.  
Gandhi Sons Ltd.—232, Samuel Street, Vadgadi, Bombay 6.

**GOLDEN DYES CORPORATION (INDIA)  
PRIVATE LTD.**



Head Office: BELA COURT No. 2, COLABA, BOMBAY 5  
Telegrams: "GOLDYES" Phone No. 212458

IMPORTERS AND MANUFACTURERS OF  
DYES, CHEMICALS FOR TEXTILES AND  
OTHER PURPOSES.

Specialities: ACID • BASIC • DIRECT OIL  
SOLUBLE • FOOD COLOURS • PIGMENTS and  
ACETATE DYES.

AGENCIES AND BRANCHES IN PRINCIPAL TOWNS  
IN INDIA

MOOSEINBHAY A. LALLJEE SONS & CO.—Navsari Bldg.,  
Dadabhoy Naoroji Road, Bombay 1. Phone: 262052. Grams:  
"FLOWERMEAD." Importers: Dyestuffs, Chemicals and  
Textile Auxiliaries.

INDIAN DYESTUFF INDUSTRIES LTD.—Mafatal House,  
Backbay Reclamation, Bombay 1. Phone: 246281.  
Grams: "HITSAGAR." Manufacturers of "NAVINON"  
Vat Dyestuffs and Intermediates.

INDOKEM PRIVATE LTD.—221, Dadabhoy Naoroji Road,  
Fort, Bombay. Phone: 265151-5.

Industrial Dyes & Chemicals Ltd.—65, Mahatma Gandhi Road, Fort.  
Industrial Minerals and Chemicals Co.—125, Narayan Dhuru Street,  
Bombay 3.



**INTERNATIONAL RESEARCH  
LABORATORIES**

349, Samuel Street, Vadgadi, Bombay 3.

*Factories:*

Moti Baug, Chembur, Bombay 71.

Anand Chemicals Compound, Bombay  
Agra Road, Vikhroli, Bombay 79.

*Manufacturers of Coal Tar Dyes such as:*

- PROMPT PRINTING COLOURS } Stabilised
- INTRAGEN COLOURS } azoics
- INTRASOL COLOURS (Solubilised Vats)
- HANSOL COLOURS (Developing Salts)

Phones: { Office: 32-4235  
Factory: 52-2356 Grams: "INTRALABS"  
Residence: 555218

Jankishindas Mohandas.—19, Siriram Market, Old Barden Gully,  
Vadgadi, Bombay 3.  
Javerchand Khimji Bangwale.—288, Vadgadi, Bombay 3.

**JAMSOL**  
DEVELOPING SALTS  
Rapid & Rapidozen Colours

*Used in Textile Industry &  
Cloth Dyeing & Printing*

*Manufactured by***JAYANTILAL M. MEHTA**

320, Samuel Street, Vadgadi, Bombay 3.

Grams: "SUNDARATA" - Phones: 326683 - Factory: { 376558  
378420



**Khatan Valabbdas & Co.**—Indian Globe Chambers, Fort Street, Bombay 1.

**Kerr, F. S., & Co., Ltd.**—125, Mahatma Gandhi Road, Fort. Phone: 32672.

**MADHAVDAS MANILAL & CO.** (Estd. 1923).—Colours and Chemicals Merchants, 10, Sussex Road, near Victoria Gardens, Bombay 27. Phone No. 75008. Branches at: 249, Samuel Street, Vadgadi, Bombay 3. Phone No. 322793; Astodia Road, Ahmedabad. Phone No. 375008; Itwari Bazar, Nagpur; Harisingh Katra, Amritsar. Agents at Madras, Calcutta, Warangal, Beawar, Vijayawada, Sholapur, Gokak, Surendranagar (Saurashtra) etc. Distributors to Devvarsons Private Ltd. AHMEDABAD, Manufacturers of Oil Soluble Dyer, Specilage Dyes for Soaps, Varnishes, Inks etc., and Azo Dyes.

**Manubhai Shah & Co.**—297, Samuel Street, Vadgadi, Bombay 3.

**Mistry & Co.**—3, Gilder Lane, off Lamington Road, Bombay 8.

**MOHAMEDBHAI KALIMUDDIN & CO.**—41, Old Bengallipura, Bombay 3. Phone Nos. 323198 (Office), 70519 (Res.) and 373748 (Factory) and 327909 (Godown). Grams: "DEITY." Importers and Manufacturers of Aniline Dyes & Chemicals.

**MOOLCHAND JEYKISHANDAS & CO.**—306, Green House, Green Street, Bombay. Phone: 254797. Quality Dyestuffs and Optical Whitening Agent for Textile & Paper Industries and tanneries. Head Office: Reid Road, Railwaypura Post, Ahmedabad 2. Phone: 22325.

**M. H. Mehta & Sons, Ltd.**—Fort Chambers, Hamam Street, Fort.

**Narayandas Jagjiwan & Co.**—60, Garibdas Street, Vadgadi, Bombay 3.

**N. Jivanlal & Co. Private Ltd.**—50, Princess Street, Bombay 2.

**N. P. Patravali & Co.**—Fort Chambers, Hamam Street, Fort.

**PARAMOUNT DYES & CHEMICALS PRIVATE LTD.**—Elphinstone Building, Vir Nariman Road, Fort, Bombay. Phones: 252535 & 256686.

**P. D. Vora.**—314, Samuel Street, Vadgadi, Bombay.

**Pragjee Brothers.**—Dholy Building, Vadgadi.

**PIONEER TRADING CO.**—210, Samuel Street, Bombay 3. Phone: 324607. Grams: "CHEMITRADE." Dealers in Light & Heavy Industrial Chemicals and Auxiliaries.

**Pravin Colour Co.**—340-42, Samuel Street, Vadgadi, Bombay 3.

**Pravin Brothers & Co.**—Commerce House, Meadows Street.

**RAMDAS & CO.**—327, Samuel Street, Vadgadi, Bombay 3. Phone: 324659 (Office) and 325201 (Res.).

**Rangoonwalla, H. N.**—Rangoonwalla Building, 91, Mahomedally Road.

## DYESTUFFS

### INTERMEDIATES & CHEMICALS

Sizing and Finishing Products, Colours for Cotton, Silk, Art Silk, Wool, Jute, Paper, Leather, Soap, Wax, Coir, Varnishes, Oils.

## S. K. KABBUR PRIVATE LTD.

3, Bastion Road, Fort, Bombay.

Telegrams: "DLAZO", Bombay. Phone: 261627.

Correspondents in England:

### KABBUR & CO. LIMITED

Radha House, Higher Ardwick. Grams: "RADHA", Manchester 12.

**Sandoz Products Ltd.**—3, Wittet Road, Ballard Estate, Fort, Bombay.

**Sardesai & Company.**—14, Murzban Road, Fort, Bombay. Phone: 263633.

**Sepulchre Brothers (India) Ltd.**—Taj Building, 210, Hornby Road.

**Sheorji Vallabhdass Colour Co.**—280, Samuel Street, Vadgadi.

**SHREE KRISHNA DYES CORPORATION.**—Importers & Stockists of Dyestuffs and Chemicals. Distributors for DYE-CHEM MFG. CO. PRIVATE LTD., Mogra, Andheri, Bombay 58; Office: Navsari Chambers, Outram Road, Fort, Bombay 1. Phones: 263671 & 262299. Grams: "DYEKING." Sales Depot: Indu Chambers, 349/353, Samuel Street, Vadgadi, Bombay 3. Phones: 323498 & 691910 (Res.).

**Shree Prabhadevi Dyes & Chemicals Co. Ltd.**—287/289, Samuel Street, Vadgadi, Bombay 3.

**Sky Bros. Private Ltd.**—81, Annie Besant Road, Bombay 18.

**Super Dyes & Chemical Co.**—281-A, Samuel Street, Vadgadi, Bombay 3.



## STERLING DYES PRIVATE LTD.

296, Samuel St., Vadgadi,  
Bombay 3

Manufacturers of:

- STERLINTHRENES (VATS)
- STERLINGSOLS (SOLUBILISED VATS)
- PRINTOGENS
- DIRECT COLOURS
- ACID COLOURS
- OIL COLOURS

Phones: { 324656 &  
328076

Grams: "LAXNAGAR"

**Tejaji Parasaram Kharawala.**—285, Samuel Street, Vadgadi, Bombay 9.

**Texdyes Corporation.**—Manekji Wadia Building, 127, Mahatma Gandhi Road, Fort, Bombay.

**Textile Dye-Chem Corporation.**—Vincent Court, 3rd Floor, Vincent Road, Bombay 14.

**Vinod Colour & Chemical Co.**—11, Chakla Cross Lane.

**VORA TRADING CO.**—357-A, Samuel Street, Vakil Bldg., Vadgadi, Bombay 3. Telephone: 325289; Telegram: "MULTISALES", Bombay (Mandvi).

**Winsol Chemical Industries.**—Tulsi Pipe Road, Dadar, Bombay 28.

**ZENITH COLOUR TRADING CO.**—317, Vadgadi, Bombay 3. Phone: 324773. Grams: "ZENCOLOUR". Dealers & Repackers in all kinds of Dyestuffs.

## EARTHMOVING & MATERIAL HANDLING EQUIPMENT

**Balmer Lawrie & Co. Ltd.**—5, Graham Road, Ballard Estate, Bombay.

**ECHJAY INDUSTRIES PVT. LTD.**—Office & Factory: Kanjur Village Road, Bhandup, Bombay-78. Phones: 581211 & 581678. Grams: "ECHJAY", Bhandup. Manufacturers of Accessories & Equipment for Machine Tools, General Steel Drop & Upset Forgings—including Forged Flanges; Forged Ports of Diesel Engines & Automobiles; Forged Hand Tool; Hand Hammers, Chisels & Punches, Spanners Pliers, Jigs & Fixtures, Press Tools, Dies & Punch.

**Gaytee & Co.**—Janmabhum Chambers, Fort Street, Bombay 1.

**Greaves Cotton & Co. Ltd.**—Forbes Street, Bombay 1.

**Gujarat Trading Syndicate.**—India House (Opp. G.P.O.), Fort Street, Fort, Bombay 1. Phone: 261248. Grams: "GUTRASV."

**Imanes Private Limited.**—94, S. V. Road, P. O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANESCOL". Springs and Forms out of Spring Wires and Strips for your Industry.

**Kilburn & Co. Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**Killick, Nixon & Co. Private Ltd.**—Home Street, Bombay 1.

**Marshall Sons & Co. Ltd.**—Marshall Bldg., Ballard Rd., Bombay 1.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Bombay 1.

## ELECTRIC BREAKDOWN REPAIR SERVICE

**EVANS ELECTRIC PRIVATE LTD.**—485, Cadell Road, Bombay 28. Phone: 451893. Grams: "KATHODE". Specialists in Repairs, Rewinds & Redesigning of Heavy & Light Electric Motors, Generators, Transformers, etc.

## ELECTRIC FANS

**AHMED & COMPANY.**—69-71, Lohar Chawl, Bombay 2. Phone: 23388. Grams: "CALLBELL." Manufacturers of "ACO" Multipurpose Table Fans. Stockists and dealers in everything Electrical.

**Anil Electric Co.**—125, Vithalwadi, Bombay 2.

**BAJAJ ELECTRICALS LIMITED.**—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers and Contractors. Phone: 25-3841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullundur & Bangalore.

**Greaves Cotton & Crompton Parkinson Ltd.**—1, Forbes Street, Post Box No. 1277, Bombay 1.

**RADIANT ELECTRIC & MACHINERY CO.**—Sir Vithaldas Chambers, Bruce Street, Bombay 1. Phones: 255296 & 730385. Grams: "RADICAL".

**Regal Trading Co. (Bombay).**—Raja Bahadur Banskil Mansion, 11, Bruce Street, Fort, Bombay 1.



## ELECTRIC FLAME & EXPLOSION PROOF MATERIALS

**ASIATIC ELECTRIC CORPORATION.**—Beaumont Chambers, Ground Floor, Meadows Street, Bombay 1. Phone: 251761. Grams: "DHOOTBIJE." Leading Importers & Stockists of Flame & Explosion Proof Installation Material. Sole Agents for India: **HEIM ELECTRIC**, Berlin, C2, East Germany.

## ELECTRIC FURNACES

**CRAFTSMAN ELECTRONIC CORPORATION PRIVATE LTD.**—Sethna Hall, Nesbit Road, Bombay-10. Grams: "CRAFTONIC". Phone: 318358. Manufacturers of all types of Industrial and Laboratory Furnaces.

**Himco (India) Private Ltd.**—Kurla Road, Andheri, Bombay 41.

**Pioneer Equipment Co., Private Ltd.**—139, Meadows Street, Bombay 1.

**Thos. W. Ward (India) Ltd.**—Marshall Building, Ballard Road, Ballard Estate, Fort.

**Voltas Ltd.**—19, Graham Road, Ballard Estate.

**HINDUSTAN BROWN BOVERI LIMITED.**—Manufacturers of Coreless Induction Furnaces upto 6 tons & Arc Furnaces upto 12 tons. Also Importers of BBC Furnaces. Sales & Engineering Division: Mahatma Gandhi Memorial Building, North Netaji Subhas Road, Bombay 2. Phones: 38221-22. Grams: "BROWNOVER." Branches all over India. Works: Baroda, Faridabad, Ghaziabad & Howrah.

## ELECTRIC GOODS

### (IMPORTERS, STOCKISTS & DEALERS)

**Akbarally Ebrahimji Pharmacy & Department Store.**—45/47, Veer Nariman Road, Fort, Bombay.

**ASIATIC ELECTRIC TRADING CO.**—46-48, Lohar Chawl, Bombay 2. Phone: 29886. Grams: "ASIALIGHT."

**Atlas Electric Co.**—243, Bazar Gate Street, Bombay 1. Phone: 263159. Grams: "DEALWELL."

**B. Maniar & Co.**—9, Pathak Wadi, Mani Bhavan, 2nd Floor, Lohar Chawl, Bombay 2.

**Balmer Lawrie & Co., Ltd.**—8, Graham Road, Ballard Estate, Fort.

**B. B. Electric & Auto Stores.**—98, Princess Street, Bombay 2.

**BOMBAY INSULATED CABLES & WIRES CO.**—10, Himalaya House, Gr. Floor, 79, Palton Road, Bombay 1. Phone: 261383. Armature Winding Wires and other Accessories for Winding purposes. V.I.R., C.T.S., Wires and Flexibles Paramite & Henley's etc. and jointing materials for underground Cable, its Accessories PILC/PVC underground Cables.

**Chandra Trading Co., P.**—2, Bhajekar Street, Khetwadi Main Road, Bombay 4.

**Chicago Telephone & Radio Co., Ltd.**—127, Mahatma Gandhi Road, Fort.

**Choksi Electric Co.**—143, Princess Street, Bombay 3.

**Chunilal Desai & Co.**—Gool Mansion, Homji Street, Fort.

**C. K. Shah & Co.**—35, Vithaldas Road, Lohar Chawl, Bombay 2.

**DAVE SHAH & CO.**—13, Picket Cross Road, Lohar Chawl, Bombay 2. Phone: 22322. Grams: "ARRESTOR." Specialists in Switch Fuse & Motor Control Gear.

**Economic Electric Co., Ltd.**—Jail Road (East), Dongri, Bombay 9.

**Electricals (India) Ltd.**—24/B, Hamam Street, Fort, Bombay.

**Empiria (India) Ltd.**—Sai Bhuvan, Princess Street, Bombay 2.

**G. K. Trading Co.**—Nawab Bldg., Dr. D. Naoroji Road, Bombay 1.

**Great Eastern Trading Co.**—107, Cawasji Patel Street, Fort, Bombay 1.

**Harda Electric Supply Co., Ltd.**—17-19, Bastion Road, Fort.

**Hindustan Electric & Radio Corporation.**—Khambata Lane, Bombay 4.

**INDO EUROPEAN TRADING AGENCIES.**—Behramji Mansion, 4th Floor, Sir Phirozshah Mehta Road, Fort, Bombay. P.O. Box 1344. Phone: 262664. Grams: "MUSKETEERS." Specialists in Thermostats and Heating Elements. Agents for Harsha Hot Plates.

**Jacks, William & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Fort.

**Jostle Trading Corporation Ltd.**—Maskati Mahal, Lohar Chawl, Bombay 2.

**Kilburn & Co., Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort, Bombay.

**Manseta, N., & Bros.**—165, Lohar Chawl, Fort.

**Metrogold Electric Stores.**—60, Lohar Chawl, Bombay 2.

**Minerva Machinery Corporation.**—22, Apollo Street, Fort.

**Modi & Modi Co.**—16, Hamam Street, Fort.

**Oriental Traders Corporation.**—Makharia House (opp. Parekh Hospital), 327, Sandhurst Road, Bombay 4.

**Paramount (India) Ltd.**—Kermani Building, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**Pavri, J. K.**—Karim Chambers, Hamam Street, Fort.

**Raichand & Sons.**—5, Picket Cross Road.

**Regal Trading Co. (Bombay).**—Rajabhadur Bansilal Mansion, 11, Bruce Street, Fort, Bombay 1.

**Refrigerator & Appliances Co. Ltd.**—Victory Court, 34, Queen's Road, Bombay 1.

**Sharda Electric & Radio Co.**—Lohar Chawl, Bombay 2. Phone: 20478. Grams: "TEAKCASING".

**Shivlal Shah & Co.**—Mahakali Chawl, Pydhownie, Bombay 3.

**Simplex Electric Trading Corporation.**—Great Eastern House, 249, Frere Road, Fort.

**Solar Electric Trading Co.**—11, People's Bldg., Sir Phirozshah Mehta Road, Fort.

**Stork Electric Co.**—6, Proctor Street, Grant Road, Bombay 7.

**SUNSHINE TRADERS.**—3, Hamam Street, Fort, Bombay. Phone: 251631. Grams: "SUBHMANGAL." (1) Manufacturers of Spindle tapes, Cotton listings, Venetian blind tapes, Zip tapes, Bleached tapes, Cotton and Manila ropes, tubular bandings, bundle bandings and cotton bandings. (2) Manufacturers of Spindle tapes and listings and textile stores suppliers. (3) Manufacturers of Egyptian cotton tapes and webbings.

**Sunil Electric Co.**—Kanji Goculdas Building, 158, Lohar Chawl.

**T. M. Tyabji & Bros.**—32-38, Hamam House, Hamam Street, Fort.

**Trade (India) Corporation.**—58, Mohamadali Road, P.O. Box No. 3231, Bombay 3.

**Venus Electric Co.**—Keravala Building, Mangaldas Road, Bombay 2.

**UNIQUE ELECTRO TRADERS.**—97, Lohar Chawl, Bombay 2. For everything Industrial Electricals, Wires & TROPODUR Cables, Insulating & Winding materials, I.C. Switchgears, Conduit Pipes & Fittings, L. T. Transformers. Phone: 30407 & 358294 (Res.).

**Westrex Co., India.**—Metro House, Mahatma Gandhi Road, Bombay 1.

## ELECTRIC LAMPS (BULBS) MANUFACTURERS

**BAJAJ ELECTRICALS LTD.**—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers and Contractors. Phone: 25-3841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder & Bangalore.

**Bijlee Products (I) Private Ltd.**—(Est. 1935), 36, A. L. Nair Road, Byculla, Bombay 8.

**U. K. AGENCIES.**—2/16, Western India House, Sir Phirozshah Mehta Road, Bombay 1. Phone: 253195. Grams: "BEBELT." Agents for Bengal Electric Lamp Works Ltd., Calcutta.

## ELECTRIC LIGHTING EQUIPMENT

**FINLAY, JAMES & CO., LTD.**—Chartered Bank Building, Mahatma Gandhi Road, Fort, Post Box No. 73, Bombay-1. Phone Nos.: 251255-59.

## ELECTRIC MOTORS, GENERATORS AND SETS

**alpha** FRACTIONAL H.P. MOTORS tested to IS 996

1/8 H.P. to 1 H.P.  
single phase and 3  
phase Motors

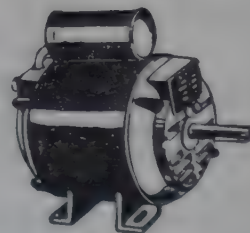
Contact:

**POWER PRODUCTS MANUFACTURING CO.,**

30, Calicut Street, Ballard Estate, Bombay 1

Phone: 263881

Grams: "BREAKDOWN"



**ARJANSINGH KHEMCHAND.**—1st Floor, 118, Commerce House, Meadows Street, Bombay-1. Phone: 253752.

**Arvinda Trading Co. Private Ltd.**—105, Apollo Street, Fort.

**Associated Machine & Tool Co.**—130, Meadows Street, Fort, Bombay.

**Batliboi & Company Private Limited.**—Regd. Office: Forbes Street,

P.O. Box 190A, Fort, Bombay-1 (BR). Phones: 255451 (6 lines).

Grams: "BATLIBOICO" Tele.: 011-284. City Branch: BATLI-

BOI HOUSE, 59/61, Nagdevi Cross Lane, Bombay-3 (BR).

Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi,

Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resi-

dent Representatives: RANCHI, Bhubaneswar.



Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.

**BHARAT ELECTRIC & ENGINEERING CORPORATION.**—Free Press Building, Ground Floor, 21, Dalal Street, Fort, Bombay. Phone: 255374. Grams: "GODGRACE."

Bhatt Bros.—163, Nagdevi Cross Lane, Bombay 3.

British Engineering Co.—105, Apollo Street, Fort.

Cassinath M. Bomonjee Eduljee—17/19, Bastion Road, Fort.

Crescent Agencies (Private) Ltd.—Beaumont Chambers, 27/33, Meadows Street, Fort, Bombay.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 26-2711 (8 lines). Machine Works: Tank Road, Bombay 33 DD. Phone: 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad and Kanpur.

Eastern Electric & Refrigeration Co.—14, Hamam Street, Fort.

Eastern Trading & Engineering Co.—Alice Building, 4th Floor, 339, Hornby Road, Fort.

Economic Electric Co., Ltd.—Jall Road (East), Dongri, Bombay 9.

**ENGINEERING PRODUCTS LIMITED.**—Office & Factory: Swarni Vivekananda Road, Jogeshwari, Bombay 60. Phone Office & Factory: 571230. Grams: "ENPROSKILL," Bombay Jogeshwari, Manufacturers of A.C. Induction, Electric Motors, Textiles & Special Motors.

English Electric Co., Ltd.—240, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

**ESSENTIAL ENGINEERING CO.**—11, Botawala Building, Elphinstone Circle, Fort. Phone: 252940. Grams: "ESSENCE". Importers, Exporters, Commission Agents and Manufacturers' Representatives.

Field Engineering Co., Private Ltd.—65, Apollo Street, Fort, Bombay.

General Radio & Appliances Private Ltd.—(Formerly Fazalbhoy Ltd.)—Opera House, Bombay 4.

Harda Electric Supply Co., Ltd.—17/19, Bastion Road, Fort.

**HINDUSTAN BROWN BOVERI LIMITED.**—Manufacturers of 3-phase A.C. Motors — 1. Squirrel Cage Motors; 2. Slipring Motors; 3. Loom, Ring Frame and Carding Motors; 4. Two-speed motors; 5. Crane Duty Motors, etc. with enclosures and mounting arrangements to meet with normal requirements. Sales & Engineering Division: Mahatma Gandhi Memorial Building, North Netaji Subhas Road, Bombay 2. Phones: 38221-22; Grams: "BROWNBOVER."

Hindustan Engineering Co.—(Machinery Dept.), Atan House, 25-31, Ropewalk Street, Fort, Bombay 1.

Ina Machinery Corporation.—65, Mahatma Gandhi Road.

Industrial & Agricultural Equipment Co.—29, Hamam Street, Fort, Bombay 1.

**INDUSTRIAL ELECTRICAL EQUIPMENT CO.**—Minerva Movitone Compound, Bunder Road, Sewri, Bombay 15. Manufacturers of Industrial Motors (3 phase totally enclosed, all speeds, Squirrel Cage, and Slip-ring).

Jacks, William, & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Fort.

Janak Engineers.—4th Floor, Lentin Chambers, Dalal Street, Fort.

Jayems Engineering Co.—Warden House, Sir Pherozshah Mehta Road, Fort.

**JYOTI LIMITED.**—Baroda 3. Phone: 8352-3-4. Grams: "JYOTIPUMPS," Bombay Branch: "Advent", 12A, Fore-shore Road, Opp. Sachivalaya, Bombay 1. Phone: 213329. Grams: "JYOTIPUMPS". Other Branches: New Delhi, Calcutta, Madras, Secunderabad & Jaipur. Manufacturers of Vertical Turbine Pumps, Centrifugal Pumps, Chemical Pumps, Electric Motors, Synchronous Generators, Hydro-Electric Generating Units, Starters, Circuit Breakers & Switchboards.

Karachi Electric Stores (Bombay) Ltd.—537, Sandhurst Bridge, Bombay 7.

Khitmandas Jagumal & Sons.—12, Hornby View Building, Gunbow Street, Fort, Bombay 1.

Kilburn & Co. Private Ltd.—Gresham Assurance House, Sir Pherozshah Mehta Road, Fort, Bombay.

Mahindra & Mahindra Ltd.—Gateway Building, Apollo Bunder, Fort.

**MANEKLAL & SONS**—(Showroom & Sales Division).—217, Nagdevi Street, Bombay 3-BR. Grams: "KIRTIRAJNI." Phone: 321924; Export-Import Division: 115 116, Narayan Dhuru Street, Bombay 3-BR. Phone: 321924. Associates: Calcutta 13. Agency: Madras 1. Importers, Exporters & Stockists of Workshop Machines, Wood Working Machines, Sheet Metal Working Machines, Electrical Tools & Cottage Industry Machines.

Manohar Bros.—Humaini Chambers, Nanabhai Lane, Churchgate, Fort.

Marshall Sons & Co. (India) Ltd.—Marshall Building, Ballard Estate, Fort.

Modi & Modi Co.—16, Hamam Street, Fort, Bombay.

**MOTOR & MACHINERY MANUFACTURERS LTD.**—32, Apollo Street, Bombay 1. Phone: 256044. Grams: "MOTMAC-MAN." Manufacturers of Squirrel Cage Induction Motors both single and three phase, Textile Motors, Jute Mill Machinery Motors like Reeling, Carding and Loom Motors, Polishing Lathes, Bench Grinder, Scratch brush lathes and heavy duty centrifugal pumping sets, undertake manufacture of special type of motors to suit special requirements; Regd. Office: 3/1, Krishnaabehari Sen Street, Calcutta 2. Branches at Delhi, Nagpur, and Madras.

**NATIONAL ELECTRICAL ENGINEERING CO.**—19-21, Hamam Street, Bombay 1. Grams: "DISCIPLINE." Phone: 254348. Distributors of "NATIONAL" Electric Motors & "S.E.W." Oil Loom Switch and D. C. Motors, Generating Sets & Rotary Convertors.

National Electrical Industries, Ltd.—Lalbaug Industrial Estate, Lalbaug, Bombay 12.

**NEW ERA ENGINEERING CO.**—128, Meadows Street, Bombay 1. Phone: 253492 & 254136. Grams: "NEECOMOTOR." Importers and Stockists of Electric Motors, Generators, Starters, Switchgears, Pumps and Pumping Sets, Slipring Motors all sizes available. Also all types of Capacitors.

**ORIENTAL ENGINEERING CO.**—25, Forbes Street, Fort, Bombay 1. Phone: 253057. Grams: "ADIVISHNU." Authorised Dealers for "BROWN BOVERI", Electric Motors "ERSKIN HEAF" Motor Starters.

Paramount Industrial Stores.—15, Ropewalk Street, Bombay 1.

P. Bai & Co.—105, Apollo Street, Fort.

Patel Electric Co., Ltd.—Vithal Sayana Building No. 2, Lohar Chawl, Bombay 2.

Popular Electric Stores.—414, Harharwalla Building, Corner Golpitha, Bombay 4.

Power Machines Corporation.—31, Forbes Street, Fort, Bombay 1. Grams: "POWERMACO."

Protos Engineering Co. Ltd.—173, Jamshedji Tata Road, Churchgate, Bombay.

**RADIANT ELECTRIC & MACHINERY CO.**—Sir Vithaldas Chambers, Bruce Street, Bombay 1. Phones: 255296 & 3-0385. Grams: "RADICAL".

Radiant Engineering Co.—79, Meadows Street, Bombay 1.

Royal Machinery & Trading Co.—6, Bell Lane, Fort, Bombay 1.

B. S. Traders.—16, People's Building, Sir Pherozshah Mehta Road, Fort.

**TALWARKER BROTHERS PRIVATE LTD., W. R.**—Lentin Chambers, Dalal Street, Fort, Bombay. Phones: 253367 & 256775. Grams: "PUMPENAMEL".

Thakar Brothers.—301/A, Commerce House, 140, Meadows Street, Fort, Bombay.

**UNITED INDIA ENGINEERING CO.**—6, Commerce House, Meadows Street, Fort, Bombay. Phone: 251492. Grams: "Uniconaram". Engineers and Machinery Dealers. Sales & Showroom: 78, Old Custom House Road, Fort, Bombay.

Voltas Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

Vulcan Trading Co. Pvt.—Indian Mercantile Chambers, Nicol Road, Ballard Estate, Bombay.

## ELECTRIC MOTOR STARTERS

**FINLAY JAMES & CO., LTD.**—Chartered Bank Bldg., Mahatma Gandhi Road, Fort, Post Box No. 73, Bombay 1. Phone Nos. 251255-59.

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Erli, P.O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANES-COL" Springs & Forms out of Spring Wires and strips for your industry.

## Electric Motors, Starters, ACB Switchgear etc.

Motors: 0.5 HP to 1000 HP onwards

Starters: D. O. L. Automatic Star Delta and Auto Transformer Starters upto 150 HP.

ACB of 200/400/600 Amps. Cartridge fuse Units, Cam Switches, Contactors, Timers etc.

Manufactured by:

**JYOTI-CALOR EMAG**

(under German collaboration)

Authorised Distributors:

**V. S. & COMPANY**

140, Commerce House, Meadows Street 302, Bombay-1.  
Phone: 254865



**JYOTI CALOR-EMAG LIMITED.**—Baroda 3. Phone: 8238. Grams: "JYOTICALOR". Bombay Branch: "Advent", 12A, Foreshore Road, Opp. Sachivalaya, Bombay 1. Phone: 213329. Grams: "JYOTICALOR". Sole Selling Agents of Jyoti Electric Motors and Jyoti Calor-Emag Starters, Circuit Breakers, Switchboards and Power Control Gear. Other Branches: New Delhi, Calcutta, Madras, Secunderabad, Jaipur.

**Larsen & Toubro Limited.**—I. C. House, Dougall Road, Ballard Estate, Bombay 1.

**Regal Trading Co. (Bombay).**—Rajabshahur Bansilal Mansion, 11, Bruce Street, Fort, Bombay 1.

**Voltas Ltd.**—19, Graham Road, Ballard Estate, Bombay 1.

## ELECTRIC MOTORIZED—GRINDERS & POLISHERS

**FINLAY, JAMES & CO., LTD.**—Chartered Bank Building, Mahatma Gandhi Road, Fort, Post Box 73, Bombay. Phone: 251255-59.

## ELECTRIC SWITCHBOARD MFRS.

**JYOTI CALOR-EMAG LIMITED.**—Baroda 3. Phone: 8238. Grams: "JYOTICALOR". Bombay Branch: "Advent", 12A, Foreshore Road, Opp. Sachivalaya, Bombay 1. Phone: 213329. Grams: "JYOTICALOR". Sole Selling Agents of Jyoti Electric Motors and Jyoti Calor-Emag Starters, Circuit Breakers, Switchboards and Power Control Gear. Other Branches: New Delhi, Calcutta, Madras, Secunderabad, Jaipur.

## ELECTRIC SWITCHGEARS MANUFACTURERS

**FINLAY, JAMES & CO., LTD.**—Chartered Bank Building, Mahatma Gandhi Road, Fort, Post Box 73, Bombay 1. Phone Nos. 251255-59.

**Kiron Textile Industries.**—Yusuf Bldg., Mahatma Gandhi Road, Bombay 1.

**VERTEX MANUFACTURING CO. LTD.**—222, Sir Mathuradas Vissanji Road, Andheri (East), Bombay 69. Phones: 572438 & 574565; Manufacturers of "Setinel" Metal Clad Switch & Fusegear such as Switch Fuses, Isolators, Changeover Switches and Distribution Fuseboards.

## ELECTRICAL ACCESSORIES

**BAJAJ ELECTRICALS LIMITED.**—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers & Contractors. Phone: 253841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder and Bangalore.

**U. K. AGENCIES.**—2/16, Western India House, Sir Phirozshah Mehta Road, Bombay 1. Phone: 253195. Grams: "BEBELT." Agents for UKA Bakelite Accessories for electric wiring.

## ELECTRICAL CONTRACTORS (LICENSED)

**Arunodaya Engineering Corporation.**—Navsari Chambers, Outram Road, Fort, Bombay 1.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**CHANDRAKIRAN.**—Neon Signs Manufacturers, Electrical Dealers and Engineers & Government Electrical Contractors. Dhan-Nur, 4th Floor, Sir Phirozshah Mehta Road, Bombay 1. Phones: 263660 & 266428. Grams: "LITELORDS," Showroom: 88, Sion Circle, Bombay 22. Phone: 471606.

**Damanla Electrical & Engineering Works.**—171, Lohar Chawl, Bombay 2.

**ECONOMIC ELECTRIC CO. PRIVATE LTD., THE.**—Kareem Manzil, Jail Road, Dongri, Bombay 9. Phone: 331137.

**ELECTRIC CORPORATION OF INDIA.**—19/21, Hamam Street, Fort, Bombay 1. Phone: 254398.

**F. R. Patel & Co.**—Holland House, next to Hotel Majestic, Colaba Causeway, Bombay 1. Water Heater Repairers and Specialists in Reconditioning Everything Electrical, Auto Electricians.

**Gopani Electric Stores.**—Bharat Bhuvan, 171, Princess Street, P. O. Box No. 2068, Bombay 2.

**Greaves Cotton & Crompton Parkinson Ltd.**—1, Forbes Street, Fort.

**Harda Electric Supply Co. Ltd.**—17-19, Bastion Road, Fort, Bombay.

**JOSTLE TRADING CORPORATION PRIVATE LTD.**—Maskati Mahal, Lohar Chawl, Bombay 2. Phone: 20823. Grams: "CORPJOSTLE", Direct Importers & Stockists of Electrical goods, Cables, Accessories, Switchgears, Conduit pipes and Fittings, Fluorescent Tubes and Fixtures, Industrial Reflectors and overhead Line materials and Licensed Contractors & on the approved list of Railways, D.G.S. & D., Municipalities, P.W.D., M.E.S., etc.

**Kantilal Keshavlal & Co.**—80-82, Vithalwadi, Bombay 2.

**Minerva Trading Agency.**—58, Forbes Street, Fort.

**MODERN ELECTRIC CO.**—(Estd. 1935), Dady House, 59, Veer Nariman Road, Fort, Bombay. Phone: 252403. For Power & Lighting Installations, Cable laying, Temporary Illuminations.

**MODERN ELECTRICAL TRADE SYNDICATE.**—Electrical Engineers and Licensed Contractors. 182, Yusuf Maheraly Road (Masjid Bunder Road), Bombay 3 (BR). Phone: 325673.

**National Electric Company.**—11, Elphinstone Circle, Fort, Bombay 1. Phone: 28762. Grams: "ELECTRICAL."

**PANDIT & CO.**—15, Forbes Street, Fort, Bombay-1. Phone: 251779. Grams: "SPECTION". Dealers in Ogales Moort and all Electrical Engineering Goods. Proprietors: IGAT-PURI ELECTRIC SUPPLY CO.

**RAJGOR TRADING CO.**—Dahanukar Building, 480, Kalbadevi Road, Bombay 2. Phone: 39936. Govt. Licensed Wiring Contractors, Dealers and Electrical Engineers. Specialists in Erection of H.T. Lines, Electrification of L. T. Distribution Lines, Electrical Installation, Illumination & Maintenance of Buildings, Factories, Mills, Offices, etc.

**Trinity Electric Syndicate.**—Princess Street, Bombay 2.

**Vikram Electric Co.**—Advani Chambers, Sir Phirozshah Mehta Road, Fort.

**Western India Engineering Corpn. Ltd.**—Cama Chambers, 21, Meadows Street, Fort.

## ELECTRICAL DRYERS MFRS.

**SURESH ENGINEERING WORKS.**—Bombay Cotton Mill Estate, Bombay-33. Manufacturers of Dryers, Electrical Steam heated or Vacuum with Thermostatic Controls, Reaction Vessels, Steel and Stainless Steel Fabrication by Argon Arc Welding. Phone: 377887.

## ELECTRICAL ENGINEERS, MFRS. & DEALERS IN ELECTRIC GOODS

**A.C.E.C. INDIA PRIVATE LTD.**—96, Apollo Street, Bombay 1. Phone: 252311. Grams: "EDEMPLAIN," Bombay.

**Acme Manufacturing Co., Ltd.**—Construction House, Ballard Estate, Bombay 1.

**ALLIANCE ELECTRIC MART.**—67, Lohar Chawli, Bombay 2. Phone: 39229.

**AHMED & COMPANY.**—69-71, Lohar Chawl, Bombay 2. Phone: 23388. Grams: "CALLBELL." Manufacturers of "ACO" Multipurpose Table Fans. Stockists and Dealers in everything Electrical.

**Alladin Virjee Nathani.**—Darukhana, Mazgaon, Bombay 10.

**Arvind Trading Co. Private Ltd.**—105, Apollo Street, Fort.

**AMERICAN ELECTRIC & ENGINEERING CO.**—11-12, "Himalaya House", Corner of Hornby & Palton Roads, Bombay-1. Phone: 263575. Grams: "AMERCTRIC."

**ASEA ELECTRIC INDIA, PRIVATE LIMITED.**—ASEA House, Goa Street, Bombay 1.

**ASHOK ENGINEERING CO.**—24, Noble Chambers, Parsi Bazar Street, Fort, Bombay 1. Phone: 253309. Grams: "REVOLUTION." Importers, Dealers and Stockists of Electric Motors, Starters, Switches, Generators, Pumping Sets, Blowers, Exhaust Fans, etc. Diesel Engines & Spare parts and Motor Vehicle parts.

**ASIATIC ELECTRIC CORPORATION.**—Beaumont Chambers, Ground Floor, Meadows Street, Bombay 1. Phone: 251761. Grams: "DHOOTBIJE." Direct Importers & Stockists of Everything Electrical. Specialists for German make Flame & Explosion Proof Fittings, Various Types of Cartridges Fuses like DZ and TDZ, Motor Starters, O.C.B. and Wiring Materials.

**Associated Electrical Industries (India), Ltd.**—Indian Mercantile Chambers, Nicol Road, Ballard Estate.

**Automatic Electric Devices Company, "Rectifier".**—Nalgaum Cross Road, Bombay 31.

**Babcock & Wilcox, Ltd.**—16, Queen's Road Estate, Bombay 1.

**BAJAJ ELECTRICALS LIMITED.**—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers and Contractors. Phone: 25-3841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder and Bangalore.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**B. B. ELECTRIC & AUTO STORES.**—98, Princess Street, Bombay 2. Phone: 30795. Grams: "BIBIELECT."

**B. CHOWDEURY & CO.**—Indian Globe Chambers, Fort Street, Bombay 1. Phone: 26-3479. Grams: "BISUKHI." Manufacturers of all kinds of "Merkuri" Brand High Pressure Mercury Vapour Lamps, including Blackwood Lamps, suitable chokes and fittings.



Bijlee Products (I) Private Ltd. (Estd. 1935).—36, Dr. A. L. Nair Road, Byculla, Bombay 8.

**BIPINKUMAR ELECTRIC CORPORATION.**—14, Tavawalla Building, Lohar Chawl. Phones: 30684 & 22185. Grams: "BIPINDEV." Sole Agents for: "TROPEX CABLES", VIR and CTS and Weather Proof and Super Deluxe Plastic Cables and Philco Resin Cored Solder Wires.

Bombay Industries, Mechanical & Electrical Engineers.—Kamer Bldg., Cawasji Patel Street, Fort, Bombay.

Brady, W. H. & Co., Ltd.—Royal Insurance Building, Vir Nariman Street, Fort.

British Electric Insulating Co.—33, Forbes Street, Fort.

British Engineering Co.—105, Apollo Street, Fort.

British Insulated Callender's Cable Ltd.—Esplanade House, Waudby Road, Fort.

Candy Filters (India), Ltd.—Forbes Building, Home Street, Fort.

Casalnath M. Bomonjee Eduljee.—17/19, Bastion Road, Fort.

**CHANDRODAYA ELECTRIC CO.**—Bhangwadi, Kalbadevi Road, Bombay-2. Phone: 22579. Grams: "TRICYCLE." Specialists in Pipes, Fittings, Wires & Switchgears. Stockists of Everything Electrical. Distributors for "C.T.L." Conduit Pipes, Dahisar.

Chicago Telephone & Radio Co., Ltd.—127, Mahatma Gandhi Road, Fort.

Chotani Electric & Engineering Co., Ltd.—57, Apollo Street, Fort, Bombay.

**COSMIC TRADERS.**—Yusuf Bldg., Veer Nariman Road, Bombay 1. Phones: 253224 & 254768; Grams: "YANTRAYUG." Importers & Stockists of L.T. Oil Circuit Breakers, Switchgears, Oil immersed on Air Break, Direct Line Starters, Reversers, Star Delta Starters, Limit Switches, Underground Cables, Wires, etc.

Damania Electrical & Engineering Works.—Jocsub Peermohomed Building, 171, Lohar Street.

Dastur & Sons.—54, Forbes Street, Fort.

**DEVIDAYAL STAINLESS STEEL INDUSTRIES PRIVATE LTD.**—Stamping Division, Manufacturers of Stampings and Lamination for Motors, Generators and Transformers. Factory & Office at Devidayal Nagar, Kanjur Village Road, Bhandup, Bombay 78. Phones: 581201, 581214, 582017, 581155.

Diamond Electric Company.—18, Hamam Street, Fort.

Dinshaw, M. H., & Co.—Apollo Street, Fort, P.O. Box No. 448, Bombay. Phone: 25-1458. Grams: "AHOORAT."

Dodsai Limited.—Mafatnal House, Backbay Reclamation, Bombay 1.

Eastern Electric & Engineering Co.—Established 1909. 127, Mahatma Gandhi Road, Fort, Post Box 459, Bombay.

Eastern Radio & Refrigeration Co.—8, Beaumon Chambers, Meadows Street, Fort, Bombay.

Economic Electric Co., Ltd., The.—Jail Road (East), Dongri, Bombay 9.

Electric and General Traders Ltd.—Bombay Mutual Annexe, Gunbow Street, Fort.

Electro Mechanics, Ltd.—Mehta House, Apollo Street, Fort.

Imanes Private Limited.—94, S. V. Road, P. O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANESCOL." Springs and Forms out of spring wires and strips for your Industry.

English Electric Co., Ltd., The.—249, Dr. Dadabhai Naoraji Road, Fort, Bombay.

**EXPRESS TRADING CO.**—Sai Bhuvan, Ground Floor, 141, Princess Street, Bombay 2. Phone: 22152.

General Electric Co. of India, Ltd., The.—"Magnet House," Dougall Road, Ballard Estate.

General Electrical Industries.—Office: Hamam House, Hamam Street, Bombay 1.

Great Eastern Trading Co., The.—107, Cawasji Patel Street, Fort.

Greaves, Cotton & Co., Ltd.—1, Forbes Street.

**GUEST, KEEN, WILLIAMS, LTD. SANKEY DIVISION.**—Mfrs. of Precision Stampings and Laminations and Light Precision Press Work for the Electrical, Automobile and Textile Industries. Factories: Shalimar, Calcutta, Phone: 672026; Rajaji Nagar, Bangalore; Phone: 74091; Bhandup, Bombay. Phones: 581651/2/3/4/5 and 582061; Regd. Office: 1, Middleton, Calcutta 16; Commercial Office: Bhandup, Bombay. Phone: 581651/2/3/4/5 and 582061; Accounts and Administrative Offices: Wakefield House, Sprott Road and Magnet House, Dougall Road, Ballard Estate, Bombay 1. Phones: 261758/9, 565515 & 261382; Bombay Retail Centre: 658, Kallias Nagar, Tardeo, Bombay; Delhi Office: Jeevan Vihar, Parliament Street, New Delhi. Phone: 48136; Delhi Retail Centre: 3/13/1B, Asaf Ali Road, New Delhi; Phone: 274721; Bangalore Office: Rajaji Nagar, Bangalore; Phone: 74091; Calcutta Office: "JEEVAN DEEP," 1, Middleton Street, Calcutta 16. Phone: 442381 (11 lines). Managing Director: K. C. Maitra. Phones: Bombay: 261758/9 and 265515; Bhandup: 581248; Residence: 364506. Grams: "LOWLOSS", Bombay, Calcutta, Bangalore, Delhi.

Harda Electric Supply Co., Ltd.—17/19, Bastion Road, Fort.

Herman & Mohatta, B. R., Ltd.—People's Building, Sir Phirozshah Mehta Road, Fort.

Himco (India) Private Ltd.—Kurla Road, Andheri, Bombay 41.

**HIMATLAL & CO.**—19-21, Hamam Street, Bombay. Authorised Dealers of "SIEMENS" Tropodur Power and Control Cables. Stockists of H.T. & L.T. Underground Cables & Dealers in Transformers Motor & O.C.B. Grams: "HOME-LIGHT." Phone: 254716; Residence 474404.

**HIND RECTIFIERS LTD.**—Lake Road, Bhandup, Bombay 78. Grams: "HIRECT," Bombay 78. Licensees of Westinghouse Brake & Signal Co., Ltd., London for Manufacture of Rectifiers, Battery Chargers, Electroplating sets, Silicon Power Plants. Selling Agents: Kaycee Industries Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1. Phone: 264030. Grams: "KAYCEE."

Hind Electric & Engineering Corporation.—183, Princess Street, Bombay 2.



**De-Lite**  
the choice of CONNOISSEURS  
**ELECTRIC BELLS  
and BUZZERS**  
Finest ultra-modern Electric Bell  
ever made in India!

(Registered design No. 120493-D)

Available in Brown, Cream, Red, Pink, Blue, etc.,  
to match your individual colour scheme.  
— GUARANTEED FOR FULL ONE YEAR —

### De-Lite Industrial Corporation

3G, Favourite Industrial Estate,  
Masrani Lane, Kurla, Bombay-70.

Phone: 551349.

**HINDUSTAN BROWN BOVERI LIMITED.**—Manufacturers of Motors, Transformers, Switchgear equipment upto and including 220 kV air blast circuit breakers, 25 kV traction duty airblast circuit breakers, Electric Furnaces, A.C.S.R. and A.A. Conductors. Importers of all products of BBC and their concessionaires. Registered Office: Thackersey House, Graham Road, Ballard Estate, Bombay 1. Phones: 261121-22. Grams: "HINDBOVERI"; Sales & Engineering Division: Mahatma Gandhi Memorial Building, North Netaji Subhas Road, Bombay 2. Phones: 38221-22. Grams: "BROWNBOVERI"; Branches all over India; Works: Baroda, Faridabad, Ghaziabad and Howrah.

India Electric Works, Ltd.—6, Sir Phirozshah Mehta Road, Fort.

**INDIA METAL TRADERS.**—92/94, Kika Street (Gulawadi), Bombay 4. Manufacturers of Copper Conductors, Copper strips and bus bars, stranded Copper Wires, binding Copper Wires, tinned Copper Wires and Aluminium Conductors. Phone: 334093. Grams: "METALDRAW." (GG)



**INDIAN ENGINEERING CO.**—World Naka, Post Box 16551, Bombay 18. Phones: 310379 & 313490. Grams: "APMVOLT" (JC). Also at Calcutta, New Delhi, Madras & Bangalore.

**INDIAN INDUSTRIAL ENGINEERS.**—43, Tamarind Lane, Fort. Phone: 254972. Grams: "NEWLIGHT."

**Indian Wild-Barfield Co., Private Ltd.**—Annie Besant Road, World, Bombay 18.

**Indmag Private Ltd.**—Esplanade House, Waudby Road, Fort, Bombay.

**INDUSTRIAL & AGRICULTURAL ENGINEERING CO. (BOMBAY) PRIVATE LTD.**—43, Forbes Street, Fort. Phone Nos. 251440, 254173 & 256593. Grams: "AGRICOLA."

**Industrial Electrical Engineering Co.**—Raja Bahadur Mansions, 10, Hamam Street, Fort.

**International Electric Corporation.**—49, Forbes Street, Fort.

**INTERNATIONAL ELECTRIC TRADING CO.**—Direct Importers and Distributors of M.E.M. I.C. Switches, Fuse units and Motor Control Gears, Conduit Pipes and Conduit accessories, Fans, Meters, Wires and Cables, Fluorescent Tubes and its accessories and Electric Accessories, Lamps etc. Devkaran Mansion, Block No. 2, 1st Floor, 63, Princess Street, Bombay 2. Grams: "INTERLITE", Bombay 2 BR. Phone: Office: 20613 & Res.: 472269.

**Jacks, William & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Fort.

**Jagmohandas, H., & Co.**—Ashok Building, 16, Princess Street.

**Jayeme Engineering Co.**—Warden House, Sir Phiroozshah Mehta Road, Fort.

**JOHNSON & PHILLIPS LTD.**—Kaiser-I-Hind Building, Currimbhoy Road, Ballard Estate, Bombay. Phone: 26-2457, 265379. Grams: "JOHNPHIL."

**JOSEPH LESLIE & CO.**—Engineers, Carbon Brushes for Electrical Machines & Automobiles, 105, Apollo Street, Bombay 1. Phone: 251608. Grams: "LEONINE."

**JOSTLE TRADING CORPORATION PRIVATE LTD.**—Maskati Mahal, Lohar Chawl, Bombay 2. Phone: 20823. Grams: "CORPJOSTLE." Direct Importers & Stockists of Electrical goods, Cables, Accessories, Switchgears, Conduit Pipes and Fittings, Fluorescent Tubes and Fixtures, Industrial Reflectors and Over-head line materials, and Licensed Contractors & on the approved list of Railways, D.G.S. & D., Municipalities, P.W.D., M.E.S. etc.

**JYOTI LIMITED.**—Baroda 3. Phone: 8352-3-4. Grams: "JYOTIPUMPS". Bombay Branch: 'Advent', 12A, Fore-shore Road, Opp. Sachivalaya, Bombay 1. Phone: 213329. Grams: "JYOTIPUMPS". Other Branches: New Delhi, Calcutta, Madras, Secunderabad & Jaipur. Manufacturers of Vertical Turbine Pumps, Centrifugal Pumps, Chemical Pumps, Electric Motors, Synchronous Generators, Hydro-Electric Generating Units, Starters, Circuit Breakers and Switchboards.

**KANTILAL KESHAVALAL & CO.**—80-82, Vithalwadi, Bombay 2. Phones: 38200/22043. Grams: "SPHEREHOT". Storage type Water heaters, Laundry Irons, Immersion Heaters, Domestic & Industrial Heating Appliances. Agents: Batliboi & Co., at Bombay, Calcutta, Madras, Delhi, Kanpur & Coimbatore.

**Karachi Electric (Cable) Co.**—Himalaya House, Phalton Road, Bombay 1.

**KAYCEE INDUSTRIES LTD.**—Agents for Hind Rectifiers Ltd. Manufacturers of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery Chargers, Silicon Powder Plants for Electro-Chemical Industries. Manufacturers of "KAYCEE" Rotary, Toggle, Heat Control and Airconditioner Switches, "KAYCEE" domestic and bulk type Watermeters; "Kaycee" Water Meters. Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1. Phone: 263521; Grams: "TURNRITE." Branches: Delhi, Calcutta, Madras & Kanpur.

**Kerala Industries (India).**—17, Hornby Building, 174, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

**KERSON'S MANUFACTURING CO. OF INDIA LTD., THE.**—Gopal Nivas, Lohar Chawl, Bombay 2. Phone: 22347. Grams: "SNIPE." Manufacturers of quality "KERSON'S" brand, Electrical Accessories.

**KESBO (PRIVATE) LIMITED** (Formerly known as The Harachi Electric Stores (Bombay) Ltd.).—Office: Bombay Mutual Terrace, 1st Floor, 534, Sandhurst Bridge, Bombay 2. Grams: "RECTIFIERS." Phone: Office: 357164.

**KUMAR ELECTRIC EQUIPMENT CO.**—80-82, Lohar Chawl, Bombay 2. Phone: 38614. P.O. Box No. 2178.

**LALLUBHAI AMICHAND PRIVATE LTD.**—Proprietors, "Dun Aluminium Factory." 225-27, Tardeo Road, Bombay 2. Leading Manufacturers of all types of Electrical Shades for Domestic, Industrial, Photographic Laboratories & other uses.

**LAXMI ELECTRIC TRADING CO.**—(Estd. 1930) 21-23, Lohar Chawl, Bombay 2. Phone: 29048. Grams: "LAXELEG". Stockists of Everything Electrical including Fans, Lightings,

Refrigerators, "MARLEX" Appliances such as Pressure Cookers, Vibro-Tools, Musical Bells, Gong Bells, Sirens.

**LIGHT HOUSE.**—51, Kitchen Garden Lane, Shree Bhuvaan, Bombay 2. Phone: 30351. Grams: "GREATWALL". Sole Selling Agents of "B.L." Brand miniature Bulbs, Electric Bulbs. Distributors of Eveready Torches, Batteries, Bulbs.

**Mahindra & Mahindra Ltd.**—Gateway House, Apollo Bunder, Fort.

**Malik Electric Works.**—Low Level, Victoria Road, Masagaon.

**Maneckji G. B. & Co. Ltd.**—Mehta House, Apollo Street, Fort.

**Manu Electric & Engineering Works.**—Kanji Gocundas Building, 160, Lohar Chawl.

**Mather & Platt, Ltd.**—Hamilton House, 8, Graham Road, Ballard Estate.

**Mehta & Co., Private Ltd., K. L.**—35, Bhangwadi, Kalbadevi Road, Bombay 2.

**METROGOLD ELECTRIC STORES.**—60, Lohar Chawl, Bombay 2. Phone: 39675. Sole Distributors for Getco Geysers and other appliances. Dealers in Hot Plates, Wires, Cables, Table Lamps, Conduits and Accessories. Sales & Service.

**Minerva Trading Agency, The.**—45, Forbes Street, Fort.

**Modern Electric Co.**—46, Cawasji Patel Street, opp. Hongkong Bank, Fort, Bombay 1.

**MODERN ELECTRIC CO.**—(Estd. 1935), Dady House, 50, Veer Nariman Road, Fort, Bombay. Phone: 252403. For Power & Lighting Installations, Cable laying, Temporary Illuminations.

**Modern Engineering Co.**—107, Apollo Street, Fort.

**Modi & Modi Co.**—16, Hamam Street, Fort, Bombay.

**MOTWANE PRIVATE LTD.**—127, Mahatma Gandhi Road, P.O. Box No. 1312, Bombay 1, BR. Phone: 252337. Grams: "CHIPHONE", Bombay.

**National Electrical Industries Ltd.**—Lalbaug Industrial Estate, Lalbaug, Bombay 12.

**Noble Electric Works.**—Rustom Building, 27, Vir Nariman Street, Fort.

**Paramount Engineering Co.**—Fort Chambers, Hamam Street, Fort.

**Paramount (India), Ltd.**—Kermani Building, Sir Phiroozshah Mehta Road, Fort.

**Parry & Co., Ltd.**—Warden House, Sir Phiroozshah Mehta Road, Fort.

**PARSRAM & CO.**—Kailash Darshan, Kennedy Bridge, Nana Chowk, Bombay 7. Phone: 357010. Grams: "REKAM."

**Photophone Equipments Ltd.**—Faralbhoy House, 8-9, Marine Lines.

**POPULAR ELECTRIC STORES.**—414, Harharwalla Building, Corner Golpitha, Bombay 4. Phone: 332359.

**Power Cables Pvt. Ltd.**—24, Badli Sayed Abdullah Road, Bombay 1.

**Prabhat Electric Equipment Corporation.**—P.O. Box No. 291, Bombay 1.

**Premier Electric Co., Ltd.**—Mehta House, Apollo Street, Fort.

**PREMIER RUBBER & CABLE INDUSTRIES.**—Jarnal Building, 211, Nagdevi Street, Bombay 3. Phone: 326551. Grams: "RUBERGOODS". Manufacturers of Rubber Insulated Cables V.I.R.—C.T.S. and Weather-proof, etc.

**Protos Engineering Co. Ltd.**—173, Jamshedji Tata Road, Churchgate, Bombay.

**RADIO ELECTRIC PRIVATE LTD.**—Lamington Chambers, Dr. Bhadkamkar Road, Bombay 4. Designers and Suppliers of Radiotone Rectifier Units, Power Supply Units, Transformers and Selenium Metal Rectifiers from few M A upto 5000 A. Managing Director: D. H. Marathe, B.Sc., S.M.I.R.E. (U.S.A.), Manager: Dh. H. Marathe, M.A. (Bom.), M.R.S.I. (Lond.). Phone: 351724. Grams: "RADTRIC", Bombay.

**RAVIN TRADING COMPANY.**—S, Mohatta Market, Palton Road, P.O. Box No. 1969, Bombay 1. Grams: "BEWITCH". Phone: 26-4883. Specialists in HT & LT Underground Cables, PVC insulated Cables for Power and Control, Wires of all sizes, Branch at Mody Chambers, Dharmendra Road, Rajkot.

**Reunion Engineering Co., Private Ltd.**—Amar Bldg., Sir P. M. Road, Fort, Bombay.

**Richardson & Graddas.**—Byculla Iron Works, Byculla.

**Rohat, H. L. & Co.**—Navsari Building, Rastion Road, Fort.

**RUBY ELECTRICAL INDUSTRIES.**—15, Vanka Mohalla, Kolbhat Lane, P.B. No. 2730. Phone: 23267. Manufacturers & Exporters of Bakelite & Porcelain Electrical Accessories, "RUBY" Brand wall sockets, Plug-Pins, Ceiling-Roses etc.

**S. K. & CO.**—Gopal Nivas, 133, Princess Street, Bombay-2. Dealers in Everything Electrical and Fluorescent Lamps.

**Sharif Electrical Works.**—Sharif House, 74, Custom House Road, Fort.

**SHARDA ELECTRIC CO.**—159-63, Lohar Chawl, Stockists of Electrical Accessories, Wires & Cables, Fans & Appliances. Phone: 20478. Grams: "TEAKCASING."

**SREE MAHAVIR ELECTRIC TRADING CO.**—182, Zaveri Bazar, Bombay 2. Grams: "DIPOTSAVI". Telephone No. 38722. Direct Importers of Electric Accessories & Auto Wires, Lamps, Insulating Materials & Nichrome Wires.



# SOPHER & COMPANY

Direct Importers & Stockists of

Electrical Accessories

BUONA CASA, SIR P. M. ROAD, BOMBAY 1

Branch: 11, BANK STREET, BOMBAY 1

Manufacturers of

SOPHER

ELECTRICAL WIRING ACCESSORIES

Phone: 25 47 29 Cables: FAREAST

Br. 25 17 35

★

Ask For Free Illustrated Catalogue

Stone, J., & Co. (India), Ltd.—Imperial Chemical House, Witlet Road, Ballard Estate.

Stork Electric Co.—6, Proctor Street, Grant Road, Bombay 7.

Supreme Electric Works.—110-112, Vithalwadi, Bombay 2.

Surya Prakash Engineering Co.—21, Forbes Street, Fort.

Tata Hydro-Electric Agencies Ltd.—Bombay House, 24, Bruce Street.

**TENBY (INDIA) PRIVATE LTD.**—Hamam House, Hamam Street, Bombay 1. Phone: 251892. Registered Office: Pondicherry; Grams: "TENBYINDIA," Bombay; Manufacturers of the Well-known "TENBY" electrical accessories under license from the English Company.

Thakar Electric Stores.—37, Vithalwadi, Kalbadevi.

T. M. Tyabji & Bros.—82-83, Hamam House, Hamam Street, Fort.

Trinity Electric Syndicate.—Princess Street, Bombay 2.

Turner, Hoare & Co., Ltd.—Gateway Building, Apollo Bunder.

United Eastern Agencies, Ltd.—144-146, Mahatma Gandhi Road, Fort.

**UNITED INDIA ENGINEERING CO.**—6, Commerce House, Meadows Street, Fort, Bombay. Phone No. 25-1492. Grams: "UNICONARAM." Engineers and Machinery Dealers, Sales & Showroom: 78, Old Custom House Road, Fort, Bombay 1.

**VEEJAY'S ELECTRIC CORP.**—Ahmed Bldg., Room No. 5, Lohar Chawl, Bombay 2. Phone: 39637. Grams: "LAXELEC". Sole Agents for "MARLEX" Electric Appliances—Pressure Cookers, Musical Bells, Gas Lighters, Sirens, Hooters, Gong Bells, Portable Blowers Cum Vacuum Cleaners, Vibro Tools, Soldering Irons, Transformers and Ventura Exhaust Fans.

Voltas Limited.—Ballard Estate, Bombay 1.

Western Agencies Co.—421, Lamington Road, Bombay 4.

Western Engineering Co.—Western India Building, Sir Phirozshah Mehta Road, Fort.

Western India Electric Co., Ltd.—Tambuwalla's Building, 96, Upper Duncan Road, Byculla.

Western India Engineering Corp., Ltd.—Cama Chambers, 23, Meadows Street, Fort.

Western Traders (India), Ltd.—Post Box No. 9, Bombay.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

**ZENITH ELECTRIC STORES.**—51, Ahmed Building, Lohar Chawl, Bombay 2. Phone: 23126. Grams: "ALLANABANDA". Manufacturers of "SUNRISE" Electrical goods.

## ELECTRICAL & ELECTRONIC INDUSTRIES

**K. F. ELECTRICALS PVT. LTD.**—Office: Himalaya House, 5th Floor, 79, Paltan Road, Bombay 1. Factory: Plot No. A 125/A 126; Wagle Industrial Estate, Thana; Mfg. of Switchgear Control Boards, Bus Bar Trunking, Fuse Boxes, etc. Phone: Office: 266448; Factory: 591733.

## ELECTRICAL GOODS & APPARATUS IMPORTERS

**ASIATIC ELECTRIC TRADING CO.**—46 48, Lohar Chawl, Bombay 2. Phone: 29886. Grams: "ASIALIGHT."

**Economic Electric Co. Ltd.**—Jail Road (East), Dongri, Bombay 9.

**JASHVANT C. SHAH & CO.**—Navraz Baug, Navrozi Lane, Ghatkopar, Bombay 77. India's Foremost Indenting House. (For Details please see Commercial Firms Section).

**J. V. Mehta & Co.**—Opera House Tram Terminus, Lamington Road, Bombay 4.

**Kilburn & Co. Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Bombay.

**PRECIOUS ELECTRIC CO.**—Yusuf Building, Veer Nariman Road, Bombay 1. Phone: 252447 & 251981; Grams: "PRECIOUS." For Philips Lamps & Radios and H.M.V. Records.

Scientific Instrument Co., Ltd.—Navsari Building, 240, Dr. Dadabhai Naorji Road (Hornby Road), Fort.

CONTACT



Phone: 29886

For your Domestic, Commercial or Industrial requirements of:

- Electric Heating & Cooking Appliances.
- All kinds of Motorised Appliances—Food Preparing Machines, Kitchen-Aid Equipments.
- Climatic Control Equipment, e. g. Fans, Air Circulators, Exhaust & Ventilating Fans.
- Electric Heating Elements—All types and their Control Equipment.
- Special Lamps—such as U/V & I/R, Sodium, Mercury Vapour.
- Perfect Lighting Equipment—of general nature.
- Wires & Cables and Switchgear.

SALE & SERVICE

**ASIATIC ELECTRIC TRADING COMPANY**

46/48, Lohar Chawl, Bombay 2.

## ELECTRICAL GOODS AND APPLIANCES

Agrawal Metal Works Private Ltd.—207, Kalbadevi Road, Bombay 2.

Ahmed & Co.—Lohar Street, Bombay 2.

Ahmed A. Fazalbhoy.—30, Queen's Road, Bombay 1.

Ahoora Trading Co.—22D, Parsi Bazar Street, Fort.

**ALLIANCE ELECTRIC MART.**—67, Lohar Chawl, Bombay 2. Phone: 39229.

Allied Exporters.—Kumud House, 267, Dr. Dadabhai Naorji Road, Fort, Bombay.

All India Trading Corporation.—25, Bank Street, Fort. Grams: "Autoglass." Agents for Paisa Fund Opal Globes.

Arvinda Trading Co. Private Ltd.—105, Apollo Street, Fort.

Auto & Electric Stores.—Bhangwadi, Kalbadevi Road, Bombay 2.

Balmer Lawrie & Co., Ltd.—Graham Road, Ballard Estate, Bombay 1.

B. B. Electric & Auto Stores.—98, Princess Street, Bombay 2.

Bharat Electric Supply Traders.—542, Sandhurst Bridge, Chowpaty, Bombay 7.

Bhargava & Co., K. L.—94, Meadows Street, Fort.

Bijlee Products (India) Ltd.—36, Lamington Road, Byculla, Bombay 8.

**BIPINKUMAR ELECTRIC CORPORATION.**—14, Tavawala Building, Lohar Chawl, Bombay 2. Dealers: M.E.M. Copperwires, Fans, Meters, Accessories & Everything Electrical. Grams: "BIPINDEV." Phone: 30684 & 22185. Sole Agents for "TROPEX CABLES," VIR CTS and weather proofs and Super Deluxe Plastic Cables and Philco Resin Corod Solder Wires.

**B. J. ELECTRICALS.**—82, Meadows Street, Entrance Oak Lane, Fort, Bombay 1. Phone: 257563. Authorised Dealers in "TROPODUR" P.V.C. Wires, USHA & Emco Fans, "MEM" and other Switchfuses, Accessories, Appliances, etc.

Candy Filters (India), Ltd.—Forbes Building, Home Street, Fort.

Casimath M. Bomonjee Eduljee.—17/19, Bastion Road, Fort.

Chandrodaya Electric Co.—Bhangwadi, Kalbadevi Road, Bombay 2.

Chimnani Desai & Co.—Gooli Mansion, Hornji Street, Fort.

Chotani Electric & Engineering Co. Ltd.—57, Apollo Street, Fort, Bombay.

Cinefones.—Opp. Opera House, 3, New Queen's Road, Bombay 4.

Cineales.—Tutorial School Building, Kennedy Bridge, Bombay 7.

Crescent Agencies (Private) Ltd.—Beaumont Chambers, 27/C33, Meadows Street, Fort, Bombay.

**CROWN BUILT CORPORATION.**—Mfrs. of "CROWN-BUILT" Hi-speed Cooking Ranges Equipped with General Electrical Calrod Fast-Heating Elements; 21, Suleman Chambers, Battery Street, Fort, Bombay 1. Phone: 212908.

Damania Electrical Engineering Works.—171, Lohar Chawl, Bombay 2.

Deepak Electric Corporation.—44, Bhangwadi, Kalbadevi.

Eastern Electric & Radio Corp.—Lohar Chawl, Bombay 2.

Eastern Trading Co.—Vithal Sayana Building, Lohar Chawl, Bombay 2.

Economic Electric Co., Ltd.—Jail Road (East), Dongri, Bombay 9.

Electric & General Trades, Ltd.—Bombay Mutual Annexe, Gunbow Street, Fort.

**ELECTRICALS (INDIA) PRIVATE LIMITED.**—24-B, Hamam Street, Fort, Bombay, P.O. Box No. 1458. Grams: "BIJLIHIND". Phone: 252009. Importers and Dealers in all Electrical Goods, Overhead line materials and Motor Winding materials. Agents for L. P. S. Electrical Co., Ltd., England, Lindner & Co., Germany and Midland Electric Manufacturing Co., England.



Basental Engineering Co.—11, Pocawala Building, Elphinstone Circle, Fort.  
 Gangeswar Sharma & Co.—Kanchan Bhawan, 15, Dadiseth Aghat Lane, Bombay 1.  
 Gannon, Dumbrey & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.  
 Gaytee & Co.—Jammahbhooni Chambers, Fort Street, Bombay 1.  
 General Electric Co. (India) Ltd.—Magnet House, Douglas Road, Ballard Estate.  
 General Radio & Appliances Ltd.—Opera House, Bombay 4.  
 Greaves Cotton & Crompton Parkinson Private Ltd.—Forbes Street, Bombay 1.  
 Harda Electric Supply Co.—17-19, Bastion Road, Fort.  
 Herman & Mohan, B. R., Ltd.—People's Building, Sir Phiroosah Mehta Road, Fort.  
 Himco (India) Private Ltd.—Kurla Road, Andheri, Bombay 41.  
 Hindustan Electric & Radio Corporation—Khandala Lane, Bombay 4.  
 Hugo Engineering Co.—Imperial Chambers, Wilson Road, Ballard Estate, Fort.  
 India Electro Traders.—157, Princess Street, Bombay 2.  
 Indian Electric Stores.—123, Lohar Chawl, Bombay 2.  
 Industrial Machinery & Tools Corporation.—Indira Nivas, 1st Floor, New Bhatwadi Street, Bombay 4.  
 Jayems Engineering Co.—Warden House, Sir Phiroosah Mehta Road, Fort, Bombay 1.  
 J. Mody & Co.—45, Nardevi St., Bombay 3.  
 Johnson & Phillips Ltd.—Currimbhoy Road, Ballard Estate, Bombay 1.  
 Joshi Trading Corporation.—Maskati Mahal, Lohar Chawl, Bombay 2.

**KESBO (PRIVATE) LIMITED.** (Formerly known as the Karachi Electric Stores (Bombay) Ltd.).—Office: Bombay Mutual Terrace, 1st Floor, 534, Sandhurst Bridge, Bombay 7, Grams: "RECTIFIERS." Phone—Office: 357164.

Killick Nixon & Co. Private Ltd.—Home Street, Bombay 1.  
 Kirtikumar Electric Corporation.—12, Yawala Bldg., Lohar Chawl, Bombay 2.

Marhel & Co.—Makharis House, 327, Sandhurst Road, Bombay 4.  
 M. C. Mody & Bros.—Maskati Mahal, 125-A, Lohar Chawl, Bombay 2.  
 Mehta, J. V., & Co.—Opera House, Tram Terminus, Bombay 4.  
 Modern Electric Co.—46, Cawasji Patel Street, opp. Hongkong Bank, Fort, Bombay 1.  
 Modern Electrical Trade Syndicate.—Wassilawal Building, 182 Masjid Bunder Road, Bombay 3.  
 Modern Radio & Electric House.—381, Hornby Road, Fort.  
 Motiram & Co.—79, Himalaya House, Paltan Road, Bombay 1.

**MOTWANE PRIVATE LTD.**—127, Mahatma Gandhi Road, P.O. Box No. 1812, Bombay 1-BR. Phone: 252337. Grams: "CHIPHOME."

Narendra Electric Stores.—158, Lohar Chawl, Bombay 2.  
 National Ekco Radio & Engineering Co. Ltd.—Ewart House, Bruce Street, Fort, Bombay 1.

National Supply & Distributing Agency.—250, Kalbadevi Road, Bombay 2.  
 New India Trading Corporation.—Vithal Sayana Building No. 2, Lohar Chawl, Bombay 2.  
 Oriental Trading Corporation.—Makharis House, 327, Sandhurst Road, Bombay 4.

Patel Electric Co., Ltd.—Vithal Sayana Building No. 2, Lohar Chawl, Bombay 2.

Patel, U. D., & Co.—Bank Street Building, Fort.  
 Pavri, J. K.—19, Karim Chambers, Hamam Street, Fort.  
 Pavri Sons & Co.—93-97, Bazar Gate Street, Fort.  
 Pestonji & Co.—570, Sultan Mansil, Chira Bazar, Bombay 2.  
 Photophone Equipments, Ltd.—Faralbhoy House, 9, Marine Lines, Bombay.

Pioneer Electricals (India) Ltd.—16, Hamam Street, Fort. Phone: 28050. Grams: "VIRCABLES."

**PRECIOUS ELECTRIC CO.**—Yusuf Building, Veer Nariman Road, Bombay 1. Phone: 252447 & 251981. Grams: "PRECIOUS." For Philips Lamps & Radios (H.M.V. Records).

Precious Electric Co.—Yusuf Building, Churchgate Street, Fort.  
 Premier Electric Co., Ltd., The—Mehra House, Apollo Street, Fort.  
 Prinos Engineering Co., Ltd.—111, Jambhedji Tata Road, Churchgate, Bombay.

R. S. Traders.—16, People's Building, Sir Phiroosah Mehta Road, Fort.

Rathand & Sons.—5, Picket Cross Road, Bombay 2.  
 Refrigeration & Appliances Co. Private Ltd.—Pravin Court, 86, Queen's Road, Bombay.

Rhythm House Ltd.—40, Rampart Row, Fort.  
 Royal Electric Co., The—Mulle Jetha Building, 199, Princess Street, Bombay 2.

**RUBY ELECTRICAL INDUSTRIES.**—15, Vanka Mohalla, Kolbhat Lane, P.B. No. 2730. Phone: 13267. Manufacturers & Exporters of Bakelite & Porcelain Electrical Accessories, 'RUBY' Brand Wall Stockists, Plug-Pins, Ceiling Roses, etc.

For your requirements of



**PIPE BENDING MACHINES**

and various other Machine Tools



**WIRE TYING MACHINES**

and general Hardware Stores.



Modpub/5A-10A/60

■ HAND TACHOMETERS & SMALL HAND TOOLS  
 ■ BRITTOOL TORQUE WRENCHES ■ 'BATY' DIAL INDICATORS ■ ECLIPSE MAGNETIC VEE BLOCKS  
 ■ PRECISION MEASURING INSTRUMENTS  
 and all kinds of HARDWARE & MILLGIN STORES.

Contact



**SACHIN & CO.,**

25, Bank Street, P. B. 1184, Bombay 1  
 Phone: 255175. Grams: "SACHEENCO"

Branch: 9, JK Chambers, 77-83, Nagdevi St., Bombay-3

## Electronic, Electrical & Scientific INSTRUMENTS



PHILIPS  
RCL  
BRIDGE  
P.P. 9030



PHILIPS  
Multi-Meter  
Model  
5210



Sawhney & Co.—Shahpur House, Cowasji Patel Street, Fort, P.O. Box 148-A, Bombay.

Scientific Instrument Co., Ltd.—Narsari Building, 240, Hornby Road, Fort.

Sealite Electric Co.—Manhar Building, 178, Lohar Chawl, Bombay 2.

Selmani & Co.—162, Hill Road, Bombay-50 A8.

Sentinel Electric Co.—Advani Chambers, Sir Phipposhab Mehta Road, Fort.

Shah Trading Agencies.—19, Hamam Street, Fort.

Shah Trading Co.—Lawyers' Chambers, Picket Road, Lohar Chawl.

**SHAH COMMERCIAL CORPORATION.**—For Industrial Electric Materials, Authorised Dealers: Insulast PVC Single & Multi-Core Cables, Sentinel Switch-Gears, Gloster Cables, L.K.L.T. Starters, Tubeflex Tubing, G.I. Flexible Pipe & Aircon Remote Control Station. Stockists of: M.E.M. Switches, Fuse units & Spares, Distribution Boxes, Conduit Pipe & Fittings, Tropodur & Underground Cable & Cable End boxes, Overhead Materials, I.C.C. Aluminium & Copper Jointing Materials, Winding Wire & Insulating Materials. 58, Mangaldas Road, Lohar Chawl, Bombay-2. Grams: "SHAHBROS"; Phone: 22723.

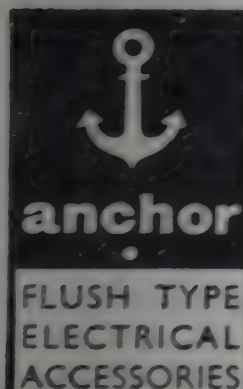
## SHANTILAL & BROTHERS

"Streeji Bhuvan," 50 52 54  
Lohar Chawl, Bombay-2

Phones: 30003 & 30004.  
Grams "TABLESTAND."

Agents for:-

"ANCHOR" Flush  
Type Electrical  
Accessories and  
"AMARJYOTI"  
Electrical Appliances.



Standard Trading Co.—Vittal Sayana Building No. 2, 43-45, Lohar Street, Bombay 2.

**STANDARD ELEC. & ENGG. CO.**—'SARDARGRIHA,' 1st Floor, Lohar Chawl, Bombay 2; Grams: "SHRAMDAN"; Stockists of 'USHA', H.T.P., H.W.P. & DEVIDAYAL'S Super Enamelled D.C.C. & S.C.C. Copper Wires, Cables, all sorts of Insulating Materials & Dealers in other Elect. Goods. Phone: 39701.

Thanawalla & Co.—192, Hornby Road, Fort. Phone: 25118.

Trinity Electric Syndicate.—Princess Street, Bombay 2.

Turf Electric Co.—24-26, Dalal Street, Fort.

Unique Trading Corporation.—Mustafa Building, Sir Phipposhab Mehta Road, Fort.

Venus Electric Co.—Keravala Building, Mangaldas Road, Bombay 2.

Voltas Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

Western Agencies' Co.—421, Lamington Road, Bombay 4.

Westrex Co. India.—Metro House, Mahatma Gandhi Road, Bombay 1.

Western India Engineering Corporation, Ltd.—Cama Chambers, 23, Meadows Street, Fort.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Bombay.

Zenith Electric Stores.—51, Ahmed Building, Lohar Chawl, Bombay No. 2. Phone: 23125. Grams: "ALLANABANDA."

## ELECTRICAL HEATING ELEMENTS

**ASIATIC ELECTRIC TRADING CO.**—46-48, Lohar Chawl, Bombay 2. Sole Representatives in India for "GRIMWOOD" Australian make Electric Heating Elements for all types of Appliances—designed or tailor made for any use e.g. for Cookers, Baking Ovens, Boiler Grills, Immersion Heating Elements for Water, or Oil, Acids and Gases, for Infra-Red Heating Elements for Industrial drying and other purposes, Strip Heaters, etc.

**SUSHERA & CO.**—76, Kakad Industrial Estate, P.B. No. 6484, Mahim, Bombay 16. Phone: 454424; Grams: "HEAT-BEAM"; Embedded "Heatbeam" Strip Heaters, Finned Heaters, Curing Heaters for Textiles, Rubber & Leather; Cartridge Heaters, Immersion Heaters for Water, Oil, Chemical Baths and for Electroplatings. Available for any Watts & Volts.

## ELECTRICAL INSTRUMENTS & METERS

**BAJAJ ELECTRICALS LIMITED.**—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers and Contractors. Phone: 25-3841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder & Bangalore.

Eastern Electric & Engineering Co.—127, Mahatma Gandhi Road, Bombay 1.

**ESSENTIAL ENGINEERING CO.**—11, Botawala Building, Elphinstone Circle, Fort, Bombay. Grams: "ESSENCE." Phone: 252940. Importers, Exporters, Commission Agents and Manufacturers' Representatives.

Express Trading Co.—Cama Chambers, 123, Meadows Street, Bombay 1.

## GYRO LABORATORIES PRIVATE LTD.

Manufacturers of:

Instruments, Current Transformers, L.T. & H.T. Potential Transformers, L.T. & H.T. Circuit Tester for Blasting (Ohmmeters), Multiratio Current Transformers, High Pressure Testers, Wheatstone Bridges, Phase Sequence Indicators, Relay Testing Sets, Switch Board Instruments. We also undertake Repair, Overhaul and Recalibration of all types of Electric Measuring Instruments.

8, Gazdar Street, Thakurdwar,  
BOMBAY 2.

Telegrams: "GYROSTATIC."

Phone: 39002

**INDIAN ENGINEERING CO.**—World Naka, Post Box 16551, Bombay 18. Phones: 370379 & 373490. Grams: "AMPVOLT" (JC). Also at Calcutta, New Delhi, Madras & Bangalore.

**INDIAN INDUSTRIAL ENGINEERS.**—43, Tamarind Lane, Fort. Phone: 254972. Grams: "NEWLIGHT."

Kerala Industries (India).—17, Hornby Building, 174, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

Toshniwal Industries Private Ltd.—198, Jamshedji Tata Road, Bombay 1.

## ELECTRICAL ILLUMINATION (TEMPORARY)

**MODERN ELECTRIC CO.**—(Estd. 1935), Dady House, 50, Veer Nariman Road, Fort, Bombay. Phone: 252403. For Power & Lighting Installations, Cable laying, Temporary Illuminations.

National Electric Company.—11, Elphinstone Circle, Fort, Bombay.

## ELECTRICAL LIGHTING FITTINGS

**BAJAJ ELECTRICALS LIMITED.**—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers & Contractors. Phone: 253841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder and Bangalore.

## ELECTRICAL RESISTANCE WIRES

**GWALANI BROS. & CO. (INDIA) PRIVATE LTD.**—Gopal Bhuvan, 199, Princess Street, Bombay-2 BR. Phone: 39047. Specialists in Insulating Materials, Armature Winding Wires & Eureka, Kanthal, Nichrome Wires.

**INDIAN INDUSTRIAL ENGINEERS.**—43, Tamarind Lane, Fort. Phone: 254972. Grams: "NEWLIGHT."

**INDUSTRIAL ELECTRICAL ENGINEERING CO.**—10, Hamam Street, Fort. Specialists in Insulating Materials & Armature Wires. Phone: 252836.

## ELECTRODES

Batlilol & Company Private Ltd.—Regd. Office: Forbes Street, P.O. Box 18-A, Fort, Bombay-1 (BR). Phones: 255451 (6 lines). Grams: BATLIBOICO. Tele.: 011-284. City Branch: Batlilol House, 59-61, Nagdevi Cross Lane, Bombay 3 (BR). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada, Associate: Bangalore 2. Resident Representatives: R. N. B. Bhushanwar.

Bombay Machine Tools & Hardware Corporation.—103 Narayan Dhura Street, Bombay 2.



**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort. Phone: 254433. Grams: "DATNARE."

Guest, Kinn, Williams, Ltd.—Wakefield House, Ballard Estate, Bombay 1.

**INDUSTRIAL GASES LTD., THE.**—Bombay. Grams: "INDUS-GASES". Head Office: P.O. Box 853, Calcutta 1. Manufacturers & Distributors of all kinds of Welding Electrodes, Welding Rods & Fluxes; Agents for Lincoln Electric Company Ltd., U.K., Suffolk Iron Foundry, U.K. & Unitor A. S. Norway.

**Power Cables Pvt. Ltd.**—24, Brivi Sayed Abdulla Road, Bombay 1.

**Vishwa Bharati Trading Co.**—14, Kumbha Street, Ballard Estate, Bombay 1.

**Voltes Ltd.**—19, Graham Road, Ballard Estate, Bombay 1.

### ELECTRONIC COMPONENTS

**ASIAN ELECTRONICS LIMITED.**—Regd. Office: Handloom House, 221, Dr. Dadabhai Naoroji Road, Fort, Bombay-1. Phones: 266354, 264399 (Office) & 592385 (Works); Manufacturers of Electronic Components; Carbon Film Resistors, "STYROFLEX" Capacitors and Ceramic Cores and Instruments in Collaboration with Messrs. ISKRA-KRANJ of Yugoslavia. Sole Distributors for: "ISKRA" Instruments for Electro Mechanics, Telecommunications, Electronics, Automation.

**SEATEX PRODUCTS PRIVATE LTD.**—11, Bank Street, Fort, Bombay. Phone: 254136. Grams: "FLU DRIVE". Dealers in Electrical and Electronic Instruments.

**NETRONICS PRIVATE LTD.**—Manufacturers of Capacitors, Resistors and Other Electronic Components. 21-B, Noble Chambers, 3rd Floor, Parsee Bazar Street, Bombay-1.

### ELECTRONIC INSTRUMENTS MFRS.

#### ELECTRONICS MANUFACTURING DIVISION

of The Indo-Burma Petroleum Co. Ltd.

Manufacturers of IBPCO

Automatic Temperature Controllers  
High Speed Counters  
Transistorized Photo-Electric Controls  
Electronic Control Systems  
Electro-Medical Equipment

Gillander House,  
Netaji Subhas Road,  
Calcutta-1.

Allahabad Bank Building,  
Apollo Street,  
Bombay-1.

Allahabad Bank Building,  
17, Parliament Street,  
New Delhi-1.

**ELECTRONIC PRODUCTS.**—Office: Bombay Mutual Annexe, Gunbow Street, Bombay 1. Phone: 263466. Grams: "ROHMEEPEE". Manufacturers of Film Carbon Resistors, Testing Instruments, Radio and Transistor Parts & Polythene Packaging Material. Factory: Plot A-27, Road No. 10, Wagle Industrial Estate, Thane, Bombay. Phone: 591340.

### ELECTROPLATERS, ELECTROTYPERS & GILDERS

**Acme Manufacturing Co., Ltd.**—Construction House, Wittet Road, Ballard Estate.

**DIAMOND ELECTRO-GILDERS & GALVANIZERS.**—Specialists for Electroplating in Chrome, Nickel, Silver, Copper, Bright Nickel Anodizing, Bronze, Oxidizing, Barrel Plating, Galvanizing & Tanning. Office: Anand Bhuvan, 6, Islampura, Bombay 4. Phone: 333319. Factories at: 39, 2nd Carpenter Street, Bombay 4 and Bunder Road, Sewri, Bombay 15.

**Kobinoor Electro Gilders.**—Khetwadi 10th Lane, Bombay 4.

**Lund & Blockley.**—Sassoon Institute, 150-154, Manatana Gandhi Road, Fort.

**New Sun Electro Gilder & Metal Manufacturing Co.**—250, Belasis Road, opp. Alexandra Cinema, Bombay 8.

**R. Lallu & Brothers.**—Shinde Wadi, 220-D, Vincent Road, Dadar, Central Railway, Bombay 14.

**S. R. MANDAWKER & CO.**—Military Square Lane, Fort, Bombay 1. Phone: 253687. Electro Platers & Gilders, Copper Plate Printers, General Engravers and Die Sinkers, Relief Stampers & Rubber Stamp Makers.

**SAIFEE ELECTROPLATING WORKS.**—Electroplaters in Chromium, Bright Nickel, Bright-Zinc Silver, and Barrel Plating; Phone: 335626; 139, Bhendi Bazar, Bombay 3.

**Scientific & Industrial Supplies Corporation.**—Prinsep Street, Bombay 2.

### ELECTROPLATING MACHINERY & MATERIAL MFRS. & DEALERS

**Associated Machine & Tool Co.**—130, Meadows Street, Fort.

**Batlilol & Company Private Limited.**—Regd. Office: Parkes Street, P.O. Box 1904, Fort, Bombay-1 (P.R.). Phone: 266451 (4 lines). Grams: "BATLIBOICO." Tele: 611-684. City Branch: "BATLIBOI HOUSE", 59/61 Nagdevi, Cross Lane, Bombay-3 (B.R.). Branches: Ahmedabad, Bangalore, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Lucknow, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: Ranchi, Bhubaneswar.

**Chokal Brothers.**—Kanjil Mansion, 315, Sandhurst Road, Bombay 4.

**GRAUER & WELL (INDIA) LTD.**—"SUKHSAGAR," Corner of Hughes Road, Chowpatty, Bombay-1. Grams: "WINE-WELL." Manufacturers of Complete Anodising, Electroplating and Metal Finishing Plates, Equipments and Supplies in Foreign Collaboration.

**Hardcastle Ward & Co. Private Ltd.**—Abce Building, Hornby Road, Bombay 1.

**HIND RECTIFIERS LTD.**—Lake Road, Bhandup, Bombay 18. Grams: "HIRECT," Bombay 18. Licensees of Westinghouse Brake & Signal Co., Ltd., London for Manufacture of Rectifiers, Battery Chargers, Electroplating sets, Silicon Power Plants. Selling Agents: Kaycee Industries Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1. Phone: 264030. Grams: "KAYCEE."



### CANNING MITRA PHOENIX LTD.

Manufacturers of:

Electroplating Salts,  
Polishing Compositions,  
Plating Plant & Equipment.

Regd. Office: Bacheobai Building, 187, Dr. Dadabhai Naoroji Road, Bombay-1.

Phone: 262342.

Grams: "NAMSAMPAT".

Products manufactured in Technical collaboration with Messrs. W. Canning & Co. Ltd. of U.K.

**K. B. Gandhi & Co.**—277, Sandhurst Road, Bombay 4.

**KAYCEE INDUSTRIES LTD.**—Agents for Hind Rectifiers Ltd. Manufacturers of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-Chemical Industries, Manufacturers of "KAYCEE" Rotary, Toggle, Heat Control and Airconditioner Switches. "Kaycee" domestic & bulk type Watermeters. Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay. Phone: 263521. Grams: "TURNRITE." Branches: Delhi, Calcutta, Madras & Kanpur.

**MACHSONS PRIVATE LIMITED.**—Electroplating Engineers. 28, 1st Agiary Lane, Karakua, Zaveri Bazar, Bombay 3. Phone: 322144. Grams: "MACEPLATE." Manufacturers of Single Cyanides, Double Cyanides, Electroplating Salts, and Chemicals and Anodes of Silver, Gold, Copper, Nickel, Zinc and Cadmium.

**MATHURADAS EROS. & CO.**—76/78, Thakurdwar Road, Bombay 2-BR. Phones: 356374 & 351319 (Office) & 480075 (Res.). Grams: "PEERLESS," Bombay. Dealers in Electroplating Chemicals, Polishing Materials and Allied Equipments, Jewellery Enamels, etc. Leading Stockists for: Ronuk Industries Ltd., Bombay.

**METALLICA WORKS PRIVATE LTD.**—73/73, Dr. Annie Besant Road, Bombay 18. Phones: 373432, 375433, 375434, 371941 & 371942. Makers of Non-Ferrous Metals, Alloys, Castings, Anodes, Lead linings of Acid Resisting Containers, Crucibles.

**MITRA & CO., S.**—Distributors for Canning Mitra Phoenix Ltd. Manufacturers of Electroplating and Polishing Equipments and materials. Bacheobai Building, 187, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 262342. Grams: "MLUDSHI." Branches at 30, Bentick Street, Calcutta 1 and 17, Venkata Chetty Mudaly Street, Madras 3.



**HONUK INDUSTRIES LTD.**—11-A, Abdul Gaffar Khan Road, (World Sea Face), Bombay 18. Phone : 453250. Grams : "PO-NUKIND." Manufacturers of Polishing and Buffing Compositions, Fibre & Wire Wheels, Calico Mops, Polishing Accessories. Dull and Bright Compounded Salts and Brighteners. Prepared Plating Salts for all Metals, Metal Bronzes, Alkali Metal Cleaners, and Plating Accessories. Also Design, Fabrication & Erection of Complete Plans for Electroplating and Anodizing. Full range of Heat Treatment & Tempering Salts.

Shah Trading Corporation.—Opp. Crawford Market, Oomrigger Building, P. B. No. 2299, Bombay 3.

### EMBROIDERIES

## FANCY CORPORATION LIMITED

16, APOLLO STREET, BOMBAY-1.

PHONES : 251438 ; 254714

*Manufacturers of*

# hakoba

## EMBROIDERED FABRICS

### ENAMEL SIGNBOARDS

**PIONEER ENAMELLING WORKS, THE.**—24, Laxmi Building, Sir Phirozshah Mehta Road, Fort, Post Box 1130, Bombay 1. Phone : 26-3464. Grams : "NAVJOT."

**TALWARKER BROTHERS PRIVATE LTD., W. R.**—122, Commerce House, Meadows Street, Fort, Bombay 1. Phone : 254710. Grams : "PUMPENAMEL."

Vasir Enamel Works Ltd.—31, Tank Bunder Estate, Bombay.

### ENAMELWARE

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort. Bawa Crockerles Ltd.—89, Mohamedali Road, Bombay 3.

Crystal House.—66C, D, Mohamedali Road, Bombay 3. Phone : 327030. Dealers in Glassware, Cutlery, Plasticware, Thermos Flask, Presentation Articles, etc.

Hindustan Export & Import Corporation Ltd.—Albert Building, Hornby Road, Fort.

Khatau Chhatrabhai.—40-41, Swadeshi Market, Kalbadevi Road.

**PIONEER ENAMELLING WORKS, THE.**—24, Laxmi Building, Sir Phirozshah Mehta Road, Post Box 1130, Fort, Bombay 1. Phone : 26-3464. Grams : "NAVJOT."

Salemahomed Padamsee & Co.—141, Chakla Street, Bombay 3.

### ENGINEERING COLLEGE REQUISITES

Evergreen Corporation.—9-15, Picket Cross Road, P.O. Box 2723, Bombay 2. Grams : "GREENLEAVE". Phone : 22162.

### ENGINEERING STORES (IMPORTERS & DEALERS)

**A. M. MOTIWALLA & CO.**—213, Nagdevi Street, Bombay 3. Phone : 326760. Shipchangers, Engineering Tools, Hardware & Pipe Fittings Merchants & General Stores Suppliers.

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone : 326960. Grams : "ALERTDEAL".

Abdulkhader Shamsuddin & Co.—48, Khoka Bazar, Bombay 3. Abdulabbai Faizullahai, Ltd.—Khoka Bazar, Bombay 3.

Adamally Guamhusein.—191, Khoka Bazar, Sarang Street, Bombay 3.

Agarwal Commercial Corporation.—35, Bibijan Street, Bombay 3.

Agarwal Machine & Engineering Stores.—55/57, Nagdevi Cross Lane, P. B. Box 3262, Bombay 3.

Ahmedally Jiwabhai & Co.—86-88, Lohar Street, Bombay 2.

**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay 1. Phone : 25-2952/25-4103. Grams : "PILOTACE."

Apollo Engineering Co.—84, Apollo Street, Fort.

Ardeahir D. Wadia & Sons.—93, Apollo Street, Fort.

Asian Tools Trading Co.—24, Nagdevi Cross Lane, Bombay 3.

Associated Machine & Tool Co.—180, Meadows Street, Fort.

**ASSOCIATED TRADING AGENCIES.**—Engineering Tools and Hardware Merchants; Sole Agents for V.E.S. Thurst and Jyoti Brand Dabi Bearings. Speciality Grease Nipple, Grease Cups, Oil Cans, Oilers, Oil Pumps and Barrel Oil Pumps. 9, Abdul Rehman Street, Yusuf Building, Phydonie, Bombay 3 (BR). Phone : 328366.

**BABULAL & BROS.**—28, Nagdevi Cross Lane, Bombay 3. Phone : 323930. Grams : "FIREFLY." Stockists of Abrasives, Asbestos Goods, Engineering Tools, Hardware, Mill Gin Stores, Pipe Fittings.

Batliboi & Company Private Limited.—Regd. Office: Forbes Street, P.O. Box 188A, Fort, Bombay-1 (BR). Phones : 256451 (6 lines). Grams : "BATLIBOICO." Tele : 011-284. City Branch : "BATLIBOI HOUSE", 50/61, Nagdevi Cross Lane, Bombay-1 (BR). Branches : Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Dibrugarh, Jaipur, Kanpur, Lucknow, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate : Bangalore 2. Resident Representatives, Ranchi, Bhubaneswar.

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.

**BHARAT ENGINEERING STORES.**—113, Nagdevi Street, Bombay 3. Grams : "UNIONTOOLS". Phone : 323193. Stockists of Elephant Brand Pulley Blocks.

**BOMBAY ENGINEERING STORES.**—C-16, Bihari Baug, 3rd Bhoiwada, Bombay 2. Stockists of Engineering Tools of all kinds.

Bombay Machine Tools & Hardware Corporation.—103, Narayan Dhuru Street, Bombay 3.

**BOMBAY TOOLS & HARDWARE MART.**—123, Narayan Dhuru Street, Bombay 3. Grams : "BOTAPS." Phone : 327122.

**BOMBAY TOOLS SUPPLYING AGENCY.**—50, Nagdevi Cross Lane, Bombay 3. Phone : 321326. Grams : "TERRATOOLS."

Brady, W. H., & Co. Ltd.—Royal Insurance Building, Churchgate Street, Fort.

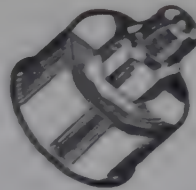
C. Bole & Co.—61, Narayan Dhuru Street, Bombay.

Central Tool & Equipment Co.—32, Sarang Street, Bombay 3.

Chhabildas & Bros.—163, Narayan Dhuru Street, Bombay 3. Phone : 24560.

Chadha, B. M., & Co. Ltd.—Jan Mansion, Sir Phirozshah Mehta Road, Fort, P. O. Box No. 671, Bombay.

Choksi, H., & Co.—106, Meadows Street, Fort.



## MAYANK

### Stauffer type Grease Cups

*Manufacturers:*

## DEEPAK INDUSTRIES

26B, Udyognagar, Rajkot-2.

Trade Inquiries: 88, Nagdevi Cross Lane, Bombay-3.

Phone: 322456

Grams: "MONKEYGRIP"

Desai Tube & Hardware Mart.—41, Nagdevi Cross Lane, Bombay 3. Devdayal Engineering Corporation, Darukhana, Reay Road, Bombay 10.

Essential Engineering Co.—11, Botawala Building, Elphinstone Circle, Fort.

Fleming, John & Co., Private Ltd.—P. B. No. 76, Bombay 1. Phone : 261153.

**GARLICK & CO. PRIVATE LTD.**—Haines Road, Jacob Circle. Also at: Maskati Market, Kapasia Bazar, Ahmedabad; 42-1, Silver Jubilee Park Road, Bangalore 2; 6-366, Trichy Road, Coimbatore; 5, Green Gates, Saifabad, Hyderabad (A.P.); 38-3, Mount Road, Madras 6; G-4, Nizamuddin West, New Delhi 13.

G. C. Vora & Co.—107, C. P. Tank Road, Bombay 4.

General Trading Corporation.—Tamarind House, Tamarind Lane, Fort.

Great Eastern Trading Co.—107, Cawasji Patel Street, Fort.

Greaves Cotton & Co., Ltd.—Forbes Street, Bombay 1.

Greentose Corporation (India).—Cama Buildings, 24-26, Dalal Street, Fort.

Hardcastle Waud & Co. Private Ltd.—Alice Building, Hornby Road, Bombay 1.



**HEMANT TOOLS TRADING CO.**—33, Bibijan Street, Bombay 3. Grams: "LACING". Phone: 321174. Importers & Stockists of Chain Pulley Blocks, Garage Eng. & Workshop Tools, Diamond Dressing Tools, Fibre Sheets, Rods, Precision Tools etc.

**Hindustan Engineering Co.**—(Machinery Dept.) "ABAN HOUSE", 25-31, Ropewalk Street, Fort, Bombay 1.

**HINDUSTAN TOOLS & HARDWARE MART.**—126, Lohar Chawl, Bombay 2. Importers, Stockists & Government & Railway Suppliers of General Engineering, Precision Measuring & Carpenter Tools. Also suppliers to Technical Colleges & Institutions. Grams: "FAKIRSAI". Phone: 20666. Branch Office: 154, Narayan Dhuru Street, Bombay 3.

**Hiralal Gokaldas Dalal & Co.**—45, Nagdevi Cross Lane, Bombay 3. **Industrial & Agricultural Equipment Co.**—29, Hamam Street, Fort, Bombay 1.

**Industrial Development Corpn.**—73, Bank of Baroda Building, Phalton Road, Bombay 1. Phone: 265529.

## MEASURING INSTRUMENTS

### GAUGES, TOOLS

for

Engineering Workshops and Research Establishments

Contact

### INDUSTRIAL MILL GIN STORES

Industrial House, 51-53, Nagdevi Cross Lane, Bombay-3

Phone: 321246.

Grams: "WIREGOODS."

**International Tools & Hardware Stores.**—84, Kika Street, Bombay 4. Phone: 73636. Grams: "SANITARY".

**Jalramdas & Sons.**—163, Narayan Dhuru Street, Bombay 3.

**Jayant Engineering & Mill Stores.**—51/53, Industrial House, Nagdevi Cross Lane, Bombay 3.

**John Fleming & Co. Private Ltd.**—Bastion Road, Bombay 1.

**Jones, J. D. & Co. (Bombay) Ltd.**—Rustom Building, Churchgate Street, Fort.

**Kadakhia Trading Corporation.**—25, Bibijan Street (Nagdevi), Bombay 3. Phone: 29493. Grams: "STEAMTRAP".

**Kaizar & Co.**—79, Mohamedali Road, Bombay-3(BR).

**Kantilal Bhogilal & Co.**—68, Nagdevi Cross Lane, Bombay 3.

**MACHINE TOOLS & IMPLEMENTS.**—93-95 Narayan Dhuru Street, Bombay 3. Phone: 322268 & 322269. Grams: "MACHTOOLS." Telex: 292 BY.

**Marine & Mills Agencies.**—197, Nagdevi Street, Bombay 3.

**MEHTA ENGINEERING STORES.**—Industrial House, 51/53, Nagdevi Cross Lane, Bombay 3. Phone: 321613 Office & 575269 Res. Grams: "TAPDIES." Importers of Precision Tools of M. & W. Storrett, Helios, Baty, Chesterman, Steinmeyer, Rambold, Eclipse, etc. Precision levels, Chain Pulley Blocks, Hacksaw Blades. Adjustable Reamers, Taps, Dies, Milling Cutters, Drills and Wood Working Saws, etc.

**Mehta Hardware Mart.**—81-83, Nagdevi Street, Bombay 3.

**MEHTA NANAVATI & CO.**—96, Narayan Dhuru Street, Bombay 3. Phone: 324645. Grams: "REDJOINT".

**MODERN MACHINE TOOLS CO.**—88, Nagdevi Cross Lane, Bombay 3. Phone: 322456. Grams: "MONKEYGRIP." Agents: Relight Ball & Cross Peni Hammers, Chain Wrenches, Hollow Punches, Spring Callipers and Dividers, Spanners and adjustable Wrenches, Vices, Nafa Oil Cans, BTI Hacksaw Frames. Stockists: Mayank Stauffer type Grease Cups.

**NAGDEVI TOOL-STEEL MART.**—186-88, Nagdevi Street, Bombay 3. Phones: 323023 and 327058. Grams: "TENDERERS."

**NUTAN TRADING CORPORATION.**—83, Nagdevi Cross Lane, Post Box No. 3238, Bombay-3.B.R. Grams: "NUTANTRADE". Phones: 323357 (Office) & 474485 (Res.). Manufacturers of "Kaushik" Brand Tools such as Reamers, Callipers, Dividers, Tool Holders, Engineering Squares etc. Dealers in Tool Bits, End Mills, Centre Drills, Slotting and side & Face Cutters etc. Stockists of Hardware, Bearings etc. Branch at: 3350, People Mahadev Hauzkaazi, Delhi-6.

**New India Hardware Mart.**—152, Narayan Dhuru Street, Bombay 3.

**Panelal Mohanlal & Co.**—89, Nagdevi Street, Bombay 3.

**Patel, U. D., & Co.**—Bank Street Building, Fort.

**PRAFULCHANDRA & CO.**—106, Lohar Street, Bombay 2. Phone: 39007. Grams: "ELECTTOOLS." Importers & Stockists of Engineering, Precision and Garage and Machine Tools.

**P. Ratilal & Co.**—48, Dhanji Street, Moti Mahal, Bombay 3. Phone: 32700.

**RELIANCE TRADING CO.**—Vithal Sayana Building No. 1, Lohar Street, Bombay 2. Phone: 38751. Grams: "STORE-TRADE." Engineering Stores, Hardware, Taps & Die Merchants.

**Sachin & Co.**—25, Bank Street, Bombay-1.

**Shah & Brothers.**—234, Nagdevi Street, Bombay 3.

**Shah Patel & Co.**—109-111, Nagdevi Street, Bombay 3.

**Standard Trading Co.**—Vithal Sayana Building No. 2, Lohar Street, Bombay 2.

**Techno Industrial Co.**—107, Sir Vithaldas Chambers, 16, Apollo Street, Fort, Post Box No. 811, Bombay.

**Trade (India) Corporation.**—58, Mohamedalli Road, P.O. Box 3231, Bombay.

**T. M. Tyabji & Brothers.**—Hamam House, Hamam Street, Fort. **Trinity Electric Syndicate.**—Princess Street, Bombay 2.

**UNIVERSAL TRADING CO.**—Stockists of Micrometers, Callipers, Feeler Gauges, T's Squares, V. Blocks, Height and Depth Gauges, Spirit Levels, Measuring Tapes, "STILLSON" Wrenches, Wheel Dressers, Pipe-Cutters, G. Cramps, Pliers, Lathe Tool Sets, Vices, Reamers, Asbestos Materials, Pipe Fittings, Ferrous and Non-Ferrous Metals. **Mohamedali House**, 79, Mohamedali Road, Narayan Dhuru Cross Lane, Bombay 3. Phone: 322537. Grams: "IRONMART". Branch Office: No. 4, Narayan Dhuru Cross Lane, Bombay 3.

**Viswabharati Trading Co.**—14, Kumpta Street, Ballard Estate, Bombay 1.

**Vora, J. C., & Co.**—107, C. P. Tank, Bombay 4.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Bombay.

## ENGINEERS AND CONTRACTORS

**Abdeally, B. M., & Co.**—127, Sarang Street, Bombay 3.

**Abdul Husain Esafally.**—Contractor, 91-93, Bapu Khote Street, Bombay 3.

**Acme Manufacturing Co., Ltd.**—Construction House, Wittet Road, Ballard Estate.

**AGRA ENGINEERING CO.**—40, Bank Street, Fort, Bombay 1; Phone: Office: 256541; Res. 532906. Grams: "RAISPAES." Manufacturers of Diesel & Automobile Spare Parts, "ARROW" & "DISPA" Liner & Pistons for Diesel Engines. "MG" Pistons for Cars, Trucks, Commercial Vehicles, Motor Cycles, Scooters & Tractors.

**Air Conditioning Corporation Ltd.**—Construction House, Wittet Road, Ballard Estate.

**Alcock, Ashdown & Co., Ltd.**—16, Bank Street, Fort.

**ALEXANDRA ENGINEERING WORKS PRIVATE LTD.**—29, Quay St., Darukhana, Bombay 10-DD. Phone: 76359. Grams: "ALEXWORKS" (VG), Bombay. Mechanical & Structural Engineers & Contractors for all jobs of machining, forging, fitting, pressing, blacksmithy & welding.

**Alfred Herbert (India), Ltd.**—Kaiser-i-Hind Building, Ballard Estate.

**All-India Construction Co., Ltd.**—Construction House, Ballard Estate.

**Apollo Engineering Co.**—84, Apollo Street, Fort.

**ART METAL WORKS (Estd. 1882).**—35-C, Jerajbhoy Street, Foras Road, Bombay 8. Phone: 71692. Brass & Iron Founders, Builders, Hardware Manufacturers and Engineers & Contractors.

**Associated Machine & Tools Co.**—130, Medows Street, Fort.

**Autogenous Welding & Repair Co. Private Ltd.**—63, Ferguson Road, Bombay 13.

**Babcock & Wilcox, Ltd.**—16, Queen's Road Estate, Bombay.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate.

**Batliboi & Co.**—Forbes Street, Fort.

**Bhagat & Sons, Ltd.**—Mahatma Gandhi Road, Fort, Bombay.

**Bharat Electric & Engineering Corporation.**—28, Apollo Street, Fort.

**Billington, W., & Co., Ltd.**—Imperial Chambers, Wilson Road, Ballard Estate.

**Brady, W. H., & Co., Ltd.**—Royal Insurance Building, Churchgate Street.

**British Engineering Co.**—105, Apollo Street, Fort.

**British Steel Piling Co. (India) Ltd.**—Hamam House, Hamam Street, Fort.

**Candy Filters (India), Ltd.**—Forbes Building, Home Street, Fort.

**Cementation Company Ltd.**—Kasturi Building, Jamshedji Tata Road, Bombay 1.

**Chadha, B. M., & Co., Ltd.**—Jan Mansion, Sir Phirozshah Mehta Road, Fort, P. O. Box 671, Bombay.

**Chokal, H., & Co.**—100, Medows Street, Fort.

**Chotani Electric Engineering Co. Ltd.**—57, Apollo Street, Fort.



## TRADES AND PROFESSIONS IN BOMBAY

Curtis, & Co., Ltd. J.—36-40, Mahalaxmi Bridge Arcade, Bombay 11.  
 Diamond Electric Co.—18, Hamam Street, Fort.  
 Dinshaw Master & Co., Ltd.—247, Nagdevi Street.  
 Drewet, Chowna & Co.—Lentin Chambers, Meadows Street, Fort.  
 Duncan, Stratton & Co., Ltd.—5, Bank Street.

Economic Electric Co., Ltd., The.—Jail Road (East), Dongri, Bombay 9.

Economy Traders.—Dholandas Mansion, Cumballa Hill, Gowalla Tank Road, Bombay 26.

Edgar Handley and Company Limited.—139, Meadows Street, Fort, Bombay.

Electric Cable & Machinery Co.—45-47, Forbes Street, Fort.

Imanes Private Limited.—94, S. V. Road, P.O. Box 8002, Bombay, 56 AS. Phone: 571634. Grams: "IMANESCOOL". Springs & Forms out of spring wires and strips for your Industry.

Engineer, Eruch D. & Co.—Crossley House, Apollo Street, Fort.  
 Raufally Adamji & Co.—134, Nagdevi Street.

Essential Engineering Co.—11, Botawalla Building, Elphinstone Circle, Fort.

Fleming John & Co. Private Ltd.—Sukhadwala Building, 21, Bastion Road, Fort.

Fleming Shaw & Co., Ltd.—Sorab House, 235, Hornby Road.

**FOUNDATION CORPORATION OF INDIA.**—Site Investigation, Diamond Core Drilling, Bored and Driven Pile Foundations, Drilling and Grouting and other Specialised Civil Engineering Work. Post Box No. 988, Mehar House, 15, Cawasji Patel Street, Fort, Bombay 1. Phones: 257643, 252414, 254667, 254810. Cable: "EFCEEAYE," Bombay.

Fowler, John & Co. (India), Ltd.—Marshall's Building, Ballard Road.  
 Francis Klein & Co. (Bombay) Ltd.—Shale Building, Bank Street, Fort.

Gagrat & Co.—160, Nagdevi Street, Bombay 3.

**GAMMON INDIA LTD.**—Civil Engineers & Contractors. Regd. Office: GAMMON HOUSE, Cadell Road, Prabhadevi, Bombay 28 DD. Phone: 454261. Grams: "GAMMON", Bombay-Dadar.

Gannon, Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.

**GARLICK & CO. PRIVATE LTD.**—Haines Road, Jacob Circle. Also at: Maskati Market, Kapasia Bazar, Ahmedabad; 42/1, Silver Jubilee Park Road, Bangalore 2; 6/365, Trichy Road, Coimbatore 1; 5, Green Gates, Saifabad, Hyderabad (A.P.); 38/3, Mount Road, Madras 6; G/4, Nizamuddin West, New Delhi 13.

General Electric Co. of India, Ltd., The.—Magnet House, Dougall Road, Ballard Estate.

Greaves, Cotton & Co., Ltd.—1, Forbes Street, Fort.

Guest, Keen, Williams, Ltd.—Wakefield House, Sprott Road, Ballard Estate, Bombay.

Halderbhoy Esmailjee & Co.—168, Nagdevi Street, Bombay 8.

Hardcastle Waud & Co., Ltd.—Alice Building, Hornby Road, Fort.

Haydari Construction Co., Ltd.—111, Mahatma Gandhi Road, Fort.  
 Heatly & Gresham, Ltd.—9, Forbes Street, Fort.

Hind Constructions Ltd.—United India Bldg., Sir Phirozshah Mehta Road, Fort.

Hindustan Construction Co., Ltd.—Construction House, Ballard Estate.

Huges & Davies.—101, Mahatma Gandhi Road, Fort.

Imanes.—94, S. V. Road, Erla, P.O. Box 8002, Bombay 56. Phone: 571634. Grams: "BELLIBONE (SZ)." Springs and Forms out of Spring Wires and Strips for your Industry.

Indian Hume Pipe Co., Ltd.—Construction House, Wittet Road, Ballard Estate.

Indian National Construction Co.—All Chambers, Tamarind Lane, Fort.

Industrial Electrical Engineering Co.—Raja Bahadur Mansion, 10, Hamam Street, Fort.

Jacks, William & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Fort.

Jayems Engineering Co.—Warden House, Sir Phirozshah Mehta Road, Fort.

**JOHN THOMPSON (INDIA) PRIVATE LTD.**—Great Social Building, Sir Phirozshah Mehta Road, Fort. Phone: 26-3144. Grams: "WATERTANK."

**KAMANI ENGINEERING CORPORATION LTD.**—Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1-BR. Phone: 261744 (5 lines), Factory and Sales Office: Agra Road, Kurla, Bombay 70 AS. Phone: 55661 (Six Lines). Manufacturing: High Tension Transmission Line Towers, Radio & Communication Masts, Substation Structures, Railway Track Structures, "Tractamount" Road Rollers, and Importers of Light, medium and heavy Electrical, Hydraulic and Industrial Plants and machineries—Railway Equipments, Locomotives, Rolling Stock, Dredgers, Harbour Cranes, Excavators, Conveyors, Switchgears, Transformers, Diesel and Thermal Power Plants, H. T. Insulators, Ground Wire and other Power Transmission Equipments, etc. Managing Agents: Kamani Brothers Private Ltd.

Kumar Engineering Works.—65, Mahatma Gandhi Road, Fort.  
 Larsen & Toubro Ltd.—I. C. House, Dougall Road, Ballard Estate, P.O. Box 278, Bombay.

Mapara Engineering Co.—381, Dadabhoy Naoroji Road, Bombay 1. Phone: 253398. Manufacturers in mild steel and stainless steel of chemical and pressure vessels, Storage Tanks and all kinds of sheetmetal & structural works.

Marshall Sons & Co. (India), Ltd.—Marshall's Buildings, Ballard Road, Fort.

Mather & Platt, Ltd.—Hamilton House, 8, Graham Road, Ballard Estate.

Mayashanker Thacker & Co.—47-A, Apollo Street, Fort.

Maxagon Dock, Ltd.—Mazagon.

McKenzies, Ltd.—Sewri.

Metals Private Ltd.—269, Dr. Dadabhai Naoroji Road, Bombay 1.

Minimax, Ltd.—63, Moreland Road, Byculla.

Modern Electric Co.—46, Cawasji Patel Street, opp. Hongkong Bank, Fort, Bombay 1.

Modern Mercantile Works.—Lotus Bldg., Hornby Road, Fort.

Modern Textile Engineering Works.—194-A, Trimbak Parashram Street, Golpitha, Bombay 4.

Mody Trading Co.—50, Nagdevi Cross Lane, Bombay 3.

Motichand & Co.—United India Building, Sir Phirozshah Mehta Road, Fort.

Muncherjee Byramjee & Co. (Estd. 1882).—Jeralbhoy Street, 100, Foras Road, near Municipal Workshop, Bombay 8.

Nadirshaw & Bros.—Silver Talkies Building, Khetwadi Back Road.

New Consolidated Construction Co., Ltd.—Rahimtoola House, Homji Street, Fort.

Pandit & Co.—Hamam House, Hamam Street, Fort.

Poonager, Billimoria & Co.—Cama Building, 24-26, Dalal Street, Fort. Phone No. 23625.

Premier Construction Co., Ltd.—Construction House, Wittet Road, Ballard Estate, Fort.

Protos Engineering Co., Ltd.—178, Jamshedji Tata Road, Churchgate, Bombay.

Reliance Electric & Hardware Stores.—55, Krishna Bhuvan, Lohar Chawl.

Reliance Trading Co.—Vithal Sayana Building, Lohar Street, Bombay 2.

Richardson & Cruddas Ltd.—Byculla Ironworks, Byculla.

**SEWRI ENGINEERING CONSTRUCTION CO. PRIVATE LTD.**—Savoy Chambers, West Wing, Wallace Street, Fort, Bombay 1. Phones: 263941 and 261456.

Sewri Engineering Works.—234, Sewri Road, Bombay 15.

S. G. Phadke & Sons.—Engineers & Contractors, 6, Meadows House, 39, Meadows Street, Fort, Bombay.

**SHAH CONSTRUCTION CO. LTD.**—198, Jamshedji Tata Road, Bombay 1. Phone: 245044 (3 lines). Grams: "SUPER-TRADE." Engineers & Contractors, Specialists in Prestressed Concrete Roads, Dams & Canals. R. C. C. Multistoreyed Buildings.

Shapoorji Pallonji & Co.—70, Meadows Street, Fort.

Sharp, R. & Sons.—Kaiser-i-Hind Building, Ballard Estate.

Simpson, D. R., & Co.—88, Gamdevi Road, Bombay 7.

**SIMPLEX CONCRETE WORKS AND CONSTRUCTION CO.**—Engineers, Contractors and Manufacturers, "La-Citadelle," 99, Queen's Road, Next to Central Government Offices, Bombay. Tel. Address: "SIMPLEX." Tel. No.: 241340.

SKF Ball Bearing Co. Private Ltd.—Mustafa Building, 19, Sir Phirozshah Mehta Road, Fort. P.O. Box No. 71, Bombay.

Smith & Co. (Bombay) Ltd., F. L.—Eros Cinema Bldg., 124/D, Queen's Road, Bombay 1.

Stewarts & Lloyds of India, Ltd.—Himalaya House, Palton Road, Fort, Bombay 1.

Structural Engineering Works Ltd.—Prospect Chambers, Hornby Road, Fort.

Surveyors & Co., Ltd.—Prospect Chambers Annexe, Fort.

**SUMMIT ENGINEERING CO.**—4th Floor, Ismail Building, 381, D.N. Road, Bombay 1. Mfrs. of Pressure and Storage Vessels, Structural Steelwork Tanks, etc.

Swastik Rolling Shutters Engineering Works.—Parel Station Road, Bombay 12. Phone: 62041. Grams: "SWASTIKROL".

Taherbhoy Goolamhussein & Bros.—Mazagon Dock.

Tata Hydro-Electric Agencies, Ltd.—Bombay House 24, Bruce Street.

Techno-Industrial Co.—107, Sir Vithaldas Chambers, 16, Apollo Street, Fort.

Thos. W. Ward (India) Ltd.—Marshall Building, Ballard Road, Ballard Estate, Fort.

Trinity Electric Syndicate.—Princess Street, Bombay 2.

Turner, Hoare & Co. Ltd.—Gateway Building, Apollo Bunder, Bombay 1.

United Engineering Corporation.—Datoobhoy Building, 5, New Queen's Road.

Universal Asphalt Products & Construction Co.—"La-Citadelle," Queen's Road.

Universal Construction Co.—Sir Vithaldas Chambers, 16, Apollo Street, Fort.



Verma, Ramlal G.—Bell Building, 4th Floor, 6, Sir Phirozshah Mehta Road, Fort.  
 Vickers (India), Ltd.—Killick Building, Home Street, Bombay.  
 Victoria Sanitary Stores.—54, 3rd Bhoiwada, Bhuleshwar, Bombay 2.  
 Voltas Ltd.—19, Graham Road, Ballard Estate.  
 Western Engineering Co.—Western India Building, Sir Phirozshah Mehta Road, Fort. P.O. Box 75.  
 Western India Engineering Corp. Ltd.—Cama Chambers, 23, Medows Street, Fort.  
 William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

## ENGINEERING TOOLS



**Carbide Tipped Tools & Tips**  
**As per BSS & ISO specifications**

Contact:

**ASIAN TOOLS TRADING CO.**

24, Nagdevi Cross Lane, Bombay-3

Phone: 329447

**NEW HIND TRADING CORPORATION.**—137, Narayan Dhuru Street, Bombay 3. Machine Tools, Metal Cutting Tools & all Sorts of Precision & Engineering Tools.

## ENGRAVERS AND DIE-SINKERS

**Commercial Art Engravers Ltd.**—4th Floor, Tutorial School Building, Grant Road, Bombay.

**CLARIDGE, G., & CO., LTD.**—Frere Road, Fort, Bombay 1. Phones: 263201 and 263202; Grams: "EGDIRALC." Letterpress and Offset Printers, Specialists in Packaging, Security Printing and Silk Screen Work.

**Ghaisas, G. J., & Co.**—Ramchandra Building, Tram Terminus, Girgaum.

**MANKAME BROS.**—Rubber Stamp Manufacturers, Engravers and Die-Sinkers, 405, Kalbadevi Road, Bombay 2. Phone: 23960.

**Mitbawkar, G. A., & Co.**—Jehangir Wadia Building, 80, Bruce Street, Fort.

**Mitra, H. P., & Co.**—Krishna Cinema Building, New Charni Road.

**MODERN DIE STAMPERS & ENGRAVERS.**—10, Homji Street, Fort, Bombay. Specialists in Die & Copper plate Embossed Printing. Phone: 251118. Proprietor: Jayantilal A. Parikh.

**Shah Trading Corporation.**—Oomrigar Building, 1st Floor, opp. Crawford Market, Bombay 3.

**Studio Ratan Batra Ltd.**—Ilaco House, Sir Phirozshah Mehta Road, Fort.

**Thacker & Co., Ltd.**—Rampart Row, Fort.

**TIMES OF INDIA PRESS, THE.**—Dr. Dadabhoy Naoroji Road, Fort.

## ESSENCES

**A. BOAKE, ROBERTS & CO. (INDIA) LTD.**—4th Floor, Harleela House, Mint Road, Fort, Bombay 1 (BR). Phone: 266180. Grams: "FLAVAROM." Suppliers of Flavouring Essences to Manufacturers of Aerated Waters, Confectionery, Ice cream and Pharmaceuticals, etc. Head Office: Madras. Branch: Calcutta.

**Akbarally Ebrahimji.**—38/C, Cawasji Patel Street, Fort, Bombay.

**Akbarally Ebrahimji Pharmacy & Department Store.**—45/47, Veer Nariman Road, Fort.

**Akbarally Mohamedally & Co.**—316, Abdul Rehman Street, Bombay 3.

**Carls Aerating Machinery Co.**—Diamond Building, Lohar Street, Bombay 2.

**General Import Co. (India).**—Keshav Baug, 102, Princess Street, Bombay 2.

**GOLDENSUN MANUFACTURING CO.**—Distillers & Manufacturers of Highly Concentrated Fruit & Flower Essences & Essential Oils, Perfume Compounds, etc. Bansilal Building, 64/C, Girgaum Road, Bombay 4. Sales Office: Mulchand Mansion, Princess Street, Bombay 2.

**Gujrat Essence Mart.**—126, Princess Street, Bombay 2.

**Indiana Chemical Works (India) Ltd.**—Atlas Mills Compound, Beay Road, Bombay 10.

**New Chemical Industries.**—Antia House, Edalji Road, Thana, Bombay.

**T. ALIMAHOMED & CO.**—(Estd. 1924), Stockists of all sorts of Essences & other Baking Requisites. 144-46, Sarang Street, Bombay 3. Phone: 327131. Grams: "AERATORS." Sole Agents for the Diamond Aerating Gas Works Ltd., Bombay 3.

**T. S. Abdullahhoy & Co.**—290-92, Abdul Rehman Street, Bombay 3.

## ESSENTIAL OILS

**Akbarally Mohamedally & Co.**—Dawoodi Building, 316, Abdul Rehman Street.

**AMRUTLAL BHURABHAI & CO.**—P. O. Box No. 2379, Anand Bhuvan, Princess Street, Bombay 2 (B.R.). Phones: 30023, 30024 & 20419. Grams: "CHEMDRUGS." Bombay 2 (B.R.). Direct Importers & Dealers of all kinds of Laboratory Chemicals, Drugs & Essential Oils.

**Anil Trading Co.**—Sharaf Mansion, 32, Princess Street, Bombay 2.

**AROMATIC PRODUCTS & CHEMICALS PRIVATE LTD.**—Importers and Indentors of Essential Oils, Aromatic Chemicals and Perfumery Raw Materials. 42, Prospect Chambers Annexe, Dr. Dadabhai Naoroji Road, Fort. Grams: "DISCOVERY." Phone: 253151.

**Balumal Santsaram.**—204, Samuel Street, Vadgadi, Bombay 3.

**B. C. PATEL & CO.**—Devkaran Building, Princess Street, Bombay 2. Stockists of Aromatic Chemicals, Essential Oils and Perfumery Compounds. Phone: 20366. Grams: "SNEHALATA."

**CALCUTTA ESSENCE SUPPLY CO.**—Mulchand Mansion, 1st Floor, Princess Street, Bombay 2. Grams: "SUPRALUX." Phone: 22623. Dealers and Importers of Essential Oils, Aromatic Chemicals and Perfumery Compounds. Branch at 41, Ezra Street, Calcutta 1.

**Carls Aerating Machinery Co.**—Diamond Building, Lohar Street, Bombay 2.

**D. D. Shah & Co.**—Damodar Bldg., 105, Princess Street, Bombay 2. Dhamdhare, K. H.—45-47, Princess Street, Bombay No. 2.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 26-2711 (8 lines). Machine Works: Tank Road, Bombay 33-DD. Phone: 78544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**F. Bock & Co.**—Shale Building, Bank Street, Bombay 1.

**FIDAAALI ABDULRASUL ATTERWALLA & CO.** (Estd. 1890).—12-14, Mirza Street, Bombay 3. Phone: 326341. Grams: "PALMAROSA." Manufacturers and Exporters of Palmarosa Oil and other Essential Oils.

**GENERAL IMPORT CO. (INDIA).**—Keshav Baug, 102, Princess Street, Post Box No. 2376, Bombay 2. Phone: 38497. Grams: "SODALEMON." Aromatic Chemicals, Essential oils, Aerated water requisites, Essences, Harmless Food Colours and Saccharine.

**Gujrat Essence Mart.**—126, Princess Street, Bombay 2.

**Kantilal Sanghvi & Co.**—Mherwan Building, Sir Phirozshah Mehta Road, Fort.

**Kapadia & Co.**—19, Phirozshah Mehta Road, Fort, Bombay 1.

**K. Metharam.**—491-3, Kalbadevi Road.

**Kirtikumar & Co.**—80, Bhandari Street, Mandvi, Bombay 3.

**Latham Abercrombie & Co., Private Ltd.**—Forbes Building, Home Street, Fort.

**M. C., DAVAR & CO.**—143, Princess Street, Bombay 2. Phone: 39752. Grams: "EMCIDAVAR." Aromatic Chemicals, Essential Oils and Perfumery materials. Agents for:—Esrolko Ltd. (Flora), Switzerland.

**N. R. SHAH & COMPANY.**—Mulchand Mansion, Princess Street, Bombay-2. Phone No.: 20093. Grams: "WALFLOWER." Perfumers and Perfumery Raw Material Dealers. Dealing in Aromatic Chemicals, B. P. Natural, Synthetic, Essential Oils and Perfumery Compounds.

**Narandas G. Bhatia.**—157, 5th Cavel Cross Lane, Gaiwadi.

**Narendra & Co.**—Bansilal Mansion, 11, Bruce Street, Fort.

**New India Pharmacy.**—Shroff Mansion, 32, Princess Street.

**Odhawji Lawji & Co.**—Chikhal House, 144/B, Princess Street, Bombay 2.

**Oriental Aromatics.**—Sharaf Mansion, 32, Princess Street, Bombay 2.

**Parekh Bros., Ltd.**—65, Mahatma Gandhi Road, Fort.

**Pravin Brothers & Co.**—501, Commerce House, Medows Street, Bombay 1. Phones: 251748, Grams: "WIDESCOPES."

**ROSHANLAL & SONS.**—133, Princess Street, Gopal Nivas, Bombay 2. Phone: 38579. Grams: "BERGAMOT." Importers & Dealers in Essential Oils, Aromatic Chemicals, Flavouring Essences & Food Colours. Distributors for "ABRAC". Agents for "CROWN" Brand Patchouli Oil & H. Reynaud Et Fils (France).



## TRADES AND PROFESSIONS IN BOMBAY

Scientific & Industrial Supplies Corporation.—Princess Street, Bombay 2.

**S. H. KELKAR & CO. PRIVATE LTD.** (Estd. 1928).—36, Mangaldas Road, Bombay 2. Phone: 29130. Grams: "SACHE-WORKS," Dadar, Bombay. Manufacturers of Essential Oils, Aromatic Chemicals & "COBRA" Brand Perfumes.

**SIKRI BROTHERS.**—79-E, Princess Street, Bombay 2. Phone: 29393. Grams: "OILMAN."

Shapurji & Co., R. K.—Prospect Chambers, 319, Hornby Road, Fort, Bombay.

T. Alimahomed & Co.—144-46, Sarang Street, Bombay 3.  
Volta Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

## EXHAUST FANS

**FINLAY, JAMES & CO., LTD.**—Chartered Bank Building, Mahatma Gandhi Road, Fort, Post Box 73, Bombay. Phone Nos. 251255-59.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 262711 (8 lines). Machine Works, Tank Road, Bombay 33-DD. Phone: 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore Secunderabad & Kanpur.

**RADIANT ELECTRIC & MACHINERY CO.**—Sir Vithaldas Chambers, Bruce Street, Bombay 1. Phones: 255296 & 370385. Grams: "RADICAL".

## EXPANDED METAL AND WIRE NETTING

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL".

Alsales Ltd.—9, Wallace Street, Bombay 1.

**CHUNILAL & CO.**—74, Abdul Rehman Street, opp. State Bank, Bombay 3. Expanded Metal, Perforated Brass, Copper and Zinc Sheet, G.I. Square and Hex. Wire Netting and Stainless Steel, and Monel Metal Netting Merchants. Phone: 326710. Grams: "HIRCHUNG".

Excel Importers.—89, Princess Street, Bombay 3.

Phone: 22461.

Grams: "WIREMESH", Bombay 2.

# EVERGREEN WIRECLOTH FACTORY

Head Office:

Bhabha Building, 151-55, Princess Street, Bombay 2.



Leading Manufacturers of:

Welded Wire Mesh, High Tensile Spring Steel Wire Screens, Wire Gauze, Hex. Wire Nettings, Chain-link Fencing, Crimped Wire Net, Barbed Wire, Panel Pins and other Wire Products.

Factory:—Goregaon (East), Bombay 62.  
Phone: 691321.

Branch:—182, Nainappa Naick Street, Madras 3.  
Phone: 32846 Grams: "WIRECLOTH", Madras 3.

**FAKRUDDIN & CO.**—43, Abdul Rehman Street, Post Box No. 3066, Bombay 3. Phone Nos. 325837 and 322725. Grams: "WOODPLY".

Great India Net Industry.—10, Bruce Street, Bombay.

**HARISHCHANDRA & CO., JALIWALA.**—233, Abdul Rehman Street (opp. Sutar Chawl), Bombay 3. Manufacturers of perforated metal sheets of all kinds, and stockist of welded mesh. Expanded metals, Wire Netting of all kinds. On Govt., Railway & Municipal Lists. Phones: 322907 & 323161. Grams: "HARIJALI".

**Hindustan Wire Netting Co., Ltd.**—55-57, Nagdevi Cross Lane, Bombay 3.

Hosseini, M. A., & Bros.—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**Indian Expanded Metals Ltd.**—2nd Floor, Prospect Chambers, Hornby Road, Fort, Bombay.

**INDIAN HARDWARE CO.**—Bhabha Building, 151, Princess Street, Bombay 3. Dealers in Wire Gauze, Hex. Wire Nettings, Chain Link Fencing, Crimped Wire Net, Panel Pins, Barbed Wire & other Wire Products & Expanded Metal, Welded Mesh, etc. Tel. No. 29904.

Jacks, William & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Fort.

**Kantilal Sanghvi & Co.**—Mherwan Building, Sir Phirozshah Mehta Road, Fort.

M. Moiz & Co.—Nakhoda Roghay Market, 8, Nagdevi Street, Bombay 3.

Mehta & Co.—35, Abdul Rehman Street, Bombay 3.

**METAL NET DEPOT.**—113, Abdul Rehman Street, Bombay 3. Phone: 321618. Dealers in G.I. Wire Nettings, Brass & Copper Wire Gauge, Expanded Metals, Cement Sheets, Plywoods, Hard Boards, Decorative Laminated Sheets, Plastic Transparent Sheets and other Building Materials, etc.

**NASH & COMPANY.**—103, Abdul Rehman Street, Bombay 3. Phone: 324968. Steel Expanded Metal. Crimped Wire Netting and Welded Mesh Fabric.

Parsee Trading Co.—Vithal Sayana Building No. 2, Lohar Chawl, Bombay 2.

Reliance Trading Co.—25-47, Lohar Street, Bombay 2.

**S. MEHTA & CO.**—Anees Chambers, Carnac Road, Bombay 1. Phone: 263001. Grams: "DUTYBOUND". Industrial Wire Netting and Perforated Metals, Stainless Steel Wire Nettings and Monel Metal Wire Nettings; Importers, Exporters and Merchants.

Saify, T. A., & Bros. (India).—20, Sarang Street, Bombay 3.

Shah & Co., Jaliwala.—"Jay Nivas", 36, Abdul Rehman Street, near Pydhonie, corner of Sutar Bazar, Bombay 3.

Siriram & Co.—97, Narayan Dhuru Street, Bombay 3.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

## FACTORY AND CALENDAR CLOCKS

**ESSENTIAL ENGINEERING CO.**—11, Botawala Building, Elphinstone Circle, Fort. Phone: 252940. Grams: "ESSENCE." Importers, Exporters, Commission Agents and Manufacturers' Representatives.

## FACTORY TIME SAVING DEVICE

**Batilboi & Company Private Limited.**—Regd. Office: Forbes Street, P.O. Box 190A, Bombay-1 (BR.). Phones: 255451 (6 lines). Grams: "BATLIBOICO." Tele: 011-284. Cir Branch: "BATLIBOI HOUSE", 59/61, Nagdevi Cross Lane, Bombay 3 (BR). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: Ranchi, Bhubaneswar.

## FELTS (WOOLLEN) PRESSED

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL".

Volta Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

**WILLIAMS, G., & CO. PRIVATE LTD.**—"Advent", 8th Floor, 12A, Foreshore Road, Backbay Reclamation, Bombay 1. Phones: 213281 and 213182. Grams: "BLANWIRE".

## FENTS (CUTPIECES)

Ahmed Ebrahim Bros.—88, Chukla Street, Bombay 3.

Allied Exporters.—Kumud House, 267, Hornby Road, Fort.

Bajaj Bros. Ltd.—Round Building, Kalbadevi.

Bhagwandas Chatrabhuj & Co.—20, Hamam Street, Fort.

Ebrahim Alibhoy & Sons.—260-64, Abdul Rehman Street, Bombay 3.

Hosseini, M. A., & Bros.—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

Kantilal Sanghvi & Co.—Mherwan Building, Sir Phirozshah Mehta Road, Fort.

Yacoob Ahmed Bros.—Topiwalla Mansion, Mahomedally Road.

## FERTILISERS

**BHARAT FERTILISER INDUSTRIES LTD.**—12, Nanabhoy Lane, Fort, Bombay 1. Phone: 254819; Factory: Majiwada, Thana, Phones: 592230, 591116. Manufacturers of P. K. Compound Granulated Fertilisers. Grams: "GRAFERTS".



**CHEMBUR BONE & FERTILISER CO., PRIVATE LTD.**—Managing Agents: Anderson Dawn & Co., Darabshaw House, Ballard Road, Bombay 1. Phones: Office: 263839; Factory: 521821. Grams: "BYPRODUCT."

Nanavati & Co., Ltd.—16, Apollo Street, Fort.

National Fertilisers Ltd.—Shale Building, Bank Street, Fort.

Poonjiaji, J. M. Jehangir.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay.

**PRAVIN BROTHERS & CO.**—501, Commerce House, Meadows Street, Bombay 1. Phones: 251748, 252419. Grams: "WIDE-SCOPE." Importers, Exporters and Agents: Sulphur, Chemicals, Solvents, Pyridene Base, Fertilisers, Minerals, Lime-Jute Products. POLYSOL-S.5, S.6, GYPSUM.

Premji Haridas & Co.—Bhanushali Chambers, Argyle Road, Bombay 9.

T. T. Krishnamachari & Co.—Vulcan Insurance Building, Veer Nariman Road, Bombay 1.

Western Chemical Industries.—Goregaon (East), Bombay.

### FILM STUDIO EQUIPMENT IMPORTERS

Patel India Ltd.—190, Hornby Road, Fort.

Photophone Equipments, Ltd.—9, Marine Lines, Bombay.

**WESTREX COMPANY (Prop.: Cinerama Private Ltd.)**—Metro House, Mahatma Gandhi Road, P.O. Box 1232, Bombay 1. Phones: 242273 & 242274. Grams: "WESTREX."

### FILTER CLOTH MANUFACTURERS

**DOSSA HARJEE**—257-59, Masjid Bunder Road, P.O. Box No. 3209, Bombay 3; Phones: 321330 & 328570; Grams: "DOSSAHCO"; Manufacturers & Suppliers of Tarpaulins, Waterproof Canvas & Gray Canvas, Filter Cloth, Jute Carpets and Linoleums.

**NEW ORIENTAL SILK MILLS PRIVATE LTD.**—27, Picket, Cross Road, Bombay 2; Mfrs. & Suppliers of "Terene" filter Cloth for all kinds of Industries such as Oil Mills, Pharmaceutical firms, Petroleum Industries, Polishing, Electroplating and other Chemical Industries.

### FILTERS

**JOHN FOWLER (INDIA) LTD.**—Marshalls Building, Ballard Road, Bombay 1. Phone: 263059. Grams: "TRACTION." Sole Selling Concessionaires of "VOKES" Filtration Equipment.

**UNIVERSAL FILTRATION CO. PRIVATE LTD.**—Office: 202, Commerce House (2nd Floor), Meadows Street, Fort, Bombay 1. Phone: 254364. Works: Saki Vihar Road, Bombay 70. Manufacturers of Filtration Equipments.

### FIRE-BRICKS & REFRACTORIES

**ALEXANDER & RAYMOND (BOMBAY)**—Manufacturers of refractory Materials, Sitaram Building, "G," Phalton Road, Bombay 1. Phone: Office: 262150 & Res.: 573040. Grams: "REFRACTORY."

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort, Bombay 1. Phone: 254433; Grams: "DATNARE."

**ISHWAR INDUSTRIES LTD., THE.**—P.O. Ishwar Nagar, New Delhi. Manufacturers of Fire Bricks of all Grades & Shapes, Fire Clays & Fire Cements, Insulating Compounds, Castable Refractories, Acid Resisting Bricks & Cements, Sillimanite Bricks & Mortars etc. Phone: 76241 (3 lines). Sales Office: 11, Bank Street, Bombay. Phone: 251898.

## FIRE BRICKS & REFRACTORIES

Standard size Fire Bricks, special size Fire Bricks, Insulation Bricks, Acid Proof Bricks, Fire Cement, Fire Clay, with High Alumina and High Temperature.

*Available from ex-stock at most competitive rate.*

### MAHAVIR REFRACTORIES CORPORATION

133, Princess Street, Gopal Nivas,  
2nd floor, Bombay-2.

Phone: Office: 30939, Res.: 335358.

**NOWROJI N. VAKIL & CO.**—Shera Castle, Mohamedalli Road, Bombay 3. Phone: 322803. Head Office and Factory at Naroda Road, Ahmedabad. Manufacturers of Stoneware Drainage Pipes & Fittings, Fire Bricks and Clay & Raschig Rings.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

### FIRE FIGHTING APPLIANCES (MANUFACTURERS AND DEALERS)

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL."

Armstrong Smith Private Ltd.—Gresham Assurance House, Sir P. M. Road, Bombay 1.

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Bombay 1.

Bengal Chemical & Pharmaceutical Works Ltd.—502, Cadell Road, Bombay 28.

Crescent Trading Co.—48, Bhajipala Lane, Bombay 3.

**EASTERN STORES & TRADING CO. PRIVATE LTD.**—115, Nagdevi Street, Bombay 3. Phones: 322215/16. Grams: "ENERGY."

Fleming, John & Co. Private Ltd.—P. B. No. 76, Bombay 1.

Imanes Private Limited.—94, S. V. Road, P.O. Box 8002, Bombay 56-AS. Phone: 571634. Grams: "IMANESCOL". Springs and Forms out of Spring Wires and Strips for your Industry.

Industrial Commercial Corporation.—157-59, Narayan Dhuru Street, Bombay 3.

Kilburn & Co. Private Ltd.—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort, Bombay 1.

Kooverji Devshi & Co. Private Ltd.—164, Lohar Chawl, Bombay 2.

### *In any Plan Production Needs Protection* **Protect Life and Property with** **"FIREX"**

India's own Extinguisher, amongst the world's best.

On rate contract with the Government of India for many years. Major requirements met last year by 'FIREX'

*Manufacturers:*

**KOOVERJI DEVSHI & CO., P. LTD.**  
164, Lohar Street, Bombay 2.

Merchant Bros.—151, Nagdevi Street.

**MINIMAX LTD.**—Janmabhoomi Chambers, 29, Fort Street, Bombay 1. Phone: 26-2879. Head Office: Mercantile Buildings, 12, Lall Bazar Street, Calcutta 1. Phone: 22-3675.

**RADIANT ELECTRIC MACHINERY CO.**—Sir Vithaldas Chambers, Bruce Street, Bombay 1. Phones: 255296 & 370385. Grams: "RADICAL."

Roberts, McLean & Co. Private Ltd.—Ilaco House, Sir Phirozshah Mehta Road, Bombay.

Shalebhoy Tyebjee & Sons.—12, Bruce Street, Bombay 1.

**SIMPLEX TIMBER MART.**—64-68, Ibrahim Mohd. Merchant Road, Khadak, Bombay 9. Phone: 331794. Grams: "LADDERMAN." Manufacturers of "AJAX" Extension Ladders, "Scaling" Ladders & Wall Extension Ladders for Fire Fighting.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Bombay 1.

**ZENITH FIRE SERVICE.**—127/129, Mody Street, Fort, Bombay 1; Grams: "BAZARSEVAK"; Phone: 265416; Manufacturers & Exporters of Quality Fire Extinguishers & 'Gas Cylinders' first time in India; Dry Chemical CTC-CO 2, Soda Acid & Foam Type (with I.S.I. Mark); Tested by National Test House, Alipore, Calcutta and approved by Mercantile Marine Deptt., Bombay and Fire Insurance Association of Bombay; On Govt. List and Major Industries. Regd. with DGS & D., & SSIC.





**Rockhard**  
PRESENTS  
FULL...  
RANGE  
OF  
**FIRE**  
FIGHTING  
EQUIPMENTS

**THE ROCKHARD,  
FIRE ENGINEERS**  
25, Bank Street, Bombay 1.  
Phone: 254292 Grams: 'ROCKHOSE'

**FIRE PROOF DOORS**

**RADIANT ELECTRIC MACHINERY CO.**—Sir Vithaldas Chambers, Bruce Street, Bombay 1. Phones: 255296 & 370385. Grams: "RADICAL."

**FIRE WORKS MANUFACTURERS AND DEALERS**

**Dada Fire Works Private Ltd. (Inc. 1953).**—H.O.: 240-42, Juma Masjid, Bombay 2.

**Kaka Fire Works.**—244, Juma Masjid, Bombay 2.

**SHAMA FIREWORKS INDUSTRIES.**—142, Samuel Street, Bombay 9. Phone: 325521. Grams: "PHULJHARI." H. O. Jalgaon M. S. Grams: "SHAMA". Manufacturers of "SWAN" Brand High Class Sparklers, Crackers, Snakes, Aeroplanes, Chakkars, etc.

**FISHING REQUISITES**

**INDOPLAST LTD.**—Kasturi Building, Jamshedji Tata Road, Bombay 1. Grams: "STYROPOR." Phone: 38071. Manufacturers of Thermocole Plastic Fishing Floats.

**Raswalla & Co., M. M. A.**—17, Janjlikar Street, Mandvi, Bombay 3.

**FLASHLIGHT TORCHES, DRY BATTERIES AND TORCH BULBS**

**EASTERN TRADING CO.**—Mahakali Chawl, Pydhonie, Bombay 3. Light Merchants & Manufacturers' Agents.

**LIGHT HOUSE.**—51, Kitchen Garden Lane, Shrijee Bhuvan, Bombay 2. Phone: 30351. Grams: "GREATWALL." Sole Selling Agents of "BL" Brand Miniature Bulbs, Electrical Bulbs, Distributors for Domestic Appliances, Eveready Batteries, Bulbs and Torches.

**UNION CARBIDE INDIA LTD.**—Laxmi Building, Sir P. M. Road, Fort, Bombay 1. Phones: 264521 & 264522. Grams: "EVEREADY."

**FLEXIBLE SHAFT GRINDERS AND SHAFTS**

**BHARAT ELECTRIC & ENGINEERING CORPORATION.**—Free Press Building, Ground Floor, 21, Dalal Street, Fort, Bombay. Phone: 255374. Grams: "GODGRACE."

**FLEXIBLE SHAFT MACHINES**

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort, Phone: 254433. Grams: "DATNARE."

**FLEXIBLE TUBES (For ELECTRICAL WIRING)**

**INDIAN FLEXIBLE TUBE MFG. CO. PRIVATE LTD., THE.**—504, Vithaldas Chambers, 16, Apollo Street, Bombay. Phone: 252627. Grams: "BESTCLAY." Manufacturers of Flexible Conduit for Electrical Wiring.

**FLORISTS AND SEEDSMEN**

**Apollo Florist.**—5, Colaba Causeway, Fort.

**PALEKAR & CO. (Estd. 1870).**—Sitaram Bldgs., near Crawford Market, Bombay 1. Phone: 262236. Grams: "RUDRA." Stockists of Flower & Vegetable seeds, Garden Tools.

**SORABJEE A. M. ERANEE (FLORIST).**—171-175, Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 262540. Suppliers of Wreaths, Crosses and Bridal Requisites in fresh and artificial flowers. Stockists of Pocha's Seeds, Garden Implements, Fertilizers, etc.

**Victoria Gardens.**—Byculla.

**FLOORING TILE & COMPOSITIONS MFRS.**

**ACME TILES MFG. CO.**—494, Duncan Road, Bombay 4. Phone Nos. 333387 & 65610. Grams: "EKMITILE." Manufacturers of 'ACME' brand Marble, Mosaic, Terazzo, Plain & Non-Slippery Cement Tiles.

**OXY-CHLORIDE FLOORING PRODUCTS LTD., THE.**—Arthur Bunder, Colaba, Bombay 5. Phone: 211571. Grams: "STONETTE."

**SOLANKI & SONS**

Manufacturers of

Oxy-Chloride Flooring in  
Charming Shades

Address: Tagara Mill Compound, Outside  
Raipur Gate, Ahmedabad-17.

Branch: 181, Maulana Azad Road, 3rd Floor,  
Bombay 8.

**STONOLITE MONOLYTHIC PRODUCTS.**—Jiji House, Ravelin Street, Bombay 1. Manufacturers of "STONOLITE" Brand Flooring Composition. Phone: 264296.

**FLUORESCENT TUBES AND FITTINGS MFRS.**

**BAJAJ ELECTRICALS LTD.**—45/47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers and Contractors. Phone: 253841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder & Bangalore.

**FLUORESCENT FIXTURES MFG. CO.**—Manufacturers of "COOLITE" Fluorescent Lighting Fixtures & Accessories, 195-197, Abdul Rehman Street, Bombay 3. Phone: Office: 321395, 326974, Factory: 582597. Grams: "GENINS."

**Hindco Lighting Industries Ltd.**—Hindlight House, Subhash Nagar, Jogeshwari East, Bombay 60.

**PREMIER LIGHTING INDUSTRIES PRIVATE LTD.**—Manufacturers of "Daylight" Fluorescent Light Fittings, Ballasts and Accessories, Mercury Vapour Lanterns and their Ballasts. Regd. Office: Jhaveri Building, 348/352, Abdul Rehman Street, Bombay 3. Phones: 323743-4. Grams: "DAYFIX." Factory: Old Sunderdas Mills Compound, Anand Rao Nair Road, Bombay 11. Phone: 373010.

**FLUSH DOORS**

**CITY PLYWOOD DEPOT.**—Opp. Chitra Cinema, Dr. Ambedkar Road, Dadar, Bombay-14. Phone: 442927, Commercial & Decorative Flush Doors, Black Boards, Okal Boards, Particle Boards and Formica.



**NASH & COMPANY.**—103, Abdul Rehman Street, Bombay 3. Phone: 324664. Commercial & Decorative Flush Doors, Black Boards, Okal Boards, Particles Board and Formica.

### FOAM RUBBER

**FOAM RUBBER COMPANY.**—M.M. Foam Mattresses, Pillows, Cushions, Bus Seating, etc. 156-148, Tardeo Road, Bombay 34 (WB).

### FOOTWEAR MFR.

**CARONA SHU CO., LTD.**—"Fort House," 221, Dadabhai Naoroji Road, Bombay-1. Manufacturers of Canvas, Rubber, Shoes & Chappals, Leather Shoes with Moulded Rubber Soles Chappals with Microcellulose Soles and Children's Leather Sandals with Rubber Soles.

### FORGINGS & CASTINGS

**ECHJAY INDUSTRIES PVT. LTD.**—Office & Factory: Kanjur Village Road, Bhandup, Bombay-18. Phones: 581211 & 581678. Grams: "ECHJAY." Bhandup. Manufacturers of Accessories & Equipments for Machine Tools, General Steel Drop & Upset Forgings—including Forged Flanges; Forged Parts of Diesel Engines & Automobile; Forged Hand Tools, Band Hammers, Chisels & Punches, Spanners, Pliers, Jigs & Fixtures, Press Tools, Dies & Punches.

### FORMICA DECORATIVE LAMINATE

**PLYNET TRADERS.**—Shahru Castle, Mohamedali Road, Bibijan Street, Bombay 3. Phone: 22334. Grams: "NETPLY." Authorised Dealers for Formica Decorative Laminate.

### FORMICA & SUNWOOD

**CITY PLYWOOD DEPOT.**—Opp. Chitra Cinema, Dr. Ambedkar Road, Dadar, Bombay-14. Phone: 442927. Authorised Dealers for Formica Decorative Laminate in Full Colourful Range.

**FAKERUDDIN & CO.**—43, Abdul Rehman Street, P.B. No. 3266, Bombay-1. Phone: 325637. Grams: "WOODPLY." Stockists of Okal Board, Formica, Plastic Laminated Sheets, Insulating Boards, Asbestos Electrical Insulating for Arc and Heat Resisting Sheets, Tempered Press Boards, Plywood Black Boards, Asbestos Cement Sheets, Veneer, Decorative Teak Plywood, Expanded Metals, Perforated Metal Sheets, Welded Wire Mesh.

### FOUNDERS AND FOUNDRY EQUIPMENT

**Amar Brass and Iron Works.**—Office and Works: 6, Sewree Cross Road, Bombay 15. Grams: "SEWREEIRON."

**ART METAL WORKS (Estd. 1882).**—35-C, Jeraibhoy Street, Foras Road, Bombay 8. Phone: 71692. Brass & Iron Founders, Builders, Hardware Manufacturers and Engineers & Contractors.

**Central Metal & Wire Products.**—60, Lamington Road, Bombay 8. Greaves Cotton & Co., Ltd.—Forbes Street, Bombay 1.

**Guest, Keen Williams Ltd.**—Wakefield House, Ballard Estate, Bombay 1.

**HARDCASTLE & WAUD MANUFACTURING CO. PRIVATE LTD.**—Alice Building, 339, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 255771. Tel. Address: "WAUDCO."

**INDUSTRIAL MINERALS & CHEMICAL CO.**—125, Narayan Dhura Street, Bombay 3. Phone: 583711 (3 lines). Grams: "IMCHEL." Chemicals & Mineral Merchants and stockists of raw material for all Industries.

**J. D. Jones & Co. (Bombay) Ltd.**—Rustom Building, Veer Nariman Road, Bombay 1.

**JAYEMS ENGINEERING CO.**—Warden House, Sir Phirozshah Mehta Road, Bombay-1. Engineering, Machinery Merchants & Manufacturers' Representatives, direct importers of Machine Tools, Wood Working Machinery, Sheet-metal Working Machinery, Welding Equipment, Foundry Equipment etc. Phone: 254251. Grams: "JAYEMS."

**METALLICA WORKS PRIVATE LTD.**—79 B3, Dr. Ambedkar Road, Bombay 18. Phones: 375432, 375433, 375434, 371941 & 371942. Makers of Non-Ferrous Metals, Castings, Alloys Anodes, Lead Linings of Acid Resisting Containers, Crucibles.

**MUNCHERJEE BYRAMJEE & CO. (Estd. 1882).**—35-C, Jeraibhoy Street, near Municipal Workshop, Bombay 8. Phone: 71692. Brass & Iron Founders and Structural & Mechanical Engineers.

**Nadirshaw & Bros.**—"Silver Talkies" Building, Khetwadi Back Road.

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P.O. Box No. 1905, Bombay 1. Phone: 251662. Also at Calcutta, New Delhi, Madras & Baroda. Manufacturers of Foundry Equipment and Stores—3.9. Cupolas & Mechanical Chargers, Reverberatory & Electric Furnaces, Sand Conditioning Plants, Moulding Machines, Core Blowers, Pouring Laddies, Conveying Systems, Moulding Boxes, Tumbling Barrels, Foundry Fluxes & Stores, etc., and Dealers in Ore Dressing Equipment, Industrial Furnaces, Laboratory Control & Research Instruments.

### P. RATILAL & COMPANY

Moti Mahal, 43, Dhanji Street, Bombay 3.

#### Importers & Stockists:

Morgan English & "Colisit" German Crucibles. Manufacturers of superior quality "Comet" Brand Indian Crucibles. Also stockists of Cockills' V-Belts, V-Link Belting, Woven Endless Belts, Rubber Canvas Endless Belts, Variable Speed Belts, "GRIPIT", Chrome Leather Nylon Sand-wich Belts, "UNIQUE" Tyre Type flexible Couplings, etc.

Telegrams: "ETERNAL"

Phone: 325700

**SHREE KARNATAK AGENCIES.**—42, Western India House, Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 254220. Dealers in Ferro-Chrome Silicon Manganese etc. "FERRO-SILICON." Grams: "SACHOTI."

**Testeels Limited.**—Prospect Chambers, Dr. Dadabhai Naoroji Road, Bombay 1.

**Ward Thos. W. (India) Ltd.**—Marshall Building, Ballard Road, Fort. William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

### FOUNDRY FLUXES & STORES

**CIBA OF INDIA LIMITED.**—Royal Insurance Building, 14, Jamshedji Tata Road, Bombay-1. Phones: 245031-3, 245064-6. Suppliers of Epoxy Pattern and Filling Resins for Foundries.

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort. Phone: 254433. Grams: "DATNARE."

**GARGI INDUSTRIES (Foundry Products Division).**—18, Union Park, Chembur, Bombay 11. Works: Kirti Rubber Works Compound, 205-207, Ghodbunder Road, Jogeshwari, Bombay 60. Grams: "GARGI." Phone: 521545.

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P.O. Box No. 1905, Bombay 1. Phone: 251662. Also at Calcutta, New Delhi, Madras and Baroda. Agents in India for "Fusite" Fused Sodium Carbonate Blocks of Tata Chemicals—a TATA Product, and for "HARMARK" Foundry Chemicals & Fluxes. Also now manufacturing in India "PMC" Foundry Chemicals & Fluxes, under licence from "HARMARK" of England.

**Vishwa Bharati Trading Co.**—14, Kumbha Street, Ballard Estate, Bombay 1.

### FOUNTAIN PENS IMPORTERS, MFRS. & DEALERS

**Dhiraj Pen Manufacturing Co., Ltd.**—Nagardas Road, Andheri (East), Bombay.

**ENAYATALI & CO.**—262-264, Abdul Rehman Street, Bombay 3. Dealers in all Famous makes Fountain Pens, Inks & Spare Parts including "ENACO" Fountain Pens, Inks, Gum, Carbon Papers, Stationers & Fountain Pen Merchants. Phone: 321763. Grams: "ENAYAT."

**India Pen House.**—224, Abdul Rehman Street, Bombay 3. Kinn & Co., Ltd.—72-75, Chhatri Chawl (Shamshet Street), Near Liberty Bazar, Bombay 2.

**Kachhani & Co.**—Sutar Chawl, Ismail Building, Bombay 2.

**Minors Pen & Stationery Industries.**—140, Jethwadi, Gurgaon, Bombay 2. New Type Fountain Pen Depot.—116-18, Narayan Dhura Street, Barbhui Mohalla, Bombay 3.

**Official Traders.**—Anand Bhuvan, Princess Street.

**Pioneer Fountain Pen Depot.**—224, Shamshet Memon Street, Bombay 2.

**Raja Fountain Pen Depot.**—115, Shamshet Street, Bombay 2.

**Shamshet C. Station & Co.**—18, Ismail Street, Bombay 1.

**R. Panchhi & Co.**—Sharaf Mansions, Princess Street, Bombay 2.

**United Commercial Co.**—45, Waghadas Building, 1, Princess Street.

**VEEKAY INDUSTRIES.**—Manufacturers of "VEEKAY" Quality Pens & Nibs. Agarwal Industrial Estate, Jogeshwari (West), Bombay 60 (NB).



## FREIGHT BROKERS

- ABRAHAM, SHAH & SONS.**—Hague Building, Ballard Estate, Sprott Road, Bombay 1. Phones: 26-1837, 26-2379 & 26-3994.
- KANJI JADHAVJI & CO.**—Masjid Bridge, Mandvi, Bombay 8. Phones: 323681 & 321412. Grams: "GITA." Freight Brokers, Clearing, Forwarding, Shipping, Landing & Travel Agents.
- London Edwards Ltd.**—Nash Road, Ballard Estate, Bombay 1. Phones: 261241/43. Grams: "LIONWARRIOR."
- M. JAMNADAS & CO.**—16, Bank Street, Fort. Phones: 253871 (5 lines). Grams: "ENJAYTOUR." Freight Brokers and Travel Agents. Recognised by I.A.T.A. I.A.C., Govt. of India & All Steamship Companies. Members: A.S.T.A., F.I.A.V., T.A.A.I., P.A.T.A. & Freight Brokers Association.
- PITAMBER & CO.**—Scindia House, Ballard Estate, Bombay 1. Freight and Chartering Brokers. Brokers to the Scindia Steam Navigation Co., Ltd. Phones: 261066 & 264269. Gram: "SAGARNUR".
- PITAMBER LALJEE & SONS.**—Bharat House, 104, Apollo Street, Bombay 1. Phones: Office: 255426 & 254230. Res.: 362050. Grams: "SAFESHIP." Freight and Chartering Brokers and House Brokers, Bharat Line Ltd.
- Pranlal L. Pandya & Co.**—26, Podar Chambers, Parsi Bazar Street, Fort, Bombay 1.
- Purdie & Co.**—Freight Brokers, 16, Elphinstone Circle, Fort.

FRESH AND FROZEN FISH AND MEAT  
(EXPORTERS AND IMPORTERS)

- FRUIT FARM PRODUCTS CO., THE.**—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone No. 262120.
- Spencer & Co., Ltd.**—Spencer Bldg., Forjett Street, Bombay 26.

FRESH VEGETABLES AND FRUITS  
(EXPORTERS AND IMPORTERS)

- FRUIT FARM PRODUCTS CO., THE.**—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone No. 262120.

## FUEL INJECTION EQUIPMENT

- BHARAT ELECTRIC & ENGINEERING CORPORATION.**—Free Press Building, Ground Floor, 21, Dalal Street, Fort, Bombay. Phone: 255374. Grams: "GODGRACE."
- EVEREST ENGINEERING CORPORATION.**—12, Hornby View Building, Gunbow Street, Fort, Bombay 1. Phone: 261691. Grams: "EXPOCORP." Specialists in Diesel Engines & Spares, Fuel Injection Equipment, Electric Motors, Small Engineering Tools, Workshops Machinery, Graphite Crucibles, Ball & Roller Bearings, Steel Shafting, Circlips, etc. (Allied Concern of Messrs. Khimandas Jagumal & Sons).
- HARRY'S TRADING CO.**—Quality Sirens from 12 Mile to 5 Miles Range and Portable Electric Blowers suitable for Cleaning etc. Fuel injection Equipments for Diesel and Tractor Engines. 501, Commerce House, Meadows Street, Bombay-1. Phone: 256605 & 535023 (Res.).
- HONESTY TRADING CORPORATION.**—Beaumont Chambers, Meadows Street, Fort. Phone: 253534 and 252018. Grams: "HOTRACO." Importers of Fuel Injection Equipment for all types of Diesel Engines and Tractors.
- IMANES PRIVATE LIMITED.**—94, S. V. Road, Erli, P.O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANES-COL." Springs & Forms out of Spring Wires and Strips for your Industry.
- Khimandas Jagumal & Sons.**—12, Gunbow Street, Bombay 1.
- Kumar Commercial Co.**—Nadirshaw Sukhia Street, Off Cawasji Patel Street, Bombay 1.
- MACHINERY SALES CORPORATION.**—5, Tamarind House, Tamarind Lane, Fort, Bombay 1. Grams: "ENGESPARES." Phone: 254480. Stockists of Imported Spare Parts for Diesel Engines, Tractors, Road Rollers & Spares.
- MOTOR INDUSTRIES CO., LTD.**—Manufacturers of Mico—Licence—Bosch Diesel Fuel Injection Equipment & Spark Plugs. Distributors of Bosch Automobile Parts & Accessories, 79, Dr. Annie Besant Road, Worli, Bombay 18 (WB). Phone: 370567. Grams: "ELEMENT." Head Office: Post Box No. 93, Bangalore. Branches: 1-155, Mount Road, Madras-2 and 91-A Park Street, Calcutta 16.
- NAREN KUMAR MACHINERY CO.**—9, Oak Lane, Off Meadows Street, Fort, Bombay. Phone: 251868. Grams: "NEW-KUMAR." Bombay. Importers of Diesel Engines spares & Stockists of "Vera" Engine valves & Electric Motors.

**SUPREME INDUSTRIAL WORKS.**—134 K, Gaiwadi, Girgaum, Bombay 4. Manufacturers of Gears & Specialists in all kinds of Worms & Worm Wheels. Phone: 355189.

## FURNISHING FABRICS

- "DECORA" RAVAL TILES AND MARBLE PRIVATE LTD.**—Edena, 97-A, Queen's Road. Phone: 242310.
- Kashmir Govt. Arts Emporium.**—Sir P. M. Road, Bombay 1.

## FURNITURE DEALERS AND MANUFACTURERS

- Apollo Furnishing Co.**—Harishankar Lodge, opp. Charal Road Railway Station, 23, Queen's Road.
- Art Flooring & Construction Co.**—16, Elester Road, near Grant Road.
- Amzel Private Ltd.**—Lotus House, Marine Lines, Bombay 1.
- BHAGAT BROTHERS.**—Patel Chambers, Sandhurst Bridge, Bombay 7. Phone: 352725. Grams: "SHOWWINDOW". Furniture & Interior Decorators.
- Bhagwandas J. Mistry.**—16, Banaji Street, Fort.
- Bharat Furniture Works (Estd. 1931)**—Swadeshi Mills Estate, 78, Girgaum, Bombay 4. Phone: 355944.
- Bombay Furniture House.**—132-138, Mutton Street, Null Bazar.
- Brijmohan Banwarlal.**—61, Reay Road, Mazgaon, Bombay 19.
- D. C. BATLIWALA & CO.**—12, Bruce Street, Fort, Bombay 1. Phone: 253732. Furniture Hired and for sale.
- Dawson & Co.**—24, Parsee Bazar Street, Bombay 1.
- Dewjee Canjee & Co.**—154, Sheriff Dewjee Street & Mohamedali Road.
- Ebrahim Jaffer & Co.**—208, Chukla Street, Bombay 2.
- E. PEERBEYOY & SONS.**—Prop., Indian Durries Emporium, 64, Mohamedali Road, Shakra Castle, Bombay 3. Phone: 323806. Grams: "INDIAWEAVE".
- Eyres, E., & Co.**—Bellasis Road, Bombay 8.
- Gujarat Furniture Works.**—Satar Sea View, 45, Chowpatty Sea Face.
- INTERFURN.**—Interior Decorators and Furniture Manufacturers, 361, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 253222.
- Jamshedji F. Bhilmoria & Co.**—290, Leheri Building, Sandhurst Road.
- KAMDAR PRIVATE LTD.**—Opp. Churchgate Station, Bombay 1. Phone: 242347 8. Grams: "SIMKIE." Bombay. Interior Decorators & Furniture Makers. Mg. Director: B. M. Kamdar. Directors: Mrs. Pushpa B. Kamdar; Mr. V. B. Kamdar.
- KANTILAL KARIA & CO.**—Furnishers and Interior Decorators, Chowpatty View, Chowpatty, Bombay 7. Phone: 352272.
- Kay & Co.**—42, Custom House Road, Fort.
- Khira Steel Works Private Ltd.**—H.O. & Factory: Ghodbunder Road, Santa Cruz, Bombay 23.
- Mahomedally Dadabhai & Son.**—Jamnadas Building, 70-72, Mutton Street, Null Bazar, Bombay 3.
- Maroo & Co.**—Noble Chambers, 13, Ghogha Street, Fort, Bombay 1.
- Mayfair Furnishing Company.**—Great Western Buildings, Apollo Street, Fort.
- McKensies, Ltd.**—Sewri.
- MINERVA FURNITURE WORKS.**—Furniture Makers and Interior Decorators, 67-71, Queen's Road, opp. Marine Lines Station, Bombay 2. Phone: 29708.
- Mitha & Co.**—Opp. Suryodaya Mills, Tardeo Road.
- NOORMOHAMEDS.**—House of Fine Furniture—(Estd. 1835), 109 A-111 B, Mohamedally Road, Bombay 3. Phone: 325124. Grams: "NOORDECOR." Furnishers, Cabinet Makers & Interior Decorators, Importers & Exporters. Branch at Mahim Causeway.
- PREMIER FURNISHING & DECORATING PRIVATE LTD.**—7, Brabourne Stadium, Churchgate Street Extension, Fort. Phone: 245632. Interior Decorators, Furniture Manufacturers and Hired and Stockists of DUNLOPILLO Products.
- Raja Furniture Mart.**—Poolchand Nivas, Chowpatty Sea Face, Bombay 7.
- Roberts & Co. Private Ltd., John.**—Jorawar Bhuvan, 93-B, Queen's Road.
- Royal Carpets & Cane-Furniture Manufacturing Co.**—Mani Bhuvan, Hughes Road, Bombay 7.
- SHERATON & CO.**—Works & Office: 131, Meadows Street, Fort, Bombay. Phone: 25-5430. Furniture & Billiard Table Manufacturers.



Steel Age Industries Ltd.—Opp. Post Office, Mazagaon, Bombay.  
 Sunderdas Saw Mills.—Opp. Reay Road Station, Bombay 10.  
 Tahilsingh Hanspal & Co.—Lady Hardinge Road, Bombay 28.  
**WOOD-WORTHS.**—Home and Office Furniture Manufacturers and Designers. Show-Room: Commerce Centre, Tardeo, Bombay 34 (WB).

### GALVANIZERS

Repute Engineering & Galvanizing Works.—Andheri Road, White Bridge, Old Kurla, Bombay 70.

**SOLEM HARDWARE MART.**—155, Nagdevi Street, Bombay 3. Phone: 326896. Grams: "QUICKFIRE." Works: 50, Nesbit Road, Bombay 10. Phones: 379148 & 373909. Galvanising carried out on any kind of mild steel and Cast Iron Products very efficiently by hot Dip Process and to B.S.S. & Admiralty Specifications. Also Government & Railway Contractors.

### GAMELLAS MANUFACTURERS

**AMRITLAL & CO.**—Iron & Hardware Merchants, Stockists of Kadai, Ghamellas, T-Hinges, 233, Nagdevi Street, Bombay 3. Phone: 326651.

### GARAGE TOOLS & EQUIPMENT

**BOMBAY ENGINEERING STORES.**—C-16, Bihari Baug, 3rd Bhoiwada, Bombay 2. Stockists of Engineering Tools of all kinds.

**DODGE & SEYMOUR (INDIA) PRIVATE LTD.**—"KRUPA-NIDHI," 9, Wittet Road, Ballard Estate, Bombay-1 BR. Phones: 263674 & 265429. Grams: "EXIMCO".

**HEMANT TOOLS TRADING CO.**—33, Bibijan Street, Bombay 3. Grams: "LACING". Phone: 321114. Importers & Stockists of Chain Pulley Blocks, Garage Tools, Fibre Sheets, Rods, Diamond Dressing Tools, Precision Tools etc.

**JAIRAMDAS & SONS.**—163, Narayan Dhuru Street, Bombay 3. Phone: 323616. Grams: "JAIRAMSONS". Importers & Stockists of all sorts of Garage Tools. Sole Agents for Pendleton Tools Industries International, Los Angeles, U.S.A.

**NEW HIND TRADING CORN.**—137, Narayan Dhuru Street, Bombay 3. Machine Tools, Metal Cutting Tools and all sorts of Precision & Engineering Tools. Phone: 329383. Grams: "DORMER".

**PARAMOUNT TOOLS CO.**—5, Narayan Dhuru Cross Lane, Bombay-3. Grams: "PARATOOLS." Dealers in Engineering, Metal Cutting Precision Tools, and General Hardware Suppliers, Garage Tools, Devetls, Taps, Dies, Files, Blades, Plastic Wire Mesh. Phone: 321860.

**PRAFFULCHANDRA & CO.**—106, Lohar Street, Bombay 2. Phone: 39007. Grams: "ELECTTOOLS." Importers & Stockists of Engineering, Precision and Garage & Machine Tools.

### GARDENING REQUISITES

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: 'ALERTDEAL.'

Dattatraya Industries Private Ltd.—Sitaram Building, Dadabhai Naorji Road, Bombay 1.

Dhami Ram & Sons.—236, Masjid Bunder Road, Bombay 3.  
 Marine Sports.—101, 1st Marine Street, Dhebi Talao, Bombay.

**PALEKAR & CO. (Estd. 1870).**—Sitaram Building, near Crawford Market, Bombay 1. Phone: 262236. Grams: "RUDRA." Flower & Vegetable Seeds, Lawn Mowers, Garden Tools, Insecticides & Fertilizers. Specialists in Garden Lay-outs.

Reliance Trading Co.—Vithal Sayana Building, Lohar Street, Bombay 2.

### GASES

**INDUSTRIAL GASES LTD., THE, BOMBAY.**—Grams: "INDUS-GASES". Head Office: P.O. Box 853, Calcutta 1. Phones: 233230, 239005, 239681, 237985 & 239981. Manufacturers & Suppliers of Oxygen, Liquid Oxygen, Acetylene-Nitrogen, Argon, Neon & Helium, Krypton, Xenon, Methyl Chloride, Cyclopropane, Ethylene, etc.

### GASKETS & PACKINGS MANUFACTURERS

**GASKET CORPORATION OF INDIA.**—7/10, Botawala Building, Horniman Circle, Bombay 1. Phone: 256623. Grams:

"GASKETS". All types of Gaskets for Boilers, Diesel Engines, Marine Engines, Motor Cars, Tractors, etc. Manufactured as per original specifications.

### GAS PLANTS

**GANSONS PRIVATE LTD.**—Adm. Office at Industry Manor, 2nd Floor, Off Cadell Road, Bombay 28. DD. Phone: 45-3154. Grams: "INMAG". Manufacturers of "Gansons" Gas Plants, Chemical & Pharmaceutical Plants, Laboratory Equipments, Isotope Handling Equipment.

**INDUSTRIAL GASES LTD., THE, BOMBAY.**—Grams: "INDUSGASES". Head Office: P. O. Box 853, Calcutta 1. Design Supply & Erection of Complete Plants for Manufacture and Distribution of Oxygen, Nitrogen, Carbon Dioxide, Acetylene and other Gases.

### GAUGES & INSTRUMENTS

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: 'ALERTDEAL.'

Fleming, John & Co., Private Ltd.—P. B. No. 76, Bombay 1. Phone: 261153.

**C. VADILAL & CO.**—40, Nagdevi Cross Lane, Bombay 3 (BR). Mfrs. and Importers of various types of Pressure, Vacuum, Compound Pressure and Vacuum Water or Altitude and Hydraulic Gauges. Phone: 321553.

**EVERGREEN CORPORATION.**—9/15, Pickett Cross Road, P.O. Box No. 2733, Bombay 2. Phone: 22162. Grams: "GREEN-LEAVE." Pressure Gauges for Gas, Air & Vacuum, Dial Gauges, Indicators, Industrial Thermometers & Hygrometers.

Gordhandas Desai Private Ltd.—Kermani Bldg., Sir P. M. Road, Bombay 1.

Greaves Cotton & Co., Ltd.—1, Forbes Street, Bombay 1.

**INDUSTRIAL MILL GIN STORES.**—Industrial House, 51/53, Nagdevi Cross Lane, Bombay 3. Grams: "WIREGOODS." Phone: 321246.

Jairamdas & Sons.—163, Narain Dhuru Street, Bombay 3.

**M. SOMNATH & CO.**—94, Lohar Chawl, Bombay 2. Phone: 20375. Grams: "SAMARTHYA," Bombay 2. Importers & Stockists of Surface Plates Slip Gauges, Micrometers, Calipers, Ring & Plug Gauges, Dial Testing Indicators, Straight Edges, Internal Dial Gauges, Measuring Instruments, Precision Water Levels, and all sorts of Measuring Instruments & Engineering Tools.

**VASI SHUMS & CO. PRIVATE LTD.**—165/67, Nagdevi Street, Bombay 3. Phone: 327381. Grams: "WIREROPE." Sole Agents for Maharashtra & Gujarat States for G.P.I.F. Brand Water Meters, Microscopes and Pressure Gauges.

### GEARS MFRS. & GEAR CUTTING SPECIALISTS

**GAJRA GEARS.**—Elve Chambers, Green Street, Bombay 1. Phones: 252088 & 254655. Grams: "ELBUSCON." Works: Station Road, Dewas (M.P.). Manufacturers of all types of Precision Gears, Spur, Helical, Spiral Internal, External, Worms, Worm Wheels etc. upto 32" Diameter.

**SUPREME INDUSTRIAL WORKS.**—196/K, Gaiwadi, Girgaum, Bombay 4. Manufacturers of Gears and Specialists in all kinds of Worms & Worm Wheels. Phone: 355189.

### GELATINES & COSMETIC RAW MATERIALS

Phones: 322752-533462

Grams: "JAMKEM"

### JAAM CHEMIE-COLOUR CO.

*Sole Representatives:*

LEINERS'

GELATINES, Pharmaceutical & Photographic Bone & Hide GLUE. Technical GELATINES (Sheets-Powder).

WHITTAKER'S

COSMETIC RAW MATERIALS—Food Colours, Titanium-Dioxide & other USP. Chemicals & Vitamins Exporters of Minerals & Guar Gum-splits—Powder.

15, Shree Ram Market, Vadgadi, Bombay 3 (B.R.)



## GERMAN SILVER UTENSILS MFRS.

**LALLUBHAI AMICHAND PRIVATE LTD.**—Proprietors: Dun Aluminium Factory, 225/27, Tardeo Road, Bombay 7. Manufacturers of "Queen" Brand Aluminiumwares & "Queen" Brand Stainless Steel Utensils and other non-ferrous metalware. Phones: 370996, 377125, 334049 & 331888. Grams: "CYCLEBRAND."

## GLASS

**ABDOOLALLY NOORBHOY.**—122-124, Abdul Rehman Street, Bombay 3. All kinds of Glass & Plywood Merchants. Government & Railway Contractors. Phone: 327156. Grams: "PATTYMART." Works: 248-A, Duncan Road, Bombay 8. Phone: 376759.

**ALIBHOY KADIBHOY KACHWALLA** (Estd. 1922).—84, Abdul Rehman Street, Bombay 3. Phone: 326803; Grams: "BELGLASS." Direct Importers and Stockists of Genuine Welding Glass & all kinds of Sheet & Plate Glass.

**DAUDEHOY M. TAYEBALLY.**—110, Abdul Rehman Street, Bombay 3. Phone: 325236 & 332067 (Office); 333159 (Res.). Grams: "SAFEGLASS."

## GOOLAMHOOSEIN VALIJI ARSIWALLA

116, Abdul Rehman Street, Bombay 3.

## DEALERS IN:

Glass Sheets, Wired, Figured Mirrors,  
Table Glasses, Show-case Glasses,  
Toughened Guage Glasses, Motor-  
Glasses, Specialists at Glazing Windows  
and Northlights.

Phone: 326643 - Grams: "NEWHOPE".

**HARGOVIND DHARAMSI.**—35, Mirza Street, Off Abdul Rehman Street, Bombay 3. Phone: 325228. Grams: "PLATEGLASS." Glass Merchants, Plate Glass, Sheet Glass, Looking Glass, Safety Glass, Plywood, Picture Moulding, Glass Cutters and everything in Flat Glass and mirror manufacturers.

**KESHOWDAS HASSANAND KARACHIWALA.**—256, Yusuf Meherally Road (Masjid Bunder Road), Bombay 3. Phones: Office: 321855, Godown: 332229 and Res.: 471641. Grams: "KESHOGLASS." Direct Importers and Stockists of all kinds of Sheet and Plate Glasses, Hardboards, Plywood, Diamond Glaziers, Motor Glasses, etc.

**M. A. KACHWALLA & SONS.**—97-99, Dhanji Street, Bombay 3. Phone: 324395. Grams: "DIADEM". Stockists of all kinds of Sheet Plate, Wired Mirrored and Figured Glasses. Manufacturers Representatives for "Glaset" Toughened Safety Glass. Stockists: FORMICA DECORATIVE LAMINATES.

**MAHALAKSHMI GLASS WORKS PRIVATE LTD., THE.**—Dr. E. Moses Road, Jacob Circle, Bombay-11. Grams: "RACEVIEW." Mfrs. of all kinds of bottles for Cosmetics, Aerated Water, Milk and Pharmaceuticals including Penicillin vials. Phone: 373431 & 373432.

On Approved List of D.G.S & D. & Rlys. etc.

## MODERN GLASS MART

63, Abdul Rehman Street, Bombay 3.

DEALERS IN: Glass Sheets, Mirrors,  
Table Glasses, Show-case Glasses,  
Sunmica, Hardboard, Plywood and Chairs

Manufacturers' Representatives for:

BENT AND TOUGHENED GLASS FOR CARS

Phone: —327709

**MAHOMEDALLY VALIJI ARSIWALLA.**—76, Abdul Rehman Street, Bombay 3. Phone: 325900 and 145, Jambli Mohalla, Bapu Khote Street, Bombay 3. Phone: 332467. Direct Importers and Dealers in all kinds of Glasses, Plywood and Picture Mouldings. Government & Railway Contractors. Godowns at 2/4, Temkar Street, New Nagpada, Bombay 8 and at 145, Jambli Mohalla, Bapu Khote Street, Bombay 3.

**Premier Glass Traders.**—Importers and Stockists of all kinds of Glass, Frames, Plywood, Mounts, Glazier's Diamonds, etc. 76/78, Dhanji Street, Bombay 3. Grams: "REASON." Phone: 326845 (Office); 71837 (Res.).

**SAMIR GLASS TRADERS.**—21-23, Dhanji Street, Parsi Gully, Bombay 3. Phone: 326785. Grams: "SAMIRGLASS."

**Salemahomed Padamsee & Co.**—141, Chukla Street, Bombay 3.

**TEK TRADING CORPORATION.**—139, Abdul Rehman Street, Bombay 3. Dealers of Sheet & Plate Glasses of all Types and Toughened Glass & Government Suppliers. Grams: "TEK-CORP." Phones: Office: 323329. Res.: 453817. Prop.: Mr. T. K. Kachwalla.

**Tyebali Ebrahimjee & Co.**—166, Abdul Rehman Street, Bombay 3.

**V. GOPALDAS & CO.**—299, Krishna Niwas, Masjid Bunder Road, Bombay 3. Phone: 324364. Grams: "VICTORGLASS." Wholesale & Retail Dealers in Sheet Glass of all Thickness, Mirrors, Safety Glass, Wire Glass, Toughened Glass and all other kinds of Imported Glass.

**YUSUFALI GOOLAMHOUSEEN ARSIWALLA.**—105, Abdul Rehman Street, Bombay 3. Grams: "GLASSAGE." Phone: 324464. Dealers in Glasses, Plywood & Hard Board. Stockists of all kinds of glasses, Window sheets, Plate, Wired, Ribbed, Figured, Opal, Vitrolite, Triplex, Mirrors, Hard Board, Steel Folding Chairs, etc.

## GLASS FACTORIES

**AJIT GLASS WORKS PRIVATE LTD.**—Office: 99, Haji Ahmed Devji Bldg., 2nd Floor, Mohamedally Road, Bombay 3. Phone: 324702. Grams: "AJITWORKS". Factory: Ghodbunder Road, P.O. Jogeshwari, Bombay 60. Phone: 572584 & 571109. Manufacturers of Pressed ware, Glass Tumblers, Glass Jars, Bottles of all kinds suitable for Pharmaceutical Trade, Cosmetic, Ink, Milk, Squashes and Aerated Water Trade, etc.

**Pearl Glass Manufacturing Co.**—Office at: 44, Cawasji Patel Street, Fort, Bombay 1.

**Safeglas Corporation Private Ltd.**—95, Dhanji Street, Bombay 3.

**VAZIR GLASS WORKS LTD.**—Manufacturers of superior quality glass containers in neutral and other types of glass, J. B. Nagar, Andheri, Bombay 59. Phones: 573335, 573336. Grams: "VAZIRGLASS".

## GLASS MFRS. AND INDENT OPERATORS

**Channil Khanna & Co.**—Sarasvati Nivas, Thakurdwar Road, Bombay 2.

**International Chemical Co.**—Tulsi Pipe Road, Matunga, Bombay 10.

**Oriental Import & Export Agency.**—52, Shri Krishna Nivas, New Silk Bazar, Kalbadevi Road, Bombay 2.

## The Safeglas

Grams: DIADEM

Phones: { 324395  
327841

## Corporation Private Ltd.

Member:

INDIAN STANDARDS INSTITUTION

Manufacturers of

"GLASEF" Brand Toughened SAFETY GLASS used in Windows of Buses, Automobiles, Cars, Furniture, Glazing-Windows, North Light Fittings, etc.

Manufactured as per BSS 857 & IRS 2-6-61.

DHANJI STREET, BOMBAY 3

**Salemahomed Padamsee & Co.**—141, Chukla Street, Bombay 3.



## GLASSES &amp; CERAMIC

**YOU NEED NOT  
TAKE SUBSTITUTES  
NOW!**

USE

**Glasswool - Glassfibre**

Loose  
Blankets  
Quilts

*for Air Conditioning, Sound  
Proofing, Electrical insulation  
purposes and Pipe Sections*

**FOR INSULATION OF ALL KINDS**

**Also Battery Separators**



*Manufactured by*

**KANGAN  
PRIVATE LTD.**

**208, L. J. ROAD,  
BOMBAY-16** Phone : 521380

## GLASSWARE MFRS. &amp; MERCHANTS

All India Glass Works Private Ltd.—326, Bail Bazar, Old Kurla, Bombay 70.

All-India Trading Corporation.—25, Bank Street, Fort. Grams : "Autoglass". Agents for Palsa Fund Glass Products.

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort. Chunilal Desai & Co.—Gool Mansion, Homji Street, Fort.

**CRYSTAL HOUSE.**—99C/D, Mohamedali Road, Bombay 3. Phone : 327030. Dealers in Glassware, Crockery, Enamelware, Kitchenware, Cutlery, Plasticware, Thermos Flasks, Presentation Articles, etc.

Embi Desai & Co.—Office: Dadyseth House, Cawasji Patel Street, Fort, Bombay 1.

**GANDHI LAHERCHAND NANCHAND.**—182, Sheriff Devji Street, Bombay 3. Phone : 324695. Grams : "GLASSWARE." Glassware Merchants and Distributors for Ogale Glass Works Ltd. for Bombay.

Getz Bros. & Co.—Western India House, Sir Phirozshah Mehta Road, Fort.

M. Daidas & Sons.—190, Princess Street.

Moosa Omer & Co.—Junction of Mahomedally & Carnac Roads.

Saify Glass Palace.—Ebrahim Building, Mohamedalli Road, Bombay 2.

Salemahomed Padamsee & Co.—141, Chakla Street, Bombay 3.

Saunbhagya Kankan Store.—27/A, Swadeshi Market, Kalbadevi Road.

Scientific Instrument Co., Ltd.—Navsari Building, 240, Hornby Road, Fort.

Shivji, K. S., & Co.—144-46, Chakla Street, Bombay 3.

**TALWARKER BROTHERS PRIVATE LTD., W. R.**—122, Commerce House, Meadows Street, Fort, Bombay 1. Phone : 254710. Grams : "PUMPENAMEL."

United Glass Works Private Ltd.—326, Bail Bazar, Old Kurla, Bombay 70.

Universal Glass & Industrial Corporation.—327, Hornby Road, Fort.

Vasir Glass Works, Ltd.—Prospect Chambers, Hornby Road, Fort.

## GLOVES &amp; GOGGLES FOR INDUSTRIAL WORKERS

**ASHA RUBBER INDUSTRIES.**—Shamwadi, 2nd Floor, Ranade Road, Dadar, Bombay-28. Manufacturers of 100% Acid and Alkali Proof Light & Heavy Duty and Fabric Lined Industrial Rubber Gloves. "Meditex" Surgeon Gloves our speciality.

**FRANCIS LESLIE & CO.**—105, Apollo Street, Fort, Bombay 1. Phones : 25524-65315. Manufacturers of Industrial safety products, Goggles, Plastic Face Shields, Respirator Helmets & Protective Clothing, for ensuring safety with maximum comfort, efficiency, economy and quality.

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Bombay 1. Phones : 266371, 264555 & 263795. Grams : "VIBHACO." Branch : G.P.O. Box 2628, Calcutta 1. Phone : 336680. Manufacturers of Industrial Safety Equipments, such as Goggles, Gloves, Dust Masks, Gas Protection Respirators, Aprons, etc.

## GOLDSMITH AND JEWELLERS TOOLS

**SEAH TRADING CORPORATION.**—Oomrigar Building, 1st Floor, opp. Crawford Market, Bombay 3. Phone : 322873 (Office) & Residence 691632. Goldsmith Tools and Hardware Merchants.

## GRAIN AND SEED MERCHANTS

Birla Bros., Ltd.—State Bank Annexe, Bank Street, Fort.

Damji Mavji & Co.—177, Khoja Gulli, Mandvi, Bombay 9.

Dewji Dhanji & Co.—Kilachand Mansion, 284, Kalbadevi Road. Grain Merchants' Association.—Musjid Bunder, Mandvi.

Haji Sattar Haji Peermahomed.—91, Rangoonwalla Building, Mahomedali Road, Bombay 3.

Hashambhoy Aloo Mahomed & Son.—Dostmahomed Building, Nishanpada Road, Khadak, Bombay 9.

Joshi Jivandas Gangaram & Co.—282, Narsi Natha Street, Bombay 9.

Khimji Poonja & Co.—Wadia Building, 17/19, Dalal Street, Fort.

Manekji Nensey & Co.—172/86, Argyle Road, Bombay 9.

Narandas Rajaram & Co.—Navsari Chambers, Outram Road.

Oomedchand Kashiram & Co.—Mudi Bazar, Mandvi, Bombay 3.

Padamshi Pancharia & Co.—Laxmidas Narsi Building, 182-184, Walkeshwar Road.

Premchand Trading Ltd.—7, Dhanji Street, Bombay 3.

Premji Haridas & Co.—Bhanushali Building, 168, Argyle Road, Bombay 9.

Ralli Bros., Ltd.—21, Ravelin Street, Fort.

Sarvajanjik Grain Stores.—190, Doctor Street, Null Bazar.

Shamji Velji & Co.—Anand Bhuvan, Narsi Natha Street, Bhat Bazar.

Vasantlal Vadlal & Co.—215-17, Samuel Street, Vadgadi.

Velji Kalidas & Sons.—177, Samuel Street, Mandvi.

Yuvak Stores, Shri.—399A, New Hanuman Lane, Kalbadevi Road.

## GRAMOPHONE DEALERS AND MANUFACTURERS

Anandji Kalyanji Vara.—Hathi Building, 448, Kalbadevi Road.

Bombay Phono and General Agency.—520-22, Kalbadevi Road.

Britannia Talking Machine Co.—407, Kalbadevi Road, Bombay 2.

Columbia Gramophone Company Ltd.—Universal Building, Sir Phirozshah Mehta Road, Fort, P. O. Box 1163, Bombay.

Ghaisas, G. J., & Co.—Ramchandra Building, Tram Terminus, Girgaum.

Gramophone Co., Ltd.—Universal Fire & General Insurance Co.'s Building, Sir Phirozshah Mehta Road, Fort.

Jawahar & Company.—133, Princess Street, Bombay 2.

Masters Trading Co.—Advani Chambers, Sir Phirozshah Mehta Road, Fort.

Metro Musics.—545, Kalbadevi Tram Junction, Dhobi Talao.

National Gramophone Record Manufacturing Co., Ltd.—110, Meadows Street, Fort.

Oriental Watch & Gramophone Co., The.—Opp. Western Rly. Station, Dadar, Bombay 14.

Rhythm House, The.—Opp. Army & Navy Stores, Fort.

Rose, S., & Co.—28, Rampart Row, Fort.

## GREETING CARDS

**GANDHI STATIONERY MART.**—165, Bazargate Street, Bombay 1. Manufacturers of Comet Visiting, Invitation, Greeting, Wedding Cards, Inland/Air Letters, Calendar & stockists of Rainbow Printing Ink. Phone : 26-5248.

**SHABBAR TRADING CORPORATION.**—212, Abdul Rehman Street, Bombay 3. Manufacturers of Greeting Cards, such as X'mas, New Year, Divall, Idd, Sankranti, Birthday and Wedding Invitation Cards. Phone : 321893. Grams : "GREETCARDS."

Taj Printing Works.—46-A, Cawasji Patel Street, Fort, Bombay 1.

Vakil & Sons (Private) Ltd.—Narandas Building, Spratt Road, 18, Ballard Estate, Bombay 1. Phones : 262177-78, 263204. Grams : "BLADE."

**VALABDAS TIRATHDAS.**—60, Kamla Nehru Cross Road, Kandivli, Bombay 67. Grams : "GREETINGS," Kandivli, Bombay 67. Manufacturers of Greeting Cards.



## GRINDING MEDIA

**NEW HAVEN STEEL BALL CORPORATION PRIVATE LTD.**—Office: Pandyan House, 309, Frere Road, Bombay-1. Phone: 261523. Grams: "GULDASTA." Factory: 38, Pawai Lake Road, Saki Naka, Kurla, Bombay-70. Phone: 581185. Mfrs. of Steel & Alloy Balls, Grinding Media & Automobile Parts, Miniature Balls.

## GRINDING &amp; PULVERISING (POWDERING)

Arvinda Trading Co. Private Ltd.—105, Apollo Street, Fort.  
 Batliboi & Company Private Limited.—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (B.R.). Phones: 255451 (6 lines), Grams: BATLIBOICO. Tele. Tele.: 011-284. City Branch: "BATLIBOI HOUSE", 59/61, Nagdevi Cross Lane, Bombay-3 (B.R.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada, Associate: Bangalore 2. Resident Representatives: RANCHI, Bhubaneswar.  
 Bharat Pulverising Mills Private Ltd.—38A, Sayani Road, Parel, Bombay 28.  
 D. Kaniyalal & Co.—45, 3rd Cavel Cross Lane, Kalbadevi Road, Bombay 2.  
 Gujarat Clay Mills.—246, Reay Road, Bombay 10.  
 Roberts, McLean & Co., Private Ltd.—Ilaco House, Sir Phirozshah Mehta Road, Fort.  
 Standard Pulverising Co.—Atlas Mills Compound, Reay Road, Bombay 10.  
 William Jacks & Co., Ltd.—Bharat House, Apollo Street, Fort.

## GUMS WHOLESALERS

**BOMBAY KIRYANA INDUSTRIES.**—204, Samuel Street, Vadgadi, Bombay 3. Phone No. 327466. Grams: "RAW-DRUGS," Bombay-Mandvi.  
 Champaklal Morarji & Co.—193, Samuel Street, Vadgadi, Bombay.  
 Chandulal & Co., Lakhwala.—313, Samuel Street, Vadgadi.  
**DAMJI MAVJI & CO.**—177, Khoja Gally, Mandvi, Bombay 9. Phone No. 325413. Grams: "GHATTY." Dealers and Exporters of all kinds of Indian Gum.  
**DEVIDAS VIRCHAND.**—22-26, Dariasthan Street. Phone: 325284. Grams: "ENGUM." Exporters of Gum Karaya & Dealers in Saffron, Cassia, Cloves & Spices.  
 Dhirren & Co.—Lakhani Building, 34, Cawasji Patel Street, Fort.  
 Gopaljee & Co.—218, Samuel Street, Vadgadi.  
 Hashambhoy Aloo Mahomed & Son.—Dostmahomed Building, Nishanpada Road, Khadak, Bombay 9.  
 Javeri Traders.—P.O. Box No. 1977, Lakhani Building, 34, Cawasji Patel Street, Fort, Bombay 1.  
 Joshi Jivandas Gangaram & Co.—282, Narshi Natha Street, Bombay 9.  
 Kirtikumar Chandulal & Co.—313, Samuel Street, Vadgadi, Bombay.  
 Lalit Kumar & Co.—86, Kazi Sayed Street, Bombay 3.  
 Laljee Godhoo & Co.—218, Samuel Street, Vadgadi.  
**N. DEVIDAS & CO.**—44, Dariasthan Street, Bombay 3. Phone: 325284. Grams: "ENGUM." Dealers in all sorts of GUMS, Saffron, Cassia, Cloves & Spices.  
 Narandas Kesurdas & Sons.—222/24, Vadgadi.  
 Premji Haridas & Co.—Bhanushali Chambers, Argyle Road, Bombay 9.  
 Ram Agency.—200, Kazi Sayed Street, Bombay 9.  
 Sising Materials Co., Ltd.—Jeroo Building, 137, Mahatma Gandhi Road, Fort.  
 Stewart's Laboratories.—327, Hornby Road, Fort.  
**SUDAN TRADING CO.**—Dhan-Nur, Phirozshah Mehta Road, Bombay 1. Phones: Office: 262788; Resi.: 62089. Grams: "VANSOBHA".  
 Valabhdas Tejpal.—219, Vadgadi, Bombay 3.  
 Varjiwandas Hirjee & Co.—240, Samuel Street, Vadgadi.  
 Vasantlal Vadilal & Co.—215/17, Samuel Street, Vadgadi, Bombay 3.  
 Vijaysinh Virchand.—248, Samuel Street, Vadgadi, Bombay 3.

## GUNNY BAGS, HESSIAN CLOTH &amp; TWINE MERCHANTS

**KORJI DAMJI.**—Katha Bazar, Oos Gally (Syed Mukri Street), Bombay 9. Phones: 321529 and 591745 (Res.). Grams: "PUNYAGANGA." Dealers in old and new gunny bags, hessian cloth, jute twines, canvas tarpaulins, etc.  
**MORARJI PERAJ & CO., TALPATRIWALA.**—138, Yusuf Meher Ali Road (Musjid Bunder Road), Bombay 3. Phone: 322352. Grams: "TALPATRI." Manufacturers of "ELEPHANT" Brand 100 per cent Waterproof Tarpaulin & Polythene and Paperlined Hessian Bags. Wholesalers Hessian Cloth, Canvas & Jute, Turine, Gunny Bags, Waterproof Paper & Eyelets etc.

**SHAMJI KALYANJI & CO.**—67, Bhandari Street (Koliwada, Mandvi), Bombay 3. Phones: 324737 & 328436. Grams: "SHAMKALYAN." Manufacturers, Suppliers & Commission Agents: New and Second-hand Gunny bags, Hessian Cloth/Jute Twine and empty Cement bags, Tarpaulins, Polythene and Paperlined Waterproof Bags. Branches at Poona, Nagpur and Ahmedabad, Empty Cement Bags Collecting Agents for Associated Cement Cos., Ltd. for Maharashtra, Gujarat & M.P.

## HACKSAW BLADES

**ANGLO AMERICAN MARINE CO. LTD.**—Manufacturers of Hacksaw Blades, Boat Hard Road, Coal Bunder, Mazagaon, Bombay-10. Phone: 377742.  
**BEHARAT ENGINEERING STORES.**—113, Nagdevi Street, Bombay 3. Grams: "UNIONTOOLS." Phone: 323193. Stockists of Elephant Brand Chain Pulley Blocks.

## HANDLOOM &amp; POWERLOOM ACCESSORIES

**KRISHNA TEXTILE STORES.**—19/21, Hamam Street, Fort, Bombay 1. Grams: "DISCIPLINE." Phone: 254348. Mill & Handloom Stores Suppliers.  
 Indo-British Trading Bureau.—7/10, Elphinstone Circle, Fort, Bombay 1.

## HANDLOOM TEXTILES

**E. PEERBHOY & SONS.**—Prop., Indian Duries Emporium, 64, Mohamedali Road, Shahru Castle, Bombay-3, Phone: 323806. Grams: "INDIAWEAVE".

## HARD BOARDS

Anil Hardboards Ltd.—Lakshmi Insurance Building, Sir Phirozshah Mehta Road, Fort, Bombay 1.  
**CITY PLYWOOD DEPOT.**—Opp. Chitra Cinema, Dr. Ambedkar Road, Dadar, Bombay-14. Phone: 442927. "JOLLY" Hardboards, Insulex Insulation Board & Ceiling Tiles and Formica Decorative Laminates.  
**MAHOMEDALLY VALIJI ARSIWALA.**—76, Abdul Rehman Street, Bombay 3. Phone: 325900 and 145, Jambli Mohalla, Babu Khote Street, Bombay 3. Phone: 332467. Dealers in all kinds of Hard Boards.  
**NASH & CO.**—103, Abdul Rehman Street, Bombay 3. Phone: 324963. "Jolly" Hardboards, Insulex Insulation Boards & Ceiling Tiles and Formica, Decorative Laminates.  
 Samir Glass Traders.—21-23, Dhanji Street, Parsi Gully, Bombay 3.  
 Sunderlal & Co.—121, Abdul Rehman Street, Bombay 3. Phone: 325204. Grams: "SUNDERJALI."  
 Tek Trading Corporation.—139, Abdul Rehman Street, Bombay 3.  
 Yusufali Goolam Hoosen Arsiwalla.—106, Abdul Rehman Street, Bombay 3.

## HARDWARE DEALERS AND IRONMONGERS

**A. M. MOTIWALLA & CO.**—213, Nagdevi Street, Bombay 3. Phone: 326760. Shipchangers, Engineering Tools, Hardware & Pipe Fittings Merchants and general stores suppliers.  
 Abbas & Brothers.—51, Bhajipala Street, Bombay 3.  
 Abbas, A., & Brothers.—127, Nagdevi Street, Bombay 3.  
 Abbasbhoi Akbarally & Co.—Kika Street, 85, Gulmawadi.  
 Abbasbhoi Kaderbhoi & Co.—97, Bhajipala Lane, Bombay 3.  
**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL".  
 Abdulhusein Escoofally Contractor.—91/93, Babu Khote Street, Bombay 3.  
 Abdool Husein Jiwahee & Co.—241, Nagdevi Street, Bombay 3.  
 Abdulhusein Kamrudin.—183, Janjlikar Street, Khokha Bazar, Bombay 3.  
 Abdulla A. Baker & Co.—89, Bhajipala Street, Bombay 3.  
 Abdullahbhai Faizullahbhai Ltd.—Khokha Bazar, Bombay 3.  
 Acme Manufacturing Co., Ltd.—Construction House, Wittet Road, Ballard Estate.  
 Adamally Gulamhusein.—Sarang Street, 101, Khokha Bazar, Bombay 3.  
 Adamji Lookmanji (Iron & Steel) Ltd.—Rahimtoola House, Homji Street, Fort.  
 Ahmedally Jivabhai & Co.—86-88, Lohar Chawl.  
 Akbarally, F. H., & Co.—58, Bhajipala Lane, Bombay 3.  
 Akbarally Mohamedally & Co.—316, Abdul Rehman Street, Bombay 3.  
 Alcock Ashdown & Co., Ltd.—Defence Works, Mazagaon.  
 Alladin Virjee Nathani.—Darukhana, Mazagaon Street, Bombay 10.  
 Allied Engineering & Trading Co.—Asian Building, Nicol Road, Ballard Estate.  
 Arco Steels.—Prospect Chambers Annexe, Hornby Road, Fort.  
 Arvinda Trading Co. Private Ltd.—105, Apollo Street, Fort.



# ASGARALI & COMPANY

(Established 1922)

HARDWARE TOOLS AND  
MACHINERY MERCHANTS

Best Guaranteed  
Tools Makers



Office: 166, Saifee Jubilee St., Null Bazar, Bombay-3 BR

SHOP: 171, Mutton Street, Null Bazar, Bombay 3.

Phones: 331847 & 333646 (Res.) Grams: "HANDBLOWER".  
Mandvi, Bombay.

Ashwin Traders.—35/A, Carnac Siding Road, Iron Market, Bombay 9.  
Asian Engineers.—Nagdevi Cross Lane, Bombay 3.  
Associated Machine & Tool Co.—130, Meadows Street, Fort.  
B. C. Hardware Mart.—38, Bibijan Street, Nagdevi, Bombay 3.

**BABULAL & BROS.**—26, Nagdevi Cross Lane, Bombay 3.  
Phone: 323930. Grams: "FIREFLY." Stockists of Abrasives,  
Asbestos Goods, Engineering Tools, Hardware, Mill Gin  
Stores, Pipe Fittings.

Baker, A. M., & Co.—218, Nagdevi Street.

Bakhshiram & Co.—Ahmed Building, 129, Modi Street, Fort.

Balasinar Trading & Industrial Corporation.—Umrigar Building, 82,  
Lohar Chawl.

Balmer, Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate.

Bashimal Kanahyalal.—124, Narayan Dhuru Street, Bombay 3.

Batliloi, C. J., & Co.—319, Hornby Road, Fort.

Batliloi & Company Private Limited.—Regd. Office: Forbes  
Street, P.O. Box 190A, Fort, Bombay-1 (BR.). Phones: 255451  
(6 lines). Grams: BATLIBOICO. Tele: 011-284. City Branch:  
"BATLIBOI HOUSE", 59/61, Nagdevi Cross Lane, Bombay-3  
(BR). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore,  
Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi,  
Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident  
Representatives: RANCHI, Bhubaneswar.

Beardsoll, W. A., & Co., Ltd.—15-16, Sir Phirozshah Mehta Road,  
Fort.

Bharat Engineering Stores.—113, Nagdevi Street, Bombay 3.

Bhasin Brothers.—Court House, 1st floor, Dhobi Talao, Bombay 2.

Bhukhanvala & Sons.—Meadows House, Meadows Street, Fort.

Bhutt Bros.—163, Nagdevi Cross Lane, Bombay 3.

Bombay-Burma Hardware Store.—128, Nagdevi Street, Bombay 3.

**BOMBAY HARDWARE TRADERS.**—79, Narayan Dhuru Street,  
Masjid Bunder Road, Bombay 3. Phone: 327153. Grams:  
"SISTACHAR." Stockists of Hardware, Screws, Bolts, Nuts,  
Shoe Materials, Woodworking & Metal Cutting Saws, Engi-  
neering Stores & Saw Files.

**BOMBAY TOOLS & HARDWARE MART.**—123, Narayan Dhuru  
Street, Bombay-3. Grams: "BOTAPS." Phone: 327122.

Brady, W. H., & Co., Ltd.—Royal Insee. Building, Veer Nariman  
Street, Fort.

Brothers, J. D.—29-33, Lohar Street, Fort.

Budhabhoy Noorbhoy & Co.—199, Abdul Rehman Street.

Builders & Engineers Co.—Amaralville, 3, Lady Jamshedji Road,  
Bombay 16.

Calcutta Iron & Steel Co., Ltd.—68/D Mohamedalli Road, Bombay 3.

C. Amichand & Co.—46A, Abdul Rehman Street, Bombay 3.

C. Bole & Co.—61, Narayan Dhuru Street, Bombay 3.

Central Machine Tools Agency.—43, Nagdevi Cross Lane, Bombay 3.

Chadha, B. M., & Co., Ltd.—Jan Mansion, Sir Phirozshah Mehta  
Road, Fort, P. O. Box 671, Bombay.

Chandulal & Co.—Kathawalla, 313, Samuel Street, Bombay 9.

Chandulal Jethalal & Co.—2, Mirchi Gali, Katha Bazar.

Chandulal Narandas.—96, Kika Street, Bombay 4.

Chasman & Co.—Bell Building, Sir Phirozshah Mehta Road, Fort.

Chhaganlal & Co.—Carnac Bunder, Bombay No. 9. Phone: 20751.  
Grams: "CONTRACTS."

Chimanlal Desai & Co.—Gool Mansion, Homji Street, Fort.

Chimanlal Vrajilal & Co.—House, Iron Market, Bombay 9.

Choksi Brothers.—315, Sandhurst Road, Bombay 4.

Choksi, H., & Co.—106, Meadows Street, Fort.

**CHUNILAL KHANNA & CO.**—Saraswati Niwas, Thakurdwar  
Road, Bombay 2. Phone: 354813. Grams: "BABALALU".

C. P. Doshi & Co.—Bombay Mutual Building, Hornby Road, Fort.

**CURRIM, E. A., PRIVATE LTD.**—Hardware Merchants &  
Ironmongers, 97, Apollo Street, Fort, Bombay 1. Phone:  
253216. Grams: "CAJM." Branch at Calcutta.

Curtis, J. & Co., Ltd.—86-40, Mahalaxmi Bridge Arcade, Bombay 11.  
Dawoodbhai, M., & Bros.—Hararwalla Building, Lohar Chawl.  
Desai, M. S., & Co.—77, Nagdevi Cross Lane, Bombay 3.

**DESAI TUBE & HARDWARE MART.**—41, Nagdevi Cross Lane,  
Bombay 3. Phone: 321606. Grams: "HASTY". Importers  
of pipe fittings, Engineering Stores & Tools, Mill gin Stores  
& Packings & Jointings.

Deviprasad Khandelwal & Co., Ltd.—Iron Jatha, Carnac Bunder.

Dewanchand Hansraj.—105, Narayan Dhuru Street, Bombay 3.

Dewanchand Budhumall.—53/55, Bibijan Street, Bombay 3.

Dohadwalla, R. H., & Co.—145, Nagdevi Street.

Drowet Chowna & Co.—Lentin Chambers, Meadows Street, Fort.

Dubash Freres & Co.—Victoria Building, Parsi Bazar Street, Fort.

Duncan Stratton & Co. Ltd.—5, Bank Street, Fort.

Eastern Tube & Hardware Mart.—123, Narayan Dhuru Street,  
Bombay 3.

Esufally Adamji & Co.—134, Nagdevi Street.

Esufally Kamrudin.—34, Khokha Bazar, Bombay 3.

Fairdeal Hardware Stores.—206-A, Abdul Rehman Street, Bombay 3.

**FAZALBHAI & BROS.**—26, Sarang Street, Bombay 3. Specialists  
in Bolts & Nuts, S.A.E., B.S.F., M.M., B.S.W. and Auto parts  
and Tools. Also exclusively dealing in Cotton Waste and  
Machinery Parts. Suppliers to various Government Depart-  
ments. Grams: "SAZEFEM." Phone: 327280.

**FIDALY GULAMALI.**—Hardware Dealers, Weighing Machi-  
nes & Scales. 163, Janjekar Street, Bombay 3. Phone: 326133.  
Show Room: 41, Sarang Street, Bombay 3.

**F. H. AKBARALLY & CO.**—58, Bhajipala Lane, Bombay 3.  
Phone: 322421. General Hardware Merchants, Dealers in  
Buildings and Workshop Materials Wholesale & Retail  
Suppliers and Commission Agents.

Fleming, John & Co., Ltd.—Sukhadwala Building, 21, Bastion  
Road.

Gannon, Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma  
Gandhi Road, Fort.

Garlick & Co.—Haines Road, Jacob Circle.

G. C. Vora & Co.—107, C. P. Tank Road, Bombay 4.

General Trading Corporation.—36-B, Tamarind House, Tamarind  
Lane, Fort.

General Tubes Ltd.—142-144, Nagdevi Street, Bombay 3.

Globe Stores Co., The.—Sitaram Building, near Crawford Market,  
Hornby Road.

Gowardhanlal Sethi & Sons.—159, Narayan Dhuru Street, Bombay 3.

Great Eastern Trading Co., The.—107, Cawasji Patel Street, Fort.

Greaves Cotton & Co., Ltd.—1, Forbes Street.

Greentose Corporation (India).—Cama Buildings, 24-26, Dalal Street,  
Fort.

Gulamhusain Sulemanji & Co.—Manu Bhuvan, 24, Kika Street,  
Gulawadi.

Haiderbhoy Esmailji & Co.—168, Nagdevi Street, Bombay 3.

Hardware & Sundries Importing Agency.—Hanshaw Building, 19,  
Bank Street, Fort.

Harjimal Kidarnath & Co.—87, Nagdevi Cross Lane, Bombay 3.

Harjimal Nand Lal (Estd. 1811).—75, Nagdevi Cross Lane,  
Bombay 3.

Hatimbhoy, A., & Co.—Argyle Road, Bombay 9.

Hatimbhoy Goolamhussein & Bros.—193, Nagdevi Street.

**HATIMBHOY MOHAMEDALLY.**—Importers of Engineering  
Precision, Carpentry, Smithy, Goldsmiths, Garage and  
Cutting Tools, Suppliers to Governments & Semi-Govern-  
ment Dept. & Technical Institutes. 132, Lohar Chawl, Bombay  
2. Phone: 22587.

Heptoola Noorudin & Co.—152-54, Nagdevi Street, Bombay 3.

Hiralal Gokaldas Dalal & Co.—45, Nagdevi Cross Lane, Bombay 3.

Hoosain & Bros., M. A.—Lakshmi Building, Sir Phirozshah Mehta  
Road, Fort.

Husein Mussa Virjee & Co.—Sheriff Hasam Building, Khoja Mohalla,  
Bombay 9.

Industrial Syndicate.—Lentin Chambers, Dalal Street, Fort.

Iron & Hardware (India) Co.—98, Nagdevi Cross Lane, Bombay 3.

Jacks & Co., Ltd., William.—Hamilton House, Graham Road, Ballard  
Estate.

**JAIRAMDAS & SONS.**—163, Narayan Dhuru Street, Bombay.  
Grams: "JAIRAMDAS." Phone: 323616.

James Tools & Hardware Co.—109-11, Nagdevi Street, Bombay 3.

Jayant Engineering & Mill Stores.—51/53, Industrial House, Nagdevi  
Cross Lane, Bombay 3.

Jayant Metal Manufacturing Co.—152, Lohar Street, Bombay.

Jayantlal & Brothers.—38, Bibijan Street, Nagdevi, Bombay 3.

Kanakia Corporation.—163, Nagdevi Cross Lane, Bombay 3.

Kantilal Bhogilal & Co.—68, Nagdevi Cross Lane, Bombay 3.

Kantilal Sanghvi & Co.—Mherwan Building, Sir Phirozshah Mehta  
Road.

**KERMANI & SONS, F. B.**—132, Sarang Street, Bombay 3.  
Phone: 326663. Grams: "GAROGAR".

Keshavlal Narsidas Jaliwalla.—157, Abdul Rehman Street, Bombay 3.

Khambatty, H. A., & Co., Ltd.—45-47, Lohar Street, Bombay 2.



K. Kirtanlal & Co.—114-16, Zaveri Bazar, Bombay 2.

Kirtilal & Company.—31, Bibijan Street (Barbhai Mohalla), Bombay 3.

**KISHORECHAND OMPRAKASH.**—101, Narayan Dhuru Street, Bombay 3. Phones: 322059 (Office) & 368707 (Res.). Grams: "CHAINPULLY". Importers of Mill Gin Stores and all kinds of Saws. Authorised Stockists, of "GEDORE" Tools, "WARRIOR" Taps & Dies, "NETTLEFOLDS" Products and Sole Distributors for "SPEED" Chain Pulley Blocks for Goa, Mysore, Kerala, Madras, Andhra, Orissa, Bihar, Madhya Pradesh and Rajasthan.

Kishor Trading Co.—145, Narayan Dhuru Street, Bombay 3.

Lookmanji Moosaji.—Diamond Building, Lohar Chawl, Bombay 2.

M. Moiz & Co.—Nakhoda Roghay Market, 8, Nagdevi Street, Bombay 3.

**MACHINE TOOLS & IMPLEMENTS.**—93-95, Narayan Dhuru St., Bombay 3. Phones: 322268 & 322269. Grams: "MACH-TOOLS." Telex: 292 BY.

Maneckchand Jivraj & Co.—Darukhana, Mazagaon, Bombay.

Mangaldas & Sons.—Lentin Chambers, Dalal Street, Fort, Bombay.

Manseta, N., & Bros.—165, Lohar Chawl.

Marine & Mills Agencies.—197, Nagdevi Street, Bombay 3.

Mashruwalla, C. M., & Co.—172/74, Nagdevi Street, Bombay 3.

**M. DAWOODBHAI & BROS.**—102, Lohar Chawl, Bombay 2. Phone: 20179. Manufacturers of Stainless Steel Bolts & Nuts; Star Washers; Cap Screws; Grub Screws; M. M. Bolts & Nuts in all Metals.

Mehta & Co., S.—Anees Chambers Annexe, Carnac Road, Bombay 1.

Mehta Hardware Mart.—81-83 Nagdevi Street, Bombay 3.

Mehta, H. P., & Co.—112, Nagdevi Street, Bombay 3.

Mehta Textile & Hardware Stores.—158/160, Narayan Dhuru Street, Bombay 3.

Modern Machine Tools Co.—88, Nagdevi Cross Lane.

Modern Mill Stores.—97, Nagdevi Street, Bombay 3.

Modi Trading Co.—163, Nagdevi Cross Lane, Bombay 3.

Molochbhai, Ahmed S., & Sons.—281, Nagdevi Street.

**MULLA TAYEBALI MULLA NOORBHAI.**—175, Janjlikar Street, Bombay 3. Phone: 325934. Grams: "TANOOR." Specialists in hinges, screws, and sole selling Agents for Brass Cups & Square hooks No. 110, Curtain Wire "MEDORA" and "457" Red Tin, M.S. Corrugated Corner, Door Tracks of all kinds, M. S. Washers of all sizes, etc.

Nanlal Ambalal & Co.—69, Nagdevi Street.

Natarwalla & Co., S. B.—Bombay Mutual Annexe, Gunbow Street, Fort.

New India Hardware Mart.—152, Narayan Dhuru Street, Bombay 3.

Ochhavlal, B., & Co.—86, Nagdevi Street, Bombay 3.

Odhavji, B., & Co.—Carnac Bunder, Argyle Road, Bombay 9.

**ORIENT PAINT & HARDWARE MART.**—67, C. P. Tank Road, Bombay 4 (BR). Phone: 333768. Grams: "ADHIKAR." Bombay. Importers, Agents, Stockists, Suppliers, Dealers in Iron, Hardware, Bolts, Nuts, Screws, Specialists in "Steel Wood Screws." Stockists of Nettlefolds Screws, Rivets, G.K.W. Bolts & Nuts. Agents for National Screws. Specialist in Manufacturing of Hardware & Machine Parts to Customers Specification, Blue Prints or Samples.

Paradise Trading Corp.—73/75, Tamarind Lane, Fort, Bombay 1.

Paramount Hardware Mart.—Carnac Bunder, Bombay 9.

Paramount Tools Company.—8, Narayan Dhuru Cross Lane, Bombay 3.

Parekh & Parbhoo Ltd.—Khetwadi Back Road, Bombay 4.

Parekh, P. S., & Co.—108, Nagdevi Street.

Patel, U. D., & Co.—11, Bank Street Building, Fort.

Pavri, J. K.—10, Karim Chambers, Hamam Street, Fort.

P. Ratilal & Co.—43, Dhanji Street, Moti Mahal, Bombay 3. Phone: 32700.

**RAMCHAND MATHRADAS AGGARWAL.**—30, Khokha Bazar, Sarang Street, Bombay 3. Phones: 326075 & 328942. Grams: "PIPEDIE." Hardware, Tools, Fittings, Pipes, Compressors, Machinery Implements, Iron & Steel, etc.

**RAMESH TRADING CORPORATION.**—51/53, Nagdevi Cross Lane, Bombay 3. Phone: 325189 (Office) & 473862 (Res.). Grams: "RAMESHCO." Authorised Stockists of "WARRIOR" Taps & Dies and "GEDORE" Hardware Tools, ABC, NBC and BBL Bearings. Dealers in all kinds of Ball, Roller and Taper Roller Bearings and Band Saws.

Rasiklal, K., & Co.—Mehta Building, Medows Street, Fort.

Rasiklal Shah & Co.—93, Narayan Dhuru Street, Bombay 3.

R. C. Traders.—Lentin Chambers, Dalal Street, Fort.

Real Paint & Hardware Mart.—105, C. P. Tank Road, Bombay 4.

**RELIANCE TRADING CO.**—Vithal Sayana Building No. 1, Lohar Street, Bombay 2. Phone: 38751. Grams: "STORE-TRADE." Engineering Stores, Hardware & Taps & Die Merchants; Manufacturers of Canteen Embossed Metal tokens.

Reliance Iron & Hardware Co.—11, Narayan Dhuru Cross Lane, Bombay 3.

Repute Engineering Co.—165, Narayan Dhuru Street, Bombay 3.

Richardson & Cruddas Ltd.—Byculla Iron Works, Byculla.

R. Vadilal Desai & Co.—15-27, Ratan Building, Bibijan Street, Nagdevi, Bombay 3.

Sachin & Co.—25 Bank Street, Bombay 1.

Sanghani & Co.—178-180, Abdul Rehman Street.

Sant Ram Biasdev Co.—8, Narayan Dhuru Cross Lane, Bombay 3.

Shah Chhaganlal Ladhuhai.—58, Mudi Bazar (Mandvi), Bombay 3.

**SHUMS TRADING AGENCY.**—26, Tava Lane, Bombay 3.

Exporters, Dealers in Hardware, Tools, Bolts, Nuts, Rivets, Files, Spring Washers, Nails, Pipe-Fittings, Non-Ferrous Metals: Mfrs. of Allen Bolts, Screws, etc. Phone: 328558.

Shantilal H. Kamdar & Co.—59, Bibijan Street, Bombay 3.

Sharafally & Sons.—73/75, Bhajipala Lane, Bombay 3.

Shivdayal Bilbhaderdas.—96, Narayan Dhuru Street, Bombay 3.

Shree Krishna Trading Co., Ltd.—Alli Chambers, Medows Street, Fort.

Siriram & Co.—97, Narayan Dhuru Street, Bombay 3.

Sivramkrishnan, M.—Hazi Manzil, 82-86, Abdul Rehman Street, Bombay 3.

Soho House.—Vithal Sayana Building, Lohar Street, Bombay 2.

Soleim Hardware Mart.—155, Nagdevi Street.

Somnath, C., & Co.—Dr. D'Silva Road, Dadar (Western Railway), Bombay.

Standard Metal Works Ltd.—17, Falkland Road, Low Level, Tardeo.

Standard Trading Co.—Vithal Sayana Building No. 2, Lohar Street, Bombay 2.

Standard Tube Co., Ltd., The.—123, Nagdevi Street, Bombay 3.

Stanley Works, The.—43-44, Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

Steelyard Limited.—Rahimtoola House, Homji Street, Fort.

Talib & Co.—Talib House, 104, Nagdevi Street, Bombay 3.

Tarachand Gupta & Bros.—Narayan Dhuru Street, Bombay 3.

Teka Hardware & Engineering Corp.—82/86, Abdul Rehman Street, Bombay 3. Phone: 326886. Grams: "TEKATOOLS". Agents for Tekrom Railing Patti (Door Tracks) in 10 ft. length iron coppered. English heavy Type and Brass Rod Brackets Nickel Plated for curtain rod, also nickel plated tubes 'Lion Brand' 12 ft. long standard thickness.

Textile Stores & Hardware Mart.—32, Bibijan Lane, Nagdevi Street.

Thakorlal & Co.—47, Nagdevi Cross Lane, Bombay 3.

T. M. Tyabji & Brothers.—Hamam House, 32-38, Hamam Street, Fort.

Tirathram Kashmirilal.—89, Nagdevi Cross Lane, Bombay 3.

Trade (India) Corporation.—58, Mohamedalli Road, P.O. Box No. 3231, Bombay.

Trivedi & Co.—Navsari Chambers, Woraby Road, Fort.

Turner, Heare & Co., Ltd.—Gateway Building, Apollo Bunder.

Tyebally Dawoodji.—(Estd. 1865), 87, Sarang Street, Bombay 3.

U. D. Patel & Company.—11, Bank Street, Fort, Bombay.

United Tube & Hardware Co.—146, Nagdevi Street, Bombay 3.

**UNIVERSAL TRADING CO.**—General Hardware Merchants and Order Suppliers, Stockists of Rubber Goods, Asbestos Goods, Jointing Sheets, Shovels, Ebonite and Fibre Sheets and Rods, Engineering Tools, Twist Drills, Hammers, Spanners, Grinding Wheels, etc. Mohamedi House, 79, Mohamedalli Road, Bombay 3. Phone: 322537. Grams: "IRONMART." Branch Office: No. 4, Narayan Dhuru Cross Lane, Bombay 3.

Vasi Shums & Co.—Vasi Building, 165-167, Nagdevi Street.

Vinod Mehta & Co.—22B, Noble Chambers, Parsi Bazar Street, Fort.

Viswabharati Trading Co.—Kumta Street, Ballard Estate, Bombay 1.

Vithaldas G., & Co.—60, Nagdevi Cross Lane, Bombay 3.

Vora Brothers.—34, C. P. Bibijan Street, Bombay 3.

Vora, J. C., & Co.—107, Tank, Bombay 4.

**V. CHUNILAL & CO.**—19, Bibijan Street, Bombay 3. Phone: 328370. Bolts, Nuts, Hardware & Tool Merchants.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

Zaveri, C. A., & Co.—44, Abdul Rehman Street.

## HARDWARE IMPORTERS

**A. A. MORBIWALA & CO.**—109/111, Abdul Rehman Street, Bombay 3. Phone: 323280. Grams: "VARNISH" (MD). Direct Importers & Stockists of Stitching Wires of all kinds.

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326986. Grams: "ALERTDEAL."

**ASGARALI NURUDDIN & CO.** (ESTD. 1916).—95, Nagdevi Street, Bombay 3. Phone: 322609, Res. 532753. Sanitaryware, Hardware & Pipe Fittings Merchants.

C. Parekh & Co.—103, Bhajipala Lane, Bombay 3.

Dinkar Trading Co.—95/97, Bhandari Street, Bombay 3.



**HEMANT TOOLS TRADING CO.**—33, Bibijan Street, Bombay 3. Grams: "LACING." Phone: 321174. Importers & Stockists of Chain Pulley Blocks, Garage Tools, Fibre Sheets, Rods, Diamond Dressing Tools, Precision Tools etc.

**HINDUSTAN TOOLS & HARDWARE MART.**—126, Lohar Chawl, Bombay 2. Phone: 20666. Grams: "FAKIRSAI." Importers, Stockists & Government & Railway Suppliers of General Engineering, Precision, Measuring & Carpenter Tools. Also Suppliers to Technical Colleges & Institutions. Branch Office: 154, Narayan Dhuru Street, Bombay 3.

Industrial Development Corporation.—73, Bank of Baroda Building, Phalton Road, Bombay 1. Phone: 265529.

International Tools & Hardware Stores.—84, Kika Street, Bombay 4. Phone: 73636; Grams: "SANITARY."

Ispat Traders.—129, Sarang Street, Bombay 3.

**JAIRAMDAS & SONS.**—163, Narain Dhuru Street, Bombay. Grams: Phone: 323616.

James Tools & Hardware Co.—109-111, Nagdevi Street, Bombay 3.

Kantilal Bhogilal & Co.—68, Nagdevi Cross Lane, Bombay 3.

M. Moiz & Co.—Nakhoda Roghay Market, 8, Nagdevi Street, Bombay 3.

Mangaldas & Sons.—Lentin Chambers, Dalal Street, Fort, Bombay.

**NAGDEVI TOOL-STEEL MART.**—186-88, Nagdevi Street, Bombay 3. Phone Nos.: 323023 and 327058. Grams: "TENDERERS."

**NATVERLAL & BROS.**—Hardware Tools & Pipe Fittings Merchants and Direct Importers, 180, Nagdevi Street, Bombay 3. Phone: 325910. Grams: "NATVERBROS."

New India Hardware Mart.—152, Narayan Dhuru Street, Bombay 3.

Shah Trading Corporation.—Oomrigar Building, opp. Crawford Market, Bombay 3.

Shalebhoy Tyebjee & Sons.—12, Bruce Street, Bombay 1.

## HATS AND CAPS MFRS. AND DEALERS

Calcutta Sola Hat Agency.—Dwarkanadas Building, Mangaldas Road, Bombay 2.

Delhi Hat Works.—206-208, Carnac Road, Bombay 2.

Kashmir Govt. Arts Emporium.—Sir P. M. Road, Bombay 1.

**LUIZ.**—Opp. G. T. Hospital, 280, Carnac Road, Bombay 2. Phone: 20447. Hatters, Uniform Cap & Badge Makers. Contractors to Bombay State Police, The Indian Navy and Railways.

Neorhamomed Manji Topiwala.—255, Ibrahim Rahimtoola Road. Dealers in Furs, Caps and Materials.

Popular Sola Hat Works.—Baria Building, opp. Crawford Market.

## HEAT EXCHANGERS

**ITALAB ENGINEERING PRIVATE LTD.**—Aban House, 6th Floor, 25, Rope Walk Lane, Bombay 1; Phone: 253319; Water-Water Heat Exchangers, Air-Compressors; After-coolers oil Heaters/Coolers, Freon Condensers, Chillers Process, Vapour Condensers Subcoolers, Reboilers, etc.

## HEAT RESISTING PAINTS

**STAR PAINT & OIL INDUSTRIES.**—Crescent Chambers, 56, Tamarind Lane, Bombay 1; Mfrs. of silvex Industrial & Marine Paints & Synthetic Enamels; Specialists in Aluminium Paint, Multi-purpose, Heatex Aluminium Paint, High Temperature Heat Resisting upto 1200°F. & Rubberex Rubber Paint (for Chemical Resisting). Grams: "STAR-PAINT." Phone: 253493.

## HEAT TREATMENT AND METAL PROCESSING PRODUCTS

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort, Bombay 1; Phone: 254433; Grams: "DAT-NARE."

**HARDCASTLE & WAUD MANUFACTURING CO. PRIVATE LTD.**—Alice Building, 339, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 255771. Grams: "WAUDCO."

**HARDCASTLE, WAUD & CO., PRIVATE LTD.**—Alice Building, Dr. Dadabhai Naoroji Road, Fort, Bombay 1.

Imperial Chemical Industries (India) Ltd.—Imperial Chemical House, Ballard Estate.

Pioneer Equipment Co. Private Ltd.—139, Medows Street, P.O. Box No. 1909, Fort.

Thos. W. Ward (India) Ltd.—Marshall Building, Ballard Road, Ballard Estate, Fort.

## HESSIAN CLOTH, CANVAS, JUTE & TWINE, ETC.

**MORARJI PERAJ & CO., TALPATRIWALA.**—138, Yusuf Mehar Ali Road, (Musjid Bunder Road), Bombay-3. Phone: 322352. Grams: "TALPATRI." Manufacturers of "ELEPHANT" Brand 100 per cent Waterproof Tarpaulin & Polythene and Paper Lined Hessian Bags. Wholesalers Hessian Cloth, Canes & Jute, Twine Gunny Bags, Waterproof, Paper & Eyelets, etc.

## HIDES AND SKINS

Edgar Handley and Co. Private Ltd.—135, Medows Street, Fort, Gevias, Basil M. P.—P. O. Box 263-A, Bombay Mutual Building, Hornby Road, Fort.

Hashambhoy Aloo Mahomed & Son.—Dostmahomed Building, Nishanpada Road, Khadak, Bombay 9.

Mahomedali Esmail.—Stock Exchange Bldg., Apollo Street, Fort.

Western Mercantile Co.—38, Western India House, Sir Phirozshah Mehta Road, Fort.

## HOISTING MACHINERY (LIFTS & HOISTS)

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL."

Batliboi & Company Private Limited.—Regd. Office: Forbes Street, P.O. Box 190-A, Fort, Bombay-1 (BR.). Phones: 255451 (6 lines). Grams: BATLIBOICO. Telex. Tele: 011-284. City Branch: "BATLIBOI HOUSE", 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, Bhubaneswar.

**CONSOLIDATED ENGINEERING EQUIPMENT CO.**—Union Co-operative Insurance Society Building, Sir Phirozshah Mehta Road, Bombay 1. Phone: 255333. Grams: "CONE-QUIP." Direct Importers of Overhead Electric Cranes & Hoists of all types.

**DODGE & SEYMOUR (INDIA) PRIVATE LTD.**—"KRUPA-NIDHI", 9, Wittet Road, Ballard Estate, Bombay-1 BR. Phones: 263674 & 365479. Grams: "EXIMCO."

**ELECTRIC CONSTRUCTION & EQUIPMENT CO., LTD.**—Neelkanth, Opp. Marine Lines Station, 98, Marine Drive, Bombay-2. Phone: 243406. Grams: "COECELL." Sole Agents in India for Schindler & Co., Ltd., CH-6030-Ebikon-Lucerne, Switzerland.

Fleming John & Co., Private Ltd.—P. B. No. 76, Bombay 1. Phone: 261153.

Gujarat Trading Syndicate.—India House, Fort, Bombay 1. Grams: "GUTRASY."

**HERCULES HOISTS LIMITED.**MANUFACTURERS OF "INDEF", Pulley Blocks, Electric Hoists & Travelling Trolleys; Bombay-Agra Road, Bombay 78.

**INDIAN LINK CHAIN MFRS. LTD.**—Bombay-Agra Road, Bhandup, Bombay 78. Manufacturers of "HERCULES" brand Electrically Welded Mild, Higher Tensile and Alloy Steel Chains. Chains Manufactured strictly according to Indian, British and German Standards. Also Manufacturers of precision Calibrated Chains for Chain pulley Blocks, Hoists, and Conveyors, all types of Slings, other lifting equipment and Cast Steel Stud link anchor Chains with all fittings. Phone: 581832. Grams: "INLINCH", Bhandup.

**TAK MACHINERY LTD.**—Manufacturers of Electric Overhead Travelling Cranes; Electric Hoists (Wire-rope & Chain types), Air Hoists, Conveying Equipment; Office: Janmabhoomi Bhavan, Ghoga Street, Fort, Bombay 1. Works: Industrial Estate, Ambarnath (C.R.).

Voltas Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

## HOMOEOPATHIC MEDICINES

Roy & Co.—HOMOEOPATHS.—(Estd. 1869), 176, Princess Street, Bombay 2.

## HOSES (RUBBER & CANVAS)

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL."

**AMIRUDIN SHALEBHAY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay 1. Phone: 25-2952/25-4103. Grams: "PILOTACE."

**AMRATLAL CHEGANLAL & CO.**—143, Nagdevi Street, Bombay 3. Phone: 326008. Grams: "EKADASHI." Dealing in Suction, Delivery & Fire Hoses, Surgical, Rubber & Plastic Tubings & Sheetings.

**BOMBAY MERCANTILE CORPORATION.**—211-217, Nagdevi Street, Bombay 3. Phone: 325982. Grams: "CORPBOMBER." Distributors for "STAR" Brand Transmission Beltings and Hoses and distributors of Goodyear Hoses.



Calcutta Iron & Steel Co. Ltd.—68/D, Mohamedalli Road, Bombay 3.  
**EASTERN STORES & TRADING CO. PRIVATE LTD.**—115, Nagdevi Street, Bombay 3. Phones: 32215/16. Grams: "ENERGY."  
 Fleming John & Co., Private Ltd.—P. B. No. 76, Bombay 1. Phone: 261153.

**JIVRAJ & VRAJLAL**—122, Nagdevi Street, Bombay 3. Phone: 325138 (Shop) & 30932 (Res.). Grams: "SANIPIPES."  
 P. Ratilal & Co.—43, Dhanji Street, Moti Mahal, Bombay 3.

**PREMIER RUBBER & CABLE INDUSTRIES**—Jamal Building, 211, Nagdevi Street, Bombay 3. Phone: 38551. Grams: "RUBBERGOODS." Manufacturers of "Premier" Rubber Hose, Pipes (Delivery & Suction), Petrol & Oil.  
 Richardson & Cruddas Ltd.—Byculla Iron Works, Bombay.

**ROYAL HARDWARE MART**—108, Nagdevi Street, Bombay 3. Phones: 325221 & 323464. Grams: "MANILAROEPE." Distributors for "VENUS" Brand Hoses, suction, delivery, garden, Pneumatic, acid and oil resisting "NEOPRENE" Hoses and also Dunlop Hoses.

Shalebhoy Tyebjee & Sons.—12, Bruce Street, Bombay 1.  
 Tahira Industries (India) Private Ltd.—53, Queen's Road, Bombay 2.

**VIKRAM & CO.**—258, Nagdevi Street, P. O. Box No. 3266, Bombay 3-BR. Phone: 322981. Manufacturers' Representatives, All types of Hose Fittings; Authorised Distributors for for "GOODYEAR," Transmission Beltings, Vee-Belts, Link Belts, Hoses, etc.

### HOSIERY MANUFACTURERS AND DEALERS

Ahmed Ebrahim Bros.—882, Chukla Street, Bombay 3.  
 Akbarally Ebrahimji Pharmacy & Department Store.—45/47, Veer Nariman Road, Fort, Bombay.  
 Bhagvandas Chatrabhuj & Co.—20, Hamam Street, Fort.

**BORIVLI HOSIERY MILLS (Estd. 1920)**—Office: Dahanukar Building, 480, Kalbadevi Road, Bombay 2. Phone No. 20414. Mills at Borivli, Western Rly. Phone No. 661135.

Cawnpore Mills Depot.—Churchgate House, Churchgate Street, Fort.  
 Chhaganlal Vishram & Co.—107-109, Chakla Street.  
 "Crawfords"—280, Carnac Road, Bombay 2.

Chunilal Mulchand & Co.—Waterloo Mansion, Mayo Road, Fort, Bombay.

Dave, J. M., & Co.—Kanta Terrace, Silk Bazar, Kalbadevi Road.  
 Haji Ebrahim Haji Mohammad B.—13, Bhajipala Lane, Bombay 3.  
 Haroon & Co.—19, Zakeria Masjid Road.  
 Hassaram & Co., K.—New Silk Bazar, Kalbadevi Road, Bombay 2.

Hukamchand Chanderbhan.—1st Floor, Hira Building, opp. Crawford Market, Carnac Road.

Jewan Bukhsh Mohammed Jan.—99, Chakla Street, Bombay 3.  
 Katrak Hosiery Works.—167, Lamington Road, Bombay 7.  
 Ladhahhal Ravji & Bros.—41, Advani Chambers, Sir Phirozshah Mehta Road, Fort.

Mansukhlal Kantilal & Co.—185, Mulji Jetha Building, Princess Street.  
 M. Daldas & Sons.—190, Princess Street.

**MENORA HOSIERY WORKS PRIVATE LTD.**—Manufacturers of Woollen, Nylon, Terylene and Orlon Knit Wears, 75, Nehru Road, Bombay 51; Phone: No. 57-13.8-79.

Modern Hosiery Works.—Dhobiwadi, Thakurdwar.  
 Mohanlal, D., & Co.—Nariman Building, near P. O., Kalbadevi.  
 Parmanand Gordhandas & Co.—280, Carnac Road, Bombay 2.  
 Patel Hosiery Mills.—7-10, Botawala Building, Elphinstone Circle, Fort.

Pavri Sons & Co.—93-97, Bazar Gate Street, Fort.  
 Popular Hosiery Works.—98B, Lady Hardinge Road, Matunga (Western Rly.), Bombay 16.

Pratapral & Co.—4, Swadeshi Market, Kalbadevi Road, Bombay 2.  
 Rajsi Bros.—Opp. Electric House, Colaba Causeway.  
 Shanghvi & Sons, N. H., (Estd. 1929).—47-48, 65-66, Swadeshi Market, Kalbadevi Road.

**SHREE JAM HOSIERY WORKS PRIVATE LTD.**—30, Old Hanuman Lane, Bombay 2. Factory: Borivli, Bombay. Phone: Office: 38954. Factory: 661157. Grams: "SUGOPHI," Bombay. Mg. Directors: Jayraj Kanji & Pranjivandas Sunderdas. Cotton & Rayon vests, drawers, shorts, cardigans and jumpers in interlock, net, Airtex and terry qualities; equipment: 43 Knitting machines; own bleaching, dyeing and finishing plant.

Sukan Haji Mahomed & Co.—Kanta Terrace, 529, Kalbadevi Road, Bombay 2.

Surat Hosiery & Printing Works.—Sayee Bhuvan, 143, Princess Street.

Trivedi, R., & Co.—28, Lalsingh Building, Lohar Chawl.  
 Utoomal & Aseudamal Co.—Bombay Mutual Annexe, Gunbow Street, Fort.

Vashani Cloth Stores.—Prospect Chambers, 313, Hornby Road, Fort.  
 Vasi Bros. & Co.—Topiwalla Mansion, Mohamedally Road, Bombay 3.  
 Vaswani (India) Ltd.—496, Kalbadevi Road, Bombay 2.

West End Shop.—234-236, Carnac Road, Kerawalla Mansion, opp. Police Commissioner's Office, Bombay 2.

Western Link Co.—19, Bank Street, Fort.

Yacob Ahmed Bros.—Topiwalla Mansion, Mohamedally Road.

### HOSPITAL EQUIPMENT & SUPPLIES

Akbarally Ebrahimji.—38/C, Cawasji Patel Street, Fort, Bombay.  
 Bole Brothers.—49, Princess Street, Bombay 2. Phone: 25316.

**BRIGHT BROTHERS PRIVATE LTD.**—156-A, Tardeo Road, Bombay 34; Grams: "BRIBOS." Phones: 378548, 378549, 378540; Mfrs. of Polythene Buckets, Basins, Mugs and Carboys for Acids and Chemicals.

**DIAMOND SURGICAL DRESSINGS WORKS, THE.**—381, Arthur Road, Bombay 11. Phone: 374636; Manufacturers of Surgical goods & Dressing & Sanitary Towels.

**DOCTOR & CO.**—Bombay Mutual Terrace, 534, Sandhurst Road (Near Sandhurst Bridge), Bombay 7. Phone: 357098. Grams: "DIATHERMY." Suppliers of all Hospital Equipments, Apparatus and Appliances.

**D. SHAH & CO.**—24, Sardar Griha Bldg., Carnac Road, Bombay 2. Phone: 30054. Grams: "SCIENCAID." Hospital & Laboratory Furnishers. Distributors for Karl-Kaps, Wetzer Microscopes. Specialists in Bacteriological Laboratory Equipment.

Fairdeal Surgical Corporation.—106, New Citizen Bank House, Palton Road, Bombay 1.

G. K. Kansara.—118, Kansara Chawl, Kalbadevi, Bombay 2.

I.C.I. (India) Private Ltd.—P. B. No. 310, Bombay 1.

**INDIAN OXYGEN LTD.**—Ghatkopar (Bombay-Agra Road), Bombay 77-AS; Phones: 582641 (7 lines), 582648, 582549 & 582782; Grams: "INDOXCO." Ghatkopar; Suppliers of Medical Apparatus for Anaesthesia, Analgesia & Oxygen Therapy and Medical Oxygen.

Jagkumar & Co.—Prospect Chambers Annexe, Hornby Road, Fort.

**JANAK MANUFACTURING WORKS.**—Antop Hill, Wadala, Bombay 31. Manufacturers of Complete range of Hospital Steel Furniture which includes Ward Furniture, Operation Tables and Invalid Equipments. Phone: 440171. Grams: "JANAKBED" (MT). Showroom at Kastur Nivas, 26/B, French Road, Off Hughes Road, Chowpatty, Bombay 7.

Kanchanlal Maganlal & Co.—Bode Chawl, Princess Street, P.B. No. 2029, Bombay 2.

Kapadia Brothers.—Kalan Building No. 3, Kandewadi, Bombay 4.

**NATIONAL STEEL EQUIPMENT CO.**—8, Ketrak Road, Wadala, Bombay 31. Phones: Office: 441755 & 442139; Factory: 442973. Grams: "BEDLOCKER," Bombay-Wadala. Manufacturers of Pressure Steam Sterilizers & Autoclaves, Pyrogen-free Water Stills, Premature Baby's Incubators, Complete range of Industrial Heavy-duty Catering (Kitchen) Equipment and fully automatic Packaged Boilers. Branches: Delhi, Calcutta, Madras.

**POLAR INDUSTRIAL CORPORATION.**—Shree Laxmi Woollen Mills Estate, Off Haines Road, Bombay 11. Phone: 371937. Grams: "COVERSLIPS." Manufacturers of Precision Laboratory Hot Air Ovens, Incubators, Water Stills (Automatic), Water Bath (Electrical), Kjeldahl Assemblies, Sand Bath, Industrial Dryer, "Blue Star" Micro Slides, Cover Glass & Microscope, etc.

Raj-Der-Kar & Co.—Commissariat Building, Hornby Road, Fort. For Research and Industries. Phone: 27304.

Reliance Electric & Hardware Stores.—55, Krishna Bhuvan, Lohar Chawl.

Salomahomed Padamsee & Co.—141, Chakla Street, P.O. Box 3131, Bombay 3.

**SHAH & CO., M.**—Kanji Mansion, Sandhurst Road, Bombay 4. Phone: 351834.

Steelmade, Dr. Annie Besant Road, Worli, Bombay 18.

Williams Jack & Co., Ltd.—Hamilton House, Ballard Estate, Bombay 1.

### HOTELS AND RESTAURANTS

Airlines Hotel.—Churchgate Reclamation, Bombay 1.

Ajanta Restaurant.—9, Mangalore Street, Ballard Estate, Bombay 1.

**AMBASSADOR HOTEL.**—Churchgate Extension, Bombay 1. Phone: 241131 (10 lines). Grams: "EMBASSY." Most modern & up-to-date hotel in the East.

Aryanivas Hindu Lodging and Boarding House.—Opp. Vithalwadi, Kalbadevi Road.

Astoria Hotel.—Churchgate Reclamation, Bombay 1.

Bentley's Hotel.—17, Oliver Road, Colaba, Bombay 1.

Berrys Restaurant.—Churchgate Extension, Bombay 1.

Bombay Lodge.—Borbhat Lane and Girgaum Road Junction, Girgaum, Bombay 4.



Bombelli's Swiss Confectionery.—63, Warden Road, Bombay 26.  
 Brandon & Co., Ltd.—Elphinstone Bldg., Veer Nariman Road, Bombay 1.  
 Bristol Grill Private Ltd.—Laxmi Buildings, Sir Phirozshah Mehta, Road, Fort.  
 Chimanlal Popatlal Minawala.—255, Zaveri Bazar, Ghia Mansion, Bombay 2.  
 Chetana.—34, Rampart Row, Fort.  
 Chez Caroline.—Dhanraj Mahal, Apollo Bunder, Bombay 1.  
 Elphinstone Hotel.—Gulshan Chambers, Hornby Road, Fort.  
 Empire Hindu Hotel.—Hornby Road.  
 Eros Theatre & Restaurant Private Ltd.—Cambata Building, Queen's Road, Churchgate Reclamation.  
 Faletti's Italian Cafe.—Cusrow Baug, Causeway, Bombay 1.  
 Frederick's Hotel.—Lansdowne Road, Apollo Bunder, Fort.  
 Gaylord Restaurant.—May Fair, Churchgate Street, Bombay 1.  
 George Restaurant.—20, Apollo Street.  
 Girgaum Lodge.—47F, Khotachi Wadi, Opp. Majestic Cinema, Bombay 4.  
 Gourdon & Co.—Rehmat Manzil, Churchgate Reclamation, Bombay 1.  
 Grand Hotel (Bombay), Ltd.—Ballard Estate, Fort.  
 Hotel Regal.—233, Frere Road.

**HOTEL WALDORF.**—Arthur Bunder Road, Colaba, Bombay. Luxurious Hotel on Continental System of Room and Breakfast, Meals Optional, Spacious airy rooms, attached private Baths with Shanks Fittings, hot and cold showers twenty-four hours. Each room with separate entrance, balcony and telephone. Dining room, Permit room and some residential rooms air-conditioned. Ladies hair-dressing, air-conditioned Beauty Parlour, Luggage room, Weighing machine, Laundry and Taxies available on Premises. Phones: 211033-34-35. Grams: "HOMELINESS."

Ideal Restaurant.—Alice Building, Hornby Road, Fort.

Juhu Country Hotel.—Juhu, near Santa Cruz.

**JUHU HOTEL PRIVATE LTD.**—Juhu Beach, Bombay 54. Open air Restaurant, sea bathing facilities. Phone: 571321, 571322, 572071, 572723. Grams: "SANDYBEACH," Bombay 54. Board of Directors: Mr. Roshanlal and Mr. Chamanlal. Manager: K. Raghavan.

Kamling Chinese Restaurant.—"Nagin Mahal", Churchgate Reclamation.

Kashmir Hotel.—Dhobi Mahal, Dhobi Talao.

Kerawalla Chamber's Guest House.—Strand Road, Bombay 1.

**KHYBER RESTAURANT.**—For the best Indian food, in Town "KABAB" is a speciality. Continental Food, Tandoori Chicken, Moglai and Punjabi Dishes served. Outside Catering Undertaken, 145, Mahatma Gandhi Road, Opp. Kala Ghoda, Bombay-1. Phones: 251016, 257207 & 250994.

King George VI Restaurant.—Noor Mahal, King's Circle, Matunga.  
 Kwaliti Restaurant & Ice Cream Company.—Causeway, Colaba, Bombay 1.

Ladies Hostel.—Maher, Gokhale Road, Cross Street II, Opp. Dadar Portuguese Church, Bombay 28.

Lawrence Hotel.—Ashokumar House, Rampart Row, Bombay 1.

Lentin Court Hotel.—Strand Road, Apollo Bunder, Bombay 1.

Leopold Cafe & Stores.—No. 6, Colaba Causeway, Apollo Bunder.

Lessers Boarding House.—Soona Mahal, Marine Drive, Bombay 1.

London Hotel.—323, Grant Road, Bombay 7.

Madhavashram.—18, Parekh Street, Girgaum, Bombay 4.

Majestic Hotel.—Esplanade, Museum.

Mama Kane's Swatchha Upahar Griha.—Dadar B.B., Bombay 28.

**METROPOLE HOTEL.**—Palton Road, Opp. Crawford Market, Bombay 1. Approved by the Bombay Municipal Corporation as 1st Grade Hotel, Air-conditioned rooms also available. Telephone in each room. Phones: 264040 and 266338-9. Grams: "MYHOTEL."

Modern Hindu Hotel.—12, Wallace Street, Fort.

Morenas & Co.—69, Mahatma Gandhi Road, 22, Meadows Street, Fort.

National Hindu Hotel.—Frere Road, opp. Tram Junction, Fort.

New Coronation Durbar Hotel.—Near Novelty Cinema, Grant Road Tram Terminus.

New Empire Restaurant, Stores & Bakery.—134, Hornby Road.

New Empire Stores & Restaurant.—Rustom Mahal, Tram Terminus, Dadar.

New Welcome Hindu Restaurant.—Meadows House, Tamarind Lane, Fort.

New World Chinese Restaurant.—Gulestan, opp. Metro Cinema, Dhobi Talao.

Nrisinha Hindu Lodge.—177-179, Hornby Road, Fort.

Orient Hotel.—Orient Hotel Building, Crawford Market.

Outram Private Hotel.—Menkwa Building, Outram Road, Fort.

Parisian Dairy Company.—Soona Mahal, Marine Drive, Bombay 1.

Plenic Cottages Restaurant.—Versova, near Andheri.

Purehit Hotel.—Parekh Mahal, Churchgate Street.

Purehit Restaurant & Stores.—Krishna Building, Fort Street, Fort.

Pyrke's Apollo Hotel.—Lansdowne Road, Apollo Bunder.

Railway Hotel.—Charni Road.

Regent Hotel.—Ballard Pier.

Ritz Hotel and Restaurant.—Churchgate Reclamation, near Eros Cinema, Bombay.

Royal Guest House (Lodging & Boarding).—Lady Hardinge Road, opp. Rivoli Cinema, Mahim, Bombay 16.

Royal Hotel.—Hassam Chambers, Parsi Bazar Street, Fort.

Santacruz Airport Restaurant.—Santacruz, Bombay 29.

Sardar Griha (Private) Ltd.—Carnac Road, Bombay 2.

Savoy Hotel & Restaurant.—Lamington Road, next to Bombay Central.

**SEA FACE HOTEL.**—Dar-ul-Habib, 29, Marine Drive, Bombay. Tel.: 245821 & 246195.

Sea Green Hotel.—Marine Drive, Bombay 1.

Sea Green South (Hotel).—Marine Drive, Bombay 1.

Sea View Hotel.—221-225, Frere Road, opp. G.P.O., Fort.

Grams: "NICEHOTEL"

Phone: 362521 (5 Lines)

## SHALIMAR HOTEL

Cumballa Hill, Bombay 26.

★

Air-conditioned Rooms,

Modernly Furnished

Telephone in Each Room

Air-conditioned Restaurant

and

Permit Room

★

## MOST LUXURIOUS HOTEL

Sea View Restaurant.—Juhu, Santacruz.

Sher-E-Punjab Restaurant.—Near G.P.O., Frere Road, Bombay 1.

Ship Hotel.—Opp. General Post Office, 219, Frere Road, Fort.

Shree Krishna Boarding House.—Girgaum Tram Terminus, Bombay 4.

Sidhwa Guest House.—Soona Mahal, Marine Drive, Bombay 1.

Simla and Calcutta Hotel.—Mangalore Street, Fort.

Soona Service Suites.—Soona Mahal, Marine Drive, Bombay 1.

Strand Hotel.—Strand Road, Apollo Bunder, Bombay 1.

**TAJ MAHAL HOTEL.**—Apollo Bunder. Grams: "PALACE". Phones: 219101 & 214221.

Tambe, B., Private Ltd.—Sanzgiri Sadan, Girgaon Road, Bombay 4.

Veerkar Ahar Bhavan.—Girgaum Corner, Bombay 4.

Volga Restaurant.—46, Churchgate Street, Bombay 1.

Wayside Inn.—Rampart Row, Fort.

Welcome Hindu Restaurant.—Meadows Street, Fort.

Welcome Hotel.—Frere Road, Fort.

West End Hotel.—(Proprietors: West End Hotel Ltd.), 45, New Marine Lines, Bombay.

## HOUSE AND ESTATE AGENTS

**ADVANI & CO., R. & G.**—Estate Agents, Sindhu House, Nana-bhoy Lane, Fort, Opp. Flora Fountain, Bombay 1. Phones: Office: 251521; Res.: 72233. Grams: "SATGURU."

Brijmohan Reayag Banwarilal.—61, Road, Mazagon, Bombay 10.

Dastur & Sons, M. B.—Ismail Building, Hornby Road, Fort.

**GILBERT LODGE & CO.**—"Elphinstone Bldg.", Veer Nariman Street, Fort, Bombay. Phones: 251819 and 252607. Grams: "READINESS."



Mayfair Furnishing Co.—Great Western Building, Apollo Street, Fort.  
Narayanrao Kulkarni & Co.—20, Hamam Street, Fort.  
Properties & Estates Management Private Ltd.—11, Bank Street, Bombay 1.

**RAM DADLANI.**—506, Commerce House, 140, Meadows Street, Fort, Bombay 1. Builders and Estate Agents. Phones: 251508 & 256601; 365939 (Res.).

Rao Saheb Rawji Sejpal & Sons.—322, Shanti Niketan, Vincent Road, Kingsway, Matunga.

**ROYAL HOUSE AGENCY (Estd. 1936).**—24, Vir Nariman Road, Fort, Bombay 1. Phones: 255759. Res.: 51314. Transact every type of accommodation Residential, Office Premises, Factory, Godown, buy and sell land, properties, etc. Partners A. K. Mehta, Shashikant Mehta & Suresh Mehta.

### HUMIDIFICATION—VENTILATION

Asea Electric India, Limited.—Tafti Building, Goa Street, Bombay.  
Bakubhai Ambalal Private Ltd.—Sahibaug Bldg., Wittet Road, Ballard Estate, Bombay.

**C. DOCTOR & CO. PRIVATE LTD. (Estd. 1915).**—11, Bruce Street, Bombay 1. Phone: 252277. Grams: "QUALITY." Humidification & Ventilation Engineers & Textile Stores Suppliers.

**INDUSTRIAL AIR CONTROL (INDIA) PRIVATE LTD.**—P.N.B. House, 2nd Floor, 59, Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 262475. Grams: "COOLAIR." Specialists in all air Handling Equipments, Textile Dust and Fume Removal and Oil Spraying.

Volta Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

### HYDRAULIC TEST PUMPS

**CRESCENT TRADING CO.**—48-50, Bhajipala Street, Bombay 3. Phones: 325140 & 328944; Grams: "WATERMETER." Manufacturers & Dealers: Hydraulic Test Pumps, Acid Resisting Vales & Pressure Gauges.

### ICECREAM MFRS.

## For Kwality Ice Cream

### PURE ICE CREAM Co.

9, Lovegrove Road, Bombay 18

Phones: 372775 & 370559

### ICE FACTORIES

**AMBICO ICE WORKS COLD STORAGE & REFRIGERATION.**—H.O.: 35-C, Jeirajbhoy Street, Bombay 8. Phone: 371692. Factory: 10-12, Cochin Street, Ballard Estate, Bombay 1. Phone: 263308.

Bakhtawar Ice Factory.—Kumbharwada, Dadar.

Bombay Crystal Ice Works.—170, Motisha Lane, Mazagaon.

Central Ice & Cold Storage Co.—Saboo Sidick Road, Crawford Market, Bombay.

City Ice Supplying & Cold Storage Ltd.—298, Bazargate Street, Fort.  
Dhunjibhoy's Ice Factory.—Meunt Road, Mazagaon.

**HOMILA ICE WORKS, COLD STORAGE AND REFRIGERATION.**—Manufacturers of Pure and Colourless Ice. 33-C, Jeirajbhoy Street, Near Municipal Workshop, Foras Road, Bombay 8 (India). Phone Nos. 71692 & 71314.

Siddley Ice Factory.—505A, Arthur Road, Tardeo.

Sitaram Industries.—Byculla Bridge, Hansraj Lane, Byculla.

**SUNAWALA ICE FACTORY & COLD STORAGE (Estd. 1918).**—Jeirajbhoy Street, Next to Municipal Workshop, Byculla, Bombay 8. Phone: 371692. Factory: 188, Lamington Road, Bombay 7.

### IMPORT AND EXPORT FIRMS (GENERAL)

**A. A. MORBIWALA & CO.**—109/111, Abdul Rehman Street, Bombay 3. Phone: 23280. Grams: "VARNISH" (MD). Direct Importers & Stockists of Stitching Wires of all kinds.

Abdool Hoosein Jivjee & Co.—241, Nagdevi Street, Bombay 3.  
Abdoola Joosab Calcuttawalla & Co.—137-41, Samuel Street, Bombay 9.

Abdul Karim & Co.—Mohomed Manzil, 59-59A, Memonwada Road.

Abdulkarim, M. H.—272, Abdul Rehman Street, Bombay 3.

Abdul Razak & Co.—Opp. Juma Masjid, Takiawad, Kurla.

Abdulkhader Shamsuddin & Co.—48, Khoka Bazar, Bombay 3.

A. A. Baker & Co.—89, Bhajipala Street, Bombay 3.

Adamally Sons Ltd.—277, Nagdevi Street, Bombay 3.

Advani & Co., G. V.—Prospect Chambers, Hornby Road, Fort, Bombay.

Advani, J. B., & Co., Ltd.—Advani Chambers, Sir Phirozshah Mehta Road.

Ahoora Trading Co.—22D, Parsi Bazar Street, Fort, Bombay.

Ahuja, C. M., & Co.—People's Building, Sir Phirozshah Mehta Road, Fort.

Akbarally Ebrahimji & Co.—38/C, Cawasji Patel Street, Fort, Bombay.

Akbarally Ebrahimji Pharmacy & Department Store.—45/47, Veer Nariman Road, Fort, Bombay.

Akbarally Mohamedally & Co.—316, Abdul Rehman Street, Bombay 3.

Alfa Sports.—Metro House, Bombay 1. Phone: 27549. Grams: "ALFASPORTS."

Alfred Herbert (India), Ltd.—Kaiser-i-Hind Buildings, Ballard Estate.

Alliance Stores & Trading Co.—Princess Street, Bombay 2.

Allied Exporters.—Kumud House, opp. Lloyds Bank, 267, Dr. Dadabhoy Naoroji Road (Hornby Road), Fort, Bombay.

All India Trading Corporation.—25, Bank Street, Fort.

Almeida, J. C.—National Insurance Building, 1st Floor, 27, Bastion Road, Fort, Bombay. Phone: 263708. Grams: "GROTTO".

**AMALGAMATED UNIVERSAL AGENCIES PVT. LTD.**—306, Lotus House, 33A, New Marine Lines, Bombay 1 BR. Phone: 244138; Grams: "DETAMAG." Exporters of Brass & Stainless Steel Wares, Spectacle Frames & Accessories, P.V.C. Leather Cloth, Sheetings & Gloves, Handicrafts, Chemicals and Allied Products and General Merchandise; Importers and Indentors of Stainless Steel Sheets, Wires, Rods, etc., Aluminium Ingots and Extrusions, Tool & Alloy Steel, Chemicals, Plasticizers, Insecticides, Fungicides, Weed-killers and Fine Pharmaceutical Chemicals.

Amin Importers.—7-10, Elphinstone Circle, Fort.

Amin & Sons.—189-82, Samuel Street, Vadgadi.

Amarut Trading Co.—44, Kumar Villas, Mangalwadi, Girgaum.

Anand Trading Co.—234, Masjid Bunder Road, Bombay 3.

Anil Brothers.—44/46, Dhanji Street, Bombay 3.

Anil Kumar & Co., Ltd.—121-123, Princess Street, Bombay 2.

Arthur Import Export Co.—166, Hornby Road, Fort, Bombay.

Ashok Brothers.—327, Dr. Dadabhoy Naoroji Road, Bombay.

Aslan Trading Corporation.—1-A, Nazir Building, Calicut Street, Bombay 1. Phone: 262575.

Askay & Co., Ltd.—Great Social Building, Sir Phirozshah Mehta Road, Fort, Bombay.

Asok Bros., Ltd.—Mubarak Manzil, 104, Apollo Street, Fort.

Badat Ltd.—105, Sir Vithaldas Chambers, 16, Apollo Street, Fort.

Bakshi Ram & Co.—129, Modi Street, Fort.

Balmer Lawrie & Co. Ltd.—5, Graham Road, Ballard Estate, Fort.

Bardlya, W. K., & Company.—155, Modi Street, Fort.

Batilbhol, C. J., & Co.—319, Hornby Road, Fort.

Beardsell, W. A., & Co., Ltd.—15-16, Sir Phirozshah Mehta Road, Fort.

Begraj Gupta & Co.—207, Kalbadevi Road, Bombay 2.

Bhagwandas Chatrabhuj.—20, Hamam Street, Fort.

Bhagwandas Devshi, Ltd.—87, Princess Street.

Bhagwandas Sant Parkash.—50, Nakhuda Street, Bombay 3.

Bhaldas Cusondas & Co.—Sir Vithaldas Chambers, 16, Apollo Street, Fort.

Bhandari Brothers Ltd.—Dadyseth House, 44, Cawasji Patel Street, Fort.

Bhanji Lavji Porbandar Ghee Supply Agency.—Shroff Mansion, 258, Kalbadevi Road.

Bhanoo Trading Co.—29, Imperial Chambers, Wilson Road, Ballard Estate.

Bharat Industrial Co.—77-79, Nagdevi Cross Lane, Bombay 3.

Bheroomal Ghanoomall.—42, Dhanukar Building, Kalbadevi Road.

Bhukanwala & Sons.—Meadows House, Meadows Street, Fort.

Birla Bros., Ltd.—Imperial Bank Annexe, Bank Street, Fort.

Bock, F. & Co.—Shale Building, Bank Street, Bombay 1.

Bombay Importing Agency.—75-77, Sarang Street, Bombay 3.

Bombay Machine Store Co., The.—Laxmi Building, 43, Nagdevi Cross Lane, Bombay 3.

Brady, W. H., & Co., Ltd.—Royal Insurance Buildings, Churchgate Street, Fort.

Brigg Bros. & Co.—Podar Chambers, Parsee Bazar Street.

Brijlal, H. R., & Co.—Beaumont Chambers, 27-33, Meadows Street, Fort.

Bulchand Co., L.—Moos Building, 510, Kalbadevi Road, Bombay 2.



Burrows, & Co., W. J.—Khatau Building, 40-44, Old Custom House Road, Fort.

Byramji, T. & Co.—Central Bank Building, Mahatma Gandhi Road, Fort.

Calico General Export Co.—12, Rampart Row, Fort.

Cambata Industries Private Ltd.—Cambata Building, 42, Queen's Road, Bombay 1.

Capital Colour & Chemical Co.—77-87, Mirchi Street, Vadgadi, Bombay 3.

Central Syndicate Ltd.—16/18, Custom House Road, Fort.

Champaklal Morarji & Co.—193, Samuel Street, Vadgadi, Bombay 9.

Chavannes & Co., Private Ltd.—Menkwa Building, 10, Outram Road.

Chimanlal & Co.—38/42, Shamsett Street, Bombay.

Chimanlal Vadilal & Co.—80, Abdul Rehman Street.

Chinoebhai & Bros., Private Ltd.—Churchgate House, Churchgate Street.

Chokhani Brothers.—59, Forbes Street, Fort.

Chotirmall & Co., K. A. J.—501, Kalbadevi Road, Bombay 2.

**CHUNILAL PRABHUDAS & CO. (BOMBAY) PRIVATE LTD.**—411/412, Himalaya House, 4th Floor, Dr. Dadabhoy Naoroji Road, Fort, Bombay. Phone: 26-2720. Grams: "HEMANICO." Importers & Manufacturers' Representatives. Specialists in Iron & Steel, Non-Ferrous Metals, Celluloid Sheets & Plastics & Chemicals.

Clarke & Smith (India), Ltd.—Esmall Building, Hornby Road, Fort.

Collinson & Co., Ltd.—Standard Building, Hornby Road, Fort.

Continental Export & Import Co.—Mehta Building, 47, Meadows Street, Fort.

Cotton Agents Ltd.—Imperial Bank Annexe, Bank Street, Fort.

Curmally Jan Mahomed.—160-162, Samuel Street, Bombay 9.

Dadajee Dhackjee & Co., Ltd.—Shree Pant Bhuvan, Sandhurst Bridge.

Dalichl Bussan Kaisha Ltd.—4th Floor, Navsari Chambers, Outram Road, Fort, Bombay. Phones: 261667 and 262148. Grams: "DAITIBUSAN".

Dali B. Shroff & Co.—361, Dr. Dadabhai Naoroji Road, Fort.

Daruwalla, M. N., & Co.—20, Apollo Street, Fort.

Das & Co.—59, Apollo Street, Fort.

Dave, J. M., & Co.—Kanta Terrace, Silk Bazar, 529, Kalbadevi Road, Bombay 2.

Devidas Mulji Kapadia.—Yusuf Building, Hornby Road, Fort.

**DEVIDAS VIRCHAND.**—22-26, Dariasthan Street, Bombay 3. Phone: 325284. Grams: "EVERGUM". Importers & Exporters. Dealers in all sorts of Gums, Spices, Textile & Wool.

Dilaj & Co.—20, Hamam Street, Fort.

**DINANATH SONS.**—466, Kalbadevi Road, Bombay 2. Phone: 39619. Grams: "PROCESSOR." Importers, Exporters and Manufacturers of Silks, Art Silk, Piecegoods and Manufacturers' Representatives.

Dossa Ltd., G.—Jan Mansion, Sir Phirozshah Mehta Road, Fort.

D. Manilal & Co.—Harischandra Nivas, 419-A, Kalbadevi Road, Bombay 2.

Drennan & Co.—Allahabad Bank Building, Fort, Bombay.

Dubash Freres & Co.—Victoria Building, Parsee Bazar Street, Fort.

Dwarkadas & Sons, Ltd.—Mehta House, 89, Apollo Street, Fort.

Dwarkadas Velji Talpatriwalla.—36, Issaji Street, Bombay 3.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phones: 26-2711 (8 lines). Machine Works: Tank Road, Bombay 33-DD. Phone: 378544-46 Offices at Madras, Calcutta, New Delhi, Bangalore, Secundrabad & Kanpur.

Eastern Import & Export Co.—Jan Mansion, Sir Phirozshah Mehta Road, Fort.

Eastern Import & Export Bureau.—3-5, Vithalwadi, Bombay 2.

Ebrahim Allibhoy & Sons.—260-64, Abdul Rehman Street, Bombay 2.

Ebrahim Manji & Co., Ltd.—Kamar Building, Cawasji Patel Street, Fort.

Ebrahim Noorudin & Co.—"Kagdy Manzil," 119, Bazar Gate Street, Fort.

**ECHKE PRIVATE LIMITED.**—43, Tamarind Lane, 4th Floor, Fort, Bombay. Phone: 251817. Grams: "ECHKE."

Edanmal Sons, L.—Krishna Nivas Building, New Silk Bazar, Bombay 2.

Empee Agencies.—40, Cawasji Patel Street, Fort, Bombay.

Engineer Bros.—Sir Vithaldas Chambers, 16, Apollo Street, Fort.

Engineer, S. D., & Son.—Imperial Chambers, 82, Wilson Road, Ballard Estate.

Excel Importers.—89, Princess Street, Bombay 2.

Ex-Import Mercantile Corporation.—229, Nishanpada Road, Bombay 9.

Eximport Trading Co.—Queen's Mansion, Prescott Road, Fort.

Ezra Bros.—Mustafa Building, Sir Phirozshah Mehta Road, Fort, Bombay 1.

Fazalibhai Ibrahim & Co., Ltd.—Ismail Building, Hornby Road.

Fillunger, H., & Co.—16, Ormiston Road, opp. Electric House, Bombay 1.

**FINLAY, JAMES & CO., LTD.**—Chartered Bank Building, Mahatma Gandhi Road, Fort, Post Box No. 73, Bombay 1. Phone Nos. 251255-59.

Firoz Trading Co.—Kamer Building, Cawasji Patel Street, Fort. Phone No. 33832. Grams: "Polestar."

Framroz M. Chinoy & Sons.—Motiwala Mansions, Gowalia Tank, Bombay 26.

Frank Rose & Co.—"Kalam Kutir", 211-219, Frere Road, Fort, Bombay 1.

Fruit Farm Products Co.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**GANDHI STATIONERY MART.**—165, Bazar Gate Street, Bombay 1. Manufacturers of Comet Visiting, Invitation, Greeting, Wedding Cards, Inland Air Letters, Phone: 265248.

Gangaram & Co.—313, 3rd Floor, Himalaya House, Paltan Road, Bombay 1.

G. Arjan (India) Co.—108, Himalaya House, Paltan Road, Bombay 1.

Gannon, Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.

Gaytee and Company.—Janmabhoomi Chambers, Fort Street, Fort.

Getz Bros. & Co.—Western India House, Sir Phirozshah Mehta Road, Fort, Bombay.

Ghadiali, J. P., & Co.—12, Rampart Row, Fort.

Gin Store Co., The.—76, Nagdevi Cross Lane, Bombay 3.

Girdharlal & Co.—48, Podar Chambers, Parsi Bazar Street, Fort, G.P.O. Box 826.

Gladwyn & Co.—251, Hornby Road, Fort, Bombay 1.

Goodwill Trading Co.—34, Nagdevi Street, Bombay 3.

Geolabkhan Peerkhan Co.—178, Nagdevi Street, Bombay 3.

Gore & Co.—Great Social Insurance Building, Sir Phirozshah Mehta Road, Fort.

Govindram Dwarakadas.—Kermani Building, Sir Phirozshah Mehta Road, Fort.

Grahams Trading Co., Ltd.—16, Bank Street, Fort.

Great Eastern Trading Co.—107, Cawasji Patel Street, Fort.

**GREENLAND ENGINEERS.**—64, Podar Chambers, Parsi Bazar Street, Fort, Bombay. Phone: 252932. Grams: "GREND." Exporters of Indian Handloom Textiles, Ladies Jari Handbags, Plastic Bangles with Gold Lacquer, Agar-batti, Pickles, Moradabad Brassware, Rolled Gold and Anodised Jewellery, etc.

Habib Rawjee, G., & Co.—Hamam House, Hamam Street, Fort.

Haji Ahmed Husain & Co.—Topiwalla Mansion, Mohamedally Road, Bombay 3.

Haji Janmehamed Moosa.—27-29, Zakaria Bazar, Sheriff Dewji Street.

Hales Bros. (India) Ltd.—K. Lekhraj Building, Carnac Bridge, Bombay 3.

Halindia Cotton Co., Ltd.—71-73, Apollo Street, Fort.

Hansraj Hariram & Co.—Fazalbhoy Building, opp. Flora Fountain, Fort.

Harda Electric Supply Co., Ltd.—17-19, Bastion Road, Fort.

Hardcastle, Waud & Co. Private Ltd.—Alice Buildings, Hornby Road, Fort.

Harilal Manilal & Co.—(Established 1919).—346, Kalbadevi Road, Bombay 2. Phone: 39717.

**HASSAMAL BROS.**—539, Kalbadevi Road, P.O. Box 2236, Bombay 2. Direct Importers and Exporters of Art Silk and Cotton Piecegoods and General Merchandise. Grams: "HASSABROS." Phones: 22001 & 22002.

Hassamal Dalamal.—538, Kalbadevi Road, Bombay 2.

Hazarat & Co.—Warden House, Sir Phirozshah Mehta Road, Fort.

Herbertsons Ltd.—11-13, Elphinstone Circle, Fort.

Herman & Mohatta, B. R., Ltd.—People's Building, Sir Phirozshah Mehta Road, Fort.

Himatlal Manilal & Sons.—346, Kalbadevi Road, Bombay 2.

Hindustan Export & Import Corporation Ltd.—Albert Building, Hornby Road, Fort.

Holland-Bombay Trading Co., Ltd.—E. D. Sassoon Bldg., Dougall Road, Ballard Estate.

Hotchand Jawharmal.—3rd Floor, Round Building, Kalbadevi Road, Bombay 2.

Hukamehand Chanderbhan.—1st Floor, Hira Building, opp. Crawford Market, Carnac Road.

Husein Abdulkarim Panju.—Panju House, 138-40, Samuel Street, Khoja Mohalla, Bombay 9.

Husein Ibrahim.—75, Mohamedally Road, Bombay 3.

Husein Laljee Dewraj.—Jamal Building, 213, Nagdevi, Bombay 3.

Husein Mussa Virjee & Co.—Sheriff Hasam Building, Khoja Mohalla, Bombay 9.

India Manufacturing Agencies.—16/18, Custom House Road, Fort.

India Overseas Trading Co.—83, Western India House, Sir Phirozshah Mehta Road, Fort.

Indian Exporter.—Sir Vithaldas Chambers, 16, Apollo Street, Fort.

Indo Europa Trading Co.—7, Dalal Street, Fort.

Indo-Overseas Representatives.—73, Bombay Mutual Bldg., Fort.



- Industrial Engineering Co.—45, Apollo Street, Fort.  
 Industries Service Corporation.—11, Bruce Street, Fort.  
 Inter-Asia Commercial Co.—111, Tamba Kanta, Bombay.  
 International Corporation.—12-A, Nanabhai Lane, Flora Fountain, Fort.  
 International Imports & Exports Ltd.—259, Kalbadevi Road, Bombay 2.  
 International Mercantile Corporation.—313, Himalaya House, 3rd Floor, Junction of Hornby Road and Paltan Road, Bombay 1.  
 International Traders.—People's Building, Sir Phirozshah Mehta Road, Fort.  
 Italindia Cotton Ltd. (Estd. 1922).—Indian Globe Chambers, Fort Street, Fort, Bombay.  
 Jafferbhoy Salebhoy & Co.—201, Nagdevi Street, Bombay 3. Grams: "Wingfish". General Merchants, Exporters & Importers.  
 Jagkumar & Co.—Prospect Chambers Annexe, 317-321, Hornby Road, Fort. Phone No. 21569.  
 Jagmohandas Shamaldas & Sons.—11, Tamarind Lane, Fort.  
 Jani & Co.—Vora Mansions, New Chinch Bunder.  
 Jashwantlal Manecklal & Co.—40, Vir Nariman Street, Fort.  
 Jassawala & Co., R. M.—105, Apollo House, Apollo Street, Fort.  
 Jeena & Co.—Elphinstone Building, 10, Vir Nariman Street, Fort.  
 Joshi Jivandas Gangaram & Co.—282, Narsi Natha Street, Bombay. Estd. 1923.  
 J. S. Elzezer.—6, Moti Mahal, Churchgate Reclamation. Phone: 21138.  
 K. A. Singh & Co.—Minthi Mansion, Sitladevi Road, Mahim, Bombay 16.  
 Kanji Morarji.—285-87, Narsi Natha Street, Bombay 9.  
 Kamat & Co. (Bombay).—134, Meadows Street, Fort.  
 Kapadia & Co.—Bell Building, Sir Phirozshah Mehta Road, Bombay.  
 Karia Brothers.—Sethna Building, Princess Street, Bombay 2.  
 Karim Gulam Husain.—Bell Building, Sir Phirozshah Mehta Road, Fort.  
 Karimjee Trading Co., Ltd.—Rahimtoola House, 7, Homji Street, Fort.  
 Kashandas Private Limited.—43, Tamarind Lane, Fort, Bombay.  
 Kavarana, E. F., & Co.—Botawala Building, Bomanji Master Road, Bombay 2.  
 Kavarana, Muncherji Heerjibhoy.—New Silk Bazar, opp. Kalbadevi P.O., Kalbadevi.  
 Keshavji Virji & Co.—8, Elphinstone Circle, Fort.  
**KESHAVALAL TALAKHAND (PRIVATE) LTD.**—India House, opp. G.P.O., Fort, Bombay 1. Phone: 262934. Grams: "CHANDRODAY." Branches at Ahmedabad, Sholapur, Coimbatore and Madras.  
 Keshavji, J., & Co.—Saheb Building, 195, Hornby Road, Fort.  
 Khanna & Hari Raj.—166, Hornby Road, Fort.  
**KHARAS BROS.**—14, Hamam Street, Fort. Merchants, Importers & Exporters, Grams: "KHAYA." Phone: 251805.  
 K. Hassaram & Co. (Estd. 1881).—New Silk Bazar, Kalbadevi Road, Bombay 2.  
 Khatau Vallabhdas & Co.—Indian Globe Chambers, Fort Street, Bombay 1. Tel. Address: "SCARLET."  
 Khazam, E. S., & Co., Ltd.—Bombay Mutual Building, Hornby Road, Fort.  
 Khosla & Co., L. C.—39, Prospect Chambers Annexe, Hornby Road, Fort.  
 Khoury, N., & Company.—Western India House, Sir Phirozshah Mehta Road, Fort.  
**KIDARNATH KISHANCHAND PRIVATE LTD.**—(Recognised by the Govt. of India as Export House). Navsari Chambers, 4th Floor, Outram Road, P.O. Box No. 1579, Bombay 1. Phone: 264960 & 262842. Grams: "SHURBIR." Exporters of Industrial Cloth and allied lines. All Cotton Piecegoods, Grey & Processed, Specialising in Poplins, Drills, Sheetings, Wider Widths, Tickings, Canvas, Ducks and also Cotton Yarns, Handloom Textiles & Handicrafts.  
 Kidarnath Kishanchand.—Navsari Chambers, Outram Road, Fort.  
 Kilachand Devchand & Co., Ltd.—45-47, Apollo Street, Fort.  
 Kirti Trading Corporation Ltd.—Fazalbhoy Building, opp. Flora Fountain, Fort.  
 Kishinchand Chellaram.—Guzdar House, Dhobi Talao.  
 Komat Merchandising Corporation.—38, Devkaran Mansion, 43, Princess Street.  
 Kotak & Co.—Navsari Building, Dr. Dadabhoy Naoraji Road, Fort, Bombay.  
 Kros & Co.—Podar Chambers, Parsi Bazar Street, Fort.  
 Kundanmal Ramlal.—78/80, New Hanuman Lane, Bombay 2.  
 Kumudechandra & Co.—Examiner Press Building, Dalal Street, Fort.  
 Lalitkumar & Co.—86, Kazi Sayed Street, Bombay 3.  
 Laljee Devraj & Co.—168/70, Sheriff Dewji Street, Bombay 3.  
 Lalji Dayal.—Near Gopal Lane, Mulji Jetha Market, Bombay 2.  
 Lallubhai Gulabchand Jhaveri.—149, Shroff Bazar.  
 Leories Trading Co.—23, Hamam Street, Fort, Bombay.  
 Liladhar P. Shah & Co.—335, Samuel Street, Vadgadi, Bombay 3.  
 Loeffler & Co., E.—Noble Chamber, Parsi Bazar Street.  
 Loucatos, G., & Co.—Menkwa Building, Outram Road, Fort.  
 L. R. Trading Co.—Navsari Chambers, opp. Lloyds Bank, Outram Road, Fort.  
 Lusob Trading Co.—Bell Building, Sir Phirozshah Mehta Road, Fort.  
 M. R. Varma & Sons.—60, Lakshmi Bldg., Sir P. Mehta Road, Bombay 1.  
 Macropolo, D., & Co., Ltd.—Kermani Building, Hornby Road, Fort.  
 Madan Mohan Jain & Sons.—216-17, Kalbadevi Road.  
 Madhav Agency.—Mohan Building, Girgaum Road.  
 Madhavji, S., & Co.—Noble Chambers, Parsi Bazar Street, Fort.  
 Madhoram Moolchand.—80/82, Nagdevi Street, Bombay 3.  
**MAGANBHAI & LALLUBHAI.**—Jewellers, Direct Importers and Exporters of Real & Cultured Pearls, Precious & Semi-Precious Stones, Diamonds, Rough and Cut. 184-186, Sheikh Memon Street, Bombay 2. Phone No. 23785. Grams: "MOTI-BUTTON."  
 Mahendra, A. C., & Co.—12, Noble Chambers, Parsi Bazar Street, Fort.  
 Mahomedali Esmail. (Estd. 1924).—Stock Exchange Building, Apollo Street, Fort.  
 Mahomedally Hebatbhoy & Co.—15, Mirza Street, Parsi Gully.  
 Manekji Nensey & Co.—172-186, Argyle Road, Bombay 9.  
 Maneklal & Co.—166, Hornby Road, Fort, Bombay.  
 Mangaldas & Sons.—Lentin Chambers, Dalal Street, Fort.  
 Mansukhlal Kantilal & Co.—Mulji Jetha Building, 185, Princess Street.  
 Manubhai, Sons & Co.—Manu Mansion, 16, Custom House Road, Fort, Bombay. Grams: "SUNFLAMES." Phone: 25-1028.  
 Mata Lachhmi Co.—Hussaini Chambers, Nanabhai Lane, Fort.  
 McKenzies Ltd.—Sewri.  
 Mehta & Co., P. N.—Cook's Building, 324, Hornby Road, Fort.  
 Mehta Brothers.—Hamam House, Hamam Street, Fort.  
 Mehta Mody & Co.—Devkaran Mansion, No. 5, Mangaldas Road, Bombay 2.  
 Mehta Ramakrishna & Co., Ltd.—Neptune Building, 166, Hornby Road, Fort.  
 Menghraj & Sons (India).—Alice Building, 339, Hornby Road.  
 Merchant Bros.—151, Nagdevi Street.  
 Merwanji Peonijajee & Sons.—Prince's Dock, Frere Road.  
 Modern Electric Corporation.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone: 262120.  
 Mohanlal Motilal.—4th Floor, Yusuf Building, Mahatma Gandhi Road, Fort.  
 Morarji Vandrayan & Co.—Krishnaraji Chawk, Mulji Jetha Market, Bombay 2.  
 Morrison, Son & Jones (India) Ltd., J. L.—Universal Building, Sir Phirozshah Mehta Road, Fort.  
 Motiram & Co.—79, Himalaya House, Paltan Road, Bombay 1.  
 Murlidhar and Khemchand & Co.—Rehem Mansion, 50, Colaba Causeway, Bombay.  
 Murugappa & Sons.—3rd Floor, United India Building, Sir Phirozshah Mehta Road.  
**MUSRY, G. N., PRIVATE LTD.**—Canada Building, Home Street, Fort, Bombay. Phone: 26-1435. Grams: "DANDELION." Importers and Exporters.  
 Nanavati & Co., Ltd.—16, Apollo Street, Fort.  
 Nanji V. Dossa & Co.—Jaa Mansion, Sir Phirozshah Mehta Road, Fort.  
 Narandas Ranchhoddas & Co.—93, Nagdevi Cross Lane, Bombay 3.  
 Narotamdas Chunilal & Co.—51, Tamarind Lane, Fort, Bombay.  
 Narsee Nagsee & Co.—3, Chinch Bunder, Bombay No. 9.  
 Navinchand Ratanchand & Co.—Advani Chambers, Sir Phirozshah Mehta Road, Fort.  
 New India African Co., Ltd.—Mathuradas Building, 344/46, Kalbadevi Road, Bombay 2.  
**N. DEVIDAS & CO.**—44, Dariyasthan Street, Bombay 3. Phone No. 325284. Grams: "ENGUM." Exporters of Gum Karaya & Dealer in Saffron, Cassia, Cloves and Spices.  
 N. M. Brothers & Co.—Shreeji Bhuvan, Lohar Chawl, Post Box No. 2163, Bombay.  
 N. P. Patravali & Co.—Fort Chambers, Hamam Street, Fort.  
 N. Thakorda & Co.—Lentin Chambers, Dalal Street, Fort.  
**N. R. SHAH & COMPANY.**—Mulchand Mansion, Princess Street, Bombay-2. Phone No.: 20093. Grams: "WATERFLOWER." Perfumers and Perfumery Raw Material Dealers, Dealing in Aromatic Chemicals, B.P. Natural, Synthetic Essential Oils and Perfumery Compounds.  
 Orient Corporation Ltd.—Bombay Mutual Annexe, Gunbow Street, Fort.  
 Overseas Trade & Agencies (India).—Beaumont Chambers, Meadows Street, Fort, Bombay 2.  
**P. PARBHULAL & CO., PRIVATE LTD.**—Metropolitan Insurance House, Dr. D. N. Road, Bombay 1. Phone: 262264 & 261157. Importers of Rayon Yarn, Staple Fibre, Nylon Yarn, Cotton Yarn Piece-goods, Raw Silk, Leather Cloth, Cutlery, etc. Exporters of cotton yarns.  
**P. RAI & CO.**—121, Commerce House, Meadows Street, Fort, Bombay 1. Phone: 252436. Grams: "PIRAICO."  
 Pannalal Ramdayal Chindak.—153, Princess Street, Bombay 2.



Paramount (India) Ltd.—Kermani Building, Sir Phirozshah Mehta Road, Fort, Bombay.  
 Parekh Trading Corporation.—10, Dubash Chambers, Kumpita Street, Ballard Estate, Bombay 1.  
 Parmanand Maneklal & Co.—Maskati Mahal, Lohar Chawl, Bombay 2.  
 Partabsingh Jagatsing & Sons.—People's Building, Sir Phirozshah Mehta Road, Fort.  
 Patel, M. K. & Co.—Wakefield House, 16, Sprott Road, Ballard Estate, Fort.  
 Pavri Sons & Co.—93-97, Bazargate Street, Fort.  
 P. D. Sheth & Co.—46, Old Hanuman Lane, Bombay 2.  
 Peerbhoy & Sons, E.—Prop.: 64, Mohamedali Road, Bombay 3.  
 Pestonji & Co.—24, New Queen's Road, opp. Roxy Talkies, Bombay 4.  
 Phiroz, N. Motabhoy & Co., Ltd.—Motabhoy Building, 146, Medows Street, Fort.  
 P. L. Bhatt & Co.—5, Bharat House, 104, Apollo Street, Fort.  
 Popular (Imp.-Exp.) Trading Co.—Javeri House, 110, Medows Street, Bombay 1.  
 Prashant Trading Co.—352/54, Samuel Street, Bombay 3.  
**PRAVIN BROTHERS & CO.**—501, Commerce House, Medows Street, Bombay 1. Phones: 251748, 252419. Grams: "WIDE-SCOPE." Importers, Exporters and Agents: Sulphur—Chemicals—Solvents, Pyridene Base, Fertilizers, Minerals Lime—Jute—Products. POLYSOL-S.5, POLYSOL-6-Gypsum.  
 Prem Brothers.—Kitab Mahal, 192, Hornby Road, Fort.  
**PREMIER TRADING CORPORATION.**—46, Veer Nariman Road, Bombay 1. Phone: 255084 (4 lines). Grams: "NACHIKETA."  
 Premji Haridas & Co.—Bhanushali Building, 168, Argyle Road, Bombay 9.  
 P. R. Patel & Co. Ltd.—Mherwan Building, Sir Phirozshah Mehta Road, Fort.  
 Purshotamdass Popatlal & Co.—Currimbhoy House, Outram Road, Fort.  
 Pyarally Gulamhusen & Co.—106, Tantanpura Street, Khoja Moholla, Bombay 9.  
 Rahimteela Dhunji & Co.—93, Tantanpura Street, Khadak, Bombay 9.  
 Raichand Brothers (India) Ltd.—11-B, Noble Chambers, Ghoga Street, Fort.  
 Rajal Corporation.—30, Rampart Row, Fort.  
 Rajgor, S. M., & Co.—Hanuman Building, Tambakanta, Pydhownie, Bombay 3.  
 Ralli Bros., Ltd.—21, Ravelin Street, Fort.  
 Ramjee Samjee Virani (India) Ltd.—185, Bazargate Street, Fort.

Ramchand Ambiram.—Above Govind Chowk, M. J. Market, Bombay 2.  
 Ramkisandas Sagarmal.—345, Kalbadevi Road, Bombay 2.  
 Rasiwalla, M. M. A., & Co.—Hoesseinbhai Building, 17, Janjkar Street, Koliwada.  
 Ratilal Dayabhai Shah.—Tambakanta, Pydhonie, Bombay.  
 Readymoney Ltd., C. R. H.—107, Mahatma Gandhi Road, Fort.  
 Reliance Trading Co.—25/47, Lohar Street, Bombay 2.  
 Rowe & Rowe.—Above Eastern Bank, 381, Hornby Road, Fort, Post Box No. 622, Bombay.  
**ROYAL INDUSTRIAL & COMMERCIAL COMPANY PRIVATE LTD.**—Exporters, Importers & Agents. Registered Office: 81/83, Mint Road, Fort, Bombay. Phone: 266233. Grams: "RICCOMP", Bombay. Administrative Office: Ashok Chambers, 3rd Floor, Broach Street, Bombay. Phone: Call-323042.  
 Ruby Trading Co.—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.  
 Rupani & Co.—Lentin Chambers, Dalal Street, Fort.  
 Sanghani & Co.—178-180, Abdul Rehman Street.  
 Sanghavi & Sons.—Sanghavi Chambers, 27, Ghoga Street, Fort, Bombay.  
 Santhanam & Co.—Exporters, Importers & Commission Agents, Sri Ram Building, 2nd Floor, 195, Dr. Cowasji Hormusji Street, Bombay 2.  
 Sarabhai & Co.—Western India House, Sir Phirozshah Mehta Road, Fort.  
 Satya Prakash Dyes & Chemicals Ltd.—Hornby Building, 174, Hornby Road, Fort.  
 Sepulchre Brothers (India) Ltd.—Taj Building, 210, Hornby Road.  
 Sethisons Ltd.—12, Rampart Row, Fort.  
 Sewaram Girdharilal.—354, Kalbadevi Road, Bombay 2.  
 Shah, C. J. & Co.—Churchgate House, Vir Nariman Street.  
 Shah Narotamdas Harjivandas Co. (Estd. 1880).—480, Kalbadevi Road, Bombay 2.  
 Shah Sheth & Co.—Importers and Exporters, 264, Samuel Street, Bombay 3.  
 Shah Trading Agencies.—19, Hamam Street, Fort, Bombay 1.  
 Shaikh & Co.—94, Ali Umar Street, Bombay 3.  
 Shalebhoy Tyebjee & Sons.—12, Bruce Street, Bombay 1.  
 Shamsun & Co.—11, Bruce Street, Fort.  
 Shapurji & Co., R. K.—319, Hornby Road, P. B. 1065, Fort.  
 Sharad Brothers.—Nehru Road, Bombay 24.  
 Sheralli Nanjee.—178, Samuel Street, Vadgadi, Bombay 9.  
 Shree Navjivan Kagdi & Co.—110, Zaveri Bazar, Bombay 2.  
 Sir Kasturchand Ltd.—Kodak House, Hornby Road, Fort, Bombay.

# SORABJI NOWROJI & CO.

16, HORNIMAN CIRCLE — FORT — BOMBAY 1

★

LARGEST STOCKISTS OF :

Sandalwood,  
 Palmarosa Oil,  
 Distillers of 'Crown' Brand  
 Sandalwood Oil.

★

Phones :

Head Office : 252410, 254181  
 Sales Depot : 331275, 261573,  
 321242, 351367  
 Factory : 378316

OLDEST EXPORTERS OF :

Sandalwood, Sandalwood Oil, Palmarosa Oil.

★

Manufacturers & Distributors of Automobile  
 Bi-Metal Bushes and Parts

★

INDENTORS OF :

Umbrella Cloth, Umbrella Fittings,  
 Czechoslovakia & Italian Glass Beads, and  
 Sole Agents for Artists Materials and other  
 articles

Manufactured by :

M. MYERS & SON LTD.  
 Birmingham  
 (England).



Sobraj Reloomal.—Silk Bazar, Kalbadevi Road.  
 Soho House.—Vithal Sayana Building, Lohar Chawl.  
 Sorabji Khursetji & Co.—Callout Street, Ballard Estate, Bombay.  
 Steel Brothers & Co. Ltd.—Allahabad Bank Building, Apollo Street, Fort.  
 Subodh Indent Agency.—44, Kumar Villas, Mangalwadi, Girgaum, Bombay 4.  
**SUDAN TRADING CO.**—"Dhan-Nur", Sir Phirozshah Mehta Road, Bombay 1. Phones—Office: 262788; Resl.: 472089. Grams: "VANSOBHA".  
 Suppliers & Trading (India) Ltd.—79, Meadows Street, Fort.  
 Techno Industrial Co.—107, Sir Vithaldas Chambers, 16, Apollo Street, Fort.  
 Techno-Industrial Syndicate.—19/B, Noble Chambers, Parsi Bazar Street, Fort.  
 Tejchand & Co.—65, Princess Street, Bombay 2.  
 Textile Export (Private) Ltd.—Queen's Mansion, Prescott Road, Fort.  
 Textile Industrial Trading Agency.—Western India House, Sir Phirozshah Mehta Road, Fort.  
 Thakker Sonderjee Nanjee & Sons (India) Ltd.—146, Kalbadevi Road, Bombay 2.  
 Thakore, T. M., & Co.—Readymoney Mansion, 43, Vir Nariman Street, Fort.  
 Traders' Link.—17, Ismail Building, 381, Hornby Road, Fort.  
 Trading Co., Late Hegt & Co., Ltd.—Indu House, Dougall Road, Ballard Estate.  
**TRANS-UNION COMMERCIAL CORPORATION PRIVATE LTD.**—Prospect Chambers Annexe, 319, Dr. Dadabhai Naoroji Road, Fort, Bombay. Grams: "TRANSMETER." Phones: 251610 & 355855 (Res.).  
 Unita Corporation.—37, Yusuf Building, Mahatma Gandhi Road, Fort, Bombay.  
 United Commercial Co.—72-80, Nagdevi Cross Lane, Bombay 3.  
 United India Trading & Manufacturing Co., Ltd.—Shale Building, Bank Street, Fort.  
 Universal Trading Co.—(Established 1947). 346, Kalbadevi Road, Bombay 2.  
 Utoomal & A sudamal Co.—Bombay Mutual Annexe, Gunbow Street, Fort.  
 Vadilal Vrajilal & Co.—Peerbhoy Building No. 2, Princess Street.  
 Valram Sons.—Patel Building, Bomanji Master Road, Kalbadevi.  
 Varjiwandas Hirjee & Co.—240, Samuel Street, Vadgadi.  
 Vasantilal Vadilal & Co.—215-17, Samuel Street, Vadgadi.  
 Vasi Bros. & Co.—Topiwalla Mansion, Mahomedali Road, Bombay 3.  
 Vikram Padamsey & Co.—Rustom Building, Vir Nariman Street, Fort.  
 Virchand Panachand & Co.—272, Narsi Natha Street, Bhat Bazar, Bombay 9.  
 Vishram Bhagwandas & Co.—31, Sutar Chawl, Bombay 2.  
 Vishram Khimji & Sons.—57-59, Kazi Sayed Street, Mandvi, Bombay 3.  
 Vithaldas & Co.—75, Khand Bazar, Bombay 3.  
 Volkart Bros.—19, Graham Road, Ballard Estate, Bombay.  
 Waghji Lakhmidas & Co.—206, Samuel Street, Vadgadi.  
 Wakefield, C. C., & Co., Ltd.—91, Walkeshwar Road, Bombay 6.  
 Waltham Trading Corporation Ltd.—12, Nanabhai Lane, Fort, Bombay.  
 Watanmal Beelchand.—P.O. Box 2233, 534, Kalbadevi Road, Bombay 2.  
 Western India Hardware Mart.—16, Narayan Dhuru Cross Lane, Bombay 3.

### INCANDESCENT LAMPS AND GAS MANTLES MANUFACTURERS

Anglo Oriental Light Co.—Peerbhoy Bldg., 89, Princess Street, Bombay 2.  
 Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.  
 Bombay Novelty Stores.—74, Lohar Chawl, Bombay 2.  
**CHUNILAL KHAMNA & CO.**—Saraswati Nivas, Thakurdwar Road, Bombay 2. Phone: 354813. Grams: "BABALALU."  
 Empire Industrial Works.—Warden House, Sir Phirozshah Mehta Road, Fort.  
**EASTERN LIGHTS CO.**—78, Lohar Chawl, Bombay-2. Mfrs. & Dealers of Stoves, Lamps & Lanterns, Blow Lamps, Torches, Batteries, Thermos Flasks, Electric Appliances & Novelties. Agents for renowned, "Elite" Brand Products. Phone: 20977.  
**EASTERN TRADING CO.**—Mahakali Chawl, Pydhonie, Bombay 3. Light Merchants & Manufacturers' Agent.  
 I.C.I. (India) Private Ltd.—P.B. No. 310, Bombay 1.  
 Indo Trading Co.—Jay Nivas, 36, Abdul Rehman Street, Bombay.

## PROGRESS

Brand Means



Right quality products—in  
 Burners, Stoves, Lanterns, Mantles,  
 Nipples, Valves and all other Spare  
 Parts.

For Trade Enquiry write:

**INTERNATIONAL BURNER MFG. CO.**

Post Box No. 3570, Bombay-4 (India)

Phone: 331391

Gram: "STOLANTERN"

**JAWAHAR & CO.**—Manufacturers of "KIRTI" brand Incandescent Lamps & Gas Mantles. Post Office Box No. 2568, Kalbadevi, Bombay 2. Phones—Office: 38911; Factory: 581294. Grams: "KRANTI".

Rasiklal & Company.—Peerbhoy Building, 89, Princess Street, Bombay 2.

### INDENTING AGENTS

**NARVO.**—IC Pitru Smriti, 4th Floor, Nanabhai Lane, Fort, Bombay 1. Grams: "AVNAVO." Phone: 254088. Sole Distributors for: Tartaric Acid, "STAR" Brand (French), Potassium Guaiacol Sulphonate & Dye-intermediates (French), Swiss make "SORBEX" Brand Sorbitol, Sorbitol Emulsifiers, Anti-foam Agents, Softeners, etc. Indenting Agents of: all Chemicals, Textile Chemicals, Fine Pharmaceuticals, Dye Intermediates, raw materials for Paints, Plastic and Rubber Industries, etc. Also Menthol, Thymol, Camphor, Sulphur, Mercury, etc., etc.

**MODERN MACHINE TOOLS CO.**—88, Nagdevi Cross Lane, Bombay 3. Phone: 322456. Grams: "MONKEYGRIP." Sole Agents: Albert Conveyor Belt Fasteners. Stockists: Albert Oval, Button, Walker, Elevator Harris Type Belt Fasteners Agents: Ameteeep Alligator Type Belt Lacings Samson Denmark Carded Belt Hooks.

### INDUSTRIAL & COMMERCIAL MANAGEMENT & COST CONSULTANTS

**BEACONS PRIVATE LIMITED.**—United Bank of India Bldg., Sir Phirozshah Mehta Road, G.P.O. Box No. 1723, Bombay 1. Phone: 251796. Grams: Consultant Industrial, Engineering and Business Consultants; Productivity, Costing, Layouts, Procedures, Systems, Structural Design and Civil Engineering; New Projects and Expansion; Market and Project reports, Schemes Preparation, Execution.

**ENDESCO PRIVATE LIMITED.**—Industrial & Management Consultants, Project Engineers, Registered Office: "Shivaenumh", 205, Dr. A. Besant Road, Worli, Bombay 18. Phone: 372614. Grams: "ENDESCO." Chairman: M. R. Thadani, Managing Director: H. N. Thadani. Foreign Associate: Ramseyer & Miller Inc., New York (USA), Iron & Steel Consultants, Gray & Donaldson Ltd., Adelaide, (Australia) Vintage Plant and Brewery Consultants. Project Engineering: Planning for new projects and for modernisation and expansion of industries for Agricultural machinery, Cement, Engineering, Ferrous and Non-Ferrous Plants, Forging Shops, Rolling Mills, Paper, Chipboard and Fibre Board Plants, Sugar, Textiles, Vintage Plants and Breweries. Management Consultants: Management organisation, financial controls, cost accounting, production planning and equipment utilisation, work standards, job evaluation, piece rates and incentives, material handling and mechanisation, stores organisation and inventory control, material utilisation and waste control, operation research, PERT/CPM, valuation of plant machinery and buildings, selection of management and technical staff, market research.

**IBCON PRIVATE LIMITED.**—Industrial and Business Consultants, Registered Office: Adelphi House, 119, Queen's Road; Phones: 242052/3; Grams: "IBCO"; Offices: 5, Russell Street, Calcutta 16; 18, Palace Road, Bangalore 1; Brady's Building, Mahatma Gandhi Road, Kanpur; D-24, Defence Colony, New Delhi 3; 14, Shivaganga Road, Nungambakkam, Madras 34; 7, Sukhastan Gardens, Off Ward Place, Colombo 7, Ceylon. Managing Director: R. R. Bajpai; Directors: B. J. Kirpalani, J. B. Vasandani, M. C. Mitter, D. K. Basu; Associate Cos.: In Pakistan, Mexico, Chile, Argentina, Brazil, United Kingdom, Hong Kong, Chicago, New York, Boston. Consultancy Services for Development



of new industries, market surveys, feasibility studies, project reports, project execution, personnel training, designs of buildings, structures and heavy machine foundations, supervision of erection and commissioning of plant and help achieve optimum performance. Planning and execution of modernisation and expansion of industries; Also raising productivity of labour and staff, machines and equipment, stores and raw materials and of capital employed and improving working efficiency of an organization by studying, recommending and helping implementations of recommendations on organization set up, office procedures, job evaluation and wage and salary structures, methods improvements, work standards, incentives, inventory control, production planning, fuel, power and steam utilization, plant layout, staff training, market demand, consumer preference, etc.

### INDUSTRIAL ENGINEERS

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Erla, P.O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANES-COL". Springs and Forms out of Spring Wires and Strips for your Industry.

**POWER-GAS CORPORATION LIMITED, THE.**—Meher Chambers, Nicol Road, Ballard Estate, Post Box No. 1331, Bombay 1.

### INDUSTRIAL EQUIPMENT

**LIGHT METAL WORKS.**—New Sun Mill Compound, DeLisle Road, Bombay 13. Manufacturers of Industrial Equipment and Export Articles in Stainless Steel & Aluminium and its Alloy Castings. Phone: 371817.

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P.O. Box 1909, Bombay 1. Phone: 251882. Also at Calcutta, New Delhi, Madras and Baroda. Importers & Dealers of Non-destructive Testing Equipment, Physical Testing Instruments, Sand Testing Equipment, Chemical Industries Instruments, etc.

### INDUSTRIAL FURNACES

**Indian Furnace Co. Private Ltd.**—Lotus Cinema Building, Dr. Annie Besant Road, Worli, Bombay 18.

**KHANDELWAL UDYOG LTD.**—Works: Ghatkopar, P.O. Rajawadi, Bombay-77. Manufacturers of all types of Furnaces, Such as Bell Type Furnaces, Heat treatment Furnaces, Continuous Automatic Lines for Galvanising and Patenting, Bogie Hearth, Rotary Hearth and Cyclone Furnaces. Standard Models available as well as Equipment designed to Customer's Specification in Collaboration with Ing. F. Ferre & Co. of Milano, Italy; Phones: 55281, 55282, 55283.

### INDUSTRIAL AND SPECIALISED OILS

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort. Phone: 254433. Grams: "DATNARE."

**Dhirren & Co.**—34, Cawasji Patel Street, Fort.

**Industrial Oils Manufacturing Co. of India.**—Prospect Chambers, Hornby Road, Fort.

**Kosma Laboratories.**—Allahabad Bank Building, Apollo Street, Fort. Roberts, McLean & Co., Private Ltd.—Ilaco House, Sir Phirozshah Mehta Road, Bombay.

### INDUSTRIAL SAFETY & RESPIRATORY EQUIPMENTS

**FIDA TRADERS.**—Manufacturers and Suppliers of Welding and Industrial safety equipments. Welding Helmets, Screen, Wire Brushes. All types of Gas and Electric Welding Goggles etc. Plastic Face Shields, Plastic Security Badges (Identity Badges) for labour, Plastic letters and sign boards. Dealers in Plastic Acrylic sheets and allied materials. 97, Dhaboo Street, Bombay-3 (BR). Phone: 334483. Grams: "UNIGOGGLE."

**FRANCIS LESLIE & CO.**—105, Apollo Street, Fort, Bombay 1. Phones: 255224-65315. Manufacturers of Industrial safety products, Goggles, Plastic Face Shields, Respirators, Helmets & Protective Clothing, for ensuring safety with maximum Comfort, efficiency, economy & quality.

**JOSEPH LESLIE & CO.**—Safety Engineers, Mfrs. of Industrial Safety Appliances and Respiratory Equipment; 105, Apollo Street, Bombay 1. Phone: 251608. Grams: "LEONINE."

**Vishwa Bharati Trading Co.**—14, Kumpta Street, Bombay 1.

### INFRA RAY EQUIPMENT

**Gordhandas Desai Private Ltd.**—Kermani Bldg., Sir P. M. Road, Bombay 1.

**Shah, M., & Co.**—Sandhurst Road, Bombay 4.

### INK MANUFACTURERS

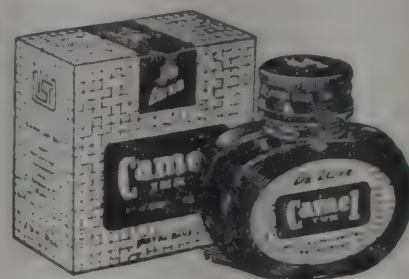
**ALTEX PRIVATE LIMITED.**—147, Mahatma Gandhi Road, Fort, Bombay 1. Phone: 251082. Grams: "BETEX."

### CAMEL INK

*De Luxe*  
With CAMLI-SOL 'GL',

Also Camel Brand

- Gum
- Paste
- Brilliantine
- Duplicating Ink



### CAMEL ARTIST MATERIALS

- Oil Colours
- Water Colours
- Oil Pastles
- Poster Colours
- Drawing Inks
- Wax Crayons
- Oil Painting Canvas
- Oil Sketching Paper
- Poster Papers

Manufactured by:

### CAMLIN PRIVATE LIMITED

210, Lady Jamshedji Road, Mahim,  
BOMBAY-16.

Grams: "CAMELINK"

Phone: 453458

Factory: Off Andheri-Kurla Road, Bombay 59.

Phone: 572949

**Desai Brothers.**—80/90, Omrigar Bldg., Lohar Chawl, Bombay 2.  
**J. B. A. Printing Inks Private Ltd.**—Bombay Agra Road, Bhandup, Bombay 40.

**Johnson & Co.**—51, Shamset Street, Bombay 3.

**Rainbow Ink and Varnish Mfg. Co. Private Ltd.**—133, Vakola, Santa Cruz (East), Bombay 55.

**Stewarts Laboratories.**—327, Hornby Road, Fort, Bombay.

### INSULATION MATERIALS

**Asbestos Packing Mfg. Co.**—15/A, Bruce Street, Bombay 1.

**B. B. ELECTRIC & AUTO STORES.**—98, Princess Street, Bombay 2. Phone: 30795. Grams: "BIBIELECT."

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.  
**Brady, W. H., & Co., Ltd.**—Royal Insurance Building, Churchgate Street, Fort.

**British Electric Insulating Co.**—33, Forbes Street, Fort.

**British Insulated Cables Ltd.**—Esplanade House, Waudby Road, Fort.

**CIBA OF INDIA LIMITED.**—Royal Insurance Building-14, Jamshedji Tata Road, Bombay-1. Phones: 245031-3; 246084-6  
Suppliers of Epoxy resins for potting, casting, encapsulation and impregnation of transformers, motors, condensers, etc.

**CITY PLYWOOD DEPOT.**—Opp. Chitra Cinema, Dr. Ambedkar Road, Dadar, Bombay-14. Phone: 442927. "JOLLY" Insulex Insulation Boards & Ceiling Tiles and Formica Sheets.

**COMMONWEALTH INSULATIONS CHEMICALS & FERTILISERS PRIVATE LTD.**—Ismael Building, Hornby Road, Fort, Bombay 1. Phone: 253570. "SUN & CROSS" Brand 85% Magnesia Hard Setting Compound, Anti-incrustative Boiler Compound, Anti-Corrosive Boiler & Chimney Paint, Binding Cement, Bonding Mortar & Refractory Cement.

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort, Phone: 254433. Grams: "DATNARE."

**Economic Electric Co., Ltd.**—Jail Road, Dongri, Bombay 2.

**FAKRUDDIN & CO.**—43, Abdul Rehman Street, P.O. Box No. 3066, Bombay 3. Phone: 325837 and 322725. Grams: "WOODPLY."



**GWALANI BROS. & CO. (INDIA) PRIVATE LTD.**—Gopal Bhawan, 189, Princess Street, Bombay 2 BR. Phone : 39047. Specialists in Insulating Materials and armature Winding Wires and Eureka Kanthal, Nichrome Wires.

**INDOPLAST LTD.**—Kasturi Building, Jamshedji Tata Road, Bombay 1. Phone : 38071. Grams : "STYROPOR." Manufacturers of Thermocole for Cold Insulation. Blocks, Slabs and Pipe Sections.

**INDUSTRIAL ELECTRICAL ENGINEERING CO.**—10, Hamam Street, Fort. Specialists in Insulating Materials and Armature Wires. Phone : 252836.

**LIGHTCRETE PRODUCTS PRIVATE LTD.**—32, Apollo Street, Fort, Bombay 1. Manufacturers of Thermo-Litecrete Lightweight, permanent fire resistant insulation slabs for Asbestos roofs, Partitions, etc. Controls Humidification loads & Condensation. Phones : 251291 & 251292.

McKenzies Ltd.—Sewri.

**NASH & COMPANY.**—103, Abdul Rehman Street, Bombay 3. Phone : 324968. "Jolly" Insullex Insulation Boards & Ceiling Tiles and Formica Sheets.

Patel Electric Wire & Insulating Co.—102, Kika Street (Gulalwadi), Bombay 4.

Pioneer Magnesia Works, Ltd., The.—Chartered Bank Building, Mahatma Gandhi Road, Fort.

**PERMALI WALLACE LIMITED.**—9, Wallace Street, Fort, Bombay 1, India. Grams : "PERMALIWAL". Manufacturers of Permal and Hy-Dulignum, Laminates for Electrical Insulation, General and Chemical Engineering use, Rail Track Insulation, Textile Accessories and Silent Gears.

**PLYNET TRADERS.**—"Shahru Castle", Mohamedali Road (Bibijan Street), Bombay 3. Phone : 327334 Grams : "NETPLY." Agents for Plywood Products (Sitapur). Manufacturers of "SITATEX" Thermal Acoustic Boards having five star features—Built in Moisture resistance, Bonded "SPFR" strength, Genuine dual purpose value, wide range of modern designs, unmatched FREE technical advice.

**R. G. KESWANI.**—World Naka, P. B. 16552, Bombay 18. Phone : 370374 & 373490. Industrial Consultants on Insulation : Mfrs. Re Insulapresentatives for materials and wires. Also raw materials for Electrical/Electronic Industries.

Reliance Trading Co.—25/47, Lohar Street, Bombay 2.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Bombay.

## INSULATION MATERIALS

### NEWKEM INSULATIONS

#### "THERMOLITE"

Regd. T. M. No. 182700.

For high temperature (100° F. to 1200° F.) Insulation Available in Powder, Preformed Pipe-Sections and Blocks.

#### "NULITEWOOL" GLASS FIBRE

for

heat, cold and Acoustic insulations. Available in mattresses (25 mm to 75 mm and upward thickness) and loose form VERMICULITE loose fill and VERMICULITE Insulating bricks.

Harganga Mahal, Dadar Tram Terminus, Bombay-14.

Phones : 440191.

## INSURANCE COMPANIES

**ALLIANCE ASSURANCE CO., LTD.**—"The International" 16, Queen's Road Estate, Churchgate, Bombay Fire, all Classes of Accident and Marine Insurance. "Branch Manager S. K. Divecha. Phone : 241789. Grams : SUNALLCO" Bombay.

**AMERICAN FOREIGN INSURANCE ASSOCIATION FINANCE CORPORATION** (Incorporated in the U.S.A. Liability of Shareholders Limited).—Principal Office in India : Universal Insurance Building, Sir Phirozshah Mehta Road, P.O. Box 1707. Annex Colon, Fort Chamber "C" 60, Tamarind Lane, Fort, Bombay 1; Phones : 252301, 252302. Grams : "AFIA-INDIA."

**AMERICAN INSURANCE CO., THE.**—(Incorporated in the U.S.A. Liability of Shareholders Limited)—Universal Insurance Building, Sir Phirozshah Mehta Road, Fort, Bombay. Phone : 255638 (Three lines). Grams : "AFIAINDIA." P.O. Box 977. Manager for India : P. B. Dastur. Bombay Regional Manager, P. N. Medora.

**ATLAS ASSURANCE CO., LTD.**—Indu House, Dougall Road, Ballard Estate, Bombay 1. (Fire—Marine—Motor—Accident and General). Branch Manager : M. M. Chakrabarty.

Baloise Marine Insurance Co., Ltd., The.—of Basle (Switzerland), Principal Office for India : French Bank Building, Homji Street, Bombay 1. Telegrams : "BASLER." Telephone : 25-5121. Transacts Fire, Marine, Miscellaneous Insurance and Reinsurance.

British Traders' Insurance Co., Ltd.—Hongkong Bank Building, Veer Nariman Road, Fort.

Clive Insurance Co., Ltd.—Elphinstone Building, Veer Nariman Road, Fort. Chief Agents : Gillanders Arbuthnot & Co. (Fire—Motor—Accident and General).

**COMMERCIAL UNION ASSURANCE CO., LTD.**—9, Wallace Street, Fort, Bombay. Phone : 264841. Grams : "CUACO."

Commonwealth Assurance Co., Ltd., Poona.—Bombay Branch : Commonwealth Building, 82, Meadows Street, Fort.

Employers' Liability Assurance Corporation Ltd., The.—Bombay Branch : Brady House, Veer Nariman Road, Bombay 1.

**GREAT AMERICAN INSURANCE COMPANY** (Incorporated in the U.S.A. Liability of Shareholders Limited).—Universal Insurance Building, Sir Phirozshah Mehta Road, Fort, Bombay. Phone : 255638 (Three lines). Grams : "AFIA-INDIA." P.O. Box 977. Manager for India, P. B. Dastur. Bombay Regional Manager, Mr. P. N. Medora.

**HARTFORD FIRE INSURANCE COMPANY** (Incorporated in the U.S.A. Liability of Shareholders Limited).—Universal Insurance Building, Sir Phirozshah Mehta Road, Fort, Bombay. Phone : 255638 (Three lines). Grams : "AFIA-INDIA." P.O. Box 977. Manager for India, P. B. Dastur. Bombay Regional Manager, P. N. Medora.

**HINDUSTHAN IDEAL INSURANCE CO., LTD.**—6, Bell Lane, Bombay 1. Phone : 251665 & 251746. Transacting Fire—Marine—Motor & Miscellaneous Insurance.

**HOME INSURANCE CO., THE** (Incorporated in the U.S.A. Liability of Shareholders Limited).—Universal Insurance Building, Sir Phirozshah Mehta Road, Fort, Bombay. Phone : 255638 (Three lines). Grams : "AFIAINDIA." P.O. Box 977. Manager for India, P. B. Dastur. Bombay Regional Manager, P. N. Medora.

**INDIAN TRADE & GENERAL INSURANCE CO., LTD.**—Principal Office : Jehangir Building, Mahatma Gandhi Road, Fort, Bombay. Grams : "ADASTRA". Phone : 255101. Regd. Office : 25, Brabourne Road, Calcutta 1. Business Transacted : —Fire, Marine, Motor and Miscellaneous. Branches : (1) Agra ; (2) Ahmedabad ; (3) Allahabad ; (4) Alleppey ; (5) Amritsar ; (6) Bangalore ; (7) Baroda ; (8) Bombay ; (9) Calcutta ; (10) Calicut ; (12) Cochin ; (11) Coimbatore ; (13) Indore ; (14) Jaipur ; (15) Lucknow ; (16) Ludhiana ; (17) Madras ; (18) New Delhi ; (19) Nagpur ; (20) Poona ; (21) Quilon ; (22) Raipur ; (23) Rajkot ; (24) Secunderabad ; (25) Surat ; (26) Trichur ; (27) Trivandrum. Overseas Branches : (1) Aden ; (2) Dar-es-Salam ; (3) Kampala ; (4) Kuala Lumpur ; (5) Mombasa ; (6) Nairobi ; (7) Penang ; (8) Singapore. Management : Surrender Lall — Managing Director, B. B. Sewhney — General Manager, A. T. Shimpi — Jt. General Manager.

**JAYABHARAT INSURANCE CO., LTD., THE.**—French Bank Building, Homji Street, Fort. (Fire—Marine—Motor and all other general Insurance). Phones : 253941, 253942, 253943, 253944, 253945.

Jupiter General Insurance Co., Ltd.—State Bank Bldg. Annexe, Bank Street, Fort.

**LEGAL AND GENERAL ASSURANCE SOCIETY LTD.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort. Phone : 255088. Manager : J. F. S. P. Fernandes. (Fire, Marine and Miscellaneous).

**LIVERPOOL & LONDON & GLOBE INSURANCE CO., LTD., THE.**—(Incorporated in England; Shareholders' Liability Ltd.)—12, Jamshedji Tata Road, Bombay. (Fire—Loss of Profits—Motor—Accident (all classes)—Engineering—Aviation—Marine). Branch Manager : R. A. Isaac. Tel. Address : "GLOBANCE." Phone No. 246226 (5 lines). Post Box No. 1840. Head Office : 1, Dale Street, Liverpool, England.

**LONDON & LANCASHIRE INSURANCE CO., LTD., THE.**—(Incorporated in England; Liability of the Members of the Company is Limited). 12, Jamshedji Tata Road, Bombay. (Fire—Loss of Profits—Motor—Accident (all classes)—Engineering—Aviation—Marine). Branch Manager : R. A. Isaac. Tel. Address : "LONDLANC." Phone : 246226 (5 lines). Post Box No. 117. Head Office : 45, Dale Street, Liverpool, England.

**MANUFACTURERS LIFE INSURANCE COMPANY OF CANADA.**—123, Mahatma Gandhi Road, Fort, Bombay. Phone : 253282. Grams : "MANULIFE." Resident Secretary, G. R. Shroff.

Marine & General Insurance Co. Ltd.—Standard Building, Dr. Dadabhoy Naoroji Road, Bombay 1.



**NATIONAL EMPLOYERS' MUTUAL GENERAL INSURANCE ASSOCIATION LTD.**—Kamani Chambers, 32, Nicol Road, Ballard Estate, P.O. Box 730. Phone: 26-2823/4 (2 Lines). Grams: "EMPLOMUTUA."

**National Fire & General Insurance Co., Ltd.**—National Insurance Building, Hornby Road. (Fire, Marine and Accident).

**NATIONAL INSURANCE COMPANY OF NEW ZEALAND LIMITED, THE.**—(Incorporated in New Zealand with Limited Liability). Head Office: Dunedin, New Zealand. Principal Office for India: Rahimtoola House, Hornji Street, Fort, Bombay 1. Transacts Fire, Marine and Miscellaneous Business. Principal Officer for India: R. W. Chidgey. Phones: 51537-8-9; Grams: "OTAGO," Bombay.

**NEW GREAT INSURANCE CO. OF INDIA, LTD.**—Principal Office: 45-47, Apollo Street, Fort, Bombay. General Manager: Shri M. G. Mody.

**New Hampshire Fire Insurance Co. of Manchester, New Hampshire.**—Warden House, Sir Phirozshah Mehta Road, Fort.

**NORWICH UNION FIRE INSURANCE SOCIETY, LTD.**—16, Bank Street, Post Box No. 49, Fort, Bombay. Western Zone Manager: K. M. Dastur. Grams: "NUFAM". Phones: 251985 and 255052.

**PANDYAN INSURANCE CO., LTD.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort. Phone No. 255088 (2 lines). Grams: "LEGRESH."

**Pearl Assurance Co., Ltd.**—Construction House, Nicol Road, Ballard Estate.

**ROYAL INSURANCE CO., LTD.**—(Incorporated in England; Stockholders' Liability Ltd.). 12, Jamshedji Tata Road, Bombay. (Fire—Loss of Profits—Motor—Accident (all classes)—Engineering—Aviation—Marine). Branch Manager: R. A. Isaac. Tel. Address: "ROYAL." Phone: 246226 (5 lines). Post Box No. 1847. Head Office:—1, North John Street, Liverpool, England.

**Scottish Alliance Insurance Co.**—9, Wallace Street, Fort (Fire).

**SCOTTISH UNION AND NATIONAL INSURANCE CO.**—16, Bank Street, Post Box No. 49, Fort, Bombay 1. Western Zone Manager: K. M. Dastur. Grams: "NUFAM." Phones: 251985 & 255052.

**Sea Insurance Co., Ltd., The.**—Head Office for India: Standard Building, Dr. Dadabhoi Naoroji Road, Fort.

**Sentinel Assurance Co., Ltd.**—Jannabhum Bhavan, Ghoga St., Fort. (Fire—Motor—Marine—etc.)

**SOUTH BRITISH INSURANCE CO. LTD.**—(Incorporated in New Zealand), Canada Building, Dr. Dadabhoi Naoroji Road, Bombay 1. Manager: J. S. Bramley. Assistants: A. L. Gabriel, M. S. Ramalingam; V. Srinivasan; B. P. Talati; R. D'Souza; C. H. Shahani. Phone No. 264711. Grams: "BRITISH." Branches at: Calcutta, Bombay, Madras, Ahmedabad and Poona.

**SOUTH INDIA INSURANCE CO., LTD.**—Regd. Office: Moti Mahal, Jamshedji Tata Road, Fort, Bombay. Grams: "COMPOSITE". Phones: 211051-2-3 & 244448-68. Business Transacted: Fire; Marine, Motor, Miscellaneous.

**SUN INSURANCE OFFICE LTD.**—"The International," 16, Queen's Road Estate, Churchgate, Bombay 1. Fire, All Classes of Accident and Marine Insurance. Manager: S. K. Divecha. Phone: 241789. Grams: "SUNALLCO," Bombay.

**Triton Insurance Co., Ltd.**—United India Life Building, 3rd Floor, Sir Phirozshah Mehta Road, Fort, P.O. Box No. 115, Bombay 1.

**Union Insurance Society of Canton, Ltd.**—Hongkong Bank Building, 16, Veer Nariman Road, Fort. (Fire—Marine—Motor—Accident and General).

**United India Fire & General Insurance Co., Ltd.**—Warden House, Sir Phirozshah Mehta Road, Fort.

**United India Life Assurance Co., Ltd.**—United India Life Building, Sir Phirozshah Mehta Road, Fort.

**Vanguard Fire and General Insurance Co. Ltd., The.**—Head Office: Madras. Bombay Branch: Sailor Building, 373, Hornby Road, Fort, Bombay.

**Warden Insurance Co. Ltd. (Estd. 1933).**—Warden House, Sir Phirozshah Mehta Road, Fort.

**Yorkshire Insurance Co., Ltd.**—10, Bruce Street, Fort.

**Zenith Assurance Co., Ltd.**—Mehta House, Apollo Street, Fort, Bombay.

### IRON, STEEL AND BRASS WORKS

**Acme Manufacturing Co., Ltd.**—Construction House, Wittet Road, Ballard Estate.

**ART METAL WORKS (Estd. 1882).**—35/C, Jeraibhoy Street, Foras Road, Bombay 8. Phone: 71692; Brass & Iron Founders, Builders, Hardware Manufacturers & Engineers & Contractors.

**Bolnkar Metal Works Ltd.**—Nana Chowk, Bombay 7.

**Bombay Iron Works.**—Ripon Road Cross Lane, Byculla.

**Brady, W. H., & Co., Ltd.**—Royal Insurance Building, Churchgate Street, Fort.

**Burjorji Pestonji & Sons, Private Ltd.**—Sussex Road, Victoria Gardens, Bombay 27.

**Chadha, B. M., & Co., Ltd.**—Jan Mansion, Sir Phirozshah Mehta Road, Fort, P. O. Box 671, Bombay.

**Chhotalal Keshawji & Co.**—Carnac Bunder.

**Chimanlal Vaddal & Co.**—80, Abdul Rehman Street.

**Curtis & Co., Ltd., J.**—6, Mahalaxmi Bridge Arcade, Bombay 11.

**Deviprasad Khandelwal & Co., Ltd.**—Iron Jetha, Carnac Bunder.

**GARLICK & CO. PRIVATE LTD.**—Haines Road, Jacob Circle. Also at Maskati Market, Kapasia Bazar, Ahmedabad; 42/1, Silver Jubilee Park Road, Bangalore 2; 6/365, Trichy Road, Coimbatore; 5, Green Gates, Saifabad, Hyderabad (A.P.); 58/3, Mount Road, Madras 6; G/4, Nizamuddin West, New Delhi 13.

**Hariprasad Amratlal & Co.**—Iron Market, Carnac Bunder.

**Hatimbhoy, A., & Co.**—Iron Jetha, Carnac Bunder, Bombay 9.

**Herman & Mohatta, B. R., Ltd.**—People's Building, Sir Phirozshah Mehta Road, Fort.

**Joshi & Co.**—207, Kumbharwada 6th Lane, Golpitha, Bombay 4.

**Kothari, P., & Sons.**—2nd Kumbharwada, Bombay 4.

**Manekchand Jivraj & Co.**—Old Iron Jetha, Darukhana.

**Mapara Engineering Co.**—381, Dadabhoi Naoroji Road, Bombay 1. Phone: 253398. Manufacturers in mild steel and stainless steel of chemical and Pressure Vessels, Storage Tanks and all kinds of Sheet Metal and Structural Works.

**Mehta & Co.**—35, Abdul Rehman Street.

**Miskhan Adamji & Co.**—Carnac Bunder.

**Modern Textile Engineering Works.**—194-A, Trimbak Parashram Street, Golpitha, Bombay 4.

**MUNCHERJEE BYRAMJEE & CO. (ESTD. 1882).**—35-C, Jeraibhoy Street, near Municipal Workshop, Bombay 8. Phone: 71692. Brass & Iron founders & structural & Mechanical Engineers.

**Murlimal Santram & Co.**—Iron Jetha, Carnac Bunder.

**Nadirshaw & Bros.**—"Silver Talkies" Building, Khetwadi Back Road, Bombay 4.

**New Standard Engineering Co., Ltd.**—222, Bellasis Road, Byculla.

**Pioneer Iron Foundry.**—11, Sukhlaji Street, Corner of Grant Road.

**Prabhudas, C., & Co.**—247, Argyle Road, Carnac Bunder.

**Ramniklal Maganlal & Co.**—Iron Market, Carnac Bunder.

**Ramsaran Dass Aggarwal & Sons.**—163, Nagdevi Cross Lane, Bombay 3.

**Richardson & Cruddas Ltd.**—Byculla Ironworks, Byculla.

**Ripon Foundry, New.**—236, Ripon Road, Byculla.

**Saif Welding & Engineering Works.**—130, Sukhlaji Street, Bombay 8.

**Samartha Engineering & Weaving Co., Ltd.**—Neville House, Ballard Estate.

**Shantilal Parmanand & Co.**—47A, Carnac Siding Road.

**SHAPARIA DOCK & STEEL CO. PRIVATE LTD.**—Shipbuilders, Engineers & Contractors—Suppliers to D.G.S. & D., Director of Industries & C.P.O., Railways, P.W.D., Port Trusts, Electricity Boards, Municipalities, etc., specialising in Corrugated Steel Pale Fencing, Ornamental Compound Gates, Rolling Shutters (Ordinary & Fireproof), Rolling Grilles, Fire Proof Steel Doors, Collapsible Gates, Tipping Wagons, Light Railway Equipments, Wheel Barrows, Refuse Hand Carts, Platform Trucks, Light Structural Steel Works, Roof Lights, Lead-Ulite (Lead Wool), Steel Rollers, Garden Benches, Tree Guards, Steel Tanks, etc., Works at: Parel Road Cross Lane, Bombay 12. Gram: "SHAPARIA." Phone: 70808.

**Standard Metal Works.**—17, Falkland Road Low Level, Bombay 7.

**STANDARD ROLLING SHUTTERS & ENGINEERING WORKS PRIVATE LTD.**—On Government & P.W.D. List. Office: 101, Mahatma Gandhi Road, Opp. Bombay University, Fort, Bombay 1. Grams: "ROLSHUTTER." Phone: 251468. Manufacturers of: M. S. Rolling Shutters, Ventilated Rolling Grilles, Collapsible Gates, Patent Shutter Gates, Alligator Doors—all Manually and Electrically Operated, Fire Proof Rolling Shutters and Fire Proof Doors—Sliding, Hinged and Automatic (approved by Fire Sectional Committee) and also Ornamental Grilles and Compound Gates, etc. of any size. Install our famous Standard Rolling Shutters.

**Sun Metal Works.**—Factory, Ghodbunder Road, Malad.

**Suresh Engineering Works.**—Bombay Cotton Mills Estate, Kalachowki Road, Bombay 33. Phone: 377887. Ferrous & Non-Ferrous Castings, Steel Fabrication, Electrically heated Driers and Stainless Steel Fabrication.

**Swastik Rolling Shutters & Engineering Works.**—Parel Station Road, Bombay 12. Phone: 62041. Grams: "SWASTIKROL".

**Tata Iron & Steel Co., Ltd.**—Bombay House, 24, Bruce Street, Fort.

**United Steel Companies (India) Private Ltd., The.**—Himalaya House, Junction of Hornby Road and Palton Road, Bombay 1.

**Vithal Purushotum & Sons, Ltd.**—2nd Khetwadi Lane, Bombay 4.

**Vithaldas, D., & Co.**—76, 1st Pathan Street, Golpitha, Bombay 4.

**Yahya & Company.**—123, Abdul Rehman Street, Bombay 3.

### IRON & STEEL MERCHANTS

**A. A. MORBIWALA & CO.**—109/111, Abdul Rehman Street, Bombay 3. Phone: 323280. Grams: "VARNISH (MD)." Direct Importers & Stockists of Stitching Wires of all kinds.

**Adamally Sons Ltd.**—277, Nagdevi Street, Bombay 3.



Adamji Lookmanji (Iron & Steel) Ltd.—Rahimtoola House, Homji Street, Fort.

Amratlal V. & Co.—Carnac Bunder, Bombay 9.

Amritlal Popatlal & Son.—Darukhana, Mazagaon, Bombay 10.

Anandji Haridas & Co., Ltd.—Frere Road, Bombay.

Arvinda Bros.—165, Vithalbhai Patel Road, Bombay 4.

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.

**BOMBAY STEEL CORPORATION.**—Importers & Stockists of Alloy & Tool Steels. Head Office: 140, Meadows Street, Bombay 1; Phones: 255077; Residence: 472383.

**BOMBAY STEEL TRADERS.**—Iron & Steel Merchants & Stockists of R. S. Joints, Channels, Angles Plates, Rounds, Flats, etc. Latif House, Iron Market, Bombay-9. Phones: 321275 & 322397. Branch: Laxmipuri, Kolhapur.

Chhaganlal & Co.—Carnac Bunder, Bombay 9. Phone: 20751. Grams: "CONTRACTS."

Chimanlal Devchand & Co.—2nd Kumbharwada Lane, Bombay 4.

Chimanlal Vrajilal & Co.—Latif House, Iron Market, Bombay 9.

Deviprasad Khandelwal & Co., Ltd.—Iron Jetha, Carnac Bunder.

Francis Klein & Co. (Bombay) Ltd.—Shale Building, Bank Street, Fort, Post Box No. 777, Bombay.

Harbanslal Aggarwal (India) Ltd.—134, Narayan Dhuru Street, Bombay 3.

Hatimbhoy, A., & Co.—Iron Jetha, Carnac Bunder, Bombay 9.

Herman & Mohatta, B. B., Ltd.—People's Building, Sir Phiroze Shah Mehta Road, Fort.

Hindustan Iron & Steel Co.—20-22, Tava Lane, Bombay 3.

Hindustan Metal Manufacturing Co.—Room No. 305, Loha Bhuvan, P. D'Mello Road (Frere Road), Bombay 9 (BR).

Indian Standard Metal Co., Ltd.—Chinchpokli Cross Lane, Bombay 27.

**INDIAN STEEL CORPORATION.**—Darukhana, 4th Lane, Mazagon, Bombay 10. Phones: 377028 & 372784. Grams: COLDROLLED. Stockists of Iron and Steel Raw Goods and Specialists in Sheets.

**JINDAL BROTHERS.**—3rd Lane, Dharmkhana, Bombay 10-DD. Phones: 376389 & 378720. Grams: "JINDALSHIP." Importers, Mfrs. and Contractors: Iron & Steel Merchants.

Maneklal & Co.—166, Hornby Road, Fort, Bombay.

**MANGALDAS RANCHHODDAS & CO.**—Iron Market, Carnac Siding Road, Bombay 9. Phone: 321884 & 327702. Grams: "MANGALODAY".

**MANUBHAI SHAH & CO.**—297, Samuel Street, Bombay 3; Iron Market, Bombay 9. Phone: 322655. Res. 471884. Grams: "CHAKOR." Dealers in Iron, Steel, Metals, Chemicals, Dyes, Starches & Mill Stores.

Maroo (Steels) & Co.—158-164, Kalbadevi Road, Bombay 2. Phone Nos. 23877, 29744 and 245004. Grams: "SILVAGENT."

**MEHTA & COMPANY.**—Latif House, Argyle Road, Iron Market, Bombay 9. Phones: 321265 & 321298. Grams: "NICERODS." Importers and Stockists of Iron, Steel, Hardware and Metals.

Mehta Nanavati & Co.—Barbhai Moholla, 96, Narayan Dhuru Street, Bombay 3.

**MODERN STEEL COMPANY.**—125/A, Ali Umer Street, Off Banian Road, Bombay 3.

Nagdevi Tool-Steel Mart.—186-88, Nagdevi Street, Bombay 3.

National Steel & Wire Products.—82/86, Abdul Rehman Street, Bombay 3.

Odhavji, B., & Co.—Carnac Bunder, Argyle Road, Bombay.

Paramount Hardware Mart.—Carnac Bunder, Bombay 9.

Parikh & Co., K.—Iron Market, Carnac Bunder, Bombay 9.

P. L. Bhatt & Co.—5, Bharat House, 104, Apollo Street, Fort, Bombay.

**RAMCHAND MATHRADAS AGGARWAL.**—30, Khokha Bazar, Sarang Street, Bombay 3. Phones: 326075 & 328942. Grams: "PIPEDIE." Hardware, Tools, Fittings, Pipes, Compressors, Machinery & Implements, Iron & Steel, etc.

Ramniklal Amidas & Co.—Carnac Bunder, Iron Jetha, Bombay 9.

**RAMNIKLAL MAGANLAL & CO.**—Carnac Siding Road, Bombay 9. Phone: 325292. Grams: "TESTED."

**RAMSAHAI RAJKUMAR.**—Registered Stockists of Iron & Steel and Re-Rollers. Loha Bhavan, Room No. 311, P. D'Mello Road, Bombay 9. Phone: 322393. Grams: "IRONAANGER."

Reliance Iron & Hardware Co.—11, Narayan Dhuru Cross Lane, Bombay 3.

Richardson & Cruddas.—Byculla Iron Works, Byculla.

Shah Chhaganlal Ladhubhai.—58, Mudi Bazar (Mendvi), Bombay 3.

**SHISHIR & CO.**—Head Office: 140, Meadows Street, Bombay 1. Phone Nos. 254756 & 255077. Grams: "SHISHIRCO."

**STEELYARD PRIVATE LTD.**—Regd. Office: Carnac Bunder, Sant Tukaram Road, Bombay 9. Phones: 322643 (Sales Office) and 39211 (Res.) Grams: "SCOTCHIRON." Steel & Hardware Merchants. Chairman: R. J. Maniar. Managing Directors: C. J. Ambani and J. J. Ambani.

**TAJ IRON & STEEL WORKS PRIVATE LTD.**—247, Maulana Azad Road, Bombay-8. Phone: 377093. Grams: "TAJSTEEL." Manufacturers of Steel bars rounds rounds, Square, hexa-

gonals, Flats and Light structurals. Factory: Saltpan Road, Wadala, Bombay-31. Phone: 440150.

Tarachand Gupta & Bros.—Narayan Dhuru Street, Bombay 3.

**TEJPAULS PRIVATE LTD.**—Head Office: Nagindas Chambers, 167, P. D'Mello Road, Bombay 1. Phone: 266365 and Sales Office: 225, Sant Tukaram Road, Iron Market, Bombay 9. Phone: 328875. Grams: "STEELDEPOT." Iron & Steel Merchants. Also Manufacturers of H. B. Wires, Spring Steel Wires, Galvanised & Copper Coated Wires, Barbed Wires & Wire Nails.

Teka Hardware & Engineering Corporation.—82/86, Abdul Rehman Street, Bombay 3.

**TIRATHRAM KASHMIRILAL (INDIA) PRIVATE LTD.**—229, Sant Tukaram Road, Bombay 9. Phones: 321623 & 328061 (Office) & 212447 (Res.). Grams: "GIRDERS." Government Controlled Stockists and Importers of Iron & Steel Light and Heavy Structural Reinforcing Bars, Sheets, Plates, Wires, etc.

Thos. W. Ward (India) Ltd.—Marshall Building, Ballard Road, Ballard Estate, Fort.

United Steel Companies (India) Private Ltd.—Patel House, Churchgate Street, Fort.

Unity Hardware Stores Co.—Iron Jetha, Carnac Bunder, Bombay 9.

**V. AMRITLAL & CO.**—201, Giriraj, Carnac Bunder, Sant Tukaram Road, Bombay 9. Phone: 661797 (Res.). Grams: "SCOTCHIRON." Iron & Steel Suppliers.

Volkart Brothers.—19, Graham Road, Ballard Estate.

Volras Ltd.—Graham Road, Ballard Estate, Bombay 1.

### JEWELLERY (Imitation)

**BIERI PRIVATE LTD.**—Manufacturers of Artificial Jewellery from aluminium and Pioneers of Anodising in India. Office & Factory: Near Bus Terminus, Sion, Bombay-22-DD. Phone: 471291, 473855 & 475565.

### JEWELLERS, GOLDSMITHS AND SILVERSMITHS

Abdul Kayum Ebrahim Jhaveri & Co. (Estd. 1902).—Mama Chambers, 93, Cumballa Hill Road, Bombay 26. Phone: 76962.

B. Jamshedji Jivanji (Estd. 1901).—Opp. Mumbadevi, Zaveri Bazar, Bombay 2.

**BHAGAT BROTHERS.**—Patel Chambers, Sandhurst Bridge, Bombay 7. Phone: 352725. Grams: "SHOWINDOW." Jewellers & Department Stores.

Chandulal L. Khokhani & Co.—130/32, Sheikh Memon Street, Bombay 2.

Chhaganlal Narotamdas Zaveri & Co.—Dhunjli Street.

### BUYING & SELLING



DIAMOND, RUBY,  
EMERALD, etc.  
JEWELLERY

Please Visit :

**CHUNILAL & COMPANY**

17, Dhanji St., Opp. Pydhonie Taxi Stand,  
Bombay-3.

Phones : Office : 326991

Resl: { Vora : 357660.  
Parekh : 29679.

Chimanlal Manchand & Co.—Showroom: Opp. Opera House, New Queen's Road. Phones: 30321. Grams: "PLATINUM."

Chimanlal Popatlal Minawala.—256, Zaveri Bazar, Ghia Mansion, Bombay 2.

**CHANDULAL T. SHAH.**—59, L. K. Market Bldg., 156, Zaveri Bazar, Bombay 2. Phone: 353269. Grams: "SHAH CITY".

**CULTURE PEARLS DEALING CO.**—Madras Building, 2nd Floor, 148, Mumbadevi Road, Bombay 2. Phone: 321658. Dealers in (Real) Culture Pearls, Ornaments and other Jewelleries.

**DAHVALAL MAKANJEE ZAVERI.**—Precious Stones—Diamonds—Pearls and Manufacturing Jewellers, also authorised valuers under the Estate Duty Act. 98, Sheikh Memon Street, Bombay 2. Phone: 23218. Grams: "JAYKUBER."

Danabhai & Amratlal Minawala (Estd. 1931).—Art Jewellers, 252-54, Sheikh Memon Street, Bombay 2.

Dayabhai Bros.—Patel Chambers, Bombay 7.

Dinshah D. Kanga & Co.—Princess Building, Princess Street, Bombay

Dipchand M. Shah.—17, Dhanji Street, Bombay 3. Phone: 20417. Grams: "Godiparas".



Doulatram Vallabdas.—Jewellers (Karachiwala), 257, Sheikh Memon Street, Zaveri Bazar.

Framroze Sorabji & Co.—Regal Cinema Building, Apollo Bunder, Fort.

Gandar Ltd.—Taj Mahal Hotel, Bombay 1.

Gordhandas K. Jhaveri & Co.—Oomrigar Building, opp. Crawford Market.

**HAIJARE & BROS., Y. A.**—Showroom & Factory: 1st Panjrapole Lane, Madhav Baugh, Bombay 4. Phones: 333666 & 336162. Grams: "KRUPAWANTI." Manufacturers of Silverware, Brassware, Presentation Articles and Specialists in Sports Trophies and Silver Caskets.

Harilal Lalji & Co.—149, Sheikh Memon Street, Bombay 2.

Harsad Novelties.—Panjrapole Compound, Madhavbaugh, Bombay 4.

Hemchand Mohanlal & Co.—Devkibal Bhuvan, Dhanji Street, Bombay 3.

Kashmir Govt. Arts Emporium.—Sir P. M. Road, Bombay 1.

Khatau Chatrabhuji.—40-41, Swadeshi Market, Kalbadevi Road, Bombay 2.

Kotwal Bros.—Near Cama Baug, opp. Girgaum Police Court, New Charni Road.

*For* **PURE DIAMONDS**  
**K. Wadia**  
**GRANT-RD. BOMBAY**

Phone: 371483 - Grams: "GEMARTWORK"

Lund & Blockley.—Sassoon Institute Building, 150-154, Mahatma Gandhi Road.

**MAGANBHAI & LALLUBHAI.**—Jewellers, Direct Importers and Exporters of Real and Cultured Pearls, Precious & Semi-Precious Stones, Diamonds, Rough & Cut, 184-186, Sheikh Memon Street, Bombay 2. Phone: 23785. Grams: "MOTIBUTTON."

Motilal Dayabhai & Sons.—208, Walkeshwar Road.

Nagindas Lalloobhai & Sons.—33-37, Dhanji Street, Bombay 3.

Nanji Bhagwan Bros.—Sheikh Memon Street.

Nanubhai Jewellers.—115, Mahatma Gandhi Road, Fort.

Narotamdas Bhau.—Bhaskar Mansion, Lamington Road, Bombay 4.

New Pearls Trading Agency.—Patel Building, 76-A, Sheikh Memon Street, Zaveri Bazar.

Noble Jewellery Mart.—Capitol Cinema Bldg., Bori Bunder, Bombay 1.

N. M. Gidvan.—631-A, Girgaum Road, Gundar House, Dhobi Talao, Bombay 2.

**PITAMBERDASS MOHANLAL & SONS (ESTD. 1880).**—4, Mandlik Road, Causeway, Opp. Colaba Police Station, Bombay 1. Phone: 21276. Grams: "GEMLEADER." Dealers and Exporters in all kinds of cut & rough precious and semi-precious stones. Also many varieties of Bead Necklaces.

Raj & Co., R. H.—Cecil Court, Corner of Lansdowne Road and Colaba Causeway, opp. Majestic Hotel, Fort.

Rasiklal Hirallal & Co.—205, Sheikh Memon Street, Bombay 2.

Ruby & Co.—Cutch Castle, opp. Opera House.

Saleh.—Jeweller, 344, Abdul Rehman Street, near Crawford Market, Bombay 2.

Samant, Keshawji & Co.—Venichand Jitadas Building, 223, Sheikh Memon Street.

Sanghavi, V. V., & Co.—528, Cheera Bazar, Kachwala Mansion, Girgaum Road.

Shanji Vishnar Zaveri.—Sheikh Memon Street, Bombay 2.

Shantilal, N., & Co.—3, Dhanji Street, C/o Diamond Merchants' Association.

Somchand M. Shah.—Mangesh Building, New Bhatwadi Street, Bombay 4.

Surajmal Lallubhai & Co.—359, Kalbadevi Road.

Tikamdas Brothers.—Next to Regal Cinema, Apollo Bunder, Fort.

Valimohomed Gulamhusain Sonavala & Co.—126, Mumbadevi, Zaveri Bazar.

**WAMAN HARI PETHE (ESTD. 1908).**—Head Office: Pethe Building, Jagannath Sunkershet Road, Bombay 4. Dadar Branch: Pethe Building, Ranade Road, Dadar, Bombay-28, Diamonds, Pearls and Jewellery Merchants. Inquire for

anything as to sale, purchase or exchange. Reliable Jewellery at moderate prices. Ready Stock and also made to order. H.O. Phone: 356185, Dadar Branch: Phone: 451592.

Y. S. Fazlehussen.—68, Mohamedali Road, Bombay 3.

### JOB WORK (Machinery Parts Mfrs.)

**CAPRI ENGINEERING CO.**—296, Frere Road (near Fort Market), Bombay 1. Phone: 266438; Grams: "CAPRIENG."

### JUTE AND JUTE PRODUCTS

Bulchand Co., L.—Moos Building, 510, Kalbadevi Road.

Chandulal & Co.—Kathawalla, 11, Kazi Sayed Street, Bombay 9.

Dwarkadas Velji Talpatriwalla.—36, Esaji Street, Vadgadi, Bombay 3.

Express Corporation.—Co-operative Insurance Building, Sir Phirozshah Mehta Road, Fort.

Keshavlal Talakchand.—India House, Fort Street, Bombay 1.

K. Metharam.—491-3, Kalbadevi Road.

Korji Damji.—Katha Bazar, Oos Gali (Syed Mukri St.), Bombay 9.

M. Daidas & Sons.—190, Princess Street.

Menty, S. M., & Co.—13, Horniman Circle, Fort.

Natwar Trading Co.—895, Kalbadevi Road, Bombay 2.

Pravin Brothers & Co.—501, Commerce House, Meadows Street, Bombay 1. Phones: 251748, Grams: "WIDESCOPE."

Shamji Kalyanji & Co.—67, Bhandari Street (Koliwada-Mandvi), Bombay 3.

Tavaris Bros.—Dhan Nur, Sir Phirozshah Mehta Road, Fort.

### LABEL MAKING MACHINERY SUPPLIERS

**GUNVANTRAY & CO.**—Crescent Chambers, Tamarind Lane, Bombay 1. Phone: 254684. Grams: "GUNARAYCO." H.O. Khadia, Ahmedabad 1. Phone: 4068.

### LABEL MANUFACTURERS

**BIERI PRIVATE LTD.**—Manufacturers of Aluminium anodised labels in different colours. Office and factory: Near Bus Terminus, Sion, Bombay-22 (DD). Phone: 471291, 473855 & 475565.

**NUTEX (INDIA) PRIVATE LTD.**—(Associated to Signograph Co., Calcutta). Specialists in Transfer Labels and Silk Screen Printing and Stencils. Devkaran Mansion, Block No. 1 (3rd Floor), Princess Street, Bombay 2. Grams: "SINONUTEX." Phone: 22860.

Ryland Paper Box Manufacturing Co.—Lakhanl Building, 34, Cawasji Patel Street, Fort, Bombay 1.

### LABORATORY APPARATUS

**INDSALES CORPORATION.**—11, Horniman Circle, Bombay 1. Phone: 253264. Grams: "ANALYTICAL." Laboratory & Industrial Stirrers, Students' Microscopes, etc. for Biology Department, Physics Instruments, Laboratory Apparatus, Polytheneware, Balances, Chemicals & Reagents, Baths, Ovens Vacuum Pumps, Water still etc.

### LABORATORY CHEMICALS

**AMRUTLAL BHURABHAI & CO.**—P.O. Box No. 2379, Anand Bhuvan Princess Street, Bombay 2 (B.R.). Phones: 30023, 30024 & 20419. Grams: "CHEMDRUGS," Bombay 2 (B.R.). Direct Importers and Dealers of all kinds of Laboratory Chemicals, Drugs & Essential Oils.

**B. M. SHAH & CO.**—40, Princess Street, Bombay 2. Phone: 29915. Grams: "BONAFIDE." Direct Importers of Drugs, Pharmaceuticals & Laboratory Chemicals.

**BRITISH DRUG HOUSES (INDIA) PRIVATE LTD.**—8, Graham Road, Bombay 1. Phones: 263138, 263139. Grams: "TETRADOME."

**CHEMICAL INTERNATIONAL.**—3, Princess Street, Bombay 2. Phones: 23694 & 20540. Grams: "CHEMINTER." Direct Importers & Stockists of Photographic, Laboratory, Industrial, Heavy & Fine Chemicals, Solvents, Pharmaceutical Drugs, Sizing Material and all sorts of Textile Requisites, Acids C.P. and A.R., Cosmetic Wax, Distilled Water, C.P. College Chemicals, etc.

Gordhandas Desai Private Ltd.—Kermani Bldg., Sir P. M. Road, Bombay 1.

**INSTRUMENTS & CHEMICALS CORP.**—Narsing Lane, Hanuman Baug, G. B. Road, Malad, Bombay 64. Stockists of Industrial Chemicals for Mills and Pharmaceutical Laboratories.

**KANTILAL MANILAL & CO.**—16, Princess Street, P.O. No. 2162, Bombay 2. Phones: 38530 & 20230. Suppliers of Pharmaceuticals, Industrial & Laboratory Chemicals, Solvents, Preservatives, Fatty Acids, etc. Grams: "DAYLIGHT."

Labo Instruments & Chemical Corporation.—Narsing Lane Hanuman Baug, G. B. Road, Malad, Bombay 64. Chemicals for Mill and Pharmaceuticals Laboratories.

Pravin Brothers & Co.—501, Commerce House, Meadows Street, Bombay 1. Phones: 251748, Grams: "WIDESCOPE."



**ROYAL DRUG & PHARMACEUTICALS CO.**—Sharaf Mansion 38, Princess Street, Bombay 2. Phone: 38749. Grams: "RODPHAR." Wholesale Dealers and direct Importers of Solvents, Drugs, Pharmaceuticals, Vitamins & Laboratory Chemicals. (Mostly useful in Colleges & Research Institutes).

**S. MATHURADAS & CO.**—P.O. Box No. 2113, Princess Street, Bombay 2. Grams: "SMATHURCO". Phone: 30273. Stockists of Laboratory & Fine Chemicals, Analytical & Laboratory Re-Agents, Amino Acids, Stains, Drugs, Vitamins, etc. Manufactured by E. Merck & other renowned products.

**NATIONAL CHEMICAL CORPORATION.**—Manufacturers of Acids, Solvents and other various Chemicals in A.R. and C. P. Grade and pellets of Caustic soda. 9, Dev Mansion, Pathak Wadi, Princess Street, Bombay-2. Phone: 29737 (Office) & 592126 (Factory).

**VELU & CO. (PVT.) LTD., P. K.**—P.O. Box No. 514, 111, Mahatma Gandhi Road, Bombay 1. Phones: 253141 & 541325. Grams: "LACQUER."

**VORA BROTHERS.**—Chemists and Druggists, Wholesale dealers and Direct Importers of Laboratory Chemicals and Glassware. 214-B, Princess Street, Bombay-2. Phones: 20256, 30204 & 39353. Grams: "BECKMAN".

### LABORATORY & HOSPITAL GLASSWARE

**Boroell Glass Works Ltd.**—Chotani Estate, Proctor Road, Grant Road, Bombay-7.

### LABORATORY EQUIPMENT

**Adair Dutt & Co. (India) Ltd.**—Syndicate Bank Bldg., Sir Phirozshah Mehta Road, Fort.

**ANDHRA SCIENTIFIC CO., LTD.**—Janmabhoomi Chambers, Fort Street, Bombay 1. Phone: 261540. Grams: "ASINSTRS." Regd. Office & Works: Masulipam, Andhra Pradesh.

**ASHA SCIENTIFIC COMPANY.**—Lotlikar Mansion, 503, Girgaum Road, Bombay 2. Grams: "ASHACOM." Phone: 22855.

**ASSOCIATED INSTRUMENT MFRS. (INDIA) PRIVATE LTD.**—India House, Fort Street, Bombay 1. Phone: 261658. Grams: "AIMILBOM."

**Bhagwandas Devshi, Ltd.**—87, Princess Street.  
**Bole Brothers.**—49, Princess Street, Bombay 2.

**BRIGHT BROTHERS PRIVATE LTD.**—156-A, Tardeo Road, Bombay 34. Grams: "BRIEOS." Phones: 378548, 378549, 378540. Manufacturers of Polythene Buckets, Basins, Mugs, Tote Boxes, Carboys and large size Containers for Acids and Chemicals.

**CENTRAL SCIENTIFIC SYNDICATE.**—475, Jagannath Shankerseth Road (Chira Bazar), Bombay 2. Grams: "MAX-SERVE." Dealers in Scientific and Laboratory requirements, suppliers of Physics and Biology Instruments.

**Donald & Co.**—255, Princess Street, Bombay 2.

**DOCTOR & CO.**—Bombay Mutual Terrace, 534, Sandhurst Road (Near Sandhurst Bridge), Bombay 7. Phone: 357098. Grams: "DIATHERMY." Suppliers of all Laboratory & Scientific Instruments, Apparatus, Appliances and Glassware.

**Gandhi Brothers.**—Anand Bhuvan, Princess Street, Bombay 2.

**GANSONS PRIVATE LTD.**—Adm. Office: at Industry Manor, 2nd Floor, Off Cadell Road, Bombay 28 DD. Phone: 45-3154. Grams: "INMAG." Manufacturers of "Gansons" Gas Plants, Chemicals and Pharmaceutical Plants, Laboratory Equipments, Isotope Handling Equipment, Ampoule Cutters.

**INDIA SCIENTIFIC TRADERS.**—Peerbhoy Mansion, 460, Sardar Valabhbhai Patel Road, Bombay 4. Phone: 356338. Grams: "ESVIJACK" (GG).

**INDSALES CORPORATION.**—11, Horniman Circle, Bombay 1. Phone: 253264. Grams: "ANALYTICAL." Laboratory & Industrial Stirrers, Students Microscopes, etc. for Biology Department, Physics Instruments, Laboratory Apparatus, Polythene ware, Balances, Chemicals and Reagents, Baths, Ovens, etc.

**Imperial Surgical Co.**—India House, opp. G.P.O., Bombay 1.

**INDUSTRIAL & RESEARCH INSTRUMENT CO.**—D2, Commerce Centre, 74, Tardeo Road, Bombay 34. Automated Analytical Instruments for Metallurgical Chemical Process Industries.

**Industrial Mill Gin Stores.**—Industrial House, 51/53, Nagdevi Cross Lane, Bombay 3.

**INSTRUMENTS & CHEMICAL CORPORATION.**—Narsing Lane, Hanuman Baug, G. B. Road, Malad, Bombay 64. Stockists of Laboratory Chemicals, Laboratory & Industrial Equipment, Glasswares (Indian & Pyrex).

**J. T. JAGTIANI.**—National House, 6, Tulloch Road, Apollo Bunder, Post Box No. 232, Bombay 1. Phone: 212035. Grams: "FACMARE." Specialists in Hospital and Laboratory Equipment.

**JIVRAJ & VRAJLAL.**—122, Nagdevi Street, Bombay 3. Phone: 325138 (Shop) & 30932 (Res.). Grams: "SAMIPIPES."

**KILBURN & CO. LTD.**—Gresham Assurance House, Phirozshah Mehta Road, Bombay 1. Phone: 256645. Grams: "TASCONIUM."

**MARTIN & HARRIS (PRIVATE) LTD.**—Savoy Chambers, Wallace Street, Bombay 1. Phone Nos. Office: 263473/4, Stores: 261270. Grams: "ROWLETTE."

**Medical Appliances Manufacturers Co.**—Kustom Building, Vir Nariman Street, Fort.

**NATIONAL STEEL EQUIPMENT CO.**—8, Katrak Road, Wadala, Bombay 31. Phones: 441755 & 442139; Factory: 442973, Grams: "BEDLOCKER", Bombay, Wadala. Manufacturers of Pressure Steam Sterilizers & Autoclaves, Pyrogen-free Water Still, Premature Baby's Incubators, Complete range of Industrial Heavy-duty Catering (Kitchen) Equipment and fully automatic Packaged Boilers. Branches: Delhi, Calcutta, Madras.

**NEW SURGICAL TRADING CO., THE.**—Balakidas Building Mangaldas Road, Princess Street, P.O. Box 2321, Bombay 2. Dealers in Surgical, Scientific and Laboratory Equipments, Hospital Steel Furniture and Sundries, Specialised in Soil and Cement Testing Equipment. Agents for Instruments & Chemical Private Ltd., Manufacturers of Equipments for Higher Research in Physiology & Pharmacology.

**Parekh Bros., Ltd.**—65, Mahatma Gandhi Road, Fort.

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P.O. Box 1909, Bombay 1. Phone: 251882. Also at Calcutta, New Delhi, Madras & Baroda. Pyrometers, Physical Testing and Balancing Equipment, Microscopes, Polarographs, Metal Spectroscopes, Colorimeters & Photoelectric Instruments, Sand Testing Equipment, Non-destructive Testing instruments and other specialised equipment for Industrial & Research laboratories.

**POLAR INDUSTRIAL CORPORATION.**—Shree Laxmi Woollen Mills Estate, Off Haines Road, Bombay 11. Phone: 371937. Grams: "COVERSLIPS." Manufacturers of Precision Laboratory Hot Air Ovens, Incubators, Water Still (Automatic), Water Bath (Electrical), Sand Bath, Industrial Dryer, "Blue Star" Micro Slides, Cover Glass & Microscope, etc.

**RAJ-DER-KAR & CO.**—Sadhana Rayon House, Dr. Dadabhoy Naoroji Road, Fort, Bombay. For Research & Industries. Phone: 262304 (P.B.X.—4 lines). Grams: "TECHLAB."

**Reliance Electric & Hardware Stores.**—55, Krishna Bhuvan, Lohar Chawl.

**Roberts McLean & Co., Private Ltd.**—Ilaco House, Sir P. Mehta Rd., Fort, Bombay 1.

**Scientific & Industrial Supplies Corporation.**—Princess Street, Bombay 2.

**Scientific Instrument Co., Ltd.**—Navari Building, 240, Dr. Dadabhoy Naoroji Road (Hornby Road), Fort.

**SHAH & CO., M.**—Kamji Mansion, Sandhurst Road, Bombay 4. Phone: 71834.

**Techno-Industrial Syndicate.**—10-B, Noble Chambers, Parsi Bazar Street, Fort.

**TEMPO INDUSTRIAL CORPORATION.**—Engg. Divn. of Primco (F) Ltd., Office: Lamington Chambers, 1st Floor, 394, Lamington Road, Bombay 4 BR. Phone: 358033. Manufacturers of Laboratory Equipments and Scientific Apparatus.

**Thermo-Electric Equipment Co.**—50, Commercial Chambers, Masjid Bunder Road, Bombay 3. Factory: Tripunittura, Kerala State.

**UNIQUE TRADING CORPORATION.**—221, Sheriff Devji Street, Bombay 3. Phone: 326227 & 326228. Grams: "UNILAB."

**Valab & Co., Ltd.**—Podar Chambers, Parsee Bazar Street, Fort.

**ZENTH SURGICAL CO.**—206 3C, Mangaldas Bldg., Mangaldas Road, Bombay 2. Grams: "INSTRUMENT." Dealers in Surgical, Scientific & Laboratory Equipment.

### LACES, RIBBONS, TRIMMINGS AND EMBROIDERY MERCHANTS

**Bombay Import & Export Agency.**—Cama House, opp. Lloyds Bank, Hornby Road, Fort.

**Holland-Bombay Trading Co., Ltd.**—E. D. Sassoon Building, Dougall Road, Ballard Estate.

**Hormusji & Sons.**—New Charal Road, Bombay 4.

**Kashmir Govt. Arts Emporium.**—Sir P. M. Road, Bombay 1.

**Kala Niketan.**—Pravin Court, Queen's Road, Bombay 1.

**Rajai Brothers.**—Opp. Electric House, Colaba Causeway.

**R. C. H. Barar & Co.**—239, Abdul Rehman Street, Bombay 3.

**Shanghvi & Co.**—66, Krishna Gully, Swadeshi Market, Bombay 2.

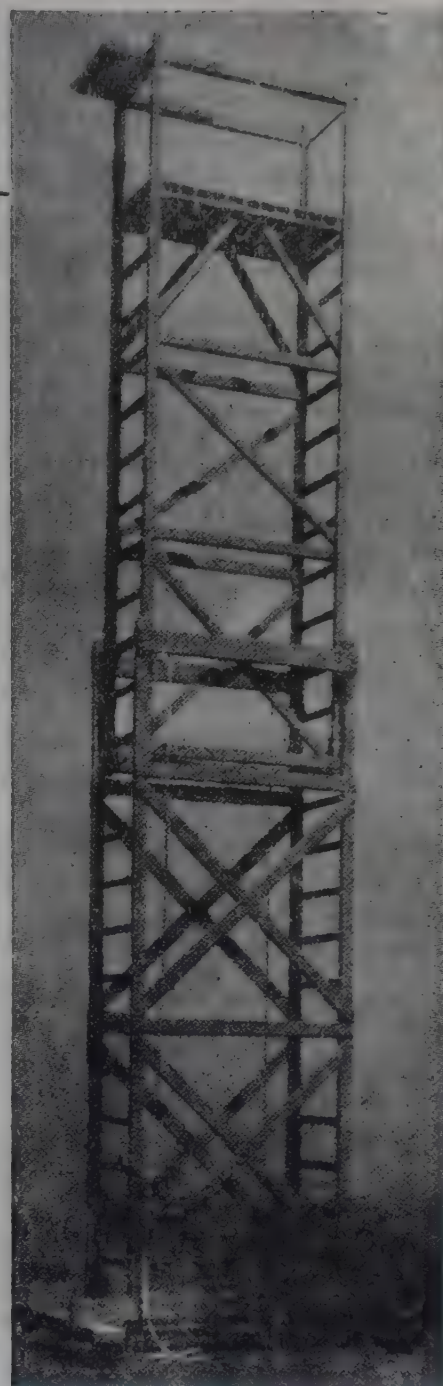


# SIMPLEX LADDERS

## ALUMINIUM & WOODEN

- Made from best selected Vellapinewood (Malabar Pinewood).
- Safe, strong and light in weight.
- Highest standard in quality.
- Durable for service.
- Cheaper in price.

Simplex ladders are used all over India and abroad by the Government departments, M.E.S., P.W.D., Railways, Power Houses, Heavy Steel Plants, Textile Mills, Factories, Theatres and Hotels, etc.



Telescopic Tower Ladder—Design No. 20

(On Govt. List)

## SIMPLEX TIMBER MART

MUNICIPAL CONTRACTORS

Manufacturers of all kinds of wooden single, folding and extension ladders, Bamboo ladders, Boat oars, Flag poles, etc. Dealers in Bamboos, Mats and Mangalore Tiles, etc. Also Manufacturers of Aluminium Ladders.

Office & Works :

P. O. BOX No. 5012

64-66-68, Ibrahim Mhd. Merchant Road,  
Bombay 9

Grams : "LADDERMAN"

Phone : 331794

CATALOGUE SENT ON REQUEST



Wheeled Tower Ladder—Design No. 10



**LADDERS**

Abba Gani & Co.—1-2, Victoria Road, Mazgaon, Bombay 10.

Clubwalla & Co.—27-29, Hamam Street, Fort, Bombay.

**FAMOUS LADDERS MANUFACTURING CO.**—Office and Works: 128/130E, Victoria Road, opp. Masina Hospital, Byculla, Bombay 27. Phone: 376447. Grams: "SAFELADDER."

**SIMPLEX TIMBER MART.**—64-66-68, Ibrahim Mohd. Merchant Road, Khadak, Bombay 9. Phone: 331794. Grams: "LADDERMAN." Manufacturers of all kinds of Wooden & Aluminium Single, Folding, Extension and Tower Ladders, Boat Oars & Bamboo Ladders. Dealers of Bamboos & Bamboo Mats, Mangalore tiles, etc.

Safe Ladders Mfg. Co.—85, I. M. Merchant Road, Khadak, Bombay 1. Manufacturers of all kinds of Ladders. Phone: C/o. 331794.

**LADIES' HANDBAGS**

**ARTISTIC LEATHERGOODS & ACCESSORIES.**—Phiroz Building, Apollo Pier Road, Fort, Bombay 1. Manufacturers of Ladies' Handbags in Leather and also Evening Bags in Brocades.

Bharat Leather Works.—183, Abdul Rehman Street, Bombay 8.

Eastern Leather Works.—Corner of Vithalbhai Patel Road and Sandhurst Road, Prarthana Samaj, Bombay 4.

Elgin Leather Wares Ltd.—Nawab Building, 327, Hornby Road, Fort.

Kashmir Govt. Arts Emporium.—Sir P. M. Road, Bombay 1.

Railship Stores.—39, Meadows Street, Fort.

Tolaram's.—Rehem Mansion, 36, Colaba Causeway.

United Cottage Industries Ltd.—Near Central Bank of India Ltd., Abdul Rehman Street, Bombay 8.

**LAMPWARE**

Abdul Rahim & Co., C.—151, Chackla Street, Bombay 8.

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Bombay 1.

Eastern Lights Company.—78, Lohar Chawl, Bombay 2.

K. B. Mehta & Bros.—Lohar Chawl, Shriji Bhuvan, 2nd Floor, Bombay 2.

L. C. Trading Co.—62, Lohar Chawl, Bombay 2.

Light House.—51, Kitchen Garden Lane, Shrijee Bhuvan, Bombay 2.

New India Trading Co.—46, Vir Nariman Road, Fort.

Racek, P. & Co., Ltd.—Lohar Street, Bombay 2.

Roberts McLean & Co., Ltd.—Ilaco House, Sir P. Mehta Rd., Bombay 1.

Salemahomed Padamsee & Co.—141, Chackla Street, Bombay 3.

**LATHE CHUCK MANUFACTURERS**

**JEMCO CHUCK MANUFACTURING WORKS.**—Office: 24, Nagdevi Cross Lane, Bombay 3—BR. Phone: 32-3839. Factory: Ram Baug, Swastik Compound, G.B. Road, Malad (West), Bombay 64 NB. Phone: 692612. Factory: 692612. Manufacturers of "JEMCO" Regd. Brand Lathe Chucks and Engineering Tools.

**LEAD SHEETS**

**VDYOGIN METAL INDUSTRIES.**—6, Sewree Cross Road, Bombay-15. Phone: 443964. Grams: "EXTRUDER." Manufacturers of quality Lead sheets. Commercial, Chemical, Antimonial or as per buyers Specifications.

**LEATHER GOODS (TEXTILE)**

Adarsha Trading Corporation.—Ismail Building, 2nd Floor, Room No. 9-H, 881, Hornby Road, Fort, Bombay.

Apex Traders.—Advani Chambers, Sir Pherozshah Mehta Road, Fort.

Arco Agencies.—Bam House, Gunbow Street, Fort, Bombay 1.

Arvinda Trading Co. Private Ltd.—105, Apollo Street, Fort.

Beardsell, W. A., & Co., Ltd.—Dhan-Nur Building, Sir Pherozshah Mehta Road, Fort.

Birkmyre Brothers Ltd.—12, Rampart Row, Fort, Bombay.

Brady, W. H., & Co., Ltd.—Royal Assurance Building, Vir Nariman Road, Fort.

Edgar Handley and Company Private Limited.—135, Meadows Street, Fort, Bombay.

Elgin Leather Wares Ltd.—Nawab Building, 327, Hornby Road, opp. Thos. Cook & Sons, Fort.

Empire Trading Company.—76/A, All Chambers, Tamarind Lane, Fort, Bombay.

Gannon, Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.

Indo-Textile Stores, The.—16, Apollo Road, Fort, Bombay.

Indusco (India).—Ibrahim Building, 6, Bell Lane, Fort, Bombay.

Industrial Leather Co., Ltd., The.—9, Ash Lane, Fort.

Jashwantlal Manecklal & Co.—40, Veer Nariman Road, Fort.

# **FAMOUS**

## **TOWER WHEELED LADDERS**

### **FOLDING & EXTENSION LADDERS**

*made of Wood for all Purposes*

*and*

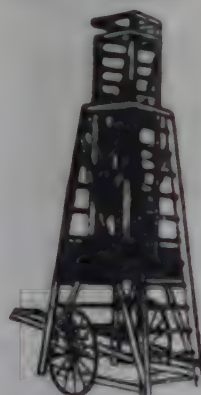
**Famous Commander Aluminium Extension Ladders**

**Famous Compact Aluminium Magic Ladders**

**Famous Conqueror & Conquest Aluminium Wall Reclining, Self-supporting and other types of Ladders**

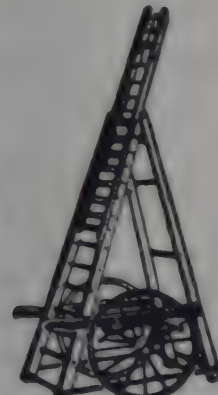
*All are worth attention*

The complete satisfaction given by their performance wherever they are used has placed these Ladders in the forefront throughout Asia and secured for them a country-wide reputation for strength, durability and lasting efficiency in use.



No. 555

**Famous Republic Collapsible Tower.**



No. 666

**Famous Sliding Roadster.**



No. 777 Self-supporting Extension Ladder.

(On Government of India List)

# **FAMOUS LADDERS**

## **MANUFACTURING CO.**

**Offices & Works: 128-130E, Victoria Road, Opp. Masina Hospital, Byculla, BOMBAY 27.**

Phone: 376447

Grams: "SAFELADDER"

*Complete literature showing all useful types of Wooden and Aluminium Ladders manufactured by us with the detailed Price Lists sent on request.*



Kilburn & Co. Private Ltd.—Gresham Assurance House, Sir Phirozshah Mehta Road, Bombay 1.  
 National Trading Co.—263, Hornby Road, Fort.  
 Ormerods (India) Ltd.—Bank of Baroda Building, Apollo Street, Fort, P. O. Box No. 410, Bombay.  
 Paradise Trading Corporation.—73/75, Tamarind Lane, Fort, Bombay 1.  
 Paramount Textile Agency.—45/47, Apollo Street, Fort, Bombay.  
 Parikh Brothers & Co.—45-47, Apollo Street, Fort.  
 Techno Industrial Co.—107, Sir Vithaldas Chambers, 16, Apollo Street, Fort.  
 Textile Supplies Syndicate (India) Ltd.—Kermani Building, Sir Phirozshah Mehta Road, Fort.  
 Union Textile Agency.—55, Laxmi Building, Sir Phirozshah Mehta Road, Fort.  
 Venus Textile Syndicate.—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.

### LEATHER GOODS MFRS. AND DEALERS

ARTISTIC LEATHER GOODS & ACCESSORIES.—Phiroz Building, Apollo Pier Road, Fort, Bombay 1. Manufacturers of Brief and Document Cases.

Bharat Leather Works.—183, Abdul Rehman Street, Bombay 3.

Bhogilal Shah & Co.—Mehta Building, Meadows Street, Fort.

BOMBAY LEATHER GOODS DEPOT.—14, Shamset Street, (Chhipi Chawl), Off Abdul Rehman Street, Bombay 2. Phone: 325649 (Office), 473564 (Res.) and 329201 (Godown). Grams: "BOLEGOD." Bombay-2. Manufacturers & Exporters of Leather, Plastic and Canvas Goods, such as Suit Cases, Portfolio Cases, Wallets, Bedding Holdalls, Air Bags, etc. Stockists and suppliers of P. V. C. Plastic films and Sheetings, Suit Cases, Locks, Zip Fasteners, Bifurcated Rivets and all sorts of Leather and Plastic goods fittings.

Bombay Swadeshi Co-operative Stores Co., Ltd.—Western India House, Sir Phirozshah Mehta Road, Fort.

BRIGHT LEATHER INDUSTRIES.—338, Abdul Rehman Street, near Crawford Market, Bombay 3. Phone: 322012. Largest Manufacturers and Exporters of all kinds of Leather and Canvas Travelgoods and Presentation Novelties such as: Suitcases, Document Cases, Ladies' Hand Bags, Money-Purses, Holdalls and Travelling Bags, etc.; Importers and Stockists of Leather goods Fittings and Plastic Sheetings. Export enquiries solicited

Elgin Leather Works Ltd.—327, Hornby Road, Fort.

Fakir Mohamed Jan Mohamed.—Madina Building, Palton Road.

Gold Filled Leather Works.—Princess Street and Sandhurst Road, Bombay.

Hornby Leather Works.—Reay House, Hornby Road, Fort.

India Goatskin Corporation Ltd.—Dharavi.

L. B. Trading Co.—Navsari Chambers, opp. Lloyds Bank, Outram Road, Fort.

Natwar Trading Co.—395, Kalbadevi Road, Bombay 2.

Noorbhai Jivaji.—Tyebi Manzil, Bhendy Bazar, near Tram Junction.

PIONEER LEATHER WORKS, THE.—Sitaram Building, Crawford Market, P.O. Box No. 1950, Bombay 1. Phone: 263618.

Premier Traders.—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.

Railship Stores.—Meadows House, 39, Meadows Street, Fort, Bombay 1.

Sardesai & Company.—14, Murzban Road, Fort, Bombay.

Shree Krishna Trading Co., Ltd.—11, All Chambers, Meadows Street, Fort.

Suraiya, M., & Co.—Prospect Chambers, Hornby Road, Post Box 439, Bombay 1.

Textile Works Ltd.—49-55, Apollo Street, Fort.

United Cottage Industries.—Near Central Bank of India Ltd., Abdul Rehman Street, Bombay 3.

Victory Leather Works.—112-144, Abdul Rehman Street, Bombay 3.

ZEPHYR LEATHER WORKS.—1st Floor, Sethna Bldg., Kitchen Garden Lane, Sheikh Memon Street, Bombay 2. Phone: 23803. Grams: "LOOSELEAF." Manufacturers of Plastic and Leather Goods. Specialists in Pocket Diaries, Wallet, Note Books, Telephone Books, Loose Leaf Files, Tender Files, and all sorts of Ultra-modern Publicity cum Presentation Novelties. Also made to order according to specification.

### LIFTS (ELECTRICAL)

OTIS ELEVATOR COMPANY (INDIA) LTD.—Head Office: Gateway Building, Apollo Bunder, Bombay 1. Phone: 211058 59. Grams: "LYNDENTREE." Manufacturers of

Passenger & Freight Lifts. Factory: Bombay Agra Road, Bhandup, Bombay 78. Branch Offices: Calcutta, New Delhi, Madras.

EASTERN ENGINEERS.—1, Bruce Street, Raja Bahadur Compound, Fort, Bombay 1. Phone: 251810. Sole Agents for 'GIMSON' English Lifts. Specialists in Concealed Wiring.

### LIFTING EQUIPMENTS (TOOLS & TACKLES)

ESOOFALI ESMAILJI KARACHIWALA & CO.—43-45, Bhandari Street, Koliwada, Bombay 3. Phone: 321617; Workshop: 261261. Grams: "SLING." Shipchangers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Block Chains, Coal Tar, Coal Pitch Felts, Marine Glue etc. Dealers in: Marine, Mill and Factory Stores.

WESTERN INDIA MARINE MILLS & ENGINEERS.—185, Janjirkar Street, Bombay-3. Phone: 326367. Grams: "WIRE-CHAINS." Shipchangers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Block Chains, Coal Tar, Coal Pitch Felts, Marine Glue, Marine, Mill and Factory Stores. Pull Lifts, Pulling lifting maxpull.

### LIGHT ENGINEERING GOODS EXPORTERS

STAR TRADING CO. PRIVATE LTD., THE.—Export Division—Exporters of Light Engineering Goods, Bank of Baroda Building, 12, Apollo Street, Fort, Bombay-1. Phones: 243480 & 251357. Grams: "STARTRADE."

### LIGHT RAILWAY MATERIALS

Associated Machine & Tool Co.—130, Meadows Street, Bombay 1.  
 Doshi Brothers & Co.—77, Meadows Street, Fort.

GREAT WESTERN ENGINEERING WORKS.—Sea View, 1st Pasta Lane, Colaba, Bombay 5. Phone: 212016 and 214026. Grams: "GREWENWORK." Structural & Mechanical Engineers & Contractors, Tank & Railway Equipment Mfrs. & Suppliers.

Greaves Cotton & Co., Ltd.—Forbes Street, Bombay 1.

Guest, Keen, Williams, Ltd.—Ballard Estate, Bombay 1.

Heatly & Gresham Ltd.—9, Forbes Street, Bombay 1.

IMANES PRIVATE LIMITED.—94, S. V. Road, Eral, P.O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANES-COL." Springs and Forms out of Spring Wires and strips for your Industry.

James Finlay & Co., Ltd.—Mahatma Gandhi Road, Bombay 1.

Seagrand & Co.—19, Arab Lane, Bombay 8.

Shalebhoy Tyebjee & Sons.—12, Bruce Street, Bombay 1.

Thos. W. Ward (India) Ltd.—Marshall Building, Ballard Road, Ballard Estate, Fort.

### LIME AND SAND

Ishwarkar & Co.—107, Jamli Mohalla, Bombay 3. Lime Manufacturers.

Janisheth & Sons.—38, Narayan Dhuru Street, Bombay 3. Lime and Sand Merchants.

PRAVIN BROTHERS & CO.—501, Commerce House, Meadows Street, Bombay 1. Phone: 251748, 252419. Grams: "WIDE-SCOPE." Importers, Exporters and Agents: Sulphur—Chemicals—Solvent—Pyridene Base—Fertilizers—Minerals Lime—Jute—Products. POLYSOL-S.5, POLYSOL S.6, Gypsum.

Behemtulla, M., & Co.—38, Narayan Dhuru Street, Bombay No. 3.

Yusuf Dada Chunawalla & Co.—34, Bapu Khote Street, Bombay No. 3.

### LITHOGRAPHERS, PHOTO OFFSET PRINTERS

BOLTON FINE ART LITHO WORKS (Estd. 1909).—274, Tardeo Road, Bombay 7. Multicolour quality work of precision; Accuracy & faithful reproduction guaranteed. Winner of numerous State Awards & A.I.F.M.P. Trophies. Phones: 367411/12/13; Grams: "BOLTONLITO," Bombay 7.

Calendar Manufacturing Co.—62-66, Meadows Street.

Everest Calendar Co.—45/47, Princess Street, Bombay 2.

Jagtap Lithographic Works.—Khatau Wadi, Girgaon, Bombay 4.

Karnodaya Litho Press.—Old Victoria Mills Compound, Gamdevi.





## HALL-MARK ON PACKAGING

### MOHAMADI FINE ART LITHO WORKS

Established :  
1878

Incorporated :  
1938



*Mohamadi Building  
Mazagaon, Bombay*

Telephones :  
378148—  
378149

Telegrams :  
'KORAN'

Lithographers - Offset & Letterpress Printers  
and Carton Manufacturers

**MOHAMADI MAKES A  
GOOD IMPRESSION**

**NATIONAL LITHO WORKS PRIVATE LTD.**—National House, 608, Haines Road, Jacob Circle, Bombay 11. Phone : 375477. Grams : "LITHOCRAFT."

**New Jack Printing Works Private Ltd.**—Seksaria Mills Compound, Globe Mills Passage, off DeLisle Road, Bombay 18.

**POPULAR FINE ART LITHO WORKS PRIVATE LTD.**—133-C, Vakola, Santa Cruz East, Bombay 55 (A.S.). Phones: 533234 & 533235. Grams : "GOOLNAR."

**Premier Offset Works.**—Swadeshi Mills Property, Roxy Cinema Compound. Offset Photo Lithographers and Colour Printers.

**Shri Raghunath Litho Works.**—74, Khetwadi 10th Lane, Bombay 4.

**TIMES OF INDIA PRESS, THE.**—Dr. Dadabhoy Nowroji Road, Fort.

**UNIVERSAL CALENDAR MANUFACTURING CO.**—Calendar Manufacturers, Lithographers and Tin Printers, 23-25, Hamam Street (Opp. Post Office), Bombay 1. Phone : 254443.

**Vinay Calendar Co.**—104, Ardeshr Dadi Street, Bombay 4.

**Western India Art Litho Works.**—11, Hathibaug Lane, Mazagaon.

### LITHOGRAPHIC & OFFSET PRINTING MACHINERY

**GUNVANTRAY & CO.**—Crescent Chambers, Tamarind Lane, Bombay 1. Phone : 254684. Grams : "GUNARAYCO." H.O. Khadia, Ahmedabad 1. Phone : 4068.

### LIVESTOCK & PETS

**Fur, Feather and Fish.**—3rd Floor, Prospect Chambers Annex, Hornby Road, Fort, Bombay 1. Grams : "CHIDIAGHAR."

**National Livestock Co.**—Near Vakola Bridge, Nehru Road, Santa Cruz, Bombay 54. Importers, Exporters and dealers in all kinds of animals.

### LOCK AND SAFE MERCHANTS

**Art Steel Products.**—263, Kalbadevi Road, Bombay 2.

**Central Safe & Co.**—286, Kalbadevi Road, Bombay 2.

**Diamond Safe Manufacturing Co.**—Office, opp. Vithalwadi, 282, Kilachand Mansion, Kalbadevi Road.

**Govin's Safe Manufacturing Co.**—266-68, Kalbadevi Road, Bombay 2.

**Gurjar Steel Products.**—20, Dadyseth Aglary Lane, Kalbadevi Road.

**Regal Safe Manufacturing Co.**—248, Kalbadevi Road, Hira Mahal, Bombay 2.

**Soho House.**—Lohar Street, Bombay 2.

**Steel Age Industries Ltd.**—Opp. Post Office, Mazagaon, Bombay.

**Swadeshi Steel Products.**—Zaver Baug, Kalbadevi Road, Bombay 2.

**Vertex Manufacturing Co., Ltd.**—Fort, Bombay 1.

**Zenith Safe Mfg. Co.**—249, Kalbadevi Road.

### LUBRICATION EQUIPMENT

**DODGE & SEYMOUR (INDIA) PRIVATE LTD.**—"KRUPA-NIDHI", 9, Wittet Road, Ballard Estate, Bombay-I BR. Phones : 263674 & 365479. Grams : "EXIMCO."

### LUBRICATING OIL AND GREASES

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**BOMBAY MERCANTILE CORPORATION.**—211-217, Nagdevi Street, Bombay 3. Phone : 325982. Grams : "CORP-BOMBER." Special Distributors : Esso Standard Eastern Inc. for Lubricating Oils & Greases.

**Burmah-Shell Oil Storage & Distributing Co. of India Ltd.**—Ballard Estate, Bombay.

**Caltex (India) Limited.**—Caltex House, 8, Ballard Road, Bombay.

**Cox & Co., Ltd.**, H. S.—24, Rampart Row, Fort, Bombay.

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort. Phone : 254433; Grams : "DATNARE."

**EXCELLENT PETROLEUM CO.**—Opp. J. J. Hospital Tram Junction, Bombay 8. Dealers in Burmah-Shell Motor-Spirit, H.S.D. and other Lubricants.

**Greaves Cotton & Co., Ltd.**—Forbes Street, Bombay 1.

**GULF OIL (INDIA) PRIVATE LTD.**—Steelcrete House, 3, Dinsha Wacha Road, Bombay 1. P.O. Box 1943. Phone : 245131 (3 lines). Grams : "GULFINDIA." Importers and Distributors of High Grade Lubricants. Area Offices : Ahmedabad, Hyderabad & Indore.

**Hardcastle, Waud & Co., Ltd.**—Alice Building, Hornby Road, Fort.

**INTERNATIONAL LUBRICANTS PRIVATE LTD.**—Court House, Dhobi Talao, Bombay 2. Phone : 29109. Grams : "LUBRICANTS", Bombay, and 12-A, Ashutosh Mukerjee Road, Calcutta 20. Grams : "VISCOSITY", Calcutta. Importers of Highgrade Motor Oils, Lubricating Oils & Petroleum Jellies.

**Kilburn & Co. Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Bombay.

**Killick, Nixon & Co. Private Ltd.**—Home Street, Bombay 1.

**Leach & Co. Ltd.**, H. J.—Asian Building, Ballard Estate.

**NAROTTAMDAS KARSANDAS & CO.**—278, Dr. Dadabhoy Naoroji Road, Bombay 1. Direct Importers of Lubricating Oils & Indentor Agents for Chemicals & General Merchandise. Phone : 262215. Grams : "NAROTTAMCO" (F.T.).

**PETRO-CHEM INDUSTRIES.**—313, Sardar V.P. Road, Bombay 4. Manufacturers of all kinds of Lubricating Greases, Cutting Oils, etc. Phone : 351283.

**SUDAN TRADING CO.**—Dhan-Nur, Phirozshah Mehta Road, Bombay 1. Phone : Office 262788. Res.: 72089. Grams : "VANSOBHA".

**Tecalemit (India) Ltd.**—9, Forbes Street, Bombay 1.

**VELU & CO. (PVT.) LTD.**, P. K.—P. O. Box No. 514, 111, Mahatma Gandhi Road, Bombay 1. Phones : 253141 & 641326. Grams : "LACQUER."

**Wakefield & Co., Ltd.**, C. C.—91, Walkeshwar Road, Bombay 6.

**Wharton, H. W., & Co., Ltd.**—339, Hornby Road, Fort.

### LUBRICATING PLUG VALVES

**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay 1. Phones : 25-2952/25-4103. Grams : "PILOTACE."

### MACHINE TOOLS

**BHARAT DIAMOND INDUSTRIES.**—16/A, Khetwadi 12th Lane, Bombay 4. Manufacturers : Diamond Dresser, Diamond Powder, Handlaps, complete Range of Diamond Tools, Diamond Drilling Bits, Diamond & Carbide Dies. Phone : 39362.

**BHARAT ENGINEERING STORES.**—113, Nagdevi Street, Bombay 3. Grams : "UNIONTOOLS." Phone : 323193. Stockists of Elephant Brand Chain Pulley Blocks.

**BOMBAY MACHINE TOOLS & HARDWARE CORP.**—103, Narayan Dhuru Street, Bombay 3. Phone : 322702. Grams : "WIREGRIIP". Importers & Stockists of Engineering Small Tools, Electrodes and Electric Portable Drills, Grinders, etc.

**ESSENTIAL ENGINEERING CO.**—11, Botawala Building, Elphinstone Circle, Fort. Grams : "ESSENCE." Phone : 252940. Importers, Exporters, Commission Agents and Manufacturers' Representatives.



**HEMCO CORPORATION.**—308, Bazargate Street, P.B. 1645, Bombay 1. Phone : 254237. Dealers in Engraving Machines, Air Compressors, Spray Guns, Sheet Metal Machinery, Flexible Shafts, Planer Blades & Other Tools.

**H. S. Sobha Singh & Sons.**—Manu Mansion, Old Custom House Road, Fort.

**INDIA MACHINE TOOLS CORPORATION.**—Stockists of Kirloskar Lathes and Hacksaw Machines, Ashok Tiger Lathes and Drillings, Radial Drillings, Cooper Shapers, PRAGA & Diamond Chucks, American Engraving machines, Pipe Bending Flexible Shaft grinders and Universal wood machines. P. B. No. 225A, Meadows Street, Bombay-1. Phone : 252917. Grams : "INDIA TOOLS".

**JAYEMS ENGINEERING CO.**—Warden House, Sir Phirozshah Mehta Road, Bombay 1. Engineers, Machinery Merchants & Manufacturers' Representatives, direct importers of Machine Tools, Wood working machinery, Sheet metal working machinery, Welding Equipment, Foundry Equipment etc. Phone : 256251. Grams : "JAYEMS."

**MACHINERY IMPEX CORPORATION.**—271-A, Nagdevi Street, Bombay 3 (BR). Phone : 324886. Grams : "MASIN-MICOR". Manufacturers of "MICOR" Progressive Machine Tools.

**Pattani Industrial Corporation.**—19/21, Hamam Street, P.O. Box No. 796, Bombay 1.

**Prafulchandra & Co.**—106, Lohar Street, Bombay 2.

**Pravin & Co.**—85/92, Nagdevi Street, Bombay 3.

**William Jacks & Co., Ltd.**—Bharat House, Apollo Street, Fort.

### MACHINERY IMPORTERS, DEALERS, MANUFACTURERS, ETC.

**ARJANSINGH KHEMCHAND.**—1st Floor, 118, Commerce House, Meadows Street, Bombay-1. Phone : 253752.

## A. D. WILLS ROWAT (I) PVT. LTD.

Ava Chambers, P. O. Box No. 375,  
4, Mahatma Gandhi Road, Bombay 1.

Importers - Exporters - Engineers

Agents for : **ARDEEC Engineering (Saurashtra) Pvt. Ltd.,**  
Surendranagar.

Auto Parts, Garage Equipments,  
Hand Tools, Machine Tools &  
Agricultural Implements.

**Edward Pryor & Son Ltd., U.K.**  
Marking Equipments.

**Borg-Warner Ltd., U.K.**  
Industrial Roller Chains.

Directors : { **Shri A. S. Daxini**  
                  { **Shri J. S. Daxini**

Secretary : **Kumari R. D. Cama**

Phone : 243280

Cable : "Clepet".

**Alcock, Ashdown & Co., Ltd.**—16, Bank Street, Fort.

**Alfred Herbert (India) Ltd.**—Kaiser-I-Hind Buildings, Ballard Estate.

**Altex Private Limited.**—147, Esplanade Road, Fort.

**Apollo Engineering Co.**—84, Apollo Street, Fort.

**Armstrong Smith Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort.

**Art Metal Works (Estd. 1882).**—Office and Factory : 100, Foras Road, near Municipal Workshop, Bombay 8.

**Asca Electric Ltd.**—Yam Building, Goa Street, Fort.

**ASHOK ENGINEERING CO.**—24, Noble Chambers, Parsi Bazar Street, Fort, Bombay 1. Phone : 253309. Grams : "REVOLUTION." Importers, Dealers and Stockists of Electric Motors, Starters, Switches, Generators, Pumping Sets, Blowers, Exhaust Fans, etc. Diesel Engines & Spare parts & Motor Vehicle Parts.

**ASSOCIATED ENGINEERING CO.**—Sane Building, Nanabhai Lane, Fort, Bombay-1. Telegram : "STELLIDE." Telephones : 252597 Office ; 521880 Works. Manufacturers of : Glucose and Starch Plants, Pharmaceutical and Chemical Plants, Industrial Machinery, Chemical Process Equipment and Sugar Machinery.

**Associated Machine & Tool Co.**—130, Meadows Street, Bombay 1.  
**Automatic Electric Devices Company.**—'Rectifier House', Naigaum Cross Road, Bombay 31.

**Babcock & Wilcox of India, Ltd.**—16, Queen's Road Estate, Bombay.

**Balmer Lawrie & Co., Ltd.**—8, Graham Road, Ballard Estate.

**Batliboi & Company Private Limited.**—Regd. Office : Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR). Phones : 255451 (6 lines).

Grams : **BATLIBOICO.** Tele : 011-284. City Branch : "BATLIBOI HOUSE". 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches : Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate : Bangalore 2. Resident Representatives : 'RANCHIBHUBANESWAR'.

**BEARAT ELECTRIC & ENGINEERING CORPORATION.**—Free Press Building, Ground Floor, 21, Dalal Street, Fort. Phone : 255374. Grams : "GODGRACE."

**BEARAT INDUSTRIAL CORPORATION.**—Manufacturers of Oil Expellers and spares thereof—Allied Machinery and Solvent Extraction Plants, Elevators, Conveyors, Plate & Structural Fabrication. Petit Compound, Grant Road, Bombay 7. Phone : 358061. Grams : "EXPEL PART."

**Bombay Company Ltd.**—9, Wallace Street, Fort.

**Brady, W. H., & Co., Ltd.**—Royal Insurance Buildings, Churchgate Street, Fort.

**British Engineering Co.**—105, Apollo Street, Fort.

**Cambata Industries Private Ltd.**—Cambata Building, 42, Queen's Road, Bombay 1.

**CAPRI ENGINEERING CO.**—296, Frere Road (Near Fort Market), Bombay 1. Phone : 266438. Grams : "CAPRIENG." **Chhmanlal Patel & Co.**—174, Hornby Road, Fort.

**CONSOLIDATED PNEUMATIC TOOL CO., LTD.**—301/302, Agra Road, Mulund, Bombay 80. Phones : 592274/6. Grams : "CAULKING", Mulund, Bombay.

**Cooper Engineering Ltd.**—Construction House, Ballard Estate, Bombay.

**Crescent Agencies (Private) Ltd.**—Beaumont Chambers, 27/33, Meadows Street, Fort, Bombay.

**DANDEKAR, G. G., MACHINE WORKS LTD.**—Manufacturers of Rice, Pulse Milling and Sugar Machinery. Regd. Office and Works : Bhiwandi, Dt. Thana (Bombay). Phone : "BHIWANDI"—57.

**DINSHAW, M. H., & CO.**—105, Apollo Street, Fort, P.O. Box No. 448, Bombay. Gram : "AHOORAT." Phone : 251458. Managing Director : **H. Dinshaw Dungor, M.I.S.E., M.M.E.A. (Ind.), A.S.E. (Lond.),** Managing Partner : **Dinshaw H. Dungor, M.I.S.E., M.M.E.A., A.M.I.E.T., (Lond.).** Residence, Victory Villa, Turner Road, Bandra.

**Drewet, Chowna & Co.**—"Lentin Chambers," Meadows Street, Fort.

**Duncan, Stratton & Co. Ltd.**—5, Bank Street, Fort, Bombay.

**Dwarkanadas & Sons Ltd.**—Mehta House, 89, Apollo Street, Fort, Bombay.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone : 262711 (8 lines). Machine Works : Tank Road, Bombay 33 DD. Phone : 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**Eastern Industrial Syndicate.**—4, Rutherford Street, Forbes Street, Bombay 1.

**Eastern Machinery & Trading Co.**—Wilson Road, Ballard Estate, Fort, Bombay.

**Edgar Handley Company Private Limited.**—135, Meadows Street Fort, Bombay.

**Electric Cable & Machinery Co.**—46-47, Forbes Street, Fort.

**ENGINEER, ERUCH D., & CO.**—Sole Agents : Crossley Bros., Ltd., Oil and Gas Engine Manufacturers, Crossley House, Apollo Street. Phone : 251876. Grams : "OILENGINES."

**English Electric Co. Ltd.**—249, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

**Essential Engineering Co.**—11, Botawala Building, Elphinstone Circle, Fort.

**EVEREST ENGINEERING CORPORATION.**—12, Hornby View Building, Gunbow Street, Fort, Bombay 1. Phone : 26-1691. Grams : "EXPOCORP." Specialists in Diesel Engines & Spares, Fuel Injection Equipment, Electric Motors, Small Engineering tools, Workshops Machinery, Graphite Crucibles, Ball & Roller Bearings, Steel Shafting, Circlips, etc. (Allied Concern of Messrs. Khimandas Jagurnal & Sons).

**Fleming, John, & Co. (India) Private Ltd.**—Sukhadwala Building, Bastion Road, Fort.

**Fowler, John, & Co. (India), Ltd.**—Marshall's Building, Ballard Road.

**Francis Klein & Co. (Bombay) Ltd.**—Shale Building, Bank Street, Fort.

**Gammon India Private Ltd.**—Hamilton House, Ballard Estate, Bombay 1.

**GANDHISON & COMPANY.**—Shop No. 11/A, 5, Musafirkhana Road, Bombay-1 (BR). Distributors : "K.M.T." Drilling Machine and "ARMCESS" Door Closers, Armcess Jigs and Fixtures Components, and Armcess Die Sets for Press Tools.



Gannon, Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.

GARLICK & CO. PRIVATE LTD.—Haines Road, Jacob Circle. Also at Maskati Market, Kapasia Bazar, Ahmedabad; 42/1, Silver Jubilee Park Road, Bangalore 2; 6/365, Trichy Road, Coimbatore 1; 5, Green Gates, Salfabad, Hyderabad (A.P.); 38/3, Mount Road, Madras 6; G-4, Nizamuddin West, New Delhi 13.

General Engineering Co.—Workshop: 47, Kumbharwada 5th Lane, Golpitha, Bombay 4.

General Radio & Appliances Ltd.—16, New Queen's Road, Bombay 4. Gladwyn & Co.—251, Hornby Road, Fort, Bombay 1.

Greaves Cotton & Co., Ltd.—1, Forbes Street.

H. S. Sobha Singh & Sons.—Mann Mansion, Old Custom House Road, Fort.

HAJARE & BROS., Y. A.—(Showroom & Factory) 1st Panjra-pole Lane, Madhav Baug, Bombay-4. Phones: 333666 & 336162. Grams: "KRUPAWANTI." Manufacturers of Spinning & Cutting Lathes, Trimming & Bidding & Polishing Machines.

Hardcastle, Waud & Co. Private Ltd.—Alice Building, Hornby Road, Fort.

Heath & Gresham, Ltd.—9, Forbes Street, Fort.

Herberts & Grovers Engineering Co.—Opp. Share Bazar, Hamam Street, Fort.

HINDUSTAN ENGINEERING CO.—(Machine Dept.), 25-31, Ropewalk Street, Fort, Bombay 1. Phone: 253583. Grams: "VIDOOALL." Dealers in Imported and Indigenous Workshop Machineries, Tools, Woodworking Machines, Mill Gie Stores, Agricultural Implements and Requisites, Diesel Engines and Spare Parts, Pumps and Pumping Sets, Canning & Pharmaceutical Machinery, etc.

Hindustan Industrial Corporation.—12-A, Nanabhai Lane, Flora Fountain, Fort.

INDIA MACHINE TOOLS CORPORATION.—Stockists of Kirloskar Lathes and Hacksaw Machines, Ashok Tiger Lathes, Diamond Chucks, American Engraving Machines, Pipe Bending and Pipe Threading Machines, Dividing Heads, Grinders, Flexible Shaft grinders and Universal wood machines. P.B. No. 225A, 62, Meadows Street, Bombay-1. Phone: 252917. Grams: "INDIATOOLES".

Indmag Private Ltd.—Esplanade House, Wandby Road, Fort, Bombay.

Indo-Berolins Ind. Pvt. Ltd.—Victoria Building, Parsee Bazar Street, Fort, Bombay.

Industrial & Engineering Combine.—"Commonwealth"—Flat B/1, Foreshore Road, Opp. Nariman Point, Bombay 1.

INDUSTRIAL STORES CO., THE.—Seksaria Chambers, 139, Meadows Street, Fort, Bombay. Phone: 252758; Grams: "PERFECOLD." Bombay. Importers, Dealers and Stockists & Distributors in Machinery items, like 'Karajgar' Horizontal and Vertical Diesel Engines, Leader Vertical Diesel Engines, Generating Sets, Generators, Alternators, Electric Motors, Pumps & Pumping Sets, Diesel Engines, Spare Parts of Diesel and Petrol Engines and Refrigerators; Branch at: 12A, Linghi Chetty Street, Madras 1.

INTERSTATE ENGINEERING COMPANY.—132, Meadows Street, Fort, Bombay-1. Phone: 256469. Grams: "ANEKANT". Importers, Exporters & Stockists of Machine Tools, Sheet Metal & Workshop Machines, Pneumatic Tools, Rock Drills, Die Filers (U.S.A. make), Automobile (Boring Bar Machine etc.) and other Machineries.

Investa Machine Tools & Engineering Co., Ltd.—Ewart House, Bruce Street, Fort, Bombay 1.

Jacks, William, & Co., Ltd.—Hamilton House, Graham Road.

JAYEMS ENGINEERING CO.—Warden House, Sir Phirozshah Mehta Road, Bombay 1. Engineers, machinery merchants & manufacturers' representatives, direct importers of machine tools, wood working machinery, sheet metal working machinery, welding equipment, foundry equipment, etc. Phone: 256251. Grams: "JAYEMS."

Kamani Engineering Corpn. Ltd.—Kamani Chambers, Ballard Estate, Bombay.

Khemka & Co. (Agencies) Private Ltd.—Vulcan Insurance Bldg., 202-A, Veer Nariman Road, Bombay 1.

KHIMANDAS JAGUMAL & SONS (Estd. 1910, Sind).—12, Hornby View Building, Gunbow Street, Fort, Bombay 1. Phone: 26-1691. Grams: "EXPOCORP." Engineers and Machinery Merchants; Specialists in Diesel Engines & spares, Fuel Injection Equipment, Electric Motors, Small Engineering Tools, Workshop Machinery, Ball & Roller Bearings, Steel Shaftings, etc. Branch Office: Belan Gunj (Agra), U.P.

Kumar Commercial Co.—Nadirshaw Sukhla Street, off Cawasji Patel Street, Bombay 1.

Kumudchandra & Co.—Examiner Press Building, Dalal Street, Fort.

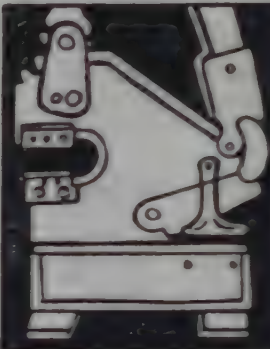
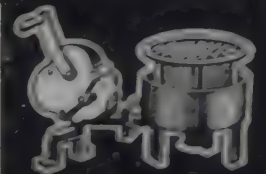
## FREZAR ENG. CORPORATION

Manufacturers :—



'RLY. SIGNAL'  
BRAND FORGES OF SIZES  
FOR BLACKSMITHS

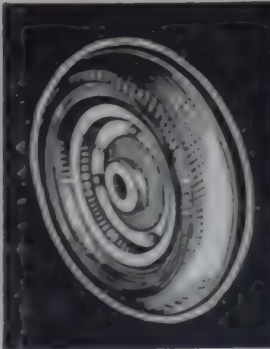
FORGES FOR HOME  
& HOTEL USES



'SUPREME-UNIVERSAL'  
HAND LEVER SHEARING  
MACHINES OF SIZES & TYPES

'RLY. SIGNAL'

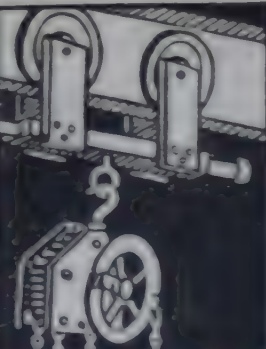
QUALITY PLANE BLADES  
OF SIZES



'CAPSTAN'  
CI RUBBER CUSHIONED  
WHEELS OF SIZES & TYPES.

'CAPSTAN'

CHAINS PULLEY BLOCKS  
& TROLRIES OF  
CAPACITIES & LIFTS.



Sole Selling Agents :—KAIZAR & COMPANY

79, Mohamedali Road, Bombay-3.  
Grams: "EVERNEW"



Larsen & Toubro Ltd.—I. C. House, Dougall Road, Ballard Estate, Bombay.

Latham Abercrombie & Co. Private Ltd.—Forbes Building, Home Street, Fort.

Laxmi Syndicate.—4th Floor, Lentin Chambers, Dalal Street, Fort, Bombay.

Linotype & Machinery, Ltd.—Botawalla Building, Elphinstone Circle, Fort.

**MACHINE TOOLS & IMPLEMENTS.**—93-95, Narayan Dhuru Street, Bombay 3. Phones: 322268 and 322269. Grams: "MACHTOOLS." Telex: 292 BY.

Machine Tools Traders.—Moti Mahal, Dhanji Street, Agiary Cross Lane, Bombay 3.

**MACHINERY IMPEX CORPORATION.**—271-A, Nagdevi Street, Bombay-3 (BR). Phone: 324886. Grams: "MASIN-MICOR", Manufacturers of "MICOR" Progressive Machine Tools.

Machinery Trading Corporation.—68, Meadows Street, Fort, Bombay 1.

Mahindra & Mahindra Ltd.—Gateway Building, Apollo Bunder, Fort.

Malhotra Trading Corporation.—Basement 4, Commerce House, Meadows Street, Bombay 1.

**MANOHAR BROTHERS.**—4, Commerce House, Meadows Street, Fort, Bombay. Phone: 254496. Grams: "LOCOMOTIVE." Branch: 37, Errabalu Chetty Street, Madras. Phone: 23274.

Marshall, Sons & Co. (India), Ltd.—Marshall Building, Ballard Estate, Fort.

Mather & Platt, Ltd.—8, Graham Road, Ballard Estate.

**MILLARS' TIMBER & TRADING CO., LTD.**—Victoria House, Victoria Road, Bombay 27. Phones: 372103 & 372104. Grams: "JARRAH." Bombay.

**MULLA TAYEBALI MULLA NOORBOY.**—175, Janjekar Street, Bombay 3. Phone: 325934. Grams: "TANOOR". Specialists in Twin Drum Travel Winches, Power take off Clutch, Gallows, Marine Lamps, Pullies, Chains, all sorts of lifting tackles and all the items connected to the Fishing Industry.

Modern Engineering Co.—107, Apollo Street, Fort.

National Electrical Industries Ltd.—Industrial Estate, Lalbaug, Bombay 12.

**NATIONAL TRADERS.**—Advani Chambers, 1st Floor, Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 261459. Grams: "WETFARM." Distributors for "Gorman-Rupp," Pumping Sets and Wisconsin Engines spares.

**NEW ERA ENGINEERING CO.**—128, Meadows Street, Fort, Bombay 1. Phone: 253492. Grams: "NEECOMOTOR." Importers & Stockists of Electric Motors, Generators, Starters, Switchgears, Pumps & Pumping Sets, Slippering Motors, all sizes available. Also types of Capacitors.

New Standard Engineering Co., Ltd.—222, Bellasis Road, Byculla, Bombay 8.

Nigo's Corporation.—Temple Bar Building, Forbes Street, Kala Ghoda, Bombay 1. Phone: 31813.

Oriental Engineering Co.—25, Forbes Street, Fort, Bombay 1.

Parry & Co., Ltd.—United India Building, Sir Phirozshah Mehta Road, Bombay 1.

**PATTANI INDUSTRIAL CORPORATION.**—19/21, Hamam St., P.O. Box No. 796, Bombay 1. Phone: 251447. Importers & Manufacturers of Lathes, Drilling Machines, Electric Bench Grinders, Chucks, Hacksaw Machines, Flexible Shaft Grinders, Wood Working Machines, Sheet Metal Working Machines, Electric Motors, Electric Portable Tools, Pumps, Polishing Machines, Tool & Cutter Grinders, Surface Grinders, Hand Shearing Machines, Capstan Lathes, Threading Machines, Tapping Machines, Tapping Attachments, Metal Cutting Motorised Machines, and Spray Painting Units.

Perfect Machine Tools Co.—Bell Building, Sir Phirozshah Mehta Road, Fort, Bombay.

Pioneer Engineering Co.—57, Apollo Street, Fort.

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P. O. Box 1909, Bombay 1. Phone: 251882. Also at Calcutta, New Delhi, Madras & Baroda. Suppliers of "PFM" Foundry and other Industrial Equipment. Manufactured by PIONEER FOUNDRY MACHINERIES of Baroda.

Popular (Imp. Exp.) Trading Co.—Javeri House, 110, Meadows Street, Bombay 1.

**P. RAI & CO.**—121, Commerce House, Meadows Street, Fort, Bombay 1. Phone: 252436. Grams: "PIRAICO."

**PRAVIN & CO.**—85/92, Nagdevi Street, Bombay 3. Grams: "POWERPIECE." Phone: 326451. Engineers & Machinery Merchants; Agents for "ASHOK" Drillings, Hacksaws, Dogchucks, Grinders, Shapers & "IEC" Grade I Lathes and Shapers "RIBCO" truechucks.

Protos Engineering Co., Ltd.—173, Jamshedji Tata Road, Churchgate, Bombay.

**RAMCHAND MATHRADAS AGGARWAL.**—30, Khoka Bazar, Sarang Street, Bombay 3. Phones: 326075 & 328942. Grams: "PIPIDIE." Hardware, Tools, Fittings, Pipes, Compressors, Machinery Implements, Iron & Steel, etc.

**RAYLONS METAL WORKS.**—293, Bellasis Road, Bombay 3. Manufacturers of Food Canning Machinery, Chemical & Pharmaceutical Plants. All in Stainless Steel. Our Specialities: Stainless Steel Jackered Kettles, Canteen & Cafeteria Equipments and Raylons Patented Aluminium Solder.

Ravi Industries Private Ltd.—Office: 68, Shamset Street, Zaveri Bazar Road, Bombay 2.

Richardson & Cruddas Ltd.—Byculla, Bombay 8.

Roberts McLean & Co., Ltd.—Ilaco House, Sir P. Mehta Road, Bombay 1.

Royal Machinery & Trading Co.—6, Bell Lane, Fort, Bombay 1.

**S. A. KAIYUM & CO.**—Direct Importers & Exporters of Tools, Rice Mill & Machinery Stores. 142, Sarang Street, (Near Crawford Market), Bombay 3-B.R. Phone: 326771. Grams: "HULLERPART."

Sachin & Co., 25 Bank Street, Bombay-1.

Salem & Company.—Mafatlal House, Backbay Reclamation, Bombay.

Shah Patel & Co.—109-111, Nagdevi Street, Bombay 3.

**SHAKTI INSULATED WIRES PRIVATE LTD.**—22, Apollo Street, Fort, Bombay 1. Phones: 254823, 253551; Grams: "THANKGOD"; Manufacturers of Laminated Multi Disc Clutches and One-Shot Lubricating Pumps."

Suryodaya Trading Co.—Behind Reserve Bank, Ground Floor, Fort, Bombay-1. Phone No. 251823.

**SHUBH MACHINERY CORPORATION PRIVATE LTD.**—15, Bank Street, Fort, Bombay 1. Dealers and Manufacturers of Machine Tools, Sheet Metal and Wood-working Machines. Manufacturers of Rectifiers, Welding Transformers, Spot & Butt Welders, Electric Hoists, Magnetic Chucks, Vice all types, Flexible and Double Ended Grinders, Capstan Lathers.

Smldth, F. L., & Co. (Bombay), Ltd.—Cambata Building, 42, Queen's Road.

Solanki Iron & Steel Works.—Bhoris Chawl, Grant Road.

Somani & Company Ltd.—Mehta Building, Meadows Street, Fort.



OF ALL  
TYPES

Manufacturers  
of

★ SPURS ★ SPIRALS  
★ HELICALS ★ BEVELS  
★ CHAIN SPROCKETS

On Precision MILLING MACHINE & HOBGING MACHINE as per your drawing or teeth cutting only on your Blank.

Specialist in: ALL KINDS OF WORMS & WORM WHEELS.

Work undertaken in any capacity over "HOBGING MACHINE".

For Particulars Please Contact:

**SUPREME INDUSTRIAL WORKS**

196-K, Gaiwadi, Girgaum, Bombay 4

Phone: 355189

Textile Machinery Corporation Ltd.—254A, Annie Besant Road, Worli.

Textile Works Ltd.—49/55, Apollo Street, Fort.

Turner, Hoare & Co., Ltd.—Gateway Building, Apollo Bunder, Bombay.



## TRADES AND PROFESSIONS IN BOMBAY

**UNITED INDIA ENGINEERING CO.**—6, Commerce House, Meadows Street, Fort, Bombay 1. Phone: 251492. Grams: "UNICONARAM." Engineers and Machinery Dealers. Sales and Show Room: 78, Old Custom House Road, Fort, Bombay 1.  
**Vasant Industrial & Engineering Works.**—"Vasant Vijay", 470-471 Worli Road, Bombay 18.  
**Voltas Ltd.**—19, Graham Road, Ballard Estate.  
**Zenith Textile Engineering Co.**—250, Ripon Road, Byculla.

## MACHINERY (SECONDHAND) &amp; PLANTS

**ORIENTAL ENGINEERING CO.**—25, Forbes St., Fort, Bombay 1. Phone: 253057. Grams: "ADIVISHNU". Dealers in New and Secondhand Diesel Generating Sets, Electric Motors, Transformers, Boilers, Diesel Engines, Oil Mill Machinery, Sugar Mill Machinery etc.

## MANGANESE AND IRON ORE EXPORTERS

**Bharat Pulverising Mills Private Ltd.**—Sayani Road, Bombay  
**Baldota Brothers.**—43, 2nd Bhoiwada, Bombay 2. Phone: 22787.  
**Industrial Minerals & Chemicals Co.**—125, Narayan Dhuru Street, Bombay 3.  
**Ishwarlal P. Patni & Co.**—Mherwan Building, Sir Phirozshah Mehta Road, Bombay 1.  
**Kemka & Co., (Agencies) Private Ltd.**—Vulcan Insurance Bldg., Vir Nariman Road, Bombay 1.  
**Sepulchre Brothers (India) Ltd.**—Taj Building, 210, Hornby Road.

## MARBLE &amp; TILE MFRS. &amp; MERCHANTS

**Asiatic Construction Co., Ltd.**—477, Duncan Road, Bombay 4.  
**Bharat Tiles & Marble Private Ltd.**—32, Apollo Street, Fort, Bombay.  
**C. BHOGILAL & CO.**—Hanuman Building, Behind Reserve Bank, 310, Bazargate Street, Fort, Bombay 1.  
**Central India Stone Co.**—503-505, Duncan Road, Null Bazar.  
**Desai, Lalubhai & Co.**—Duncan Road, Null Bazar.  
**DUNCAN STONE CO.**—500, Maulana Azad Road, Bombay 4.  
 Phones: Res.: 352185, Office: 332409. Grams: "TILERIES".  
 Stockists of Marble & Tiles & Sanitary Wares.  
**Gilgibhai, K., & Sons.**—8/10, Green Street, Fort, Bombay.  
**Gopal Chand Puri & Bros.**—70, Mahomedali Road, Bombay.  
**Himalayan Tiles & Marbles.**—Himalaya Bwg, Lady Jamshedji Road, Mahim.

**HINDUSTAN TILES & CEMENT INDUSTRIES.**—(Estd. 1946). Manufacturers of Flooring Tiles, Synthetic Marble, Mosaic, Terrazzo, Art, Coloured, etc., 89, Princess Street, Bombay 2. Phone: 23951. Grams: "MARMOSAIC." Head Office and Factory: Gulabnagar, P.O. Box 3, Jamnagar Gujarat (India). Phone: 269 & 427. Grams: "TILES." No other Branches.

**Hodiwalla, A. P., & Co.**—Bank Street, Fort, Bombay 1.  
**Indian Stone & Marble Work.**—2nd Pasta Lane, Colaba, Bombay 5.  
**LIBERTY TILES & MARBLE CO.**—8/10, Green Street, Fort, Bombay. Phone: Call at 252453. Factory: 581105. Manufacturers of Cement Marble Mosaic Tiles & Sanitarywares. Factory: Kuria Vihar Road, Kuria, Bombay 37.

**Manilal, N., & Co.**—120-181, Dadyseth Aglary Lane.  
**Mehta, N. M., & Co.**—6-10, Old Custom House Road, Fort, Bombay.  
**Mistry Kamruddin Badruddin & Co.**—Duncan Road, Null Bazar, Bombay 4.

**Modern Tiles Co. Private Ltd.**—Duncan Road, Null Bazar, Bombay 4.  
**Muraglia, F., & Co.**—12, Green Street, Elphinstone Circle, Fort.  
**Natvarlal & Son.**—Hanuman Building, Near Reserve Bank, Elphinstone Circle, Bombay 1.

**NATIONAL TILES & INDUSTRIES (PRIVATE) LTD.**—31, Hamam Street, Bombay 1. Mfrs. of Marble Mosaic, Terrazzo Non-Slippery, Industrial Heavy Duty Steelcrete and Acid Resisting Cement Tiles. Phones: 251007, 256392. Grams: "NECTILES."

**Oxy-Chloride Flooring Products Ltd.**—Arthur Bunder, Colaba, Bombay 5.

**Raval & Co.**—21, Bank Street.

**Raval Tiles & Marble Ltd.**—Edena, 97-A, Queen's Road.

**RAVI MARBLE CORPORATION.**—Dealers & Contractors for White & Coloured Marble, Marble Mosaic & Plain Cement Tiles, Glazed Tiles & Sanitarywares, 488, M. Azad Road, Bombay 4. Phones: 332571, 333038 & 377160.

**Rehman, F. J., & Co.**—Bank Street, Fort, Bombay 1.

**RUBY MARBLE CORPORATION.**—Dealers and Contractors in Marble Tiles, Glaze Tiles & Sanitary Wares. Office: 31, Hamam Street, Dena Bank House, Bombay-1BR. Sales Office: 499, M. Azad, Road, Bombay 4-BR. Factory: A-18, Ambewadi, Parel Tank Road, Bombay 33-DD. Phones: Office: 251007. Sales Office: 333038 and Factory: 377160.

**R. Moolchand & Co.**—44, Nagdevi Cross Lane, Bombay-3. Direct Importers, Sanitarywares, Tiles, Bath Tubes, Fancy Bathroom Fittings. Grams: "POTTERY." Phone: 324207. Res.: 78837.

**Rajan & Co.**—18, Custom House Road, Fort, Bombay.  
**Shah, A. H., & Co. Ltd.**—Jan Mansion, Sir P. Mehta Road, Fort, Bombay 1.

**SIMPLEX ART FLOORINGS PRIVATE LTD.**—Flooring and Interior decorators. Specialists in Marble, Tiling, Mosaic, Terrazzo and all decorative stone work. Office: "La Citedelle," 99, Queen's Road, Bombay. Factory: "Shant Shree" (Formerly Lovji Castle), Government Gate Road, Parel, Bombay. Phones: Office: 241340. Factory: 440623. Tel. Address: "SIMPLEX."

**Stone Supplying Co., (Private), Ltd.**—494, Duncan Road, Bombay 4.  
**Tandur & Shahabad Stone Co.**—Round Temple, Sandhurst Road, Bombay 4.

**Tribhovandas, C., & Co.**—Green Street, Fort, Bombay 1.

## MATERIAL &amp; MECHANICAL HANDLING EQUIPMENT &amp; CONVEYORS

**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Bldg., 2nd floor, Bank Street, Fort, Bombay. Phones: 252952 & 254103. Grams: "PILOTACE."

**CONSOLIDATED ENGINEERING EQUIPMENT CO.**—Union Co-operative Insurance Society Building, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone: 255333. Grams: "CONEQUIP." Direct Importers of Overhead Electric Cranes & Hoists of all types.

**DYNACRAFT MACHINE CO. PRIVATE LTD.**—Material Handling Engineers, Andheri, Bombay 58. Gravity Roller Conveyors, Powerised Roller Conveyors, Stationary Belt Conveyors, Portable Belt Conveyors, Slat Conveyors, Overhead Chain Conveyors, Cable Carriers and Skip Hoists. Phone: 571278 & 571279. Grams: "DYNACRITY," Andheri.

**ESSENTIAL ENGINEERING CO.**—11, Botawala Building, Elphinstone Circle, Fort. Grams: "ESSENCE." Phone: 252940. Importers, Exporters, Commission Agents and Manufacturers' Representatives.

**ESOOFALI ESMAILJI KARACHIWALA & CO.**—43-45, Bhandari Street, Koliwada, Bombay 3. Phone: 321617; Workshop: 261261. Grams: "SLING". Shipchangers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Block Chains, Coal Tar, Coal Pitch Felts, Marine Glue, etc. Dealers in: Marine, Mill & Factory Stores. Stockists of "ELDEE" Wire Rope (Indian Make).

**Fleming, John & Co. Private Ltd.**—P. B. No. 76, Bombay 1. Phone: 261153.

**Gujarat Trading Syndicate.**—India House, Fort Street, Bombay 1. Phone: 261248. Grams: "GUTRASY".

**HERCULES HOISTS LIMITED.**—Manufacturers of "INDEF" Pulley Blocks, Electric Hoists & Travelling Trolleys, Bombay Agra Road, Bombay 78.

## KONELS CONVEYORS — ELEVATORS

(FIXED AND PORTABLE BELT CONVEYORS, BUCKET ELEVATORS, GRAVITY ROLLER CONVEYORS, CHAIN SLAT CONVEYORS, BAG STACKING MACHINE, BAG FILLING MACHINE, OVERHEAD CHAIN CONVEYORS, SCREW CONVEYORS and other mechanical handling equipments)

IDLERS & RETURN ROLLERS  
(Troughed as well as straight type)

Designed & Manufactured by

**MESSRS. KONEL CORPORATION**  
 Niranjana, 4th Floor, West of Marine Lines Station,  
 BOMBAY 2  
 Call on Phone No. 243757.

**RADIANT ELECTRIC & MACHINERY CO.**—Sir Vithaldas Chambers, Bruce Street, Bombay 1. Phones: 255296 & 370385. Grams: "RADICAL".

**Voltas Limited.**—19, Graham Road, Ballard Estate, Bombay 1.

**WESTERN INDIA MARINE MILLS & ENGINEERS.**—185, Janjikar Street, Bombay 3. Phone: 326367. Grams: "WIRE-CHAINS". Shipchangers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Block Chains, Coal Tar, Coal Pitch Felts, Marine Glue, Marine, Mill and Factory Stores. Pull Riffs Pulling lifting maxpull.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.



## MATTRESSES &amp; PILLOWS

**CITY PLYWOOD DEPOT.** Opp. :—Chitra Cinema, Dr. Ambedkar Road, Dadar, Bombay-14. Phone : 442997. Mattresses and Cushions in Various Shapes and sizes.

## MEASURING TAPES &amp; INSTRUMENTS

**ABDEALLY, B. M. & CO.**—127, Sarang Street, Bombay 3. Phone : 326980. Grams : "ALERTDEAL."

Ajmera & Bros., V. G.—103, Narayan Dhuru Street, Bombay-3 BR.  
Batliboi & Company Private Limited.—Regd. Office : Forbes Street, P.O. Box 190A, Fort, Bombay 1. (BR.). Phones : 255451 (6 lines). Grams : BATLIBOICO. Tele : 011-284. City Branch : "BATLIBOI HOUSE." 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches : Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijawada. Associate : Bangalore 2. Resident Representatives : RANCHI, BHUBANESHWAR.

**BHARAT ENGINEERING STORES.**—113, Nagdevi Street, Bombay 3. Grams : "UNIONTOOLS." Phone : 323193. Stockists of Elephant Brand Chain Pulley Blocks.

**BOMBAY HARDWARE TRADERS.**—79, Narayan Dhuru Street, Masjid Bunder Road, Bombay 3. Phone : 327153. Grams : "SISTACHAR". Stockists of Hardware, Screws, Bolts, Nuts, Shoe Materials, Woodworking & Metal Cutting Saws, Engineering Stores & Saw Files.

Elliott Waud & Hill Private Ltd.—Lakshmi Bldg., Sir P. M. Road, Bombay 1.

Fleming, John & Co. Private Ltd.—Bastion Road, Bombay 1.

**HEMANT TOOLS TRADING CO.**—33, Bibijan Street (Barbhai Mohalla), Bombay 3. Grams : "LACING." Phone : 321174. Importers & Stockists of Chain Pulley Blocks, Garage Tools, Fibre Sheets, Rods, Diamond Dressing Tools, Precision Tools etc.

**HINDUSTAN TOOLS & HARDWARE MART.**—126, Lohar Chawl, Bombay 2. Phone : 20666. Grams : "FAKIRSAI." Importers, Stockists & Govt. & Rly. suppliers of General engineering, Precision, Measuring & Carpenter tools. Also suppliers to Technical Colleges & Institutions. Branch Office : 154, Narayan Dhuru Street, Bombay 3.

**INDUSTRIAL MILL GIN STORES.**—Industrial House, 51/63, Nagdevi Cross Lane, Bombay 3. Phone : 321246. Grams : "WIREGOODS."

Jairamdas & Sons.—163, Narain Dhuru Street, Bombay 3. Phone : 323616. Grams : Jairamsons.

**M. SOMNATH & CO.**—94, Lohar Chawl, Bombay 2. Phone : 20375. Grams : "SAMARTHYA". Bombay 2. Importers & Stockists of Surface Plates, Slip Gauges, Micrometers, Calipers, Ring and Plug Gauges, Dial Testing Indicators, Straight Edges, Internal Dial gauges, Measuring Instruments, Precision Water Levels, and all sorts of Measuring Instruments & Engineering Tools.

Paramount Tools Corp.—3, Narayan Dhuru Cross Lane, Bombay 3.  
William Jacks & Co. Ltd.—Bharat House, Apollo Street, Fort.

**INDUSTRIAL TOOLS TRADING CO.**—101, Narayan Dhuru Street, Bombay 3. Stockists of Precision Tools of "MITUTOYO," Moore & Wright, Nebos Baty & Steinmeyer, etc. Grams : "MITUTOYO." Phone : 328793.

**M. S. DOSHI & CO.**—101, Narayan Dhuru Street, Bombay-3. Phone : C/o 328193. Importers & Stockists of Hardware Metal Cutting Engineering & Precision Tools.

## MECHANICAL AND ELECTRICAL ENGINEERS

Arunodaya Engineering Corporation.—Navsari Chambers, Outram Road, Fort, Bombay 1.

**JANI S. BUCHIA, D.I.C.E., D.E.E.**—13, N. Petit Road, Bombay 7.

**MOTWANE PRIVATE LTD.**—127, Mahatma Gandhi Road, P.O. Box No. 1312, Bombay 1 BR. Phone : 252337. Grams : "CHIPHONE," Bombay.

Testeels Limited.—Prospect Chambers, Dr. Dadabhoy Naoroji Road, Bombay 1.

## MERCURY AND MERCURY SALTS

Fleming, John & Co., Private Ltd.—P. B. No. 76, Bombay 1. Phone : 261153.

Kantilal Sanghvi & Co.—Mherwan Building, Sir Phirozshah Mehta Road, Fort.

Vasantlal Vadilal & Co.—215, Samuel Street, Vadgadi, Bombay 3.

**VELU & CO. (PRIVATE) LTD., P. K.**—P. O. Box 514, 111, Mahatma Gandhi Road, Bombay 1. Phones : 253141 & 641326. Grams : "LACQUER."

Volras Ltd.—19, Graham Road, Ballard Estate.

## MERCURY VAPOUR LAMPS

**B. CHOWDHURY & CO.**—Indian Globe Chambers, Fort Street, Bombay 1. Phone : 26-3479. Grams : "BISUKHI". Manufacturers of "Merkuri" Brand High Pressure Mercury Vapour Lamps, Suitable Chokes and Fittings.

## METAL CUTTING TOOLS

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone : 326980. Grams : "ALERTDEAL."

Ajmera & Bros. V. G.—103, Narayan Dhuru Street, Bombay 3 BR.  
Batliboi & Company Private Limited.—Regd. Office : Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR.). Phones : 255451 (6 lines). Grams : BATLIBOICO. Tele : 011-284. City Branch : "BATLIBOI HOUSE", 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches : Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate : Bangalore 2. Resident Representatives : RANCHI, BHUBANESHWAR.

**BHARAT ENGINEERING STORES.**—113, Nagdevi Street, Bombay 3. Grams : "UNIONTOOLS." Phone : 323193. Stockists of Elephant Brand Chain Pulley Blocks.

**BOMBAY ENGINEERING STORES.**—C-16, Behari Baug, 3rd Bhoiwada, Bombay 2. Stockists of Engineering Tools of all kinds.

**BOMBAY TOOLS SUPPLYING AGENCY.**—50, Nagdevi Cross Lane, Bombay 3. Phone : 321326. Grams : "TERRATOOLS." Direct Importers—Stockists of Engineering & Precision Tools.

Central Machine Tools Agency.—51-53, Nagdevi Cross Lane, Bombay 3.

**NEW HIND TRADING CORPORATION.**—137, Narayan Dhuru Street, Bombay 3. Machine Tools, Metal Cutting Tools & all sorts of Precision & Engineering Tools. Phone : 329383. Grams : "DORMER".

Dewanchand Nikkamall & Co.—126, Narayan Dhuru Street, Bombay 3.

Elliott Waud & Hill Private Ltd.—Lakshmi Bldg., Sir P. M. Road, Bombay 1.

**EMKAY TRADERS.**—32, Fatma Bldg., 7, Nagdevi Street, Bombay 3. Carbon, High Speed, Taps, Dies, Chasers & other Threading Tools, Twist Drills, Garage & Small Tools, Precision & Measuring Tols. Stockists : S.T.M. Tools; Phone : 328578. Grams : "MONDHRUV."

Hemant Tools Trading Co.—33, Bibijan Street, Bombay 3.

**INDUSTRIAL MILL GIN STORES.**—Industrial House, 51-53, Nagdevi Cross Lane, Bombay 3. Grams : "WIREGOODS." Phone : 321246.

Jairamdas & Sons—163, Narain Dhuru Street, Bombay 3. Phone : 323616. Grams : "Jairamsons". Sole Selling Agents for Sanderson Bros. & Newbould Ltd., Sheffield—9 (U.K.) and Nicholson File, International Providence, R.I., U.S.A.

**JAIRAMDAS UDYOG PRIVATE LTD.**—157/159, Narayan Dhuru Street, Bombay 3. Mfrs. of Jesons brand Twist Drills, Reamers, Cutters, Thread-Forming Taps & Dies, etc.

James Tools & Hardware Co.—109-11, Nagdevi Street, Bombay 3.

Kirtilal & Co.—31, Bibijan Street, Bombay 3.

Laxmi Engineering Stores.—154, Kadakia Mansion, Narayan Dhuru Street, Bombay 3.

**M. S. DOSHI & CO.**—101, Narayan Dhuru Street, Bombay 3. Phone : C/o 328193. Importers & Stockists of Hardware Metal Cutting Engineering & Precision Tools.

**MODERN MACHINE TOOLS CO.**—88, Nagdevi Cross Lane, Bombay-3. Phone : 322456. Grams : "MONKEYGRIP." Stockists : SAP-SHIVA Hackshaw Blades, SAP Metal Cutting Bandsaws, SAP Screw Slotting Cutters Wineth Carbide Tips and Tip Tools Complete, Taps and Dies, etc.

**NUTAN TRADING CORPORATION.**—83, Nagdevi Cross Lane, Post Box No. 3238, Bombay-3. B.R. Grams : "NUTAN-TRADE." Phones : 323357 (Office) & 474485 (Res.). Manufacturers of "KAUSHIK" Brand Tools—such as Reamers, Callipers, Dividers, Tool Holders, Engineering Squares etc. Dealers in Tool Bits, End Mills, Centre Drills Slotting and Side & Face Cutters etc. Stockists of Hardware, Beavings etc. Branch at : 3350, People Mahadev, Hauz Kazi, Delhi-6.

Paramount Tools Corp.—3, Narayan Dhuru Cross Lane, Bombay 3.

Raskial Shah & Co.—93, Narayan Dhuru Street, Bombay 3.

Shah Engineering Stores Corporation.—Industrial House, 51/53, Nagdevi Cross Lane, Bombay 3.

Shah Trading Corporation.—Oomrigar Building, opp. Crawford Market, Bombay 3.

Vishwa Bharati Trading Co.—14, Kumpta Street, Ballard Estate, Bombay 1.

Volras Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

William Jacks & Co. Ltd.—Hamilton House, Graham Road, Ballard Estate.



**METAL PHOTOGRAPHS**

**EXCEL PROCESS (P) LTD.**—Mfrs. of Anodised Aluminium Labels, Advertising Gifts, Scales, Dials, Badges, Decorative Radio Trims & Panels, Identity Cards & Photographs in exclusive finishes. 117, Andheri Kurla Road, Bombay 69. Phones: 512743, 513327.

**METAL JOINING EQUIPMENT**

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Bombay 1. Phones: 266371, 264555 and 263795. Grams: "VIBHACO." Branch: G.P.O. Box 2628, Calcutta 1. Phone: 336680. Manufacturers of all kinds of Metals Welding, Brazing & Soldering requirements.

**METAL LABELS AND NAME PLATES MANUFACTURERS**

**EXCEL PROCESS (P) LTD.**—Mfrs. of Anodised Aluminium Labels, Advertising Gifts, Scales, Dials, Badges, Decorative Radio Trims & Panels, Identity Cards & Photographs in exclusive finishes; 117, Andheri Kurla Road, Bombay 69. Phones: 512743, 513327.

**METAL MANUFACTURERS AND MERCHANTS**

**Abdeally, B. M. & Co.**—127, Sarang Street, Bombay 3.  
**Abdullahai Faizullahai Ltd.**—Khoka Bazar, Bombay 3.  
**Adamji Lookmanji & Co.**—Rahimtoola House, Homji Street, Fort.

**ANDHERI METAL REFINERY AND FOUNDRY.**—Metal Refiners—Founders—Engineers. Chandi Karkhana, Mogra, Post Box No. 7365, Andheri, Bombay 58. Phone: 512247. Grams: "RUPAWALA."

**Balmer Lawrie & Co., Ltd.**—6, Graham Road, Ballard Estate, Fort.  
**Bharat Trading Co.**—43, Laxmi Building, Nagdevi Cross Lane, Bombay 3.

**BOMBAY METAL DEPOT, THE.**—88/90, 3rd Bhoiwada, Bhuleshwar, Bombay-2. Direct Importers and dealers in Copper, Brass, Lead, Tin, Zinc & Aluminium in Jots, Sheets, Strips, Circles, Utensils, Pipes, Rods, Wires, Scoraps etc. and Commission Agents. Phone Nos.: 334009 & 331705. Grams: "BIYEMDI." Associated offices: The Bombay Metal Depot, 112, Mint Road, 1. Grams: "BOMETAL." The South India Metal Works & Rolling Mills, 112, Mint Road, Madras-1. Grams: "COPROLLONG."

**BOMBAY METAL SYNDICATE.**—166, Kika Street, Gulalwadi, Bombay 4. Phone: 331873 & 333601. Grams: "ABBRASIVE." Sole Selling Agents in India for VEREINIGTE DEUTSCHE METAL-LWERKE A. G. (Germany) for Aluminium, Brass, Copper Rods, Sheets, Tubes, Wires, Strips and Radiator Strips for Automobile Industry and Copper Tubings for Air-Conditioning & Refrigerating Industry.

**CHANDULAL NARANDAS.**—96, Kika Street, Shop No. 1, Bombay 4. Phones: 333645 and Res. 39549. Grams: "METAL-MART." Direct Importers & Dealers in Copper & Brass Rods, Pipes, Sheets, Sheathings, Wires, Strips, Phos, Bronze and Monel Metal Rods, Sheets, Wire, Tin, Lead, Zinc, Antimony, White Metal, Tin Solders, etc.

**Choksi Brothers.**—815, Sandhurst Road, Bombay 4.  
**Choksi, H. & Co.**—106, Meadows Street, Fort.

**CHOONILAL MOHANLAL & CO.**—Shop No. 54, Kika Street (Gulalwadi), Bombay 4. Importers & Dealers in Non-Ferrous Metals & Alloys, i.e. Aluminium, Brass, Copper, & Phosphor Bronze Rods, Tubes, Sheets, Sheathings, Wire & Welding Rods. Phone: 333904 and 335886 (Res.).

**Curtis & Co., Ltd., J.**—Mahalaxmi Bridge Arcade, Bombay 11.  
**Desai & Co., M. S.**—77, Nagdevi Cross Lane, Bombay 3.  
**Devidayal Metal Industries.**—Darukhana, Reay Road, Bombay 10.  
**Dineshchandra Keshavlal & Co.**—209, Kika Street, Bombay 2.  
**Frances Klein & Co. (Bombay), Ltd.**—Shale Building, Bank Street, Fort. Post Box No. 777, Bombay.

**KIND HARDWARE STORES.**—Pirbhoy Building No. 1, Lohar Chawl, Bombay 2. Phone: 29804. Grams: "AGEKADUM." Dealers in all kinds of Wires, Brass & Copper Rods & Non-Ferrous Metals.

**Hindustan Metal Manufacturing Co.**—Lal Chimney Compound, Near Nair Hospital, Lamington Road (North), Bombay 11.

**HOOSAIN METAL ROLLING MILL PRIVATE LIMITED.**—Office: 66/68, Narayan Dhuru Street, Bombay 3. Phone: 376965 & 323941. Grams: "ALUBRAS." Manufacturers of Brass, Copper & Aluminium Sheets, Strips of Industrial and Commercial Quality, Stove Tanks & Lead Sheets. Factory: Atlas Mill Compound, Reay Road, Bombay 10.

**INDIA METAL TRADERS.**—92/94, Kika Street (Gulalwadi), Bombay 4. Manufacturers of Copper Conductors, Copper Strips and bus bars, Stranded Copper Wires, tinned Copper Wires, and Aluminium Conductors. Phone: 334093. Grams: "METALDRAW" (GG).

**INDIAN SMELTING & REFINING CO., LTD., THE.**—"Industry House," 159, Churchgate Reclamation, Bombay 1. Phone: 246261.

**INDIAN STANDARD METAL CO., LTD.**—Chinchpokli Cross Lane, I.S.M. Estate, Bombay 27. Phone Nos. 372299 & 375018. Grams: "ISMETCO."

**JAIPUR METALS & ELECTRICALS LTD.**—Kamani Chambers, Nicol Road, Ballard Estate. Phones: 26-1744. Head Office: Near Railway Station, Jaipur. Manufacturers of Hard drawn bare electrolytic Copper Conductors, Cadmium Copper Conductors, House Service Meters, Gun Metal, Phosphor Bronze, Tin Solder, White Metal and other non-ferrous metal alloys, Arsenical Copper Rods, Copper Strips, Brass Rods & Wires. Also Importers of Copper and other non-ferrous metals, Component Parts of House Service Meters, etc. Managing Agents: Poonamchand and Brothers Private Ltd.

**JAYANT METAL MANUFACTURING CO.**—Manufacturers of Brass & Aluminium Door & Window Fittings, Copper and Aluminium Conductors, Flexible Braided Copper Strips, Paper/Cotton covered Winding Wires & Strips, Commutator Segments, Transformer Copper Strips, Boatnails, Rivets, Tacks, Brass Bolts & Nuts, Panel Pins and other Copper & Brass Semis. Tel. Address: "JAYANTBABU". Head Office & Showrooms: 152, Lohar Street, P.O. Box No. 2227, Bombay-2. (Phone: 23919) Adm. Office & Factory: 16, Sayani Road, Bombay 28 (Phones: 452818, 242874 & 451411).

**KAMANI METALS & ALLOYS LTD.**—Kamani Chambers, Ballard Estate, Bombay 1. Phone: 261744. Manufacturers of Brass, Copper, Phosphor Bronze, Sheets, Strips and Coils for Industrial purposes. Factory & Sales Office: Agra Road, Kurla (North), Bombay 70. Phone: 55661 (6 lines).

**Lallubhai Kalidas.**—136, Jamli Mohola, Bombay 3.

**MEHTA & COMPANY.**—Latf House, Argyle Road, Iron Market, Bombay-9. Phones: 321265 & 321298. Grams: "NICERODS." Importers and Stockists of Iron, Steel, Hardware and Metals.

Phone: 334925

**G. K. KANSARA**

118, Kansara Chawl, 1st floor,  
Kalbadevi Road, Bombay 2

Manufacturers of:

**STAINLESS STEEL UTENSILS  
& APPARATUSES**—Chemical,  
Industrial, Pharmaceutical &  
Oil - Acid - Water Tanks

Wholesale and Retail Dealers in:

18/8 Non-Magnetic, Acid resisting weldable Quality  
**SHEETS, STRIPS, RODS, PIPES, WIRES  
& PLATES**

in any gauge with Standard Sizes

TRADE INQUIRIES SOLICITED



**METALLICA WORKS PRIVATE LTD.**—79/83, Dr. Annie Besant Road, Bombay 18. Phones: 375432, 375433, 375434, 371941 & 371942. Makers of Non-Ferrous Metals. Castings, Alloys Anodes, Lead linings of Acid Resisting Containers, Crucibles.

**Molooobhoy, Ahmed S. & Sons.**—281, Nagdevi Street.

**Oriental Metal Pressing Works.**—131, Worli, Bombay 18.

**SHANTILAL HIRALAL & CO.**—63/65, Kika Street, Bombay-4. Phone: 331459, 334479. Grams: "LESS PROFIT." Dealers in all kinds of Non-Ferrous Metal, Metal Scraps, Brass Rods, Tubes & Pipes in all sizes & 'K' Brand Brass Sheets, etc. Phone: 331762.

**Standard Metal Works.**—17, Falkland Road, Low Level, Tardeo.

**TAMBAWALA PRODUCTS AGENCIES PVT. LTD.**—66/68, Narayan Dhuru Street, P.O. Box 3092, Bombay 3. Phones: 323941-42. Grams: "AXLE." Metal Merchants, Manufacturers Agents, Importers & Exporters.

**Tarkar, B. A.**—Mumbadevi, Kansara Chawl, Kalbadevi, Bombay 2. Trade (India) Corporation.—58, Mohamedalli Road, P.O. Box No. 8231, Bombay.

**Tirathdas Kotumal.**—107, Narayan Dhuru Street, Bombay 3.

**Union Carbide India Limited.**—Kasturi Building, Jamshedji Tata Road, Bombay 1.

**Vasantlal Vadilal & Co.**—215-17, Samuel Street, Vadgadi.

**Vishwa Bharati Trading Co.**—14, Kumbha Street, Ballard Estate, Bombay 1.



**V. M. METAL CO. (Estd. 1950).**—180, Kika Street, Bombay 4. Phone : 334543. Grams : "SHAKAGO," Girgaum. Dealers in Brass, Copper, Aluminium, Specialised in Industrial Sheets.

**VORA TRADING CO.**—357-A, Samuel Street, Vakil Bldg., Vadgadi, Bombay-3. Telephone: 325289. Telegram : "MULTI-SALES." Bombay-Mandvi.

**VYAS BROTHERS.**—Manufacturers of Copper Conductors, A.C.S.R. and All Aluminium Conductors, Arsenic Copper Rods, Hot Dip Tinned Copper Wires, T.C. Fuse Wires, Valves & Cocks, Non-Ferrous Castings a speciality. 65, Tamba Kanta, Bombay 3. Phone : 325687. Grams : "CUPRO-CABLE." Factory : Bombawadi, Katargam, Surat. Phone : 3845.

### METALLIZING

**JYOTI METALLIZING CORPORATION.**—Metallizing of Modern Costume, Jewellery and Novelties. Udyog Bhavan, 250-D, Worli, Bombay-18. Phone : 454595. Grams : "JYOMET-COR."

### METAL POWDER MFRS.

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Fort, Bombay 1. Phones : 266371, 264555 & 263795. Grams : "VIBHACO." Branch : G.P.O. Box No. 2628, Calcutta 1. Phone : 336680. Manufacturers of Powders of all Metals.

### MICROSCOPES

**Gordhandas Desai Private Ltd.**—Kermani Bldg., Sir P. M. Road, Bombay 1.

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P.O. Box 1909, Bombay 1. Phone : 251882. Also at Calcutta, New Delhi, Madras and Baroda. Agents in India for Messrs. **VICKERS INSTRUMENTS LTD.**, U.K. Manufacturers of Famous "VICKERS" Projection microscopes. Also Microscopes of all other types & surveying equipment.

### MILITARY AND GOVERNMENT CONTRACTORS

**Chadha, B. M. & Co., Ltd.**—Jan Mansion, Sir Phirozshah Mehta Road, Fort, P. O. Box No. 671, Bombay.

**Chandulal Narandas.**—96, Kika Street, Bombay 4.  
**Crescent Supplying Co.**—Cama Building, 24-26, Dalal Street, Fort.  
**Edgar Handley & Co.**—Seksaria Chambers, 139, Medows Street, Fort.  
**Hindustan Tools & Hardware Mart.**—126, Lohar Chawl, Bombay 2.  
**India Goatskin Corporation Ltd.**—Dharavi, Bombay 17.

**India Timber Trading Co.**—Mustafa Building, Sir Phirozshah Mehta Road, Fort.

**Jairamdas & Sons.**—163, Narayan Dhuru Street, Bombay 3. Phone : 323616. Grams : "Jairamsons." Offices : Delhi, Madras, Bangalore and Secunderabad (A.P.) On the Approved list of DGS & D, New Delhi and other Govt. Depts.

**Khambati & Co., G. L.**—437, Katha Bazar, Bombay 9.

**Kooverji Devshi & Co.**—164, Lohar Street.

**Mackenzies Ltd.**—Sewri.

**New India Hardware Mart.**—152, Narayan Dhuru Street, Bombay 3.

**V. CHUNILAL & CO.**—19, Bibijan Street, Bombay 3. Phone : 328310. Bolts, Nuts, Hardware & Tool Merchants.

### MILK POWDER (IMPORTERS)

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone : 26-2711 (8 lines). Machine Works : Tank Road, Bombay 33 DD. Phone : 378544-46. Offices at : Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

### MILL AND GIN STORE SUPPLIERS

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone : 326980. Grams : "ALERTDEAL."

**ACME MANUFACTURING & AGENCIES (INDIA).**—Post Box No. 1732, Bombay 1. Manufacturers, Importers & Stockists of Textile Stores & Machinery Accessories.

**Acme Manufacturing Co., Ltd.**—Construction House, Wittet Road, Ballard Estate, Fort.

**Adamji Kaderbhoy.**—337, Katha Bazar, Bombay 9. Stockist of Heald Cord, Dobby Twine, etc.

**Adarsha Trading Corporation.**—Ismael Building, 2nd Floor, Room No. 9-H, 381, Hornby Road, Fort, Bombay. Phone : 32404.

**Agarwal Commercial Corp.**—35, Bibijan Street, Nagdevi, Bombay 3.

**Allied Exporters.**—Kumud House, 267, Hornby Road, Fort.

**ALTEX PRIVATE LIMITED.**—147, Mahatma Gandhi Road, Fort, Bombay 1. Phone : 251082. Grams : "BETEX."

**Apollo Engineering Co.**—84, Apollo Street, Fort.

**Ardeshr D. Wadia & Sons.**—93, Apollo Street, Fort. Importers of "V" Tex Ropes Drives, Clutches and Gearing.

**Arvinda Trading Co. Private Ltd.**—105, Apollo Street, Fort, Bombay 1.

**Asave Mehta & Co. Bahadur.**—24-B, Raja Compound, Hamam Street, Fort.

**Associated Machine & Tool Co.**—130, Medows Street, Fort.

**BABULAL BROS.**—26, Nagdevi Cross Lane, Bombay 3. Phone : 323930. Grams : "FIREFLY." Stockists of Abrasives, Asbestos Goods, Engineering Tools, Hardware, Mill Gin Stores, Pipe Fittings.

**Baker, A. M., & Co.**—218, Nagdevi Street.

**Balkrishna & Bros.**—71, Nagdevi Street.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**BELTEX LIMITED.**—Managing Agents : Karaka & Co. Head Office : Ellis Bridge, Ahmedabad 6. Phones—Office : 7205; Works : 5289. Grams : "LEATEX", Ahmedabad. Manufacturers of Leather Beltings, Buffers, Picker Savers, Check Straps, Check ends, Laces, and other Sundry Loom Fittings. Manufacturers of Olive green Picking Bands. Bombay Branch : 43, Tamarind Lane, Bombay 4. Phone : 253707. Grams : "FUSHNABAND," Bombay.

**Bhagvandas Chatubhuj & Co.**—20, Hamam Street, Fort.

**Bharat Industrial Co.**—77-78, Nagdevi Cross Lane, Bombay 3.

**Bhathena, B. N., & Co.**—100, Nagdevi Street.

**Bhogilal Shah & Co.**—Mehta Building, Medows Street, Fort.

**Bombay Burma Hardware Store.**—128, Nagdevi Street, Bombay 3.

**Bombay Machine Store Co., The.**—Laxmi Building, 43, Nagdevi Cross Lane, Bombay 3.

**Bombay Mill Stores Supplying Co., Ltd.**—Western India House, Sir Phirozshah Mehta Road, Fort.

**Bombay Pulley Marketing Co.**—30, Nagdevi Cross Lane, Bombay 3.

**BOMBAY TOOLS & HARDWARE MART.**—123, Narayan Dhuru Street, Bombay 3. Grams : "BOTAPS." Phone : 327122.

**Bombay Tools Supplying Agency.**—50, Nagdevi Cross Lane, Bombay 3.

**Brady, W. H., & Co., Ltd.**—Royal Insurance Building, Churchgate Street, Fort.

**British Mill Stores Co.**—Sir Vithaldas Chambers, Bruce Street, Fort.

**B. R. Jnide & Co.**—14, Mohan Niwas, Chandavarkar Road, Bombay 19. Phone : 472267. Grams : "GOLDENHILL."

**C. Bole & Co.**—75, Nagdevi Cross Lane, Bombay 3.

**C. R. Contractor & Co.**—82, Nagdevi Cross Lane, Bombay 3.

**Central Machine Tools Agency.**—43, Nagdevi Cross Lane, Bombay 3.

**Central Tool & Equipment Co.**—32, Sarang Street, Bombay 3.

**Chhabildas & Co.**—78-A, Abdul Rehman Street.

**Chimanlal Desai & Co.**—Gool Mansion, Homji Street, Fort, Bombay 1.

**Collinson & Co., Ltd.**—Standard Building, Hornby Road, Fort.

**Commissariat, H. M., & Co.**—7, Elphinstone Circle, Fort.

**CONCORD CORPORATION PRIVATE LTD.**—16, Apollo Street, Fort, Bombay. Manufacturers of "SILVER STAR." Brand Wire Reels. Phone : 255261. Grams : "ALTRADCO."

**Consolidated Mill Supplies, Ltd.**—Co-operative Insurance Building, Sir Phirozshah Mehta Road.

**Damania & Co.**—25, Bank Street, Fort.

**DARUWALLA, M. N. & CO.**—Dealers in Tallow and all kinds of Mill Stores. 32, Apollo Street, Fort. Phone No. 252715. Tel. Address : "TALLOW."

**Desai, M. S., & Co.**—77, Nagdevi Cross Lane, Bombay 7.

**DESAI TUBE & HARDWARE MART.**—41, Nagdevi Cross Lane, Bombay 3. Phone : 321606. Grams : "HASTY." Mill Gin Store Suppliers. Pipe Fittings and Hardware Merchants.

**Dewanchand Nikkamall & Co.**—126, Narayan Dhuru Street, Bombay 3.

**Dinshaw Master & Co., Ltd.**—247, Nagdevi Street.

**Diwan Bros.**—51, Nagdevi Street, Bombay 3.

**Dulabhdas, P., & Co.**—Samuel Street, Vadgadi.

**Duncan Stratton & Co., Ltd.**—5, Bank Street, Bombay 1.

**Dwarkadas Khetan & Co.**—139, Medows Street, Fort.

**Eastern Stores & Trading Co.**—115-A, Nagdevi Street.

**Edgar Handley and Company Private Limited.**—135, Medows Street, Fort, Bombay.

**Ehbal & Co.**—Lucky Mansion, Mahomedally Road, Bombay 3.

**Empire Trading Co., The.**—76-A, All Chambers, Tamarind Lane, Fort.

**ENGINEER BROS.**—16, Apollo Street, Fort, Bombay. Phone : 251009. Grams : "SHRIJIBAVA." Importers and Manufacturers of Textile Mill Machinery Accessories.

**Engineer, Eruch D., & Co.**—Crossley House, Apollo Street, Fort.

**Engineering & Agencies Ltd.**—Dena Bank Building, Elphinstone Circle.

**Essafally Adamji & Co.**—134, Nagdevi Street.

**Excelstor Mill Supply Co.**—All Chambers, Medows Street, Fort.

**Fulabhai & Company.**—134, Medows Street, Fort, Bombay.

**Gannon Dunkerley & Co., Ltd.**—Chartered Bank Building, Mahatma Gandhi Road, Fort.

**General Tube Ltd., The.**—142-44, Nagdevi Street, Bombay 3.

**General Stores Co.**—154, Narayan Dhuru Street, Bombay 3.



**Gets India Ltd.**—Western India House, Sir Phirozshah Mehta Road, Fort.

**Ghia, M. C., & Co.**—Raja Bahadur Motilal Mansion, 23, Apollo Street, Fort.

**The Gin Store Company.**—76, Nagdevi Cross Lane, Bombay 3.

**Great Eastern Trading Co.**—107, Cowasji Patel Street, Fort.

**Greaves Cotton & Co., Ltd.**—Forbes Street, Bombay 1.

**Greentose Corporation (India).**—Cama Buildings, 24-26, Dalal Street, Fort.

**Haiderbhoy Ramallji & Co.**—163, Nagdevi Street, Bombay 3.

**Hardcastle, Waud & Co., Ltd.**—Alice Building, Hornby Road, Fort.

**Harjimal Kidarnath & Co.**—87, Nagdevi Cross Lane, Bombay 3.

**Hazarat & Co.**—People's Building, Sir Phirozshah Mehta Road, Fort.

**Hindustan Engineering Co. (Machinery Dept.).**—25, Ropewalk Street, Fort, Bombay 1.

**Hindustan Tube Company.**—163, Nagdevi Cross Lane, Bombay 3.

**Hiralal Gokuldas Dalal & Co.**—45, Nagdevi Cross Lane, Bombay 3.

**Hiralal T., Co.**—72-80, Nagdevi Cross Lane, Bombay 3.

**Hoosain & Bros., M. A.**—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**Imperial Trading Syndicate.**—Podar Chambers, 54, Parai Bazar Street, Fort.

**Indian Commercial Agency.**—Regd. Office: Rahimtoola House, 7, Homji Street, Fort.

**Indian Commercial Co.**—86, Sarang Street (Bhusari Mohalla), Bombay 3. Phone: 30885.

**Indian Stores Trading Co.**—Sir Vithaldas Chambers, 10, Apollo Street, Fort.

**Indo-Bobbins & Textile Co., Ltd.**—Jan Mansion, Sir Phirozshah Mehta Road, Fort.

**Indo-Bombay Trading Co.**—34, Nagdevi Street.

**Indo-British Trading Bureau.**—7/10, Elphinstone Circle, Fort, Bombay 1.

**Indo-Commercial Co., Ltd.**—Hamam House, Hamam Street, Fort.

**Industrial Engineering Co.**—45-47, Apollo Street, Fort.

**Industrial Leather Co., Ltd., The.**—9, Ash Lane, Fort.

**Industrial Machine & Tools Co.**—347, Lamington Road, Bombay 7.

**Industrial Stores Co.**—Sektaria Chambers, 130, Meadows Street, Fort.

**Industrial Textile Stores.**—55-57, Nagdevi Cross Lane, Bombay 3.

**Industrial Textile Stores Co.**—7-10, Elphinstone Circle, Fort.

**INDUSTRIAL TRADING AGENCIES.**—248, Masjid Bunder Road, Bombay 3. Phone: 325838. Grams: "HOSEPIPE." Mill Gin Stores, Hardware, Tools, Pipes & Fittings Merchants, Distributors for "Rocket" Brand Hose Pipes and Beltings.

**Ishverdas Jugmohandas & Co.**—Mubarak Manzil, Apollo Street, Fort.

**Ispat Traders.**—129, Sarang Street, Bombay 3.

**J. Champaklal & Co.**—44, Nagdevi Cross Lane, Bombay 3.

**Jagmohandas Shamaidas & Sons.**—11, Tamarind Lane, Fort.

**Jairam Jadhavji & Sons.**—74, Nagdevi Cross Lane, Bombay 3.

**JAIRAMDAS & SONS.**—163, Narain Dhuru Street, Bombay 3. Grams: "JAIRAMDAS." Phone: 323616.

**James Tools & Hardware Co.**—109-11, Nagdevi Street, Bombay 3.

**Jamnadas Chaturbhuj & Bro.**—92, Vithalwadi, Bombay 2.

**Jayashanker Nathalal & Co.**—5, Ali Chambers, Tamarind Lane, Fort.

**Jhaveri Brothers.**—149, Shroff Bazar, Bombay 2.

**Jones & Co. (Bombay) Private Ltd., J. D.**—Rustom Building, Churchgate Street, Fort.

**JUGMOHANDAS SAMULDAS & SONS.**—45, Tamarind Lane, Fort, Bombay 1. Phone: 252100, Grams: "CHEMISTRY." Specialities: Shuttles, Bobbins, Textile Leather Goods, Bandings, Twines, & Tapes, etc.

**Kanchan Brothers & Co.**—45/47, Apollo Street, Fort.

**Kantilal Bhogilal & Co.**—Nagdevi Cross Lane.

**Khusaldas, J., & Co.**—77, Nagdevi Street.

**KISHORECHAND OMPRAKASH.**—101, Narayan Dhuru Street, Bombay-3. Phone: 322059 (Office) & 368707 (Res.). Grams: "CHAINPULLY." Importers of Mill Gin Stores Hardware and all kinds of Saws. Authorized Stockists of "GEDORE" Tools, "WARRIOR" Taps & Dies, "NETTLEFOLDS" Products and Sole Distributors for "SPEED" Chain Pulley Blocks for Goa, Mysore, Kerala, Madras, Andhra, Orissa, Bihar, Madhya Pradesh and Rajasthan.

**Kishor Trading Co.**—145, Narayan Dhuru Street, Bombay 3.

**KRISHNA TEXTILE STORES.**—19-21, Hamam Street, Fort, Bombay 1. Grams: "DISCIPLINE." Phone: 254348. Mill & Handloom Stores Suppliers.

**MACHINE TOOLS & IMPLEMENTS.**—93-95, Narayan Dhuru Street, Bombay 3. Phones: Office: 322268 & 322269. Grams: "MACHTOOLS." Telex: 292 BY.

**Maganlal Pranlal & Sons.**—105, Nagdevi Street, Bombay 3. Phone: 23015. Grams: "ARMPPIPE." Pipe Fittings, Sanitary Wares & Mill Gin Stores. Specialists in Water Meter.

**Maganbhai Amin & Co.**—105, Apollo Street, Fort.

**Mahendrarai Textile Stores Co.**—Sir Vithaldas Chambers, 16, Apollo Street, Fort.

**Mangaldas Jesingbhai & Co.**—49, Tamarind Lane, Fort.

**Mangaldas & Sons.**—Lentin Chambers, Dalal Street, Fort.

**MANOHAR BROTHERS.**—4, Commerce House, Meadows Street, Fort, Bombay. Phone: 254496. Grams: "LOCO-MOTIVE." Branch: 37, Errabalu Chetty Street, Madras. Phone: 23274.

**Mayashanker Thacker & Co.**—66, Apollo Street, Fort.

**Mehta Brothers.**—Hamam House, Hamam Street, Fort.

**Mehta Bros. & Co.**—78, Apollo Street, Fort.

**Mehta, H. P., & Co.**—112, Nagdevi Street, Bombay 3.

**Mehta Nanavaty & Co.**—Barbhai Moholla, 96, Narayan Dhuru Street, Bombay 3.

**Mehta Textile & Hardware Stores.**—158-160, Narayan Dhuru Street, Bombay 3.

**Menty, Naterwalla & Co.**—Bombay Mutual Annexe, Gunbow Street, Fort.

**Mills Store Co., The.**—43, Nagdevi Cross Lane, Bombay 3.

**MILL STORES TRADING CO. OF INDIA PRIVATE LTD.**—Mehta House, 79-91, Apollo Street, Bombay 1. Phone: 253354. Grams: "MISTCOLINE."

**Minerva Engineering Stores.**—76, Nagdevi Street.

**Modern Mill Stores.**—97, Nagdevi Street, Bombay 3.

**Modern Shuttle Manufacturing Co., Ltd.**—15, Forbes Street, Fo Bombay.

**Moody Trading Co.**—163, Nagdevi Cross Lane, Bombay 3.

**MOOLCHAND JEYKISHANDAS & CO.**—306, Green House, Green Street, Bombay. Phone: 254797. Quality dyestuffs and Optical Whitening agent for textile and Paper Industries and Tanneries. Head Office: Reid Road, Railwayपुरा Post, Ahmedabad 2. Phone: 22325.

**MULJIBHAI & CO.**—76-78, Nagdevi Street, Bombay 3. Phone: 321891. Grams: "BANDSAWS." Pipes, Fittings, Mill & Gin Stores, Hardware, Tools Merchants & Suppliers.

**Narandas G. Bhatia & Bros.**—167, 5th Cavel Cross Lane, Galwadi, Bombay 2.

**Narielwala, B. P., & Sons.**—101, Apollo Street, Fort.

**Narotamdas Chunilal & Co. (Estd. 1903).**—51, Tamarind Lane, Fort, Bombay.

**New India Hardware Mart.**—152, Narayan Dhuru Street, Bombay 3.

**Noble Mill Stores Co.**—Western India House, Sir Phirozshah Mehta Road, Fort.

**Noble Trade Co.**—141, Nagdevi Street, Bombay 3.

**NUTAN TRADING CORPORATION.**—83, Nagdevi Cross Lane, Post Box No. 3238. Bombay-3 BR. Grams: "NUTANTRADE." Phones: 323357 (Office) & 474485 (Res.). Manufacturers of "KAUSHIK" Brand Tools—Such as Reamers, Callipers, Dividers, Tool Holders, Engineering Squares etc. Dealers in Tool Bits, End Mills, Centre Drills, Slotting and Side & Face Cutters etc. Stockists of Hardware, Bearings, etc. Branch at: 3350, People Mahadev, Hauz Kari, Delhi-6.

**Ochbavial, R., & Co.**—86, Nagdevi Street, Bombay.

**Ormerods (India), Ltd.**—Bank of Baroda Building, Apollo Street, Fort.

**P. Mohanlal & Company.**—44, Nagdevi Cross Lane, Bombay 3.

**PANALAL MOHANLAL & CO.**—89, Nagdevi Street, Bombay 3. Direct Importers of Copper, Brass, Galvanised Black Pipes & Fittings and Gun Metal Fitting & Valves. Phone: 323071.

## P. RATILAL & CO.

Moti Mahal, 43, Dhanji Street, Bombay 3.

**Distributors:** "COCKILL'S V-Belts" Manufactured by Fenner Cockill Ltd. Blue-Star: V-Link Belting (Tested quality), Endless Solid Woven Canvass/Linen/Terylene Belts. Vari-Speed Belts, Cone Drum Belts, "GRIPIT" Chrome Leather Lyon Sandwich Belts, "UNIQUE" Tyre Type flexible Couplings, Crucibles, etc.

Telegrams: "ETERNAL" Phone: 325980

**Paradise Trading Corporation.**—73/75, Tamarind Lane, Fort, Bombay.

**Paramount (India) Ltd.**—Kermani Building, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**Parekh Bros.**—Sangli Bank Building, Behind Reserve Bank, 290, Bazargate Street, Fort, Bombay.

**Parikh Brothers & Co.**—45-47, Apollo Street, Fort.



**PATEL BROTHERS & CO.**—41, Nagdevi Cross Lane, Bombay 3. Phone: 321606. Grams: "HASTY." Mill Gin Stores Suppliers, Pipe Fittings and Hardware Merchants.

Patel, U. D., & Co.—11, Bank Street, Fort.

Phiroz N. Motabhoj & Co., Ltd.—Motabhoj Building, Corner of Meadows and Forbes Streets, Fort, Bombay.

P. Ratilal & Co.—43, Dhanji Street, Bombay 3.

**PICKERS LIMITED.**—Manufacturers of Quality Pickers of all sizes and descriptions, 43, Tamarind Lane, 4th Floor, Fort, Bombay. Head Office: Ellis Bridge, Ahmedabad 6. Grams: "COWSIE," Bombay & Ahmedabad. Bombay Office Phone No. 253707.

Pioneer Hardware & Engineering Corporation.—Sangli Bank Building, 296, Bazargate Street, Fort, Bombay.

Printer, D. P., & Co.—1, Bruce Street, Fort.

**PUNEGAR, N. E. & CO.**—Union Bank Building, Dalal Street, Fort, Bombay-1. Phone: 253178. Grams: "ACMECOMPO", Bombay-1. "ACME" Compounds for descaling Boilers & Economiser, "ACME" Anti-Corrosive Application (Black Paint) for Metallic Plants.

R. C. Traders.—Lentin Chambers, Dalal Street, Fort, Bombay.

**R. R. JINDE & CO.**—14, Mohan Nivas, Chandavarkar Road, Bombay 19. Grams: "GOLDENHILL." Phone: 472267.

**Reliance Stores & Trading Co.**—Raja Bahadur Building, 43, Tamarind Lane, Fort.

Reliance Trading Co.—25/47, Lohar Street, Bombay 2.

Repute Engineering Co.—165, Narayan Dhuru Street, Bombay 3.

**R. MOHANLAL & CO.**—38, Bibijan Street, Bombay 3. Phone: 324929. Grams: "HANDTAPS." Speciality: All kinds of Asbestos Packings, Jointings, Leather & Rubber Beltings, Vulcanised Fibre Sheets and allied Accessories.

Roberts, McLean & Co. Private Ltd.—Ilaco House, Sir Phirozshah Mehta Road, Fort.

**Ruby Trading Co.**—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.

Sachin & Co.—25 Bank Street, Bombay 1.

Sardesai & Company.—14, Murzban Road, Fort, Bombay.

**SAURASHTRA WIRE HEALDS MFG. CO. PRIVATE LTD.**—Manufacturers of Wire healds, Inserted ring wire healds, wire drawing and flattening, Lining and Panel Pins. Sole Selling Agents: Madhu Corporation, Sanghavi Chambers, 27, Ghoga Street, Fort, Bombay. Phones: 253502 (Office) & 357336 (Residence); Grams: "VIRVAANDAN" and "MADHUCORP." Factory: 1A, Udyoganagar, Bhaktinagar Station Road, Rajkot (Saurashtra). Phone: 943; Grams: "WIRE-HEALDS." Rajkot, Managing Directors: M. K. Sanghavi; Madhu Sanghavi.

Sethna, Katrak & Co.—Tamarind House, 30, Tamarind Lane, Fort.

**SHAH PATEL & CO.**—111, Nagdevi Street, Bombay 3. Phones: 324309 and 321377. Grams: "LUCKYCHAP." Manufacturers of Flat & Grooved Pulleys, and shaft couplings. Stockists of Ball Bearings, Shafts, Beltings, etc. "Nirmill" Rubber Beltings.

Shamsun & Co.—11, Bruce Street, Fort.

Shantilal Sheth & Co.—Bansilal Mansion, Bruce Street, Fort.

**SHETH S. C. & CO., PRIVATE LTD.**—Dealers in Mill Stores, Bobbins & Shuttles, Textile Auxiliaries, Sizing Materials, Colours, Chemicals, China Clay, Beltings, Gums, Binder, Softening Agents and Leather goods for Textile Industry, Raja Bahadur Mansion, 8, Hamam Street, Fort, Tel. Address: "AGMOL." Phone: 255358.

Shree Vijay Trading Corporation.—71/73, Apollo Street, Fort.

Shri Shakti Trading Co.—22, Apollo Street, Fort.

Shroff Bros. & Co.—7-9, Elphinstone Circle, Fort, Bombay.

Siraj, A. H., & Co.—145, Janjkar Street, Bombay 3.

Sizing Materials Co., Ltd.—Jeroo Building, Mahatma Gandhi Road, Fort.

S. Sevantillal & Co.—246, Masjid Bunder Road, Bombay 3.

Standard Mill Stores Co.—41, Bruce Street, Fort.

Standard Trading Agency.—Seksaria Chambers, 139, Meadows Street, Fort.

Standard Trading Co.—Vithal Sayana Building No. 2, 43-75, Lohar Street, Bombay 2.

Sun Stores Private Ltd.—61, Churchgate Reclamation, Bombay 1.

Sunderlal & Sons.—Narayan Dhuru Cross Lane, Pranjivan Building, Bombay 3.

**SUNSHINE TRADERS.**—3, Hamam Street, Fort, Bombay. Phone: 251631. Grams: "SUBHMANGAL." (1) Manufacturers of Spindle tapes, Cotton listings, Venetian blind tapes, Zip Tapes, Bleached Tapes, Cotton & Manila Ropes, Tubular bandings, Bundle bandings and Cotton bandings; (2) Manufacturers of spindle tapes and listings and textile stores suppliers; (3) Manufacturers of Egyptian tapes and webbings.

## SUPREME MILL STORES

36, Bhajipala Lane, Bombay-3.

Phone: 325150.

Grams: "SUPMILISTO"

AUTHORISED STOCKISTS

Of Hindustan Ferrodo Fire Fly Asbestos Packings, Jointings, Sheets.

MANUFACTURERS:—

"SUMISTO" 85% Magnesia,  
"SUPREME" Red Liquid  
Indicator for remote controlled  
water level of boilers.

Talib & Co.—Talib House, 104, Nagdevi Street, Bombay 3.

Teamsan Traders.—Post Box No. 8162, Nagdevi Street, Bombay 3.  
Techno-Industrial Co.—107, Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay.

Textile Machinery Corporation, Ltd.—254-A, Annie Besant Road, Worli, Bombay 18.

Textile Supplies Syndicate (India), Private Ltd.—India House, 1st Floor, Opp. G.P.O., Bombay.

## TRADECO (INDIA)

Importers, Exporters and Mill Store Suppliers

Prospect House, 29, Ragunath Dadaji Street, Bombay 1.

Phone: 261641. Grams: "PRODUCTION".

Wholesale Importers and Indentors of British and Foreign make Textile Accessories.

Specialists in:

Healds, Reeds, Shuttles, Beltings, Picking Bands, Pickers, Buffers, Picker Savers, Cotton Ropes, Cotton Bandings, Spindle Tapes, Card Cans, Hair Beltings and Wire Healds.

Tribhovandas Sons Ltd.—70, Dadyseth Agiary Lane, off Kalbadevi Road, Bombay 2.

Trinity Industrial Stores.—72-74, Nagdevi Street, Bombay 3.

Trinity Textile Traders.—Seksaria Chambers, 139, Meadows Street, Fort.

Trivedi Textiles & Company.—9, Ash Lane, Fort. Mill Gin Stores Suppliers & Machinery Merchants.

T. U. Patel & Sons, Ltd.—Huseini Chambers, 33, Nanabhai Lane, Fort, Bombay 1.

**U. D. PATEL & COMPANY PRIVATE LTD.**—11, Bank Street, Fort, Bombay. Phone: 254554. Grams: "UDIPATEL," Bombay & Akola. Mill Gin Stores and Hardware Dealers. Sole Agents for: M.L.F. Brand Chrome Composite Ginning Washers, Eccentric drive Ball Bearing Conversion Sets for single Roller gins; "Pagoda" & "Sun" brand Leather Beltings; Oil Engines, Pumps, Electric Motors, etc.

Universal Supply & Trading Co.—Ismail Building, 381, Hornby Road, Fort.

Universal Tanneries, Ltd.—Dharavi, Bombay 17.

Universal Trading Co.—79, Mohamedi House, Mohamedalli Road, Bombay 3.

Vadilal, H., & Co.—18, Tamarind Lane, Fort.

Vasantlal Vadilal & Co.—215-17, Samuel Street, Vadgadi.

Victor Trading & Engineering Co. Pvt. Ltd.—Victor House, Jacob Circle, Bombay 11.

Vinod Mehta & Co.—22-B, Noble Chambers, Parnes Bazar Street, Fort.

Vishwabharati Trading Co.—Kumta Street, Ballard Estate, Bombay 1.

Vithaldas, G., & Co.—60, Nagdevi Cross Lane.

Voltas Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

Waghji Lakhmadas & Co.—206, Samuel Street, Vadgadi.

Wallace, P. R., & Sons, Ltd.—Elphinstone Building, 10, Vir Nariman Street, Fort.

Western Engineering Co.—Western India House, Sir Phirozshah Mehta Road, Fort. P. O. Box 75.

Western Textile Corporation.—Prospect Chambers Annexe, Hornby Road, Fort.



## MINERAL MERCHANTS

**AMAR MINERALS PRIVATE LTD.**—Alice Buildings, 339, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Phone: 255771. Factory: Netivali Baug, Kalyan. Dealers in all kinds of Minerals such as 85 per cent Asbestos Magnesia, Barytes, Bentonite, Red Oxide, Talc, etc.

**Bajaj Textile Mills Ltd.**—S84M, Kalbadevi Road, Bombay 2.

**Baldota Brothers.**—43, 2nd Bhoiwada, Bombay 2.

**Bapusaheb M. & Co.**—Bharat House, 3rd Floor, Apollo Street, Fort, Bombay.

**Chimanlal Patel & Co.**—124, Hornby Road, Fort.

**Coal Mining & State Minerals Ltd.**—Alice Bldg., Hornby Road, Fort.

**Devidayal (Sales) Private Ltd.**—Tulsiram Gupta Mills Estate, Mazagaon, Bombay 10.

**Ferro Metal & Chemical Corporation.**—Bhupat Bhuvan, 80, Nepean Sea Road, Bombay 6.

**GANPAT HARJIVAN.**—114, Nagdevi Street, Bombay 3. Phone: 321238. Grams: "CLAY."

**Gujarat Clay Mills.**—246, Reay Road, Bombay 10.

**Hariram Dinanath.**—Oriental Bank Building, 65, Mahatma Gandhi Road, Fort, Bombay.

**Hindustan Manganese Mines Ltd., The.**—93-95, Kazi Syed Street, Bombay 3.

**Hindusthan Mineral Products Co. Private Ltd., The.**—111, Industrial Area, Sion, Bombay 22DD.

**Indian Mineral Supply Co.**—14, Western India House, Sir Phirozshah Mehta Road, Fort.

**INDUSTRIAL MINERALS & CHEMICAL CO.**—125, Narayan Dhuru Street, Bombay 3. Phone: 323721 (3 lines). Grams: "IMCHEL." Chemicals & Mineral Merchants and Stockists of raw material for all Industries.

**Jagannath Gupta & Co. Ltd.**—(Manganese Department), 7, Vishnu Mahal, 'D' Road, Churchgate Extension, Bombay.

**Javeri Traders.**—Lakhmi Building, 34, Cawasji Street, Fort, Bombay.

**Kajaria Traders (India) Ltd.**—325, Kalbadevi Road, Bombay 2.

**Kerala Trading Co.**—35, Bombay Mutual Annexe Building, Gunbow Street, Fort, Bombay 1.

**Khandelwal Brothers Private Ltd.**—Khandelwal Bhavan, 166, Dadabhai Naoroji Road, Bombay.

**Khandelwal Mining Corporation.**—6, Itola Street, Opp. Argyle Road, Carnac Bunder, Bombay 9.

**Khemka (Agencies) Private Ltd.**—Vulcan Insurance Building, 202-A, Veer Nariman Road, Churchgate Reclamation, Bombay 1.

**Kirtikumar & Co.**—80, Bhandari Street, Mandvi, Bombay 3. Phone: 20583. Grams: "LALITKIRTI."

**Mercantile Trading Co.**—Gulzare Kasim, Mazagaon, Bombay 10.

**Mineral Mining Co., Private Ltd., The.**—111, Industrial Area, Sion, Bombay 22DD.

**Nagri Mining Co. Private Ltd.**—Sambava Chambers, Sir P. M. Road, Fort, Bombay.

**National Industries of India.**—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.

**Natwarial Shamaldas & Co.**—94, Meadows Street, Fort, Bombay.

**New Bharat Grinding Mills.**—Near Animal Hospital, Govt. Gate Road, Parel, Bombay 12.

**NEWKEM PRODUCTS CORPORATION.**—Harganga Mahal, Dadar T.T., Bombay 14. Asbestos Raw, Fluff, Powder, Fibre Vermiculite-Raw and Exfoliated. Grams: "THER-MOLITE." Phone: 440191.

**Overseas Trade & Agencies (India).**—Beaumont Chambers, Meadows Street, Fort, Bombay.

**PRAVIN BROTHERS & CO.**—501, Commerce House, Meadows Street, Bombay 1. Phones: 251748 & 252419. Grams: "WIDE-SCOPE." Importers, Exporters and Agents: Sulphur-Chemicals-Solvents, Fertilizers, Pyridene Base, Minerals-Lime-Jute-Products. POLYSOL. 5-5, POLYSOL. 6, Gypsum.

**Pitty Brothers Ltd.**—20, Hamam Street, Bombay.

**QUALITY MINERAL SUPPLY SYNDICATE.**—44, Old Custom House Road, Fort, Bombay. Phone: 251835. Grams: "SYM-PATHY." Dealers in all kinds of Minerals such as Asbestos, Barytes, Bentonite, Calcite, China Clay, Soapstone, Activated Fullers Earth, etc.

**Ram Bahadur Thakur & Co.**—11-B, Noble Chambers, Ghoga Street, Bombay.

**RAJ CORPORATION.**—207, Samuel Street, Bombay-3. Mine Owners and Suppliers of Bentonite and other minerals to Industrial Concerns and Retail and Wholesale Dealers. Phone: 327664.

**S. RATILAL & CO.**—285, Frere Road, Bombay 1. Mfrs. of China Clay, Calcium Carbonate, French Chalk, whiting Calcite, Barytes Red, Oxide, Limestone, Graphite, Bentonite, Bauxite, Silica-Gel etc. for Textile mills, Rubber, Paints, Foundries etc. Phone: 266211.

**Sepulchre Brothers (India) Ltd.**—Taj Building, D. Naoroji Road, Bombay.

**Sharma & Sharma.**—Oriental Bank Building, 65, Mahatma Gandhi Road, Bombay.

**Shethia & Co., S. D., Ltd.**—Podar Chambers, Parsi Bazar Street, Bombay 1.

**Shivrajpur Syndicate Ltd., The.**—Home Street, Fort, Bombay.

**Standard Pulverising Co.**—Atlas Mill Compound, Reay Road, Bombay 10.

**Tavaria Bros.**—Dhan-Nur, Sir Phirozshah Mehta Road, Fort.

**TECHNO-INDUSTRIAL SYNDICATE.**—Sole Distributors for W. Marshall (Hessle), Ltd., through the Cement Marketing Co. Ltd., England. N.V. "LITHOS," Holland. The Murarka Paint & Varnish Works Private Ltd., Calcutta. 19-B, Noble Chambers, Parsi Bazar Street, Fort. Importers and Dealers of Heavy and Industrial Chemicals, Oils, Zinc Oxide, Pigments, Paint Materials, and Minerals of all Sorts. Phone: 251220. Grams: "TEINSY."

**UNIVERSAL MINERALS & CHEMICAL CO.**—7/10, Horniman Circle, Fort, Bombay 1. Phones: 255110 and 254145. Grams: "UNIVERSAL." Dealers & Manufacturers of Minerals for Paints, Rubber, Textile Engineering, Glass and Paper Industries.

**UPCO MINERALS.**—192, Khetwadi, 9th Lane, Bombay 4 BR. Mfrs. of every kind of Quality Plaster of Paris, Gypsum Powder & other Minerals. Bombay (Phone: 352461). Delhi (Phone: 852236).

**Vaswani (India) Private Ltd.**—496, Kalbadevi Road, Post Box No. 2009, Bombay 2.

**VORA TRADING CO.**—357-A, Samuel Street, Vakil Bldg., Vadgadi, Bombay 3. Phone: 325289. Grams: "MULTI-SALES", Bombay, Mandvi.

**Wallem & Co.**—India House, Opp. G.P.O., Bombay.

**Western India Trading Co., The.**—Jan Mansion, Sir P. M. Road, Bombay.

## MINING MACHINERY &amp; EQUIPMENT

**KILBURN & CO. LTD.**—Gresham Assurance House, Pherozshah Mehta Road, Fort, Bombay 1. Phone: 256845. Grams: "TASCONIUM".

## MONSOON REQUISITES

**Arco Agencies.**—Bam House, Gunbow Street, Fort, Bombay 1. Phone: 26-1208.

**PRAMODKUMAR & CO.**—Prospect Chambers, 4th Floor, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Dealers in cloth Rain Coats, Gum Boots, Umbrellas & Tarpaulins Winter Wear & Footwear.

## MOTORS AND TRUCKS (AUTOMOBILES)

**Advance Trading Corporation.**—Bhangwadi, Kalbadevi Road, Bombay 2.

**Allibhai Premji Tyrewalla.**—211, Lamington Road, Bombay 7.

**Asian Motor Car Co.**—Ramchandra Mansion, Sandhurst Road.

**Automobile Co., Ltd.**—41, Queen's Road.

**Bombay Garage Ltd.**—Meher Building, Chowpatty, Bombay 7.

**Bombay Motors & Radios Ltd.**—33, New Queen's Road.

**BOMBAY SCOOTER & MOTOR AGENCY.**—43, Queen's Road, Bombay 2. Phone: 20086. Grams: "SRETOOCS." Distributors for Lambretta Scooters, Three Wheelers and Scooterettes.

**CARWAY'S.**—83, Victoria Road, Mustafa Bazar, Mazagon, Bombay-10 (DD). Phone: 371129. Grams: "TIMPLANK" Dealers in Old & New Cars, Car Repairers, Finance Brokers & Insurance Agents, Free Adviser of the R.T.O. Works.

**Car Mart Ltd.**—Pratt's Building, Hughes Road.

**Continental Auto Stores.**—Tram Terminus, Opera House.

**DADAJEE DHACKJEE & CO. PRIVATE LTD.**—Automobile Engineers; Dealers for JEEP FC-150 Full Forward Control Chassis; LAMBRETTA Scooters, Scooterettes & Three-Wheeler Delivery Van & Rickshaw Chassis; HINDUSTAN Tractors, Tractor Accessories and attachments; Patentees of Specially designed 'PR' type streamlined Vans on Lambretta Three-Wheeler Chassis; Distributors for Rolls-Royce, Bentley, Hillman, Humber & Sunbeam Cars & Commer & Karrier Commercial Vehicles; Importers & Dealers of Automobile Spare Parts & Accessories; Distributors for "WOLF" Electric Tools & Equipment; Manufacturers of "NULIFE" Automobile Batteries; Distributors for Pentol Additive; Kerosol Kerosene Additive and All-In-One domestic lubricating Oil. Sandhurst Bridge, Bombay 7. Grams: "PROMPT", Bombay-7. Phones: 352321 (3 Lines); Workshop: 74629.

**Eastern Motor Corporation.**—Indira Nivas, Bhatwadi, Girgaum.

**Empire Automobiles.**—Junction of New Queen's Road and Lamington Road.



Foreign Products Distributing Co.—401, Sandhurst Road, Bombay 4.  
 French Motor Car Co., Ltd.—9-11, Hughes Road, Bombay.  
 Garware Motors Engineering Private Limited.—Chowpatty Chambers, Sandhurst Bridge, Bombay 7.  
 Harvan Motor House.—"Kapole Nivas", Sandhurst Road.

**IDEAL MOTORS SERVICE DEPT.**—Bombay Mutual Annexe, Cawasji Patel Street, Fort. Phone: 262660 and Head Office: Sitaram Bldg., Dr. Dadabhoy Naoroji Road, Bombay 1. Phone: 263485. Distributors of Jawa Motor Cycles, Cycles & Spare Parts. Grams: "IDEALMOTOR."

Imperial Motors.—Parekh House, 14, New Queen's Road.  
 Indian Automobile Co., Ltd.—2-4, Apollo Street, Fort.  
 Lincon Motors.—Marina Mansion, Sandhurst Bridge.  
 Lucas Indian Service Ltd.—15, New Queen's Road.  
 Mahindra & Mahindra Ltd.—Gateway Building, Apollo Bunder, Bombay 1.  
 Metro Motors, The.—Motor House, Hughes Road, Bombay 7.  
 Nizel Motors.—7-A, Princess Avenue, Bandra, Bombay.  
 Noble Cycle & Motor Co.—Commissariat Building, Hornby Road.  
 Patel, F. M., & Co.—Ramchandra Mansion, Sandhurst Road, Bombay 4.  
 Patel, N. D., & Co.—180-82, Princess Street.  
 Premier Automobiles Ltd.—Agra Road, Bombay 37.

**PREMIER AUTOMOBILES LTD.**—Office: Construction House, Ballard Estate, Bombay-1. Phones: 262125-26. Grams: "PREMOBILES." Factory: Agra Road, Kurla, Bombay-70. Phone: 55111. Manufacturers of Dodge, Plymouth & Fiat Cars & Fargo Trucks.

Rapid Cycle & Motor Co., Ltd.—Opp. Edward Theatre, Kalbadevi Road.

Shetty Automobiles.—Opera House Tram Terminus.

Society of Motors Manufacturers and Traders, Ltd.—National Insurance Building, 27, Bastion Road, Fort.

Tata Locomotive & Engineering Co. Ltd.—148, Mahatma Gandhi Road, Bombay 1.

United Motors (India), Ltd.—Hughes Road.

United Overseas Service.—16, New Queen's Road, Bombay 4.

### MOTOR BODY BUILDERS

**ANAND AUTOMOBILES.**—Bus and Truck Body Builders, Bombay Agra Road, Mulund, Bombay 80. Phone: 583151.

**BHARATI WORKSHOP.**—Office: 20, Wadi Bunder Road, Mazagaon, Bombay 10. Phone: 76129. Factory: 167, Central Salsette Road, Kalina, Santa Cruz (East), Bombay 55. Phone: 531377. One of the oldest Motor Body Builders in Bombay. Accredited Motor Body Builders & Central and Maharashtra State Governments, Factories and Leading Firms.

Hiralal & Company (Estd. 1927).—Petit Compound, Kennedy Bridge, Bombay 7.

**JAYANAND KHIRA AND CO. PRIVATE LTD.**—Office & Showroom: Khira Bhavan, Sandhurst Bridge, Bombay 7. Phones: 355451-52. Grams: "SWAKALA." Manufacturers of Bus Bodies and Bus Body Kits.

Regal Motors.—Old Victoria Mills Compound, Gamdevi, Bombay 7.

Royal Auto Works.—Tanker Ville Estate, 200, Gowalia Tank Road.

**RUBY INDUSTRIES.**—Motor Body Builders (on Government & Municipal List), 75, Dr. Annie Besant Road, Worli, Bombay 18. Phones: 370538 & 370671. Grams: "MOTORBODY." Associates: Ruby Industries (Ahmedabad).

Sam Ruston & Co.—31/33, Mangalore Street, Ballard Estate.

Sewri Engineering Works.—234, Sewri Road, Bombay 15.

### MOTOR (BUS & COACH) BODY BUILDING MATERIALS

Associated Auto Parts Ltd.—445, Lamington Road, Bombay 4.

**JYOTI MOTOR ACCESSORIES.**—Contractor Bldg. No. 1, Opp. Prarthana Samaj, Bombay 4. 138, New Charni Road, Bombay 4. 342, Sardar V. P. Road, Bombay 4. Grams: "JAGJYOTI." Phone: C/o 354150. Importers & Stockists of Jagger's Bus Body Fittings, PVC Leather Cloth, Upholstery Materials, Rubber Matting, etc.

Mamaji & Son (Private) Ltd., Y. A. (Estd. 1885).—136/38, Sri Ebrahim Rahimtulla Road, Bombay 3.

McKensies Ltd.—Sewri.

**MOHAMEDALLY NOORBHAI & CO.**—144-148, Ibrahim Rahimtulla Road, Bombay 3. Phone Nos.: 333068 & 333763. Grams: "CABRUBBER." Direct Importers, Dealers in Motor Carriage, Bus Body Fittings & Accessories, Hood & Upholstery materials, P.V.C. Leather Cloth, Aluminium section & Circles, Celluloid Sheets, Rubber Matting, Flag Brand Cab Tyres. Branches at Calcutta, Madras & Lucknow.

Mehta, J. V., & Co.—Opera House Tram Terminus, Bombay 4.

Motor Hood Depot.—Nair Building, 480, Sandhurst Road, Bombay No. 4.

N. B. Fadia & Co.—493, Sandhurst Road, Bombay 4.

Safeglas Corporation Private Ltd.—95, Dhanji Street, Bombay 3.

Shah & Sunder.—7/10, Horniman Circle, Bombay 1.

S. S. Prabhu.—Ghamat Terrace, opp. Dadar (Western Rly.) Station, Bombay 14.

Teka Hardware & Eng. Corp.—82/86, Abdul Rehman Street, Bombay 3. Phone No. 322886. Grams: "TEKATOOLS". Agents for Tekrom Nickelless Tubes, 'Lion Brand' 12 ft long for Buses & Coaches. Dia.  $\frac{1}{2}$ ,  $\frac{3}{4}$ ,  $1\frac{1}{2}$  & 1 Standard thickness. Approved by State Transports and leading Coach Builders.

### MOTOR TYRES AND ACCESSORIES

Automobile Resort Co.—Corner of Wittet Road, Ballard Estate.

Batliboi & Sons.—Standard Vacuum Service Station, Hughes Road.

Bombay Tyre Service.—28, Ibrahim Rahimtulla Road, Near J. J. Hospital, Bombay 3.

Dunlop Rubber Co. (India), Ltd.—"Dunlop House," Hughes Road.

Empire Automobiles.—Junction of New Queen's Road & Lamington Road.

Firestone Tyre & Rubber Co. of India, Ltd.—Hay Bunder Road, Sewree.

Goodyear Tyre and Rubber Co. (India), Ltd.—7-9, Mathew Road.

Greaves Cotton & Co., Ltd.—1, Forbes Street.

Harvan Motor House.—Kapole Nivas, Sandhurst Road.

**HIRJI LADHA & CO.**—Amir House, 245/249, Lamington Road, Bombay. Grams: DHARANICO." Dealers in all kinds of Tyres and Tubes. Tyre sales with Service. Retreading of Tyres a Speciality. Phone: 379144. Branch at: Vishnu Bhavan, 4631, Relief Road, Ahmedabad-1. Grams: "TYREHOUSE". Tele.: 23793.

Indian Automobile Co., Ltd.—4, Apollo Street, Fort.

Modern Auto Stores.—Vallabh Terrace, Sandhurst Road.

Overseas Trading Corporation.—Nusser House, New Queen's Road.

United Motors (India), Ltd.—Arthur Bunder, Colaba.

### MOULDING MACHINES AND BOXES

Batliboi & Co. Private Limited.—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR.). Phones: 255451 (6 lines). Grams: "BATLIBOICO." Tele: 011-284. City Branch: "BATLIBOI HOUSE," 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, BHUBANESWAR.

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P.O. Box 1909, Bombay 1. Phone: 251882. Also at Calcutta, New Delhi, Madras and Baroda. Mfrs. in India of "PFM" and "KUNBEL WAGER" Hand Moulding Machines. Agents for Kunkel, Wagner & Co., West Germany. Famous manufacturers of Moulding Machines and Hesonwerke, Germany for Heson Moulding Boxes.

Thos. W. Ward (India) Ltd.—Marshall Building, Ballard Road, Ballard Estate, Fort.

### MUSIC AND MUSICAL INSTRUMENT DEALERS

Chait Singh Gurbax Singh & Bros.—292, Sandhurst Road (West), Bombay 4.

Gramophone Company Ltd.—(Inc. in England with Limited Liability). Bombay Office: Universal Building, Sir Pherozshah Mehta Road, Fort.

**HIRO MUSIC HOUSE.**—23/C, Sir Pherozshah Mehta Road, Bombay 1. Phone: 257352 & 253690. Dealers in Records & Radios.

James & Co.—Navsari Building, Hornby Road, Fort.

Ruby Record Company.—8/10, Tamarind Lane, Fort.

### MYROBALANS

Badheka & Co.—Noble Chambers, Parsi Bazar Street, Fort.  
 Bhagwandas, H. & Co.—104/108, Clive Road, Dana Bunder, Bombay 9.

Bholaram Agarwal—220, Bhat Bazar, Bombay 3.

Capitol Colour & Chemical Co.—77/87, Mirchi Street, Vadgaol, Bombay 3.

General Trading Co.—220, Bhat Bazar, Bombay 3.

Jivanlal, C., & Co.—Azad Bhuvan, Masjid Bunder Road, Bombay 3.

Joshil Jivandas Gangaram & Co.—282, Narshi Natha Street, Bombay 9.

Karsandas Haridas.—Argyle Road, Bombay 9.

Karsandas, Ramdas.—Argyle Road, Bombay 9.

Karamjee Tricamji—51/55, Clive Road, Dana Bunder, Bombay 9.

Lalji Birji & Co.—Argyle Road, Bombay 9.

Laxmi Trading Co.—86, Vir Nariman Road, Fort, Bombay 1.

Mansukhlal, B. & Co.—51/55, Clive Road, Bombay 9.

Narayan Anant.—Khand Bazar, Bombay 3.

Poonjiajee Jehangir, J. M.—Byramji Mansion, Sir Pherozshah Mehta Road, Fort.



Purshotam Mathradas & Co. Private Ltd.—3, Mherwan Building, Sir Phirozshah Mehta Road, Fort, Bombay 1.  
 Rex Commercial Corporation, Ltd.—Central Bank Building, Bruce Street, Fort, Bombay 1.  
 Tata, P. R. & Co.—Anant Nivas, 262/70, Bhat Bazar, Bombay 9.

### NATURE CURE CLINICS

**NATURAL THERAPY CLINIC.**—140, Cumballa Hill, Dial: 364111. Electro-Hydrotherapy, Dietetics, Scientific Massage, Osteopathy, Chiropractic, Orificial Therapy & other Modern Therapeutic Methods given under the Directorship of Dr. JENANGIR MERWANJI JUSSAWALLA, N.D., D.O., D.C. (Eng.); Secretary, (India) Health Practitioners' Association (London); Vice-President, Bombay Provincial Natureopathic Association; Member, American Natureopathic Association (U.S.A.).

### NEON LIGHTINGS

Brilliant Neon Signs Co.—Readymoney Mansion, Vir Nariman Road, Bombay 1.

"**CHANDRAKIRAN**".—Neon Signs Manufacturers, Electrical Dealers & Engineers & Government Electrical Contractors. Dhan-Nur, 4th Floor, Sir Phirozshah Mehta Road, Bombay 1. Phones: 263660 & 266428. Grams: "LITELORDS".

### NEWSPAPER PRESS MACHINERY SUPPLIERS

**GUNVANTRAY & COMPANY.**—Crescent Chambers, 1st Floor, Tamarind Lane, Bombay 1. Phone: 254684. Grams: "GUNARAYCO."

### NEWSPAPERS AND PERIODICALS

#### ENGLISH DAILY

"**ECONOMIC TIMES**".—Times Building, Dr. Dadabhoy Naoroji Road, Fort.  
 "**EVENING NEWS OF INDIA**".—Times Building, Dr. Dadabhoy Naoroji Road, Fort.  
 "Financial Express".—Newspaper House, Sassoon Dock, Colaba.  
 "Free Press Bulletin".—21, Dalal Street, Fort.  
 "Hindusthan Standard" (English Daily from Calcutta).—Bombay Office: United Bank of India Bldg., Sir Phirozshah Mehta Road, Bombay 1.  
 "Indian Express".—Standard Press, Colaba.  
 "**TIMES OF INDIA**".—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

#### WEEKLY

"**Bharat Jyoti**".—21, Dalal Street, Fort.  
 "Blitz".—Blitz Publications Private Ltd., 17/17-H, Covasji Patel Street, Fort.  
 "Commerce".—Brady House, Veer Nariman Road, Fort.  
 "Current".—Meher House, Cawasji Patel Street, Bombay 1.  
 "Economic Weekly".—Sonawala Building, 65, Apollo Street, Fort.  
**EVE'S WEEKLY** (India's Premier Women's Magazine).—Sanj Vartaman Press, Apollo Street, Fort, Bombay. Price: 35 P. per copy (pp. 48). Annual Subscription Rs. 18 (Inland), Rs. 30 (Foreign). Editor: Gulshan Ewing. Advt. Manager: B. R. Chopra. Advertisement Rates: Casual. Full Page Rs. 1,000, Half Page Rs. 500, Quarter Page Rs. 250. Contract: Full Page Rs. 900, Half Page Rs. 450, Quarter Page Rs. 225. Colour Page Rs. 1,500. Phones: 255361-2-3. Grams: "EVES-WEEKLY".

"**Examiner**".—35, Dalal Street, Fort.  
 "Film Politics".—208, Vincent Road, Dadar.

"**ILLUSTRATED WEEKLY OF INDIA**".—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"**Janata**".—National House, 6, Tullock Road, Apollo Bunder.

"**JOURNAL OF THE FILM INDUSTRY**".—Indian Motion Picture Producers' Association. Sandhurst Building, Sardar Vallabhbhai Patel Road, Bombay 4. Annual Subscription Rs. 7.50; Single Copy: 15 P. Advt. Rates: Rs. 3.50 per col. cm. 1 Full Page Rs. 600. Half Page Rs. 320.

"**Racing Times**".—A/31, Anand Nagar, Forjett Street, Cumballa Hill, Bombay 26.

"**Screen**".—Newspaper House, Sassoon Dock, Bombay 5.

"**Sunday Standard**".—Newspaper House, Sassoon Dock, Bombay 5.

"**Tide**".—143, Mahatma Gandhi Road, Bombay 1.

"**TIMES OF INDIA**" (Sunday Edition).—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

#### FORTNIGHTLY

"**Bhavan's Journal**".—Bharatiya Vidya Bhavan, Chowpatty, Bombay 7.

"**FEMINA**".—Times Building, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

"**FILMFARE**".—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"**Goan Tribune**".—Kamani Chambers, Nicol Road, Ballard Estate.  
 "**Industrial Times**".—Sanj Vartaman Press, Apollo Street, Fort.  
 "**Onlooker**".—Seervai Building, 20-G, Sleater Road, Bombay 7.

#### MONTHLY

"**Imprint**".—F. & S. Distributors (P) Ltd., O/o Little & Co., Central Bank Building, Bombay 1.

"**India's Stamp Journal**".—Standard Building, Dr. Dadabhoy Naoroji Road, Fort.

"**Indian Journal of Medicine Sciences**".—Khetwadi Main Road, Bombay 4.

## INDIAN TEXTILE JOURNAL

An ably-conducted Technical and Engineering magazine (illustrated), representing since 1890, the manufacturing interests of South Asian countries with a circulation which extends to the United Kingdom, Europe, U.S.A. and Far East. The recognised authority on matters pertaining to Textile & Engineering Industries of India.

Published Monthly by:

**THE INDIAN TEXTILE JOURNAL PRIVATE LTD.**

"**SURYA MAHAL**", MILITARY SQUARE, FORT,  
BOMBAY 1 BR.

Phone : 2 5 2 9 4 3

Grams : "JOURNAL"

"**Indo German Review**".—127, Mahatma Gandhi Road, Bombay 1.

"**INDRAJAL COMICS**".—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"**Journal of the Indian Medical Profession**".—United India Building, Sir Phirozshah Mehta Road, Fort.

"**Mirror**".—Eve's Weekly (P) Ltd., Sanj Vartaman Press, Apollo Street, Fort, Bombay 1.

"**MOTHER INDIA**" (Formerly Filmindia).—The Most Exciting Magazine in the World. The largest circulated Monthly Magazine in India, Sir Phirozshah Mehta Road, Fort, Bombay, India. Price Rs. 3 per copy. Annual subscription Rs. 35 (Inland); Rs. 72 or 70 Shillings (Foreign); Mg. Editor: Baburao Patel, Editorial Director: Mrs. Sushila Rani Patel, Manager: Mr. Suryakant Patel. Advt. rates Rs. 7.20 per col. cm. (5 cm.) and Rs. 9.60 per col. cm. (7 cm.). For 1st and 4th Cover 3 Colours, Centre Spread 2 Colours and other Special Advertisement, Special quotations will be given from month to month. Phone No.: 261752.

"**RADIO TIMES OF INDIA**".—29, New Queen's Road, Bombay 4. Phone No. 355381. Grams: "ETHERWAVE." Edited by D. D. Lakhapal, B.A., B.Sc. (Tech.) (Manchester), A.M.C.T., M.I.E. (India), M.I.E.E. (London), M., Britt I.R.E. Published monthly on the 5th of every month.

"**Readers Digest**".—5, Lotus Court, Jamshedji Tata Road, Bombay 1.

"**SCIENCE TO-DAY**".—Times Bldg., Dr. D. N. Road, Fort.

"**Students Digest**".—22, Apollo Street, Bombay 1.

"**Trend**".—Sanj Vartaman Press, Apollo Street, Fort, Bombay 1.

#### QUARTERLY & HALF-YEARLY

"**Bombay Hospital Journal**".—Bombay Hospital, 10, Marine Lines, Bombay 1.

"**Links**".—(Bi-Monthly), The State People Press, Ghogha Street, Bombay 1.

"**OCEANITE**".—The Maritime Magazine of India, 204, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Phone No. 26-3052.

"**Probe**".—(Bi-Monthly) The Himalaya Drug Co., 251, Dr. D. N. Road, Bombay 1.

"**Quest**".—(Quarterly) Army & Navy Building, 148, Mahatma Gandhi Road, Bombay 1.

#### ANNUAL

"**Industrial India Annual**".—United India Building, Sir Phirozshah Mehta Road, Fort, Bombay.

"**Onlooker Annual**".—Onlooker Publications Private Ltd., 20-G, Sleater Road, Bombay 7.

"**TIMES OF INDIA DIRECTORY AND YEAR BOOK**".—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"**THE TIMES OF INDIA ANNUAL**".—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"**Textile Age Annual**".—56/57, Lakshmi Building, Sir Phirozshah Mehta Road, Fort, Bombay 1.

#### ANGLO-GUJARATI

#### WEEKLY

"**Parsi Avaj**".—R. F. Joshi P. Press, Mangalore Street, Fort.



**ANGLO-MARATHI****WEEKLY**

"Subodh Patrika."—Prarthana Samaj, Charni Road, Girgaum.

**ANGLO-PORTUGUESE & KONKANI****WEEKLY**

"Ave Maria."—New Sonapur Street.

"Goa Mail."—322, Girgaum Road, Thakurdwar.

"Goa Times."—84-86, 1st Marine Lines, Dhobi Talao.

"Udentichem Neketr" (Konkani).—Examiner Press, Medows Street, Fort.

**MARATHI****DAILY**

"Loksatta."—Newspaper House, Sassoon Dock, Colaba.

"Lucky Star."—Bombay Printing Press, 5th Cross Lane, Falkland Road, Bombay 4.

"MAHARASHTRA TIMES."—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"Maratha."—Maharashtra Papers (P) Ltd., Love Grove Road, Worli.

"Navakal."—13, Shenviwadi, Kandewadi, Girgaum.

"Navshakti."—Navshakti Printing Press, 21, Dalal Street, Fort.

"Praja Mitra."—211-219, Frere Road, Bombay 1.

"Sampatti."—New Amar Printery, 262, Madhavji Bhuwan, 3rd Khetwadi, Bombay 4.

"Sandhyakal."—13, Shenviewadi, Khadilkar Road, Bombay 1.

"Sanj Maratha."—Maharashtra Papers (P) Ltd., Love Grove Road, Worli, Bombay 18.

"Zunjar."—31, Tribhuwan Road, Bombay 4.

**WEEKLY**

"Alamgeer."—11, Tribhuwan Road, Bombay 4.

"Film Kesri."—Altas Printing Press, Fancy Market, Wylie Street, Bombay 11.

"Janawani."—Servants of India Society's House, Sardar Vallabhai Patel Road, Girgaum.

"Marmik."—77/A, Ranade Road, Shivaji Park, Bombay 28.

"Raviwaracha Nawakal."—13, Shenviewadi, Khadilkar Road, Bombay 4.

"Sahitya Swapna."—Nitin Mansions, Khetwadi 7th Lane, Bombay 4.

"Vivek."—310, Cadell Road, Prabha Devi, Bombay 29.

**FORTNIGHTLY**

"Konkan Valbhav."—2/4, Topiwala Lane, Lamington Road, Bombay 7.

**MONTHLY**

"Anuradha."—525, Tulsi Pipe Road, Dadar, Bombay 28.

"Daryawardi."—2/4, Dharmshala Road, Bombay 9.

"Dipavali."—40-42, Kennedy Bridge, Bombay 4.

"Gammat-Jammat."—37, Western India House, Sir Phirozshah Mehta Road, Fort, Bombay 1.

"INDRAJAL COMICS."—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"Kalyan Yatra."—Old Custom House, 2nd Floor, Fort, Bombay 1.

"Kathasagar."—14, Tribhuwan Road, Bombay 4.

"Lalana."—Rukmini Niwas, Maubag Road, Dadar, Bombay 14.

"Nava Neet (Marathi Digest)."—341, Tardeo, Bombay 7.

"Parchure."—Parchure Prasad, Block No. 5, 144, Shivaji Park, Road No. 2, Bombay 28.

"Phool-Baag."—A/1, Bhaveshwar Mansion, Shivaji Park, Cross Road No. 3, Mahim, Bombay 16.

"Prafulla Mala."—E/Block, Himraj Wadi, Thakurdwar, Bombay 2.

"Rahasyamala."—E/Block, Hemraj Wadi, Thakurdwar, Bombay 2.

"Rambha."—Om Printing Press, Rangwala Market, Wylee Street, Agripada, Bombay 11.

"Sahitya Asha."—Shah Bldg. No. 3, Lady Hardinge Road, Mahim.

"Samaj Seva."—C.K.P. Dnyatigriha, Ram Maruti Road, Dadar, Bombay 28.

"Sanjaya."—525, Tulsi Pipe Road, Dadar, Bombay 28.

"Satya Katha."—Khatar Wadi, Bombay 4.

"Shree Deeplaxmi."—9/10-B, Zaoba Wadi, Thakurdwar, Bombay 2.

"Suwarta."—Examiner Press, 35, Dalal Street, Fort.

"Vasant."—87, Charni Road, Bombay 4.

**ANNUAL**

"Avaz."—Modi Chambers, French Bridge, Bombay 4.

"Manoranjan."—Abhyankar Building, Sleater Road, Grant Road, Bombay 7.

"Prabha."—22/B, Nirmala Niwas, Merwanji Street, Parel, Bombay 12.

"Ratnadeep."—461/A, Rama Niwas, Opp. King's Circle Garden, Matunga.

"Sugandha."—292, V. P. Patel Road, Bombay 4.

**GUJARATI****DAILY**

"Bombay Samachar."—Red House, Parsi Bazar Street.

"Jam-e-Jamshed."—Ballard House, Mangalore Street, Fort.

"Janmabhumi."—Janmabhoomi Bhavan, Ghoga Street, Fort, Bombay.

"Kutchbhumi."—Keshav Bhuwan, 1st Parsiwada, V. P. Road, Bombay 4.

"Loktantra."—31, Tribhuwan Road, Bombay 4.

"Praja-Tantra" (Gujarati Evening Daily).—Kalam Kutir, 211/19, Frere Road, Fort, Bombay.

**WEEKLY**

"Begum."—2/A, Naaz Building, Lamington Road, Bombay 4.

"Chitralekha."—Star Printery, 62, Karwar Street, Off Mint Road, Bombay 4.

"Janmabhumi Pravasi."—Janmabhoomi Bhawan, Ghoga Street, Fort, Bombay 1.

"Paras."—Atlas Press, Rangwala Market, Wylie Street, Agripada, Bombay 11.

"Sukani."—Gul-Bahar, Barrack Road, Bombay 1.

"Vatan."—2/A, Naag Building, Lamington Road, Bombay 4.

**MONTHLY**

"Beej."—The Star Printery, 62, Karwar Street, Bombay 1.

"Chetan."—23/A, Zaoba Wadi, Thakurdwar, Bombay 2.

"Chhupi Police."—Tinwala Building, Tribhuwan Road, Bombay 4.

"Dwij Jivan."—Sharaf Mansion, 32, Princess Street, Bombay 2.

"Gayatri Vignan."—206, Jawahar Nagar, Goregaon (West), Bombay 62.

"Gujarati Hindu Stree Mandal Patrika."—123, Vithalbhai Patel Road, Bombay 4.

"Gunjam."—Commerce House, Medows Street, Fort, Bombay 1.

"Gup Sup."—Ballard House, Mangalore Street, Fort.

"Jee."—The Star Printery, 62, Karwar Street, Bombay 1.

"Jeewan Madhuri."—Gulbahar, Barrack Road, Bombay 1.

"Kismet."—397-B, Sir Mangaldas Wadi, Naaz Compound, Lamington Road.

"Kutch Vikas."—547, B. DeLisle Road, Laxmi Bhuwan, Bombay 11.

"Mahendi."—Kismet Printery, Naaz Cinema Compound, Lamington Road.

"Mukti Samachar."—Salvation Army, Morland Road, Byculla, Bombay 8.

"Navaneet (Gujarati Digest)."—341, Tardeo, Bombay 34.

"Ramakdum."—211-19, Kalam Kutir, Frere Road, Fort.

"Samarpan."—Bharatiya Vidya Bhavan, Chowpatty, Bombay 7.

"Savita."—Premier Printery, 73, Tulsibaug-Tabala, Tardeo Road, Bombay 34.

"Varsha."—37, Abdul Rehman Street, Bombay 5.

**ANNUAL**

"Bombay Samachar Dipotsavi Ank."—Red Building, Parsi Bazar Street, Bombay 1.

**HINDI****DAILY**

"NAVBHARAT TIMES."—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"Vishwamitra."—Noble Chambers, Parsi Bazar Street, Fort.

**WEEKLY**

"Blitz Hindi Edition."—Blitz Publications Private Ltd., 17/17-H, Cawasji Patel Street, Fort, Bombay 1.

"Cinevani."—5-F, Naaz Cinema Building, Bombay 4.

"DHARMAYUG"—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"Urvashi."—Manek Chambers, Lamington Road, Bombay 4.

"Vikrant."—Shukla Printers, Dr. Deshmukh Lane, Vithalbhai Patel Road, Bombay 4.

**FORTNIGHTLY**

"MADHURI"—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

**MONTHLY**

"Bharati."—Bharatiya Vidya Bhavan, Chowpatty, Bombay 7.

"Chitrawali."—BK. 17/2, Muland Colony, Bombay 82.

"Gajara."—47, Laxmi Insurance Building, Sir Phirozeshah Mehta Road, Fort.

"INDRAJAL COMICS."—Times Building, Dr. Dadabhoy Naoroji Road, Fort.

"Navaneet (Hindi Digest)."—341, Tardeo, Bombay 7.

"PARAG."—Times Building, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1.

"SARIKA."—Times Building, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1.

**ANNUAL**

"Dipavali Annual."—40/42, Kennedy Bridge, Near Opera House, Bombay 4.

"Ratnadeep."—461/A, Ram Niwas, Opp. King's Circle Gardens Matunga.



**URDU  
DAILY**

- "Aaj."—242, Ripon Road, Bombay 8.  
 "Ajmal."—Princess Building, Ebrahim Rahimtullah Road, Bombay 3.  
 "Hindustani."—259, Ripon Road, Bombay 8.  
 "Inquilab."—Inquilab Press, 6/10, Tamkar Street, Bombay 8.  
 "Khilafat."—Khilafat House, Love Lane, Bombay 27.  
 "Qyadat."—107, Jail Road (North), Bombay 9.  
 "Shaam."—Inquilab Press, 6/10, Tamkar Street, Bombay 8.  
 "Urdu Times."—Guzarea Building, 243, Moulana Azad Road, Bombay 8.

**WEEKLY**

- "Kahkasen."—6/10, Temkar Street, Bombay 2.  
 "Nai Boshni."—Hindustan Press, 32, Sukhlaji Street, Bombay.  
 "Salasil."—259, Ripon Road, Bombay 8.

**MONTHLY**

- "Akkas."—21, Ali Umer Street, Bombay 3.  
 "Film Line."—H/No. 471, Ghodbunder Road, Khar, Bombay 52.  
 "Film Sansar."—11, Motishah Jain Trust Building, Love Lane, Bombay 27.  
 "Shakila."—36, Imamwada Road, Bombay 9.

**SINDHI  
DAILY**

- "Hindustan."—23, Hamam Street, Fort.

**WEEKLY**

- "Bharat Jiwan."—163, Dongri Street, Bombay 9.  
 "Hindvasi."—23, Hamam Street, Fort, Bombay 1.  
 "Jagriti."—546, Bazar Road, Bandra, Bombay 50.

**MONTHLY**

- "Kahani."—Chandan Printing Press, Hanali Tank Road, Bombay 28.  
 "Raj Filmstan."—163, Dongri Street, Bombay 9.  
 "Shanti."—Flat No. 11, Plot No. 424, 14th Road, Bandra, Bombay 50.

**PUNJABI  
DAILY**

- "Ranjit."—40, Goa Street, Fort.

**WEEKLY**

- "Punjabi Samachar."—14/D, Allana Compound, Agripada, Bombay 11.  
 "Ranjit."—40, Goa Street, Fort.

**KONKANI  
WEEKLY**

- "Ave Maria."—303, Ground Floor, New Sonapur Street, Bombay 2.  
 "Goan Express."—63, Portuguese Church Street, Dadar, Bombay 28.  
 "Goa Times."—84/86, First Marine Street, Bombay 22.  
 "Poinnari."—209, Frere Road, Bombay 1.

**NON-ALCOHOLIC PERFUMERY COMPOUNDS**

S. H. KELKAR & CO., PRIVATE LTD. (Estd. 1928).—36, Mangaldas Road, Bombay-2. Phone: 29130. Grams: "SACHEWORKS," Dadar, Bombay. Manufacturers of Essential oils, Aromatic Chemicals and "COBRA" Brand Perfumes.

**NON-FERROUS DIE CASTING**

GENCO INDUSTRIES PRIVATE LTD.—Die Making & Non-Ferrous Die-Casting for Automobile & Motor Cycle parts, Electrical Components, Builders, Furniture, Plumbing, Textile and Railway Hardware. Regd. Office: Himalaya House, 5th Floor, 79, Palton Road, Bombay 1. Tel. No. 266448. Grams: "WIECOL." Works: A-52, A-53, Government Industrial Estate, Wagle Wadi, Agra Road, Thana, Bombay. Phone: 591733.

**NON-FERROUS METALS**

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort-Bombay Company Ltd.—9, Wallace Street, Fort.

C. AMICHAND & CO.—46 A, Abdul Rehman Street, Bombay 3. Dealers in Hardware & Non-Ferrous Metals. Phone: 323601. Grams: "SHIPCOCK." Bombay (Mandvi).

Choonilal Mohanlal & Co.—Shop No. 54, Kika Street (Gulalwadi), Bombay 4.

DEVIDAYAL METAL INDUSTRIES.—Gupta Mills Estate, Reay Road, Bombay 10. Phone: 378561 (4 lines). Grams: "GINGER." Manufacturers of Aluminium, Copper & Brass Sheets, Sheathings, Strips, Circles, etc.

Dineshchandra Keshavlal & Co.—209, Kika Street, Bombay 2.

EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 26-2711 (8 lines). Machine Works: Tank Road, Bombay 33 DD. Phone: 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**★ ALUMINIUM:**

Sheets, Plates, Strips, Foils, Rods, Tubes, Architectural, Structural & Bus Body Sections, Electrical Grade Busbars & Wires etc.

**★ BRASS:**

Sheets, Plates, Strips, Rods, Tubes, Industrial Sheathings, Shims, Sugar Mill Condensor Tubes etc.

**★ COPPER:**

Electrolytic & Commercial Quality Sheets, Plates, Strips, Rods, Busbars, Tubes, Refrigeration tubings etc.

**★ OTHER COPPER ALLOYS:** Phosphor Bronze Sheets, Rods, Gun Metal Bushings, Cored Rods etc.**TO B. S. & I. S. SPECIFICATIONS****★ STOCKISTS & WHOLESALE**

Grams: 'NAMRATA'

Phones: 332188/332187

**PREMIER METALS & ENGINEERING CO.**

11-B, Ardeshir Dady Cross Lane, C. P. Tank, Bombay-4 BR.



Great Western Engineering Works.—"Sea View," 1st Pasta Lane, Colaba, Bombay 5.

Greaves Cotton & Co., Ltd.—Forbes Street, Bombay 1.

Guest, Keen Williams, Ltd.—Sprott Road, Ballard Estate, Bombay 1.

Hindustan Metal Manufacturing Co.—Lal Chhinney Compound, Near Nair Hospital, Lamington Road (North), Bombay 11.

India Metal Agencies.—"India House", Opp. G.P.O., Bombay 1.

Indian Standard Metal Co., Ltd.—Chinchpokli Cross Lane, Bombay 27.

James Finlay & Co., Ltd.—Mahatma Gandhi Road, Bombay 1.

Jayant Metal Manufacturing Co.—152, Lohar Street, Bombay 2.

Kamani Engineering Corp., Ltd.—Kamani Chambers, Nicol Road, Ballard Estate, Fort.

Kamani Metals & Alloys Ltd.—Kamani Chambers, Nicol Road, Ballard Estate.

**KAMANI TUBES PRIVATE LTD.**—Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1. Phone : 261744. Manufacturers of Non-ferrous Rods, Pipes & Tubes. Works : Agra Road, Kurla, Bombay-70 AS. Phone : 55661 (6 lines).

**METAL DISTRIBUTORS LTD.**—12-18, Vithalbhaji Patel Road, Bombay 4. Importers, Exporters & Indentors of Metals, Scrap & Virgin. Phones : 331921 (four lines). Grams : "DHATUBANA." Telex No. 315.

**METALLICA WORKS PRIVATE LTD.**—79/83, Dr. Annie Besant Road, Bombay 18. Phones : 375432, 375433, 375434, 371941 & 371942. Makers of Non-Ferrous Metals, Castings, Alloys, Anodes, Lead lining of Acid Resisting Containers, Crucibles.

**MITRA AGENCIES PVT. LTD.**—25, Brelvi Sayed Abdulla Road, Bombay 1. Phone : 253109. Grams : "MITRAGENCY", Representing Anaconda Sales Co., 25, Broadway, New York 4, and New Jersey Zinc Co., 160 Front Street, New York 38. Non-Ferrous Metals, Scrap, residues, Ores, Minerals, Minor Metals, Tool & Alloy Steel, Ferro Alloys etc.

Montana Ltd.—Rahimtoola House, Homji Street, Fort.

Non-Ferrous Metal Refinery.—24, Sitafalwadi, New Anjirwadi, Mount Road, Mazagaon, Bombay 10.

**POPULAR METAL WORKS & ROLLING MILLS.**—Sion, Bombay 22. Manufacturers of Aluminium Brass, Copper Sheets, Circles, Utensils and Copper and Brass Cold Rolled Industrial Sheathings.

**PRAVINCHANDRA D. BROS.**—105, Kika Street, Gulabwadi, Bombay 4. Phone : 332419. Grams : "RODSBRASS." Dealers & Stockists of Non-Ferrous Metals & Semi Finished products. Copper & Brass Rods, Pipes, Sheets, Sheathing, Wire Strips, etc. Phosphor Bronze Rods & Wires. Aluminium Sheets, Rods, Wires & Tubes, Stainless Steel Sheets, Tubes & Rods.

**SHANTILAL HIRALAL & CO.**—63/65, Kika Street, Bombay-4. Phone : 331459, 334479. Grams : "LESSPROFIT". Dealers in all kinds of Non-Ferrous Metal, Scraps, Rods, Tubes & Pipes in all sizes and 'K' Brand Brass Sheets. Phone : 331762.

**STANDARD METAL WORKS PRIVATE LTD.**—Office : 17, Tardeo Bridge (Low Level), Bombay 34 (W.R.). Phone : 375108. Grams : "BRASSLEAD." Manufacturers of Non-Ferrous Metal Goods and Specialists in Lead Sheets, Lead Pipes, Lead Wool, Lead Strips Washer, Tape, Brass & Copper Wires, Brass Chains (Toda), etc. Lead Lining & Lead Bonding Job Undertaken. Factory : Standard Metal Compound, Mogra, Old Nagardas Road, Andheri (East), Bombay 69AS.

**V. M. METAL CO. (Estd. 1950).**—180, Kika Street, Bombay 4. Phone : 334543. Grams : "SHAKAGO", Girgaum. Dealers in Brass, Copper, Aluminium, Specialise in Industrial Sheets.

**VORA TRADING CO.**—357-A, Vakil Bldg., Samuel Street, Vadgadi, Bombay 3. Phone : 325289. Telegram : "MULTI-SALES," Bombay-Mandvi.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

## NON-FERROUS METALWARE MANUFACTURERS

Bombay Brass & Metal Works.—Panjrapole 2nd Street, Bombay 4.

Eastern Aluminium Works.—60, Bapu Khote Cross Lane, Kika Street, Bombay 3.

G. K. Kansara.—Kansara Chawl, Bombay 2.

Gupta Metal Industries Ltd.—Gupta Mills Estate, Reay Road, Darukhana, Bombay 10.

Kamani Engineering Corporation Ltd.—Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1.

Kandivli Metal Works, C/o Messrs. Natwarlal & Co.—Dhobi Wadi, Thakurdwar, Bombay 2.

**LALUBHAI AMINCHAND PRIVATE LTD.**—Proprietors, "Dun Aluminium Factory," 225/27, Tardeo Road, Bombay 7. Manufacturers of "QUEEN" Brand Stainless Steel Utensils & "QUEEN" Brand Brasswares & Other non-ferrous Metalware. Phones : 320996, 377175, 334049 & 331888. Grams : "CYCLEBRAND."

Oriental Metal Pressing Works Private Ltd.—131, Worli, Bombay 18.

Pitamberdas Lallubhai & Co.—86, Kansara Chawl, Kalbadevi Road, Bombay 2.

Standard Metal Works Ltd.—17, Falkland Road, Low Level, Bombay 7.

Tarkar, B. A.—50, Kansara Chawl, Kalbadevi Road, Bombay 2.

Vajeram Devchand & Bros.—21-22, Chirabazar, Dukerwadi, Bombay.

## NOVELTIES

Akbarally Ebrahimji Pharmacy & Department Store.—45/47, Veer Nariman Road, Fort, Bombay.

Aurora Toys and Novelties.—"Parimal", Keluskar Road, South, Shivaji Park, Dadar, Bombay 28.

Ebrahim Alibhoy & Sons.—260-64, Abdul Rehman Street, Bombay 3.

Excel Process Works.—Manufacturers of Advertising Gift Items, Excel House, Ghodbunder Road, Irla, Vile-Parle, Bombay 24.

Grand Bazar.—25, Colaba Causeway, Bombay 1.

Noble Jewellery Mart.—Capitol Cinema Bldg., Borli Bunder, Bombay 1.

Sammaho Paleeddamssee & Co.—141, Chakla Street, P.O. Box 3131, Bombay 3.

## OFFICE EQUIPMENT & SUPPLIES

Apex Enterprises.—17/5th Floor, Mohatta Market, Palton Road, Bombay 1.

Ashok Typewriters.—40, Cowasji Patel Street, Ground Floor, Savoy Chambers, Fort, Bombay.

Artytoys.—Sir Ratan Tata Road, Tardeo, Bombay 7.

**BELLARES PRIVATE LIMITED.**—Chequewriters, Office Systems & Equipment Specialists. Sole Distributors, Ames Supply Company (U.S.A.). Spare Parts, Tool & Accessories for Typewriters, Adding & Calculating Machines, Manufacturers of Heavy duty "Magnolia" Paper Punch and **CHEQUEWRITERS**. 210-A, Lamington Road, Post Box No. 4101, Bombay 7. Grams : "INSPIRON." Factory : A-374, Thana Industrial Estate, Thana (Maharashtra).

Bombay Safe Manufacturing Co.—307-9, Kalbadevi Road, Bombay 2.

Bombay Typewriting Institution.—Opp. The General Post Office, Bhatia Mitra Mandal, Fort Street, Fort, Post Box No. 936, Bombay 1.

General Equipment Merchants, Ltd.—People's Building, Sir Phiroshah Mehta Road, Fort.

**GENERAL OFFICE EQUIPMENT COMPANY.**—Anand Bhuvan, 3rd Floor, Dr. D. Naoroji Road, Fort, Bombay. Phone 254346. Repairs and Maintenance of Typewriters and other office Machines.

General Typewriters (Bombay) Co., Private Ltd.—375, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

Gestetner Duplicators Ltd.—Construction House, Ballard Estate, Bombay.

Gillanders Arbuthnot & Co., Ltd.—16, Queen's Road Estate, Bombay 1.

**GOVIN'S SAFE MANUFACTURING CO.**—266-68, Kalbadevi Road, Bombay 2. Phone : 29869; Grams : "GOVINSAFE." Manufacturers of Steel Cabinets, Safes, Steel Furniture & Padlocks.

James Manufacturing Co.—407, Kalbadevi Road, Bombay 2. Phone : 22874.

**JANAK MANUFACTURING WORKS.**—Antop Hill, Wadala, Bombay 31. Manufacturers of Steel Shelving Racks. Phone : 440171. Grams : "JANAKBED" (MT). Showroom at : Kastur Nivas, 26/B, French Road, Off Hughes Road, Chowpatty, Bombay 7.

Jhaveri Bros. & Co. Private Ltd. (Estd. 1914).—345, Abdul Rehman Street, Near Crawford Market, Bombay 3.

**LATHAM ABERCROMBIE DIVISION OF FORBES FORBES CAMPBELL & CO. LTD.**—Forbes Building, Home Street, Fort, Bombay. Phone : 268081. Grams : "LATHAM."

National Cash Register Co.—Steelcrete House, Backbay Reclamation, Bombay 1.

National Steel Equipment Co.—Naigaum Road (Near Spring Mills), Dadar, Bombay 14.

**NOBLE STATIONERY MART.**—Parsi Bazar Street, Fort, Bombay 1. Phone : 254748. Grams : "CELLOTAPE." Manufacturing Stationers, Suggest Filing System, Ceeda Regd. Files.

Prince, H. I. & Son.—9, Lilly Court, Churchgate Reclamation, Bombay.



**REMINGTON RAND OF INDIA LIMITED.**—Manufacturers of Remington Rand Business Equipment. Thackersey House, Graham Road, Ballard Estate, Bombay. Phones: 265591/92/93. Grams: "REMINGTONS."

**SOCIAL STATIONERY MART.**—Victoria Building, 27/B, Parsi Bazar Street, Fort, Bombay 1. Phone: 251466. Specialists in "Social" Files, Typewriters & Pencil Carbon Papers, Account Books & Office Requisites.

**Steel Age Industries Private Ltd.**—Opp. Post Office, Mazagaon, Bombay 10.

**Steelmade, Dr. Annie Besant Road, Worli, Bombay 18.**

**Universal Typewriter Co.**—31, Nawab Bldg., 327, Hornby Road, Bombay 1. Phone: 251949.

## OFFSET PRINTERS

**LAXMI OFFSET & PRINTING WORKS.**—23, Goa Street, Ballard Estate, Bombay 1. Phone: 26147. Grams: "LAXPIC-PLAY." Art Lithographers and Printers.

## OIL AND LEATHER CLOTH MANUFACTURERS AND DEALERS

**Dharamshi Ramji.**—241, Masjid Bunder Road, Bombay 3.

**Hariram Bhawanji Co.**—156, Masjid Bunder Road, Bombay 3.

**Hindustan Plastic Co.**—95, Abdul Rehman Street, Bombay 3.

**Jivanlal & Company (Estd. 1937).**—464, Sardar Valabhbhai Patel Road, Bombay 4.

**Kapadia & Co.**—19, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**Leather Cloth Processors & Printers.**—Moghul Lane, Matunga, Bombay 16.

**Mamaji & Son (Private) Ltd., Y. A. (Estd. 1885).**—136-38, Sir Ebrahim Rahimtoola Road, Bombay 3.

**Menty, S. M., & Co.**—13, Horniman Circle, Fort, Bombay 1.

**National Leather Cloth Manufacturing Co.**—480, Sandhurst Road, Bombay 4.

**Regal Trading Co. (Bombay).**—Rajabhadur Bansilal Mansion, 11, Bruce Street, Fort, Bombay 1.

**Western India Manufacturers' Agency Private Ltd.**—190, B. K. Building, Khetwadi Main Road, Bombay 4.

## OIL BURNERS

**Heatly & Gresham Ltd.**—9, Forbes Street, Bombay 1.

**NESTLER BOILERS PRIVATE LTD.**—Mfrs. of Oil Burners. Head Office & Works: Love Lane Cross Lane, Byculla, Bombay 21. Phones: 376264 & 372818. Grams: "NESTLER."

**William, Jacks & Co., Ltd.**—Hamilton House, Ballard Estate, Bombay 1.

## OIL ENGINES AND SPARES

**Acme Manufacturing Co., Ltd., The.**—Construction House, Ballard Estate, Bombay.

**AGRA ENGINEERING CO.**—40, Bank Street, Fort, Bombay 1. Phones: Office: 256541; Res.: 532906. Grams: "RAJSPARES." Manufacturers of Diesel & Automobile Spare Parts, "ARROW" & "DISPA" Liner & Pistons for Diesel Engines, "MG" Pistons for Car, Trucks, Commercial Vehicles, Motor Cycles, Scooters & Tractors.

**Associated Machine & Tool Co.**—130, Medows Street, Fort.

**B. KUMAR METAL WORKS.**—Sitafalwadi, Mount Road, Mazagaon, Bombay 10. Phone: 373094. Grams: "BEKUMAR." Manufacturers of Oil Engines, Crank Shafts, Connecting Rods and other spares, Crankshaft grinding jobs accepted.

**BHARAT ELECTRIC & ENGINEERING CORPORATION.**—Free Press Building, Ground Floor, 21, Dalal Street, Fort, Bombay. Phone: 255374. Grams: "GODGRACE."

**Bharat Industrial Co.**—77-79, Nagdevi Cross Lane, Bombay 3.

**Brady, W. H., & Co., Ltd.**—Churchgate Street, Fort.

**CAPRI ENGINEERING CO.**—296, Frere Road, (Near Fort Market), Bombay 1. Phone: 266438. Grams: "CAPRIENG."

**Chhaya Trading Co.**—Opp. Share Bazar Building, Hamam Street, Fort.

**Drewet Chowna & Co.**—Lentia Chambers, Medows Street, Fort, Bombay.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 262711 (8 lines). Machine Works: Tank Road, Bombay 33 DD. Phone: 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**Eastern Electric and Refrigeration Co.**—14, Hamam Street, Fort, Bombay.

**Engineer, Eruch D., & Co.**—Crossby House, Apollo Street, Fort, Bombay.

**General Commercial and Industrial Co.**—Vishram Bhuvan, 1st Floor 41, Kolbhat Street, Bombay 2.

**Greaves Cotton & Co., Ltd.**—Forbes Street, Bombay 1.

**Gujarat Industrial Corporation.**—22, Ali Chambers, Tamarind Lane, Fort, Bombay 1.

**India Engineering Works.**—Opp. Share Bazar Building, Hamam Street, Fort.

**Jacks, William & Co.**—Hamilton House, Graham Road, Ballard Estate, Fort.

**Jayems Engineering Co.**—Warden House, Sir Phirozshah Mehta Road, Fort.

**Jhala, B. T., & Co.**—9, Forbes Street, Fort, Bombay.

**Khimandas Jagumal & Sons (Estd. 1910), Sind.**—12, Hornby View Building, Gunbow Street, Fort.

**Larsen & Toubro Ltd.**—I. C. House, Dougall Road, Ballard Estate, Fort.

**NATIONAL METAL INDUSTRIES.**—15/A, Parel Village Road, Parel, Bombay 12. Phone: 442400. Grams: "MANMUL." Office: 26/A, Behind Mumbadevi Post Office, Bombay 2. Phone: 325434. Manufacturers of "NAMI" Oil Bath Air Cleaners Exhaust Silencers and Fuel Filters for Oil Engines. Also for Tracks and Car Engines.

**Paramount Industrial Stores.**—15, Ropewalk Street, Bombay 1.

**Parry & Co., Ltd.**—United India Building, Sir P. M. Road, Fort.

**Power Machines Corporation.**—31, Forbes Street, Fort.

**Regal Trading Co. (Bombay).**—Rajabhadur Bansilal Mansion, 11, Bruce Street, Fort, Bombay 1.

**Small-Diesels Ltd.**—36, Western India House, Sir Phirozshah Mehta Road, Fort.

**TALWALKER BROTHERS PRIVATE LTD., W. R.**—Lentia Chambers, Dalal Street, Fort, Bombay. Phone: 253367. Grams: "PUMPENAMEL."

**Volts Limited.**—10, Graham Road, Ballard Estate, Bombay 1.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

## OIL MILLS (COMPANIES), IMPORTERS & EXPORTERS

**Ahmed Oomerbhoy Oil Mills.**—Two Tanks, Bombay 8. P.O. Box No. 4511.

**Bhavnagar Oil & Chemical Industries Private Ltd.**—Sales Office: Bombay Mutual Building, Dr. Dadabhoy Naoraji Road, Fort, Bombay 1.

**Bombay Oil Industries Pvt. Ltd.**—285/287, Narshi Natha Street, Bombay 9.

**Hindustan Oil Mills.**—Nawab Mansion, 22, Gunbow Street, Fort. Grams: "Paultext." Head Office & Works at Ghat Road, Nagpur.

**Indu Oil & Soap Co.**—Office: 335, Katha Bazar, Bombay 9.

**Jamnadas Laljee Oil Mills.**—Champsai Bhimji Wadi, Old Anjirwadi, Mazagon.

**JAYANT OIL MILLS.**—13, Sitafalwadi, Mazagaon, Bombay-10. Phones: 374283 & 376425. Grams: "SWEETOIL." Manufactures particularly Specialised in Castor Oil—Commercial, B.S.S. and B.P. qualities. Also manufacturing By-Products of Castor Oil, viz., Blown Castor Oil, Dehydrated Castor Oil, Heptaldehyde, Undecylenic Acid, etc.

**Oomedchand Kashiram & Co.**—Mudi Bazar, Bombay 3.

**Sonal Rangnow & Co.**—41, Hamam Street, Fort, Bombay.

**Swastik Oil Mills, Ltd.**—Saltpan Road, Wadala, Bombay 31.

**Tata Oil Mills, Co., Ltd.**—Bombay House, 24, Bruce Street, Fort, Bombay.

**Tide Water Oil Co. (India) Ltd.**—Nicol Road, Ballard Estate, Bombay.

**Wharton, H. W., & Co., Ltd.**—329, Hornby Road, Fort.

## OIL SEALS

**AGRA ENGINEERING CO.**—40, Bank Street, Fort, Bombay 1. Phones: Office: 256541; Res.: 532906. Grams: "RAJSPARES." Manufacturers of Diesel & Automobile Spare Parts, "ARROW" & "DISPA" Liner & Pistons for Diesel Engines, "MG" Pistons for Car, Trucks, Commercial Vehicles, Motor Cycles, Scooters & Tractors.

**B. CHOUDHURY & CO.**—Indian Globe Chambers, Fort Street, Bombay 1. Phone: 263479. Grams: "BISUKHI." Sole Agents for Carl Frendenberg, West Germany. cFw Simmering Oil Seals.

**Kumar Commercial Co.**—Nadreshaw Sukhia St., off Cawasji Patel St., Bombay 1.

**Oil Seals Mfg. Co. (India)**—Ratan House, Tribhuvan Road, Bombay 4.

**Western Machinery Co.**—22, Basement Commerce House, Medows Street, Bombay-1.



**OILS, OIL CAKES & OILSEEDS**

Kotak & Co.—Navsari Building, Dr. Dadabhoy Naoroji Road, Fort, Bombay.  
 Swastik Oil Mills Ltd.—Saltpan Road, Wadala, Bombay 31.  
 Sorabji Nowroji & Co.—16, Horniman Circle, Fort.  
 Uttamlal, V., & Co.—P.O. Box No. 1531, Bombay.

**OIL MILLS MACHINERY MANUFACTURERS & DEALERS**

**BHARAT ELECTRIC & ENGINEERING CORPORATION.**—Free Press Building, Ground Floor, 21, Dalal Street, Fort, Bombay. Phone : 25537. Grams : "GODGRACE."

**BHARAT INDUSTRIAL CORPORATION.**—Manufacturers of Oil Expellers—Spares thereof, Allied Machinery, Elevators, Conveyors & Solvent Extraction Plant Elevators, Conveyors Plate & Structural Fabrication, Petit Compound, Grant Road, Bombay 1. Phone : 41361. Grams : "EXPEL PART."

**B. KUMAR METAL WORKS.**—Sitafalwadi, Mount Road, Mazagaon, Bombay 10. Phone: 373094. Grams: "BEKUMAR." Engineers, Manufacturers and Contractors; Specialists in Oil Mill Machinery & Spares.

**ESSENTIAL ENGINEERING CO.**—11, Botawala Building, Elphinstone Circle, Fort. Grams : "ESSENCE." Phone: 252940. Importers, Exporters, Commission Agents and Manufacturers' Representatives.

**Hindustan Engineering Co. (Machinery Dept.).**—25, Ropewalk Street, Rampart Row, Fort.

**Jayems Engineering Co.**—Warden House, Sir Phirozshah Mehta Road, Fort.

**Kilburn & Co. Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Bombay.

**KUMAR METAL INDUSTRIES.**—50, Nesbit Road, Mazagon, Bombay 10. Manufacturers & Exporters of Oil Expellers, Filter Presses, Elevators, Conveyors, Baby Boilers and spare parts of oil expellers. Phone : 72954. Grams : "CRANK," Bombay-Mazagon.

**Laxmi Engineering Works.**—40, Khetwadi 10th Lane, Bombay 4.

**Marshall Sons & Co. (India) Ltd.**—Ballard Road, Bombay 1.

**Oriental Engineering Co.**—25, Forbes Street, Fort, Bombay 1.

**Paramount Industrial Stores.**—15, Ropewalk Street, Bombay 1.

**Volta Limited,** Ballard Estate, Bombay 1.

**Western India Engineering Co.**—Signal Hill Avenue, Sewree, Bombay 15.

**OPTICAL GOODS**

**Artbangle Private Ltd.**—204, Dr. Dadabhai Naoroji Road, Bombay 1.

**MONTEX CORPORATION.**—Yusuf Bldg., Mahatma Gandhi Road, Fort, Bombay 1. Manufacturers of Spectacle Frames & Sun-Glasses & Lenses.

**OPTI-PLAST CORPORATION.**—183, Girgaum Road, Opp. Gaiwadi, Bombay 4. Micro-lenses, moulded, spherical, Cosmetic lenses, Life-like Eyes, wonderful Invisible Spectacles etc. made & Fitted. Take a successful trial in Rs. 50 only. Phone : 354756.

**ROYAL OPTICAL INDUSTRIES.**—Manufacturers and Exporters of all types of Spectacle Frames. Address : Naigaum Cross Road, Wadala, Bombay 31 D.D. Phone : 440175. Grams : "CELLULOID."

**OPTICIANS**

**Baliwalla & Homi Ltd.**—365, Hornby Road, Fort.

**Bharat Optical Company.**—Kalbadevi Road, 366/68, Ibrahim Mansion, Bombay 2.

**Darbar Singh & Sons.**—166, Hornby Road, Fort.

**Ghaswala, Dr. K. S., L.M.&S.**—Dr. Ghaswala's Eye Hospital, "Edena," 105, Queen's Road.

**Hatim Brothers.**—302, Abdul Rehman Street.

**Helms-Optics.**—Qualified German Sight Testing Opticians, 8, Esplanade Mansions, Fuller Road, Fort, Bombay 1.

**Homi & Co.**—Dhootpapeshwar Prasad, Girgaum Road, Bombay 4.

**Kataria Optical Factory.**—104, Clarke Road, Jacob Circle, Bombay 11.

**LAWRENCE & MAYO (INDIA) PRIVATE LTD.**—274, Dr. Dadabhoy Naoroji Road, Fort, Bombay. Phone : 261827.

**Lund & Blockley.**—Sassoon Institute Building, 150, Mahatma Gandhi Road, Fort.

**Mansukhlal & Co.**—356, Kalbadevi Road.

**Patson Ocularium.**—2, Regal Cinema Building, Apollo Pier Road, Fort, Bombay 1.

**BHAVNAGAR OIL & CHEMICAL INDUSTRIES PRIVATE LTD.**

*Manufacturers of :*

**Refined and High Grade Castor Oils, Medicinal Castor Oil, Perfumed Castor Oil, Hydraulic Brake Fluids, Refined Groundnut Oil, Salad Oil, etc.**



**Head Office & Factory :**  
**Mahatma Gandhi Road,**  
**Bhavnagar (Gujarat).**  
 Telephone: 4646  
 Telegrams: "BOCIL"

**Sales Office :**  
**Bombay Mutual Building,**  
**Dr. Dadabhoy Naoroji Road, Bombay.**  
 Telephone : 261359  
 Telegrams: "BOCIL"



**PHIROZE M. DASTOOR & CO.**—(Manufacturing Opticians),  
Next to Eastern Bank Ltd., Opp. Flora Fountain, 379, Dr.  
Dadabhai Naoroji Road, Fort.

**P. S. SHIRODKAR & SONS.**—Dealers in Optical goods, Ranade  
Road, Dadar, Bombay 28.

**REMEDIOS OPTICIANS.**—Ophthalmic and Consulting Opti-  
cians. Consulting Optician: I. R. Lobo. 255, Dr. Dadabhoy  
Naoroji Road (Hornby Road), Fort, Bombay. Phone: 263336.

**Takandas H. Kataria.**—Showroom: 323-325, Abdul Behman Street,  
Bombay 3.

**VARTAK BROTHERS.**—187, Dr. Dadabhoy Naoroji Road,  
Fort. Phone: 262915.

### ORTHOPAEDIC APPLIANCES MANUFACTURERS

**SMO ORTHOPAEDIC APPLIANCES.**—183, Girgaum Road,  
Opp. Gaiwadi, Bombay 4. Suppliers to Surgeons & Govt.  
Hospitals, Thompson Heads, S. P. Pins & Plates and all  
types of K nails, etc. made of EN 58 J as per Br. Std. Speci-  
fications. Phone: 354756.

### OVENS (HOT AIR)

**KILBURN & CO. LTD.**—Gresham Assurance House, Pheroz-  
shah Mehta Road, Bombay. Phone: 256845. Grams:  
"TASCONIUM."

### OVERHEAD LINE MATERIALS

**Evergreen Corporation.**—9/15, Picket Croas Road, P.O. Box No.  
2733, Bombay 2. Phone: 22162. Grams: "GREENLEAVE".

**JINDAL ENGINEERING WORKS.**—Darukhana, Kasara Street,  
Bombay 10-DD. Phones: 376389 & 318720. Grams: "JINDAL-  
SHIP." "Manufacturers of Cable Carrying Trays, Barbed  
Wires, "U" Staples, and A.C.S.R. Accessories and Overhead  
Transmission Line Tools. (Viz. Stringing Rollers, Snatch  
Blocks, Sheave Pulleys, Come along clamps, "D" Shackles,  
"U" Bolts, Bird Guards, etc.).

### OXYGEN AND GAS FACTORIES

**Bombay Gas Co., Ltd.**—Empire House, 214, Dr. Dadabhoy Naoroji  
Road (Hornby Road).

**BOMBAY OXYGEN CORP. LTD.**—Regd. & Sales Office:  
Bombay-Agra Road, Mulund, Bombay 80; City Depot,  
Arched Bungalow Road, Bombay 33; City Office: 5, Convent  
Street, Colaba, Bombay 5.

**Chapman & Co., K.**—Opp. Marwarl Vidyalyaya, Sandhurst Road.

**INDIAN OXYGEN LTD.**—Ghatkopar (Bombay-Agra Road),  
Bombay 77-AS. Phones: 582641 (7 lines), 582648, 582649 &  
582782; Grams: "INDOXCO" Ghatkopar. Manufacturers  
of Oxygen, Dissolved Acetylene, Nitrous Oxide, Nitrogen  
gases, etc.

**Sirdar Carbonic Gas Co., Ltd.**—Connaught Road, Mazagaon.

### PACKAGING

**AFZAL PAPER BOX FACTORY.**—43, Foras Road, Bombay 8.  
Phone: 312338. Manufacturers of Cardboard Boxes and  
Corrugated Paper Rolls & Sheets.

**APCA PACKAGING PRIVATE LTD.**—151, Upper Duncan Road,  
Bombay 8. Phone: 375986. Grams: "APCAPACK". Quality  
cardboard box, corrugated box and Carton Manufacturers.  
Also exporters of special greeting cards.

## ARTYTOYS

### SIR RATAN TATA WELFARE CENTRE

*Manufacturers of*

School Teaching Aids \* Playground Equipment  
Wooden Stationery Articles \* Cardboard  
Boxes \* Wooden Packing Cases \* Envelopes  
& Paper Bags

ANY ARTICLE OF WOOD MADE TO ORDER

Sir Ratan Tata Road, Tardeo, Bombay-34 (WB)

Phone: 374873

**Arvinda Trading Co. Private Ltd.**—105, Apollo Street, Fort.

Grams:  
"BOXPACK"



Phone:  
266233

### BOXPACK PAPER INDUSTRIES PVT. LTD.

*Manufacturers of*

"ZEBRA" Brand Corrugated Paper Rolls  
and Double Faced Corrugated Sheets.

*Registered Office:*

81 83, Mint Road, Fort, BOMBAY.

**CLARIDGE, G., & CO., LTD.**—Frere Road, Fort, Bombay 1.  
Phones: 263201 & 263202; Grams: "EGDIRALC." Letter-  
press and Offset Printers, Specialists in Packaging, Security  
Printing and Silk Screen Work.

**COLOUR CARTONS LIMITED.**—Specialists in the manu-  
facture of packaging materials for pharmaceutical and  
allied industries and engineering industry. Head Office:  
Tiecicon House, Haines Road, Bombay 11. Phones: 371185  
& 379362. Factory: Lake Road, Bhandup, Bombay 78. Phone:  
592560.

**DWARKADAS VELJI TALPATRIWALA.**—36, Issaji Street,  
Bombay-3. Phones: 323232, 324332 & 321615-6. Factory:  
371271. Grams: "VELTHAKKER." Waterproof Paper,  
Polyethylene lined & Paperlined Hessian, Polyethylene  
Sheets, Hessian Jute Twine, Coir Matting etc.

**EVEREST PACKAGING CORPORATION.**—Chopra Estate,  
Agra Road, Bhandup, Bombay-78. Phone: 581736, 581909.  
Manufacturers of Corrugated Shipping Containers, Cartons,  
Corrugated Paper & Boards. Outer boxes and Paper Packing  
requisites.

**GERMRICH INDUSTRIES.**—Manufacturers of Plastic Cum  
Cardboard Containers for Powders such as Chemicals,  
Cosmetics, Insecticides Detergents, Tablets, Confection-  
eries and many other purposes, 91, Mohamedali Road,  
Bombay 3. Phone: 325933.

**Jaydip & Co.**—Sambava Chambers, Sir Phirozshah Mehta Road,  
Fort, Bombay.

**KADRI PAPER BOX FACTORY.**—Mohamedali Road, Bombay  
3. Phone: 332856. Cardboard and Corrugated Board Boxes of  
every size & description with Printing if required and  
Cardboard Tubes for Calendars. Grams: "BOXWORK."

**LESLIE, E. & CO.**—Botawalla Building, 7-10, Horniman Circle,  
Fort, Bombay. Professional Packers of Household effects,  
movings, transporting, warehousing, insurance & Custom  
House Licensed Agents. Packers of Household Effects.  
Phone: 255540. Grams: "RITTA."

**Mansukhlal Jechandbhal & Co.**—181/183, Samuel Street (Khoja  
Galli), Bombay 9.

**MOHAMADI FINE ART LITHO WORKS.**—Proprietors: Alli-  
bhoy Sharafally & Co., Private Ltd. (Estd. 1878; Incorpo-  
rated: 1938). Mohamadi Building, Mazagon, Bombay 10  
(DD). Lithographers, Offset and Letterpress Printers and  
Carton Manufacturers. Phones: 378148 & 378149. Grams:  
"KORAN."

**MORARJI PERAJ & CO., TALPATRIWALA.**—138, Yusuf  
Meher Ali Road (Masjid Bunder Road), Bombay-3. Phone:  
322352. Grams: "TALPATRI." Manufacturers of  
"ELEPHANT" Brand 100 per cent Waterproof Tarpaulin &  
Polythene and Paper lined Hessian Bags. Wholesalers  
Hessian Cloth, Canvas & Jute, Twine, Gunny Bags, Water-  
proof Paper, Eyelets, etc.

**New Jack Printing Works.**—Sekearia Mills Compound, Globe Mills  
Passage, off DeLisle Road, Bombay 13.

**New Pack Industries.**—Lotus House, 33A, Marine Lines, Bombay 1.

**PAPER PRODUCTS LTD.**—Vaswani Mansions, 5th Floor,  
120, Dinshaw Vachha Road, P.O. Box No. 732, Bombay-1.  
Phone: Office: 246116, 245852 & 245341; Factory: 592129,  
592130.

**Packers (India) Co.**—34-38, Hamam Street, Fort, Bombay.

**Standard Paper Box Manufacturing Co.**—51, Mangaldas Road, Lohar  
Street, Bombay 2.

**Swastik Paper Bag Co.**—168/80, Bhimpura, Chinch Bunder Road,  
Bombay 9.



## PACKAGED BOILERS

**NATIONAL STEEL EQUIPMENT CO.**—8, Katrak Road, Wadala, Bombay 31. Phone : Office : 441766, 442139 ; Factory: 442973. Grams : "BEDLOCKER," Bombay-Wadala. Manufacturers of Pressure Steam Sterilizers & Autoclaves, Pyrogen Free Water Still, Premature Baby's Incubators, Complete range of Industrial Heavy-duty Catering (Kitchen) Equipment and Fully Automatic Packaged Boilers. Branches: Delhi, Calcutta, Madras.

## PACKING CASES

**Abba Gani & Co.**—1-2, Victoria Road, Mazagaon, Bombay 10.  
**ANAND TIMBER TRADERS.**—170, Reay Road, Bombay 10. Phones—Office : 379199; Res. : 440144.  
**Artytoys.**—Sir Ratan Tata Road, Tardeo, Bombay 34.  
**Brijmohan Banwarilal.**—61, Reay Road, Mazagaon, Bombay 10.  
**Godse & Company.**—Sitaram Bldg., Palton Road, Bombay 1.  
**Indian Commercial Agency.**—Regd. Office : Nasir Palace, opp. Dockyard Railway Station, Mazagaon, Bombay 10.  
**Northern India Timber Corp.**—63, Reay Road, Bombay 10.  
**Packers (India) Co.**—34-38, Hamam Street, Fort, Bombay.  
**Plastic Extruders Private Ltd.**—204, Dr. Dadabhai Naoraji Rd., Fort, Bombay.  
**Podar Saw Mills.**—61, Reay Road, Bombay 10.  
**Processed Timber Products.**—104, Ghodbunder Road, Chunabhatti, Santa Cruz (West), Bombay 23.

## PACKINGS AND JOINTINGS

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone : 326980. Grams : "ALERTDEAL."  
**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay 1. Phone : 25-2952/25-4103. Grams : "PILOTACE."  
**Asbestos Packing & Manufacturing Co.**—15/A, Bruce Street, Bombay 1.  
**DESAI TUBE & HARDWARE MART.**—41, Nagdevi Cross Lane, Bombay-3. Phone : 321606. Grams : "HASTY." Importers of Pipe Fittings Engineering Stores & Tools, Mill Gin Stores & Packings & Jointings.  
**HIRALAL GOKULDAS DALAL & CO.**—45, Nagdevi Cross Lane, Bombay 3. Phone : 321594. Grams : "HIRAGOCUL" "Fire-fly" Asbestos Textiles, Packings, Jointings, Millgin Stores, Engineering Hardware Tools.  
**MEHTA NANAVATI & CO.**—96, Narayan Dhuru Street, Bombay 3. Phone : 324645. Grams : "REDJOINT."  
**R. Mohanlal & Co.**—38, Bibijan Street, Bombay 3.  
**SHALEBHOY TYEBJEE & SONS (Estd. 1840).**—12, Bruce Street, Fort, Bombay 1. Phones : 252357 and 252358. Grams : "ROTATOR." Packing, Jointings "Beldams."  
**VASI SHUMS & CO. PRIVATE LTD.**—165-67, Nagdevi Street, Bombay 3. Phone : 327381. Grams : "WIREROPE".

## PAINTING CONTRACTORS

**Cooverji Hormusji & Sons, N.**—298, Wadia Bldg., Girgaum Road, Bombay 2.  
**DAVAR, N. & CO.**—Syndicate Bank Building, Sir Phirozshah Mehta Road, Bombay. Phone : 26-1880. Interior Decorators and Painting Contractors. Showroom : Commerce Centre, Tardeo, Bombay 34 (W.B.).  
**Fleming John & Co., Private Ltd.**—P.B. No. 76, Bombay 1. Phone : 261153.  
**KAPADIA BROTHERS.**—81, Abdul Rehman Street, Bombay 3. "Painting Contractors of Repute" also Dealers in : Paints, Enamels, Distempers, Plastic Emulsion Paints, etc. Chief Stockists of "NOBLE PAINTS." Phone : 324108. Grams : "DECORATORS."  
**NEW ERA PAINT WORKS (Estd. 1934).**—Opp. Byculla Station, Bombay 27; Makes of High Grade Paints and Professional Decorative Printing Contractors of Residential, Commercial and Industrial Projects throughout India. Phone : 373679. Grams : "NEWERA."  
**OSNAR PAINTS & CONTRACTS PRIVATE LTD.**—Industrial and Decorative Painting, Sandblasting, Waterproofing. T.K. Industrial Estate, King Edward Cross Lane, Sewri, Bombay 15 (DD). Phone : 440753 (Call). Delhi Office : 48, Hanuman Road, New Delhi. Phone : 48332.  
**PRAVIN DECORATORS.**—Artistic Paintings Contractors, Colour Scheme Specialists for Buildings, Flats, Offices, Factories, Mills, etc. Inquiries Invited. Contact 81, C. P. Tank Road, Bombay 4. Phone : 333844.  
**S. More & Co.**—34/38, Hamam Street, Fort, Bombay 1.

**S. MANCHERSHA & CO.**—Senior Recommended Painting Contractors of Messrs. JENSON & NICHOLSON (India) LTD., Navsari Chambers, Outram Road, Fort, Bombay 1. Phone : 26-2373.

**Vibgyor (India) Private Ltd.**—143, Mahatma Gandhi Road, Fort, Bombay.

**WAKEFIELD PAINTS PRIVATE LIMITED.**—"Dhan-Nur", 15/16, Sir Phirozshah Mehta Road, Fort, Bombay 1 (India). Grams : "WAKEPAINT." Phone : 264061.

## PAINT RAW MATERIALS

**CIBA OF INDIA LIMITED.**—Royal Insurance Building, 14, Jamshedji Tata Road, Bombay-1. Phones : 245031-3 ; 246084-6 Suppliers of Epoxy Resins.

**INDUSTRIAL MINERALS & CHEMICAL CO.**—125, Narayan Dhuru Street, Bombay 3. Phone : 323721 (3 lines). Grams : "IMCHEL". Chemists & Mineral Merchants and Stockists of raw material for all Industries.

**MURARILAL BALKISHAN.**—30, Commerce Chambers, Masjid Bunder Road, Bombay 3. Phone : 328028 ; Residence : 522183. Grams : "DANVEER." Importers & Suppliers of Paint, Raw Materials, Solvents, Pigments & Chemicals for Textiles, Sugar, Glass & Ceramic Industries & Dyes Intermediates.

## PAINT SHADE CARDS

**KADAM & CO.**—Makers of Shade Cards, for Paint Manufacturers. Girdhari Bhawan, Sadashiv Cross Lane, Girgaum, Bombay-4.

## PAINT TESTING MACHINES

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P. O. Box 1909, Bombay 1. Phone : 251882. Also at Calcutta, New Delhi, Madras and Baroda. Agents for, "REL" Research Equipments Ltd., U.K.

## PAINTS, ENAMELS AND VARNISHES

**Abdeally, B. M., & Co.**—127, Sarang Street, Bombay 3.  
**Abdeali Mohamedali Rangwala.**—148, Nagdevi Street, Bombay 3.  
**Adamally Kikabhai Rangwala.**—309, Shaik Memon Street, Bombay 3.  
**Allied Trading Co.**—Importers & Stockists of all kinds of Enamels, Varnishes, etc., 39, Nagdevi Street, Bombay 3.  
**Advance Paints Ltd.**—125, Meadows Street, Fort.  
**Ahmed Moosa Motiwala & Sons.**—Tank Road, Parel.  
**Ahmed Oomerbhoi.**—Two Tanks, Grant Road.  
**Akbarally Sharfally Zaveri.**—25, Ebrahim Rahimtoola Road, Bombay 3.  
**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay 1. Phone : 25-2952/25-4103. Grams : "PILOTACE."  
**Amritlal & Co., Ltd.**—Sprott Road, Ballard Estate, Fort.  
**AMZEL PRIVATE LTD.**—Nusser House, New Queen's Road, Bombay 4. Phone : 357511 (5 lines). Distributors for Spartan Paints manufactured by Addisons Paints & Chemicals Ltd., Madras.  
**ASIAN PAINTS (INDIA) PRIVATE LIMITED.**—Des Chambers, Dalal Street, Fort, Bombay 1. Manufacturers of Quality Paints, Varnishes, Enamels, Brushes, Syn. Resins, etc., etc. Phones : 255671-2-3-4. Grams : "REDLEAD," Bombay.  
**BAKER BROTHERS.**—31, C. P. Tank Road, Bombay 4. Phone : Office 334421 & Factory 370207. Grams : "BAKERCOLOR." Paints, Enamels, Varnishes, N.C. Lacquers and thinners for all purposes.  
**Baker, M. & Co.**—35, Nagdevi Street, Bombay 3.  
**Bassein Paint & Varnish Co.**—Magazine Street, near Reay Road Station, Mazagaon.  
**Beardsell, W. A., & Co., Ltd.**—15-16, Sir Phirozshah Mehta Road, Fort.  
**BLUNDELL EOMITE PAINTS LIMITED.**—Western Sales Division & Bombay Industrial Sales Division, Ruston Building, Veer Nariman Road, Bombay 1. Phones : 251246-47. Grams : "BLUNPAINTS".  
**BRIGHT & CO. PRIVATE LTD.**—18, Commercial Chambers, Masjid Bunder Road, Bombay 3. Phone : 324668. Factory : Saki-Vihar Road, Kurla, Bombay 70. Phone : Factory : 581125. Grams : "PAINTMAKER." Manufacturers of all kinds of Paints, Enamels, Distempers, Varnishes, Lithographic & Paper Varnishes, Linseed oils, etc.  
**CHEMIDYE TRADING CO., PRIVATE LTD.**—Kamer Building, Cawasji Patel Street, Fort, Bombay-1. Phone : 251034.  
**COOPER & CO.**—53, Abdul Rehman Street, Bombay 3. Phone : 323908. Grams : "COOPEROIL". Manufacturers of Paints, Enamels, Varnishes, Distempers, Emulsion Paints & Industrial Finishes.



Carbon Dry Colour Works.—115, Nagdevi Street, Bombay 3.

Dadajee Dhackjee & Co., Ltd.—Shree Pant Bhuwan, Sandhurst Bridge.

D. Walker & Sons.—Prospect House, New Bhatwadi, Sandhurst Road, Bombay 4.

FINLAY, JAMES, & CO. LTD.—Chartered Bank Bldg., Mahatma Gandhi Road, Fort, Post Box No. 73. Bombay 1. Phone Nos. 251255-59.

Fleming, John & Co., Private Ltd.—Sukhadwala Building, 21, Bastion Road, Fort.

Gillanders Arbuthnot & Co., Ltd.—16, Queen's Road Estate, Bombay 1.

GOODLASS NEROLAC PAINTS PRIVATE LTD.—Forbes Building, Home Street, Fort, Bombay 1. Phone: 268088. Grams: "GOODLASS."

Goolamally Dawoodbhoy & Co.—23, Mangaldas Road, Princess Street, Bombay No. 2. Phone No. 30423.

Hardcastle, Waud & Co., Ltd.—Alice Building, Hornby Road, Fort.

Holmes & Co., Ltd.—Alice Buildings, Hornby Road, Fort.

I. C. I. (India), Ltd.—Imperial Chemical House, Dougall Road, Ballard Estate.

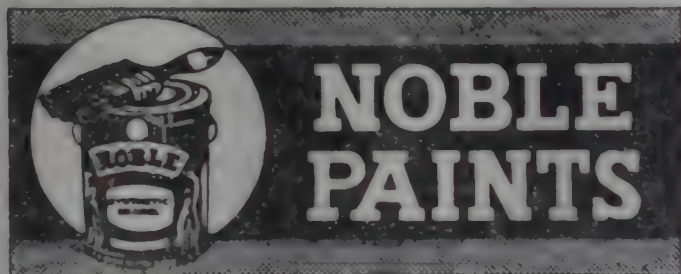
Indianite Insulation Co. of India.—139, Medows Street, Fort.

Ishverdas Jugmohandas & Co.—Mubarak Manzil, Apollo Street, Fort.

Jenson & Nicholson (India), Ltd.—Mackinnon Mackenzie Building, Ballard Estate, Bombay.

Kalapi Colour Trading Co.—42, Dadyaheth Aglary Lane, near G.T. High School, Bombay 2.

Kanthawala, N., & Co.—77, Medows Street, Fort.



(ESTD. 1910)

CHIEF STOCKISTS

**KAPADIA BROTHERS**

Paint Merchants & Paintings Contractors of Repute

81, ABDUL REHMAN STREET, BOMBAY 3.

Gram: "DECORATORS".

Phone: 324108.

KAPADIA BROTHERS.—81, Abdul Rehman Street, Bombay 3. "Painting Contractors of Repute" also Dealers in: Paints, Enamels, Distempers, Plastic Emulsion Paints, etc. Chief Stockists of "Noble Paints." Phone: 74868. Grams: "DECORATORS."

SIGMA PAINTS LIMITED.—221, Dadabhoy Naoroji Road, Bombay 1. Post Box No. 1406. Grams: "MACHPAINTS." Phone: 264687. Works: Mogra, Andheri. Manufacturers of Enamels, Paints, Varnishes, Distempers, Dry Colours, Insulating Materials and Waterproofing Compound, etc.

Mahomedbhoy Abdulhusein & Bros.—Opp. Ram Mandir, Nagdevi Street.

Munshi & Co.—48-A, Abdul Rehman Street, Bombay 3.

Narotandas & Co.—179-A, Abdul Rehman Street, Bombay 3.

National India Engineering Co., Ltd.—7-10, Elphinstone Circle, Fort.

Nazarally Mulla Jivaji & Co.—116, Musjid Bunder Road.

Nazarally Samsuddin & Sons.—283, Sheikh Memon Street.

NEW ERA PAINT WORKS (Estd. 1934).—Opp. Byculla Station, Bombay 27. Top Quality Paints, Enamels, Plastic Rubberized, Synthetics, Industrial Coatings and Professional Decorative Painting Contractors. Phone: 373679. Grams: "NEWERA."

New Mahaluxmi Oil Mills.—37, Frere Road, Bombay 9.



**Noble Paint & Varnish Co. Private Limited**

Fergusson Road, Lower Parel, Bombay 13. Phone: 373123/4

Chief Selling Agents:

**JOHN FLEMING & CO. PRIVATE LTD.**

21, BASTION ROAD, FORT, BOMBAY 1. Phone: 261153

Pallonji, M., & Co.—87, Abdul Rehman Street.

**PAULSON PAINT  
CELLULOSE WORKS**

Office:  
Phone: 521141  
Factory: 522507  
Grams:  
"EMBOSSSED"

Behind R. K. Studio, Chembur, Bombay 71.

Manufacturers of:

"WATERLOCK" Cement, Waterproofing Compound, N. C. Lacquers, Enamels, Paints, Varnishes, Oxide Colours for Cement Tiles, "Flora" Synthetic and Stoving Enamels, Distempers, Industrial and Building Paints, "Woodrescu", Floracem etc.

Premier Acid & Chemical Co.—12, Mirza Ally Street, Imamwada Road, near Bhendi Bazar.

RAJKAMAL SUPPLYING STORES.—295, Abdul Rehman Street, Bombay 3. Phone: 321895. Grams: "RAJPAINT." Direct Importers and Stockists of Paints, Dry Colours, Brushes and Artist's Materials. Manufacturers of Chromes, Lakes, Dry Distemper & Poster Colours.

Ratanji, H. J., & Co.—Shapur House, 114, Cawasji Patel Street, Fort.

Real Paint & Hardware Mart.—105, C. P. Tank Road, Bombay 4.

Salehbbhoy Tyebbhoy & Co. (Estd. 1865).—Tyebji Building, 93, Nagdevi Street, Bombay 3.

**SAURASHTRA PAINTS PRIVATE LTD.**

Authorised Manufacturers in India for

**COOK & DUNN PAINT CORPORATION**  
Newark, New Jersey, U.S.A.

Makers of Harmony Colours, Decorative Paints, Industrial & Maintenance Paints and Finishes, and Famous Marine Paints

Bombay Office:

Taj Building, Ground Floor, Wallace Street, Bombay 1.

Tel: 261996

Grams: "GUMBRUSH"

Head Office & Factory:

Bedi Port Road, Jamnagar, Gujarat.

Tel: JAMNAGAR 15

Grams: "MERCOCHEM"

Shaw Wallace & Co., Ltd.—3, Wittet Road, Ballard Estate.

SHALIMAR PAINTS LIMITED.—Hamilton House, 1st Floor, Graham Road, Ballard Estate, P.O. Box No. 1516, Bombay 1. Phone: 265012.

Shivchand Amritlal & Co., Ltd., B.—Fort Chambers, Hamam Street, Fort.



**STAR PAINT & OIL INDUSTRIES.**—Crescent Chambers, 56, Tamarind Lane, Bombay 1. Mfrs. of Industrial & Marine Paints & Synthetic Enamels. Specialists in "SILVEX" Aluminium Paint. Multi-purpose, Heatex Aluminium Paint, High Temperature Heat Resisting upto 1200°F. and Rubberex Rubber Paint (for Chemical Resisting). Grams: "STARPAINT." Phone: 253493.

**SUNBEAM COLOUR WORKS.**—Specialists in the Manufacture of High Class Poster Colours, Paste Colours, Lakes, Chromes & Other Dry Colours. Asha Studio Compound, Sion-Trombay Road, Chembur, Bombay 71. Phone: 321895. Grams: "RAJPAINT." Factory: 522140.

**Tyebally Dawoodbhai Rangwala.**—29, Kika Street, Bombay 4. Turner, Morrison & Co., Ltd.—16, Bank Street.

**WAKEFIELD PAINTS PRIVATE LIMITED.**—"Dhan-Nur", 15/16, Sir Phirozshah Mehta Road, Fort, Bombay 1 (India). Grams: "WAKEPAINT." Phone: 264061. Manufacturers of "Synolac" Synthetic Enamels, Plastic Emulsion Paints and Industrial Finishes.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Bombay.

## PAPER & BOARD MILL MACHINERY MFRS. & SUPPLIERS

**GUNVANTRAY & COMPANY.**—Crescent Chambers, 1st Floor, Tamarind Lane, Bombay 1. Phone: 254684. Grams: "GUNARAYCO."

**JASHVANT C. SHAH & CO.**—Navroz Bang, Navrozi Lane, Ghatkopar, Bombay 77. India's Foremost Indenting House. Sole Agents for India for: The World Famous "E.G.D." Moisture Measuring and Controlling Automatic Electric Equipments. (For Details Please see Commercial Firms Section).

**Kilburn & Co. Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Bombay.

**WILLIAMS G. & CO., PRIVATE LTD.**—"Advent," 8th Floor, 12 A, Foreshore Road, Backbay Reclamation, Bombay 1. Phones: 213281 & 213182. Grams: "BLANWIRE."

## PAPER MANUFACTURERS

**SUN COATED PAPER CO.**—Janmahaboomi Chambers, Fort Street, Bombay 1. Phone: 262810 (Paper Manufacturers).

## PAPER BAGS MFRS.

**NATIONAL PAPER BAG CO.**—168, Bhimpura, Chinch Bunder, Bombay 9. Phone: 333239. Grams: "PAPERBAG." Manufacturers of Paper Bags, Plastic Bags, Carrier Bags, etc. Also Plastic Sealing Machine & Gum Tape Machine.

## PAPER BOX MFRS.

**Hindustan Paper Box Mfg. Co.**—275-79, Bellasis Road, Bombay 8.

**KADRI PAPER BOX FACTORY.**—30, Mohamedally Road, Bombay 3. Phone: 332856. Cardboard and Corrugated Board Boxes of every Size and description with printing if required and Cardboard Tubes for Calendars. Grams: "BOXWORKS."

## PAPER CONVERTORS

**BAKER & CO. PRIVATE LTD.**—Oomrigar Building, 1st Floor, Opp. Crawford Market, Bombay 3. Phone: 324984. Grams: "BAKERCO." Factory at 66, Off Haines Road, Worli, Bombay 18. Manufacturers of Paper Plates, Ice Cream and Drinking Cups, Gift Boxes, Fancy Wrapping Paper, Paper doilies, Paper Napkins & Flexible Packaging. Dealers in Bakery & Confectionery Machinery, etc.

**IDEAL WRAPPERS PRIVATE LTD.**—Advani Chambers, Sir Phirozshah Mehta Road, Fort, Bombay. Phones: Office: 261061-2; Factory: 591444. Grams: "LAMINATED." Manufacturers of "Himalaya" Drinking Straws.

**National Cardware Manufacturing Co.**—Victoria Mill Compound, Gamdevi, Bombay 7. Phone: 75552.

## PAPER MERCHANTS

**ABDULLABHAI FIDAALLI & CO.** (Estd. 1890).—18, Princess Street, Bombay 2. Indenting Agents & Stockists of all kinds of Paper, Boards and Newsprint. Phones: 39407 & 29977. Grams: "PAPERPORT."

**Advani, J. B., & Co., Ltd.**—Advani Chambers, Top Floor, Sir Phirozshah Mehta Road, Fort.

**Ajit Paper Mart.**—65/67, Sutar Chawl, Bombay 2.

**Akbarally Abdulhussain & Co.**—19, Sutar Chawl, Bombay 2.

**Ambalal Dharamchand & Co.**—1, Esaji Street, Vadgadi, Bombay 3.

**Amritlal, K., & Co.**—27-29, Mirza Street, Parsi Galli.

**Asiatic Paper Company.**—56, Sutar Chawl, Bombay 2.

**ASOK BROTHERS PRIVATE LTD.**—104, Apollo Street, Fort. Phone: 254329. Grams: "ASOKBROS." Importers of all sorts of Paper and Boards.

**Associated Agencies (Bombay).**—47, Podar Chambers, Parsi Bazar Street, Fort.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Bombay 1.

**Bansil Dhar Kapoor & Sons.**—73-75, Mirza Street, 3rd Floor, Bombay 3.

**Beardell, W. A., & Co., Ltd.**—15-16, Sir Phirozshah Mehta Road, Fort.

**Bhargava & Co., K. C.**—P. Box No. 19, Bombay 1.

**BHARAT PAPER MART (Estd. 1932).**—Bharat Bhuvan, 51, Sutar Chawl, Bombay 2. Grams: "GLAZE." P.O. Box No. 2245. Phone: Office: 325329. Res.: 355227. Distributors for Titaghur Paper Mills, India Paper Pulp Co. and Bengal Paper Mill Co. Ltd. Calcutta.

**BOMBAY SALES AGENCIES.**—51-52, Podar Chambers, Parsi Bazar Street, Bombay 1. Phones: 253113 & 254465. Grams: "PANQUICK." Stockists for West Coast Paper Mills Ltd., Dandeli & Sirpur Paper Mills Ltd., Sirpur.

**Bombay Stationery Mart.**—7-A, Sir Phirozshah Mehta Road, Fort.

**Bombay Trading Co.**—"Dhun-Nur," Sir Phirozshah Mehta Road, Fort.

**Bombay United Agencies, Ltd.**—21, Western India House, Sir Phirozshah Mehta Road, Fort.

**Cama, Norton & Co.**—23, Medows Street, Fort.

**Chalasani & Co.**—Noble Chambers, Parsi Bazar Street, Fort.

**Chhaganlal Keshavjee.**—22-A, Parsi Bazar Street, Fort.

**Chimanlal & Co.**—38/42, Shamsett Street, Bombay.

**CHIMANLAL PAPER COMPANY.**—Importers of High Grade Papers, Boards and Mill Representatives, 1st Floor, Macmillan Building, Dr. Dadabhoi Naoroji Road, Fort, Bombay. Grams: "SELECTION." Phones: 262041/42, 262210 and 532060 (Residence).

**C. T. Mehta Bros.**—Noble Chambers, Parsi Bazar Street, Fort, Bombay 1.

**D. R. Patodia & Co.**—Warden House, Sir Phirozshah Mehta Road, Fort, Bombay.

**Deccan Paper Mart.**—52, Mirza Street.

**Dharia, R., & Co.**—Sutar Chawl, Bombay 2.

**Dilaj & Co.**—20, Hamam Street, Fort.

**EAST INDIA PAPER CO.**—Khorshed Building, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phones: 262301 & 264069. Grams: "INDIAPRINT." Importers of all varieties of papers—Sole Distributors of the BALLARPUR Paper & Strawboard Mills Ltd., for Bombay, Bengal & Assam and of "WISDOM" Exercise Books for Bombay, Mysore & whole of South India—Distributors for Bombay of the Nepa Mills. Branches at: Calcutta, Ahmedabad & Poona.

**Eastern Paper Co., Ltd.**—No. 44, Sutar Chawl.

**Elof Hansson Agency Ltd.**—Adelphi House, 2, Queen's Road, Bombay.

**Empire Traders.**—Stationers, Printers & Paper Merchants, 18, Hassan Chambers, Parsi Bazar Street, Fort.

**Fidakhosein Shamsuddin & Sons.**—15-17, Mirza Street, Parsi Gully, Bombay 3.

**FINLAY, JAMES & CO., LTD.**—Chartered Bank Bldg., Mahatma Gandhi Road, Fort, Post Box No. 73, Bombay 1. Phone Nos. 251255-59.

**Friends Paper Store.**—299, Abdul Rehman Street, Opp. Safe Co-operative Bank Ltd., Bombay 3.

**GANDHI BROTHERS.**—203, Dr. Dadabhoi Naoroji Road, Bombay 1. Phone: 261345. Wholesale Dealers in all kinds of Paper & Boards & Manufacturers of Gum, Vynatite Coated Papers.

**GENERAL PAPER TRADERS.**—16, Noble Chambers, Parsi Bazar Street, Fort, Bombay 1. Phone: 256477. Grams: "FASHFAB." Distributor: Sirpur Paper Mills Ltd. (H.D.).

**GEORGE F. HITCHMAN.**—Waterloo Mansions, Opp. Museum, Bombay 1. Phone: 212173. Grams: "INDOPAPER." Paper Merchants & Manufacturers' Representatives; Parsons & Whittemore Ltd., London.

**Gets Bros. & Co.**—Western India House, Sir Phirozshah Mehta Road, Fort.

**Great Eastern Trading Co.**—107, Cawasji Patel Street, Fort.

**Hardcastle, Wand & Co., Ltd.**—Alice Building, Hornby Road.

**Hevelwala Paper Mart.**—"Zainab House," 34-36, Mirza Street, Bombay 3.

**Hosseini & Bros., M. A.**—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**India Paper Corporation.**—64, Sutar Chawl, Bombay 2.



**INDULAL & COMPANY.**—11 45, Tamarind Lane, Bombay 1. Dealers in Paper, Boards & Gelatine Papers. Agents, Meerut Straw Board; Mills Branch: Kapasia Bazar, Ahmedabad. Sub-Distributors: Mandya National Paper Mills for Gujarat State. Phones: 255655 & 503430.

**International Impex Corporation.**—18, Motilal Jamnadas Building, 64, Sutar Chawl, Bombay 2. Phone: 23566. Grams: "INTIMEX-COR."

**International Paper Co.**—26 People's Building, Sir Phirozshah Mehta Road, Fort.

**JAI DAYAL KAPUR.**—Distributors for Shree Gopal Paper Mills Ltd., Jagadhari and Ballarpur Paper & Straw Board Mills Ltd., 31, Sutar Chawl, Bombay 2. Phone: 325667 and 328161. Grams: "JAIKAPSO."

**James Finlay & Co., Ltd.**—Mahatma Gandhi Road, Bombay 1. **J. N. Singh & Co. Private Ltd.**—63, Princess Street, Bombay 2.

**Kanthawala, M., & Co.**—77, Meadows Street, Fort.

**Kikaboy Chandabhoi.**—53-55, Mangaldas Road, Bombay 2. Phone: 24601. Grams: "Creamlaid."

**Kilburn & Co. Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Bombay.

**Ktmex (India) Ltd.**—47, Tamarind Lane, Fort, Bombay.

**KOSMOS PAPER STORES, THE.**—57-A, Khadilkar Road, Bombay 4. Phone: 351901. Grams: "KOSMOSPAP." Importers of Paper and Boards.

**LAXMI COMMERCIAL CO.**—44, Mirza Street, 1st Floor, Bombay 3. Phone: 324716. Grams: "LAXMIPAPER." Importers & Paper Merchants. Sole Agents for Maharashtra for G. S. Mandip Paper Mills Private Ltd.

**M. A. Desai & Co.**—106, Meadows Street, Post Box No. 1119, Fort, Bombay.

**MAEVY & COMPANY.**—Nawab Building, 4th Floor, 327, Hornby Road, Fort, Bombay. Phone: 252235.

**MAHESH PAPER MART.**—13, 2nd Aglary Lane, Dhanji Street, Bombay 3. Phone: 326691. Grams: "MANTHAN." Sole Agents for Mahalaxmi Board & Paper Industries, Bhavnagar.

**MAHOMEDALLY HEBATBOY & CO.**—15, Mirza Street, Bombay 3. Dealers in all kinds of Indian Papers, Stationery and Strawboard, Printing Inks, etc. Phone: 325824. Grams: "TAHERI."

**Model Art Printery Ltd.**—4, Nanabhai Lane, off Churchgate Street, Fort.

**Mohamedali Abdulhusein.**—63, Mirza Street, Bombay 3.

**MULTANI PAPER MART.**—302, Kalbadevi Road, Bombay 2. Shop: 29, Sutar Chawl, Bombay 2. Phones: 324966 & 23705. Grams: "BHASIN."

**Natverial & Bros.**—40, Sutar Chawl, Bombay 2.

**Noble Paper Mart.**—Hassan Chambers, Parsee Bazar Street, Fort, Bombay.

**NOBLE STATIONERY MART.**—Parsee Bazar Street, Fort, Bombay 1. Phone: 254749. Grams: "CELLOTAPE." Importers and Dealers in all varieties of Papers, Boards and Stationery.

**Ochavial & Bros.**—62, Sutar Chawl.

**PARDIWALA PAPER MART.**—32A, Parsee Bazar Street, Fort. Phone: 251444. Grams: "PAPERMART." The Popular House for Paper, Boards, Inks, Printing Materials and Book Binding Cloth. Stockists of Titagbur Mills Paper and Hooghly Printing Inks. Rohit Pulp & Paper Mills Ltd.

**Pavri Sons & Co.**—95-97, Bazar Gate Street, Fort.

**PIMCO SALES AGENCIES.**—102/104, Dhanji Street, Bombay 3. Phone: 321543. Grams: "FILEBOARD." Sole Distributors for Papco Mills, Khopoli & Shree Gopal Paper Mill.

**P. Kirpalani & Co.**—Bulakhidas Building, 11, Vitthalidas Road, Bombay 2.

**Prabhat Trading Company.**—Vithal Sayana Building No. 2, Lohar Chawl, Bombay 2.

**Praful Paper Mart.**—54, Sutar Chawl, Bombay 2.

**PRAHLADRAI DALMIA & SONS.**—51-52, Podar Chambers, Parsee Bazar Street, Fort, Bombay 1. Phone: 253113 & 254465. Grams: "PANQUICK." Authorised distributors for paper & boards manufactured by Rohtas Industries Ltd., Dalmianagar.

**Ratilal P. Mehta & Co.**—65, Sutar Chawl, Bombay 2.

**R. B. Shivdasani & Co.**—73, Bombay Mutual Building, Hornby Road, Fort, Bombay 1.

**R. Gulambusen & Bros.**—41-43, Mirza Street, Parsee Gully.

**R. Kantilal & Co.**—Zaveri Bhuvan, 2nd Aglary Lane, Parsee Gully, Bombay 3.

**Rowlandson Bros. (Estd. 1927).**—Podar Chambers, Parsee Bazar Street, Fort, Bombay.

**ROYAL PAPER STORES.**—Mapla Bldg., 187-89, Abdul Rehman Street, Bombay 3. Phone: 321103.

**S. Kumar & Co.**—People's Buildings, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**SAIF & CO.**—36, Sutar Chawl, Bombay 2. Phone: 325787. Grams: "PRIMEPAPER." Kalbadevi. Importers & Stockists of all kinds of Papers & Boards. Mfrs. of Blue Cloth Lined Papers, Rolls & Envelopes, Gummed Paper & Plastic Coated Papers, etc. and Butterfly Brand Tinsel (Jari) Powder Silver & Coloured.

**Sales Corporation.**—119/112, Dhanji Street, Bombay 3. Phone: 21559. Grams: "SALESCO."

**Shah & Company.**—103, New Citizen Bank House, Palton Road, Bombay.

**Shambhulal A. Shah & Co.**—Podar Chambers, Parsee Bazar Street, Fort.

**Shantilal Shah & Co.**—Bombay Mutual Annex, 17, Gunbow Street, Fort.

**Shree Trading Co.**—259, Girgaum Road, Bombay 4.

**SOUTHERN INDIA TRADING CORPORATION.**—Himalaya House, Hornby Road, Bombay 1. Phone: 261028. Grams: "SOUTRADES." Dealers in Papers, Boards, Piece-goods and Empty Gunny bags.

**Spicers (Export), Ltd.**—Imperial Chambers, Wilson Road, Ballard Estate.

**Standard Paper Co.**—72-74, Sutar Chawl.

**Subodh Indent Agency.**—44, Kumar Villas, Mangalwadi, Girgaum.

**Sultanali Mohammadali (Estd. 1895).**—148, Sarang Street, Bombay 3.

**SUPERIOR STATIONERY MART LTD.**—117, Nagindas Master Road, (Meadows Street), Fort. Phone: 25-2398. Grams: "LOVELINESS." Printers and Paper Merchants.

**Swastik Paper Mart.**—54, Sutar Chawl, Bombay 2.

**United Company.**—Peerbhoy Building, 80, Princess Street, Bombay 2.

**United Corporation.**—National Indian Life Building, 59, Forbes Street, Fort.

**Variety Paper Co.**—Mahar House, 15, Cawasji Patel Street, Fort, Bombay.

**WIGGINS TEAPE & ALEX. PIRIE BRANCH OF TRIBENI TISSUES PVT. LTD.**—Paper Merchants, Kamani Chambers, Nicol Road, Ballard Estate. Telegrams: "WINCHMORE." Phone No. 26-1622.

## PAPER MILLS

**WEST COAST PAPER MILLS LTD.**—Regd. Office: Shree Nivas House, Waudby Road, Bombay 1. Phones: 268241, 288245, 261224, 264456. Mills at Dandeli, North Kanara Dist. Manufacturers of Writing, Printing & Kraft varieties.

## PATENT ATTORNEYS

**PURSHOTTAMDAS GOKULDAS.**—6th Floor, Khorshed Bldg., Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 265014 & 265172. Grams: "CONCOLABRO." Consulting Engineers & Patent Attorneys, Inventions, Patents, Design, Trade-marks and Industrial Planning. Ask for Free Brochure on "Patents & Trade-marks."

## PEARLS (SIMULATED) MANUFACTURERS

For:

Simulated Pearls

Pearl Necklaces

Costume Jewellery

Glass Beads—

Asia's Largest Manufacturers

GOLDFILLED.

**GOLDFILLED MERCANTILE CO.,**  
13/15, BASTION ROAD, FORT, BOMBAY.

## PENCIL MANUFACTURER

**HINDUSTAN PENCILS PRIVATE LTD.**—111/112, Himalaya House, Phalton Road, Bombay 1. Phone: 261972. Grams: "WRITESFINE."





## PERFORATED METAL SHEETS MFRS.

**HARISHCHANDRA & CO., JALIWALA.**—233, Abdul Rehman Street (opp. Sutar Chawl), Bombay 3. Manufacturers of Perforated Metal Sheets of all kinds, and Stockist of Welded Mes, Expanded Metals, Wire Netting of all kinds. On Govt., Railway & Municipal Lists. Phones : 322907 & 323161. Grams : "HARIJALI."

**S. MEHTA & CO.**—Anees Chambers, Carnac Road, Bombay 1. Phone : 263001. Grams : "DUTYBOUND". Industrial Wire Netting and Perforated Metals, Stainless Steel Wire Nettings, Monel and Metal Wire Nettings; Importers, Exporters and Merchants.

## PERFUMERS &amp; PERFUMERY RAW MATERIALS

**A. BOAKE, ROBERTS & CO. (INDIA) LTD.**—Fourth Floor, Harilela House, Mint Road, Fort, Bombay 1 (BR.). Phone : 266180; Grams : "FLAVAROM." Suppliers of Quality Perfumes for Agarbatties, Hair Oils, Face Talc Powders, and Perfumes for all type of cosmetics. Head Office : Madras. Branch at Calcutta.

**Ahmed, D., & Sons.**—Teher Mansion, 10-A, Nepean Sea Road, Bombay 26.

**Akbarally Ebrahimji Pharmacy & Department Stores.**—45/47, Veer Nariman Road, Bombay.

**Allwyns Private Ltd.**—92-94, Ardeshir Dady Street, Vithalbhai Patel Road, Bombay 4.

**Anil Trading Co.**—Sharaf Mansion, 32, Princess Street, Bombay 2.

**AROMATIC PRODUCTS & CHEMICALS PRIVATE LTD.**—42, Prospect Chambers Annexe, Dr. Dadabhai Naoroji Road, Fort. Phone : 253151. Grams : "DISCOVERY." Stockists of Imported Perfumery, Raw Materials and Manufacturers of Perfume Compounds.

**B. C. PATEL & CO.**—Devkaran Building, Princess Street, Bombay 2. Stockists of Aromatic Chemicals, Essential Oils & Perfumery Compounds. Phone : 20366. Grams : "SNEHALATA."

**Bhagat & Sons.**—21-23, Shamset Street, Bombay 2.

**Bhalchandra Upasani.**—338, Samuel Street, P.B. No. 3268, Bombay 3.

**Bombay Agarbatti Co.**—Simplex Building, Pawwalla Street, near Krishna Cinema, Bombay 4.

**Bombay Chemicals Private Ltd.**—129, Mahatma Gandhi Road, Bombay 1.

**Bombay Perfumery Co.**—Devkaran Mansion, Princess Street.

**CALCUTTA ESSENCE SUPPLY CO.**—Mulchand Mansion, 1st Floor, Princess Street, Bombay 2. Grams : "SUPRALUX." Phone : 23623. Dealers & Importers of Essential Oils, Aromatic Chemicals & Perfumery Compounds. Branch at : 41, Ezra Street, Calcutta 1.

**Chavannes & Co., Private Ltd.**—P.B. No. 552, Mercantile Chambers, Graham Road, Ballard Estate, Bombay 1.

**Chimanlal Maganlal & Co.**—4, Mangaldas Road, Princess Street, Bombay 2.

**Chunilal Prabhudas & Co., (Bombay) Private Ltd.**—211-12, Himalaya House, Palton Road, Bombay 1.

**Colaba Drug Stores.**—Namdar Manzil, Colaba Road, Bombay 5.

**Coryse-Salome, Paris.**—Regal Building, Apollo Bunder.

**Dalal Bros.**—74, Swadeshi Market, Kalbadevi Road, Bombay 2.

**M. C. DAVAR & CO.**—143, Princess Street, Bombay 2. Phone : 39752. Grams : "EMCIDAVAR." Aromatic Chemicals, Essential Oils and perfumery materials. Agents for Esrolko Ltd. (Flora), Switzerland.

**D. D. Shah & Co.**—Damodar Building, 105, Princess Street, Bombay 2.

**Derby & Co.**—P. B. Press Building, 299, Frere Road, Fort.

**D. G. Gore.**—31, Mangaldas Road, Princess Street, Bombay 2.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD.**—Wavell House, Graham Road, Ballard Estate, Bombay 1. Phone : 26-2711 (8 lines). Machine Works : Tank Road, Bombay 33 DD. Phone : 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**Eastern Aromatics.**—105, Hindu Colony, 4th Road, Dadar, Bombay 14.

**Enamdar Trading Co.**—Devkaran Mansion, 63, Princess Street, Bombay 2.

**Ethical Products (India) Private Ltd.**—Advani Chambers, Sir Phirozshah Mehta Road, Bombay 1.

**Eve Fabrics Private Ltd.**—Indu House, Dougall Road, Ballard Estate, Bombay.

**Fedco Private Ltd.**—Mafatlal House, Backbay Reclamation, Bombay 1.

**Foreign Scent Supplying Syndicate.**—Santa Cruz, Bombay 23.

**General Import Co. (India).**—Keshav Baug, 102, Princess Street, Bombay 2.

**GOLDENSUN MANUFACTURING CO.**—Distillers & Manufacturers of Highly Concentrated Fruit & Flower Essences & Essential Oils, Perfume, Compounds, etc. Bansilal Building, 64-C, Girgaum Road, Bombay 4. Sales Office : Mulchand Mansion, Princess Street, Bombay 2.

**Gore, D. G.**—31, Mangaldas Road, Bombay 2.

**Grand Bazar.**—25, Colaba Causeway, Bombay 1.

**Gujarat Essence Mart.**—Keshav Baug, 25, Princess Street, Bombay 2.

**Gulab Singh Johrimal.**—62-62A, Marwarl Bazar, Bombay 2.

**G. P. Patel & Co.**—Mansoor Building, 98, Princess Street, Bombay 2.

**GUPTA & CO.**—Shroff Mansion, Princess Street, Bombay 2. Phone : 29859. Grams : "AROMATIC," Bombay 2. Manufacturers & Suppliers of high class Perfumes for Scents, Hair Oil, Snow, Powders, Vaseline, Soaps, Agarbatti, Zarda, Tobacco, Scented Supari, Panmasala and Snuffs, etc.

**Hamil & Co.**—Perfumers. Cutlery Market, Jumma Masjid, Bombay 2.

**Harrison & Co.**—168-170, Cumballa Hill.

**Hasanali Kamroodin.**—10, Shamset Street, Chippi Chawl, Bombay 2.

**Hira, P. H., & Co.**—18-20, Princess Street, Bombay 2.

**H. M. Zakaria & Bros.**—Perfumers, 299, East Sandhurst Road, Bombay 3.

**Ina Trading Co.**—35 Vithaldas Road, Princess Street, Bombay 2.

**International Import Export Co.**—Botawala Building, Elphinstone Circle, Churchgate Street, Bombay 1.

**INDUSTRIAL PERFUMES LTD.**—Head Office : 3rd Floor, Army & Navy Building, Mahatma Gandhi Road, Bombay 1. Phone : 255526/9 Extn. 3 & 4. Factory : Hay Bunder Road, (Tata Oil Mills Compound), Sewri, Bombay 33. Phone : 373331. Manufacturers of Aromatic Chemicals and Perfumery Compounds.

**Jayantilal & Co., B.**—15, Mangaldas Road, Princess Street, Bombay 2.

**J. L. Morison Son & Jones (India) Ltd.**—Contractor Bldg., Ballard Estate, Bombay.

**Kalapi Store.**—53-56, Swadeshi Market, Kalbadevi Road, Bombay 2.

**Kapadia & Co.**—Bell Building, Sir Phirozshah Mehta Road, Bombay 1.

**K. H. Dhamdhare.**—Devkaran Mansion, 45-47, Princess Street, Bombay 2.

**Madon, M. T., & Co.**—The "Corner-shop", 346, Abdul Rehman Street.

**Madon, Sons & Co.**—Madon Mansion, 67, Hughes Road, Bombay 7.

**Manek Chemical Company.**—Bhadaran Nagar, Ghodbunder Road, Malad, Bombay.

**M. B. Thakkar.**—105, Princess Street, Bombay 2.

**M. D. Patel & Co.**—Devkaran Mansion, Princess Street, 1st Floor, Block No. 1, Bombay 2.

**Mehta Nariman & Co.**—"K" Building, Fort Street, Bombay 1.

**Mercantile Essential Oil Co.**—5, Mint Road, Fort, Bombay 1.

**M. M. Khambatwala, C/o C. Narottam & Co.**—Mangaldas Road, Bombay 2.

**MOHINI AGENCY.**—Jakaria Building, Masjid Bunder Road, Bombay 3. Manufacturers of Perfume Compounds "OTTO MOHINI," "PHUL-TORA," etc. and long-lasting "INDIA GATE," "MOHINI ROSE," "MISS INDIA," Agarbattis, Exporters and Importers.

**M. R. Mody.**—Mangaldas Building, Mangaldas Road, Bombay 2.

**Mysore Products Ltd.**—191, Princess Street, Bombay 2.

**Mysore Sugandhi Dhoop Factory.**—Post Box No. 3178, Masjid Bunder Road, Bombay 3.

**Naarden Chemical Works (India) Private Ltd.**—Sevna House, 84, Annie Besant Road, Worli, Bombay 18.

**National Overseas Corporation.**—105, Princess Street, 2nd Floor, Bombay 2.

**National Trading Co.**—190-191, Mangaldas Road, Bombay 2.

**N. R. SHAH & COMPANY.**—Mulchand Mansion, Princess Street, Bombay 2. Phone No. 20093. Grams : "WAL-FLOWER". Perfumers and Perfumery Raw Material Dealers. Dealing in Aromatic Chemicals, B.P., Natural, Synthetic Essential Oils and Perfumery Compounds.

**New Chemical Industries, The.**—Antio House, Edalji Road, Thana.

**NEW INDIA AROMATICS CO.**—Devkaran Mansion No. 3, 45/47, Princess Street, Bombay 2. Grams : "PANILAS", Bombay 2. Manufacturers of Synthetic Essential Oils (Industrial Perfumes) used in Perfuming : Hair Oils, Brilliantine, Face Cream, Scents, Agarbattis, Zarda, Snuff, Chewing Tobacco, Face Powder, Toilet Soaps, etc., etc.

**Otto Manz.**—14, Hamam Street, P.O. Box 1550, Bombay 1.

**PATANWALA PRIVATE LTD.**—182-84, Abdul Rehman Street, Bombay 3. Phone : 322899. Grams : "OTTODUNYA." Dealers in Cosmetics, Toilet Goods and Perfumery.

**P. Chunilal & Co.**—Mulchand Mansion, 2nd Floor, Princess Street, Bombay 2.

**Pearline (Paris).**—Bahman Building, Vir Nariman Street, Fort.

**P. Muncherji & Co.**—10, Hamam Street, Bombay 1.



## TRADES AND PROFESSIONS IN BOMBAY

**Purshottam Laxmichand.**—Bulakhidas Building, Princess Street, Bombay 2.  
**Rayon Industries.**—Shree Hari Nivas, 20, Gowalia Tank Road, Bombay 28.  
**R. H. Mody & Co.**—8, Khanderao Wadi, 1st Floor, Kalbadevi Road, Bombay 2.  
**R. K. Shapurji & Co.**—Prospect Chambers, 319, Hornby Road, Bombay 1.  
**R. Randow.**—Kitab Mahal, Hornby Road, Bombay 1.  
**Sepulchre Brothers (India) Private Ltd.**—Import Dept., Taj Building, Hornby Road, Bombay 1.  
**S. G. Kothari & Co.**—88-90, Abdul Rehman Street, Bombay 3.  
**SIKRI BROTHERS.**—79-E, Princess Street, Bombay No. 2. Phone No. 33494. Grams: "OILMAN".  
**S. Javeri & Co.**—Devkaran Mansion, Block No. 3, 3rd Floor, Princess Street, Bombay 2.  
**S. Parth & Co.**—7, Chandra Mahal, Girgaum, Bombay 2.  
**Trading Co. Late Hegt. & Co., Ltd.**—Indu House, Dougall Road, Ballard Estate, Bombay 1.  
**Tata Oil Mills Company Ltd.**—Bombay House, Bruce Street, Bombay.  
**V. Harkishandas & Co.**—Sharaf Mansion, 32, Princess Street, Bombay 2.  
**Voltas Limited.**—Graham Road, Ballard Estate, Bombay 1.  
**Vrajlal, B., & Co.**—28, Princess Street.  
**Weil Company.**—Stadium House, 2nd Floor, Veer Nariman Road, Bombay 1.

## PEST CONTROL

**CHEMAFUMES PRIVATE LTD.**—Dena Bank Building, 17, Horniman Circle, Bombay 1. Phone: 251627. For White Ants, Household Insect Pests, Fumigation & General Pest Control Service.

**PEST CONTROL (INDIA) PRIVATE LTD.**—36, Yusuf Bldg., Mahatma Gandhi Road, Fort, Bombay 1. Phones: 251546-7. Grams: "PESTCIL". Consulting Entomologists, Termite Controls, Disinfection & Fumigation Service. Member, National Pest Control Association Inc., U.S.A. & Entomological Society of India. Branches: Delhi, Calcutta, Madras, Poona, Coimbatore, Bangalore, Allahabad, Baroda, Vishakapatnam, Hyderabad and Ernakulam.

## PETROLEUM &amp; OIL COMPANIES

**ANDREW YULE & CO. LTD.**—32, Nicol Road, Ballard Estate, Bombay 1. Phone: 261355. Grams: "YULETIDE." Calcutta Office: 8, Clive Row, Calcutta-1.

**Balmer Lawrie & Co. Ltd.**—5, Graham Road, Ballard Estate, Bombay.

**Burmah-Shell Oil Storage and Distributing Co. of India Ltd.**—Burmah-Shell House, Currimbhoy Road, Ballard Estate, Bombay.

**CALTEX (INDIA) LIMITED.**—Caltex House, Ballard Road, Ballard Estate, Bombay 1—BR.

**Esso Standard Eastern Inc.**—Esso Bldg., 17, Jamshedji Tata Road, Bombay 1.

**GULF OIL (INDIA) PRIVATE LIMITED.**—Steelcrete House, 3, Dinsha Watcha Road, Bombay 1. P.O. Box No. 1943. Phone: 245131 (3 lines). Grams: "GULFINDIA." Importers and Distributors of High Grade Lubricants. Area Offices: Ahmedabad, Hyderabad & Indore.

**Indian Oil Company Ltd.**—Clarke Road, Mahalaxmi, Bombay 34. Marketing and Distribution of Petroleum Products.

**Indo-Burma Petroleum Co. Ltd.**—Allahabad Bank Building, Apollo Street, Fort, Bombay.

## PETROLEUM PRODUCTS

**INTERNATIONAL LUBRICANTS PRIVATE LTD.**—Court House, Dhobi Talao, Bombay 2. Phone: 29109. Grams: "LUBRICANTS." Bombay and 12-A, Ashutosh Mukerjee Road, Calcutta 20. Grams: "VISCOSITY." Calcutta. Importers of High grade Motor Oils, Lubricating Oils & Petroleum Jellies.

**SUDAN TRADING CO.**—Dhan-Nur, Phirozshah Mehta Road, Bombay 1. Phones — Office: 262788; Resi.: 472089; Grams: "VANSOBHA." Importers of Liquid Paraffin.

## PHARMACEUTICALS

**ABBOTT LABORATORIES (INDIA) PRIVATE LTD.**—Manufacturing Pharmaceutical Chemists, Jehangir Building, Mahatma Gandhi Road, Fort, G.P.O. Box No. 1334, Bombay. Phone: 283637; Ahmedabad Depot: Amit Chambers, Mirzapur Road, Lal Darwaja, Ahmedabad; Grams: "ABBOTT-LAB." Madras Depot: Ebrahim Mansion, 3rd Floor, 3, Errabalu Chetty Street, P.O. 1224, Madras 1; Grams: "ABBOTT-LAB." Madras; Phone: 24792; Calcutta Depot: 611, Lindsay Street, Calcutta 16. Grams: "ABBOTT-LAB." Phone: 233907.

**Alembic Chemical Works Co., Ltd., Baroda.**—Distributors in Bombay. Alembic Distributors Ltd., Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**AMRUTANJAN LTD.**—249, P. D'Mello Road, Fort, Bombay 1. Phone: 261673. Grams: "AMRUTANJAN." Head Office: Madras. Other Branches: Calcutta and Delhi. Manufacturers of Amrutanjan Pain Balm, Anoleum, Dermal Ointment, Inhalers and Gripe Mixture.

**Anglo-Thal Corporation Ltd.**—Ewart House, Bruce Street, Bombay 1.  
**Asian Drug Corporation.**—Podar Chambers, Parsi Bazar Street, Fort.  
**Asiatic Pharmaceutical and Chemical Corpn.**—10, Bank Street, Fort, Bombay.

**ATUL DRUG HOUSE.**—85, Dr. Annie Besant Road, Worli, Bombay 18. Phone: 376722. Grams: "ATULDRUG." Sole Agents and Manufacturers in India for:—Laboratoires VIFOR S. A., Geneva, Switzerland; Laboratoires HOUDE, Paris, France; COMTECK Laboratories, Bombay, India.

**BEECHAM (INDIA) PRIVATE LTD.**—Manufacturers of Pharmaceuticals and Toiletory Products. Beecham House, Pitamberwadi, Off Lady Jamshedji Road, Mahim, Bombay-16. Phones: 453286 and 453287.

**Bengal Chemical & Pharmaceutical Works Ltd.**—502, Cadell Road, Bombay 28..

**B. A. & BROTHERS (BOMBAY) PRIVATE LTD.**—98, Princess Street, Bombay 2. Phone: 22939. Grams: "BABULINE."

**BIOLOGICAL EVANS LIMITED.**—Das Chambers, 25, Dalal Street, Bombay 1. Phone: 256561, 256907. Manufacturers of Anti-T.B. Drugs, Sera & Bacterial Vaccines together with other fine Chemicals, Glandular Products and a Selection of Evans Medical Specialities.

**Bock, F., & Co.**—Shale Building, Bank Street, Fort.



## BOEHRINGER-KNOLL LIMITED

Manufacturers of:

Chloramphenicol and Pharmaceutical Specialities.

Head Office: United India Bldg., P.M. Road, Bombay 1  
 Phone: 254571/256485.  
 Grams: ALCALOID.

Factory: Kolshet Road, Thana, Maharashtra.  
 Phone: 591363.

**BOMBAY TABLET MANUFACTURING CO.**—Sales Depot: 304, Princess Street, Bombay 2. Grams: "SACCHARIN." Factory: Tablet House, Near Goregaon Talkies, Goregaon (East), Bombay 62. Manufacturers of Pharmaceutical Products.

**BOOTS PURE DRUG CO. (INDIA) LTD.**—Registered Office: 17, Nicol Road, Bombay 1 BR. Phone: 261436. Grams: "DRUGBOOTS." Bombay. Factory: Sion, Bombay 22 DD. Phone: 472444 and 472445. Grams: "BURNOL."

**BRITISH DRUG HOUSES (INDIA) PRIVATE LTD.**—8, Graham Road, Bombay. 1 Phones: 263138, 263139. Grams: "TETRADOME."

**CAMA, NORTON & CO.**—Cama Chambers, 23, Meadows Street, Fort. Phone: 255354. Grams: "CAMANORTON."

**CASTOPHENE MANUFACTURING CO.**—Manufacturers of Fine Household Remedies such as Castophene Laxative, Capirin, Gripe Mixture, Cough Syrups and Tablets, Ointments etc. 85, Dr. Annie Besant Road, Worli, Bombay 18. Phone: 72456. Grams: "CASTOPHENE". Branch at Delhi 6, and Agencies throughout India.

**CHEMICAL, INDUSTRIAL & PHARMACEUTICAL LABORATORIES, LTD. (CIPLA).**—289, Bellasis Road, Byculla, Bombay 8. Phones: 375211, 375212 and 375213.

**CHEMIDYE TRADING CO., PRIVATE LTD.**—Kamer Building, Cawasji Patel Street, Fort, Bombay-1. Phone: 251034.

**CHEMO-PARMA LABORATORIES LTD.**—Manufacturers of Ethical Pharmaceuticals and Fine Chemicals. Regd. Office & Factory: Plot No. C. S. 215, Sewri, Bombay 15. Phone: 443231. Grams: "CHEMOLABS."

**Chundilal Desai & Co.**—Gool Mansion, Homji Street, Fort.



**CIBA OF INDIA LIMITED.**—Royal Insurance Building, 14, J. Tata Road, Bombay 1. Phones: 245031-3 & 246084-6.

**Crookes Laboratories Ltd.**—Court House, Carnac Road, Bombay 2.

**CYANAMID INDIA LTD.**—Producers of Broad Spectrum Antibiotics and other Pharmaceutical Products, Veterinary Products, Antibiotic Feed Supplements as well as Insecticides—Registered Office: "254-D(2), Dr. Annie Besant Road, Worli, Bombay 18 WB. Grams: "CYANAMID", Bombay. Western Regional Office & City Sales Depot: "The International," 16, Queen's Road, Bombay 1 BR. Grams: "LEDERSALES," Factory at P.O. Atul, Via Bulsar. Phone: 29. Grams: "CYANAMID," Bulsar.

**DEY'S MEDICAL STORES PRIVATE LTD.**—Manufacturers and Distributors of Pharmaceuticals. Exclusive distributors of Winthrop products, London & New York. Head Office: 6/2B, Lindsay Street, Calcutta, 16. Bombay Office: Raj Mahal, 3rd Floor, Churchgate Street, Bombay 1. Delhi Office: Netaji Subhas Marg, Daryaganj, Delhi 6. Madras Office: 302, Linghi Chetty Street, Madras 1. Patna Office: Jamal Road, Patna 1. Gauhati Office: Gopal Road, Pan Bazar, Gauhati. Cuttack Office: Ziaullah Building, Buxi Bazar, Cuttack. Branches at: (1) Dey's Medical Stores P. Ltd., Durga Bhawan, 1st Floor, 141/1, Rastrapati Road, Secunderabad 3. Indore Office: 156, Jaora Compound, Indore; (2) Dey's Medical Stores P. Ltd., Amrit Bhavan, Panjabi Mohalla, Nicholson Road, Ambala Cantt. (3) Dey's Medical Stores, P. Ltd., Raghu Kamal Niwas, Mirza Ismail Road, Jaipur.

**DR. BHALCHANDRA LABORATORY.**—21S, Charni Road, Girgaum, Bombay 4. Phone: 354721. Grams: "BHALABS." Manufacturers of High Quality Pharmaceuticals and Ethical Specialities.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 26-2711 (8 lines). Machine Works: Tank Road, Bombay 33 DD. Phone: 378544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**Evans Medical Supplies (India) Ltd.**—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**FAIRDEAL CORPORATION (PRIVATE) LTD., THE.**—Lakshmi Building, Sir P.M. Road, Fort, Bombay 1. Phone: 263593. Pharmaceutical Laboratories: 142-48, Swami Vivekananda Road, Jogeshwari, Bombay 60 (NB). Phone: 572408. Branches: Laha Paint House, 7, Chittaranjan Avenue, Calcutta 13. Phone: 23-3157; 2, Errabalu Chetty Street, Madras 1. Phone: 24835.

**GEOFFREY MANNERS & CO., LTD.**—Manufacturers, Importers & Distributors of Pharmaceuticals, Fine Chemicals, Toilet Requisites and allied products. Head Office: Magnet House, Dougall Road, Ballard Estate, Bombay. Phone Nos. 26-1361-2-3. Bombay Sales Office: Cadell Road, Dadar, Bombay. Phone No. 453428. Factory: Hattersley Mills Estate, Bombay Agra Road, Ghatkopar, Bombay. Phones: 582361-2-3-4-5. Sales Offices: Calcutta, New Delhi, Madras, Bangalore, Gauhati, Kanpur, Faridabad and Patna.

**GERMAN REMEDIES PRIVATE LTD.**—Manufacturers and Importers of Pharmaceuticals, "Adelphi," 119, Queen's Road, G.P.O. Box No. 1945, Bombay 1. Cables: "CHEMAGENT." Telephones: 242293/4. Factory: Andheri Kurla Road, Bombay 69. Phone: 571660.

**Gillanders Arbuthnot & Co., Ltd.**—16, Queen's Road, Bombay 1.

**GLAXO LABORATORIES (INDIA) PRIVATE LTD.**—Dr. Annie Besant Road, Worli, Bombay 18-WB. Grams: "GLAXO-LABS," Bombay, Calcutta, Madras, New Delhi. Phones: Bombay 454311 (8 lines); Calcutta: 45-2015 (3 lines); Madras 80944 (3 lines); New Delhi 76203 (3 lines); P.O. Box Nos. 202 (Bombay 1); 2251 (Calcutta 1); 3211 (Madras 32); 510 (New Delhi); Manufacturers of Baby Foods, Pharmaceuticals, Antibiotics, Corticosteroids, Vaccines and Fine Chemicals.

**HIMALAYA DRUG CO.**—Pharmaceutical Manufacturers, 251, Dr. Dadabhai Naoroji Road, Bombay 1. Phones: 262222 and 262223. Grams: "SERPINA" and at 22-24, Mahatma Gandhi Road, Dehra Dun, U.P. Grams: "SERPINA." Phone: 339.

**Hoechst Pharmaceuticals Private Ltd.**—Dugal House, Backbay Reclamation, Bombay.

**Imperial Chemical Industries (India) Private Ltd.**—Imperial Chemical House, Dougall Road, Ballard Estate.

**IPCA LABORATORIES PVT LIMITED.**—9S, Morland Road, Byculla, Bombay 8; Phones: 374280 & 374638; Grams: "IPCAPHARM." Manufacturers of Pharmaceuticals & Biological Products.

**Indo-Pharma Pharmaceutical Works Private Ltd.**—Kohinoor Road, Dadar, Bombay 14; Managing Director: J. R. Parikh; Tech. Dir., E. Schlesinger.

**International Chemical Co. Ltd.**—Magnet House, Dougall Road, Ballard Estate.

**J. & J. De Chane.**—Star Mansion, 80, Clare Road, Byculla, Bombay. **J. L. Morison Son & Jones (India) Ltd.**—Contractor Building, Ballard Estate, Bombay 1.

**JOHN WYETH & BROTHER LTD.**—(Incorporated in England with Limited Liability). Steelcrete House, Dinshaw Wacha Road, Backbay Reclamation, Bombay 1. Grams: "WYETHICAL." Phone: 246171 (4 lines).

**JUGGAT SINGH'S SON & BRO.**—Regal Cinema Building, 41, Apollo Pier, Bombay 1. Phone: 211812. Grams: "PHYDRUGCO." Manufacturers & Exclusive Distributors for:—E. Tosse & Co., Hamburg, Germany; Maggioni & Co., Milan, Italy; Calmic Ltd., London; Ejice-Bruxelles; Instituto Sieroterapico E. Vaccinogeno 'Scalvo' Institute, Italy; Meinicke Extrakte, Germany; Sessi (Nylon Syringes), France; Lister Institute of Preventive Medicine, England; Pharmaton S.A., Lugano (Switzerland); Montavit Ltd., Austria; U. Ravizza, Italy.

**KEMP & CO., LTD.**—88/C, Old Prabhadevi Road, Bombay 28. Phone: 452251. Grams: "PHARMACY."

**Khatun Valabhdas & Co.**—Indian Globe Chambers, Fort Street, Bombay 1.

**Little's Oriental Balm & Pharmaceuticals Ltd.**—11, Western India House, Sir Phirozshah Mehta Road, Bombay 1.

**Laboratories Grimaud Private Ltd.**—20, Haines Road, Bombay -11.

**LYKA LABS.**—Subhash Road (A), Vile Parle (East), Bombay 57. Manufacturers of Pharmaceutical Specialists and Fine Chemicals. Phones: 571141 & 573211.

**MAC LABORATORIES PRIVATE LTD.**—Great Social Building, Sir Phirozshah Mehta Road, G.P.O. Box No. 1831, Bombay 1. Phone: 265051, Grams: "MACLON." Manufacturing Chemists.

**Manufacturing Analytical & Research Chemists Ltd.**—Esplanade House, Waudby Road, Fort, Bombay.

**MARTIN & HARRIS (PRIVATE) LTD.**—Savoy Chambers, Wallace Street, Bombay 1. Phones: Office 263473/4, Stores 261270. Grams: "ROWLETTE."

**May & Baker (India) Private Ltd.**—Karimjee House, Sir Phirozshah Mehta Road, Fort, Bombay.

**MONSANTO CHEMICALS OF INDIA PRIVATE LTD.**—Wakefield House, Sprott Road, Ballard Estate, Bombay 1. Phone: 26-2624. Grams: "MONSANTO," Bombay. Branch Offices: (1) Monsanto Chemicals of India Private Ltd., 19, Rajendranath Mukherjee Road, Calcutta 1. (2) Monsanto Chemicals of India Private Ltd., 3/8, Asaf Ali Road, near Turkman Gate, New Delhi and (3) Monsanto Chemicals of India Private Ltd., Caithness Hall, 310/311, Linghi Chetty Street, G.T., Madras.

**NAPHA-NATIONAL PHARMACEUTICALS.**—Manufacturers of Pharmaceutical Specialities, C. S. Track Road, Koli Kalyan, Aerodrome, Bombay 29. T. No. 534137.

**NICHOLAS OF INDIA LTD.**—Manufacturers of Pharmaceutical Products:—"ASPRO"—"DIGESTIF RENNIE"—"KRUSCHEN SALTS"—"VACULAX". Contract Manufacturing & Unit Packaging. 11/12, Off Haines Road, Bombay 18. Phone: 370278.

**NYMPH LABORATORIES.**—Manufacturers of Pharmaceuticals 164, Tulsi Pipe Road, Opp. Phoenix Mills, Bombay 13 (BC).

**Okasa Co. Ltd.**—12, Gunbow Street, Fort. Phone: 20206.

**Oriental Pharmaceutical Industries, Ltd.**—Kavarana Building, 64-66, Tulsi Pipe Road, Malim.

**PARKE DAVIS (INDIA) LTD.**—Pharmaceutical Manufacturers, Saki Naka, Bombay 72 AS. Head Office for India and Ceylon. Telegraphic Address: "CASCARA," Bombay 1 BR. Post Box No. 86. Factory: Saki Naka, Bombay 72 AS. Phone: 581691 (9 lines).

**PFIZER PRIVATE LTD.**—Manufacturers & Distributors of a complete range of Pharmaceuticals, Animal Health Products, Pharmaceutical Chemicals, Agro-Chemicals and Nutritional Products; Registered Office: 163, Backbay Reclamation, Bombay 1. Phone: 246031 (10 lines); Offices & Depots: Ahmedabad, Ambala, Bombay, Bangalore, Calcutta, Cuttack, Ernakulam, Gauhati, Indore, Jaipur, Lucknow, Madras, New Delhi, Patna, Secunderabad and Srinagar. (Plant) Powder Works Sunder, Darukhana, Bombay 10. Phones: 376141, 374033-2-178; 178, Industrial Area, Chandigarh (Punjab), (Phone: 995).

**PHARMED PRIVATE LTD.**—25/31, Rope Walk Lane, Fort, Bombay 1. Phone: 254244, 254260. Grams: "PHARMED." Factory: Sion Trombay Road, Deonar, Chembur, Bombay 71. Phone: 521331/32/33.



**RST***Your Guarantee  
in***AMPOULE CUTTING FILES**

- Indigenously made on high precision machines.
- Best quality High-Carbon Steel used.
- Out-come of incessant efforts of foreign qualified engineer.
- Each ampoule cutting file factory inspected for quality control.
- Equivalent to best Foreign makes.
- Approved by well known Indian and Foreign Pharmaceutical manufacturers.
- Quality Electro-plated on most modern German plant.
- Well packed in 1000 Pcs. boxes.

Manufactured by:

**R. S. TRADERS (INDUSTRIAL DIVISION)** 16, Khorshed Bldg., Sir P.M. Rd, Bombay I

Telephone : 262649

Telegrams : ARESTRADER.

Rajni Industrial Corporation.—Kitab Mahal, 192, Hornby Road, Fort.

Roche Products Ltd.—28, Tradeo Road, Bombay—34-W.B.

Sandoz Products Ltd.—8, Wittet Road, Ballard Estate, Fort, Bombay.

Sarabhai Merck Ltd.—110, Meadows Street, Bombay 1.

**SCHERING ASIA G.m.b.H.**—Manufacturers of Pharmaceutical Specialities on behalf of Messrs. Schering Asia G.m.b.H. Berlin, West Germany and Scientific Information Service. India Branch: Post Box 10085, Bombay 1. Phone: 245266. Grams: "SCHERASIA."

Shetty's Pharmaceuticals and Biologicals Ltd.—Sales Office: 361, D. Naoroji Road, Fort.

**SIGMA LABORATORIES.**—Plot No. 43 (South), Wadala, Bombay No. 31. Manufacturers of high quality Pharmaceutical Preparations & Specialities. Phone: 441458. Grams: "SIGMALAB."

Super Pharma Corporation, Ltd.—220, Jumabhai Lalji Building, Pydhonie Road, Bhat Bazar, Bombay 9. P. O. Box 904.

**TATA FISON INDUSTRIES LIMITED.**—Registered Office, Head Office and Spraying Service Section: Ralli House, 21, Ravelin Street, Bombay 1. Phone: 268221; Regional Office: Union Bank Building, Dalal Street, Fort, Bombay 1; Telegraphic Address: "TATFISON," Bombay; Phones: 256284/8. Manufacturers of Agricultural Chemicals and Pesticides and ethical pharmaceuticals. Sole Distributors in India—Pesticides: Kallis India Limited. Pharmaceuticals: Martin & Harris (India) Private Limited.

United Pharmaceutical Co.—157-59, Girgaum Road, Bombay 4. Voltas Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

**WANDER PHARMED LIMITED.**—Lotus House, 33A, New Marine Lines, Bombay 1. Telephone: 244030. Telegrams: "WANDERPAS." Manufacturers of Chemicals (Anti T.B. Drugs) and Pharmaceuticals. Factory: Sion-Trombay Road, Deonar-Chembur, Bombay 71. Telephone: 521807.

**WARNER-HINDUSTAN LIMITED.**—(Chemical Manufacture, Pharmaceuticals & Cosmetics), Savoy Chambers, Wallace Street, Bombay 1. Phone: 262576; Grams: "QUICKPILL." Factory: Uppal, Hyderabad 13.

**WORLI CHEMICAL WORKS.**—216/A, Dr. Annie Besant Road, Bombay 18. Phone: 451240; Grams: "WOHEM."

**PHARMACEUTICAL MACHINERY & OTHER REQUIREMENTS SUPPLIERS**

**ASSOCIATED ENGINEERING CO.**—Sane Building, Nanabhai Lane, Fort, Bombay-1. Telegram: "STELLIDES." Telephone: 252597. Office. 571880 Works. Manufacturers of: Glucose and Starch Plants—Pharmaceutical and Chemical Plants—Industrial Machinery—Chemical Process Equipments and Sugar Machinery.

Batlibol & Company. (Props. Bhogilal Leherchand Pvt. Ltd.).—Regd. Office: Forbes Street, Bombay 1.

**CARLS AERATING MACHINERY CO.**—Diamond Building, Lohar Street, Bombay 2. Essences, Harmless Food Colours, Saccharine, Essential Oils, Crown Corks, Gelatine Powder,

**UNICHEM**A trusted name  
in Pharmaceuticals**UNICHEM LABORATORIES LTD.,  
BOMBAY 60.**



Citric Acid, Tartaric Acid & other Aerated Water and Pharmaceutical Requisites and Sole Distributors of "Rising Sun" Brand Essences. Grams: "MAGCHUCO" (K.B.), Bombay 2. Phone: 22543.

**CENTRAL BOTTLE TRADING CO.**—Green House, Green Street, Fort, Bombay 1. Phone: 255008. Grams: "CENT-BOTTLE." Dealing in Glass Bottles, Neutral, Amber and White Vials, Ampoules, Bakelite Caps, etc.

**ESSENTIAL ENGINEERING CO.**—11, Botawala Building, Elphinstone Circle, Fort. Grams: "ESSENCE." Phone: 252940. Importers, Exporters, Commission Agents and Manufacturers' Representatives.

Gladwyn & Co.—251, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1.

**K. MAHADEV & CO. PRIVATE LTD.**—Datta Mandir Road, Bhandup, Bombay 78. Manufacturers of Chemical & Pharmaceutical Machinery.

**KILBURN & CO. LTD.**—Gresham Assurance House, Pherozshah Mehta Road, Bombay. Phone: 256845. Grams: "TASCONIUM."

**RAJ-DER-KAR & CO.**—Sadhana Rayon House, Dr. Dadabhoy Naoroji Road, Fort, Bombay. For Research Industries. Phone: 262304 (P.B.X.—4 lines). Grams: "TECHLAB."

**YAJNIK ENGINEERING WORKS.**—64, Podar Chambers, 3rd Floor, Parsi Bazar Street, Fort, Bombay 1. Phone: 251471. Grams: "GREND." Chemical & Mechanical Engineers. Tanks, Vessels and Industrial Equipments of Stainless Steel, Aluminium, Copper, Mild Steel also lining of Rubbers Lead and Polyethylene for Chemicals, Pharmaceuticals, Food, Fertilizer and Dairy Industries.

### PHOTOGRAPHERS

Central Camera Company Ltd.—195, Dr. Dadabhoy Naoroji Road, (Hornby Road), Fort, Bombay.

Chitra Studio.—362, Thakurdwar, Bombay 2.

Dave Brothers.—Waterloo Mansion, Apollo Pier, Fort.

Devare & Co.—Cutch Castle, opp. Royal Opera House, Sandhurst Road, Bombay 4.

Eos Studios.—427, Kalbadevi Road, Bombay 2. Phone: 27367.

Felicita Studios.—Roxy Cinema Building, New Queen's Road, Bombay 4.

**FORWARD STUDIO.**—(Kodak-Gold Medalist) for speaking portrait, Still & Cine out-door photography, lovely Finishing and life-like paintings, Designers, Block makers, Photostat & Artistic Frame Makers. For quick & quality service at moderate rates. Duthpateswar Building, Mangalwadi, Girgaum, Bombay 4. Phone: 355225.

Gomes & Lawrie.—Empire Building, 136, Hornby Road.

Industrial Art Studio.—Co-operative Insurance Building, Sir Phirozshah Mehta Road, Fort.

Koor Camera Co.—Jhaveri Nivas, Kennedy Bridge, near Opera House.

Linder Studio.—162, Hornby Road, Fort.

Maxarts.—1st Floor, 203, Hornby Road, Fort, Bombay.

Meera Photo Service.—Rewa Bhuvan, Lady Jamshedji Road, Dadar, Bombay 28.

**MODERN PHOTO STORES AND STUDIO.**—358, Lamington Road, Bombay 7. Next to Lamington Road Police Station.

**PHOTO-MASTERS.**—23, Hamam Street, Bombay 1. Grams: "FOTOMASTER". Phone: 251381. Commercial Photography, 'Photostat' Copies, Microfilming, Filmstrips, Advertising & Documentary Films.

Press Photographer.—162, D. Naoroji Road, Fort.

Rembrandt & Vandykes.—Whiteaways Building, Hornby Road.

Sabnis Photo Studio.—Lady Jamshedji Road, opp. Post Office, Dadar.

Saraswati Art Studio.—Ghamat Terrace, opp. Western Rly. Station, Dadar.

S. Pereira.—Karanjia Building, 653-A, Girgaum Road, Dhobi Talao, Bombay 2.

Tasvir Make-up Photo Studios.—Thakurdwar Tram Terminus, Bombay 2.

**B. B. VARTAK & CO., STUDIO.**—187, Dr. Dadabhoy Naoroji Road (Hornby Road), Fort, Bombay 1; Phone: 262915. The Premier House for all Photographic Requirements, Developing, Printing, Enlarging, Document Copying and Expert Camera Repairs, Portraits Studio.

Virkar, N. V., & Co.—Mohan Building, near Majestic Cinema, Girgaum Road, Bombay 4.

Zaraphkar Photo Studios.—Head Office: 247, Girgaum Road. Branches: Dadar; Malvan; Savantwadi; Vengurla.

### PHOTO-OFFSET

**CLARIDGE, G. & CO. LTD.**—Frere Road, Fort, Bombay 1. Phones: 263201 & 263202; Grams: "EGDIRALC." Letterpress and Offset Printers, Specialists in Packaging, Security Printing and Silk Screen Work.

### PHOTOGRAPHIC MATERIALS IMPORTERS AND DEALERS & MFRS.

Adair Dutt & Co. (India) Ltd.—Syndicate Bank Bldg., Sir Phirozshah Mehta Road, Fort, Bombay.

**AGFA-GEVAERT INDIA LIMITED.**—H.O.: Kasturi Building, Jamshedji Tata Road, Bombay; Phones: 246188 & 246189. Branch Office: 198, Jamshedji Tata Road; Phones: 246071, 245447, 245468. Stores: Sangham Bhuwan, Opp. Strand Cinema, Colaba; Phone: 213480.

**AMA PRIVATE LTD.**—Canada Building, Dr. Dadabhoy Naoroji Road, Fort, Bombay; P.O. Box 556, Phone: 265271 (3 lines); Grams: "AMALIMITED." Branch: Plaza Building, Connaught Place, New Delhi.

Asian Trading Corporation.—1-A, Nazir Building, Calicut Street, Bombay 1.

**BHARAT PHOTO STORES.**—Authorized Photographic Dealers, Gola Lane, Off Jiwanji Lane, Near Central Camera, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Phone No. 265133.

Central Camera Co. Ltd.—195, Dr. Dadabhoy Naoroji Road (Hornby Road), Fort, Bombay.

**CONTINENTAL PHOTO STORES.**—243-45, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone: 262059.

Datta & Co.—Ganga Nivas, Ranade Road, Dadar.

Dave Brothers.—Waterloo Mansion, Apollo Pier, Fort, Bombay.

Devare & Co.—Cutch Castle, opp. Opera House.

Great India Trading Co.—Beaumont Chambers, 27-33, Meadows Street, Fort.

**FORWARD STORES.**—Mangalwadi, Girgaum, Bombay-4. Photographic Wholesalers, Retailers, Quick & True Reproduction of Documents, Life like Portrait Painters, Still and Cine Outdoor Photographer, Courteous Service. Phone: 355225.

**HIRO PHOTO CINE STORES.**—23/C, Phirozshah Mehta Road, Bombay 1. Phone: 253690 & 257352. Photographic goods Dealers.

**ILFORD-SELO (INDIA) PRIVATE LIMITED.**—Cooks Building, Dr. Dadabhoy Naoroji Road. Branches: Calcutta, and Madras.

**KESHO RAM SURINDER NATH.**—321, Commerce House, 3rd Floor, Meadows Street, Bombay 1. Agents for "MI-MOSA," Kiel (West Germany).

**KESHO RAM & SONS (INDIA) PRIVATE LTD.**—314, Commerce House, Meadows Street, Fort, Bombay 1. Grams: "PHOTOPAPER." H.O.: Chandni Chowk, Opp. Dariba, Delhi 6.

**KODAK LIMITED.**—Kodak House, Dr. Dadabhoy Naoroji Road, Fort, Bombay-1-BR. Phone: 26-2604.

Koor Camera Co.—Jhaveri Nivas, Kennedy Bridge, near Opera House.

Koparde & Khandke.—Empire Building, 136, Hornby Road.

Koparde & Wadia.—71, Mahatma Gandhi Road, Fort (opp. Flora Fountain).

**LOKAMANYA PHOTO PRODUCTS.**—26, Gunbow Street, Bombay No. 1. Manufacturers of Photographic Papers.

**MODERN PHOTO STORES & STUDIO.**—358, Lamington Road, Bombay 7, next to Lamington Road Police Station.

**NAYAK & CO.**—Harganga Mahal, Khodadad Circle, Dadar, Bombay 14.

**ORWO PRIVATE LIMITED.**—"ORWO" Film for Photo, Cine and X-ray Colour and Black and White, Stadium House, Churchgate, Bombay 1.

Patel India Ltd.—190, Dr. Dadabhoy Naoroji Road, Fort, Bombay. Photostats, The.—Mherwan Building, Sir Phirozshah Mehta Road, Fort.

Popular Camera Company.—Nawab Building, 327, Hornby Road, Fort.

Ravel Brothers.—185, Princess Street, Bombay 2.

Scientific Instrument Co., Ltd.—Navsari Building, 240, Dr. Dadabhoy Naoroji Road (Hornby Road), Fort, Bombay.

**B. B. VARTAK & CO., STUDIO.**—187, Dr. Dadabhoy Naoroji Road (Hornby Road), Fort, Bombay. Phone: 262915. The Premier House for all Photographic Requirements, Developing, Printing, Enlarging, Document Copying, Expert Camera Repairs, Portraits and Studio.



**"PHOTOSTAT" PRINTS AND MICROFILMING**

**PHOTO-MASTERS.**—23, Hamam Street, Bombay 1. Grams: "FOTOMASTER". Phone: 251381. Commercial Industrial Photography, 'Photostat' Copies, Microfilming, Film Strips, Advertising & Documentary Films.

**PHYSICS & BIOLOGICAL INSTRUMENTS**

**CENTRAL SCIENTIFIC SYNDICATE.**—475, Jagannath Shankerseth Road (Chira Bazar), Bombay 2. Grams: "MAX-SERVE." Dealers in Scientific and Laboratory Requirements, Suppliers of Physics and Biology Instruments.

**INDSALES CORPORATION.**—11, Horniman Circle, Bombay 1. Phone: 253264. Grams: "ANALYTICAL." Laboratory & Industrial Stirrers, Students' Microscopes, etc. for Biology Department, Physics Instruments, Laboratory Apparatus, Polytheneware, Balances, Chemicals & Reagents, Baths, Ovens, Vacuum Pumps, Water Stills etc.

**PICKERS MANUFACTURERS**

**PICKERS LIMITED.**—Manufacturers of Quality Pickers of all sizes and descriptions, 43, Tamarind Lane, 4th Floor, Fort, Bombay. Head Office: Ellis Bridge, Ahmedabad 6. Grams: "COWSIE," Bombay & Ahmedabad. Bombay Office Phone No. 253707.

**PICTURE DEALERS AND FRAME MAKERS**

**Chemould.**—Princess Building, 271, Princess Street, Bombay 2.  
**Joshi, M. A., & Co.**—145-147, Princess Street.  
**Kotkar Bros., M. B.**—373, Girgaum Road, Thakurdwar.  
**Prabha, V., & Co.**—Near Sandhurst Road Tram Terminus, Girgaum.

**PUNDOLE ART GALLERY.**—369/371, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Agents for Chemould Picture Frames. Stockists for Paintings & Prints.

**SATGURU'S FRAME CRAFTS.**—House of Paintings and Frames. Specialists in Photo Framing and Colouring and Original Leaf Paintings, Artistic Wire, Straws, 333, Dr. Dadabhoy Naoroji Road (opp. Thos. Cooks), Fort, Bombay 1. Phone: 254366. Office: Noble Chambers, 17, Ghogha Street, Bombay 1. Factory: 3-A, Old Anjirwadi, Mazagaon, Bombay 10. Phone: 42408.

**PICTURE FRAMES MANUFACTURERS (MOULDING)**

**Chemical Moulding Manufacturing Co., Ltd. (Chemould).**—Ta Building, Hornby Road, Fort.

**SATGURU'S FRAME CRAFTS.**—House of Paintings and Frames. Specialists in Photo Framing and Colouring & Original Leaf Paintings, Artistic Wire, Straws, 333, Dr. Dadabhoy Naoroji Road (opp. Thos. Cooks), Fort, Bombay 1. Phone: 254366. Office: Noble Chambers, 17, Ghogha Street, Bombay 1. Factory: 3-A, Old Anjirwadi, Mazagaon, Bombay 10. Phone: 370179.

**PIECE-GOODS (COTTON, SILK & WOOLLEN)**

**Abdulkarim Abdul Shakur & Co.**—Ganeshwadi, Mulji Jetha Market, Bombay 2.

**Abdulkarim Ibrahim & Co.**—Chandra Chowk (2nd Gulli), Mulji Jetha Market, Bombay 2.

**Ambalal Patel R. & Co.**—Lakhmidas Market, 3rd Gulli, Bombay 2.

**Arun Mahendra & Co.**—Chikhali Gulli, Mulji Jetha Market, Bombay 2.

**Babubhai Lalji & Co.**—Mangaldas Market, 5th Gulli, Bombay 2.

**Babulal Kapurchand.**—Pragraj Gulli, Mulji Jetha Market, Bombay 2.

**Babulal Mohanlal & Co.**—Navi Gulli, Mulji Jetha Market, Bombay 2.

**Babulal Prantal & Bros.**—Dharamraj Gulli, Mulji Jetha Market, Bombay 2.

**Bachubhai & Co.**—Old Hanuman Gulli, Bombay 2.

**Baheramji Limji & Sons.**—Ghadial Gully, Mulji Jetha Market, Bombay 2.

**Balmukund & Co.**—Narayan Chowk, Mulji Jetha Market, Bombay 2.

**Bhaichand Rugnath & Co.**—Narayan Chowk, Mulji Jetha Market, Bombay 2.

**Bharatkumar & Co.**—Govind Chowk, Mulji Jetha Market, Bombay 2.

**Bharatkumar & Co.**—Krashna Chowk, Mulji Jetha Market, Bombay 2.

**Bharat Textile Corporation.**—Krashnaraaj Gulli, Mulji Jetha Market, Bombay 2.

**Bhupatral & Co.**—Sancha Gulli, Mulji Jetha Market, Bombay 2.

**Bhupendra Rajnikant & Co.**—Dadar Gulli, Mulji Jetha Market, Bombay 2.

**Bipinchandra & Bros.**—Chhipi Chawl, Bombay 2.

**Bombay Trading Co., Pvt. Ltd.**—Bombay Mutual Annexe, 17, Gunbow Street, Bombay 1.

**Champaklal & Co.**—Chandra Chowk, Mulji Jetha Market, Bombay 2.

**CHANDARANA BROTHERS.**—Bombay Office: Jaihind Estate Building No. 3C, 2nd Floor, Bhuleshwar, Bombay 2; Head Office: Post Box No. 50; Nellikal Road, Mangalore 1. Wholesale & Retail Piece Goods Merchants.

**Chandrakant Tarachand Badani.**—Building No. 19, Champa Gulli, Bombay 2.

**Chandrakant Vallabhdas & Co.**—Mangaldas Market, 7th Gulli, Bombay 2.

**Chandrakant & Co.**—Navi Gulli, Mulji Jetha Market, Bombay 2.

**Chandrakant Maganlal & Co.**—Narayan Chowk, Mulji Jetha Market, Bombay 2.

**Chandulal Babalal & Co.**—Lakhmidas Market, 2nd Gulli, Bombay 2.

**Chandulal Navnilal & Co.**—Gaumukh Gulli, Mulji Jetha Market, Bombay 2.

**Chandulal Mantilal & Co.**—Swadeshi Market, Radha Gulli, Bombay 2.

**Chatrabhuj Bhaichandbhai & Co.**—40, Hasam Building, Vir Nariman Road, Fort, Bombay 1.

**Chatrabhuj Gordhandas & Co.**—Krashna Chowk, Mulji Jetha Market, Bombay 2.

**Chimanlal Umaji & Sons.**—Ganeshwadi, Mulji Jetha Market, Bombay 2.

**Chimanlal & Sons.**—Chandra Chowk, 8th Gulli, Mulji Jetha Market, Bombay 2.

**Chimanlal Popatlal Shah.**—Diamond Building, Lohar Chawl, Bombay 2.

**Chunilal & Bros.**—Gaumukh Gulli, Mulji Jetha Market, Bombay 2.

**Damodardas Jeramdas & Co.**—Krashna Chowk, Mulji Jetha Market, Bombay 2.

**Desai Pravinchandra Ochhaval & Bros.**—Old Hanuman Gulli, Bombay 2.

**Devdas Hirjee & Co.**—Building No. 22, Vithalwadi, Bombay 2.

**Dev Sharma & Co.**—2, Jai Hind Estate, 3rd Floor, Bhuleshwar, Bombay 2.

**Dhansukhlal & Co.**—Ganeshwadi, Mulji Jetha Market, Bombay 2.

**Dhanvantrai C., & Co.**—Champa Gulli, Bombay 2.

**Dhirajlal Hirjee.**—Madhavrai Gulli, Mulji Jetha Market, Bombay 2.

**Dhirajlal S. Shah & Co.**—Navi Gulli, Mulji Jetha Market, Bombay 2.

**Dhirajlal Vrajilal & Co.**—Champa Gulli, Bombay 2.

**Dilipkumar & Co.**—Ghadial Gully, Mulji Jetha Market, Bombay 2.

**Dineshchandra & Co.**—Pragraj Gulli, Mulji Jetha Market, Bombay 2.

**Doctor C., & Co. Ltd.**—12, Bruce Street, Fort, Bombay 1.

**Dwarkadas & Co.**—Gaumukh Gulli, Mulji Jetha Market, Bombay 2.

**Dwarkadas Keshavlal & Co.**—86, Sugar Chawl, Bombay 2.

**Dwarkadas Meghji (Private) Ltd.**—Swadeshi Market, Bombay 2.

**Ganesh Dyeing & Printing Works.**—Bombay Cotton Mill Compound, Kala Chowki, Bombay 12.

**Ganesh Gangaram & Sons.**—Krashna Chowk, Mulji Jetha Market, Bombay 2.

**Ganeshshanker & Co.**—10/12, Thakeral Building, Old Hanuman Gulli, Bombay 2.

**Gokulesh Cloth Co.**—Office Gulli, Mulji Jetha Market, Bombay 2.

**Gordhan P., & Co.**—Sheikh Memon Street, Bombay 2.

**Gordhandas Amratilal & Co.**—Building No. 28, Champa Gulli, Bombay 2.

**Govindji & Sons.**—Narayan Chowk, Mulji Jetha Market, Bombay 2.

**Govindram Hasanand & Co.**—Chandra Chowk, 3rd Gulli, Mulji Jetha Market, Bombay 2.

**Hansraj Tricumdas.**—Chandra Chowk, Mulji Jetha Market, Bombay 2.

**Haridas N., & Co.**—Ghadial Gully, Mulji Jetha Market, Bombay 2.

**Harilal Kantilal & Co.**—Swadeshi Market, Radha Gulli, Bombay 2.

**Harischandra Ratilal & Co.**—Gordhan Gulli, Mulji Jetha Market, Bombay 2.

**Himatilal Bapulal & Co.**—Navi Gulli, Mulji Jetha Market, Bombay 2.

**Himatilal, H., & Co.**—Sunder Chowk, Mulji Jetha Market, Bombay 2.

**Hind Commercial Co. Ltd., The.**—Building No. 72, Champa Gulli, Bombay 2.

**Indravadan Chunilal & Co.**—Dharamraj Gulli, Mulji Jetha Market, Bombay 2.

**Ishwarlal & Co.**—9, Amar Nivas, Prarthana Samaj, Vithalbhai Patel Road, Bombay 4.

**Jagdish & Co.**—Champa Gulli, Bombay 2.

**Jagjivan Pragji & Co.**—Mangaldas Market, 5th Gulli, Bombay 2.

**Jagjivan Uttamchand & Co.**—No. 45-47, 1st Floor, Bazar Gate Street, Fort, Bombay 1.

**Jamnadas Brothers.**—37, Sutar Bazar, Tambakanta, Bombay 3.

**Jamnadas Bros.**—Sancha Gulli, Mulji Jetha Market, Bombay 2.

**Jamnadas Narandas Bros.**—Parsottam Nivas, 3rd Floor, Block No. 20, Dadyseth Aglary Lane, Kalbadevi, Bombay 2.

**Jashvantlal Dhansukhlal & Co.**—Champa Gulli, Bombay 2.

**Javerilal & Bros.**—Chandra Chowk, Mulji Jetha Market, Bombay 2.

**Jawaharsing Shobhasingh & Co.**—Gaumukh Gulli, Mulji Jetha Market, Bombay 2.

**Jayantilal Nanalal.**—Ghadial Gulli, Mulji Jetha Market, Bombay 2.

**Jayantkumar & Co.**—Dwarkesh Gulli, Mulji Jetha Market, Bombay 2.

**Jayant & Co.**—Swadeshi Market, Maniar Gulli, Bombay 2.

**Jaynarayan & Co.**—Krashnaraaj Gulli, Mulji Jetha Market, Bombay 2.

**Jaybharat Mills Cloth Shop.**—Gordhan Gulli, Mulji Jetha Market, Bombay 2.

**Jashwantlal & Co.**—Sir Vithaldas Gulli, Mulji Jetha Market, Bombay 2.

**Jechand, N., & Co.**—Champa Gulli, Bombay 2.

**Jesukhlal & Co.**—Swadeshi Market, New Gulli, Bombay 2.

**Jethabhai Khatau & Co.**—Krashna Chowk, Mulji Jetha Market, Bombay 2.

**Jethalal V. Dave & Co.**—Building No. 295, Masjid Bunder, Bombay 3.



Jivandas Dayalji & Co.—Govind Gulli, Mulji Jetha Market, Bombay 2.  
 Jivandas Jamnadas & Co.—Chandra Chowk (3rd Gulli), Mulji Jetha Market, Bombay 2.  
 Kakubhai & Co.—Lakhmidas Market, 1st Gulli, Bombay 2.  
 Kanayalal Navnitlal & Co.—Sir Vithaldas Gulli, Mulji Jetha Market, Bombay 2.  
 Kantilal Raichand & Co.—Chandra Chowk, Mulji Jetha Market, Bombay 2.  
 Kantilal Vithaldas & Co.—Ganeshwadi, Mulji Jetha Market, Bombay 2.  
 Kapad Traders Co.—Champa Gulli, Bombay 2.  
 Karsandas Premji & Sons.—Dharamraj Gulli, Mulji Jetha Market, Bombay 2.  
 Laxminarayan Mansukhlal & Co.—Govind Chowk, Mulji Jetha Market, Bombay 2.  
 Madhavji, D., & Sons.—Sancha Gulli, Mulji Jetha Market, Bombay 2.  
 Madhavsingh, J., & Co.—Krashna Chowk, Mulji Jetha Market, Bombay 2.  
 Madhavai Thakersi & Sons.—Govind Chowk, Mulji Jetha Market, Bombay 2.  
 Manilal Gordhandas & Co.—Gordhan Gulli, Mulji Jetha Market, Bombay 2.  
 Manilal Mulji, D., & Co.—Sir Vithaldas Gulli, Mulji Jetha Market, Bombay 2.  
 Manilal Keshavji & Co.—Chandra Chowk, Mulji Jetha Market, Bombay 2.  
 Mansukhlal, L., & Co.—Govind Chowk, Mulji Jetha Market, Bombay 2.  
 Mansukhram, N., & Co.—Office Gulli, Mulji Jetha Market, Bombay 2.  
 Mansukhlal, R. M., & Co.—Gordhan Gulli, Mulji Jetha Market, Bombay 2.  
 Mathuradas Natverlal & Co.—Dadar Gulli, Mulji Jetha Market, Bombay 2.  
 Mehta, H. P., & Co.—Swadeshi Market, New Gulli, Bombay 2.  
 Mehta, J. P., & Co.—Ganeshwadi, Mulji Jetha Market, Bombay 2.  
 Mehta Parekh & Co.—Building No. 98-100, Champa Gulli, Bombay 2.  
 Minis, K. M., & Co.—Jal Chambers, Charni Road, Bombay 4.  
 Mohanlal & Sons.—Building No. 78-84, Champa Gulli, Bombay 2.  
 Mohanlal Gokaldas & Co.—Umakant Mansion, Dabholkar Wadi, Kalbadevi Road, Bombay 2.  
 Mohanlal Maganlal.—Chandra Chowk (6th Gulli), Mulji Jetha Market, Bombay 2.  
 Naginlal, S., & Co.—Sancha Gulli, Mulji Jetha Market, Bombay 2.  
 Nanalal Amarchand.—Ghadial Gulli, Mulji Jetha Market, Bombay 2.  
 Nanchand Mulchand & Co.—Office Gulli, Mulji Jetha Market, Bombay 2.  
 Nandlal & Bros.—Pragraj Gulli, Mulji Jetha Market, Bombay 2.  
 Nandlal & Co.—Sancha Gulli, Mulji Jetha Market, Bombay 2.  
 Nandlal P., & Co.—Swadeshi Market, Radha Gulli, Bombay 2.  
 Nandlal Ladhahbai & Co.—Ghadial Gulli, Mulji Jetha Market, Bombay 2.  
 Narandas, H. B., & Co.—Chandra Chowk (5th Gulli), Mulji Jetha Market, Bombay 2.  
 Narbheram, R., Co.—Pragraj Gulli, Mulji Jetha Market, Bombay 2.  
 Narendra & Co.—Krashnaraaj Gulli, Mulji Jetha Market, Bombay 2.  
 Narandas Maneklal & Co.—Dadar Gulli, Mulji Jetha Market, Bombay 2.  
 Narottamdas Chimanlal & Co. Ltd.—Dadar Gulli, Mulji Jetha Market, Bombay 2.  
 Narottamdas Nanchand & Co.—Dadar Gulli, Mulji Jetha Market, Bombay 2.  
 Narottam Hansraj.—Swadeshi Market, New Gulli, Bombay 2.  
 Nasher, D. M., & Co. Ltd.—Manek Chamber, 1st Marine Lines, Bombay 1.  
 Narsidas, D. & Co.—Dadar Gulli, Mulji Jetha Market, Bombay 2.  
 Natverlal Chunilal & Co.—Sancha Gulli, Mulji Jetha Market, Bombay 2.  
 Nautamlal Zaverchand & Co.—Gaumukh Gulli, Mulji Jetha Market, Bombay 2.  
 Navalchand, P., & Co.—Chandra Chowk (2nd Gulli), Mulji Jetha Market, Bombay 2.  
 Navinchandra Bipinkumar & Co.—Madhavrai Gulli, Mulji Jetha Market, Bombay 2.  
 Navinchandra & Co.—Madhavrai Gulli, Mulji Jetha Market, Bombay 2.  
 Navnitlal & Co.—185, Mulji Jetha Building, Princess Street, Bombay 2.  
 Omkarimal & Co.—Goraj Gulli, Mulji Jetha Market, Bombay 2.  
 Pendse, L., & Co.—196, Charni Road, Bombay 4.  
 Parekh Bros.—Madhavrai Gulli, Mulji Jetha Market, Bombay 2.  
 Parikh, P. J., & Co.—Vithalwadi, Bombay 2.  
 Parsottam Govindji & Sons.—Krashna Chowk, Mulji Jetha Market, Bombay 2.  
 Parsottam Jamnadas & Co.—Govind Chowk, Mulji Jetha Market, Bombay 2.  
 Parsottam Lalji.—Ghadial Gulli, Mulji Jetha Market, Bombay 2.  
 Parsottam Surchand & Co.—Mangaldas Road, Bombay 2.

Patel Ghanshyamdas & Co.—Dharamraj Gulli, Mulji Jetha Market, Bombay 2.  
 Pioneer Piecegoods Co.—Goraj Gulli, Mulji Jetha Market, Bombay 2.  
 Popatlal Juthabhai.—Lakhmidas Market, 3rd Gulli, Bombay 2.  
 Prabhodhchandra & Co.—Ghadial Gulli, Mulji Jetha Market, Bombay 2.  
 Raghunath & Co.—Govind Gulli, Mulji Jetha Market, Bombay 2.  
 Raghunath & Co.—Champa Gulli, Bombay 2.  
 Raghunath Ramchandra Samant & Bros.—Champa Gulli, Bombay 2.  
 Rajnikant Bros.—Dharamraj Gulli, Mulji Jetha Market, Bombay 2.  
 Rajiv & Co.—Sir Vithaldas Gulli, Mulji Jetha Market, Bombay 2.  
 Ramanlal Ratilal & Co.—Chandra Chowk (2nd Gulli), Mulji Jetha Market, Bombay 2.  
 Ramesh & Co.—Girilila Building, Champa Gulli, Bombay 2.  
 Rameshchandra & Co.—Vithalwadi, Bombay 2.  
 Rameshchandra Jamnadas & Co.—Krashnaraaj Gulli, Mulji Jetha Market, Bombay 2.  
 Rameshchandra Kantilal & Co.—Chikhal Gulli, Mulji Jetha Market, Bombay 2.  
 Sanghvi Bros.—29, Bhangwadi, Kalbadevi Road, Bombay 2.  
 Sanghvi Mody & Co.—Lentin Chambers, Dalal Street, Fort, Bombay.  
 Sarabhai, M., & Sons.—Office Gulli, Mulji Jetha Market, Bombay 2.  
 Saralal Laxmichand (Textile).—Sheikh Memon Street, Bombay 2.  
 Shah & Co.—Sancha Gulli, Mulji Jetha Market, Bombay 2.  
 Shah, N. M., & Co.—Lakhmidas Market, 1st Gulli, Bombay 2.  
 Shah, S. B., & Co.—Lakhmidas Market, 2nd Gulli, Bombay 2.  
 Shashikant Jayant & Co.—Navi Gulli, Mulji Jetha Market, Bombay 2.  
 Shamaldas, N. V., & Co.—Chandra Chowk (8th Gulli), Mulji Jetha Market, Bombay 2.  
 Shantilal & Co.—Lakhmidas Market, 3rd Gulli, Bombay 2.  
 Suryakant, K., & Co.—Pragraj Gulli, Mulji Jetha Market, Bombay 2.  
 Sushilkumar & Co., C/o Messrs. Ramniklal Bhikhabhai & Co.—Govind Chowk, Mulji Jetha Market, Bombay 2.  
 Tayabmamad Haji Musa & Co.—Karim Building, Mohamadali Road, Bombay 3.  
 Thakersi Mulji & Co.—Krashna Chowk, Mulji Jetha Market, Bombay 2.  
 Thakkar, M. R., & Co.—Lakhmidas Market, 1st Gulli, Bombay 2.  
 Thana Stores.—Building No. 72, Champa Gulli, Bombay 2.  
 Tribhawan Nemchand & Co.—67, Bazar Gate Street, Fort, Bombay 1.  
 Tulsidas Mohanlal & Co.—Daya Mandir, Masjid Bunder, Bombay 3.  
 Tulsidas V. Patel.—Swadeshi Market, New Gulli, Bombay 2.  
 Udhavdas Mulchand.—Krashna Chowk, Mulji Jetha Market, Bombay 2.  
 Vadilal Limited.—Champa Gulli, Bombay 2.  
 Vadilal Vrajilal & Co.—186, Pirbhai Mansion, 2, Princess Street, Bombay 2.  
 Vallabhram, N., & Co.—Lakhmidas Market, 2nd Gulli, Bombay 2.  
 Vallabhdas Mathuradas & Co.—Sancha Gulli, Mulji Jetha Market, Bombay 2.  
 Vallabhdas Madhavji & Co.—Gaumukh Gulli, Mulji Jetha Market, Bombay 2.  
 Varjivandas Padamsi & Co.—Govind Gulli, Mulji Jetha Market, Bombay 2.  
 Vasani, K., & Co.—Goraj Gulli, Mulji Jetha Market, Bombay 2.  
 Vasanji & Co. Private Ltd.—Building No. 259, Kalbadevi Road, Bombay 2.  
 Vasantlal, J., & Co.—Chandra Chowk, Mulji Jetha Market, Bombay 2.  
 Vasudev Manilal & Co.—Chandra Chowk, Mulji Jetha Market, Bombay 2.  
 Vijaykumar & Co.—Ganeshwadi, Mulji Jetha Market, Bombay 2.  
 Vikas Ltd.—Madhavrai Gulli, Mulji Jetha Market, Bombay 2.  
 Vinodrai & Co.—Sir Vithaldas Gulli, Mulji Jetha Market, Bombay 2.  
 Vinodchandra & Co.—Pragraj Gulli, Mulji Jetha Market, Bombay 2.  
 Vishvnath Bhagwanji.—Chandra Chowk (6th Gulli), Mulji Jetha Market, Bombay 2.  
 Vithaldas, C., & Co.—Parekh Building, Old Hanuman Gulli, Bombay 2.  
 Zaveri Bhagwanji Premchand.—Chikhal Gulli, Mulji Jetha Market, Bombay 2.  
 Zaveri Hemchand Zaverchand.—Sancha Gulli, Mulji Jetha Market, Bombay 2.

### PIPES AND FITTINGS MERCHANTS

ABDEALLY, B. M., & CO.—127, Sarang Street, Bombay 3.  
 Phone : 326980. Grams : "ALERTDEAL."  
 Abdulhusein Escofaly Contractor.—91-93, Bapu Khote Street, Bombay 8.  
 Abdullahbhai Faizullahbhai Ltd.—Khokha Bazar, Bombay 3.  
 Adamji Lookmanji & Co.—Rahimtoola House, Homji Street, Fort.  
 ADVANCE TUBE CO.—99, Nagdevi Street, Bombay 3. Phone : 323522. Grams : "ELBOWS."  
 A. G. KARIMJI CALCUTTAWALA.—Pipes Fittings and Sanitarywares, 82/84, Gulabwadi, Kika Street, Bombay 4.  
 Phone : 333626. Grams : "SANITARY."  
 A. Vallabhdas & Sons.—37, Nagdevi Street, Bombay 3.



**ALEXANDRA ENGINEERING WORKS PRIVATE LTD.**—29, Quay Street, Darukhana, Bombay 10. Phone : 76359. Grams : "ALEXWORKS." Mechanical & Structural Engineers & Contractors. Manufacturers of Pipes, Fittings to all Specifications and "Alex" solder wire for Radio & Electrical uses.

**ASIAN INDUSTRIAL CORPORATION.**—53, Bhajipala Lane, Bombay 3. Phone : 322734. Grams : "ASIANIRON." One of the largest stockists of Galvanised and Black Pipes of Light, Medium & Heavy Quality.

**ASIAN PIPES & HARDWARE CO.**—30, Nagdevi Street, Bombay 3. Phones : 324158 and 327625 (Office) and 325647, 573573 (Res.). Grams : "NEWASIAN."

**ASGARALI NURUDDIN & CO. (Estd. 1916).**—95, Nagdevi Street, Bombay 3. Phone : 322609, Res. : 532753. Sanitarywares, Hardware & Pipe Fittings Merchants.

**BABULAL & BROS.**—26, Nagdevi Cross Lane, Bombay 3. Phone : 323930. Grams : "FIREFLY." Stockists of Abrasives, Asbestos Goods, Engineering Tools, Hardware, Mill Gin Stores, Pipe Fittings.

**Badrudin Hasanali & Co.**—43, Gulalwadi, Kika Street, Bombay 4.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort. **Bharatkumar & Co.**—Carnac Siding Road, Iron Market, Bombay.

**BHATHENA, B. N., & CO.**—100, Nagdevi Street, Bombay 3. Stockists of Copper, Brass, Galvanised and Steam Pipes and Fittings, Asbestos Goods, Flax Fire Hose, G.M. and C.I. Valves and Cocks, etc. Phone : 323155. Grams : "TEENAZ."

**Bombay Burma Hardware Store.**—128, Nagdevi Street, Bombay 3.

**Bombay Tube and Hardware Mart Private Limited, The.**—284, Nagdevi Street, Bombay 3.

**Brady, W. H., & Co., Ltd.**—Royal Insurance Building, Churchgate Street, Fort.

**C. CHAMPAKLAL & CO.**—205, Nagdevi Street, Bombay 3. Phone : 326073. Stockists of Pipes, Fittings & Valves for Steam, Water, Gas and Air, Water Meter.

**Calcutta Iron & Steel Co. Ltd.**—68/D, Mohamedalli Road, Bombay 3. **Central Tool & Equipment Co.**—32, Sarang Street, Bombay 3.

**Chhabildas & Co.**—78-A, Abdul Rehman Street.

**CRESCENT TRADING CO.**—48-50, Bhajipala Street, Bombay 3. Phones : 325140 & 328944. Grams : "WATERMETER." Manufacturers and Dealers : Pipes, Fittings, Boiler Mountings, Valves, Water Meters, etc.

**C. B. Contractor & Co.**—82, Nagdevi Cross Lane, Bombay 3.

**Daulatram Ratanji & Company.**—208, Nagdevi Street, Bombay No. 3.

**Dewanchand Hansraj.**—105, Narayan Dhuru Street, Bombay 3.

**Doshi Brothers & Co.**—77, Medows Street, Fort.

**ECHJAY INDUSTRIES PRIVATE LTD.**—Office and Factory : Kanjur Village Road, Bhandup, Bombay-78. Phones : 581211 & 581678. Grams : "ECHJAY." Bhandup. Manufacturers of Accessories & Equipments for Machine Tools, General Steel Drop & Upset for Rings including Forged Flanges ; Forged Parts of Diesel Engines & Automobiles ; Forged Hand Tools, Hand Hammers, Chisels, Punches, Spanners, Pliers, Jigs & Fixtures, Press Tools, Dies & Punches.

**ESUFALLY ADAMI & CO. (ESTD. 1885).**—134, Nagdevi Street, Bombay 3. Phones : 323775 and Res. : 212141. Grams : "TRAVELLER." Burmah-Shell Agents for Maharashtra.

**EVERGREEN CORPORATION.**—9/15, Picket Cross Road, P.O. Box 2733, Bombay 2. Phone : 22162. Stockists of E.R.W. Pipes, Seamless Steel Pipes & Fittings, Cocks, valves, Plumber Requirements.

**Fakhrudin Noorbhai & Co.**—105, Kika Street, Bombay 4.

**Fidahusein Hasanali.**—46, Gulalwadi, Kika Street, Bombay 4.

**Gannon, Dunkerley & Co., Ltd.**—Chartered Bank Building, Mahatma Gandhi Road, Fort.

**Garlick & Co. Private Ltd.**—Haines Road, Jacob Circle.

**General Tube Ltd., The.**—142-44, Nagdevi Street, Bombay 3.

**Gin Stores Co.**—76, Nagdevi Cross Lane, Bombay 3.

**Gokaldas Shrivai & Co.**—76, Kika Street, Bombay 4.

**Gujarat Tube & Hardware Mart, The.**—24, Nagdevi Cross Lane, Bombay 3.

**Hatimbhoy Goolamhusein & Bros.**—(Estd. 1894), 193-1A, Nagdevi Street, Bombay 3.

**Heptoola Noorudin & Co.**—152-54, Nagdevi Street, Bombay 3.

**Hindustan Tube Company.**—183, Nagdevi Cross Lane, Bombay 3.

**Hiralal Gokaldas Dalal & Co.**—45, Nagdevi Cross Lane, Bombay 3.

**INDUSTRIAL TRADING AGENCIES.**—248, Masjid Bunder Road, Bombay 3. Phone : 325838. Grams : "HOSEPIPE." Mill Gin Stores, Hardware, Tools, Pipes & Fittings Merchants. Distributors for "ROCKET" Brand Hose Pipes and Beltings.

**ISHARDAS AGARWAL & SONS.**—Latif House, Lokhand Jatha, Bombay 9. For your Industrial and Domestic requirements in M.S. Tubes and Seamless Tubes in all Sizes at reasonable rates from ready stocks. Grams : "KARCHITE." Phone : 321768.

**Jai Bharat Steel Syndicate.**—Iron Jetha, Carnac Bunder, Bombay 9. **Jayantilal & Brothers.**—88, Bibijan Street, Nagdevi, Bombay 3.

**JAYANTILAL GOKALDAS & SONS.**—232, Masjid Bunder Road, Bombay 3. Phones : 325495 (Office) and 471449 (Res.). Stockists of Galvanised Pipes & Fittings, Cast Iron Rain-water & Soil Pipes & Fittings, Cast Iron Spigot & Socket Pipes, Special Fittings, Brass BIB Cocks and Stop cocks, Sanitarywares and Sanitary Fittings, Gunmetal wheel valves and Gate Valves, Lead Pipes and Lead Traps, Stoneware Pipes & Fittings, Cast Iron Manhole Covers & Gratings.

**J. Champaklal & Co.**—44, Nagdevi Cross Lane, Bombay 3.

**JIVRAJ & VRAJLAL.**—122, Nagdevi Street, Bombay 3. Phones : 325138 (Shop) & 30932 (Res.). Grams : "SANIPIPES."

**Joshi & Co.**—207, Kumbharwada 6th Lane, Golpitha, Bombay 4.

**K. Chimanlal & Co.**—107-A, Nagdevi Street, Bombay 3.

**K. S. Parikh & Co.**—40, Hararwalla Building, Golpitha, Bombay.

**Kutch Sanitary & Plumbing Works.**—Matunga, Bombay 19.

**KAPADVANI TRADING CORPORATION.**—61, Nagdevi Street, Bombay-3. Phone : 328165. Stockists for G.I. Pipes, Fittings, Brass Cocks, Copper Ball Cocks, C.I. Strainers, G.M. Check Valves our Speciality, Brass Cocks and Water Meters.

**M. K. Palla & Sons Pvt. Ltd.**—Palla Bldg., 189, Nagdevi Street, Bombay 3.

**Machine Tools & Implements.**—24, Nagdevi Cross Lane, Bombay 3.

**MAHENDRA TUBE & HARDWARE MART.**—39, Nagdevi X Lane, Bombay 3. Dealers in Pipes, Fittings, Seamless Tubes, Valves & Hardware Materials, Bolts, Nuts, set screws, Mch Screws Splts. for Textile & Sugar Mills reqts. enlisted in Govt. Depts. Phones : 324553 ; Residence : 367240.

**Mangaldas Ranchhodhas & Co.**—Iron Market, Carnac Bunder, Bombay 9. Phone : 29884.

**Mashruwala, C. M., & Co.**—172-74, Nagdevi Street, Bombay 3.

**MEHTA NANAVATI & CO.**—96, Narayan Dhuru Street, Bombay 3. Phone : 324645. Grams : "REDJOINT."

**M. K. PALIA & SONS PRIVATE LTD.**—Palia Building, 189, Nagdevi Street, Bombay-3. Phones : 325922 & 326761. Grams : "MANASNI." Shipchandlers, Government & Railway Contractors, Pipes, Boiler Tubes and Seamless Tubes Specialists.

**M. N. PADIA & CO.**—70, Kika Street (Gulalwadi), Bombay 4. Phone : 334283.

**M. J. PATEL & CO.**—177, Nagdevi Street, Bombay 3. Phone : 327931. Grams : "REDTEE." Direct Importers & Stockists. G. I. & Steam Pipes, Boiler Tubes & Valves, C. I. Pipes & Specials, Hydraulic Pressure & Tubes. Manufacturers of Steam Flanges.

**Muljibhai Chhotalal & Co.**—78-78, Nagdevi Street, Bombay 3.

**NAGDEVI TOOL-STEEL MART.**—186-88, Nagdevi Street, Bombay 3. Phone Nos. : 323023 & 327058. Grams : "TENDERERS."

**NANALAL AMBALAL & CO. (ESTD. 1917).**—69, Nagdevi Street, Bombay 3. Phone : 322754. Grams : "VILVALHIRO." One of the leading Wholesalers of Galvanised Iron, Cast Iron & Asbestos Cement Pipes & Fittings and Sanitaryware. Sole Regional Distributors for (1) Parry's Superfine Vitreous Sanitaryware and (2) Stoneware, Pipes Manufactured by the Perfect Pottery Co., Ratlam & Jabalpur.

**NECET TRADING CORPORATION PRIVATE LTD.**—94, Nagdevi Street, Bombay 3. Grams : "NECETPIPES." Phone : 323945. Cast Iron S/S & Double-Flanged Pipes, Specials, Sluice Valves, G.I. Pipes, Fittings and G.M. Valves available in large stock.

**New India Hardware Mart.**—152, Narayan Dhuru Street, Bombay 3.

**New India Pipes Ltd.**—50, Bhajipala Lane, Bombay 3.

**Noble Tube Co.**—141, Nagdevi Street, Bombay 3.

**NOWROJI N. VAKIL & CO.**—Shahru Castle, Mohamedalli Road, Bombay 3. Phone : 322803. Head Office and Factory at Naroda Road, Ahmedabad. Manufacturers of Stoneware, Drainage Pipes & Fittings, Fire Bricks and Clay & Raschig Rings.

**Pankaj Trading Corpn.**—25, Bibijan Street, Bombay-3.

**PANALAL MOHANLAL & CO.**—89, Nagdevi Street, Bombay 3. Direct Importers of Copper, Brass, Galvanised Black Steam Pipes, Fittings and Gun Metal Fittings & Valves. Phone : 323071.

**PATEL BROTHERS & CO.**—41, Nagdevi Cross Lane, Bombay 3. Phone : 321606. Grams : "HASTY." Importers of Copper, Brass, Galvanised & black steam pipe fittings & Gunmetal fittings & Valves.



**RAMCHAND MATHRADAS AGGARWAL.**—30, Khokha Bazar, Sarang Street, Bombay 3. Phones: 326075 & 328942. Grams: "PIPEDIE." Hardware, Tools, Fittings, Pipes, Compressors, Machinery, Implements Iron & Steel, etc.

**R. Moolchand & Co.**—44, Nagdevi Cross Lane, Bombay-3.

**Raupal & Son.**—436, Shradhanand Road, Bombay 19.

**R. Babulal & Co.**—163, Nagdevi Cross Lane, Bombay 3.

**R. V. SHAH & CO.**—Bhajipala Street, Bombay-3. G.I. Black & Steam Pipes of all Classes A, B and C, and Boiler Tubes of E. R. W. D. Steamless. Phones: 327049, 324663.

**Royal Tube Corporation.**—94, Nagdevi Street, Bombay 3.

**SHAH PATEL & CO.**—111, Nagdevi Street, Bombay 3. Phones: 324309 and 321377. Grams: "LUCKYCHAP." Water & Steam Pipes and Boiler Tubes, Fittings, Valves & Cocks manufacturers of Slip-on-weldable and screwed M.S. Flanges.

**SHARMAN SONS (Estd. 1949).**—10, Nagdevi Street, Bombay 3. Phone: 321589. Stockists of G.I. Pipes, M. S. Steam Pipes & Boiler Tubes. All types of Fittings including G.M. Peet Valves, Wheel Valves, Stop Cock, etc.

**STANDARD PIPES & FITTINGS CO.**—93-A, Nagdevi Street, Bombay 3. Grams: "STANDPIPES". Phone: 323444. Importers & Stockists of Pipes & Fittings, Sanitary Wares, Hardware & Mill Stores.

**Standard Trading Co.**—Vithal Sayana Building No. 2, 43-75, Lohar Street, Bombay 2.

**Steel Industries of Hindustan Ltd.**—Magazine Street, Darukhana, Bombay 10.

**TALIB & CO.**—Talib House, 104, Nagdevi Street, Bombay 3. Phone No. 321977. Grams: "TALIBCO." Pipes, Fittings & General Hardware Merchants.

**Trivedi, S. G.**—90, Nagdevi Street, Bombay 3.

**United Tube & Hardware Co.**—146, Nagdevi Street.

**VASANT ENGG. & TRADING CORPORATION.**—57, Bibijan Street, Bombay 3 BR. Stockists of Galvanised & Steam Pipes & their Fittings, G.M. & C.I. Valves & Cocks. Boiler Mountings, Boiler Tube & Flange & Asbestos Goods etc. Telegrams: "SURUDINU." Phone: 329002.

**Venus Trading Co.**—122, Barbhal Moholla, Narayan Dhuru Street, Bombay 3. Phone: 32147.

**Victoria Sanitary Stores.**—54, 3rd Bholwada, Bhuleshwar, Bombay 2.

**VINUBHAI CHANDULAL & CO.**—63, Nagdevi Street, Bombay 3. Phones: Shop: 324282 & 329141 & Res.: 38869. Grams: "STONEWARE."

**Western India Tube Syndicate.**—Carnac Siding Road, Bombay-9.

**ZENITH STEEL PIPES LIMITED.**—Manufacturers of ERW Black and Galvanised Steel Pipes in the Size 1/2" to 3" in Light, Medium & Heavy Class in accordance with IS 1239/1964; also of Oval, Square and Rectangular Pipes, Moti Mahal, 195, Churchgate Reclamation, Bombay 1.

### PISTONS, RINGS & LINERS

**AGRA ENGINEERING CO.**—40, Bank Street, Fort, Bombay 1. Phone: Office: 256541. Res.: 532906. Grams: "RAJSPARES." Manufacturers of Diesel & Automobiles Spare Parts, "ARROW" & "DISPA" Liner & Pistons for Diesel Engines, "MG" Pistons for Car, Trucks, Commercial Vehicles, Motor Cycles, Scooters & Tractors.

### PLASTIC INTERCHANGEABLE SIGN BOARDS

**C. J. INDUSTRIES.**—Showroom No. 6, Hampton Court, Wodehouse Road, Bombay 5; Manufacturers of "PRESTOSIGN/ PRESTOGRAPH" Interchangeable Sign Boards for Multi-purpose Visual Publicity in English, Hindi, and Marathi. Phone: 213103.

### PLASTIC MACHINERY

**R. H. WINDSOR (INDIA) LIMITED.**—Plot E-6, 'U' Road, Thana Industrial Estate, Thana. Manufacturers of "WINDSOR" range of Machinery for Plastic Industry viz. Injection Moulding Machines, Extruders, and Take-off Equipments.

### PLASTIC MACHINERY MFRS.

**BRIMCO PLASTIC MACHINERY CORPORATION.**—Plot No. 55, Govt. Industrial Estate, Kandivli (West), Bombay-67. Phone: 692818. Grams: "BRIMSEAL". Bombay, Kandivli. Machinery and Equipments for Processing Plastics, Brimco Thermo-plastic Extruders and Equipments for Extrusion of Tubular Film (Layflat Tubes), Rods, Strips, Sections, Plastic Cane, Monofilament, and Covering Wires and Cables, etc. From Polyethylene, Polystyrene, PVC, Cellulose Acetate, High Density Polyethylene, Polypropylene, etc. Also Injection Moulding Machines, Granulators, Palletizing, Colouring, Reprocessing Equipments and Automatic Bag Making Machines. Sole Selling Agents for Whole of India: William Jacks & Company Limited.

**LATHAM ABERCROMBIE DIVISION OF FORBES FORBES CAMPBELL & CO. LTD.**—Forbes Building, Home Street, Fort, Bombay 1. Phone: 268081. Grams: "LATHAM."

**Radio Electrical Corporation.**—Mamlatdar Wada Road, Malad (West), Bombay-64.

**Universal Mechanical Works Private Ltd.**—Opp. Worli B. D. D. Chawl No. 114, Bombay 13.

**William Jacks & Co., Ltd.**—Bharat House, Apollo Street, Fort, Bombay.

### PLASTIC MOULD MANUFACTURERS

**MUTUAL STEEL INDUSTRIES.**—47, Kandivli Industrial Estate, Kandivli, Bombay 67 N.B. Phone: 692843. Plastic Moulding in compression and injection Compression, Manufacturers of Bakelite & Plastic Radio Cabinets, and "TIDY HOME" Plastic Housewares.

### PLASTIC (RAW MATERIAL)

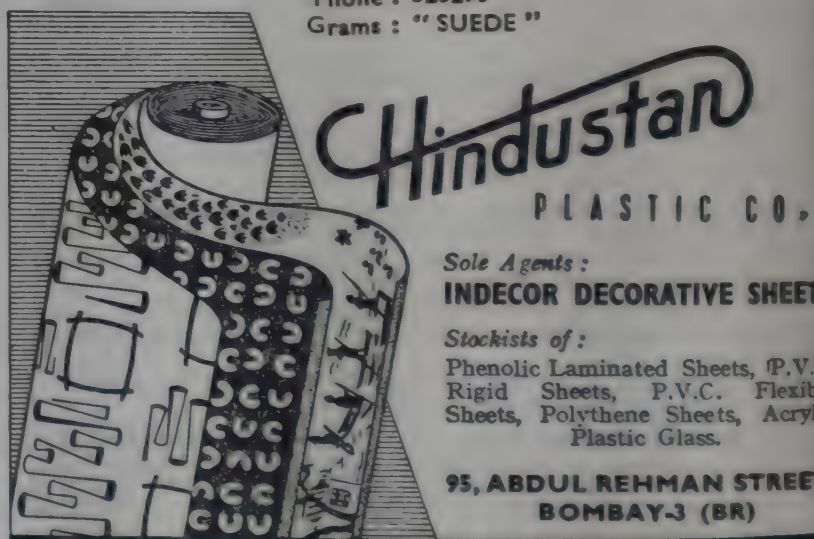
**BAKER BROTHERS.**—31, C. P. Tank Road, Bombay 4. Phone: 334421 Office & 370207 Factory. Grams: "BAKERCOLOR." Suppliers of Sticking Solution for Polystyrene Plastic.

### PLASTIC SHEETINGS

**BHOR INDUSTRIES LTD.**—Sales Department, 392, Cadell Road, Bombay 28. Phone: 451418, 451967, 451978. Grams: "COVERCLOTH." Manufacturers of "RAJA" Brand Plastic Cloth & "NATRAJ" Brand Plastic Films & Sheetings. VYNATILE Flooring Material & STEELGRIP PYC Electrical Insulation Tape.

Phone: 323270

Grams: "SUEDE"



**Hindustan**  
PLASTIC CO.

Sole Agents:  
**INDECOR DECORATIVE SHEETS**

Stockists of:  
Phenolic Laminated Sheets, P.V.C.  
Rigid Sheets, P.V.C. Flexible  
Sheets, Polythene Sheets, Acrylic  
Plastic Glass.

95, ABDUL REHMAN STREET,  
BOMBAY-3 (BR)

Hindustan Plastic Co.—95, Abdul Rehman Street, Bombay 3.

### PLASTIC TUBINGS

**AMRATLAL CHEGANLAL & CO.**—143, Nagdevi Street, Bombay 3. Phone: 326008. Grams: "EKADASHI." Dealing in Suction, Delivery, & Fire Hoses; Surgical, Rubber & Plastic Tubings & Sheetings.

**BOMBAY ELECTRICAL SLEEVING & TUBING CO.**—Al-Karim Manzil, 2nd Floor, 15, Palton Road, Behind Crawford Market, Bombay 1; Phone: 264165; Grams: "SLEEVING." Sole Distributors of "PLASTICAGE" Brand Polythene Pipes.

**MAHAVIR MILL STORES.**—168, Nagdevi Street, Bombay 3. Sole Distributors for "VINOLITE" Plastic Tubing & Sleevings; Distributors for "BASANT" Rubber Tubing, Delivery Hose & Suction Pipes, "KLIPCO" Worm Drive Hose Clips. Grams: "MAHMISTORE." Phones: 326672 & 473463 (Res.).

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Bombay.

### PLASTIC WELDING & TORCHES, MACHINES & MATERIALS

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Bombay 1. Phones: 266371, 264555 and 264795. Grams: "VIDHACO". Branch: G.P.O. Box 2626, Calcutta 1. Phone: 336680. Manufacturers of Plastic Welding Machines, Plastic Spraying Machines & Torches, Adhesives.



**PLASTICS MFRS.**

Abdul Kayam Esufally & Bros.—193, Abdul Rehman Street, Bombay 3.

**ACME PLASTICS INDUSTRIES.**—Manufacturers of all types of Industrial and Household Injection Moulded Articles. 58/59, Kurla-Andheri Road, J. B. Nagar, Bombay-59. Grams: "ACMEPLAST." Phone: 571251-52, 573348.

Arthangles Private Limited.—204, Dr. Dadabhai Naoroji Road, Fort.

Ashok Brothers.—187, Abdul Rehman Street, Bombay 3.

Associated Agencies (Bombay).—47, Podar Chambers, Parsee Bazar Street.

Aurora Toys & Novelties.—"Parimal", Keluskar Road South, Shivaji Park, Dadar, Bombay 28.

**BAKELITE (INDIA) PRIVATE LTD.**—Tiecicon, 18, Dr. E. Moses Road, Bombay 11; Phones: 377368 & 370843; Godown: India House, Opp. G.P.O., Bombay 1. Phone: 261419; Sole Selling Agents for Hylam Limited, Secunderabad; Manufacturers of HYLAM Laminated Sheets & Tubes, DECOLAM Decorative Laminated Sheets, HYLAK Polyester Resins, Moulding Materials and Phenolic Resins, Associates of Bakelite Ltd., London; Manufacturers of BAKELITE Laminated Sheets, rods and tubes; WARERITE—Decorative Laminated Sheets and VYBAK PVC Compounds; Agents for Rohm Haas, Manufacturers of PIEXIGLAS Acrylic Sheets, Rods, and Tubes. PLEXIGUM Moulding Powder. Branches at: 3, Esplanade East, Calcutta 1. Phone: 237609. Telex: 504; 1, Tolstoy Lane, New Delhi 1; Phone: 44081.

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Fort.

For Polythene Containers of 5, 10, 20, 30, 40 and 60 Litre Capacities in Rectangular and Round shapes.

For Industrial Plastic Items

For PVC Self-adhesive Insulation Tape.

Please contact:

**BLOW PLAST PRIVATE LTD.,**

Bombay-Agra Road, Bhandup, Bombay-78.

Phone: 581252.

Grams: 'BLOWPLAST',  
Bombay-78.

**BOMBAY AGENCY.**—5, Ramnam Mansion, Behind Metro Cinema, Dhobi Talao, Bombay 1. Phone: Office: 242041. Sole Agents for Bombay Plastic Industries. Mfrs. of Plastic Injection Moulding, Blow Moulding Extruding Process, Utility Industrial Chemical Packaging Suppliers.

**BOMBAY ELECTRICAL SLEEVING & TUBING CO.**—Al-Karim Manzil, 2nd Floor, 15, Palton Road, Behind Crawford Market, Bombay 1; Phone: 264165; Grams: "SLEEVING." Sole Distributors of "PLASTICAGE" Brand Polythene Pipes.

**BOMBAY PLASTIC CORPORATION.**—Elphinstone Building, 10, Veer Nariman Road, Bombay 1. Phone: 252527. Grams: "BESIEGER." Manufacturers of Plastic Advertising & Complimentary Articles.

**BRIGHT BROTHERS PRIVATE LTD.**—156-A, Tardeo Road, Bombay 34; Grams: "BRIBOS." Phones: 378548, 378549, 378540; Manufacturers of Plastic Articles for Home, Industry, Office and Gift advertising.

**CAPRIHANS (INDIA) PRIVATE LTD.**—Janmabhoomi Chambers, Fort Street, Bombay 1; Manufacturers of Sunglass Decorative Surfacing, Sunlam Industrial Laminator, Sunvic Rigid P.V.C. Sheets, Sunflex PVC Sheeting, Sunstrone Polystyrene Sheets; Phone: 261021; Grams: "CAPRIHANS". Branches: New Delhi, Calcutta and Madras.

Chhmanlal Patel & Co.—174, Hornby Road, Fort.

**EBRAHIM ALLIBHOY & SONS (ESTD. 1934).**—Exporters & Stockists. 260-64, Abdul Rehman Street, Bombay 3. Phone: 325163.

Embi Desai & Co.—Office: Dadyaeth House, Cawasji Patel Street, Fort, Bombay 1. Phone: 258082 & 253772.

**ENGINEERING PLASTICS**

Insulation Tapes • Plastic Spray coating • Specialised Technical consultants

Telephone: 253622

**ENGINEERING PLASTICS**

HAROON HOUSE,

294, Bazar Gate Street, Bombay-1.

**GANDHI BROTHERS.**—203, Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 261345. Manufacturers of Polythene Transparent Coloured Gift Bags, Sheets in any size and gauge. Grams: "SELOPAPER."

**GERMRICH INDUSTRIES.**—Manufacturers of Plastic-cum-Cardboard Containers for Powders such as Chemicals, Cosmetics, Insecticides, Detergent, Tablets, Confectioneries and many other purposes; 91, Mohamedali Road, Bombay 3; Phone: 325933; Grams: "FORGIVING."

Hardcastle, Wand & Co., Ltd.—Alice Building, Hornby Road, Fort.  
Indian Plastics Ltd.—Kandivli, Bombay 67.

*Tipcolite*

Urea Resins; Phenolic Resins; Phenolic Moulding compounds of various

shades in ISI grade I, II and III; High Dielectric, High Impact, High and Medium Shock Resistance grades also available.

**TIPCO**

**The Industrial Plastics Corp., Pvt. Ltd.**

Rajabhadur Mansion, 14, Hamam St., Fort, Bombay 1

Grams:

Phones:

Office: 'PLASTICO', BOMBAY

Office: 253035

Factory: 'TIPCO' MALAD.

Factory: { 692527  
692656

Industrial Plastics & Machinery Co.—Vithal Sayana Building No. 1, Lohar Street, Bombay 2.

Iwacom Private Limited.—204, Dr. Dadabhai Naoroji Road, Fort, Bombay.

**JAGDHIR DESAI & CO.**—13, Gunbow Street, Fort. Grams: "ALLNOVEL." Phone: 264352. Plastic Dealers and Manufacturers of Plastic Presentation Articles.

Kapadia & Co.—19, Sir Phirozshah Mehta Road, Fort, Bombay 1.

Kisco India.—315, New Charni Road, Bombay 4.

Kosmek Private Ltd.—Cecil Court, Lansdowne Road, Apollo Bunder, Bombay 1.

**MAHARASHTRA PLASTIC INDUSTRIES.**—312, Kalbadevi Road, Bombay 2; Phone: 22198; Manufacturers of NYLON MONO-FILAMENTS (for fishing lines and Nets), Bristles (for Brush Industry). Also furniture Cane, P.V.C. Slewing and Tubes, P.V.C. Curtain Lines, Semi Round Chords, Synthetic Mono-filaments.

Mamaji & Son (Private) Ltd., Y. A. (Estd. 1885).—136-33, Sir Ebrahim Rahimtoola Road, Bombay 3.

**MODERN PACKAGINGS.**—201, Kalbadevi Road, Bombay-2. Manufacturers of: Polythene Bags, Plain or Gusseted, Liners, Sheets and Sheet Rolls, P.V.C. Tubes, Belts, etc.

**MONSANTO CHEMICALS OF INDIA PRIVATE LTD.**—Wakefield House, Sprott Road, Ballard Estate, Bombay 1. Phone: 26-2624. Grams: "MONSANTO," Bombay. Branch Offices: Monsanto Chemicals of India Private Ltd., 19, Rajendranath Mukherjee Road, Calcutta 1. (2) Monsanto Chemicals of India Private Ltd., 3/8, Asaf Ali Road, Near Turkman Gate, New Delhi. (3) Calithness Hall, 3 10/11, Linghi Chetty Street, G.T., Madras.



**MUTUAL STEEL INDUSTRIES.**—47, Kandivli Industrial Estate, Kandivli (West), Bombay-67. N.B. Phone: 692843. Plastic Moulders in Compression and injection manufacturers of Bakelite and Plastic Radio Cabinets and "TIDY HOME" Plastic Housewares.

**Newpack Industries.**—Lotus House, 33A, Marine Lines, Bombay 1.

**NEW INDIA PLASTICS.**—Khana Construction House, 44-A, Abdul Gaffar Khan Road, Worli, Bombay-18. Manufacturers of Industrial Purposes. Specific Inquiries Solicited.

**Noble Plastic Works.**—22, Mangesh Senoy Street, Fort, Bombay.

**Norinco Ltd.**—P.O. Box 871, Bombay 1.

**PLASTIC EXTRUSION PRODUCTS.**—Nathoo Estate, Marol Naka, Kurla-Andheri Road, Bombay 59 (AS); Tel. 572512. "PEP" Plastics—Manufacturers of: Polythene Pipes—Normal & Heavy Gauge; P.V.C. Tubing & Sleeving; Ball-Pen Refill Tubes; Industrial Sections and Florescent Lighting Sections.

**Pital Extruders Private Ltd.**—204, Dr. Dadabhai Naoroji Road, Fort.

**PODAR PLASTICS PRIVATE LTD.**—Podar Chambers, Fort, Bombay 1. Telephone No. 259261. Grams: "ELECTRA." Manufacturers of Industrial Components in Nylon and other Materials. Advertising and Display items, Household Articles, etc. Custom Moulding a speciality.

**PLUCK & CO. (Estd. 1902).**—Sales Office: 415, Commerce House, Meadows Street, Bombay 1. Phone: 251131. Grams: "INTERSEAS." Badges, Advertising Gifts like Key Chains, Paper Weights, Paper Cutters, Table Calendars, everything in soft plastics like wallets, Memo Pads, Files, Diaries, etc.

**Rubako Industries.**—Behramji Mansion, Sir Phirozshah Mehta Road, Fort.

**RATILAL PAREKH & CO.**—Bombay Mutual Bldg., Sir P. M. Road, Bombay 1. Manufacturers of Plastic Umbrella Handles, Bangles, Novelties, Art Silk Cord, Tapes, Nylon Cordage and Imitation jewellery. Plastic Machinery Parts and Radio dial.

**Selwel Corporation.**—Nakhuda Rogbay Market, 8, Nagdevi Street, Bombay 3.

**Sonal Rangnow & Co.**—41, Hamam Street, Fort.

**SRINIVAS BROTHERS PRIVATE LTD.**—Karim Chambers, 40, Hamam Street, Fort, Bombay 1. Phones: 251254 (Office) and 473768 (Res.). Grams: "PLASMOULD." Managing Director: J. N. Iyer. Sole Agents for B.I.P. Chemicals Ltd., London for U.F. Moulding Powders and Resins; B.I.P. Engineering for Bipel Moulding Presses; Srinivas Brothers Agents for Rattanchand Harjas Rail Plastics Private Ltd., 54, Industrial Area, Faridabad for Presrite Urea Formaldehyde Moulding Powder.

**Sunder Mehta & Co.**—413G, Vasantwadi, Kalbadevi Road, Bombay 2.

**SUPREME INDUSTRIES LTD.**—Wadala, Bombay 31. Manufacturers of Plastic Articles for Household & Industry—Buckets, Trays, Commode Seats, Polythene Films, Bags, Pipes—Welding, Spraying, Coating, Industrial & Artists Paints, Adhesives, Waterproofing Compounds, etc. Phones: 442181-2; Grams: "SILPRODUCT", Bombay, (Dadar).

**Totaldas, T.**—Botawala Building, 61, Picket Road, Bombay 2.

**Trading Co., L. B.**—Navsari Chambers, opp. Lloyds Bank, Fort.

**United Corporation.**—National Indian Life Building, 59, Forbes Street, Fort.

**United Cottage Industries.**—Near Central Bank of India Ltd., Abdul Rehman Street, Bombay 3.

**Vibha Industries.**—Arches 2-3-4 under Mahalaxmi Bridge, opp. Race Course, Bombay 11.

**VIJAY BAKELITE TRADING CO.**—8 Chakla Street, Bombay 3. Phone: 323145. Grams: "BESTCAP." Manufacturers & Distributors of all kinds of Caps and Stoppers made of Plastic Bakelite & Rubber.

**ZEPHYR LEATHER WORKS.**—1st Floor, Sethna Building, Kitchen Garden Lane, Sheikh Memon Street, Bombay 2. Phone: 23803. Grams: "LOOSELEAF." Manufacturers of Plastic and Leather Goods, Specialists in Pocket Diaries, Wallets, Note Books, Telephone Books, Loose Leaf Files, Tender Files, and all sorts of Ultra-Modern Publicity cum Presentation Novelties. Also made to order according to specification.

### PLAYING CARD MANUFACTURERS

**LAXMI PLAYING CARDS MFG. CO.**—23, Goa Street, Ballard Estate, Bombay 1. Phone: 263147. Grams: "LAXPIC-PLAY." Manufacturers of quality Playing Cards.

**POPULAR FINE ART LITHO WORKS PRIVATE LTD.**—133-C, Vakola, Santacruz East, Bombay 55 AS. Phones: 533234, 533235. Grams: "GOOLNAR."

**Sahu Printers Ltd.**—15/A, Elphinstone Circle, Fort, Bombay.

**Sharda Paper Box Mfg. Co.**—Motisha's Chawl, Gangadas Hall, Sheikh Memon Street, Bombay 2

**THE HINDUSTAN PLAYING CARDS MANUFACTURING CO.**—Central Salsette Road, Kalina, Santa-Cruz East, Bombay-29 AS. Phone: 534185. Managing Partner: Abdul Hussein. City Telephone: 325288.

### PLUMBERS REQUISITES

**R. MOOLCHAND & CO.**—44, Nagdevi Cross Lane, Bombay 3. Direct Importers Sanitarywares, Tiles, Bath Tubs, Fancy Bathroom Fittings, Grams: "POTTERY." Phones: 324207. Res.: 78837.

### PLYWOOD MANUFACTURERS AND DEALERS

**Abdoolally Noorbhoy.**—122, Abdul Rehman Street, Bombay 3.  
**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**CITY PLYWOOD DEPOT.**—Opp: Chitra Cinema, Dr. Ambedkar Road, Dadar, Bombay-14. Phone: 442927. Commercial & Decorative Plywood, Black-Boards, Okal Boards, Particle Boards, Flush Doors & Formica Sheets.

**ESMAIL ESSAK & CO.**—87/89, Masjid Street, Kazi Mohalla, Bombay 3. Phone: 332347. Timber Merchants, General Contractors and Suppliers of Plywood & Hardboard.

**FAKHRUDDIN & CO.**—43, Abdul Rehman Street, Post Box No. 3066, Bombay 3. Phones: 325837 and 322725. Grams: "WOODPLY." Stockists of Okal Board "FORMICA", Plastic Laminated Sheets, Insulating Boards, "Anchor" Nova-teak, Asbestos Electrical Insulating for Arc and heat-resisting sheets, tempered press boards, Plywood block boards, Asbestos Cement Sheets, Veneer, decorative teak plywood, Expanded Metals, perforated Metal Sheets, Welded Wire Mesh.

**Getz (India) Ltd.**—Western India House, Sir Phirozshah Mehta Road, Fort.

**INDIAN PLYWOOD MANUFACTURING CO. LTD., THE.**—9, Wallace Street, Post Box 1175, Fort, Bombay 1. Phones: 26-3381. Grams: "INDPLYWOOD." Manufacturers of Decorative Plywood, Veneers, Marine and other Special types of Plywood, OKAL Veneered Boards, Anchor Flush Doors, Anchor Concrete Shuttering Plywood, Anchor Particle Boards, Anchor Nova Doors, Anchor Veneered Boards Commercial and Decorative, Anchor Nova Tops, Anchor Nova Mount.

**Kantilal Sanghvi & Co.**—Mherwan Building, Sir Phirozshah Mehta Road.

**Karimji Ebrahimji Arsiwala.**—118-20, Abdul Rehman Street, Bombay 3.

**Kerbadji Bejanji & Sons.**—Opp. Silk Mill, Mustafa Bazar, 54/A, Victoria Road, Bombay 10. Phone: 78871. Stockists of Asbestos Cement Sheets, Plywood & Hardboard.

**Keshowdas Hassanand Karachiwala.**—256, Masjid Bunder Road, Bombay 3.

**Mehta & Co.**—35, Abdul Rehman Street, Pydhonie, Bombay 3.

**MAHOMEDALLY VALIJA ARSIWALA.**—76, Abdul Rehman Street, Bombay 3. Phone: 325900; and 145, Jambli Mohalla, Bapu Khote Street, Bombay 3. Phone: 332467. Dealers in all kinds of Plywood, Teakwood, Furniture Wood and also folding chairs.

**MYSORE COMMERCIAL UNION LTD.**—Manufacturers of Mysoply and Mysobord. 28, Apollo Street, Fort, Bombay-1. Phone: 252251.

**Mody & Co., R. E.**—Reay Road, Tank Bunder, Bombay 10.

**NASH & CO.**—103, Abdul Rehman Street, Bombay 3. Phone: 324968. Commercial & Decorative Plywood, Block-Boards, Okal Boards, Particle Boards, Flush Doors & Formica Sheets.

**Phoenix Plywood Depot.**—Prospect Chambers Annexe, Hornby Road, Fort.

**PLYNET TRADERS.**—Shahru Castle, Mohamedali Road, Bibijan Street, Bombay 3. Phone: 327334. Grams: "NETPLY," Bombay. Stockists & Dealers in Plywood, Hardboard, Insulation Board, Flush Door, Block Board (Commercial & Decorative), Teak Plywood, Cement Sheets (Plain & Roofing), and other allied building materials.

**Premier Glass Traders.**—74/78, Dhanji Street, Bombay 3.

**Shah & Co., Jaliwala.**—"Jaynivaa," 36, Abdul Rehman Street, near Pydhonie, corner of Sutar Bazar, Bombay 8.

**SUNDERLAL & CO.**—121, Abdul Rehman Street, Bombay 3. Phone: 325204. Grams: "SUNDERJALI." Direct importers & Stockists of Plywood, Teak Plywood, Block Boards, Asbestos Cement Sheets, Hard Boards, Masonite Boards, etc. Folding Chairs & Chairseats our speciality.

**Tek Trading Corporation.**—189, Abdul Rehman Street, Bombay 3.  
**Yusufali Goolamhoosen Arsiwala.**—106, Abdul Rehman Street, Bombay 8.



## POLYTHENE BAGS &amp; SHEETS

**MODERN PACKAGINGS.**—201, Kalbadevi Road, Bombay 2. Manufacturers of: Polythene Bags—Plain or Gusseted Liners, Sheets and Sheet Rolls. Telephone No.: 22425.

**NATIONAL PAPER BAG CO.**—168, Bhimpura, Chinch Bunder, Bombay 9. Phone: 333239. Grams: "PAPERBAG." Manufacturers of Paper Bags, Plastic Bags, Carrier Bags, etc. Also Plastic Sealing Machines & Gum Tape Machines.

**NEW PACK INDUSTRIES.**—Lotus House, 33-A, New Marine Lines, Bombay-1. Phone: 241711. Grams: "NUPACK." Manufacturers of: "NEWPACK" Polythene Bags, Sheetings & Rolls, Etc.

**POLYMER CORPORATION.**—Manufacturers & Printers of 'HIPACK' brand Polyethylene bags and Liners, Tubular Film Sheeting and Cane. 70, Kansara Chawl, Kalbadevi Road, Bombay 2. Phone: Office: 334557. Grams: "WAL-KAL."

**TRIBHOVAN NEMCHAND & CO.**—51, Bazargate Street, Fort, Bombay 1. Estd. 1911. Phone: 262261. Grams: "HONEY-MOON."

## PORCELAIN &amp; STONEWARE TOWER

**BASSEIN CERAMICS PRIVATE LTD.**—Manufacturers of Chemical Stoneware and Porcelain Tower Packings like Rashing and Lessing Rings, Berl and Sector Saddles, Metallic Packings, Lining Bricks and Porcelain Balls. Also acid proof Bricks and Tiles; 324, Cooks Bldg., 2nd Floor, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone: 252644; Grams: "KARDWEB."

## POSTAL FRANKING MACHINES

**KILBURN & CO. LTD.**—Gresham Assurance House, Phirozshah Mehta Road, Bombay. Phone: 256845. Grams: "TASCONIUM."

## POWER CONTROL GEARS

**JYOTI CALOR-EMAG LIMITED.**—Baroda 3. Phone: 8238. Grams: "JYOTICALOR", Bombay Branch: 'Advent', 12A, Foreshore Road. Opp: Sachivalaya, Bombay 1. Phone: 213329. Grams: "JYOTICALOR". Sole Selling Agents of Jyoti Electric Motors and Jyoti Calor-Emag Starters, Circuit Breakers, Switchboards and Power Control Gear. Other Branches: New Delhi, Calcutta, Madras, Secunderabad, Jaipur.

## POWER GENERATION &amp; TRANSMISSION EQUIPMENT

**INDUSTRIAL GASES LTD., THE.**—Bombay. Grams: "INDUS-GASES". Head Office: P. O. Box 853, Calcutta 1. Design, Supply & Erection of complete Power Stations, Turbines, Generators, Motors, Diesel Generating Sets, Transformers, Switchgears, Lighting Arrestors, Voltage Regulators, Relays, etc.

## PRECISION TOOLS &amp; INSTRUMENTS

"ARIFTA".—Die & Tool Engineers, Soho House, Lohar Street, Bombay 2. Phone: 20779. Die Tool & Consulting Engineers. Mfrs. of Diesets, Machine Vices, Tool Holders, Parallel Clamps, Boring Heads, Angle Plates, Press Clamps.

**BHARAT ENGINEERING STORES.**—113, Nagdevi Street, Bombay 3. Grams: "UNIONTOOLS." Phone: 323193. Stockists of Elephant Brand Chain Pulley Blocks.

**BOMBAY ENGINEERING STORES.**—C-16, Behari Baug, 3rd Bhoiwada, Bombay 2. Stockists of Engineering Tools of all kinds.

**BOMBAY TOOLS SUPPLYING AGENCY.**—50, Nagdevi Cross Lane, Bombay 3. Phone: 321326. Grams: "TERRATOOLS". Direct Importers—Stockists of Engineering & Precision Tools.

**EMKAY TRADERS.**—32, Fatma Bldg., 7, Nagdevi Street, Bombay 3. Carbon, High Speed, Taps, Dies, Chasers & other Threading Tools, Twist Drills, Garage & small Tools, Precision & Measuring Tools. Stockists: S.T.M. Tools. Phone: 328518. Grams: "MONDERUV."

**HEMANT TOOLS TRADING CO.**—33, Bibijan Street (Barbhai Mohalla), Bombay 3. Grams: "LACING." Phone: 321174. Importers & Stockists of Chain Pulley Blocks, Garage Tools, Fibre Sheets, Rods, Diamond Dressing Tools, Precision Tools, etc.

**INDUSTRIAL MILL GIN STORES.**—Industrial House, 51-53, Nagdevi Cross Lane, Bombay 3. Grams: "WIREGOODS." Phone: 321246.

**INDUSTRIAL TOOLS TRADING CO.**—101, Narayan Dhuru Street, Bombay 3. Stockists of Precision Tools of "MITUTOYO", Moore & Wright, Helios Baty & Steinmeyer, etc. Grams: "MITUTOYO." Phone: 328193.

**JAIRAMDAS & SONS.**—163, Narain Dhuru Street, Bombay 3. Phone: 323616. Grams: "JAIRAMSONS." Importers & Largest Stockists of "Starrett", "M & W", "MITUTOYO", "Steinmeyer" Brand Precision Measuring Tools.

**MODERN MACHINE TOOLS CO.**—88, Nagdevi Cross Lane, Bombay 3. Phone: 322456. Grams: "MONKEY GRIP." Micrometers, Vernier Callipers, Dial Gauges, Feeler, Thread, Wires Radius Gauges, etc.

**NEW HIND TRADING CORPN.**—137, Narayan Dhuru Street, Bombay 3. Machine Tools, Metal Cutting Tools & all sorts of Precision & Engineering Tools. Phone: 329383. Grams: "DORMER."

**PRAFULCHANDRA & CO.**—106, Lohar Street, Bombay 2. Phone: 39007. Grams: "ELECTOOLS." Importers & Stockists of Engineering, Precision and Garage and Machine Tools.

**PARAMOUNT TOOLS CO.**—5, Narayan Dhuru Cross Lane, Bombay 3. Grams: "PARATOOLS." Dealers in Engineering Metal-cutting precision tools and General Hardware Suppliers. Garage Tools, Devetts, Taps, Dies, Files, Blades, Plastic Wire mesh. Phone: 321860.

Rasiklal Shah & Co.—93, Narayan Dhuru Street, Bombay 3.

**UNIVERSAL TRADING CO.**—Stockists of Micrometers, Callipers, V. Blocks, Height & Depth Gauges, Planers, Wrenches, Pliers, Spanners, Cutters, Reamers, Drills, Vices, Chucks, Tipped Tools, Taps and Dies, Pressure and Vacuum Gauges and General Engineers Requisites. Mohamedali House, 79, Mohamedali Road, Bombay 3. Phone: 322537. Grams: "IRONMART." Branch Office: No. 4, Narayan Dhuru Cross Lane, Bombay 3.

## PRECISION PARTS MFRS.

**NEW HEVAN ENGINEERING CO. PRIVATE LTD.**—Nanjee Building, 17-B, Horniman Circle, Bombay 1. Phone: 257616. Grams: "GULDASTA". Manufacturers of Automobile Parts, Machinery Spares, Bright Polished bolts and nuts, Socket head cap Screws, Precision Turned Automatic Parts, etc.

## PRESENTATION ARTICLES

**BRIGHT BROTHERS PRIVATE LTD.**—156/A, Tardeo Road, Bombay 34. Grams: "BRIBOS." Phones: 378548, 378549, 378540. Specialists in Plastic Gift Advertising Novelties.

**Dattatray Industries Private Ltd.**—Sitaram Bldg., Dadabhai Naoroji Road, Fort, Bombay.

**Ebrahim Allibhoy and Sons (Estd. 1934).**—260-64, Abdul Rehman Street, Bombay 3. Phone: 325183.

**Gazdar Ltd.**—Taj Mahal Hotel, Bombay.

**Grand Bazar.**—25, Colaba Causeway, Bombay 1.

**Jagatiani, M. K., & Sons.**—Moolji Jetha Market, Ganeshwadi, First Floor, Shaik Memon Street.

**Jhaveri & Co., Gordhandas K.**—Oomrigar Building, opp. Crawford Market.

**Jhaveri Bros. & Co. Pvt. Ltd. (Established 1914).**—Novelties and Gift Specialists. 345, Abdul Rehman Street, Near Crawford Market, Bombay 3. (BR). Phone: 326196. Grams: "GIFTS".

**Kashmir Govt. Arts Emporium.**—Sir P. M. Road, Bombay 1.

**Lalit Jewellery Mart.**—435, Lamington Road, near Opera House.

**L. R. Trading Co.**—Navsari Chambers, opp. Lloyds Bank, Outram Road, Fort.

**Lund & Blockley Ltd.**—150, Mahatma Gandhi Road, Fort, Bombay.

**Marine Sports.**—101, 1st Marine Street. Dhobi Talao, Bombay 2.

**Motilal, M. Shah & Co.**—Opp. Crawford Market, Bombay.

**Narotamdas Bhau (Estd. 1864).**—Jewellers, Specialists in Presentation and all possible novelty articles. Lamington Road, Bombay 4. Phone: 30833. Grams: "DASNAROTAM (GG)".

**Noble Jewellery Mart.**—Capitol Cinema Bldg., Borl Bunder, Bombay 1.

**Novelties, The.**—Hughes Road, Bombay.

**PLUCK & CO. (Estd. 1902).**—Sales Office: 415, Commerce House, Medows Street, Bombay 1. Phone: 251131. Grams: "INTERSEAS." Badges, Advertising Gifts like Key Chains, Paper Weights, Paper Cutters, Table Calendars, everything in soft plastics like Wallets, Memo Pads, Files, Diaries, etc.

**Ruby & Co.**—Opera House, Bombay No. 4.

**Sharada Novelty House.**—96, 3rd Bholwade, Bombay 2.

**Sharda Stores.**—Swadeshi Markets, Kalbadevi Road, Bombay 2.

**Shewakram & Sons (Jewellers).**—815-817, Prospect Chambers, Hornby Road, Fort.

**Spencer & Co., Ltd.**—Forjett Street, Bombay 26.

**United Cottage Industries.**—Near Central Bank of India Ltd., Abdul Rehman Street, Bombay 3.



**ZEPHYR LEATHER WORKS.**—1st Floor, Sethna Bldg., Kitchen Garden Lane, Sheikh Memon Street, Bombay 2. Phone: 23803. Grams: "LOOSELEAF." Manufacturers of Plastic and Leather Goods. Specialists in Pocket Diaries, Wallets, Note Books, Telephone Books, Loose Leaf Files, Tender Files, and all sorts of Ultra-Modern Publicity-cum-Presentation Novelties. Also made to order according to specifications.

### PRESSURE CONTROL INSTRUMENTS

## ASHOK SUNIL & CO

*Howell*

High Pressure Packless  
Sarco Operated SOLENOID  
Valves for AIR - GAS  
STEAM - LIGHT OIL - WATER  
FREON ETC

Sizes 1/8" to 2" & 1/4"  
3-way & 4-way

Pneumatically operated Diaphragm type control VALVE widely used in Petroleum Refineries, Chemical Plants, Paper Industries, Fertiliser Plants, Sugar Mills & many other Industries. Also Magnetic Level Switches, Pressure Regulators & Safety Valves.

Address: 507, Neelkanth, 98, Marine Drive, Bombay-2.  
Phone: 244241. Grams: "ASHIRWAD".

### PRESSURE GAUGES

**CRESCENT TRADING CO.**—48-50, Bhajipala Street, Bombay 3. Phones: 325140 & 328944. Grams: "WATERMETER." Manufacturers & Dealers: Hydraulic Test, Pumps, Acid Resisting Valves & Pressure Gauges.

### PRESSURE STOVES

**Anglo-Oriental Light Co.**—Peerbhoy Building, 89, Princess Street, Bombay 2.

**K. B. Mehta & Bros.**—Lohar Chawl, Shreeji Bhuvan, 2nd Floor, Bombay 2.

**L. C. Trading Co.**—62, Lohar Chawl, Bombay 2.

**Light House.**—51, Kitchen Garden Lane, Shrijee Bhuvan, Bombay 2.

**OPTIMO HAR INDUSTRIES PRIVATE LTD.**—Manufacturers of Pressure Stoves, Pressure Lanterns, Blow Lamps, Paint Spray Guns. Export enquiry Solicited. Phone Nos.: 256871-72. Address: 16, Custom House Road, Bombay-1. Grams: "SNUFLAMES."

**Racek, F., & Co.**—Lohar Street, Bombay 2.

**Rasiklal & Co.**—Peerbhoy Building, 89, Princess Street, Bombay 2.

**Salemahomed Padamsee & Co.**—141, Chakla Street, P.O. Box 3181, Bombay 3.

**Shah, H. T., & Co.**—Ahmed Building, Golpitha, Bombay 4.

### PRINTING INK MANUFACTURERS

**Bengal Chemical & Pharmaceutical Works Ltd.**—502, Cadell Road, Bombay 28.

**Gripoli Printing Inks.**—10/A, Sarvodaya Mill Compound, Tardeo, Bombay 9.

**HOOGELY INK CO. (BOMBAY) LTD.**, 7 & 15, Kumbhta Street, Ballard Estate, Bombay 1; Manufacturers of Fine Printing Inks of all kinds. Phone: 261809.

**J. B. A. PRINTING INKS PRIVATE LTD.**—Manufacturers of Quality Printing Inks and Varnishes under the Supervision of Foreign-trained Technicians. Regd. Office: Advani Chambers, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone: 261204. Factory: Bombay-Agra Road, Bhandup, Bombay 78. Phones: 591866-67.

**RAINBOW INK AND VARNISH MFG. CO. PRIVATE LTD.**—133, Vakola, Santa Cruz (East), Bombay 55. Phones: 533234 & 533235. Grams: "RAINBOINKS."

### PRINTING PRESS MATERIAL & MACHINERY

**AHUJA TYPE FOUNDRY.**—Kothari Mansion, Opp G.P.O., Bombay-1. Phone: 265530. Importers of Printing Press Materials, Offset Lithographic Sundries and Files.

**A. A. MORBIWALA & CO.**—109/111, Abdul Rehman Street, Bombay 3. Phone: 323280. Grams: "VARNISH (MD)." Direct Importers & Stockists of Stitching Wires of all kinds.

**Batliboi & Company Private Limited.**—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR.). Phones: 255451 (6 lines). Grams: "BATLIBOICO." Tele: 011-284. City Branch: "BATLIBOI HOUSE", 59/61, Nagdevi Cross Lane, Bombay-3 (BR). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associates: Bangalore 2. Resident Representatives: RANCHI, Bhubaneswar.

**CAMA, NORTON & CO.**—Cama Chambers, 23, Meadows Street, Fort. Phone: 255354. Grams: "CAMANORTON."

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Sole Agents for Northern, Southern and Central India for Original Heidelberg Printing Machinery, Wavell House, Graham Road, Ballard Estate, P.O. Box No. 639, Bombay 1. Phones: 26-2711 (8 lines). Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**Gujarat Trading Syndicate.**—India House (Opp. G.P.O.), Fort Street, Fort, Bombay 1.

**GUJARATI TYPE FOUNDRY.**—196-B, Gaiwadi Girgaum, Bombay 4 BR. Phone: 354332. Grams: "GUTYFO." Type Founders & Printing Press Material Dealers.

**GUNVANTRAY & COMPANY.**—Crescent Chambers, 1st Floor, Room No. 2, Tamarind Lane, Fort, Bombay 1. Phone: 254684. Grams: "GUNARAYCO." Importers and Dealers in Letterpress, Litho, Offset, Process & Box Making Machinery, Materials, Spare Parts and Rubber Rollers suppliers.

**Indo-Europa Trading Co.**—9, Dalal Street, Bombay 1. Phone: 252124.

**METALLICA WORKS PRIVATE LTD.**—79/83, Dr. Annie Besant Road, Bombay 18. Phones: 375432, 375433, 375434, 371941 & 371942; Makers of Non-Ferrous Metals, Castings, Alloys, Anodes, Lead Linings of Acid Resisting Containers, Crucibles.

**PAPER PULP & MACHINE CO.**—7, Kumbhta Street, Ballard Estate, Bombay 1. Phone: 263386. Grams: "LIONBRAND." Sole Importers into India of the Products of John Dickinson & Co., Ltd., London.

**Printing Materials Store.**—89, Princess Street, Bombay 2.

## RAJ & COMPANY

Savla Chambers, 40, Cawasji Patel Street, Fort, Bombay 1.

Phone: 254455

Grams: "INKOPRINT"

Direct Importers of

Printing Machinery, Types, Inks, Roller Composition; Latest requisites for Printing Presses: "Cornerstone Quoins", "Lemm system Quoins", "Bacher Utensils", Lightweight Metal Furniture, Eyeletting, Hand & Automatic Machines, Punching Hand & Treadle

Agents for:

"Elephant" Brand Indian Paper Cutting Machines made in 26, 32 & 36 sizes. Fower & Hand-drive arrangements. Also dealing in Indian Printing Machines, Chandler & Price Pattern and complete line of offset Sundries

**Rawlandson Bros. (Estd. 1927).**—Parsee Bazar Street, Fort.

**SHEKASA ENGINEERING CO. PRIVATE LTD.**—21-B, Noble Chambers, Parsee Bazar Street, Fort, Bombay-1. (1) Manufacturers of Printers Requirements. (2) Manufacturers of Surgical Instruments—such as Instrument Sterilisers.

**Subodh Indent Agency.**—44, Kumavillas, Mangalwadi, Girgaum. **Volta Ltd.**—19, Graham Road, Ballard Estate.

**Yeshanand & Co.**—Podar Chambers, Parsi Bazar Street, Fort.

### PRINTING PRESSES

**AFZAL PAPER BOX FACTORY.**—43, Foras Road, Bombay 8. Phone: 372338. Manufacturers of Card Board Boxes and Corrugated Paper Rolls & Sheets.



# AHURA PRINTING PRESS

(ESTABLISHED 1920)

## COMMERCIAL PRINTERS

(On Government Approved List.  
Specialised in Diaries, Calendars,  
Publicity Material in Colours)

LENTIN CHAMBERS - DALAL STREET  
BOMBAY 1

Telephone: 253422

Ahura Printing Press.—Lentin Chambers, Dalal Street, Fort.

Ajmal Printing Press.—Princess Building, J. J. Hospital.

Albert Printing Works.—Podar Chambers, Parsi Bazar Street, Fort.

Alliance Art Printing Works.—17, Benham Hall Lane.

Amrut Sagar Press.—54-58, Sheikh Memon Street.

Army &amp; Navy Press.—21, Forbes Street, Bombay 1.

ASHOK PRINTING WORKS.—(Job Printers), 22/A, Parsee Bazar Street, Fort, Bombay 1—BR. Phone: 255347.

Associated Advertisers &amp; Printers Ltd.—505, Arthur Road, Tardeo, Bombay 7.

BOMBAY ART PRINTERS.—Kurla Road, Bombay 72. Phones: 553667 &amp; 55798. Cartons, Labels, Literature, Booklets, etc.

Bombay Chronicle Press.—Red House, Parsi Bazar Street, Elphinstone Circle.

Bombay Press.—15 Store Lane, Homji Street, Opp. French Bank, Fort, Bombay.

Bombay Printing Works.—Podar Chambers, Parsi Bazar Street, Fort.

Bombay Samachar Press.—Parsi Bazar Street, Elphinstone Circle.

Bowen Press.—Sambava Chambers, 2nd Floor, Sir Phirozshah Mehta Road, Fort.

Canton Printing Works.—Grahams Building, 74, Homji Street, Fort.

Canton Printing Works.—Frere Road.

Central Printing Works.—Lalgar Chambers, Tamarind Lane, Fort.

COMMERCIAL PRINTING PRESS LTD.—34/38, Bank Street, Bombay 1. Phones: 253891-92. Grams: "TATAPRESS."

Competition Press.—Dwarkanadas Building, Benham Hall Lane.

CROWN ELECTRIC PRINTING WORKS.—111-A, Mahatma Gandhi Road, Fort, Bombay 1. Phone: 251437. Fine Art Printers, Calendar and Diary Manufacturers.

Crystal Stationery Mart.—109, Dhanji Street, Bombay 3.

Evergreen Syndicate.—19, Hamam Street, Fort.

Examiner Press.—Meadows Street, Fort.

Felixons.—Quality Printers, Rahimtoola House, Homji Street, Fort, Bombay.

FIDVI PRINTING PRESS.—179, Abdul Rehman Street, Bombay 3. Phone: 325915. Grams: "FIDVIPRESS". Manufacturers, Dealers &amp; Exporters of Account &amp; Exercise Books, Files, Diaries, Calendars, Desk Calendar Refills &amp; Stands &amp; Other Advertising Novelties.

Fort Office Printing Press.—94, Mint Road, Fort.

Gangadhar Printing Press.—Haroon Rangari Chawl, near Western Rly. Station, Dadar.

Gem Printing Works.—Marine Chambers, Marine Lines.

Government Central Press.—Gardens, Charni Road.

Gutenberg Printing &amp; Commercial Co., Ltd.—Raja Bahadur Banisall Motilal Mansion, Apollo Street, Fort.

Hind Printing Works.—Opposite Kandewadi B.E.S.T. Sub-station, Girgaum.

IDEAL PRINTERS PRIVATE LIMITED.—Regd. Office &amp; Works Unit No. 1. Bell Building, Sir Phirozshah Mehta Road, Bombay. Phone: 25326 &amp; 251551. Works Unit No. 2, Asok Press, Zandu Pharmacy Compound, Gokhale Road South, Bombay 28. Phone: 454293.

India Printing Works.—9, Bakehouse Lane, Fort.

Industrial Press.—9, Bastion Road, Fort.

Ismailli Printing Press.—Bhimpura, Dongri Street.

Jalprakash Printing Press.—191-93, Samuel Street, Khoja Gully, Bombay 9.

Jam-e-Jamshed Printing Press.—Ballard House, Mangalore Street, Fort.

Jawahir Printing Press.—12, Kesowji Naik Road, Bombay 9.

Jawahir Printing Press.—234-36, Narai Natha Street.

Kagzi Electric Printing Works.—Pydhonie Road, Khadak.

Kaiser-i-Hind Printing Press.—Old Sassoon Building, Elphinstone Circle, Fort.

Karnatak Art Printing Works.—Prospect Chambers Annexe, Hornby Road, Fort.

Karnatak Printing Press.—Karnatak House, Chitra Bazar, Bombay 2.

Kothari Printing Press.—67, Apollo Street, Fort.

Lal Printing Press.—302, Kalbadevi Road.

Lalit Printing Press.—Shantinath Jain Temple Building, Pydhonie, Bombay 3.

Leaders' Press Private Ltd.—108, Love Lane, Mazagon, Bombay 10.

Lotus Art Printery.—7, Prospect Chambers, Hornby Road, Fort.

Maraban, J. B., &amp; Co., Ltd.—Ballard House, Fort.

Mebasser Printing Works.—Laxmi Building, Ballard Road.

Mehta Printing Press.—73-77, Meadows Street, Fort.

Mekda Corporation.—407, Kalbadevi Road, Bombay 2.

Metro Printing Press.—East &amp; West Building, 49, Apollo Street.

Minerva Printing Press.—31, British Hotel Lane, Fort.

MODEL ART PRINTERY PRIVATE LTD.—Commercial &amp; Multicolor Printers. 4, Nanabhai Lane, Fort. Phone: 252725

Motee Printing Works.—6, Lal Chimney, Lamington Road (North), Bombay 11.

Multiprint.—242-244, Bellasis Road, Byculla, Bombay.

Navyug Printing Press.—Portuguese Church Street, Dadar.

Neabit Printing Works.—6-A, Nesbit Road (East), Bombay 10.

New Anand Sagar Printing Press.—204, Samuel Street, Vadgadi.

New Apollo Printing Works.—129, Meadows Street, Fort.

New Era Printing Press.—7, Chowpatty Road.

Nirnaya Sagar Press &amp; Jawaji Dadaji Type Foundry.—26-28, Kolbhat Street, Bombay 2.

NOBLE STATIONERY MART.—Parsee Bazar Street, Fort, Bombay-1. Phone: 254748. Grams: "CELLOTAPE." High Class Printers, Stationers and Paper Merchants.

PHILPRESS.—Colour Printers, Printing House, 28/D, Police Court Lane, Fort, Bombay 1. Phone: 261775.

Prakash Printing Press.—73, Apollo Street, Fort.

Premier Offset Works.—Swadeshi Mills Property, Charni Road, Girgaum.

Rafsdain Printing Works.—3, Lalgar Chambers, Tamarind Lane, Fort.

Ramkrishna Printing Press.—Judex Building, Tribhuvan Road, Girgaum.

## REWA PRINTERY

*Printers of Repute*

Prop. Three Bros. & Fils

*Office:*

144, Mahatma Gandhi Road, Bombay-1.

Phone: 256463.

*Works:*

Silk Mill Compound, Malad, Bombay-64.

Phone: 692403.

RISHON PRINTING WORKS.—21-23-25, Kumbhta Street, Ballard Estate, Bombay 1. Phone: 262507. Grams: "GATEWAY." Commercial and Art Printers.

Rising Sun Printing Press.—6, Bodke Building, Dadar, Bombay 14.

Rowlandson Bros. (Estd. 1927).—Parsee Bazar Street, Fort.

Sadbhakti Prakash Printing Press Ltd.—12, Homji Street, Fort.

Sadu Ruling Press.—57, Sutar Chawl, Bombay 2.

Saeed Fine Art Printing Press.—Mahomedali Building, Mahomedali Road, Bombay 3.

Sanap Printing Press.—Sidharud Prasad, 302, Girgaum Road, near P.O., Thakurdwar.

Sanjvartman Press.—Pera Building, British Hotel Lane, Fort.

Saraop Printing Press.—365, Girgaum Road, near Thakurdwar Post Office.

Sarya Ltd.—Prospect Chambers, Hornby Road, P.O. Box No. 429, Bombay 1.

Satguru Printers Limited.—Podar Chambers, Parsi Bazar Street, Fort, Bombay. Commercial Printers.

Saxon Press.—43, Fort Street, near G.P.O., Bombay 1.

Shree Laxmi Narayan Press.—364, Thakurdwar, Bombay 2.

Shreeram &amp; Co.—Podar Chambers, 109, Parsee Bazar Street, Fort.

Shri Venkateshwar Steam Press.—7th Khetwadi, Bombay 4.

Standard Printing Works.—Rahimtoola House, Homji Street.



Standard Stationery Mart.—Rahimtoolla House, Hornji Street, Fort.

Standard Type Foundry (Private) Ltd.—4 & 5, Himalaya House, Palton Road, Bombay 1. Phone: 26-3151. Grams: "PRINTYPES." Stockists of Printing Press Materials & Machinery. Head Office: Calcutta. Phone: 263151 & 266147. Grams: "PRINTYPES." Branches: New Delhi and Madras.

Superior Stationery Mart.—Examiner Press Building, Meadows Street, Fort.

Suryakant Printing Press.—451, Kalbadevi Road, Fort.

TAJ PRINTING WORKS.—46-A, Cawasji Patel Street, Fort, Bombay 1. Phone: 252432. Commercial & Art Printers, Manufacturers of Invitation Cards, Greeting Cards and Calendars.

Tatva Vivechaka Printing Press.—Opp. Alexandra Cinema, Bellasis Road.

Thacker & Co., Ltd.—19-20, Rampart Row, Fort.

TIMES OF INDIA PRESS, THE.—Times Building, Dr. Dadabhoi Naoroji Road, Fort.

Turf Printing Works.—Tribhuvan Road, off Lamington Road.

Uniform Printing Press.—41, Tamarind Lane.

UNION PRESS.—13, Hornji Street, 16, Horniman Circle, Fort, Bombay 1. Phone: 251354. Commercial Job Printers, Binders & Calendar Manufacturers.

Union Printing Works.—Jan Mansion, Sir Phirozshah Mehta Road, Fort, Bombay 1.

UNIQUE PRINTING PRESS PRIVATE LTD.—1, Police Court Lane, Fort, near Handloom House, Bombay 1. Printers, Designers, Stationers, Binders. Specialists in Colour Printing. Phone: Press: 23974.

UNIVERSAL CALENDAR MANUFACTURING CO.—Calendar Manufacturers, Lithographers and Tin Printers. 23-25, Hamam Street (opp. Post Office), Bombay 1. Phone: 254443.

VAKIL & SONS (PRIVATE) LTD.—Narandas Building, Sprott Road, 18, Ballard Estate, Bombay 1. Phones: 262171 & 263204. Grams: "BLADE." Industry Manor, Chowney Gully, Worli, Bombay-28; Phone: 451960. Grams: "RANGOLI." Quality Printers, Greeting Card and Wedding Card Manufacturers.

Victoria Press.—142-144, Victoria Road, Byculla.

Vijaya Art Printing Bureau.—Podar Chambers, 109, Parsi Bazar Street, Fort.

Vora Bros.—218, Princess Street, Bombay 2.

WAGLE PROCESS STUDIO & PRESS PRIVATE LTD.—Lakshmi Building, Sir Phirozshah Mehta Road, Fort. Phone: 262923. Office and Studio: 266509 Press; Managing Director: Manik V. Wagle. Director: Mohan V. Wagle.

Writers Press.—Colaba, Bombay 5.

ZENITH PRINTING WORKS.—Mody & Mody Building No. 2, 30, Meadows Street, Fort, Bombay. Phone: 252983. Highclass Printers, Engravers, Gilders and Account Book Manufacturers. Residential Phone No. 333171.

### PROCESS BLOCK MAKERS

Bombay Process Studio.—Crescent Chambers, Tamarind Lane, Bombay 1.

BUCHANAN & CO., S. E.—17, Mangalore Street, Ballard Estate, Fort, Bombay. Phone: 261348. Block Makers, Designers and Art Printers.

Mahanand Process Works.—2, Surya Mahal, Military Square Lane, Meadows Street, Fort.

Mitra, H. P., & Co. (Estd. 1920).—Krishna Cinema Building, New Charni Road, Bombay 4.

New Jack Printing Works, Private Ltd.—Seksaria Mills Compound, Globe Mills' Passage, off DeLisle Road, Bombay 18.

Press Process Studio.—Victoria Mills, 2nd floor, Gamdevi, Bombay 7.

Studio Ratan Batra Ltd.—Ilaco House, Sir Phirozshah Mehta Road, Fort.



Telephone: 351620, 356935

Telegram: SUNPROCESS

## SUN PROCESS WORKS

*Specialists in advanced  
techniques of process  
engraving*

**8, Tata Road, off New Queen's Road, Bombay 4**

WAGLE PROCESS STUDIO & PRESS PRIVATE LTD.—Lakshmi Building, Sir Phirozshah Mehta Road, Fort. Phones: 262923, Office and Studio: 266509, Press; Managing Director: Manik V. Wagle; Director: Mohan V. Wagle.

### PROVISION MERCHANTS

AKBARALLY EBRAHIMJI.—Kamar Building, 38-C, Cowasji Patel Street, Fort. Wholesale and Retail Provision and General Merchants, Perfumers, Dispensing Chemists and Druggists and Manufacturers' Representatives. Phone Nos. 253921-22-23. Grams: "TUSSIBAR." Branch: 12, Sir Phirozshah Mehta Road. Phone: 26-3716.

Akbarally Ebrahimji.—Pharmacy & Department Stores, 45/47, Veer Nariman Road, Bombay.

Atlantic Stores.—Western Breeze Building, Colaba Causeway.

Bill & Co.—Empire Mahal, Tram Terminus, Dadar.

Chinoy & Co.—S, Mistry Building, 202, Khetwadi Back Road, Bombay 4.

Empire Stores.—Crawford Market.

Fruit Farm Products Co.—Byramji Mansion, Sir Phirozshah Mehta Road, Fort.

Great Western Stores.—Standard Building, Dr. Dadabhoi Naoroji Road, Fort, Bombay.

Haji Tarmahomed Ahmed & Co.—Inside Crawford Market.

Huns. Dewan & Co.—P. B. No. 4518, 158, Upper Duncan Road, Byculla, Bombay 8.

J. L. Morison Son & Jones Co., Ltd.—Contractor Building, Ballard Estate, Bombay 1.

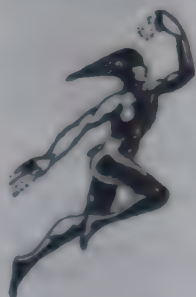
Kalvert, A., & Co.—90, Mazagaon Road, Bombay 10.

Keshavji Dharsi & Co.—Haji Abdulla Building, opp. Railway Station, Dadar.

Mehta, F. D., & Co.—Standard Building, Dr. Dadabhoi Naoroji Road, Bombay.

National Stores.—Sitaram Building, Crawford Market, Bombay.

Palet Ruby & Co.—Cumballa Hill.



## EXPRESS BLOCK

A name that has been  
engraved in the minds of  
advertising and printing  
men for 30 years as  
quality block makers.

### EXPRESS BLOCK & ENGRAVING STUDIOS PRIVATE LIMITED

MUSTAFA BUILDING, SIR PHIROZSHAH MEHTA ROAD,  
FORT, BOMBAY 1.  
TELE 252204-05

## REX STORES

*Leading General Merchants for*

PROVISIONS — COLD STORAGE FOODS  
TINNED FOODS — PATENT MEDICINES



*Free Home Delivery at Standard Market Prices*  
30, KIRAN NIVAS, PEDDER ROAD, BOMBAY 26

*No Branches*

Phone: 366911



**R. N. Rustomji & Co. (Prop. James Smith & Co.).**—Office: Sreenivas House, Waudby Road, Fort, Bombay. Grams: "HEROINE." Phones: 261334.

**Spencer & Co. Ltd.**—Spencer's Building, Forjett Street, Bombay 26.

**Shah & Co.**—Wine & Provision Merchants, Sitaram Building, Dr. Dadabhoy Road, Fort, Bombay-1. Phone: 261998/264618. Grams: "KHORDASAL".

**SULTANALI MOHAMADALI (Estd. 1895).**—148, Sarang Street, Bombay 3. Phone: 326609. Grams: "GLASSHONEY." Direct Importers of Provisions, Toilet Requisites and General Merchants. Stockists: Parry's Sweets & Dippy's provision.

**Thomson & Taylor Ltd.**—New Department Stores, 177-119, Mahatma Gandhi Road, Bombay 1.

**Unity Stores.**—Near Portuguese Church, 92-94, Girgaum Road, Bombay 4.

**Wadhvani & Co.**—Botawala Building, 7-10, Elphinstone Circle, Fort, Bombay.

**Yazdan Stores and Restaurant.**—Imperial Mahal, Tram Terminus, Dadar.

### PULLEYS MANUFACTURERS

**BOMBAY PULLEY MARKETING CO.**—164, Nagdevi Street, Bombay 3. Manufacturers & Suppliers of anything in Pulleys Aluminium or Cast Iron Flat or V-Belt Drive Split or Solid to suit individual requirements and all types of Hardware Material. Phone: 327224.

### PULP AND BOARD MERCHANTS

**FINLAY, JAMES & CO., LTD.**—Chartered Bank Building, Mahatma Gandhi Road, Fort, Post Box No. 73, Bombay 1. Phone Nos. 251255-59.

### PUMPS AND PUMPING SETS MANUFACTURERS AND DEALERS

**AGRA ENGINEERING CO.**—40, Bank Street, Fort, Bombay 1. Phone: Ofl. 256541; Res.: 532906. Grams: "RAJSPARES." Manufacturers of Diesel & Automobiles Spare Parts, "ARROW" & "DISPA" Liner & Pistons for Diesel Engines. "MG" Pistons for Car, Trucks, Commercial Vehicles, Motor Cycles, Scooters & Tractors.

**Asiatic Engineers.**—Mehta House, Meadows Street, Fort.

**ARJANSINGH KHEMCHAND.**—1st Floor, 118, Commerce House, Meadows Street, Bombay 1. Phone: 253752.

**Batlifol & Company Private Limited.**—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR.). Phones: 255451 (6 lines). Grams: "BATLIBOICO." Tele.: 011-284. City Branch: "BATLIBOI HOUSE", t59/61, Nagdevi Cross Lane, Bombay 3 (BR.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, Bhubaneswar.

**SHARAT ELECTRIC & ENGINEERING CORPORATION.**—Free Press Building, Ground Floor, 21, Dalal Street, Fort, Bombay. Phone: 255374. Grams: "GODGRACE."

**Bhogilal & Company, E.**—261/263, D. Naoroji Road, Fort.

**Bhutt Brothers.**—163, Nagdevi Cross Lane, Bombay 3.

**British Engineering Co.**—105, Apollo Street, Bombay, Bombay 1.

**CONSOLIDATED PNEUMATIC TOOL CO., LTD.**—301-302, Agra Road, Mulund, Bombay 80. Phone: 592274-6. Grams: "CAULKING", Mulund, Bombay.

**Crescent Agencies (Private) Ltd.**—Beaumont Chambers, 27/33, Meadows Street, Fort, Bombay.

**Diarvi Trading Co.**—78, Apollo Street, Fort.

**DODGE & SEYMOUR (INDIA) PRIVATE LTD.**—"KRUPA-NIDHI", 9, Wittet Road, Ballard Estate, Bombay-1 BR. Phone: 263674 & 265479. Grams: "EXIMCO."

**Drewet Chowna & Co.**—Lentin Chambers, Meadows Street, Fort.

**Duncan Stratton & Co. Ltd.**—5, Bank Street, Bombay.

**EAST ASIATIC CO. (INDIA) LTD., THE.**—Wavell House, Graham Road, Ballard Estate, P.O. Box No. 639, Bombay-1. Phones: 262711 (3 lines).

**Eastern Electric & Refrigeration Co.**—14, Hamam Street, Fort, Bombay.

**Edzar Handley & Company Private Ltd.**—135, Meadows Street, Fort, Bombay 1.

**Gannon, Dunkerley & Co., Ltd.**—Chartered Bank Building, Mahatma Gandhi Road, Fort.

**Garlick & Co.**—Haines Road, Jacob Circle.

**Greaves Cotton & Co., Ltd.**—Forbes Street, Bombay 1.

**Heatley & Gresham Ltd.**—9 Forbes Street Bombay 1.

**Hindustan Engineering Co. (Machinery Dept.).**—25-31, Ropewalk Street, Fort, Bombay. Phone: 253883. Grams: "VIDOOALL".

**India General Engineering Co. Private Ltd.**—1st Floor, 21, Forbes Street, Fort, Bombay 1.

**Ingersoll-Rand (India) Ltd.**—Devkaran Nanjee Building, Elphinstone Circle, Fort, Bombay.

**Investa Machine Tools & Engineering Co., Ltd.**—Ewart House, Bruce Street, Bombay 1.

**Jacks, William & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Fort.

**JYOTI LIMITED.**—Baroda 3. Phones: 8352-3-4. Grams: "JYOTIPUMPS", Bombay Branch: 'Advent', 12A, Fore-shore Road, Opp.: Sachivalaya, Bombay 1. Phone: 213329. Grams: "JYOTIPUMPS". Manufacturers of Vertical Turbine Pumps, Centrifugal Pumps, Chemical Pumps, Electric Motors, Synchronous Generators, Hydro-Electric Generating Units, Starters, Circuit Breakers and Switchboards. Other Branches: New Delhi, Calcutta, Madras, Secunderabad & Jaipur.

**Kilburn & Co., Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Bombay.

**Mahindra & Mahindra Ltd.**—Gateway Building, Apollo Bunder, Bombay.

**Marshall Sons & Co. (India) Ltd.**—Marshall's Building, Ballard Road, Fort.

**National Traders.**—Advani Chambers, 1st Floor, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**New Era Engineering Co.**—128, Meadows Street, Bombay 1.

**New Standard Engineering Co. Ltd.**—222, Bellash Road, Bombay 8.

**NIGO'S CORPORATION.**—64, Forbes Street, Fort, Bombay. Phones: 253428 and 74102. Grams: "NIGOS." Manufacturers of Nigo's Glandless 'Mono-Block' Electrically Operated Pumping sets for Farmers, Factories, Buildings, Contractors and Chemical Factories.

**ORIENTAL ENGINEERING CO.**—25, Forbes Street, Fort, Bombay 1. Phone: 253057. Grams: "ADIVISHNU." Sole Agents for S. F. Coimbatore. Makers of Centrifugal Pumps and Monoblock Pumping Sets from 1' to 12' sizes.

**Power Machines Corporation.**—31, Forbes Street, Fort, Bombay 1.

**RADIANT ELECTRIC MACHINERY CO.**—Sir Vithaldas Chambers, Bruce Street, Bombay 1. Phones: 255296 & 370385. Grams: "RADICAL".

**Richardson & Cruddas, Ltd.**—Byculla, Bombay 8.

**Somanl & Company, Ltd.**—Mehta Building, Meadows Street, Fort, Bombay.

**RUSTON & HORNSBY (INDIA) LTD.**—1, Forbes Street, Bombay-1. Phone: 259171. Grams: "RUSTONIND." Manufacturers of Horizontal Diesel Engines, Vertical Water-Cooled and Air Cooled Diesel Engines, Diesel Alternator sets, Propellers and Sterngear, Deepwell Turbine Pumps and Centrifugal Pumps. Works: Chinchwad, Poona-19. Phone: 88231. Grams: "RUSTONIND," Chinchwad.

**SIGIL (INDIA) SERVICES PRIVATE LTD.**—Ismail Building, 381, Dr. Dadabhoy Naoroji Road, P.O. Box 952, Bombay-1. Phone: 253688 & 254531. Grams: "SIGIL." Branch: P.O. Box 1961, Madras-1. Manufacturers, Exporters and Distributors of Diesel Engines, Diesel Pumping sets and Component Parts thereof, also Automobile Parts.

**TALWARKER BROTHERS PRIVATE LTD. (W. R.).**—Lentin Chambers, Dalal Street, Fort, Bombay 1; Phones: 253367 & 256775; Grams: "PUMPENAMEL."

**Tecalemit (India) Ltd.**—9, Forbes Street, Bombay 1.

**UNITED INDIA ENGINEERING CO.**—6, Commerce House, Meadows Street, Fort, Bombay. Phone: 251492. Grams: "UNICONARAM." Engineers and Machinery Dealers. Sales & Showroom: 18, Old Custom House Road, Fort, Bombay.

**Voltas Ltd.**—19, Graham Road, Ballard Estate, Bombay 1.

**WATER SUPPLY SPECIALISTS PRIVATE LTD.**—8, Hamam Street, Bombay 1. Phone: 252325. Grams: "PUMPENAM." Branches: Calcutta, Madras & New Delhi. Sole Agents for Myers Pumps. Manufacturers of 'WASP' pumping sets etc.

**William Jacks & Co., Ltd.**—Bharat House, Apollo Street, Fort.

**Y. M. PATHARE & CO.**—Post Box No. 1426, Bombay 1.

### P. V. C. LEATHER CLOTH MFRS. & DEALERS

**BHOR INDUSTRIES LTD.**—Sales Department, 392, Cadell Road, Bombay 28. Phones: 451418, 451967, 451978. Grams: "COVERCLOTH." Manufacturers of "Raja" Brand Plastic Cloth & "Natraj" Brand Plastic Films & Sheetings. VYNATILE Flooring Material & STEELGRIP PVC Electrical Insulation Tape.

**DHARAMPUR LEATHER CLOTH CO. PVT. LTD.**—Manufacturers of heavy upholstery materials, PVC Handgloves, Industrial and Domestic type. Acid Resisting Polyester Glass Fibre Laminates, Tanks, Pipes & Fittings. 10, Chowpatty Sea Face, Bombay 7. Phone: 35-5481. Grams: "PUNEM."



**GANDHI, R. & CO.**—50, Sheriff Devji Street (Chakla), Bombay 3. Wholesale Distributors of P.V.C. Leather Cloth and Book Binding Cloth. Phone: No. 322897.

**Hindustan Plastic Co.**—95, Abdul Rehman St., Bombay 3.

**MAMAJI INDUSTRIAL CORPORATION.**—136/38, Sir Ebrahim Rahimtoola Road, Bombay 3. Phone: 332282. Grams: "MA-MAJISON."

### P. V. C. PLASTIC SHEETINGS

**BOMBAY LEATHER GOODS DEPOT.**—14, Shamset Street (Chippi Chawl), Off Abdul Rehman Street, Bombay 2. Phone: 325649 (Office), 473564 (Res.) and 329201 (Godown). Grams: "BOLEGOLD", Bombay-2. Wholesale Stockists & Suppliers of P.V.C. Plastic Films and Sheetings.

### RADIO AND SOUND ENGINEERS

**MOTWANE PRIVATE LTD.**—127, Mahatma Gandhi Road, P.O. Box No. 1312, Bombay 1 BR. Phone: 252337. Grams: "CHIPHONE," Bombay.

### RADIO IMPORTERS, MANUFACTURERS, DEALERS AND PART SUPPLIERS

**Acme Radio Corporation, The.**—Pitle Mansion, 83, Vithalbhai Patel Road, Bombay 4.

**A. M. Talati & Co.**—381, Hornby Road, Fort.

**Audio Waves.**—P.O. Box 480, G.P.O., Bombay 1.

**Automobile Co., Ltd.**—41, Queen's Road, Bombay 2.

**Bell Radio & Electric Co.**—Swadeshi Mills Estate, Tata Road, Girgaum.

**Bharat Electric Supply Traders.**—542, Sandhurst Bridge, Chowpatty, Bombay 7.

**Bharat Radio Corporation.**—404, Waghwadi, Kalbadevi, Bombay No. 2.

**Bombay Motors & Radios Ltd.**—33, New Queen's Road.

**Bombay Phone & General Agency.**—520-22, Kalbadevi Road.

**Bombay Radio Service.**—First Floor, Prospect Chambers, Hornby Road, Fort.

**British Radio & Electric Co.**—Prospect Chambers, Hornby Road, Fort, Bombay.

**Choice Radio.**—Opp. Royal Opera House, Bombay 4.

**CHOPRA RADIO ELECTRIC COMPANY.**—Sole Concessionaires for West German. 4 Speed PE Record Changers, Embassy and Hitachi/Chopra Transistor, Radios, Public Address Equipment. Imperial Cinema Building, Lamington Road, Bombay 4. Phone: 357891.

**Cinefones.**—Opp. Opera House, 3, New Queen's Road.

**City Radio Co.**—Malabar Mansion, opp. Cusrow Baug, 37, Garden Road, Colaba.

**Dominion Radios.**—15, New Queen's Road, Bombay 4.

**Eastern Electric & Engineering Co.**—127, Mahatma Gandhi Road, Bombay 1.

**Eastern Radio Corporation.**—99A-2, Jenabai Building, Main Road, Dadar.

**ELECTRONIC RADIO & SOUND CORPORATION.**—394-B, Lamington Road, Lamington Chambers, Bombay 4. Phone: 72056. Grams: "TRANSOCEAN." Electronic Components for Trade, Industry, Education & Research.

**Economic Electric Co., Ltd., The.**—Jail Road (East), Dongri, Bombay 9.

**EXPRESS ELECTRONICS.**—78, Abdul Rehman Street, Bombay 3. Authorised Dealers: "PHILIPS" Radio, and "LEONARD" Refrigerators. Phone: 325938. Grams: "PRIME-WATCH".

**General Radio & Appliances Private Ltd.** (Formerly Fazalbhoy Ltd.)—Opera House, Bombay 4. Phone: 26204.

**Gramophone Co., Ltd.**—Sir Phirozshah Mehta Road, Fort.

**Imanes Private Limited.**—94, S. V. Road, P. O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANESCOL". Springs and Forms out of Spring Wires and Strips for your Industry.

**Impex Trading Co.**—Kothari Mansion, opp. G.P.O.

**Indian Electric Equipment Co.**—220, Khetwadi Main Road, Tara Mansion, Bombay 4.

**Indo-American Radio & Electronic Corporation.**—Allana Compound, Opp. Agripada Police Station, Lamington Road (North), Bombay 11.

**J. V. MEHTA & CO.**—Opera House, Bombay 4. Phones: 352631-32. Partners Res.: 354178. Grams: "JEVIMEHTA."

**Lakhanpal Private Ltd.**—29, New Queen's Road, Bombay 4.

**Lalwani Radio Corporation.**—Office: Tinwala Building, Tribhuvan Road, Bombay 4.

**LAXMIDAS & DWARKADAS** (Estd. 1914).—486, Sardar V. P. Road, Bombay 4; Phone: 357392; Grams: "THYMOL." Makers of "OMEGA" & Electronic Products.

**METRO MUSICS.**—545, Kalbadevi Road, Bombay 2. Phone: 23778. Grams: "METMUSICS." Sole Distributors for METZ (German) Radios and "TRIOTRON" Valves & Radio parts.

**Modern Electric Corporation.**—Byramji Mansion, Sir Phirozshah Mehta Road, Fort.

**Monitor Radios.**—24, New Queen's Road, Opp. Eary Talkies, Bombay 4.

**Motwane (Private) Ltd.,** Incorporating Chicago Telephone & Radio Co. Private Ltd. (Estd. 1909).—127, Mahatma Gandhi Road, P. B. No. 1312, Fort, Bombay.

**Murphy Radio of India Ltd.**—Dr. Shirodkar Road, off Hospital Avenue, Parel, Bombay.

**National Echo Radio & Engineering Co. Ltd.**—Ewart House, Bruce Street, Fort, Bombay 1. Phone: 253615. Grams: "ENNABEE."

**Paradise Radio Electric & Engineering Co.**—Opp. Swimming Bath, 39, Seaface, Chowpatty, Bombay.

**Parakh & Sons.**—483, Kalbadevi Road, Bombay 2.

**PARSRAM & CO.**—"Kailash Darshan," Kennedy Bridge, Nana Chowk, Bombay 7. Phone: 357010; Grams: "REKAM."

**Radio Services.**—417-21, Lamington Road, next to Powells Ltd., Bombay No. 4.

**RADIOCRAFTERS, THE.**—Radio and Sound Engineers, Land Mansion, opp. Charni Road Station, 21-C-D, Queen's Road. Phones: 354406 (Office) and 356003 (Works).

**Ragavji & Co.**—427, Kalbadevi Road, Bombay 2.

**Rex Radio Amplifier & Cinema Service.**—23, Kennedy Bridge, near Opera House.

**Rhythm House Private Ltd.**—40, Rampart Row, Bombay.

**Star Radio Service.**—Bhivandivala House, Gowalia Tank.

**Star Radio & Engineers Ltd.**—Parekh House, New Queen's Road, Bombay.

**Sundarlal, C., & Co.**—Manhar Building, 189, Lohar Chawl, Bombay 2.

**Super Simplex Radio Co.**—16, Harinivas, Lady Jamshedji Road, Bombay 28.

**Supreme Electrical Engineering Co., Ltd.**—Lady Jamshedji Road, Mahim, Bombay 16.

**Surendra Trading Corporation.**—159-2, Khetwadi Back Road, Bombay 4.

**Talati, A. M., & Co.**—Esmal Building, Hornby Road.

**TELEFLUTE RADIO AGENCY.**—Homji Street, off Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 253358.

**Unique Trading Corporation.**—Mustafa Building, Sir Phirozshah Mehta Road, Fort.

**United Engineering Corporation.**—Datoobhoy Building, 5, New Queen's Road.

**United Radio Service.**—Padhye Wadi, Bhawani Shanker Road, Dadar.

**Universal Radio Co.**—6, Banos Building, Prarthana Samaj, Bombay 4.

**WACO RADIO ELECTRONIC INDUSTRIES.**—Office: Sukhsagar Building, Hughes Road, Bombay 7. Phone: 352951. Showroom 421, Lamington Road, Bombay 7. Phone: 352580. Factory: Ulhasnagar, 4, Opp.: Vithalwadi, C. Rly. St., Maharashtra State, Mfrs. of Sanyo Transistor Radios, Waco Radios, Amplifiers, Intercom equipments, Hi-Fi Amplifiers, Ampligrams, Radiograms, Transformers, Chokes, Ballasts for Fluorescent & HPMV Lamps and Wooden Radio Cabinets. West End Radio.—385, Kalbadevi Road.

**WESTERN AGENCIES CO.**—Sukhsagar Building, Hughes Road, Bombay 7. Phone: 352951. Grams: "WESTCOY." Showroom: 421, Lamington Road, Bombay 7. Phone: 352580. Engineers, Importers of Radio Components, P.A. Equipment, Electric Appliances, Telecommunication Equipments Electronic Components, Electronic and Communication Equipment & Instruments. "WACO" Radios, Amplifiers, Intercoms, Transformers, Chokes.

### RADIO AND COMPONENT PARTS MANUFACTURERS

**BRIGHT BROTHERS PRIVATE LTD.**—156/A, Tardoo Road, Bombay 34. Grams: "BRIBOS." Phones: 378545, 378549, 378540; Manufacturers of Radio Grilles, Knobs, Strips, Cabinets, Transistor Sets, etc., etc. in Plastics against customer specification.

**DOMINION RADIOS.**—15, New Queen's Road, Bombay 4. Phone: 352298; Grams: "DOMIRA." Importers and Distributors of all makes of Radio Components, P.A. Equipments, Tape Recorders, Record Changers and Electronic Instruments.

**MURPHY INDIA LTD.** (Formerly M. R. Industries Ltd.).—Dr. Shirodkar Road, Parel, Bombay 12. Phones: 442474 & 442475. Grams: "RADMURPHY." Manufacturers of Murphy Radio Receivers and Component Parts.

**MULCHANDANI ELECTRICAL & RADIO INDUSTRIES LTD.**—Manufacturers of Bush Radios, Celestion Speakers, Hunts capacitors and McMurdo Valveholders, Sukhsagar, Sandhurst Bridge, Hughes Road, Bombay 7. Phones: 356928 & 353246; Grams: "MULRAIN."



**TELECOM INDUSTRIES PRIVATE LTD.**—61, Dr. S. S. Rao Road, Parel, Bombay 12. Phone : 443354. Largest Manufacturers of Radio Cabinets & Dials in India. Sole Distributors for Pye RF Dielectric & Induction Heating Equipment for Plywood, Furniture & General Engineering Industries.

**Telerad Private Ltd.**—Manufacturers of "TELARD" Radios and component Parts. Atlas Mills Compound, Reay Road, Bombay 10. Phone : 73627-28.

### RAILWAY & WAGON EQUIPMENT

**JINDAL ENGINEERING WORKS.**—Darukhana Kasara Street, Bombay 10 DD. Phone : 376389 & 378720. Grams : "JINDAL-SHIP." Manufacturers of various Components for M.C.C.R. and Box Type Wagon, Forgings, Hooks, Structural Fabricator, Barbed Wires, "U" Staples, Cable Carrying Trays and A.C. S.R. Accessories and transmission line tools.

### RAILWAY SPRING MFRS.

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Eria, P.O. Box 8002, Bombay 56 A3. Phone : 571634. Grams : "IMAN-ESCOL". Springs & Forms out of Spring wires and strips for your industry.

### RATING ADVISERS

**GILBERT-LODGE & CO.**—Elphinstone Building, Veer Nariman Street, Fort, Bombay. Phones : 251819 & 252607. Grams : "READIMESS."

### RAYON (RAW MATERIALS)

**Batilbol & Company Private Limited.** Regd. Office : Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR.). Phones : 255451 (6 lines). Grams : "BATLIBOICO." Tele : 011-284. City Branch : "BATLIBO HOUSE", 59/61, Nagdevi Cross Lane, Bombay-2 (BR.). Branches : Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate : Bangalore 2. Resident Representatives : RANCHI, BHUBANESWAR.

### RAYON MACHINERY (PARTS) SUPPLIERS

**DOBSON & BARLOW (RAYON PLANTS) PRIVATE LTD.**—3rd Floor, Stadium House, Veer Nariman Road, Bombay 1. Phone : 245878. Suppliers of plants for the production of Continuous Filament Viscose Rayon and Transparent Paper.

**INDIA RUBBER PRODUCTS.**—Kasturichand Mills Estate, Dadar, Bombay-28. Phone : 454072. Manufacturers of Industrial & Moulded Rubber Products. Such as Rubber Bushes, Rings etc. to Drawing and Specifications.

### RAYON YARN MANUFACTURERS

**NATIONAL RAYON CORPORATION LTD., THE.**—Sales Office : Eros Theatre Building, 124, Karve Road, Fort, Bombay 1. Phone : 246043 (Three lines). Grams : "NARACORP," Bombay.

### READYMADE CLOTHES MFRS.

**Cawnpore Mills Depot.**—"Churchgate House", Churchgate Street, Fort, Bombay.

**JAYSHREE TRADING CORPORATION.**—23, Ghoga Street, Bombay 1. Marketers in India of "ARMOUR" Brand Ready-made Garments.

**Karnatak Concerns Ltd.**—197, Shivali Park, Bombay 28.

"Nanjis."—206-208, Carnac Road, Bombay 2.

**Railship Stores.**—39, Meadows Street, Fort, Bombay.

**WEAR (INDIA) PRIVATE LTD.**—4th Floor, Nanabhai Mansion, Sir Phirozshah Mehta Road, Fort, Bombay 1. Grams : "READYWEAR." Phone : 265213. Sole Agents (Bombay, Thana & Kolaba Dist.) for Samsons Dresses.

**Weldon Shop.**—Oomrigar Building, opp. Crawford Market, Bombay 3.

### RECTIFIERS

**HIND RECTIFIERS LTD.**—Lake Road, Bhandup, Bombay 78. Grams : "HIRECT," Bombay 78. Licensees of Westinghouse Brake & Signal Co., Ltd., London, for Manufacture of Rectifiers, Battery Chargers, Electroplating Sets, Silicon Power Plants. Selling Agents : Kaycee Industries Ltd., Kamani Chambers, Nicol Road, Ballard Estate, Bombay 1. Phone : 264030. Grams : "KAYCEE."

**R. G. KESWANI.**—World Naka, P. B. 16552, Bombay-18. Phones : 370379 & 373490. For Selenium and Silicon Rectifier Elements & Stacks. Industrial Consultation on Rectifier Installations. Raw Materials and Components.

### REFINERS AND ASSAYERS OF PRECIOUS METALS

**NATIONAL REFINERY PRIVATE LTD.**—87, Tardeo Road, Bombay 34. Refiners and Assayers of Precious Metals, Mfrs. of Silver Solders, Silver Salts, Silver Anodes, Powder, Strips, etc.; Carat Gold in Various Forms and Colours. Phone : 372263.

### REFRACTORIES

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort. Phone : 254433. Grams : "DATNARE."

**ISHWAR INDUSTRIES LTD., THE.**—P.O. Ishwarnagar, New Delhi. Manufacturers of Fire Bricks, B.F.C. High Temp. Fire Cements, Castable Refractories, Insulating Bricks & Cements, Acid Resisting Bricks & Cements & Sillimanite Bricks & Mortars, etc. Phone : 76241 (3 lines). Sales Office : 11, Bank Street, Bombay. Phone : 251899.

### REFRIGERATORS (DOMESTIC)

**AIRCONDITIONING & REFRIGERATION CORPORATION.**—Repairs of all types of Refrigerators, Air-Conditioners, Water-Coolers, Deep-Freezers, Bottle Coolers, X-Ray Developing Units, Industrial Air Control, Installation, Servicing, Maintenance, Dealers, Manufacturers. 297, S. V. P. Road, Bombay 3. Phone No. : 334795.

**Blue Star Engineering Co.**—Kasturi Building, J. Tata Road, Bombay 1.

**Bombay Gas Co., Ltd.**—214, Hornby Road, Fort.

**BOMBAY REFRIGERATOR INDUSTRIES LTD.**—Manufacturers of Domestic Refrigerators, 119, Bhawani Shanker Road, Dadar, Bombay 28. Phone : 451912.

**Eastern Electric & Refrigeration Co.**—14, Hamam Street, Fort.

**Eastern Radio and Refrigeration Co.**—8, Beaumont Chambers, Meadows Street, Fort.

**Economic Electric Co. Ltd.**—Jall Road (East), Dongri, Bombay 9.

**FREEZALL.**—Air Conditioning, Refrigeration, Electrical & Mechanical Engineers, Tribhuvan Road, Bombay 4. Phone : 70815. Grams : "FREEZALL."

**Gramophone Co., Ltd.**—Universal Fire & General Insurance Co.'s Building, Sir Phirozshah Mehta Road, Fort.

**Maugharam & Co.**—Jan Mansion, Sir Phirozshah Mehta Road, Fort.

**Modern Traders.**—Post Box No. 1344, Bombay.

**RADIOCRAFTERS, THE.**—Refrigeration Engineers, Land Mansion, opp. Charni Road Station, 21-C-D, Queen's Road, Bombay. Phones : 354406 (Office) and 356003 (Works).

**Refrigeration & Appliances Co. Private Ltd.**—Pravin Court, 95, Queen's Road, Bombay.

**Rhythm House Ltd.**—40, Rampart Row, Fort, Bombay 1.

**SPENCER & CO. LTD.**—Spencers Building, Forjett Street, Bombay 26. Phones : 362861-62-63. Grams : "PORTEDOS." Sole Distributors throughout India for Kelvinator, Refrigerators & Belaire Air-Conditioners, Sales and Service.

**UNITED ENGINEERING CO., THE.**—Daya Manelli, 27-A, Deorukhkar Road, Bombay 14. Assemblers and Manufacturers of Air-Conditioners, Refrigerators, Water Coolers, Commercial Freezing Plants and Accessories. Also Specialists in Repairs and Maintenance and undertake service contracts. Phone : 443008.

### REPRESENTATIVES (MANUFACTURERS)

**Advani, G. V., & Co.**—Prospect Chambers, Hornby Road, Fort. Advani & Co., Ltd., J. B.—Advani Chambers, Top Floor, Sir Phirozshah Mehta Road, Fort.

**Akbarally Ebrahimji.**—38/C, Cowasji Patel Street, Fort, Bombay. Grams : "Tussibar."

**Associated Agencies (Bombay).**—47, Podar Chambers, Parel Bazar Street, Fort.

**Associated Corporation of Industries (India) Ltd.**—Commerce House, Currimbhoy Road, Ballard Estate.

**Bakshi Ram & Co.**—129, Modi Street, Fort.

**Batilbol, O. J., & Co.**—319, Hornby Road, Fort.

**Beardsell, W. A., & Co., Ltd.**—Dhan-Nur Building, Sir Phirozshah Mehta Road, Fort.

**Bhogilal & Company, R.**—261/263, Hornby Road, Fort.

**Birkmyre Brothers Ltd.**—12, Rampart Row, Fort.

**Boek, F., & Co.**—Shale Building, Bank Street, Fort, Bombay.

**Brady, W. H., & Co., Ltd.**—Royal Insurance Building, Churchgate Street, Fort.

**British Engineering Co.**—105, Apollo Street, Fort.

**Byramji, T., & Co.**—Central Bank Building, Mahatma Gandhi Road, Fort.

**Cambata Industries Private Ltd.**—Cambata Building, 42, Queen's Road, Bombay 1.



**Chavannes & Co., Ltd.**—Mercantile Chambers, Graham Road, Ballard Estate.

**Chimanlal Desai & Co.**—Gool Mansion, Homji Street, Fort.

**Choksi, H., & Co.**—106, Meadows Street, Fort.

**Chotani Electric & Engineering Co. Ltd.**—57, Apollo Street, Fort, Bombay.

**Corn Products Co. (India), Ltd.**—Shreenivas House, Waudby Road, Fort.

**Dali B. Shroff & Co.**—361, Dr. Dadabhai Naoroji Road. Phone: 21465.

**Deeth & Co., W. H.**—P. O. Box 320, Bombay 1.

**Denis Malcolm & Co., Ltd.**—Kumud House, 267, Dr. Dadabhai Naoroji Road, Fort, Bombay.

**Dodsai Limited.**—Mafatlal House, Backbay Reclamation, Bombay 1.

**Drewet Chowna & Co.**—Lentin Chambers, Meadows Street, Fort.

**Dubash Freres & Co.**—Victoria Building, Parsee Bazar Street, Fort.

**Duncan Stratton & Co., Ltd.**—5, Bank Street, Fort.

**Dwarkanadas & Sons Ltd.**—Mehta House, 89, Apollo Street, Fort, Bombay.

**EASTERN TRADING CO.**—Mahakali Chawl, Pydhownie, Bombay 3. Light Merchants & Manufacturers' Agents.

**Engineer, Eruch D., & Co.**—Crossby House, Apollo Street, Fort, Bombay.

**Fairdeal Corporation Ltd., The.**—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**Fazalbhoy Ltd.**—16, New Queen's Road, Bombay 4.

**Fereshaw, L., & Co.**—Shirin Mansion, Sleater Road, Bombay 7.

**Forbes, Forbes, Campbell & Co. Private Ltd.**—Forbes Building, Home Street, Fort.

**Francis Klein & Co. (Bombay) Ltd.**—Shale Building, Bank Street, Fort, Bombay.

**Gaytee and Company.**—Janmabhoomi Chambers, Fort Street, Fort. Grams: "IMPENG."

**Gillanders Arhuthnot & Co., Ltd.**—16, Queen's Road Estate, Bombay.

**Gladwyn & Co.**—Powvala Building, 251, Hornby Road, Fort.

**Hardcastle, Wand & Co., Ltd.**—Alice Building, Hornby Road, Fort.

**Heatley and Gresham Ltd.**—9, Forbes Street, Fort.

**Jayems Engineering Co.**—Warden House, Sir Phirozshah Mehta Road, Fort.

**Khatau Valabhdas & Co.**—Indian Globe Chambers, Fort Street, Bombay 1.

**LATHAM ABERCROMBIE DIVISION OF FORBES FORBES CAMPBELL & CO. LTD.**—Forbes Bldg., Home Street, Fort, Bombay. Phone: 268081. Grams: "LATHAM."

**Mahindra & Mahindra Ltd.**—Gateway Building, Apollo Bunder.

**Marshall Sons & Co. (India) Ltd.**—Marshall Building, Ballard Estate, Fort.

**Muller & Phipps (India) Ltd.**—Queen's Mansions, Bastion Road, Fort.

**Narvo.**—IC-Hooseini Chambers, 4th Floor, Nanabhai Lane, Fort.

**Ormerods (India) Ltd.**—Bank of Baroda Building, Apollo Street, Fort, P.O. Box No. 410.

**Paramount (India) Ltd.**—Kermani Building, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**Parry & Co., Ltd.**—United India Building, Sir Phirozshah Mehta Road, Fort.

**Pioneer Consolidated Co. of India, Ltd.**—Botawalla Building, 11-13, Elphinstone Circle, Fort.

**Ratanal Morarji Ltd.**—Prospect Chambers, 317-21, Hornby Road, Fort.

**Refrigeration & Appliances Co. Private Ltd.**—Pravin Court, 95, Queen's Road, Bombay 1.

**Roberts McLean & Co. Private Ltd.**—Ilaco House, Sir Phirozshah Mehta Road, Fort.

**Scientific Instrument Co., Ltd.**—Navsari Building, 240, Hornby Road, Fort.

**Sethisons Ltd.**—12, Rampart Row, Fort.

**Somani & Company Ltd.**—Mehta Building, Meadows Street, Fort, Bombay.

**Stoessel, W. R., & Co.**—63, New Marine Lines, Fort.

**Turner Hoare & Co. Ltd.**—Gateway Building, Apollo Bunder, Fort, Bombay.

**Vikram Padamsey & Co.**—Rustom Building, 29, Veer Nariman Road, Fort.

**Volkart Brothers.**—19, Graham Road, Ballard Estate, Bombay.

**Ward, Thos. W. (India) Ltd.**—Marshall Building, Ballard Road, Fort.

**Western India Engineering Corp. Ltd.**—Cama Chambers, 23, Meadows Street, Fort.

**William Jacks & Co., Ltd.**—Hamilton House, Ballard Estate, Fort.

**Williams, G., & Co. Private Ltd.**—Steelcrete House, Backbay Reclamation, Bombay 1.

**Y. M. Pathare & Company.**—Post Box 1423, 41, Meadows Street, Bombay 1.

**Yesbanand & Co.**—Podar Chambers, Parsee Bazar Street, Fort.

## RESPIRATORS (DUST PROTECTION) MFRS.

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Bombay 1. Phones: 266371, 264555 and 263795. Grams: "VIBHACO." Branch: G.P.O. Box 2628, Calcutta 1. Phone: 336680. Mfrs. of Industrial Safety Equipments, such as Goggles, Gloves, Dust Masks, Gas Protection Respirators Helmets, Safety Belts, Aprons, etc.

## ROADS BUILDERS

**SHAH CONSTRUCTION CO. LTD.**—198, Jamshedji Tata Road, Bombay 1. Phone: 245044 (3 lines). Grams: "SUPER-TRADE." Engineers & Contractors. Specialists in Prestressed Concrete Roads, Dams and Canals, R. C. C. Multi-storied Buildings.

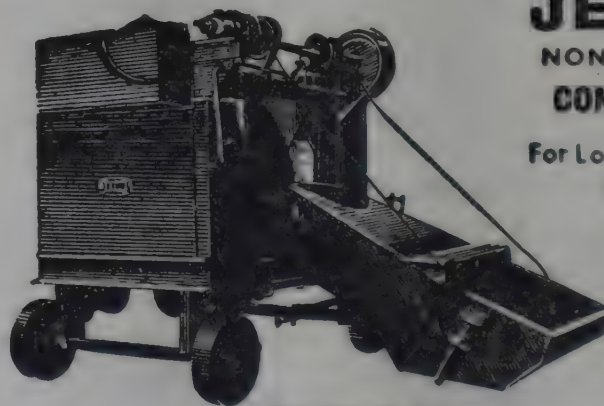
## ROAD BUILDING & CONSTRUCTION MACHINERY

**Associated Machine & Tool Co.**—130, Meadows Street, Fort.  
**Balmer Lawrie & Co., Ltd.**—Ballard Estate, Bombay 1.

**BATLIBOI & COMPANY PRIVATE LIMITED.**—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay 1 (BR). Phones: 255451 (6 lines). Grams: "BATLIBOICO". Tele: 011-284. City Branch: "BATLIBOI HOUSE", 59/61, Nagdevi Cross Lane, Bombay 3 (BR). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore-2. Resident Representatives: Ranchi, Bhubaneswar.

**Greaves Cotton & Co., Ltd.**—Forbes Street, Bombay 1.

**Jacks, William & Co. Ltd.**—Hamilton House, Graham Road, Ballard Estate, Fort.



## JESONS NON-TILTING TYPE CONCRETE MIXER

For Lower Maintenance  
Fast Mixing cycle  
Better concrete  
Easy to handle  
Longer life

GEAR & CHAIN  
SYSTEM OF DRIVE

Manufactured by:

## JAIRAMDAS & SONS

7937, Ranigunj, Secundrabad · Bombay · Bangalore · Delhi · Madras

**Killick, Nixon & Co., Ltd.**—Home Street, Fort, Bombay 1.

**Larsen & Toubro Ltd.**—I. C. House, Dougall Road, Ballard Estate, Fort.

**Lusob Trading Co.**—Bell Building, Sir Phirozshah Mehta Road, Fort.

**MILLARS' TIMBER & TRADING CO., LTD.**—Victoria House, Victoria Road, Bombay 27. Phones: 372103 & 372104. Grams: "JARRAH", Bombay.

**NATIONAL ASPHALT PRODUCTS & CONSTRUCTION CO.**—Hill View, Mahul Road, Chembur, Bombay 74 AS. Phone: 521637 & 521795. Dealers in and Hirers of: Bulldozers, Road Rollers Asphalt Mixers, Bowsers & Boilers, Concrete Mixers & Vibrators, Water Pumps, Compressors, etc.

**ORIENTAL ENGINEERING CO.**—25, Forbes Street, Fort, Bombay 1. Phone: 253057. Grams: "ADIVISHNU." Dealers in Second-hand Road Rollers, Stone Crushers, Air-compressors, Concrete & Pan Mixers.

**Volta Limited.**—19, Graham Road, Ballard Estate.

**Ward, Thos., W. (India) Ltd.**—Marshall's Building, Ballard Road, Fort.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

## ROLLING SHUTTERS MANUFACTURERS

**NAVBHARAT ROLLING SHUTTERS & ENGINEERING WORKS.**—For:—Strength, Security, Smooth Running and Lasting Service, Manually, Mechanically and Electrically Operated. Manufacturing: M. S. Rolling Shutters, Rolling Grills, Collapsible Compound Gates, Fire Proof Doors, Alligator Doors etc. C. Rly. Parel Station Road, Parel, Bombay-12. Phone: 445835. Grams: "ENBEROL."



National Engineering Works.—Khed Gully, Bombay 28.  
Shaparia Dock & Steel Co., Ltd.—Sewri Fort Road, Bombay 15.  
Standard Rolling Shutters & Engineering Works.—37, A.B.E. Parel Road Cross Lane, Bombay 12.

**SENTINEL ROLLING SHUTTERS & ENGINEERING CO PRIVATE LTD.**—96, Bora Bazar Street, Fort, Bombay 1. Phone: 262019. Grams: "DARWAJA". Manufacturers of Rolling Shutters, Collapsible Gates, Fire-proof Doors & Steel Windows, etc.

**SHUBHDWAR ROLLING SHUTTERS & ENGINEERING CO.**—15, Bank Street, Fort, Bombay. Phones: 254445, 254185 & 256502. Grams: "SHUBHROLL". Manufacturers of Steel and Aluminium Rolling Shutters, Window Grills, Collapsible Gates, Fireproof Doors, Compound Gates, Steel Doors & Windows, all types of Steel Fabrication Works.

## Where there's SWASTIK there's Protection

### Manufacturers of:



All Steel Rolling Shutters—Vertical Rolling Shutters—Gear & Electrically Operated Rolling Shutters—Airy Ventilated Rolling Grills Collapsible Gates—New Type of Shutter Gates, Etc.

## SWASTIK ROLLING SHUTTERS & ENGINEERING WORKS

Office:—1st floor, Giriraj, Sant Tukaram Road, Bombay-9 Office Phone: 321771

Grams: "SWASTIKROL"

Factory:—Ram Mandir Road, Goregaon (West), Bombay-62.



## ROOF WATERPROOFING

**GLADSTONE LYALL & CO., LTD.**—21, Lansdowne Road, Apollo Bunder, Bombay 1. Tel. No. 212805 & 211241. Grams: "GLADSWYLL". Bombay Manager: Cmdr. L. N. Deefholts, Regd. Office: 4, Fairlie Place, Calcutta.

**INDOPLAST LTD.**—Kasturi Building, Jamshedji Tata Road, Bombay 1. Grams: "STYROPER". Phone: 38071. Manufacturers of the dual-purpose Thermocole which insulates as it waterproofs.

**SHALIMAR TAR PRODUCTS (1935) LTD.**—16, Bank Street, Fort, Bombay 1. Phone: 254643. Grams: "TARSTIL". Specialists in Roof Waterproofing, Damp-proofing, Flooring, Decking, Canal Linings, etc. Contracts executed under guarantee.

## ROPERIES

Adamally Sons Ltd.—277, Nagdevi Street, Bombay 3.

**ADAMJI KADERBHOY.**—Post Box No. 5046, 337, Katha Bazar, Bombay 9. Tel. No. 322485. Grams: "RAJKOTWALA". Manufacturers and Stockists of Cordage, Manila Coir, Hemp & Cotton Ropes. Approved Contractors to Govt., Rlys. and Steamship Companies. Exporters of Coir Products. Selling Agents for: The Ganges Rope Co., Ltd., Calcutta.

**CHANDULAL & CO., KATHAWALA.**—11, Kazi Sayed Street, Bombay 9. Grams: "CORDCOIR". Phone: 325598.

**EVERGREEN CORPORATION.**—9/15, Picket Cross Road, P.O. Box No. 2733, Bombay 2. Phone: 22162. Grams: "GREENLEAVE". Stockists of Manila Ropes, Stay Rods, Pulley Blocks & Tackling, Lifting Stores.

Fatabhal, K. S., & Co.—129, Nagdevi Street, Bombay 3.

**GARWARE FILAMENT CORPORATION PRIVATE LTD.**—Chowpatty Chambers, Sandhurst Bridge, Bombay 7. Phone: 22091.

**GUJRAT ROPE FACTORY, THE.**—57/61, Bhajipala Lane, Bombay 3. Phone: 324768. Grams: "WEBTAPE". Manufacturers of all kinds of Cotton Rope, Hemp, Ropes, Tapes, Newer, etc.

Mohamedbhoy, H., & Co.—114-116, Bhajipala Lane, Bombay 3.

**M.M.A. RASIWALLA & CO., (Estd. 1910).**—17, Janjikar Street, Huseinbhai Bldg., Mandvi, Bombay 3. Phone: 323450. Grams: "TWIST". Manufacturers of Cotton Ropes, Thread and Twine, and Dealing in Fish Hooks and Hemp Twine, Plastic Fishing Lines and Sail Needles.

Star Rope Works, The.—87, Sun Mill Road, Lower Parel, Bombay 13.

Talib & Co.—Talib House, 104, Nagdevi Street, Bombay 3.

**THANA TEXTILE ROPE WORKS.**—"Sun Brand" Pink Ply, Cotton Rope, Spindle Tapes, Bandings & Endless Bands Manufacturers and Merchants. Crescent Chambers, Tamarind Lane, Fort, Bombay 1. T. No.: 257395. Grams:

"ROPEDRIVE." Works: Bombay-Agra Road, Thana (C.R.). T. No.: 591889.

Thanawala, B., & Sons, Ltd.—47, Tamarind Lane, Fort.

## ROSIN AND TURPENTINE

**BOMBAY ROSIN & TURPENTINE CO.**—G.P.O. Box 1512, Bombay 1. Grams: "RAJGANGA." Phone: 253587. Manufacturers, Agents, Suppliers & Exporters of Rosin, Oils, Varnishes, Shellac, Glues, Disinfectants and all Chemicals to Mills & Factories. Agents & Distributors: Haward Rosin Chemicals, Nepal; National Rosin & Turpentine Factory, Punjab. Local Sales Office: Meghji Building Compound, Near Wallace Flour Mill, Mazagaon Road, Bombay 9.

Bombay Rosin Corporation.—181, Samuel Street, Mandvi, Bombay 9.

**EMPEE CORPORATION PRIVATE LTD.**—44, Cawasji Patel Street, Bombay 1. Selling Agents of "Chir Brand" Rosin and Turpentine I.S.I. Grade. Grams: "ROSTURP." Phone: 251902.

Kirtikumar Chandulal & Co.—313, Samuel Street, Vadgadi, Bombay.

**PRABHAT GENERAL AGENCIES.**—195, Kalbadevi Road, Bombay 2. Phone: 20359. Grams: "EXPANSION."

Universal Traders.—Himalaya House, Phalton Road, Bombay 1.

## RUBBER GOODS MANUFACTURERS

Bombay Rubber Works Pvt. Ltd.—Powal Point, Agra Road, Bombay 79.

Cosmos India Rubber Works, Ltd.—7, Homji Street, Fort.

Dunlop Rubber Co. (India) Ltd.—Dunlop House, Hughes Road.

**EASTERN STORES & TRADING CO. PRIVATE LTD.**—115, Nagdevi Street, Bombay 3. Phones: 322215/16. Grams: "ENERGY."

**EBRAHIM ALLIBHOY & SONS (ESTD. 1934).**—Exporters & Stockists. 260-64, Abdul Rehman Street, Bombay 3. Phone: 325163.

Empire Industrial Works.—Warden House, Sir Phirozshah Mehta Road, Fort.

Great Eastern Trading Co.—107, Cawasji Patel Street, Fort.

Gujarat Tube & Hardware Mart, The.—24, Nagdevi Cross Lane, Bombay 3. Phone: 326616. Grams: "GAUGE COCK".

Harivadan S. Dholabhai.—21A, West View, 10th Khetwadi, Bombay 4.

Heptoola Noorudin & Co.—152, Nagdevi Street, Bombay 3.

**HIND RUBBER INDUSTRIES PRIVATE LTD.**—Suryodaya Mills Compound, Tardeo, Bombay 34 WB. Phone: 379559. Grams: "HINDRUBBER." Manufacturers of Moulded rubber goods such as Bicycle Pedal Rubbers, Brake Rubbers, Seat Covers, Reflectors, Solid Tyres and Rubber Accessories for Tricycles & Perambulators, Solid Tyres for Trolleys, Complete Trolley Wheels and various industrial rubber goods required by Railways, Mills, Power Houses, Automobile Industry, etc. Managing Director: Shri Shankarlal G. Jhunjhunwalla.

**HINDUSTAN TYRES PRIVATE LTD., THE.**—Manufacturers of all kinds of Rubber and Ebonite Goods and Retreaders of Tyres, Lamington Road (North), opp. Agripada Police Station, Bombay 11. Phone: 77476. Grams: "TYRES."

**INDIA RUBBER PRODUCTS.**—Kasturchand Mills Estate, Dadar, Bombay 28. Phone: 454072. Manufacturers of Industrial & Moulded Rubber Products such as Rubber Bushes, Rings, etc. to Drawing and Specifications.

International Rubber & General Industries Private Ltd.—24, Argyle Road, Wadi Bunder, Bombay 9.

Jai Hind Rubber Products, Ltd.—391F, Grant Road, Bombay 7.

Kapadia Brothers.—Kalan Building No. 3, Kandewadi, Bombay 4.

Kishore Rubber Industries.—Suryodaya Mills Compound, Tardeo, Bombay 7.

PHONE \* 326840

GRAMS: "YOUTH"

## MERCHANT BROTHERS

151, NAGDEVI STREET, BOMBAY 3

Manufacturers & Manufacturers' Representatives

Rubber Hose, Beltings, V-Belts, Trolley Wheels, Fire-fighting Equipment, Mechanical handling Equipment, Rubber Sheets, Insertions, Rubber Gloves, Gum-Boots, Plastic Pipes & Fittings, Oil Resistant Neoprene Sheet & Other Moulded Parts, etc.

TRADE INQUIRIES INVITED



**KORULA RUBBER CO. PRIVATE LTD.**—Manufacturers of Latex Foam Cushions, Telecord Cables, Automobile parts, Rubber Lined Tanks, Industrial Rubber Goods, Gloves & Pharmaceutical Rubber Goods. 249B, Worli, Bombay 18. Phone: 451750. Grams: "ZIRCON," Worli, Bombay.

**Modak Rubber Products Private Ltd.**—Registered Office and Factory: Kondivata Road, Opp. Marol Bazar, Andheri-Kurla Road, Bombay 59.

**N. MOHANLAL & CO.**—Dunlop Rubber Belting, Vee Belts, Hose Pipes, Asbestos Goods, Pipes & Pipe Fittings, Warrior Taps & Dies, Boiler Tubes and Dowdall Tools, 124, Nagdevi Street, Bombay 3. Phone: 322545; Grams: "JEPIBELT."

**ORIENTAL RUBBER INDUSTRIES PRIVATE LTD.**—Agra Road, Bhandup, Bombay 78. Phone: Office: 254953, Works: 581140 & 581291. Grams: Office: "ORIENRUBER," Bombay. Works: "Oriental," Bhandup. Manufacturers of "Oriental," "LIBRA" & "RITTA" Brand Rubber Canvas Ply Conveyor and Transmission Beltings, Suction, Delivery, Pneumatic and Vacuum Hoses, Rubber Sheetings, All types of Rubber Fittings for Railways, Mechanical & Moulded Rubber Goods, Poll Star and Poll Master Cycle Tyres and Cycle Tubes, Chief Technologist & Director: V. N. Makar, A.I.R.I. (London).

**Paradise Trading Corporation.**—73/75, Tamarind Lane, Fort, Bombay 1.

**PRECISION RUBBER CO. (INDIA).**—Rubber Parts for all Industries as per specifications or drawings. 278, Dr. Dadabhoy Naoroji Road (4th Floor), Fort, Bombay 1. Phones: 661992 & 262384.

**PREMIER RUBBER & CABLE INDUSTRIES.**—Jamal Building, 211, Nagdevi Street, Bombay 3. Phone: 38551. Grams: "RUBERGOODS." Manufacturers of quality Rubber Goods such as "PREMIER" Cycle and Rickshaw Tyres and "PREMEX" Tubes, Rubber Hose Pipes (Delivery & Suction), Petrol and Oil resisting Hose Pipes, Rubberised Texture Cloth, Rubber Beltings, Moulded and extruded articles. 13/D, Kurla Industrial Estate, off Agra Road, Ghatkopar, Bombay 77. Phone: 68326. Grams: "PURERUBBER", Bombay 77.

**PUROHIT RUBBER WORKS.**—13/D, Kurla Industrial Estate, off Agra Road, Ghatkopar, Bombay 77. Phone: 55326. Grams: "PURERUBBER." Specialists in Automobile Rubber Parts, Sponge & Rubber Channels, Tubings Rubber Extrusions Mouldings, etc.

**RADIANT RUBBER INDUSTRIES (PRIVATE) LTD.**—Rubber Plugs (Latex or Ordinary), Rubber Teats, Rubber Tubings & Rubber Components. Mahalaxmi Woollen Mills Compound, Haines Road, Bombay 11. Call on: 255008 & 256010.

**ROYAL HARDWARE MART.**—108, Nagdevi Street, Bombay 3. Phone: 325221 & 323464. Grams: "MANILAROEPE."

**RUBBER INDUSTRIES (INDIA).**—Works at Kurla Road, Andheri. Phone: 572214. Office 243, Bazar House, Abdul Rehman Street, Bombay 3. Grams: "RUBINTEX," Bombay.

**Sandow Traders.**—117, Meadows Street, Fort, Bombay.

**Sorabji D. Daruwalla.**—Round Bldg., Kalbadevi Road, Bombay 2. Standard Rubber Corporation, The.—81, Esplanade Mansion Mahatma Gandhi Road, Fort, Bombay.

**Supreme Industries Ltd.**—Sewree Cross Road, Wadala, Bombay.

**VITHAL MAHADEO & CO. (ESTD. 1923).**—109, Nagdevi Street, Bombay 3. Phone: C/o 324570. Suppliers to Mills and Factories. Manufacturers of Industrial Rubber, Fibre, Ebonite & Leather goods. Specialists in Boiler Asbestos Rings, Leather-Ram Rings & Leather Buckets.

**West India Company.**—Behramji Mansion, Sir Phirozshah Mehta Road, Fort.

## RUBBER (RAW MATERIALS)

**RISHIROOP CHEMICAL COMPANY.**—160, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Phone: 265216. Grams: "TEEROBERTS." Dealers & Stockists of Raw Rubber, Synthetic Rubber, Reclaimed Rubber, Chemicals, Colours, Factice, Stearic Acid, Calcium & Aluminium Silicates and Calcium and Magnesium Carbonates, etc.

## RUBBER STAMP MAKERS

**Ghalseas, G. J., & Co.**—Ramchandra Building, Tram Terminus, Girgaum.

**Goonanath, P.**—Nana Shankar Seth's Wadi, Girgaum Road, Thakurdwar.

**Kotkar, M. B., Bros.**—373, Girgaum Road, Thakurdwar.

**MANKAME BROTHERS.**—Rubber Stamp Manufacturers, Engravers and Die-Sinkers, 406, Kalbadevi Road, Bombay 2. Phone: 23960.

**Masani & Co.**—91, Meadows Street, Fort.

**Stewarts Laboratories.**—327, Hornby Road, Fort.

**Thacker & Co. Ltd.**—18-20, Rampart Row, Fort.

**Young India Stationery Mart.**—43, Ghoga Street, Fort.

## SAFETY WEAR FOR INDUSTRIAL WORKERS

**FIDA TRADERS.**—Manufacturers and Suppliers of Welding and Industrial Safety equipments. Welding Helmets, Screen, Wire Brushes. All types of Gas and Electric Welding Goggles etc. Plastic Face Shields, Plastic Security Badges. (Identity Badges). For labour, Plastic Letters and sign boards. Dealers in Plastic Acrylic Sheets and Allied Materials, 97, Dhaboo Street, Bombay 3 (BR). Phone: 334483. Grams: "UNIGOGGLE".

**PIONEER LEATHER WORKS, THE.**—Sitaram Building, Crawford Market, P.O. Box No. 1950, Bombay 1. Phone: 263618.

**STANDARD EQUIPMENT CORPORATION.**—A/6, Shri Ram Industrial Estate, 13, Katrak Road (Naigaon Cross Road), Bombay 31 (DD). Specialised in all types of Handgloves, Apron, Safety Goggles, Respirators, Face Guard, Hand Shield, Gum Boots, Leg Guards etc. Also ask for Industrial Trolley Wheels & Tyres, Ebonite Rods & Sheets and Industrial Rubber & Ebonite parts to your specifications.

**UNIVERSAL AGENCIES.**—250, Reay Road, Opp. Railway Bridge, Bombay 10. Phone: 78957. Branch office: 202, Commerce House, Meadows Street, Fort, Bombay 1. Phone: 254364. Works: Salti Vihar Road, Bombay 70. Manufacturers and Suppliers of Welding Transformers, Oxy-Acetylene Gas Welding Sets, Accessories & Industrial Safety Equipment, etc.

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Bombay 1. Phones: 266371, 264555 and 263795. Grams: "VIBHACO." Branch: G.P.O. Box 2628, Calcutta 1. Phone: 336680. Mfrs. of Industrial Safety Equipments, such as Goggles, Gloves, Dust Masks, Gas Protection Respirators, Helmets, Safety Belts, Aprons, etc.

## SAFFRON & MENTHOL

**KHOSLA KESERWALA.**—70, Masjid Bunder Road, Mandvi, Bombay 3. Grams: "KHOSLABROS." Phone: 324932. Sole Prop.: of "Ramain" Brand 100 per cent pure and best selected Saffron largest nett sales in India. Mount Everest Brand Pure Menthol. Wholesale and Retail Merchants.

## SALT MERCHANTS

**Bhiwandiwalla & Co., H. M. D. H.**—583, Chira Bazar, Bombay No. 2.

**MIRA SALT WORKS CO.**—Lalji Mansing Bldg., Lohar Chawl, Bombay 2. Works: Mira Road (W. Rly.). Phone: 22111. Grams: "MIRASALT." Salt Manufacturers.

**ORIENTAL SALT TRADING CO.**—207, Samuel Street, Bombay 3. Manufacturers and Suppliers of Common Salt to Industrial Concerns and Retail and Wholesale Dealers. Phone: 327664.

## SAND, STONE AND CHUNAM MERCHANTS

**Atmaram Bros.**—Thakurdwar Mortar Mill, 340, Girgaum Road and Duncan Road.

**Fazluddin Ibrahim Chunawala.**—Near Water Pipe, Chinch Bunder.

**Haji Adam Haji Abba & Co.**—Reti Bunder, Mazagaon.

**Haji Umer Haji Musa.**—Near Police Station, Pydhownie.

**Harilal Tribhovandas & Bros.**—161, Panjrapole Road.

**Hasham Joosab.**—291-A, Duncan Road.

**Industrial Minerals & Chemical Co.**—125, Narayan Dhuru Street, Bombay 3.

**Laxmi Mortar Mills.**—Portuguese Church Street, Dadar.

**Mohanlal Jamnadas & Sons.**—Opp. Mohan Building, Girgaum.

**NENSHI MONJI.**—123, Mahatma Gandhi Road, Bombay 1. Contractors, Stone and Sand Suppliers, Phones H.O.: 251882 and 255048. Bhoiwada quarry 441150; Kurla Quarry: 581844; Sand Depot: 72626.

**Pavri, Kavasjee Bhicaji.**—10, Transvaal Terrace, Falkland Road.

**Stone Supplying Co. Private Ltd.**—494, Duncan Road, Bombay 14.

**Taiyabi Mortar Mills.**—10, Underla Street, Chokey Moholla.

**Tansukhlal Ratilal & Co.**—15, 2nd Sutar Gali, Null Bazar.

**Wagle & Sons.**—Opp. Congress House, Girgaum Back Road.

**Yusuf Dada Chunawala & Co.**—34, Bapu Khote Street, Bombay 8.

## SAND TESTING EQUIPMENT

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P.O. Box 1909, Bombay-1. Phone: 251882. Also at Calcutta, New Delhi, Madras & Baroda. Manufacturers of "PCI" Control Instruments and other Sand Testing Equipment, eg., Rammer, Permeability Meters, etc.



## SANITARY ENGINEERS

**ABDUL HUSEIN ESSOFAALLY CONTRACTOR.**—Sanitary Engineer, Licensed Plumber and Building Contractor. On the list of Government, P.W.D., B.I.T., Bombay Municipality, M.E.S. Naval and Native States. Office: 91-93, Bapu Khote Street, Bombay-3. Phone No.: 332598. Residence Phone No.: 329578.

**Advance Tube Co.**—99, Nagdevi Street, Bombay 3.

**A. G. Karimji Calcuttawalla.**—82/84, Gulalwadi, Kika Street, Bombay 4.

**ASGARALI NURRUDDIN & CO. (ESTD. 1916).**—95, Nagdevi Street, Bombay 3. Phone: 322609; Res. 532753. Sanitary-ware, Hardware & Pipe Fittings Merchants.

**Badrudin Hasanali & Co.**—43, Gulalwadi, Kika Street.

**B. BAMBOAT & CO. PRIVATE LTD.**—56, Gowalia Tank Road, Bombay 26. Phone: 36431/7; Grams: "PILLARTAP." Plumbers, and Sanitary Engineers.

**Bhathena & Co.**—Patel's Bungalow, 187, opp. Grant Road Railway Station (Up).

**Bhathena, B. N., & Co.**—100, Nagdevi Street, Bombay 3.

**Bhole & Co.**—Near Fire Temple, Junction of Queen's Road & Thakurdwar Road.

**Burjor Framji & Co.**—Marine Mansion, Marine Lines, Off Queen's Road.

**Chunilal Parikh & Co.**—478, Duncan Road, Bombay 4.

**Dhamankar, W., & Co.**—196A, Girgaum Road, Bombay 4.

**Essofally Dawoodbhoy.**—18, Doctor Street, Dhanwadi Moholla.

**Esufally Adamji & Co.**—134, Nagdevi Street.

**Fidaali Rajabali.**—165, Hill Road, Bandra.

**Fidahusein Hasanali.**—48, Kika Street, Gulalwadi, Bombay 4.

**Gagrat & Co.**—160, Nagdevi Street.

**Gannon, Dunkerley & Co., Ltd.**—Chartered Bank Building, Mahatma Gandhi Road, Fort.

**Godbole Bros.**—101-103, Mughhat Street, Girgaum.

**JAFFERJEE HASSONALLY & SONS.**—(Licensed Plumbers), 259, Nagdevi Street, Bombay 3. Phone: 326459.

**Keshavlal Laloobhai.**—87-89, Parsi Gali, Dhanji Street.

**Khambatl, G. L.**—Hararwalla Building, 5, Ardeshir Dady Street, Sandhurst Road, Bombay 4.

**M. N. Padia & Co.**—70 Kika Street (Gulalwadi), Bombay 4. Phone: 334283.

**Mavani, B., & Co.**—187, opp. Grant Road Station (East), Bombay 7.

**Minoo Cawasji Press, L. S. E.**—Sanitary Engineer, Hamal Wadi, Dhobi Talao.

**Mistry, P. M., & Co.**—48, Tamba Kanta, Pydhonie.

**Mohomedbhoy Essofally Nulwalla.**—78, Bapu Khote Street, Jambli Moholla, Null Bazar, Bombay 3.

**Nanalal Ambalal & Co.**—69, Nagdevi Street, Bombay 3.

**Nanalal Pandya & Co.**—802, Angrewada, Kalbadevi Road.

**NARIMAN B. BHARUCHA & SONS.**—Kalakdina Terrace, B, Gowalia Tank Road, Bombay-26. Phone: 40914. Builders, Sanitary Engineers, Specialists in Shells & Prestressed Concrete.

**National Engineering Co.**—103, Nagdevi Street.

**NEW INDIA SANITATION COMPANY.**—Central Bank Building, 3rd Floor, Bruce Street, Fort, Bombay. Phone: 254122. Grams: "NISC." Sanitary Engineers, Licensed Plumbers, Contractors and Hot Water Specialists.

**Patankar, B. A. & Co.**—Madhav Wadi, Naigaum Cross Road, Dadar.

**Pawar, B., & Co.**—Near Madhav Bang, 102, Ardeshir Dady Street, Press Cowasji Dinshaw.—Hamal Wadi, Dhobi Talao, Bombay 2.

**R. MOOLCHAND & CO.**—44, Nagdevi Cross Lane, Bombay 3. Direct Importers, Sanitary Wares, Tiles, Bath Tubs, Fancy Bath-Room Fittings. Grams: "POTTERY." Phones: 324207. Res.: 78837.

**Ratlal & Co.**—Madhavji Thakersey Building, Picket Cross Road.

**Richardson & Cruddas.**—Byculla Ironworks, Byculla.

**Sharman Sons (Estd. 1949)**—10, Nagdevi Street, Bombay 3.

**Simpson, D. R., & Co.**—38, Gamdevi Road, Grant Road, Bombay 7.

**United Tube & Hardware Co.**—146, Nagdevi Street, Bombay 3.

**Victoria Sanitary Stores.**—54, 3rd Bhoiwada, Bhuleshwar, Bombay 2.

**Vidya Sanitary Works.**—16-24, Lohar Chawl, Bombay 2.

**VADILAL & CO.**—423, Falkland Road, Bombay 4; Licensed Plumbers, Sanitary Engineers & Building Contractors. Specialists in Water Supply & Drainage, Undertaking New Installation, Repairs & Maintenance Work of any Magnitude. Phones: 334981; Residence: 38009.

## SANITARY WARES, PIPES &amp; FITTINGS

**ABDEALLY, B. M. & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL."

**Abdulhusein Essofally Contractor.**—91-93, Bapu Khote Street, Bombay 3.

**Advance Tube Co.**—99, Nagdevi Street, Bombay 3.

**A. G. KARIMJI CALCUTTAWALLA.**—Pipes, Fittings and Sanitarywares, 82/84, Gulalwadi, Kika Street, Bombay 4. Phone: 333626. Grams: "SANITARY."

**A. H. SHAH & CO., PRIVATE LTD.**—Nanabhoy Mansion, Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 261930. Grams: "OCSAH."

**Armstrong Smith Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Bombay 1.

**Badrudin Hasanali & Co.**—43, Gulalwadi, Kika Street, Bombay 4.

**Batlibol, C. J., & Co.**—319, Hornby Road, Fort.

**Bharucha & Co.**—129, Esplanade Mansions, Mahatma Gandhi Road, Bombay.

**BOMBAY BUILDING MATERIALS TRADING CO.**—Dealers in Sanitarywares & Manufacturers of "Bilmat" Bathroom Fittings, 73, Meadows Street, Fort, Bombay 1. Phone: 253042. Grams: "BILMAT."

**Bombay Potteries & Tiles Ltd.**—Pipe Road, Kurla, Bombay.

**Bombay Sanitaryware Association.**—Jeroo Building, 1st floor, 137, Mahatma Gandhi Road, Bombay 1.

**Calcutta Iron and Steel Co. Private Ltd.**—68/D, Mohamedally Road, Bombay 3.

**C. BHOGILAL & CO.**—Hanuman Building, behind Reserve Bank, 310, Bazargate Street, Fort, Bombay 1.

**Chunilal Parikh & Co.**—476-478, Duncan Road, Bombay 4.

**Clubwala & Co.**—27-29, Hamam Street, Fort.

**Domestic Appliances Co., Ltd.**—Forbes Building, Home Street, Bombay 1.

**Esufally Adamji & Co.**—134, Nagdevi Street, Bombay 3.

**Fleming John & Co., Private Ltd.**—P. B. No. 76, Bombay 1. Phone: 261153.

**F. J. Rehmani & Co.**—5, Bank Street, Bombay 1.

**Garlick & Co.**—Haines Road, Jacob Circle.

**Geo. Service & Co.**—Byculla Iron Works, Parel Road, Bombay 8.

**GIGABHAI, K. & SONS PRIVATE LTD.**—8-10, Green Street, Fort, P.O. Box No. 1180, Bombay 1. Phone: 252453. Grams: "TILESTONE." Importers & Exporters of Tiles, Sanitarywares, "BESTOLITE" W.C. Seats, G.I. Flush Pipes, Water Filters, Marble Slabs, Marble Chips, Fire Bricks, Fire Clay, Cement Colours, Cement Mosaic Tiles, etc.

**Gokaldas Shivalal & Co.**—76, Kika Street, Bombay 4.

**Gopal Chand Puri & Brothers.**—70, Mohamedalli Road, Bombay 3.

**Gupta, D. P., & Co.**—181, Nagdevi Street, Bombay 3.

**Hindustan Tube Company.**—163, Nagdevi Street, Bombay 3.

**Jayantilal Gokaldas & Sons.**—232, Masjid Bunder Road, Bombay 3. Phones: 325495 (Office). 471449. (Res.).

**JIVRAJ & VRAJLAL.**—122, Nagdevi Street, Bombay 3. Phone: 325138 (Shop) & 30932 (Res.) Grams: "SANIPIPES."

**K. Chimanlal & Co.**—107-A, Nagdevi Street, Bombay 3.

**M. N. PADIA & CO.**—70, Kika Street (Gulalwadi), Bombay 4. Phone: 334283.

**Marker, S. D. & Co., Ltd.**—381, Hornby Road, Fort.

**NANALAL AMBALAL & CO. (Estd. 1917).**—69, Nagdevi Street, Bombay 3. Phone: 322754. Grams: "VILVALHIRO." Sole Regional Distributors for (1) Parry's Superfine Vitreous Sanitaryware, (2) Stoneware Glazed Pipes. Manufactured by Perfect Pottery Co. Ltd., Ratlam & Jabalpur. Also one of the leading Wholesales of all kinds of Pipes, Fittings & Cocks, etc.

**Parikh Brothers.**—12, Elphinstone Circle, Botawala Building, Fort Bombay 1.

**P. S. Parekh & Co.**—108, Nagdevi Street, Bombay 3.

**Raval & Co.**—21, Bank Street, Bombay 1.

**Richardson & Cruddas Ltd.**—Byculla Iron Works, Parel Road, Bombay 8.

**R. MOOLCHAND & CO.**—44, Nagdevi Cross Lane, Bombay 3. Direct Importers, Sanitarywares, Tiles, Bath Tubs, Fancy Bathroom Fittings. Grams: "POTTERY." Phone: 324207. Res.: 78837.

**Sally Sanitary Stores.**—109/114, Nagdevi Street, Bombay 3.

**Sajan & Co.**—18, Custom House Road, Fort, Bombay.

**Shah, A. H., & Co., Ltd.**—Jan Mansion, Sir Phirozshah Mehta Road, Fort.

**Shapurji & Co., R. K.**—319, Hornby Road, P.B. 1065, Fort.

**Sharman Sons (Estd. 1949).**—10, Nagdevi Street, Bombay 3.

**Teka Hardware & Engineering Corp.**—82-86, Abdul Rehman Street, Bombay 3. Phone: 326886. Grams: "Tekatools". Stockists of "Tata/SL" Block and Galvanised Pipes & fittings.

**Universal Sanitary Engineering Co.**—Kitab Mahal, 100/102, Hornby Road, Fort.

**Vadilal & Co.**—435, Duncan Road, Bombay 4.

**Vaseem & Co.**—72/74, Nagdevi Street, Bombay 3.

**Victoria Sanitary Stores.**—54, 3rd Bhoiwada, Bhuleshwar, Bombay 2.



**VINUBHAI CHANDULAL & CO.**—63, Nagdevi Street, Bombay 3. Phone: Shop: 324282 & 329141 and Res.: 38869. Grams: "STONEWARE."

**Virba & Co.**—Ash Lane, Meadows Street, Fort.

**V. Pech & Co.**—Aludin Building, Dhobi Talao, Bombay.

**W. H. Deeth & Co.**—Stronach House, Ballard Estate, Bombay 1.

### SCIENTIFIC INSTRUMENTS

**Adair Dutt & Co. (India) Ltd.**—Syndicate Bank Building, Sir Phirozshah Mehta Road, Fort, Bombay.

**ANDHRA SCIENTIFIC CO., LTD.**—Janmabhoomi Chambers, Fort St., Bombay 1. Phone: 261540. Grams: "ASINSTS." Regd. Office & Works: Masulipatam (Andhra Pradesh).

**ASHA SCIENTIFIC COMPANY.**—Lotlikar Mansion, 503, Girgaum Road, Bombay 2. Grams: "ASHACOM." Phone: 22855.

**ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LTD.**—India House, Fort Street, Bombay 1. Phone: 261658. Grams: "AIMILBOM."

**BAJAJ ELECTRICALS LTD.**—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers and Contractors. Phone: 253841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder & Bangalore.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**CENTRAL SCIENTIFIC SYNDICATE.**—475, Jagannath Shankerseth Road (Chira Bazar), Bombay 2. Grams: "MAXSERVE." Dealers in Scientific and Laboratory requirements, Suppliers of Physics and Biology Instruments.

**CRAFTSMAN ELECTRONIC CORPORATION PRIVATE LTD.**—Sethna Hall, Nesbit Road, Bombay 10. Grams: "CRAFT-RONIC." Phone: 373358. Manufacturers and dealers in all types of Scientific Instruments for Industries and laboratories.

**Eastern Electric & Engineering Co.**—127, Mahatma Gandhi Road, Bombay 1.

**Gordhandas Desai Private Ltd.**—Kermani Bldg., Sir Phirozshah Mehta Road, Fort, Bombay.

**Hardcastle, Waud & Co., Ltd.**—Alice Building, Hornby Road, Fort.

**INDIA SCIENTIFIC TRADERS.**—Peerbhoy Mansion, 460, Sardar Vallabhbhai Patel Road, Bombay 4. Phone: 355336. Grams: "ESVIJACK."

**INDUSTRIAL & RESEARCH INSTRUMENT CO.**—D2 Commerce Centre, 14, Tardeo Road, Bombay 34. Automated Analytical Instruments for Metallurgical and Chemical Process Industries.

**Jagtiani, J. T.**—National House, 6, Tulloch Road, Bombay 1.

**Larsen & Toubro Ltd.**—I. C. House, Dougall Road, Ballard Estate, Fort.

**LAWRENCE & MAYO (INDIA) PRIVATE LTD.**—274, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Phone: 261827.

**MARTIN & HARRIS (PRIVATE) LTD.**—Savoy Chambers, Wallace Street, Bombay 1. Phone: Office 263473-4, Stores: 261270. Grams: "ROWLETTE."

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P.O. Box 1909, Bombay 1. Phone: 251882. Also at Calcutta, New Delhi, Madras & Baroda. Agents in India for Messrs. Vickers Instruments Ltd., for Microscopes and other optical Instruments; Messrs. Evershed & Vignoes Ltd., for Tinsley; Strohlein & Co., Germany for Chemical Analysis equipment. Also Pyrometers, Photo-electric Instruments, etc., for Industrial & Scientific Research Laboratories.

**POLAR INDUSTRIAL CORPORATION.**—Shree Laxmi Woollen Mills Estate, Off Haines Road, Bombay 11. Phone: 371937. Grams: "COVERSLIPS." Manufacturers of Precision Laboratory Hot Air Ovens, Incubators, Water Stills (Automatic), Water Bath (Electrical), Sand Bath, Industrial Dryer, "Blue Star" Micro Slides, Cover Glass & Microscopes, etc., etc.

**RAJ-DER-KAR & CO.**—Sadhana Rayon House, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. For Research Industries. Phone: 262304 (P.B. X—4 lines). Grams: "TECHLAB."

**REMEDIOS & SONS** (Registered as Small Scale Industry No. ME R—311 of 4-4-1962).—Manufacturers of Surveying Instruments, Cama House, 255, Dr. Dadabhoy Naoroji Road, Fort, Bombay-1. Phone: 263336.

**Rohit Industries.**—203, Himalaya House, Phalton Road, Bombay 1.

**Sachin & Co.**—25, Bank Street, Bombay-1.

**Scientific Apparatus & Chemical Works Ltd.**—27, Hamam Street, Fort.

**Scientific & Industrial Supplies Corporation.**—Princess Street, Bombay 2.

**Scientific Instrument Co., Ltd.**—Navsari Building, 240, Dr. Dadabhoy Naoroji Road (Hornby Road), Fort.

**Shah, M., & Co.**—Kanji Mansion, Sandhurst Road, Bombay 4.

**Sonal Rangnow & Co.**—41, Hamam Street, Fort, Bombay.

**TEMPO INDUSTRIAL CORPORATION.**—Engg. Divn. of Primco (Private) Ltd., Office: Lamington Chambers, 1st Floor, 394, Lamington Road, Bombay-4 BR. Phone: 41233. Manufacturers of Laboratory Equipment and Scientific Apparatus.

**Thermo-Electric Equipment Co.**—59, Commercial Chambers, Masjid Bunder Road, Bombay 3. Factory: Tripunithura, Kerala State.

**Toshniwal Industries Pvt. Ltd.**—198, Jamshedji Tata Road, Bombay 1.

**UNIQUE TRADING CORPORATION.**—221, Sheriff Devji Street, Bombay 3. Phones: 326227 & 326228. Grams: "UNILAB."

**ZENITH SURGICAL CO.**—206/3C, Mangaldas Bldg., Mangaldas Road, Bombay-2. Grams: "INSTRUMENT." Dealers in Surgical, Scientific & Laboratory Equipment.

**Zill & Co.**—Princess Street, Bombay 2.

### SCIENTIFIC & MARINE INSTRUMENTS

**Gaytee & Co.**—Janmabhoomi Chambers, Fort Street, Bombay 1.

**Gordhandas Desai Private Ltd.**—Kermani Bldg., Sir P. M. Road, Bombay 1.

**Hardcastle Waud & Co. Private Ltd.**—Alice Bldg., Dr. D. Naoroji Road, Bombay 1.

**Voltas Ltd.**—Ballard Estate, Bombay 1.

### SCRAP IRON

**JINDAL BROTHERS.**—3rd Lane, Dharukhana, Bombay 10 DD. Phones: 376389 & 378720. Grams: "JINDALSHIP." Dealers in Iron, Steel, Re-rolling and other Scraps of all kinds.

**Nathanl Steel Yard.**—Opp. Sewree Police Station, Darukhana, Bombay 10.

### SEWING MACHINE DEALERS

**Ambica Sewing Machines Co. Pvt. Ltd.**—118, Narayan Dhuru Street, Bombay 3.

**Bell & Co., Ltd.**—6, Sir Phirozshah Mehta Road, Fort.

**Imperial Sewing Machine Co.**—Dhutipapeshwar Building, Mangalwadi, Girgaum.

**JAYANTILAL KESHAVAL & BROS.**—Lehri Bldg., 282, Sardar Vallabhbhai Patel Road, Bombay 4. Grams: "GORDIA." Importers and Exporters. Progressive manufacturers of "IMPERIAL" Brand Sewing Machines and "JK" Brand Sewing Machines Parts. Pioneers in Sewing Machines Parts for every model since 1920.

**Khurya Co. Ltd.**—Head Office: Beaumon Chamber, 27/33, Meadows Street Fort.

**Lalchand, R., & Co.**—93, Princess Street, Bombay 2.

**Mehta Bros. & Co.**—Krishna Building, 306, Sandhurst Road, Bombay 4.

**Pedneker & Co.**—172, Girgaum Road, Bombay 4.

**Shah & Co.**—Opp. Prarthana Samaj, 161, Charni Road, Bombay 4.

### SEWING MACHINES MANUFACTURERS

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Erli, P.O. Box 8002, Bombay 56 AS. Phone: 571634. Grams: "IMANES-COL." Springs & Forms out of Spring wires and strips for your Industry.

**SINGER SEWING MACHINE CO.**—Singer Building, 207, Dr. Dadabhoy Naoroji Road, Fort, P.O. Box No. 176, Bombay 1. Phone: 26-3187 (3 Lines). Grams: "SINGER." Sellers of SINGER\*—Industrial and MERRITT\*—Domestic Sewing Machines—MERRITT Fans and Irons. "FRIDEN" Adding & Calculating Machines. Simac Art Knitter—A Trade-mark of The Singer Company.

### SEWING THREAD & BUTTONS MERCHANTS

**Ahmed, H., & Co.**—130, Nagdevi Street.

**Allied Exporters.**—Kumud House, 267, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

**Amratlal & Co.**—Sutarwala, 10, Mirza Street (Parsi Gally), Bombay 3.

**Fakhri Thread House.**—72, Bhajipala Lane, Bombay 3.

**Gulam Rasul Allahbux.**—1-B, Bachooali House, Nowroji Hill Road No. 1, Bombay 9.

**J. & P. COATS (INDIA) PRIVATE LTD.**—81, Palton Road, Bombay 1.



**Kahitiskumar Das.**—94, Swadeshi Market, Kalbadevi Road, Bombay 2.

**Kulin Industries.**—12-13, Swadeshi Market, Kalbadevi.

**Lalchand, R., & Co.**—93, Princess Street, Bombay 2.

**Lukmanji Musaji Sutarwala.**—41, Nagdevi Street, Bombay 3.

**Narottamdas Bhagwandas & Sons.**—32-36, Nagdevi Street, Bombay.

**Pralhabhai Nagarbhai.**—386, Linking Road, Khar, Bombay 21.

**Purshotam Bechar & Bros.**—108-9, Swadeshi Market, Bombay 2.

**Tolaram Ramdass & Co.**—647, Girgaum Road, near Dhobi Talao, Bombay 2.

**Vishram Bhagwandas & Co.**—31, Sutar Chawl, Bombay 2.

### SEWING THREAD MANUFACTURERS & DEALERS

**Acme Thread Company Private Ltd.,** The—Atlas Mills, Reay Road, Mazagaon, Bombay 10.

**C. NAROTAMDAS & CO.**—185, Upper Duncan Road, Bombay 3. Phones: 379292 (Office) & 355026 (Res.). Grams: "BHUI-WALA." Specialised in polished threads and winding it on wooden spools (reels). Trade Mark: "TRIPPLE STAG."

**HARI THREAD WORKS.**—405, Maulana Azad Road (Duncan Road), Bombay 4. Phone: 332589. Grams: "TUBEROLLS." Leading manufacturers of all kinds of Sewing Thread and Embroidery goods.

**ISHWARDAS & CO.**—2, Sutar Chawl, Bombay 2. Tel. Office: 323641. Res. 38786. Grams: "BADMINTON." Manufacturers, Exporters & Dealers of all sorts of threads. Sole Agents: Raghuvanshi Mills Ltd., The Girdhardas Harivalladas Mills Ltd., for Sewing, Embroidery & Glazed Threads.

**Shah Tarachand Shamji.**—45, Nagdevi Street, Bombay 3.

**Thread House Limited.**—Head Office: Beaumont Chambers, 27-33, Meadows Street, Fort.

### SHAFTINGS

**INDIA TUBE MILLS & METAL INDUSTRIES PRIVATE LTD.**—126, Narayan Dhuru Street, Bombay 3. Grams: "TUBEMILL". Phones: Office: 322142, Factory: 581541 & 581542. Leading manufacturers of Bright Bars, Free Cutting Commercial & other qualities.

**TEXTELO ENGINEERING WORKS.**—52-A, Islampura Street, Bombay 4 BR. Phone: 334671. Importers and Stockists of Free Cutting Bright Bars, Round, Square and Hexagonal, Tool Alloy—Special Steel.

### SHEET METAL WORKING MACHINES

**HEMCO CORPORATION.**—308, Bazargate Street, P. B. 1645, Bombay 1. Phone: 254237. Dealers in Engraving Machines, Air Compressors, Spray Guns, Sheet Metal Machinery, Wood Working Machinery, Workshop Machinery, Flexible shafts, Planer Blades & other Tools.

**JAYEMS ENGINEERING CO.**—Warden House, Sir Phirozshah Mehta Road, Bombay-1. Engineers, Machinery Merchants & Manufacturers' Representatives, direct Importers of Machine Tools, Wood Working Machinery, Sheet Metal Working Machinery, Welding Equipment, Foundry Equipment etc. Phone: 256251. Grams: "JAYEM."

**Maneklal P. Sons.**—277, Nagdevi Street, Bombay 3-BR.

### SHIP BUILDERS

**AFCO LTD.**—(A wholly owned subsidiary of the Bombay-Burmah Trading Corporation Ltd.). Builders of Power and Sailing Craft, Naval Architects, Surveyors, Marine Engineers. Office and Boat Building Yard at Erangal, Madh Island, Post Box 7383, Bombay 58 AS. Phone No. (Office & Boat Yard): 692368, 692369, 692276. Grams: "FEDACRETE," Bombay.

**Alcock, Ashdown & Co. Ltd.**—16, Bank Street, Bombay.

**Chinese Engineering Works.**—Sewri Fort Road, Sewri, Bombay 15.

**MAZAGON DOCK LTD.**—Mazagon, Bombay 10. Branch at Goa. Ship Builders, Ship Repairers and Engineers. Cable: "MAZDOCK." Phones: 379511-4. Craft upto 230 ft. in length like passenger vessels, coasters, dredgers, tugs, barges, lighters, etc. Repairs to all types of ships. General Engineering work like ferrous and non-ferrous castings, steel forgings, marine electrical installation, pressure vessels, etc.

**SHAPARIA DOCK & STEEL CO. PRIVATE LTD.**—Bombay. Shipbuilders, Engineers & Contractors—Suppliers to D.G.S. & D., Director of Industries & C.P.O., Railway, P. W. D., Port Trusts, Electricity Boards, Municipalities etc., Specialising, Steel Cargo & Passenger Vessels, Tugs, Barges, Launches, Life Boats (Ordinary & Motor), Row Boats, Dinghies, Life Saving Appliances, Buoyant Apparatus, Mooring Buoys etc., also Lighterage Contractors to Mineral Ore Exporters—Shipyard: Sewree Fort Road, Bombay 15. Grams: "SHAPARIA" Sewree, Bombay. Phones: 60071/72.

### SHIPCHANDLERS

**A. M. MOTIWALLA & CO.**—213, Nagdevi Street, Bombay 3. Phone: 326760. Shipchandlers, Engineering Tools, Hardware & Pipe Fittings, Merchants & General Store Suppliers.

**Abbas, A., & Brothers.**—127, Nagdevi Street, Bombay 3.

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL."

### ABDULHUSEIN PEERBHAI & SONS

#### SHIPCHANDLERS

**Stockists of:** MARINE STORES, CHAINS, WIRE ROPES, CHAIN PULLEY BLOCK, CRAB WINCHES, ANCHORS, BINNACLE COMPASS ETC.

**Address:** 66-68A, Peerbhai Building, Bhandari Street, Bombay 3.

**Phone:** 323956

**Grams:** "STUDCHAIN"

**ABDULHUSEIN PEERBHAI & SONS.**—66-68A, Peerbhai Bldg., Bhandari Street, Bombay 3. Phone: 323956. Grams: "STUDCHAIN." Stockists of Marine Stores, Chains, Wire Ropes, Chain Pulley Block, Ship Tackles, Winches, etc.

**ADAMJI KADERBHOY.**—P. B. No. 5046, 337, Katha Bazar, Bombay 9. Phone: 322485. Grams: "RAJKOTWALA."

**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay 1. Phones: 252952 and 254103. Grams: "PILOTACE."

**Baker, A. M., & Co.**—218, Nagdevi Street.

**Bombay Shipchandlery & Engineering Mart.**—Shipchandlers, Contractors and General Merchants, Mogul House, 377, Dellsie Road, Bombay 11.

**Calcutta Iron and Steel Co.**—68/D, Mahomedally Road, Bombay 3. Chadha, B. M., & Co.—Jan Mansion, Sir Phirozshah Mehta Road, Fort, P. O. Box 671, Bombay.

**Chandulal & Co.**—Kathawalla, 11, Kazi Sayed Street, Bombay 9.

**Chatrabhuj & Co.**—Lohar Chawl.

**Darukhanawalla, F. E., & Co.**—244, Nagdevi Street.

**Dawoodi H. Vasi & Co.**—164, Nagdevi Street.

**Doriwalla & Co.**—Katha Bazar, next to Union Bank, Bombay 9.

**Eastern Stores & Trading Co., Ltd.**—115A, Nagdevi Street.

**Edgar Handley & Co.**—Saksaria Chambers, 139, Meadows Street, Fort.

**ESOOFALI ESMAILJI KARACHIWALLA & CO.**—43-45, Bhandari Street, Koliwada, Bombay 3. Phone: 321617; Workshop: 261261. Grams: "SLING." Shipchandlers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Blocks Chains, Coal Tar, Coal Pitch Felts, Marine Glue, etc. Dealers in: Marine, Mill and Factory Stores.

**Halderbhoy Esmailji & Co.**—168, Nagdevi Street, Bombay 3.

**Hatimbhoy Goolamhusein & Bros.**—193, Nagdevi Street.

### HEPTOOLA NOORUDIN & CO.

154, Nagdevi Street, Bombay 3.

|            |       |        |
|------------|-------|--------|
| Grams:     | Estd. | Phone: |
| "IMMUNITY" | 1900  | 326787 |

Importers & Dealers in:

**MARINE • MILL & INDUSTRIAL STORES**

**STOCKISTS OF:** STEEL WIRE ROPES • WIRE ROPE FITTINGS • SCREW JACKS • CRAB WINCHES  
PULLEY BLOCKS • CHAIN PULLEY BLOCKS & RUBBER GOODS

MANUFACTURERS OF:

**WIRE ROPE SLINGS & NETS**



K. Chimanlal & Co.—107/A, Nagdevi Street, Bombay 3.  
 Machine Tools & Implements.—24, Nagdevi Cross Lane, Bombay 3.  
 Mackenzies Limited.—Sewri, Bombay.  
 Mashruwala, C. M. & Co.—172-74, Nagdevi Street, Bombay 3.  
 Mohsinbhai Dawoodbhai.—171-73, Nagdevi Street, Bombay 3.  
 Moloobhoy & Sons.—281, Nagdevi Street, Bombay 3.  
 New India Hardware Mart.—152, Narayan Dhuru Street, Bombay 3.  
 Nomanbhoy Abdeally & Co.—96-98, Nagdevi Street.  
 Ochhavial, B., & Co.—86, Nagdevi Street, Bombay 3.  
 Reliance Trading Co.—25/47, Lohar Street, Bombay 3.  
 Salfy, T. A., & Brothers (India).—20, Sarang Street, Bombay 3.  
 Salehbhoy Tyebbhoy & Co. (Estd. 1865).—Tyebji Building, 93, Nagdevi Street, Bombay 3.  
 SHALEBHOY TYEBJEE & SONS.—(Estd. 1840), 12, Bruce St., Fort, Bombay 1. Phones: 252357 and 252358. Grams: "ROTATOR." Packing & Jointings "Beldams."  
 TALIB & CO.—Talib House, 104, Nagdevi Street, Bombay 3. Phone: 321977. Grams: "TALIBCO." Pipes, Fittings & General Hardware Merchants.  
 Textile Store & Hardware Mart.—32, Bibijan Lane, Nagdevi Street.  
 Vasi Shums & Co., Ltd.—Vasi Building, 165-67, Nagdevi Street.  
 Vishwa Bharati Trading Co.—14, Kumpta Street, Ballard Estate, Bombay 1.  
 WESTERN INDIA MARINE MILLS & ENGINEERS.—185, Janjekar Street, Bombay-3. Phone: 326367. Grams: "WIRE-CHAINS". Shiphandlers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Blocks Chains, Coal Tar, Coal Pitch Felts, Marine Glue, Marine, Mill and Factory Stores. Pull lifts, Pulling Lifting Maxpull.

## WESTERN INDIA MARINE MILLS & ENGINEERS

Stockists of:

Marine Stores, Chains, Wire Ropes, Chain Pulley Block, Crab Winches, Anchors, Pull Lifts, Pulling & Lifting Equipment

185, Janjekar Street, Bombay-3.

Phone: 326367. Grams: "WIRECHAINS".

Zaveri, C. A., & Co.—44, Abdul Rehman Street.

## SHIPPING AGENTS

ABRAHAM, D., & SONS PRIVATE LTD.—Hague Building, Sprott Road, Ballard Estate, Fort.  
 Chinubhai Kalidass & Bros.—19/21, Hamam St., Fort, Bombay.  
 COX & KINGS (AGENTS), LTD.—Lloyds Bank Building, Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Phone: 263065, (5 lines). Grams: "COXSHIP."  
 EASTERN BUNKERERS LTD.—Scindia House, Dougall Road, Ballard Estate, Bombay 1. Phone: 262461. Grams: "VAVTO."  
 EXPRESS TRANSPORT PRIVATE LTD.—Western India House, Sir Phirozshah Mehta Road, Bombay 1. Phone: 253864-5. Grams: "MOVEFAST." Clearing, Forwarding & Shipping Agents. Branches at Ahmedabad & Gandhidham.  
 FINLAY, JAMES & CO., LTD.—Chartered Bank Building, Mahatma Gandhi Road, Fort, Bombay 1. Post Box No. 73. Phone Nos. 251255-59.  
 Forbes, Forbes Campbell & Co. Private Ltd.—Forbes Bldg., Home Street, Bombay 1.  
 KANJI JADHAVJI & CO.—Musjid Bridge, Mandvi, Bombay 9. Phone: 323681 & 321412. Grams: "GITA." Freight Brokers, Clearing, Forwarding, Shipping, Landing & Travel Agents.  
 Killick, Nixon & Co. Ltd.—Killick House, Home Street, Bombay 1.  
 LESLIE, E., & CO.—Botawalla Bldg., 7-10, Horniman Circle, Fort. Shipping, Clearing, Forwarding, Passenger and Insurance Agents. Packers of Household Effects. Phone: 255540. Grams: "RITTA."  
 Lionel Edwards Ltd.—Nicol Road, Ballard Estate, Bombay.

Manilal Patel & Co.—Kamer Building, 38, Cawasji Patel Street, Bombay.  
 Marine Transport Co. Private Ltd.—Sprott Road, Ballard Estate, Bombay.  
 NAROTTAM & PEREIRA LTD.—Scindia House, Dougall Road, Ballard Estate, Bombay 1. Phone: 262461. Grams: "JALATHARG." Shipping & Insurance Agents & Dubashes.

## NAVABHARAT CORPORATION

*Licensed Custom House Agents.*

*Clearing, Forwarding, Shipping & Warehousing Agents.*

15, Bombay Mutual Annexe, Gunbow Street, Bombay 1.

Phones: 263794 - 265389.

Grams: "DELICATE".

New Dholera Shipping & Trading Co. Ltd.—Bombay Mutual Building, 293, Hornby Road, Bombay 1.  
 SHEROFF & CO.—Alice Bldg., Dr. Dadabhoy Naoroji Road, Bombay-1. Phone: 253254. Grams: "BONESECKS", Shipping, Clearing, Forwarding & Insurance Agents.  
 TRAVELS & SHIPPING PRIVATE LTD.—Darabshaw House, Dougall Road, Ballard Estate, Bombay 1. Phone: 263548. Grams: "TRAVELAGENT." Travel, Clearing, Forwarding, Shipping and Warehousing Agents.  
 Turner Morrison & Co. Ltd.—16, Bank Street, Bombay 1.  
 Volkart Brothers—Graham Road, Ballard Estate, Bombay 1.  
 Wallem & Co. (India) Ltd.—India House, Fort Street, Fort, Bombay 1.

## SHOE MAKING MACHINERY AND MATERIALS

BOMBAY HARDWARE TRADERS.—79, Narayan Dhuru Street, Masjid Bunder Road, Bombay 3. Phone: 327153. Grams: "SISTACHAR." Stockists of Hardware, Screws, Bolts, Nuts, Shoe Materials, Woodworking & Metal Cutting Saws, Engineering Stores & Saw Files.  
 E. PEERBHOY & SONS.—Prop.: Indian Durries Emporium, Shahru Castle, 64, Mohamedali Road, Bombay 3. Phone: 323806. Grams: "INDIAWEAVE".

## SILK & ART SILK MILLS AND FACTORIES

Adarsh Textile Industries Private Ltd.—Agra Road, Bhiwandi (Dist. Thana).

## ADITYA TEXTILE INDUSTRIES PRIVATE LTD.

*Manufacturers of:*

Velvet, Plush, Nylon & Terene Fabrics.

Mills: Kurla-Andheri Road, BOMBAY 72 AS.

Sales Office: Krishnaraj Gully, 1st Floor, M. J Market, Bombay-2.

Managing Director: Mr. S. M. Parekh.

Director: Mr. Jivraj N. Mehta.

Alali & Co., Private Ltd.—Agra Road, Vikhroli, Bombay 40.  
 Alliance Silk Mills.—588, Kalbadevi Road, Bombay 2.  
 Amar Silk Mills.—New Islam Mills Compound, Currey Road, Bombay 3.  
 Amarchand Silk Mills.—6 A, Bruce Street, Sir Vithaldas Chambers, Fort, Bombay 1.  
 Amar Jyoti Silk Mills.—Nizampura, Bhiwandi (Dist. Thana).



**AMBIKA SILK MILLS CO. LTD., THE.**—11-12, Haines Road, Mahalaxmi, Bombay 13. Mg. Agents: Maganlal Bhagwandas & Co., Mills at Haines Road, Mahalaxmi, Bombay 13. Office on Mill premises. Phones: 377425-6-7 (Office); 373652 (Mill); Grams: "QUALITYFAB." Manufacturers of Rayon, Nylon and Terylene Piece goods.

**Amrit Silk Mills.**—Shroff Wadi, Mount Road, Mazagon, Bombay 10.

**Anis Silk Mills.**—Saudagar Moholla, Bhiwandi (Dist. Thana).

**Arun Silk Mills.**—Umakant Mansion, 2nd Floor, 384, Kalbadevi Road, Bombay 2.

**Asha Silk Mills Private Ltd.**—Agra Road, Vikhroli, Bombay.

**Ashar Silk Mills.**—Sonari Road, Vile Parle (East), Bombay 24.

**Ashok Silk Mills.**—144, Dharavi Road, Sion, Bombay 17.

**Asian Rayon Mills.**—New Islam Mills Compound, Currey Road, Bombay 18.

**B. M. K. Industries Private Ltd.**—Kalina Road, Old Kurla, Bombay 37.

**Bajaj Textile Mills Private Ltd.**—39, Champagalli, New Silk Market, Bombay 2.

**Bharat Silk Mills Private Ltd.**—Opp. Kurmuri Village, Agra Road, Kurla, Bombay.

**Bharat Textiles.**—480, Kalbadevi Road, P.O. Box 2320, Bombay 2.

**BHARAT VIJAY VELVET & SILK MILLS.**—Kurla-Andheri Road, Bombay 72. Phones: 55146/48 (3 lines); Grams: "CHARUHAN." Manufacturers of Velvet, Terene Suitings, Shirtings, Plush & Fancy Art Silk Fabrics.

**Bhiwandi Textile Works.**—Samad Mills Compound, Kumbharwada, Bhiwandi (Dist. Thana).

**Bipin Silk Mills Co., Private Ltd.**—12, Dadar Road, Kasturchand Mills Compound, Dadar, Bombay 14.

**BISHEN SILK MILLS (THE).**—Agra Road, Bhandup, Bombay-78. Phone: 581224 & 255305. Manufacturers & Exporters of: Nylon Georgette "NEEL KAMAL" Bernberg Georgette, Twinkle Nylon Satin, Crepe 909, Chiffon, Fancy Voils, etc. Partner: Daljit Singh Bubber; General Manager: Mohinder Singh.

**BOMBAY SILK MILLS LTD., THE.**—Industrial Estate, Lalbaug, Bombay-12. Manufacturers of Art Silk Georgette, Crepe, Half Crepe, Nylon Georgette, Twinkle Satin, Polyester Shirtings and Suitings etc., 5800 throwing spindles, 108 Silk and Rayon Looms (all drop Box) with dobbies, Preparatory Machines, Cloth Width 66 to 132 cms., also Bleaching, Dyeing and Processing with Stentering and Calendering Machines. G. J. Shah, Manager, G. D. Ved, Secretary, U. M. Bhatt Asst.

**Bombay Textile Mills.**—Suryodaya Mills Compound, Tardeo Road, Bombay 7.

**Bradbury Mills Ltd.**—C/o Messrs. Ramnarayan Sons Ltd., Imperial Bank Bldg., Bank Street, Fort, Bombay 1.

**Cadell Wvg. Mills Co., Private Ltd.**—400, Cadell Road, Bombay 28.

**Calico Industrial Engineers.**—Sone Baug, Chakala, Andheri (B.S.D.).

**Central Wvg. & Mfg. Co.**—Swastik Mills Compound, Fergusson Road, Lower Parel, Bombay 13.

**Champaklal & Bros.**—Sayee Bhuvan, 143, Princess Street, Bombay 2.

**Choltram's Silk Mills.**—Gandhi Mansion, New Silk Market, Bombay 2.

**Chokshi Silk Mills.**—61-63, Shamset Road, 1st Floor, Chhipi Chawl, Zaveri Bazar, Bombay 2.

**D. V. INDUSTRIES.**—167, Bhavanishankar Road, Dadar, Bombay 28. Phone: 451865. Grams: "TEJCHRAYA." Manufacturers & Exporters of Rayon & Synthetic Fabrics. Partners: V. J. Radia, C. M. Jhaveri, Mrs. S. C. Javeri and Shri D. V. Radia. Manager: K. G. Patel. Sales Office: 367-A, Kalbadevi Road, Bombay 2. Phone: 29341.

**Dinesh Silk Industries Private Ltd.**—Bombay-Agra Road, Bhandup (C.R.), (Dist. Thana).

**ELDEE VELVET & SILK MILLS PRIVATE LTD.**—243/A, DeLisle Road, Bombay 13. Phone: 375070. Grams: "ELDI-SILK." Manufacturers of All Rayon, Silk, Cotton, Woollen—Pile Fabrics such as Velvets, Velvetene, Corduroy, Carpets, Plush, etc. Directors: D. R. Nayar, K. L. Nayar, B. B. Nayar, J. M. Nayar. Works Manager: S. L. Mehra, Textile Engineer: Hans Promper.

**Easardas Silk Mills.**—Agra Road, Bhandup (C. Rly.), (Dist. Thana).

**Ganga Silk Mills.**—C/o Satish Trading Co., Old Hanuman Lane, Parekh Building, 2nd Floor, Bombay 2.

**Gauttam Silk Mills.**—Ishwarbhai Patel's Estate, Goregaon, Bombay.

**Harichand Textile Mills Private Ltd.**—Agra Road, Vikhroli, Bombay 40.

**Hazari Silk Mills.**—Kasara-Basin Road, Darukhana, Mazagaon, Bombay 10.

**Hidayatullah Textile Works.**—Samad Mills Compound, Khumbharwada, Bhiwandi (Dist. Thana).

**HIND SILK MILL PRIVATE LTD.**—Dahanukar Building, Resham Bazar, Bombay 2. Grams: "SHETHSAN." Manufacturers of Artsilk Fabrics, Exporters, Importers & Wholesale Dealers. Board of Directors: K. A. Sheth, R. A. Sheth, and H. J. Doshi.

**Indianese Silk Mill Co., The.**—Sewri Cross Road, Wadala, Bombay 15.

**J. L. Gokani Mills.**—Opp. Dak Bungalow, Bhiwandi (Dist. Thana).

**JAGDAMBA FABRICS WVG. WORKS.**—Goregaon (East), Bombay 63. Phone: Office: 691512; Res.: 533889.

**Jagmohan Silk Mills Private Ltd.**—9, Silk House, 1st Floor, Hamalwadi, Bombay 2.

**JAIFABS RAYON INDUSTRIES PRIVATE LIMITED.**—Agra Road, Ghatkopar, Bombay 77. Phones: 582561, 582562 & 582321; Grams: "JAIFABS."—Ghatkopar; Manufacturers of: Terylene Suitings and Shirtings, Polyester Printed Sarees, Nylons, Twinkle Nylons, Crepes, Dyed and Printed Satins, Taffetas, etc.

**Jalem Wvg. Mills.**—Village Road, Kurla.

**Jasmine Mills Private Ltd.**—Mahim, Bombay 16.

**Jyoti Silk Mills.**—C/o Vanmalidas Zaverchand, 418, Kalbadevi Road, Bombay 2.

**Kala Silk Factory.**—Ganesh Wadi, Ganesh Building, Bombay 2.

**Kamala Mills Ltd.**—45-47, Apollo Street, Fort, Bombay 1.

**Kapoor Wvg. Works.**—Jambulwadi, Kalbadevi Road, Bombay 2.

**Kathiawar Textile Mills.**—C/o Hasamukh & Co., 58, Chhipi Chawl, Bombay 2.

**Khaltan Silk Mills Private Ltd.**—St. Mary's Road, Mazagaon, Bombay 10.

**Khetan Industries Ltd.**—Khetan Bhuvan, 198, Jamsedji Tata Road, Churchgate Reclamation, Bombay 1.

**Khetani Textile Industries, Private Ltd.**—105/107, Bazar Ward, Old Kurla, Bombay.

**Kiran Silk Mills Private Ltd.**—Kasturchand Mills Compound, Dadar, Bombay 14.

**Kothari Silk Mills.**—Atlas Mill Compound, Reay Road, Bombay 10.

**Kum Kum Silk Mills.**—60, Chhipi Chawl, Shamset Street, Zaveri Bazar, Bombay 2.

**Lahoti Wvg. Mills.**—Kalyan Road, Bhiwandi (Dist. Thana).

**Lajya Silk Mills.**—Khatav Nivas, Jambulwadi, Kalbadevi, Bombay 2.

**Liberty Silk Mills Private Ltd.**—108/107, Bazar Ward, Kurla.

**Lotus Silk Mills.**—Kumbharwada, Bhiwandi (Dist. Thana).

**M. K. Gupta Wvg. Mills.**—Behind Electric Power House, Bhiwandi (Dist. Thana).

**Madan Mohan Dyeing, Printing & Silk Mills.**—419D, Joshi Wadi, Kalbadevi Road, Bombay 2.

**Mahajan Silk Mills.**—3A, Dadaji Dhakjee Bldg., Dr. Annie Besant Road, Worli, Bombay 18.

**Maharaj Silk Mills.**—Gazdar House, Dhobi Talao, Bombay 2.

**Mahavir Silk Mills.**—64, Chhipi Chawl, Opp. M. J. Market, Bombay 2.

**Manhar Mills Private Ltd.**—Framji Petit Mills Compound, Reay Road, Bombay 10.

**Model Silk Mills.**—Suryodaya Mills Compound, Tardeo, Bombay 7.

**Modern Textile Mills.**—Opp. 155, D. D. Chawl, Worli, Bombay 18.

**Mohanlal Silk Mills.**—Atlas Mills Compound, Reay Road, Bombay 10.

**Moon Silk Mills.**—Suryodaya Mills Compound, Tardeo, Bombay 7.

**Mukund Silk Mills.**—Bombay Cotton Mills Compound, Kalachowki Road, Parel, Bombay 12.

**Narendra Silk Mills.**—Atlas Mills Compound, Reay Road, Bombay 10.

**National Industrial Works.**—Palonji's Chawl, Sussex Road, Bombay 27.

**National Rayon Mills.**—Mogro, Off Nagardas Road, Andheri (East).

**NEERU SILK MILLS.**—Formerly known as Nehru Silk Mills, Mathuradas Mills Compound, Lower Parel, Bombay 13. Managing Partners: Harilal Jechand Doshi; Manager: M. H. Doshi; Office-Mill premises: Phone No. 373459; Grams: "NEERUMILLS"; (Rayon Shiozi, Sarees, Dobby Spotted Designs; Suitings, Shirtings, Taffetas, coloured stripe satins; mulls, lining cloth, brocades, Sanghai jacquard pyas, nylon, etc.); also twisting, doubling, coning and beaming of rayon yarns from 60 to 200 dnrs.; and staple yarn of 20s to 80s count—both viscose and acetate, 132 looms, jacquard/dobby, high speed sizer and warper; twisting machines with complete preparatory machines; sales office: C/o B. Nagindas & Co., Mulji Jetha Market, Navi Galli, Narayan Chowk, Bombay 2. Phone No. 29597; main stockists—V. Hasamukhlal & Co. Chikhal Galli, Mulji Jetha Market, Bombay 2; and Shyam Trading Co., Swadeshi Market, Kalbadevi, Bombay 2.

**New Era Fabrics, Private Ltd.**—Mogal Lane, Tuli Pipe Road, Bombay 16.

**New Hindustan Silk Mills.**—Narayan Nagar, Agra Road, Ghatkopar, Bombay.

**New India Textiles.**—Block No. 12, Suryodaya Mills Compound, Tardeo, Bombay 7.

**New Kaiser-I-Hind Spg. & Wvg. Co., Ltd.**—J. K. Building, Dougall Road, Ballard Estate, Bombay 1.



New Oriental Silk Mills Private Ltd.—2nd Floor, New Silk Market, Bombay 2.

New Parbhat Silk Mills.—C/o Messrs. Valiram Sons, New Silk Bazar, Kalbadevi Road, Bombay 2.

New Santosh Silk Mills.—Mahakali Chawl, 2nd Floor, Pydhoni, Bombay 3.

New Shah Silk Mills Private Ltd.—88, Khed Gully, Gokhale Road (South), Dadar, Bombay 28.

New Sun Mills Co., Private Ltd.—Sun Mills Road, Lower Parel, Bombay 13.

New Vinod Silk Mills Private Ltd.—12, Dadar Road, Dadar, Bombay 14.

Nitin Silk Mills.—67, Yambakanta, 2nd Floor, Bombay 3.

Novelty Silk Mills.—Ghodbunder Road, Dahisar (W. Rly.), Bombay.

Orkay Industries Private Ltd.—(Subhash Silk Mills Dept.), 40, Central Bldg., Bomanji Master Road, Bombay 2.

Panatal Silk Mills Private Ltd.—Atlas Mills Compound, Reay Road, Bombay 10.

Panatal Silk Mills Private Ltd. No. 2.—Bombay Cotton Mills Compound, Kalachowki Road, Parel, Bombay 12.

Paragon Textile Mills.—Opp. Century Mills, Off Globe Mills' Passage, Worli, Bombay 13.

Parekh Silk Mills.—Paranjape Scheme Plot B, Sonari Road, Vile Parle (East), Bombay 24.

Parsharam Karwa Mills.—Hafsan Ali, Bhiwandi (Dist. Thana).

Paru Silk Mills.—73-75, Sutar Chawl, Bombay 2.

Phoenix Mills Ltd.—C/o Ramnarain Sons Ltd., Imperial Bank Building, Bank Street, Fort, Bombay 1.

Pratap Silk Mills.—C/o Lalubhai Pittamber, New Silk Market, Bombay 2.

Raghavanshi Mills Ltd.—11-12, Haines Road, Mahalaxmi, Bombay 13.

Rahath Silk Mills.—Worli, Bombay 13.

Rajkamal Silk Mills.—34-42, Nesbit Road, Mazagaon, Bombay 10.

**RAJRAJNA SILK MILLS.**—20, Navroji Seth Street, Thakurwar, Bombay 2.—BR. Phones: Office: 29842; Mills: 691331-32. Grams: "PITIMIL," Bombay-2 BR.

Ramkrishna Silk Mills.—529, Kalbadevi Road, Bombay 2.

Raval Textiles.—Nagardas Road, Andheri (East), Bombay.

Ravi Industries Ltd.—68, Chhipi Chawl, 1st Floor, Zaveri Bazar, Bombay 2.

Rayon Textile Mfg. Co.—771, Mogul Lane, Matunga, Bombay 18.

Resham Textile Mills Private Ltd.—61, Government Gate Road, Lower Parel, Bombay 12.

Sadhana Textile Mills Private Ltd.—Off Globe Mills Passage, Worli, Bombay 13.

Samerth Eng. & Wvg. Co., Ltd.—Gandhi Mansion, New Silk Market, Bombay 2.

Samraat Silk Mills.—Agra Road, Vikhroli, P.O. Bhandup, Bombay.

Saraswati Silk Mills.—1-5, Mount Road, Mazagaon, Bombay 10.

Saroj Silk Mills.—Atlas Mills Compound, Reay Road, Bombay 10.

Sarvodaya Silk Mills.—Agra Road, Old Kurla, Bombay.

**SASSOON & ALLIANCE SILK MILL CO., LTD.**—Victoria Road, Mazagaon, Bombay-10. Regd. Office: Podar Chambers, Parsee Bazar Street, Fort, Bombay-1. Phone: Office: 259261 (8 Lines). Mills: 371389. Manufacturers of: Shantung, Terylene, Nylon, & Bush Shirtings, Satin & Taffeta, Brocades, Nylon Satin Sarees & Twinkle Nylon, Crepes, Gold Silver etc., etc. Directors: Ramnath A. Podar, Chairman; Manoo-bhai Doongursee, Jayantilal R. Mehta, Kamalnayan J. Bajaj, Ganesh Narayan R. Podar, Kantikumar R. Podar, D. N. Shroff (Director), M. N. Bajaj, B.A., B.Com., General Manager. Satyanarayan N. Singhi, Plant & Marketing Manager. Zolovan C. Mehta, Mill Manager. J. B. Saldanha, Secretary.

Sandagar Textile Works.—Sandagar Mohala, Bhiwandi (Dist. Thana).

Saurashtra Silk Mills.—C/o Kantilal Manilal Kamdar, 36, Bhangwadi, F Block, 1st Floor, Room No. 17, Kalbadevi, Bombay 2.

Secunder Sari Mills.—Bhiwandi (Dist. Thana).

Sekhari Silk Mills.—C/o Sekharia Cotton Mills Ltd., Sekharia Chambers, 139, Meadows Street, Fort, Bombay 1.

Shakuntala Silk Mills Private Ltd.—Bombay Cotton Mills Estate, Kalachowki Road, Lalbong, Bombay 12.

Shanghai Mills Private Ltd.—Great Social Bldg., 3rd Floor, Sir P. M. Road, Bombay 1.

Shanti Rayon Mills.—Tokershi Jivraj Road, Bombay 15.

**SHARDA SILK MILLS PVT. LTD.**—Mills: Agas Mills Compound, Reay Road, Bombay 10. Office: Dahannakar Building, 2nd Floor, Kalbadevi, Bombay 2. Phones: Office: 28515; Mills: 378901. Grams: "REASONABLE". Manufacturers/

Wholesalers Exporters of Rayon Shioxi, Sarees, Dobby Spotted Designs, Suitings, Taffetas, Coloured Stripes Satins, Mulls, Lining Cloth, Brocades, Shanghai Jacquard Flowers, Jacquard Taffeta Brocades & Jacquard Pyas and Nylon Sarees. Sales: Messrs. B. Nagindas & Co., Mulji Jetha Market, Navi Galli, Narayan Chowk, Bombay 2. Tel.: 29887. Stockists: Messrs. V. Hasimukhlal & Co., Chikhal Galli, M. J. Market, Bombay 2 and Messrs. Shyam & Co., Swadeshi Market, Kalbadevi, Bombay 2. Board of Directors: Managing Director: Harilal Jechand Doshi. Directors: Manharlal H. Doshi, A. D. Kothari, S. S. Parekh.

Shree Ambika Tape Mfg. Co.—2nd Floor, Hanuman Bldg., Tambakanta, Pydhoni, Bombay 3.

Shree Central Silk Mills.—Premji Bhimji, Sir Vithaldas Gully, M. J. Market, Bombay 2.

Shree Hanuman Silk Mills.—Near Powai Cross Road, Agra Road, Vikhroli, Bombay.

**SHREE LAXMI SILK MILLS.**—Kasturchand Mills Compound, Dadar, Bombay 28. Phone: 451492. Grams: "LAXSILKS." Manufacturers of Quality Art Silk Fabrics.

Shree Monan Dyeing, Ftg. & Wvg. Mills.—Gandhi Mansion, New Silk Bazar, Bombay 2.

Shree Navyug Wvg. & Ftg. Mills.—C/o Popatlal, Mulchand & Co., Dharamraj Galli, M. J. Market, Bombay 2.

Shree Samrath Textile Industries.—Fergusson Road, Lower Parel, Bombay 13.

**SHREE SHAKTI MILLS LTD.**—Podar Chambers, Parsee Bazar Street, Fort, Bombay 1. Mills at Mahalaxmi & Parel. Phone: 259261 (8 Lines). Grams: "SHREESAKTI". Manufacturers of Georgettes, Crepes, Taffetas, Satins, Nylons, Bush Shirt Fabrics, Rayon & Terene, Shirtings & Suitings.

Shree Shakti Mills Ltd. No. 2.—Podar Chambers, Parsee Bazar Street, Fort, Bombay 1.

Shree Shanti Silk Mills.—Lal Chimney Compound, S2F, Lamington Road (North), Bombay.

Shree Shanti Textile Mills Private Ltd.—Agra Road, Ghatkopar, Bombay 39.

Standard Mills Co., Ltd.—29, Churchgate Street, Fort, Bombay 1.

Suryakant Textile Mills.—Building No. 15, Bhuleshwar, Doka Galli, Bombay 2.

Swan Textiles.—Bhiwandi (Dist. Thana).

Tarun Silk Mills.—Yakub Road, Bhiwandi (Dist. Thana).

United Rayon Mills, Private Ltd.—Near Elphinstone Bridge, Parel Tank Road, Parel, Bombay.

Venus Silk Mills.—Suryodaya Mills Compound, Tardeo, Bombay 7.

Vijay Silk Mills.—Atlas Mills Compound, Reay Road, Mazagaon.

Vikram Industries.—Bhau Saheb Desai's Wadi, Bhavani Shankar Road, Dadar, Bombay 28.

Vinod Silk Mills.—Kasturchand Mills Estate, Tulsi Pipe Road, Dadar.

Vipul Silk Mills.—Ganesh Godown No. 15, Tank Bunder Road, Reay Road, Bombay 10.

Vishnu Silk Mills Private Ltd.—49-55, Apollo Street, Fort, Bombay.

Zaveri Rayon & Silk Mills Ltd.—Darabshaw House, Ballard Road, Bombay 1.

## SILK MILL MACHINERY & STORES SUPPLIERS

**INDIA RUBBER PRODUCTS.**—Kasturchand Mills Estate, Dadar, Bombay-28. Phone: 453012. Manufacturers of Industrial & Moulded Rubber Products, such as Rubber Bushes, Rings, etc.; to Drawing and Specifications.

**R. R. JINDE & CO.**—14, Mohan Nivas, Chandavarkar Road, Bombay 19. Grams: "GOLDENHILL." Phone: 472267.

## SILVER SOLDERS

**NATIONAL REFINERY PRIVATE LTD.**—87, Tardeo Road, Bombay 34; Refiners and Assayers of Precious Metals, Manufacturers of Silver Solders, Silver Salts, Silver Anodes, Powder, Strips, etc.; Carat Gold in various forms and colours. Phone: 372263.

## SIRENS & BLOWERS

**HARRY'S TRADING CO.**—Quality Sirens from 12 Mile to 5 Miles Range and Portable Electric Blowers suitable for Clearing, etc. Fuel Injection Equipments for Diesel and Tractor Engines. 501, A. Commerce House, Meadows Street, Bombay-1. Phone: 256605 & 535023 (Res.).

## SIZING MATERIALS

Adarsha Trading Corporation.—Small Building, 2nd Floor, Room No. 9-H, 881, Hornby Road, Fort, Bombay.

Apex Traders.—Advan Chambers, Sir Phirozshah Mehta Road, Fort, Bombay.



**ASSOCIATED ENTERPRISES.**—Suppliers of Sizing Materials to majority of leading rayon mills. 7, Kasilash Kutir, Behind Mysore Chemicals, Scheme No. 6, Road No. 4, Sion East, Bombay 22.

**Rhoadal & Co.**—7-10, Elphinstone Circle, Botawalla Building, Fort.  
**Bradly, W. H., & Co., Ltd.**—Royal Insurance Building, Churchgate Street, Fort.

**CHUDGOR & CO. PRIVATE LTD.**—Regd. Office: Anand Bhuvan, Princess Street, Bombay 2 (B.R.). Phones: C/o 30023, 30024 & 20419. Grams: "CHUDGORECO," Bombay 2 (B.R.). Dealers in Chemicals, Dyes, Sizing Materials, Waxes, etc.

**Dandekar Company.**—Bombay Mutual Annexe, 17, Gunbow Street, Fort, Bombay 1. Phone: 261038. Grams: "Shekhar".

**Daver, B. F., & Co.**—Appa Bang Building, 41, Queen's Road.

**Gannon, Dunkerley & Co., Ltd.**—Chartered Bank Building, Mahatma Gandhi Road, Fort.

**General Industrial Chemicals.**—Beaumont Chambers, 27/33, Meadows Street, Fort.

**General Textile Stores Ltd.**—Beaumont Chambers, 27/33, Meadows Street, Fort.

**Har Castle, Waud & Co. Private Ltd.**—Alice Building, Hornby Road, Fort.

**Imperial Chemical Industries (India), Ltd.**—Imperial Chemical House, Dougall Road, Ballard Estate.

**Indo-British Chemical Co.**—Raja Bahadur Mansion, 11, Tamarind Lane, Fort.

**Industrial Minerals and Chemical Co.**—25, Narayan Dhura Street, Bombay 3.

**Industrial Trading Agency.**—Tamarind House, Tamarind Lane, Fort, Bombay. (Healds, Beeds, Wire healds and Shuttles).

**Javeri Traders.**—Lakhmi Building, 34, Cawasji Patel Street, Fort, Bombay.

**Kirtikumar & Co.**—80, Bhandari Street, Mandvi, Bombay 3. Phone: 20583. Grams: "LALITEKIRTI."

**Kirtikumar Chandulal & Co.**—313, Samuel Street, Vadgadi, Bombay.

**Lalitkumar & Co.**—86, Kazi Sayed Street, Bombay 3.

**Latham Abercrombie & Co., Private Ltd.**—Forbes Building, Home Street, Fort.

**MAIZE STARCH PRODUCTS CORPORATION.**—32, Apollo Street, Fort. Dealers in Sizing Materials and Industrial Chemicals. Phone: 252715. Grams: "MAZISTARCH."

**Mehta, J. H., & Co.**—103-8, Bazargate Street, Fort.

**Mehta, Sanghvi & Co.**—303, Samuel Street, Vadgadi, Bombay 3.

**Nanavati & Co., Ltd.**—16, Apollo Street, Fort.

**NATIONAL TRADING COMPANY, THE.**—Manufacturers, Importers & Distributors of Sizing & Finishing Materials and Textile Auxiliaries. 263, Dr. Dadabhai Naoroji Road, P.O. Box 158, Bombay 1. Phone: 265050. Grams: "BEARAT." Branches: Ahmedabad, Calcutta, Coimbatore and Delhi.

**Poonjiajee, Jehangir J. M.**—Byramji Mansion, Sir Phirozshah Mehta Road, Fort.

**Rasiklal & Co., Ltd.**—60-62, Princess Street, P. B. No. 2228, Bombay.

**Sheth, S. C., & Co., Ltd.**—Raja Bahadur Mansion, 14, Hamam Street, Fort.

**Shree Krishna Trading Co., Ltd.**—11, All Chambers, Tamarind Lane, Fort.

**Sizing Materials Co., Ltd.**—Jercoo Building, 137, Mahatma Gandhi Road, Fort.

**Standard Pulverising Co.**—Atlas Mills Compound, Reay Road, Bombay 10.

**VORA TRADING CO.**—357-A, Samuel Street, Vakli Building, Vadgadi, Bombay 3. Phone: 325289. Grams: "MULTI-SALES" Bombay, Mandvi.

**Waghji Lakhmadas & Co.**—206, Samuel Street, Vadgadi.

## SLOTTED ANGLE

**FITTON.**—211, D'Mello Road (Frere Road), Bombay 1. Phone: 264525. Fitton is a versatile Slotted Angle which can be put together to tailor storage racks, bins, worktable, rest benches, trolleys, conveyors, Factory equipments, ladders, Machine Stands, Mezzanine Floors, False ceilings, loftis factory sheds, almost anything you need . . . And a fitton structure is usually the strongest and most versatile and by far the effective in construction. After all, that's what counts most.

**KILBURN & CO. LTD.**—Gresham Assurance House, Phirozshah Mehta Road, Fort, Bombay 1. Phone: 256845. Grams: "TAGCONIUM."

**KILLICK SLOTTED ANGLES LIMITED.**—Manufacturers of "DEXION" Slotted Angles, Shelves, Panels, Dexion open Steel Planks and Accessories for Racks, Benches, Machine

guards, trolleys, conveyors, access steps, platforms, roof trusses, sheds and shelters. Selling Agents: Killick, Nixon & Co. Ltd., P.O. Box 7165, Bombay 70. Offices at: Ahmedabad, Calcutta, New Delhi, Madras, Poona, Goa, Bangalore, and Gandhidham.

**METREX PRIVATE LTD.**—Slotted Angles and Equipments Units, India House, 1st Floor, Kemp's Corner, Bombay-26.

## SOLDERING & BRAZING EQUIPMENTS

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Bombay 1. Phones: 266371, 264555 and 263795. Grams: "VIBHACO." Branch: G.P.O. Box 2428, Calcutta 1. Phone: 336680. Manufacturers of all kinds of Metals, Welding, Brazing & Soldering requirements.

## SOLDERING IRONS

**BAJAJ ELECTRICALS LTD.**—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers and Contractors. Phone: 25-3841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullundur & Bangalore.

## SOLVENT EXTRACTION PLANT

**DE SMET (INDIA).**—Khana Construction House, 44, Maulana Abdul Gaffer Road, Worli, Bombay 18 (WB). Phone: 372231. Grams: "EXTRAXMET." Manufacturers of Solvent Extraction Plants, Vegetable, Oil Refining Plants, Cotton seed Processing Equipment, Sugar Plant Machineries. Factory: Panch Pakhadi, Eastern Express Highway, Thana.

**INDUS ENGINEERING COMPANY.**—Office & Works: Opp. Worli D.D. Chawl No. 114, Bombay 13 (B.C.). Phone: 379332 & 371743. Grams: "INDUSINDH." Mfrs. of Tubular Condensers, Evaporators, Cyclonic Separators, Stripping Columns, Brine Coolers, Feed and Discharge Hoppers, etc.

## SOLVENTS (ORGANIC & INORGANIC)

**COMMERCIAL SOLVENTS CORPORATION.**—Commissariat Building, 5th Floor, 231, Dr. Dadabhai Naoroji Road, Bombay 1. Phones: 265446, 262762. Grams: "SOLVO." Stockists of Chemicals, Solvents, etc.

**PRAVIN BROTHERS & CO.**—501, Commerce House, Meadows Street, Bombay 1. Phones: 251748, 252419. Grams: "WIDE-SCOPE." Importers, Exporters and Agents: Sulphur — Chemicals—Solvents, Pyridene Base, Fertilizers, Minerals Lime—Jute—Products. POLYSOL. S., Polysol-S-6., Gypsum.

**ROYAL DRUG & PHARMACEUTICALS CO.**—38, Princess Street, Bombay 2. Phone: 38749. Grams: "RODPHAR." Contact for your requirements in Trichloroethylene, Perchloroethylene, D.B.P., D.O.P., M.E.K., MIBK., Toluene, Benzene, Acetone, etc. for your Paint, Engineering, Rubber, Plastic & Chemical Industries.

**SULTANCHAND BIMALPRAKASH & SONS.**—30, Commercial Chambers, Masjid Bunder Road, Bombay No. 3. Grams: "DELHICHEM." Importers & Suppliers of Paint, Raw Material, Solvents, Pigments & Chemicals for Textile, Sugar, Glass & Ceramics Industries & Dyes Intermediates. Phones: Office: 323425 & 327636; Res.: 522544.

## SOUND RECORDING EQUIPMENT

**Ama Private Ltd.**—Hornby Road, Fort, Bombay.

**Chicago Radio & Telephone Co. Ltd.**—127, Mahatma Gandhi Road, Fort.

**General Radio and Appliances Ltd.**—18, New Queen's Road, Bombay 4.

**National Education and Information Film: Ltd.**—National House, Tulloch Road, Apollo Bunder, Bombay. Grams: "Edufilms."

**Patel (India) Ltd.**—Kitab Mahal, Hornby Road, Fort, Bombay.

**Western Agencies' Co.**—421, Lamington Road, Bombay 4.

## SPICES AND ASAFOETIDA

**Asher & Company.**—Vadgadi, Bombay 3.

**Bhanushali Brothers Ltd.**—Bhanushali Chambers, 168, Argyle Road, Bombay 9.

**Bombay Hing Supply Co.**—Hansraj Karamsi Building, 66, Masjid Bunder Road.

**BOMBAY KIRYANA INDUSTRIES.**—204, Samuel Street, Vadgadi, Bombay 3. Phone: 327466. Grams: "RAWDRUGS" (Bombay, Mandvi).

**Chamvakal Morarji & Co.**—193, Samuel Street, Vadgadi, Bombay 3.

**Damji Mavji & Co.**—177, Khoja Gulli, Mandvi, Bombay 9.

**Dubash Freres & Co.**—Victoria Building, Parsi Bazar Street, Fort.

**Ebrahim Manji & Co.**—49, Pydbownle Road, Khadak, Bombay 9.



**Fruit Farm Products Co.**—Byramji Mansion, Sir Phirozshah Mehta Road, Fort, Bombay. Phone : 262120.

**Gandhi Sons Ltd.**—232, Samuel Street, Vadgadi, Bombay 3.

**Gopaljee & Co.**—218, Samuel Street, Vadgadi.

**Gorakhram Gokalchand (Estd. 1891).**—Choksi Chambers, Zaveri Bazar, Bombay 2.

**Govindj Padamshi.**—317, Narsi Natha Street, Kharek Bazar, Mandvi Bombay 9.

**Govindji Ratanji.**—84, Mirchi Street, Vadgadi.

**Gulabchand Nathalal & Co.**—45, Mirchi Lane, Bombay 3.

**Hashambhoy Aloo Mahomed & Son.**—Dostmahomed Building, Nishanpada Road, Khadak, Bombay 9.

**Husein Mussa Virjee & Co.**—Sheriff Hasam Building, Khoja Mohalla, Bombay 9.

**Jehangir C. Masalawalla.**—C. P. Tank Bus Stand, Vithalbhai Patel Road.

**Jehangir J. M. Poonjiajee.**—Byramjee Mansion, Sir Phirozshah Mehta Road, Fort.

**Lakshmichand Vasanji & Co.**—229, Samuel Street, Vadgadi.

**Laljee Godhu & Co.**—213, Samuel Street, Vadgadi.

**Merwanjee Poonjiajee & Sons.**—Prince's Dock, Frere Road.

**Narandas Kesurdas & Sons.**—222-24, Vadgadi.

**Narotamdas Harivalabhdas.**—80, Khand Bazar, Mandvi.

**New India Hing Supplying Co.**—215-217, Samuel Street.

**Pavri. J. K.**—10, Karim Chambers, Hamam Street, Fort.

**Shah & Co.**—108, New Citizen Bank House, Palton Road, Bombay 1.

**Somnath Motiram.**—306, Kharek Bazar, Bombay 9.

**Sudan Trading Co.**—Dhun-Nur, Sir Phirozshah Mehta Road, Fort.

**TRANS-UNION COMMERCIAL CORPORATION PRIVATE LTD.**—Prospect Chambers Annexe, 319, Dr. Dadabhai Naoroji Road, Fort, Bombay. Grams : "TRANSMETER." Phones : 251610 & 355855 (Res.).

**Valabhdas Tejpal.**—219, Vadgadi, Bombay 3.

**Varliwandas Hirjee & Co.**—240, Samuel Street, Vadgadi.

**Vasantil Vadlal & Co.**—215-17, Samuel Street, Vadgadi, Bombay 3.

**Vikaram Padamsey & Co.**—Rustom Building, Veer Nariman Street, Fort.

**Waghji Lakshmidas & Co.**—206, Samuel Street, Vadgadi.

**Y. K. Sampat & Co.**—382-84, Katha Bazar, Bombay 9.

### SPORTS GOODS MANUFACTURERS AND DEALERS

**A. N. KAPUR & CO.**—Court House, Dhobi Talao, Bombay 2. Phone : 22776. Grams : "SANDAL."

**ALFA SPORTS.**—Sports Goods Manufacturers, Importers, Exporters and Stockists of Slazenger's, Surco's and Sunder's goods, Fishing and Playground Equipment, Presentation Articles, Swimwear and Athletics. Metro House, Dhobi Talao, Bombay-1. Phone : 242549. Grams : "ALFA SPORTS"

**Artytoys.**—Sir Ratan Tata Road, Tardeo, Bombay 7.

**Austin Sports Co.**—Byculla Bridge, Bombay.

**Bombay Sports.**—Dhobi Talao, Bombay 2.

**Bombay Sports Depot.**—Jer Mahal Estate, Dhobi Talao.

**Ebrahim Allibhoy & Sons (Estd. 1934).**—Exporters & Stockists. 280-64, Abdul Rehman Street, Bombay 3. Phone : 325163.

**I.C.I. (India) Private Ltd.**—Crescent House, Ballard Estate, Bombay 1.

**J. L. Morison Son & Jones (India) Ltd.**—Ballard Estate, Bombay 1.

**Jhaveri Bros. & Co. (Estd. 1914).**—345, Abdul Rehman Street, near Crawford Market.

**Jhaveri Sports & Gifts.**—Jer Mahal, Dhobi Talao, Bombay 2.

**K. L. MALHOTRA BROTHERS.**—WX/83, Basti Nau, Jullundur City, India. Grams : "MALBRO." Branch Office : Mohatta Market, 5th Floor, Palton Road, Bombay 1. Manufacturers & Exporters of Sports Goods, Specialists in Tennis, Squash & Badminton Rackets, Shuttlecocks and other Sports Articles.

**Mahomedally Noorbhoy.**—244-246, Abdul Rehman Street.

**Nadkarni & Co.**—Ava Chambers, next to Metro Cinema, Dhobi Talao.

**SYMOND DISTRIBUTORS PRIVATE LTD.**—Eruchshah Bldg., 249, Dr. Dadabhoy Naoroji Road, Bombay 1; 18, Netaji Subhas Road, Calcutta 1; and 15, Elgin Road, Allahabad. Sole Distributors in India for the "SLAZENGER" Sports Goods, made in India.

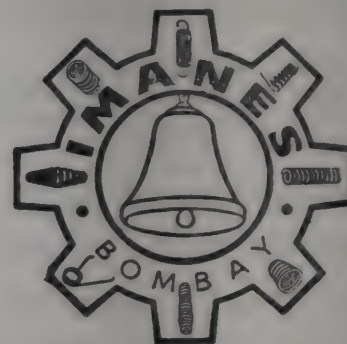
**United Importers Corporation.**—Mistry Estate, 15/2, Palton Road, Bombay 1.

**Wagle & Co.**—Opp. St. Xavier's High School, 290, Carnac Road, Bombay 2.

### SPRING MANUFACTURERS

**Bombay Spring Works.**—Main Road, Bombay 14.

**IMANES PRIVATE LIMITED.**—94, S. V. Road, Eris, P.O. Box 8002, Bombay 56 HS. Phone : 571634. Grams : "IMANES-COL." Springs & Forms out of Spring Wires and strips for your Industry.



**KEMEN MANUFACTURING CO.**—Harilela House, 7th Floor, Opp. G.P.O., Mint Road, Bombay 1; Phone : 263745; Grams : "KEMENGIN." Manufacturers of all kinds of springs, specially for upholstery and Industrial type.

### SPRINGS

FOR ALL USE

Contact :

**MILAN SPRING WORKS**

MANUFACTURERS OF  
AUTOMOBILE, TEXTILE,  
PRECISION SPRINGS.  
ALSO SPRINGS FOR  
USE IN ALL INDUSTRIES



43, Khandia Street (Near Two Tanks),  
BOMBAY 8.

Telephones : 376900 & 379159 (Office) and  
372640 (Factory)

**WESTON INDUSTRIES.**—Hanuman Baug, Nursing Lane, Ghodbunder Road, Bombay 64. Manufacturers of all kinds of Springs for use in all Industries.

### SPRING WASHERS MANUFACTURERS

**FAIRFIELD MANUFACTURING CO.**—Hanuman Building, 4th Floor Tambakanta, Pydhowni, Bombay 3 (BR.). Phones : 324323 and 323758. Grams : "MASRANICOY." Manufacturers of Spring Washers, Shake Proof Washers, Circlips and Precision Strip forms. Factory at: Masrani Estate, Halav Bridge, Kurla, Bombay-70 (AS.).

### STAINLESS STEEL WIRE NETTING

**INDUSTRIAL ENGINEERING CO.**—H.O. : 45, Apollo Street, Fort, Bombay 1. Phones : 254072, 325156. Direct Importers of Tool, Alloy, special Steel & Stainless Steel Bars, etc.

**S. MEHTA & CO.**—Anees Chambers, Carnac Road, Bombay 1. Phone : 26-3001. Grams : "DUTYBOUND". Industrial Wire Netting and Perforated Metals, Stainless Steel Wire Nettings; and Monel Metal Wire Nettings; Importers, Exporters and Merchants.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

### STAINLESS STEEL UTENSILS MANUFACTURERS & DEALERS

**Agrawal Metal Works Private Ltd.**—207, Kalbadevi Road, Bombay 2.

**Bombay Steel Corporation.**—241, Kumbharwada, opp. 2nd Sutar Lane, Bombay 4.



**DEVIDAYAL STAINLESS STEEL INDUSTRIES PRIVATE LTD.**—Gupta Mills Estate, Reay Road, Bombay 10. Local Sales Office: 39, 2nd Bhoiwada, Bombay 2. Phone No.: 378033 & 373586. Grams: "DEVISTEEL." Manufacturers of a wide range of Kitchen utensils, Tableware, Electric Kettles, Pocket-Tiffin Carrier, Fabricated Steel Tanks for Food & Chemical Industries, Wash Basins and Hospital Equipments and Railway Fittings.

**G. K. KANSARA.**—118, Kansara Chawl, 1st Floor, Kalbadevi Road, Bombay 2. Phone: 334925. Manufacturers of Stainless Steel Utensils & Medical Apparatus.

**HARSHADRAY PRIVATE LTD.**—Jiji House, Raveline Street, Bombay 1. Phones: 266281 (4 lines). Grams: "FACTORIND." Factory: Pandit Jawaharlal Nehru Road, Santa Cruz, Bombay 54. Phone: 532432.

**LALLUBHAI AMICHAND PRIVATE LTD.**—Proprietors: Dun Aluminium Factory, 225/27, Tardeo Road, Bombay 7. Manufacturers of "CYCLE" Brand Aluminium wares & "QUEEN" Brand Stainless Steel Utensils & other non-ferrous metalware. Phones: 41618, 77175, 334049 & 331888. Grams: "CYCLEBRAND."

**NATIONAL METAL INDUSTRIES.**—15/A, Parel Village Road, Parel, Bombay 12. Phone: 62400. Grams: "MANMUL." Office: 26/A, Behind Mumbadevi Post Office, Bombay 2. Phone: 325434. Specialists in Stainless Steel & Brass Utensils, Hospitalwares, etc.

Oriental Metal Pressing Works.—131, Worli, Bombay 18.

### STAMP DEALERS



India's largest dealers in Postage Stamps, Stamp Albums & Philatelic Accessories. Publishers of *Indian Stamp Collector*, India's largest bi-monthly newspaper for stamp collectors.

Phone: 263851.

## BOMBAY PHILATELIC CO.

Sambava Chambers, Sir Phirozeshah Mehta Road, Fort, BOMBAY-1.

Imperial Stamp Mart.—C/o Wahid Watch Co., Abubaker Mansion, Causeway.

**JAL, COOPER, F.R.G.S.**—Standard Building, Hornby Road, Fort. Tel. 252117. Dealers in Indian & States' Stamps Philatelic Auctioneer and Valuer. Editor and Publisher "India's Stamp Journal."

Liberty Stamp Depot.—166, Dr. Dadabhoy Naoroji Road, Bombay 1. Oriental Collectors' Club.—42, Churchgate Street, Fort.

### STARCH

**C. M. VORA & CO.**—160, Dr. Dadabhoy Naoroji Road, Fort, Bombay. Phone: 261609 Office; 22572 Res. Importers & Stockists of Chemicals for all Industries. Approved Contractors to Defence Factories.

Ialitkumar & Co.—86, Kazi Sayed Street, Bombay 3.

Maize Starch Products Corporation.—20, Apollo Street, Bombay 1.

Narendra Starch Products Ltd.—Das Chambers, 25, Dalal Street, Bombay 1.

### STATIONERY (MFRS. & DEALERS)

**A. A. MORBIWALA & CO.**—109/111, Abdul Rehman Street, Bombay 3. Phone: 323280. Grams: "VARNISH (MD)." Importers & Stockists of Stitching Wires in all gauges used in manufacturing Stationery.

Akbarally Ebrahimji.—38C, Cowasji Patel Street, Fort, Bombay 1. Artytoys.—Sir Ratan Tata Road, Tardeo, Bombay 7.

**BELLARES PRIVATE LTD.**—Chequewriters, Office Systems & Equipment Specialists. Sole Distributors: AMES SUPPLY COMPANY (U.S.A.). Spare Parts, Tool & Accessories for Typewriters, Adding & Calculating Machines. Manufacturers of Heavy duty "MAGNOLIA" Paper Punch and CHEQUE-WRITERS. 210-A, Lamington Road, Post Box No. 4101, Bombay 7. Factory: A-374, Thana Industrial Estate, Thana (Maharashtra). Grams: "INSPIRON."

Bharat (Sales) Limited.—People's Building, Sir Phirozshah Mehta Road, Fort.

**BHARAT TRADING CO.**—9/A, Nadirsha Sukhia Street, Fort, Bombay. Phone: 255232. Grams: "MAMUBHANJA." Stationers and Paper Merchants. Also Dealers in Drawing Materials; Government & Railway Contractors & Suppliers.

Bombay Book Depot.—217, Charni Road, P. O. Girgaum, Bombay 4. Bombay Importing Agency.—75, Sarang Street, Bombay 3.

## BOMBAY STATIONERY MART

Proprietors:

**GULAMHUSEIN AHMEDALLY & CO.**

7A, Sir Phirozshah Mehta Road, Fort. Phones: 253897/98.

Tel. Address: "PAPERWALA" - - Estd. 1873.

—Largest Stockists of:—

PAPER, STATIONERY, ARTIST, DRAWING, ENGINEERING AND SURVEYING MATERIALS AND GIFT NOVELTIES

N O B R A N C H

**BOMBAY PIN & ZIP MFG. CO. PVT. LTD.**—Devkaran Mansion, 1st Floor, 63, Princess Street, Bombay-2. Leading Manufacturers of Swan Brand Paper Pins & Gem Clips invite enquiries from Whole Sellers & Suppliers. Grams: "PINSCLIPS". Phones: Office: 23003 & 39880; Factory: 453800.

Bombay Stationery Stores.—213-217, Abdul Rehman Street, Bombay 3.

Bombay Tape Distributors, 35, Vithaldas Road, Princess Street, Bombay 2.

**BRIGHT BROTHERS PRIVATE LTD.**—156-A, Tardeo Road, Bombay 34. Grams: "BRIBOS." Phones: 378548, 378549 & 378540. Plastic Stationery Articles, like Desk Calendars, Memo Pads, Novelities, Paper Weights, etc.

Cam, Norton & Co.—23, Meadows Street, Fort.

Camlin Limited.—210, Ram Baug, Lady Jamshetji Road, Bombay 28.

Central Stationery Mart.—15, Bruce Street, Fort.

Chalasanil & Co.—8, Noble Chambers, Parsi Bazar Street, Fort.

Champaklal & Co.—195-7, Abdul Rehman Street, Bombay 3.

**CHHAGANLAL KESHAVJEE** (Estd. 1913).—Stationers, Printers and Dealers in Loose Leaf Binders. 22A, Parsee Bazar Street, Fort. Phone: 253008. Grams: "STAPRI."

City Stationery Stores.—Gool Mansion, Store Lane, Parsi Bazar Street, Fort, Bombay.

**CRYSTAL STATIONERY MART.**—Manufacturing Stationers, such as Exercise Books, Note Books, Files, Account Books, etc. 146, Abdul Rehman Street, Bombay 3. Grams: "CRISMART." Phone: 324461.

Deelip Stationery Mart.—299, Abdul Rehman Street, Bombay 3.

Empire Traders.—Stationers, Printers & Paper Suppliers, 18, Hassan Chambers, Parsi Bazar Street, Fort.

Enayatall & Co.—262-64, Abdul Rehman Street, Bombay 3.

**EVERGREEN SYNDICATE.**—19/21, Hamam Street, Fort, Bombay 1. Phone: 252641. Grams: "TAPEKING." Stationers & Printers. Importers & Stockists of all kinds of Office Stationery. Chief Stockists of Cellulose Self-adhesive Tape, Brown Kraft Gummed tape Typewriter Rolls & Drawing Materials.

Gandalal & Co.—170, Abdul Rehman Street, Bombay 3.

**GANDHI STATIONERY MART.**—165, Bazargate Street, Bombay 1. Manufacturers: Comet Visiting, Invitation, Greeting, Wedding Cards, Inland/Air Letters. Phone: 265248.

General Equipment Merchants, Ltd.—People's Building, Sir Phirozshah Mehta Road, Fort.

General Stationery Mart.—36, Dhanji Street, Bombay 3.

Godbole & Co., S. K.—74, Khetwadi 10th Lane, Bombay 4.

Gujarat Stationery Mart.—198, Abdul Rehman Street, Bombay 3.

Himalaya Stationery Mart.—Himalaya House, Palton Road and Hornby Road Junction, Bombay 1.

**HINDUSTAN PENCILS PRIVATE LTD.**—111/112, Himalaya House, Palton Road, Bombay 1. Phone: 261972. Grams: "WRITESFINE."

H. M. Shah & Co.—181, Abdul Rehman Street, Bombay 3.



**IMPERIAL STATIONERY CO., THE.**—Alli Chambers, 35, Meadows Street, Fort. Stationers and Printers.

**Indo-Stationery Mart.**—Rahimtoola House, Homji Street, Fort.

**International Stationery Stores.**—Victoria Building, Parsee Bazar Street, Fort.

**JAGJIVANDAS NANDLAL & CO.** (Golden Jubilee year, 1916-1966)—237, Abdul Rehman Street, Bombay 3. Phone : 323634. Grams : "SWANHOUSE." Sole Distributors for ELECTRIC PEN-PENCIL, Wax-Backed and TYPEWRITING CARBON PAPERS, ELECTRIC STAPLES in Sizes 24/6, 26/6 & B.8.

**Kashyap & Sons, G. S.**—40, Prospect Chambers Annexe, Hornby Road, Fort.

**Kilburn & Co. Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort, Bombay.

**Kores (India) Ltd.**—Plot No. 10, off Haines Road, Worli, Bombay 18, W.B.

**Kumar Stationery Stores.**—9/A, Nadirsha Sukhia Street, Fort, Bombay.

**KUMAR STATIONERY MART (Estd. 1942).**—Podar Chambers, Store Lane, Parsi Bazar Street, Fort. Importers, Stationers, Paper Merchants and Government and Railway Contractors. Sole Distributors of "Daylight" Brand Pencils and "Planway" Brand Ferro and Ammonia Paper Rolls, and "Projecto" Brand Indian Tracing Cloth and "Excella" Brand Foreign Tracing Paper. "STAPCO" Brand Stapling Machines. Stockists of Gem Clips and Pins. Phone : 255303. Grams : "TRADEMOTO."

**Lalwani Printing Press.**—35, Mirza Street, Bombay 3.

**Lion Pencils Private Ltd.**—Pencil Manufacturers, 95, Marine Drive, Bombay 2.

**Longmans, Green & Co., Ltd.**—Vulcan House 53, Nicol Road, Ballard Estate.

**"EVERREADY"**

STAPLES

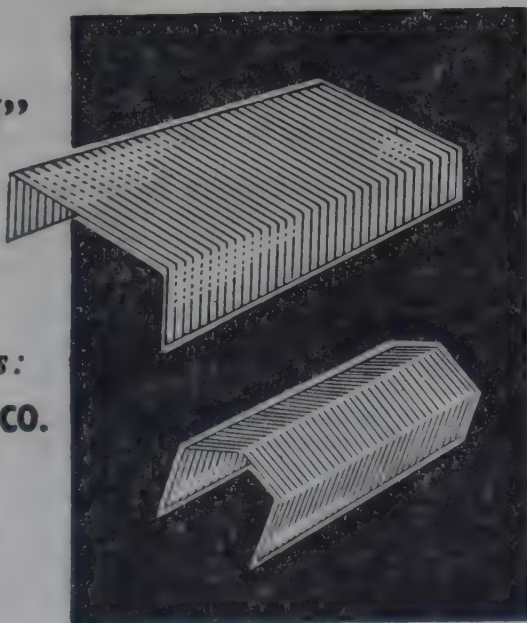


Manufacturers:

**M. SOMNATH & CO.**

94, Lohar chawl  
Bombay 2.

Phone: 20375



**M. M. KADERJEE & CO.** (Estd. 1913).—245, Abdul Rehman Street, Bombay 3. Stockists : AMMONIA PAPERS, Importers & Suppliers of Office Requisites, Drawing Materials, Gum Tapes, Cellulose Tapes, Stationery & Papers. Phone : 326154.

**M. SOMNATH & CO.**—94, Lohar Chawl, Bombay 2. Phone : 20375. Grams : "SAMARTHYA." Manufacturers of Everready Staples. A quality product made of imported special type of Wire.

**Mahomedally Hebatbhoy & Co.**—15, Mirza Street, Parsi Gully, Bombay.

**Mazda Printers.**—Next to Bharat Tiles Ltd., 32, Apollo Street, Fort.

**Mazumdar & Co.**—Opp. Krishna Cinema, Tribhuvan Road, Bombay 4.

**MEHRA LEONARDT PENS PRIVATE LTD.**—Manufacturers of Steel Pens, Stationers' Sundries, Agra Road, Bombay 79.

**Minerva Stationery Mart.**—32, Apollo Street, opp. Allahabad Bank, Fort.

**Model Art Printery Private Ltd.**—4, Nanabhai Lane, Fort, Bombay.

**Model Stationery Mart.**—All kinds of Stationery Goods and Paper Merchants, 44, Cawasji Patel Street, Fort, Bombay.

**Mohamedali Abdulhusein.**—83, Mirza Street, Bombay 3.

**NATIONAL STATIONERY STORES.**—Stationers, Printers, Paper Merchants, Government and Railway Contractors, Podar Chambers, 12/A, Store Lane, Fort, Bombay. Godown :

23, Parsee Bazar Street, Fort. Phone : 253416. Grams : "SER-VYUTRUE."

**Navalakhi & Co., J. V.**—Kalbadevi Road, Bombay 2.

**New Book Co., Ltd.**—Kitab Mahal, 188-190, Hornby Road, Fort.

**New India Stationery Mart.**—9, Hummum Street, Fort.

**New Popular Book Shop.**—Nana's Chowk, Gownlia Tank Road, P.O. Grant Road, Bombay 7.

## NOBLE STATIONERY MART, BOMBAY 1

Parsee Bazar Street, Fort.

Grams : "CELLOTAPE "

Phone : 254748

Envelopes : White, Brown, Coloured, Cloth, etc. ;  
Fastener-envelopes too.

- ♦ All kinds of Files
- ♦ Cedarwood Pencils
- ♦ Cellotape & Dispensers
- ♦ All Stationery Items

SUPPLIERS THROUGHOUT THE COUNTRY  
AND EXPORTERS

**Ofipin Private Ltd.**—397, Sheikh Memon Street, Bombay 2.

**Paradise Agency.**—75, Abdul Rehman Street, Bombay 3.

**Pioneer Stationery Mart.**—106-108, Cawasji Patel Street, Fort.

**Popular Book Depot.**—Aabid House, Lamington Road.

**Rowland Son Bros. (Estd 1927).**—Importers, Exporters, Stationers, Printers, Paper Merchants, Dealers in drawing Materials and Artists Requisites. Manufacturers of Teleprinter Paper Rolls 1 to 4 Ply, Adding Machine Paper-Roll and White and Blue Cloth lined Paper Rolls in required sizes. Podar Chambers, Parsi Bazar Street, Fort, Bombay-1. Phone : 251107 (Office) and 264861 (Res.) Grams : "TELLTRUE."

**S. M. Soni & Brothers (Regd.).**—54, Abdul Rehman Street, Bombay-3.

**Regal Stationery Stores.**—Lentin Chambers, Dalal Street, Fort, Bombay 1.

**Regent Stationery Stores.**—Khodram House, New Parsi Bazar, Fort.

**RELIABLE STATIONERY MART, THE.**—23/D, Sir Phirozshah Mehta Road, Fort, Bombay. Phone : 252850. Highclass printers & dealers in stationery.

**Renown Stationery Stores.**—Byramjee Mansion, Sir Phirozshah Mehta Road, Fort.

**ROWLANDSON BROS. (Estd. 1927).**—Importers, Stationers, Printers, Paper Merchants, Dealers in Drawing Materials and Artists Requisites. Manufacturers of Teleprinter Paper Rolls 1 to 4 Ply, Adding Machine Paper Roll and White and Blue Cloth-lined Paper Rolls in required sizes. Podar Chambers, Parsi Bazar Street, Fort, Bombay 1. Phone : 251107 (Office) and 264861 (Res.). Grams : "TELLTRUE."

**S. R. Brothers.**—406 & 412/A, "Commerce House," Meadows Street, Fort, Bombay 1.

**SAIF & CO.**—36, Sutar Chawl, Bombay 2. Phone : 325797. Grams : "PRIMEPAPER", Kalbadevi. Importers & Stockists of all kinds of Papers & Boards. Mfrs. of Blue Cloth Lined Papers, Rolls and Envelopes, Gummed Papers and Plastic Coated Papers, etc. and Butterfly Brand Tinsel (Jari) Powder Silver & Coloured.

**Salebhoy, E., & Co.**—19, Mangaldas Road, Princess Street.

**Sanghani & Co.**—178-80, Abdul Rehman Street.

**Shreeman & Co.**—Podar Chambers, 109, Parsi Bazar Street, Fort.

**SOCIAL STATIONERY MART.**—Victoria Building, 27-B, Parsee Bazar Street, Fort, Bombay 1. Phone : 251466. Specialists in "SOCIAL" Files, Typewriters & Pencil Carbon Papers. Account Books & Office Requisites.

**Sorabji Nowroji & Co.**—Horniman Circle, Fort.

**Standard Stationery Mart.**—Rahimtoola House, Homji Street, Fort.

**Stela Equipments.**—327, Nawab Building, Hornby Road, Fort.

**SUPERIOR STATIONERY MART LTD.**—117, Nagindas Master Road, (Meadows Street), Fort, Bombay 1. Phone : 25-2398. Grams : "LOVELINESS." Stationers, Printers and Paper Merchants.

**SURESH STATIONERY MART.**—285, Abdul Rehman Street, Post Box No. 3056, Bombay 3.

**Svastik Traders.**—282, Pannalal Terrace, Lamington Road, Grant Road.

**Taraporevala, D. B., Sons & Co.**—210, Hornby Road, Fort.



Taraporevala, Phirose & Kaikhushru, F. D. B.—Kitab Mahal, 188-190, Hornby Road, Fort.  
 Union Printing Works.—Jan Mansion, Sir Phirozshah Mehta Road, Fort.  
 United Commercial Co.—48, Mangaldas Building, 1, Princess Street.  
 Universal Trading Corporation, The.—Usuf Building, Mahatma Gandhi Road, Fort.  
 Venus Stationery Co.—Hassan Chambers, Fort.  
 V. Prabha & Co.—476, Sandhurst Road, Bombay 4.  
 Young India Stationery Mart.—43, Ghoga Street, Fort.

**ZENITH TYPEWRITING CO. (INDIA).**—229, Abdul Rehman Street, Bombay 3. Phone : 326992. Stationers, Stockists of all Foreign Pencils including "Venus" and "Kohinoor" Engineering Instruments, Boxes, Slide Rules, Drawing Papers, Artists Brushes, Table Decoration Stationery, Stapling Machines, Office & School Stationery. Sole Importers of Steadler's German Camel Pencils.

### STEAM TRAPS AND VALVES

Crescent Trading Co.—48-50, Bhajipala Street, Bombay 3. Phones: 325140 & 327004. Grams : "WATERMETERS."

**JIVRAJ & VRAJLAL.**—122, Nagdevi Street, Bombay 3. Phones : 325138 (Shop) & 30932 (Res.). Grams : "SANIPIPES."

General Tubes Private Ltd.—142-44, Nagdevi St., Bombay 3.

**KILBURN & CO. LTD.**—Gresham Assurance House, Phirozshah Mehta Road, Fort, Bombay 1. Phone : 251908. Grams : "TASCONIUM."

**MEHTA NANAVATI & CO.**—96, Narayan Dhuru Street, Bombay 3. Phone : 324645. Grams : "REDJOINT."

### STEAMSHIP AGENTS

**KANJI JADHAVJI & CO.**—Masjid Bridge, Mandvi, Bombay 9. Phones: 323681 & 32142. Grams : "GITA." Freight Brokers, Clearing, Forwarding, Shipping, Landing & Travel Agents.

Lionel Edwards Ltd.—Nicol Road, Ballard Estate, Bombay 1. Phones : 261241/43. Grams : "LIONWARDS".

Marine Transport Co. Private Ltd.—Wakefield House, Sprott Road, Ballard Estate.

United Liner Agencies of India Pt. Ltd.—Kaiser-i-Hind Bldg., Currimbhoy Road, Bombay 1.

### STEAMSHIP COMPANIES

Ambica Steam Navigation Co. Ltd.—Prospect Chambers, Dr. Dadabhai Naoroji Road, Fort, Bombay 1.

Bharat Line Ltd.—Bharat House, Apollo Street, Fort, Bombay 1.

**EVERETT STEAMSHIP CORPORATION** (Incorporated in Philippines).—Fort House Annexe, 221, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone : 264081-3 (3 lines). Grams : "STARLINER" & "EVORIENT." Shipowners, Brokers, Operators & Travel Agents.

Great Eastern Shipping Co. Ltd.—60, Mahatma Gandhi Road, Fort, Kamal Shipping Co. (Private) Ltd.—Scindia House, Ballard Estate, Bombay.

Killick, Nixon & Co. Private Ltd.—Killick House, Home Street, Fort.  
 Mackinnon Mackenzie & Co.—Ballard Road, Ballard Estate.

**MALABAR STEAMSHIP CO. LTD.**—Darabsha House, Ballard Road, Ballard Estate, Bombay 1. Phones : 263625 & 263626. Grams : "RUBICON." Branches at Calcutta, Cochin, Kozhikode & Alleppey.

Merchant Steam Navigation Co. (Private) Ltd.—Gaumikh Bhuvan, Masjid Bridge, Bombay 9.

**NATIONAL STEAMSHIP CO. LTD.**—Darabsha House, Ballard Road, Ballard Estate, Bombay-1. Phone : 264432. Grams : "RASHTRA." Branches at Cochin, Kozhikode & Alleppey.

**NEW DHOLERA STEAMSHIPS LTD.**—Darabsha House, Ballard Road, Ballard Estate, Bombay. Phone : 263443. Grams : "JAYSHIPS."

**SCINDIA STEAM NAVIGATION CO. LTD.**—Scindia House, Ballard Estate, Bombay 1. Phone : 268161. Grams : "JALANATH." (Coastal) "SAMUDRAPAR" (Overseas). Telex : 205.

### STEARATES (METALLIC SOAP)

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort, Bombay. Phone : 254433. Grams : "DATNARE."

### STEEL

Ahmed A. Fazelbhoy Private Ltd.—Liberty Building, 41, Marine Lines, Bombay 1.

F. Bock & Co., Ltd.—Shale Building, Bank Street, Bombay 1.

Guest, Keen, Williams Ltd.—Ballard Estate, Bombay 1.

**JAIRAMDAS & SONS.**—163, Narain Dhuru Street, Bombay 2. Phone : 323616. Grams : "JAIRAMSONS." Sole Agents for Sanderson Bros. & Newbould Ltd., Sheffield (U.K.). Firth Cleveland Steel Strips Ltd. U.K.

**MARCAR STEEL & ENGINEERING LTD.**—India House, 4th Floor, Fort Street, Bombay 1. Telegraphic Address : "MARCASTEEL," Bombay. Steel Materials and Engineering Products of all kinds. Branch Offices : Calcutta and Delhi.

**MORSEL TRADERS & AGENTS.**—Stockists, Suppliers and Fabricators of all types of M.S. Steel Materials, viz. Beams, Channels, Rounds, Sheets, Plates, Shaftings, Nails, etc. NEW IRON Market, Bombay 9. Phones : 321799 & 475986.

Richardson & Cruddas Ltd.—Byculla, Bombay 8.

United Steel Co. (India) Private Ltd.—Himalaya House, Palton Road, Bombay 1.

### STEEL BALLS MANUFACTURERS

**NEW HAVEN STEEL BALL CORPORATION PRIVATE LTD.**—Office : Pandyan House, 309, Frere Road, Bombay 1. Phone : 261523. Grams : "GULDASTA." Factory : 38, Pawai Lake Road, Saki Naka, Kurla, Bombay 70. Phone : 581185. Mfrs. of Steel & Alloy Balls, Grinding Media, & Automobile Parts. Miniature Balls.

### STEEL CASTINGS

**DANDEKAR G. G. MACHINE WORKS LTD.**—Bhiwandi, Dist. Thana, Bombay. Manufacturers of Steel & Alloy Steel Castings. Grams : "DANDEKARCO." Bhiwandi. Phone : "BHIWANDI", 57.

### STEEL DOORS & WINDOWS

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Bombay.

**METALS PRIVATE LTD.**—269, Dr. Dadabhai Naoroji Road, Bombay 1. Phone : Office : 265309 ; Factory : 534295.

Richardson & Cruddas Ltd.—Byculla Iron Works, Parel Road, Bombay 8.

**SHUBHDWAR ROLLING SHUTTERS & ENGINEERING CO.**—15, Bank Street, Fort, Bombay. Phones : 254445, 254185 & 256502. Grams : "SHUBROLL." Manufacturers of Steel and Aluminium Rolling Shutters, Window Grills, Collapsible Gates, Fireproof Doors, Compound Gates, Steel Doors & Windows, all types of Steel Fabrication Works.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate, Bombay.

### STEEL FILES

Jairamdas & Sons.—163, Narain Dhuru Street, Bombay 3. Phone : 323616. Grams : "Jairamsons".

**JOHN BAKER & SONS.**—Killick House, Home Street, Bombay 1. Phones : 262311 266326. Manufacturers of Engineer's Steel Files, Plane Irons & Screw Drivers. Grams : "KINDRED." Factory at Kurla-Powai Road, Bombay 70.

Shah & Brothers.—234, Nagdevi Street, Bombay 3.

Tyebally Dawoodji.—(Est. 1865), 68, Sarang Street, Bombay 3.

### STEEL FURNITURE

**ART STEEL PRODUCTS.**—263, Kalbadevi Road, Bombay 2. Phone : 29869. Grams : "GOVINSAFE." Manufacturers of Steel Cabinets, Safes, Steel Furniture, Padlocks and Specialists in Sofa-cum-Bed.

Govin's Safe Manufacturing Co.—266/68, Kalbadevi Road, Bombay 2.

**JANAK MANUFACTURING WORKS.**—Antop Hill, Wadala, Bombay 31. Manufacturers of Steel Furniture such as Steel Shelving Racks, Canteen Furniture and Hospital Equipments. Phone : 440171. Grams : "JANAKBED" (MT). Show Room at : Kastur Nivas, 26/B, French Road, Off Hughes Road, Chowpatty, Bombay 7.

Khira Steel Works Private Ltd.—Factory : Swami Vivekanand Road, Santa Cruz, Bombay 54.

Metro Steel Products.—Head Office & Showroom : 277, Kalbadevi Road, Bombay 2.

**NADIRSHAW BURJORJI & SONS.**—47, Abdul Rehman Street, Bombay 3. Phone : 321930. Dealers in Crucibles & Steel Furniture.

Steelmade.—Dr. Annie Besant Road, Worli, Bombay 18.

Sudarshan & Co.—209, Masjid Bunder Road (opp. State Bank), Bombay 3.



**STEEL MANUFACTURERS & MERCHANTS**

**GRAHAM FIRTH STEEL PRODUCTS (INDIA) LTD.**—Regd. Office: 16, Horniman Circle, Fort, Bombay-1. Phone: 252847. Grams: "GRAMFIRTH". Manufacturers of Narrow Cold Rolled Steel Strips of Plain Carbon, Medium Carbon and Alloy Steel. Factory: Firststeel Compound, Behind Jogeshwari Marshalling Yard, Western Express Highway, Goregaon (East), Bombay 63. Phone: 691802.

**MODERN STEEL COMPANY.**—125/A, Aliumer Street, Off Banian Road, Bombay 3.

**STEEL (MILD) MANUFACTURERS**

**INDUSTRIAL ENGINEERING CO.**—H. O.: 45, Apollo Street, Fort, Bombay 1. Phones: 254072, 325156. Grams: "CALLING." Manufacturers of Mild Steel, Commercial & Free Cutting Bars.

**STEEL TUBULAR POLES (MFRS.)**

**BOMBAY TUBES & POLES CO.**—Manufacturers of Electric Tubular Poles (on Government & Municipal Lists). Darukhana, 2nd Lane, Mazagon, Bombay 10. Phone: 376866. Grams: "TUBESPOLES."

**INDIA ELECTRIC POLES MFG. CO.**—Farida Villa, 108, Waterfield Road, Bandra, Bombay 50. Phone: 373560 & 378411. On Government and Municipal Lists.

**STEEL (SHAFTINGS)**

**B. P. STEEL INDUSTRIES PRIVATE LTD.**—Bright Bars & Shaftings, 39/44, Sion East, Bombay-22. Phone: 473423.

**KANCHAN BRIGHT STEEL CORPORATION.**—111, Nagdevi Street, Bombay 3. Phones: Office: 324309 & Factory: 592939. Grams: "LUCKYCHAP." Manufacturers of Round, Square, Flat & Hexagon Bright Steel Bars.

**MODERN STEEL COMPANY.**—125/A, Aliumer Street, Off Banian Road, Bombay 3.

**TEXTELO ENGINEERING WORKS.**—52-A, Islampura Street, Bombay-4 BR. Phone: 334671. Importers and Stockists of Free Cutting Bright Bars, Round, Square and Hexagonal, Tool Alloy & Special Steel.

**STEEL WIRE MANUFACTURERS****SPECIAL STEELS, LIMITED.**

Dattapara Road, Borivli (East), Bombay-66 (NB),

Phones: 661246 (4 lines)

Grams: "DRAWNWIRE", BORIVLI, Bombay.

**Manufacturers of:**

High tensile prestressed concrete wires, High tensile Galvanised Steel wires for ACSR conductors, Galvanised cable armour wires, Umbrella ribs wires, Spring steel wires, Cycle spokes wires, Electrode core wires, Cycle accessories wires, Cold heading wires, and all other types of high, low and medium carbon steel wires for wood screws, machine screws, panel pins, rolling shutters, ball bearings, blue tacks, card & gill pin, barbed wires, etc., with the technical know-how of Messrs. Felten & Guillaume Carlswerk Eisen und stahl ag. Koln-Mulheim, West Germany.

**STENCIL INK MANUFACTURERS**

**LATHAM ABERCROMBIE DIVISION OF FORBES FORBES CAMPBELL & CO., LTD.**—Forbes Building, Home Street, Fort, Bombay. Phone: 268081. Grams: "LATHAM."

**STEVEDORES AND DUBASHES**

**ARDESHIR B. CURSETJEE & SONS (PRIVATE) LTD.**—6, Rampart Row, Fort, Bombay. Phones: 254223, 252543 & 254077. Grams: "GREYHOUND." Master Stevedores & Dubashes, Clearing & Forwarding Agents.

**Bomanji Dhunjibhoy Private Limited** (Established 1867).—Registered Office: 24-A-B, Nawab Tank Road, Bombay 10.

**Cawasji Behramji & Co.**—City Ice Building, 298, Bazargate Street, Fort, Bombay.

**Cawasjee Eduljee's Sons.**—Elphinstone Circle, Fort.

**Darashaw B. Cursetjee's Sons.**—Darabshaw House, Ballard Road.

**EASTERN BUNKERERS, LTD.**—Scindia House, Dougall Road, Ballard Estate, Bombay 1. Phone: 262461. Grams: "VAVTO."

**Ferns Ships Supply Company.**—Post Box No. 1508, Wakefield House, Ballard Estate, Bombay 1.

**Hill, Son & Dinshaw Ltd.**—Marshall's Bldg., Ballard Road, Bombay 1.

**J. M. BAXI & CO.**—Steamship Agents & Stevedores. 16, Bank Street, Bombay 1. Phones: 253021 & 253871. Grams: "BAXICO." Branches at all ports on the East and West Coast of India.

**KANJI JADHAVJI & CO.**—Masjid Bridge, Mandvi, Bombay 9. Phones: 323681 & 321412. Grams: "GITA." Freight Brokers, Clearing, Forwarding, Shipping, Landing & Travel Agents.

**Maneckji & Jamshedji Company.**—Ahmed Building, Gunpowder Road, Mazagaon Tram Terminus, Bombay 10.

**NAROTTAM & PEREIRA LTD.**—Scindia House, Dougall Road, Ballard Estate, Bombay 1. Phone: 262461. Grams: "JALATHARG." Shipping & Insurance Agents & Dubashes.

**NEW DHOLERA SHIPPING & TRADING CO. LTD.**—Stevedores, Shipping, Clearing & Forwarding Agents. Darabsha House, Ballard Road, Ballard Estate, Bombay-1. Phone: 263443. Grams: "RAVASIA."

**Patel, D. C., & Co.**—268, Bazar Gate Street, Fort.

**Purshotamdas Madhavan & Co. Ltd.**—Regd. Office: Botawalla Building, 8, Horniman Circle, P.O. Box No. 274, Bombay.

**Ruttonjee Bomanjee & Co.**—60, Forbes Street.

**Shalebhoy Tyebjee & Sons.**—12, Bruce Street, Bombay 1.

**Sorabji Pestonji & Co.**—105, Apollo Street, Fort.

**Tookaram Hariha & Sons, B. H.**—Sadguru Sadan, 15, Babulnath Road, Bombay 7.

**STITCHING WIRES**

**A. A. MORBIWALA & CO.**—109/111, Abdul Rehman Street, Bombay 3. Phone: 323280. Grams: "VARNISH (M.D.)." Direct Importers & Stockists of Stitching Wires of all kinds.

**STONE BREAKERS AND GRANULATORS**

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Bombay.

**STONE CRUSHERS & JAWS**

**CAPRI ENGINEERING CO.**—296, Frere Road (Near Fort Market), Bombay 1. Phone: 266438. Grams: "CAPRIENG."

**STONEWARE PIPES**

**NOWROJI N. VAKIL & CO.**—Sheru Castle, Mohmedalli Road, Bombay 3. Phone: 322803. Head Office & Factory at Naroda Road, Ahmedabad. Manufacturers of Stoneware Drainage Pipes & Fittings, Fire Bricks and Clay & Raschig Rings.

**Sharman Sons** (Estd. 1949).—10, Nagdevi Street, Bombay 3.

**STRAW-BOARDS**

**Abdullahai Fidally & Co.**—24, Sutar Chawl, Bombay 2.

**Advani, J. B., & Co. Ltd.**—Advani Chambers, Sir Phirozshah Mehta Road, Fort.

**Ambalal Dharamchand & Co.**—1, Esaji Street, Vadgadi, Bombay 3.

**Ashok Brothers Private Ltd.**—Mubarak Manzil, 104, Apollo Street, Fort.

**Bombay Paper Marketing Co.**—Podar Chambers, Parsi Bazar Street, Fort.

*For Packing Cone & Tube*

*Manufacturing*

*Book Binding*

**G. T.**

**GREY-COLOUR**

**MILL-STRAW BOARDS**

*Good quality Competitive Prices Ready Stock.*

**Mfrs. G. T. INDUSTRIES**

33A, New Marine Lines, Bombay 1. B.R.

Cable: NARAINVAT

Telephone: 244175.

**Hardcastle, Waud & Co., Ltd.**—Alice Building, Hornby Road, Fort.

**India Paper Corporation.**—64, Sutar Chawl, Bombay 2.

**International Paper Co.**—28, People's Bldg., Sir Phirozshah Mehta Road, Fort.

**Jayantilal J. Gandhi & Co.**—45, Mint Road, near G. P. O., Fort.

**Kanthawala, N., & Co.**—77, Medows Street, Fort.

**Kikabhoy Chandabhoj.**—33-35, Mangaldas Road, Bombay 2.



**Mansukhlal Sukhlal & Co.**—Ghoga Street, Fort.  
**Mahomedally Hebatbhoy & Co.**—15, Mirza Street, Bombay 3.  
**Mohanlal & Co.**—56, Sutar Chawl, Bombay 2.  
**Pardiwala Paper Mart.**—32/A, Parsi Bazar Street, Fort, Bombay.  
**Patel, B. K., & Co.**—106, Meadows Street, Fort.  
**Prabhat Trading Company.**—Vithal Sayana Building No. 2, Lohar Chawl, Bombay 2.  
**Shantilal Shah & Co.**—Bombay Mutual Annexe, 17, Gunbow Street, Fort.  
**Siddho Mal & Sons.**—49, Sutar Chawl, Bombay 2.  
**Sivramakrishnan, M.**—Hazi Mansil, 82-86, Abdul Rehman Street, Bombay 3.  
**United Import Co., The.**—67-69, Mahomedalli Road.  
**Universal Trading Corporation, The.**—43, Mahatma Gandhi Road, Fort.

### STRUCTURAL ENGINEERS & CONTRACTORS

**ALCOCK, ASHDOWN & CO., LTD.**—Structural, Mechanical, Marine and Electrical Engineers. Defence Works—Masagon, Bombay 10-DD. Phones: 372584-86 (Works); 251321-26 (Office). Grams: "MORRISONS." Ramasar Works, Bhavnagar. Phone: 3415. Grams: "ALCOCKS." Registered Office: 16, Bank Street, Fort, Bombay 1 BR.  
**BEARAT TANK & STEEL CO., THE.**—64, Podar Chambers, Parsi Bazar Street, Fort, Bombay. Phone: 251471. Grams: "GREND." Steel and Stainless Steel Fabrication of Industrial Equipment for Chemical, Sugar, Cement, Oil, Dyes and Dairy Industries and Structural Work.  
**Bombay Rolling Shutters.**—Mansukh Nivas, 2nd floor, 188, Khetwadi Back Road, Bombay 4.  
**Gupta Manufacturing Works.**—Works: Cotton Green, Bombay.  
**HAWA INDUSTRIES PRIVATE LTD.**—(Mechanical & Structural Engineers), Fabrication Steel Pipes & Fittings upto 72 inch Dia. for water, Gas, Steam, Compressed Air & Chemicals (Suitable for Rubber Lining), Pressure Vessels, Storage Tank, 142/44, Nagdevi Street, Bombay 3. Phone: 322894.  
**HIND TANK MANUFACTURING CO.**—Trimbak Parsaram Street, Bombay 4. Phone: 331845. Grams: "INDUSPLANT." Designers and Fabricators of complete plants, Machinery & Equipment for all Industries. Also Manufacturers of storage tanks.

## FABRICATIONS

**We Manufacture: Chemical Process Vessels - Air Receivers - Pressure Vessels - Storage and Vertical Tanks - M.S. Pipes - Steel Structures - Gratings**

**Insist on: "NT-SKID" Industrial Grate Floorings**



### HINDUSTHAN ENGINEERING WORKS

7-C, Pitamber Lane, Behind Paradise Cinema, Mahim, Bombay-16.  
 Telephone No.: 451408 & 455105.

**INDIA TUBE MILLS & METAL INDUSTRIES PRIVATE LTD.**—Agra Road, Vikhroli, Bombay 83. Phone: 581541 & 581542. Grams: "TUBEMILL." Specialists in Tank Fabrication and Erection, Pressure Vessels, Laying of Oil Pipe Lines and Manufacturers of Bright Bars free Cutting and Commercial Quality.

**INDUS ENGINEERING COMPANY.**—Office & Works: Opp. Worli, D.D. Chawl No 114, Bombay 13 (B.C.). Phones: 379332 & 371743. Grams: "INDUSINDH." Fabricators of Structural Steel, Tanks, Chimneys, Stagings, Floor Gratings, Pipe Lines, Conveyors, Elevators, etc.  
**Jayant Engineering Corporation.**—14/D, Kurla Industrial Estate, Bombay 77.

**JINDAL ENGINEERING WORKS.**—Darukhana, Kasara Street, Bombay 10 DD. Phones: 326389 & 378720. Grams: "JINDAL-SHIP." Manufacturers of various components for M.C., C.R., and Box Type Wagon, Forgings, Hooker, Structural Fabricator, Barbed Wires, "U" Staples, Cable Carrying Trays and A.C.S.R. Accessories and Transmission line tools.

**Mapara Engineering Co.**—381, Dadabhoy Naoroji Road, Bombay 1. Phones: 25-3398. Manufacturers of Mild Steel and Stainless Steel, Chemical and Pressure Vessels, Storage Tanks and all kinds of Sheet-metal and Structural works.  
**Metals Private Ltd.**—269, Dr. Dadabhai Naoroji Road, Bombay 1.

**MUNCHERJEE BYRAMJEE & CO.** (Estd. 1882).—35/C, Jerajbhoy Street, near Municipal Workshop, Bombay 8. Phone: 71692. Brass & Iron Founders and Structural & Mechanical Engineers.

**Richardson & Cruddas Ltd.**—Byculla, Bombay 8.

**SENTINEL ROLLING SHUTTERS & ENGINEERING CO. PRIVATE LTD.**—96, Bora Bazar Street, Fort, Bombay-1. Phone: 262019. Grams: "DARWAJA." Manufacturers of Rolling Shutters, Collapsible Gates, Fireproof Doors & Steel Windows, etc.

**Steel Industries of Hindustan Ltd.**—Magazine Street, Darukhana, Bombay 10.

**STRUCTURAL ENGINEERING WORKS LTD.**—Managing Agents: Bhagat & Sons Private Ltd. Registered Office: Maneckji Wadia Building, 127, Mahatma Gandhi Road, Fort, Bombay 1. Grams: "BHAGATSON." Phones: 255601-2-3-4. Chairman: Mr. H. M. Patel. Managing Director: Mr. I. N. Bhagat. Specialists in the Design and Fabrication of Water Pipes, Oil Pipes, Penstocks, Boilers, Pressure Vessels, Transmission Towers, Industrial Buildings, Cranes, etc., etc. Complete Mechanised Automatic Welding.

**SUMMIT ENGINEERING CO.**—4th Floor, Ismail Building, 381, D. N. Road, Bombay 1. Manufacturers of Pressure and storage Vessels, Structural Steelwork Tanks, etc.

### For FABRICATION of:

**Factory Sheds & Warehouses, Cubical & Vertical Tanks, Pressure Vessels, Chimney Stacks & Pipe Lines, Conveyors (Roller), M. S. Shutterings, Steel Doors & Windows, Gantry Girders, General Steel Works,**

(Works at Site also undertaken)

Contact :

### VELHARI STEEL INDUSTRIES

(Structural Engineers & Contractors)

Sangli Bank Bldg., 5th Floor, 296, Bazar Gate St., Bombay-1. Phone: 254647

**Western India Engineering Co., The.**—Signal Hill Avenue, Sewri Bombay 15.

### STRUCTURAL WATERPROOFING

**GLADSTONE LYALL & CO., LTD.**—21, Lansdowne Road, Apollo Bunder, Bombay 1. Phones: 212805 & 211241. Grams: "GLADSWYLL." Bombay Manager: Cmdr. L. N. Deefholts. Regd. Office: 4, Fairlie Place, Calcutta.

### SUGAR MILL MACHINERY & OTHER REQUIREMENTS SUPPLIERS

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL."

**ADVANCE TUBE CO.**—99, Nagdevi Street, Bombay 3. Phone: 323522. Grams: "ELBOWS."

**Asian Textile Engineering Corporation.**—Kermani Building, Sir Phirozshah Mehta Road, Fort.

**ASSOCIATED ENGINEERING CO.**—Sane Building, Nababhai Lane, Fort, Bombay-1. Telegram: "STELLIDES." Telephone: 252597. Office: 571880. Works: Manufacturers of Glucose and Starch Plants, Pharmaceutical and Chemical Plants, Industrial Machinery-Chemical Process Equipments and Sugar Machinery.

**DEVIDAYAL TUBE INDUSTRIES LTD.**—Gupta Mills Estate, Reay Road, Bombay 10. Grams: "DEVITUBE." Phone: 70001 (4 lines). Manufacturers of Seamless Solid drawn bright Annealed Brass Tubes, 70/30, Alloy & Copper Tubes for Sugar and Distillery Industries.

**DE SMET (INDIA) PVT. LTD.**—Khanna Construction House, 44, Maulana Abdul Gaffar Road, Worli, Bombay-18 (WB). Phone: 372231. Grams: "EXTRAXMET." Manufacturers of Solvent Extraction Plants, Vegetable Oil Refining Plants, Cotton Seed Processing Equipment, Sugar Plant Machineries. Factory: Panch Pakhadi Eastern Express Highway, Thana.

**ESSENTIAL ENGINEERING CO.**—11, Botawala Bldg., Elphinstone Circle, Fort. Grams: "ESSENCE." Phone: 252601. Importers, Exporters, Commission Agents and Manufacturers' Representatives.



**INDUS ENGINEERING COMPANY.**—Office & Works: Opp. Worli D.D. Chawl No. 114, Bombay 13 (B.C.). Phones: 379332 & 371143. Grams: "INDUSINDH." Mfrs. of Evaporators (single or multiple effect), Steam Jacketed Evaporating Pans, Vacuum Pans, Heat Exchangers & Condensers coil or tubular type, Crystallisers, Grass Hoppers, etc., etc.

**INDIA RUBBER PRODUCTS.**—Kastarchand Mills Estate, Dadar, Bombay 28. Phone: 454072. Manufacturers of Industrial & Moulded Rubber Products. Such as Rubber Bushes, Rings, etc. to Drawing and Specifications.

**JIVRAJ & VRAJLAL.**—122, Nagdevi Street, Bombay 3. Phone: 325138 (Shop), 30932 (Res.). Grams: "SANIPIPES".

**Kirtikumar & Co.**—80, Bhandari Street, Mandvi, Bombay 3. Grams: "LALITKIRTI".

**Oriental Engineering Co.**—25, Forbes Street, Fort, Bombay 1.

**P. Ratilal & Co.**—43, Dhanji Street, Bombay 3.

**Pravin Brothers & Co.**—501, Commerce House, Meadows Street, Bombay 1. Phone: 251748. Grams: "WIDESCOPE".

**Shah Engineering Stores.**—88-92, Nagdevi Cross Lane, Bombay 3.

**SUPREME INDUSTRIAL WORKS.**—196 K, Caiwadi, Girgaum, Bombay 4. Manufacturers of Worm Reduction Gear Units and Specialists in all kinds of Worms and Worm Wheels. Phone: 355189.

**Vaai Shums & Co. Private Ltd.**—165-67, Nagdevi Street, Bombay 3.

**Vithal Purshotum & Sons Private Ltd.**—2nd Khetwadi Lane, Bombay 4.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

### SUGAR MILLS

**Belapur Company Limited.**—Brady House, 12/14, Veer Nariman Road, Fort, Bombay 1.

**Belwandi Sugar Farm Ltd.**—Industrial Assurance Building, Churchgate, Fort, Bombay 1.

**Brady, W. H., & Co. Ltd.**—Royal Assurance Building, Churchgate Street, Fort.

**GODAVARI SUGAR MILLS LTD., THE.**—Fazalbhoy Building, Mahatma Gandhi Road, Fort, Bombay 1. Phone: 255337-8.

**Hindustan Sugar Mills Ltd.**—51, Mahatma Gandhi Road, Fort.

**Kolhapur Sugar Mills Ltd.**—Fazalbhoy Building, Mahatma Gandhi Road, Bombay 1.

**Kopargaoon Sahakari Sakhar Karkhana Ltd.**—Fazalbhoy Building, Mahatma Gandhi Road, Bombay 1.

**Maharashtra Sugar Mills Ltd.**—Industrial Assurance Building, Churchgate, Fort, Bombay 1.

**PHALTAN SUGAR WORKS LTD., THE.**—Manufacturers of Sugar, Sangli Bank Bldg., 4th Floor, 296, Bazargate Street, Bombay 1. Phone: 253339 & 256866. Grams: "RISINGSUN".

### SULPHUR

**PRAVIN BROTHERS & CO.**—501, Commerce House, Meadows Street, Bombay 1. Phones: 251748, 252419. Grams: "WIDESCOPE." Importers, Exporters and Agents: Sulphur—Chemicals—Solvents—Pyridine Base—Fertilizers—Minerals—Lime—Jute—Products. Polysol, S-5, Polysol, S-6, Gypsum.

### SURGICAL INSTRUMENTS & APPLIANCES

**Adair Dutt & Co., Ltd.**—Calcutta National Bank Building, Sir Phirozshah Mehta Road, Fort.

**Alliance Medical Co.**—Dwarkanadas Building, 457, Sandhurst Road, Bombay 4.

**ANDHRA SCIENTIFIC CO., LTD.**—Janmabhoomi Chambers, Fort Street, Bombay 1. Phone: 261540. Grams: "ASINSTS." Regd. Office & Works: Masulipatam, Andhra Pradesh.

**Bombay Surgical Co.**—New Charni Road, Bombay No. 4.

**DIAMOND SURGICAL DRESSINGS WORKS, THE.**—381, Arthur Road, Bombay 11. Phone: 374636. Manufacturers of Surgical Goods, Dressing and Sanitary Towels.

**Eyres, E., & Co.**—Bellasis Road, Bombay 8.

**Girdhar Javer & Co.**—Devkaran Mansion, Princess Street.

**Gordhandas Desai Private Ltd.**—Kermani Building, Sir Phirozshah Mehta Road, Bombay 1.

**Government Medical Stores.**—Bellasis Road, Byculla.

**L.C.I. (India) Private Ltd.**—P.B. No. 310, Bombay 1.

**IMPERIAL SURGICAL CO. PRIVATE LTD.**—"India House," Opp. G.P.O., Fort, Bombay 1. Leading Manufacturers of Hospital Equipment. Importers of Surgical Instruments, Hospital Sundries, Catguts and Ligatures, Dental Instruments, Electro-Medical Equipment, Microscopes, and Laboratory Furnishers. Grams: "IMPIURGCO." Phone: 28-3468. Branches at: Lucknow, New Delhi and Hyderabad.

**INDIAN OXYGEN LTD.**—Ghatkopar (Bombay-Agra Road), Bombay 17-AS. Phones: 582641 (7 Lines), 582648, 582649 & 582782. Grams: "INDOXCO." Ghatkopar. Suppliers of Medical Apparatus for Anaesthesia, Analgesic & Oxygen Therapy and Medical Oxygen.

**Jadavjee Goverdhandas & Co.**—58-60, Princess Street, Bombay 2.

**Jagtiani, J. T.**—National House, 6, Tulloch Road, Apollo Bunder, Bombay 1.

**J. L. Morison Son & Jones (India) Ltd.**—Ballard Estate, Bombay 1.

**Kanchanlal Maganlal & Co.**—Bode Chawl, Princess Street, Bombay 2.

**K. Chapman & Co.**—462, Sardar Vallabhbhai Patel Road, Bombay 4.

**Mahomed Husain & Bros.**—106, Kansara Chawl, Kalbadevi, Bombay 2.

**Martin & Harris Ltd.**—Savoy Chambers, Wallace Street, Fort.

**Modern Traders.**—Dwarkanadas Mansion (Entrance Benham Hall Lane), 457, Sandhurst Road, Bombay 4.

**NEW SURGICAL TRADING CO., THE.**—Bulakhidas Building, Mangaldas Road, Princess Street, P.O. Box 2321, Bombay 2. Dealers in Surgical, Scientific and Laboratory Equipments, Hospital Steel Furniture and Sundries. Specialise in soil and cement testing equipment. Agents for Instruments & Chemical Private Ltd., Manufacturers of Equipments for Higher Research in Physiology & Pharmacology. Tel. No. 39138. Telegrams: "COWORKER."

**Patravalli, N. P., & Co.**—Fort Chambers, Hamam Street, Fort.

**Rajni Industrial Corporation.**—Kitab Mahal, 102, Hornby Road, Fort.

**Reliance Electric & Hardware Stores.**—55, Krishna Bhuvan, Lohar Chawl.

**Scientific Apparatus & Chemical Works Ltd.**—Krishna Building, Bori Bunder.

**Scientific & Industrial Supplies Corporation.**—Princess Street, Bombay 2.

**Scientific Instrument Co., Ltd., The.**—Navsari Building, 240, Hornby Road.

**Shah, M., & Co.**—Kanji Mansion, Sandhurst Road, Bombay 4.

**SHEKASA ENGINEERING CO., PRIVATE LTD.**—21-B, Noble Chambers, Parsee Bazar Street, Fort, Bombay-1. (1) Manufacturers of Printers Requirements. (2) Manufacturers of Surgical Instruments—Such as Instrument Sterilisers.

**Thomson & Taylor.**—119, Mahatma Gandhi Road.

**Universal Supply and Trading Co.**—Jamali Building, 381, Hornby Road, Fort.

**Viaso Trading Co.**—462, Sandhurst Road.

**Whitten, F. C., & Co.**—Commissariat Building, 227, Hornby Road, Fort.

**ZENITH SURGICAL CO.**—206 3C, Mangaldas Bldg., Mangaldas Road, Bombay 2. Grams: "INSTRUMENT". Dealers in Surgical, Scientific & Laboratory Equipment.

**Zilli & Co.**—Princess Street, Bombay 2.

### SURVEYORS

**SORABJI, S. K., & CO.**—Army & Navy Bldg., Mahatma Gandhi Road, Bombay 1. Phones: 252726 & 256094. Accident, Marine & Engineering Surveyors, Assessors and Valuers.

**V. N. C. NARICHAINA (PRIVATE) LTD.**—P.O. Box 207-A, 22, Sir Phirozshah Mehta Road, Fort, Bombay (India). Phones: 266525, 212676 & 245329. Grams: "SURVEYLOSS."

### SURVEYING AND MEASURING INSTRUMENTS

**Andhra Scientific Co., Ltd.**—Janmabhoomi Chambers, Fort Street, Bombay 1.

**Bombay Stationery Mart.**—Sir Phirozshah Mehta Road, Fort.

**ESSENTIAL ENGINEERING CO.**—11, Botawala Building, Elphinstone Circle, Fort. Grams: "ESSENCE." Phone: 252940. Importers, Exporters, Commission Agents and Manufacturers' Representatives.

**EVERGREEN CORPORATION.**—9 15, Picket Cross Road, P.O. Box No. 2733, Bombay 2. Grams: "GREENLEAVE." Phone: 22162. Measuring Tapes, Chains, Refills, Precision Measuring Instruments, Theodolites, Planimeters, Stop-watches, Levels, Compasses & Rulers, Survey & Drawing Instruments.

**LAWRENCE & MAYO (INDIA) PRIVATE LTD.**—274, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 261827.

**Mercantile Stationery Mart.**—261, Abdul Rehman Street, Bombay 3.

**Navlakhi & Co., J. V.**—Kanta Terrace, Kalbadevi Road, Bombay 2.

**PIONEER EQUIPMENT CO. PRIVATE LTD.**—139, Nagindas Master Road, P.O. Box No. 1909, Fort, Bombay 1. Phone: 251632. Also at Calcutta, New Delhi Madras & Baroda. Agents for VICKERS INSTRUMENTS LTD. U.K. for Engineers' Block Levels Gauges, Surveyors' Levels, Theodolites, etc.



**RAJ-DER-KAR & CO.**—Sadhana Rayon House, Dr. Dadabhai Naoroji Road, Fort, Bombay. For Research Industries. Phone: 262304 (P.B.X.—4 lines). Grams: "TECHLAB."

**REMEDIOS & SONS** (Registered as Small Scale Industry No. MH/R-311 of 4-4-62).—Manufacturers of Surveying Instruments, Cama House, 255, Dr. Dadabhai Naoroji Road, Fort, Bombay-1. Phone No.: 263336.

### SWITCHES

"AG" Brand

Always Grand Better than the Best

## CENTRIFUGAL SWITCHES

with NYLON CLUTCH & Silver Contacts  
(governor's Wings of Nickel-Plated Brass!)  
for Single-phase motors of  $\frac{1}{4}$  to 1 & 2 H.P.  
& Synchronous Speeds of 750/1000/1500/  
3000 RPM.

\*TESTED FOR OVER 22 LAKH  
OPERATIONS

now manufactured in India by  
Artist & Grandsons—Bombay

Industrial & Trade Enquiries welcome by:  
SALES DIV.

## TRANSACTO

REGISTERED FIRM

Partners:

N. V. PARIKH & J. C. SHAH

Devkaran Mansion, Block No. 6,  
1st floor, Vithaldas Road,  
Bombay-2.

### SWITCHBOARD PANELS

**RADIANT ELECTRIC & MACHINERY CO.**—Sir Vithaldas Chambers, Bruce Street, Bombay 1. Phones: 255296 & 370385. Grams: "RADICAL".

### TABLET MAKING MACHINES

**Batliboi & Company Private Limited.**—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (B.R.). Phones: 255451 (6 lines). Grams: "BATLIBOICO." Tele: 011-284. City Branch: BATLIBOI HOUSE, 59/61, Nagdevi Cross Lane, Bombay-3 (B.R.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, BHUBANESWAR.

**KILBURN & CO. LTD.**—Gresham Assurance House, Pherozshah Mehta Road, Fort, Bombay 1. Phone: 251908. Grams: "TASCONIUM."

### TAILORS, OUTFITTERS AND DRESSMAKERS

**Beauforts Ltd.**—35, Churchgate Street, Fort.  
**Bhatt, T. R., Co.**—G. S. Mhaskar Ltd., Lady Jamshedji Road, Dadar, Bombay 14.  
**Cawnpore Mills Depot.**—Churchgate House, Churchgate Street, Fort.  
**Charagh Din & Bros.**—Hyder Building, 64, Wodehouse Road.  
**Charagh Din & Son.**—Linden House, Apollo Bunder.  
**Dean & Sons.**—Kulsum Terrace, opp. Cusrow Baug, Colaba.  
**Dias, A. R., & Bros.**—105, Mahatma Gandhi Road, Fort.  
**Dias & Bros., J.**—173, Princess Street.  
**Dias & Co., A. S.**—Commisariat Building, Hornby Road, Fort.  
**Esquire Limited.**—141, Mahatma Gandhi Road, Bombay 1.  
**Excelator Drapers, Ltd.**—Neptune Building, 170, Hornby Road, Fort.  
**Gonsalves & Victor.**—"Hampton, Court", 125, Wodehouse Road, Bombay 5.  
**Laffane (India) Ltd.**—Rustom Building, Churchgate Street, Fort.

**Lal & Co.**—Lansdowne Road, Apollo Bunder.  
**Narain & Company.**—Opp. Churchgate Station.

**New Lord & Co.**—Royal Terrace, 58, Wodehouse Road, Colaba, Bombay 5.

**Oxford Tailors.**—Majestic Hotel, Colaba Causeway, Fort.

**S. V. Rao & Sons.**—Parel, Bombay 12.

**Tropical Tailors.**—Waterloo Mansion, Wodehouse Road.

**UPPALS & COMPANY.**—Tailors, Outfitters & Liberty's Ready-made Garments & Thackersey's Easy-care Fabrics. Indian Merchants' Chamber Building, Churchgate Street Extension, Fort. Phone: 241378. Grams: "UPPALMAK."

**Wassiamull Asanmull & Co.**—3-A, Churchgate, Fort.

### TALLOW IMPORTERS, DEALERS AND MANUFACTURERS

**Apex Traders.**—Advani Chambers, 81r Phirozshah Mehta Road, Fort.

**DR. YAJNIK'S KEMICOLOR INDUSTRIES.**—193/195, Dr. D. Nowroji Road, Bombay 1. Phone: 261192. Grams: "COLORCRAFT." Manufacturers of Conc Textallow. 1 kilo of Textallow replaces 8 kilos of Mutton Tallow.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—Wavell House, Graham Road, Ballard Estate, Bombay. Phone: 26-2711 (8 lines). Machine Works: Tank Road, Bombay 33 DD. Phone: 878544-46. Offices at Madras, Calcutta, New Delhi, Bangalore, Secunderabad & Kanpur.

**Firoz Trading Co., Private Ltd.**—Kamar Bldg., Cowasji Patel Street, Bombay 1.

**General Textile Stores, Ltd.**—Beaumont Chambers, 27/33, Meadows Street, Fort.

**Seth, S. C. & Co., Ltd.**—Raja Bahadur Mansion, 14, Hamam Street, Fort.

### TANK MANUFACTURERS

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Fort.

**BHARAT TANK & STEEL CO., THE.**—64, Podar Chambers, Parsi Bazar Street, Fort, Bombay. Phone: 251471. Grams: "GREND." Manufacturers of Steel & Stainless Steel Oil & Water Tanks, Chimneys, Pressure Vessels and Industrial Processing Equipment.

**EMMES METALS PRIVATE LTD.**—M. S. Catch Pots, Wash Tanks, Stainless Steel and Monel Metal Vessels, Lead Lined/Bonded, P.V.C. Lined and Rubber Lined Tanks, Steel Reinforced Wooden Vats. 11, Worli Road, Bombay 18 WB. Phones: 375432-3-4. Grams: "METAMELT."

**Garlick & Co.**—Haines Road, Jacob Circle.

**Herman & Mohatta Ltd., B. R.**—People's Building, 81r Phirozshah Mehta Road, Fort.

**Hind Tank Manufacturing Co.**—Trimbak Parsaram Street, Bombay 4. Phone: 331845. Grams: "INDUSPLANT."

**Industrial Machine & Tools Co.**—347, Lamington Road, Bombay 7.

**Mapara Engineering Co.**—381, Dadabhai Naoroji Road, Bombay 1.

**METALLICA WORKS PRIVATE LTD.**—79 83, Dr. Annie Besant Road, Bombay 18. Phones: 375432, 375433, 375434, 371941 & 371942. Makers of Non-Ferrous Metals, Castings, Alloys, Anodes, Lead Linings of Acid Resisting Containers, Crucibles.

**Richardson & Cruddas.**—Byculla Ironworks, Byculla.

**Steel Industries of Hindustan Ltd.**—Magazine Street, Darukhana, Bombay 10.

**SUMMIT ENGINEERING CO.**—4th Floor, Ismail Building, 381, D. N. Road, Bombay 1. Manufacturers of Pressure and Storage Vessels, Structural Steelwork, Tanks, etc.

### TAPES, TWINES & BANDINGS

**ACME TAPE TWINE & THREAD MANUFACTURING CO.**—73 75, Tamarind Lane, Fort, Bombay 1. Mfrs. of all types of Cotton & Silk Tapes & Ribbons, Cotton Ropes, Bandings, Thread, Electric Tapes, etc.

**GARWARE NYLONS.**—Chowpatty Chambers, Sandhurst Bridge, Bombay 1. Phone: 352491. For nylon yarn, Fishnet twine & rope.

**GUJRAT ROPE FACTORY, THE.**—57 61, Bhajipala Lane, Bombay 3. Phone: 324768. Grams: "WEBTAPE." Manufacturers of all kinds of cotton Rope Hemp, Ropes, Tapes, Newar, etc.

**SUNSHINE TRADERS.**—3, Hamam Street, Fort, Bombay. Phone: 251631. Grams: "SUBHMANJAL." (1) Manufacturers of Spindle tapes, Cotton listings, venetian blind tapes, Zip Tapes, Bleached Tapes, Cotton and Manila Ropes, tabular bandings, bundle bandings & Cotton bandings; (2) Manufacturers of Spindle tapes and listings and textile stores suppliers; (3) Manufacturers of Egyptian Cotton tapes and Webbing.



**TAPE MANUFACTURERS**

Eagle Advertising Tape Factory, The.—Eagle Wadi, Kurla (C. Rly.)

**GANDHI BROTHERS.**—203, Dr. Dadabhoy Naoroji Road, Bombay 1. Phone: 261345. Wholesale Dealers in all types of Self-Adhesive Tapes, viz. Cellulose and Polythene Transparent & Coloured, Waterproof Cloth, Insulating, Double-sided Adhesive Tapes and Paper backed Gum-Tapes.

**TAPS & DIES**

**BHARAT ENGINEERING STORES.**—113, Nagdevi Street, Bombay 3. Grams: "UNIONTOOLS." Phone: 33193. Stockists of Elephant Brand Chain Pulley Blocks.

**JAIRAMDAS UDYOG PRIVATE LTD.**—157/159, Narain Dhuru Street, Bombay 3. Mfrs. of "Jesons" Brand Twist Drills, Reamers, Cutters, Thread Forming Taps & Dies.

**RELIANCE TRADING CO.**—Vithal Sayana Building No. 1, Lohar Street, Bombay 2. Phone: 38751. Grams: "STORE-TRADE." Engineering Stores, Hardware, Taps and Die Merchants. Manufacturers of Canteen Embossed Metal tokens.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

**TAR BOILERS**

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate, Bombay 1.

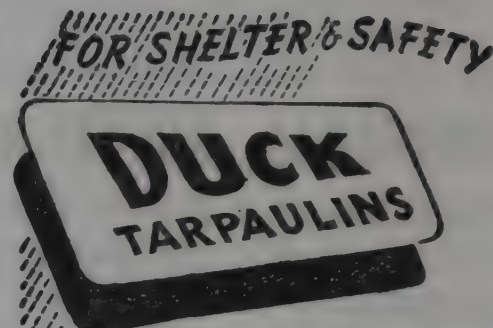
**TARPAULIN**

**ANANDJI V. KAZI.**—Manufacturers of all types of Waterproof Tarpaulins and Dealers in Waterproof Canvas. 85, Bazargate Street, Fort, Bombay 1. Phone: 263116. Works: 108-C. New Chinch Bunder Road, Bombay-9.

**DAISY TRADING CORPORATION.**—Manufacturers, Exporters & Stockists of Tarpaulins, Canvas, Hessian, Old & New Gunny Bags, Jute, Twine, Ropes, Butuminised Waterproof Hessian Bags & Allied Jute Products. 55, Commercial Chambers, Masjid Bunder Road, Post Box No. 3185, Bombay 3. Phones: 327007 & 661129. Grams: "PROOFTALP."

**DOSSA HARJEE.**—257-59, Masjid Bunder Road, P.O. Box No. 3209, Bombay 3. Phones: 321330 & 328570. Grams: "DOSSAH-CO". Manufacturers & Suppliers of Tarpaulins, Waterproof Canvas & Gray Canvas, Filter Cloth, Jute Carpets and Linoleums.

# DWARKADAS VELJI TALPATRIWALA



**100% WATER PROOF**

Manufacturers & Dealers of:

DUCK TARPULINS, POLYETHYLENE TARPULIN, WATERPROOF PAPERS, PAPERLINED AND ALKATHENELINED BITUMINISED BAGS, HESSIAN CLOTH, JUTE TWINE, COIR MATS, MATTINGS ETC.

36, Issaji Street, Bombay-3.

Phone Nos. Office: 323232, 324332—321615-6

Factory: 371271

Grams: "VELTHAKKER"

## MONSOON SHEDS... PROBLEM OF STORAGE WITH OPEN LAND? DON'T WORRY

CONTACT FOR EXPERT SERVICE & PROTECTION ON HIRE & SALE

for INDUSTRIES, CHEMICALS & PHARMACEUTICAL FACTORIES,  
WORKSHOPS, PASSAGES, GARAGES, HOTELS, AUDITORIUMS,  
THEATRES, TERRACES etc.

## MORARJI PERAJ & CO., TALPATRIWALA

138, Masjid Bunder Road, Bombay-3

Manufacturers of:

**Elephant Brand TARPULINS**

SPECIALISTS IN CONSTRUCTION OF TARPULIN SHEDS ALSO  
TARPULINS SUPPLIED ON HIRE

Polyethylene & Paper Lined Hessian & Gunny Bags, Dealers in Canvas  
Hessian, Jute, Twines & Cruiser Brand Eyelets.

**WATERPROOF PACKING MATERIAL AVAILABLE**





## TRADES AND PROFESSIONS IN BOMBAY

**EVERGREEN CORPORATION.**—9-15, Picket Cross Road, P.O. Box No. 2733, Bombay 2. Grams: "GREENLEAVE". Phone: 22162. Stockists of Tarpaulin, Tents & Equipments.

**KHIMJI VELJI & CO.**—62, Dondad Street, Bombay-9. Phone: 325443. Manufacturers of: Waterproof Tarpaulins, Papers, Hessian Paper, Wax Paper, etc. Dealing in: Packing wood, Bailing Hoops, Mattings, Selling Agents for "Gulf Metal-coats."

**KILBURN & CO., LTD.**—Gresham Assurance House, Pherozshah Mehta Road, Fort, Bombay 1. Phone: 251908. Grams: "TASCONIUM."

**LAKHMICHAND COOVERJI & CO.**—297, Narshi Natha Street, Bombay 9. Phone: 322768. Grams: "WAGONCOVER," Mandvi. Manufacturers of Waterproof Tarpaulins, Dealing in Grey and Waterproof, Cotton & Jute Canvas, Tarpaulins given on hire.

**MORARJI PERAJ & CO., TALPATRIWALA.**—138, Yusuf Meher Ali Road (Musjid Bunder Road), Bombay-3. Phone: 322352. Grams: "TALPATRI." Manufacturers of "ELEPHANT" Brand 100 per cent Waterproof Tarpaulin & Polythene and Paper lined Hessian bags. Wholesalers Hessian Cloth & Jute, Twine, Gunny Bags, Waterproof Paper & Eyelets, etc.

## ESTABLISHED WATERPROOFERS & MANUFACTURERS OF TARPAULINS T. LAKHAMSHI LADHA & Co. TALPATRIWALA

(Estd: 1920)

298, Narshi Natha Street, Bombay-9

Grams: "DUCKPROOF" Phones:  $\begin{cases} 323428 \\ 321942 \\ 329404 \text{ (Res.)} \\ \& 329101 \text{ (Res.)} \end{cases}$

HIRE • SALE • SERVICE

"SUN" BRAND ANY COLOUR  
ANY SIZE  
**TARPAULINS**  
MANUFACTURERS



Also  
Stockists of:

All kinds of Jute Canvas, Cotton Canvas, Hessian Cloth, Hessian Paper Bags, and Hessian Alkathene with Betumine Solution

**M. V. JOSHI & CO.**  
**TALPATRIWALA**

31, Essaji Street, Bombay 3  
Phone: Office: 322570

**PRAMODKUMAR & CO.**—Prospect Chambers, 4th Floor, Dr. Dadabhoy Naoroji Road, Fort. Dealers in Tarpaulins, Woollen & Cotton Textiles, Monsoon Wear, Winter Wear & Footwear. Suppliers to Industrial Concerns, Govt. Depts. & Railways.

**Shalebhoy Tyebjee & Sons.**—12, Bruce Street, Bombay 1.

### TEA AND COFFEE MERCHANTS

**AMBER TIPS PRIVATE LTD.** (Estd. 1922).—Mandvi, Bombay 3. Phone: 324684. 75, New Barden Lane, Tea Blenders, Suppliers to Mill Stores, Canteens and Factories. Enquiries for Gift Parcels to U.K. solicited.

**Bhagwandas Chhatrabhuj & Co.**—20, Hamam Street, Fort. **Bombay Burmah Trading Corp. Ltd.**—9, Wallace Street, Fort. **Brooke Bond India, Private Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, P.O. Box 271, Bombay 1. **Champaklal Morarji & Co.**—193, Samuel Street, Vadgadi, Bombay 9. **Desai Dalal & Co.**—Duncan Road, Null Bazar. **Dwarkadas Siramdas & Co.**—233, Jumma Masjid. **Great Western Stores.**—Standard Building, Hornby Road. **Himatlal Jamnadas Dani.**—Mandvi, New Barden Gully, Bombay 8. **Hiralal Raichand & Co.**—85, New Barden Gully. **Impa Tea Corporation.**—176, Dongri Street, Bhat Bazar, Bombay 9. **J. E. Mody & Sons Coffee Specialists.**—164, Hornby Road. **Lipton (India) Ltd.**—Haco House, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**Mehta & Co., F. D.**—Standard Building, Hornby Road, Fort. **Nathubhai Hirji & Co.**—68, New Barden Lane, Mandvi. **Oomrigar & Sons.**—80-90, Lohar Chawl Street.

**Paradise Tea Co.**—Sambhava Chambers, Sir Pozshah Mehta Road, Fort, Bombay.

**POLSON LTD.**—65B, Dockyard Road, Mazagaon, Bombay 10 (DD). Phones: 373245 (2 lines). Grams: "POLSON," Mazagaon, Bombay 10.

**Prabodhan Bhujanglal.**—Khimjee Meghji House, Essaji Street, Vadgadi.

**Shah Narotamdas Harjivandas Co.** (Estd. 1880).—480, Kalbadevi Road, Bombay 2.

**Somnath Motiram.**—306, Kharek Bazar, Bombay 9. **Spencer & Co. Ltd.**—Spencer's Buildings, Forjett Street, Bombay 26. **Titus George & Co.**—45, Palsar Market, Kandivli, Bombay (S.D.).

**Vasantlal Vadlal & Co.**—215-17, Samuel Street, Vadgadi.

### TELEPHONE ENGINEERS AND CONTRACTORS

**British Radio & Electric Co.**—Prospect Chambers, Hornby Road, Fort, Bombay.

**SUPER SERVICES (INDIA).**—18, New Queen's Road, Bombay-1. Superphone Intercom Telephone, Mrs. Superphone Record Players, Grunding, Standard, Bush, Pye, Sharp, Sanyo Transistors, Garrad Changers, Telerad Hi-Fi Radios. Phone: 20876.

**TELEPHONE ELECTRONIC CORPORATION.**—391-A, Girgaum Road, Bombay-2. All types of intercom Telephone Systems, Automatic Exchange, Magneto, CB Switch boards, Radio, Portable, Flame Proof and loud Speaking Telephones, Spare, Telephone Cables, Electronic Apparatus, Installation, Maintenance undertaker. Phone: 20591.

**Western Agencies' Co.**—421, Lamington Road, Bombay 4.

### TENTS

**KAMLAKANT CHHOTALAL & CO.**—106, Bhandari Street, Near Chakla Street, Bombay 3. Phone: 326913. Tents of all types for work on Projects, Survey, Dams, Picnics & Scouting.

### TEXTILE AUXILIARIES MANUFACTURERS AND DEALERS

**AHURA CHEMICAL PRODUCTS PRIVATE LTD.**—84, Sion Road, Bombay 22. Manufacturers of all Textile Auxiliaries, Surface—active Agents, Turkey Red Oil, Synthetic Anionic Detergents and Wetting Agents, Non-ionic Emulsifiers for various industries, cationic germicides and softeners, cosmetic Raw Materials and other General Chemical Products. Managing Director: S. M. Mistry. Phone: 471394, 471911. Grams: "AHURACHEM." Bombay-Sion.

**ALTEX PRIVATE LTD.**—147, Mahatma Gandhi Road, Fort, Bombay 1. Phone: 251082. Grams: "BETEX."

**Amritlal & Co., Private Ltd.**—Sprott Road, Ballard Estate, Fort.

**Anvar Textile Mills Ltd.**—Bundeally Building, Sandhurst Road, East, Dongri, Bombay 9.

**ASSOCIATED ENTERPRISES.**—Manufacturers of the Most Popular Sizing Materials for Rayon & Synthetic Yarns, 7, Kailash Kutir, Behind Mysore Chemicals, Sion, Bombay 22. Phone: 63895.



Bakubhai Ambalal Private Ltd.—Wittet Road, Bombay 1.  
 Bhogilal & Company, E.—261/263, Hornby Road, Fort.  
 Bhukhanwala & Sons.—Medows House, Medows Street, Fort.  
 Brady, W. H., & Co., Ltd.—Royal Insurance Building, Churchgate Street, Fort.

**CHEMIDYE TRADING CO., PRIVATE LTD.**—Kamer Building, Cawasji Patel Street, Fort, Bombay-1. Phone: 251034.

**CIBA OF INDIA LTD.**—Royal Insurance Bldg., 14, Churchgate Reclamation, Bombay 1. Phones: 245031-3; 246084-6.

**C. DOCTOR & CO. PRIVATE LTD.** (Estd. 1915).—11, Bruce Street, Bombay 1. Phone: 252277. Grams: "QUALITY." Humidification & Ventilation Engineers & Textile Stores Suppliers.

Durga Laboratories.—71, Bhandari Street, Vadgadi, Bombay 8.  
 Edgar Handley & Co. Private Ltd.—135, Medows Street, Fort, Bombay.

**ESKAY CHEMICAL CORPORATION.**—Manufacturers of SKAYWHIT-BV Optical. Whitening Agent, 22-D, Parsi Bazar Street, Fort, Bombay-1.

Firos Trading Co. Ltd.—Kamar Building, Cawasji Patel Street, Fort.  
 General Industrial Chemicals.—Beaumont Chambers, 27/33, Medows Street, Fort.

Greentose Corporation (India).—24-26, Dalal Street, Fort, Bombay  
 Haver Chemical Industries.—78, Keny Road, P. O. Box 6016, Bombay 12. Stockists of "SWAN" brand Cloth Stamping Paste.

**HICO PRODUCTS PRIVATE LTD.**—Mogal Lane, Mahim, Bombay 16. Manufacturers of Textile Auxiliaries, Gums, Ethylene Oxide Condensates, Optical Whitening Agents, Emulsifiers, Quaternary Ammonium Compounds, Rot Proofing Compounds, Textile Preservatives, etc. Phones: 454211-2. Grams: "BATCHINOL."

I.C.I. (India) Private Ltd.—P. B. No. 310, Bombay 1.  
 Indo-Bobbins & Textile Co., Ltd.—Jan Mansion, Sir Phirozshah Mehta Road, Fort.

**INDOKEM PRIVATE LTD.**—221, Dadabhoy Naoroji Road, Fort, Bombay 1. Phone: 265151/5.

Dr. YAJNIK'S

*Kemicolor*

## INDUSTRIES

Manufacturers:

**CONC TEXTALLOW • CHEMICALS AND TEXTILE AUXILIARIES**

193-195, D. N. ROAD, FORT, BOMBAY 1  
 Grams: "COLORCRAFT" \* Phone: 261192

Distributors: ALL OVER INDIA

**N. DINSHAW & COMPANY** (Estd. 1945).—14, Ismail Building, Flora Fountain, Bombay 1. Phone: 253488. Grams: "DILINOL." Importers and Stockists of all types of Textile Auxiliaries and Accessories on Govt. Railway and Textile Mills list.

Kirtikumar & Co.—80, Bhandari Street, Mandvi, Bombay 3.

Lalitkumar & Co.—86, Kazi Sayed Street, Bombay 3.

**NATIONAL TRADING COMPANY, THE.**—Manufacturers, Importers & Distributors of Sizing & Finishing Materials and Textile Auxiliaries. 263, Dr. Dadabhoy Naoroji Road, P.O. Box 158, Bombay 1. Phone: 265050. Grams: "BHARAT." Branches: Ahmedabad, Calcutta, Coimbatore and Delhi.

Phiroz N. Motabhoj & Co. Ltd.—Motabhoj Building, Corner of Medows and Forbes Streets, Fort, Bombay.

**PICKERS LTD.**—Manufacturers of Quality Pickers of all Sizes and descriptions. 43, Tamarind Lane, 4th Floor, Fort, Bombay. Head Office: Ellis Bridge, Ahmedabad 6. Grams: "COWSIE." Bombay & Ahmedabad. Bombay Office Phone No.: 253707.

Pioneer Textillies Corporation Ltd.—Lentin Chambers, Dalal Street, Fort.

Sardesai & Company.—14, Murzban Road, opp. New Empire Cinema, Fort.

**SARVODAYA REEDS MANUFACTURING CO.**—137-141, Samuel Street, Bombay-9. Grams: "JASJUG." Telephone: 323394. Manufacturers of "SARVODAYA" brand steel Reeds and Striking combs from best imported Steelwire on most modern machineries. Works: Ghatkopar, Bombay-77.

Sugar Textiles Service.—Third Floor, Bombay Mutual Building, Sir Phirozshah Mehta Road, Bombay 1.

Suppliers & Trading (India) Ltd.—79, Medows Street, Fort.

Textile Machinery Corporation, Ltd.—Annie Besant Road, Bombay 18.

**VELU & CO. (PVT.) LTD., P. K.**—P.O. Box No. 514, 111, Mahatma Gandhi Road, Bombay 1. Phones: 253141 & 641326. Grams: "LACQUER."

## TEXTILE ENGINEERS AND MACHINERY IMPORTERS, DEALERS & MFRS.

**ALTEX PRIVATE LIMITED.**—147, Mahatma Gandhi Road, Fort, Bombay 1. Phone: 251082. Grams: "BETEX."

Apollo Engineering Company.—84, Apollo Street, Fort.

Associated Machine & Tool Co.—130, Medows Street, Fort.

Autogenous Welding & Repair Co. Private Ltd.—63, Ferguson Road, Bombay 13.

Batliboi & Company Private Limited.—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR.). Phones: 255451 (6 lines). Grams: "BATLIBOICO." Tele: 011-284. City Branch: "BATLIBOI HOUSE." 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, BHUBANESWAR.

Bharat Electric & Engineering Corporation.—Dalal Street, Bombay 1.

Bracewell Private Ltd.—50/56, Custom House Road, Fort, Bombay.

Brady, W. H., & Co., Ltd.—Royal Insurance Building, Churchgate Street, Fort.

**R. R. JINDE & CO.**—14, Mohan Nivas, Chandavarkar Road, Bombay-19. Phone: 472267. Grams: "GOLDENHILL."

Collinson & Co., Ltd.—Standard Building, Hornby Road, Fort.

Diarvi Trading Co.—64, Old Custom House Road, Fort, Bombay.

Duncan Stratton & Co., Ltd.—5, Bank Street, Bombay 1.

Gannon, Dunkerley & Co., Ltd.—Chartered Bank Building, Mahatma Gandhi Road, Fort.

Greentose Corporation (India).—24, Dalal Street, Fort, Bombay.

Gujarat Trading Syndicate.—41, Medows Street, Fort, Bombay 1.

**HINDUSTAN TEXTILE ENGINEERS.**—Janmabhoomi Bhavan, Ghoga Street, Fort, Bombay. Tel.: 257131. Grams: "AERIAL." Branches and Representatives at: Ahmedabad, Bangalore, Coimbatore, Calcutta, Madurai. Manufacturers of Krischner, Two/Three Bladed Beaters, Card Coilers, High Speed Card Conversion, Duo Flat Conversion, Ball Bearing Comb Boxes (Conventional Heavyduty and Highspeed) Undercasings, R.B. Spindles, Spinning Rings, Pneumofils Broken end Collection Machines, Conversion of Ring Frames, Fluted Rollers, Warp Stop Motions, Renovation of Flyers, Leno motions Drop Boxes and Lappet Motions Dobbys-Crank Shafts and Tappet Shafts. Processing Machinery, Reeling Machines, Yarn Building Press, Electric Balling Press, Step Cotton Cleaners, Tensionless Pneumatic Soaper, Ager, Semi Automatic Jiggers, Washing Chemicaling, Padding, Damping, Scutcher, Back Filling, Soaper Baby Cloth Merceriser, Print Blanket, Washing Machines, Cheese Beam Dyeing Plant and Accessories, Folding etc. Also sale and Purchase of Second hand machineries for Textile Industry for every Process.

**INDIA RAW PRODUCTS SUPPLY CO.**—65, Allt Chambers, Tamarind Lane, Fort, Bombay 1. Textile Machinery & Equipment. Phones: 254645 (Office) and 471178 (Res.). Grams: "KATANKUM."

Indian Commercial Agency.—Regd. Office: Rahimtoola House, 7, Hornji Street, Fort.

**INDIAN TEXTILE ENGINEERS PRIVATE LTD.**—Stadium House, 81/83, Veer Nariman Road, Bombay 1. Phone: 246238/9. Grams: "INTEXTILE."

Industrial Equipment Mfg. Co.—Kasturchand Mills Estate, Bhavani Shankar Road, Dadar, Bombay 28.

Industrial Engineering Co.—45-47, Apollo Street, Fort.

**JASHVANT C. SHAH & CO.**—Navroz Baug, Navrozi Lane, Ghatkopar, Bombay 77. India's Foremost Indenting House. Sole Agents for: The World Famous "E.G.D." Moisture measuring and controlling Automatic Electric Equipment. Made in Austria. (For Details please see Commercial Firms Section.)

Laxminarayan Mill Supply Co.—Noble Chambers, 116, Parsi Bazar Street, Fort.

Mahendra & Co.—Chattrabhuji Nivas, 70, Vadgadi, Bombay 3.

Mahindra & Mahindra Ltd.—Gateway Building, Apollo Bunder, Fort.

Mehta & Co., P. N.—Cook's Bldg., 324, Hornby Road, Fort.

Mehta Parikh & Co.—45-47, Apollo Street, Fort.

Ormerods (India) Ltd.—Bank of Baroda Building, Apollo Street, Fort, P. O. Box No. 410, Bombay.

Paramount Textile Agency.—45/47, Apollo Street, Fort, Bombay.



Paramount Traders.—Noble Chambers, 1st Floor, Parsee Bazar Street, Fort, Bombay.

Parekh Bros.—Sangli Bank Building, 206, Bazargate Street, Fort, Bombay.

R. R. JINDE & CO.—14, Mohan Nivas, Chandavarkar Road, Bombay 19. Grams: "GOLDENHILL." Phone: 472267.

Roberts, McLean & Co. Private Ltd.—Ilaco House, Sir Phirozshah Mehta Road, Fort.

SHAH TEXTILE PRODUCTS CO.—22, Apollo Street, P.O. Box No. 1958, Bombay 1. Phone: 254039. Grams: "WEAVE-WELL." Importers and Manufacturers' Representatives of Textile Machinery & Spare Parts, Leather Goods, Bobbins, etc.

Shree Vijay Trading Corporation.—71/73, Apollo Street, Fort.

STANDARD TRADING AGENCY PRIVATE LTD.—139, Meadows Street, Fort, Bombay 1. Importers & Manufacturers of Textile Machinery and Stores; Exporters of Machinery, Piece-goods and Yarns. Phone: 251449. Grams: "KUBER."

STAR TRADING CO. PRIVATE LTD., THE.—Bank of Baroda Building, 12, Apollo Street, Fort, Bombay 1. Phones: 243480 & 251357. Grams: "STARTRADE." Importers of Textile Machinery. Textile Engineers and Merchants.

Techno Industrial Co.—107, Sir Vithaldas Chambers, 16, Apollo Street, Fort.

Texind Corporation Ltd.—Kermani Bldg., Sir P. M. Road, Bombay.

TETCOTEX PRIVATE LTD.—Bisni Bldg., 4th Floor, Nanabhoy Lane, 371, D. N. Road, Bombay 1. Offers Complete Machinery for Cotton, Silk, Woollen & Shoddy plants; Agents for KERALA GEARS, QUILON. Manufacturers of Spur, Helical, Worm Gears and other Engineering items. Phone: 251955. Grams: "TETCOTEX."

TEXMACH SYNDICATE.—Textile Engineers & Machinery Spare Parts, Suppliers. Manufacturers & Suppliers of complete Range of Spare Parts for Carding Engines, Fly Frames, Ring Frames and Plain and Automatic Looms. Specialists in perforated Dyeing beams, Cones, Tubes, etc. 45/46, Podar Chambers, Parsi Bazar Street, Fort, Bombay 1. Phone: 252638. Grams: "STANSIZE", Bombay.

Textile Engineering & Trading Co.—7/10, Botawalla Building, Horniman Circle, Bombay 1.

Textile Supplies Syndicate (India) Private Ltd.—India House, 1st Floor, Opp. G.P.O., Bombay.

Textile Works Ltd.—49-55, Apollo Street, Fort.

U. M. MISTRY & SONS.—Crescent Chambers, 1st Floor, Tamarind Lane, Fort, Bombay 1. 2783, Pankore Naka, Ahmedabad. Manufacturers of Textile Machinery, Machine Spares; Specialists: Manufacturing of Stainless Steel Dyeing Plant, Barber Colman Dye Sleeves and Carriers for Cones, Tubes and Sleeves, Steel Furniture and Steel Structure.

Vithal Purshotum & Sons Private Ltd.—2nd Khetwadi Lane, Bombay 4.

Voltas Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

Zenith Textile Engineering Co.—250, Ripon Road, Bombay 8.

### TEXTILE GOODS PROCESSORS

BOMBAY TEXTILE MILLS (Processing House).—Suryodaya Mills Compound, Tardeo, Bombay 34. Phone Nos. Mills: 378541 & 42; Shop: 22338; Resi.: 364391 & 363981. Grams: "AKUMARCO." Processors of Textile Goods. TEXMARK No. 4224. Manager: S. R. Vivalkar, Asstt. Manager—N. M. Mathur, Technical Adviser: P. Banerji; Labour Officer: K. S. Sabnis & Chief Purchase Officer: Ramchandra Bhabra. Prop.: Messrs. Anjanikumar Company Pvt. Ltd.; Director: Shreeram Taparia and Incharge Director: Harnarayan Taparia.

### TEXTILE MACHINERY MANUFACTURERS & DEALERS

BILTMORE INDUSTRIES.—Sabu Sadiq Hospital Compound, 84, Imamwada Road, Bombay-9. Textile Engineers and Machinery Spare Parts Manufacturers. Specialists in: Rollers of Brass, Copper, Stainless Steel, Ebonite, Rubber and Boller Tubes for Sizing, Bleaching and Printing. Tin Rollers for Wrapping and Winding as per Specifications; Cans: Card, Cans and accessories Doff Cans, West Cans and Comber Cans. All kinds of Sheet tin work.

BIPINCHANDRA & CO.—43, Tamarind Lane, 2nd Floor, Fort, Bombay 1. Mill Machinery & Accessories Suppliers, Specialising in Winding Machinery & Spares.

Bombay Textile Machinery Manufacturers.—12/14, Trimbak Parasram Street, Bombay 4.

CALICO INDUSTRIAL ENGINEERS.—Office: 41-E, Parel Chawl Road, Bombay 12. Phone: 37321-2. Grams: "DYEPRINT." Manufacturers of Textile Wet Processing Machinery. Works: 20A, Chakala Road, Andheri, Bombay 69. Phones: 574381-82-83. Grams: "DYEPRINT."

ESSENTIAL ENGINEERING CO.—11, Botawalla Building, Elphinstone Circle, Fort, Bombay 1. Grams: "ESSENCE." Phone: 252940. Importers, Exporters, Commission Agents and Manufacturers' Representatives.

JOHN T. HARDAKER (INDIA) PRIVATE LTD.—Office and Works: Ferguson Road, Lower Parel, Bombay 13. Phone: 373469. Engineers, Iron Founders, makers of all types of Jacquard Machines for power & Hand Looms, Jacquard Harness Builders, Pattern Cutting Machine Makers, Designers and Card Cutters and Truck Builders. Grams: "JACQUARDS," Bombay. P.O. Box No. 742, Bombay 1.

KUMUDCHANDRA & CO.—29, Dalal Street, Fort, Bombay 1. Phones: Office: 253214, Godown: 264437. Grams: "VERY-GOOD." Importers and Manufacturers of replacement parts for Textile Winding Machinery.

MODERN SHUTTLE MFG. CO. LTD., THE.—(Estd. 1944). Shuttles of all types for Textile Industry. Phone: 251779 Office: 454683 (Factory).

STANDARD FABRICATORS (INDIA) PRIVATE LTD.—Majiwada, Agra Road, Thana. Phones: 591653 & 591847.

Star Textile Engineering Works Ltd.—12, Apollo Street, Bombay 1. Phone: 251357. Grams: "STARROLLER."

### TEXTILE, PRINTING & FILTRATION TRADERS

WILLIAMS G. & CO., PRIVATE LTD.—"Advent", 8th Floor, 12/A, Foreshore Road, Backbay Reclamation, Bombay 1. Phones: 213281 & 213182. Grams: "BLANWIRE."

### TEXTILES

#### Established Export House for

Cotton Piece-goods, Art Silk Fabrics,  
Yarns, Oils and General Merchandise

For your requirements kindly contact:

#### ABDULLABHAI FIDAALLI & CO.

(Estd. 1890)

18, Princess Street, Bombay 2

Phone: 39407 - Grams: "PAPERPORT"

"FABRICPORT"

Branches at: Madras, Calcutta, Cochin & Nagpur.

Aadarsh Vastralaya.—7/8, Sham Gali, Swadeshi Market, Kalbadevi, Bombay 2.

Arthur Import Export Co.—166, Hornby Road, Fort, Bombay.

Ashay & Co., Ltd.—Great Social Building, Sir Phirozshah Mehta Road, Fort, Bombay.

Babubhai Choonilal & Bros.—Next to Swadeshi Market, Kalbadevi Road.

Bajaj Brothers Ltd.—Round Building, Kalbadevi Road.

Batlibol, C. J., & Co.—319, Hornby Road, Fort.

Bhagwandas Chatrabhuj & Co.—20, Hamam Street, Fort.

Bhathena & Co., Pirojshah Burjorji.—4-5, Edrus Building, New Charni Road.

Bheroomall Ghanoomall.—Dahanukar Building, Kalbadevi Road, Bombay 2.

Bombay Co., Ltd.—9, Wallace Street, Fort.

Bombay Swadeshi Co-operative Stores Co., Ltd.—Western India House, Sir Phirozshah Mehta Road.

Bulchand Co., L.—Moos Building, 510, Kalbadevi Road, Bombay 2.

Cawnpore Mills Depot.—Churchgate House, Churchgate Street, Fort.

Chotirmall & Co., K. A. J.—Krishna Nivas, New Silk Bazar, Bombay 2.

Chinoobhai & Bros., Ltd.—Churchgate House, Churchgate Street, Fort.

Chunilal Mulchand & Co.—Waterloo Mansions, Mayo Road, Fort.

Commercial Traders.—23-25, Old Hanuman Lane, Bombay 2.

D. Patel & Co. (Estd. 1916).—Gaumukh Gully, Mulji Jetha Market, Bombay No. 2.

Dubash Freres & Co.—Victoria Building, Parsi Bazar Street, Fort.

Dulabhdas Manilal & Co.—New Silk Bazar, Kalbadevi.

Durlabhji & Co., B.—Shri Krishna Nivas, Kalbadevi Road.

Ebrahim Manji & Co.—49, Pydhowne Road, Khadak, Bombay 9.

Essardas & Sons.—74, Carnac Road, Bombay 2.

FINLAY, JAMES, & CO., LTD.—Chartered Bank Building, Mahatma Gandhi Road, Fort, Bombay 1. Phone Nos. 251255-59. Post Box No. 73.



Forbes Forbes Campbell & Co. Private Ltd.—Forbes Building, Home Street, Fort, Bombay.

Framji Ardaseer Davur & Sons.—Navsari Chambers, Outram Road, Fort.

Gaganmal Ramchand.—P. O. Box No. 2133, New Silk Bazar, Bombay 2.

Gobhai, M. N., & Co.—501, Kalbadevi Road.

Gorakhram Gokalchand (Estd. 1891).—Choksi Chambers, Zaveri Bazar, Bombay 2.

Haji Janmohamed Moosa.—27-29, Zakaria Bazar, Sheriff Devji Street.

Hasanali Saleh Mahomed & Co.—Bundeally Building, Sandhurst Road East, Dongri, Bombay 9.

Hassamal Bros.—538, Kalbadevi Road, P. O. Box No. 2286, Bombay 2.

Hassaram & Co., K.—New Silk Bazar, Kalbadevi Road, Bombay 2.

Hazrat & Co.—Warden House, Sir Phirozshah Mehta Road, Fort.

Holland-Bombay Trading Co., Ltd.—E. D. Sassoon Building, Dougall Road, Ballard Estate.

Hossein, M. A., & Bros.—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

Hotchand Motumal.—331, Hornby Road, Fort, Bombay.

Hukamchand Chanderbhan.—1st Floor, Hira Building, opp. Crawford Market, Carnac Road.

Husein Ebrahim.—75, Mahomedally Road, Bombay 3.

H. V. M. Moosa Motiwalla & Sons, Ltd.—91, Mahomedalli Road, Bombay 3.

India Corporation Ltd.—Indian Globe Chambers, Fort Street, Fort, Bombay.

Italindia Cotton Co. Ltd.—Indian Globe Chambers, Fort Street, Bombay.

Jamnadas, B.—Mulji Jetha Market, Gaumukh Gully, Bombay 3.

Jamnadas Nanjee Mangrolwala.—83-85, Bazar Gate Street, Fort, Bombay.

Jassawalla, R. M., & Co.—105, Apollo Street, Fort.

J. A. Thadani & Co.—People's Building, Sir Phirozshah Mehta Road, Fort.

Jerandas Naumal.—371, Hornby Road, Fort, Bombay.

Jewan Bukhsh Mohammed Jan.—99, Chakla Street, Bombay 3.

Jivandas Bhanaji & Co. (Estd. 1925).—Dwarkesh Gully, Mulji Jetha Market, Bombay 2.

Kala Niketan.—Pravin Court, Queen's Road, Bombay.

Kanshi Ram Kidar Nath.—Vulcan Insurance Bldg., Veer Nariman Road, Bombay 1.

Kapadia Trading Co.—Botawalla Building, New Silk Bazar, Kalbadevi Road, Bombay 2.

Kapur & Sons, Ltd.—Chandra Chowk, 8th Lane, Muljee Jetha Market.

Karanjia & Co., Ltd.—Sukhadwala Buildings, 172, Hornby Road, Fort.

Kashmir Govt. Arts Emporium.—Sir P. M. Road, Bombay 1.

Kavarana Muncherji Heerjibhoy.—New Silk Bazar, opp. Kalbadevi P.O., Kalbadevi.

Kavarana, R. S., & Co.—635, Mistry Building, Girgaum Road, Dhobi Talao.

Kedarnath Singhee & Co.—233-34, Sheikh Memon Street, Bombay 2.

Keshavlal Talakchand (Private) Ltd.—Post Box No. 1472, India House, opp. G.P.O., Bombay. Phone No. 261982. Grams: "CHANDRODAY".

Kewalram & Bulchand.—Shree Krishna Nivas, Kalbadevi Road, Bombay 2.

Kidarnath Kishanchand.—106, Meadows Street, Fort, Bombay.

Kimrat, J., & Co.—Mistry Building, Bomanji Master Road.

Kishinchand Chellaram.—Gusdar House, Dhobi Talao.

Kishinchand & Co. (India).—133, Hornby Road, Fort.

K. Metharam.—491-3, Kalbadevi Road.

Kros & Co.—Podar Chambers, Parsi Bazar Street, Fort.

Kundenmal Ramlal.—78/80, New Hanuman Lane, Bombay 2.

Ladhabhai Ravji & Bros.—41, Advani Chambers, Sir Phirozshah Mehta Road, Fort.

L. N. Mehta & Sons.—Laxmi Building, Sir Phirozshah Mehta Road, Fort.

Madhavdas Ragnathdas & Co.—172, Hornby Road.

Madhusudan Gordhandas & Co.—Ganeswadi, Mulji Jetha Market, P.O. Box No. 2110, Bombay 2.

Mahendrakumar & Co.—Central Bank Building, Mahatma Gandhi Road, Fort.

Mansukhlal Kantilal & Co.—135, Mulji Jetha Building, Princess Street.

Mohanlal & Co.—Chhotalal Bhuvan, 3rd Floor, Kalbadevi Road, Bombay 2.

Mohanlal, D., & Co.—Bomanji Master Lane, near Kalbadevi P.O., Bombay 2.

Mohanlal Goculdas.—Lalsingh Building, opp. Crawford Market.

Moosa Shariff Sons (Estd. 1933).—77, Mahomedalli Road, Bombay 3.

Morarji Vojji & Sons.—7, Kolbhat Street, Post Box No. 2001, Bombay 2.

MUSRY, G. N., PRIVATE LTD.—Canada Building, Home Street, Fort, Bombay. Phone: 26-1435. Grams: "DANDELION." Importers and Exporters.

Mysore Silk Depot.—112, Swadeshi Market, Kalbadevi Road, Bombay 2.

Narandas Girdhardas.—Chandra Chawh Lane, Mulji Jetha Market.

Navmitlal Dayalal.—68, Swadeshi Market, Kalbadevi Road.

N. M. Brothers Co.—Shreeji Bhuvan, Lohar Chawl, Post Box No. 2163, Bombay.

Noormohamed Haji Mohamed Mukatey.—Wassiamull Building, 184, Musjid Bunder Road, Bombay 3.

Panalal Silk Mills Ltd.—Atlas Mills Compound, Reay Road, Mazagaon, Bombay 10.

Pavri Sons & Co.—93/97, Bazargate Street, Fort.

Popatlal Ghelebbhai & Co.—104, Chukla Street, Bombay 3.

Pragjee Vandrawan & Co.—Pragraj Lane, Mulji Jetha Market.

Premchand Trading Ltd.—7, Dhanji Street, Bombay 3.

**PREMIER FURNISHING & DECORATING PRIVATE LTD.**—7, Brabourne Stadium, Churchgate Street Extension, Fort, Bombay. Phone: 245632. Authorised Distributors: The Arvind Mills Limited, The Raipur Mfg. Co. Limited, The Ashoka Mills Limited, The Ahmedabad New Cotton Mills Co. Ltd., and Distributors: Hemla Embroidery Mills Private Ltd., Hemla Nagar, Faridabad.

Purshotam Govindjee & Co.—Mulji Jetha Market.

Rajai Bros.—Opp. B.E.S.T. & Co., Colaba Causeway.

Ralli Brothers, Ltd.—21, Ravelin Street.

Ramchandra Gopal & Co.—Parsi Galli, Dhanji Street.

Ramdas Khimji Bros.—Warden House, Sir Phirozshah Mehta Road, Fort.

Ramkisanadas Sagarmal.—Kalyan Bhuvan, 354, Kalbadevi Road.

Ramkishan & Sons.—Opp. Post Office, Kalbadevi.

Rangoonwala, H. N.—Rangoonwala Building, 91, Mahomedalli Road.

Rasiklal Nagindas & Co.—Dadar Galli, 4th Shop, M. J. Market.

Roop Kala.—Queen's Chambers, Queen's Road, opp. Marine Bridge.

Roshanali D. Nasser & Co.—68/72, Champa Gully, Mulji Jetha Market.

Rowe & Rowe.—38, Hornby Road, Fort.

Rylands & Sons (Overseas) Ltd.—Cook's Building, Hornby Road.

Saleem Hafiz & Brothers.—94, Modi Street, Fort.

Sassoon, E. D., & Co., Ltd.—E. D. Sassoon Building, Ballard Estate.

Shah Chhaganlal Sevachand.—504, Kalbadevi Road, New Silk Bazar.

Shah, L. P., & Sons.—Central Building No. 2, New Silk Bazar, opp. Kalbadevi P.O., Bombay 2.

Shri Laxmi Cloth Trading Co.—135, Zaveri Bazar, Bombay 2.

Spianer, E., & Co.—8, Tamarind Lane, Fort.

Sorabji Nowroji & Co.—16, Horniman Circle, Fort, Bombay.

Subodhchandra Popatlal (Estd. 1915).—Exporters & Importers, 223-25, Sheikh Memon Street, Bombay 2.

Tirathdas Sons.—New Silk Bazar, Kalbadevi Road, Bombay 2.

Tulsidas V. Patel.—Morarji Goculdas Road, Bombay 2; Kalbadevi Road, Bombay 2.

Unimen Industrial Corporation.—5, Parker Building, 10, Cawasji Patel Street, P.B. No. 1179, Bombay 1.

Utoomal & Assudamal Co.—Bombay Mutual Annexe, Gunbow Street, Fort.

Vadilal Vrajilal & Co.—Peerbhoy Building No. 2, 89, Princess Street.

Valla & Co.—Harganga Mahal, Tram Terminus, Dadar, Bombay 14.

Valibhai Kamruddin.—101, Abdul Rehman Street, Bombay 3.

Valiram Sons.—Patel Building, Bomanji Master Road, Kalbadevi.

Vasi Bros. & Co.—Topiwalla Mansion, Mahomedalli Road.

Vasudev Girdharilal.—Central Building No. 2, New Silk Bazar, opp. Kalbadevi P.O., Bombay 2.

Vaswani, D. W.—11, Bharat Bhuvan, New Silk Bazar, 468, Kalbadevi Road, Bombay 2.

Vaswani, K. D., & Co.—New Silk Bazar, 499, Kalbadevi Road, Bombay 2.

Volkart Brothers.—19, Graham Road, Ballard Estate.

Windmere (India) Ltd.—110, Sir Vithaldas Chambers, 16, Apollo Street, Fort, Bombay.

Yacoob Ahmed Brothers.—Topiwalla Mansion, Mahomedalli Road.

## TEXTILE WOODEN ARTICLES

**ACME BOBBINS & SHUTTLES (PRIVATE) LTD.**—Manufacturers of Bobbins and Shuttles for Cotton, Woolen, Silk and Jute. Speciality in Northrop and other automatic types Shuttles and Jute Shuttles, Laminated Compressed Wood Picking Sticks. Raja Bahadur Mansion, 8, Hamam Street, Fort, Grams: "CORRECTFIT". Phone: 255359. Factory at: Corner of Ash Lane, Cadell Road, Dadar, Bombay 28. Phone: 452164.

**PRAKASH TRADING COMPANY.**—69, Mody Street, Bombay 1. Phone: 264639. Grams: "DHANLAXMY." Direct Importers and Manufacturers of Textile Stores. Direct Importers of: Licker-in-Wire, Raising-Stripping-Cylinder-Doffer-Folding Fillets (Card Clothings of all description), Spinning and Weaving Accessories, Machinery Cloth. Pickers, Picking Bands, Roller Skins, Healds, Reeds, Shuttles, Dobby Lattices and Pegs, Spindle Tapes, Ropes and Bandings. Manufacturers of: Card Plugs and Pegs, Shuttle pegs, Picking Band



Pegs, Wrapper Creel Pegs, Reeling Pegs, All types of Rollers, Picking Arms and Sticks, Spiked Lattices, Heald Frames, Swift Hubs and Pegs, Spinning, Weaving and Winding Machines spare parts of all descriptions. Bobbins: Slubbing-Roving, Ring-Rabbeths, West and Universal Pirns, Cones, Doubling Bobbins and Spools, Skewers etc. Trade inquiries solicited.

**VINAYAK AGENCIES.**—N. M. Wadia Building, 123, Mahatma Gandhi Road, Bombay-1. Phone: 253006. Grams: "LUMBERMAN." Leading Merchants of Indian Wood & Timber in hard wood and soft wood in logs, Planks, Squares, Strips. Also Bobbins, Spools, Shuttles, Rolls, Rollers, Picking arms etc. for Cotton, Rayon, Woollen Industries.

### THERMAL INSULATION ENGINEERS

**GLADSTONE LYALL & CO., LTD.**—21, Lansdowne Road, Apollo Bunder, Bombay 1. Phone Nos. 212805 & 211241. Grams: "GLADSWYLL." Bombay Manager: Cmdr. L. N. Deefholts. Regd. Office: 4, Fairlie Place, Calcutta.

**INDOPLAST LTD.**—Kasturi Building, Jamshedji Tata Road, Bombay 1. Grams: "STYROPER." Phone: 38071. Manufacturers of Thermocole Low Temperature Expanded Polystyrene Insulation Material Blocks, Slabs and Pipe Sections.

### THERMOS FLASK DEALERS

**EAGLE VACUUM BOTTLE MFG. CO. PRIVATE LTD.**—Manufacturers of "Eagle Brand" Vacuum Flasks, Refills & Insulated wares. Regd. Office: 144/146, Sheriff Devji (Chakla) Street, Bombay 3. Phones: 322075 & 322096. Grams: "EAGLEFLASK"

### THERMOPLASTIC SHEETS

**LATHAM ABERCROMBIE, DIVISION OF FORBES, FORBES CAMPBELL & CO., LTD.**—Forbes Building, Home Street, Fort, Bombay. Phone: 268081. Grams: "LATHAM"

### THREAD CUTTING TOOLS

**EVERGREEN CORPORATION.**—9/15, Picket Cross Road, P.O. Box No. 2733, Bombay 2. Grams: "GREENLEAVE." Phone: 22162. Thread Cutting Tools, Drills, Tapes, Dies, Toolbits, Small Hand Tools & Mechanists' Tools, etc.

(For TILES & MARBLES Please Refer MARBLES & TILES)

### TIMBER MERCHANTS

**Abba Gani & Co.**—1-2, Victoria Road, Mazagaon, Bombay 10.  
**Abbaskhan Mahamood Khan & Co.**—Ghodbunder Road, Andheri.  
**Abdul Gani Abdul Latif.**—99, Koliwada, Sewri.

**Abdulhusain Allibhai.**—Tank Bunder, opp. Reay Road Station, Mazagaon.

**Aboobakar Mohamed Chhapra & Co.**—Islami Bazar, 7, Victoria Road, Byculla.

**Allimohammed Ahmed & Co.**—55, Dontad Street, Khadak, Bombay 9.

**Amratlal, M., & Co.**—Tank Bunder, Reay Road.

**ANAND TIMBER TRADERS.**—170, Reay Road, Bombay 10. Phone: Office: 42203; Res. 60144.

**Andheri Saw Mill & Timber Works.**—Ghodbunder Road, Andheri, Bombay. Timber Merchants and Government Contractors. Phone: 86437.

**Barodawalla, A. S., & Co.**—Altamont Road, Cumballa Hill.

**Bejanji Kerbadji & Sons.**—Victoria Road, Tank Bunder.

**Bharat Timber Mart.**—Jambli Meholla, Panjrapole.

**Bombay-Burma Trading Corporation, Ltd.**—9, Wallace Street.

**Bombay Saw Mills Co.**—Connaught Cross Lane, Ghorupdeo.

**Bombay Timber Importing & Landing Co.**—148, Middle Colaba.

**Brijmohan Banwarilal.**—61, Reay Road, Mazagaon, Bombay 10.

**Chunilal Maganlal.**—Reay Road, Tank Bunder, Bombay 10.

**D. P. CAWASJI & CO.**—Connaught Saw Mill Compound, D. P. Wadi, Ghorupdeo, Bombay 33. Tel. No. 374901. Tel. Address: "JUNGLEWOOD." Timber Merchants.

**DARVESH TIMBER MART.**—83, Victoria Road, Mazagaon, P.O. Box No. 16201, Bombay 10. Phone: 371129. Grams: "TIMPLANK." Largest Stockists of all kinds of Indian wood and also exporters to any part of the World.

**ESMAIL ESSAK & CO.**—87/89, Masjid Street, Kazi Mohalla, Bombay 3. Phone: 332347. Timber Merchants—General Contractors. Suppliers of Plywood & Hardboard.

**Famous Ladders Mfg. Co.**—13, Khadak, Dontad Street, Bombay 9.

**Faramroze & Co.**—Reay Road, Bombay 10.

**Fatch Saw Mill & Timber Works.**—51, Ismail Curtay Road, Bombay 8.

**Fatemahomed Osman Parekh & Co.**—77, Victoria Road, Byculla.

**FOPCO TRADERS.**—100, Victoria Road, Mustafa Bazar, Bombay-10 DD. Phone: 373149 (Office) & 534678 (Res.). Timber Merchants & Commission Agents. Scaffolding Material, Bamboos & Bullies for Sale & Hire.

**Grand Wood Works & Saw Mill.**—Connaught Cross Road, Ghorupdeo.

**Gulam Huseln Meherally & Co.**—Ghorupdeo, Connaught Road, Bombay 10.

**Haji Ebrahim Haji Suleman Darwesh & Co.**—8, Islami Bazar, Victoria Road.

**Haji Ebrahim Karim Mohamed & Sons.**—64, New Kazi Street.

**Haji Janmahomed, H. A., & Co.**—Tank Bunder, Reay Road, Bombay 10.

**Hargovindas Shivlal & Co.**—Opp. Reay Road Station, Tank Bunder, Bombay 10.

**J. HARILAL & CO.**—Tank Bunder, Reay Road, Bombay 10. Phone: 377486. Grams: "FIRWOOD." Stockists of Teak Wood, Fir Wood, Dealwood, Chilpine, Jungle wood, Packing wood, Silver Oak and seasoned Silver Oak available from ex-stock.

**Janmahomed Habib.**—Mustafa Bazar, Victoria Road, Byculla.

**Janmahomed Haji Moosa.**—Victoria Road, Byculla.

**Janmahomed Moledina.**—50, Dontad Street, Khadak.

**Kanti Wood Works.**—Office, Saw Mills, Factory: Quay Street, Darukhana, Bombay 10.

**Kantilal Bhalthand & Co.**—Opp. Silk Mill, 63, Victoria Road.

**Kantilal Ramanlal & Co.**—Reay Road, Tank Bunder.

**Kassam Abdulla & Co.**—Victoria Road, Mustafa Bazar, Byculla.

**Kazi, Ebrahim Dawood.**—59, Victoria Road.

**Khan Bahadur S. R. Mody.**—No. 24, Colaba Chambers, Colaba Road.

**Khar Timber Mart.**—132, Ghodbunder Road, Old Khar, Bombay 21.

**Kohinoor Timber Mart.**—Reay Road, Tank Bunder, Bombay 10.

**Lalji Dewji Mehta.**—Victoria Road, Byculla.

**Lumber Industries Limited.**—Victoria Road, Byculla.

**MADHORAM & SONS.**—Forest Contractors, 136, Tank Bunder, Reay Road, Bombay 10. Stockists: Chil Pine, Fir Pine, Shisham Wood, Teak Wood, Jungle Wood, etc.

**Maganlal Nagardas & Co.**—126-B, Victoria Road.

**MAKLAI TIMBER MART.** (Estd. 1932).—79, Ghogari Mohalla, Post Box No. 3140, Bombay-3. Grams: "BURMAWOOD."

Dealers in all Sorts "TIMBER"—Such as C. P. Teak, Jungle Wood, Plywood, Teak Ply Hard Board, etc. Phone: 332242.

**Mahomed Janmahomed.**—68, Pydhoni Road, Khadak, Bombay 9.

**Malabar Timber Supplying Co.**—Opp. Masina Hospital, Victoria Road, Byculla.

**McKenzies, Ltd.**—Sewri.

**Meherally Saw Mill & Timber Works.**—Connaught Road, Ghorupdeo.

**MILLARS' TIMBER & TRADING CO., LTD.**—Victoria House, Victoria Road, Bombay 27. Phones: 372103 & 372104. Grams: "JARRAH." Bombay.

**Modi, R. E. & Co.**—Reay Road, Bombay 10.

**National Forests & General Mills Co. Private Ltd.**—Signal Hill Avenue Road, Darukhana, Bombay 10.

**Noormahomed Osman.**—New Kazi Street.

**Northern India Timber Corp.**—63, Reay Road, Bombay 10.

**NYALCHAND R. TOLIA.**—52, Bombay Timber Market Ltd., Reay Road, Bombay 10. Stockists & Dealers in all kinds of Timber as Jungle Wood, Poon Wood, Pioneers in Packing Wood, Manufacturers of Cable Drums. Grams: "FRESH-WOOD." Phone: 378345 (Residence) Phone: 582851.

**PAREKH & CO.**—Timber Merchants, Direct Importers & Exporters. Largest Stockists of Vellapine Wood Suitable for Shuttering purpose. 77, Victoria Road, Mustafa Bazar, Bombay 10. Phones: 379381 & 373149 (Office), 332432 (Res.), Grams: "KAMALKING."

**Pestonji Jamsaji & Co.**—Reay Road, Tank Bunder.

**Podar Saw Mills.**—61, Reay Road, Bombay 10.

**Popatlal Parbhudas.**—Near Reay Road Station, Tank Bunder.

**Potia, Fidaalli Mohamedally & Bros.**—51, Husselny Lakda Bazar, Bellasis Road.

**Quality Timber Trading Co.**—The Bombay Timber Market Ltd., Shop No. 78, Signal Hill Avenue, Reay Road, Bombay 10.

**Ravishanker P. Acharya.**—Reay Road, Tank Bunder.

**S. D. D. Gilder & Co.**—40, Victoria Road, Mazagaon, Bombay 10. Grams: "TREETOP."

**Simplex Timber Mart.**—66, Pydhoni Road, Khadak, Bombay 9.

**Standard Timber Trading Co.**—Islami Bazar, Victoria Road, Byculla.

**Sunderdas Saw Mills.**—Opp. Reay Road Station, Bombay 10.

**Timber Trading Corporation.**—Tank Bunder, Reay Road, Bombay 10.

**Timber Wood Syndicate.**—All kinds of Timber, Bullies, Mundas, Basters, Bamboos, etc., available in Big Stock. Ghodbunder Road, Andheri, Bombay 41.

**Trinity Timber Syndicate.**—57, Dontad Street, Khadak.

**Vaid & Co.**—26, New Kazi Street, Null Bazar.



Valimohamed Haji Ahmed & Co.—146, Victoria Road, Byculla, P.O. Box 6953, Bombay 27. Stockists of Burma & C.P. Teak Poon & Jungle Wood of all Species & Dealwood. Phone: 42586. Grams: "WOODPECKER."

Vishnool Ballal & Co.—Opp. Reay Road Station, Bombay 10.

VINAYAK AGENCIES. N. M. Wadia Building, 123, Mahatma Gandhi Road, Bombay-1. Phone: 253006. Grams: "LUMBERMAN." Leading Merchants of Indian Wood & Timber in Hard wood and Soft woods in logs, Planks, Squares, Strips. Also Bobbins, Spools, Shuttles, Rolls, Rollers, Picking arms etc. for Cotton, Rayon, Woollen Industries.

Wallace & Co.—9, Wallace Street.

West Coast Timber & Plywoods.—57, Victoria Road, Mazagaon.

Western Australia State Saw Mills, Perth.—Agents: Killick, Nixon & Co., Home Street, Fort.

Wood Box Private Ltd.—10, Kurla Industrial Estate, Narayan Nagar, Bombay 77.

Zakariy & Dawood Co.—37, Dondad Street, Khadak, Bombay 9.

### TILES-ROOFING

REGO SONS.—41/A, Mazagaon, Bombay 10. Phone: 372622. Grams: "REGOSONS." Manufacturers of the famous "Engine" Brand Tiles. Factories at Bolar, Mangalore.

### TIN PRINTERS & BOX (CONTAINERS) MANUFACTURERS

BOMBAY TIN PRINTERS.—221-223, Thakurdwar Road, Bombay 2. Grams: "LITHOPRINT." Phone: 30187. Manufacturers of Printed Decorative Tin Boxes, Containers (Readymade & made to order), Metal Signs, Seals; Tin-made of Joints only.

H. A. H. Bachooally Tin Factory.—Nishan Pada Road, Dongri, Bombay 9.

INDIAN METAL CAN MFRS. PRIVATE LTD.—Office & Factory: 43-E, Foras Road, Bombay 8. Phone: 251603. Grams: "ECONDUR." Manufacturers of Tin Containers.

KIV TRADING CO.—17, 1st Parsiwada, Khetwadi, Bombay 4. Phone: 375103. Grams: "KIVGROUP."

Kotecha & Co.—231, Dr. Dadabhoy Naoraji Road, Bombay 1.

ORIENTAL CAN MANUFACTURING CO.—1076, Dr. E. Moses Road, Worli, Bombay-18. Manufacturers of Plain & Lithographed Tin Containers, Showboards, Calendars, etc., Gram: ORCANMAN—Worli. Phones: Manager 379363; Factory: 372355.

QADRI TIN FACTORY.—Shroffwadi, Mazagaon, Bombay 10. Manufacturers of Printed & Plain Tin Containers for Vegetable Oils, Paints & Varnishes, Sweetmeats, Sweets & Toffees, Posters, Calendars & Labels & other Publicity Materials. Phone: 372313.

Grams: "METALPRINT"      Phones: { Office: 254416  
Factory: 573056

### THE METAL PRINTERS COMPANY

#### Offices:

Aga Khan Building,  
Dalal Street,  
P.B. 411, Bombay 1-BR.

14, Princep Street,  
Calcutta 13.

2B, Jangpura, N. Delhi.

#### Factory:

114, Marol Naka, Andheri  
East, Bombay 59-AS.

#### Manufacturers of:

METAL POSTERS,  
CALENDARS,  
DECORATED  
CONTAINERS,  
TRAYS, TOYS,  
CLOCK DIALS, etc.

SAIFY TIN FACTORY.—Manufacturers of Tin Containers. 127-135, Maulana Azad Road (Upper Duncan Road), Bombay 8. Phone: 377261. Office: Dhan Building, 23/25, Ghoga Street, Bombay 1. Phone: 256004. Grams: "SAFETINS". Byculla.

ZENITH TIN WORKS PRIVATE LTD.—Opp. Race Course, Clerk Road, Mahalaxmi, Bombay 34. Phone: 370375. Grams: "ZENITHTINS." Manufacturers of Plain & Lithographed Tin Containers, Sanitary Cans, Collapsible Tubes and Pillar Proof Caps.

### TOBACCO DEALERS AND MANUFACTURERS

Behram Bros.—Oomrigar Building, opp. Crawford Market.

BYRAM & CO.—Wakefield House, 11, Sprott Road, Ballard Estate, Bombay.

Dilaj & Co.—20, Hamam Street, Fort.

Godfrey Phillips (India) Ltd.—Kurla Road, Chakala, Andheri, Greater Bombay.

Hiralal Panachand Shah.—Office: Jai Hind Estate No. 1, Cathedral Street, Bhuleshwar, Bombay 2.

IMPERIAL TOBACCO COMPANY OF INDIA, LTD., THE.—Factory: P.O. Box No. 6002, Parel, Bombay 12-DD. Phones: 442521 (4 lines). Grams: "BACCYMAKE." (PL) Bombay.

Khodadad Sheriar & Co.—No. 2, Crawford Market.

Macropolo, D., & Co., Ltd.—Kermani Building, Hornby Road, Fort.

Olympia Cigarette Co. & General Stores.—Metro House, Dhobi Talao.

Pioneer Industrial Tobacco Works.—Imamwada Road, Bombay 9.

Spencer & Co., Ltd.—Spencer's Building, Forjett Street, Bombay 26.

Star Beedi Works.—Keshav Bhuwan, 1st Sutar Gully, Bombay 4.

### TOILETRIES

Abdulla A. Baker & Co.—89, Bhajipala Street, Bombay 3.

Akbarally Ebrahimji.—38/C, Cawasji Patel Street, Fort, Bombay. Grams: "Tussibar."

Allmohamed Husein & Co.—229, Jumma Masjid, Bombay 4.

Budroodn Mahomedally & Sons.—238, Nagdevi Street, Bombay 3.

Chesebrough—Pond's Inc.—(Incorporated in U.S.A. with Limited Liability), 13, Gunbow Street, Fort, Bombay 1.

Chic Cosmetics Private Ltd.—91/A, Walkeshwar Road, Bombay 6.

CIBA OF INDIA LIMITED.—Royal Insurance Building, 14, Jamshedji Tata Road, Bombay-1. Phones: 245031-3, 246084-6. Manufacturers of Cosmetics and Toiletries.

COLGATE-PALMOLIVE (INDIA) PRIVATE LTD.—Steelcrete House, 3, Dinshaw Vacha Road, Bombay 1-BR. Toilet Articles Mfrs. Phone Nos.: 245071/2/3. Grams: "PALMOLIVE".

Ebrahim Allibhoy & Sons.—260-64, Abdul Rehman Street, Bombay 3.

Hebertsons Ltd.—Ewart House, Bruce Street, Fort.

Hindustan Lever Ltd.—Scindia House, Ballard Estate.

I.C.I. (India) Private Ltd.—P.B. No. 310, Bombay 1.

Komal Manufacturing Chemists, Ltd.—23-36, Imperial Chambers, Ballard Estate, Fort.

Madon, M. T., & Co.—The "Corner-Shop", 346, Abdul Rehman Street, Bombay 3.

New India General Stores.—33, Meadows Street, Fort, Bombay.

PEARLINE-PARIS PRIVATE LTD.—Rehman Building, 24, Veer Nariman Road, Bombay 1. Phone: 254337. Grams: "PEARLAB."

Sultanali Mohamadali (Estd. 1895).—148, Sarang Street, Bombay 3.

Swastik Oil Mills Ltd.—Saltpan Road, Wadala, Bombay 31.

Tata Oil Mills Company Ltd.—Bombay House, Bruce Street, Fort, Bombay.

### TOOL MANUFACTURERS AND MERCHANTS

ABDEALLY, B. M. & CO.—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL".

Abdool Hoosein Jiwajee & Co.—241, Nagdevi Street, Bombay 3.

Abdullahal Faizullahal Ltd.—Khoka Bazar, Bombay 3.

Adamally Gulamhusein.—191, Khoka Bazar, Sarang Street, Bombay 3.

Akbarally & Co., F. H.—58, Bhajipala Lane, Bombay 3.

Asian Textile Engineering Corporation.—Kermani Building, Sir Phirozshah Mehta Road, Fort.

ASIAN TOOLS & HARDWARE STORES.—33, Pathakwadi, Lohar Chawl, Bombay 2. Phone: 20067. Grams: "ASIAN-TOOLS," Kalbadevi. Stockists in Tools for Carpentry, Smithy, Foundry Fittings, Precision, etc., Suppliers to Navy, Engineering Colleges, Polytechnic Institutes and Industrial Training Institutes. Grams: "ASIAN TOOLS", Bombay 2.

Asiatic Engineers.—Mehta House, Meadows Street, Fort.

Batlilol & Company Private Limited.—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1. (BR.). Phones: 255451 (6 lines) Grams: "BATLILOICO." Tele: 011-284. City Branch: "BATLI-BOI HOUSE," 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, BHUBANESWAR.

BHARAT ENGINEERING STORES.—113, Nagdevi Street, Bombay 3. Grams: "UNIONTOOLS." Phone: 323193. Stockists of Elephant Brand Chain Pulley Blocks.

Bhogilal & Co., R.—261/263, Hornby Road, Fort, Bombay.



**BOMBAY ENGINEERING STORES.**—C-16, Bihari Baug, 3rd Bhoiwada, Bombay 2. Stockists of Engineering Tools of all kinds.

**BOMBAY MACHINE TOOLS & HARDWARE CORP.**—103, Narayan Dhuru Street, Bombay 3. Phone: 322702. Grams: "WIREGRIP." Importers & Stockists of Engineering small tools, Electrodes and electric portable drills, grinders, etc.

**Bombay Steel Corporation.**—241, Kumbharwada, opp. 2nd Sutar Lane, Bombay 4.

**BOMBAY TOOLS SUPPLYING AGENCY.**—50, Nagdevi Cross Lane, Bombay 3. Phone: 321326. Grams: "TERRA-TOOLS." Direct Importers—Stockists of Engineering & Precision Tools.

**Cambata Industries Private Ltd.**—Cambata Building, 42, Queen's Road, Bombay 1.

**C. Bole & Co.**—Narayan Dhuru Street, Bombay 3.

**Central Machine Tools Agency.**—43, Nagdevi Cross Lane, Bombay 3.

**Central Tool & Equipment Co.**—32, Sarang Street, Bombay 3.

**Chasman & Co.**—Bell Building, Sir Phirozshah Mehta Road, Fort.

**Chokal, H., & Co.**—106, Meadows Street, Fort.

**Cooper Engineering Ltd.**—Construction House, Ballard Estate, Bombay.

**Crescent Agencies (Private) Ltd.**—Beauman Chambers, 27/33, Meadows Street, Fort, Bombay.

**NEW HIND TRADING CORN.**—137, Narayan Dhuru Street, Bombay 3. Machine Tools, Metal Cutting Tools and all sorts of Precision and Engineering Tools. Phone: 329383. Grams: "DORMER".

**Desai, M. S. & Co.**—77, Nagdevi Cross Lane, Bombay 3.

**Desai Tube & Hardware Mart.**—41, Nagdevi Cross Lane, Bombay 3.

**Duncan Stratton & Co., Ltd.**—5, Bank Street, Bombay 1.

**Eastern Machinery Trading Co.**—Wilson Road, Ballard Estate, Bombay 1.

**EASTERN STEEL INDUSTRIES.**—Manufacturers of Wood working Saws, Circular Saws, Planing Knives etc. 21-B, Noble Chambers, Parsee Bazar Street, Fort, Bombay. Phone: 254476. Grams: "INVICTA."

**Eastern Trading Co.**—Mahakali Chawl, Pydhonie, Bombay 3.

**ECHJAY INDUSTRIES PRIVATE LTD.**—Office & Factory: Kanjur Village Road, Bhandup, Bombay-78. Phones: 581211 & 581678. Grams: "ECHJAY" Bhandup. Manufacturers of Accessories & Equipments for Machine Tools, General Steel Drop & Upset Forgings—including Forged Flanges; Forged Parts of Diesel Engines & Automobiles: Forged Hand Tools: Hand Hammers, Chisels & Punches, Spanners, Pliers, Jigs & Fixtures, Press Tools, Dies & Punches."

**Electro Technics & Engineering Co.**—P. O. Box No. 1356, Fort. Elliott Waud & Hill Private Ltd.—Lakshmi Bldg., Sir P. M. Road, Bombay 1.

**Francis Klein & Co. (Bombay) Ltd.**—Shale Building, Bank Street, Fort.

**General Tubes Ltd.**—142-144, Nagdevi Street, Bombay 3.

**Gin Store Co.**—76, Nagdevi Cross Lane, Bombay 3.

**Greaves Cotton & Co., Ltd.**—Forbes Street, Bombay 1.

**Guest, Keen, Williams, Ltd.**—Ballard Estate, Bombay 1.

**HATIMBHOY MOHAMEDALLY.**—Importers of Engineering Precision, Carpentry, Smithy, Goldsmith, Garage and Cutting Tools, Suppliers to Governments & Semi-Government Dept. & Technical Institutes. 132, Lohar Chawl, Bombay 2. Phone: 22587.

**Hans Steel Industries.**—105, Narayan Dhuru Street, Bombay 3.

**Harjimal Kidernath & Co.**—87, Nagdevi Cross Lane, Bombay 3.

**Heatly & Gresham Ltd.**—9, Forbes Street, Fort.

**HEMANT TOOLS TRADING CO.**—33, Bibijan Street (Barbhai Mohalla), Bombay 3. Grams: "LACING." Phone: 321174. Importers & Stockists of Chain Pulley Blocks, Garage Tools, Fibre Sheets, Rods, Diamond Dressing Tools, Precision Tools, etc.

**Hind Hardware Stores.**—Pirbhoy Building No. 1, Lohar Chawl, Bombay 2.

**Hindustan Engineering Co. (Machinery Dept.).**—25, Ropewalk Street, Rampart Row, Fort.

**Hiralal Gokaldas Dalal & Co.**—45, Nagdevi Cross Lane, Bombay 3.

**INDIAN TOOL MANUFACTURERS LTD., THE.**—101, Sion Road, Bombay 22. Phones: 471273, 471274 & 472292. Grams: "ITOOLS", Sion, Bombay. Manufacturers of Small Tools, Particularly Twist Drills, Reamers, Cutters, Taps & Carbide Tips & Tools and Micrometers.

**Industrial and Agricultural Equipment Co.**—29, Hamam Street, Fort, Bombay.

**Industrial Machine & Tools Co.**—347, Lamington Road, Bombay 7.

**Industrial Machinery & Tools Corpn.**—Indira Nivas, 1st Floor, New Bhatwadi Street, Bombay 4.

**Investa Machine Tools & Engineering Co., Ltd.**—Ewart House, Bruce Street, Fort, Bombay.



COMPLETE RANGE IN  
**DRILLS**  
**TAPS**  
**DIES**  
IN INCHES &  
MILLIMETRES

**JAIRAMDAS & SONS**

163, Narain Dhuru Street, Bombay 3

**BANGALORE DELHI MADRAS SECUNDERABAD**

*Manufacturers of:*

M. S. Bolts and Nuts, Concrete Mixers, Lime Mortar Mill, C. I. Surface Plates, Angle Plates, Straight Edges, etc.

*Factories:*

Industrial Area, Azmabad, Hyderabad  
8th Mile, Mysore Road, Bangalore.

**James Finlay & Co., Ltd.**—Mahatma Gandhi Road, Bombay 1.

**JEEWAJEE ESSAJEE.**—135/137, Lohar Chawl, Bombay 2. Importers of Engg. Precision, Measuring, Construction, Carpentry and Garage Tools. Also Smithy, Mill Stores & Garden Implements. Suppliers to Govt. & Semi-Govt. Depts. Phone: 23936.

**Kantilal Bhogilal & Co. (Estd. 1933).**—68, Nagdevi Cross Lane, Bombay 3.

**KERMANI & SONS, F. B.**—132, Sarang Street, Bombay 3. Phone: 326663. Grams: "GAROGAR."

**Kilburn & Co., Ltd.**—Gresham Assurance House, Sir Phirozshah Mehta Road, Fort, Bombay 1.

**Kirtilal & Co.**—31, Bibijan Street, Barbhai Mohalla, Bombay 3.

**KISHORECHAND OMPRAKASH.**—101, Narayan Dhuru Street, Bombay 3. Phones: 322059, (Office) & 368101 (Res.). Grams: "CHAINPULLY". Importers of Mill Gin Stores Hardware and all kinds of saws. Authorised stockists of "GEDORE" Tools, "WARRIOR" Taps and Dies, "NETTLE FOLDS" Products and Sole Distributors for "SPEED" Chain Pulley Blocks for Goa, Mysore, Kerala, Madras, Andhra, Orissa, Bihar, Madhya Pradesh and Rajasthan.

**Kishor Trading Co.**—145, Narayan Dhuru Street, Bombay 3.

**KUMAR COMMERCIAL CO.**—12-A, Nadirshaw Sukhia Street Off Cawasji Patel Street, G.P.O. Box No. 1525, Bombay 1. Importers and Dealers of Spare Parts for all known types of Engines & Distributors of "CFW" German Oil Seals and accredited Dealers for World Famous "Wolf" Electric Tools. Also "EMCO" drills, grinders, etc. Phone: 255719. Grams: "SIZING."

**MACHINE TOOLS & IMPLEMENTS.**—93-95, Narayan Dhuru Street, Bombay 3. Phones: Office: 322268 & 322269. Grams: "MACHTOOLS." Telex 292 BY.

**Machine Tools (India) Ltd.**—Imperial Chambers, Wilson Road, Ballard Estate, Bombay.

**Machinery Trading Corporation.**—68, Meadows Street, Fort, Bombay 1.

**Mahindra & Mahindra Ltd.**—Gateway Building, Apollo Bunder, Fort.



## MEASURING INSTRUMENTS GAUGES, TOOLS

for

Engineering Workshops and  
Research Establishments

Contact:

## MEHTA ENGINEERING STORES

"Industrial House," 51/53, Nagdevi Cross Lane,  
BOMBAY-3

Phone: 321613 (Office) & 575169 (Res.) Grams: "TAPDIES"

Accredited Dealers for "GECO" Precision Tools

**MEHTA NANAVATI & CO.**—96, Narayan Dhuru Street,  
Bombay 3. Phone: 324645. Grams: "REDJOINT."

**Mehta Textile & Hardware Stores.**—158-160, Narayan Dhuru Street,  
Bombay 3.

**Modern Hardware & Trading Co.**—107, Abdul Rehman Street,  
Bombay 3.

**Mody Trading Co.**—163, Nagdevi Cross Lane, Bombay 3.

**New India Hardware Mart.**—152, Narayan Dhuru Street, Bombay 3.

**NUTAN TRADING CORPORATION.**—83, Nagdevi Cross Lane,  
Post Box No. 3238, Bombay-3. (BR). Grams: "NUTAN-  
TRADE." Phones: 323357 (Office) & 474485 (Res.). Manu-  
facturers of "KAUSHIK" Brand Tools—Such as Reamers,  
Callipers, Dividers, Tool Holders, Engineering Squares etc.  
Dealers in Tool Bits, End Mills, Centre Drills, Slotting and  
Side & Face Cutters etc. Stockists of Hardware, Bearings etc.  
Branch at:—3350, People Mahadev Hauz Kazi, Delhi-6.

**Oriental Engineering Co.**—25, Forbes Street, Fort, Bombay 1.

**P. DALAL & COMPANY**—357, Nagindas Building, Opp.  
Family Planning Centre, Sardar Vallabhbhai Patel Road,  
Bombay-4. Phone: 351874. Importers of Metal Hardness  
Testers, Rubber Testers, Tachometers and Precision  
Measuring Tools.

**Paramount Tools Company.**—3, Narayan Dhuru Cross Lane,  
Bombay 3.

**P. Batlilal & Co.**—43, Dhanji Street, Bombay 2.

**PRAFFULCHANDRA & CO.**—106, Lohar Street, Bombay 2.  
Phone: 39007. Grams: "ELECTTOOLS." Importers &  
Stockists of Engineering, Precision and Garage & Machine  
Tools.

**Rajkumar Khanna & Son.**—82, Bhajipala Street, Bombay 3.

**RAMCHAND MATHRADAS AGGARWAL.**—30, Khokha Bazar,  
Sarang Street, Bombay 3. Phones: 326075 & 328942. Grams:  
"PIFEDIE." Hardware, Tools, Fittings, Pipes, Compressors,  
Machinery and Implements.

**Rasiklal Shah & Co.**—93, Narayan Dhuru Street, Bombay 3. Phone:  
321759 & Grams: "PRECISION." Stockists of Engineering Tools  
of all types.

**R. Babulal & Co.**—163, Nagdevi Cross Lane, Bombay 3.

**Reliance Trading Co.**—Vithal Sayana Bldg., Lohar Street, Bombay 2.

**Royal Hardware Mart.**—108, Nagdevi Street, Bombay 3.

**Shah & Brothers.**—284, Nagdevi Street, Bombay 3.

Grams: "SIMCO TOOLS"

Phone: 323160.

## SIMPLEX MACHINE TOOLS COMPANY

Mohamadi House, 1st Floor,  
214/16, Nagdevi Street, Bombay-3.

Stockists of

All kinds of Engineering Tools such as  
Drills, Reamers, Cutters, Slitting Saws,  
Hacksaw Blades, Carbide Tips, Carbide  
Tip Tools, Coventry Dies, Taps & Dies and  
all Precision Tools.

**STAR DIAMOND TOOLS.**—60, Sir Pherozshah Mehta Road,  
Bombay. Mfrs. of Diamond Dresses, Special Tools, Diamond  
Powders and Paste etc. Resetting Service Undertaken.  
Phone: 265051.

**Stanley Works, The.**—44, Lakshmi Bldg., Sir Pherozshah Mehta  
Road, Bombay 1.

**Suryodaya Trading Co.**—Behind Reserve Bank, Ground Floor,  
Bombay 1.

**Swastic Hardware Stores.**—116, Narayan Dhuru Street, 2nd Floor,  
Room No. 23, Bombay 3.

**Tube Tools and Hardware Mart.**—94, Nagdevi Street, Bombay 3.

**TYEBALLY DAWOODJI (Estd. 1865).**—87, Sarang Street,  
Bombay 3. Phone: 325362. Grams: "FOOTRULES." Stock-  
ists of John Bakers, J. K's and Hindustan's Files. Dealers in  
Files, Garraze & Engineering Tools.

**UNIVERSAL TRADING CO.**—Manufacturers of Engineering  
and General Hardware, Callipers, Screwdrivers, Pliers,  
Vices, Reamers, Saws, Chucks, Cramps, Machine Vices,  
Hand Drilling Machine Dies, Chain Pipe Wrench, Nail  
Puller, Hammers, Mason's Squares, Steel Ruler, engineers  
Level Tin Cutter, Motor Spanners, etc. etc. Mohamedi  
House, 79, Mohamedali Road, Bombay 3. Phone: 322537.  
Grams: "IRONMART". Branch Office: No. 4, Narayan  
Dhuru Cross Lane, Bombay 3.

**V. CHUNILAL & CO.**—19, Bibijan Street, Bombay 3. Phone:  
328370. Bolts, Nuts, Hardware and Tool Manufacturers.

**Vishwabharati Trading Co.**—Kumta Street, Ballard Estate,  
Bombay.

**Vulcan Trading Co. (Pvt.) Ltd.**—Indian Mercantile Chambers,  
Nicol Road, Ballard Estate, Bombay.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard  
Estate, Bombay.

**Workshop Engineering & Equipment Co.**—30/32, Bhajipala Lane,  
Bombay 3.

## TOOL, ALLOY AND SPECIAL STEEL MERCHANTS

**AGARWAL MACHINE & ENGINEERING STORES.**—55/57,  
Nagdevi Cross Lane, Bombay 3. Phone: 323335 Office and  
326995 (Shop). Grams: "OMNISTORES." Importers and  
Stockists of Tool and Alloy Steels.

Phone: 324786

Grams: STEELART

## TOOL & ALLOY STEEL

Available Ex-Stock:

### ASSOCIATED STEEL & TOOL CORPORATION

116, Nagdevi Street, Bombay 3 (BR)

Importers & Stockists of: High speed steel—Hot Die  
steel, High Carbon, High chrome steel, Oil Hardening  
& Non-shrinking steel, Carbon Tool steel, Nickel Chrome  
steel, Stainless steel Round, Squares and Flats, Bright  
drawn bars, Round, Square, Flat, Hexagon and Octagon etc.

Specialised in EN-Specification.

**Batlilol & Company Private Limited.**—Regd. Office: Forbes Street,  
Grams: "BATLIBOICO." Tele: 011-284. City Branch: "BATLI-  
BOI HOUSE", 59/61, Nagdevi Cross Lane, Bombay-3 (BR.).  
Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi,  
Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna,  
Secunderabad, Vijayawada. Associate: Bangalore 2. Resident  
Representatives: RANCHI, BHUBANESWAR.

**BHARAT ENGINEERING STORES.**—113, Nagdevi Street,  
Bombay 3. Grams: "UNIONTOOLS." Phone: 323193.  
Stockists of Elephant Brand Chain Pulley Blocks.

**BOMBAY STEEL CORPORATION.**—Agents of Deutsche Stahl  
Metall, Berlin (German Democratic Republic). Indentors,  
Importers and Stockists of Tool, Alloy and Special Steels.  
H.O. 140, Meadows Street, Bombay 1. Grams: "STEEL-  
HOUSE." Phones: 255077, 254756. Residence: 412383. Retail  
Shop: 241, Kumbharwada, Bombay 4. Phones: 331517.  
Residence: 472252.

**Calcutta Iron & Steel Co., Ltd.**—68/D, Mohamedally Rd., Bombay 3.



# A Sure Source for TOOL & ALLOY STEEL

*Specialist in :—*

**CARBON STEEL**

**OIL HARDENING NON SHRINK-  
ING STEEL**

**HIGH CARBON, HIGH CHROME  
STEEL**

**HOT DIE STEEL**

**HIGH SPEED STEEL**

**CONSTRUCTIONAL STEEL**

**SILVER STEEL**

**STAINLESS STEEL**  
(Magnetic and Non-magnetic)

**PNEUMATIC TOOL STEEL**

**COINING DIES STEEL**

**AND STEEL OF AISI AND  
BSS Specifications.**

*Importers & Stockists*

## INDIA TOOL STEEL MART

200, Trimbak Pursuram Street, Golpitha,  
Bombay 4.

Phones: 331420 & 334531

Grams: "RAPIDEXTRA"

Phones : { Office : 329009  
Res.: 475455 Grams : "CARBOSTEEL"

## CAMBAY TOOL STEEL CO.

92A, Memonwada Road, Dada Mansion,  
Bombay 3

*Indentors & Stockists of :*

**TOOL & ALLOY STEEL**

High Speed Steel—High Carbon—High Chromium  
Steel—Oil Hardening Non-Shrinking Steel—  
Carbon Steel—Stainless Steel—Nickel Chrome  
Steel—Silver Steel—Hot Die Steel—En Specifica-  
tion Steel, etc.

**CONTINENTAL STEEL CORPORATION.**—Stockists of  
BOHLER STEELS, High Speed Steels, High Carbon, High  
Chromium Steels, Oil Hardening Non-Shrinking Steels,  
Carbon Steels, Stainless Steels, Nickel Chrome Steels, Silver  
Steels, Hot Die Steels, EN Special Steels. Office : Haji Manzil,  
82, Abdul Rehman Street, Opp. State Bank, Bombay 3.  
Phones: 325817 & 323893. Shop: 12-14, Dady Ardeshir Street,  
Golpitha, Bombay 4.

*For all types of*

## TOOL & ALLOY STEELS

*such as*

## HIGH-SPEED, CARBON SILVER, HOT DIE, H.C.H.C. O. H. N. S., STAINLESS NICKEL CHROME

## & EN SPECIFICATION STEELS

*Please contact*

## DHIRAJ STEEL CO.

*Indentors & Stockists*

93, Mohamedali Road, Bombay 3 BR.

Phones : 322340 & 325862 Grams : "STEELOCEAN"

**DEHARAMDAS M. JHAVERI & CO.**—108, Jhaveri Bazar, Bombay  
2. Phone : 38727. Stockists of High Speed Steel, Carbon Tool  
Steel, Valve Steel (Nickel-Chrome Steel), Stainless Steel  
Pipes, etc. Agents for: Low Moor Alloy Steel Works Ltd.,  
Bradford, England.

**EMKAY TRADERS.**—32, Fatma Bldg., 7, Nagdevi Street,  
Bombay 3. Carbon, High Speed Taps, Dies, Chasers &  
other Threading Tools, Twist Drills, Garage & Small Tools,  
Precision & Measuring Tools. Stockists: S.T.M. Tools.  
Phone : 328578. Grams : "MONDHURV."

**Excelsior Commercial Corporation.**—110, Sarang Street (Khoka  
Bazar), Bombay 3.



## DHARAMDAS M. JHAVERI & CO.

108, Jhaveri Bazar, Bombay-2

Telephone: 38727

### STOCKISTS

High Speed Steel, Carbon Tool Steel, O.H.N.S. Die Steel, Stainless Steel, Valve Steel (Nickel-Chrome Steel), Stainless Steel Pipes, etc.

Agents for

**LOW MOOR ALLOY STEEL WORKS LTD.,**  
BRADFORD, ENGLAND.

**HARISHANKER NARBHERAN & CO., D. M.**—94, Kansara Chawl, Kalbadevi Road, Bombay 2. Phones: 335294 (Office), 532231 (Res.). Grams: "BAKULBAUGH." Importers of Tool, Alloy and Special Steel. From Stocks—EN 8, 9, 3212, 24 and 36.

**INDUSTRIAL DEVELOPMENT CORPORATION.**—Post Box No. 44, 73, Bank of Baroda Building, Phalton Road, Bombay 1. Phone: 266533, Grams: "MESSAGE". Hardware for Automobile, Electrical, Mechanical Industries, Pipes & Fittings, Tool, Alloy and Steel Metals & Electrical goods in full range, Small tools, Precision tools, Electrical and Mechanical Tools, Light and Heavy Machineries, Imported & Indian.

**INDUSTRIAL ENGINEERING CO.**—H.O.: 45, Apollo Street, Fort, Bombay 1. Phones: 254072 and 325156. Grams: "CALLING." Direct Importers of Tool, Alloy, Special Steel & Stainless Steel Bars, etc.

**Jairamdas & Sons.**—163, Narain Dhuru Street, Bombay 3. Phone: 323616. Grams: "Jairamsons."

*For Tool & Alloy Steel*

## KWALITY TOOL STEEL CORPORATION

24, Narayan Dhuru St., Bombay 3.

Phone: 322892

High Speed Steel, High Carbon High Chromium Steel, Oil Hardening Non-Shrinking Steel, Carbon Steel, Stainless Steel, Magnetic and Non-Magnetic Silver Steel, Hot-Die Steel and EN Specification Steel.

### TOOL & ALLOY STEEL

High Speed, Stainless, Carbon, Hot-Die, Silver and EN Steels such as EN-1A, 1B, 2A, B, C, D, 3, 3B & D, 4A, 5, 5D, 6, 6A & K, 8, 9, 16, 19, 24, 31, 32A & B, 36, 352, 353, 354 and 361 and also cut lengths as per customer's requirements.

Contact:

## LAXMI STEEL COMPANY

(Indentors & Stockists)

Shop:

85, 1st Pathan Street, 39, Nagdevi Cross Lane,  
4th Kumbharwada Lane, Bombay-3.  
Bombay-4.

Gram: LAXMISTEEL

Office:

Phone: 326477-78

**MEHTA NANAVATI & CO.**—96, Narayan Dhuru Street, Bombay 3. Phone: 324643. Grams: "REDJOINT."

**MODERN STEEL COMPANY.**—125/A, Allumer Street, Off Banian Road, Bombay 3.

## TOOL & ALLOY STEEL

|                       |                      |
|-----------------------|----------------------|
| ★ High Speed Steel    | ★ H. C. H. C.        |
| ★ Hot Die Steel       | ★ O. H. N. S.        |
| ★ Stainless Steel     | ★ Carbon Steel       |
| ★ Nickel Chrome Steel | ★ En Speci. or Equi. |

etc. etc.

## NEW ERA STEEL COMPANY

7, Narayan Dhuru Cross Lane, Bombay-3

Phones: Office: 327885, Sales: 321651, Gram: 'Steelcrown'

**SHISHIR & CO.**—Importers & Stockists of Alloy & Tool Steel. Agents for Poldi Steel of Czechoslovakia. Head Office: 140, Meadows Street, Bombay 1. Grams: "SHISHIRCO." Phone Nos. 254756 & 255077. Sales Office: 62, Nagdevi Street. Phone Nos. 323047 & 324508. Residence: 472383.

**TEXTELO ENGINEERING WORKS.**—52-A, Islampura Street, Bombay-4BR. Phone: 334671. Importers and Stockists of Free Cutting Bright Bars, Round, Square and Hexagonal, Tool Alloy & Special Steel.

Grams: "SUKESHI"

Phones: 327641 (Office)  
334238 (Res.)

## UNITED STEEL AGENCY (INDIA)

92, Nagdevi Street, Bombay-3.

*Dealing in:—*

High Speed Steel, Carbon Steel, O.H.N.S. Steel, Nickel Chrome Steel, Stainless Steel, Hot Die Steel, High Carbon High Chrome and all other kinds of Alloy Tool Steel.



**TOOL, ALLOY  
& SPECIAL STEEL**

## VARIETY (AGENTS) PVT. LIMITED.

H. Office: 15, Cawasji Patel Street, Bombay-1.

Phone: 254453.

Grams: "ZAPPALLOY"

Branch: 22B, Pusa Road, New Delhi-5.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

**WORKSHOP ENGINEERING & EQUIPMENT CO.**—30/32, Bhatipala Street, Post Box No. 3091, Bombay 3. Grams: "WEARRESIST." Importers & Stockists of "Bohler" Special Steel such as Carbon Steel, Oil hardening non-shrinking Steel, High Carbon, High Chromium Steel, Nickel Chrome Steel, Case hardening Steel, Stainless Steel, Plastic Die Steel, Chisel Steel, High Speed Steel, Alloy Steel in the form of Round Rods, Flats, Squares, Wires, Sheets, Triangles, Half rounds, Strips, Pipes, Billets, Blanks, Hexagonals and Octagonals etc., etc. Phones: 322270 and 323336.



**TOUGHENED GLASS MFRS.**

**BHOPAL TOUGHENED GLASS WORKS.**—139, Abdul Rehman Street, Bombay-3. Grams: "TAFTANGLAS" Phone: 323329. Manufacturers of TAFTANGLASS Brand Bent and Straight Toughened Glasses for windscreens, Automobiles, Buses, Railway Coaches, Gauge Glass, etc. Phone: Res.: 453812.

**TOYS AND FANCY GOODS MANUFACTURERS AND DEALERS**

**Bright Bros. Private Ltd.**—156-A, Tardeo Road, Bombay 7.

**EBRAHIM ALLIBHOY & SONS (ESTD. 1934).**—Exporters & Stockists. 260-64, Abdul Rehman Street, Bombay 3. Phone: 325163.

**E. S. KOTHARI.**—Dealers in Toys, Games, Scooters and Fry-cycles. 61-C, Mohamedali Road, Bombay-3.

**Grand Bazar.**—25, Colaba Causeway, Bombay 1.

**HONESTY TOYS CENTRE.**—26, 1st Floor, New Cutlery Market, Bombay 2. Phone: 325818. Grams: "HONTOYCEN." Direct Importers & Exporters, Manufacturers' Representatives and Wholesale Dealers in all kinds of Toys, Games & Sports Goods, Carrom Boards, Baby Motors, Jeeps, Pedalkars, Perambulators, etc.

**Kashmir Govt. Arts Emporium.**—Sir P. M. Road, Bombay 1.

**Modern Indian Art Crafts.**—Sambava Chambers, Sir Phirozshah Mehta Road, Fort.

**New India Toys & Novelties Co.**—581, Jamshed Road, Bombay 19.

**Sanghani & Co.**—178-80, Abdul Rehman Street.

**United Stores.**—House of Toys, Kitab Mahal, 124, Hornby Road, Fort.

**TRACTORS & SPARES**

**AGRA ENGINEERING CO.**—40, Bank Street, Fort, Bombay 1. Phones: Office: 256541; Res.: 532908. Grams: "RAJSPARES." Manufacturers of Diesel and Automobile Spare Parts "ARROW" and "DISPA" liner and Pistons for Diesel Engines, "MG" Pistons for Cars, Trucks, Commercial Vehicles, Motor Cycles, Scooters and Tractors.

**Balmer Lawrie & Co., Ltd.**—5, Graham Road, Ballard Estate, Bombay 1.

**Cambata Industries Private Ltd.**—Cambata Building, 42, Queen's Road, Bombay 1.

**ELVE BUSINESS CONTACTS CORPORATION.**—Elve Chambers, Green Street, Bombay 1. Phones: 252088 & 254655. Grams: "ELBUSCON." Importers and Dealers in Spare Parts for Diesel Engines, Tractors and Automobiles.

FUEL INJECTION EQUIPMENT FOR  
TRACTORS LIKE CATERPILLAR  
FORDSON MAJOR, INTERNATIONAL  
HARVESTER, CLETRAC, FERGUSON  
ALLIS CHALMER, STEYR, ZETOR  
U.S.S.R. TRACTORS

Contact:

**HONESTY TRADING CORPORATION**

Beaumont Chambers, 27/33, Meadows St., Bombay 1

Phones: 253534-252018

Grams: "HOTRACO"

**Jayems Engineering Co.**—Warden House, Sir Phirozshah Mehta Road, Fort.

**MACHINERY SALES CORPORATION.**—5, Tamrind Lane, Fort, Bombay 1. Grams: "ENGESPARES". Phone: 254480. Stockists of Imported Spare Parts for Diesel Engineer, Tractors, Road Rollers & Spares.

**Marshall Sons & Co. (India) Ltd.**—Marshall Building, Ballard Estate, Fort, Bombay.

**STANDARD SPARES & MACHINERY CO.**—Bouna Casa, Sir Phirozshah Mehta Road, Fort, Bombay. Phone: 251192. Grams: "RINGCENTRE." Importers & Distributors of Spare Parts of Diesel Engines, Tractors and Earth moving Equipments.

**Voltas Ltd.**—19, Graham Road, Ballard Estate.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

**TRADE MARK, PATENT & DESIGN AGENTS AND CONSULTANTS**

**DEWAN RAJ KUMAR (Estd. 1942.).**—Trade Mark and Patent Attorneys, 78, Podar Chambers, Parsi Bazar Street, Fort,

Post Box No. 711, Bombay. Phone: 252044. Grams: "RAJMILAP." Poona Office: 1147/B, Shivajinagar. Phone: 57455.

**Gubbi & Co.**—Fort Chambers, Hamam Street, Fort, Bombay.

**TRANSFORMERS MFRS.**

**BAJAJ ELECTRICALS LTD.**—45-47, Veer Nariman Road, Bombay 1. Electrical Engineers, Manufacturers & Contractors. Phones: 25-3841. Grams: "SOFTLITE." Branches at Calcutta, Delhi, Madras, Kanpur, Patna, Indore, Wardha, Gauhati, Hyderabad, Jaipur, Jullunder & Bangalore.

**EMCO ELECTRICALS PVT. LTD.**—Sales Division, Ballard House, Mangalore Street, Ballard Estate, Bombay 1. Manufacturers of Transformers for Low Voltage, Lighting, Phase Conversion, Stepless Variation and for Special Purposes to Customer's own Specifications. Phone: 261222.

**FINLAY, JAMES & CO. LTD.**—Chartered Bank Bldg., Mahatma Gandhi Road, Fort, Bombay. Post Box No. 73. Phone Nos. 251255/59.

**VISHWA BHARATI TRADING CO.**—45, Mint Road, Post Box No. 1052, Bombay 1. Phones: 266371, 264555 and 263795. Grams: "VIBHACO." Branch: G.P.O. Box 2628, Calcutta 1. Phone: 336680. Manufacturers of Welding Transformers of all types.

**TRANSLATORS**

**Faustino Dias.**—Translator of Foreign Languages, 74, Lakshmi Building, Sir Phirozshah Mehta Road, Fort, Bombay.

**Oriental Languages Bureau, The.**—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**TRANSPORT (CONTRACTORS)**

**All India General Transport Corporation.**—39, Chakla Street, Bombay. **Globe Corporation.**—10, Shree Ram Market, Old Barden Gully, Vadgadi, Bombay 3.

**INLAND CARRIERS (Bombay).**—112, Sarang Street, Khokha Bazar, Bombay-3. Daily Service from Bombay to Akola, Amraoti, Nagpur, Jabalpur, Delhi (Bhilai), Katl, full load accepted any city of India. Phones: Office: 327710. Godown: 335420.

**JAI HIND ROADWAYS**

H. O. 324A, Ibrahim Rahimtoola Road,  
Pydhoni, Bombay-3

Daily Direct Services to & from Bombay to:  
GUJARAT, MYSORE, MADRAS AND  
KERALA STATES

Branch Offices: BANGALORE, MADRAS,  
COIMBATORE, MADURAI AND  
AHMEDABAD

Grams: "JAIROADS".

Phone: 334504.

**Mahalaxmi Transport (Private) Ltd.**—49 A-B, Mohamedali Road, Bombay 3.

**MANGATRAM BROS.**

25, P. D'Mello Road, Bombay 9.

Phones: 331814 and 331929 — Grams: "YATAYAT"

Public goods Transport Contractors,  
Fleet equipped with Heavy Trucks and  
special carriers such as Tractor-Trailer  
up to 40 tons for handling heavy,  
lengthy packages. Crane hirers  
for loading and unloading heavy  
articles, etc.

ALSO WEIGH-BRIDGES of 25  
and 30 Tons.



Obhan Transport Co.—Raichur Street, Bombay 9.

## RAPID TRANSPORT CO.

Carriers to leading Industrial & Oil Concerns

38, NARAYAN DHURU STREET, BOMBAY 3.

Phone :  
321868

Cable :  
RAPIDSPEED

BRANCHES : { NAGPUR, JABALPUR  
KATNI, SATNA

Regular & Prompt Service to :

Khamgaon, Akola, Amraoti, Yeotmal, Nagpur,  
Gondia, Durg (Bhilai), Raipur, Rajnandgaon,  
Dhamtari, Jabalpur, Katni, Jagdalpur, Bilaspur,  
Sambalpur, Indore, Ujjain, Ratlam, Satna,  
Bhopal, Gwalior, Rewa, Saugor, Kanpur,  
Agra, Delhi, Calcutta, etc.

FULL LOADS ACCEPTED FOR ANY CITY IN INDIA  
AT CONCESSIONAL RATES

Shantilal & Co.—364/70, Samuel Street, Vadgadi, Bombay 3.

## SHROFF TRANSPORT SERVICE

Phone : 261207

Opp.: Police Station, Palton Road, Bombay-1.

FLEET OPERATORS & TRANSPORT CONTRACTORS

Daily Parcel Service from Bombay to Akola,  
Amravati, Nagpur, Yeotmal and other places in  
Vidharbha. Full truck load to any part of Maha-  
rashtra, M. P. and Gujarat.

For touring India comfortably "House on  
Wheels" is also available.

Grams : "QUICKTRANS"

P. B. 1585, Bombay-1.

**SOUTHERN INDIA TRANSPORT SERVICE.**—Fleet Owners  
& Transport Contractors, 14, Himalaya House, Palton Road,  
Bombay 1. Phone : 261028. Grams : "SOUTRADES." Bran-  
ches : Mangalore & Bangalore. Associates all over Mysore,  
Kerala & Madras States. Daily Parcel Services to all im-  
portant places in South.

**TATANAGAR TRANSPORT CORPORATION.**—Razak Cham-  
ber, Nowroji Hill Road No. 1, Dongri Bombay 9. Daily Direct  
Service to M.P., Bihar, Orissa, West Bengal, Assam and other  
important Stations of India. H.O., 147, M. G. Road, Calcutta 7.  
Branch Manager: Shrikirshna Mittal. Phone : 334572 (Dongri),  
327133 (Bhandari Street Booking Office), 22425.

### TRAVEL AGENTS

Airfreight Private Limited.—Neville House, Nicol Road, Ballard  
Estate.

**AMERICAN EXPRESS CO., INC., THE.**—364, Dr. Dadabhoy  
Naoroji Road (P.O. Box No. 507), Bombay 1. Phones :  
25-5021/4. Grams : "AMEXCO."

## Consult ASIATIC TRAVEL SERVICE

For all your TRAVEL requirements

Travel Agents Approved by the  
GOVERNMENT OF INDIA,  
INTERNATIONAL AIR TRANSPORT  
ASSOCIATION,

and members of :—

TRAVEL AGENTS ASSOCIATION OF  
INDIA LTD., F.I.A.V. & A.S.T.A.

12, Murzban Road, Bombay 1

Tel. : 6 Lines :—26-3581-2-3, Grams : "AIRASIA"  
264978, 261074, 264117 Phones : 45366, 48580  
1/9 Connaught Circus, New Delhi. Grams : "AIRASIA"

**BALMER LAWRIE & CO., LTD.**—5, Graham Road, Ballard  
Estate, Bombay 1. Phones : 261494/5 and 265492. Tel. Address :  
"BALMER." Agents for all Principal Steamship Companies,  
Airlines, and Indian Railways.

**BATHIJA TRAVELS PRIVATE LTD.** (I.A.T.A. Approved).—  
New Silk Bazar, 491, Kalbadevi Road, Bombay 2. Phone :  
30208. Grams : "TRAVELRITA."

**BUHARIWALA & SONS, B. C.** (Estd. 1925).—5, Graham Road,  
1st Floor, Ballard Estate, Bombay 1. Phone Nos. : 265451/53.  
Grams : "BECIBESONS." Licensed Clearing, Shipping &  
Baggage Agents. Branch Office : 3/A, Asafali Road, Saraswati  
Devi Building, New Delhi. Tel. 271796.

Chunibhai Patel & Co., M.—10/12, Dr. Wilson Street, Bombay 4.

**COX & KINGS (AGENTS), LTD.**—Lloyds Bank Building,  
Dr. Dadabhoy Naoroji Road, Fort, Bombay 1. Phone  
26-3065 (5 Lines). Grams : "COXSHIP."

**EVERETT STEAMSHIP CORPORATION** (Incorporated in  
Philippines).—Fort House Annexe, 221, Dr. Dadabhoy  
Naoroji Road, Bombay 1. Phone : 264081-3 (3 lines). Grams :  
"STARLINER" & "EVORIENT." Shipowners, Brokers,  
Operators & Travel Agents.

**FREIGHT CARRIERS PRIVATE LTD.**—Clearing, Forwarding  
& Travel Agents, 43, Tamarind Lane, Fort, Bombay. Phone  
Nos. : 253401 & 253305. Grams : "QUICKFREIT."

Jamnadas & Co., N.—16, Bank Street, Fort.

Jeena & Co.—10, Veer Nariman Street, Fort.

**KANJI JADHAVJI & CO.**—Masjid Bridge, Mandvi, Bombay 9.  
Phones : 323681 & 321412. Grams : "GITA." Freight Brokers,  
Clearing, Forwarding, Shipping, Landing & Travel Agents.



PHONE :

251571  
(5 lines)

255377

12, RAMPART ROW

FORT - BOMBAY 1

## FREE SERVICE

For All Travel Arrangements  
By

AIR - RAIL - SEA

Documentation & Hotel Reservations

Special Trips and Tours Arranged

Branches: DELHI CALCUTTA MADRAS  
AHMEDABAD & GOA

Lionel Edwards Ltd.—Nicol Road, Ballard Estate, Fort, Bombay 1.  
Phones : 261241/43. Grams : "LIONWARDS"

**MERCURY TRAVELS (INDIA) PRIVATE LTD.**—70, Forbes  
Street, Rampart Row Corner, Fort, Bombay 1. Phone : 253948  
(3 lines). Head Office : Oberoi Grand Hotel, Chowringhee,  
Calcutta 13. Phone : 236051 (8 lines). Branches: Oberoi  
Imperial Hotel, New Delhi. Phone : 43001 (3 lines). Ashoka  
Hotel, Pantheon Road, Egmore, Madras, 8. Phone : 85095.  
Oberoi Palace Hotel, Srinagar, Kashmir. Phone : 1045.  
Srinagar. National Motors Building, Mirza Ismail Road,  
Jaipur. Phone : 77284. Grams : "MERCTRAVEL."



**N. JANNADAS & Co.**Phone :  
253871  
(5 lines)Travel Agents & Tour Operators  
16, BANK STREET, FORT, BOMBAY 1Recognised by :  
I.A.T.A., I.A.C., Leading Steamship Companies, Govt.  
of India

## Members :

T.A.A.I., A.S.T.A.,  
F.I.A.V., P.A.T.A.

## Branches :

6, Lyons Range,  
Calcutta 1  
Phone : 22-3264  
Hotel Metro,  
Janpath, New Delhi  
Phone : 44255

## PASSAGES BY:

AIR — RAIL — SEA

Arranging Passports, Visas,  
Exchange, Hotel Accommo-  
dation, Sightseeing, etc.Grams : "ENJAYTOURS", BOMBAY—CALCUTTA—NEW  
DELHI.New Globe Shipping Service Ltd.—Karim Chambers, Hamam Street,  
Fort.ORIENT EXPRESS CO. PRIVATE LTD., THE.—UCO Bank  
Building, 359, Dadabhoy Naoroji Road, Bombay 1. Phone :  
251047. Grams : "OREXPRESO."SODDER & CO., A. M. (Established 1889).—Oldest Custom  
House Agent, 11/1. Travel and Recruiting Agents. Agents at  
London, Marmagao. Bank Street Building, Top Floor  
(Behind State Bank of India): 11, Bank Street, Fort,  
Bombay. Post Box No. 708. Tel. Add.: "SPEEDY,"  
Bombay. Phone : 255683.Subedar & Sons.—303, Himalaya House, Hornby Road, Bombay 1.  
Thos. Cook & Sons (Continental & Overseas) Ltd.—Cooks Building,  
Hornby Road, Fort.TRADE WINGS LTD.—30, Rampart Row, Fort, Bombay 1.  
Phones : 255111 (7 lines), 256471-72 and 251477. Grams :  
"TRAVEL."TRAVELS & SHIPPING PRIVATE LTD.—Darabshaw House,  
Dougall Road, Ballard Estate, P.O. Box 1314, Bombay 1.  
Phone : 263548. Grams : "TAVELAGENT". Travel, Clear-  
ing, Forwarding & Shipping and Warehouse Agents.United Liner Agencies of India Pvt. Ltd.—Kaiser-i-Hind Bldg.,  
Currimbhoy Road, Bombay 1.VENSIMAL BASSARMAL & BROS.—521, Kalbadevi Road,  
Opp. Edward Cinema, Bombay 2. Phones : 38233 4/5, Grams :  
"VENSIMAL." Official Travel Agents recognised by the  
Ministry of Transport, Government of India, Principal  
Steamship Lines and Airlines, Indian Airlines Corporation,  
Indian Railways and International Air Transport Association.  
Branches : 9, Pagiya Patti, Bara Bazar, Calcutta 7. Phone :  
334183. Grams : "VENBASBRO."

## TRAVELLING REQUISITES

ARTISTIC LEATHERGOODS & ACCESSORIES.—Phiroz  
Building, Apollo Pier Road, Fort, Bombay 1.Cawnpore Mills Depot.—Churchgate House, Churchgate Street, Fort.  
Elgin Leatherwares Ltd.—Nawab Building, 327, Hornby Road, opp.  
Thos. Cook & Sons, Fort.Khambatta Leather Works.—199, Princess Street, Bombay 2.  
Kashmir Govt. Arts Emporium.—Sir P. M. Road, Bombay 1.PIONEER LEATHER WORKS, THE.—Sitaram Building, Craw-  
ford Market, P.O. Box No. 1950, Bombay 1. Phone : 263618.

Rallsip Stores.—39, Meadows Street, Fort.

## TUBE CLEANING EQUIPMENT AND ACCESSORIES

DATSON RAVIRAJ & CO. (PRIVATE) LTD.—43, Tamarind  
Lane, Fort. Phone : 254433. Grams : "DATNARE."AHUJA TYPE FOUNDRY.—Kothari Mansion, Opp. G.P.O.  
Bombay 1. Phone : 265530. Importers of Printing Press  
materials, Offset lithographic Sunders and Films.

## TYPE MANUFACTURERS AND DEALERS

GUJARATI TYPE FOUNDRY.—196-B, Galwadi, Girgaum,  
Bombay 4 BR. Phone : 3543321 Gram : "GUTYFO."Nirnaya Sagar Press & Jawaji Dadaji Type Foundry.—28-28, Kolbhat  
Street, Bombay 2.

## TYPE METAL

METALLICA WORKS PRIVATE LTD.—79/83, Dr. Annie Besant  
Road, Bombay 18. Phones : 315432, 315433, 315434, 311941  
& 311942. Makers of Non-Ferrous Metals, Castings, Alloys,  
Anodes, Lead lining of Acid Resisting Containers, Crucibles.

## TYPEWRITERS AND ACCESSORIES

GENERAL OFFICE EQUIPMENT COMPANY.—Anand Bhuvan,  
3rd Floor, Dr. D. Naoroji Road, Fort, Bombay 1. Phone :  
254346. Repairs and Maintenance of Typewriters and other  
Office Machines.IMANES PRIVATE LIMITED.—94, S. V. Road, Erla, P.O. Box  
8002, Bombay 56 AS. Phone : 571634. Grams : "IMANESCOL."  
Springs & Forms out of spring Wires and Strips for your  
Industry.Kerala Industries (India).—Manufacturers of Typewriter Spares,  
174, Hornby Road, Fort, Bombay.LATHAM ABERCROMBIE DIVISION FORBES FORBES  
CAMPBELL & CO., LTD.—Forbes Building, Home Street,  
Fort, Bombay 1. Phone : 268081. Grams : "LATHAM."NJCOLLS & CO.—Typewriter Experts, Typewriter Sales,  
Service & Repairs, Carbon and Ribbons. Kermani Building,  
Sir Phirozshah Mehta Road (above Macropolo's), Fort,  
Bombay. Phone : 253523.Office Appliance Corporation.—Hassan Chambers, Parsee Bazar  
Street, FortOliver Typewriter Agency.—Hassan Chambers, Parsee Bazar Street,  
Fort.Premier Typewriter Co.—235, Hornby Road, above Kemp & Co.,  
Fort.REMINGTON RAND OF INDIA LIMITED.—Manufacturers of  
Remington Rand Business Equipment. Thackersey House,  
Graham Road, Ballard Estate, Bombay. Phones : 265591-92-  
93. Grams : "REMINGTONS."SUNBEAM CO.—29, Ismail Bldg., 381, Hornby Road, Above  
Eastern Bank, Opposite Flora Fountain, Bombay-1. Dealers  
in : Everything in Typewriters. Typewriters—Bought—Sold  
—Repaired—Exchanged—Given on Hire. Phone : 251673.

Sind Typewriting Co.—242, Abdul Rehman Street.

Standard Typewriting Co.—Cama Building, 257, Hornby Road, Fort.

UNIVERSAL TYPEWRITER CO.—327, Dadabhoy Naoroji  
Road, Bombay 1. Phone : 251949. Dealers in Typewriters,  
Accessories and Spare Parts. Specialists in Repairs of all  
makes of Typewriters. Branch in New Delhi.

Voltas Limited.—19, Graham Road, Ballard Estate, Fort.

Western India Typewriter Co.—General Assurance Building, Hornby  
Road, Fort.

## TYRE DEALERS MFRS. AND RETREADERS

ARDEEC RUBBER AND AUTOMOBILE  
PRIVATE LIMITEDAva Chambers, 4 Mahatma Gandhi Road,  
Bombay 1Retreading of "Off The Road Rubber  
Tyres" for Tractors & Earth Moving Equip-  
ments by patented process of VACU-LUG  
(U.S.A. Patent) under licence.Directors: Shri A. S. Daxini } Managing  
Kumari R. D. Cama }  
Shri R. K. Malhotra } (Technical)

Phone: 243280

Cable: ARDEECAM.

HIRJI LADHA & CO.—Amir House, 245/249, Larnington Road,  
Bombay. Grams : "DHARANICO." Dealers in all kinds of  
Tyres & Tubes. Tyre Sales with Service. Retreading of Tyres  
a Speciality. Phone : 379144. Branch at: Vishnu Bhuvan,  
4631, Relief Road, Ahmedabad-1. Grams : "TYREHOUSE."  
Tel.: 23793.

## TYRE MANUFACTURERS AND DISTRIBUTORS

Bombay Garage Ltd.—Meher Building, Chowpatty, Bombay 7.

CEAT TYRES OF INDIA LTD.—Manufacturers of Tyres and  
Tubes, Registered Office & Factory: Bhandup, Bombay-78.  
Phones : 581366 (3 lines), 581153, 581744. Grams :  
"CEATYRES," Bombay. Telex No. 285 & 377.

Dunlop Rubber Co. (India) Ltd.—Dunlop House, Hughes Road.

EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.—Wavell  
House, Graham Road, Ballard Estate, Bombay. Phones :  
26-2711 (8 lines). Machine Works : Tank Road, Bombay 33  
DD. Phone : 378544-46. Offices at Madras, Calcutta, New  
Delhi, Bangalore, Secunderabad and Kanpur.



Firestone Tyre and Rubber Co. of India Ltd.—Hay Bunder Road, Sewree, Bombay.  
 Goodyear Tyre & Rubber Co. of India Ltd.—7-9, Mathew Road.  
 India Tyre & Rubber Co. (India) Ltd.—Spencer's Building, Forjett Street, Cumballa Hill, Bombay 26.  
 Mehta Motor Stores.—Banji Nivas, Sandhurst Road.  
 New Eastern Traders (India) Private Ltd.—16, Avantikabai Gokhale Street, Bombay 4.  
 Premier Rubber & Cable Industries.—Jamal Building, 211, Nagdevi Street, Bombay 3.

**TYRESOLES CONCESSIONAIRES PRIVATE LTD.**—Sayani Road, Bombay 28. Tel. 454377. H.O. Ewart House, Bruce Street, Bombay 1. Phone : 252261. Retreading and repairs of tyres of all sizes.

### UMBRELLAS, UMBRELLA PARTS MANUFACTURERS & MERCHANTS

Akbarally Ebrahimji.—38/c, Cowasji Patel Street, Fort, Bombay. Grams : "Tussibar."

Arco Agencies.—Bam House, Gunbow Street, Fort, Bombay.  
 Asiatic Umbrella Manufacturing Co.—Dev Karan Mansion, 22, Mangaldas Road, Bombay 2.

**BHARAT UMBRELLA MFG. CO.**—65, New Hanuman Lane, Bombay 2. Grams : "DHARUV." Exporters, Specialists in "Umbrella" Cloth. Phone : 39319.

**EBRAHIM CURRIM & SONS.** (Estd. 1860).—Rahim Building, Princess Street. Umbrella Merchants & Manufacturers of "STAG" Brand Umbrellas. Tel. No. 22238. Grams : "CANOPY."

Iwacom Private Ltd.—204, Dr. Dadabhai Naoroji Road, Fort, Bombay.

**J. K. & SONS.**—55-A, New Hanuman Lane (Babu Genu Road), Bombay 2. Phone : 22823. Grams : "JEKESONS." Manufacturers of "CHAKRA" Brand quality Umbrellas; Sole Agents for "MMM" Brand Umbrellas & Ribs; Wholesale Dealers & Exporters of Umbrellas and other Accessories.

**PYDHONIE UMBRELLA MART.**—421-23, Pydhonie, Bombay 4. Mfrs. and Exporters of "STAR" Brand Umbrellas Fitted with directly imported accessories. Selected by the Masses for Quality and Durability. Phone : 321624.

**RAJASTHAN TRADING CO.**—419-C, Joshi Wadi, Kalbadevi, Bombay 2. Manufacturers and Dealers in "LION Brand" Umbrellas and Spare Parts. Grams : "REPUTATION." Phone : 39653.

Ramniki Lal Harilal & Co.—86-90, Sutar Chawl, Bombay 2.

**RATILAL PAREKH & CO.**—Bombay Mutual Bldg., Sir Phirozshah Mehta Road, Bombay-1. Manufacturers of Plastic Umbrella Handles, Bangles, Novelties Art Silk Cord, Tapes, Nylon Cordage, Umbrellas and imitation Jewellery. Plastic Machinery Parts and Radio dials.

**SAIT NAGJEE PURUSHOTHAM & CO., PRIVATE LTD.**—94/96, Princess Street, Bombay 2. Phone : 30768. Grams : "LIMDA". Umbrellas, Textiles, Soaps, Glycerine & Plastic.

Senaji Sobhaji & Co.—65, New Hanuman Lane, Bombay 2.

### UNIFORMS & CLOTHING CONTRACTORS

**INDUSTRIAL CLOTHING CO.**—Makers and Contractors of Uniforms for Industrial Workers, Peons, Watchmen etc. 79, Meadows Street (2nd Floor), Fort, Bombay 1.

### UPHOLSTERY MATERIALS DEALERS

**BHOR INDUSTRIES LTD.**—Sales Department, 392, Cadell Road, Bombay 28. Phones : 451418, 451967, 451978. Grams : "COVERCLOTH." Manufacturers of "RAJA" Brand Plastic Cloth & "NATRAJ" Brand Plastic Films & Sheetings. VYNATILE Flooring Material & STEEL GRIP PVC Electrical Insulation Tape.

**CHEMISOL INDUSTRIES.**—41, Princess Street, Bombay 2. Phone : 29086. Grams : "BAYCITY." Importers and Manufacturers of Industrial Organic Chemicals, Solvents and Adhesives.

**DHARAMPUR LEATHER CLOTH CO. PVT. LTD.**—Manufacturers of heavy upholstery materials, PVC Handgloves, Industrial and Domestic type. Acid Resisting Polyester Glass Fibre Laminates—Tanks, Pipes and Fittings. 10, Chowpatty Seaface, Bombay 7. Phone : 35-5481. Grams : "PUNEM".

**GANDHI, R. & CO.**—50, Sheriff Devji Street (Chakla), Bombay 3. Wholesale Distributors of Book Binding Cloth & P.V.C. Leather Cloth. Phone : 322897.

Jafferbhai & Co.—106-108, Bhandi Bazar, P. O. Box No. 3055, Bombay 3.

**JYOTI MOTOR ACCESSORIES.**—(1) Contractor Bldg. No. 1, Opp. Prarthna Samaj, Bombay 4. (2) 138, New Charni Road, Bombay 4. (3) 342, Sardar V. P. Road, Bombay 4. Grams : "JAGJYOTI." Phone : C/o 354150. Importers & Stockists of Jagger's Bus Body Fittings, P.V.C. Leather Cloth, Upholstery Materials, Rubber Matting, etc.

Leather Cloth Processors & Printers.—Moghul Lane, Matunga, Bombay 16.

### VACUUM FLASKS & BOTTLES

**EAGLE VACUUM BOTTLE MFG. CO. PRIVATE LTD.**—Manufacturers of "Eagle Brand" Vacuum Flasks, Refills and Insulated Wares. Regd. Office : 144/146, Sheriff Devji (Chakla) Street, Bombay 3. Phones : 322075 & 322096. Grams : "EAGLEFLASK."



**SUN**  
KEEPS  
**HOT**  
\*  
**SUN**  
KEEPS  
**COLD**

### VICTORY FLASK CO. PRIVATE LTD.

208, L. J. Road, Bombay-16.

BOMBAY \* DELHI \* CALCUTTA \* MADRAS

### VACUUM CLEANING MACHINERY

Batliboi & Company Private Limited.—Regd. Office : Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR). Phones : 255451 (6 lines). Grams : "BATLIBOICO." Tele : 011-285. City Branch : "BATLIBOI HOUSE," 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches : Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate : Bangalore 2. Resident Representatives : RANCHI, BHUBANESWAR.

General Radio & Appliances Private Ltd.—16, New Queen's Road, Bombay 4.

### VACUUM EQUIPMENT

**ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LTD.**—India House, Fort Street, Bombay 1. Phone : 261658. Gram : "AIMILBOM".

### VACUUM VESSELS AND PUMPS MANUFACTURERS

**HERBERTS & GROVERS ENGINEERING CO.**—Opp. Share Bazar, Hamam Street, Fort, Bombay 1. Phone : 254836. Specialised in Vacuum pumps, Air Blowers, Reduction Gears, Flexible Couplings, Chemical pumps and Kirloskar water Pumps.

J. B. Sawant Engineering Works.—40, Old Nagordas Road, Bombay 69.



## VALUERS (MACHINERY, BUILDING &amp; LANDS)

**DINSHAW, M.H., & CO.**—105, Apollo Street, Fort, P.O. Box 448, Bombay. Gram: "AHOORAT." Phone: 251458. Managing Director: H. Dinshaw Dungor, M.I.S.E., M.M.E.A. (Ind.), A.S.E. (Lond.); Managing Partner: Dinshaw H. Dungor, M.I.S.E., M.M.E.A., A.M.I.E.T., (London), Residence: Victory Villa, Turner Road, Bandra.

## VALVES

**AGRA ENGINEERING CO.**—40, Bank Street, Fort, Bombay 1. Phones: Office: 256541; Res.: 532906. Grams: "RAJSPARES." Manufacturers of Diesel & Automobiles Spare Parts, "ARROW" & "DISPA" Liner & Pistons for Diesel Engines, "MG" Pistons for Cars, Trucks, Commercial Vehicles, Motor Cycles, Scooters & Tractors.

**CALCUTTA IRON & STEEL CO., PRIVATE LTD.**—68/D, Mohamedally Road, Bombay 3 B.R. Grams: "RIVETBOLT", Mandvi, Bombay. Phone: 322182.

**CRESCENT TRADING CO.**—48-50, Bhajipala Street, Bombay 3. Phones: 325140 & 328944. Grams: "WATERMETER." Manufacturers and Dealers, Hydraulic Test Pumps, Acid Resisting Valves & Pressure Gauges.

**William Jacks & Co., Ltd.**—Bharat House, Apollo Street, Fort.

## VEE-BELTS

**AUTO SPARES (INDIA).**—Opp. Opera House, Bombay 4. Phone: 356920.

**Batliboi & Company Private Limited.**—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (B.R.). Phones: 255451 (6 lines). Grams: BATLIBOICO. Tele: 011-284. City Branch: BATLIBOI HOUSE, 59/61, Nagdevi Cross Lane, Bombay-3 (B.R.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, BHUBANESWAR.

**Bharat Engineering Stores.**—113, Nagdevi Street, Bombay 3.

**Darvi Trading Co.**—64, Old Custom House Road, Fort.

**Edgar Handley & Co. Private Ltd.**—135, Meadows Street, Fort, Bombay.

**Greaves Cotton & Crompton Parkinson Ltd.**—1, Forbes Street, Post Box No. 1277, Bombay 1.

**Greentose Corporation (India).**—24-26, Dalal Street, Fort, Bombay. Jhala, B. T., & Co.—9, Forbes Street, Fort, Bombay 1.

**N. MOHANLAL & CO.**—Dunlop Rubber Belting, Vee Belts, hose pipes, Asbestos goods, pipes & pipe fittings, Warrior Taps & Dies Boiler Tubes and Dowdall tools. 124, Nagdevi Street, Bombay 3. Phone: 322545. Grams: "JEPIBELT."

**Paramount Textile Agency.**—54/47, Apollo Street, Fort, Bombay.

**P. RATILAL & CO.**—43, Dhanji Street, Moti Mahal, Bombay 3. Phone: 325980. Grams: "ETERNAL." Cockills' V-Belts, Blue Star V-Link Belting. Manufacturers of all types of quality Endless Belts, Cone-Drum & Variable Speed Belts, Flat Belts "GRIPIT" Chrome Leather Nylon Sandwich Belts, "UNIQUE" Tyre type Flexible Coupling.

**R. B. Ishwardas & Co.**—79, Nagdevi Cross Lane, Bombay 3.

**V. N. MEHTA.**—Lotus Chambers, 159, Narayan Dhuru Street, Bombay 3. Phone: 322858 and 173, V. P. Road, Bombay 4. Phone: 354429. Dunlop Vee-Belts, Beltings, Water, Air & Pneumatic Hoses and Adhesives.

**V. S. & Company.**—Commerce House, Block 302, 140, Meadows Street, Bombay 1.

**VIKRAM & CO.**—250, Nagdevi Street, P.O. Box No. 3266, Bombay 3 B.R. Phone: 322981. Manufacturers' Representatives, All types of Hose Fittings, Authorised Distributors for "GOODYEAR" Transmission Beltings Vee-Belts, Link Belts, Hoses, etc.

**Voltas Ltd.**—19, Graham Road, Ballard Estate, Bombay 1.

## VENETIAN BLINDS

**B. S. MOHINDAR & CO.**—45-I, Gowalia Tank Road, Bombay 26. Phone: 358615. Grams: "BIMOHINDAR."

**BAWEJA TRADING AGENCY.**—55, Abdul Rehman Street, (2nd Floor), Bombay 3. Phone: 325920. Bombay Agents for Annams Engineering Co. (Private) Ltd., Calcutta 1. Manufacturers of "ANNAMS" Venetian Blinds.

**Prafullakumar & Co.**—208, Hira Mahal, Station Road, Wadala, Bombay 31.

## VENTILATION

**INDUSTRIAL AIR CONTROL (INDIA) PRIVATE LTD.**—P. N. B. House, 2nd Floor, 59, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phone: 262475. Grams: "COOLAIR." Specialists in all Air Handling Equipments, Textile Dust and Fume Removal and Oil Spraying.

## VETERINARY INSTRUMENTS &amp; APPLIANCES

**CIRUGIA DE LUX PRIVATE LTD.**—17, Gunbow Street, Bombay 1. Phones: 263802 (Res. Phone: Mg. Director 362687). Grams: "SURGIQUIP." Specialists in the Supply of Veterinary Instruments and Appliances, Livestock Artificial Insemination and Sterility Equipment, Poultry Incubators & Brooders. Regd. Office: 24, Chowringhee Road, Calcutta 13. Branches: 1/30, Pantheon Road, Madras 8 and H/89, New Delhi South Extn., Part I, Ring Road, New Delhi 3.

## WASHERS (SHAKE PROOF) MFRS.

**FAIRFIELD MANUFACTURING COMPANY.**—Hanuman Bldg., 4th Floor, Tambakanta, Pydhonie, Bombay 3 (B.R.). Phones: 324323 & 323758. Grams: "MASTRANICOY." Manufacturers of spring washers, shake-proof washers, Circlips and Precision Strip Forms. Factory at: Masrani Estate, Halav Bridge, Kurla, Bombay 70 (AS).

## WASHING AND DYEING COMPANIES

**Band-Box.**—145, Mahatma Gandhi Road, Bombay 1.

**Comet Cleaners.**—Park House, 81, Wodehouse Road, Colaba.

**Diamond Jubilee Washing Company.**—Hamam Street, Fort.

**GARMENT CLEANING WORKS.**—The largest Power Laundry in India. 36 Branches in the City. Laundry Contractors to all leading Shipping Companies, Railways & Hotels. Head Office & Worli Factory: 37/43, Dr. Annie Besant Road, Worli, Bombay 18. Phones: 372790 & 374187. Malabar Hill Factory: 364110.

**LEACH & WEBORNY.**—Drycleaners, Dyers, Ship Contractors, Carpet Cleaning & Dyeing a Speciality. 34, Hamam House, Hamam Street, Fort, Bombay. Member of the American Institute of Laundering & British Institute of Launderers. Factory at Worli. Phones: 254100, 374374, 375644 (Factory).

**Vacuum Dry Cleaning Co.**—Elysium Mansion, Colaba Causeway.

**Vasudev Dyeing Works.**—318, Dr. Cowasji Hormusji Street, opp. Sonapur Church, near Marine Lines Railway Station, Bombay 2.

## WATCH AND CLOCK IMPORTERS AND DEALERS, MFRS.

**Bhagat & Company, L.**—Abdul Rehman Street, Bombay 3.

**BULLION WATCH CO.**—215-17, Kalbadevi Road, Bombay 2. Importers and Dealers in Watches, Clocks, Timepieces and Fancy Straps (Repairing Specialists).

**Crown Watch Co.**—Nanavati Building, 16/18, Abdul Rehman Street, Bombay 3, near Pydhonie.

**D. P. Pundole & Co.**—44, Nagdevi Street, Bombay 3.

**D. R. PUNDOLE & SONS.**—369-371, Dr. Dadabhai Naoroji Road, Fort, Bombay. Sole Manufacturers of "Beaumont" Watches and Clocks and also Agents for "Cyma" Watches and "Chemould" Picture Frames.

**EASTERN WATCH.**—231-3, Dr. Dadabhai Naoroji Road, Fort. Clocks and Watches, Electric Clocks Specialists. P.O. Box 263. Phone: 261962.

**E. M. M. GHADIALI & SONS (REGD.) ESTD. 1860.**—59, Abdul Rehman Street, Bombay 3. H.O. Ahmedabad. Importers of Watches & their parts.

**EXCELSIOR WATCH CO. PRIVATE LTD.**—64/64A, Abdul Rehman Street, P. O. Box No. 3001, Bombay 3. Grams: "EXCELWATCH." Phone: 324085. Dealers in Watches, Clocks, Timepieces, Watch Materials, Watchmaker tools, etc. Sole Distributors for well-known "RIVEX" and "SEVAK" Wall clocks.

**EXPRESS WATCH COMPANY.**—78, Abdul Rehman Street, Bombay 3. Importers, Wholesalers and Retailers of Watches, Clocks and Timepieces. Grams: "PRIMEWATCH." Phone: 325938.

**Geneva Watch Co.**—97, Abdul Rehman Street, Bombay 3. Grams: "ZEILER."

**JAMSHEDJI NOWROJI & CO. PRIVATE LTD.**—90, Abdul rehman Street, Bombay 3. Phone: 327342. Grams: "TIMEHOUSE." Manufacturers of Electrical and Non-Electrical Watch Cleaning Machines, Watch Maker's Tools, Direct Importers and Wholesalers of Watches, Clocks and Timepieces.

**Jawahir Watch Co.**—Opp. Western Rly. Station, D'Silva Road, Dadar, Bombay 14.

**Jayco Watch Co.**—Opp. Crawford Market, Oomrigar Building, Bombay 3.

**Kothari Watch Co.**—199A, Princess Street, Bombay 2.

**LAWRENCE WATCH CO.**—Empire Bldg., 150, Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 264318. Grams: "HAIRSPRING." Direct Importers of Watches, Clocks,



Timepieces, etc. Repairing is our Speciality. Approved contractors of Government and Railways.

Leon Watch Co.—20, Abdul Rehman Street.

**LOKAMANYA WATCH CO.**—26-C, Gunbow Street, Fort. Importers of Lowaco & Kisan Watches. Phone: 264378.

Lund & Blockley Ltd.—Sassoon Institute Building, 150-154, Mahatma Gandhi Road, Fort.

Maganbhai & Lalubhai.—184-186, Sheikh Memon Street, Bombay 2.

Nasar Watch Co.—320, Abdul Rehman Street, Bombay 3.

Nelson Watch Co.—43, Abdul Rehman Street, Bombay 3.

Novelties, The.—Hughes Road, Bombay.

Paskard Watch Co.—52-54, Nakhoda Street, near Pydhownie.

Parekh Watch Service.—375-77, Sandhurst Road, Bombay.

Peoples Watch Co. Private Ltd.—177, 179A, Dr. Dadabhai Naoroji Road, Fort, Bombay 1.

Pioneer Watch Co.—89, Abdul Rehman Street, Bombay 3.

Popular Watch Co.—Near Western Rly. Station, Ranade Road, Dadar, Bombay 14.

Prabhat Watch Co.—Prarthana Samaj Corner, Bombay 4.

Precision Watch Co., Private Ltd.—127, Abdul Rehman Street, Bombay 3.

**PRESIDENT WATCH & RADIO CO.**—39/41, Dhanji Street, Bombay 3 (BR). Indenting Agents for HENRI SANDOZ & FILS Watches, for India, Nepal & Sikkim.

Precious Watch.—233, Hornby Road, next to Kemp & Co., Fort.

Pundole Watch Co.—Opp. Lloyds Bank, 263, Hornby Road, Fort. Dealers in Watches, Clocks, Timepieces and Jewellery.

Rogers Watch Co.—Prospect Chambers, Hornby Road, Fort, Bombay.

**SANGHEVI WATCH CO.**—Khandelwal Bhavan, 170, Dr. Dadabhai Naoroji Road, Fort, P. O. Box 112, Bombay 1. Phone: 263738. Grams: "DICTATOR." Branch: 47, Abdul Rehman Street, Bombay 3. Phones: 322964 and 51628 (Res.). Direct Importers, Wholesalers and Retailers in Watches, Clocks and Timepieces.

Shakti Watch Co.—48, Abdul Rehman Street, Bombay 3.

**SHREE BOMBAY WATCH CO.**—160, Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 262694. Grams: "SHRIBOW." House for Reliable Watches, Clocks & Time Pieces, Straps and Jewellery. Our famous Trade Marks: Shritex, Selecta, Shriman, Sevenstars, Sundar, Sparrow, Saturn, Jalpari, Shribow Alarm, Sovereign Clocks. All kinds of Watch Repairing Undertaken.

**SWISS INDIA WATCH CO.**—(Props.: G. Bhagat & Sons), 457, Kalbadevi Road, Bombay 2. Phone: 23732. Grams: "WATCHDEPOT". Direct Importers & Wholesale Dealers in Watches, Clocks & Timepieces.

**TIME EQUIPMENT CO.**—55, Abdul Rehman Street, P.O. Box 3086, Bombay 3. Manufacturers' Representatives, Importers and Distributors of Watches, Watch parts, Watch makers Tools, Equipment, etc.

Trinity Watch Co.—46A, Abdul Rehman Street, Bombay 3.

**VOG & CO.**—Empire Building, Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 264068. Grams: "VOGSTRAPS." Manufacturers of quality Nylon Watch Straps, Bracelets in Stainless Steel & Rolled Gold & Clocks.

**WEST END WATCH CO.**—49, Mahatma Gandhi Road, P.O. Box No. 504, Bombay 1. Watch & Clock Makers, Jewellers & Silversmiths. Tel. Address: "HOROLOGY," Bombay. Phone: Office: 255644.

Wilson Watch Co.—144, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

## WATCH STRAPS & BRACELETS MANUFACTURERS

**COLLINS & CO.**—Bentex Building, Tulsiwadi, Off Tardeo Road, Bombay 34. Phones: 376196-7. Grams: "BENTEXBAND." Manufacturers of quality Watch Straps & Bracelets in Stainless Steel, Gold-plated, Leather, Nylon, Plastic etc., under the Trade Mark "BENTEX."

**DESAI TRADING CO.**—189, Abdul Rehman Street, Bombay 3. Phone: Office: 321170. Grams: "MANPRAN". Manufacturers of "ARISTO" Straps & Bracelets.

Swiss Trading Corpn.—14, Sadashiv Street, Bombay 4.

**VOG & CO.**—Empire Bldg., Dr. Dadabhai Naoroji Road, Bombay 1. Phone: 264068. Grams: "VOGSTRAPS". Manufacturers of quality Nylon Watch Straps, Bracelets in Stainless Steel & Rolled Gold & Clocks.

## WATER METERS

**C. CHAMPAKLAL & CO.**—205, Nagdevi Street, Bombay 3. Phone: 326073. Distributors for CAPSTAN Water Meters from 1" to 24" diameter. Strainer, Reflex Valves, C.I. Pipes, class B. S/s. and D/F and Sanitaryware.

**CRESCENT TRADING CO.**—48-50, Bhajipala Street, Bombay 3. Phones: 325140 & 327004. Grams: "WATERMETER." Manufacturers and Dealers, Pipes, Fittings, Boiler Mountings, Valves, Watermeters, etc.

General Tubes Private Ltd.—142/44, Nagdevi Street, Bombay-3.

**JIVRAJ & VRAJLAL.**—122, Nagdevi Street, Bombay 3. Phone: 325138 (Shop) & 30932 (Res.). Grams: "SANIPIPES."

**KAYCEE INDUSTRIES LTD.**—Agents for Hind Rectifiers Ltd. Manufacturers of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-Chemical Industries, Manufacturers of "KAYCEE" Rotary, Toggle, Heat Control and Airconditioner switches, domestic and bulk type "Kaycee" Water Meters. Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay. Phone: 263521. Grams: "TURNRITE." Branches: Delhi, Calcutta, Madras & Kanpur.

**KADAKIA TRADING CORPORATION.**—3, Bibijan Street (Nagdevi), Bombay 3. Phone: 322493. (Office) and 352344 and 352733 (Res.). Grams: "STEAMTRAP." Distributors for Water Meters—Size 1" to 2" "KAYCEE" Brand, "CAPSTAN," "AQUA-METRO REMCO" Indian, "CAPSTAN" English, "I-REMA" Czechoslovakian make. Repairing also undertaken with guarantee and satisfaction.

**KAPADVANI TRADING CORPORATION.**—61, Nagdevi Street, Bombay 3. Phone: 328165. Stockists for G.I. Pipes, Fittings, Brass, Cocks, Copper Ball Cocks, C.I. Strainers, G.M. Check Valves our Speciality Brass Cocks and Water Meters.

Richardson & Cruddas Ltd.—Byculla, Bombay 8.

Sharman Sons (Estd. 1949).—10, Nagdevi Street, Bombay 3.

**VASI SHUMS & CO. PRIVATE LTD.**—165/67, Nagdevi Street, Bombay 3. Phone: 327381. Grams: "WIREROPE." Sole Agents for Maharashtra & Gujarat States for G.P.I.F. Brand Water Meters, Microscopes and Pressure Gauges.

Voltas Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

## WATERPROOF PAPER MANUFACTURERS

Modern Waterproof Paper Mfg. Co.—109, Masjid Bunder Road, Bombay 3.

# NEPTUNE'S

## Waterproof Papers



Range of manufacture :

- ★ WATERPROOF PACKING PAPER
- ★ Waterproof Jute Lined Paper
- ★ Polythene-Lined Hessian Paper and Bags
- ★ Polythene-Lined Kraft Paper
- ★ Hessian Lined Paper
- ★ Bituminised Hessian
- ★ Waxed Paper Etc., Etc.
- ★ Roofing Felt

Enquiries Solicited

## NEPTUNE WATERPROOF MANUFACTURING CO.

Office : 11, Gola Lane, Fort, Bombay 1

Phone : 262298 Grams : "READYCASH".

Factory : 13, Kotkar Industrial Estate, Bombay 62.



## THE PACKING MATERIALS CORPORATION



**Khed Gally, Gokhale Road,  
BOMBAY 28 DD**

### Manufacturers of :

Bituminised Waterproof Papers  
Bituminised Paperlined Hessians & Bags  
Bituminised Polythenelined Hessians & Bags  
Bituminised Polythenelined Paper  
Waxed Papers

Grams : "SUNLIGHT"

Phone : 452824

**WATERPROOF PAPER MANUFACTURING CO., PRIVATE LTD.**—Alice Buildings, 339, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone : 255771. Factory : (1) Anjirwadi, Mazagon, Bombay 10. Manufacturers of all kinds of Waterproof Packing Paper in Rolls for Packing Textile Goods, Machinery, etc.

## WATERPROOFING PRODUCTS MFRS. & DEALERS

**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay. Phones : 25-2952/25-4103. Grams : "PILOTACE."

**CALCUTTA PROOFING CO.**—Chinchpokli, Cross Lane, Post Bag No. 6954, Bombay 21. Waterproofers of Cotton & Jute Canvas for use of Tarpaulins and Curtains, etc. Residence : 361169. Office : Phone : 371776. Grams : "CALPROOF."

**Daisy Trading Corporation.**—55, Commercial Chambers, Masjid Bunder Road, Post Box No. 3185, Bombay 3.

**DOSSA HARJEE.**—257-59, Masjid Bunder Road, P.O. Box No. 3209, Bombay 3. Phones : 321330 & 328570. Grams : "DOSSAHCO." Manufacturers & Suppliers of Tarpaulins, Waterproof Canvas & Gray Canvas, Filter Cloth, Jute Carpets and Linoleums.

**Dwarkadas Velji Talpatriwalla.**—36, Isaacji Street, Bombay 3.

**GLADSTONE LYALL & CO., LTD.**—21, Lansdowne Road, Apollo Bunder, Bombay 1. Phones : 212805 & 211241. Grams : "GLADSWYLL." Bombay Manager : L. N. Deefholts. Regd. Office : 4, Fairlie Place, Calcutta.

**INDOPLAST LTD.**—Kasturi Bldg., Jamshedji Tata Road, Bombay 1. Grams : "STYROPOR." Phone : 38071. Manufacturers of the dual purpose Thermocole which insulates as it waterproofs.

**Kilburn & Co. Private Ltd.**—Gresham Assurance House, 81 Phirozshah Mehta Road, Fort, Bombay 1.

**KOKJI DAMJI.**—Katha Bazar, Oos Gally (Sayed Mukri Street), Bombay-9. Phone : 321529 and 591745 (Res.). Grams : "PONYAGANGA." Manufacturers of Bituminised Moisture proof Packing Bags for Chemicals and Fertilisers.

**MORARJI PERAJ & CO., TALPATRIWALA.**—138, Yusuf Meher Ali Road (Masjid Bunder Road), Bombay 3. Phone : 322352. Grams : "TALPATRI." Manufacturers of "ELEPHANT" Brand 100 percent Waterproof Tarpaulin and Polythene and Paperlined Hessian Bags. Wholesalers Hessian Cloth, Canvas and Jute, Twine, Gunny Bags, Waterproof Paper and Eyelects etc.

**SHALIMAR TAR PRODUCTS (1935) LTD.**—16, Bank Street, Fort, Bombay 1. Phone : 254643. Grams : "TARSTIL." Manufacturers of Tarfelt, Tarmastic Roofing, Tarstill, Tarplastic and anti-corrosives, Wood preservatives, Shalikote—Cold Bonders and Lagging—Protection, etc. Contracts executed under guarantee.

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

## WAX CANDLES & WAX MANUFACTURERS

**INDIAN WAX INDUSTRIES.**—2, Shri Ram Market, Vadgadi, Bombay 3 BR. Phones : 322613 (Office); 591412 (Factory); Residence : 592612. Manufacturers, Exporters & Wholesalers of quality Candles & Wax Products. Famous Brands "IWIS" Silverlight Candles, "IWIS" Deepak & "ELEPHANT" Sealing Wax.

## WEIGHING MACHINES & SCALES MANUFACTURERS, DEALERS AND REPAIRERS

**A. M. MASTER & CO.**—179-81, Janjekar Street, Bombay 3. Phone : 326309. Manufacturers of "Horse" Brand Goldsmith's Scales & "Apollo" Brand Counter Scales and Dealers of all kinds of Scales and Weights. Stockists of Metric Weights & Measures, Salter Spring Balances & German Counter Scales and Platform Weighing machines.

**AVERY CO. OF INDIA PRIVATE LTD., THE.**—16, Dougall Road, Ballard Estate. Phones : 26-3974.5. Grams : "WEIGHING."

**D. L. VAID.**—Manufacturer, Repairer and Dealer in Scales and Metric Weights. 202, Cutlery Bazar, Bombay 3. Factory : 215/A, Maulana Azad Road, Bombay 8.

**Eastern Scales Ltd.**—Yusuf Building, Vir Nariman Street, Fort.

**Ebrahim Mulla Abdultayeb.**—69, Sarang Street, Bombay 3.

AVAILABLE

NOW

from

READY STOCK



**METRIC WEIGHTS, SCALES,  
MEASURES & DIP-ROD MEASURES**

Please Contact :

**HINDUSTAN SCALE CO.**

186-188, Janjekar Street, Bombay 3

Tel. 323183

**DIRECT IMPORTERS & STOCKISTS**

**FIDAALLY GULAMALI.**—Hardware Dealers, Weighing Machines & Scales. 163, Janjekar Street, Bombay 3. Phone : 326133. Show Room : 41, Sarang Street, Bombay 3.

**Y. M. PATHARE & CO.**—Post Box No. 1428, Bombay 1.

## WEIGHTS & MEASURES

**NATIONAL METAL INDUSTRIES.**—15-A, Parel Village Road, Parel, Bombay 12. Phone : 62400. Grams : "MANMULL." Manufacturers of Weights, Measures and Length Meters according to I. S. I. Specifications.



With our Service

## WELDED TO INDIAN INDUSTRY

Inseparably—

When it comes to welding equipment, industry thinks of *Arc Brazer*, and with good reason, too, because they supply everything in the welding line . . .

★ *Official Distributors of :*

### INDIAN OXYGEN LIMITED

For Industrial Gases, Oxy-Acetylene & Electric Arc Welding Equipment, Cutting Machines, Welding Rods, Fluxes and Electrodes

★ *Supply & Hire :*

Transformers, Air Compressors, Motor Generators, Diesel and Petrol Driven Portable Welding Sets, Argon Arc Sets complete with Accessories.



## THE ARC BRAZER

Engineers & Welding Specialists

Office : 84, Foras Rd., Bombay 8

Phone : { 378898  
374443  
374402

Grams : " ARCBRAZER "

Res. : { 379353  
374438

Works Cotton Green : 378441, 372327



**WELDERS (ELECTRIC AND GAS)**

**ALEXANDRA ENGINEERING WORKS PRIVATE LTD.**—29, Quay Street, Darukhana, Bombay 10 DD. Phone: 76359. Grams: "ALEXWORKS" (VG), Bombay. Mechanical & Structural Engineers & Contractors for all jobs of machining, forging, fitting, pressing, blacksmithy and welding.

Arc Brazer, The.—84, Foras Road, Bombay 8.

Batlilol & Company Private Limited.—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR). Phone: 255451 (6 lines). Grams: "BATLIBOICO." Tele: 011-284. City Branch: "BATLIBOI HOUSE," 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, BHUBANESWAR.

Garlick & Co.—Haines Road, Jacob Circle.

Himco (India) Private Ltd.—Kurla Road, Andheri, Bombay 41.

Masagon Mechanical Marine & Welding Works.—Dockyard Road, Masagon, Bombay 10.

New Standard Engineering Co., Ltd.—222, Bellasis Road, Byoulla, Bombay 8.

**WELDING SETS & MATERIALS MFRS., IMPORTERS & DEALERS**

ABDEALLY, B. M., & CO.—127, Sarang Street, Bombay 3. Phone: 326980. Grams: "ALERTDEAL".

ALIBHOY KADIBHOY KACHWALLA (Estd. 1922).—84, Abdul Rehman Street, Bombay 3. Phone: 326803. Grams: "BELGLASS." Direct Importers & Stockists of Genuine Welding Glass & all kinds of sheet & Plate Glass.

Arc Brazer, The.—84, Foras Road, Bombay 1.

Balmer Lawrie & Co., Ltd.—5, Graham Road, Ballard Estate, Bombay 1.

DATSON RAVIRAJ & CO. (PRIVATE) LTD.—43, Tamarind Lane, Fort, Phone: 254433. Grams: "DATNARE."

ENGINEER, ERUCH D., & CO.—Distributors for "ESAB" Sweden Welding Sets, Motor Generators and Petrol Driven Welding Sets, Crossley House, Apollo Street, Fort, Bombay. Phone: 251876. Grams: "OILENGINES."

FIDA TRADERS.—Manufacturers and Suppliers of Welding and Industrial Safety equipments Welding Helmets, Screen, Wire Brushes, All types of Gas & Electric Welding Goggles etc. Plastic Face Shields, Plastic Security Badges. (Indentity Badges) for labour, Plastic letters and Sign Boards. Dealers in Plastic Acrylic Sheets and Allied Materials. 97, Dhaboo Street, Bombay 3 (BR). Phone: 334483. Grams: "UNIGOGGLE".

FRANCIS LESLIE & CO.—105, Apollo Street, Fort, Bombay 1. Phones: 255224-65315. Manufacturers of Industrial Safety Products Goggles, Plastic Face Shields, Respirator Helmets & Productive Clothing, for ensuring safety with maximum comfort, efficiency, economy & quality.

Hindustan Engineering Co.—(Machinery Dept.), 25, Ropewalk Street, Rampart Row, Fort, Bombay 1.

INDUSTRIAL GASES LTD., THE.—Bombay. Grams: "INDUS-CASES". Head Office: P.O. Box 853, Calcutta 1. Manufacturers and Suppliers of all kinds of welding and cutting Machines and Equipment; Automobile; Resistance, Spot, Seam, Steel and Flash; Inert Gas Shielded Arc, Sub-merged arc, Cutting Machines, Blowpipes, Regulators, Acetylene Generators, Electrodes, Rods, Wires, Electrode—Holders, etc.

INDIAN OXYGEN LTD.—Ghatkopar (Bombay-Agra Road), Bombay 77-AS. Phones: 582641 (7 lines), 582648, 582649 & 582782. Grams: "INDOXCO," Ghatkopar, Suppliers of Oxy-Acetylene Welding & Cutting Equipment, Rods & Fluxes. Manual Arc Welding Transformers, Manual Arc Welding Electrodes, Manual Arc Welding Accessories, Automatic & Semi-automatic Arc Welding Equipment and Consumables.

James Finlay & Co., Ltd.—Mahatma Gandhi Road, Bombay 1.

JOSEPH LESLIE & CO.—Engineers, Welding Accessories and equipment for Gas & Electric Welding, 105, Apollo Street, Bombay 1. Phone: 251608. Grams: "LEONINE."

JEYEMS ENGINEERING CO.—Warden House, Sir Phirozshah Mehta Road, Bombay-1. Engineers, Machinery Merchants & Manufacturers' Representatives, Direct Importers of Machine Tools, Wood Working Machinery, Sheet, Metal Working Machinery, Welding Equipment, Foundry Equipment etc. Phone: 256251. Grams: "JAYEMS."

MALIK ELECTRIC WORKS.—No. 13, Victoria Road, Low Level, Reay Road, Bombay-10 DD. Manufacturers of:—House Service meters, AC and DC ARC Welders, Argonarc

Welding Equipment, Spot, Press, Projection, Seam, Butt & Hash Butt Welders From 3 to 500 KVA with Electronic Controls, Furnace Transformers, Meter Testing Equipments, Electronic Coil Testers, etc. Partners: S. K. Hari, and M. L. Hari. General Manager: V. K. S. Krishnan. Phone: Nos. 377904 and 379046. Grams: "MALIKTRIC". Branches at Madras, Calcutta and New Delhi and Kanpur.

METAL NET DEPOT.—113, Abdul Rehman Street, Bombay 3, Phone: 321618. Manufacturers of Aluminium P.V.C. & Steel Helmet, Rubber Gloves, Leather, Asbestos, Canvas and Welding Screen. All types of Welding Goggles, Respirator, Eye Protector, Electric Holders & Wire Brushes.

RADIANT ELECTRIC & MACHINERY CO.—Sir Vithaldas Chambers, Bruce Street, Bombay 1. Phone: 255296 & 370385. Grams: "RADICAL".

S. A. P. Corporation.—98, Princess Street, Bombay-2.

TRIO SALES SYNDICATE, Manufacturers of "DELTA" Arc Welding, Transformers,—Spot Welders, 3KVA Butt Welders, 12, Chakala Road, Andheri East, Bombay-69 (AS).

UNITED INDIA ENGINEERING COMPANY.—6, Commerce House, Meadows Street, Fort, Bombay. Phone: 251492. Grams: "UNICONARAM." Engineers and Machinery Dealers, Sales & Showroom: 78, Old Custom House Road, Fort, Bombay.

UNIVERSAL AGENCIES.—250, Reay Road, Opp. Railway Bridge, Bombay 10. Phone: 378957. Branch Office: 202, Commerce House, Meadows Street, Fort, Bombay 1. Phone: 254364. Works: Saki Vihar Road, Bombay 70. Manufacturers & Suppliers of Welding Transformers, Oxy-Acetylene Gas Welding Sets, Accessories and Industrial Safety Equipment, etc.

VISHWA BHARATI TRADING CO.—45, Mint Road, Post Box No. 1052, Bombay 1. Phones: 266371, 264555 and 263795. Grams: "VIBHACO." Branch: G.P.O. Box No. 2628, Calcutta 1. Phone: 336680. Mfrs. of Welding Transformers, Acetylene & Oxygen Gas Generators and Accessories.

Volta Ltd.—19, Graham Road, Ballard Estate, Bombay 1.

WELDING MATERIAL TRADERS.—48, Noor Manzil, 6th Kumbharwada, Bombay-4. Phone: 331645. Dealers in all kinds of accessories for gas and electric welding and equipment.

WHARTON, E. W., & CO., PRIVATE LTD.—Alice Buildings, 339, Dr. Dadabhai Naoroji Road, Fort, Bombay 1. Phone: 255771.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

**WELDING RECTIFIERS MFRS.**

VISHWA BHARATI TRADING CO.—45, Mint Road, Post Box No. 1052, Fort, Bombay 1. Phones: 266371, 264555 & 263795. Grams: "VIBHACO". Branches: G.P.O. Box No. 2628, Calcutta 1. Phone: 336680. Manufacturers of Welding Rectifiers of various capacities.

**WELDING SPECIALISTS**

Great Western Engineering Works.—Sea View, 1st Pasta Lane, Colaba, Bombay 5.

Hasambhoy Jetha.—Opp. Byculia Goods Depot, Parel Road, Bombay 27.

Himco (India) Private Ltd.—Kurla Road, Andheri, Bombay 41.

Jetha Welding & Construction Co.—Opp. Byculia Railway Station, Bombay.

Mehta Nanavati & Co.—Barbhai Moholla, 96, Narayan Dhuru Street, Bombay 3.

Parekh, B., & Co.—Anand Bhuvan, 1st Floor, Princess Street, Bombay 2.

Rocks Engineering and Welding Works.—Shivlal Mottial Mansion Compound, opp. Bombay Central Station, Bombay 8.

Steel Industries of Hindustan Ltd.—Magazine Street, Darukhana, Bombay 10.

Vasant Industrial and Engineering Works.—"Vasant Vijay", 470-71, Worli Road, Bombay 18.

**WINCHES**

ABDULHUSEIN PEERBHAI & SONS.—66-68A, Peerbhai Bldg., Bhandari Street, Bombay 3. Phone: 323956. Grams: "STUD-CHAIN." Stockists of Marine Stores, Chains, Wire Ropes, Chain Pulley, Block, Ship Tackles, Winches, etc.

CALCUTTA IRON & STEEL CO., PRIVATE LTD.—68/D, Mohamedally Road, Bombay 3 BR. Grams: "RIVETBOLT", Mandvi, Bombay. Phone: 322182.

ESOOFALLI ESMAILJI KARACHIWALLA & CO.—43/45, Bhandari Street, Bombay 3. Phone: 321617. Grams: "SLING." Manufactured to strict quality Control & Relevant standard



specifications all categories of hand operated winches. We specialise in the manufacture of Portable, Wall-mounting and heavy duty Double & Treble purchase crab winches from 1/2 ton to 20 tons capacity.

**HEPTOOLA NOORUDIN & CO. (Estd. 1900).**—154, Nagdevi Street, Bombay 3. Phone: 326787. Grams: "IMMUNITY." Stockists of and dealers in Marine—Mill Gin—Industrial Stores.

**WESTERN INDIA MARINE MILLS & ENGINEERS.**—185, Janjekar St., Bombay 3. Phone: 326361. Grams: "WIRE-CHAINS". Shipchandlers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Blocks Chains, Coal Tar, Coal Pitch Felts, Marine Glue, Marine, Mill and Factory Stores, Pull lefts, Pulling Lifting Maxpull.

### WINE AND SPIRIT MERCHANTS

Great Western Stores.—Standard Building, Dr. Dadabhoy Naoroji Road, Fort, Bombay.

Herbertsons, Ltd.—Ewart House, Bruce Street, Fort, Bombay.

Maneckjee Jamshedjee.—307, Frere Road, Fort.

National Stores.—Sitaram Building, Crawford Market, Bombay.

**MOHAN BROS.**—9, Ismail Building, Flora Fountain, Bombay 1. Phone: 252417. Wine & Spirit, Cigarette & Provision Imports.

**NOWROJEE ARDASEER & SONS.**—24-26, Dalal Street, Fort, Bombay. Manufacturers' Representatives, Agents and Merchants for Foreign Liquors, Provisions and Dairy Products. Sole Agents: Dewar's Whiskies and Castillon Brandies.

Oomrigar, D. C., & Co., Ltd.—Opp. Crawford Market, 354-356, Abdul Rehman Street.

**PHIPSON & CO. LTD.**—No. 1, Bakehouse Cross Lane, Fort. Telephone: 253996-7. Telegrams: "PHIPSON," Bombay.

**SHAH & CO.**—Sitaram Building, Dr. Dadabhoy Naoroji Road, Fort, Bombay-1. Phone: 264618. Grams: "KHORDADSAL." Sole Agents: Very Rare Munro's "King of Kings" Scotch Whisky in Jugs, Old Parr Scotch Whisky, "CLAYMORE," Scotch Whisky in Litre Jugs, "LONG JOHN" Scotch Whisky, Christopher Royal Wine and Governor's own Brandy.

Spencer & Co., Ltd.—Spencer's Building, Forjett Street, Bombay 26.

### WIRE BRUSHES

**DATSON RAVIRAJ & CO. (PRIVATE) LTD.**—43, Tamarind Lane, Fort, Bombay. Phone: 254433. Grams: "DATNARE."

### WIRE DRAWING MACHINES

**CAPRI ENGINEERING CO.**—296, Frere Road (Near Fort Market), Bombay 1. Phone: 266438. Grams: "CAPRIENG."

### WIRE NETTING MFRS.

## GINI CONSTRUCTION & SALES CORPORATION

Consult us on Your safety & security Problems

We are specialists in :

Fencing Compounds, Transformers PWD Specifications, Building Store Rooms in Factories R.C.C. Poles Etc., Etc.

Address : 10, Bruce Street, Bombay 1.

Phone Nos. : 257206 & 255777 (Office)  
591732 (Factory)

Sole Selling Agents for : Great India Net Industry

### WIRE PRODUCTS MANUFACTURERS & DEALERS

**A. A. MORBIWALA & CO.**—109/111, Abdul Rehman Street, Bombay 3. Phone: 323280. Grams: "VARNISH" (M.D.), Direct Importers & Stockists of Stitching Wires of all kinds.

Aisales Ltd.—9, Wallace Street, Bombay 1.

**CHUNILAL & CO.**—74, Abdul Rehman Street, opp. State Bank, Bombay 3. Phone: 326710. Grams: "HIRCHUNG1."

**DEWANCHAND HANSRAJ.**—105, Narayan Dhuru Street, Bombay 3. Phone: 324024. Grams: "CHAINGUPT." Manufacturers of Iron & Steel Wires, Wire Nails, Panel Pins, Roofing Nails, etc.

Eastern Stores & Trading Co., Ltd.—115A, Nagdevi Street.

Evergreen Corporation.—9/15, Picket Cross Road, P.O. Box No. 2738, Bombay 2. Grams: "GREENLEAVE." Phone: 22162.

Phone : 22461.

Gram : "WIREMESH", Bombay 2.

## EVERGREEN WIRECLOTH FACTORY

Head Office :

Bhabha Building, 151-55, Princess Street, Bombay 2.



Leading Manufacturers of :

Welded Wire Mesh, High Tensile Spring Steel Wire Screens, Wire Gauze, Hex. Wirenettings, Chain-link Fencing, Crimped Wire Net, Barbed Wire, Panel Pins and other Wire Products.

Factory :— Goregaon (East), Bombay 63.

Phone : 691321.

Branch:—182, Nainappa Naick Street, Madras 3.  
Phone : 32846 Grams : "WIRECLOTH", Madras 3.

Phone :

257206

Grams :

"CRIMPNET"



## GREAT INDIA NET INDUSTRY

10, Bruce Street, Bombay 1

Factory : Thana, Phone : 591732

Manufacturers of Galvanised M. S. Wire Nettings :

SQUARE, CRIMP, CHAINLINK, HEXAGONAL, HEAVY STEEL NETTING, STEEL CONVEYOR BELTS, Etc.

We also undertake Brass, Copper, M. Steel, Aluminium wire drawing work to any required gauge.

**GUEST, KEEN, WILLIAMS, LTD.**—Wakefield House, Sprott Road, Ballard Estate, Box No. 575, Bombay 1. Phone: 261302 (3 Lines). Grams: "POINTSMAN."

**HANS STEEL INDUSTRIES.**—105, Narayan Dhuru Street, Bombay 3. Phone: 324024. Grams: "CHAINGUPT." Manufacturers of Barbed Wires, Bolts & Nuts, Machine Screws, Coach Screws and Iron Rivets, etc.

**HARISCHANDRA & CO., JALIWALA.**—233, Abdul Rehman Street (Opp. Sutar Chawl), Bombay 3. Manufacturers of perforated Metal Sheets of all kinds and Stockist of Welded Mesh, expanded Metals, Wire Netting of all kinds : on Government, Railway and Municipal lists. Phone Nos. 322907 & 323161. Grams: "HARIJALI."



**HIND HARDWARE STORES.**—Pirbhoy Building, 1, Lohar Chawl, Bombay 2. Phone: 29804. Grams: "AGEKADUM." Dealers in all kinds of Wires, Brass & Copper Rods & Non-Ferrous Metals.

**HINDUSTHAN WIRE NETTING CO., PRIVATE LTD.**—Mfrs. of Wire Gauge, Hexagon Wire Netting, Galvanized Chain Link Fencing, Galvanized Stranded Stay Wires, Galvanized Signal Wires, Stranded Copper Conductors and Panel pins. Works: Agra Road, Thana. City Office: 55-57, Nagdevi Cross Lane, Bombay 3. Grams: "WIREGAUZE," Bombay. Phones: 324009 & 327430, Works: 591898, 591559, 592637, 592636.

Jayant Metal Manufacturing Co.—152, Lohar Street, Bombay 2.

Kantilal Sanghvi & Co.—Mherwan Building, Sir Phirozshah Mehta Road, Fort.

**NASH & COMPANY.**—103, Abdul Rehman Street, Bombay 3. Phone: 324968. Sheet Expanded Metal Crimped Wire Netting and Welded Mesh Fabrics and Fencing.

**NATIONAL WIRE HEALD WORKS PRIVATE LTD.**—Manufacturers of all types of Wire healds and flat healds. Regd. Office: Lakshmi Building, Block 70, 4th Floor, Sir Phirozshah Mehta Road, Fort, Bombay 1. Phones: 26-2166/67. Grams: "TROPICALS." Works: 54/56, Hill Side, Tardeo Road, Bombay 1 and Mohili, Andheri-Kurla Road, Bombay. Directors: R. B. Gotla, M. A. Hoosein, B. R. Daver, J. B. Gotla.

**NEW ERA TRADING AGENCY.**—No. 6, Chawl No. 4, Saboo Siddik Road, Behind Musafir Khana, Bombay 1. Phone: 264329. Grams: "NETACRIMP." Makers of famous "COMPASS" brand "NETA" G.I. Wirenetting in—square Mesh Hexagonal (Chicken Mesh), Crimp Net & most popular Neta chain link Fencing. Also manufacturers of Brass, Copper & Stainless Steel Wire Mesh. Also leading stockists of Swiss-Welded Mesh in Sheets & Rolls.

Parsee Trading Co.—Vithal Sayana Building No. 2, Lohar Chawl Bombay 2.

Shah & Co., Jaliwala.—"Jay Nivas," 36, Abdul Rehman Street, near Pydhonie, Corner of Sutar Bazar, Bombay 3.

**S. MEHTA & CO.**—Ancees Chambers, Carnac Road, Bombay 1. Phone: 263001. Grams: "DUTYBOUND". Industrial Wire Netting and Perforated Metals, Stainless Steel Wire Nettings, and Monel Metal Wire Nettings, Importers, Exporters and Merchants.

Tejapaul Private Ltd.—Head Office: Nagindas Chambers, 167, P. D'Mello Road, Bombay 1.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

### WIRE ROPES

**ABDULHUSEIN PEERBHAI & SONS.**—66-68-A, Peerbhai Bldg., Bhandari Street, Bombay 3. Phone: 323956. Grams: "STUDCHAIN." Stockists of Marine stores, chains, wire ropes, Chain Pulley Blocks, Ship Tackles, Winches, etc.

**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Building, 2nd Floor, Bank Street, Fort, Bombay 1. Phone: 25-2952/25-4103. Grams: "PILOTACE."

**AMRATLAL CHHAGANLAL & CO.**—143, Nagdevi Street, Bombay 3. Phone: 326008. Grams: "EKADASHI." Stockists of Wire Ropes, Pulley Blocks, Slings, Nets, Shackles, Thimbles and Clamps.

Calcutta Iron & Steel Co., Ltd.—68/D, Mohamedali Road, Bombay 3.

**EASTERN STORES & TRADING CO. (PRIVATE) LTD.**—115, Nagdevi Street, Bombay 3. Phones: 322215/16. Grams: "ENERGY."

**EASTERN TRADING & ENGINEERING CO.**—Alice Building, 3rd Floor, 339, Hornby Road, Fort, Bombay. Phone: 251659. Grams: "HIGSTEL." Manufacturers of Bright drawn Steel Bars, Rounds, Hexagons and Squares, Commercial and Free Cutting Qualities. Sole Representatives for Maharashtra & Gujarat States for: Indian Link Chains Manufacturers Ltd., Bombay. Manufacturers of "Hercules" Brand Electrically Welded Steel Chains, Hercules Mechanical Works, Bombay. Manufacturers of "Elephant" Brand Chain Pulley Blocks. Seshasayee Wire Ropes Ltd., Edathala. (Alwaye), Kerala. Manufacturers of Steel Wire Ropes.

**ELDEE WIRE ROPES PVT. LTD.**—Eldee Chambers, 3, Broach Street, Bombay-9. Grams: "ELDEEROPES." Phone Nos. Office: 321141, 32784 & 327689. Works: 581150. Manufacturers of quality Steel Wire Ropes & Stranded Wire. Works at: Lekhraj Devraj Industrial Estate, Sakl Naka, Kurla-Vihar Road, Bombay 70. Registered with D.G.S. & D. Railways & State Governments.

**ESOOFALI ESMAILJI KARACHIWALLA & CO.**—43-45, Bhandari Street, Koliwada, Bombay 3. Phone: 321617. Workshop Phone: 261261. Grams: "SLING." Shipchandlers and Stockists of: Wire Ropes, Manila Ropes, Hardware, Ship

Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chainslings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Blocks Chains, Coal Tar, Coal Pitch Felts, Marine Glue, etc. Dealers in:—Marine, Mill & Factory Stores.

**HEPTOOLA NOORUDDIN & CO. (Estd. 1900).**—154, Nagdevi Street, Bombay 3. Phone: 326787. Grams: "IMMUNITY." Stockists of and Dealers in Marine—Mill Gin—Industrial Stores.

James Finlay & Co., Ltd.—Mahatma Gandhi Road, Bombay 1.

**JIVRAJ & VRAJLAL.**—122, Nagdevi Street, Bombay 3. Phone: 325138 (Shop) & 30932 (Res.). Grams: "SANIPIES."

**KISHORE & CO.**—16, Noble Chambers, Parsi Bazar Street, Bombay 1. Grams: "FASHFAB." Phone: 256477. Stockists of "USHA MARTIN BLACK" Wire Ropes.

Modi & Modi & Co.—16, Hamam Street, Fort, Bombay 1.

Shaw Wallace & Co., Ltd.—Ballard Estate, Bombay 1.

**UNITED WIRE ROPES LIMITED.**—Regd. Office: 43, Tamarind Lane, Fort, Bombay 1. BR. Telephones: 25181/254458. Telegram Address: "HIGHTENSIL." Works: Marutikumar Road, Panchpakhadi, Thana (Maharashtra). Telephone: 59-2050/59-2403. Branches: (1) Mehta Building, 55, Canning Street, Calcutta 1. Telephone: 34-4505. Telegrams: "HIGHTENSILE." (2) 44/5, Regal Buildings, Connaught Place, New Delhi, Telephone: 48764. Manufacturers of Steel Wire Ropes used for Mining, Shipping, and General Engineering purpose in all standard sizes and constructions, galvanised and ungalvanised conforming to International/Indian Standard Specification.

**VASI SHUMS & CO. PRIVATE LTD.**—165-67, Nagdevi Street, Bombay 3. Phone: 327381. Grams: "WIREROPE."

**WESTERN INDIA MARINE MILLS & ENGINEERS.**—185, Janjikar St., Bombay-3. Phone: 326367. Grams: "WIRE-CHAINS". Shipchandlers and Stockists of Wire Ropes, Manila Ropes, Hardware, Ship Chains, Pulley Blocks, Shackles, Thimbles, Rope Clamps, Straining Screws, Hooks, Chain Slings, Wire Rope Slings, Wire Rope Nets, Chain Pulley Blocks, Pulley Blocks Chains, Coal Tar, Coal Pitch Felts, Marine Glue, Marine, Mill and Factory Stores. Pull lifts, Pulling Lifting Maxpull.

William Jacks & Co., Ltd.—Hamilton House, Graham Road, Ballard Estate.

### WIRES (ALUMINIUM, BRASS & COPPER)

**A. A. MORBIWALA & CO.**—109/111, Abdul Rehman Street, Bombay 3. Phone: 323280. Grams: "VARNISH" (MD). Direct Importers & Stockists of Stitching Wires of all kinds.

**INDIA METAL TRADERS.**—92/94, Kika Street (Gulabwadi), Bombay 4. Manufacturers of Copper Conductors, Copper Strips and bus bars, Stranded Copper Wires, binding Copper Wires, tinned Copper Wires and Aluminium Conductors. Phone: 334093. Grams: "INDTALDRAW." (GG).

**VYAS BROTHERS.**—Manufacturers of Copper Conductors, A.C.S.R. and All Aluminium Conductors, Arsonic Copper Rods, Hot Dip Tinned Copper Wires, T.C. Fuse Wires, Valves & Cocks, Non-Ferrous Castings a Speciality. 65, Tamba Kanta, Bombay 3. Phone: 325687. Grams: "CUPRO-CABLE." Factory: Bambawadi, Katargam, Surat. Phone: 3845.

### WOOD SCREWS

**ORIENT PAINT & HARDWARE MART.**—67, C. P. Tank Road, Bombay No. 4 BR. Importers, Agents, Stockists, Suppliers, Dealers in Iron, Hardware, Bolts, Nuts, Screws, Specialists in "Steel Wood Screws" Stockists of Nettlefold Screws, Rivets & G.K.W. Bolts & Nuts Agents of National Screws. Specialists in manufacturing of Hardware and Machine parts to Customers Specification, blue prints or samples. Grams: "ADHIKAR." Phone: 333768.

### WOOD WORKING TOOLS, SAWS AND MACHINERY

**ABDEALLY, B. M., & CO.**—127, Sarang Street, Bombay 3. Phone: 29990. Grams: "ALERTFEAL."

Agarwal Commercial Corporation.—35, Bibijan Street, Nagdevi Bombay 3.

Batlilol & Company Private Limited.—Regd. Office: Forbes Street, P.O. Box 190A, Fort, Bombay-1 (BR.). Phones: 255451 (6 lines). Grams: "BATLIBOICO." Tele: 011-284. City Branch: "BATLIBOI House," 59/61, Nagdevi Cross Lane, Bombay-3 (BR.). Branches: Ahmedabad, Bhopal, Calcutta, Coimbatore, Delhi, Ernakulam, Jaipur, Kanpur, Ludhiana, Madras, New Delhi, Patna, Secunderabad, Vijayawada. Associate: Bangalore 2. Resident Representatives: RANCHI, BHUBANESWAR.



**BOMBAY HARDWARE TRADERS.**—79, Narayan Dhuru Street, Masjid Bunder Road, Bombay 3. Phone Nos. 327153. Grams: "SISTACHAR." Stockists of Hardware Screws, Bolts, Nuts, Shoe Materials, Woodworking & Metal Cutting Saws, Engineering Stores & Saw Files.

**Eastern Steel Industries.**—Manufacturers of Wood Working Saws, Circular Saws, Planing Knives etc. 21B, Noble Chambers, Parsee Bazar Street, Fort, Bombay. Phone: 254476. Grams: "INVICTA."

**Elliott Waud & Hill Private Ltd.**—Lakshmi Bldg., Sir P. M. Road, Bombay 1.

**Excellent Engineering Co.**—11, Botawala Building, Elphinstone Circle, Fort.

**Hemant Tools Trading Co.**—33, Bibijan Street, Bombay 3.

**Hemco Corporation.**—308, Bazargate Street, P. B. 1645, Bombay 1.

**Jairamdas & Sons.**—163, Narain Dhuru Street, Bombay 3. Phone: 323616. Grams: "Jairamsons".

**James Tool & Hardware Co.**—109-11, Nagdevi Street, Bombay 3.

**JAYEMS ENGINEERING CO.**—Warden House, Sir Phirozshah Mehta Road, Bombay-1. Engineers, Machinery Merchants & Manufacturers & Representatives, Direct Importers of Machine Tools, Good Working Machinery, Sheet Metal Working Machinery, Welding Equipment, Foundry Equipment, etc. Phone: 256251. Grams: "JAYEMS."

**Hindustan Engineering Co.**—(Machinery Dept.), 25/31, Ropewalk Street, Fort, Bombay 1.

**Janak Engineers.**—4th Floor, Lentin Chambers, Dalal Street, Fort.

**Laxmi Engineering Stores.**—154, Kadakia Mansion, Narayan Dhuru Street, Bombay 3.

**New India Hardware Mart.**—152, Narayan Dhuru Street, Bombay 3.

**SHUBH MACHINERY CORPORATION PRIVATE LTD.**—15, Bank Street, Fort, Bombay 1. Dealers and Manufacturers of machine tools, Sheet metal and Wood working machines. Manufacturers of Rectifiers, Welding Transformers, Spot & Butt Welders, Electric Hoists, Magnetic Chucks, Vice all types, Flexible and Double Ended Grinders, Capstan Lathes.

**Sunderlal & Sons.**—11, Narayan Dhuru Cross Lane, Bombay 3.

**Thos. W. Ward (India) Ltd.**—Marshall Building, Ballard Road, Ballard Estate, Fort.

**William Jacks & Co., Ltd.**—Bharat House, Apollo Street, Fort.

### WOODWOOL

**WOOD-WOOL PRIVATE LTD.**—29, Gala Industrial Estates, Dumping Road, Mulund West, Bombay 80. Manufacturers of High graded Wood-Wool according to individual specifications. Phones: 591410, 251603.

### WOOLLEN MILLS

**Eastern Woollen Mills Ltd.**—Bhawanishanker Road, Dadar, Bombay.

**Nagpal Woollen Mills.**—Darukhana, Reay Road, Mazagaon.

**P. Parbhulal & Co. Ltd.**—Metropolitan Assurance Building, Hornby Road, Fort.

**RAYMOND WOOLLEN MILLS LTD., THE.**—Registered Office: J. K. Building, Dougall Road, Ballard Estate, Bombay 1. Mills: P. O. Jekegram, Thana (Maharashtra). Phone Nos.: Regd. Office: 263931-5, Mill Office: 591242 & 591243. Grams: "RAYOLAGRAM."

**Usha Woollen Mills, Ltd., The.**—Bhawanishanker Road, Dadar.

### WOOLLEN PIECE-GOODS

**Beardsell, W. A., & Co., Ltd.**—15-16, Sir Phirozshah Mehta Road, Fort.

**Cawnpore Mills Depot.**—Churchgate House, Churchgate Street, Fort.

**Grand Bazar.**—25, Colaba Causeway, Bombay 1.

**Jivral, A. M., & Co.**—171, Khoja Moholla, Bombay 9.

**Kanshi Ram Kidar Nath.**—Vulcan Insurance Bldg., Veer Nariman Road, Bombay 1.

**Madhusudan Gordhandas & Co.**—Ganeswadi, Mulji Jetha Market, P.O. Box 2110, Bombay 2.

**P. Prabhulal & Co., Ltd.**—Whiteaway Laidlaw Building, Hornby Road, Fort.

**Reoshanalli D. Nassur & Co.**—68-72, Champagalli.

**Sampat Store.**—22-30, Swadeshi Market, Kalbadevi Road.

**Sharafally Lookmanji & Sons (Estd. 1893).**—H.O. Chakla Street, Bombay 3.

**Yacoub Ahmed Brothers.**—Topiwalla Mansion, Mahomedally Road.

### WORKSHOP MACHINERY

**AMIRUDIN SHALEBHOY TYEBJEE & SONS.**—Shale Bldg., 2nd Floor, Bank Street, Fort, Bombay. Phone: 25-2952/25-4103. Grams: "PILOTACE."

**CAPRI ENGINEERING CO.**—296, Frere Road (near Fort Market), Bombay 1. Phone: 266438. Grams: "CAPRIENG." Everest Engineering Corporation.—12, Hornby View Bldg., Gunbow Street, Fort.

**Hindustan Engineering Co.**—(Machinery Dept.), 25/31, Ropewalk Street, Fort, Bombay 1. Telephone: 253583. Grams: "VIDOO-ALL."

**INTERSTATE ENGINEERING COMPANY.**—132, Meadows Street, Fort, Bombay 1. Phone: 256469. Grams: "ANEKANT". Importers, Exporters and Stockists of Machine Tools, Sheet Metals, & Workshop Machines, Pneumatic Tools, Rock Drills, Die Filers (U.S.A. make) Automobile (Boring Bar Machine etc.) and other machineries.

**Khimandas Jagumal & Sons.**—12, Hornby View Building, Gunbow Street, Bombay 1.

**MALHOTRA TRADING CORPORATION.**—Basement 4, Commerce House, Meadows Street, Bombay 1. Phone: 256328. Grams: "LOHVASTU." Dealers in Lathes, Shapers, Milling Machines, Drill Machines, Hand Presses, Power Presses, Printing and Paper Cutting Machines, Electric Motors, Switches, Starters, Grinders, Polishing Lathes, Reversible Switches, True Chucks, Dog Chucks, other Machine Tools & Spares of all description.

**Oriental Engineering Co.**—25, Forbes Street, Fort, Bombay 1. Phone: 253057. Grams: "ADIVISHNU."

**William Jacks & Co., Ltd.**—Hamilton House, Graham Road, Ballard Estate.

**Workshop Engineering & Equipment Co.**—30/32, Bhajipala Lane, Bombay 3.

### X-RAY & ACCESSORIES

**ILFORD-SELO (INDIA) PRIVATE LIMITED.**—Cook's Building, Dr. Dadabhai Naoroji Road, Branches: Calcutta, Madras.

### X-RAY AND ELECTRO-MEDICAL EQUIPMENT

**Fairdeal Corporation Ltd., The.**—Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

**Forbes, Forbes Campbell & Co. Private Ltd.**—Forbes Building, Home Street, Fort.

**Gordhandas Desai Private Ltd.**—Kermani Bldg., Sir P. M. Road, Bombay 1.

**SHAH & CO., M.**—Kanji Mansion, Sandhurst Road, Bombay 4. Phone: 351834.

### X-RAY MACHINERY IMPORTERS

**General Radio & Appliances, Ltd. (Formerly Fazalbhoy Ltd.).**—16, New Queen's Road, Bombay 4.

**Gordhandas Desai Private Ltd.**—Kermani Bldg., Sir P. M. Road, Bombay 1.

### YARN MERCHANTS & EXPORTERS

**Allied Exporters.**—Kummud House, 267, Hornby Road, Fort. Amritlal Hiralal & Co.—2nd Floor, Mahakali Chawl, Pydhonie, Bombay 3.

**Arthur Import Export Co.**—166, Hornby Road, Fort, Bombay.

**Asahi Chemical Distributing Company.**—National Insurance Building, 1st Floor, 27, Bastion Road, Fort, Bombay.

**Beardsell & Co., Ltd., W. A.**—15/16, Sir Phirozshah Mehta Road, Fort.

**Eastern Trading Co.**—Mahakali Chawl, Pydhonie, Bombay 3.

**Firoz Trading Co. Ltd.**—Kamar Building, Cawasji Patel Street, Fort.

**Gorakhram Gokulchand (Estd. 1891).**—Chokel Chambers, Zaveri Bazar, Bombay 2.

**Gore & Co.**—Great Social Building, Sir Phirozshah Mehta Road, Fort.

**Gurdial Naraindass & Co.**—Patel Building, New Silk Bazar, Bombay 2.

**Hazarat & Co.**—Warden House, Sir Phirozshah Mehta Road, Fort.

**Hemandas Dolumal.**—56/A, Abdul Rehman St., 1st Floor, Bombay 3.

**Herbertsons Ltd.**—11/12, Elphinstone Circle, Fort.

**Hindersingh & Co.**—36, Abdul Rehman Street, Bombay 3.

**Hind Trading Co.**—Alli Chambers, Tamarind Lane, Fort.

**Hindustan Export & Import Corp. Ltd.**—Albert Building, Hornby Road, Fort.

**Italindia Cotton Co., Ltd.**—(Estd. 1922), Indian Globe Chambers, Fort Street, Fort, Bombay.

**Jayashanker Nathalal & Co.**—5, Alli Chambers, Tamarind Lane, Fort.

**Jehangir J. M. Poonjiajee.**—Byramjee Mansion, Sir Phirozshah Mehta Road, Fort.

**Kanshi Ram Kidar Nath.**—Vulcan Insurance Building, Churchgate Street, Bombay.

**Kapadia Trading Co.**—Botawalla Building, New Silk Bazar, Kalbadevi Road, Bombay 2.



Kavarana, E. F., & Co.—Botawala Building, Bomanji Master Road, Bombay 2.

Keshavlji Virji & Co.—8, Elphinstone Circle, Fort.

**KESHAVAL TALAKCHAND (PRIVATE) LTD.**—India House, Opp. G.P.O., Fort, Bombay 1. Phone: 262934. Grams: "CHANDRODAY." Branches at Ahmedabad, Sholapur, Coimbatore and Madras.

Kishinchand & Co. (India).—138, Hornby Road, Fort.

Kotak & Co.—Menkwa Building, Outram Road, Fort.

Kros & Co.—Podar Chambers, Parsi Bazar Street, Fort.

K. Motilal & Co.—Sayee Building, 143, Princess Street, Bombay 2.

Latham Abercrombie & Co. Private Ltd.—Forbes Building, Home Street, Fort.

Mehta & Co., P. N.—Cook's Building, 324, Hornby Road, Fort.

Maganlal Parbhudas.—Nakhoda Street, Pydhonie.

Manekji & Co.—17, Gunbow Street, Fort.

Manubhai Gokaldas.—39, Old Vora Mala, Tambakanta, Bombay 3.

Morariji Velji & Sons.—7, Kolbhat Street, Post Box 2001, Bombay.

Pannalal Ramdayal Chindak.—153, Princess Street, Bombay 2.

Pavri Sons & Co.—93/97, Basargate Street, Fort.

Pestonjee, B. N.—Halcyon Lodge, Vaccha Gandhi Road, New Gamdevi, Bombay 7.

Podar Trading Co., Ltd.—Podar Chambers, Parsi Bazar Street, Fort.

Pralhadbhai Nagarbhai.—386, Linking Road, Khar, Bombay 21.

Ramdas Khimji Bros.—Warden House, Sir Phirozshah Mehta Road, Fort.

Ramkisanadas Sagarmal.—Kalyan Bhuvan, 354, Kalbadevi Road.

Rangoonwalla, H. N.—Rangoonwalla Building, 91, Mohammedally Road.

Ratilal Dahyabhai Shah.—Hanuman Building, Tambakanta, Pydhonie, Bombay 3.

Sapt Textile Products (India) Ltd.—Sapt Building, Graham Road, Ballard Estate.

Shah Bros. & Co.—Raja Bahadur Compound, 24/B, Hamam Street, Fort, Bombay.

**SOBHARAJ PRITAMDAS.**—54, Abdul Rehman Street, Bombay 3. Phones: 323567 & 60499 (Res.). Grams: "DESIYARN." Dealers in all types of Yarns such as Cotton Yarns, Sewing & Embroidered Threads, Art Silk Yarns, Staple Fibre Yarns and Synthetic Yarns, Hosiery Yarns a Speciality.

Sorabji Nowroji & Co.—16, Horniman Circle, Fort.

Sushin & Co.—65, Lakshmi Building, Sir Phirozshah Mehta Road, Fort.

Surat Yarn Exchange Co.—141, Princess Street, Bombay 2.

Tavaria Brothers.—Dhun Nur, Sir Phirozshah Mehta Road, Fort.

Textile Works Ltd.—49-55, Apollo Street, Fort.

Vadilal Vrajilal & Co.—Peerbhoy Building No. 2, 89, Princess Street, Bombay 2.

Yacoob Ahmed Brothers.—Topiwala Mansion, Mohamedally Road.

Yarn Trading Co.—95, Tamba Kanta, Bombay 3.

## ZINC CHLORIDE

**VORA TRADING CO.**—357-A, Samuel Street, Vakil Bldg., Vadgadi, Bombay 3. Phone: 325289. Grams: "MULTI-SALES". Bombay, Mandvi.

## ZIP FASTENER MFRS.

**FLEET FASTENERS (PRIVATE) LTD.**—"Delstar", 1st Floor, 9-9A Hughes Road, Bombay 26 WB. Phone: 74425. Grams: "FLEETFAST". Manufacturers of FLEET—the Quality Zipper.

**HOME INDUSTRIES CORPORATION.**—64, Commercial Chambers, Masjid Bunder Road, Bombay 3. Phone: 34997.

**L. R. TRADING CO.**—Manufacturers of 'FLASH' & 'BEST' Zip Fasteners, Navsari Chambers, Outram Road, Fort, Bombay 1. P.O. Box 72. Phones: 263141 & 264073. Grams: "SHAHANICO."

**MADHU FASTENERS CO.**—(Member of Madhu Group of Industries). Manufacturers of Zip Fasteners, Brass & Aluminium Strips. Sole Distributors: Madhu Corporation, Sanghavi Chambers, 27, Ghoga Street, Fort, Bombay 1. Phones: 253502 (Office) & 357336 (Res.). Grams: "VIR-VANDAN" & "MADHUCORP." Factories at: 250, D, Worli, "Udyog Bhavan," Bombay 18. Phone: 454519 and Udyog-nagar, Bhaktinagar Station Road, Rajkot (Saurashtra), Phones: 201 & 943. Proprietors: M. K. Sanghavi; Madhu Sanghavi.

## POONA DISTRICT TRADES & PROFESSIONS

Abubhai Ibrahim.—368, Nana Peth, Poona-2.

Africa Drug House.—Laxmi Road, Poona-2.

Agarwal & Co.—775, Ganesh Peth, Poona-2.

Agarwal Cloth Stores.—130/131, New Bazar, Kirkee.

All India Motor Transport Co.—63, Nana Peth, Poona-2.

Allied Electronics Ltd.—2435/2, East Street, Poona-1.

Anand Cloth Stores.—9-B, Budhwar Peth, Poona-2.

Bakre & Co.—204, Mangalwar Peth, Poona-2.

Buldota & Co.—391, Raviwar Peth, Poona-2.

Bhagade & Co.—3, Ganesh Peth, Poona.

Bombay Garage (Poona) Private Ltd.—East Street, Poona-1.

### BUCKAU WOLF NEW INDIA ENGINEERING WORKS

Manufacturers of Sugar Mill Machinery; Regd. Office: 72,

Medows Street, Bombay-1; Poona Office & Works:

Pimpri, Poona-18; Phone: 88265, Grams: "DEVCORP".

Chandrakant & Co.—990/2, Shukrawar Peth, Poona-2.

Cresswell & Co.—5, Elphinstone Road, Poona-1.

Dhanji Harji & Co.—110, Nana Peth, Poona-2.

### FORMICA INDIA LTD.,

H.O. & Factory: P.O. Box 64, Poona.

Mfrs. of FORMICA decorative and Industrial Laminates.

Hindustan Sheet Metal Works.—602, Sadashiv Peth, Poona-2.

"FINOLEX" Household & Automobile Cables

Manufacturers of:

### INDIAN CABLE INDUSTRIES,

Bombay Poona Road, Pimpri, Poona-18.

"JAVAHAR" Standard Diesel Engines and Pumping Sets

• 6 BHP • 1500 RPM • Four Stroke • Water Cooled

• Best for Agriculture.

Manufacturers:

### JAVAHAR ENGINEERS PRIVATE LTD.,

Shrirampur, Distt. Ahmednagar

(Maharashtra)



Flux Cored Solder Wires and Solder Sticks

Manufactured By

**KHOSLA ENGINEERING PVT. LTD.**

Poona-3.

Sole Agents:

Bhupendrakumar & Co.  
65, Apollo St., Bombay-1.

Phone:  
251939.

Grams:  
"BHUPENKO"



---

**KIRLOSKAR  
OIL ENGINES LTD.,**

Office & Factory, Elphinstone Road,  
Kirkee, Poona-3.

Phones: 57346, 57347 & 57348

Grams: "KOEL"—Poona.

Manufacturers of High Speed Diesel Engines and  
Thinwalled Bearings.

---

Mavjibhai & Co.—534, Raviwar Peth, Poona-2.

---



---

**N. MEHTA & CO.,**

648, Shukrawar Peth, Poona-2.

Phone: 25331, 25332.

Electrical & Machinery Dealers.

Branches:

Bhavani Peth, Satara, Shahganj, Aurangabad.

---

*Manufacturers of :*

**FRP RODS, TUBES, SHEETS,  
TRAYS, TANKS and STRUCTURAL  
MOULDINGS**

Fibreglass Reinforced Polyester Sheets.

Decorative & Colourful for Roof-lighting,  
Window Panelling, Partitioning,  
Furniture, etc.

*Contact Sole Distributors :*

**NAVALAKHA AGENCIES**

1379, Bhawanipeth, Poona-2

Phone : 22821

Grams : "FREBEAN"

---



---

**PEST CONTROL (INDIA) PVT. LTD.,**

Consulting Entomologists, Termite Control, Disinfestation,  
Fumigation Service, Attan Bldg., Chinchwad P.O.;  
Bombay, Poona Road, Poona-19; Head Office, Yusuf  
Bldg., Mahatma Gandhi Road, Bombay-1; (For further  
details please see Bombay Commercial Firms Section).

---

Oriental Metal Pressing Works Ltd.—780/2, S' Nagar, Poona-4.

---

**SATHE BISCUIT &  
CHOCOLATE CO. LTD.,**

Poona-2.

Manufacturers of  
Chocolate & Biscuits

---



---

**SUDARSHAN CHEMICAL INDUSTRIES  
PRIVATE LTD.,**

27, Shankarshet Road, Poona-9

Manufacturers of Organic & Inorganic Pigments  
Sole Selling Agents: Rath Brothers

A. 27, Shankarshet Road, Poona-9.

B. 7-A, Elgin Road, Calcutta-20.

C. 5619, Basant Road, Paharganj, New Delhi-1.

D. Neelkanth, 98, Marine Lines, Bombay-2.

E. 22, Royappa High Road, Madras-14.

---



---

**SEEMCO BALL BEARING  
CORPORATION,**

4, East Street, Cawas Villa, Camp-Poona-1.

Phone: 25418

Dealers in Ball, Bearings for Industrial & Automobile  
Purposes.

Authorised Distributors of 'SKF'—'BBL' Bearings &  
Pioneer Oil Seals.

---



---

**TOM & BAY (Advertising) PRIVATE LTD.,**

Regd. Office: Joshi Estates, 658, J. M. Road, Poona-4;

Grams: "ALAMODE" Phone: 54221/22; Managing

Director: Mr. G. V. Tambe.

Branch Office: Krishna Nivas, 281, Frere Road, Bombay-1

(BR); Phone: 265566; Chief Executive: Mr. D. K. Sonalkar.

---

**TOM & BAY (Advertising) PRIVATE LTD.—Regd. Office:**  
Joshi Estate, 658, J. M. Road, Poona-4; Grams:  
"ALAMODE". Phone: 54221/22; Managing Director:  
Mr. G. V. Tambe; Branch Office: Krishna Nivas, 281, Frere  
Road, Bombay-1 (BR), Phone: 265566; Chief Executive:  
Mr. D. K. Sonalkar.

---



---

**UNITED HOSIERY WORKS,**

Poona-2.

'Pioneers in India'

In the Manufacture of 'DOUBLE LOCK' underwears, soft-  
absorbent-durable keep shape.

---



---

**"WEIKFIELD" — Supra Harmless Food  
Colours, Tartrazine WP, Ponceau WPU4,  
Carmoisine WP etc, and WEPCOL Permitted  
Harmless Food Colours Mixtures**

ZX Series in 11 Colours

XXX Series in 3 Colours

Manufactured for the first time in India Strictly con-  
firming to prevention of Food Adulteration Rules  
Available in 500 Grms and 125 Grms Sealed Tins.  
Write for Particulars :—

**WEIKFIELD PRODUCTS CO.  
(INDIA), UNIT 4,  
Weikfield Estate, Poona-14, India**

---



## MYSORE TRADES & PROFESSIONS

A.C.E.C. (India) Private Ltd., Shoukat Bldg., Silver Jubilee Park Road, Bangalore 2.  
 Addison & Co. Ltd., 24, St. Mark's Road, Bangalore 1.  
 Advani & Co. Private Ltd., J. B., Silver Jubilee Park Road, Bangalore 2.  
 Ahmedally & Co., A., Sri Narasimharaja Road, Bangalore.  
 Airflow Transports Private Ltd., 28, St. Mark's Road, Bangalore 1.  
 All India General Transport Corp., 217/9, Albert Victor Road, Bangalore.  
 All India Sewing Machine Co., 20, S. J. Park Road, Bangalore 2.  
 Allied Machinery and General Supplies, 88, Sadar Patrappe Road, Bangalore 2.  
 Alfa Industries, Sri Shallam, Vedanta Mandir Road, Jayanagar, Bangalore.  
 Amco Batteries Ltd., Mysore Road, Bangalore.  
 American Radio Co., Narasimharaja Road, Bangalore 2.  
 A. R. Khaleel & Sons, 743, Chickpet, Bangalore 2.  
 Aromatik (India), 3-A, Seshadri Road, Bangalore 9.  
 Aruna Agarbatti Co., 5, Ekambara Sathuji Lane, Chickpet, Bangalore 2.  
 Arvind Corporation, Aroot House, 5th Main Road, Malleswaram, Bangalore 3.  
 Ashoka Industrial Co-operative Society Ltd., Kalkondanahalli, Bangalore 6.  
 Ashwini Electric Co., No. 8, Uttaradhi Mutt Street, Chickpet, Bangalore 2.  
 Asian Oil & Paint Co. (India) Ltd., 18-B, Godown Street, X Lane, Bangalore 2.  
 Asoka Electric Corp., Chickpet, Bangalore 2.  
 Asoka Elec. & Engg. Co., Brigade Road, Civil Area, Bangalore 1.  
 Asoka Trading Co., 57, Cottonpet, Bangalore 2.  
 Associated Electrical Industries (India) Private Ltd., Sri Narasimharaja Road, Bangalore 2.  
 Associated Printers (Madras) P. Ltd., Gandhi Road, Bangalore 1.  
 Auto & Bearing Co., D-28, 5th Main Road, Bangalore 9.  
 Auto Associates, 20-D, Mahatma Gandhi Road, Bangalore 1.  
 Automatic Telephone & Radio Co. of India P. Ltd., 53-A, Richmond Road, Bangalore 2.  
 Avery Co. of India Private Ltd., Ramakrishna Bldgs., No. 1, Narasimharaja Road, Bangalore 2.  
 Balaji Agarbatti Co., Arcot Srinivasachar Street, Bangalore.  
 Bandy Bros., 78, Commercial Street, Bangalore 1.  
 Bangalore Chemical Mfg. Co. Ltd., Malleswaram, Bangalore 3.  
 Bangalore Dress Mfg. Co., 12, Lalbagh Road, Bangalore.  
 Bangalore Enamels, Chemicals & Paints Ltd., West End Road, Bangalore.  
 Bangalore Trading Co., 44, Old Tharagupet, Bangalore 2.  
 Bangalore Traders, Kalasipalyam Main Road, Bangalore 2.  
 Barton, Son & Co. Ltd., Mahatma Gandhi Road, Bangalore.  
 Batlibol Private Ltd., Post Box No. 538, Bangalore 2.  
 Bengal Electricals Co., Malleswaram P.O., Bangalore 3.  
 Bharani Agencies, P. Box 1023, Malleswaram, Bangalore 3.  
 Bharath Agencies, 18-A, Sri Jayachamarajendra Road, Bangalore 2.  
 Bharat Automobiles, 1/4, Narasimharaja Road, Bangalore 2.  
 Bharat Industries, F-19, Old Tharagupet, Bangalore 2.  
 Bharat Machine Tools, 5, Residency Road, Bangalore 25.  
 Bharat Steel & Metal Industries, 41, Kemmangudi Road, Bangalore 2.  
 Blackstone Tyre Retreaders, B-51, Vani Vilas Institute Road, Kalasipalyam, Bangalore 2.  
**BLUNDELL EOMITE PAINTS LTD.**—Southern Sales Division, 91, Jayachamarajendra Road, Bangalore-2. Phone: 28871. Grams: "BLUMPAINTS."  
 Bombay Auto and Radio Stores, 50, Sri Narasimharaja Road, Bangalore.  
 Bombay Automobiles, 26, S. Jubilee Park Road, Bangalore 2.  
 Brahmayya & Co., Sugar Co. Bldg., Sri Jayachamarajendra Road, Bangalore 2.  
 Burmah-Shell Oil Storage & Distributing Co. of India Ltd., Sankey Road, High Grounds, Bangalore 1.  
 Capital Cycle and Motor Company, Sri Narasimharaja Road, Bangalore.  
 Cement Marketing Co. of India Ltd., Sugar Company Building (near Town Hall), Sri Jayachamaraja Wadiyar Road, Bangalore City.  
 Champion Radio Co., Brigade Road, Bangalore.  
 Chamundi Metal Industries, 80, Industrial Area, Yeshwantpur, Bangalore 22.  
 Chandiram Bros., Raja Market, Chickpet, Bangalore 2.  
 Cheemas Engineering Industries, 10/1, Berlie St. Cross, Langford Town, Bangalore 1.  
 Chicago Telephone & Radio Co. Ltd., 2, Narasimharaja Road, Bangalore 2.  
 City Implement Works, Kote Manjappa Street, Ulsoor Gate, Bangalore 2.  
 Commercial Hardware Co., 21, Old Poor House Road, Bangalore.  
 Consolidated Electric Industries, No. 29, Sri Narasimharaja Road, Bangalore City.  
 Crompton Engineering Co. (Madras) Ltd., Post Box 651, Bangalore 2.  
 Diesel (India), Lalbagh Road, Bangalore 2.

Desi Soap and Ink Works, Sampangi Tank Road, Bangalore.  
 Devidayal Private Ltd., 5, Race Course Road, Bangalore 1.  
 Dhondusa Dhaktappa & Brothers, S., Subedar Chatram Road, Bangalore 2.  
 Dunlop Rubber Co. (India) Ltd., 24, Mahatma Gandhi Road, Bangalore 1.  
 Eastern Agencies, 24, Narasimharaja Road, Bangalore 2.  
 Easwar & Co., A. B., 40, Silver Jubilee Park Road, Bangalore 2.  
 Efficient Publicities Ltd., 436, Middle School Road, Visvevarapuram, Bangalore 4.  
 E. G. K. & Sons, Mahatma Gandhi Road, Bangalore 1.  
 Electronic Corporation of India, 2-F, M. Gandhi Road, Bangalore 1.  
 Fabrikote Corporation, 281/1, V. Main Road, Malleswaram, Bangalore 3.  
 Famous Radio Co., S. J. Park Road, Bangalore 2.

"FEATHERLITE"  
 Aluminium Furniture  
 Elegant — Durable — Portable  
 Manufacturers:

### FEATHERLITE CORPORATION

(Props.: Ramnarayan Chellaram & Co.)

136, Mysore Road,  
 Bangalore-26.

Phone: 29028.

Grams: "RAMGIR".

Firebricks & Potteries Private Ltd., Yesvanthapur P.O., Bangalore.  
 Firestone Tyre and Rubber Co. of India Ltd., 1 A, Sydney Road, Bangalore.  
 Forster & Co., J. B., 15, St. Mark's Road, Bangalore 1.  
 Fraser & Ross, 2, Mahatma Gandhi Road, Bangalore 1.  
 Furtado & Sons, B. X., Sri Krishna Buildings, Avenue Road, Bangalore.  
 Gannon Dunkerley & Co. Ltd., 157, Sri Narasimharaja Road, Bangalore.  
 Gaura Corporation, St. Mary's Building, 5, Residency Road, Bangalore 1.  
 General Electric Company of India, Ltd., 5, Mahatma Gandhi Road, Bangalore.

GRAMS: "GENERAL"

Phones: 71366, 72161.

### GENERAL INDUSTRIAL AGENCIES

Qualified Mechanical Engineers, Automobile Specialists.  
 Sri Jayachamaraja Wadiyar Road, Bangalore-2.

Stockists:—Spares for Kew Dodge—Kew Fargo—Leyland Trucks & Diesel Road Rollers.

General Radio & Appliances Co. Ltd., S. J. Park Road, Bangalore 2.  
 George Oakes P. Ltd., Sri Narasimharaja Square, Bangalore 1.  
 Glenand Products, Mahatma Gandhi Road, Bangalore 1.  
 Goodyear Tyre and Rubber Co., of India Private Ltd., 13-15, Jayachamarajendra Road, Bangalore 2.  
 Karnatak Tin Factory, 102/28, Block No. 4, Rajajinagar, Bangalore 10.

### HINDUSTAN MACHINE TOOLS LTD.

Registered Office:

H.M.T. P.O., Bangalore-31.

Telephones: 25134-39/75131-38.

Grams: "HINDTOOLS" — Telex No. 043 211.

Delhi Office: "Jeevan Tara" Building,  
 Parliament Street, New Delhi-1.

**Chairman:** K. B. MATHUR, C-83 South Extension II, New Delhi; **Managing Director:** S. M. PATIL, HMT, Bangalore-31, Phone: 23738; **Factories:** I & II, Bangalore-31 (Mysore), Phones: 25134-39/75131-38, Grams: "HINDTOOLS", Telex No. 043 211, III Pinjore (Punjab), Phones: 1044-1045, Grams: "HINDTOOLS"; IV Kalamassery (Kerala), Phones: 3420-3454, Grams: "HINDTOOLS"; V Hyderabad (Andhra Pradesh), Phones: 72011-72014, Grams: HINDTOOLS; Telex No. 015 211; **WATCH FACTORY:** Bangalore (Mysore), Phones: 25134-39/75131-38, Grams: "HINDTOOLS", Telex No. 043 211. **SHOWROOMS:** New Delhi, Jeevan Tara Buildings, Parliament Street, 1. Phone: 47594, Grams: "HINDTOOLS"; Bombay: 9/9A, Hughes Road-26, Phones: 357960, Grams: "HINDMASHIN"; Calcutta: 31, Chowringhee Road-16; Phone, 23-6625, Grams: "HINDMASHIN"; Madras: 158, Mount Road-2; Phone: 86228, Grams: HINDMASHIN.



Higginbothams Ltd., Mahatma Gandhi Road, Bangalore 1.  
 Hind Industrial & Mercantile Corporation Private Ltd. 50-51, Silver Jubilee Park Road, Bangalore 2.  
 Hind Mercantile Corpn. Ltd., Ruthandale, 4, Brunton Road, Bangalore 1.  
 Hindustan Automobiles Co., 5, Ramakrishna Bldg., Narasimharaja Road, Bangalore 2.  
 Hindustan Dealers Ltd., Kempegowda Road, Bangalore 2.  
 Hindustan Hotel, 35, Dickenson Road, Bangalore 1.  
 Hindustan Transports Ltd., 5, Mangapathi Muniyappa Lane, Silver Jubilee Park Road, Bangalore.  
 Hotel Ambassador, 5, Crescent Road, Bangalore 1.  
 Hotel Embassy, 2, Infantry Road, Bangalore 1.  
 Ibeon P. Ltd., George Oakes Bldg., 8, Narasimha Raja Road, Bangalore.  
 Imperial Tobacco Co. of India Ltd., Fraser Town, Bangalore 5.  
 Indian Cable Co. Ltd., 24, Mahatma Gandhi Road, Bangalore 2.  
 Indian Chemical Industries India Private Ltd., 'Netra' Malleswaram, Bangalore 3.  
 Indian Engineering Co., 68, Silver Jubilee Park Road, Bangalore-2.  
 Indian Hume Pipe Co. Ltd., Rajaji Nagar, Yeshwantpur, Bangalore.  
 Indian Metal Industries, J-18, Tank Bunder Road, Bangalore 2.  
 Indian Oxygen & Acetylene Co Ltd., Hindustan Aircraft P.O., Bangalore.  
 Indian Process & Chemical Laboratories, 2044, Sampige Road, Bangalore 3.  
 India Tin Industries Private Ltd., The old Madras Road, Duravaninagar P.O., Bangalore 16.  
 Industrial and Agricultural Engineering Co. (Mysore) P. Ltd., 54-55, Silver Jubilee Park Road, Bangalore.

### Use "BRIL" INKS

Manufacturers :

### INDUSTRIAL RESEARCH CORPORATION

Thiruvannamiyur,  
 Madras-41.

12th Main Road,  
 Bangalore-3.

International Chemical & Biological Institute Ltd., 7, South End Road, Basavangudi, Bangalore 4.

**INTERNATIONAL COMPUTERS AND TABULATORS (INDIA) PVT. LTD.**—Electronic Data Processing Equipment. George Oakes Bldg., Narasimharaja Square, P.O. Box 60, Bangalore 2. Telephone No. 6025. Telegraphic Address: "TABULORIAL". Manager: Mr. K. S. Vishwanathan; Maintenance Manager: Mr. O. Santos; Head Office: Magnet House, Dougal Road, Ballard Estate, P.O. Box 516, Bombay 1.

International (India) Agencies, 61, Silver Jubilee Park Road, Bangalore 2.

**INTERNATIONAL INSTRUMENTS PVT. LTD.**—140, Hosur Road, Adugodi P.O., Bangalore; Manufacturers of Tachographs, Speedometers, Ammeters, Fuel gauges, Temperature gauges, Pressure gauges, Vacuum gauges, Industrial gauges, Cables and other Automobile Precision Instruments.

J. & J. DeChane Agency, 21, First Floor, City Market, Bangalore 2.

**JAIRAMDAS & SONS.**—Silver Jubilee Park Road, Bangalore-2; Importers & Stockists of Garage Tools, Precision Measuring Tools, Metal cutting and Thread forming Tools, Pipe & Pipe fittings, Bearings and all other Engineering requisites; Manufacturers of M.S. Bolts and Nuts, Concrete Mixer, Lime Mortar Mill, C.I. Surface Plates, Angle Plates, V-Blocks, Straight Edges etc., Sole Selling Agents for Sanderson Bros. & Newbould Ltd., The oldest Tool and Alloy Steel Manufacturers of Sheffield; Nicholson File International S.A. of U.S.A. for Metal Cutting Saws and Industrial Products; Holland & Blair Ltd., London for Ratchet & Spiral Screw Drivers, Pendleton Tools Industries S.A., Los Angeles for Garage and Hand Tools etc., Offices: Delhi, Bombay, Madras & Secunderabad (A.P.).

**JAIRAMDAS UDYOG PRIVATE LTD.**, Silver Jubilee Park Road, Bangalore-2; Regd. Office: 157-159, Narain Dhuru Street, Bombay-3; Factory: Jairamdas Estate, 8th Mile, Mysore Road, Bangalore; Manufacturers of "JESONS" Brand Cutting Tools.

**JAYEMS ENGINEERING CO.**, 111/118, Silver Jubilee Park Road, Bangalore-2; Engineers, Machinery Merchants and Manufacturers' Representatives; Direct Importers of Machine Tools, Wood Working Tools, Sheet Metal Working Machinery, Welding & Foundry Equipment; Head Office: Warden House, Sir P. M. Road, Bombay-1; Branches at all important centres.

Jhajharia Trading Co. Private Ltd., 13, Fairfield Road, Bangalore 1.

**JOHN FOWLER (INDIA) LTD.**—Sarjapur, Bangalore 1; Sole Selling Concessionaires of "VOKES" Filtration Equipment.

Kamal Industries, 2-F, M. Gandhi Road, Bangalore 2.

Kapurchand Bros. (Bangalore) Ltd., 274-276, Chickpet, Bangalore 2.  
 Karamchand Thapar & Bros. Ltd., Narasimharaja Square, Bangalore 2.

Karnataka Trading Corporation, 17, Malavally Rama Rao Road, Bangalore 2.

Kerala Automobiles, 2/71, Lalbagh Fort Road, Bangalore 4.

**K. S. SEETHARAMIAH & SONS.**—Mechanical & Textile Engineers, 2, Sri Jayachamarajendra Road, Bangalore 2; Phone: 25937; Grams: "CENTRIFUGE"; Pioneers in the Manufacture of Hydro-Extractors/Centrifuges for Textile, Laundry, Chemical Dye-stuff and Pharmaceutical Industries; Specialists in the manufacture of Silk Reeling Machines and Preparatory Plant for Silk and Rayon Industry.

**KHODAY RIBBON CARBON & ALLIED INDUSTRIES.**—9, Seshadri Road, Bangalore 9; Manufacturers of quality Typewriter Ribbon, Carbon Papers of all Varieties, Stamp Pads, Inks, Paper Pins, Gem Clips, Flexible Packaging Paper Bags, Drinking Straws, Waxed Twist Wrappers, High-shine Wax Polish etc.

Kilburn & Co. P. Ltd., P. Box 10, Bangalore 1.

Kirloskar Bros. Ltd., H/141, Narasimharaja Road, Bangalore 2.

Kissan Products P. Ltd., Old Madras Road, Krishnarajapuram, Bangalore 16.

Kochikar Brothers Ltd., Visveswarapuram, Bangalore.

Kohinoor Electric Co., Chickpet, Bangalore 2.

Krishna Industries P. Ltd., 230, Old Tharagupet, Bangalore 2.

Krishnamachari & Co., T. T., Tasker Town, Bangalore.

Laboratory Supplies Co., Avenue Road, Bangalore 2.

Lalwani Radio Corporation, 37/38, Silver Jubilee Park Road, Bangalore 2.

Machine Tools India Private Ltd., 41, Silver Jubilee Park Road, Bangalore 2.

Madras Auto Service P. Ltd., 137, Sri Narasimharaja Road, Bangalore.

Madras Bangalore Transport Co., 14, II Road, New Tharagupet, Bangalore 2.

Madras Circle Pipe Dealers' Association Ltd., Shankar Bldg., Silver Jubilee Park Road, Bangalore 2.

Madras Vegetable Oil Products Ltd., Platform Road, Bangalore 2.

Madras Woodlands Hotel, 5, Sampangy Tank Road, Bangalore 1.

Mahadeswara Lorry Service. (Redg.) Ramu Mansion, No. 9, 4th Cross Road, New Kalasipalayam Layout, Bangalore-2.

Mahakali Engineering Corporation, H-66, Nagarthpeth, Bangalore 2.

Mahalakshmi Transport Co. Private Ltd., D-113, Mamulpet, Bangalore 2.

Management & Industrial Consultants P. Ltd., 17th Cross, Bangalore 3.

Mahomed Ebrahim & Co. P. Ltd., Brigade Road, Bangalore.

Manyam & Co., 23, East Subedar Chatram Road, Bangalore 3.

Margarine & Refined Oils Co. Ltd., Mysore Road, Bangalore 2.

Massey-Ferguson India Ltd., P. Box No. 3, Bangalore 1.

Meccano Floorings P. Ltd., 1/1, Richmond Road, Bangalore 25.

Metro Cycle & Auto Stores, A-94, Albert Victor Road, Bangalore 2.

Metro Malleable Manufacturers Ltd., Silver Jubilee Park Road, Bangalore 2.

Misrlal Moolchand & Co., Dewan Surappa Lane, Bangalore 2.

Misrlal Bhabutmal & Brothers, 314, Chickpet, Bangalore 2.

Modalliar & Sons, P. M., Cottonpet, Bangalore 2.

Modern Automobiles, Bank Road, Mysore.

Modern India Trading Co., 296, Akkipet, Bangalore 2.

Monotype Corporation Ltd., 6A, Cunningham Road, Bangalore 1.

### MOTOR INDUSTRIES CO. LTD.,

Manufacturers of Mico-Licence-Bosch Diesel Fuel Injection Equipment & Spark Plugs, Distributors of Bosch Automobile Parts & Accessories. Head Office: Post Box No. 93, Bangalore; Phone: 72294 (4 Lines), Grams: "MICO-DIESEL"; Branches: 79, Dr. Annie besant Road, Worli, Bombay 18 (WB). 1/155, Mount Road, Madras 2 and 91-A, Park Street, Calcutta 16.

Muddanna, M., & Sons, 158, Avenue Road, Bangalore City.

Mysore Ace Apparels P. Ltd., 2-B, M. Gandhi Road, Bangalore 1.

Mysore Carpet Works Ltd., 67, Subedar Chatram Road, Bangalore 3.

Mysore Cements Ltd., 19, Race Course Road, Bangalore 1.

Mysore Chemical & Fertiliser Ltd., Chikbanavar P.O., Bangalore.

Mysore Chemical & Industrial Minerals, 40, Sabuvani Bldg., Narasimharaja Road, Bangalore 2.

Mysore Cycle Importing Co., G-35, Arcot Sreenivasachar Street, Bangalore.

Mysore Electro-Chemical Works Ltd., The.—Post Box No. 1022, Bangalore 3.

Mysore Electroplating & Engg. Works, 11-A, Jayachamarajendra Road, Bangalore 2.

Mysore Industrial Products, 331, First Main Road, New Tharagupet, Bangalore.

Mysore Industrial & Testing Laboratory Ltd., Malleswaram, Bangalore 3.

Mysore Industries Supplies, Post Box No. 559, Bangalore 2.



Mysore Lamp Works Ltd., P. Box No. 1009, Malleswaram, Bangalore 12.  
 Mysore Machinery Manufacturers Ltd., 5th Mile, Mysore Road, Bangalore 2.  
 Mysore Paper Mills Ltd., Asiatic Buildings, Bangalore.  
 Mysore Starch Manufacturing Co., Bangarapet P.O., Bangalore.  
 Mysore Stoneware Pipes and Potteries Ltd., 6th Cross Road, Gandhinagar, Bangalore.  
 Mysore Sugandhi Agarbathi Factory, Cottonpet, Bangalore 2.  
 Mysore Sugar Co. Ltd., Sri Jayachamaraja Road, Bangalore.  
 Mysore Surgical Industries, 66, Dewan Surappa Lane, Bangalore 2.  
 Mysore Tobacco Co. Ltd., District Board Buildings, Kemppegowda Road, Bangalore City.

**MYSOORE WATERPROOFS LTD., Hindustan Aircraft P.O., Bangalore 17; Manufacturers of "LUSTROLAC" Enamels, "LINOLAC" and "MYSOLAC" insulating varnishes, "PROXYLAC" Nitrocellulose Lacquers & Thinners and all kinds of high class Paints, Varnishes and allied Products.**  
 Mysore Wire & Metal Industries, No. 13, IVth Cross, Magadi Road, Bangalore 2.  
 Nagindas Kilabhai, 87, Silver Jubilee Park Road, Bangalore 2.  
 Nagaraja Industries, Rajajinagar, Yeshwanthpur P.O., Bangalore 22.  
 National Industries Co., Magadi Road, Bangalore 2.  
 National Sugar Works and Coffee Powder Manufacturers, Old Tharagupet, Bangalore.  
 New India Corporation, 7/1, Mission Road, Bangalore 1.  
 New India Pharmaceutical Industries Ltd., 44, Lalbagh Road, Bangalore 2.  
 New Premier Chemical Industries, Albert Victor Road, Chamaraajpet, Bangalore 2.  
 Noble Paint & Varnish Co. Private Ltd., 5, Godown Street, Bangalore 2.  
 Olympaid Engineering Works, Industrial Estate, Rajajinagar, Bangalore 10.  
 Optoplas Industries, M. Gandhi Road, Bangalore 1.  
 Oriental Hat Mfg. Co., 67, Jangam Maistry Lane, Balepet, Bangalore 2.  
 Oriental Rubber Trading Co., 2/3, Silver Jubilee Park Road, Bangalore 2.  
 Parry & Co., Ltd., Silver Jubilee Park Road, Bangalore.  
 Paxal Corporation, 13, Sri Krishnarajendra Road, Bangalore 2.

### PEST CONTROL (INDIA) PRIVATE LTD.,

Consulting Entomologists — Termite Control —  
 Disinfestation — Fumigation Service.

12, Saleh Alimed Bldg.,

105/1, Infantry Road, Bangalore-1.

H.O.: Yusuf Bldg., Mahatma Gandhi Rd., Bombay-1.

(for further details please see Bombay Commercial firm section)

Philips India Ltd., George Oakes Bldg., Sri Narasimharaja Road, Bangalore.  
 Pioneer (Madras) Ltd., 180, Commercial St., Bangalore 1.  
 Poddar Martin Mining and Minerals Private Ltd., 6, Church Street, Bangalore 1.  
 Popular Automobiles, 86, S. J. Park Road, Bangalore 2.  
 Popular Umbrella Mfg. Co., Mamulpet, Bangalore 2.  
 Porcelain Products Co., Subedar Chatram Road, Bangalore.  
 Printers (Mysore) Ltd., Mahatma Gandhi Road, Bangalore 1.  
 Printers House Ltd., Musvee Bldg., 48, Central Street, Bangalore.  
 Pyramid Advertising & Publicities, 4, Okalipuram Extension, Bangalore 2.  
 Radhakrishna Soapnut & Perfumery Works Co., 712/1, Chickpet, Bangalore 2.

### RADIO & ELECTRICALS MFG. CO., LTD.,

Post Bag No. 16, Mysore Road,  
 Bangalore-26

Phone: 78177

Grams: "REMCO"

Manufacturers of (1) Radios (Valve and Transistorised types) (2) Radio Components such as Electronic Switches, Loud Speakers, Paper & Electrolytic Capacitors (3) Single and Polyphase Electricity Meters (4) Water Meters and (5) PVC Covered Wires, Cables, Sleeveings, Insulation Types, Tubings, Hose-Pipes, etc.

Radio Engineering Co., Philips House, 6-D, Brigade Road, Bangalore.  
 Radio House, Brigade Road, Bangalore.  
 Radio Soap Institute, The, Lalbagh Road, Bangalore 2.  
 Raghulal & Co. (Bangalore) Ltd., 70, Arcot Srinivasachar Street, Bangalore 2.  
 Rainbow Trading Co., Chickpet, Bangalore.  
 Raja Cycle and Motor Works, "Raja Buildings", Sri Narasimharaja Road, Bangalore.  
 Rampen Pharmaceuticals, 271, 10th Cross Road, Bangalore.  
 Rane (Madras) Ltd., Narasimharaja Road, Bangalore 2.  
 Ranjan Automobiles, Shaft Bldg., Kalasipalayam Main Road, Bangalore 2.  
 R. G. Engineering Works, 5/63, Manvarthipet, Bangalore 2.  
 Refrigerators & Home Appliances (Mysore) Agencies, Residency Road, Bangalore 1.  
 Reliable Corpn. P. Ltd., 2 & 3, Narasimharaja Road, Bangalore 2.  
 Reliable Engineering Works, Oosmankhan Road, Bangalore 2.  
 Reliance Electric Co., 20, Sri Narasimharaja Road, Bangalore.  
 Research Chemical Laboratories, 550, 8th Main Road, Bangalore 12.  
 Rico Trading Co., Narasimharaja Road, Bangalore 2.  
 R. S. Cooper & Co., 112-D, Brigade Road, Bangalore 1.  
 Rudra Industries, Kailas Kunj, Bangalore 3.  
 S. Dhondusa Gold Thread Factory, Subedar Chatram Road, Bangalore City.  
 Sandur Manganese & Iron Ores (Private) Ltd., Sandur House, Palace Road, Bangalore.  
 Sankey Electrical Stampings Private Ltd., Rajaji Nagar, Bangalore 10.  
 Satya Industries Private Ltd., 3, Seshadri Road, Bangalore 9.  
 Shantilal & Co., Oosmania Buildings, Sri Narasimharaja Road, Bangalore.  
 Shilton Hotel, St. Mark's Road, Bangalore 1.  
 Shivram's Radio House, S. J. Park Road, Bangalore 2.  
 Shroff Channabasappa & Sons, Avenue Road, Bangalore 2.  
 Shoukatali Automobiles, Albert Victor Road, Bangalore 2.  
 Simpson & Co. Ltd., 29-A, Mahatma Gandhi Road, Bangalore.  
 Singer Sewing Machine Co., 171, Commercial St., Bangalore.  
 Singson Automobiles, Kalasipalayam Main Road, Bangalore 2.  
 Sound Products Co., Post Box No. 14, 60, Subedar Chatram Road, Bangalore 2.  
 Southern Roadways Ltd., 201, Jayachamarajendra Road, Bangalore 2.  
 Spencer & Co. Ltd., Mahatma Gandhi Road, Bangalore.  
 Sri Hindwani Electricals, 3, Santha Veeriah Lane, Chickpet, Bangalore 2.  
 Sri Krishna Spg. & Wvg. Mills P. Ltd., Sudhama House, Chickpet, Bangalore 2.  
 Standard Plastic Manufacturers, 8, Avenue Road, Bangalore 2.  
 States Engineering Co., Sri Narasimharaja Road, Bangalore.  
 States Hotel, Gundopanth Street, Bangalore 2.  
 Steel Construction Co. Ltd., Hardinge Road, Bangalore 4.  
 Steel (India) P. Ltd., 86-87, S. J. Park Road, Bangalore 2.  
 Steelman Private Ltd., 2, Annaswami Road, Bangalore 1.  
 Stumpp Schule & Somappa (P.) Ltd., 78, Hosur Road, Bangalore South.  
 Suedes & Leatherettes Ltd., Hindustan Aircraft P.O., Bangalore.  
 Super Automobiles, 151, Broadway Road, Bangalore.  
 Swastik & Co., 92, 3rd Cross Road, Gandhinagar, Bangalore.  
 Swastik Agencies, Post Box No. 647, Sabuvani Buildings, Sri Narasimharaja Road, Bangalore 2.  
 Swastik Dress Mfg. Co. Ltd., 104, Jangam Maistry Lane, O.T.C. Road, Bangalore 2.  
 Swastik Electric Industries, Chickpet Cross, Bangalore 2.  
 Tata Oil Mills Co. Ltd. (Tomco Sales Department), 2A, Mahatma Gandhi Road, Bangalore 1.  
 Thos. Cook & Son (Continental and Overseas) Ltd.—20C, Mahatma Gandhi Road, Bangalore.  
 Trans Auto Traders, 70/4, Narasimharaja Road, Bangalore 2.  
 Tyretreads (India) Private Ltd., 1, New Mental Hospital Road, Bangalore 2.  
 Uberoi Trading Co., 11, Mission Road, Bangalore 2.  
 United Engineering Corporation Private Ltd., 8, Mission Road, Bangalore 2.  
 United Trades and Agencies, Chickpet, Bangalore.  
 Vaswani India Ltd., 130-C, Veerappa Block, 17th Cross Road, Malleswaram, Bangalore 3.  
 Victoria Hotel, 21, Residency Road, Bangalore 1.  
 Vikas Sons Private Ltd., 298, Chickpet, Bangalore 2.  
 Viswanath Electric & Radio Corpn., Narasimharaja Road, Bangalore 2.  
 Voltas Limited, 2/2, Kasturba Road, Bangalore 1.  
 Waco, 2F, Mahatma Gandhi Road, Bangalore.  
 Webb's Sales & Service Ltd., 30, Mahatma Gandhi Road, Bangalore 1.  
 West Coast Paper Mills Ltd., 14, Kasturba Road, Bangalore 1.  
 West End Hotels, Race Course Road, Bangalore 1.  
 Western India Match Co. Ltd., 41, Old Tharagupet, Bangalore.  
 Wind Parts Co., G-67, Osmania Bldg., Sri N. Raja Road, Bangalore 2.



## RAJASTHAN TRADES & PROFESSIONS

- Aditya Industries, Industrial Estate, Jaipur.  
 Aeromatic Equipment Co., P. Box 129, Jaipur.  
 Agarwal Crystal Ice Factory, Jaipur.  
 Agencies (Rajasthan) Ltd., Purohitji-ka-Katla, Jaipur.  
 Agricultural Machinery Works, Dhan Mandi, Jodhpur.  
 Ajanta Industries, Kalawati Bhawan, Bikaner.  
 Alcobex Metal Corporation, Pali House, Jodhpur.  
 Allied Industries, 48, Bullion Exchange Bldg., Haldion-ka-Rasta, Jaipur.  
 Amar Automobiles, Jalori Gate, Jodhpur.  
 Anand Electric Lampworks, Jhotwara, Jaipur.  
 Arjun Medical and Provision Stores, Station Road, Jaipur.  
 Arora Bros., Station Road, Jodhpur.  
 Arora Crockery House, Minerwa Building, Railway Road, Jodhpur.  
 Arya Sahitya Mandal Ltd., Srinagar Road, Ajmer.  
 Aseri Brothers, opp. Railway Station, Jodhpur.  
 Ashoka Wire Netting Industries, Bharti Bhawan, Chaura Rasta, Jaipur.  
 Associated Films Distributors, Station Road, Jodhpur.  
 Associated Stone Industries (Kotah) Ltd., Ramganj Mandi.  
 Associated Stone Distributing Co. Private Ltd., Johari Bazar, Jaipur.  
 Babu Safe Co., Ghat Gate, Jaipur.  
 Bankidass Moolraj & Co., Jalorigate, Jodhpur.  
 Bansilal Chowthmal, Katla Bazar, Jodhpur.  
 Bhandari Brothers, opp. Mahatma Gandhi Hospital, Jodhpur.  
 Bharat General & Seed Stores, Minerva Building, P.B. No. 52, Jodhpur.  
 Bharat Lodge, Station Road, Near Raghunath Savai Dharamshala, Jodhpur.  
 Bhargava & Company, opp. Prem Prakash Talkies, Sawai Mansingh Highway, Jaipur.  
 Bhargava Scientific Corporation, Devi Bhavan, Kutchery Road, Ajmer.  
 Bhatia Bros., Chopasani Road, Jodhpur.  
 Bhupal Mining Works, P.O. Bhilwara, (Rajasthan).  
 Bijoy Mica Mining Ltd., Bhopalganj, Bhilwara.  
 Bikaner Industrial Corporation, Industrial Area, Bikaner.  
 Bikaner Polythene Products, Mohata-chowk, Bikaner (Rajasthan).  
 Bikaner Steel Works, Jassusar Gata, Bikaner.  
 Bikaner Woollen Mills, Industrial Area, Bikaner.  
 Birla Cotton Spg. & Wvg. Mills Ltd., Moti Dungri Road, Jaipur.  
 Bombay Watch Co., Inside Sojatigate, Jodhpur.  
 B. N. Bhargava & Bros., Station Road, Ajmer.  
 B. P. Agdayenawer & Sons (Regd.), Mot Doongri Road, Jaipur.  
 Burmah-Shell Co. Ltd., Kamani House, Tholia Circle, Ajmer Road, Jaipur.  
 C. D. Jain & Co., Outside Sojati Gate, Jodhpur.  
 Caltex Motors, Kutchery Road, Jodhpur.  
 Central Radio & Service Co., Radio House, Ajmer.  
 Central Steel & General Industries, Ajmeri Gate, Jaipur.  
 Inder Mohan & Co., Sadul Colony, Bikaner.  
 Challani Woollen Mills, Jassusar Gate, Bikaner.  
 Chandra Industrial and Commercial Corporation, Kutchery Road, Jodhpur.  
 Chandra Industries, Mirza Ismail Road, Jaipur.  
 Chitra Cinema, Mehta Market, Jodhpur.  
 Chitraprakash Film Exchange, Ajmer Road, Jaipur City.  
 Chopani Ice Aerated Water & Oil Mills Ltd., Jodhpur.  
 Cinema Publishers, 2, Hyder Building, Sojatigate, Jodhpur.  
 Cosmopolitan Trading Corporation, Johari Bazar, Jaipur.  
 Decalco Transformer Mfg. Co., 612, Adarshnagar, Jaipur.  
 Deepak Industries, Hathi Babu-ka-Bagh, Jaipur.  
 Delhi Mishthan Bhandar, Chaura Rasta, Jaipur.  
 D. P. Bhargava, B.Sc., LL.B., Press Representative and Advertisement Bookings, opp. Railway Station, Jodhpur.  
 D. R. Sharma & Sons, Sojatigate, Jodhpur.  
 D. S. & Co., Johari Bazar, Jaipur.  
 Duduwala & Co., Bhilwara (Rajasthan).  
 Durgasingh & Sons, Gramophone Dealers, Sojatigate, Jodhpur.  
 Dwarka Dass Rathi, Bookseller and Newspaper Agent, Jodhpur.  
 East India Mineral Development Syndicate Ltd., Jaipur.  
 Eastern Commodities P. Ltd., P. Box 129, Jaipur.  
 Eastern Motor Company, Station Road, Jodhpur.  
 Edward Mills Co. Ltd., Beawar.  
 Electric Radio Corporation, Station Road, Jodhpur.  
 Empire Stores, Sir Mirza Ismail Road, Jaipur.  
 English Watch Company, Jalorigate, Jodhpur.  
 Fatehpuria Trading Co. Ltd., Ramganj Bazar, Jaipur.  
 Frontier Namda Woollen Factory, Jail Road, Jaipur.  
 Ganesh Das Jiwanlal, Station Road, Jodhpur.  
 Garg Metal Industries, Tripolia Bazar, Jaipur.  
 General Marketing Company, Hind Hotel Bldg., Jaipur.  
 Gajadhar Sitaram Mineral Co., Bhopalganj, Bhilwara.  
 Ganganagar Industries, Rangni Chowk, Bikaner.  
 Gargia & Co., B. D., Mirza Ismail Road, Jaipur.  
 General Assurance Society Ltd., Khetan Bhavan, M. I. Road, Jaipur.  
 General Marketing Co., Hind Hotel Bldg., Chaura Rasta, Jaipur.  
 George Talkie Circuit, Lakharan-ka-Bas, Jodhpur (Rajasthan).  
 Girdhar Ganesh Trading Co., Bhomihonji-ki-Ghati, Jodhpur.  
 Gopal Watch Co., Sojatigate, Jodhpur.  
 Gotan Lime Syndicate, C/o Anand Theatres Ltd., Jodhpur.  
 Globe Motors Private Ltd., Mirza Ismail Road, Jaipur.  
 Govindram Ramchand, Ajmer Road, Jaipur.  
 Grand Hotel, Railway Road, Jodhpur.  
 Handicraft Corporation (India), Ganesh Bhavan, Outside Sojati Gate, Jodhpur (Rajasthan).  
 Hari Narain Kacholia & Co., Mirza Ismail Road, Jaipur.  
 H. C. Brothers, Tirpolia Gate, Jaipur.  
 Heera Crushing Private Ltd., Masuria Colony, Jodhpur.  
 Hind Mica Ltd., C-23, Prithviraj Road, Jaipur.  
 Hind Sports, Beawar Road, Ajmer.  
 Hindustan Engineering Works, Jalorigate, Jodhpur.  
 Hindustan Radiators Co., Station Road, Jodhpur (Rajasthan).  
 Hira Crushing P. Ltd., Post Box No. 34, Jodhpur.  
 Hiralal & Sons, Martindale, Ajmer.  
 Hiralsingh & Sons, Opp. Martindale Bridge, Ajmer.  
 H. S. Elahibux & Sons, Mirchi Bazar, Jodhpur.  
 India Agencies, Riyan House, Sojatigate, Jodhpur.  
 India Radiogram Corporation, P.O. Box 63, Kutchery Road, Jodhpur.  
 Indian Industrial Command, Kutchery Road, Jodhpur.  
 Indra & Company, General Merchants, Station Road, Jodhpur.  
 Industrial Command of India P. Ltd., Mirza Ismail Road, Jaipur.  
 Industrial Trade Corporation, M. I. Road, Jaipur.  
 Industrial Trust Ltd., Khetan Bhawan, Ajmer Road, Jaipur.  
 Italia Restaurant (Jodhpurwala), Mirza Ismail Road, Jaipur.  
 Jagdish Hotel & Restaurant, Mirza Ismail Road, Jaipur.  
 Jai Bharat Industrial Corporation, 15-C, Industrial Estate, Jaipur.  
 Jaipur Art Studio, Kutchery Road, Jodhpur.  
 Jaipur Bikaner Trading Co. P. Ltd., Chandpole Bazar, Jaipur.  
 Jaipur Cycle & Parts Industries, Shriji-ki-Mori, Jaipur.  
 Jaipur Development Co. Ltd., Johari Bazar, Jaipur.  
 Jaipur Metals & Electricals Ltd., Near Rly. Station, Jaipur.  
 Jaipur Mineral Development Syndicate Private Ltd., Johari Bazar, Jaipur.  
 Jaipur Paper Mart, Tripolia Bazar, Jaipur City.  
 Jaipur Spg. & Wvg. Mills Ltd., Near Railway Station, Jaipur.  
 Jaipur Wine Stores, Mirza Ismail Road, Jaipur.  
 J. Santosh & Sons, Engineers & Contractors, Sojatigate, Jodhpur.  
 Jodhpur Zinc Metal Works, Ada Bazar, Jodhpur.  
 Juneja Sate Co., Chaura Rasta, Jaipur.  
 Kachhwaha Brothers, Kutchery Road, Jodhpur.  
 Kaluram Shiam Dass, Opp. Ratanada Bridge, Jodhpur.  
 Kamal & Co., Mirza Ismail Road, Jaipur.  
 Kamal Engineering Works, Sharma Bldg., M. I. Road, Jaipur.  
 Kamla Optical Company, Station Road, Jodhpur.  
 Karamchand Thapar & Bros., Tripolia Bazar, Jaipur.  
 Karp Industries, Jhalaniyon-ka-Rasta, Jaipur.  
 Khadayala Stores, Azad Chowk, Dungarpur.  
 Khadi & Cottage Industries Ltd., Jodhpur.  
 Khairatilal & Sons, Electric Dealers, Station Road, Jodhpur.  
 Khajanchi Film Distributors, P.O. Box 9, Jodhpur (Rajasthan).  
 K. H. Thanvi & Company, Jalorigate, Jodhpur.  
 Khosla Sales Corporation Maneck Chowk, Durgarpur.  
 Kitabghar, Outside Sojatigate, Jodhpur.  
 K. N. Gutgutia & Co., Ajmeri Gate, Jaipur.  
 Kota Bone Products Ltd., C/o Messrs. Raj Traders Private Ltd., "C" Scheme, Jaipur.  
 Kuchaman Electric Co., Ltd., Jodhpur.  
 Kumbhat Binding Works, Jodhpur.  
 Krishan Kumar & Co., Chaughan, Gagnori Bazar, Jaipur.  
 Krishna Mills Co. Ltd., Beawar.  
 Laxmi Motor Co., Ajmer Road, Jaipur.  
 Laxmi Pen Company, Jodhpur.  
 Lokvani, Hindi Daily, Jaipur.  
 Lunkar & Co., Kapra Bazar, Jodhpur.  
 Madan Gopal Zaveri & Co., Tripolia Bazar, Jaipur City.  
 Madhu Industries P. Ltd., B-6, Prithviraj Road, Jaipur.  
 Maharaja Shri Umair Mills Ltd., Pali, Marwar.  
 Mahavir Metal Mfg. Co., Falna.  
 Mahesh Metal Works, Madanganj, Ajmer.  
 Man Industrial Corporation Ltd., P. Box 191, Jaipur.  
 Man Radio & Electricals Ltd., Near Rly. Station, Jaipur.  
 Manmohan Opticals, Sojatigate, Jodhpur.  
 Marudhar Industries Ltd., Jodhpur.  
 Marwar Cement Company, Station Road, Jodhpur.  
 Marwar Cold Storage Company, Ratanada Bridge, Jodhpur.  
 Marwar Industries Private Ltd., Kuchaman House, Jodhpur.  
 Marwar Textiles, Keshar Bag, Jodhpur.  
 Merchandise & Stores Ltd., Johari Bazar, Jaipur.



## TRADES &amp; PROFESSIONS IN RAJASTHAN

## TRAVEL AGENT

**MERCURY TRAVELS (INDIA) PRIVATE LTD.**—National Motors Bldg., Mirza Ismail Road, Jaipur. Phone: 77284. Head Office: Oberoi Grand Hotel, Chowringhee, Calcutta 13. Phone: 236051 (7 lines). Grams: "MERCTRAVEL." Branches: Oberoi Imperial Hotel, New Delhi. Phone: 43001 (3 lines). 70, Forbes Street, Rampart Row Corner, Fort, Bombay 1. Phone: 253948 (3 lines). Ashoka Hotel, Pantheon Road, Egmore, Madras 8. Phone: 85095. Oberoi Palace Hotel, Srinagar, Kashmir. Phone: Srinagar 19.

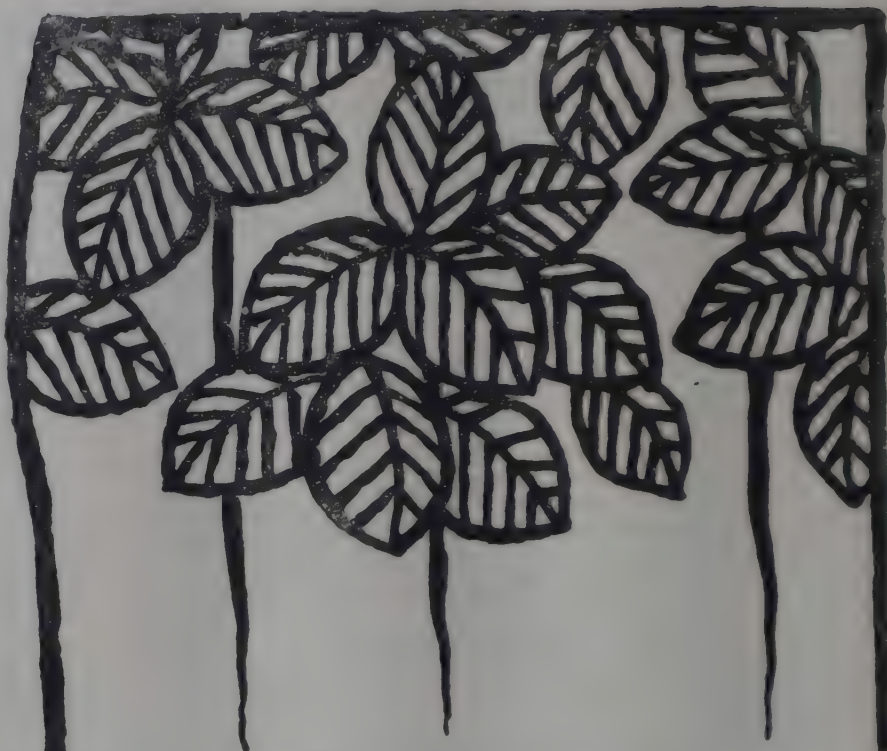
Metal Corpn. of India Ltd., Zawar Mines, Udaipur.  
 Metal Udyog P. Ltd., Gulab Niwas, M. I. Road, Jaipur.  
 Mewar Textile Mills Ltd., Philwara.  
 Minerva Cinema, Station Road, Jodhpur.  
 Mital Stores, Ajmer Road, Jaipur.  
 Modern Woollen Mills, Jassusar Gate, Bikaner.  
 Mohan Brothers, Outside Jalorigate, Jodhpur.  
 M. Kumbhat & Sons, Jodhpur.  
 M. Suraj Raj & Co., Ganchha Bazar, Jodhpur.  
 M. B. & Sons, Opp. Railway Station, Ajmer.  
 Narsinghmal Mehta & Co., Sojatigate, Jodhpur.  
 National Cycle Works, Berhampur, Jaipur (Rajasthan).  
 National Engineering Industries Ltd., Ashoknagar, Jaipur.  
 National Motors, Chopasni Road, Jodhpur.  
 National Tractors, Chopasni Road, Jodhpur.  
 National Traders Ltd., Podar Park, Statue Circle, Jaipur.  
 National Weaving Industries, Nagaurigate, Jodhpur.  
 Nav Bharat Machineries P. Ltd., M. I. Road, Jaipur.  
 Northern India Machinery Corporation, Ras House, Jodhpur.  
 Olympic Cinema, Jodhpur (Rajasthan).  
 G. P. G. Radio Industry, Chowkhantli, Mohalla, Bikaner.  
 Oriental Engg. Co., Mirza Ismail Road, Jaipur.  
 Padam Singh & Co. Private Ltd., Sawal Jaisingh Highway, Jaipur.  
 Pall Electricity Co., Ltd., Jodhpur.  
 Paradise Trading Corporation, Station Road, Jodhpur.  
 Patwa & Co., Kapra Bazar, Jodhpur.  
 Phalodi Electricity Co., Ltd., Jodhpur.  
 P. M. Allah Baksh & Son, Mirza Ismail Road, Jaipur.  
 P. N. Kapoor & Co., Station Road, P.O. Box No. 50, Ajmer.  
 Poonamchand & Bros. Ltd., Near Rly. Station, Jaipur.  
*Prava Sewak* (Weekly), Outside Jalorigate, Jodhpur.  
 Prakash Industry, Near Sadul High School, Bikaner.  
 Prakash Metal Co., Dargah Bazar, Ajmer.  
 Prakash Optical & General Mart, Minerva Talkies Building, Shop No. 9, Jodhpur.  
 Pratap Engineering Works, Sardarpura, Jodhpur.  
 Pream Prakash Cinema DeLux, Sawal Mansingh Highway, Jaipur.  
 Prem Universal Stores, Kutchery Road, Jodhpur.  
 Premnat Motors (Rajasthan) P. Ltd., Khasa Kothi Road, Jaipur.  
 Publicity Studio, Station Road, Jodhpur.  
 Pustak Bhandar, Chopasni Road, Jodhpur.  
 Raj Traders P. Ltd., "C" Scheme, Jaipur.  
 Raj Iron & Steel Mfg. Works, Industrial Estate, Jaipur.  
 Rajputana Automobiles, Ram Bhavan, Mahatma Gandhi Road, Ajmer.  
 Rajputana Corporation Ltd., C-23, Prithviraj Road, C Scheme, Jaipur.  
 Rajputana General Dealers Ltd., Purohitji-ka-Katla, Jaipur.  
 Rajputana Electric Works, Kalsarganj, P.O. Box No. 107, Ajmer.  
 Rajasthan Central Stores Private Ltd., Bhagat Bhawan, Mirza Ismail Road, Jaipur.  
 Rajasthan Chemical (Paints) Industries, Mirza Ismail Road, Jaipur.  
 Rajasthan Cycle & Parts Industries, Mirza Ismail Road, Jaipur.  
 Rajasthan Cycle Industries, Behind Atish, Jaipur.  
 Rajasthan Electric Industries, Industrial Estate, Jaipur.  
 Rajasthan Electric Products Private Ltd., Chandpole Bazar, Jaipur.  
 Rajasthan Electronics, 662, Adarshnagar, Jaipur.

Rajasthan Electricals P. Ltd., 3, Chandra Hira Bldg., M. I. Road, Jaipur.  
 Rajasthan Engineering Products, Goga Gate, Bikaner.  
 Rajasthan Industries, Behind Power House, Jodhpur.  
 Rajasthan Industries Ltd., Ashok Niwas, Mahaver Marg, Jaipur.  
 Rajasthan Metal & Rolling Mills, Ltd., Ratanada (Rajasthan).  
 Rajasthan Mineral Co., Ltd., Fort Road, Jaipur.  
 Rajasthan Plasters Industry, Outside Goga Gate, Bikaner.  
 Rajasthan Rubber & Chemical Works P. Ltd., Uston-ki-Bari, Bikaner.  
 Rajasthan Pharmaceutical Laboratories, C-19, Bapunagar, Jaipur.  
 Rajasthan Steel Corporation, Moti Doongri Road, Jaipur.  
 Rajasthan Textile Mills, Bhawani Mandi.  
 Rajasthan Traders, 1/B Road, Sardarpura, Jodhpur.  
 Rajasthan Trading Corporation, Station Road, Jodhpur.  
 Rajendra Pictures, Motion Picture Distributors, Bapu Bazar, Jaipur (Rajasthan).  
 Rajkumar & Bros., Rasta Mishra Rajaji, Jaipur.  
 Rajputana Agencies, Jaipuria Mansion, Mirza Ismail Road, Jaipur.  
 Rajputana Corpn., Ltd., 12, Prithviraj Road, "C" Scheme, Jaipur.  
 Rajputana Metal Works, 1/B Road, Sardarpura, Jodhpur.  
 Rajputana Stationery Mart, Sojatigate, Jodhpur.  
 Rajputana Trading Co., Ltd., Jodhpur.  
 Rajshi Pictures (Private) Ltd., Johari Bazar, Jaipur.  
 Bakesh & Co., Hospital Road, Jodhpur.  
 Ramesh Films Motion Picture Distributors, Olympic Cinema Building, Jodhpur.  
 Ram Sewashram, Perfumed Hair Oil Manufacturers, Jalorigate, Jodhpur.  
 Ratoomal, Kehtan Bhawan, M. I. Road, Jaipur.  
 Regal Sports, Station Road, Jodhpur.  
 Remington Rand of India Ltd., Mirza Ismail Road, Jaipur.  
 Sainik Motors, Sojatigate, Jodhpur.  
 Santosh Chemical Works, Pushkar Road, Ajmer.  
 Scientific Apparatus & Chemical Works, Kankaria Building Jalorigate, Jodhpur.  
 Shah Manmal Bhikamchand Surana, Pall House, Jodhpur.  
 Shah & Co., Chaura Rashta, Jaipur.  
 Shankerlal & Sons, Station Road, Jodhpur.  
 Shanti Bhawan Lodge, Jodhpur.  
 Sharda Devi Moondhra & Co., Station Road, Jodhpur.  
 Sharda Industries P. Ltd., Industrial Estate, Jaipur.  
 Sharma Brothers, Newspaper Agents, Baiji Talab, Jodhpur.  
 Shive Engineering Works, Sharma Bldg., Mirza Ismail Road, Jaipur.  
 Shree Automobile Works, Chopasni Road, Jodhpur.  
 Shri Hanuman Iron & Steel Industries, Industrial Estate, Jaipur.  
 Shri Mahalaxmi Colour Mfg. Co., Ltd., Erinpura.  
 Shri Marwar Printers Ltd., Jodhpur.  
 Shri Shardadevi Moondhra Motor Company, Station Road, Jodhpur.  
 Somani Metal & General Industries, C Scheme, Jaipur.  
 Standard Electric Co., P.O. Box No. 142, Kalsarganj, Ajmer.  
 Supreme General Film Exchange Ltd., Johari Bazar, Jaipur.  
 Surana Bros., Sojatigate, Jodhpur.  
 Surana & Co., Minerva Building, Jodhpur.  
 Tak Studios, Opp. Prem Prakash, Jaipur.  
 Thakryamal Baichand, Mirza Ismail Road, Jaipur.  
 Thakar Das Khatri & Sons, Tripolia Bazar, Jodhpur.  
 Toshnival Bros. Private Ltd., Kutchery Road, Ajmer.  
 Udani Engineering Works, Chaura Rasta, Jaipur.  
 Udaipur Distillery Company Limited, The, Udaipur.  
 Udaipur Mineral Development Syndicate, Bhilwara.  
 Ugamraj & Co., Kutchery Road, Jodhpur.  
 United Motors, Chopasni Road, Jodhpur.  
 United Motors of Rajasthan, Opp. Khasa Kothi, Jaipur.  
 United Traders, Station Road, Jodhpur.  
 Universal Trading Co., Jwala Bldg., Bhagwandas Road, Jaipur.  
 Vinod Silicate & Pharmaceuticals, Hospital Road, Jaipur.  
 Vohas Limited, Mirza Ismail Road, Jaipur.  
 Vyas, P. B. & Co., Jalorigate, Jodhpur.  
 Wilcox Buckwell India P. Ltd., New Colony, Jaipur.  
 Zoraater, S. & Co. (Supplies) P. Ltd., Johari Bazar, Jaipur.



Age is not all... nor the mere fact of survival on the frayed ends of tradition. Among the earliest promoters of a concept — that of self-sufficiency for our country through extensive industrialization, we have known no ingenious ways to overcome obstacles apart from flexibility in decision making, and regard for ordinary principles of management wedded to probity. If we are today a rational complement of industrial units, that is because of our reluctance to sit on the fence of the status quo — waiting for an overwhelming consumer demand to develop before being able to set our sights. And if we have a modest reputation of worthiness, we intend to live up to it through an optimum use of talents, available resources and initiative.

**AGE  
IS NOT  
ALL...**



#### AMONG THE COMPANIES IN THE MARTIN BURN GROUP ARE:

**THE INDIAN IRON AND STEEL CO. LTD.:** With an enviable record of production efficiency, the million ton integrated steel plant at Burnpur is ready with another programme to expand its production capacity. IISCO's foundry division at neighbouring Kulti is one of the largest of its type in the East.

A subsidiary, The IISCO-Stanton Pipe and Foundry Company Limited, recently inaugurated, has its brand new factory coming up at Ujjain for the manufacture of spun iron pipes and ancillaries directly for the benefit of consumers in developing areas.

**BURN & COMPANY LTD., HOWRAH WORKS:** Pioneers in foundry practice in India, in structural steelwork fabrication and the manufacture of rolling stock—the origins of the Company go back to the year 1781.

**BURN & CO. LTD., REFRACTORY & CERAMIC GROUP:** Apart from stoneware pipes and chemical stoneware, the works of this group—eight in number and located in four states—manufacture nearly all types of refractories to meet the requirements of India's steel industry, power undertakings, railways, ordnance factories—in fact, any industry requiring refractory material for the maintenance of furnaces.

**THE INDIAN STANDARD WAGON CO. LTD., SANTA:** The oldest Indian unit started for the specific purpose of manufacturing railway rolling stock—has been mainly responsible for building up the wagon building

industry. Also manufactures springs, forgings, pressings and stampings for heavy industry as well as automotive springs and components.

**THE HOOGLY DOCKING & ENGINEERING CO. LTD.** Established in 1819, the Company with its shipbuilding yard, dry dock and extensive workshops is geared to meet defence and civilian requirements, and to produce dredges to keep our new harbours and channels of inland navigation open.

**ROBERT HUDSON (INDIA) LTD.:** A premier concern in its own field, the Company devotes itself to all types of light railway engineering—has important connections with the mining industries.

**RAILWAY COMPANIES:** Some of the first feeder railways in India, with six systems in four states, still a great aid to suburban travel.

**ELECTRIC SUPPLY COMPANIES:** Pioneers again in the generation and distribution of domestic power in India serving a wide area in Uttar Pradesh and Madhya Pradesh.

**THE VAUGHAN BURN CRANE COMPANY LTD.:** A collaboration with The Vaughan Crane Company Ltd. of Manchester... Hand operated and electric overhead travelling cranes and chain pulley blocks.

**REYROLLE BURN LTD.:** A collaboration with A. Reyrolle & Co. Ltd., Hebburn, England—for the manufacture of specialized types of electrical switchgear of worldwide repute.

**MARTIN BURN LIMITED**

Calcutta New Delhi Bombay Kanpur Patna





## COMMERCIAL FIRMS IN CALCUTTA

- Abdul Rahim Oosman & Co., India Pvt. Ltd., 2, Rajmohan Street, Calcutta 1.
- Abdulbhal Fidailli & Co., Radhabazar Street, Calcutta 5.
- Acme Manufacturing Co., 8-1, Esplanade East, Calcutta 1.
- Adair Dutt & Co., Pvt. Ltd., 5, Dalhousie Square East, Calcutta 1.
- Adcco Ltd., 29-3-A, Chetla Central Road, Calcutta 27. Phone : 45-2599.
- Adding Machines (India) Private Ltd., 29, Ezra Mansions, 10, Govt. Place, Calcutta 1. Sole Agents and Service Representatives in India for Burroughs Corporation, Detroit Michigan, U.S.A. Directors: Mr. M. M. P. DeSouza, Mrs. T. M. Ball, Mrs. R. V. DeSouza, Director and General Manager; Mr. S. H. W. Ball, Sales; Mrs. Y. R. Ball, Service Manager; Mr. N. Pal, Engineers; H. N. Ghosh, S. K. Mitra, M. K. Mitra, M. Macdonald, D. Bowers, B. N. Ghose, Leon Bowers, A. R. Ghose, B. Goswami; Accounts Department: A. S. Ghosh, R. J. Banerjee; Secretaries: Mrs. G. Wadsley, Mrs. M. Grant, Mrs. J. Basak; Store Keeper: H. Bell. Tel. Address: "ADDMACHIND" (C), Phones : 23-6197/6198/6199.
- Adrema Ltd., Addressing Machines & Business System, 20-B, Park Street, P.O. Box No. 2098, Calcutta. Phone : 235747.
- Adress Pvt. Ltd., 24, Chowringhee Road, Calcutta 13.
- ADVANCE ENGINEERING CORPORATION.** (Est'd. 1944), Dealers in all Steel Pipe Fittings; Distributors for 'R' Brand Pipe Fittings; 12-B, Clive Row, P.O. Box 2431, Calcutta 1; Phone : 224956; Grams : "WETGRIND."
- Advani Pvt. Ltd., 3-D, Garstin Place, Calcutta.
- AEICORP PRIVATE LTD.**, 10, Lall Bazar Street, Calcutta 1; Specialists in Supply of Spare Parts for Automobiles, Tractors, Earthmoving Equipment, Construction Machinery, Locomotives, Drilling Rigs and Tanks (ordnance vehicles); Holders of Parallel Rate Contract with D.G.S. & D. for U.S.A., U.K. and India made Primary Manufacturers' Spares for I.H.C., Mack, P & H Gallion, Austin — Western, Euclid, Bucyrus Erie, Marion, Letourneau, Ruston-Bucyrus, Spare Parts for Caterpillar, Allischalmers, Cummins and all other Earthmoving Equipment & Engines are also available exstock; Spares not available exstock will be supplied on our own import Licence. Phone : 22-5120 & 220834; Grams : "EAGERNESS."
- Aero-Flow Company, 16, Mandal Temple Road, Calcutta 33.
- A. Firpo Ltd., 18/2, Chowringhee Road, Calcutta 13.
- Agarpara Co. Ltd., 1 & 2, Old Court House Corner, Calcutta 1.
- Agarwal Trading Corp., 191, M. Gandhi Road, Calcutta 7.
- Agrind Fabrications Ltd., 6, Ganesh Chandra Avenue, Calcutta.
- A. H. Bhiwandiwalla & Co. Pvt. Ltd., 2, Doyehatta Street, Calcutta 7.
- A. H. ENGINEERING WORKS**, Manufacturers of 'Shield' Brand Vices, Surface Plate, Angle Plate, V-Block Smithy Hearths and all kinds of casting jobs; Government contractors and general order suppliers; 20, Musalman Pava Lane (Bantra), Howrah-1; Phone: 664617.
- Ahmed Dadabhoy & Co. (India) Pvt. Ltd., 8-A, Amratolla Lane, Calcutta 1.
- Ahmed A. Fazalbhoy Pvt. Ltd., 55, Canning Street, Calcutta 1.
- Air Carrying Corporation, 134-4, M. Gandhi Road, Calcutta 7.
- Air France, 41, Chowringhee Road, Calcutta 16.
- Air Link Pvt. Ltd., 5-B, Clive Chat Street, Calcutta 1.
- Air Survey Co. of India Pvt. Ltd., 2-1, Jessore Road, Calcutta 28.
- Airways India Ltd., 31, Chittaranjan Avenue, Calcutta 12.
- Ajodhya Prasad & Mitra Co., 14, Pollock Street, Calcutta 1.
- A. & J. Main & Co., Ltd., 16, Netaji Subhas Road, Calcutta 1.
- Albert David Ltd., 15, Chittaranjan Avenue, Calcutta 15.
- Albs Engineering Co., 20, Netaji Subhas Road, Calcutta 1.
- Aleen Trading Corp., 71-A, Netaji Subhas Road, Calcutta 1.
- Alcock W. J. & Co., Ltd., 7, Hastings Street, Calcutta.
- Alexander Pvt. Ltd., 26, Strand Road, Calcutta 1.
- Alexander Moody & Co. Ltd., P-21/22, Radha Bazar Street, Calcutta 1.
- Alex Miller & Co., 137, Canning Street, Calcutta 1.
- Alfred Herbert (India) Private Ltd., 13/3, Strand Road, Post Box No. 681, Calcutta-1. Importers and Distributors of Machine Tools, Small Tools & Workshop Equipment. Also Plastic Moulding & Die Casting Machines, Steam and Pneumatic Hammers and Drop Stamps, Forging, Presses and Upsetting Hot Forging Machines, Attritor Pulverizers; Phone : 23-4801-2-3-4-5. Grams : "MACHINE (C)", Calcutta, Telex 314, MACHINECAL.
- All India General Transport Co., 134/4, Mahatma Gandhi Road, Calcutta 7.
- All India Trading Co., 1, Central Avenue, Calcutta 13.
- Alcock E. M. & Mohatta Ltd., 19, British Indian Street, Calcutta 1.
- Allen & Hanburys Ltd., 8, Gillander House, 8, Netaji Subhas Road, Calcutta 1.
- Allen Richards & Co., 5-B, Clive Ghat Street, Calcutta 1.
- Alliance Engineers Pvt. Ltd., 67-B, Netaji Subhas Road, Calcutta 1.
- ALLIED ANODISERS.** For the best in Anodising and Builders Hardware; 25, Radha Madhab Dutt Garden Lane, Calcutta 10; Phone : 351905 & 354311.
- Allied Distributors & Co., 33, Brabourne Road, Calcutta.
- Allied Industries of India, Norton Bldg., 2-1, Old Court House Corner, Calcutta 1.
- Allied Trading Corp., 71-A, Netaji Subhas Road, Calcutta 1.
- American Express Co. Inc., 21, Old Court House Street, Calcutta 1.
- American Refrigerator Co., Pvt. Ltd., 13/C, Russell Street, Calcutta.
- Amrita Bazar Patrika Pvt. Ltd., 14, Ananda Chatterjee Lane, Calcutta 3.
- Amritlal Ojha & Co., Ltd., Security House, 23B, Netaji Subhas Road, Calcutta 1.
- Amrutnjan Ltd., 132-1, Harrison Road, Calcutta 7.
- Ananda Bazar Patrika Ltd., 6, Sooterkin Street, Calcutta 13.
- Anandamoyee Agency Pvt. Ltd., 24, Netaji Subhas Road, Calcutta 1.
- Anderson Wright & Co., 7, Wellesley Place, Calcutta 1.
- Andrew Yule & Co. Ltd., 8, Clive Row, Calcutta 1.
- Angelo Brothers Ltd., P. Box 68, Calcutta.
- Anglo Iranian Oil Co. (India) Ltd., Hongkong House, Dalhousie Square, Calcutta.
- Angus Co., Ltd., 4, Clive Row, Calcutta 1.
- Angus Keith Co., 30, Strand Road, Calcutta 1.
- Anodising Co., 30/H/1, Canal East Road, Calcutta 1.
- Antoine Bentz Ltd., 9, Stephen House, Dalhousie Square, Calcutta 1.
- Antool & Co. Pvt. Ltd., S., 91, Upper Circular Road, Calcutta 9.
- A. P. V. Engineering Co. Pvt. Ltd., 41, Chowringhee Road, Calcutta 16.
- Aricha Trading Co., Ltd., 8, Dalhousie Square East, Calcutta 1.
- Arim Metal Industries Pvt. Ltd., 23, Convent Street, Calcutta 14.
- Arkay Equipment Co., 2, Brabourne Road, Calcutta.
- Armco India Pvt. Ltd., 21, Esplanade Mansions, Calcutta 1.
- Armen George Co. Pvt. Ltd., 35, Ezra Street, Calcutta 1.
- Arora & Co. Pvt. Ltd., 74, Clive Row, Calcutta.
- Arora & Sehgal Pvt. Ltd., 2, Clive Row, Calcutta 1.
- Art Centre Private Ltd., 7, Indian Mirror Street, Calcutta 13.
- Art Floors Pvt. Ltd., 2, Clive Row, Calcutta 1.
- Artik Jagat** (Hindi Financial Weekly), 10, Bakery Road, Calcutta 22.
- Arthur Butler & Co. (Muzafferpore) Ltd., 18, Netaji Subhas Road, Calcutta 1.
- Arun Importers Pvt. Ltd., 5, Pollock Street, Calcutta 1.
- Arvind Brothers Pvt. Ltd., 4, Saklat Place, Calcutta 13.
- Aryan Mining & Trading Corp. Pvt. Ltd., 61, Strand Road, Calcutta 1.
- Aryan Trading Corp. Ltd., 22, Canning Street, Calcutta 1.
- A. S. Soobashah Bros., 21, Colootla Street, Calcutta 1.
- Asbestos Cement Pvt. Ltd., Taratolla Road, Calcutta 24.
- Asbestos Magnesite and Friction Materials Ltd., 7, Hastings Street, Calcutta.
- Asbestos Products Co., 71-A, Netaji Subhas Road, Calcutta 1.
- Asea Electric India Pvt. Ltd., Post Box 194, Calcutta 1.
- Asea United Traders and Industries Pvt. Ltd., P-40, Mission Row Extn., Calcutta 13.
- Ashland Oil Co. India, 2, Clive Row, Calcutta.
- Ashok Chandra Rakhit Pvt. Ltd., 26, Cotton Street, Calcutta 7.
- ASHOK ENGINEERING & CONSTRUCTION CO.** (Props.: Vibromachines (India) Private Ltd.); 14, Ganesh Chandra Avenue, Calcutta 13; Phone : 236814; Grams : "CASH"; For full range of Concrete Vibrators, Immersion Screed, Shutter or form, Pan, Table, Rammer, Screen, etc. and Mixers; Flexible Shaft-Grinders, Pneumatic Grinder, Rammer, etc., "ASHOK" Super Vibrator (No Belt, No Pulley, Low Flexible Shaft Speed Very High Vibration); "ASHOK" Aeroget Pneumatic Vibrator (No cur Motor, No bearings, No Lubrication, Very High Vibration); Works: Shibpur, Howrah; Phone : 674033.
- Ashoka Marketing Ltd., 11, Clive Row, Calcutta.
- Asia Engineering & Mfg. Co. Pvt. Ltd., 11, Ezra Street, Calcutta 1.



Asia Engg. Supply Stores, Pvt. Ltd., P-15, Bentinck Street, Calcutta 1.

Asia Marketing Co. Ltd., 38, Netaji Subhas Road, Calcutta 1.

Asian Enterprising Syndicate, 40-B, Princep Street, Calcutta 13.

Asiatic Mfg. Co., 84-A, Netaji Subhas Road, Calcutta 1.

Asiatic Oxygen & Acetylene Co. Ltd., 8, Dalhousie Square East, Calcutta.

Asiatic Shipping Co. Pvt. Ltd., P-14, Mission Row Extension, Calcutta 1.

Asiatic Steam Navigation Co. Ltd., 6, Lyons Range, Calcutta 1.

Assam Bengal Cement Co., Ltd., 7, Wellesley Place, Calcutta 1.

Assam Bengal River Service Pvt. Ltd., 25, Swallow Lane, Calcutta 1.

Assam Sillimanite Ltd., 6, Ganesh Chandra Avenue, Calcutta 13.

Associated Accessories Pvt. Ltd., 20, Mangoe Lane, Calcutta 1.

Associated Aeaby Industries Ltd., 22, Strand Road, Calcutta 1.

Associated Cement Companies Ltd., Bombay Mutual Bldg., India Exchange Place, Calcutta.

Associated Commercial Concerns, 14, Bow Bazar Street, Calcutta 12.

Associated Engineers Pvt. Ltd., 24, Netaji Subhas Road, Calcutta 1.

Associated Equipment Co., 10, Clive Row, Calcutta.

Associated Exports, Imports Corp., 8-B, Lal Bazar Street, Calcutta.

Associated Indian Enterprises Pvt. Ltd., 206, Lower Circular Road, Calcutta 1.

Associated Industrial Development Co. Ltd., Stephen House, Dalhousie Square East, Calcutta.

**ASSOCIATED INSTRUMENT MANUFACTURERS (INDIA) PRIVATE LTD.,** Scientific Instrument Manufacturers and Manufacturers' Representatives.

Regd. Office: B-5, Gillander House, P.O. Box No. 2136, Calcutta.

Telegrams: "AIMIL".

Telephone: 223304.

Manufacturers of: Laboratory Apparatus, Soil, Cement and Fuel Testing Equipments.

Dealers in: Scientific, Surveying and Optical, Electrical, Communications, Vacuum and other types of Instruments.

Associated Metal Industries of India Ltd., 16, Mangoe Lane, Calcutta 1.

Associated Mining Industries Ltd., 4, Lyons Range, Calcutta 1.

Associated Pigments Ltd., 14, Netaji Subhas Road, Calcutta 1.

Asutosh Mookerjee & Co., P. Ltd., 12, Raja Woodmunt Street, Calcutta 1.

Atherton & Co., Pvt. Ltd., G., 4, Mission Row, Calcutta 1.

Atlantis East Ltd., 41, Chowringhee Road, Calcutta 16.

Atlas Industries Co., 13/C, Raja Rajkissen Street, Calcutta 6.

Atlas Works Pvt. Ltd., 119, Ripon Street, Calcutta 16.

Automatic Machine Co. India Ltd., P-96, Chowringhee Square, Calcutta 13.

Avery Co. of India Pvt. Ltd., 28-2, Waterloo Street, Calcutta 1.

Aviquipo of India Pvt. Ltd., 22, Chittaranjan Avenue, Calcutta 13.

Awat Sing & Co., P-6, Mission Row Extn., Calcutta 1.

Azad Trading Co. Pvt. Ltd., 12, Zakaria Street, Calcutta 1.

**B. CROWDEURY & CO.,** Engineers & Manufacturers' Representatives; 155, Canning Street, Calcutta. (For details

please see Commercial Firms Section—BOMBAY).

**B. A. & BROTHERS (EASTERN) PRIVATE LTD.,** 6, Clive Row, Calcutta; Phone: 225940, Grams: "BABULINE" for all offices; Offices: Station Road, Patna, Phone: 2647; Panbazar, Gauhati, Assam, Phone: 356; Buxi Bazar, Cuttack, Orissa, Phone: 381.

Babcock & Wilcox of India Pvt. Ltd., Ilaco House, Brabourne Road, Calcutta.

Babulal & Co. Pvt. Ltd., 13, Syed Salley Lane, Calcutta 7.

Badri & Co. Pvt. Ltd., 24, Amratolla Lane, Calcutta 1.

Bagri Iron & Steel Co., 138, Canning Street, Calcutta 1.

Bahri & Co. P. Ltd., P-39, Mission Row Extension, Calcutta 13.

**bajaj**

**BAJAJ ELECTRICALS LTD.,** Electrical Engineers, Manufacturers & Contractors, 10, Ganesh Chandra Avenue, Calcutta 1. Telephone: 237041.

Grams: "SOFTLITE".

For further details please see Commercial Firms Section—BOMBAY.

Bajoria Agencies Pvt. Ltd., 174, Mahatma Gandhi Road, Calcutta 7.

Baker & Co., 71-A, Netaji Subhas Road, Calcutta 1.

Bakshi, S. A. B. & Co., Bakshi Bldgs., 32, Colootola Street, Calcutta 1.

Bakshi & Sons Pvt. Ltd., D.N., 152-B, Mahatma Gandhi Road, Calcutta 7.

Baldeoram Saligram Pvt. Ltd., 61, Strand Road, Calcutta 6.

Balmer Lawrie & Co. Ltd., 21, Netaji Subhas Road, Calcutta 1.

Bando & Co. Ltd., 35, Diamond Harbour Road, Alipore, Calcutta 27.

Banerjee & Co. Ltd., S.N., 14-2, Old China Bazar Street, Calcutta 1.

Banerjee Chakraborty & Co. Ltd., 135, Canning Street, Calcutta 1.

Banerjee Santosh Ch. & Sons Ltd., 7, Swallow Lane, Calcutta 1.

Banerji & Co. Pvt. Ltd., G.C., 74-A, Nalini Self Road, Calcutta 7.

Bangur Brothers Ltd., 14, Netaji Subhas Road, Calcutta 1.

Banka & Sons, 8, India Exchange Place, Calcutta 1.

Banku Behari Paul & Co. Pvt. Ltd., 133, Old China Bazar Street, Calcutta 1.

Bansal & Co. Ltd., 16, Noormal Lohia Lane, Calcutta 7.

Basmail & Co. India Ltd., 296-98, Jessore Road, Calcutta 28.

Bata Shoe Co. Pvt. Ltd., 30, Theatre Road, Calcutta 16.

Bathgate & Co. Ltd., 17, 18 and 19, Old Court House Street, Calcutta 1.

Batlbot & Co., Gandhi House, P-10, Mission Row Extension, Calcutta 1.

Bawa Iron & Steel Works Ltd., 83, Brabourne Road, Calcutta-1.

B. B. Chatterjee & Co. Pvt. Ltd., 22, Raja Woodmunt Street, Calcutta 1.

B. Bhownick & Co., P-10, Mission Row Extn., Calcutta 1.

B. C. Nawn & Bros. Ltd., 7, Bipin Behari Ganguly Street, Calcutta 12.

Beacon Brothers Pvt. Ltd., 17, Mangoe Lane, Calcutta 1.

Beardsell & Co. Pvt. Ltd., W.A., 8, Netaji Subhas Road, Calcutta.

Behar Firebricks & Potteries Ltd., 22, Strand Road, Calcutta 1.

Behar Rubber Industrial Co., 14-1, Bibibagan Lane, Calcutta 15.

Beharilal Bempershad Exports & Imports Pvt. Ltd., 144, Cotton Street, Calcutta 7.

Beharilal Khandelwal & Co., 20, Maharsi Debendra Road, Calcutta 7.

Bell's Asbestos & Engineering India Pvt. Ltd., 24, Chittaranjan Avenue, Calcutta 12.

Phone: 23-3756/0 (4 Lines). Grams: "BESTOBELL," Calcutta.

**BELLISS & MORCOM (INDIA) LTD.,** 6, Little Russell Street, Calcutta 16; Phone: 441198 & 447296. Grams: "BEL-LINDIA"; Manufacturers of Steam Engines, Single Stage Steam Turbines and Experimental Equipment for Colleges, Spare Parts thereof, and Importers of Instructional Steam Turbines, Air Compressors, Multi-stage Steam Turbines and Spares thereof.

**BENGAL CHEMICAL & PHARMACEUTICAL WORKS LTD.,** 6, Ganesh Chandra Avenue, Calcutta-13. Phone: 23-2165-67 (3 Lines), Grams: "RASAYAN"—Calcutta, Bombay Office: 502, Cadell Road, Bombay 28; Pharmaceuticals, Heavy & Fine Chemicals, High Class Toilet Products, Coal Tar Distillation Products, Fire Extinguishers, Printing inks, Driers etc., Branch Office—Kanpur.

Bengal Cordage Co., 113, Monohardas Chowk, Netaji Subhas Road, Calcutta 1.

Bengal Corporation Pvt. Ltd., 14, Netaji Subhas Road, Calcutta 1.

Bengal Dental Supply Co. Pvt. Ltd., 275-4, Bowbazar Street, Calcutta.

Bengal Enamel Works Ltd., 60-2, Dharamtala Street, Calcutta 13.

Bengal Engineering Co. Ltd., 12, Dalhousie Sqr. (East), Calcutta 1.

Bengal Engineering and Trading Co., 30, Diamond Harbour Road, Calcutta 38.

Bengal Export & Import Corporation, 12-1, Belliaghata Main Road, Calcutta 10.

Bengal Hardware & Tin Sheet Mfg. Co., 70, Netaji Subhas Road, Calcutta 1.

Bengal Immunity Co. Ltd., 153, Dharamtala Street, Calcutta 13.

Bengal Industries, 132, Cotton Street, Calcutta 7.

Bengal Ingot Co. Pvt. Ltd., 5, Hide Road, Kidderpore, Calcutta 23.

Bengal Machinery Corp., Pvt. Ltd., 9, New Tangra Road, Calcutta 15.

Bengal Mercantile Co., 7, Swallow Lane, Calcutta 1.

Bengal Meteorograph Co., 53, Pramanick Ghat Road, Calcutta 36.

Bengal Overseas Trading Co., 1, Bonfield Lane, Calcutta 1.

Bengal Paste Co., 10, Delhi Entally Road, Calcutta 14.

Bengal Phototype Co. Pvt. Ltd., 46-1, Amherst Street, Calcutta 9.

Bengal Porcelain Co. Ltd., 1/2, Moti Seal Street, Calcutta 13.

Bengal River Service Co. Ltd., 22, Strand Road, Calcutta 1.

Bengal Stores Ltd., 8A, Chowringhee Place, Calcutta 13.

Bengal Tea Co. Ltd., 9, Brabourne Road, Calcutta 1.

Bengal Timber Trading Co. Ltd., 4, Clive Row, Calcutta 1.

Bengal Trading Co., 22, Strand Road, Calcutta 1.

Bengal Trading Corporation, 71, Canning Street, P.B. No. 2557, Calcutta 1.

Bengal United Co. Pvt. Ltd., 36, Strand Road, Calcutta 1.

Bengal Waterproof Works (1940) Ltd., 32, Theatre Road, Calcutta 16.



Bengal Wire Nails Co. Ltd., 37, Cross Street, Calcutta 7.

Benn, C. & Co. (India), 124-B, Dharamtala Street, Calcutta 13.

Bennett, Coleman & Co. Ltd., 13-1 & 13-2, Govt. Place, East, Calcutta 1.

Bensen Industries, 96, Shree Arobindo Road, Salkia, Howrah.

Benson (India) Ltd., S. H. (Formerly Bomas Ltd.), Govind Bhawan, 2, Brabourne Road, Calcutta 1.

Bhadani Brothers Ltd., 15, Netaji Subhas Road, Calcutta 1.

Bhagwan Finance Corporation Pvt. Ltd., 10, Clive Row, Calcutta 1.

Bhalotia Metal Mfg. Co., 2, Digamber Jain Temple Road, Calcutta-7.

**BHALLA'S CARPETS**, For Woollen Carpets and Rugs in exquisite designs and Self Colours; 45, Park Street, Calcutta 16; Phone: 232755 & 238697; Grams: "NUMDAS."

Bharat Engineering Co., Bharat Bhawan, 3, Chittaranjan Avenue, South, Calcutta 13.

Bharat Exports Ltd., 9B, Chowringhee Place, Calcutta 13.

Bharat Line Ltd., 13, Brabourne Road, Calcutta 1.

Bharat Overseas Pvt. Ltd., 18-A, Brabourne Road, Calcutta 1.

Bharat Produce Co. Ltd., 8, India Exchange Place, Calcutta.

Bharat Sheet Metal Industries Ltd., 6-A, S. N. Banerjee Road, Calcutta 13.

**BHARTIA COMMERCIAL CO. LTD.**, Manufacturers of Bright Bars & Shaftings of all sizes and Specifications; B-1, Gillander House, 8, Netaji Subhas Road, Calcutta 1; Phone: 227735 & 229465, Grams: "LINESHAFT"; Factory at Ganganagar, 24-Parganas.

Bhartia Electric Steel Co. Ltd., 4, Old Court House Street, Calcutta 1.

Bholanath Dutt (Paper Merchants) Pvt. Ltd., Raghunath Bldgs., 34-A, Brabourne Road, Calcutta.

Bhutoria Bros. Pvt. Ltd., 56, Netaji Subhas Road, Calcutta 1.

Bidyut Shilpa Ltd., 372/66, Russa Road South, Calcutta-33.

Bimal Bottle Stores Pvt. Ltd., 130, Radhabazar Street, Calcutta 1.

Binani Commercial Co. Pvt. Ltd., 42/1, Strand Road, Calcutta.

Binani Metal Works Pvt. Ltd., 38, Strand Road, Calcutta.

Biological Supply Concern Pvt. Ltd., 14, Hare Street, Calcutta 1.

Bird & Co. Pvt. Ltd., Chartered Bank Bldgs., Calcutta 1.

Birkmyre Bros Ltd., 4, Dalhousie Square East, Calcutta 1.

Birla Bros. Pvt. Ltd., 8, India Exchange Place, Calcutta 1.

Birmingham Iron & Steel Co., 8, Canning Street, Calcutta 1.

B. K. Khanna & Co. Pvt. Ltd., 4, Council House Street, Calcutta 1.

B. K. Nayak & Brothers Pvt. Ltd., 141, Netaji Subhas Road, Calcutta 1.

B. K. Shaw Industries Pvt. Ltd., P.B. B. K. Paul Avenue, Calcutta 5.

Blacker & Co. Pvt. Ltd., 18, Strand Road, Calcutta 1.

Blackwood Hodge (India) Pvt. Ltd., Euclid Works, 139, Beliaghata Road, Calcutta 15.

Blackwoods India Ltd., 2, Mangoe Lane, Calcutta 1.

Bobb Framjee Private Ltd., 41-A, Free School Street, Calcutta 16.

Bokaro & Ramgur Ltd., 22, Chittaranjan Avenue, Calcutta 13.

Bombay Ammonia & Refrigeration Co. Pvt. Ltd., 5, Mission Row, Calcutta.

Bombay Co. Pvt. Ltd., 18-A, Brabourne Road, Calcutta 1.

Bombay Trading Co. Pvt. Ltd., 14, Pageyapatti Street, Calcutta 7.

Bonard & Co. Ltd., 5, Council House Street, Calcutta 1.

Boral & Sen Private Ltd., 11/B, Romanath Biswas Lane, Calcutta 9.

Bose D. N. & Co. Pvt. Ltd., 12, Kalidas Singhee Lane, Calcutta.

Bose M. L. & Co. Pvt. Ltd., Lakshmi Bilas House, 14, Jagannath Dutt Lane, Calcutta 9.

Boseck J. & Co. Pvt. Ltd., Grand Hotel Arcade, 16-5, Chowringhee, Calcutta.

Bourne & Sheppard, 141, Corporation Street, Calcutta.

Boving & Co. Ltd., 21, Netaji Subhas Road, Calcutta 1.

B. P. Khemka Pvt. Ltd., 5, Clive Row, Calcutta.

**BRADMA OF INDIA LTD.**, Data Writing Machines & Business Systems, 20-B, Park Street, Calcutta; Phone: 235747, Grams: "BRADMALT."

Brady W. H. & Co. Ltd., Mercantile Bldgs., Lall Bazar, Calcutta 1.

Braithwaite & Co. (India) Ltd., Hide Road, Kidderpore, Calcutta-23.

Bridge & Roof Co. (India) Ltd., 21, Netaji Subhas Road, Calcutta 1.

Briggs R. V. & Co. Pvt. Ltd., 16, Old Court House Street, Calcutta 1.

Brijmohan Bros. Pvt. Ltd., 90, Stephen House, 4, Dalhousie Square East, Calcutta.

Britannia Building & Iron Co. Ltd., Stephen House, 4, Dalhousie Square East, Calcutta.

**BRITISH ELECTRICAL & PUMPS PRIVATE LTD.**, Hydraulic, Electrical and Mechanical Engineers, 1-1B, Mission Row, Calcutta 1; Self-Priming, Centripetal, Centrifugal, Agricultural, Sewage and Engine driven Pumping Sets and Electric Motors; Phones: 227826, 27 & 28.

British India Export & Import Trading Co., 67-B, Raja Nabakissen Street, Calcutta 5.

British India Steam Navigation Co. Ltd., 16, Strand Road, Calcutta.

British India Trading Co., 12, Waterloo Street, Calcutta.

British Overseas Airways Corp., 41, Chowringhee Road, Calcutta 16.

British Tabulating Machine Co. Ltd., 107, Stephen House, Dalhousie Square, Calcutta.

Broadway Agency of India, 185-AB, Bow Bazar Street, Calcutta 12.

Brocho & Co. Ltd., 36, Weston Street, Calcutta 13.

Brooke Bond India Pvt. Ltd., Brooke House, Calcutta 13.

B. R. Herman & Mohatta (India) Private Ltd., 19, British Indian Street, Calcutta-1.

B. S. B. & Co. Pvt. Ltd., P-7, Mission Row Extension, Calcutta 1.

B. S. Industries, 435, Jessore Road, Calcutta 28.

Bubna More & Co. Pvt. Ltd., 5, Clive Row, Calcutta 1.

Buher (Asbestos) Pvt. Ltd., 12, Netaji Subhas Road, Calcutta 1.

Bunge & Co. Ltd., 8, Old Court House Street, Calcutta 1.

Burmah Oil Co. (India Trading) Ltd., India Exchange Bldgs., India Exchange Place, Calcutta.

Burmah-Shell Oil Storage & Distributing Co. of India Ltd., 81, Dalhousie Square, Calcutta 1.

Burn & Co. Ltd., 12, Mission Row, Calcutta 1.

Burnet, Davies & Co. Ltd., 22, Canning Street, Calcutta 1.

Butto Kristo Neogi & Co., 14-2, Old China Bazar Street, Calcutta 1.

Butto Kristo Paul & Co. Ltd., 1, Bonfield Lane, Calcutta 1.

Cadbury-Fry (India) Ltd., 9-A, Esplanade East, Calcutta 11.

Calcutta Chemical Co. Ltd., 35, Panditla Road, R. B. Avenue, Calcutta 29.

Calcutta Commercial Co., 37, Strand Road, P.B. No. 662, Calcutta 1.

Calcutta Credit Corp. Ltd., 36, Chowringhee Road, Calcutta 16.

Calcutta Electric Supply Corp. Ltd., Victoria House, Chowringhee Square, Calcutta.

Calcutta Engineering Co. (India) Ltd., British Indian Street, P.B. No. 589, Calcutta 1.

Calcutta Essence & Gas Supply Co., 2-A, Grants Lane, Calcutta 12.

Calcutta Expanded Metal Mfg. Co. Pvt. Ltd., P-16, Kalakar Street, Calcutta 7.

Calcutta Fan Works Private Ltd., 19/B, Chowringhee Road, Calcutta-13.

Calcutta (India) Trading Co., 132, Cotton Street, Calcutta 7.

Calcutta Industrial Chemicals & Minerals Co. Pvt. Ltd., 43, Dharamtolla Street, Calcutta 13.

Calcutta Investment Co. Ltd., 9, Brabourne Road, Calcutta 1.

Calcutta Jute Agency Pvt. Ltd., 2, Clive Row, Calcutta 1.

Calcutta Mercantile Co., 161-1-A, Rash, Behary Avenue, Calcutta 19.

Calcutta Metal Industries Ltd., P-3, Kalakar Street, Calcutta 7.

Calcutta Metallic Co., 11, Harish Mukherjee Road, Calcutta 25.

Calcutta Paper Bag Co., 1, Rhabanath Sen Street, Shambazar, Calcutta 4.

Calcutta Phototype Co. Pvt. Ltd., 6, Chowringhee, Calcutta 13.

Calcutta Safe Deposit Co. Ltd., 102-A, Netaji Subhas Road, Calcutta.

Calcutta Steam Navigation Co. Ltd., 5, Fairlie Place, Calcutta 1.

Calcutta Traders Co., 28, Amrtolla Street, Calcutta 1.

Calcutta Trading Corp., 12, Lower Chitpur Road, Calcutta.

Calcutta Tramways Co. Ltd., P-4, Mission Row Extension, Calcutta 1.

Calcutta Tube Co., 21-A, Canning Street, Calcutta 1.

Calcutta Wax Traders & Co. Pvt. Ltd., 22, Bonfield Lane, Calcutta 1.

Callarman J. Pvt. Ltd., P-34, Mission Row Extension, Calcutta 13.

Caltex (India) Ltd., 22, Chittaranjan Avenue, Calcutta 13.

Cambray R. & Co. Pvt. Ltd., Kent House, P-33, Mission Row Extn., Calcutta 13.

Canteen Equipment Trading Co., 22, Shyampukur Street, Calcutta 4.

Capco Pvt. Ltd., 14, Netaji Subhas Road, Calcutta 1.

Capital, 5, Mission Row, P.O. Box 14, Calcutta 1.

Caprihans (India) Pvt. Ltd., 53-D, Chowringhee Road, Calcutta 16.

Cardboard Materials & Printing Co. Ltd., 7, Convent Road, Entally, Calcutta 14.

Care & Construction Co., 44, Chittaranjan Avenue, Calcutta-12.

Carew & Co. Ltd., Fairlie Place, Calcutta 1.

Cargo Inspectors & Superintendence Co. Pvt. Ltd., 17, Brabourne Road, Calcutta.

Carlie Lawrie & Co., 1, British Indian Street, Calcutta 1.

Carr Allen & Co., 13-A, Russell Street, Calcutta 16.

Carr & Co. Ltd., 35, Chittaranjan Avenue, Calcutta 12.



Carrit Moran & Co. Pvt. Ltd., 9, Mission Row, Calcutta.

Carter Pooler & Co., 10, Clive Row, Calcutta 1.

Castlewood (India), 12G, Park Street, Calcutta 16.

**CASTROL LTD.**, 14, India Exchange Place, Calcutta 1. Manager: R. J. Habbick.

Cement Marketing Co. of India Ltd., Bombay Mutual Assurance Bldg., Calcutta 1.

Central India Machine Co., 153, Dharamtolla Street, Calcutta 13.

Central Oil Co., 36, Brabourne Road, Calcutta 1.

Central Stores Supplies Pvt. Ltd., 76, Cotton Street, Calcutta 7.

Central Trading Co., 137, Canning Street, Calcutta 1.

Century Components Co., 44-A, Wellesley Street, Calcutta 16.

Chaman Industries Ltd., 12, Jackson Lane, Calcutta 1.

Chancham & Worah Pvt. Ltd., 18, Netaji Subhas Road, Calcutta.

Chanda, P. C. & Co. Ltd., P-2, Mission Row Extn., Calcutta 1.

Chandi Charan Dass & Co. Pvt. Ltd., 121/4-A, Maniktola, Main Road, Calcutta 11.

Chandi Charan Nayak Pvt. Ltd., 124-1, Bow Bazar Street, Calcutta 12.

Chandra Kanta Manna & Co. Pvt. Ltd., 20, Maharshi Debendra Road, Calcutta 11.

Chandra & Sons Pvt. Ltd., 116/1-117, Bow-bazar Street, Calcutta 12.

Chatarji, P. & Co. Ltd., 10, Bindu Palit Lane, Calcutta 6.

Chatterjee B. B. & Co. Pvt. Ltd., 22, Raja Woodmunt Street, Calcutta 1.

Chatterjee J. N. & Sons Ltd., 63-B, Radha Bazar Street, Calcutta 1.

Chatterjee R. M. & Sons Pvt. Ltd., 49, Sitanath Bose Lane, Salkia, Howrah.

Chemical Plant & Equipment Ltd., 7, Lower Chitpur Road, Calcutta 1.

Chemo Therapeutics (India) Ltd., 68-2, Sikdar Bagan Street, Calcutta 4.

Chhaganlal Dahyabhai & Co. Pvt. Ltd., 8, Ezra Street, Calcutta 1.

Chicka Pvt. Ltd., 31, Chittaranjan Avenue, Calcutta 12.

Chicago Telephone & Radio Co. Pvt. Ltd., 25, Chowringhee, Calcutta 13.

Chimanlal Desai & Co., 54, Bentinck Street, Calcutta 1.

Chitpore Golabari Co. Pvt. Ltd., 8, Clive Row, Calcutta 1.

Chowgule & Co. (Hind) Ltd., 7, Chittaranjan Avenue, Calcutta 13.

Chowringhee Sales Bureau Pvt. Ltd., 24B, Park Street, Calcutta 7.

Chunilal Prabhudas & Co. (Calcutta) Pvt. Ltd., 55/58, Canning Street, Calcutta 1.

Cleco Pvt. Ltd., 2-1, Barrackpore Trunk Road, Barnagore, Calcutta 36.

Cinecita P. Ltd., 6/3, Madan Street, Calcutta 13.

Cirugia De Lux Pvt. Ltd., 24, Chowringhee Road, Calcutta 13.

C. K. Sen & Co. Pvt. Ltd., Jabakusum House, Calcutta 12.

Clegg, Cruickshank & Co. Pvt. Ltd., 14, Netaji Subhas Road, Calcutta 1.

Cleveland Construction Co. Pvt. Ltd., P.O. Box 174, Calcutta.

Coates of India Pvt. Ltd., 3, Canal East Road, Calcutta 4.

Cobin P. Ltd., 7, Short Street, Calcutta 16.

Columbia Films of India Ltd., Humayun Court, Lindsay Street, Calcutta 16.

Comens C. & Sons, Ltd., 103-3, Diamond Harbour Road, Calcutta 38.

Commercial Corporation of India, 22, Netaji Subhas Road, Calcutta 1.

Commercial & Engineering Corp., 138, Canning Street, Calcutta 1.

Commercial Trading Corp., 26, Gopi Bose Lane, Calcutta 12.

Commission Agents Pvt. Ltd., 161, Mahatma Gandhi Road, Calcutta 7.

Components and Machinery Corporation, 9/12, Lall Bazar Street, Calcutta 1.

Concrete Products & Construction Co., P-15-1, Chowringhee Sqr., Calcutta 1.

Consolidated Construction Co., Pvt. Ltd., P-12, Mission Row Extn., Calcutta 1.

Consolidated Pneumatic Tool Co. Ltd., 88, Stephen House, 4, Dalhousie Sqr. East, Calcutta 1.

Containers & Closures Ltd., 2, Fairlie Place, Calcutta 1.

Continental Commercial Co. Pvt. Ltd., 8-1, Dalhousie Square East, Calcutta 1.

Continental Machinery Co., Pvt. Ltd., 26, Tarchand Dutta Street, Calcutta 1.

Continental Plant Machinery Co. Pvt. Ltd., 16, Hare Street, Calcutta 1.

Cooke & Kelvev Ltd., 20, Old Court House Street, Calcutta 1.

Coomar Industrial Corporation, 5/2, Ripon Street, Calcutta 16.

Coomar P. C. & Sons (Hardware) Pvt. Ltd., 145, Netaji Subhas Road, Calcutta 1.

Corn Products Co. of India Ltd., P. Box 982, Calcutta 1.

Corrugating & Paper Processing Co., 243, Barrackpore Trunk Road, Calcutta 36.

Cotton Agents Pvt. Ltd., 8, India Exchange Place, Calcutta 1.

Cosmo Trading Co., 37, Netaji Subhas Road, Calcutta 1.

Cox & Kings (Agents) Ltd., A-3, Gillander House, Netaji Subhas Road, Calcutta 1.

Cresswell W. S. & Co. Pvt. Ltd., 3, Clive Row, Calcutta 1.

Cromelite (India) Pvt. Ltd., P-35, India Exchange Place, Calcutta 1.

Crossley & Towers Pvt. Ltd., 3, Robinson Street, Calcutta 16.

Cruickshank & Co. Pvt. Ltd., 4/5, Bankshall Street, Calcutta.

Cuthbertson & Harper (India) Ltd., 10, Government Place, Calcutta 1.

Cyma Engineering Co., 34, Strand Road, Calcutta 1.

Cystophone Sound Corp., Pvt. Ltd., 115-A, Amherst Street, Calcutta 9.

Dacca Ayurvedic Pharmacy Ltd., 195, Prince Anwar Shah Road, Calcutta 33.

D. N. Bakhshi & Sons Private Ltd., 162-B, Mahatma Gandhi Road, Calcutta-7.

Dalmia Cement (Bharat) Ltd., 1st floor, Stephen House, 4, Dalhousie Sqr. East, Calcutta 1.

Dalmia M. L. & Co., 76 Ashutosh Mukherjee Road, Bhowanipore, Calcutta 25.

Das D. K. & Co. Pvt. Ltd., 233, Bellillos Road, Bantra, Howrah.

Das D. M. & Sons Ltd., 28, Dalhousie Sqr. East, Calcutta 1.

Das Gupta & Co. Ltd., 54-3, College Street, Calcutta 12.

Das Mullick & Co. (India), 18, Raja Woodmunt Street, Calcutta.

Das Zimmermann Pvt. Ltd., Taratolla Road, Calcutta 27.

Dasett & Co. (Eastern) Ltd., 127-B, Lower Circular Road, Calcutta 14.

Dass & Co. (India) Pvt. Ltd., 48, Dharamtolla Street, Calcutta 13.

Dass K. P. & Co. Pvt. Ltd., 163, Netaji Subhas Road, Howrah.

Dass N. & Sons Ltd., Hukumchand House, 88, Netaji Subhas Road, Calcutta 1.

Dass S. C. & Co. Pvt. Ltd., 178, Bellillos Road, Howrah.

Dass S. N. & Bros. Ltd., 312, Gopal Lall Tagore Road, P. O. Barnagore, Calcutta 36.

Datta Chaudhuri & Co. Ltd., 129, Surendra Nath Banerjee Road, Calcutta 13.

Datta P. C. & Co. Ltd., 32, Swallow Lane, Calcutta 1.

Dattas India Pvt. Ltd., 24, Strand Road, Calcutta 1.

Davenport & Co. Pvt. Ltd., 6, Church Lane, Calcutta 1.

David Maximillian & Co., 12-B, Windsor House, Mission Row Extn., Calcutta 1.

Davidson & Co. Ltd., 31, Chowringhee, Calcutta 16.

Daw Sen & Co. Pvt. Ltd., 29, Dr. Suresh Sarkar Road, Entally, Calcutta 14.

Day Bannermann & Co. (India) Pvt. Ltd., 27, Weston Street, Calcutta 12.

Dazzle Products Ltd., 138, Canning Street, Calcutta 1.

D. C. Dhiman & Bros. Pvt. Ltd., 8, Esplanade, East, Calcutta.

D. C. M. Products Pvt. Ltd., 9, Convent Road, Entally, Calcutta 14.

Debsons Pvt. Ltd., 2, Madan Street, Calcutta 13.

**DELHI TRADING CORPORATION**, Importers and Exporters of Iron & Steel Scraps, Finished Steels, Ores, Minerals, Machines, etc., 5, Clive Row, Calcutta 1; Phone: 222499 & 223298; Grams: "YAN-TRIK."

Denis Malcolm & Co. Pvt. Ltd., 8, Netaji Subhas Road, Calcutta.

De Luxe Pvt. Ltd., 34, Ballygunge Circular Road, Calcutta 19.

Depenning & Depenning, 10, Govt. Place East, Calcutta 1.

Dev A. T. Pvt. Ltd., 21, Jhamapooker Lane, Calcutta 9.

Development of Industries (India) Ltd., 135, Prinsep Street, Calcutta 13.

Development of Metal Industries Pvt. Ltd., 72/1-B, Sarat Bose Road, Calcutta 25.

Dhakuria Engineering Works Pvt. Ltd., 23-24, Strand Road, Calcutta-1.

D. H. Brothers Ltd., 138, Canning Street, Calcutta.

Dhur Galvanizing Work Pvt. Ltd., 92, Ultadanga Main Road, Calcutta 4.

Diamond Products Ltd., 4, Clive Row, Calcutta 1.

Diana Engineering Co. Pvt. Ltd., 42, Netaji Subhas Road, Calcutta 1.

Dickie R. A. & Co. (Agencies) Ltd., 30, Strand Road, Calcutta 1.

Dies & Tools Ltd., 10/3, Kasinath Mallick Lane, Calcutta 1.

Dilaverkhan & Rahimkhan Co. Pvt. Ltd., 12, Amratolla Lane, Calcutta 1.

D. Khaitan & Sons. Pvt. Ltd., 96, Garden Reach Road, Calcutta 23.

**DODSAL PRIVATE LTD.**, 'MANNES-MANN' Steel Products & Industrial Machinery, 'TELEFUNKEN' Telecommunication Equipment, and design, Fabrication and Erection of Electrical and Mechanical Plants, Pipeline Specialists; 2, Brabourne Road, Calcutta 1; Phone: 22-8501/5, Telex: 271; Regd. Office: Masfial House, Backbay, Reclamation, Bombay 1; Also at: Delhi, Madras, Bangalore, Rourkela, Hyderabad and Baroda.

Don Watson & Co. Pvt. Ltd., 19, British India Street, Calcutta 1.

Dost Mohammad & Co. Pvt. Ltd., 19, Zakaria Street, Calcutta 1.

Ducat & Co. Pvt. Ltd., W.F., 5, Clive Row Calcutta 1.



Duff Thomas & Co. India Pvt. Ltd., 3, Clive Row, Calcutta 1.  
 Duffs J. C. & Co. Ltd., National Bank Bldg., 5, Fairlie Place, Calcutta 13.  
 Duncan Bros. & Co. Ltd., 31, Netaji Subhas Road, Calcutta 1.  
 Dunlop Rubber Co. (India) Ltd., Dunlop House, 57-B, Free School Street, P.B. No. 391, Calcutta 16.  
 Durlov Chandra Singha Pvt. Ltd., 58, Clive Street, Calcutta 7.  
 Dutt S. L. & Co. Pvt. Ltd., 42-1-2, Murari-pookur Road, Calcutta 4.  
 Dwarkin & Son Pvt. Ltd., 8-2, Esplanade East, Calcutta 1.  
 Eagle Commercial Co. Pvt. Ltd., 10, Dharam-tolla Street, Calcutta 13.  
 Eagle Plywood Industries Pvt. Ltd., 202, Russa Road (South), Calcutta 33.

## EAST ASIATIC COMPANY (INDIA) PVT. LTD., THE

P-29, Mission Row Extension,  
 Calcutta 13. Phones: 232114,  
 237221. Grams: "EASTASIA".  
 P.O. Box No. 364.

MANUFACTURERS,  
 IMPORTERS, EXPORTERS  
 AND ENGINEERS

East Bengal River Steam Service Ltd., 87 Sovabazar Street, Calcutta-5.  
 East Coast Export Imports Ltd., 5, Fairlie Place, Calcutta 1.  
 East End (India) Ltd., 35, Chittaranjan Avenue, Calcutta.  
 East India Corporation, 18, Netaji Subhas Road, Calcutta 1.  
 East India Goatskin Co., 13, Mir Meher Ali Lane, Calcutta 15.  
 East India Metal Co. Ltd., 4-A, Durga Charan Chatterjee Lane, Calcutta 3.  
 East India Trading Co., P. B. No. 487, 2, Church Lane, Calcutta 1.  
 East Indies Trading Corporation, 12-B, Clive Row, Calcutta 1.  
 Eastern Accumulator Co., 3-1, Mangoe Lane, Calcutta 1.  
 Eastern Commerce Co., 7A, Leonard Road, Calcutta 22.  
 Eastern Electric & Engineering Co. Pvt. Ltd., 25, Chowringhee, Calcutta 13.  
 Eastern Electro-Chemical Co., 112, Narkeldanga Main Road, Calcutta 11.  
 Eastern Equipment and Sales Ltd., Bombay Mutual Building, 9, Brabourne Road, Calcutta 1.  
 Eastern Import & Export Co., 11-1, Panchanantola Lane, Calcutta 12.  
 Eastern Importers Syndicate, 10, Canning Street, Calcutta 1.  
 Eastern Industries Co., 9/4, Patutala Lane, Calcutta 9.  
 Eastern Industrial Corporation, 142/1, Radhabazar Street, Calcutta 1.  
 Eastern Mercantile Co., 12, Raja Woodmunt Street, Calcutta.  
 Eastern Metallizing Co. Ltd., 2, India Exchange Place, Calcutta 1.  
 Easun Engg. Co. Ltd., Suite D-4, Bharat Bhawan, 3, Chittaranjan Avenue, Calcutta 13.

Ebco Knitting Wool Mfg. Co., 3, David Joseph Lane, Calcutta 1.  
 Economic Tanks Supply Co., 100, Mahatma Gandhi Road, Calcutta 7.  
 Edison Industries Pvt. Ltd., 12, Dalhousie Square East, Calcutta 1.  
 Edna Lorenz Ltd., 30, Chowringhee, Calcutta 16.  
 Edward Keventers Ltd., 11/3, Lindsay Street, Calcutta 16.  
 Edward Miller & Co., 20, Strand Road, Calcutta 1.  
 Edwards G. & Co., 67, Dharamtala Street, Calcutta 13.  
 Electric Construction & Equipment Co., Ltd., 9, Kaliprasanna Singhee Road, Calcutta 2.  
 Electrical Equipment & Sales Ltd., Bombay Mutual Bldg., 9, Brabourne Road, Calcutta.  
 Electro-Chemical Industries Ltd., 9, Jogesh Mitter Road, Calcutta 25.  
 Elevec Pvt. Ltd., 9, Royal Exchange Place, Calcutta 1.  
 Elias B. N. & Co. Pvt. Ltd., Norton Bldg., 1-2, Old Court House Corner, Calcutta 1.  
 Empire Trading Corp., 10, Canning Street, Calcutta 1.  
 Engineering Corporation of India, 40, Sadananda Road, Calcutta 26.  
 Engineering Materials Supply Co., 128, Hazra Street, Calcutta 26.  
 Engineers Syndicate (India) Ltd., Grosvenor House, 21, Old Court House Street, Calcutta 1.

**ENGLISH ELECTRIC CO. OF INDIA LTD., THE**, Manufacturers of English Electric Protective and Auxiliary Relays, Control Panels, High Rupturing Capacity Heavy Duty Switch and Fusegear including Overhead Busbar Equipment, Rising Mains and non-deteriorating H.R.C. Cartridge Fuselinks, Electronic Instruments.

Agents in India for Heavy Electrical Plant including Water, Steam and Gas Turbines, Diesel Engines, Electric and Diesel Electric Locomotives, all classes of Electric Motors, Transformers, Switchgear, Fusegear, Welding Plant, also complete Atomic Power Stations manufactured by The English Electric Co. Ltd. of U.K.

Registered Office: D3, Gillander House, 8, Netaji Subhas Road, Calcutta-1.

Works: Pallavaram, Dist. Chingleput, Madras-43.

Calcutta: D3, Gillander House, 8, Netaji Subhas Road (Post Box No. 2224). Telephone No. Calcutta 22-3991, Telegraphic Address: "ENELECTICO" Calcutta.

Bombay: Vulcan Insurance Building, 202B, Veer Nariman Road (Post Box No. 752). Telephone No. Bombay 24-2061, Telegraphic Address: "ENELECTICO", Bombay.

New Delhi: Allahabad Bank Bldg., 17, Parliament Street, (Post Box No. 207). Telephone No. Delhi 45801; Telegraphic Address: "ENELECTICO", New Delhi.

Lucknow: 11, The Mall, Hazratgunge (Post Box No. 117). Telephone No. Lucknow 24901, Telegraphic Address: "ENELECTICO", Lucknow.

Madras: 150-B, Mount Road, Madras-2; Post Office Box 2415; Telephone No. 85933, Telegraphic Address: "ENEL-ECTICO", Madras.

South India: Agents: For fusegear:— Binny & Co. Ltd., 7, Armenian Street (Post Box No. 66). Telephone No. Madras 29171. Telegraphic Address: "BINNY" Madras.

Equitable Trading Co. Pvt. Ltd., 158-C, Dharamtala Street, Calcutta 13.

Esavi India Match Mfg. Co., 47, Murarupukar Road, Calcutta 11.  
 Essence & Bottle Supply (India) Private Ltd., 14, Radha Bazar Street, Post Box 372, Calcutta-1.  
 Ess Lahiri & Co. Pvt. Ltd., 2, Church Lane, Calcutta 1.  
 Essco Pvt. Ltd., 25, Ganesh Chandra Avenue, Calcutta 13.  
 ESSO Standard Eastern, Inc., 6, Church Lane, Calcutta 1.

**ETON PRESS PVT. LTD., THE**  
 Photo-Lithographers & Quality Printers, Calcutta  
 Regd. Office: 41, Netaji Subhas Road, 1.  
 Phone: 22-5420.  
 Main Office: 107, Grey Street, 5.  
 Phone: 55-4130.  
 Grams: "PRINTRADE".

Everett Steamship Corp., P-35, India Exchange Place, Calcutta 1.  
 Everett Travel Service, 1, Old Court House Street, Calcutta 1.  
 Everlite Insulating Industries P. Ltd., 25, Swallow Lane, Calcutta 1.  
 Ewing & Co. Ltd., 4, Clive Row, Calcutta 1.  
 Exporters and Distributors (India) Pvt. Ltd., 20, Mangoe Lane, Calcutta 1.  
 Eyre Smelting Pvt. Ltd., Hide Road, Kidderpore, Calcutta 23.  
 FAG India P. Ltd., 16, Cossipore Road, Calcutta 2.  
 Fairway Trading Co., 39, Sitalatola Lane, Narkeldanga, Calcutta 11.  
 Far-Eastern Agencies Ltd., P-14, Mission Row Extn., Calcutta 1.  
 Favre-Leuba & Co. Pvt. Ltd., Norton Bldg., 1, Old Court House Corner, Calcutta 1.  
 F. Bock & Co., Post Box 816, Calcutta.  
 Fenner J. H. & Co. (India) Ltd., 10-1-C, Mercantile Bldg., Lall Bazar, Calcutta 1.  
 Figgis A. W. & Co. Pvt. Ltd., D-6, Gillander House, Calcutta 1.  
 Finacs Pvt. Ltd., 83 & 109 E & A, Park Street, Calcutta 16.  
 Financiers & Fibre Dealers Ltd., P.B. No. 322 (GPO), 15-B, Clive Row, Calcutta 1.  
 Firestone Tyre & Rubber Co. of India Pvt. Ltd., 76, Lower Circular Road, Calcutta 14.  
 Fogt, G. M. & Co. Pvt. Ltd., 2, Garstin Place, Calcutta 1.  
 Fort Gloster Industries Ltd., 14, Netaji Subhas Road, Calcutta 1.  
 Fotic Lall Seal & Sons Pvt. Ltd., 10, Swallow Lane, Calcutta 1.  
 Francis Klein & Co. Pvt. Ltd., 1, India Exchange Place, Calcutta 1.  
 Frank Ross & Co. Ltd., 7, Chowringhee, Calcutta 13.  
 Fraser & Co., Ltd., Fairlie House, Fairlie Place, Calcutta 1.  
 French Motor Car Co. Ltd., 234-3, Lower Circular Road, Calcutta 2.  
 Friendlander Ores & Metals Pvt. Ltd., 109, Stephen House, Dalhousie Sqr. East, Calcutta 1.  
 F. W. Heilgers & Co. Pvt. Ltd., Chartered Bank Bldg., Calcutta.  
 G. Ambalal Export Pvt. Ltd., 4, Mission Row, Calcutta 1.  
 G. D. Pharmaceuticals Private Ltd., Boroline House, 11/1, Nivedita Lane, Calcutta-3.  
**GAMMON INDIA LTD.**, (East Zonal Office), 36, Ganeshchandra Avenue, Fourth Floor, Calcutta 13; Phone: 246202; Grams: "GAMMONCO", Calcutta; Designing and Constructional Engineers and Contractors; Specialists in Bridges, Cooling Towers, Water Towers, Harbour Works, Chimneys, Silos, Dams,



- Jetties & Airports, Hangars, Power Stations, Factories, Earthworks, Foundations, Piling, Weirs, Syphons, etc. Regd. Office: Gammon House, Cadell Road, Prabhadevi, Bombay 28 (DD).
- Ganesan P. N. & Sons**, P-35, India Exchange Place, Calcutta 1.
- Ganges Agencies Pvt. Ltd.**, 32, Jannalal Bajaj Street, Calcutta 7.
- Ganges Mfg. Co. Ltd.**, 7, Council House Street, Calcutta.
- Ganges Rope Co. Ltd.**, 2, Fairlie Place, Calcutta 1.
- Ganguli D. N. & Co.**, 7, Nilamber Mukherjee Street, Shambazar Street, Calcutta 4.
- General Commercial Corpn.**, 8-1, Sidhaswar Chandra Lane, Calcutta 12.
- General Electric Co. of India Pvt. Ltd.**, Magnet House, Chittaranjan Avenue, Calcutta 13.
- General Fibre Dealers Ltd.**, India Exchange, Calcutta 1.
- General Machinery & Electrical Stores Pvt. Ltd.**, 138, Canning Street, Calcutta.
- General Machinery Trading Co.**, 14-2, Old China Bazar Street, Calcutta 1.
- General Merchandise Dealers Ltd.**, 135, Canning Street, Calcutta 1.
- General Produce Co. Ltd.**, India Exchange, Calcutta 1.
- General Radio & Appliances Pvt. Ltd.**, 3, Madan Street, Calcutta 13.
- General Trading Corpn. Ltd.**, 8-B, Lall Bazar, Calcutta 1.
- Genuine Rubber Stamp Mfg. Co.**, 7, Lall Bazar Street, Calcutta 1.
- Geo Miller & Co. Pvt. Ltd.**, 7, Hastings Street, Calcutta 1.
- Geoffrey Manners & Co. Pvt. Ltd.**, 2, Saklat Place, Calcutta 13.
- George Henderson & Co. Ltd.**, 4, Clive Row, Calcutta.
- George Miller & Co. Pvt. Ltd.**, 3, Netaji Subhas Road, Calcutta 1.
- George Spencer Moulton & Co. (India) Pvt. Ltd.**, 11 & 12, Esplanade Mansions, Calcutta 1.
- George Vint Bhalla (I) Pvt. Ltd.**, 2, Princep Street, Calcutta 13.
- Germline Ltd.**, 47, Mirzapur Street, Calcutta 9.
- Gestetner Duplicators Pvt. Ltd.**, 9-A, Esplanade East, Calcutta 1.
- GETZ BROS. & CO., Inc.** (Incorporated in Switzerland with limited Liability); International Merchants and Steamship Agents; Principal Office: San Francisco, U.S.A. Branches all over the World; Indian Offices: Calcutta, Bombay & Madras.
- Ghosal B. N. & Sons (Calcutta)**, 25-B, Chittaranjan Avenue, Calcutta 13.
- Ghose D. C. & Co. (Agents) Pvt. Ltd.**, 11, Govt. Place East, 1st Floor, Calcutta 1.
- Ghosh & Sons Pvt. Ltd.**, 16-1, Radha Bazar Street, Calcutta 1.
- Ghosh N. R. & Co. Pvt. Ltd.**, 2, Canal East Road, Calcutta 4.
- Giddings Pvt. Ltd.**, H.C., 8, Short Street, Calcutta 16.
- Glemec Traders Ltd.**, 26, Nakuleswar Bhattacharya Lane, Calcutta 26.
- Gillanders Arbuthnot & Co. Ltd.**, Gillander House, Netaji Subhas Road, Calcutta 1.
- Gladstone Lyall & Co., Ltd.**, 4, Fairlie Place, Calcutta 1.
- Glaxo Laboratories (India) Pvt. Ltd.**, 50, Hide Road, Kidderpore, Calcutta 27.
- Globe Machinery (India)**, 24, Strand Road, Calcutta 1.
- Globe Theatres Ltd.**, 7, Lindsay Street, Calcutta 16.
- Globe Trading Co.**, 53, Netaji Subhas Road, Calcutta 1.
- Godrej & Boyce Mfg. Co. Ltd.**, 9, Brabourne Road & Park Street, Calcutta.
- Goetz Bros. & Co.**, Bombay Mutual Bldg., India Exchange Place Extn., Calcutta 1.
- Goodman & Co. (India) Pvt. Ltd.**, 38, Netaji Subhas Road, Calcutta 1.
- Goodyear Tyre & Rubber Co. of India Pvt. Ltd.**, 209, Lower Circular Road, Calcutta 17.
- Gopal Chunder Dass & Co. Pvt. Ltd.**, 24, Raja Woodmunt Street, Calcutta 1.
- Grahams Trading Co. (India) Pvt. Ltd.**, 6, Lyons Range, Calcutta 1.
- Gramophone Co. Ltd.**, 33, Jessore Road, Dum Dum, Calcutta 28.
- Great Indian Steam Navigation Co. Ltd.**, 29, Strand Road, Calcutta 1.
- Greaves Cotton & Co. Ltd.**, P.B. No. 702, Ball House, 16, Hare Street, Calcutta 1.
- Greaves Cotton & Crompton Parkinson Pvt. Ltd.**, 4, Mission Row Extension, Calcutta 1.
- Green E. & Son (India) Ltd.**, 12, Dalhousie Sqr. East, Calcutta 1.
- Green Miller & Co.**, 41, Chetla Road, Calcutta 27.
- Gresham & Craven of India Pvt. Ltd.**, 22, Gobra Road, Calcutta 14.
- Gripex (India) Ltd.**, C-6, Gillander House, 8, Netaji Subhas Road, Calcutta 1.
- G. T. R. Co. Pvt. Ltd.**, 37, Dum Dum Road, P.O. Ghugudanga, Calcutta 30.
- Guest Keen Williams Ltd.**, 41, Chowringhee Road, Calcutta 16.
- Guin B. C. & Co. Pvt. Ltd.**, 101, Netaji Subhas Road, Calcutta 1.
- Gulf Oil of India Pvt. Ltd.**, P-13, Mission Row Extn., Calcutta 1.
- Gungadhar Banerjee & Co. Pvt. Ltd.**, Bakulia House, Post Box No. 10606, Kidderpore, Calcutta 28.
- Gunpatroy Pvt. Ltd.**, Malic House, 2, Pretoria Street, Calcutta 16.
- Gupta Brothers Ltd.**, 4, Clive Ghat Street, Calcutta 1.
- Gupta S. D. & Co. Ltd.**, Netaji Subhas Ch. Bose Road, Asoke Park, Calcutta 40.
- Gutgutia & Co., K. N.**, 33, N. Subhas Road, Calcutta 1.
- H. L. Sett & Sons Private Ltd.**, 21, Jadu Pandit Road, Calcutta-6.
- Haji Munna Miah & Co. Pvt. Ltd.**, 23, Russa Road South, Calcutta 33.
- Haldar N. & Co. Pvt. Ltd.**, 21/3, Sudhir Chatterjee Street, Calcutta 6.
- Hall & Anderson Ltd.**, 31, Chowringhee Road, Calcutta 16.
- Halley & Co. Pvt. Ltd.**, J. P. Box 117, Calcutta 1.
- Halwasiya Pvt. Ltd.**, 1, Chittaranjan Avenue, Calcutta 13.
- Hamilton & Co. Pvt. Ltd.**, 8, Old Court House Street, Calcutta 1.
- Handles Mfg. Co.**, 18, Raja Woodmunt Street, Calcutta 1.
- Hanumanbax Surajmali Pvt. Ltd.**, P-8, Mission Row Extn., Calcutta 1.
- Harbans Lall Malhotra & Sons Ltd.**, 18, Netaji Subhas Road, Calcutta 1.
- Hardware & Machine Tools Corpn.**, 2, Maharshi Debendra Road, Calcutta 7.
- Haricharan Shyamsunder Pvt. Ltd.**, 49-1-1, Cotton Street, Calcutta 7.
- Harrisons & Crosfield Ltd.**, 6, Church Lane, Calcutta 1.
- Harshadray Pvt. Ltd.**, 22, Brabourne Road, Calcutta 1.
- Hauer Trading Co.**, 7, Stephen House, Calcutta 1.
- Haworth, W. & Co. Pvt. Ltd.**, 1, Commercial Bldgs., Netaji Subhas Road, Calcutta 1.
- Hayward Waldie & Co.**, P. Box 661, Calcutta 1.
- Head Wrightson India Ltd.**, 10, Middleton Row, Calcutta 16.
- Heath & Co. (Calcutta) Pvt. Ltd.**, P.N.B. House, 18-A, Brabourne Road, Calcutta 1.
- Heatly & Gresham Ltd.**, 31, Chittaranjan Avenue, Calcutta 12.
- Henderson George & Co. Ltd.**, 4, Clive Row, Calcutta 1.
- Henray Maddison Pvt. Ltd.**, 33, Bowbazar Street, Calcutta 12.
- Henry Morgan & Co.**, 71-A, Netaji Subhas Road, Calcutta 1.
- Herbert Doyle & Co., Ltd.**, 4, Commercial Bldgs., Calcutta 1.
- Herbertsons Pvt. Ltd.**, 48, Stephen House, Dalhousie Square, Calcutta 1.
- Heroes Engineering Works Private Ltd.**, 20, Paul Street, Calcutta-4.
- Hewitt Robins Inc.**, 5-A, Lord Sinha Road, Calcutta 16.
- H. G. Fewkes & Co. Pvt. Ltd.**, 44-B, Wellesley Street, Calcutta 16.
- Hill Elliot & Co. Pvt. Ltd.**, 22, Chittaranjan Avenue, Calcutta 13.
- Hill Green Co. of India**, 12-B, Netaji Subhas Road, Calcutta 1.
- Himani Pvt. Ltd.**, 3, Khelat Babu Lane, Calcutta 2.
- Hind Associated Corporation Pvt. Ltd.**, 23-24, Radha Bazar Street, Calcutta 1.
- Hind Ceramics Ltd.**, Stephen House, Mission Row, Calcutta 7.
- Hind General Mercantile Agency Ltd.**, 8, Lyons Range, Calcutta-1.
- Hind General Trading Co. Ltd.**, 61, Strand Road, Calcutta 1.
- Hind Wire Industries Ltd.**, P-16, Kalakar Street, Calcutta 7.
- Hinduk Trading Co. (India) Pvt. Ltd.**, Stephen House, Dalhousie Sqr. East, Calcutta 1.
- Hindustan Auto Distributors**, 17, Government Place East, Calcutta-1.
- Hindustan Gas Co. Ltd.**, 42, Garden Reach Road, Calcutta 24.
- Hindustan General Electric Corpn. Pvt. Ltd.**, 12, India Exchange Place, Calcutta.
- Hindustan General Mercantile Agency Ltd.**, 8, Lyons Range, Calcutta 1.
- Hindustan Investment Corpn. Ltd.**, 8, India Exchange Place, Calcutta.
- Hindustan Lever Ltd.**, 4, Lyons Range, Calcutta 1.
- Hindustan Motors Ltd.**, 8, I. E. Place, Calcutta 24.
- Hindustan Trading Co.**, 77, Netaji Subhas Road, Calcutta 1.
- Hindustan Transmission Products Pvt. Ltd.**, P-15, Bentinck Street, Calcutta.
- Hindustan Twyfords Ltd.**, 2, Wellesley Place, Calcutta.
- Hindusthan Chemical & Industrial Corporation**, 22, Brabourne Road, Calcutta 1.
- Hindusthan Development Corpn. Ltd.**, Hindusthan Bldgs., 4, Chittaranjan Avenue, Calcutta 13.
- Hindustan Gas & Industries Ltd.**, 36, Ganesh Ch. Avenue, Calcutta 13.
- Hindusthan Housing & Land Development Trust Ltd.**, 36, Chowringhee Road, Calcutta 16.
- Hindusthan Engineering & Construction Co.**, 2, Church Lane, Calcutta 1.
- Hindusthan Musical Products Ltd.**, 6/1, Akur Dutta Lane, Calcutta 12.
- Hindusthan Refractories & Ceramics Pvt. Ltd.**, 20, Netaji Subhas Road, Calcutta 1.
- Hindusthan Rubber Works Ltd.**, 14, Ballygunge Station Road, Calcutta-19.
- Hindustan Sheet & Metal Co. Pvt. Ltd.**, 9, Clive Road, Calcutta 1.
- Hindusthan Trading Co.**, 18-4, Akur Dutta Lane, Calcutta 12.



Hindusthan Wire & Metal Products Ltd., 67-74, Stephen House, 4, Dalhousie Sqr. East, Calcutta 1.

Hirji & Co. Pvt. Ltd., 20, Pollock Street, Calcutta 1.

Hobb H. & Co. Ltd., Grosvenor House, 21, Old Court House Street, Calcutta 1.

Holchst Dyes & Chemicals Ltd., 6, Ganesh Chandra Avenue, Calcutta 13.

Holland & Co. Ltd., 18, British India Street, Calcutta 1.

Holman-Climax Mfg. Pvt. Ltd., Chartered Bank Bldgs., Calcutta.

Holmes Wilson & Co. Ltd., Stephen House, 4, Dalhousie Sqr. East, Calcutta 1.

Hooghly Docking & Engg. Co. Ltd., 6, Howrah Road, Salkia, Howrah.

Hooghly Printing Co. Ltd., 8, Clive Row, Calcutta 1.

Hoosen Kasam Dada (India) Ltd., 26, Amrattolia Street, Calcutta 1.

Hope Prudhomme & Co. Pvt. Ltd., 7, Wellesley Place, Calcutta 1.

Howrah Engineering Concern Pvt. Ltd., 153/155, Madhusudan Pal Choudhury Lane, Howrah.

Howrah Motor Co. Ltd., Howrah Motor Bldgs., P-6, Mission Row Extn., Calcutta 1.

Howrah Trading Co. Pvt. Ltd., 8, Dalhousie Sqr. East, Calcutta.

Huque Bros. Pvt. Ltd., 1, Suhrawardy Avenue, 30, Park Palace, Calcutta 17.

Hydrolifts & Equipments P. Ltd., 10/1, Prinsep Street, Calcutta 13.

Ibcon Pvt. Ltd., 2, Fairlie Place, Calcutta 1.

I. B. M. World Trade Corp., Mackinnon Mackenzie Bldg., 16, Strand Road, Calcutta 1.

Ilford Selo (India) Pvt. Ltd., 15, Chittaranjan Avenue, Calcutta 13.

Imperial Chemical Industries (India) Pvt. Ltd., 34, Chowringhee, Calcutta 1.

**IMPERIAL TOBACCO CO. OF INDIA LTD.**, Head Office: Virginia House, 37, Chowringhee, Calcutta 16; Phone: 239141 (15 lines).

Indequip Pvt. Ltd., 1 & 2, Old Court House Corner, Calcutta 1.

Inderschand Rajgarhia & Sons Pvt. Ltd., 12, Syed Salley Lane, Calcutta 7.

Inderstro (India) Agency, 38, Netaji Subhas Road, Calcutta 1.

India Automobiles (1960) Ltd., 12 Govt. Place, East, Calcutta 1.

India Engineering Co., 20, Sree Kissen Vakati Lane, Howrah.

India Engineering Corp., 20, Strand Road, Calcutta 1.

India Exchange Corp. Pvt. Ltd., 10, Govt. Place East, Calcutta 1.

India Foils Ltd., 11, Sooterkin Street, Calcutta 13.

India Furnace Co. Pvt. Ltd., 27-29, Brabourne Road, Calcutta 1.

India General Navigation & Railway Co. Ltd., 4, Fairlie Place, Calcutta 1.

India Jute Co. Ltd., 16, Strand Road, Calcutta 1.

India Linoleums Ltd., 8, India Exchange Place, Calcutta 1.

India Machinery Co. Ltd., Dassnagar, Howrah.

India Micanite Manufacturers Co., 161, Mukhtaram Babu Street, Calcutta 7.

India Moulding Co., C-2, Bharat Bhawan, 3, Chittaranjan Avenue, Calcutta 13.

India Potteries Ltd., 91, Dharamtolla Street, Calcutta 13.

India Steamship Co. Ltd., India Steamship House, 21, Old Court House Street, Calcutta 1.

India Tyre & Rubber Co. (India) Pvt. Ltd., 1, Waterloo Street, Calcutta 1.

Indian Aluminium Co. Ltd., 31, Chowringhee, Calcutta 16.

**INDIAN CABLE CO. LTD.**, Cable Manufacturers, Electrical Engineers and Contractors; Regd. Office: 9, Hare Street, Calcutta 1; Phone: 23-5711-17-23-8711-13; Grams: "INCAB." Telex 202 INCAB. Branches: Ahmedabad, Bangalore, Bombay, Colimbatore, Kanpur, Madras, Nagpur, New Delhi and Secunderabad. Works: Tatanagar, P.O. Golmuri, Jamshedpur, S. E. Rly. Representative in India for British Insulated Calender's Cables Ltd.



**INDIAN ENGINEERING CO.**, P 59, Dr. Sundari Mohan Avenue, Calcutta-14; Tel. Nos. 444477 & 444512; Grams: "SPOTWELD". (Also at Bombay, New Delhi, Madras & Bangalore. (Manufacturers and Dealers of Electrical Equipment, Components and raw materials for the Elec. Industry.

Indian Galvanizing Co. Ltd., 21, Netaji Subhas Road, Calcutta 1.

Indian Hard Metals Pvt. Ltd., 20, Ballygunge Park Road, Calcutta 19.

Indian Hume Pipe Co. Ltd., 190-1, Rash Behari Avenue, Calcutta.

Indian Import & Export Co. Pvt. Ltd., 50, Ezra Street, Calcutta 1.

Indian Industrial Corp., 10, Canning Street, Calcutta 1.

Indian Iron & Steel Co. Ltd., 12, Mission Row, Calcutta.

Indian Metal & Steel Products Ltd., 20-1, Lall Bazar, Calcutta 1.

Indian Mineral Industries Ltd., 22-1, 22-C, Dum Dum Road, Calcutta 2.

Indian Minerals & Associated Industries, 12-B, Netaji Subhas Road, Calcutta 1.

Indian Molasses Co. Pvt. Ltd., P-14, Princep Street, Calcutta 13.

Indian National Petroleum Co. Ltd., 22, Canning Street, Calcutta 1.

Indian Oxygen Ltd., 48/1, Diamond Harbour Road, Calcutta 27.

Indian Patent Stone Co. Pvt. Ltd., Chartered Bldg., Netaji Subhas Road, Calcutta 1.

Indian Photo Engraving Co. Pvt. Ltd., 28, Beniatola Lane, Calcutta 9.

Indian Pin Mfg. Co. Ltd., 1, Satya Doctor Road, Calcutta 23.

Indian Smelting and Refining Co. Ltd., 1, Royal Exchange Place, Calcutta 1.

Indian Standard Wagon Co. Ltd., 12, Mission Row, Calcutta 1.

Indian Steel & Wire Products Ltd., 7, Wellesley Place, Calcutta 1.

Indian Steelworks Construction Co. Ltd., Stephen House, Dalhousie Sqr., Calcutta 1.

Indian Terrazo & Patent Floors Ltd., 16, Mangoe Lane, Calcutta 1.

Indian Textiles Co. Pvt. Ltd., 1-2-3, Old Court House Street, Calcutta 1.

Indian Tools Corp., 353 & 354, Upper Chitpore Road, Calcutta 6.

**INDIAN TRADE & GENERAL INSURANCE CO. LTD.**, Regd. Office: 25, Brabourne Road, Calcutta 1; Business transacted—Fire, Marine, Motor, and Miscellaneous; Principal Office: Jehangir Building, Mahatma Gandhi Road, Bombay 1; Phone: 255101 (5 Lines), Grams: "ADASTRA".

Indian Tube Co. (1953) Ltd., 41, Chowringhee Road, Calcutta 16.

Indian Turpentine and Rosin Co. Ltd., 60/1, Hazra Road, Calcutta 19.

Indian Union Traders Ltd., 12, Dalhousie Square East, Calcutta 1.

**INDIAN WOOD PRODUCTS CO. LTD.**, THE, Gillander House, Netaji Subhas Road, Calcutta 1; Manufacturers of Cutch Leather Tanning Extracts and Katha.

Indo-American Commerce Pvt. Ltd., 35, Chittaranjan Avenue, Calcutta 12.

Indo-British Trading Syndicate, 192-B, Chittaranjan Avenue, Calcutta 7.

Indo-Burma Forest Syndicate, 65-A, Daramhatta Street, Nimtola, Calcutta 6.

Indo-Burma Petroleum Co. Ltd., Gillander House, Netaji Subhas Road, Calcutta 1.

Indo-European Agency Pvt. Ltd., 67, Ezra Street, Calcutta 1.

Indo-European Machinery Co. Pvt. Ltd., 5, Bentinck Street, Calcutta 1.

Indo-Japanese Industries Ltd., 150, Dharamtolla Street, Calcutta 13.

Indo-Mineral Corp., 32, Cross Street, Calcutta 7.

Indo-Overseas Trading Co. Pvt. Ltd., 2, India Exchange Place, Calcutta 1.

Indo-Phillips Industries Pvt. Ltd., 3, Bentinck Street, Calcutta 1.

Indo-Swiss Trading Co. Pvt. Ltd., Kent House, P-33, Mission Row Extn., Calcutta 13.

Indo-Trading Co., 18, Netaji Subhas Road, Calcutta 1.

Indo-World Trading Co. Ltd., 10, Armenian Street, Calcutta 1.

Industrial Accessories Supply Corp., 47, Kalidas Patitundi Lane, Calcutta 26.

Industrial Chemical Corp. Ltd., 22, Swallow Lane, Calcutta 1.

Industrial Corporation, 138, Canning Street, Calcutta.



**INDUSTRIAL GASES LTD.**, THE, 15, Ganesh Chandra Avenue, Post Box No. 853, Calcutta 1; Phones: 239681, 233230, 239006, 237985 & 239981; Gram: "INDUS-GASES", Calcutta; Manufacturers of: Industrial Gases, Pressure, Vacuum Gauges, Welding and cutting machines, Equipment and Accessories, Welding Electrodes and Rods, Acetylene Generators, Complete Plants for manufacture of Gases.

**Distributors of:** Power Generation and Transmission Plates and equipment, Haulage equipment and Colliery equipment.

**Factories:** Kanpur, Lucknow, Varanasi, Gauhati, Ranchi, Tollygunge and Howrah.

**Offices:** Calcutta, New Delhi, Madras, Mettur, Patratu and Harduagunge.

**Agents:** All important towns in India.

Industrial Importers Pvt. Ltd., 34, Stephen House, 4, Dalhousie Sqr. East, Calcutta 1.

Industrial Instrument Co., 30, Strand Road, Calcutta 1.

Industrial Machinery Co., 20, Netaji Subhas Road, Calcutta 1.

Industrial Machines Corp., 138, Canning Street, Calcutta 1.

Industrial Syndicate Pvt. Ltd., 119-B, Ripon Street, Calcutta 16.

Industries (India) Ltd., 24, Ezra Mansions, Calcutta 1.

Industries Syndicate, Post Box 7828, Calcutta.

Ingersol-Rand (India) Pvt. Ltd., 7, Wellesley Place, Calcutta 1.



Inter-Continental Trading Corpn., 12-B, Netaji Subhas Road, Calcutta 1.

International Aluminium Co. Ltd., 41, Chowringhee, Calcutta 16.

International Combustion (India) Pvt. Ltd., 101, Park Street, Calcutta 16.

**INTERNATIONAL COMPUTERS AND TABULATORS (INDIA) PRIVATE LIMITED**, Electronic Data Processing Equipment—2-3, Clive Row, P.O. Box 2135, Calcutta; Telephone Nos. 226189, 223160; Telegraphic Address: "TABULORIAL". Eastern Zone Manager: D. Y. Hodarkar; Maintenance Manager: K. R. Kapoor; Head Office: Magnet House, Dougall Road, Ballard Estate; P.O. Box 516, Bombay 1.

International Commercial Agency, Ltd., 57, Radha Bazar Street, Calcutta 1.

International Electric & Engineering Co., 12, Lower Chitpur Road, Calcutta.

International Engineering Co., 7-1/C, Lindsay Street, Calcutta 16.

International Equipment Corpn. Pvt. Ltd., 7, Hare Street, Calcutta 1.

International Exporters Pvt. Ltd., 178, Mahatma Gandhi Road, Calcutta 7.

International General Electric Co. (India) Pvt. Ltd., Wellesley Place, P.B. No. 2007, Calcutta 1.

International Industries Ltd., 32/1, Strand Road, Calcutta 1.

International Linkers Ltd., P-22, Swallow Lane, Calcutta 1.

International Lubricants Ltd., 12-A, Ashutosh Mukherjee Road, Calcutta 20.

International Refrigeration Engineering Co., 5/2, Ripon Street, Calcutta 16.

International Remedies Ltd., 8-A, Rajendra Lal Street, Calcutta 6.

International Sales Corpn. Pvt. Ltd., 5, Clive Row, Calcutta 1.

International Tyres & Motors Pvt. Ltd., 2, Rowland Road, Calcutta 20.

International Tools Corpn., 138, Canning Street, Calcutta 1.

Inter Sales (India), 62, Netaji Subhas Road, Calcutta 1.

Intertrade Publications, 2, Presidency Court, 55, Gariahat Road, Calcutta-19.

Irmeo P. Ltd., 12-B, Netaji Subhas Road, Calcutta 1.

**ISGEC JOHN THOMPSON LTD.**, Steam Plant Engineers and makers of all types of Boilers and Pressure Vessels; Head Office: 8, Chittaranjan Avenue, Calcutta 13; Phone: 23-8221/3; Grams: "WATER-TUBE"; Managing Director: K. S. Whitehouse; Northern Office: Yamunanagar, Punjab.

Ispahani Ltd., 51, Esra Street, Calcutta 1.

Italab Pvt. Ltd., 10, Lal Bazar Street, Calcutta.

Itoo Pvt. Ltd., 4, Raja Woodmunt Street, Calcutta 1.

Ivan Jones Ltd., 18-B, Brabourne Road, Calcutta.

**J. STONE & CO. (INDIA) PRIVATE LTD.**, Regd. Office: 16, Taratalla Road, Calcutta 53; Phone: 45-2891 (8 lines); Grams: "STONECO"; Telex 021249; Train Lighting Equipment, Air Conditioning and Refrigeration Equipment for Railway and Road Vehicles, Pantographs for Locomotives and EMU Stock, Loco-Superheater Elements, Fractional Horse Power Motors, Brake Regulators for Rolling Stock—Marine Propellers and Specialities, etc. Steamite and Porcelain Products Ltd., Pilkington Bros. Ltd., Taylor Bros. & Co. Ltd., Thomas Turton & Sons Ltd., Svenska Aktiebolaget Bromsregulator, Vapor International, National Electric Coil Co., Et. Pierre Carrier and Etablissements L. Faiveley. Jagannath Gupta & Co. Ltd., 7-B, Clive Row, Calcutta 1.

Jagdishprashad Pannalal & Co. Pvt. Ltd., 27, Amratolla Lane, Calcutta 1.

Jaipuria Bros. Ltd., 33, Netaji Subhas Road, Calcutta 1.

Jaiswal Trading Corporation, 62/1-A, Netaji Subhas Road, Calcutta 1.

Jalan & Sons, Jalan House, 124, Harrison Road, Calcutta 7.

Jalan Bros. Pvt. Ltd., 178, Mahatma Gandhi Road, Calcutta.

Jalan Industries Pvt. Ltd., 62, Ballygunge Circular Road, Calcutta 19.

James & Co. Ltd., 25, Netaji Subhas Road, Calcutta 1.

James Alexander & Co. Ltd., 15, Watgunge Street, Kidderpore, Calcutta 23.

James Finlay & Co. Ltd., 2, Netaji Subhas Road, Calcutta 1.

James Glendye & Co. Pvt. Ltd., 6, Chowringhee, Calcutta 13.

James Lord & Sons Ltd., 5, Commercial Bldgs., Calcutta 1.

James Murray & Co. Pvt. Ltd., 5, Old Court House Street, Calcutta 1.

James Warren & Co., Ltd., 31, Chowringhee Road, Calcutta 16.

James Wright Ltd., 22, Chittaranjan Avenue, Calcutta 13.

Jammi Venkataramanayya & Sons, 132-1, Harrison Road, Calcutta 7.

Jardine Henderson Ltd., 4, Clive Row, Calcutta 1.

Jasodlal Ghosal Pvt. Ltd., 20, Maharshi Devendra Road, Calcutta 7.

Jatashanker & Co. Pvt. Ltd., 81, Stephen House, Dalhousie Square East, Calcutta 1.

Java Bengal Line, 5 & 7, Netaji Subhas Road, Calcutta 1.

Jayantilal Ojha & Co. Pvt. Ltd., 4, Dalhousie Square East, Calcutta 1.

Jayems Engineering Co., 22, Brabourne Road, Calcutta 1.

Jaynarain Gobindparsad Pvt. Ltd., 1, Jankidas Lane, Calcutta 7.

Jayer & Co., 12-B, Netaji Subhas Road, Calcutta 1.

Jay Shree Tea Gardens Ltd., India Exchange, Calcutta 1.

J. Mansfield & Co., 28/2A, Beniapukur Road, Calcutta-14.

J. B. Advani & Co. Pvt. Ltd., P-38, Mission Row Extension, Calcutta.

J. Bos ck & Co. Pvt. Ltd., 16-5, Chowringhee Road, Calcutta.

J. D. James Pvt. Ltd., G. P.O. Box 393, Calcutta.

**JEENA & CO.**, 25, Netaji Subhas Road, Calcutta 1. Travel, Shipping, Clearing, Forwarding and Warehousing Agents; Correspondents everywhere; Telegrams: "TRAVELJENA". Phones: 22-8911 (5 Lines).

Jeetmull Jaichandlal, 113, Netaji Subhas Road, Calcutta 1.

Jeewanlal (1929) Ltd., 31, Netaji Subhas Road, Calcutta 1.

Jenson & Nicholson (India) Ltd., 2, Fairlie Place, Calcutta 1.

Jesraj Jiwanram Pvt. Ltd., 161/1, Mahatma Gandhi Road, Calcutta 7.

Jessop & Co. Ltd., 63, Netaji Subhas Road, Calcutta 1.

Jessore Comb Industries Co., 117, Balithakhana Road, Calcutta 9.

Jewell Filter Co. Ltd., 23, Chittaranjan Avenue, Calcutta 12.

Jewraj Chunilal & Co. Pvt. Ltd., 161-1, Mahatma Gandhi Road, Calcutta 7.

Jharla Firebricks & Pottery Works (Private) Ltd., 24, Netaji Subhas Road, Calcutta 1.

Jiwanram Sheodutrai, 10, Ganesh Chandra Avenue, Calcutta.

J. J. H. Industries Pvt. Ltd., 174, Mahatma Gandhi Road, Calcutta 7.

J. K. Industries Pvt. Ltd., 7, Council House Street, Calcutta 1.

Jogendra Nath Ghose & Sons, 64, Ballygunge Gardens, Calcutta-19.

John Dickinson & Co. Ltd., 6, Clive Row, Calcutta 1.

John Fowler India Pvt. Ltd., 136-A, Raah Behari Avenue, Calcutta 29.

John Herbert & Co. Pvt. Ltd., Canning House, 137, Canning Street, Calcutta 1.

John Paterson & Co. (India) Ltd., 96, Garden Reach Road, Calcutta 23.

**JOHN THOMPSON (INDIA) PRIVATE LTD.**, Engineers and Specialists in Water Softening, Conditioning & Filtration Plant; Head Office: 8, Chittaranjan Avenue, Calcutta 13; Phone: 238221/3; Grams: "WATERTANK"; Managing Director: K. S. Ayapa; Bombay Office: Great Social Building, 8, P. Mehta Road, Fort, Bombay 1.

Johnston Pumps India Ltd., 2, Fairlie Place, Calcutta 1.

Jost's Engineering Co. Ltd., 19, British Indian Street, Calcutta 1.

Jugantar Pvt. Ltd., 14, Ananda Chatterjee Lane, Calcutta 3.

K. K. Roy (Private) Ltd., 2, Presidency Court, 55, Gariahat Road, Calcutta-19.

Kailash Financiers P. Ltd., P-50, Princep Street, Calcutta 13.

Kajaria Bros. Pvt. Ltd., 9, Jagmohan Mullick Lane, Barabazar, Calcutta 7.

Kalinga Tubes Ltd., 33, Chittaranjan Avenue, Calcutta 12.

Kamala Sheet Metal Industries Ltd., 98-99, Bellaghata Main Road, Calcutta 10.

Kamalalaya (Export) Private Ltd., 14, Ballygunge Station Road, Calcutta-19.

Kamalalaya Stores Pvt. Ltd., 156, Dharamtala Street, Calcutta 13.

Kanji Pannachand Pvt. Ltd., 33, Armenian Street, Calcutta 1.

Kanji Shavji Parekh Pvt. Ltd., 55, Canning Street, Calcutta.

Kanoli (India) Pvt. Ltd., P-8, Mission Row Extension, Calcutta 1.

Karamchand Thapar & Bros. Pvt. Ltd., Thapar House, 25, Brabourne Road, Calcutta 1.

Kashiram Banaresilal Pvt. Ltd., 83, Old China Bazar Street, Calcutta 1.

Kasim & Ismael (India) Pvt. Ltd., 32, Dalhousie Square South, Calcutta 1.

Kaviraj N. N. Sen & Co. Pvt. Ltd., 18-1 & 19, Lower Chitpur Road, Calcutta 1.

Kaybee & Co., 13, Brabourne Road, Calcutta 1.

## KAYCEE

### INDUSTRIES LIMITED

2, Woodburn Court,

10, Elgin Road, Calcutta.

Electrical & Mechanical Engineers.

Agents for: Hind Rectifiers Ltd., Manufacturers of: Selenium and Silicon Semi-Conductors of Electroplating Rectifiers, Battery changers, Silicon Power Plants for Electro-Chemical Industries. Manufacturers of: Kaycee Rotary, Toggle, Heat Control and Air-conditioning Switches "KAYCESS" Domestic & Bulk type water meters.

Address:—

Head Office:—Kamran Chambers, Nicol Road, Ballard Estate, Bombay 1. Telephone: 263521.

Telegram Address: "TURNRITE."

Branches: Delhi, Madras & Kanpur.

Kariranga Udyog, P-24, Radha Kanta Deb Lane, Calcutta 5.



Kedarnath Parnotamdas & Co. Pvt. Ltd., 37, Netaji Subhas Road, Calcutta 1.  
 Kemp & Co. Ltd., 32-C, Chittaranjan Avenue, Calcutta 12.  
 Kettlewell Bullen & Co. Ltd., 21, Strand Road, Calcutta 1.  
 Koyal Brothers Ltd., 20/1, Maharshi Debendra Road, Calcutta 6.  
 Keymer Bagshawe & Co. (India) Pvt. Ltd., 22, Strand Road, Calcutta 1.  
 Khan Pal Chowdhury & Co. Pvt. Ltd., 71-A, Netaji Subhas Road, Calcutta 1.  
 Khemka & Co. (Agencies) Pvt. Ltd., 31/32, India Exchange Place, Calcutta.  
 Khandelwal Bros. Pvt. Ltd., 33, Netaji Subhas Road, Calcutta 1.  
 Kian Gwan Co. (Calcutta) Pvt. Ltd., 5-B, Clive Ghat Street, Calcutta.  
 Kilachand Devchand & Co. Pvt. Ltd., 9, Brabourne Road, Calcutta.  
 Kilburn & Co. Pvt. Ltd., 4, Fairlie Place, Calcutta 1.  
 Killick Nixon & Co. Pvt. Ltd., F-2, Clive Bldgs., Calcutta 1.  
 King & Co., 90-7A, Harrison Road, Calcutta 7.  
 Kinkar & Co. Pvt. Ltd., 33, Canning Street, Calcutta 1.  
 Kinlab Pvt. Ltd., 5, Marquis Street, Calcutta 16.  
 K. L. M. Royal Dutch Airlines Ltd., 7, Chowringhee Road, Calcutta 13.  
 Kodak Ltd., 17, Park Street, Calcutta 16.  
 Kores (India) Pvt. Ltd., 7, Canal Street, Entally, Calcutta 14.  
 Kothar M. D. & Co. Pvt. Ltd., 8, India Exchange Place, Calcutta 1.  
**KOTHARI ORGANISATION**, 12, India Exchange Place, Calcutta 1. Phones: 22-9563, 226512; G.P.O. Box 362; Grams: "ZEITGEIST."  
*Controlling:* India—International News Service (News Service: Press Representatives, Publicity & Public Relations Consultants), Kothari Engineering Corporation (Machinery Merchants and Manufacturers' Representatives, Sole Agent in India for Hydraulic & Gramophone Record Presses, Tobacco Industry Machines of Johannessen & Lund of Denmark, Time Recorders Manufactured by Zenith Watch Co. Ltd., of Switzerland; Kothari Publications (Publishers of who's who series and other Reference Works in India), Kothari Consultants (Management & Technical Consultants, Industrial Valuers & Consulting Engineers), Professional Engineer (quarterly about Engineering Profession), The Director (Top Management, Quarterly Journal) and Compact (Weekly Digest of World News), What's on in Calcutta (fortnightly Entertainment Guide); Films & Femme (Monthly Journal of Films & Fashions). Agents and Representatives for many Manufacturers, Publishers & Papers (Indian & Foreign).  
 Krishna Industries, 68, Grand Trunk Road, Lilcoah, Howrah.  
 Krishna Pada Coomer & Co. Pvt. Ltd., 16-2, Ramkanto Bose Street, Calcutta 3.  
 Krishna Rubber Industries, 23/24, Radha Bazar Street, Calcutta 1.  
 Kristo Dhone Gangooly & Co., 115, Netaji Subhas Road, Calcutta 1.  
 Krudd Industries Ltd., 20-21, Stephen House, Calcutta 1.  
**KULJIAN CORPORATION (INDIA) PVT. LTD.**, THE, Consulting Engineers; Regd. Office: 24-B, Park Street, Calcutta 16; Phone: 44-7541 (5 Lines); Board of Directors: Chairman: Dr. Harry A. Kuljian; Mg. Director: Mr. Sadhan C. Dutt; Directors: Dr. A. K. Mukherjee, Mr. A. H. Kuljian; Alternate Directors: Mr. B. B. Sinha, Mr. A. K. Bhattacharyya.

Kumar & Co., Ltd., 21, Maharshi Debendra Road, Calcutta 7.  
 Kumar Bros. & Co., Pvt. Ltd., 14-15, Raja Woodmunt Street, Calcutta 1.  
 Kundla Industrial Corporation, 23, Canning Street, Calcutta 1.  
 Kusum Engineering Co., Ltd., 25, Swallow Lane, Calcutta 1.  
 Kusum Products Ltd., 9, Brabourne Road, Calcutta 1.  
 Laha A. N. & Co., Ltd., Clive Ghat Street, Calcutta 1.  
 Laha Engineering Works Pvt. Ltd., 7-B, Protap Chatterjee Lane, Calcutta 12.  
 Laha G. C. Pvt. Ltd., 1, Dharumtola Street, Calcutta 13.  
 Lahiri A. C. & Co. Ltd., 14, Hare Street, Calcutta 1.  
 Lakshmi Narayan Sen & Sons Ltd., 62, Chowringhee, Calcutta 20.  
 Lakshmi Produce Co. Ltd., 14, Netaji Subhas Road, Calcutta 1.  
 Lal & Co., Pvt. Ltd., S., 15, Chittaranjan Avenue, Calcutta 13.  
 Lamba Trading Co., 9/2, Ashutosh Mukherjee Road, Calcutta-20.  
 Land Reclamation Corporation Ltd., 6, Ganesh Chandra Avenue, Calcutta 13.  
 Landale & Clark Ltd., 18, Netaji Subhas Road, Calcutta 1.  
 Landale & Morgan Pvt. Ltd., 5, Fairlie Place, Calcutta 1.  
**LARSEN & TOUBRO LTD.**, Manufacturers Representatives and Manufacturers of Agricultural Earthmoving and Construction Equipment, Equipment for drilling and mining, Plant and equipment for dairy, meat processing and Cold Storages, Pneumatic gram dischargers, garbage Compost milling plants, Equipment for Sugar, fertiliser, chemical, pharmaceutical, petrochemical and other process Industries, plant & Equipment for cement, Pulp and paper and steel Industries; Electrical Switchgear and other electrical Equipment, Petrol Pumps, Pin Disc grinders, taper Plug Valves, Instruments and other appliances and equipment; The Company also undertakes civil Engineering, mechanical, electrical and instrumentation contracts; (further details under Bombay section); Regd. L & T House, Dougal Road, Ballard Estate, Bombay 1; Calcutta Office: Kanak Bldg., 41, Chowringhee Road, Calcutta 16; Phone: 442331 (4 lines).  
 Laterite Syndicate Pvt. Ltd., 36, Chowringhee, Calcutta 16.  
 Law & Law Ltd., 6, Old Post Office Street, Calcutta 1.  
 Law, Prawn Kissen & Co., 63, Radhabazar Street, Calcutta 1.  
 Lawrence & Mayo (India) Pvt. Ltd., 11, Govt. Place East, Calcutta 1.  
 Lakshmi Iron and Steel Works Pvt. Ltd., P-16, Kalakar Street, Calcutta 17.  
 L. C. Sett & Co., Pvt. Ltd., 43, Dharamtolla Street, Calcutta 13.  
 Leather Chemicals & Industries Ltd., 9, Muraripukur Road, Calcutta 4.  
 Levetus Ltd., Pollock House, 18-B, Brabourne Road, Calcutta 1.  
 Lewis & Tylor Pvt. Ltd., 5, Clive Row, Calcutta 1.  
 Likwipol Research Industries, 10, Kyd Street, Calcutta 16.  
 Linton Private Ltd., 13 and 14, Dalhousie Square East, Calcutta 1.  
**LIONEL EDWARDS LTD.**, 21, Old Court House Street, Calcutta; Branch Office at Bombay; Freight and Steamship Agents; Managing Agents: India Steamship Co. Ltd.; Agents: American Export Isbrandtsen Lines, Inc. New York; Pacific Far East Line Inc., San Francisco; Codes

used: Bentley's 1st & 2nd Editions and New Boe Code; Phone: 231171 to 1178; Grams: "LIONWARDS" all Offices Post Box 541.  
 Lionel Martin & Co., 23A, Netaji Subhas Road, Calcutta 1.  
 Lipton (India) Ltd., 9, Weston Street, Calcutta 13.  
 Lloyds Mercantile Corporation, Post Box 6870, Calcutta 7.  
 L. N. Poddar & Co., Ltd., Stephen House, Dalhousie Square East, Calcutta 1.  
 Lolit Mohan Roy & Sons, 23, Brabourne Road, Calcutta 1.  
 Louis Dreyfus & Co., Ltd., 18-A, Brabourne Road, Calcutta 1.  
 Lovelock & Lewes, 4, Lyons Range, Calcutta 1.  
 Low H. V. & Co., Pvt. Ltd., 3, Synagogue Street, Calcutta 1.  
 Lucas Indian Service Ltd., 46, Wellesley Street, Calcutta 16.  
 Ludlow Jute Co., Ltd., 7, India Exchange Place, Calcutta 1.  
 Lynx Machinery Co., 10, Clive Row, Calcutta 1.  
 Lyons (India) Pvt. Ltd., P. N. B. House, 18A, Brabourne Road, Calcutta 1.  
 M. A. Eblagh & Son Pvt. Ltd., P/34, Mission Row Extn., Calcutta 13.  
 M. B. Mercantile Co., 138, Canning Street, Calcutta 1.  
 Machine & Mill Stores Corp. Pvt. Ltd., 32, Natabar Pal Road, Belgachia, Howrah.  
 Machine Tools Traders (Calcutta), 25, Ganesh Chandra Avenue, Calcutta 13.  
 Machinery Supplying Agency, 40, Strand Road, Calcutta 1.  
 Machine Techno (Sales) Private Ltd., 33, Netaji Subhas Road, Calcutta-1.  
 Mackenzie Lyall & Co., 5, Mission Row, Calcutta.  
 Mackinnon Mackenzie & Co., Pvt. Ltd., 16, Strand Road, Calcutta 1.  
 Mackintosh Burn Pvt. Ltd., D-2, Gillander House, Netaji Subhas Road, Calcutta 1.  
 Macmillan & Co., Ltd., 294, Bow Bazar Street, Calcutta 12.  
 MacNeil & Barry Ltd., 2, Fairlie Place, Calcutta 1.  
 Macropolo D. & Co., Pvt. Ltd., 11, Old Court House Street, Calcutta 1.  
 Mafatal Gagalbhai & Sons, 18, Netaji Subhas Road, Calcutta 1.  
 Mahindra & Mahindra Ltd., Hall & Anderson Bldg., Park Street, Calcutta.  
 Mahendra Datta & Co., Pvt. Ltd., 153/1, Cotton Street, Calcutta 7.  
 Mair, A. M. & Co., Pvt. Ltd., India Exchange Place, Calcutta 1.  
 Maitra Brothers & Co., Ltd., Jadavpur, Calcutta 32.  
 Majula Pvt. Ltd., 6/1, Lindsay Street, Calcutta 16.  
 Maneklal & Sons (Calcutta), 23, Ganesh Chandra Avenue, Calcutta-13.  
 Mansfield Oil & Gas Co. Ltd., 16, Radhanath Choudhury Road, Calcutta 15.  
 Manton & Co., Ltd., 13, Old Court House Street, Calcutta 1.  
 Manton & Martin, 70, Netaji Subhas Road, Calcutta 1.  
 Marconi Electric Corp. Pvt. Ltd., 117, Keshab Sen Street, Calcutta 9.  
 Marconi International Marine Communication Co., Ltd., 6, Old Post Office Street, Calcutta 1.  
 Marshall Sons & Co. (India) Ltd., 33/1, Netaji Subhas Road, Calcutta 1.  
 Martin Burn Ltd., 12, Mission Row Calcutta 1.  
 Martin & Harris Pvt. Ltd., Mercantile Bldg., Lal Bazar, Calcutta 1.



Matadin Khaitan & Co., 9, India Exchange Place, Calcutta 1.  
 Mather & Platt Ltd., 7, Hare Street, Calcutta 1.  
 Maurice George & Son Pvt. Ltd., 6, Mangoe Lane, Calcutta 1.  
 May & Baker India Pvt. Ltd., 7, Old Court House Street, Calcutta 1.  
 Mayurbhanj Mineral Syndicate Pvt. Ltd., 54, Ezra Street, Calcutta 1.  
 M. B. Mercantile Co., 138, Canning Street, Calcutta.  
 McDill R. & Co., Ltd., 34-B, Ratu Sarkar Lane, Calcutta 9.  
 M. C. Mowjee & Co., 46, Ezra Street, Calcutta 1.  
 M. Dhar Co. Pvt. Ltd., 175, Rash Behari Avenue, Calcutta 19.  
 McGregor & Balfour Ltd., 18, Netaji Subhas Road, Calcutta 1.  
 McKenzle G. & Co., Pvt. Ltd., 24-B, Park Street, Calcutta 16.  
 McLeod & Co., Ltd., McLeod House, 3, Netaji Subhas Road Calcutta 1.  
 M. E. Bhalyat & Sons India Pvt. Ltd., 22, Zakaria Street, Calcutta 1.  
 Meboe (India) Ltd., 2, Netaji Subhas Road, Calcutta 1.  
 Mechanical Handling Equipment Pvt. Ltd., 33, Chittaranjan Avenue, Calcutta 12.  
 Medland Bose & Co., Ltd., 2, Church Lane, Calcutta 1.  
 Maghna Industries Pvt. Ltd., 22, Canning Street, Calcutta 1.  
 Mepco & Co., 20, Maulana Abul Kalam Azad Road, Howrah; Inventors of three fold chairs protected by patents and designs.  
 Mercantile Agency Syndicate, 3-1, Chowringhee Square, Calcutta 13.  
 Mercantile Union Pvt. Ltd., 30, Bepin Behari Ganguly Street, Calcutta 12.  
 Merchants' Syndicate Pvt. Ltd., 4, Lyons Range, Calcutta 1.

#### MERCURY TRAVELS (INDIA) PRIVATE LTD.,

Travel Agents

Regd. Office: 17, Chowringhee Road, Calcutta 13.

Branches: Bombay, Madras, New Delhi, Srinagar & Jaipur.

Metal Box Co. of India Ltd., Barlow House, 59C, Chowringhee Road, Calcutta 20.  
 Metalcraft (India) Ltd., 28, Strand Road, Calcutta 1.  
 Metal Ind. Private Ltd., 51, Canal East Road, Calcutta 10. Phone: 241057/58.  
 Metal Press Works Ltd., 3, Jagmohan Mullick Lane, Calcutta 7.  
 Metal Products & Engg., Co., Jalan House, 124, Mahatma Gandhi Road, Calcutta 7.  
 Metal Wood Industries Pvt. Ltd., 34, Prince Anwar Shah Road, Calcutta 33.  
 Metcons Engineering P. Ltd., 13, Brabourne Road, Calcutta 1.  
 Metro-Goldwyn-Mayer India Ltd., 5, Chowringhee, Calcutta 13.  
 Metropolitan Dental Co., 2, Corporation Street, Calcutta 13.  
 M. Goyee & Co., 133, Netaji Subhas Road, Calcutta 1.  
 Mida & Co., Pvt. Ltd., 33, Canning Street, Calcutta 1.  
 Mill Borne & Co. (India), 24, Strand Road, Calcutta-1.  
 Millar & Co., Pvt. Ltd., 3, Netaji Subhas Road, Calcutta 1.

Minimax Ltd., Mercantile Bldgs., Lall Bazar Street, Calcutta 1.  
 Mira Chemical Industries P. Ltd., 11-A, Prince Anwar Shah Road, Calcutta 33.  
 Miscellaneous Engineering Stores Pvt. Ltd., 71-A, Netaji Subhas Road, Calcutta 1.  
 M. K. Shipping & Chartering Co., Pvt. Ltd., Standard Insurance Bldg., Dalhousie Square South, Calcutta.  
 Modern Trading Co., 76/1, Cornwallis Street, Calcutta 6.  
 Mohameddin (India) Pvt. Ltd., 29, Colootolla Street, Calcutta 1.  
 Mohatta Brothers, 19, British Indian Street, Calcutta 1.  
 Mohendra Lal Dutt & Sons, 49-B, Harrison Road, Calcutta 9.  
 Mohin & Co., Pvt. Ltd., 44, Beadon Row, Calcutta 6.  
 Monmotho Nath Mookerjee & Sons, 113, Monohar Dass Chowk, Barabazar, Calcutta 7.  
 Monotype Corpn. Ltd., 8, Mission Row Extension, Calcutta 1.  
 Mooljee Sicka & Co., 51, Ezra Street, Calcutta 1.  
 Moran & Co., Pvt. Ltd., 8, Netaji Subhas Road, Calcutta 1.  
 Morgan Milton Ltd., 43, Park Mansions, Park Street, Calcutta 16.  
 Morgan Walker & Co., Pvt. Ltd., 2, Clink Ghat Street, Calcutta 1.  
 Morison J. L. Son & Jones (India) Ltd., United India Bldg., 22, Chittaranjan Avenue, Calcutta 13.  
 Morrison & Cottle Pvt. Ltd., 30-G, Chowringhee Road, Calcutta 16.  
 Motihari Enterprises Pvt. Ltd., 178, Mahatma Gandhi Road, Calcutta 7.  
 Moti Ram Agarwal & Co. Pvt. Ltd., 137, Canning Street, Calcutta 1.  
**MOTOR INDUSTRIES CO., LTD.**, Manufacturers of Mico-Licence-Bosch Diesel Fuel Injection Equipment & Spark Plugs; Distributors of Bosch Automobile Parts & Accessories; 91-A, Park Street, Calcutta-16; Phone: 44-6831, Grams: "MICO-DIESEL", Calcutta; Head Office: Post Box No. 93, Bangalore; Branches: 79, Dr. Annie Besant Road, Worli, Bombay-18 (WB) and 1/155, Mount Road, Madras-2.  
 Motor & Machinery Mfrs. Ltd., 31, Chittaranjan Avenue, Calcutta 12.  
 Motwane Private Ltd., 25, Chowringhee, Calcutta 13.  
 Mukerjee A. N. Pvt. Ltd., 10, Shamlall Street, Shambazar, Calcutta 4.  
 Mukherji A. R. & Co. Ltd., P-74, Bentinck Street, Calcutta 1.  
 Mullick Bajendra Nath & Co. Ltd., 20, Maharshi Debendra Road, Calcutta 7.  
 Murarka (Overseas) Pvt. Ltd., 17, Noormal Lohia Lane, Calcutta 7.  
 Mytton Wallace & Co., 18, Netaji Subhas Road, Calcutta 1.  
 Nalinakshya Tah & Co. Pvt. Ltd., 20, Maharshi Debendra Road, Calcutta 7.  
 Nandy Dey Pvt. Ltd., 67-49, Strand Road, Calcutta 7.  
 Narayan Chowdhury Brothers Pvt. Ltd., 2, Dalhousie Square East, Calcutta.  
 Nasr S. A. & Co. Pvt. Ltd., 2, Chittaranjan Avenue, Calcutta 13.  
 Natabar Paul & Co. Pvt. Ltd., Natabar Bhaban, 19, Maharshi Debendra Road, Calcutta 7.  
 National Bearing Co. Ltd., India Exchange India Exchange Place Extn., Calcutta 1.  
 National Book Agency (Private) Ltd., 12, Bankim Chatterjee Street, Calcutta-12.  
 National Carbon Co. (India) Ltd., P-17, Mission Row Extension, Calcutta 1.  
**NATIONAL CASH REGISTER CO.** (A branch of the National Cash Register Co.,

Dayton, Ohio, U.S.A.). Head Office for India, Ceylon and Pakistan: Stephen House, 4-D, Dalhousie Square East, Calcutta 1. Grams: "NACARECO"—Calcutta, Sales Office: 5, Park Street, Calcutta 16. Phones: 23-1922 and 23-1923. National Cash Registers, Adding and Accounting Machines; Sole Distributors for India Addressograph and Multigraph Addressing and Duplicating Machine.  
 National Cement Mines & Industries Ltd., 82, Stephen House, Dalhousie Square East, Calcutta 1.  
 National Engineering Corpn., 85-B, Nimtolla Ghat Street, Calcutta 6.  
 National Engineers & Traders, 12-A, Netaji Subhas Road, Calcutta 1.  
 National Machinery Stores, 138, Canning Street, Calcutta 1.  
 National Manufacturers & Traders Agency Ltd., 171-A, Harrison Road, Calcutta 7.  
 National Moulding Co. Ltd., 26, Upper Chitpur Road, Calcutta 7.  
 National Pigments Mfg. Syndicate, 12-B, Netaji Subhas Road, Calcutta 1.  
 National Refrigerators Pvt. Ltd., 30-A, Chowringhee, Calcutta 16.  
 National Rolling & Steel Ropes Ltd., Stephen House, 4, Dalhousie Square East, Calcutta 1.  
 National Rubber Manufacturers Ltd., Leslie House, 19, Chowringhee, Calcutta 13.  
 National Safe Deposit & Cold Storage Ltd., 11, Clive Row, Calcutta 1.  
 National Sheet & Metal Works Pvt. Ltd., 36-A, Sahitya Parishad Street, Calcutta 6.  
 National Steel & Wire Ropes Ltd., 2, Hare Street, Calcutta 1.  
 National Tobacco Co. of India Ltd., Norton Bldgs., 1-2, Old Court House Corner, Calcutta 1.  
 National Trading Co., Moon House, P-40 Mission Row Extension, Calcutta 1.  
 National Trading Corpn., 1-1-D, European Asylum Lane, Calcutta 16.  
 National Travel Agency (India), Mercantile Bldgs., Lall Bazar, Calcutta 1.  
 National Tyre and Rubber Co. of India Ltd., Rowland Road, Calcutta 20.  
 National Union Corpn. Ltd., D-5, Gillander House, Netaji Subhas Road, Calcutta 1.  
 Nayak Land Development Corpn. Ltd., 14, Nebutala Row, Calcutta 12.  
 Nederland Steam Navigation Co., 5 & 7, Netaji Subhas Road, Calcutta 1.  
 Nettlefolds of India Ltd., P-35, India Exchange Place Extension, Calcutta 1.  
 New Allenberry Works, 62, Hazra Road, Calcutta-19.  
 New Eastern Traders (Spirit) Pvt. Ltd., 14, Hare Street, Calcutta 1.  
 New India Investment Corpn. Ltd., 9, Brabourne Road, Calcutta 1.  
 New India Mercantile Co. Pvt. Ltd., 8, India Exchange Place, Calcutta 1.  
 New India Proofing Co., Calso Park, Calcutta 39.  
 Nigamco Ltd., 51-4, Strand Road, P.B. No. 733, Calcutta 1.  
 Non-Ferrous Metal Industries Pvt. Ltd., 161/1, M. Gandhi Road, Calcutta 1.  
 Norinco Pvt. Ltd., 14, Netaji Subhas Road, Calcutta 1.  
 North Bengal Jute Trading Co. Ltd., 8, Dalhousie Sq. East, Calcutta 1.  
 North Eastern Agencies Pvt. Ltd., Faraday House, P-17, Mission Row Extn., Calcutta 13.  
 Norton J. B. & Sons Ltd., P.B. No. 2617, Calcutta 1.  
 N. R. Sarkar & Co. Pvt. Ltd., 4, Chittaranjan Avenue, Calcutta 13.  
 Nundy Bros. Pvt. Ltd., 8-3, Maharshi Debendra Road, Calcutta 7.



Nundy H. D. & Co., 50-6, Dharamtala St., P.B. No. 8982 Calcutta 13.

Nundy Pvt. & Sons, 35-6, Ratan Babu Road, Calcutta 2.

Octavius Steel & Co. Ltd., 14, Old Court House Street, Calcutta 1.

Odhavji Devidas & Co. Pvt. Ltd., 9, Armenian Street, Calcutta 1.

Olympic Trading Corp., 25, Swallow Lane, 2nd Floor, Calcutta 1.

Oodlabari Co. Ltd., 14, Old Court House Street, Calcutta.

Orient Engineering & Commercial Co. Ltd., Thaper House, 25, Brabourne Road, Calcutta 1.

**ORIENT EXPRESS CO. PRIVATE LTD., THE**, National Tobacco Building, 1 & 2 Old Court House Corner, Calcutta-1; Phones: 22-1911 & 22-1358, Grams: "OREXPRESO"; Worldwide Travel Service; Authorised Agents for Airlines, Steamship Companies, Railways and Hotels; Offices in New Delhi, Calcutta, Bombay & Madras; Correspondents in 350 Cities throughout the world; Managing Director: Mr. S. S. Poddar.

Orient General Industries Ltd., 6, Ghore Bibi Lane, Calcutta-11.

Orient Longmans Pvt. Ltd., 17, Chittaranjan Avenue, Calcutta 13.

Orient Metal Industries Pvt. Ltd., 77, Bowbazar Street, Calcutta 12.

Oriental & Occidental Trading Co., 30, Brabourne Road, Calcutta 1.

Oriental Gas Co. Ltd., 8, Dalhousie Sq. East, Calcutta 16.

Oriental Import Agency Pvt. Ltd., Mercantile Bldgs., 10-1D, Lall Bazar, Calcutta 1.

Oriental Sealing Wax Co., 21, Stephen House, Dalhousie Sqr., Calcutta 1.

Oriental Steel & Wire Industries Pvt. Ltd., 2, Brabourne Road, Calcutta 1.

Oriental Trading Co. Pvt. Ltd., 71-A, Netaji Subhas Road, Calcutta 1.

Ormul Products (India) Ltd., Gillander House, Netaji Subhas Road, Calcutta 1.

Orr, Tignam & Co., 29, Netaji Subhas Road, Calcutta 1.

Osler F. & C. (India) Ltd., 12, Old Court House Street, Calcutta 1.

Oswal & Co. Pvt. Ltd., 14/2, Old Chinabazar Street, Calcutta.

Otis Elevator Co. (India) Pvt. Ltd., 207, Lower Circular Road, Calcutta.

Overseas (India) Pvt. Ltd., 4, Clive Ghat Street, Calcutta 1.

P. & M. Co. (England) Ltd., 41, Chowringhee Road, Calcutta 16.

Paharpur Timbers Pvt. Ltd., 1-B, Judges Court Road, Calcutta 27.

Pakriwala Bros. Pvt. Ltd., 14, Netaji Subhas Road, Calcutta 1.

Pan American World Airways Inc., 42, Chowringhee Road, Calcutta 16.

Pancroft Ltd., Mercantile Bldgs., Lall Bazar, Calcutta 1.

Parry & Co. Ltd., 9, Lall Bazar St., Calcutta.

Parsons C. A. & Co. Ltd., 31, Chittaranjan Avenue, Calcutta 12.

Pashabhai Patel & Co. Ltd., Aryasthan Bldg., Chittaranjan Avenue, Calcutta 13.

Patker & Co. Pvt. Ltd., N. K., 138, Canning Street, Calcutta 1.

Patnaik & Co. Pvt. Ltd., B., 33, Chittaranjan Avenue, Calcutta 13.

Patel Brothers, 34, Strand Road, Calcutta 1.

**PATEL INDIA PRIVATE LTD.**, Largest Distributors for well-known Photographic and Cinematographic goods for India; 3, 4 and 5, Lindsay Street, Calcutta 16; Phone: 232234; Grams: "PATELIND"; Administration Office & Manufacturing: 68, Tardeo Road, Bombay 34; H.O. at Bombay; Branches at New Delhi & Madras.

Patrika Syndicate Private Ltd., 12/1, Lindsay Street, Calcutta-16.

Paul Biswas & Co. Pvt. Ltd., 55/2, Canning Street, Calcutta 1.

Paul H. K. & Bros. Pvt. Ltd., 3/3, Maharshi Debendra Road, Calcutta 7.

Paul L. Pvt. Ltd., 24, Netaji Subhas Road, Calcutta 1.

Paul K. C. & Co. Pvt. Ltd., 120, Upper Circular Road, Calcutta 9.

Paul's Engineering Co., P-7, Natabar Paul Road, P.O. Dassnagar, Howrah.

P. C. Mazumdar & Co. Pvt. Ltd., 13, Brabourne Road, Calcutta 1.

Peninsular & Oriental Steam Navigation Co., 16, Strand Road, Calcutta 1.

People's Enterprises Pvt. Ltd., 3, New Tangra Road, Calcutta 46.

Peters & Smith (India) Ltd., 17, Chowringhee, Calcutta 13.

Phelps & Co. Ltd., 21, Old Court House Street, Calcutta 1.

Phillip & Co. Pvt. Ltd., Mercantile Bldgs., 9, Lalbazar Street, Calcutta 1.

Phillips India Ltd., Phillips House, 7, Justice Chandra Madhab Road, Calcutta 20.

Phillips & Roy Pvt. Ltd., 38/2, Wellington Street, Calcutta 13.

Phipson & Co. Pvt. Ltd., 6, Old Court House Street, Calcutta 1.

Pioneer Consolidated Co. of India Ltd., 2, Clive Row, Calcutta 1.

Pioneer Engineering Co., 158, Dharamtala Street, Calcutta 13.

Pioneer Equipment Co. Pvt. Ltd., 1, Mangoe Lane, Calcutta.

Pioneer Industrial Syndicate, 67, Ezra Street, Calcutta 1.

Place, Siddons & Gough (Private) Ltd., 6, Lyons Range, Calcutta-1; Stock and Share Brokers; Managing Directors: R. G. Edwards, D. N. Kapur, M. I. Wadsley and K. K. Dutt; Assistants: H. K. Basu, R. K. Chari, K. N. Kapur, H. S. Madathian and G. D'Rosario; Codes used: ABC 6th Edn. Utility Bentley's Complete and Broomhall's Imperial; Tel. Add.: "PLACID". Phone Nos.: 22-7391 (5 Lines) & 22-5391 (Trunks); P.O. Box No. 592.

Plasto-Iron (India) Pvt. Ltd., Patipukur Dum Dum, Calcutta 28.

Plating & Polishing Materials Supply Agency, 27, Sashi Bhusan De Street, Calcutta 12.

Poddar Jaipuria & Co., 33, Netaji Subhas Road, Calcutta 1.

Poddar K. L. & Sons Ltd., 25, Netaji Subhas Road, Calcutta 1.

Poddar Land Development Trust Ltd., 36, Chowringhee Road, Calcutta 16.

Polson Pvt. Ltd., 6-A, Sudder Street, Calcutta 16.

Popular Jute Trading Co. Ltd., 8, Dalhousie Sq. East, Calcutta 1.

Port Engineering Works Ltd., 8, Clive Row, Calcutta 1.

Power and Machinery Corporation Pvt. Ltd., 10/1/D, Lall Bazar Street, Calcutta 1.

Power Equipment & Construction Co., 91, Netaji Subhas Road, Calcutta 1.

Power Equipment & Electric Corp., 36, Strand Road, Calcutta 1.

Power Equipment & Engineering Co., 70, Netaji Subhas Road, Calcutta 1.

Power Farming Pvt. Ltd., 3, Jagmohan Mullick Lane, Calcutta 7.

Powers-Samas Accounting Machines (Sales) Ltd., 2 & 3, Clive Row, Calcutta.

Power Tools & Appliances Co., 2, Dalhousie Sqr. East, Calcutta 1.

Power Transmission Equipment Corp., 37, Strand Road, Calcutta 1.

Precision Products of India, 10/A, Creek Lane, Calcutta 14.

Premier Stores Supplying Co., Ltd., 6/1, Dilarjung Road (Chopra Market), Cosapur, Calcutta-2.

Premier Theatres Pvt. Ltd., 40-2, Harrison Road, Calcutta 9.

Price, Waterhouse Peat & Co., Gillander House, Netaji Subhas Road, Calcutta.

Printers House Ltd., 32-A, Chittaranjan Avenue, Calcutta 13.

Process Control Equipment Co., 55, Joy Mitter Street, Calcutta 5.

Pronob & Co. Pvt. Ltd., 68, Chongrihata Road, Calcutta 15.

Protos Engineering Co. Pvt. Ltd., Post Box No. 2549, Calcutta.

Purtabpore Co. Ltd., 9, Brabourne Road, Calcutta.

Purushottum Choubey & Co. Ltd., 183, Raja Dinendra Street, Calcutta 4.

Racek F. & Co. Pvt. Ltd., 57, Radhabazar Street, Calcutta 1.

Rach Behary Sen (1897) Pvt. Ltd., P. Box No. 335, Calcutta.

Radiant Electric Kitchen Works, 167/1, Cornwallis Street, Calcutta 1.

Raghunath Dutt & Sons, Pvt. Ltd., 32-B, Brabourne Road, Calcutta 1.

Railway Appliances & Engineering Co., 71-A, Netaji Subhas Road, Calcutta 7.

Railway Engineering Corporation, 4, Clive Ghat Street, Calcutta 1.

Rai Sahib Chandanmull Indrakumar Pvt. Ltd., 3, Synagogue Street, Calcutta 1.

Rajaniklal Company (Private) Limited, 24, Brabourne Road, Calcutta-1.

Rajendra Nath Mullick & Co., Ltd., 20, Maharshi Debendra Road, Calcutta 7.

Rajgarhia Brothers, Ltd., 13, Harrington Street, Calcutta 16.

Rajgarhia Trading Co. Pvt. Ltd., 123, Grey Street, Calcutta 5.

Rallis India Ltd., Ralli House, 16, Hare Street, Calcutta 1.

Ramdev & Sons Pvt. Ltd., 19, British Indian Street, Calcutta 1.

Randerian G. A. Pvt. Ltd., 16, Ganesh Chandra Avenue, Calcutta 13.

Rank Film Distributors of India Pvt. Ltd., Light House Cinema Bldg., 1, Humayun Place, Calcutta 1.

Rash Behary Sen (1897) Pvt. Ltd., 190-191, Old China Bazar Street, Calcutta 1.

Raunaq & Co. Pvt. Ltd., 85, Netaji Subhas Road, Calcutta 1.

Ray & Co. India Pvt. Ltd., P. C., 4, Lyons Range, Calcutta.

Raymond India Pvt. Ltd., 2, Brabourne Road, Calcutta 1.

R. B. Rodda & Co. Ltd., 2, Wellesley Place, Calcutta 1.

Reckit & Colman of India Ltd., 41, Chowringhee Road, Calcutta 16.

**REFRIG PRIVATE LIMITED**, 58C, Chowringhee Road, Calcutta 16. Phone: 445774, Grams: "AUTOFRIGE (P)" Refrigerating & Air-conditioning Engineers. Agents for J. & E. Hall Ltd. of Dartford, England.

Refrigeration Equipment Pvt. Ltd., 32, Chowringhee, Calcutta.

Refrigerators (India) Pvt. Ltd., 59-C, Park Street, Calcutta 16.

Reliable Water Supply Service of India Pvt. Ltd., 10, Canning Street, Calcutta 1.

Reliance Firebrick & Pottery Co. Ltd., 4, Lyons Range, Calcutta.

Reliance Development & Engineering Ltd., P-14, Durga Charan Mitter Street, Calcutta 6.

Reliance Dyes & Chemical Co., 38, Armenian Street, Calcutta 1.

Reliance Firebrick & Pottery Co. Ltd., 4, Lyons Range, Calcutta 1.



Reliance Products Ltd., 15, Chittaranjan Avenue, Calcutta 13.  
 Reliance Trading Co., 8-B, Amratolla Lane, Calcutta 1.  
 Relief Roller Castings Co., 4, Girish Chandra Bose Road, Calcutta 14.  
 Remfry & Son, Stephen House, Dalhousie Sqr., Calcutta 1.

### REMINGTON RAND OF INDIA LTD.,

3, Council House Street,  
 Calcutta.

REMINGTON TYPEWRITERS  
 and Business Equipment.

Phone: 237401 (10 Lines)

Grams: "REMINGTONS"

Renwick & Co. P. Ltd., 19, Zakasia Street, Calcutta 1.  
 Republic Traders Corp., P-12, Mission Row Extn., Calcutta 1.  
 Rex Engineering Co., 71-A, Netaji Subhas Road, Calcutta 1.  
 Reyrolle, A. & Co. Ltd., 12, Mission Row, Calcutta 1.  
 Ringer, C. & Co., Norton Bldg., 23, Lall Bazar, Calcutta 1.  
 Rivers Steam Navigation Co. Ltd., 2, Fairlie Place, Calcutta 1.  
 R. K. Millen & Co. (India) Pvt. Ltd., 38, Netaji Subhas Road, Calcutta 1.  
 R. K. Modi Pvt. Ltd., 12, Dalhousie Sqr. East, Calcutta 1.  
 RKO Radio Pictures Pvt. Ltd., New Empire Theatre Bldg., 1, Humayun Place, Calcutta 13.  
 R. L. Modi & Sons Pvt. Ltd., 2, Doyehatta Street, Calcutta 7.  
 R. McDill & Co. Pvt. Ltd., 34B, Ratu Sarkar Lane, Calcutta 7.  
 R. M. Purkait & Co. P. Ltd., P-34, Mission Row Extn., Calcutta 1.  
 R. N. Sarangi & Co. Ltd., 56, Netaji Subhas Road, Calcutta 1.  
 Roadways (India) Transport Corporation, 3, Mitra Lane, Calcutta 7.  
 Robert Hudson (India) Pvt. Ltd., 12, Mission Row, Calcutta 1.  
 Roberts McLean & Co. Ltd., Regd. Office: 2, Brabourne Road, Calcutta 1.  
 R. N. Jhunjhunwala & Co. Pvt. Ltd., 9, Ezra Street, Calcutta 1.  
 Robsan & Co. Ltd., Windsor House, P14, Mission Row Extn., Calcutta 1.  
 Rodda, R. B. & Co. Ltd., 2, Wellesley Place, Calcutta 1.  
 Roneo Ltd., 13, Mission Row Extension, Calcutta.  
 Roofex (India) Pvt. Ltd., 135, Canning Street, Calcutta 1.  
 Rohtas Industries Ltd., 11, Clive Row, Calcutta 1.  
 Rostron, & Co. Pvt. Ltd., 10, Govt. Place, East, Calcutta 1.  
 Roy, A. C. & Co. Pvt. Ltd., 5, Mission Row (1st Floor), Calcutta 1.  
 Royal Elephant Twine Ball Mfg. Co., 12, Tamer Lane, Calcutta 9.  
 Royson & Co., 55, Gariahat Road, Calcutta 19.  
 R. Sen & Co. (Agents) Pvt. Ltd., P-66, Circular Garden Reach Road, Calcutta 23.  
 R. Shanthlal & Co. Pvt. Ltd., 31/C, Brabourne Road, Calcutta 1.  
 Rudra & Co. Pvt. Ltd., 32, Madan Mitter Lane, Calcutta 6.  
 Rungta Sons Pvt. Ltd., P-16, Kalakar Street, Calcutta 7.

Rupabani Theatres Pvt. Ltd., 32-A, Shyama Prosad Mukherjee Road, Calcutta 26.  
 S. A. Nasar & Co. Pvt. Ltd., 2, Chittaranjan Avenue, Calcutta.  
 S. A. Torab & Co., 55, Canning Street, Calcutta 1.  
 Saha, B. K. & Bros. Pvt. Ltd., 5, Pollock Street, Calcutta 1.  
 Saha, C. C. Ltd., 45, Moti Sil Street, Calcutta 13.  
 Saharia Industries, 12, Dalhousie Square East, Calcutta.  
 Sahib Singh Mfg. Co. Pvt. Ltd., Post Box 9104, Calcutta.  
 Sahu Cement Service, 18-A, Brabourne Road, Calcutta.  
 Sales & Industries Pvt. Ltd., 6, Old Post Office Street, Calcutta 1.  
**SAMUEL FITZE & CO. PRIVATE LTD.,**  
 Department Store of Distinction; Estd. 1898; Household Linen, Gentlemen's Tailoring & Outfitting, Staff Uniforms, Soft Furnishings, Shipping, Clearing & Forwarding, etc., 26, Chowringhee, Calcutta 13; Phone: 235835-36; Grams: "FITZE", Calcutta.  
 Samuel Osborn (India) Pvt. Ltd., 1, Lower Circular Road, Calcutta 20.  
 Sandoz Products Pvt. Ltd., 5, Bankshall Street, Calcutta 1.  
 Sangneria Co. Pvt. Ltd., 9, Jagmohan Mullick Lane, Calcutta 7.  
 Sankey Electrical Stampings Pvt. Ltd., Mookerjee House, 17, Brabourne Road, Calcutta 1.  
 Santos Chandra Banerjee & Sons Pvt. Ltd. 24, Mandeville Gardens, Calcutta 19.  
 Sarkar, Gupta & Co. Pvt. Ltd., 154/1, Mahendra Bhattacharjee Road, Howrah.  
 Sarkar, M. C. & Sons Pvt. Ltd., 14, Bankim Chatterjee Street, Calcutta 12.  
 Sarkar, N. R. & Co. Pvt. Ltd., Hindusthan Bldgs., 4, Chittaranjan Avenue, Calcutta 13.  
 Sarker, P. R. Co. Pvt. Ltd., Hindusthan Bldgs., 4, Chittaranjan Avenue, Calcutta 13.  
 Sarkar, S. C. & Sons Ltd., 1-1-C, College Sqr., Calcutta 12.  
 Sarma (India) Pvt. Ltd., 9, Chowringhee Road, Calcutta 13.  
 Scandinavian Airlines System, 18, Park Street, Calcutta 16.  
 Scientific Dyeing & Cleaning Co. Pvt. Ltd., 23, Free School Street, Calcutta 16.  
**SCIENTIFIC INSTRUMENT CO. LTD.,**  
 THE, Head Office: 6, Tej Bahadur Sapru Road, Allahabad 1; Phone: 2451; Calcutta Office: 11, Esplanade East, Calcutta 1; Importers & Manufacturers of Scientific Instruments and Appliances including Electronic, Nucleonic, optical and Photographic for Education, Research and Industry; Offices also at: Bombay, Calcutta, Madras & New Delhi.  
 Scindia Steam Navigation Co. Ltd., 33, Netaji Subhas Road, Calcutta 1.  
 Scott & Pickstock Pvt. Ltd., P.B. No. 461, 5, Fairlie Place, Calcutta 1.  
 Scotts Pvt. Ltd., Queen's Mansions, 13-A, Russell Street, Calcutta 16.  
 Scott & Saxby Pvt. Ltd., 4, Netaji Subhas Road, Calcutta 1.  
 Screen Corp., Pvt. Ltd., 76-3, Cornwallis Street, Calcutta 6.  
 Scroggie Bros. (India) Ltd., 2, Clive Ghat Street, Calcutta 1.  
 S. C. Sarkar & Sons Pvt. Ltd., 1-C, College Square, Calcutta 12.  
 S. C. Sons Pvt. Ltd., 4, Clive Ghat Street, Calcutta 1.  
 S. D. Shevalia & Co. Pvt. Ltd., 8, Netaji Subhas Road, Calcutta 1.  
 Siemens Corporation of India, 71, Raja Naba Kissen Street, Calcutta 5.

Selvel Syndicate (Calcutta), 21, Park Palace, Park Circus, Calcutta 17.  
 Sen Brothers Pvt. Ltd., 3, Amratolla Lane, Calcutta 1.  
 Sen & Pandit Pvt. Ltd., Mercantile Bldg. Lall Bazar, Calcutta 1.  
 Sen Ray & Co. Ltd., 15, College Square, Calcutta 12.  
 Sen-Raleigh Industries of India Ltd., Mercantile Bldgs., Calcutta 1.  
 Sen & Sen Pvt. Ltd., 10-A, Ram Pal Lane, Calcutta 5.  
 Senola Musical Products Co., 11, Esplanade East, Calcutta 1.  
**SEPULCHRE BROTHERS (INDIA) LTD.,**  
 Importers, Exporters and Engineers, 20, Rajendra Nath Mukherji Road, Calcutta 1; Phone: 23-2474 (2 Lines), Head Office: Taj Building, Dr. Dadabhoi Naoroji Road, Fort, Bombay 1; Branches: Calcutta & Madras.  
 Sett & Dass Co. Ltd., 78-79, Beadon Street, Calcutta 6.  
 Sett, H. L. & Sons Pvt. Ltd., 21, Jadu Pandit Road, P.O. Beadon Street, Calcutta 6.  
 S. F. A. Corp., India Pvt. Ltd., P-22, Swallow Lane, Calcutta 1.  
 S. G. R. Industries Pvt. Ltd., 10, The Mall, Dum Dum, Calcutta 26.  
 Shah, P. B. & Co. Pvt. Ltd., 34, Netaji Subhas Road, Calcutta 1.  
 Shahani, M. G. & Co. (Cal.), Ltd., 3, Chittaranjan Avenue, Calcutta 13.  
 Shalimar Wood Products Pvt. Ltd., 138, Canning Street, Calcutta 1.  
 Shalimar Works Ltd., 4, Garden Beach Road, Calcutta 23.  
 Shankar Industries, 192, Jamunlal Baja Street, Calcutta 7.  
 Shaw Wallace & Co., Ltd., Wallace House, 4, Bankshall Street, Calcutta 1.  
 Shellim, A. J. & Co., Pvt. Ltd., 135, Canning Street, Calcutta 1.  
**SHETHIA S. D. & CO. PRIVATE LTD.,**  
 Dealers in Coal, Coke, Dyes, Chemicals, Salt, Starches, Glucose, Hessian & Gunnies, Gypsum Colliery Equipment and Stores, Transport C.I. Pipes, Refractories, etc. Head Office: F/2, Gillander House, 8, Netaji Subhas Road, Calcutta 1; Phone: 22-9933 (5 Lines); Grams: "SHETHIACO"; Telex No. 523, Code 021. Branch: Podar Chambers, Parsi Bazar Street, Fort, Bombay 1; Phone: 25-5505; Grams: "SHETHIACO".  
 Shilpa-Peeth Ltd., 111-1, Gopal Lal Thakur Road, Alambazar, Calcutta 35.  
 Shimwell & Bro. (Calcutta) Pvt. Ltd., 1, India Exchange Place, Calcutta 1.  
 Shree Hanuman Industrial Corp., 8, India Exchange Place, Calcutta 1.  
 Shreekanth Trading Co. Pvt. Ltd., 1-3, Brabourne Road, Calcutta 1.  
 Shri Niwas Co. Pvt. Ltd., 14, Noormal Lohia Lane, Calcutta 7.  
 Siemens Edison Swan Ltd., 5, Clive Row, Calcutta 1.  
 Siemens Engg. & Mfg. Co. of India Ltd., G.P.O. Box No. 715, Calcutta.  
 Sigma Engineering Co., 60, Dharamtala Street, Calcutta 13.  
 Signograph Co., Signograph Bldg., 173-175, Kashi Nath Dutt Road, Barnagore, Calcutta 36.  
 Sikri & Co., Pvt. Ltd., 9, Ezra Street, P.B. No. 2287, Calcutta 1.  
 Simon-Carves Ltd., Simon House, Calcutta 27.  
 Simplex Concrete Pipes (India) Pvt. Ltd., 103-3, Diamond Harbour Road, Calcutta 38.  
 Simpson & Munro (India) Ltd., 4, Lyons Range, Calcutta 1.  
 Simpson, P. D. & Co., Kent House, P-33, Mission Row Extension, Calcutta 13.



Sinclair, Murray & Co., Pvt. Ltd., 6, India Exchange Place, Calcutta.  
Singapore Cane Mfg., Co., 137, Canning Street, Calcutta 1.  
Singer Sewing Machine Co., 29, Waterloo Street, Calcutta 1.  
Sinha Ghose & Co. P. Ltd., 38, Chandni Chowk Street, Calcutta 13.  
Sinha, M. L. & Co., Pvt. Ltd., 50, Ezra Street, P.B. No. 516, Calcutta 1.  
Sircar S. & Co., Ltd., 16, Bonfield Lane, Calcutta 1.  
Sizing & Finishing Materials Co., 60-2, Dharamtolla Street, Calcutta 13.  
S. K. Chakravarti Pvt. Ltd., 1/1B, Mission Row, Calcutta 1.  
S. K. F. Ball-Bearing Co. Pvt. Ltd., 18, Netaji Subhas Road, Calcutta 1.  
S. K. Mitra Pvt. Ltd., 6, Mission Row, Calcutta 1.  
S. L. Dutt & Co. Pvt. Ltd., 42/1/2, Murari-pooker Road, Calcutta.  
S. M. Ali Pvt. Ltd., 40, Chittaranjan Avenue, Calcutta 12.  
Smith B. H. & Co., Pvt. Ltd., 46, Dharamtolla Street, Calcutta 13.  
Smith Stanistreet & Co., Ltd., 18, Convent Road, Calcutta 14.  
Solomon N. & Co., Pvt. Ltd., 29, Strand Road, Calcutta 1.  
Soman Brothers Pvt. Ltd., 21A, Canning Street, Calcutta 1.  
Sone Valley Portland Cement Co., Ltd., 31, Chittaranjan Avenue, Calcutta 1.  
Soolesman Dadabhoi Bros. Pvt. Ltd., 130, Lower Chitpur Road, Calcutta 1.  
Scor, Neogi Coomar & Co. Pvt. Ltd., 39, College Street, Calcutta 12.  
Soorajmull Nagarmull, 61, Harrison Road, Calcutta 1.  
Spark Engineering & Trading Co., 32, Jackson Lane, Calcutta 1.  
Spence Ltd., P-38, Mission Row Extension, Calcutta 1.  
Spencer & Co., Ltd., 70, Diamond Harbour Road, Calcutta 23.  
Squareman Commercial Corpn., 25, Swallow Lane, B. No. 4, Calcutta 1.  
Shree Krishna Private Ltd., 20, Mangoe Lane, Calcutta 1.  
Sri Ram Machinery Corpn. Pvt. Ltd., 18, Netaji Subhas Road, Calcutta 1.  
Stadmed Pvt. Ltd., 84, Chowringhee Road, Calcutta 20.  
Standard Engineering Co., Ltd., 62, Bow Bazar Street, Calcutta 12.  
Standard Literature Co., Pvt. Ltd., 13/1, Old Court House Street, Calcutta 1.  
Standard Radio & Winding House Private Ltd., Brabourne Court, 1, Chandney Chowk Street, Calcutta 13.  
Standard Steels (India) Private Ltd., P-7, Mission Row Extn., Calcutta 1.  
Standard Stores & Agency Pvt. Ltd., 24, Chittaranjan Avenue, Calcutta 12.  
Statesman Pvt. Ltd., Statesman House, 4, Chowringhee Square, Calcutta 1.  
Steam & Mining Equipment (India) Private Ltd., 207-B, Park Street, Calcutta-17; Phone: 447551.  
Steel Age Industries Pvt. Ltd., 71, Ganesh Chandra Avenue, Calcutta 13.  
Steel & Allied Products Ltd., 17, Brabourne Road, Calcutta 1.  
Steel Box P. Ltd., 14-2, Old Chinabazar Street, Calcutta 1.  
Steel Brothers & Co., Ltd., Gillander House, Netaji Subhas Road, Calcutta 1.  
Steel Equipment & Construction Pvt. Ltd., 22, Grand Trunk Road, Lillooah, Howrah.  
Steel, R. & Co. Pvt. Ltd., 4, Netaji Subhas Road, Calcutta 1.

Steelex Private Ltd., 38, Netaji Subhas Road, Calcutta 1.  
Steelverse & Co. (1960) Pvt. Ltd., 152, Acharya Prafulla Chandra Road, Calcutta 6.  
Stephens & Co., Pvt. Ltd., 23, Chowringhee, Calcutta 13.  
Sterling India Co. Pvt. Ltd., Calcutta 14.  
Stewarts & Lloyds of India Pvt. Ltd., 41, Chowringhee Road, Calcutta 16.  
Stone J. & Co. (India) Pvt. Ltd., 5, Hilde Road, Kidderpore, Calcutta 23.  
Stores Supply & Mfg. Co., 8-B, Lal Bazar Street, Calcutta 1.  
Structural Waterproofing Co. Pvt. Ltd., 21-1, Dover Road, Calcutta 19.  
Subol Chandra Dutt Properties Pvt. Ltd., Subol Dutt Bldgs., 13, Brabourne Road, Calcutta 1.  
Sudhir Chatterjee & Co. Pvt. Ltd., 10, Ganesh Chandra Avenue, Calcutta 13.  
Sudsons Pvt. Ltd., 3, Esplanade East, Calcutta 1.  
Super Crafts Pvt. Ltd., 163, Kasba Road, Calcutta 42.  
Superintendence Co. of India Pvt. Ltd., 35, Ezra Street, Calcutta 1.  
Sur B. & Co., 69, Dr. Suresh Sarkar Road, Entally, Calcutta 14.  
Sur Enamel & Stamping Works Pvt. Ltd., 24, Middle Road, Calcutta 14.  
Sur Industries Pvt. Ltd., 163, Lower Circular Road, Calcutta 14.  
Surensons Pvt. Ltd., 3/1, Raja Kali Klassen Lane, Calcutta 5.  
Surlsons & Co. Ltd., 72-73, Old China Bazar Street, Calcutta 1.  
Surveyors & Salvagers Ltd., Temple Chambers, 6, Old Post Office Street, Calcutta 1.  
Sutton & Sons Ltd., 13-D, Russe Street, Calcutta 16.  
Swalka Export & Import Ltd., Pollock House, 18-B, Brabourne Road, Calcutta 1.  
Swatantra Bharat Trading Co. Ltd., 208, Jannalal Bajaj Street, Calcutta 7.

# SYMOND DISTRIBUTORS PRIVATE LIMITED

18, Netaji Subhas Road, Calcutta 1.

Sole Distributors in India for the "SLAZENGER" Sports goods made in India.

Phone: 22-4945/46.

Grams: 'FOURSQUARE'.

Synthetic Moulders Ltd., 53, Netaji Subhas Road, 2nd Floor, Calcutta 1.  
T. I. & M. Sales Ltd., Regd. Office: 6, Church Lane, Calcutta-1.  
Talbot & Co., Tower House, Chowringhee Sqr., Calcutta 1.  
Talukdar Law & Co., Private Ltd., Hindusthan Buildings, 4, Chittaranjan Avenue, Calcutta 13.  
Talukdar S. & Co. Ltd., 5, Commercial Bldgs., 23, Netaji Subhas Road, Calcutta 1.  
Tantia Bros. Pvt. Ltd., Norton Bldg., Old Court House Corner, Calcutta 1.  
Targett & Co. Ltd., W.H., 5, Mission Row, Calcutta 1.  
Tata Chemicals Ltd., Mercantile Bldgs., 10, Lal Bazar, Calcutta.  
Tata Iron & Steel Co. Ltd., 23-B, Netaji Subhas Road, Calcutta 1.  
Tatanagar Foundry Co. Ltd., 51, Stephen House, 4, Dalhousie Square, Calcutta 1.  
Tatanagar Transport Corporation, 147, Mahatma Gandhi Road, Calcutta 7.  
T. D. Kumar Brothers Pvt. Ltd., 20/1, Maharshi Debendra Road, Calcutta 7.

Tecalemit (India) Ltd., 31, Chittaranjan Avenue, Calcutta 12.  
Technical (India) Pvt. Ltd., 62-1, Joy Narain Babu & Ananda Dutta Lane, Howrah.  
Technico Enterprises Pvt. Ltd., P-22, Swallow Lane, Calcutta 1.  
Textile Machinery Corpn. Ltd., 8, India Exchange Place, Calcutta 1.  
Thacker Spink & Co. (1933) Pvt. Ltd., 3, Esplanade East, Calcutta.  
Thacker's Press & Directories Ltd., 6-B, Bentinck Street, Calcutta 1.  
Thapar Financial Corporation, 29-A, Chandra Nath Chatterjee Street, Calcutta 25.  
Thermolites Products Pvt. Ltd., 58-4, Barrackpur Trunk Road, Calcutta 2.  
Thomas Duff & Co. (India) Pvt. Ltd., 2 & 3, Clive Row, Calcutta 1.  
Thomas J. & Co., Pvt. Ltd., 8, Mission Row, Calcutta 1.  
**THOMPSON COMPANY PRIVATE LTD., J. WALTER**, International Advertising and Merchandising Consultants; Calcutta Office: 30, Bondel Road, Calcutta; Manager: Subhas Ghosal; Head Office: Lakshmi Building, Sir Pherozshah Mehta Road, Chairman & Managing Director: Edward J. Fielden; Branches at Calcutta, Delhi, Madras, Colombo and Offices throughout the World; Phone: 443601 (5 lines); Grams: "THOMETWAL."  
Thomson T. E. & Co. Ltd., 9-A, Esplanade East, Calcutta 1.  
Tideman & Co. (India) Pvt. Ltd., P-15, Bentinck Street, Calcutta.  
Tide Water Oil Co. (India) Ltd., 8, Clive Row, Calcutta 1.  
Times of India, 13/1, 13/2, Govt. Place East, Calcutta.  
Time Products Ltd., India Exchange Bldg., Calcutta 1.  
T. I. of India Ltd., 5 & 7, Netaji Subhas Road, Calcutta 1.  
Torrance & Sons Ltd., 30, Chowringhee Road, Calcutta 16.  
Torrington Needle Agency, 21-A, Gaur Laha Street, P.O. Beadson Street, Calcutta 6.  
Tractors (India) Ltd., 1, Taratolla Road, Garden Reach, Calcutta 27.  
Trade Land (India) Ltd., 22, Strand Road, Calcutta 1.  
Traders Cartel Pvt. Ltd., 235-H, Bowbazar Street, Calcutta 12.  
Traders' International Mercantile Agency Pvt. Ltd., 1-A, Russel Street, Calcutta 16.  
Tribeni Tissues Pvt. Ltd., 37, Chowringhee, Calcutta 16.  
Tungabhadra Industries Ltd., 8, India Exchange Place, Calcutta.  
Turner Hoare & Co. Pvt. Ltd., 27, Brabourne Road, Calcutta.  
Turner Morrison & Co. Pvt. Ltd., 6, Lyons Range, Calcutta 1.  
Twentieth Century-Fox Corpn. (India) Pvt. Ltd., 19, Chowringhee Road, Calcutta 13.  
Uberoi Ltd., 22-1, Chowringhee Road, Calcutta 13.  
Umakant & Co. Pvt. Ltd., 4, Mullick Street, Calcutta 7.  
Union Carbide Pvt. Ltd., 1 & 3, Brabourne Road, Calcutta 1.  
Union Commercial Corporation, Mercantile Bldgs., Lal Bazar, Calcutta.  
Union Metal Industries Ltd., 2, Clive Ghat Street, Calcutta 1.  
United Commercial and Industrial Co. Pvt. Ltd., 20, Mangoe Lane, Calcutta 1.  
United Commercial Trading Corpn. Ltd., 138, Canning Street, Calcutta 1.  
**UNITED ENGINEERING (EASTERN) CORPORATION**, Local Sales Office: 22, Canning Street, Calcutta 1; Phone: 22-2426; Export Department No. 10,



Canning Street, Calcutta 1; Phone: 22-3531; Factory No. 10, Convent Road, Calcutta 14; Phone: 24-3752 for Oil Expellers, Filter Presses, Disintegrators and Spare parts of all types of oil Expellers in the world etc.

United Liner Agencies of India Pvt. Ltd., 17, Brabourne Road, Calcutta 1.

United Machine Co. Ltd., 2, Dalhousie Square East, Calcutta 1.

United Provinces Commercial Corporation, 6, Ganesh Chandra Avenue, Calcutta 13.

United Steel Companies (India) Pvt. Ltd., P-13, Mission Row Extension, Calcutta 1.

United Supply Agency Pvt. Ltd., 38, Strand Road, Calcutta 1.

United Trading Co., 172, Mahatma Gandhi Road, Calcutta 7.

Universal Importers Co., 32-E, Jackson Lane, Calcutta 1.

Universal Industrial & Mercantile Corpn., 13, Gope Lane, Calcutta 14.

Universal Railway Material Supply Co., 4, Commercial Bldgs., Netaji Subhas Road, Calcutta 1.

Universal Refrigeration Corpn. Ltd., 47, Southern Avenue, Calcutta 29.

Universal Safe & Tank Mfg. Co., 100, Harrison Road, Calcutta 7.

Universal Trading Co., 33, Canning Street, Calcutta 1.

Universal Trading Corporation, 20, Strand Road, Calcutta 1.

Usha Automobile & Engineering Private Ltd., 2, Ramgopal Ghosh Road, Cossipore, Calcutta-2.

Vasanjee Topun Madhowjee & Co., 5-1, Portuguese Church Street, Calcutta 1.

Vasant Corporation Pvt. Ltd., 28, Amratolla Street, Calcutta 1.

V. D. Swami & Co. Pvt. Ltd., 2, Mangoe Lane, Calcutta 1.

Victory Trading Co., 172, Mahatma Gandhi Road, Calcutta 7.

Vinar Ltd., 2-A, Theatre Road, Calcutta 16.

Virchand Panachand & Co. (Calcutta) Pvt. Ltd., 87, Canning Street, Calcutta.

Vishnu Agencies Pvt. Ltd., Bharat Bhawan, 3, Chittaranjan Avenue, Calcutta.

Vishwa Bharati Trading Co., Post Box 2628, Calcutta.

Vishwakarma Constructions (Private) Ltd., 31, Chittaranjan Avenue, Calcutta 12.

Volkart Brothers, 8, Netaji Subhas Road, Calcutta 1.

Voltas Limited, 8, Netaji Subhas Road, Calcutta 1.

Vulcan Trading Co. Pvt. Ltd., 19, British Indian Street, Calcutta 1.

Wakefield C. C. & Co. Ltd., Allahabad Bank Bldgs., 14 India Exchange Place, Calcutta 1.

Waldie D. & Co. Ltd., Gillander House, Netaji Subhas Road, Calcutta 1.

Walford Transport Ltd., 71, Park Street, Calcutta 16.

Walker W. J. & Co., 6, Commercial Bldgs., Calcutta 1.

Walter Bennet & Co., 21-C, Gokul Mitra Lane, Calcutta 5.

Walter Bushnell Ltd., Grosvenor House, 21, Old Court House Street, Calcutta 1.

Walters M. & Co., 17, Chowringhee, Calcutta 13.

Walworth International Co., 14-2, Clive Row, Calcutta 1.

Water Supply Specialists Pvt. Ltd., Gujrat Mansions, Mission Row Extn., Calcutta 1.

Weddel India Pvt. Ltd., 103, Park Street, Calcutta 16.

Weights & Measures Syndicate, 76/2, Ichapur Road, Howrah.

Wellman Incandescent India Ltd., 8, Harrington Street, Calcutta 16.

Wesman Engineering Co. Pvt. Ltd., 71, Ganesh Chandra Avenue, Calcutta 13.

West Bengal Safe Deposit Vault Ltd., 5, Clive Row, Calcutta 1.

West End Trading Co. Pvt. Ltd., 91, Netaji Subhas Road, Calcutta 1.

Western India Arc Welding Co. Pvt. Ltd., 3, Esplanade East, Calcutta.

Western India Match Co. Ltd., Wellesley House, 7, Wellesley Place, Calcutta 1.

Western India Theatres Ltd., 136, S. N. Banerjee Road, Calcutta 13.

Western Mechanical Industries P. Ltd., P-36, India Exchange Place, Calcutta 1.

Western Oxy-Acetylene & Electric Welding Co., 233-4, Lower Circular Road, Calcutta 20.

Western Tools & Hardware Co., 89, Netaji Subhas Road, Calcutta 1.

Westrex Co., (Prop.: Cinerama Pvt. Ltd.); Lighthouse Cinema Bldg., 2, Humayan Place, Calcutta 13.

W. H. Harton & Co. Ltd., 8, Dalhousie Square East, Calcutta 1.

Wharton H. W. & Co. Pvt. Ltd., 17, Brabourne Road, Calcutta 1.

Wheeler A. H. & Co., Pvt. Ltd., 18, Netaji Subhas Road, Calcutta 1.

Wiggins Teape & Alex Pirie (Export) Ltd., 18-A, Brabourne Road, Calcutta 1.

William Jacks & Co. Ltd., 16, Netaji Subhas Road, Calcutta 1.

Williamson Magor & Co. Ltd., 4, Mangoe Lane, Calcutta 1.

**WILLIAMSON'S (INDIA) PRIVATE LTD.**, Textile Mill Stores & Machinery Suppliers; 8, Netaji Subhas Road, Calcutta 1; Regd. Office: 10, Veer Nariman Road, Bombay 1; Branches: Ahmedabad & Calcutta.

Wing Hing & Co. Pvt. Ltd., 18, Chandney Chowk Street, Calcutta 13.

Wire Machinery Manufacturing Corpn., 1/A, Vansittart Bow, Calcutta 1.

W. Newman & Co. Ltd., 3, Old Court House Street, Calcutta.

Wood Craft Products Ltd., 8, India Exchange Place, Calcutta 1.

Woodcrafts (Assam) Ltd., India Exchange, Calcutta 1.

Worah K. & Co. Ltd., 135, Canning Street, Calcutta 1.

Wren D. & Co., Warley House, 25, Swallow Lane, Calcutta 1.

Wright T. S. & Co. (India) Pvt. Ltd., P-5, Canning Street, Calcutta 1.

W. S. Atkins & Partners (I) Ltd., 2, Fairlie Place, Calcutta 1.

## CLASSIFIED LIST OF TRADES AND PROFESSIONS

### ABRASIVES MANUFACTURERS AND DEALERS

**CARBORUNDUM UNIVERSAL LTD.**—Manufacturers of Bonded Abrasives, Coated Abrasives, Super Refractories and Abrasive Grains; 56-D, Free School Street, P.B. No. 9058, Calcutta 16.

Grindwell Abrasives P. Ltd.—23, Ganesh Ch. Avenue, Calcutta 13.

International Trading Co. (Engineers)—22, N. Subhas Road, Calcutta 1.

National Abrasive Works.—6, Mission Road, Calcutta.

National Engineers & Traders.—12A, N. Subhas Road, Calcutta.

### ACCOUNTING, ADDING, ADDRESSING & STATISTICAL MACHINES, CALCULATORS, DUPLICATORS, ETC.

Adding Machines (India) Pvt. Ltd.—29, Ezra Mansions, 10, Govt. Place East, Calcutta 1.

**BRADMA OF INDIA LTD.**—Data Writing Machines and Business Systems; 20-B, Park Street, P.O. Box No. 9098, Calcutta; Grams: "BRADMALTY", Phone: 235747.

Burroughs Adding Machine Co.—29, Ezra Mansions, 10, Govt. Place East, Calcutta 1.

Cloiko Office Machines Pvt. Ltd.—800, Bow Bazar Street, Calcutta.

Gestetner Duplicators Ltd., 9-A, Esplanade East, Calcutta 1.

Hollerith (India) Pvt. Ltd.—17, Chittaranjan Avenue, Calcutta 13.

IBM World Trade Corpn.—Mackinnon Mackenzie Building, 16, Strand Road, Calcutta 1.

International Computers & Tabulators (I) P. Ltd., 2 & 3, Clive Row, Calcutta 1.

J. K. Business Machines Ltd.—2, Mangoe Lane, Calcutta 1.

P. N. Ganesan & Sons.—P-35, Royal Exchange Place Extn., Calcutta 1.

Kilburn & Co. P. Ltd.—2, Fairlie Place, Calcutta 1.

Mullick & Co. H. Ltd.—65, Ganesh Ch. Avenue, Calcutta.

National Cash Register Co.—4-D, D. Square East, Calcutta.

Typewriter & Stationery Corpn. P. Ltd.—12-A, N. Subhas Road, Calcutta.

### ACETYLENE GENERATORS

**INDUSTRIAL GASES LTD., THE.**—15, Ganesh Chandra Avenue, Post Box 853, Calcutta-1; Phones: 233230, 239005, 239681, 237985 & 239981; Manufacturers of Acetylene Gas Generators both Carbide to water and water to Carbide, Portable & Stationary, Trolleys & Manifolds.

### ACIDS & ALLIED PRODUCTS

**LUCKY ACID & CHEMICAL WORKS.**—Manufacturers of Analytical, C.P. & Pure grade Hydrochloric, Sulphuric and Nitric Acids and Chemicals; 32/2, Muraripukur Road, Calcutta-4; Phone: 353147. We are ISI Licensees.

**SHROFF CHEMICALS PRIVATE LTD.**—3, Ra's Ahmed Kidwai Road, Calcutta-13.

### ADDRESSING & LISTING MACHINES

**BRADMA OF INDIA LTD.**—Data Writing Machines and Business Systems; 20-B, Park Street, P.O. Box No. 9098, Calcutta; Grams: "BRADMALTY", Phone: 235747.



## ADHESIVES

**ADHESIVES & ALLIED PRODUCTS.**—Manufacturers of all types of Industrial Adhesives, 'Thermofix' for Bonding 'Thermocole' and Insulating Boards, 12, Netaji Subhas Road, Calcutta-1; Phone: 224841 & 242429.

## ADVERTISING &amp; PUBLICITY AGENTS &amp; CONSULTANTS

Advertising Corp. of India P. Ltd., 1 & 2, Old Court House Corner, Calcutta 1.  
Advertising & Sales Promotion Co.—P-35, India Exchange Place, Calcutta.  
Aero Advertisers, 22, Canning Street, Calcutta 1.  
**AJANTA ADVERTISING.**—24-B, Park Street, Calcutta-16; Bombay Office: Lakshmi Bldg., Sir P. M. Road, Bombay-1; Phone: 263343/44, Grams: "ADCOUNSEL".  
Alpha Advertising Service.—Marble House, 5/2 Garstin Place, Calcutta.  
Apollo Advertising Agency.—7A, Lower Circular Road, Calcutta 17.  
Associated Advertisers & Printers Ltd.—B-6, Bharat Bhavan, 3, Chittaranjan Avenue, Calcutta 13.  
Banar Ltd.—2, Brabourne Road, Calcutta 1.  
Bhattacharya Publicity.—64, Colootola Street, Calcutta 1.  
Blaze Advertising Service.—16, Theatre Road, Calcutta.  
Bomas Ltd.—2, Brabourne Road, Calcutta 1.  
Broadway Publicity of India.—185-1-B, Bowbazar St., Calcutta 12.  
Calcutta Advertising Agency, 3, Kedarnath Bhattacharjee Lane, Calcutta 35.  
Central Publicity Service.—161/1, Mahatma Gandhi Road, Calcutta 7.  
Clarion Advertising Service Pvt. Ltd.—5, Council House Street, Calcutta.  
Electrically Lighted Advtg. Pillars P. Ltd.—12-1, Kyd St., Calcutta 16.  
Everest Advertising P. Ltd.—24, Park Street, Calcutta 16.  
Export Advertising Service.—25A, Chittaranjan Avenue, Calcutta 13.  
Ghose & Co.—219, Cornwallis Street, Calcutta 6.  
**GRANT ADVERTISING INTERNATIONAL, INC.**—16, Shakespeare Sarani, Calcutta-16. Phone: 445824-5-6; Grams: "GRANTCHI." Advertising Agents & Consultants; R. S. J Davidson, Director & Vice-President, West Asia Division. Eric Dobson, Manager. Offices at Bombay, Madras, Delhi. (37 Branches all over the World).  
Ideal Advertising Agency.—54, College Street, Calcutta 12.  
India Publicity Co. P. Ltd., 18B, Brabourne Road, Calcutta 1.  
Indian Publicity Bureau Pvt. Ltd.—6/2 Madan Street, Calcutta 18.  
India-International News Service.—P-14, Kalakar Street, Calcutta-7.  
Indus Press & Publicity Ltd., 157B, Dharamtola St., Calcutta 13.  
Kalpana Advertising & Public Relations.—"Commercial House", 135, Canning Street, Calcutta.  
K. Shaw Sign & Neon Service Pvt. Ltd.—128/45, Cornwallis Street, Calcutta 4.  
LPE-Aiyars Private Ltd.—12, Stephen House, 5, Dalhousie Square East, Calcutta-1.  
National Advertising & Publicity Corporation.—25A, Chittaranjan Avenue, Calcutta 13.  
National Advertising Agency, P-360, Keyatolla St., Calcutta.  
**NATIONAL ADVERTISING SERVICE PRIVATE LTD.**—(Estd.: 1931) 21, Princep Street, Calcutta 13. Phone: 232686 & 232456, Grams: 'JEYENJEYN' Advertising, Market Research, Public Relations; Head Office: Khorsheed Building, Sir P. M. Road, Bombay-1; Branch Office at New Delhi; Associates in 71 Countries. Resident Director: Kailash C. Jain, B.A.  
New India Publicity.—2-B, Scott Lane, Calcutta 9.  
Orient Publicity Service.—Commercial Buildings, Block No. 2, Netaji Subhas Road, Calcutta 1.  
Paradise Advertising Agency, 4, Sahitya Parishad St., Calcutta 6.  
Phoenix Advertising Pvt. Ltd.—1-A, Vansittart Row, Calcutta 1.  
Press & Publicity International, The.—Post Box 537, Calcutta-1. (India).  
Press & Publicity Syndicate Pvt. Ltd.—53, Radha Bazar Lane, Calcutta.  
Press Syndicate Ltd.—10, Govt. Place East, Calcutta.  
Progressive Publicity Service.—14, Bentinck Street, Calcutta.  
Publicity Forum.—P-6, Mission Row Extension, Calcutta.  
Publicity Society of India Ltd.—1, Waterloo Street, Calcutta 1.  
Publishers & Publicity Ltd.—17, Mangoe Lane, Calcutta 1.  
Radiant Display (I.) P. Ltd.—29, Waterloo Street, Calcutta 1.  
Selvel Syndicate (Calcutta).—83, Theatre Road, Calcutta 17.  
Universal Publicity Co., 89, Bechu Chatterjee St., Calcutta 9.  
Western Publicity Service.—142, Rashbehari Avenue, Calcutta-29.

## AERATED WATER

Bathgate & Co.—17, 18, 19, Old Court House Street, Calcutta.  
Byron & Co.—5, Chowringhee Place, Calcutta.

Calcutta Cold Storage Ltd.—D/1, Hide Road, Kidderpore, Howrah.  
Campbells Minerals Co. Ltd.—6-1, Sudder Street, Calcutta 16.  
Carlsbad Mineral Water Mfg. Co. P. Ltd.—14, Watkins Lane, Howrah.  
Club Mineral Water Co.—14, Watkins Road, Howrah.  
Cotton & Co.—18, British Indian Street, Calcutta 1.  
Crystal Ice Co.—50, Tangra Road, Entally, Calcutta 15.  
Hind Ice & Cold Storage Ltd.—23 and 24/1, Canal West Road, Calcutta 4.  
Hindustan Gas Co. Ltd.—22, New Tangra Road, Calcutta.  
Hindustan Ice & Cold Storage Co., Ltd.—3, Gas Street, Amherst Street, Calcutta.  
India Ice, Aerated Water & Cold Storage Co., Ltd.—20-21, Stephen House, Dalhousie Sq., Calcutta.  
Magnolia Soda Fountain P. Ltd.—16/3, Chowringhee, Calcutta 13.  
Pure Drinks (Calcutta) Ltd.—209, Karnani Estate, Lower Circular Road, Calcutta 17.  
Rose & Thistle.—16, Sandel Street, Calcutta 16.  
**SPENCER AERATED WATER FACTORY PRIVATE LTD.**—82, Dr. Suresh Sarkar Road, Entally P.O., Calcutta 14.

## AGRICULTURAL MACHINERY AND IMPLEMENTS MANUFACTURERS &amp; DEALERS

Agricultural Machinery Mfg. Corp. Ltd.—Bosepara Lane, Calcutta.  
Agricultural Machinery Mfg. Corporation Ltd., 12B, Lower Chitpur Road, Calcutta.  
Agrind Fabrication Ltd.—P/2/2, Taratola Road, Paharpur, Calcutta.  
Anand Metal & Steel Works.—137, Canning Street, Calcutta 1.  
Arthur Butler & Co. (Muzaffarpur) Ltd.—11, Brabourne Road, Calcutta.  
Arvind Brothers P. Ltd.—4, Saklat Place, Calcutta 13.  
Associated Aesby Industries Ltd.—22, Strand Road, Calcutta.  
Associated Exports Imports Corp.—8B, Lall Bazar St., Calcutta 1.  
Azamgarh Agricole Industries.—135, Canning Street, Calcutta.  
Bengal Iron & Steel Works.—8, Canning Street, Calcutta.  
Bengal Iron Works P. Ltd.—16-2, Chatterjee Lane, Howrah.  
Bharat Industries & Commercial Corp., Tower House, Chowringhee Square, Calcutta 1.  
**BRITISH ELECTRICAL & PUMPS PRIVATE LTD.**—1/1B, Mission Row, Calcutta-1; Self-priming, Centripetal, Centrifugal, Agricultural, Sewage and Engine Driven Pumping Sets and Electric Motors; Phone: 22-7826, 27 & 28.  
Carl Ohmes & Co. (I) P. Ltd.—23, Waterloo Street, Calcutta 1.  
Components and Machinery Corporation.—9/12, Lall Bazar Street, Calcutta 1.  
Cosmopolite Engineering Works Ltd.—21, Mahendra Goswami Lane, Calcutta.  
Dass, K. C. & Sons.—74-3, Harish Chatterjee St., Calcutta 25.  
D. C. De & Sons.—150, Narasingha Dutta Road, Howrah.  
East India Engg. & Agency Co.—63-1, Benaras, Road, Howrah.  
Ganges Galvanising Works (I) Pvt. Ltd.—14 & 14-1, Kissen Dayal Jalan Road, Salkia.  
Gobindo Sheet Metal Works & Foundry.—210, Harrison Road, Calcutta 7.  
Gopal & Kumar.—14, Netaji Subhas Road, Calcutta 1.  
Guchait, S. P. & Sons Ltd.—2, Madhusudan Paul Chowdhury Lane, Howrah.  
Hind Enterprises.—4, Mission Row, Calcutta 1.  
Hindustan Engineering Works.—36, Beadon Row, Calcutta 6.  
Howrah Foundry Works Pvt. Ltd.—53-3, Ashu Bose Lane, off Bellis Road, Howrah.  
Howrah Iron & Steel Works Pvt. Ltd.—90, Benaras Road, Salkia.  
Industrial & Agricultural Engg. Co. (Calcutta) P. Ltd.—8, Mission Row, Calcutta 1.  
J. N. Puri.—206, Bellis Road, Howrah.  
K. C. Dass.—32, Natabar Paul Road, Howrah.  
Larsen & Toubro Ltd.—41, Chowringhee Road, Calcutta 16.  
Luxmi Engg. Co. Pvt. Ltd.—123, Narasingha Dutt Road, Howrah.  
Marshall Sons & Co. (India) Ltd.—33/1, Netaji Subhas Road, Calcutta 1.  
Maya Galvanizing Works.—9, Upper Chitpur Road, Calcutta 7.  
Metal Craft (India) Ltd.—96, Garden Reach Road, Calcutta 23.  
Parts Service India Ltd.—30, Chittaranjan Avenue, Calcutta 12.  
Parveen & Co.—138, Canning Street, Calcutta.  
Roger Engineering Works.—10, Clive Row, Calcutta 1.  
Tractors (India) Ltd.—1, Taratolla Road, Garden Reach, Calcutta 24.  
Tractors Spares P. Ltd.—2, Royal Exchange Place, Calcutta 1.  
**UNITED PROVINCES COMMERCIAL CORPORATION PRIVATE LTD.**—Distributors in India for FORD Tractors, attachments & Spare Parts thereof and FIAT Crawler Tractors; 6, Ganesh Chandra Avenue, Calcutta; Phone: 233291 (5 Lines), Telex-505 UPCC CA.  
Volta Limited.—8, Netaji Subhas Road, Calcutta.  
William Jacks & Co. Ltd.—16, Netaji Subhas Road, Calcutta 1.



**AIR CONDITIONING & REFRIGERATION**

Air Conditioning Corpn. Pvt. Ltd.—E-2, Clive Bldgs., Netaji Subhas Road, Calcutta.

Air Equipment Works.—44/12, Barrackpore Trunk Road, Calcutta 36.

Alliance Trading Co.—15-A, Clive Row, Calcutta.

AMERICAN REFRIGERATOR CO. LTD.—Manufacturers of 'ARCO-BUSH' Coils 'ARCO' Air Conditioners & Water Coolers, Cold Storage, Refrigeration Equipment, Industrial Blowers; Sole Distributors 'TRANE & FRIGIDAIRE'; Phone: 237841 (4 Lines).

Arya Refrigeration & Air Conditioning Co.—36, J. K. Paul Road, Calcutta 36.

Blue Star Engineering Co. Ltd.—7, Hare Street, Calcutta 1.

C. C. Saha Ltd.—45, Mott Sil Street, Calcutta 13.

Calcutta Refrigerators Corpn.—4, Harrington Street, Calcutta 16.

Century Components Co.—44/A Wellesley Street, Opp. Lucas, Calcutta 16.

Century Refrigeration Co.—A/2-C, Kyd Street, Calcutta 16.

Corporated Engineers (India) Ltd.—2/1, Chetla Road, Tollygunge Calcutta.

Cumberland & Martin Pvt. Ltd.—1A, Elgin Road, Calcutta 20.

Eastern Electric & Trading Co.—31, Chowringhee Road, Calcutta.

Electrolux Refrigerators.—19/C, British Indian St., Calcutta 1.

Fedders Lloyds Sales Corporation.—4A, Kyd Street, Calcutta 16.

Hatim & Co.—P-39, Mission Row Extension, Calcutta 13.

Himalux P. Ltd.—2-A, Theatre Road, Calcutta 16.

Hindustan Refrigerations Ltd.—9, Ezra Street, Calcutta.

Hindustan Refrigeration Co.—86/7, Wellesley St., Calcutta.

International Refrigeration Engineering Co.—5/2, Ripon Street, Calcutta.

International Refrigerators Ltd.—87, Lower Circular Road, Calcutta 16.

Jaybee & Brothers.—138, Canning Street, Calcutta.

Keymer Bagshawe & Co. Ltd.—22, Strand Road, Calcutta 1.

Khandelwal Refrigeration Corporation Ltd.—33, Netaji Subhas Road, Calcutta 1.

Mahamaya Refrigerators Co.—88/3, S. N. Banerjee Road, Calcutta.

Middleton Engineering Co.—12-E, Park St., Calcutta 16.

Mohanty & Bros.—16, Golap Sastry Lane, Calcutta 14.

National Refrigerators Pvt. Ltd.—30-A, Chowringhee, Calcutta 16.

N. B. Sen & Brothers.—11, Esplanade East, Calcutta 13.

New India Mercantile Co. Pvt. Ltd.—8, India Exchange Place, Calcutta 1.

Oriental Refrigeration Corporation.—17-C, Indian Mirror Street, Calcutta 16.

Paramount Refrigeration Ltd.—2, Middleton Row, Calcutta.

Rahvec & Co., Ltd.—26/1/1, Deodar Street, Calcutta 19.

R. L. Dolui & Sons.—10, Clive Row, Calcutta 1.

Refrige Private Ltd.—58C, Chowringhee Road, Calcutta 16.

Refrigeration Accessories Pvt. Ltd.—60, Dharamtalla Street, Calcutta 1.

Refrigeration Equipment Ltd.—70, Diamond Harbour Road, Calcutta 23.

Refrigerators (I) Pvt. Ltd.—59C, Park Street, Calcutta 16.

Sanitary Refrigeration Corporation.—A/2-C, Kyd Street, Calcutta 16.

SF Products India Ltd.—2-A, St. Georges Terrace (Hastings), Calcutta-22.

Sur Industries Pvt. Ltd.—163, Lower Circular Road, Calcutta 14.

Surfrige Service Refrigerators India P. Ltd., 4/1, Bhawanipore Road, Calcutta.

UNIVERSAL REFRIGERATION CORP. PVT LTD.—47, Southern Avenue, Calcutta 29. Refrigeration & Air Conditioning Engineers and Manufacturers of Cold Storage & Air Conditioning Plants.

Voltes Ltd.—8, Netaji Subhas Road, Calcutta.

**ALUMINIUM & ALUMINIUM PRODUCTS MANUFACTURERS & DEALERS**

A. G. Bros. & Co.—2, Neogipara Road, Calcutta 36.

Almetal Equipment Works Private Ltd.—57, Diamond Harbour Road, Calcutta 23.

ALUMINIUM & ALLOYS INDUSTRIES.—435, Jessore Road, Calcutta-28; Experts in Aluminium Sand & Die Castings; Manufacturers of Aluminium Sheets, Circles, Strips and Tea Garden Stores of all kinds; Phone: 572903 & 223858.

Aluminium Cables & Conductors (U.P.) P. Ltd.—47, Hyde Road Extn., Calcutta 27.

Aluminium Corporation of India Ltd.—7, Connell House Street, Calcutta 1.

Aluminium Hindustan P. Ltd.—2, Jessore Road, Calcutta 28.

Aluminium Industries P. Ltd., 5, Clive Ghat Street, Calcutta.

ALUMINIUM MANUFACTURING CO. PRIVATE LTD., THE.—Head Office & Works: 2, Jessore Road, Dum Dum, Calcutta-28; Phone: 572051, 572052, 572053 & 572054; Aluminium Sheet Metal Fabricators, Argon Arc and Oxy-Acetylene Welders; Aluminium Founders, Specialists in Sand, Gravity and Pressure Die Castings, Press Works, Spinning Tanks, Containers, Trays, Windows, Ladders—Single section and Extension Type, Anodisers Suppliers to Government and Railways, Automobile Chemical, Electrical, Textile Industries, Fisheries and Tea and Rubber Plantations.

Aluminium Production Co. of India Ltd.—31, Chowringhee Road, Calcutta.

Ashok Company.—157, Netaji Subhas Road, Calcutta 1.

Bengal Aluminium Stores P. Ltd.—55/14, Canning St., Calcutta.

Gautam Brothers.—157, N. Subhas Road, Calcutta 1.

Hindustan Aluminium Corporation Ltd.—Calcutta.

Indian Aluminium Co. Ltd.—31, Chowringhee, Calcutta 16.

India Aluminium Products.—P-11, Howrah Bridge Approach Road, Calcutta 1.

Luxmi Metal Works.—40/A, Armenian St., Calcutta.

Patod Industries P. Ltd.—109/A, Canning Street, Calcutta 1.

Pressed Steel Co. Private Ltd.—32, Cossipore Road, Calcutta-2.

Progressive Aluminium Trading Organisation.—10, The Mall (Road), Dum Dum, Calcutta 28.

**ANALYSTS**

ITALAB PRIVATE LTD.—Mercantile Bldg., 10, Lal Bazar, Calcutta. Assayers, Samplers, Surveyors, Geologists, Consultants and Public Analysts; Head Office: 15, Cawasji Patel Street, Bombay-1; Phones: 253882/83; Grams: "ITALABO"; Chain of Laboratories at Madras, Vishakapatnam and Kandla.

**ANODISERS**

ALLIED ANODISERS.—25, Radha Madhab Dutt Garden Lane, Calcutta-10; Largest and best equipped Anodisers of Aluminium to I. S. S. and B. S. S. Specifications; Phone: 351905 & 354311.

INDIA EXPORT ENTERPRISES.—Post Box No. 540, 138, Conning Street, Calcutta; Manufacturers and Anodisers of Aluminium Wares, Exporters of Engineering goods such as Cast Iron goods, Steel Furniture, Shovels, Rice and Flour mills etc. and Importers and Dealers in Ball Roller and Taper Bearings and order Suppliers.

**ARC WELDING EQUIPMENT & ELECTRODES**

GUEST, KEEN, WILLIAMS, LTD.—Head Office: 'Jeevan Deep', 1, Middleton Street, Calcutta 16; Works: Andule Road, Howrah.

**AROMATIC CHEMICAL MFRS. & DEALERS**

Aceto Chemicals Private Ltd.—22, Brabourne Road, Calcutta-1.

Anand & Co.—34-A, Brabourne Road, Calcutta.

B. C. Patel & Co.—44/45, Ezra Street, Calcutta.

Bipradas Dutt.—7, Swallow Lane, Calcutta.

Calcutta Essence Supply Co.—44/45, Ezra Street, Calcutta.

Dass & Sons.—18/1, Ezra Street, Calcutta.

D. Jayantilal & Co.—8/2, Rupchand Rai Street, Calcutta.

F. N. Sirkar.—37, Canning Street, Calcutta.

Ghose Bros. (Perfumers).—50, Ezra Street, Calcutta.

Hind Perfumers Pvt. Ltd.—54, Ezra Street, Calcutta.

Hindustan Chemical & Industrial Corpn.—22, Brabourne Road, Calcutta.

Hindusthan Perfumers.—18, Ezra Street, Calcutta.

Kaisers Trading Co.—159, Lower Chitpur Road, Calcutta.

Kamal Mercantile Corpn.—1, Mangoe Lane, Calcutta.

K. H. Dhamdhare.—44/45, Ezra Street, Calcutta.

Khatir Chemical Co.—5, Lucas Lane, Calcutta.

Lakshmi Bottle Stores.—17, Ezra Street, Calcutta.

M. J. Patel.—84, Dharamtolla Street, Block C.R. 10, Calcutta.

Makhulal Ayodhya Prasad.—4-B, Machua Bazar Street, Calcutta.

Moolraj & Co.—33, Brabourne Road, Calcutta.

National Perfumery House.—45/46, Ezra Street, Calcutta.

Neshat Perfumery House.—21, Parsi Church Street, Calcutta.

Oswal Co.—14/2, Old China Bazar Street, Calcutta.

O. T. Kader Basha Sahib.—17, Ezra Street, Calcutta.

Paradise Perfumery House.—6/2, Colootola Street, Calcutta 1.

Paul & Son.—18, Ezra Street, Calcutta.

Plummer Bros. & Co.—5 & 6, Fancy Lane, Calcutta.

Pt. Debi Pershad Prayag Dutt.—89, Lower Chitpur Road, Calcutta.

S. D. Bose.—83, Radha Bazar Street, Calcutta.

Sikri & Sons Pvt. Ltd.—55/8, Canning Street, Calcutta.

Sikri & Grover.—Sikri House, Ezra Street, Calcutta.

Shroff Perfumery Co.—47, Ezra Street, Calcutta.

S. Khushalchand & Co.—167, Old China Bazar Street, Calcutta.

S. N. Jhunjhunwalla.—Sikri House, Ezra Street, Calcutta.

Sohanlal Mohanlal.—5, Lucas Lane, Calcutta.

Synoflor Co. (Cal.).—21, Parsi Church Street, Calcutta.

United Trade Agency (Cal.).—39, Armenian Street, Calcutta.



**ARMATURE WINDING WIRES & STRIPS**

**HINDUSTAN WIRE PRODUCTS LTD.**—14, Netaji Subhas Road, Calcutta; Manufacturers of Super Enamelled & Cotton Covered Copper Wires, Factory: Factory Area, Patiala (Punjab); Bombay Office: Sardar Griha Bldg., Carnac Road, Bombay-2; New Delhi Office: 1774, Vishnu Bhavan, Bhagirath Place, Chandni Chowk, Delhi-6.

**ASBESTOS**

**A. H. Trading Co.**, 21A, Eden Hospital Road, Calcutta 12.

**A. N. HUSSUNALLY & CO.**—(Estd. 1917), 28, Strand Road, Calcutta-1; Importers and Stockists of Asbestos, Platted, Tape Jointing, Mill Board, 'Dryo' Graphited Packing and Fibre, Ebonite; Phone: 224140, 228568.

**Asbestos Products Co.**, 71-A, N. Subhas Road, Calcutta.

**ASBESTOS MAGNESIA & FRICTION MATERIALS LTD.**—(Incorporated with limited liability in England); A member of the "Turner & Newall" Group. Calcutta Sales Office: 7, Hastings Street, Calcutta; Phone: 232012. Grams: "ASMAFRIC." Bombay Office: Bombay Agra Road, Ghatkopar, Bombay 77; Phone: 582391. Grams: "ASMAFRIC." Sales Offices at Madras & New Delhi.

**Buher's Asbestos P. Ltd.**, 12, N. Subhas Road, Calcutta.

**D. Saraf & Sons**, 24, Strand Road, Calcutta 1.

**HINDUSTAN FERODO LTD.**—A member of the "Turner & Newall" group. Calcutta Sales Office: 7, Hastings Street, Calcutta. Phone: 232012; Grams: "FERODOSTAN." Head Office & Factory: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391. Grams: "FERODOSTAN." Sales Offices: Madras & New Delhi; Manufacturers of "Firefly" Asbestos Textiles, Compressed Asbestos Fibre jointings & "Limpet" Asbestos Sheets.

**Indian Asbestos Insulation Co.**, 28, Strand Road, Calcutta 1.

**J. D. Jones & Co. Ltd.** (Estd. 1893).—C/5, Gillander House, 8, Netaji Subhas Road, Calcutta-1.

**National Stores**, 263, Bowbazar St., Calcutta.

**National Syndicate**, 7, Hare Street, Calcutta.

**AUCTIONEERS**

**DHARAM PAL CHADHA & SONS.**—H.O. 3, Madan Street, Calcutta 13; Phone: 23-5318; Branch Office: F. 20, Shankar Market, Connaught Circus, New Delhi; Phone: 47200.

**AUTOMOBILES & AUTOMOBILE PARTS & ACCESSORIES DEALERS**

**Advance Auto Agency.**—7, Sooterkin Street, Calcutta 13.

**A. K. Motor Accessories.**—120, Dharamtolla Street, Calcutta 13.

**Aelcorp P. Ltd.**—Block E, Mercantile Bldgs., 10, Lallbazar Street, Calcutta 1.

**Agency Services P. Ltd.**—10/1, Prinsep Street, Calcutta 13.

**A. K. Sinha.**—15, Kent House, P-33, Mission Row Extn., Calcutta 13.

**Anand Motors.**—24, Mangoe Lane, Calcutta 1.

**Allied Auto Accessories P. Ltd.**—9, Prinsep Street, Calcutta 13.

**Alpha Battery Corporation**, 80, Acharya Jagdish Bose Road, Calcutta-14.

**Anglo American Autos Ltd.**—13, Ganesh Ch. Avenue, Calcutta.

**Anglo American Auto P. Ltd.**—16, Pannalal Bysack Lane, Calcutta.

**A. R. Mukherji & Co.**—P-74, Bentinck Street, Calcutta 1.

**A. Surrender & Co.**—Post Box 2623, Calcutta 17.

**ASBESTOS, MAGNESIA & FRICTION MATERIALS LTD.**—(Incorporated with limited liability in England); A member of the "Turner & Newall" Group. Calcutta Sales Office: 7, Hastings Street, Calcutta; Phone: 232012; Grams: "ASMAFRIC." Bombay Office: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391; Grams: "ASMAFRIC." Sales Offices at Madras and New Delhi.

**Ashok Motors.**—2, Metcalfe Lane, Calcutta 13.

**Associated Accessories P. Ltd.**—20, Mangoe Lane, Calcutta 1.

**Associated Cycle & Motor Agencies.**—10, British Indian St., Calcutta 1.

**Associated Indian Enterprises Pvt. Ltd.**—206, Lower Circular Road, Calcutta 17.

**Austin Distributors Pvt. Ltd.**—19, Chowringhee Road, Calcutta 13.

**Auto Distributors Pvt. Ltd.**—36, Chowringhee Road, Calcutta.

**Auto Friends P. Ltd.**—P-74, Bentinck Street, Calcutta 1.

**Auto Parts Co.**—35, Metcalfe Lane, Calcutta 13.

**Automotive Corporation.**—9, Prinsep Street, Calcutta 13.

**Auto Sales Corporation.**—10, Bentinck Street, Calcutta 13.

**Automotive Rubber Co.**—5, Sooterkin Street, Calcutta 13.

**Auto Traders.**—17, Mangoe Lane, Calcutta.

**Autocar Industries of India.**—1, Gariahat Road, Calcutta.

**Avenue Motors Ltd.**—42B, Chetla Road, Alipore, Calcutta 27.

**Azad Automobiles.**—14, Bentinck Street, Calcutta.

**Automotive Agencies P. Ltd.**—14, Bentinck Street, Calcutta.

**Automotive Manufacturer's Agencies.**—57/B, Chittaranjan Avenue, Calcutta-12.

**AUTOMOTIVE MANUFACTURER'S AGENCIES.**—Automobiles, Automobile Parts & Accessories Dealers; 6, Saklat Place, Calcutta-13; White House, 91, Walkeshwar Road, Bombay-6; Branches: 42-E, General Patters Road, Madras-2; 2610, Hamilton Road, Delhi-6.

**Bagla Motors.**—7, Old P.O. Street, Calcutta 1.

**Bengal Auto Distributors.**—25-B, Park Street, Calcutta 16.

**Bengal Automobiles.**—10, British Indian Street, Calcutta.

**Bharat Industries & Commercial Corporation.**—Tower House, Chowringhee Square, Calcutta-1.

**Bharat Commercial Enterprises.**—26, Chittaranjan Avenue, Calcutta 12.

**Bharat Motors**, P-29, Mission Row Extension, Calcutta 13.

**Bhawanipore Motor Accessories Agency.**—10C, A. M. Road, Calcutta 20.

**B. R. Motors.**—P-50, Prinsep Street, Calcutta 13.

**Calcutta Motor Parts and Accessories Co. Ltd.**, 19, Jatin Mohan Lane, Calcutta.

**Central Motor Parts & Accessories Co. Pvt. Ltd.**—20, Mangoe Lane, Calcutta 1.

**Calcutta Motor Works.**—54, Bentinck Street, Calcutta 1.

**Carbrush Engineering Co.**—190, Maharshi Debendra Road, Calcutta 6.

**Central Motor Parts & Accessories Co. P. Ltd.**—20, Mangoe Lane, Calcutta 1.

**Continental Distributing Co.**—P-12, Mission Row Extension Calcutta 1.

**Creet Automobiles.**—30, Circus Avenue, Calcutta.

**Cycle and Automobile Components P. Ltd.**—21, Rajendra Nath Mukherjee Road, Calcutta 1.

**Dewar's Garage (I) P. Ltd.**—4, Council House Street, Calcutta 1.

**Dominion Distributors Private Ltd.**—7, British Indian Street, Calcutta 1.

**East India Automobiles.**—P-24, Mission Row Extension, Calcutta 13.

**East and West Agencies.**—36, Ezra Street, Calcutta.

**Eastern Auto Parts Co. (Calcutta) Ltd.**—55, Bentinck St., Calcutta 1.

**Eastern Motors P. Ltd.**—57, Ganesh Ch. Avenue, Calcutta.

**Evergreen Auto Agency.**—2, Metcalfe Lane, Calcutta 13.

**Elgin Motors P. Ltd.**—9/2, A. M. Road, Calcutta.

**French Motor Car Co. Ltd.**—234/3, Lower Circular Road, Calcutta 20.

**HINDUSTAN AUTO DISTRIBUTORS.**—For Bedford Petrol & Diesel Chassis, Hindustan Ambassador Cars and Spare Parts; Showroom: 17, Government Place East, Calcutta-1; Phones: 236424, 232753 & 54; Workshop: 62, Hazra Road, Calcutta-19; Phone: 471717.

**Hindustan Auto Suppliers.**—P-50, Prinsep Street, Calcutta 13.

**HINDUSTAN FERODO LTD.**—A member of the "Turner & Newall" Group. Calcutta Sales Office: 7, Hastings Street, Calcutta; Phone: 232012; Grams: "FERODOSTAN"; Head Office and Factory: Bombay-Agra Road, Ghatkopar, Bombay 77; Phone: 582391; Grams: "FERODOSTAN"; Sales Offices: Madras & New Delhi; Manufacturers of "FERODO" Brake and Clutch Linings.

**Hindustan Motors Ltd.**—8, India Exchange Place, Calcutta.

**Hindustan National Motor & Accessories Co.**—181/7, U.C. Road, Calcutta.

**HINDUSTAN SALES AGENCY.**—P. 29, Mission Row Extn., Calcutta-13; Phone: 23-4910 & 23-9447; Stock complete range of Spare Parts for T.M.B. & FIAT Cars; Distributors of Autometers (Dashboard Instruments), Bramec (Brake & Clutch Linings) Banco-Royal (Gaskets), Mahie Pistons, Goetze Rings etc., etc.

**Hompaco P. Ltd.**—9, Mangoe Lane, Calcutta 1.

**Howrah Motor Car Co. P. Ltd.**—Mission Row Extn., Calcutta.

**Howrah Motor Accessories Agency Ltd.**—3-1, Mangoe Lane, Calcutta 1.

**Ideal Engineering Works.**—10, British Indian Street, Calcutta 1.

**Indo British Motor Industries.**—565, D. H. Road, Calcutta.

**Indra Motors P. Ltd.**—57, D. H. Road, Calcutta.

**International Automobiles.**—10, British Indian Street, Calcutta.

**International Tyres and Motors P. Ltd.**—2, Rowland Road, Calcutta 20.

**Jaidka Motor Co. Ltd.**—129, Park Street, Calcutta 16.

**Jai Hind Motor Stores.**—42, Kali Krishna Tagore Street, Calcutta 7.

**Jay Jay Automobiles Co.**—20, Mangoe Lane, Calcutta.

**Jyoti Motor Stores.**—P-38, Mission Row Extension, Calcutta 1.

**Kaybee & Co.**—13, Brabourne Road, Calcutta 1.

**K. G. Industries & Motor Parts Co.**—6/1-A, British Indian Street, Calcutta 1.

**Khalasa Automobiles.**—15, Russa Road, Kalighat, Calcutta 26.

**Laxmi Automobiles.**—P. 62/1, Bentinck St., Calcutta 1.

**London Automobiles.**—17, Prinsep Street, Calcutta 13.

**Lucas Indian Service Ltd.**—46, Wellesley Street, Calcutta 16.

**Madan Automobiles.**—27-1, Waterloo Street, Calcutta 1.

**Mohan Automobiles.**—24, Mangoe Lane, Calcutta 1.

**Motolite Ltd.**—111/1, B. T. Road, Calcutta 35.

**Motor Fuel Stores P. Ltd.**—17, Beadon Street, Calcutta 6.



**MOTOR INDUSTRIES CO. LTD.**—Manufacturers of Mico-Licence-Bosch Diesel Fuel Injection Equipment & Spark Plugs; Distributors of Bosch Automobile Parts & Accessories; 91-A, Park Street, Calcutta-16; Phone: 44-6831, Grams: "MICODIESEL", Calcutta; Head Office: Post Box No. 93, Bangalore; Branches: 79, Dr. Annie Besant Road, WORLI, Bombay-18 (WB).

**NATIONAL AUTOMOBILES.**—3, Princep Street, Calcutta-13; Importers of Auto Parts & Accessories; Distributors—SKF & NBC Bearings, FINOLEX Auto Cables, SJR Ignition Products, KEW Service Parts, PIONEER OIL Seal, ASVEE Sealed Beam and BAWCO Radiators, Phones: 23-2933 6539, 8805. Grams: "NATIONAUTO."

New Indo Trading Co.—S. Mangoe Lane, Calcutta 1.

Northern Automobiles.—182 C, U. C. Road, Calcutta.

Nundy Automobiles.—19, Chittaranjan Avenue, Calcutta 13.

Oriental Automobile Stores.—16-A, Ashutosh Mukherjee Road, Calcutta 20.

Oriental Motor Accessories Agency Ltd.—12, Waterloo Street, Calcutta 1.

Overseas Manufacturers Sales Co.—Post Box 576, Calcutta 1.

Pacific Automobiles.—13-3, Chittaranjan Avenue, Calcutta.

Parkside Motors Ltd.—34, Ritchie Road, Calcutta.

P. K. Industries—P-16, Kalakar Street, Calcutta 7.

P. G. R. Mechanical Manufacturers P. Ltd.—77/2, Dharamtolla Street, Calcutta 13.

P. G. Radiators—3B, Short Street, Calcutta 16.

Pioneer Automobile Co.—P. 39, Princep Street, Calcutta.

Pioneer Motors of India Ltd.—5-A, Clive Ghat Street, Calcutta 1.

Poddar Automobiles.—200, Lower Circular Road, Calcutta 17.

Primus India.—69, Hazra Road, Calcutta 19.

Princep Motors.—13-B, Chittaranjan Avenue, Calcutta 13.

Radiant Auto Agencies.—7, Sooterkin Street, Calcutta 13.

R. B. S. Rubber Mills Ltd.—8, Bentinck Street, Calcutta 1.

Republican Automobiles.—14, Bentinck Street, Calcutta.

Russell Auto Supply Co.—Galstann Mansions, Park St., Calcutta 16.

**S. P. SINGH & CO.**—Manufacturers of High Pressure Steel Diesel Fuel Injector Pipes and Brake Pipes of B.S.S. for all makes of Diesel Engines including Bedford, Leyland, Perkins, T.M.B. Dodge, Meadows, Tractors and all types of Stationary Diesel Engines; 62, Ganesh Chandra Avenue, Calcutta-13; Phones: 242615 & 244975.

Sabharwal Brothers.—21, Princep Street, Calcutta 13.

Safal Motor Co.—35, Chittaranjan Avenue, Calcutta 12.

Sawrika Metal Products.—90, Mukhtaram Babu Street, Calcutta 7.

Shree Pawan Kumar Co. Ltd.—19, Mangoe Lane, Calcutta 1.

Shah (I) P. Ltd.—P-50, Princep Street, Calcutta 13.

S. P. Manufacturing Co.—23, Brabourne Road, Calcutta 1.

Shishir Industries.—157-A, Dharamtolla Street, Calcutta 13.

Sovereign Automobiles.—55, Bentinck Street, Calcutta 1.

**TECALEMIT (HIND) LTD.**—Filter Replacement Elements, Grease Guns, Fuel & Oil Flexible delivery Lines, Brake holes for all classes of Vehicles, tractors, Earthmoving Equipment etc., 8 & 12, C.R. Avenue, Calcutta 13; Phones: 236681, 236682 & 236683.

Tracto Technic Corporation.—P-33, Mission Row Extension, Calcutta 13.

United Automobiles P. Ltd.—20, Mangoe Lane, Calcutta 1.

Walford Transport Ltd.—71, Park Street, Calcutta.

## BALL & ROLLER BEARINGS

Ashoka Industrial Corporation.—188, Canning Street, Calcutta 1.

**ASSOCIATED BEARINGS ENTERPRISES.**—91, Netaji Subhas Road, Calcutta-1; Official Stockists of Ball, Roller & Taper Roller Bearings for Automobiles and Industries in Imported and NBC, AEC, BBL & Norma makers; Phones: 220240, 223821 & 559212.

Auto Bearing Agency (India).—16, Mangoe Lane, Calcutta 1.

Associated Bearing Co.—26, Netaji Subhas Road, Calcutta 1.

Ball Bearing and Engineering Co.—52, Netaji Subhas Road, Calcutta.

Ball Bearing & Machinery Corporation.—33, Brabourne Road, Calcutta-1.

Bearing Service Co.—10, Canning Street, Calcutta 1.

Bearing Supply and Engineering Co.—138, Canning Street, Calcutta 1.

Bose.—50, Strand Road, Calcutta 1.

**BHARAT BALL BEARING CO. LTD.**—49 1, Gariahat Road, Calcutta-19; Phones: 47-7958 9 & 47-6860; Manufacturers of 'BBL' Brand Ball Bearings; Technical Collaborators—Fafair Bearing Company, U.S.A.

**CENTRAL TRADING CO., THE.**—Importers and Specialists of all kinds of Ball, Roller, Taper Roller Bearings and allied items; Sole Distributors for 'RIV' Bearings throughout India; 137, Canning Street, Calcutta-1; Phones: 225638, 225839 & 227175.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—9-29, Mission Row Extension, Calcutta 13; Phones: 2321-14, 237221 & 239769; Grams: "EASTASIA", P.O. Box 364; Manufacturers, Importers, Exporters and Engineers.

Eastern Importers Syndicate.—10, Canning Street, Calcutta 1.

Gajananand Lachhmi Narayan.—47, Netaji Subhas Road, Calcutta.

General Ball Bearing Co.—138, Canning Street, Calcutta.

Hariram Hariprasad Shaw.—81, Machuva Bazar Street, Calcutta 12.

Hindustan Ball Bearing Corporation.—137, Canning Street, Calcutta 1.

India Bearing and Mill Stores.—18 A, Sukeas Lane, Calcutta 1.

Indian Stores Supplying Co.—187, Canning Street, Calcutta 1.

Joosub Peermahomed & Co.—44, Ezra Street, Calcutta 1.

J. R. Co.—Khenka House, 4, Bhawanji Latt Lane, Calcutta 7.

Lucky Machinery Stores (India)—G.P.O. Box No. 2691, Calcutta 1.

M. L. Shaw & Sons.—P. 1, College Street Market, Calcutta 12.

Mohammed, A. & Co.—26, Netaji Subhas Road, Calcutta.

National Engineering Industries Ltd.—India Exchange, Calcutta 1.

Nundiali Luderchand Pvt. Ltd.—10, Canning Street, Calcutta 1.

Overseas Industrial Accessories.—58, Netaji Subhas Road, Calcutta.

Parveen & Co.—138, Canning Street, Calcutta 1.

Popatlal Ghelabhai & Co.—P-7, Old China Bazar Street, Calcutta 1.

S. D. Sharma & Co.—20, Netaji Subhas Road, Calcutta 1.

Shree Giridharilal & Co.—89, Netaji Subhas Road, Calcutta 1.

SKF Ball Bearing Co. Pvt. Ltd.—11, Rajendra Nath Mukherji Road, Calcutta 1.

Soni Jain P. Ltd.—38, Netaji Subhas Road, Calcutta 1.

Taparia & Co.—137, Canning Street, Calcutta 1.

William Jacks & Co. Ltd.—16, Netaji Subhas Road, Calcutta 1.

Wren, D. & Co.—Wardley House, 25, Swallow Lane, Calcutta.

## BANDSAWS AND CIRCULAR SAWS

Bijoy Trading Co.—21-A, Canning Street, Calcutta 1.

Harbanslal Malhotra & Sons P. Ltd.—12, Netaji Subhas Road, Calcutta.

Mandolla & Co.—40, Netaji Subhas Road, Calcutta 1.

Shree Vishwakarma Industries.—192, Jamunahar Bajaj Street, Calcutta 7.

Steel & Allied Products Ltd.—17, Brabourne Road, Calcutta 1.

## BARBED WIRES

**BENGAL SHEET METAL WORKS.**—19-B, Bowbazar Street, Calcutta-12; Manufacturers of Barbed Wire, Strand Wire and Barbed Wire making Machines; Distributors: H. B. Wire; Grams: "STRANDWIRE", Phone: 222869, 447270 (Residence).

## BARREL PUMPS

**D. P. J. INTERNATIONAL.**—57, Park Street, Calcutta-16; Manufacturers of New 'J.J.' Barrel Pumps Suitable for drawing all kinds of oils from 200 205 Litre drums, save wastages, Long lasting and easy to handle; Phone: 231509.

## BATTERY MANUFACTURERS & DEALERS

Acme Battery Mfg. Co.—35, Chittaranjan Avenue, Calcutta 12.

Associated Battery Makers (Eastern) Pvt. Ltd.—69-C, Chowringhee Road, Calcutta 20.

Associated Indian Enterprises P. Ltd.—200, Lower Circular Road, Calcutta 17.

Auto Power (I) P. Ltd.—4/1, Teliapara Lane, Calcutta.

Caesar Engineering & Accumulator Co.—6, Brahmapara Lane, Calcutta 6.

Chloride & Exide Batteries (Eastern) Pvt. Ltd.—Barlow House, 89, Chowringhee Road, Calcutta 20.

Eastern Accumulator Co. Pvt. Ltd.—3-1, Mangoe Lane, Calcutta 1.

**ELECTRICAL STORAGE CO. PVT. LTD.**—112, Narkeldanga Main Road, Calcutta 54.

Estrela Batteries Ltd.—Biplabi Bhai Behari Basm Road, Calcutta 1.

Free India Dry Accumulators Pvt. Ltd.—2, Brabourne Road, Calcutta 1.

General Lead Batteries Co. Pvt. Ltd.—2A, Ramdhoni Mitter Lane, Calcutta 4.

Great Indian Battery Mfg. Co. 14/TB, Praan Krishna Mukherjee Road, Calcutta.

Hawrah Battery Mfg. Co.—16, G. T. Road, Howrah.

India Accumulators.—13 2, Russa Road, Calcutta.

Indian Battery Mfg. Co. Ltd.—1-A, "Mitar", Lower Circular Road, Calcutta 20.

Indian Battery Corporation.—20B, Hazra Road, Calcutta.

Jaiswal Battery Co.—22F, Gorchand Basm Road, Calcutta 6.

Kishor, P. & Co.—60-A, Central Avenue, Calcutta 12.

Lucas Indian Service Pvt. Ltd.—46, Wellesley Street, Calcutta 16.

National Battery Co.—85, Gorchand Basm Road, Calcutta 6.

National Battery Mfg. Corp.—16, Russa Road, Calcutta 20.

National Carbon Co. (India) Ltd.—18-A, Brabourne Road, Calcutta.

Newton Battery Industries.—167/3, Asharya Trefalla Ch. Road, Calcutta.

Oriental Battery Mfg. Co.—10, G.T. Road, Howrah.

P. Kishor & Co.—60-A, Chittaranjan Avenue, Calcutta 12.



Power Battery & Plates Mfg. Corp. Pvt. Ltd.—72, Ganesh Ch. Avenue, Calcutta 18.  
 Pritchett & Gold & E. P. S. & Co. Ltd.—31, Chittaranjan Avenue, Calcutta 12.  
 Rajco Battery Industries.—32, Gorachand Bose Road, Calcutta.  
 Sakti Batteries Pvt. Ltd.—17-A, Russa Road, Calcutta 28.  
 Spark Engineering & Trading Co.—40/2, Gariahat Road (South), Calcutta 31.  
 Sun Battery Co.—166, Upper Circular Road, Calcutta 4.  
 Ultra Battery Co.—172-B, Madhu Sudan Pal Chowdhury Lane, Howrah.  
 V. N. Rajan & Co.—65, Chittaranjan Avenue, Calcutta.

### BELTING (LEATHER, HAIR & COTTON) & MECHANICAL LEATHERS AND BELT DRESSING MANUFACTURERS & DEALERS

Asia Belting & Spinning Mills (Private) Ltd.—91, Netaji Subhas Road, Calcutta 1.  
 Basak, P. & Co.—9, Chidam Mody Lane, Calcutta 6.  
 Bengal Belting Works Ltd.—2, Dalhousie Square East, Calcutta.  
 Bengal Tools & Belting Co.—138, Canning Street, Calcutta.  
 Bharat Belting Works.—10, Govt. Place East, Calcutta 1.  
 Bharat Hardware & Textile Syndicate.—138, Canning Street, Calcutta.  
 Birkmyre Bros., Ltd.—87, Stephen House, Calcutta 1.  
 BOSE INDUSTRIES PRIVATE LTD.—32, Shib Chandra Chatterjee Street, Belur (Howrah); Manufacturers of Endless V-Belt, Link V-Belt, Variable Speed V-Belt, Flat Endless Cord Belt, Woven Endless Belt etc., Phone : 664871 (3 Lines).  
 Brand & Co.—S.B., 60, Pathuriaghat Street, Calcutta 6.  
 Central Trading Co.—137, Canning Street, Calcutta 1.  
 D. Wren & Co.—Wardley House, 25, Swallow Lane, Calcutta 1.  
 Dutt, S. L. & Bros.—69, Netaji Subhas Road, Calcutta.  
 Eastern Belting & Cotton Mills Ltd.—Baidyabati, Hooghly (West Bengal).  
 E. B. Leather Mfg. Co.—76-A, Upper Circular Road, Calcutta.  
 Fenner, J. H., & Co. (India) Ltd.—10/3A, Mercantile Buildings, Calcutta.  
 F. Husain & Brothers.—28, Strand Road, Calcutta.  
 Gladstone Lyall & Co. Ltd.—4, Fairlie Place, Calcutta 1.  
 Hindusthan Belting & Spinning Mills Ltd.—174, Mahatma Gandhi Road, Calcutta 7.  
 India Belting & Cotton Mills Ltd.—7/G, Clive Row, Calcutta.  
 Indian Stores Supplying Co.—137, Canning Street, Calcutta 1.  
 Kaybee & Co.—13, Brabourne Road, Calcutta.

KEMRUB PRIVATE LTD.—Manufacturers of 'Hartex' Brand Industrial V-Belts, Variable Speed Belts, Lenix Cord, Nylon & Canvas Ply Endless Belts, Cone Drum Belts & Dixel Rope; 14, Netaji Subhas Road, Calcutta-1; Phones: 227171/3.  
 McGregor & Balfour, Ltd.—18, Netaji Subhas Road, Calcutta 1.  
 Mohammed & Co., A.—26, Netaji Subhas Road, Calcutta.  
 Mundra & Co.—8, Canning Street, Calcutta.  
 Nundlall Inderchand Pvt. Ltd.—10, Canning Street, Calcutta.  
 Playfair, G. F. & Co.—4, Fairlie Place, Calcutta.

REX CORPORATION (INDIA).—Largest Stockists for 'Brammer' and 'Whittle' Type Rubber link 'V' Belts, Leather Link Belts and Rubberised Endless Flat Canvas Belts etc., 71/A, Netaji Subhas Road, Calcutta-1; Phone: 229907.

Rostron & Co. Pvt. Ltd.—12-A, Ezra Mansion, 10, Govt. Place, Calcutta 1.  
 Serampore Belting Works Ltd.—Serampore, Hooghly.  
 Vulcan Electric & Engineering Co.—12-B, Lower Chitpur Road, Calcutta.  
 Zenith Stores & Agency Pvt. Ltd.—19, Strand Road, Calcutta.

### BEVERAGES (FRUIT JUICE)

SPENCER AERATED WATER FACTORY PRIVATE LTD.—57, Dr. Suresh Sarkar Road, Entally P.O., Calcutta 14.

### BISCUIT & CONFECTIONERY MANUFACTURERS

Arizona.—2, Lindsay Street, Calcutta 16.  
 Aryan Bakery.—53, Kali Temple Road, Calcutta 26.  
 Barua Bakery Pvt. Ltd.—123-A, Dharamtolla Street, Calcutta 13.  
 Bengal Confectionery Works.—99-3, Canning Street, Calcutta.  
 Bharat Biscuit Co.—Raniganj, E. Ry.  
 Calcutta Biscuit Co. Ltd.—155-8A, Upper Circular Road, Calcutta 8.  
 Calcutta Crown Biscuit Co.—99-C, Canning Street, Calcutta.  
 C. E. Morton (I.) Ltd.—8, Royal Exchange Place, Calcutta 1.  
 East Indian Bakery.—106, Lansdowne Road, Calcutta 29.  
 Empire Confectionery Co.—157-A, Dharamtolla Street, Calcutta 13.  
 Ferrazzini's Pvt. Ltd.—Homayan Court, 21, Lindsay Street, Calcutta.

### BLOWERS

AMERICAN REFRIGERATOR CO. LTD.—Manufacturers of 'ARCO-BUSH' Coils 'ARCO' Air Conditioners & Water Coolers, Cold Storage, Refrigeration Equipment, Industrial Blowers; Sole Distributors 'TRANE & FRIGIDAIRE'; Phone : 237841 (4 Lines).

Flury's Swiss Confectionery, Pvt. Ltd.—18, Park Street, Calcutta.  
 G. S. Emporium Ltd.—47-A, Chittaranjan Avenue, Calcutta 12.  
 India Biscuit Co.—15-A, Badridas Temple Street, Calcutta 4.  
 James Lord & Sons Ltd.—19, Strand Road, Calcutta.  
 Kamala Biscuit Co.—112, Raja Dinendra Street, Nandan Bagan, Calcutta.  
 Kolay Biscuit Co., Pvt. Ltd.—100A, Charakdanga Road, Calcutta 10.  
 Lily Biscuit Co., Pvt. Ltd.—3, Ramakanta Sen Lane, Calcutta 4.  
 Lord's Bakery, Confectionery & Biscuit Co.—2, Prince G. M. Shah Road, Tollygunge, Calcutta.  
 Santosh Biscuit Co., Ltd.—121, Manicktolla Main Road, Calcutta 11.  
 Sett Brothers.—19, Murari Pukur Road, Calcutta 4.  
 Standard Trading Co., The.—14, Chittaranjan Avenue, Calcutta 13.  
 Sudhamoyee Biscuit Factory.—60, Barrackpore Trunk Road, P.O. Cossipore, Calcutta.

### BOARDS MILLS

Asiatic Board Mills Ltd.—29/B, Beerpara Lane, Calcutta 30.  
 Baranagore Board Mills.—312, Gopal Lal Tagore Road, Calcutta 36.  
 Bharat Board Mills Ltd.—32, Ezra Street, Calcutta 1.  
 Calcutta Board Mills.—43, Murari Pukur Road, Calcutta 4.  
 Diamond Board Mills.—24-1, Gurudas Dutta Garden Lane, Calcutta 4.  
 Eastern Paper Mills Ltd.—2, Dakshindari Road, South Dum Dum, Calcutta 37.  
 Himalaya Paper & Board Mills.—20, Seven Tanks Lane, Calcutta 30.  
 Lata Board Mills.—22, Amratola Street, Calcutta 1.  
 Mahabir Paper & Board Industries.—6, Canal Road, Calcutta 33.  
 Pioneer Paper & Pulp (Pvt.) Ltd.—24, Netaji Subhas Road, Calcutta.  
 Sahapore Board Mills.—8, N. Roy Road, Calcutta 38.  
 Sree Arabindo Board Mills.—2-1, Chetla Road, Calcutta 27.  
 Swastik Board Mills Pvt. Ltd., C/o. Narsing & Co. Ltd.—51, Stephen House, Dalhousie Sq., Calcutta.  
 Union Paper & Board Mills.—18, Netaji Subhas Road, Calcutta.

### BOBBINS & SHUTTLES

BHARAT INDUSTRIES CORPORATION PRIVATE LTD.—Manufacturers of all kinds of Bobbins, Wooden Rollers and also all sorts of Wooden accessories for Textile Industry; 13, Naba Kumar Kar Lane, P.O. Salkhia, Distt. Howrah; Phone : 663551.

### BOBBIN AND SPOOL MANUFACTURERS

Bengal Bobbin Plywood Co. Ltd.—44/46, Canning St., Calcutta.  
 Bharat Industries Corp. Pvt. Ltd.—88, Shambhu Halder Lane, Salkia.  
 Bobbins Ltd.—31, Chowringhee Road, Calcutta 16.  
 Greenway & Co.—3, Mangoe Lane, Calcutta 1.  
 India Bobbin Industries.—135, Canning St., Calcutta.  
 National Industrial Works.—135, Canning Street, Calcutta 1.  
 S. K. Wood Products Co.—86-2, Bahir Surah Road, Calcutta 10.  
 Woodcraft Products Ltd.—8, India Exchange Place, Calcutta 1.

### BOBBINS (JUTE MILL) MANUFACTURERS

B. K. Desai & Co.—40, Tangra Road, Calcutta.  
 Hindusthan Bobbin Industries.—15, Canal East Road, Calcutta 4.  
 Hindusthan Bobbin Mfg. Co.—8/1/1, Gurudas Dutt Garden Lane, Calcutta 4.  
 Shalimar Industries P. Ltd.—25, Ganesh Ch. Avenue, Calcutta 13.  
 Shalimar Wood Products Private Ltd.—138, Canning Street, Calcutta.

### BOILER FITTINGS, MOUNTINGS, & VALVES

A. N. HUSSUNALLY & CO.—(Estd. 1917), 28, Strand Road, Calcutta-1; Stockists for Boiler Mountings and G. M. Valves and Cocks for Air, Steam and Gas and Water.  
 ANNAPURNA METAL WORKS.—Manufacturers of High Class Boiler Mountings for Land, Loco Land Marine Boilers to Standard Boiler regulations; 99/4, Ballygunge Place, Calcutta-19; Phone: 477820.  
 J. D. Jones & Co. Ltd. (Estd.: 1893).—C 5, Gillander House, 8, Netaji Subhas Road, Calcutta-1.  
 Pelican Valves & Engineering Works.—57/2, Q Road, Belgachia, Howrah.

### BOLT, NUT & RIVET MANUFACTURERS & DEALERS

Agarwal Hardware Works Private Ltd.—167, Chittaranjan Avenue, Calcutta.  
 Alliance Engineering Works.—Santragachi, Howrah.



Aminchand Pyarelal.—135, Canning Street, Calcutta.  
Amritlal Coomar & Brothers.—113, Monohardas Chowk, Calcutta 7.  
Associated Steel Products Corporation Private Ltd.—7, Lyons Range Calcutta 1.

Bhupendra Nath Das & Bros.—71-A, Netaji Subhas Road, Calcutta.  
Bolts Nuts & Forging Co.—47, Gaushala Road, Lilloah, (Dt. Howrah).  
Bose & Co.—38, Narasinha Dutta Road, Howrah.  
Bose Manna & Co.—74-2, Ichapore Road, Howrah.

C. G. Engineering Works.—233, Belilios Road, Howrah.  
Chowdry, P. C. & Sons.—Santragachi New House, Howrah.  
Dewanchand Nikkamal.—71-A, Netaji Subhas Road, Calcutta 1.  
Dutson & Co.—10, Baburam Sil Line, P.O. Bowbazar, Calcutta 12.

**EASTERN INDUSTRIES.**—Leading Manufacturers of Bolts, Nuts, Rivets etc., to any Specification; 25-27, Netaji Subhas Road, Calcutta-1; Phone: 221884.

Edward Miller & Co.—20, Strand Road, Calcutta.  
Empire Trading Corp.—10, Canning Street, Calcutta.  
Fatick Chandra Mondal.—65, Kali Kundu Lane, Howrah.

**GANESH INDUSTRIES.**—Manufacturers of 'G' Brand Bolts, Nuts, Rivets, Dogspikes as per B.S.S. & Customers' Specifications; Also Pins, Washers, G.I.J. & L. Hook Bolts; 2, Haren Mukherji Road, Belurmath, Howrah; Phone: 663648.

Ganguli & Co.—89, Netaji Subhas Road, Calcutta.  
Ghose & Co.—11, Brindaban Mullick Lane, Howrah.

**GUEST, KEEN, WILLIAMS, LTD.**—Head Office: Jeevan Deep, 1, Middleton Street, Calcutta 16; Works: Andul Road, Howrah.

Harrison Agency.—71-A, Netaji Subhas Road, Calcutta 1.  
Herbert Doyle & Co. Pvt. Ltd.—Commercial Bldgs., Calcutta.  
India Bolts & Rivets Co.—23, Brindaban Mullick Lane, Howrah.  
Indo-Commercial Stores.—77-1, Netaji Subhas Road, Calcutta.  
Jhunjhunwala Industries.—Raniganj, E. Rly.  
J. P. Agarwalla & Son.—115, G. T. Road, Salkia.  
Kasco Metal Products.—6, Mangoe Lane, Calcutta.  
Khan Pal Chowdhury & Co., Pvt. Ltd.—71-A, Netaji Subhas Road, Calcutta.

King Engineering Co.—157, Belilios Road, Howrah.  
Leather & Steel Products.—26, Burtolla Street, Calcutta 7.  
L. Mullick & Co.—81, Netaji Subhas Row, Calcutta 1.  
Lyall, M. T. & Co.—36, Strand Road, Calcutta.  
Miscellaneous Engg. Stores Pvt. Ltd.—71/A, Netaji Subhas Road, Calcutta.

Motiram Agarwal & Co. Pvt. Ltd.—137, Canning Street, Calcutta 1.  
Mullick, A. M. & Co.—71-A, Netaji Subhas Road, Calcutta.  
Mullick, S. N. & Co.—37, Netaji Subhas Road, Calcutta.  
National Bolts & Rivets Ltd.—44, Madhusudan Pal, Chowdhury Lane, Howrah.

National Machine Tools Co.—10/10, Brindaban Mullick Lane, Kadamtala, Howrah.  
N. C. Paul & Co.—196, Panchanantola Road, Howrah.  
New India Engineering Concern.—10-10, Brindaban Mullick Lane, Howrah.

Oriental Engineering Co.—13 & 14, Danesh Millah Lane, Howrah.  
P. N. Dey & Co.—3-4, Kalachand Nandy Lane, Howrah.  
Premier Stores Supplying Co. Ltd.—6-1, Dilarjung Road, Cossipur, Calcutta 2.

Probbat Works.—67/A, Netaji Subhas Road, Calcutta 1.  
Shalimar Iron Works.—138, Canning Street, Calcutta.  
Shree Krishna Pvt. Ltd.—20, Mangoe Lane, Calcutta.  
Shyam Steel Industries.—6/3, Guha Road, Ghosury, Howrah.  
S. N. Mullick & Co.—37, N. Subhas Road, Calcutta 1.  
Steel & Allied Products Ltd.—17, Brabourne Road, Calcutta 1.  
Suburban Stores Supply Co.—10, Canning Street, Calcutta.  
Traders Union.—84, Netaji Subhas Road, Calcutta.

Union Engineering Works.—4, Gopinath Choungdar Lane, Ramkristopore, Howrah.  
Universal Railway Material Supply Co.—4, Commercial Bldgs., Netaji Subhas Road, Calcutta.

Vijay Bolt Mfg. Co.—1/A, Nanda Mullick Lane, Calcutta.

### BOOKSELLERS, PRINTERS AND PUBLISHERS

Abhinaya Publishing Syndicate.—43, Burtolla Street, Calcutta 7.  
All India Publishing Co. Ltd.—30, Cornwallis Street, Calcutta 6.

**ALLIED PUBLISHERS PRIVATE LTD.**—17, Chittaranjan Avenue, Calcutta-13; Phone: 233104; Head Office: 15, Graham Road, Ballard Estate, Bombay-1; Branches: 13/14, Asaf Ali Road, New Delhi and Mohan Mansions, 38/C, Mount Road, Madras 6.

**A. MUKHERJEE & CO. (PRIVATE) LTD.**—Publishers, 2, Bankim Chatterjee Street, Calcutta 12; Phone: 34-1606; Grams: "PRAKASHIKA"; Mg. Dir.: A. R. Mukherjee.

**A. H. WHEELER & CO. PRIVATE LTD.**—18, Netaji Subhas Road, Calcutta 1. Phones: 22-4945/46; Grams: "BOOKSTALLS."

Aryan Publishing Co.—76, Bowbazar Street, Calcutta 12.  
Asia Publishing Co.—132/133, College Street, Calcutta.  
Baikuntha Book House P. Ltd.—183, Cornwallis Street, Calcutta 6.  
Bengal Publishers P. Ltd.—15, Bankim Chatterjee Street, Calcutta 12.  
B. G. Printers & Publishers Ltd.—80-6, Grey Street, Calcutta 6.  
Book Centre.—76, Bowbazar Street, Calcutta 12.  
Bookland Pvt. Ltd.—1, Sankar Ghosh Lane, Calcutta 16.  
Books of the World.—21, Old Court House St., Calcutta 1.

Builders Publications of India Ltd.—47-E-6, Block B, Garden Reach, Calcutta 28.  
Cambridge Book & Stationery Co.—20-D, Park Street, Calcutta 16.  
Chuckervertty Chatterjee & Co. Ltd.—15, College Square, Calcutta 12.

**C. RINGER & CO.**—Homoeopathic Chemists, Booksellers and Publishers, 23, Lall Bazar Street, Calcutta 1. Phone: 22-4747. Grams: "RINGERCOY." Business running 80 years.

Das Gupta & Co. P. Ltd.—54/5, College Street, Calcutta.  
Doodhnath Pustakalaya & Press.—63, Jamunlal Bajaj Street, Calcutta 7.

Esaco P. Ltd.—25, Ganesh Chandra Avenue, Calcutta 13.  
E. W. Stevens & Co. P. Ltd.—22, Chowringhee Road, Calcutta 13.  
Guradas Chatterji & Sons.—203-1-1, Cornwallis Street, Calcutta 6.  
Hahnemann Publishing Co. Ltd.—165, Bowbazar Street, Calcutta 12.  
Indian Associated Publishing Co. Ltd.—93, Harrison Road, Calcutta.  
Indian Industrial Directory.—29-A, Chandra Nath Chatterjee Street, Calcutta 25.

Indian Printing and Publishing Co.—11, British Indian Street, Calcutta.

Indian Publishers P. Ltd.—22, R. G. Kar Road, Calcutta.  
Intertrade Publications.—2, Presidency Court, 55, Gariahat Road, Calcutta 19.

Jalco Publishing House.—35, Chittaranjan Avenue, Calcutta.  
Jnanodaya Press.—12, Maharani Swarnamayee Road, Calcutta 9.  
K. K. Roy (Private) Ltd.—2, Presidency Court, 55, Gariahat Road, Calcutta 19.

Kothari Publications.—12, India Exchange Place, Calcutta 1.  
Macmillan & Co. Ltd.—294, Bowbazar Street, Calcutta 12.  
M. C. Sarkar & Sons P. Ltd.—14, Bankim Chatterjee Street, Calcutta 12.

**MODERN BOOK DEPOT., THE.**—Book-Sellers and Publishers; 9, Chowringhee Centre, Opp. Lighthouse, Calcutta-13; Phone: 234627.

Nanigopal Chattopadhyay & Co., Private Ltd.—1/1, Brindaban Mullick Lane, Calcutta 9.

National Book Agency Pvt. Ltd.—12, Bankim Chatterji Street, Calcutta 12.

Orient Book Co.—C-29-31 College Street Market, Calcutta 12.  
Orient Longmans P. Ltd.—17, Chittaranjan Avenue, Calcutta 13.  
Oriental Publishing Co.—38A, Motijheel Avenue, Calcutta 28.  
Oxford Book & Stationery Co.—17, Park Street, Calcutta 16.

Oxford University Press.—Mercantile Buildings, Lall Bazar, Calcutta 1.

R. Cambray & Co. P. Ltd.—Kent House, P-33, Mission Row Extn., Calcutta 13.

Rupadey Publications P. Ltd.—Tangree House, 36, Ezra Street, Calcutta 12.

Sanskrit Book Depot.—28-1, Cornwallis Street, Calcutta 6.

Scientific Publishing Co.—85, Netaji Subhas Road, Calcutta 1.

S. C. Sarker & Sons P. Ltd.—14, Bankim Chatterji Street, Calcutta 12.

S. K. Bose.—162/12/2, Prince Anwarsha Road, Calcutta 33.

Society Publishers.—18, Baburam Seal Lane, Calcutta 12.

Standard Literature Co. P. Ltd.—13/1, Old Court House Street, Calcutta 1.

Thacker Spink & Co. (1933) P. Ltd.—3, Esplanade East, Calcutta 1.

Vidyodaya Library Private Ltd.—72, Mahatma Gandhi (Harrison) Road, Calcutta 9.

W. Newman & Co., Ltd.—3, Old Court House Street, Calcutta.

### BOOK MANUFACTURERS

**A. MUKHERJEE & CO. (PRIVATE) LTD.**—Publishers; 2, Bankim Chatterjee Street, Calcutta 12; Phone: 341606; Grams: "PRAKASHIKA"; Mg. Dir.: A. R. Mukherjee.

### BOOTS & SHOES

**GLACE KID (INDIA) PRIVATE LTD.**—Mining & Safety Boots—for mines & Industrial Undertakings; 75, Ganesh Chandra Avenue, Calcutta-13; Phone: 244331.

### BORING & TUBE-WELL CONTRACTORS

**ASSOCIATED TUBE WELLS (INDIA) PRIVATE LTD.**—Tube-well Engineers & Experts in Drilling Deep Gravel Treated Slotted Tube wells with Reverse and Direct Rotary Rigs, Manufacturers of Signalling Equipment, VERSHA High level Cisterns, chain Pulley Blocks & Jainti Winches; 9/1, Darga Road, Calcutta 17; Phone: 44-7395, Head Office: 12, Scindia House, New Delhi-1, Phone: 46546 & 46547.



## TRADES AND PROFESSIONS IN CALCUTTA

BOTTLE, BOTTLE CAP AND CAPSULE  
MANUFACTURERS

Bimal Bottle Stores Ltd.—93/1, Baitakhanna Road, Calcutta 9.  
Containers and Closures Ltd.—2, Fairlie Place, Calcutta 1.  
Continental Bottle Co. P. Ltd.—24, Ezra Street, Calcutta 1.  
Crown Cork Mfg. Co.—1, Umakanto Sen Lane, Calcutta 30.  
P. Nundy & Sons.—35-6, Ratan Babu Road, Calcutta 2.  
Radhabasur Bottle Stores.—15, Radhabazar Street, Calcutta 1.  
S. P. Dutt & Brothers.—7, Ezra Street, Calcutta 1.

## BRASS &amp; BRASSWARE WORKS

Ashok Metal Industries Ltd.—157, Netaji Subhas Road, Room No. 161, Calcutta 1.  
Chandra Industries Private Ltd.—59, Cotton Street, Calcutta 7.

## BRASS &amp; COPPER PRODUCTS

Binani Metal Works Ltd.—38, Strand Road, Calcutta.  
Burman Metal Works P. Ltd.—17, Tarak Pramanik Road, Calcutta 6.  
Chandra Industries P. Ltd.—59, Cotton Street, Calcutta 7.  
Ganga Metal Refining Co. Ltd.—C/o Binani Traders Ltd., 43, Strand Road, Calcutta.  
General Metal Industries Ltd.—C/o Hanuman Prasad Pragdas, 62, Netaji Subhas Road, Calcutta.  
S. C. Bodak & Co.—85-83, Netaji Subhas Road, Calcutta 1.  
Union Metal Works.—169, Andul Road, Howrah.  
United Metal Industries Ltd.—62, Netaji Subhas Road, Calcutta 1.

## BRUSH MANUFACTURERS &amp; DEALERS

Amherst Brush Factory.—12-B, Amherst St., Calcutta 9.  
B. C. Ghosh & Brothers.—44, Old China Bazar St., Calcutta 1.  
B. C. Mullick & Co.—25/A, Balaram Ghose Street, Calcutta 4.  
Bengal Brush Factory.—20, Serpentine Lane, Calcutta 14.  
Bepin Pal Sons & Co.—174-A, Dharamtolla St., Calcutta 13.  
Bharat Industries Corp'n. P. Ltd.—88, Sambhu Halder Lane, Salkia.  
Boseck & Boseck.—3, Prinsep Street, Calcutta 13.  
Britannia Brush Works.—123-24, Canning Street, Calcutta 1.  
Calcutta Brush & Fibre Co.—Barnagore, Calcutta 36.  
Calcutta Carbon Brush Mfg. Co.—21, Parsee Church Street, Calcutta.  
Caledonian Brush Works.—20-1, Manick Bose Ghat St., Calcutta 6.  
Climax Brush Works.—64-A, Mirzapur St., Calcutta 9.  
Eagle Brush Mfg. Corporation.—10/1, Russa Road, Calcutta 33.

## BRUSHES—INDUSTRIAL

INDIA BRUSHWARE.—'Scco' Power Driven & Industrial Brushes; Rotary, Tube Cleaning & DE-Carbonizing Brushes a Speciality; 72, Canning Street, Calcutta 1; Phones: 341985, 444446.

General Electric Trading Co.—52, Creek Row, Calcutta 14.  
India Carbon Brush Mfg. Co.—26, Pollock St., Calcutta 1.  
National Brush Factory.—6, Pataldanga St., Calcutta 9.  
Oriental Brush & Bristle Co.—31/1, Tagore Road, Calcutta.  
P. D. Simpson & Co.—P. 33, Mission Row Extension, Calcutta 13.  
Pioneer Brush Factory.—11, Amherst St., Calcutta 9.  
Preston Electric Co. (I) P. Ltd.—2, Madan Street, Calcutta 13.  
Standard Brush & Bellows Works.—11, Dayal Banerjee Road, Sibpur, Howrah.  
Victor Works.—2, Parshi Bagan Lane, Calcutta 9.  
Vulcan Brush Works.—1, Nabo Kumar Raha Lane, Calcutta 4.  
Western Brush Co.—18, Amherst Street, Calcutta 9.

## BUCKET MANUFACTURERS

Agerwal Hardware Industries.—3, Munshi Sadaruddin Lane, Calcutta.  
Asian Industries.—9, Upper Chitpur Road, Calcutta 7.  
Banwarilal Purshotamdas.—29, Banstolla Street, Calcutta 7.  
Bengal Industries.—132, Cotton Street, Calcutta 7.  
Bengal Iron Trading Co.—227/228, G. T. Road, Ghusray, Howrah.  
Beriwala Hardware Industries.—221, G. T. Road, Lillooah, Howrah.  
Bhagya Devi Factory.—213, Harrison Road, Calcutta 7.  
Bhalotia Metal Manufacturing Co.—2, Doyehatta Street, Calcutta 7.  
Bharat Steel & Metal Industries.—14/2, Old China Bazar Street, Calcutta.  
Binapani Galvg. Works.—150, Ultadanga Main Road, Calcutta.  
Calcutta Iron & Engg. Co. Pvt. Ltd.—77A, Benares Road, Howrah.  
Cromelite (India) Pvt. Ltd.—149, Mahatma Gandhi Road, Calcutta 7.  
East India Metal Co. Pvt. Ltd.—4A, Durga Charan Chatterjee Lane, Calcutta.  
Ganga Iron & Galvg. Works Pvt. Ltd.—58, Clive Street, Calcutta.  
Goodman & Co. (I.) Pvt. Ltd.—38, Netaji Subhas Road, Calcutta 1.  
H. A. Nanji & Co.—46, Ezra Street, Calcutta.  
Hariana Iron Works.—30/31, Kalakar Street, 5th Floor, Calcutta 7.  
Hariganga Galvg. Works Pvt. Ltd.—68, Clive Street, Calcutta.  
Hindustan Industrial Co.—192, Jamunabai Bazar Street, Calcutta 7.  
Howrah Galvg. Works.—71, Burtolla Street, 3rd Floor, Calcutta.  
Imperial Bucket Co.—10, Rajendra Mallik Street, Calcutta.  
Indian Steel Galvg. Works.—213, Harrison Road, Calcutta.

Kedarnath Parsotamdas & Co. (Private) Ltd.—87, Netaji Subhas Road, Calcutta 1.

Krishna Galvg. Works.—20, Belur Road, Lillooah, Howrah.  
Krishna Iron Foundry & Metal Works Pvt. Ltd.—Gopalpur, P.O. Asansol, Dist. Burdwan.

Ladhuram Rajkapoor.—49/1, Abani Dutta Road, Howrah.  
Maya Galvg. Works.—9, Upper Chitpur Road, Calcutta.  
M. G. R. Iron & Steel Works Pvt. Ltd.—P-16, Kalakar St., Calcutta 7.  
Metal & Alloy Corporation.—38-A, Belgachia Road, Calcutta 37.  
Nathmali Girdharilall.—22, Burtolla Street, Calcutta.  
Orissa Steel Corporation Pvt. Ltd.—2, Doyehatta Street, Calcutta 7.  
Poddar Galvg. Works.—26, Burtolla Street, Calcutta 7.  
Shiw Ganga Iron Galvg. Works.—22C, Canal West Road, Calcutta.  
Shree Bishandas Iron Works.—22, Burtolla Street, Calcutta.  
Shree Dhakalia Industries.—138, Canning Street, Calcutta.  
Shree Hanuman Iron Works.—193/2, Mahatma Gandhi Road, Calcutta.  
Shree Laxmi Industries.—46, Strand Road, Calcutta.  
Susil Iron & Galvg. Works.—56, Clive Street, Calcutta.  
Victory Iron Works Pvt. Ltd.—48, Canning Street, Calcutta.  
Vijay Industries.—2, Maharshi Debendra Road, Calcutta 7.

## BUILDERS &amp; CONTRACTORS

Associated Construction and Planning Corporation.—138, Canning Street, Calcutta.  
Associated Steel Construction Ltd.—47/2, Mirzapore Street, Calcutta.  
Banerjee, S. C.—20, Gariahat Road, Calcutta 19.  
Bengal Builders and Traders P. Ltd.—128, Southern Avenue, Calcutta.  
Bengal Construction Co. P. Ltd.—8/2, Hastings Street, Calcutta.  
Bhai Sundar Das Sarkar Singh Pvt. Ltd.—34, Ganesh Chandra Avenue, Calcutta.  
Bridge and Building Construction Co. P. Ltd.—90/A, Shyamaprasad Mukherjee Road, Calcutta.  
Britannia Building & Iron Co. Ltd.—4, Dalhousie Square East, Calcutta.  
Calcutta Builders Stores Pvt. Ltd.—32/A, Chittaranjan Avenue, Calcutta 12.  
Chatterjee Bros.—14-A, Protapaditya Road, Calcutta 26.  
Dakhineswar Sarkar & Bros. Ltd.—2, Maharshi Debendra Road, Calcutta 7.  
Dalmiya & Co., M. L.—76, Ashutosh Mukherjee Road, Bhowanipore, Calcutta.  
Dharam Pal Chadha & Sons.—3, Madan Street, Calcutta.  
East India Construction Co.—2, Commercial Bldgs., Calcutta 1.  
East India Engineering & Construction Co.—61-A, Lansdowne Road, Calcutta.  
Eastern Traders.—18, Harish Chatterjee St., Calcutta 25.  
Electric Construction & Equipment Co. P. Ltd.—9, Kaliprasanna Singh Road, Calcutta.  
Engineers' Syndicate (India) P. Ltd.—21, Old Court House, Calcutta 1.  
Gladstone Lyall & Co. Ltd.—4, Fairlie Place, Calcutta.  
Heavy Construction Corporation P. Ltd.—10, Prinsep Street, Calcutta 13.  
Hind Construction Co. Ltd.—8, Royal Exchange Place, Calcutta.  
Hindusthan Engineering & Construction Co.—Engineers, 2, Church Lane, Calcutta.  
Home Builders India P. Ltd.—12-P, Park Street, Calcutta 16.  
Indian Steel Works Construction Co. Ltd.—58/59, Stephen House, Calcutta 1.  
J. N. Ghosh & Co.—71, Serpentine Lane, Calcutta.  
Kumar Narayana P. Ltd.—28, Southern Avenue, Calcutta 26.  
Mackintosh Burn Ltd.—8, Netaji Subhas Road, Calcutta 1.  
Mansfield & Sons.—16, Radhanath Chowdhury Road, Post Box 124, Calcutta.  
Modern India Construction Co. Pvt. Ltd.—9, Brabourne Road, Calcutta 1.  
National Construction Corporation.—14, Netaji Subhas Road, Calcutta.  
Nayak Land Development Corporation Ltd.—14, Natabar Dutta Row, Calcutta 12.  
Orient Building and Trading Co. Ltd.—15, Chittaranjan Avenue, Calcutta.  
S. N. Roy & Sons P. Ltd.—10, Hastings St., Calcutta.  
Sett & Co.—9, Digamber Jain Temple Road, Calcutta 7.  
Sewak Ram & Co.—41/1, Bhupendra Bose Avenue, Calcutta 4.  
Shalimar Tar Products (1935) Ltd.—6, Lyons Range, Calcutta.  
Shaw & Co.—8, Frankrishna Mukherjee Road, Calcutta 2.  
SHIB BANERJEE CONSTRUCTION PRIVATE LTD.—Engineers & Contractors; 20, Gariahat Road, Calcutta-19.  
Subodh Aditya & Co.—36, Lake Temple Road, Calcutta.  
Sudan & Co.—81, Panchananata Lane, Calcutta 34.  
Technical Builders and Traders P. Ltd.—128, Southern Avenue, Calcutta.



**CABLE & WIRE MANUFACTURERS & DEALERS**

- Aluminium Cable & Conductors (U.P.) P. Ltd.—47, Hide Road, Calcutta.
- Electrical Industries Corporation.—99, Motilal Gupta Road, Calcutta 41.
- Electrical Manufacturing Co. Ltd.—Office: E. M. C. Gardens 136, Jessore Road, Calcutta-28; Grams: 'ELCORP'.—Calcutta.
- Fort Gloster Industries Ltd.—(Cable Division), 14, Netaji Subhas Road, Calcutta 1.
- India Sales Corporation.—49/1, Gariahat Road, Calcutta 19.
- Indian Cable Co. Ltd.—9, Hare Street, Calcutta.
- Lloyds Commercial Corporation.—P. Box 6870, Calcutta 1.
- National Insulated Cable Co. of India Ltd.—The Nicco House, 2, Hare Street, Calcutta—1; Phone: 235102 (6 lines).
- National Insulated Cable Co. of India Ltd.—4, D. Square East, Calcutta 1.
- RAVAL & CO.**—12/B, Lower Chitpur Road, Calcutta; Phone: 345651; Head Office: Shreeji Bhuvan, Lohar Chawl, Post Box No. 2279, Bombay 2; Phone: 23720, Grams: 'GOD-SPEED'; Dealers in everything electrical; stockists of I.C.C. & C.C.J. Wires, Trailing Flexibles; PILEDSTA Power & PVC Tropodur Control Cables & Transformers.

**CALENDAR MANUFACTURERS**

- Ajanta Calendar Mfg. Co.—Post Box 962, Calcutta.
- Britannia Calendar Mfg. Co.—8A, Ramkrishna Dass Lane, Calcutta.
- Calendar Corpn. (I) Ltd.—25, Chittaranjan Avenue, Calcutta 12.
- Empire Calendar Mfg. Co.—145, Cotton Street, Calcutta 7.
- Imperial Calendar Co.—35, Chittaranjan Avenue, Calcutta 12.
- Indian Press P. Ltd.—93A, Dharamtolla Street, Calcutta 13.
- Jai Hind Calendar Mfg. Co.—34/1A, Sudhir Chatterjee Street, Calcutta.
- National Calendar Mfg. Co.—151, Madhusudan Pal Chowdhry Lane, Howrah.
- Oriental Calendar Mfg. Co.—P-7, C.I.T. Road, Entally, Calcutta.

**CANNING AND CONDIMENT WORKS**

- Bengal Collective Industries & Farm Ltd.—56, Bentinck St., Calcutta 1.
- Daw Sen & Co. P. Ltd.—29, Dr. Suresh Sarkar Road, Entally, Calcutta 14.
- Farm & Fruit Products P. Ltd.—71-A, Chakrabere Road North, Calcutta 20.
- Great Eastern Preserving Works.—18, Blochmann St., Calcutta 13.
- Imperial Fruit Preserving Co.—35-A, Murari Pukur Road, Calcutta 4.
- Mida & Co. P. Ltd.—150, Manicktola Main Road, Calcutta 11.
- Mitter Sircar & Co.—68, Serpentine Lane, Calcutta 14.

- SREEKISSEN DUTT & CO.**—128, Middle Road, Calcutta-14; (Estd. 1841); Manufacturers & Exporters of Canned Fruits, Vegetables, Condiments etc.
- Snow White Food Products Co. Ltd.—18, Netaji Subhas Road, Calcutta 1.
- Sreekissen Dutta & Co.—128, Middle Road, Calcutta 14.
- Tims Products Ltd.—15, India Exchange Place, Calcutta 1.
- Vax Institute Laboratory Ltd.—Calcutta 4.

**CANVAS & 'PAULIN MANUFACTURERS & DEALERS**

- A. N. Mukherjee P. Ltd.—10, Shamlal Street, Calcutta 4.
- A. S. Soobashah Brothers.—29, Colootola Street, Calcutta 1.
- Bengal Canvas Goods Mfg. Co.—2B, St. George Terrace, Calcutta.
- Bengal Waterproof Works Ltd.—32, Theatre Road, Calcutta 16.
- Calcutta Proofing & 'Paulins Mfg. Co. Ltd.—19, Brabourne Road, Calcutta.
- Crescent Star Tent Co.—29, Colootola Street, Calcutta 1.
- Harley & Co., F.—5, Delhi Serampore Road, Entally, Calcutta 14.
- Kilburn & Co. P. Ltd.—4, Fairlie Place, Calcutta 1.
- Mohatta Brothers.—19, British Indian St., Calcutta.
- Premier Canvas Co.—28, N. Subhas Road, Calcutta 1.
- Tarachand Gupta & Co.—131, Cotton Street, Calcutta 7.

**CARD & GILL PINS**

- India Pin Mfg. Co.—1, Satya Doctor Road, Calcutta 23.
- Shalimar Wood Products Private Ltd.—138, Canning Street, Calcutta.

**CARDBOARD BOX & CARTON MANUFACTURERS**

- Antool, S. & Co. Pvt. Ltd.—91, Upper Circular Road, Calcutta.
- Bengal Box Mfg. Co.—1 & 4, Raj Kumar Chatterjee Road, Cossipur, Calcutta 2.
- Bengal Cardboard Box Co.—14, Amberst Street, Calcutta 9.
- Bengal Cardboard Industries & Printers Pvt. Ltd.—72, Tiljala Road, Calcutta 17.
- Bharat Cardboard Industries & Printing Co.—227/5, Manicktola Main Road, Calcutta 1.
- Bharat Cardboard Box Mfg. Co.—117, Keshab Sen Street, Calcutta 9.

**CALCUTTA PAPER INDUSTRIES.**—121, Chittaranjan Avenue, Calcutta-7; Manufacturers of Corrugated Cardboard Boxes & Cartons, Corrugated Boards in Sheets & Rolls; Gummed tapes Plain & Printed & all other packing requisites for every Industry; Phone: 346021.

**CARBIN BOX & TUBE.**—H. O. 76, Lower Circular Road, Calcutta-14; Factory: Tagore Villa, Alambazar, Calcutta-35; Manufacturers: Mill & Gray Board, Corrugated Sheets & Rolls; Specialists: All kinds of Boxes, Varnished & Printed Cartons, Paper-Core, Round-Composite Containers; Printers; Offset, Automatic Letter Press & Silk Screen; Phone: 243772.

Cardboard Box Factory Ltd., & Art Ptg. Works, Pvt. Ltd.—8-1, Chowringhee Lane, Calcutta 16.

Cardboard Box Mfg. Co.—38, Colootola St., Calcutta 7.

Cardboard Industrial & Printing Co.—194-B, Manicktola Main Road, Calcutta 11.

Cardboard and Paper Products Co.—44, Lockgate Road, Calcutta.

Cardboard Materials & Printing Co. Pvt. Ltd.—7, Convent Road, Calcutta 14.

Diamond Products Ltd.—4, Clive Row, Calcutta 1.

H. L. Sett & Sons P. Ltd.—21, J. R. Pandit Road, Calcutta.

Indian Cardboard Industries Ltd.—2, Fairlie Place, Calcutta 1.

Modern India Machine Tools Pvt. Ltd.—18-1-6, Canal West Rd., Calcutta.

Oriental Cardboard Industries Pvt. Ltd.—25, Ganesh Chandra Avenue, Calcutta 13.

Packaging & Printing Industries.—1, British Indian St., Calcutta 1.

Paul & Son.—1, Manicktola Main Road, Calcutta.

Prafulla Box Mfg. Co. P. Ltd.—Calcutta 9.

Sett, H. L. & Sons Pvt. Ltd.—21, Jadu Pandit Road, Calcutta 6.

Standard Cardboard Industries.—8, Belgachia Road, Calcutta.

Sunshine Cardboard Box Mfg. Co.—104, Mechua Bazar Street, Calcutta.

Swastik Box Mfg. Co.—36G, Sitalata Lane, Narkeldanga, Calcutta 11.

Unique Cardboard Box Mfg. Co. Pvt. Ltd.—12, Grey Street, Calcutta 5.

**CARPET MANUFACTURERS AND DEALERS**

Birla Jute Manufacturing Co., Ltd.—8, Royal Exchange Place, Calcutta 1.

Cosmo Trading Co.—98, Netaji Subhas Road, Calcutta 1.

Eastern Carpets P. Ltd.—Kernani Mansion, 29, Park Street, Calcutta.

India Carpet Weaving Enterprises.—46, Free School Street, Calcutta.

Indian Carpet Corporation.—80, Central Avenue, Calcutta 12.

**KHARDAH CO., LTD.**—7, Wellesley Place, Calcutta 1.

Shree Hanuman Jute Mills.—8, D. Square East, Calcutta 1.

Shroffs Carpets.—12, Chowringhee Road, Calcutta 13.

**CASTINGS**

Abjanabh Industries P. Ltd.—25, Burtolla Street, Calcutta.

Agarwal Hardware Works P. Ltd.—167, Chittaranjan Avenue, Calcutta.

Agarwala Iron & Steel Works.—P-38, Mission Row Extn., Calcutta 13.

Ajanta Plastics P. Ltd.—2, Kailash Bose Street, Calcutta 6.

Ananta Chatterjee & Sons.—200, Bellis Road, Howrah.

Annapurna Metal Works.—3, Ashu Biswas Road, Calcutta 25.

B. N. Pachal & Sons Private Ltd.—38/1/1, Natabar Paul Road, Howrah.

Bengal Castings & Engg. Co. P. Ltd.—117, Barrackpore Trunk Road, Calcutta 35.

Bengal Iron Works P. Ltd.—16-2, Chatterjee Lane, Howrah.

Bengal Machine Tool Works.—112, Narasingha Dutta Road, Howrah.

Bharat Weighing Scales & Engineering Syndicate.—75-1, Kalachand Nandy Lane, Howrah.

Burn & Co. Ltd.—P-10, Mission Row Extension, Calcutta.

Castings & Metal Products P. Ltd.—122, B. T. Road, Calcutta.

Castings Corporation (I) P. Ltd.—45, Madhusudan Pal Chowdhury Lane, Howrah.

D. C. De & Sons.—150, Narasingha Dutta Road, Howrah.

D. K. Das & Co. P. Ltd.—233, Bellis Howrah Road, Calcutta.

Dhang & Co.—2, Sreeram Dhang Road, Salkia.

Dutson Engineering Corpn. P. Ltd.—5, Mahendra Chandra Garden Road, Dum Dum, Calcutta 30.

East India Engineering & Agency Co.—63-1, Banaras Road, Howrah.

Fakirchand Dass Mistry & Sons P. Ltd.—143 and 144, Bellis Road, Howrah.

Great Eastern Foundry Works.—138, Canning Street, Calcutta 1.

Hanuman Metals Ltd.—66, Stephen House, Calcutta 1.

Hindustan Industrial Co.—192, Jamunahar Bajaj Street, Calcutta 7.

Howrah City Engineering Co. P. Ltd.—1, Deshapran Sasmal Road, Howrah.

Howrah Engineering Concern P. Ltd.—19, Maharshi Debendra Road, Calcutta 6.

Howrah Engineering & Galvanising Works.—68, Benares Road, Howrah.



Howrah Iron & Steel Works P. Ltd.—90, Benares Road, Salkia.  
 Howrah Light Casting Co. P. Ltd.—213, Mahatma Gandhi Road, Calcutta 7.  
 India Weighing Scales & Engg. Co. P. Ltd.—233, Bellillos Road, Howrah.  
 Indian Malleable Castings Ltd.—4, Lyons Range, Calcutta.  
 Iron Craft P. Ltd.—12 & 13, Sree Kishan Bhakat Lane, Howrah.  
 J. M. Sain & Bros.—15, College Street, Calcutta 12.  
 K. P. Das & Co. P. Ltd.—163, Netaji Subhas Road, Howrah.  
 K. P. Das & Sons P. Ltd.—179, Bellillos Road, Howrah.  
 Lakshmi Narayan Eng. Works.—133, Bellillos Road, Howrah.  
 Luxmi Engineering Co. P. Ltd.—123, Narasingha Dutt Road, Howrah.  
 Lynx Machinery Co.—104, Ultadanga Main Road, Calcutta 4.  
 Mondal & Karar Co.—177-1, Bellillos Road, Howrah.  
 Motilal Roy.—34, Natabar Pal Road, Howrah.  
 National Casting Co.—8, D. Square East, Calcutta 1.  
 Nreka Engineering Co.—29, The Mall, Calcutta 28.  
 Non-Ferrous Metal Industries (P) Ltd.—161/1, Harrison Road, Calcutta 7.  
 Panchkori Ghosh & Sons P. Ltd.—166, Bellillos Road, Howrah.  
 Ramkrishna Iron Works P. Ltd.—56, Ramkrishna Mandir Path, Howrah.  
 Reliance Engineering Works.—233, Bellillos Road, Howrah.  
 S. C. Dass & Co. P. Ltd.—178, Bellillos Road, Howrah.  
 Shiva Durga Iron Works.—166/1, Madhusudhan Pal Chowdhury Lane, Howrah.  
 Thakurdass Surekha.—40, College Street, Calcutta 12.  
 Ultra Engineering Co.—172-8, Madhusudan Pal Chowdhury Lane, Howrah.

### CEMENT & SOIL TESTING EQUIPMENTS

**ASSOCIATED INSTRUMENT MFRS. (INDIA) PRIVATE LTD.**—B-5, Gillander House, Calcutta. Phone: 223304.  
 Grams: "AIMIL."

### CHAINS, POWER TRANSMISSION & CONVEYORS

Chain Mfg. Enterprises, 11, Jadab Chandra Ghosh Lane, Calcutta 36.  
**REX CORPORATION (INDIA)**—House for (all types of chains for Power, Load and Conveyor) Power Transmission Roller Chains, Connecting Links, M.S. & C.I. Sprocket Wheels & Pinions B.B. Malleable Iron Link Chains for Elevators, Inverted Tooth Chains, M.S. Balance Chains, M.S. Electrically Welded Short Link Chains (Confirming to B.S.S. 590 of 1949) M.S. Twisted Chains & Locking Chains etc., 71-A, Netaji Subhas Road, Calcutta-1; Phone: 229807.  
 S. A. Goolamally & Co.—77, Netaji Subhas Road, Calcutta 1.

### CHEMICAL & PHARMACEUTICAL MACHINERY

A. P. V. Engineering Co. Ltd.—41, Chowringhee, Calcutta.  
 Chemical Plant & Equipment Ltd.—7, Lower Chitpore Road, Calcutta.  
 Corporated Engineers (India) P. Ltd.—7, Chittaranjan Avenue, Calcutta 13.  
 Engineers (Overseas) Corpn. P. Ltd.—62, Alipore Road, Calcutta 27.  
 H. Mukerji & Banerjee Pvt. Ltd.—Shamprasad Mookerjee Road, Calcutta.  
 Heroes Engineering Works.—20, Paul Street, Calcutta.  
 Hindustan Development Corpn., Ltd.—38, Tiljala Road, 24-Parganas.  
 Jewell Fitter Co. Ltd.—56-A, Free School Street, Calcutta.  
 Lilcoah Iron Works.—Guba Park, Lilcoah, Howrah.  
 Oriental Machinery Supplying Agency Ltd.—17/2/H/18, Canal West Road, Calcutta 9.  
 W. J. Alcock & Co. P. Ltd.—7, Hastings Street, Calcutta.

### CHEMICALS (IMPORTERS, STOCKISTS & MFRS.)

Aceto Chemicals P. Ltd.—22, Brabourne Road, Calcutta 1.  
**ASHOK EXPORTERS & IMPORTERS**—4, Bhawani Dutt Lane, Calcutta-7; Phone: 342732; Importers and Stockists of all kinds of Chemicals including Caustic Soda, Soda Ash, Bleaching Powder, Hydrosulphite of Soda etc., Sales Office: 37, Armenian Street, Calcutta-1; Phone: 334358.  
 Alpha Trading Co.—4, Bysack Lane, Calcutta 7.  
 Atlas Chemical Industries.—33, Canal South Road, Calcutta.  
 Asiatic Chemical Co.—18/B, Sukeas Lane, Post Box 2101, Calcutta-1.  
 Basic Synthetics and Chemicals P. Ltd.—17, North Road, Calcutta 32.  
**BENGAL CHEMICAL & PHARMACEUTICAL WORKS LTD.**—6, Ganesh Chandra Avenue, Calcutta 13; Pharmaceuticals, Heavy and Fine Chemicals, High Class Toilet Products, Coal Tar Distillation Products, Fire Extinguishers, Printing Inks, Driers, etc., Branch Office—Bombay and Kanpur.  
 C. K. Thakkar & Co.—22, Brabourne Road, Calcutta.  
 Chemical Industries Ltd.—25, Swallow Lane, Calcutta 1.  
 Chemical Importers and Distributors P. Ltd.—P-21/22, Radhabazar Street, Calcutta.

Chemical Plant and Equipment Ltd.—66 Dharamtolla Street, Calcutta.  
 Cyanides and Pigments Ltd.—23-B, Netaji Subhas Road, Calcutta.  
 D. Jayantilal & Co.—8/2, Rupchand Roy Street, Calcutta 2.  
 Hindustan Scientific Chemical Industries P. Ltd.—6, Mangoe Lane, Calcutta.  
 Monsanto Chemicals of India Ltd.—19, Mission Row, Calcutta.  
 Neo Chemical and Engineering Industries.—38, Pratapadiya Place, Calcutta 26.  
 P. Vrajilal Dulabhdas & Co.—22, Brabourne Road, Calcutta 1.  
 Pinkto Chemicals.—7, Amratolla Street, Calcutta 1.  
 S. P. SINGH & CO.—Importers and Stockists of Industrial Chemicals including Activated Carbon, Fullers, Earth, Filter Aids, Nickel Formate and Nickel Catalyst, Cellulose Acetate/Butyrate; 62, Ganesh Chandra Avenue, Calcutta-13; Phones: 242615 & 244975.  
 Shroff Chemicals P. Ltd.—3, Rafi Ahmed Kidwai Road, Calcutta 12.  
**WESTERN COMMERCIAL CORPORATION**—Importers & Exporters of Chemicals, Solvents, Tanning Materials, Industrial Resins, Plasticisers, Bichromates, Acetic Acid; 3, Bentinck Street, Calcutta-1; Phones: 237540 & 235733; Grams: "VALLACO".

### CHEMICALS, DRUGS AND PHARMACEUTICAL PRODUCTS MANUFACTURERS

Abco's Pharmaceutical Works (India) Ltd.—Abco House, Calcutta 11.  
 Adeco Ltd.—Manufacturers of Drugs and Pharmaceuticals including injectables, Spirituous and non-Spirituous B.P. Preparations and Patent Preparations, Fine Chemicals, Oils, Soft Soap, etc., Adeco Nagar, Dist. Hooghly; City Office: 2, Jawaharlal Nehru Road, Calcutta 13; Phone: 238982.  
 Adeco Ltd.—29-3-A, Chetla Central Road, Calcutta 27.  
 Albert David Ltd.—15, Chittaranjan Avenue, Calcutta 13.  
 Alkali & Chemical Corpn. of India Ltd.—ICI House, 84, Chowringhee, Calcutta 16.  
 Allen & Hanbury's Ltd.—E-4, Clive Buildings, Netaji Subhas Road, Calcutta.  
 Allied Resins & Chemicals P. Ltd.—13, Camac Street, Calcutta 16.  
 Alpha Foods & Chemicals P. Ltd.—Calcutta 33.  
 Arrow Co.—10-1, Bipradas Street, P.O. Amherst Street, Calcutta 9.  
 Aryan Drug House Pvt. Ltd.—28, Kali Kumar Banerjee Lane, Calcutta 2.  
**ASHOK EXPORTERS & IMPORTERS**—Importers and Stockists of all kinds of Chemicals including Caustic Soda, Soda Ash, Bleaching Powder, Hydrosulphite of Soda etc., 4, Bhawani Dutt Lane, Calcutta-7; Phones: 342732 & 346168.  
 Asia Drug Co., Ltd.—29, Strand Road, Calcutta 1.  
**ASIATIC CHEMICAL CO., THE**—71, Canning Street, Post Box No. 2101, Calcutta-1; Phones: 34-8832 & 34-9805; Exporters and Stockists of Industrial Heavy Chemicals and Solvents, Manufacturers of Zinc Chloride Fused and Anhydrous Powder of all grades, Zinc, Sulphate, Sodium Acetate, Manganese Sulphate etc. etc.  
 Asiatic Drug House Ltd.—42, Barwaritola Road, Belliaghata, Calcutta.  
 Asiatic Oxygen & Acetylene Co., Ltd.—8, Dalhousie Square, Calcutta.  
 Assam Sillimanite Ltd.—6, Ganesh Chandra Avenue, Calcutta.  
 Associated Drugs & Chemical Works.—197, P. Ghat Road, Barnagore, Calcutta.  
 Azad Hind Pharmaceutical Works P. Ltd.—Panchanatala Road, Calcutta.  
 Banerjee Chemical Works.—88A & 89, Bagmari Road, Calcutta 11.  
 Banga Luxmi Ayurved Works.—7, Chowringhee Road, Calcutta 13.  
 Banga Luxmi Chemical Works.—7, Chowringhee Road, Calcutta 13.  
 Bangalore Whitelead Syndicate Pvt. Ltd.—Gillander House, Calcutta.  
 Barnagore Chemical Works.—4, Chowringhee Road, Calcutta.  
 Basak, K. P. & Co.—29A, Durga Charan Mitter Street, Calcutta 6.  
 Basmall & Co. (India) Ltd.—296/98, Jessore Road, Calcutta 28.  
 Bathgate & Co. Ltd.—17, 18 & 19, Old Court House Street, Calcutta.  
 Belur Chemical Works.—P.O. Bellur Math, Railway Station, Belur, Howrah.  
 Bengal Acid & Chemical Manufacturing Co.—27-A, Acharya Prafulla Chandra Road, Calcutta 9.  
**BENGAL CHEMICAL & PHARMACEUTICAL WORKS LTD.**—6, Ganesh Chandra Avenue, Calcutta 13. Pharmaceuticals, Heavy and Fine Chemicals, High Class Toilet Products, Surgical and Hospital Equipment, Laboratory Equipment, Coal Tar Distillation Products, Fire Extinguishers, Printing Inks, Driers, etc., Branch Offices: Bombay & Kanpur.  
 Bengal Drugs & Pharmaceutical Works.—Lakshminilias House, 11, Raj Narayan Street, Calcutta 9.  
 Bengal Drug & Chemical Works.—7-1A, Nabin Sarcar Lane, Bagh-bazar, Calcutta 3.



Bengal Health & Chemical Works Ltd.—2, Harimohan Roy Lane, Calcutta 15.  
 Bengal Immunity Co., Ltd.—153, Dharamtala Street, Calcutta 13.  
 Bengal Industrial & Scientific Works Ltd.—83-B, Vivekananda Road, Beadon St., Calcutta.  
 Bengal Medical Research.—63-3, Mirzapur Street, Calcutta 9.  
 Bengal Pharma Institute.—32/2, Muraripukur Road, Calcutta.  
 Bengal Research Institute.—13/3, Natherbagan St., Calcutta.  
 Bengel Laboratories (I) Ltd.—16, Hare Street, Calcutta.  
 Bharat Immunity Laboratories.—87, Chakradanga Road, Calcutta.  
 Bharat Laboratory & Chemical Works Ltd.—Post Office Tollygunge, 24-Parganas.  
 Bharati Rasayanagar Ltd.—29-3A, Chetla Central Road, Calcutta 27.  
 Bharat Laboratory & Chemical Works Ltd.—10, Prince Anwar Shah Road, Calcutta.  
 Bhattacharjee Chemical Works.—25, Latafat Hussain Lane, Calcutta 10.  
 Bhattacharyya, M. & Co.—85, Netaji Subhas Road, Calcutta.  
 Bijoya Chemical Works Ltd.—Provi Road, Behala, Calcutta 34.  
 Bio Pharma Laboratories.—106/2, Hazra Road, Calcutta.  
 Birla Laboratories.—2, Birpara Lane, Calcutta 30.  
 Bisharad's Ayurvedic Laboratory.—14, Puranchand Nahar Avenue, Calcutta 13.  
 Bose Chemical Works.—18/1, Sahitya Parishad St., Calcutta.  
 Bose's, Dr., Laboratory Ltd.—45, Amherst Street, Calcutta 9.  
 Brahmachari Research Institute.—82-3, Cornwallis Street, Calcutta 4.  
 British Drug Houses (I) Ltd.—58/D, Chowringhee Road, Calcutta 16.  
 British Medicines & Pharmaceutical Co.—1/1, Justice Dwarkanath Road, Calcutta 20.  
 British Medicine & Pharmaceutical Co.—44/45, Ezra Street, Calcutta.  
 Bronkol P. Ltd.—25, Indra Biswas Road, Calcutta 37.  
 B. S. B. & Co. Ltd.—P-7, Mission Row Extension, Calcutta.  
 Burma Lime & Chemical Co., Ltd.—5, Clive Ghat Street, Calcutta.  
 Butto Kristo Paul & Co., Pvt. Ltd.—1, Bonfield Lane, Calcutta.  
 C. D. Thakkar & Co.—22, Brabourne Road, Calcutta 1.  
 C. S. I. (Chemicals & Pharmaceuticals) Pvt. Ltd.—9-3, Chowringhee Road, Calcutta 13.  
 Calcutta Acid & Chemical Co.—226, Bagmarl Road, Calcutta 11.  
 Calcutta Chemical Co. Ltd.—35, Panditia Road, R. B. Avenue, Calcutta 29.  
 Calcutta Industrial Chemicals & Minerals Co. Ltd.—43, Dharamtala Street, Calcutta 13.  
 Calcutta National Chemical Industries.—17, Badridas Temple St., Calcutta.  
 Calcutta Polyclinic Ltd.—6-A Sureshnath Banerjee Road, Calcutta 13.  
 Calcutta Pure Drug Co.—2, Cooper Lane, Calcutta.  
 Calcutta Sereological Institute & Laboratory Ltd.—9-3, Chowringhee, Calcutta 13.  
 Calcutta Soap Works Ltd.—Calso Park, Ballygunge Siding Road, 24-Parganas.  
 Capco Ltd.—1, Netaji Subhas Road, Calcutta 1.  
 C. C. Industries.—81-1-1D, Raja Dinendra Street, Calcutta 6.  
 Central Chemical Works.—7, Bisseswar Banerjee Lane, South, Banatru; Howrah.  
 Central India Medical Laboratories Ltd.—62, Landsdowne Road, Calcutta.  
 Central Polyclinic Laboratory & Chandrakanta Pharmacy.—45-1, Beadon Street, Calcutta 6.  
 Century Chemical & Pharmaceutical Works Ltd.—P-64, Raja Nabakissen Street, Calcutta.  
 Chakravarty Chemical Industries Ltd.—17, Mangoe Lane, Calcutta.  
 Charak Chemical Works Ltd.—161-1, Harrison Road, Bangur Bldg., Calcutta 7.  
 Chemical Corpn. of India.—6, Kalicharan Ghose Road, Calcutta.  
 Chemical Industries Co. Private Ltd.—29, Strand Road, Calcutta.  
 Chemical & Surgical Works Ltd.—186, Bow Bazar Street, Calcutta 12.  
 Chemical Supplies (Bengal) Co.—10-C, Gurudas Dutt Garden Lane, Calcutta 4.  
 Chemical Synthetics (India).—83/A, Karbala Tank Lane, Calcutta 6.  
 Chemicals and Solvents Ltd.—Post Box 707, Calcutta 1.  
 Chempure Ltd.—6, Lucas Lane, Calcutta.  
 Chinla Pharmaceutical Industries P. Ltd.—18/26, Ballygunge Place, Calcutta 19.  
 Ciba Pharma Ltd.—59-B, Chowringhee, Calcutta 20.  
 City Chemical Industries.—58-D, Netaji Subhas Road, Calcutta.  
 City Drug & Chemical Works.—17/1, Shibtoia Street, Calcutta.  
 Cured Laboratories (I) Ltd.—240/1, Russa Road South, Calcutta.  
 Dabur (Dr. S. K. Burman) Pvt. Ltd.—142, Rasbehari Avenue, Calcutta, 29.  
 Dacca Laboratories.—7, Madan Chatterjee Lane, Calcutta.  
 Delta Chemical Industries.—81-A, Hazra Road, Calcutta 26.  
 Detto Chemicals.—Auddy Lane, Serampore, Hooghly.  
 Dey's Medical Stores, Pvt. Ltd.—6/D, Lindsay Street, Calcutta 16.  
 Dolphin Laboratories Ltd.—11-A, Prince Anwar Shah Road, Calcutta.  
 Dominion Chemicals Ltd.—35-A, Simla Street, Calcutta 6.  
 Dr. Paul Lohmann (I) Ltd.—23, Camac Street, Calcutta 16.

Dragon Chemical Works Pvt. Ltd.—204-1, Russa Road South, Calcutta 33.  
 Drug House (India) Ltd.—52, Sambhunath Pandit Street, Calcutta 25.  
 Durgapur Chemicals Ltd.—10, Middleton Row, Calcutta 16.  
 East India Chemical Works Ltd.—Victoria Road (South), Calcutta 30.  
 East India Pharmaceutical Works Ltd.—11/1/4, Syama Prosad Mukherjee Road, Calcutta 26.  
 Eastern Chemical Products.—6, Brahmanpara Lane, Calcutta 6.  
 Eastern Drug Co. Ltd.—4, Moyerpore Road, Calcutta 27.

**EASTERN INDUSTRIAL CORPORATION.**—Starch, Dextrines, Industrial Chemicals, Pharmaceutical, Mineral 'Eastern' Cereal Core Binder for Foundries; 142/1, Radha Bazar Street, Calcutta-1; Phone: 225508, Grams: "UNNAYAN", Calcutta.

Emsons Pharmaceuticals P. Ltd.—111-A, S. P. Mukherjee Road, Calcutta 26.  
 Eyedrop Manufacturing Co.—271, Chittaranjan Avenue, Calcutta 16.  
 Epsilon Laboratories.—35/2, Panditia Road, Calcutta 29.  
 Fairdeal Corporation Ltd.—7, Chittaranjan Avenue, Calcutta 13.  
 Febrome Ltd.—172, Landsdowne Road, Calcutta.  
 Filpen Products.—70-3, Sambhunath Pandit Street, Calcutta 25.  
 Forward Chemical Industries.—18, Tamer Lane, Calcutta.  
 Frank Ross & Co. Ltd.—7, Chowringhee, Calcutta 13.  
 G. D. A. Chemicals Ltd.—36, Panditia Road, Calcutta 29.  
 G. D. Pharmaceuticals P. Ltd.—Calcutta 3.  
 Gem Chemical Co.—54, Sri Gopal Mallick Lane, Calcutta 12.  
 General Drugs Antiseptics & Chemicals.—44, Badridas Temple St., Calcutta.  
 Ghosh, M. L. & Co.—Windsor House, Mission Row Extn., Calcutta.  
 Glemcie Traders Ltd.—26, Nakuleshwar Bhattacharjee Lane, Calcutta 26.  
 Glaxo Laboratories (I) Ltd.—32, Stephen House, Calcutta.  
 Globe Research Institute.—L-A, Sanatan Seal Lane, Off Wellington St., Calcutta 12.  
 Gluconate Ltd.—70A, Prinsep Street, Calcutta 13.  
 Grimault Ltd. Laboratories.—5, Garstin Place, Calcutta.

**H. NAGINDAS & CO.**—Dealers in Industrial Chemicals, Laboratory Chemicals, Photographic Chemicals, Solvents, Drugs, Indicators, Stains and Re-agents; 55/125, Canning Street, Calcutta-1; Phones: 345640 & 476508, Grams: "NAVI-ASHA".

H. S. Das.—104/1, Serpentine Lane, Calcutta 14.  
 Health Remedies & Laboratories.—42-D, Jibon Krishna Mitra Road, Belgachia, Calcutta.  
 Herber Chemical Laboratories (I) Ltd.—41-D, Baldeopara Road, Calcutta.  
 Hindustan Drug House Ltd.—120, Dharamtolla Street, Calcutta.  
 Hindustan Industries Co.—18, Mangoe Lane, Calcutta.  
 Hindusthan Heavy Chemicals, Ltd.—Hindusthan Bldgs., 4, Chittaranjan Avenue, Calcutta 13.  
 Hindusthan Pharmaceutical Works Pvt. Ltd.—44, Beliaghata Main Road, Calcutta 10.  
 Hindusthan Scientific Chemical Industries Pvt. Ltd.—6, Mangoe Lane, Calcutta.  
 Hoechst Pharma P. Ltd.—6, Ganesh Ch. Avenue, Calcutta.  
 Howrah Chemical Works.—148, Mahatma Gandhi Road, Calcutta 7.  
 Hutchison, J. & R. Pvt. Ltd.—10, Clive Row, Calcutta 2.  
 Ithothas Trading Co.—22, Netaji Subhas Road, Calcutta.  
 Immune Drug Co. Ltd.—14, Bancharan Akur Lane, Calcutta.  
 Immune Chemical Laboratory Ltd.—19, Canal Street, Calcutta 14.  
 Immunity Chemical Co.—8/3, Canal Street, Calcutta 14.  
 Immuno Biological Laboratories.—15, Roy Mansions, Elgin Road, Calcutta 20.  
 Imperial Chemical Industries (I) Ltd.—34, Chowringhee, Calcutta.  
 India Alkalies Ltd.—5, Garstin Place, Calcutta.  
 India Chemical Industries, Ltd.—105, Cotton Street, Calcutta 7.  
 Indian Chemical & Pharmaceutical Industries.—188, Manicktolla Main Road, Narkeldanga, Calcutta.  
 Indian Chemical & Therapeutical Works, Ltd.—68, Barrackpore Trunk Road, Calcutta 2.  
 India Chemico Mineral Industries.—188, Manicktolla Main Road, Calcutta.  
 India Drug Laboratory.—P-7, Beliaghata Main Road, Calcutta 10.  
 Indian Chemical Institute.—100/A, Grey Street, Calcutta.  
 Indian Chemical & Pharmaceutical Works Ltd.—9, Barrackpore Trunk Road, Cossipore, Calcutta 3.  
 Indian Chemical & Pharmaceutical Institute.—59-J, Garper Road, Calcutta.  
 Indian Health Institute & Laboratory Ltd.—1, Garandanga Road, Dum Dum Cantt., Calcutta 28.  
 Indian Medical Laboratory Ltd.—44, Badur Began St., Calcutta 9.  
 Indian Medical Supply Laboratory Ltd.—6, India Exchange Place, Calcutta 1.  
 Indian Mineral Industries Ltd.—22-1 & 22C, Dum Dum Road, Calcutta 2.  
 Indian National Drug Co. Ltd.—5/2, Beliaghata Main Road, Calcutta 10.



- Indian Oxygen Ltd.—48-1, Diamond Harbour Road, Calcutta 27.  
 Indian Overseas Drug House Ltd.—19/1, Radhanath Mallick Lane, Calcutta.  
 Indian Pharmaceutical Works.—13, Upper Circular Road, Calcutta 9.  
 Indian Research Institute Ltd.—3, Rustumjee Parsee Road, Cossipore, Calcutta.  
 Indian Research Laboratories.—16, Belgachia Road, Calcutta 4.  
 Indian Research Laboratories Ltd.—37/7A, Khelat Babu Lane, Calcutta.  
 Indian Scientific Industries.—2/2-P1, Upper Chitpore Road, Calcutta.  
 Indo-British Chemical Co.—32-2, Murari Pookur Road, Calcutta 4.  
 Indo-European Agency Pvt. Ltd.—67, Ezra Street, Calcutta.  
 Industrial & Chemical Laboratory.—5-3, Harinath Nayaratra Lane, Sibpur, Howrah.  
 Industrial Chemicals Corpn.—22, Swallow Lane, Calcutta.  
 Industrial Gases Ltd.—138, Canning Street, Calcutta.  
 International Chemical Industries.—Jadavpur, Calcutta 32.  
 International Drug & Chemicals Co.—55-104, Canning Street, Calcutta 1.  
 International Remedies, Ltd.—8-A, Rajendra Lal Street, Calcutta 6.  
 Ivy Chemical & Industrial Works.—94, Vaskarpara Road, P.O. Ghosuri, Howrah.  
 Jagabandhur Chemical Works Ltd.—2, Ram Krishna Lane, Calcutta 3.  
 Jatiya Ayurvediya Aushadhalaya.—42, South End Park, Calcutta 29.  
 Jay Shree Chemicals & Fertilizers.—8, India Exchange Place, Calcutta 1.  
 Jewel of India Perfume Co.—Cocola House, Behala, Calcutta 34.  
 Kalpataru Ayurvedic Works.—223, Chittaranjan Avenue, Calcutta 6.  
 Kanoria Chemicals & Industries Ltd.—9, Brabourne Road, Calcutta 1.  
 Kema Products Ltd.—3A/4, Ram Ratan Bose Lane, Calcutta.  
 Krishna Laboratories.—14/1, Sri Gopal Mallick Lane, Calcutta.  
 Kemp & Co. Ltd.—21, Old Court House Street, Calcutta.  
 Laboratoires Grimault (Private) Ltd.—40/B, Prinsep Street, Calcutta 13.  
 Lily Chemical Works.—3, Ramakanta Sen Lane, Calcutta 4.  
 Lion Chemical Works.—141/T/1B, South Sinthee Road, Cossipore, Calcutta 2.  
 Loknath Chemical Works.—31/1, The Mall, Dum Dum, Calcutta 28.  
**LUCKY ACID & CHEMICAL WORKS.**—Manufacturers of Analytical, C. P. & Pure Grade Hydrochloric, Sulphuric & Nitric Acids and Chemicals; 32/2, Muraripukur Road, Calcutta-4; Phone: 353147. We are ISI Licensee.  
 Lyndon Chemical Industries Ltd.—4, Riffe Road, Park Circus, Calcutta 17.  
 Mahalaxmi Industries.—11/2/1, Panchanantala Lane, P.O. Bowbazar, Calcutta 12.  
 Mandoss Drugs Ltd.—221-2, Strand Bank Road, Calcutta.  
 Malixion Chemical Works.—6-J, Kavatola Road, Calcutta 29.  
 Martin & Harris Pvt. Ltd.—Mercantile Bldg., Lall Bazar, Calcutta 1.  
 May & Baker (India) Ltd.—7, Old Court House Street, Calcutta.  
 M. C. G. P. Works.—21B, Nivedita Lane, Baghbazar, Calcutta 3.  
 Medical Health Institute Ltd.—82, Harrison St., Calcutta 9.  
 Medico Products Ltd.—5, Bonfield Lane, Calcutta.  
 Mendina Pharmaceutical Works.—34, Alipore Road, Calcutta 27.  
 Metropolitan Chemical Industries Ltd.—50, Christopher Road, Calcutta 14.  
 Metropolitan Drug House Pvt. Ltd.—55/125, Canning Street, Calcutta 1.  
 Mill Ford Biochemical Industries Ltd.—89, Chowringhee Road, Calcutta.  
 Mira Perfumery & Chemical Works.—69, Nimtolla Ghat Street, Calcutta.  
 Mira Chemical Industries Ltd.—1, Indrani Park, Calcutta 33.  
 Modern Scientific Equipment Co.—36, Brabourne Road, Calcutta 1.  
 Mumtaz & Co.—H. 11, Swinhoe Lane, Ballygunge, Calcutta 19.  
 Nadia Chemical Works Pvt. Ltd.—C-44 to 46, College St. Market, Calcutta 12.  
 Nag Chemical Industries.—4, Mandeville Gardens, Ballygunge, Calcutta 19.  
 Nandy & Co.—52, Sambhunath Pandit St., Calcutta 25.  
 National Carbon Co. (India) Ltd.—P-17, Mission Row Extn., Calcutta.  
 National Chemical Industries Co.—124, Harrison Road, Jalan House, Calcutta 7.  
 National Chemical & Pharmaceutical Works.—4, Narkelbagan Lane, Calcutta.  
 National Chemical & Salt Works (India) Ltd.—5, Commercial Bldg., Netaji Subhas Road, Calcutta.  
 National Medicine Mfg. Co.—19, Banstola Lane, Calcutta 7.  
 National Pure Drugs (I) Ltd.—4/1, Ultadanga Main Road, Calcutta.  
 Neovit Laboratories Ltd.—9-B, Shahnagar Road, Kalighat, Calcutta 26.  
 Nestle's Products (I) Ltd.—7, Hare Street, Calcutta.  
 New India Acids & Chemicals.—25-C, Panchanantola Lane, Calcutta 12.  
 New India Chemical Co. & Pharmaceutical Works.—29, Burtolla St., Calcutta.  
 New Research & Chemical Industries Ltd.—26, Ram Kamal Sen Lane, Calcutta.  
 New Standard Barley Mfg. Co.—105, Cotton Street, Calcutta 7.  
 Niru Veena Corporation.—55, Canning Street, Calcutta.  
 Nivea Pharmaceuticals Ltd.—Clive Buildings, Calcutta 1.  
 Nu-way Mfg. Co.—6, Syed Amirali Avenue, Park Circus, Calcutta 17.  
 Odhavji Devidas & Co. P. Ltd.—9, Armenian Street, Calcutta.  
 Oriental Research & Chemical Laboratory Ltd.—Qumareesh House, Salkia, Howrah.  
 Oriental Research & Chemical Laboratory Ltd.—61, Hurroganj Road, Calcutta.  
 Oster Chemical & Pharmaceutical Works Private Ltd.—78-B, Manicktolla Street, Calcutta 6.  
 Pasteur Laboratories Pvt. Ltd.—2, Cornwallis Street, Calcutta 6.  
 Pearl Chemical Industries Pvt. Ltd.—2, Bonomali Chatterjee Street, Calcutta 2.  
 People's Research Laboratories Ltd.—1, Sura East Road, Calcutta.  
 Pharma Chemical International Ltd.—4, Kaloo Ghose Lane, Calcutta.  
 Phosphate Co. Ltd.—14, Netaji Subhas Road, Calcutta.  
 Phoenix Chemical Laboratories Ltd.—1, Amrit Lal Dawn Road, Barnagore, Calcutta.  
 Phoenix Drug House Ltd.—10, Bonfield Lane, Calcutta.  
 Pioneer Drug & Chemical Works Ltd.—3C, Baldeopara Road, Calcutta.  
 Pioneer Industrial Syndicate.—67, Ezra Street, Calcutta.  
 P. K. Sen's Drugs & Chemical Works.—105-1, Ultadanga Main Rd., Calcutta 4.  
 Primco Ltd.—P-39, Mission Row Extension, Calcutta.  
 President Chemical Works.—49, Karbala Tank Lane, Calcutta 6.  
 Puspita Industries.—56, South End Park, Calcutta 29.  
 Radha Chemical Co. Ltd.—3, Synagogue Street, Calcutta 1.  
 Rajvaidya Ayurveda Works.—172, Bowbazar Street, Calcutta 12.  
**RANIGANJ CHEMICAL WORKS.**—105, Cotton Street, Calcutta-7; Manufacturers of Heavy Chemicals, Copper Sulphate, Ferrous Sulphate, Manganese Sulphate, Sodium Sulphate, Potash-Nitrate, Calcium Chloride, Zinc Sulphate and Sodium Acetate.  
 Rasayana Shipa Ltd.—97, Victoria Road, Barnagore, Calcutta.  
 Ratan Perfumery Works.—Kapasdanga, Hooghly.  
 Rays Laboratories Pvt. Ltd.—114, Ashutosh Mukherjee Road, Calcutta 25.  
 Regalin Laboratories Ltd.—11, Ghosh Lane, Calcutta 12.  
 Release Reliance Research Ltd.—12-B, Balaram Bose Ghat Road, Calcutta.  
 Reno Chemical Works.—139/2, Rusa Road, Calcutta.  
 Renuka Chemical Works.—153/1, Radhabazar Street, Calcutta.  
 Research Industries Ltd.—9, Dharamtolla Street, Calcutta 13.  
 Sahu Chemicals & Fertilisers.—11, Clive Row, Calcutta 1.  
 Sakti Chemical Works.—10-11, Upper Circular Road, Calcutta.  
 Sandoz Products Ltd.—P-117, Saklat Place, P.O. Box 491, Calcutta.  
 Sarkar Gupta & Co. Pvt. Ltd.—154-1, Mahendra Bhattacharjee Rd., Howrah.  
 Scientific Indian Research Institute.—22/1/1, Jaliatola St., Calcutta.  
 Scientific Supplies (Bengal) Co.—C-37 & 38, Coole St. Market, Calcutta 12.  
 Scientific Research Association.—32, Scott Lane, Calcutta.  
 Sen, C. K. & Co. Ltd.—Jabakusum House, 34, Chittaranjan Avenue, Calcutta.  
 Sen, Kaviraj M. N. & Co. (P) Ltd.—18-1 & 19, Lower Circular Road, Calcutta 1.  
 Sen O. K. & Co., Pvt. Ltd.—Jabakusum House, 34, Chittaranjan Avenue, Calcutta 12.  
 Sen's P. K. Drugs & Chemical Works.—105-1, Ultadanga Main Rd., Calcutta 4.  
 Senco Laboratories.—10/1B, Swinhoe Street, Calcutta.  
 Serochemic (I) Laboratories.—7, Bhutnath Paul Road, Dum Dum, Calcutta.  
 Seth Chemical Works.—160, Jamunalal Bajaj Street, Calcutta 7.  
 Seven Chemical & Pharmaceutical Works Ltd.—302/1, Upper Circular Road, Calcutta.  
 Shallmar Chemical Works Pvt. Ltd.—Calcutta 27.  
 Shankar Distillery & Chemical Works Ltd.—2, Doyahatta Street, Calcutta 7.  
 Shaw Wallace & Co.—Fertilisers Dept., 4, Bankshall St., P.B. No. 70, Calcutta.  
 Sisir Chemical Works.—2/1B, Nirode Behari Mallick Street, Calcutta.  
 Smith Stanistreet & Co. Ltd.—18, Convent Road, Entally, Calcutta 14.  
 Solmint Ltd.—4, Ram Ratan Bose Lane, Calcutta.  
 Soreline Chemical Works.—12, Haji Zakaria Lane, Calcutta.  
 Sree Drug Chemical Works.—8, Patwar Bhagan Lane, Calcutta.  
 Srinath Chemical Ltd.—249, Bowbazar St., Calcutta 12.  
 Stadeo Stores & Laboratories Ltd.—57/1/1A, Raja Dinendra St., Calcutta 6.  
 Stadmed Ltd.—15, Jawpure Road, Calcutta 30.  
 Standard Chemical Industries.—378, G. T. Road, North, P.O. Belur Math, Howrah.



Standard Chemical & Pharmaceutical Works.—1, Jawar Lal Dutta Lane, Calcutta 4.  
 Standard Industrial & Chemical Corp'n. Ltd.—24, Chittaranjan Avenue, Calcutta 12.  
 Standard Pharmaceuticals Ltd.—67, Dr. Suresh Sarkar Road, Calcutta 14.  
 Standard Products Ltd.—67, Dr. Suresh Sarkar Road, Entally, Calcutta.  
 Sterling Pharmaceutical Products Co. Ltd.—72-2, Sambhunath Pandit Street, Calcutta 25.  
 Super Drugs Ltd.—258-A, Upper Circular Road, Calcutta 6.  
 Swaika Oil Mills.—18-B, Brabourne Road, Calcutta 1.  
 Swan Laboratories (I) Ltd.—21/A, Chore Bazar Lane, Calcutta.  
 Swandent (Eastern) Ltd.—Post Box 712, Calcutta 12.  
 Technico Enterprises P.Ltd.—Swallow Lane, Calcutta.

**THAKKAR, C. D. & CO.—Manufacturers of Alumina Ferric, Alumina Sulphate, Alum, Magnesium Sulphate, Hydrochloric Acid, Sodium Sulphate, Lead Nitrate and other Lead Compounds, Sulphuric Acid etc., Dealers in Chemicals (Heavy & Fine); 22, Brabourne Road, Calcutta-1; Phones: 225140 & 227267.**

Tropical Chemical Works.—25, Indra Biswas Road, Calcutta 37.  
 Tropical Drug Works.—1-6, Fakir Chakrabarty Lane, Calcutta 6.  
 Tropical Laboratories.—2, Ram Chandra Das Road, Calcutta.  
 Union Carbide India Ltd.—Ilaco House, 1 & 3, Brabourne Road, Calcutta 1.  
 Union Drug Co. Ltd.—285, Bowbazar Street, Calcutta 12.  
 Universal Chemical Works.—34, Muraripukur Road, Ultadanga, Calcutta 4.  
 Universal Drug House (P) Ltd.—10, Bonfield Row, Calcutta 1.  
 Vax Institute Laboratory Ltd.—13, Kritybash Mukherjee Road, Calcutta 4.  
 Vitamin Laboratories.—16/2, Mahendra Bose Lane, Calcutta.  
 Waldie, D. & Co. Ltd.—Gillander House, Netaji Subhas Road, Ultadanga, Calcutta 1.  
 Walford Chemical & Pharmaceutical Works.—9, Clive Road, Calcutta.  
 Wasserman Institute (Laboratory) Ltd.—50, Cornwallis Street, Calcutta.

## CHEMICALS & PHARMACEUTICALS

A. Natarajan.—71, Ganesh Chandra Avenue, Calcutta.  
 Allied Agency.—16, Bonfield Lane, Calcutta.  
 Anand Overseas Co.—32, Armenian Street, Calcutta.  
 Arun Importers Pvt. Ltd.—5, Pollock Street, Calcutta.  
 Ashok Exporters & Importers.—4, Bhawani Dutta Lane, Calcutta.  
 Asian Traders.—22, Bonfield Lane, Calcutta 1.  
 Associated Agencies Co.—P-11, New Howrah Bridge Approach Road, Calcutta.  
 B. R. Harman & Mohatta (India).—19, British Indian Street, Calcutta.  
 Babulal Santhalia.—48, Canning Street, Calcutta.  
 Badriprasad Satyanarain.—89/8, Lower Chitpur Road, Calcutta.  
 Ballabram Badrinarain.—135, Canning Street, Calcutta.  
 Banshidar Purshottamdas.—178, Mahatma Gandhi Road, Calcutta 7.  
 Basant Brothers.—3, Amratolla Street, Calcutta.  
 Bejaya Glass Depot.—4, Jackson Lane, Calcutta.  
 Bengal Chemicolour Co.—10, Armenian Street, Calcutta 1.  
 Bengal Corp'n. Ltd.—14, Netaji Subhas Road, Calcutta.  
 Bengal Mineral Supply Co.—71/A, Netaji Subhas Road, Calcutta.  
 Bengal Scientific & Chemical Supply Co.—100, Keshab Chandra Sen Street, Calcutta.  
 Berlia Trading Co.—2, Doyehatta Street, Calcutta.  
 Bhagwandass Purnamal.—4, Narain Babu Lane, Calcutta.  
 Bharat Export & Import Co.—6, Karbala Mohammed Street, Calcutta.  
 Bharat Commercial Agency.—12, New Howrah Bridge Approach Road, Calcutta.  
 Bharat Import Agency.—167, Old China Bazar Street, Calcutta.  
 Bharat Laxmi Trading Co. (P) Ltd.—278, Chittaranjan Avenue, Calcutta.  
 Bharat Tubewell Co. Ltd.—118-A, Chittaranjan Avenue, Calcutta.  
 Bharmal Champalal.—26/4, Armenian Street, Calcutta 1.  
 Bhimsain Sundersain.—14, Amratolla Street, Calcutta.  
 Bhotica Traders P. Ltd.—208, Cross Street, Calcutta.  
 Bhudarmal Ramchander.—122, Cotton Street, Calcutta 7.  
 Bhuta & Co.—8/B, Amratolla Street, Calcutta.  
 Blyani & Sons P. Ltd.—137, Canning Street, Calcutta.  
 Bombay Textiles.—178, M. Gandhi Road, Calcutta 7.  
 C. A. Mohammad.—26, Brabourne Road, Calcutta.  
 Calcutta Traders Co.—28, Amratolla Street, Calcutta.  
 Calcutta Trading Corp'n.—12, Lower Chitpur Road, Calcutta.  
 Capoo Private Ltd.—14, Netaji Subhas Road, Calcutta.  
 Champalal Kajaria.—53, Munshi Saddrudin Lane, Calcutta.  
 Chemi Colour Agency.—12, Bonfield Lane, Calcutta.  
 Chemical Agents (P.) Ltd.—25-C, Swallow Lane, Calcutta 1.  
 Chemical & Commercial Industry.—39A, Armenian Street, Calcutta.  
 Chemical & Solvents Ltd.—27/29, Brabourne Road, Calcutta.  
 Chemical Importers & Distributors (P) Ltd.—21/22, Radhabasar Street, Calcutta.

Chemical Supplies (Bengal) Co.—10-C, Gurudas Dutt Garden Lane, Calcutta 4.  
 Chemical Trading Co.—72, Canning Street, Calcutta.  
 Chemicals & Pharmaceuticals Supply Agency Ltd.—39, Strand Road, Calcutta 1.  
 Chunilal Radheshyam.—22, Amratolla Street, Calcutta.  
 Continental Trading Agency.—P-27, Prinsep Street, Calcutta 13.  
 Dalchand Omprakash.—4, Narayan Prasad Babu Lane, Calcutta 7.  
 Dass & Co. (India) Ltd.—43, Dharamtolla Street, Calcutta.  
 Dhudarmal Ramchander.—122, Cotton Street, Calcutta.  
 Dilsukhrai Hanumandass.—9, Bonfield Lane, Calcutta.  
 Dilsukhrai Krishna Kumar.—22, Bonfield Lane, Calcutta.  
 Dungarmal Taparia.—4, Bhawani Dutta Lane, Calcutta 7.  
 Durgaprasad Jagdishprasad.—7, Hastings Street, Calcutta.  
 Eagle Brothers.—32, Armenian Street, Calcutta.  
 Eastern Industrial Corp'n.—142/1, Radhabazar Street, Calcutta 1.  
 Fazlehusain & Bros.—44, Armenian Street, Calcutta 1.  
 F. E. Sachee & Co.—54/1, Canning Street, Calcutta.  
 Garg & Sons.—138, Canning Street, Calcutta.  
 Gemica Traders.—A 208-71, Canning Street, Calcutta.  
 Ghasiram Laxminarayan.—15, Portuguese Church Street, Calcutta.  
 Ghoneshamdas Jwalaprasad.—40, Strand Road, Calcutta.  
 Ghoneshamdass Tulsiram.—22, Raja Woodmunt Street, Calcutta.  
 Gopiram Onkarmal.—208, Cross Street, Calcutta.  
 Great Indian Mercantile Co. (P) Ltd.—278, Chittaranjan Avenue, Calcutta.  
 Gulabroy Mahadeo.—178, Mahatma Gandhi Road, Calcutta.  
 Hanuman Commercial Corp'n.—Post Box No. 6819, 9, Bonfield Lane, Calcutta.  
 Harkisandas & Co.—9, Amratolla Street, Calcutta.  
 Hatim & Co.—P-39, Mission Row Extension, Calcutta.  
 Hind Supply Co.—48, Canning Street, Calcutta.  
 Hind Traders.—171/1, Jogendranath Mukherjee Road, Salkia, (Howrah).  
 Hindusthan Chemical & Industry Corp'n.—22, Swallow Lane, Calcutta.  
 Hindusthan Industrial Corporation.—1-A, S. N. Banerjee Road, Calcutta 13.  
 Hiralall Kajaria.—157, Chittaranjan Avenue, Calcutta.  
 Hope Prudhomme & Co. Ltd.—7, Wellesley Place, Calcutta.  
 H. S. Das.—104/1, Serpentine Lane, Calcutta 14.  
 India Selling Organisation Ltd.—8, Brojodayal Shaw Road, Calcutta.  
 Ind Com. Ltd.—P-16, Kalakar Street, Calcutta 7.  
 Indo-European Agency Ltd.—67, Ezra Street, Calcutta.  
 Industrial Chemical Corporation, 22, Brabourne Road, Calcutta 1.  
 Industrial Importers (P) Ltd.—R. No. 49, 4, Dalhousie Square East, Calcutta.  
 International Chemical Co.—146, M. Gandhi Road, Calcutta 7.  
 International Trading Co.—28, Old China Bazar Street, Calcutta.  
 Jackaria Oosman & Co.—4, Rajmohan Street, Calcutta 1.  
 Jagannath Bajranglall.—32, Armenian Street, Calcutta.  
 Jagannath Jeetmal.—37, Armenian Street, Calcutta.  
 Jagadishprasad Pannalal & Co. Ltd.—27, Amratolla Street, Calcutta.  
 Jal Hind Supply Co. (P) Ltd.—48, Canning Street, Calcutta.  
 Jainarayan Nagarmal.—19, Mallick Street, Calcutta.  
 Jankidas Ramgopal.—48, Canning Street, Calcutta.  
 Jayantilal Jagdish Prasad.—117, Canning Street, Calcutta 1.  
 Jaysree Importers.—18, Amratolla Street, Calcutta.  
 Jiwanlal Taparia.—37, Armenian Street, Calcutta 1.  
 Jiwraj Heeralall & Co.—28/1, Armenian Street, Calcutta.  
 Jnanendra Lal Sircar.—19/1, Mathur Sen Garden Lane, Calcutta.  
 K. C. Dang.—2/A, Amratolla Lane, Calcutta.  
 K. D. More & Co.—43/44, Cotton Street, Calcutta.  
 Kajaria Sons Ltd.—32, Armenian Street, Calcutta.  
 Kanji Savaji Parekh (Calcutta) P. Ltd.—55, Canning Street, Calcutta.  
 Kedarnath Hulash Chand.—40-A, Armenian Street, Calcutta.  
 Khandelwal Bros. (P) Ltd.—33, Netaji Subhas Road, Calcutta.  
 Khatan Brothers P. Ltd.—24, Netaji Subhas Road, Calcutta.  
 Kheria Brothers.—5, Chaitan Sett Street, Calcutta.  
 Khubchand Baijnath.—77, Netaji Subhas Road, Calcutta.  
 Kishanalal Purushottamdas.—32, Ezra Street, Calcutta.  
 Lachhminarayan Ramjiwan.—13, Portuguese Church Street, Calcutta.  
 M. B. Zaki.—5, Pollock Street, Calcutta.  
 Mahabir Prasad Sitaram.—19, Mullick Street, Calcutta.  
 Mahadeo Prosad Dhandhania.—132, Cotton Street, Calcutta.  
 Mahadeo Ramkumar.—56, Sir Hariram Goenka Street, Calcutta.  
 Mangaldas Dwarkadas.—12, Portuguese Church Street, Calcutta.  
 Mansukhury Hazarimall.—201, Mahatma Gandhi Road, Calcutta.  
 Manoharlal & Co.—19, Mullick Street, Calcutta.  
 Merchants & Traders Ltd.—32, Armenian Street, Calcutta.  
 Milk Trading Co.—71, Canning Street, Calcutta.  
 Moda Brothers.—15, Sovaram Bysack Street, Calcutta.  
 Mohanlal Chandravan.—32, Armenian Street, Calcutta.  
 Mohatta Brothers.—19, British Indian Street, Calcutta.  
 Mohamed Ebrahim Mohamed Jaffer & Co.—10, Amratolla Lane, Calcutta.  
 Mohamed Noon Mohamed P. Ltd.—5, Pollock Street, Calcutta.  
 Monoharlal Mahabirprasad.—178, M. Gandhi Road, Calcutta 7.  
 Mulchand Marwari.—57, Saraju Sen Road, Alambazar, Calcutta 35.  
 Murlidhar Jaipuria.—30-A, Raja Nabo Kissen Street, Calcutta 5.  
 N. Manseta & Bros. (Cal.).—G. P. O. Box No. 885, Calcutta.  
 N. N. Biswas & Sons.—19, British Indian Street, Calcutta.



Narsingdas Biswanath.—3, Amratolla Street, Calcutta.  
 New India Chemicals.—52A, Indian Mirror Street, Calcutta 18.  
 New India Traders Corpn.—71, Canning Street, Calcutta.  
 Ntkuni Traders.—49, Muktarab Babu Street, Calcutta.  
 Odhavji Devidas & Co. (P) Ltd.—9, Armenian Street, Calcutta.  
 Oriental & Occidental Trading Co.—30, Brabourne Road, Calcutta.  
 Oswal Co. (P) Ltd.—14/2, Old China Bazar Street, Calcutta.  
 P. Vrajlal Dulabhdas & Co.—23, Brabourne Road, Calcutta.  
 Pannalall Kishanlal.—18, Amratolla Street, Calcutta.  
 Parasramka Commercial Co. Pvt. Ltd.—207, Mahatma Gandhi Road, Calcutta.  
 Parekh Brothers.—1, Portuguese Church Street, Calcutta.  
 Paul Chemicals Co.—19B, Pottery Road, Calcutta.  
 Pioneer Chemical Corpn.—P119, Ganesh Chandra Avenue, Calcutta.  
 Pioneer Industrial Syndicate.—67, Ezra Street, Calcutta 1.  
 Pokarmal Gurdhayal.—208, Cross Street, Calcutta.  
 Pranlal Bhagwanji.—10/1, Portuguese Church Street, Calcutta.  
 Purshottamdas & Co.—4, Doyahatta Street, Calcutta.  
 Radheshyam Sushilkumar.—48, Canal West Road, Calcutta.  
 R. K. Santosh.—C/o B. K. Shroff, A.C.A., 155, Chittaranjan Avenue, Calcutta.  
 R. Tibrowala & Co.—26/1, Armenian Street, Calcutta.  
 S. B. Poddar & Co.—178, Mahatma Gandhi Road, Calcutta.  
 S. Kushalchand & Co.—167, Old China Bazar Street, Calcutta.  
 Santosh Brothers.—28, Armenian Street, Calcutta.  
 Shamde Govindram.—208, Cross Street, Calcutta.  
 Sheobhagwan Gajedar.—113, Manohardas Katra, Calcutta.  
 Shewbuxrai Onkarmall.—26, Burtolla Street, Calcutta.  
 Shewbuxrai Rameshwarlal.—26, Burtolla Street, Calcutta.  
 Shivasdas Jethmall.—37, Armenian Street, Calcutta.  
 Shyamsundar Srilal.—135/B, Muktarab Babu Street, Calcutta.  
 Sohanlal Mohanlal.—5, Lucas Lane, Calcutta.  
 Soorajmull Nagarmull.—8, Dalhousie Square East, Calcutta.  
 Sovan & Co.—32, Armenian Street, Calcutta.  
 Spices (India) Ltd.—10, Amratolla Street, Calcutta.  
**SRICOL CHEMICAL INDUSTRIES PRIVATE LTD.**—25, Ganesh Chandra Avenue, Calcutta-13; Manufacturers of Dyestuffs Auxiliaries.  
 Srikanth & Co.—34, Burtolla Street, Calcutta.  
 Surajmull Murlidhar.—28, Amratolla Street, Calcutta.  
 Surendra Overseas (P) Ltd.—135, Canning Street, Calcutta.  
 Tarachand Agarwalla.—208, Cross Street, Calcutta.  
 Tolasaria & Co.—12, Sir Hariram Goenka Street, Calcutta.  
 United Chemical & Hardware Agency.—27/29, Brabourne Road, Calcutta.  
 United Drug & Chemical Co.—16, Bonfield Lane, Calcutta.  
 Universal Trading Co.—71, Canning Street, Calcutta.  
 Vachharaj Nemchand & Co.—10, Portuguese Church Street, Calcutta.  
 Vasant Corpn. Ltd.—28, Amratolla Street, Calcutta.  
 Victor Commercial Co.—44/45, Ezra Street, Calcutta 1.  
 West Bengal Supply Agency.—35, Armenian Street, Calcutta.

### CIGARETTES

Hindustan Tobacco Co.—21, Jatindra Mohan Avenue, Calcutta 6.  
 Imperial Tobacco Co. of India Ltd.—Circular Garden Reach Road, Kidderpore, Calcutta.  
 International Tobacco Co. of India Ltd.—12, Normal Lohia Lines, Calcutta.  
 National Tobacco Co. of India Ltd.—1 & 2, Old Court House Corner North Bldg., Calcutta.  
 Union Tobacco Co. Ltd.—23, Convent Road, Calcutta.

### CINEMA MACHINERY

**WESTREX CO.**—(Prop. Cinerama Pvt. Ltd.,) Lighthouse Cinema Bldg., 2, Humayan Place, Calcutta-13.

### CLEARING AND FORWARDING AGENTS

Amarchand Butail & Sons.—7, Chittaranjan Avenue, Calcutta 13.  
 Atlas Agency.—29, Strand Road, Calcutta.  
 Alex Miller P. Ltd.—7, Old Court House Corner, Calcutta 1.

**ARUN MUKHERJEE & CO. PRIVATE LTD.**—Customs Authorised Clearing & Shipping Agents, Storage, Transport, Labour, Insurance, Railway Bookings, Specialists in Handling Consignments of Steel, Fertilisers and Heavy Machinery; 12-A, Netaji Subhas Road, Calcutta-1; Phone: 225238; Dock Office: 117-A, Circular Garden Reach Road, Calcutta-23; Phone: 456110, Grams: "QUICKSERVE".

Bharat Clearing and Forwarding Agency.—27, Prinsep Street, Calcutta.  
 Bose & Co.—44/2, Chakrabaria Road South, Calcutta 25.  
 Chatterjee Sarat & Co. Ltd.—3, Mangoe Lane, Calcutta.  
 Commercial Agencies.—5, Clive Ghat Street, Calcutta 1.  
 Cox & Kings (Agents) Ltd.—A-3, Gillander House, Netaji Subhas Road, Calcutta 1.  
 Express Clearing Agency.—14/2, Old China Bazar Street, Calcutta.

**FALLOON'S AGENCY.**—Clearing & Shipping Agents, 5, Mission Row, Calcutta-1. Grams: "OTAIND". Phones: 236781-2. Associates: OTA INDIA; Central Office: Bombay (Phone: 212602), Bombay Office (Phones: 254772 & 256592), Kandla Office (Phone: 2145—Gandhidham), New Delhi Office (Phone: 43799).

Free India Clearing Agency.—23, Mangoe Lane, Calcutta.

International Clearing and Shipping Agency.—Tosh Bldg., P.31/32, India Exchange Place, Calcutta.

Independent Transport and Shipping Agency.—P-40.—Princep Street, Calcutta.

Oriental Clearing Agency.—9, Pollock Street, Calcutta.

**OTA INDIA.**—Clearing, Shipping and Stevedoring Agents; Central Office: 159, Colaba Road, Bombay-5. Grams: "CENOTA". Phone: 212602. Branches: Bombay (Phones: 254772 & 256592), Calcutta (Phone: 236781), Kandla (Phone: 2145—Gandhidham) and New Delhi (Phone: 43799).

Petero & Smith (I) Ltd.—17, Chowringhee, Calcutta 13.

Pioneer Consolidated Co. of India Ltd.—2, Clive Row, Calcutta 1.

Reliance Corporation P. Ltd.—6, Commercial Bldgs., Calcutta 1.

Reliance Corpn. P. Ltd.—6, Commercial Bldgs., Calcutta 1.

R. Sen & Co.—10/1, Elgin Road, Calcutta 20.

**UNITED CLEARING AGENCY (PRIVATE) LTD.**—Clearing & Forwarding Agents, 219-C, Old China Bazar Street, Calcutta 1. Phone: 22-1979.

W. R. Hildreth & Co.—45, Stephen House, Dalhousie Sqr., Calcutta.

### COCKS & VALVES

**ANNAPURNA METAL WORKS.**—Manufacturers of High Class Cocks and Valves for Water, Steam, Air, Gas or Oil Lines, 99/4, Bullygunge Place, Calcutta-19; Phone: 477820.

### COLD STORAGE

**AMERICAN REFRIGERATOR CO. LTD.**—Manufacturers of 'ARCO-BUSH' Coils 'ARCO' Air Conditioners & Water Coolers, Cold Storage, Refrigeration Equipment, Industrial Blowers; Sole Distributors 'TRANE & FRIGIDAIRE'; Phone: 237841 (4 Lines).

### COLLAPSIBLE GATE MANUFACTURERS & DEALERS

Bengal Collapsible Gate & Engg. Works.—1-2, Canal West Road, Calcutta 13.  
 Biswanath Collapsible Gate Co.—167, Bellaghata Main Road, Calcutta.  
 Calcutta Collapsible Gate Co. Ltd.—77, Netaji Subhas Road, Calcutta.  
 Hindustan Collapsible Gate Co. P. Ltd.—5, Bancharam Ankrur Lane, Calcutta 12.  
 India Collapsible Gate Co.—23, Picnic Garden Road, Tiljala, Calcutta.  
 India Gate Co.—5, New Bazar Lane, Calcutta.  
 National Collapsible Gate Co.—35, Akhil Mistry Lane, Calcutta 9.  
 Paris Collapsible Gate Co.—2 & 2, Rifle Road, Calcutta 17.

### COLLIERY EQUIPMENTS

Anantha Chatterjee & Son.—200, Belilios Road, Howrah.  
 B.M.S. Engineering Works P. Ltd.—3-1, Kali Prasad Chakrabarty Lane, Howrah.  
 G. N. Kolley.—207, Belilios Road, Howrah.  
 Gopinath Ray & Co. P. Ltd.—69, Panchanantola Road, Howrah.  
 Howrah Engineering Concern P. Ltd.—19, Maharshi Debendra Road, Calcutta 6.  
 Howrah Iron & Steel Works P. Ltd.—90, Benaras Road, Salkia.  
 K. P. Das & Sons P. Ltd.—179, Belilios Road, Howrah.  
 Panchkori Ghosh & Sons P. Ltd.—166, Belilios Road, Howrah.

### COMMUNICATIONS TEST EQUIPMENTS

**ASSOCIATED INSTRUMENT MFRS. (INDIA) PRIVATE LTD.**—B-5, Gillander House, Calcutta. Phone: 223304. Grams: "AIMIL".

### CONDIMENTS

**DAW SEN & CO. PRIVATE LTD.**—29, Dr. Suresh Sarkar Road, Calcutta 14. Manufacturers of Indian Condiments covering Chutneys, Pickles, Curry Powder and Curry Paste.

### CONDUIT PIPES

Bose Bros.—76, Benaras Road, Howrah.  
 Electric Products.—26, Burtolla Street, Calcutta.  
 Great Eastern Pipe Works.—Nimtolla Street, Calcutta.  
 International Wire Nail Mfg. Co.—7/1/1, Benaras Road, Salki, Howrah.  
 Kamala Sheet & Metal Industries.—98 & 99, Main Road, Bellaghata, Calcutta.



Kedarnath Parsotamdas & Co. (Private) Ltd.—37, Netaji Subhas Road, Calcutta 1.

M. Chandra & Co.—12, Lower Chitpore Road, Calcutta.

National Conduits.—138, Canning Street, Calcutta.

**NATIONAL CONDUITS.—Manufacturers and Suppliers of High grade Conduit Pipes & Accessories ; 15, Ganesh Chandra Avenue, Post Box 85 Calcutta-1 ; Phone : 233230, 239005, 239681, 237985 (Office) ; Factory : Regent grove, Tollygunge, Calcutta-40 ; Phone : 467437.**

S. D. Trading Co.—62, Netaji Subhas Road, Calcutta 1.

Shree Hanuman Steel & Pipe Works.—P.O. Box 6804, Calcutta.

### CONSULTING ENGINEERS

**CHATTERJEE & POLK** in collaboration with The J. G. White Engineering Corporation, a 75 year old firm of consultants of New York, U.S.A., now offers complete consultation service on all engineering problems, civil, mechanical, electrical and process engineering services of plants and industries, long span bridges, steel mill facilities, feasibility study & report and complete architectural and engineering services for large townships, multistoreyed flats & offices, auditoriums, etc.; Offices : Calcutta-23, Brabourne Road-1; New Delhi—C-504 Defence Colony-3 ; Phone : 22-9211/3 (Calcutta), 14265 (New Delhi).

### CONVEYORS, DESIGNERS AND MANUFACTURERS

New India Conveyor Co.—15, Pagiaputty, Calcutta 7.

Sterling India Co. P. Ltd.—68B, Dilkusha Street, Calcutta 17.

### COOLING TOWER MFRS.

**PAHARPUR TIMBERS PRIVATE LTD.—1-B, Judges Court Road, Calcutta 27. Phones : 451514 (Office), 452041 (Factory).**

### COTTON MERCHANTS

**GILL & CO. (PRIVATE) LTD.—4, Lyons Range, P.O. Box No. 13, Calcutta 1. Regd. Office : Indu House, Dougall Road, Ballard Estate, Bombay 1.**

### COTTON TEXTILE MACHINERY

India Machinery Co. Ltd.—29, Strand Road, Calcutta.

Machinery Mfrs. Corpn.Ltd.—P-61 B, Circular Garden Reach Road Kidderpore, Calcutta 23.

Modern Engineering Works.—12, Jadupandit Road, Calcutta 6.

### COTTON-WASTE MANUFACTURERS

Banka & Sons.—8, India Exchange Place, Calcutta.

Bharat Hardware & Textile Syndicate.—14, Netaji Subhas Road, Calcutta.

Khan Industries Ltd.—14, Hare Street, Calcutta 1.

Ladakchand O. Vora.—68-D, Netaji Subhas Road, Calcutta 1.

Textile Waste Co.—113-C, Netaji Subhas Road, Calcutta 1.

### CREDIT INFORMATION AND STATUS REPORTS

**COMMERCIAL CENTER, THE.—G.P.O. Box No. 38, Calcutta 1 (India) Office : 169/2, Sarat Ghosh Garden Road, Calcutta-31.**

### CYCLES & CYCLE ACCESSORIES

A. K. Bose & Co.—64, Bentinck Street, Calcutta 1.

A. Quader & Co.—P-48, Princep Street, Calcutta 13.

Associated Machinery Co. Pvt. Ltd.—8, India Exchange Place, Calcutta.

Banerjee Brothers.—4, Bentinck Street, Calcutta 1.

Banerji Cycle Industries.—17, Weston Street, Calcutta.

Bengal Bihar Cycle Industries.—33/3, Tangra Road, Calcutta.

Bentinck Cycle Co. P. Ltd.—1/2, Chowringhee Road, Calcutta.

Beriwala Brothers Ltd.—49/1, Princep Street, Calcutta 13.

Bharat Steel & Metal Industries.—Kali Muzumdar Road, Ghosuri P.O., Howrah.

Bombay & Calcutta Cycle Co.—P-39, Princepreet, Calcutta 13.

British & Continental Agency, 40, Strand Road, Calcutta 1.

Calcutta Cycle Trading Co.—1, Bentinck Street, Calcutta 1.

Calcutta Cycle Supply Co.—11-A, Lall Bazar Street, Calcutta 1.

Calcutta Motor and Cycle Co.—5, Bentinck Street, Calcutta.

Cameo Industries Ltd.—5, Bentinck Street, Calcutta 1.

Central India Machine Co.—155, Dharamtolla Street, Calcutta 13.

Chakralaya.—67, Bentinck Street, Calcutta 1.

Crescent Cycle & Motor Co.—158, Dharamtolla Street, Calcutta 13.

D. Das & Brothers.—67, Bentinck Street, Calcutta 1.

Dutt Master Cycle Industries.—22, R. G. Kar Road, Calcutta.

Eagle Cycles Ltd.—3, New Tangra Road, Calcutta.

East & West Agency.—79/1, Bentinck Street, Calcutta 1.

Eastern Cycle Co.—80/1, Bentinck Street, Calcutta.

Eastern Engineering Works.—56, Russa Road, Calcutta.

Excell Lamps & Products (India).—75, Lower Circular Road, Calcutta.

Ganguly Brothers.—62, Bentinck Street, Calcutta 1.

Ghosh & Sons.—31, Bentinck Street, Calcutta 1.

Gauranga Cycle Co.—62, Bentinck Street, Calcutta 1.

Gobindo Sheet Metal Works & Foundry.—74, Narkeldanga Main Road, Calcutta.

Hashabi & Co.—295, Bepin Behari Ganguly Street, Calcutta 12.

H. D. Nundy & Co.—50-6, Dharamtolla Street, Calcutta 13.

Hindustan Vehicles Ltd.—11, Clive Row, Calcutta.

India Cycle Manufacturing Co. Ltd.—8 & 9, Tiljala Road, Calcutta.

Indian Union Manufacturers Ltd.—190/2, Rash Behari Avenue, Calcutta.

Indophilips Industries P. Ltd.—3, Bentinck Street, Calcutta 1.

International Engineering Co.—17 & 18, Rafi Ahmed Kidwai Road, Calcutta 13.

J. J. Mallik & Brothers.—21, Bentinck Street, Calcutta 1.

J. K. Pal & Brothers.—P-39, Princep Street, Calcutta 13.

K. C. Ghosh & Brothers.—54, Bentinck Street, Calcutta 1.

Kashi Cycle & Rickshaw Co.—P-25, Princep Street, Calcutta 13.

Lakshmi Cycle & Motor Co.—64, Bentinck Street, Calcutta 1.

M. M. Ghose & Brothers.—61, Bentinck Street, Calcutta 1.

Mallik & Co.—10, Bentinck Street, Calcutta 1.

National Cycle Importing Co., 21, Bentinck Street, Calcutta.

Nibaran Chander Seth & Co.—65, Bentinck Street, Calcutta 1.

Nundy Brothers.—34, Dharamtolla Street, Calcutta 13.

Nundy & Co.—6, G.E. Ghosh Road, Calcutta 37.

Overseas Cycle Co.—3, Bentinck Street, Calcutta.

Paradise Cycle Co.—12, Mangoe Lane, Calcutta 1.

Pioneer Cycle Co.—66, Bentinck Street, Calcutta.

Pranjiwandas & Sons.—3, Bentinck Street, Calcutta 1.

R. K. Cycle Industries P. Ltd.—80, Lower Circular Road, Calcutta 14.

Republic Engineering Corporation Ltd.—7, Chowringhee Road, Calcutta 13.

Senco Engineering Works & Co. P. Ltd.—55/2, Sastitala Road, Calcutta 11.

Tara Cycle Stores.—17/19, R. G. Kar Road, Calcutta 4.

Tarun Cycle Co.—74, Bentinck Street, Calcutta 1.

Union Cycle Co.—62, Bentinck Street, Calcutta 1.

Universal Cycle Trading Corporation.—67, Bentinck Street, Calcutta.

Zenith Cycle Co.—65, Bentinck Street, Calcutta 1.

### CYCLES & MOTOR CYCLE MANUFACTURERS & DEALERS

Hindustan Bicycle Mfg. & Industrial Corpn. Ltd.—14, Netaji Subhas Road, Calcutta 1.

India Cycle Manufacturing Co., Ltd.—4, Clive Ghat Street, Calcutta 1.

International Engineering Co., The.—17, Rafi Ahmed Kidwai Road, Calcutta-13.

Senco Engineering Works & Co. Private Ltd.—55/2, Sastitala Road, Calcutta 11.

Sen-Raleigh Ltd.—Regd. Office : Mercantile Buildings, Lall Bazar Street, Calcutta 1.

### DAIRY PRODUCTS

Alphine Dairy & Farm.—Norton Bldgs., 1 & 2, Old Court House Corner, Calcutta 1.

Dangaich Traders Syndicate P. Ltd.—26, Prasanna Kumar Tagore Street, Calcutta 6.

Edward Keverter Ltd.—11-3, Lindsay Street, Calcutta 13.

Express Dairy Co. Ltd.—198, Bhupen Roy Road, Behala, Calcutta 34.

Magnolia Dairy Products (India).—3-B, Wellesley Street, Calcutta 13.

Mahananda Datta & Co. P. Ltd.—153/1, Cotton Street, Calcutta 7.

New Regent Dairy Ltd.—9, India Exchange Place, Calcutta 1.

Sircar Dairy & Farm P. Ltd.—22/3, K. C. Ghosh Road, Calcutta 50.

Sur's Dairy Farm.—P-11, Indra Biswas Road, Belgachia, Calcutta.

### DEBT COLLECTORS

**COMMERCIAL CENTER, THE.—G.P.O. Box No. 38, Calcutta-1. (India) Office : 169/2, Sarat Ghosh Garden Road, Calcutta-31.**

### DIESEL ENGINES & PARTS

Associated Exports Imports Corpn.—8-B, Lall Bazar Street, Calcutta 1.

Blackwood Hodge (India) Pvt. Ltd.—139, Beliaghata Road, Calcutta 15.

Components & Machinery Corpn.—9/12, Lall Bazar Street, Calcutta 1.

Edward & Co.—35, Chittaranjan Avenue, Calcutta 12.

General Industrial Stores Supplying Co. P. Ltd.—13, Canning Street, Calcutta.

General Trading Co.—138, Canning Street, Calcutta.

Indian National Diesel Engines Ltd.—Hal & Anderson Bldg., Park Street, Calcutta 16.

Industrial Gases Ltd.—138, Canning Street, Calcutta 1.

Kilburn & Co. Pvt. Ltd.—2, Fairlie Place, Calcutta 1.

Modern Engineering Co.—138, Canning Street, Calcutta.

Ram Krishan Kulwant Rai.—38, Netaji Subhas Road, Calcutta 1.

United Provinces Commercial Corporation, The.—6, Ganesh Chandra Avenue, Calcutta 13.

Volta Limited.—8, Netaji Road, Calcutta.



**DOORS & WINDOWS MANUFACTURERS**

- Andaman Timber Industries Ltd.—26, Chittaranjan Avenue, Calcutta 12.  
 Canton Carpentry Works Ltd.—14, Radhanath Chowdhury Road, Calcutta 15.  
 Debendra Nath Paul & Co.—39, Nirmal Chamber Street, Calcutta 12.  
 Ghanshyam Engineering Works.—17, Bhawani Dutt Lane, Calcutta 7.  
 Joynarain Jhunjhunwala.—65-1, Maharshi Debendra Road, Nimtollah, Calcutta.  
 Mansfield & Sons.—16, Radhanath Chowdhury Road, Calcutta 15.  
 P. C. Ganguly.—6, Brabourne Road, Calcutta.  
 Paharpur Timbers Private Ltd.—1-B, Judges Court Road, Calcutta 27.

**DRAWING & SURVEYING INSTRUMENTS**

- Adair Dutt & Co. India P. Ltd.—5, Dalhousie Square East, Calcutta.  
 B. S. Syndicate.—1, Mission Row, Calcutta.  
 B. Kelley & Sons.—27/1B, Simla Road, Calcutta.  
 Chandi Charan Nayak P. Ltd.—124/1, Bepin Behari Ganguly Street, Calcutta.  
 East End Engineers.—52, Bhopendra Bose Avenue, Calcutta.  
 Eastern Distributing Co. of India.—14/2, Old China Bazar Street, Calcutta.  
 G. C. Laha Pvt. Ltd.—1, Dharamtolla Street, Calcutta 13.  
 G. C. Sirkar & Co.—22, Sukeas Lane, Calcutta 1.  
 J. Sur & Co. Pvt. Ltd.—3, Dalhousie Square East, Calcutta.  
 Kilburn & Co. Pvt. Ltd.—2, Fairlie Place, Calcutta 1.  
 Killearn & Co.—106/C, Raja Dinendra Street, Calcutta 4.  
 K. K. Das & Co.—14-2, Old China Bazar Street, Calcutta.  
 National Instruments Ltd.—Raja Subodh Mullick Road, Calcutta.  
 Pioneer Stationery House.—Norton Buildings (North), Calcutta 1.  
 Products India P. Ltd.—114, Stephen House, Dalhousie Sqr., Calcutta 1.  
 Scientific Miscellany Co.—16, Pasupati Bose Lane, Calcutta 3.  
 Simco, 2A, Kedar Dutt Lane, Calcutta 6.

*For your Requirements of*

**SURVEY DRAWING INSTRUMENTS & EQUIPMENTS LIKE MINER'S DIAL, DUMPY LEVEL, THEODOLITES, ETC.**

*Contact*

**STANDARD TRADING CO.**

*Sales & H. O.*

*Show Room*

43, Ezra Street, 71/A-205, Canning Street,  
 Phone : 34-1134 Phone : 34-1665

CALCUTTA-1

**REPAIRING OF INSTRUMENTS ALSO UNDERTAKEN**

**SUR IRON & STEEL CO. PRIVATE LTD.**—Manufacturers of 'Sisco' Dumpy and Engineers Levels, Transit Theodolites; 18, Convent Road, Calcutta-14; Phone: 241307 (2 Lines).  
 Survey Industries.—2A, Congress Exhibition Road, Calcutta 17.

**DRUMS & CONTAINERS**

- Dhur Galvanising Works P. Ltd.—92, Ultadanga Main Road, Calcutta.  
 Kamala Factory.—13/3, Pathuria Ghat Street, Calcutta 6.  
 M. L. Day & Co.—57B, Chittranjan Ave., Calcutta 12.  
**METAL CONTAINER CO.**—Manufacturers of Welded Drums, Kegs, Tin Containers and Sheet Metal work of all types; P-2, Mission Row Extension, Calcutta-1; Phone: 23-6690.  
 Metal Products & Engg. Co.—124, M. Gandhi Road, Calcutta 7.

**DYESTUFF MANUFACTURERS & DEALERS**

- Indian Chemical & Colour Works.—66, Simla Street, Calcutta.  
 Luxmi Narayan Dyestuff & Chemical Works P. Ltd.—65-1, Prince Anwar Shah Road, Tollygunj, Calcutta 13.  
 Naranarayan Dye-Stuff & Chemical Works Ltd.—2, Karunamoyee Ghat Road, P.O. Barisa, Calcutta 8.  
 Paramount Dyes & Chemicals P. Ltd.—P-15, Bentinck Street, Calcutta 1.  
 Premier Dyes & Chemicals P. Ltd.—9/4, Zakaria Street, Calcutta 1.

**EARTHMOVING MACHINERY & EQUIPMENT**

- Amalgamated Universal Agencies (Cal.).—2nd Floor, Block C-211, 71, Canning Street, Calcutta 1.  
 Associated Exports Imports Corp.—8-B, Lall Bazar Street, Calcutta 1.  
 Blackwood Hodge (India) Pvt. Ltd.—139, Bellaghata Road, Calcutta 15.  
 Components & Machinery Corp.—Mercantile Bldgs., Lall Bazar, Calcutta 1.  
**CONSTRUCTION EQUIPMENTS PARTS DISTRIBUTORS.**—5, Outram Street, P.B. No. 9040, Calcutta-16; Stockists and Dealers in Spare Parts of Letourneau Euclid, Mack, Allis Chalmers, Cummins, Caterpillar, Buda, G.M., All types of excavators; Phone: 447459 & 473238 (Residence).  
 Marshall Sons & Co. (India) Ltd.—33/1, Netaji Subhas Road, Calcutta 1.  
 Ramanlal Madanlal.—56, Burtolla Street, Calcutta 7.  
 Tractors (India) Ltd.—1, Taratolla Road, Garden Reach, Calcutta 24.  
**UNITED PROVINCES COMMERCIAL CORPORATION PRIVATE LTD.**—Distributors in India for Clark & Skoda earth-moving equipment, Ituber Motor Graders, Berliet Dumpers; 6, Ganesh Chandra Avenue, Calcutta; Phone: 233291 (5 Lines), Telex-505 UPCC CA.  
 Voltas Limited.—8, Netaji Road, Calcutta.  
 William Jacks & Co. Ltd.—16, Netaji Subhas Road, Calcutta 1.

**ELECTRIC FANS**

- Aero Flow Co.—16, Mondal Temple Road, Calcutta 33.  
 Asia Mechanical & Electrical Works Ltd.—3, Kaliprasad Chakravarty Lane, Kadamtolla, Howrah.  
 Beni Engineering Works Ltd.—1, Crooked Lane, Calcutta.  
 Bharat Electrical Industries Ltd.—52, Hindusthan Bldgs., 6-A, S. N. Banerjee Road, Calcutta 13.  
 Calcutta Electrical Mfg. Co. Ltd.—38, N. Subhas Road, Calcutta 1.  
**CALCUTTA FAN WORKS PRIVATE LTD.**—Manufacturers of all types of Domestic and Industrial Fans; 30, Chowringhee Road, Calcutta-16; Phone: 237552, 237553.  
 Clyde Fan Co. Ltd.—21/2, Chowringhee Road, Calcutta 13.  
 Electrical Distributors.—3, Mangoe Lane, Calcutta.  
 Engineering Works of India P. Ltd.—20, Ultadanga Road, Calcutta 4.  
 General Electric Co. of India Ltd.—Magnet House, Chittaranjan Avenue (South), Calcutta.  
 India Electric Works Ltd.—Behala, Calcutta 36.  
 India Reconstruction Corp. Ltd.—21-A, Gour Laha Street, Calcutta.  
**JAY ENGINEERING WORKS LTD.**—183-A, Prince Anwarshah Road, Calcutta 31. P.O. Box No. 2158, Calcutta; Phone: 463461 (9 lines); Grams: "USHAKO"—Calcutta. Manufacturers and Exporters of Usha Electric Fans, Ceiling, Table, Pedestal, Air-Circulator and Exhaust Fans and Fractional H. P. Motors.  
 Keymer Bagshawe & Co. (India) Pvt. Ltd.—22, Strand Road, Calcutta.  
 Marconi Electric Corporation P. Ltd.—117, Keshab Sen Street, Calcutta 9.  
 Metropolitan Enterprises P. Ltd.—28, Barrackpore Trunk Road, Calcutta 2.  
**PANDAY INDUSTRIES PRIVATE LTD.**—202/2, Netaji Subhas Chandra Bose Road, Calcutta 47.  
 Polar Electrical Fan Marketing Co.—168-B, Cotton Market, Calcutta 7.

**ELECTRIC LAMPS MANUFACTURERS**

- Asia Electric Lamp Co. P. Ltd.—45, Durgacharan Mukherjee Street, Bagbazar, Calcutta.  
 Bengal Electric Lamp Works Ltd.—7, Old Court House Street, Calcutta.  
 Bharat Electric Bulb Works Ltd.—1, Uma Kanta Sen Lane, Dum Dum, Calcutta.  
 Calcutta Electric Lamp Works Ltd.—3, Mangoe Lane, Calcutta 1.  
 Electric Lamp Mfrs. (India) Ltd.—1, Taratolla Road, Garden Reach, Calcutta.  
 Hindustan Lamps & Fluorescent Tubes Ltd.—P-88/4, Incinerator Road, Alipore, Calcutta 27.  
 India Industrial Works Ltd.—55/1, Dharamtolla Road, Salkia, Howrah Dist.  
 Orient Works.—11, Central Sinter Road, Cossipore, Calcutta.  
 Pradiy Lamp Works.—45, Armenian Street, Calcutta.  
 Radio Lamp Works Ltd.—10, Ganesh Ch. Avenue, Calcutta 13.

**ELECTRIC MOTORS, GENERATORS & SETS**

- Allied Electrical Corporation P. Ltd.—10/1, Elgin Road, Calcutta 20.  
 Associated Electrical Industries Mfg. Co. Ltd.—1, Taratolla Road, Garden Reach, Calcutta 24.



British India Electric Construction Co. Ltd.—21, Netaji Subhas Road, Calcutta.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.**—9-29, Mission Row Extension, Calcutta 13; Phone: 232114, 237221 & 239769; Grams: "EASTASIA"; P.O. Box 364; Manufacturers, Importers, Exporters and Engineers.

Electro and Machineries Corporation.—29, Strand Road, 1st floor, Calcutta 1.

F. Husain & Brothers.—28, Strand Road, Calcutta 1.

G. T. R. Co.—6, Netaji Subhas Bose Road, Calcutta.

India Electric Works, Ltd.—Diamond Harbour Road, Behala P.O., Calcutta.

Motor and Machinery Manufacturers Ltd.—31, Chittaranjan Avenue, Calcutta 12.

National Electrical Appliances Co.—10, The Mall, Dum Dum, Calcutta.

Nistatrim Electric Co. P. Ltd.—20, N. Subhas Road, Calcutta 1.

Power and Machinery (India) Ltd.—3, Mangoe Lane, Calcutta 1.

Workshop Equipment Corporation.—P-15, Bentinck Street, Calcutta 1.

**WEIGHTS & MEASURES SYNDICATE.**—Sales office: 14, Chandney Chowk Street, Calcutta-13; Manufacturing F.H.P. Motors 3 Phase and Single Phase, Silica Gel Breathers, Tapping Switches, Bushings etc.

### ELECTRIC SWITCHGEARS

**E. S. & E. CO. PRIVATE LTD.**—Manufacturers of High Tension Air & Oil Switches, Isolators, Air Break Switches, Metering Sets, Current and Potential Transformers; 59/6, Christopher Road, Calcutta-46, Phone: 445540.

J. K. Trading Co.—35, Ezra Street, Calcutta-1; Phone: 343645.

### ELECTRICAL ENGINEERS, MFRS., DEALERS & CONTRACTORS

A. C. Lahiri & Co. Private Ltd.—2, Church Lane, Calcutta 1.

Allied Electrical Corp'n. P. Ltd.—30/1, Elgin Road, Calcutta 26.

Associated Engineering Industries.—City Office: Mercantile Buildings, Block 'E', 1st Floor, Calcutta 1.

Bagchi Electric Co.—262, Upper Circular Road, Calcutta 6.

**BAJAJ ELECTRICALS LTD.**—10, Ganesh Chandra Avenue, Calcutta; Electrical Engineers, Manufacturers & Contractors; Phone: 237041, Grams: "SOFTLITE"; Head Office at Bombay.

Banerjee Electricals.—103-A, Cornwallis Street, Calcutta 4.

B. Jivon & Co. Pvt. Ltd.—97, Grey Street, Calcutta 5.

C. S. Niyogee.—P-546, Block 'N', New Alipore, Calcutta 33.

Calcutta United Engineers Pvt. Ltd.—10, British Indian Street, Calcutta 1.

Chatterji Brothers.—7, Pollock Street, Calcutta.

Consolidated Construction Co. Ltd.—P-12, Mission Row Extension, Calcutta 1.

Corona & Co.—123, Shyama Prasad Mukherjee Road, Calcutta 26.

De. Deb & Co.—13-C, Fordyce Lane, Calcutta 14.

Eastern Electric Co.—41-42, Dharamtolla Street, Calcutta 13.

Eastern Electric & Trading Co.—31, Chowringhee Road, Calcutta 16.

Eastern Mechanical & Electrical Industries P. Ltd.—15, Chittaranjan Ave., Calcutta 13.

Electrical Enterprisers.—5, Clive Row, Calcutta.

Engineers Syndicate (India) Pvt. Ltd.—21, Old Court House Street, Calcutta 1.

Faraday Corporation Pvt. Ltd.—309, Bowbazar Street, Calcutta 12.

Friend's Engineering Co. Pvt. Ltd.—6-A/1, Durga Pituri Lane, Calcutta 12.

G. N. Mookerji.—12-B, Lower Chitpur Road, Calcutta 1.

Ganapati Industries & Trading Corporation Pvt. Ltd.—2, Church Lane, Calcutta 1.

Garden Reach Workshops Pvt. Ltd.—43/46, Garden Reach Road, Calcutta 24.

General Electric Co. of India Pvt. Ltd.—Magnet House, Chittaranjan Avenue, Calcutta 13.

Ghosh Brothers.—71, Patuatola Lane, Calcutta 9.

Gossen & Co. (India) Pvt. Ltd.—35/1C, McLeod Street, Calcutta 16.

Greaves Cotton & Crompton Parkinson Pvt. Ltd.—4, Mission Row Extension, Calcutta 1.

H. N. Electricals.—29-A, Bentinck Street, Calcutta 1.

Haider & Co.—282, Upper Chitpur Road, Calcutta 5.

Harry & Co.—161/1M, Upper Chitpur Road, Calcutta 5.

Hind Electronics Pvt. Ltd.—38, Netaji Subhas Road, Calcutta 1.

Hindustan Dealers Ltd.—54, Ezra Street, Calcutta 1.

Indian Cable Co. Ltd.—9, Hare Street, Calcutta 1.

**INDIAN ENGINEERING CO.**—P-59, Dr. Sundari Mohan Avenue, Calcutta 14. Phones: 444477 & 444512. Grams: "SPOTWELD". Also at Bombay, New Delhi, Madras & Bangalore.

Indian Overseas Trading Co.—54, Ezra Street, Calcutta 1.

Indo American Commerce P. Ltd.—35, Chittaranjan Ave., Calcutta 12.

Indo Imper Ltd.—2, India Exchange Place, Calcutta 1.

Industrial Engineers.—3, Mangoe Lane, Calcutta 1.

**KAYCEE INDUSTRIES LTD.**—2, Woodburn Court, 10, Elgin Road, Calcutta; Agents for Hind Rectifiers Ltd., Manufacturers of Selenium and Silicon Semi-conductors, Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-chemical Industries, 'Kaycee' Rotary, Toggle, Heat Control and Airconditioner Switches, 'Kaycee' Domestic and Bulk type water meters. Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay; Phone: 263521, Grams: 'TURNRITE'; Branches: Delhi, Madras & Kanpur.

Martin Burn Ltd.—12, Mission Row, Calcutta 1.

Mehareswari Electric Works.—87-B, Sarat Bose Road, Calcutta 26.

Metropolitan Electric & Engg. Co.—22, Ezra Street, Calcutta 1.

Midland Electric Co.—34, Ezra Street, Calcutta 1.

Middleton Engineering Co.—Queen's Mansions, Park Street, Calcutta 16.

Mitra & Co.—15, Shyama Charan Dey Street, Calcutta 12.

National Electrical Industries.—P-56, Ananda Palit Road, Calcutta 14.

National Engineers & Traders.—12A, N. Subhas Road, Calcutta.

National Supply Co.—5, Prinsep Street, Calcutta 13.

New India Electric Co.—1, Manook Lane, Calcutta 1.

Omega Engineering Works Pvt. Ltd.—132/3-B, Cornwallis Street, Calcutta 4.

Otis Elevator Co. (India) Pvt. Ltd.—207, Lower Circular Road, Calcutta 16.

P. Bose.—1/1-A, Herambo Das Lane, Calcutta 9.

Pandey Engineers (Electrical) Pvt. Ltd.—160, Harrison Road, Calcutta 7.

Popular Electric Co. Pvt. Ltd.—36, Ezra Street, Calcutta 1.

Preston Electric Co. (I) P. Ltd.—2, Madan Street, Calcutta 13.

Progressive Engineers Pvt. Ltd.—14, Bentinck Street, Calcutta 1.

Roos Electrical Works.—2, Lindsay Street, Calcutta 16.

Russa Garage & Electrical Works Pvt. Ltd.—3, Mangoe Lane, Calcutta 1.

S. S. Bagchi.—75, Bechu Chatterjee Street, Calcutta 9.

S. K. Chatterjee Electricals Pvt. Ltd.—10, Waterloo Street, Calcutta 1.

S. K. Mitra & Co. Private Ltd.—P-6, Grey Street Extension, Calcutta 4.

**SATAL ENGINEERING WORKS.**—Electrical Installation of all descriptions undertaken, Repairs in all sections executed with satisfaction; 16, British India Street, Calcutta-1. Phone: 233811 & 236523.

Satish Brothers Pvt. Ltd.—202-A, Harish Mukherjee Road, Calcutta 26.

Scientific Repairs & Trading Co.—27, Beniapukur Road, Calcutta 14.

Sen & Co.—99/1, Serpentine Lane, Calcutta 14.

**SERVICE & SUPPLY AGENCY.**—Authorised Dealers in AEL, SIEMENS & ECE Products; Dealers in Electric Motors, Starters, Switchgears, Transformers & Pumps; P-40, Mission Row Extn., Calcutta-13; Phone: 23-1614/7544.

Sett & Brothers.—14, Bentinck Street, Calcutta 1.

Shanker Electric Co.—2, Doyahatta Street, Calcutta 7.

Shewratan & Co. Pvt. Ltd.—14, Weston Street, Calcutta.

Sibani Electronics.—P-36, Radhabazar Street, Calcutta 1.

Simpson & Ferris Pvt. Ltd.—321/11, Russa Road South, Tollygunge, Calcutta 38.

Techno Electric Corporation.—36, Ezra Street, Calcutta 1.

T. Madan & Co. Pvt. Ltd.—12, Lower Chitpur Road, Calcutta.

Town Talk Co.—1, Prana Nath Sen Lane, Calcutta 6.

United Electric & Engineering Co.—21, Ezra Mansions, Calcutta.

Universal Electric & Cycle Co.—23-F, Russa Road, Calcutta 2.

Universal Eng. Co.—99-D, Kalighat Road, Calcutta 26.

### ELECTRICAL GOODS & APPLIANCES

Associated Electrical Industries Pvt. Ltd.—Crown House, 6, Mission Row, Calcutta.

Associated Electro Mechanical Engineers P. Ltd.—7, Lower Chitpur Road, Calcutta 1.

Auto Electric Industries.—14, Gour Laha Street, Calcutta 6.

Bajaj Electricals Ltd.—10, Ganesh Ch. Avenue, Calcutta.

Ballygunge Mechanical Works.—Bondel Road, Ballygunge, Calcutta.



Bells Electrical Corporation P. Ltd.—P-36, India Exchange Place, Calcutta 1.  
 Bengal Standard Electric Co.—Sikdar Bagan, Calcutta.  
 Bengal Standard Engineering Works Ltd.—172-A, Upper Circular Road, Calcutta.  
 Bharat Electrical Industries Ltd.—6-A, S. N. Banerjee Road, Calcutta 13.  
 B. M. Singh & Sons.—1, Crooked Lane, Calcutta 1.  
 British Engineering Corp.—91, Netaji Subhas Road, Calcutta 1.  
 British India Electric Construction Co. Ltd.—21, Netaji Subhas Road, Calcutta.  
 Calcutta (Elec. & Mech.) Engineers Private Ltd.—27/2C, Strand Road, Calcutta.  
 Carbrush Engineering Co.—190, Maharshi Debendra Road, Calcutta 6.  
 Casting Corp. (India) Ltd.—45, Madhusudan Pal Choudhary Lane, Howrah.  
 Cleco Pvt. Ltd.—2/1, Barrackpore Trunk Road, Baranagore, Calcutta 36.  
 Clyde Fan Co. Pvt. Ltd.—Raj Bahadur Road, Behala, Calcutta 24.  
 Continental Electric & Trading Co.—26/1, Pollock Street, Calcutta 1.  
 Corporated Electrical Industries P. Ltd.—72, Rash Behari Ave., Calcutta 26.  
 Cosmo Electric Ltd.—8, Krishnaram Bose Street, Calcutta 4.  
 Cyma Electric Works.—12, Chapel Road, Hastings, Calcutta 22.  
 D. N. Singha & Co. Ltd.—6/1, Sitanath Bose Lane, Salkia, Howrah Dist.  
 Durga Engineering Works.—145, Dharamtolla Street, Calcutta 13.  
 East Asiatic Industries Ltd.—25, Southend Park, Calcutta.  
 Electric Construction & Equipment Co., Ltd.—9, Kaliprasanna Singhee Road, Calcutta 12.  
 Electric Products.—26, Burtolla Street, Calcutta 7.  
 Electrical Apparatus Pvt. Ltd.—54, Ezra Street, Calcutta 1.  
 Electrical Enterprises.—5, Clive Row, Calcutta 1.  
 Electrical Equipment & Engineering Co.—29, Kaliprasad Banerjee Lane, Howrah.  
 Electrical Industries Corp.—33, Brabourne Road, Calcutta.  
 Electrical machines Corp. P. Ltd.—136, Jessore Street, Calcutta 28.  
 Electrical Mfg. Co. Ltd.—E.M.C. Gardens, 136, Jessore Road, Dum Dum, Calcutta.  
 Electrical Storage Co. P. Ltd.—112, Narkeldanga Main Road, Calcutta 11.  
 English Electric Co. of India (Pvt.) Ltd.—D-3, Gillander House, 8, Netaji Subhas Road, Calcutta.  
 Essen Electrical Accessories Mfg. Ltd.—1-A, Lower Circular Road, Calcutta.  
 General Electric Co. of India Pvt. Ltd.—Magnet House, Chittaranjan Avenue, Calcutta 13.  
 Ghosh Electricals.—35, Chittaranjan Avenue, Calcutta 12.  
 G. T. B. Co. Ltd.—12, Netaji Subhas Road, Calcutta.  
 Hindustan Electric Co. Ltd.—184, J. N. Mukerjee Road, Salkia, Howrah.  
 Hindusthan Electric & Engineering Co.—64 & 64-1, Beadon Street, Calcutta 6.  
 Hindustan General Electrical Corp. Ltd.—25, Brabourne Road, Calcutta.  
 Hindustan Industrial Syndicate.—2, Rash Behari Avenue, Calcutta 26.  
 India Electric Works Ltd.—Diamond Harbour Road, Calcutta 34.  
 India Moulding Co.—2, Roberts Road, Dum Dum, 24 Parganas Dist.  
 India Reconstruction Corp. Ltd.—21-A, Gour Laha Street, Calcutta.  
 Jay Engineering Works Ltd.—183-A, Prince Anwar Shah Road, Dhakuria, Calcutta 31.  
 Jaybee & Brothers.—138, Canning Street, Calcutta.  
 Kalinga Industries Ltd.—33, Chittaranjan Avenue, Calcutta 12.  
**LUZ ELECTRICALS PRIVATE LTD.—35, Chittaranjan Avenue, Calcutta 12.**  
 Macmahon & Co.—71-A, Netaji Subhas Road, Calcutta.  
 Mayfair Electrical Equipment Industries.—177A, Chittaranjan Ave., Calcutta 7.  
 Motor & Machinery Mfrs. Ltd.—31, Chittaranjan Avenue, Calcutta 12.  
 Mullick, B. C. & Co.—25-A, Balaram Ghose Street, Calcutta 4.  
**NATIONAL CONDUITS.—Manufacturers and Suppliers of Electrical Equipment, 15, Ganesh Chandra Avenue, Post Box 851, Calcutta-1 ; Phone : 233230, 239005, 239681, 237985 ; Factory: Regentgrove, Tollygunge, Calcutta-40 ; Phone : 467437.**  
 New India Electric Co.—1, Manook Lane, Calcutta 1.  
 Orient General Industries Ltd.—6, Ghore Bibi Lane, Narkeldanga, Calcutta 11.  
 Paul, B. K.—8, Waterloo Street, Calcutta.  
 P. D. Simpson & Co.—Kent House, 14, Ganesh Chandra Avenue, Calcutta.  
 Philips India Ltd.—Philips House, 7, J. C. Madhab Road, Calcutta 20.  
 Power Transmission & Construction Co.—91, Netaji Subhas Road, Calcutta.  
 Radon House.—7, Sirdar Sankar Road, Calcutta 26.  
 Ray, B. B. & Co.—Windsor House, P-14, Bentinck St., Calcutta.

S. D. Trading Co.—62, Netaji Subhas Road, Calcutta 1.  
 Sett & Co.—38, Pramanick Ghat Road, P.O. Baranagore, Calcutta 36.  
 Shree Nursingsahay Mudungopal Electric Co. Pvt. Ltd.—55, Ezra Street, Calcutta 1.  
 Stone, J. & Co. (India) Pvt. Ltd.—5, Hide Road, Kidderpore, Calcutta 23.  
 Suburban Electrical Engineering Co. Private Ltd.—34-A, Ananda Pallit Road, Calcutta 14.  
 Surya Engineering Ltd.—209, Picnic Garden Road, Calcutta 39.  
 Swadeshi Industries Ltd.—142-A, Jammalal Bajaj Street, Calcutta 7.  
 Technical Works.—9, Saha Lane, Calcutta 7.  
 United Flash Industries P. Ltd.—46, Muraripukur Road, Calcutta 1.  
**UNIVERSAL ELECTRICS LTD.—15, India Exchange Place, Calcutta 1; Manufacturers and Suppliers of House Service Electricity Meters.**

### ELECTRICAL INSTRUMENTS & METERS

**OVERSEAS TRADE CORPORATION.—Ammeters, Voltmeters, Frequency Meters, Megger Insulation Testers, Tong Testers, Earth Testers, Power Factor Meters, Single and Three Phase energy Meters and all kinds of Instruments ; 133, Canning Street, Calcutta-1 ; Phone : 226540/220664.**

### ELECTRODES

Cosmopolitan Trading Co.—138, Canning Street, Calcutta-1; Phones: 224798 & 220987.

**INDUSTRIAL GASES LTD., THE.—15, Ganesh Chandra Avenue, P.O. Box 853, Calcutta 1. Phones : 233230, 239005, 239681, 237985 & 239981; Manufacturers and Distributors of all kinds of Welding Electrodes, Welding Rods & Fluxes; Agents for Lincoln Electric Co. Ltd.; U.K. Sustolk Iron Foundry, U.K. & Unitor A. S. Norway.**

### ELECTROPLATING & ELECTROPLATING MATERIALS

**KAYCEE INDUSTRIES LTD.—2, Woodburn Court, 10, Elgin Road, Calcutta; Agents for Hind Rectifiers Ltd., Manufactures of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-Chemical Industries, 'Kaycee' Rotary, Toggle, Heat Control and Airconditioner Switches, 'Kaycee' Domestic and Bulk type Water Meters; Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay; Phone: 263521. Grams: 'TURNRITE'; Branches: Delhi, Madras & Kanpur.**

**RELIABLE TRADING AGENCY.—W. Canning's and Indian make Electroplating Chemicals, Polishing Composition, Dynamos & Barrels, Mops and Industrial Brushes; 67/B, Netaji Subhas Road, Calcutta-1; Phone: 222277, 224774, 228562 and 348223.**

**SINHA ELECTRO-PLATERS.—Electroplaters of Chromium, Nickel, Copper, Oxidising, Bronze, Cadmium, Silver, Tin, Zinc, & Bright Zinc with passivation etc., 77, Dharamtolla Street, Calcutta-13; Phones: 241365.**

### ENGINEERS (MECHANICAL & ELECTRICAL), BUILDERS & CONTRACTORS

Air Equipment Works.—44/12, G. T. Road, Barnagore, Calcutta 36.  
 Ashok Engineering and Construction Co.—161/1, Mahatma Gandhi Road, Calcutta.  
 Asian Pipe Material and Hardware Co.—19, Brabourne Road, Calcutta 1.  
 Associated Engineers P. Ltd.—24, Netaji Subhas Road, Calcutta 1.  
 Bajrangbali Engineering Co. P. Ltd.—10-11, G. T. Road, Lilooh, Dt. Howrah.  
 Balillas Engineering Co.—137, Canning Street, Calcutta.  
 Banerjee Electricals.—103-A, Cornwallis Street, Calcutta 4.  
 B. R. Herman & Mohatta India Ltd.—19, British Indian St., Calcutta 1.  
 Bharat Engineering Works.—Saraogi Mansions, 243, Chittaranjan Avenue, Calcutta-6.  
 Bijay Engineering Works.—71, Canning Street, Calcutta.  
 Calcutta Casting & Engineering Works.—243, Chittaranjan Avenue, Calcutta-6.  
 Canton Carpentry Works P. Ltd.—14, Radhanath Chowdhury Road, Calcutta 15.  
 Consolidated Construction Co. P. Ltd.—P-12, Mission Row Extn., Calcutta 1.  
 Coomar Docking & Engineering Works.—36, Strand Road, Calcutta 1.  
 Cyma Engineering Co.—223, Bellis Road, Howrah.  
 Dhar Engineering Works.—77, Dharamtolla St., Calcutta 13.  
 Dodsai P. Ltd.—33, Chittaranjan Avenue, Calcutta 1.  
 Don Watson & Co. Ltd.—19, British Indian Street, Calcutta 1.  
 D. Wren & Co.—25, Swallow Lane, Calcutta 1.



Engineers Overseas Corporation P. Ltd.—42, Raja Santosh Road, Calcutta.  
 Gannon Dunkerley & Co. Ltd.—4, Lyons Range, Calcutta 1.  
 General Commercial Corporation.—8/1, Sidheswar Chandra Lane, Calcutta 12.  
 Great Eastern Mechanical Works.—Ichapore Road, Calcutta.  
 G.T.R. Company P. Ltd.—37, Dum Dum Road, Calcutta 30.  
 Hazra Engineering Co.—21/1A, Deshpriya Shasmal Road, Howrah.  
 Heros Engineering Works Ltd.—20, Paul Street, Calcutta.  
 Hind Constructions Ltd.—8, India Exchange Place, Calcutta 1.  
 Hindustan Development Corporation Ltd.—4, Chittaranjan Avenue, Calcutta 13.  
 Hindusthan Engineering & Construction Co.—2, Church Lane, Calcutta 1.  
 Howrah Electricals and Engineering Stores.—57/1, Dasarath Ghose Lane, Howrah.  
 Howrah Engineering Concern P. Ltd.—153-155, Madhusudan Pal Chowdhury Lane, Howrah.  
 Ibcen P. Ltd.—2, Fairlie Place, Calcutta 1.  
 International Combustion (I) P. Ltd.—101, Park St., Calcutta 16.  
 Jessop & Co. Ltd.—63, Netaji Subhas Road, Calcutta 1.  
 J. H. Fenner & Co. (I) Ltd.—Mercantile Buildings, Calcutta 1.  
 J. Sur & Co. P. Ltd.—3, Dalhousie Square East, Calcutta 1.  
 Kuljian Corporation.—7, Chittaranjan Avenue, Calcutta 1.  
 Kumar & Co.—135, Canning Street, Calcutta 1.  
 Lakshmi Narayan Engineering Works.—206, Belilios Road, Howrah.  
 Mansfield & Sons.—16, Radhanath Chowdhury Road, Calcutta 15.  
 Mechanical Engineering Co. P. Ltd.—25, Swallow Lane, Calcutta 1.  
 M. L. Sinha & Co. P. Ltd.—50, Ezra Street, Calcutta 1.  
 Model Engineering Works.—27, Pataldanga St., Calcutta 9.  
 Motwane P. Ltd.—25, Chowringhee, Calcutta 13.  
 National Planning & Construction Ltd.—16, Ganesh Chandra Avenue, Calcutta 13.  
 Paterson Engineering Co. P. Ltd.—21, Theatre Road, Calcutta 16.  
 P. C. Biswas & Co.—42, Russa Road East, Calcutta 33.  
 Peary & Co.—77, Dharamtolla St., Calcutta 13.  
 P. K. Mookherji & Co. P. Ltd.—D-1, Jagannath Ghat Road, Calcutta 7.  
 Sigma Engineering Co.—60, Dharamtolla Street, Calcutta 13.

**SIMPLEX CONCRETE PILES (INDIA) PRIVATE LTD.—**  
**Reinforced Concrete in-situ Piling Specialists etc. and Heavy**  
**Reinforced Concrete Foundation and Structural Engineers;**  
**103/3, D. H. Road, Calcutta-38; Phone: 455731 (4 Lines).**

S. L. Dutt & Co. P. Ltd.—42-1-2, Muraripukur Road, Calcutta 4.  
 S.R.T. Co. P. Ltd.—27, Beniapur Road, Calcutta 14.  
 Satel Engineering Works.—16, British Indian Street, Calcutta.  
 Senco Engineering Works.—55/2, Sastitola Road, Calcutta 11.  
 Sri Durga Engineering Works.—109, B. T. Road, Calcutta 35.

**THE TECHMECH (INDIA).—7, Swallow Lane, Calcutta 1.**  
**Engineers (Electrical & Mechanical) and Dealers in Electric**  
**Motors, Switchgears, Transformers, Cables, Generating**  
**Sets, Pumping Sets and every type of heavy electrical goods.**  
 West Engineering Works.—15, Mohendra Bose Lane, Calcutta 3.

## ENGINEERING

A. & J. Main & Co. Ltd.—16, Netaji Subhas Road, Calcutta 1.  
 Abjanabh Industries P. Ltd.—25, Burtolla Street, Calcutta 7.  
 ACC-Vickers Babcock Ltd.—1 & 3, Brabourne Road, Calcutta 1.  
 Acme Mfg. Co.—8/1, Esplanade East, Calcutta.  
 Advance Tube Co.—65-A, Netaji Subhas Road, Calcutta 1.  
 Agrind Fabricators Ltd.—8, Ganesh Chandra Avenue, Calcutta 13.  
 American Refrigerators Co.—12D, Park Street, Calcutta.  
 Anand Metal & Steel Works.—137, Canning Street, Calcutta 1.  
 Ancillary Industries Cranks P. Ltd.—Mercantile Bldgs., Lall Bazar, Calcutta 1.  
 Angus Engineering Works.—3, Clive Row, Calcutta 1.  
 Annapurna Metal Works.—3, Ashu Biswas Road, Bhowanipur, Calcutta.  
 Apeejay Structurals Ltd.—47, Hide Road Extension, Calcutta 27.  
 A. P. V. Engineering Co. Pvt. Ltd.—41, Chowringhee Road, Calcutta.  
 Arim Tin & Steel Works.—258-4, Upper Circular Road, Calcutta 6.  
 Associated Aesby Industries Pvt. Ltd.—22, Strand Road, Calcutta 1.  
 Associated Mfg. Co. Pvt. Ltd.—6, Kissendayal Jalan Road, Salkia, Howrah.  
 A. Stock & Co. Ltd.—8, Garagacha Road, Calcutta 27.  
 Atlas Works P. Ltd.—119, Ripon Street, Calcutta 16.  
 Atta's Iron Foundry.—171, Grand Trunk Road (N), Salkia, Howrah.  
 Avery Co. of India P. Ltd.—28-2, Waterloo Street, Calcutta.  
 B. B. Herman & Mohatta (India) P. Ltd.—19, British Indian Street, Calcutta.  
 Babcock & Wilcox of India Ltd.—Ilaco House, 1 & 3, Brabourne Road, Calcutta 1.  
 Ballygunge Engineering Works.—33-1-1, Kankulia Road, Calcutta 19.  
 Bando & Co. Ltd.—35, Diamond Harbour Road, Calcutta 27.  
 Banerjee, Chakraborty & Co. P. Ltd.—135, Canning Street, Calcutta 1.  
 Bantra Engineering Works.—233, Belilios Road, Howrah.  
 Barick Iron Foundry & Engineering Works.—194, Vivekananda Road, Calcutta 6.

Batliboi & Co.—P-34, Mission Row Extension, Calcutta.  
 Bell's Asbestos & Engg. (I) P. Ltd.—24, Chittaranjan Avenue, Calcutta 12.  
 Bengal Industries.—132, Cotton Street, Calcutta.  
 Bengal Ingot Co. P. Ltd.—5, Hide Road, Kidderpore, Calcutta.  
 Bengal Iron & Steel Works.—121, Raja Dinendra Street, Calcutta 4.  
 Bengal Iron Works Ltd.—16-2, Chatterjeepara Lane, Howrah.  
 Bengal Rolling Mills Ltd.—86B, Netaji Subhas Road, Calcutta.  
 Beni Engineering Works.—1, Crooked Lane, Calcutta.  
 Bharat Barrel & Drum Mfg. Co. Ltd.—103/1, Dharamtolla Street, Calcutta 13.  
 Bharat Steel & Metal Industries.—14/2, Old China Bazar Street, Block No. 169, Calcutta.  
 Bharatia Commercial Co. Ltd.—P-23-24, Radhabazar Street, Calcutta.  
 Bhabia Engineering Works.—22, Canal West Road, Calcutta 4.  
 Bihar Firebricks & Potteries Ltd.—22, Strand Road, Calcutta.  
 Birkmyre Brothers Ltd.—87, Stephen House, 4, Dalhousie Square East, Calcutta.  
 Birla Boiler & Heavy Engineering Works.—8, India Exchange Place, Calcutta 1.  
 Blackwood Hodge (India) Pvt. Ltd.—139, Beliaghata Road, Calcutta.  
 Braithwaite & Co. (India) Ltd.—Clive Works, Hide Road, Kidderpore, Calcutta.  
 Braithwaite Burn & Jessop Construction Co. Ltd.—P-13, Mission Row Extn., Calcutta.  
 Bridge & Roof Co. (India) Ltd.—21, Netaji Subhas Road, Calcutta.  
 Britannia Building & Iron Co. Ltd.—Stephen House, 4, Dalhousie Sqr. East, Calcutta.  
 Britannia Engineering Co. Ltd.—3, Netaji Subhas Road, Calcutta.  
 British India Electric Construction Co. Ltd.—21, Netaji Subhas Road, Calcutta.  
 Burn & Co. Ltd.—Howrah Iron Works, 12, Mission Row, Calcutta.  
 C. Comens & Sons Ltd.—103/3, Diamond Harbour Road, Calcutta 38.  
 Calcutta Engineering & Mfg. Co.—108-1, Benaras Road, Salkia.  
 Calcutta Tramways Co. Ltd.—P4, Mission Row Extension, Calcutta.  
 Calcutta Wire Works.—6, Tiljala Road, Calcutta 17.  
 Chaliah Rolling Mills.—6, Mission Row, Calcutta 1.  
 Ching Wah & Co. P. Ltd.—118, Ripon St., Calcutta 16.  
 Coles Cranes of India Ltd.—1, Taratolla Road, Calcutta 24.  
 Coomar Docking & Engineering Works.—36, Strand Road, Calcutta 1.  
 D. K. Das & Co. Ltd.—233, Belilios Road, Howrah.  
 Dalmia Iron & Steel Ltd.—Stephen House, 4, Dalhousie Square East, Calcutta 1.  
 Davidson of India P. Ltd.—10, Middleton Row, Calcutta 16.  
 Davy & United Engineering Co. Ltd.—Simon House, Calcutta 27.  
 Debendra Nath Paul & Co.—39, Wellington Street, Calcutta 12.  
 Delta Engineering & Foundry Works.—177, Muktaream Babu Street Calcutta 7.  
 Development of Metal Industries Ltd.—72/1, Lansdowne Road, Calcutta.  
 Dewrance Macneill & Co. Ltd.—2, Fairlie Place, Calcutta 1.  
 Dey's Engineering Co.—237-K, Manicktolla Main Road, Calcutta 11.  
 Diana Rolling Shutters & Engineering Works.—114, Princep Street, Calcutta 13.  
 D. N. Bose & Co. P. Ltd.—12, Kalidas Sinha Lane, Calcutta 9.  
 D. N. Dass & Co.—25/A, Beliaghata Main Road, Calcutta 10.  
 Dorman Long & Co. Ltd.—8, Netaji Subhas Road, Calcutta 1.  
 Durga Rolling Mills Ltd.—197/1, G. T. Road, Ghosury, Howrah.  
 Dutt & Co. P. Ltd., S.L.—12-1-2, Muraripookur Road, Calcutta 4.  
 Eastern Economic Engineering Co.—24, Strand Road, Calcutta 1.  
 Eastern Equipment & Sales Ltd.—24B, Park Street, Calcutta 16.  
 Economic Tanks Supply Co.—100, Harrison Road, Calcutta 7.  
 Electric Construction & Equipment Co. Ltd.—9, Kaliprasanna Singhee Road, Calcutta 2.  
 Engineering Works of India (P) Ltd.—1/4C, Gunfoundry Road, Calcutta 2.  
 Eyre Smelting P. Ltd.—5, Hide Road, Kidderpore, Calcutta 23.  
 Ganesh Industries.—2, Haren Mukherjee Road, P. O. Belurmath, Howrah.  
 Ganges Galvanizing Works (I) P. Ltd.—14 & 14/1, Kissen Dayal Jalan Rd., P. O. Ghosury, Howrah.  
 George Salter India P. Ltd.—Chartered Bank Bldgs., Calcutta 1.  
 Gobindo Sheet Metal Works & Foundry.—76, Narkeldanga Main Road, Calcutta.  
 Godrej & Boyce Mfg. Co. Ltd.—9, Brabourne Road, Calcutta.  
 Goodman & Co. (I) Ltd.—38, Netaji Subhas Road, Calcutta.  
 Gramophone Co. Ltd.—33, Jessore Road, Dum Dum, 24-Parganas.  
 Grant James P. Ltd.—8A & B, Lower Bawdon Street, Calcutta 20.  
 Greaves Cotton & Crompton Parkinson P. Ltd.—4, Mission Row Extension, Calcutta.  
 Gresham & Craven of India P. Ltd.—31, Chittaranjan Avenue, Calcutta.  
 Guest, Keen, Williams Ltd.—41, Chowringhee Road, Calcutta.  
 Harbanslal Malhotra & Sons P. Ltd.—18, Netaji Subhas Road, Calcutta.  
 Harshadray P. Ltd.—22, Brabourne Road, Calcutta.  
 Hazra Engineering Works.—13, Rani Rashmoni Road, Calcutta 13.  
 Hind Constructions Ltd.—8, India Exchange Place, Calcutta.



- Hind Tin Industries.—6, Jadulal Mullick Road, Calcutta 6.  
Hind Wire Industries.—P-16, Kalakar Street, Calcutta.  
Hindusthan Development Corpn. Ltd.—4, Chittaranjan Avenue, Hindusthan Bldg., Calcutta.  
Hindusthan Machineries Ltd.—220-A, Rash Behari Avenue, Calcutta 19.  
Hindusthan Sheet & Metal Co. P. Ltd.—9, Clive Row, Calcutta.  
Hindusthan Wire & Metal Products Ltd.—87/74, Stephen House, 4, Dalhousie Sqr. East, Calcutta.  
Hoare Miller & Co. Ltd.—Mfg. Divn., 5, Fairlie Place, Calcutta 1.  
Holman-Climax Mfg. P. Ltd.—Chartered Bank Bldgs., Calcutta 1.  
Hooghly Docking & Engineering Co. Ltd.—12, Mission Row, Calcutta.  
Hope's Metal Windows India Ltd.—21, Netaji Subhas Road, Calcutta 1.  
Howrah City Engineering Co.—75, Panchanantola Road, Howrah.  
Howrah Iron Works.—Nityadhan Mukherjee Road, Howrah.  
Howrah Trading Co. Ltd.—7, Dalhousie Square East, Calcutta 1.  
Ideal Industries & Construction Co. (P) Ltd.—44, Chittaranjan Avenue, Calcutta 12.  
Imperial Engineering Works P. Ltd.—122, Bellios Road, Howrah.  
India Engineering Co.—20, Sree Kissen Vakant Lane, Howrah.  
India Industrial Works P. Ltd.—55/1, Dharamtolla Road, Malipanchghora, Howrah.  
India Machinery Co. Ltd.—29, Strand Road, Calcutta.  
India Wire Nail & General Trading Co.—178, Mahatma Gandhi Road, Calcutta.  
Indian Die Casting Co. (P) Ltd.—P-2, Taratolla Road, Calcutta 24.  
Indian Iron & Steel Co. Ltd.—12, Mission Row, Calcutta.  
Indian Oxygen Ltd.—48, Diamond Harbour Road, Kidderpore, Calcutta.  
Indian Standard Wagon Co. Ltd.—12, Mission Row, Calcutta.  
Industrial Containers Ltd.—21, Netaji Subhas Road, Calcutta 1.  
Industrial Electrodes & Gauges P. Ltd.—138, Canning Street, Calcutta 1.  
International Combustion (India) P. Ltd.—101, Park Street, Calcutta 16.  
International Wire Nail Mfg. Co. Ltd.—196B, Chittaranjan Avenue, Calcutta 7.  
Iron Founders & Fabricators.—24, Belur Road, Lilluah, Howrah.  
J. B. Advani & Co. Pvt. Ltd.—P-38, Mission Row Extn., Calcutta 1.  
J. C. Coondoo & Sons.—22, Raja Woodmunt Street, Calcutta 1.  
J. J. H. Industries P. Ltd.—174, Mahatma Gandhi Road, Calcutta 7.  
James Alexander & Co. Ltd.—15, Watgunge Street, Calcutta 23.  
Jay Engineering Works Ltd.—183A, Prince Anwarshah Road, Calcutta 31.  
Jeewanlal (1929) Ltd.—31, Netaji Subhas Road, Calcutta.  
Jessop & Co. Ltd.—63, Netaji Subhas Road, Calcutta.  
Jewell Filter Co. Ltd.—56A, Free School Street, Calcutta.  
K. T. Steel Industries P. Ltd.—20, Maharshi Debendra Road, Calcutta 7.  
Kamala Engineering Works.—124, Barrackpore Trunk Road, Calcutta 35.  
Kaman Engineering Works.—30, Ganesh Chandra Avenue, Calcutta 13.  
Keymer Bagshawe Mfg. Co. P. Ltd.—22, Strand Road, Calcutta 1.  
King Engineering Co.—157, Bellios Road, Howrah.  
Krishna Private Ltd.—20, Mangoe Lane, Calcutta 1.  
Kushumika Iron Works P. Ltd.—3, Maharshi Debendra Road, Calcutta.  
Lagan Jute Machinery Co. P. Ltd.—24, Chittaranjan Avenue, Calcutta.  
Lakshmi Iron & Steel Works P. Ltd.—P-16, Kalakar Street, Calcutta 7.  
Lilloah Iron Works.—41, Chowringhee Road, Calcutta.  
Lotus Industries.—32, Armenian Street, Calcutta.  
Lynx Machinery Co.—104, Ultadanga Main Road, Calcutta.  
**M.G.R. IRON & STEEL WORKS PRIVATE LTD.—P-16, Kalakar Street, Calcutta 7; Manufacturers of both ferrous and Non-ferrous Tinmen & Structural Rivets, Washers, Bolts, Nuts, etc.; Press Jobs of various types are undertaken.**  
M. L. Dey & Co.—9, Harinbari 1st Lane, Calcutta 12.  
Machinery Mfrs. Corpn. Ltd.—Anderson Bldg., 31, Chowringhee, Calcutta.  
M. L. Day & Co. (Estd. 1899).—9, Harinbari first Lane, Calcutta 12.  
Mahindra Engineering Co. Ltd.—5, Hide Road, Calcutta 43.  
Main, A. & J. Co. Ltd.—16, Netaji Subhas Road, Calcutta.  
Marcandy Prasad, Radha Krishna Prasad P. Ltd.—65, Grand Trunk Road, Salkia, Howrah.  
Marshall Sons & Co. (India) Ltd.—31-1, Netaji Subhas Road, Calcutta.  
Martin Burn Ltd.—Structural Dept., 12, Mission Row, Calcutta.  
Maya Engineering Works P. Ltd.—200-A, S. P. Mookerjee Road, Calcutta 28.  
Maya Galvg. Works.—9, Upper Chitpore Road, Calcutta 7.  
Mcgrigor & Balfour P. Ltd.—18, Netaji Subhas Road, Calcutta.  
Mechanical Engineering Co. P. Ltd.—Warley House, 25, Swallow Lane, Calcutta.  
Metal Box Co. of India Ltd.—Barlow House, 59C, Chowringhee Road, Calcutta.  
Modern India Const. Co. P. Ltd.—9, Brabourne Road, 5th Floor, Calcutta.  
Modern Malleable Casting Works.—42, Goushala Road, Lilloah, Howrah.  
Molins of India P. Ltd.—12, Biren Roy Road West, Behala, Calcutta 34.  
Motor & Machinery Mfrs. Ltd.—31, Chittaranjan Avenue, Calcutta.  
Mukand Iron & Steel Co. Ltd.—10, Ganesh Chandra Avenue, Calcutta.  
National Engineering Industries Ltd.—India Exchange, 5th Floor, Calcutta.  
National Iron & Steel Co. Ltd.—Stephen House, 4, Dalhousie Square, Calcutta.  
National Pipes & Tubes Co. Ltd.—67, Stephen House, 4, Dalhousie Square East, Calcutta.  
National Screw & Wire Products Ltd.—51, Stephen House, 4, Dalhousie Square East, Calcutta.  
National Steel Corporation Ltd.—4, Dalhousie Sq. East, Calcutta 1.  
New Allenbury Works.—62, Hazra Road, Calcutta 19.  
Nundon Bagan Engineering Works.—14, Ultadanga Road, Calcutta 4.  
Oriental Gas Co. Ltd.—12, Park Street, Calcutta.  
Orient General Industries Ltd.—6, Ghose Bibi Lane, Calcutta 11.  
Orient Industrial Engg. Co. P. Ltd.—P-16, Kalakar Street, Calcutta 7.  
Orient Steel & Wire Industries Pvt. Ltd.—2, Brabourne Road, Calcutta.  
Oriental Machinery Supplying Agency Ltd.—P-12, Mission Row Extn., Calcutta 1.  
Oriental Metal Inds. P. Ltd.—77, Bowbazar Street, Calcutta.  
Orissa Steel Corpn. Ltd.—29, Strand Road, Calcutta.  
Otis Elevator Co. (India) P. Ltd.—21, Netaji Subhas Road, Calcutta.  
Panel Pin Mfg. Co. Ltd.—6, Raghob Koley Lane, Salkia, Howrah.  
Parry & Co. Ltd.—Mercantile Bldgs., 9, Lali Bazar Street, Calcutta.  
Paul's Engineering Co.—P-7, Natabar Paul Road, Dasanagar (Dt. Howrah).  
P. C. Dutt & Co.—71-A, Netaji Subhas Road, R. No. A-166, Calcutta 1.  
Pioneer Iron & Steel Corpn.—119, Grand Trunk Road, Belur, Howrah.  
Port Engineering Works Ltd.—8, Clive Row, Calcutta.  
Ramchander Heeralsall.—138, Canning Street, Calcutta 1.  
Ramkrishna Iron Works P. Ltd.—56, Sri Ramkrishna Mandir Path, North Bantra, Howrah.  
Ranjit Engineering Works.—149, Benares Road, Salkia.  
Raymon Engineering Works Ltd.—2, Brabourne Road, Calcutta 1.  
Beckitt & Colman of India Ltd.—41, Chowringhee Road, Calcutta 16.  
Reliable Water Supply Service of India Ltd.—10, Canning Street, Calcutta.  
Robert Hudson (I) P. Ltd.—12, Mission Row, Calcutta.  
Robsan & Co. Ltd.—P-14, Mission Row Extension, Calcutta 1.  
Roger Engineering Works.—137, Canning Street, Calcutta.  
Salkia Industrial Works.—195-1, Grand Trunk Road (North), Ghusuri, Howrah.  
Sankey Electrical Stampings P. Ltd.—5th Floor, Mukherjee House, 17, Brabourne Road, Calcutta.  
Saxby & Farmer (I) P. Ltd.—17, Convent Road, Entally, Calcutta.  
Shalimar Industries (Private) Ltd.—25, Ganesh Chandra Avenue, Calcutta 13.  
Shalimar Iron Works.—62, College Ghat Road, Shalimar, Howrah.  
Shalimar Works P. Ltd.—9, Lyons Range, Calcutta.  
Shankar Industries Ltd.—192, Cross Street, Calcutta.  
Ship Repairers P. Ltd.—Taratalla Road, Paharpur, Calcutta 24.  
Shree Bajrang Electric Steel Co. Ltd.—83, Old China Bazar St., Calcutta.  
Shree Hanuman Industries.—178, Harrison Road, Calcutta 7.  
Shree Hanuman Steel Rolling Mills Co. Ltd.—62/2/D1, Ghusuri, Salkia, Howrah.  
Shree Vishwakarma Industries.—192, Cross St., Calcutta 7.  
Shyamnagar Tin Factory.—113, Manohardas Katra, Calcutta 7.  
Simon Carves Ltd.—32, Dalhousie Square, Calcutta.  
Simplex Concrete Piles I. P. Ltd.—103-3, Diamond Harbour Road, Calcutta 38.  
S. K. B. Industries.—140-B, Dharamtola St., Calcutta 13.  
Spence Ltd.—P-38, Mission Row Extension, Calcutta 13.  
Standard Electronics Ltd.—23, Fakirdas Mondal Lane, Howrah.  
Steel Products Ltd.—96, Garden Reach Road, Calcutta 23.  
Steel Equipment & Construction Private Ltd.—22, Grand Trunk Road (North), Lilluah, Howrah.  
Steel Rolling Mills of Hindustan P. Ltd.—135, Canning St., Calcutta.  
Stewarts & Lloyds of India P. Ltd.—41, Chowringhee Road, Calcutta 16.  
Stone, J. & Co. I. P. Ltd.—5, Hide Road, Kidderpore, Calcutta.  
Swadeshi Industries Ltd.—33, Netaji Subhas Road, Calcutta.  
Tata Iron & Steel Co. Ltd.—23-B, Netaji Subhas Road, Calcutta.  
Technical India Ltd.—62-1, Joy Narain Babu Lane, Howrah.  
Textile Machinery Corpn., Ltd.—8, India Exchange Place, Calcutta.  
Ultra Engineering Co.—172-8, Madhusudan Pal Chowdhury Lane, Howrah.  
United Commercial Industries P. Ltd.—192, Cross Street, Calcutta 7.  
United Engineering (Eastern) Corpn.—22, Canning Street, Calcutta 1.



United Flashlight Industries P. Ltd.—14/2, Old China Bazar Street, Calcutta.  
 United Rolling Mills P. Ltd.—171, Girish Ghosh Road, P. O. Belur-math, Howrah.  
 Variety Industrial Works Ltd.—P-16, Kalakar Street, Calcutta 7.  
 Veegal Engines & Engg. Ltd.—31, Chittaranjan Ave., Calcutta 12.  
 Victory Engineering Works.—Tangra Road, Calcutta 15.  
 Vijay Engineering Co. Ltd.—86, Dewangazi Road, Bally, Howrah.  
 Westwork Engineers P. Ltd.—56-D, Free School Street, Calcutta 16.  
 Wellington Engineering Works.—3-1, Sanatan Seal Lane, Calcutta 12.  
 Wolverhampton Iron & Steel Co.—137, Canning Street, Calcutta 1.

### ESSENCES

D. JAYANTILAL & CO.—All kinds of Essences, Essential Oils, Food Colours, Aromatic Chemicals, Perfumery Compounds, Provisions, Polythene Bags & Tubes, Yeast, Chemicals etc., 33, Canning Street, Calcutta-1; Phone: 229071.

### ESTATES & PROPERTY AGENTS

DEHARAMPAL CHADHA & SONS.—H.O. 3, Madan Street, Calcutta 13; Phone: 23-5318; Branch Office: F. 20, Shankar Market, Connaught Circus, New Delhi; Phone: 47200.

### EXHAUST FANS

EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.—9-29, Mission Row Extension, Calcutta 13; Phones: 232114, 237221 & 239769; Grams: "EASTASIA"; P.O. Box 364; Manufacturers, Importers, Exporters and Engineers.

### EXPANDED METAL MANUFACTURERS

ACME MANUFACTURING CO.—Manufacturers of all Sizes of Expanded Metals for Protective Measures, in Windows, Fencing Railings; 8/1, Esplanade East, Calcutta-1; Phone: 235594 (3 Lines).

CALCUTTA EXPANDED METAL MFG. CO. PRIVATE LTD.—P-16, Kalakar Street, Calcutta 7.

Delta Engineering & Foundry Works.—195, Mukhtaram Babu Street, Calcutta 7.

Hindusthan Wire & Metal Products Ltd.—57-74, Stephen House, Dalhousie Square, Calcutta 1.

### FERTILISERS & CHEMICAL PRODUCTS MFRS. & DEALERS

Atlas Fertilisers Ltd.—4/5, Bankshall Street, Calcutta.  
 Beegos Manure Works.—21, Barwaritola Road, Calcutta 10.  
 Compound Fertilisers Ltd.—2, Dalhousie Sq., East, Calcutta.  
 Globe Nursery.—25, Ramdhone Mitter Lane, Calcutta.  
 Harshad Ray Pvt. Ltd.—22, Brabourne Road, Calcutta.  
 Hooghly Agricultural & Fertiliser Syndicate.—495, Circular Road, Calcutta.  
 Imperial Chemical Industries (I) Pvt. Ltd.—18, Strand Road, Calcutta.  
 Jalan Industries P. Ltd.—62, Ballygunge Circular Road, Calcutta.  
 Mitter, R. C. & Sons.—54, Ramkanto Bose Street, Calcutta 3.  
 P. Basak & Co.—9, Chidam Modi Lane, Calcutta 6.  
 Phosphate Co. Ltd.—14, Netaji Subhas Road, Calcutta 1.  
 Roy, B. K. Private Ltd.—4, Bankshall Street, Calcutta 1.  
 Shaw Wallace & Co. Ltd.—4, Bankshall Street, P. B. No. 70, Calcutta.

### FILTER AND FILTER INSTALLATIONS

Associated Exports & Imports Corporation.—Lal Bazar, Calcutta.  
 Bharat Filter Stores.—62/1A, Netaji Subhas Road, Calcutta.  
 Calcutta Filter Mfg. Co.—62/1A, Netaji Subhas Road, Calcutta.  
 Fritz & Singh P. Ltd.—227, N.S.C. Bose Road, Calcutta 47.  
 G. B. Dey & Co.—36, Strand Road, Calcutta.  
 Gour Mohan Das & Co.—233, Old China Bazar Street, Calcutta 1.  
 India Potteries Ltd.—91, Dharamtala Street, Calcutta 31.  
 Jewell Filter Co.—28, Chittaranjan Avenue, Calcutta.

JOHN FOWLER (INDIA) LTD.—136-A, Rash Behari Avenue, Calcutta 29; Bombay Office: Marshalls Bldg., Ballard Road, Bombay 1; Sole Selling Concessionaires of "Vokes" Filtration Equipments.

S. M. Dey & Co.—51/3D, Strand Road, Calcutta.

SPARKLER MANUFACTURING CO., U.S.A.—Indian Division (Kamitter & Co.), 35, Chittaranjan Avenue, Calcutta-12; Distributors: Sparkler Range of Filters for Filtration of Pharmaceuticals, Antibiotics, Biologicals, Vegetable Lubricating & Insulating Oils, Chemicals, Paints Varnishes, Syrups, Fruit Juices, Plating Solutions, Steam Condensate, Industrial and Domestic Water and anything that is liquid; Sales & Service; Phone: 236072.

TECALEMIT (HIND) LTD.—Filter and Filter Replacement Elements for Lubricating Oils, Fuel and Air lines, 8 and 12, C.R. Avenue, Calcutta-13; Phones: 236681, 236682 & 236683.

### FIRE BRICKS & REFRACTORIES

HARRY REFRACTORY & CERAMIC WORKS PRIVATE LTD.—Manufacturers of Refractories (Fire Bricks, High Alumina Bricks, Insulating Bricks, Tiles, Blocks etc.) of various shapes and Specifications; 640, Rabindra Sarani, Calcutta-3; Phones: 55/7181-84.

India Refractories Ltd.—23/24, Radhabazar St., Calcutta.

Kharkaree Firebricks Works.—9, Old Court House St., Calcutta.

Planters and Guide Supply Co.—135, Canning Street, Calcutta.

Refractories & Mineral Syndicate P. Ltd.—20, N. Subhas Road, Calcutta.

### FIRE FIGHTING EQUIPMENTS

BENGAL CHEMICAL & PHARMACEUTICAL WORKS LTD.—6, Ganesh Chunder Avenue, Calcutta 13; Pharmaceuticals, Heavy & Fine Chemicals, High Class Toilet Products, Coal Tar Distillation Products, Fire Extinguishers, Printing Inks, Driers, etc., Branch Offices: Bombay & Kanpur.

Eastern Industrial Syndicate, 10, Canning St., Calcutta.

Sur Enamel & Stamping Works Ltd.—24, Middle Road, Entally, Calcutta.

Technico (I).—3, B. B. Ganguli Street, Calcutta 12.

William Jacks & Co. Ltd.—16, N. Subhas Road, Calcutta.

### FLEXIBLE SHAFTS & ACCESSORIES

MILLER & CO. (CALCUTTA) PRIVATE LTD.—Sole Agents & Stockists: Bostul (Export) Ltd., London; Manufacturers of Flexible Shafts (Inner and Outer Core Casing for Grinders, Vibrators, Boilers, Tube Sealing Machines; 24, Netaji Subhas Road, Calcutta-1; Phones: 227181 & 225175. Grams: 'HARD-WARMAN'.

### FLOUR MILLS

Bengal Flour Mills Co. Ltd.—21, Netaji Subhas Road, Calcutta.

Calcutta Flour Mills.—11, Shib Thakur Lane, Calcutta.

Hooghly Flour Mills Co. Ltd.—4, Bankshall Street, Calcutta.

Howrah Flour Mills Pvt. Ltd.—21, Roopchand Roy Street, Calcutta 7.

Imperial Roller Flour Mills Ltd.—9 Jagmohan Mullick Lane, Calcutta 7.

Krishna Flour Mills Pvt. Ltd.—8, Lyons Range, Calcutta 1.

Mahabir Flour Mills.—102, Raja Dinendra Street, Calcutta 7.

Master Stores.—44, Burtolla Street, Calcutta 7.

Nandan Bagan Flour Mills Ltd.—241/2B, Upper Circular Road, Calcutta 4.

Narkeldanga Roller Flour Mills.—17-4, Canal West Road, Calcutta 9.

New India Flour Mills.—41, Simla Road, Calcutta 6.

Roger Engineering Works.—10, Clive Row, Calcutta 1.

Shree Biswanath Swadeshi Flour Mills.—3, Chaitan Sett Street, Calcutta 7.

Shree Krishna Gyanodaya Flour Mills.—29/41, J. N. Mukerjee Road, Salkia, Howrah.

Shree Lakshmi Flour Mills Co. Ltd.—234, Upper Chitpur Road, Calcutta.

United Flour Mills Co. Ltd.—4, Bankshall Street, Calcutta.

West Bengal Flour Mills.—8, Lyons Range, Calcutta 1.

### FOLDING & BENDING MACHINES

UNION TOOLS & AGENCIES PRIVATE LTD.—'Brabourne Court,' 1, Chandni Chowk Street, Calcutta 13.

### FOUNDRY AND FOUNDRY REQUISITES

Agarwal Hardware Works (P) Ltd.—107, Chittaranjan Avenue, Calcutta.

Agarwalla Iron & Steel Works.—P-38, Mission Row Extn., Calcutta 13.

Atta's Iron Foundry.—171, Grand Trunk Road (North), Salkia, Howrah.

Bagri Iron & Steel Co.—138, Canning Street, Calcutta.

Belur Iron Foundry & Engg. Works.—203/1, Harrison Road, Calcutta 7.

Bengal Rolling Mills Ltd.—67B, Netaji Subhas Road, Calcutta.

Bhartia Electric Steel Co. Ltd.—4, Old Court House Street, Calcutta.

Bhattacharjee Brothers.—71A, Netaji Subhas Road, Calcutta.

Binani Metal Works (P) Ltd.—Binani Bldgs., 38, Strand Road, Calcutta.

Bose Brothers.—76, Benaras Road, Howrah.

Calcutta Iron & Engg. Co. (P) Ltd.—77, Benaras Road, Howrah.

Dalmia Iron & Steel Ltd.—4, Dalhousie Square East, Calcutta.

D. N. Singha & Co.—61, Sitanath Bose Lane, Salkia, Howrah.

Dragon Iron Works.—31, Kissonlal Burman Road, Salkia, Howrah.

East India Metal Co. Ltd.—4A, Durga Charan Chatterjee Lane, Calcutta.

Garden Reach Workshops Ltd.—2, Fairlie Place, Calcutta.

Hanuman Engg. Works Ltd.—13, Syed Sallary Lane, Calcutta 7.



Hind Overseas (P) Ltd.—7, Narain Prasad Babu Lane, Calcutta 7.  
Hindustan Industrial Co.—192, Cross Street, 3rd Floor, Calcutta.  
Indaag Industries.—35, Ezra Street, Calcutta 1.  
Indian Malleable Castings Ltd.—4, Lyons Range, Calcutta.  
Kumardhubi Engg. Works Ltd.—Chartered Bank Bldgs., Calcutta.  
Liluah Iron Works.—41, Chowringhee Road, Calcutta 16.  
Moulders Private Ltd.—71A, Netaji Subhas Road, Calcutta.  
Nandikeshwari Iron Foundry (P) Ltd.—10K, Road, Belgachia, P.  
O. Dassnagar, Howrah.  
Poddar Sanitary Works.—50, Chingrihatta Road, Calcutta 15.  
Premier Iron & Steel Works (P) Ltd.—P-16, Natabar Paul Road,  
North Bantra, Howrah.  
Ramkrishna Iron Foundry.—5, Dolgobinda Sinha Lane, Salkia,  
Howrah.  
R. K. Industries.—144, Cotton Street, Calcutta 7.  
R. M. Chatterjee & Sons (P) Ltd.—49, Sitanath Bose Lane, Salkia,  
Howrah.  
Shalimar Iron & Steel Industries.—P-84, Benaras Road, Belgachia,  
Howrah.  
Shankar Iron Engg. Works (Pvt.) Ltd.—42/1, Dr. Abani Dutta  
Road, Howrah.  
Shree Baidyanath Iron & Steel Co. Ltd.—Agarwalla Mansions, 370,  
Upper Chitpur Road, Calcutta 6.  
Shree Hanuman Foundry Works.—8, Dalhousie Square East,  
Calcutta.  
Shree Hanuman Foundry & Engg. Co. Ltd.—46, Strand Road,  
Calcutta.  
Shree Hanuman Foundries Ltd.—Agarwalla Mansions, 37, Upper  
Chitpur Road, Calcutta 6.  
Shree Krishna (P) Ltd.—20, Mangoe Lane, Calcutta.  
Shree Luchminarain Jute Mfg. Co. Ltd.—59, Netaji Subhas Road,  
Calcutta 1.  
Tatanagar Foundry Co., Ltd.—4, Dalhousie Square East, Calcutta.  
Textile Machinery Corpn. Ltd.—Belgharia, 24 Parganas.  
Thakurdas Sureka Iron Foundry Ltd.—10, Goho Road, Ghosury,  
Howrah.  
Victory Iron Works Pvt. Ltd.—P26, North Bantra, Salkia, Howrah.  
Vijay Iron Foundry.—105, Stephen House, 4, Dalhousie Square East,  
Calcutta 1.  
Vijaya Engineering Co. Ltd.—66/1, Dewangazi Road, Bally, Howrah.  
Wesman Engineering Co. Private Ltd.—71, Ganesh Chandra Avenue,  
Calcutta 13.

## FOUNTAINPEN MANUFACTURERS AND DEALERS

A. K. Products.—5, Jagabhandu Boral Lane, Calcutta.  
Crown Pen Industries.—90, Phears Lane, Bara Bazar, Calcutta.  
Delta Industrial Co.—2/4, Bellaghata Main Road, Calcutta.  
Harkishanlal Brothers.—167, Old China Bazar Street, Calcutta.  
Hercules Pen Industries.—32, Kristo Das Pal Lane, Calcutta 6.  
India Pen & Allied Industries Co.—86-2, Bahir Surah Road,  
Calcutta 10.  
Modern Pen Industries.—P-41, B. K. Paul Avenue, Calcutta 5.  
Pen Service Agency P. Ltd.—10, Chowringhee Road, Calcutta 13.  
Pen Supply Corporation.—15, Free School Street, Calcutta.  
Port Industries Private Ltd.—12, Ramproshad Shaha Lane,  
Calcutta 1.  
R. K. Plastic Works.—374, Upper Chitpore Road, Calcutta.  
R. K. Products.—5, Jagabhandu Boral Lane, Calcutta 7.  
Shri Bijoy Industries.—24-25, Upper Chitpore Road, Calcutta.

## FREIGHT BROKERS

B. D. Khaitan.—5, Clive Row, Room No. 31, Calcutta.  
Blacker & Co. (Pvt.) Ltd.—18, Strand Road, Calcutta.  
Champalal & Co.—23/24, Radha Bazar Street, Sethia House, Calcutta.  
C. L. Kasera & Co.—21-A, Canning Street, Calcutta.  
D. N. Ojha & Co.—11/B, Radha Madhab Saha Lane, Calcutta.  
H. Davecur.—7, Wellesley Place, Calcutta.  
H. P. Dey & Son.—2, Church Lane, Calcutta.  
H. P. Goenka & Co.—21/A, Canning Street, Calcutta.  
M. L. Chopra & Co.—8/3, Roop Chand Rai Street, Calcutta.  
P. N. Mookerjee & Co.—12, Netaji Subhas Road, Calcutta.  
R. Jaitha & Co.—16, Strand Road, Calcutta.  
R. N. Khemka.—Temple Chambers, 6, Old Post Office Street, 4th  
Floor, Calcutta.  
R. Sen & Sons.—4, Fairlie Place, Calcutta.  
S. A. Nasr & Co. (Pvt.) Ltd.—2, Chittaranjan Avenue, Calcutta.  
S. Chatterjee & Co.—18, Netaji Subhas Road, Top Floor, Eastern  
Block, Calcutta.  
S. C. Mitra & Sons.—C/o N. C. Bose & Co., 25, Swallow Lane, Calcutta.  
Sinclair & Co.—5, Commercial Bldg., Calcutta.  
Singh Khurana & Co.—8, Windsor House, P/14, Mission Row  
Extension, Calcutta.  
S. S. Khaitan & Co.—Room No. 51, 138, Canning Street, Calcutta.  
Vabubjee & Co.—6, Lyons Range, Calcutta.  
Varajlal & Sons.—37, Ezra Street, Calcutta.  
Ziffo & Co.—5, Garstin Place, Calcutta.

## FUEL INJECTION EQUIPMENTS

**MOTOR INDUSTRIES CO., LTD.**—Manufacturers of Micro-  
Licence Bosch Diesel Fuel Injection Equipment & Spark  
Plugs; Distributors of Bosch Automobile Parts & Acces-  
sories; 91-A, Park Street, Calcutta 16; Phone: 44-6831;  
Grams: "MICODIESEL," Calcutta; Head Office: Post Box  
No. 93, Bangalore; Branches: 79, Dr. Annie Besant Road,  
Worli, Bombay 18 (WB); and 1/155, Mount Road, Madras 2.

## FUEL STORAGE (BULK OIL & DISPENSING EQUIPMENT)

**TECALEMIT (HIND) LTD.**—Equipment for factories, Heavy  
Industries, Chemical Plants, Cement, Paper, Sugar Mills  
etc., 8 & 12, C. R. Avenue, Calcutta-13; Phones: 236681,  
236682 & 236683.

## FUEL TESTING EQUIPMENTS

**ASSOCIATED INSTRUMENT MFRS. (INDIA) PRIVATE LTD.**—  
B-5, Gillander House, Calcutta; Phone: 223304, Grams:  
"AIMIL".

## FURNACES

**WELLMAN INCANDESCENT INDIA LTD.**—Manufacturers of  
all types of Furnaces, Low temperature ovens, Material  
Handling Equipment built to the design of Wellman Incan-  
descent group of Companies; 8, Harrington Street,  
Calcutta-16; Phone: 447654 (3 Lines).

## FURNITURE AND FITTINGS MANUFACTURERS & DEALERS

Amkar Furnishers.—42, Central Avenue South, Calcutta.  
Art Furnishers Pvt. Ltd.—3, Southern Avenue, Calcutta 26.  
B. H. Smith & Co. Pvt. Ltd.—46, Dharamtala Street, Calcutta 13.  
Calcutta Cabinet Co.—66, Bow Bazar Street, Calcutta 12.  
Calcutta Furnishing Stores Ltd.—62, Bowbazar Street, Calcutta 12.  
Calcutta Furniture Mfg. Co.—6, Chhattawalla Gally, Calcutta 12.  
Calcutta Furniture Works Ltd.—27E, Balam Ghosh St., Calcutta 4.  
Chatterjee Furnishing Co. Pvt. Ltd.—2B, Russel Street, Calcutta 16.  
Chen's Carpentry Works Pvt. Ltd.—14, Black Burn Lane, Calcutta 12.  
Eastern Furnishers.—62, Bowbazar Street, Calcutta 12.  
Fashion Furnishers.—264B, Bowbazar Street, Calcutta 12.  
Goodearth Industrial Corpn.—P-14, New C.I.T. Road, Calcutta 12.  
Guha & Sons.—268A, Bowbazar Street, Calcutta 12.  
**HINDUSTHAN WOOD CRAFTS.**—Manufacturers and Suppliers  
of Furniture, Building Wood Works (Office, Household,  
School, College and Laboratory Decorator); 8/2, St. James  
Square, Calcutta-12; Phone: 344646.  
Hyderabad Cane Furniture House.—4, Theatre Road, Calcutta.  
Indian Teak-Wood Products Pvt. Ltd.—P-3, Kalakar St., Calcutta 7.  
Inter-Continental Exports.—12-B, N. Subhas Road, Calcutta 1.  
J. N. Bhattacharji & Co.—N. Subhas Road, Calcutta.  
Modern Furnishers.—38, Park Mansion, Calcutta 16.  
Modern Furnishing Stores.—67, Bowbazar Street, Calcutta 12.  
National Syndicate.—7, Hare Street, Calcutta.  
Nu-Bilt Furniture Co.—57, Park Street, Calcutta 16.  
Paradise Furnishers.—264K, Bowbazar Street, Calcutta 12.  
Prabartak Furnishers Ltd.—61, Bepin Behari Ganguli Street,  
Calcutta 12.  
Sinha Ghosh & Co. P. Ltd.—38, Chandney Chowk St., Calcutta 13.  
Standard Cabinet Co., Ltd.—32, Chittaranjan Avenue, Calcutta 12.

## GALVANISED HOLLOW-WARES & METALWARES

Bantra Engineering Works.—233, Bellios Road, Howrah.  
Bengal Bucket & Steel Works.—68-D, Netaji Subhas Road,  
Calcutta 1.  
Containers & Closures Ltd.—2, Fairlie Place, Calcutta 1.  
Dhur Galvanising Works.—92, Ultadanga Main Road, Calcutta 4.  
Ghosh & Co.—96, Mahatma Gandhi Road, Calcutta 7.  
Goodman & Co. (I) Ltd.—38, Netaji Subhas Road, Calcutta 1.  
Marwar Galvanising & Iron Works.—161-1, Harrison Road,  
Calcutta 7.  
Metal Press Works Ltd.—3, Jagmohan Mullick Lane, Calcutta 7.  
Nathmali Girdharilal.—22, Burtolla St., Calcutta 7.  
Shree Krishna P. Ltd.—192, Cross Street, Calcutta 7.

## GALVANISED SHEET MERCHANTS

Abhay Charan Dey & Brother.—20, Maharshi Debendra Road,  
Calcutta 7.  
A. C. Bros. & Co.—12, Maharshi Debendra Road, Calcutta.  
A. K. S. Paul & Co.—70, Nalini Sett Road, Calcutta.  
Anandji Haridas & Co. (P) Ltd.—20, Maharshi Debendra Road,  
Calcutta.  
Balmer Lawrie & Co. Ltd.—21, Netaji Subhas Road, Calcutta.  
Basantlal Ghansamdas.—8/5, Roopchand Roy Street, Calcutta.  
B. B. Paul & Co.—18, Raja Woodmunt Street, Calcutta.  
B. B. Dutt & Co., (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
Chandra Kanta Manna & Co. (P) Ltd.—20, Maharshi Debendra Road,  
Calcutta.



Chuni Lal Paul.—3/3, Maharshi Debendra Road, Calcutta.  
 D. J. Vora.—47, Ezra Street, Calcutta.  
 Dukhineswar Sarker & Bros. P. Ltd.—2, Maharshi Debendra Road, Calcutta.  
 Ganeshmull Labhuram.—4, Raja Woodmunt Street, Calcutta.  
 Gauri Shanker Bihani.—49, Nalini Sett Road, Calcutta.  
 G. C. Banerjee & Co. P. Ltd.—74/A, Nalini Sett Road, Calcutta.  
 G. C. Gupta & Co.—261, Bowbazar Street, Calcutta.  
 Gour Churn Law & Co.—19, Maharshi Debendra Road, Calcutta.  
 H. K. Paul & Bros. (P) Ltd.—3/3, Maharshi Debendra Road, Calcutta.  
 Ishan Chandra Chatterjee & Son (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
 Jamnadas & Bros. (P) Ltd.—55/58, Canning Street, Calcutta.  
 Jasoda Lal Ghosal (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
 J. Guha & C. K. Guha.—20, Maharshi Debendra Road, Calcutta.  
 J. M. Saha & R. R. Banik.—20/1, Maharshi Debendra Road, Calcutta.  
 K. C. Ghattack & Sons (P) Ltd.—3, Maharshi Debendra Road, Calcutta.  
 K. C. Ghosh & Sons (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
 Madan Mohan Saha (P) Ltd.—27, Sowabazar Street, Calcutta.  
 Makhan Lal Dey & Sons (P) Ltd.—D/15, Jagannath Ghat, Calcutta.  
 Narayandas & Co.—D/5, Jagannath Ghat, Calcutta.  
 Nareesh Nath Mookerjee (Metals) Pvt. Ltd.—6, Clive Row, Calcutta.  
 N. M. J. M. & S. C. Saha.—12, Maharshi Debendra Road, Calcutta.  
 N. Tah & Co. (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
 Natabar Paul & Co. (P) Ltd.—19, Maharshi Debendra Road, Calcutta.  
 Paul & Co. (P) Ltd.—20/2B, Maharshi Debendra Road, Calcutta.  
 P. N. Manna & Co. (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
**PROVASH CHANDRA NUNDY & CO.—20, Maharshi Debendra Road, Calcutta 7; Stockists and Dealers of Iron Sheet Materials (Black Plain and Corrugated Sheets).**  
 Radhakissen Satyanarain.—4, Doyhatta Street, Calcutta.  
 Ramachandra Keshrichand Pvt., Ltd.—4, Doyhatta Street, Calcutta.  
 Shyam Lal Ghosal.—20, Maharshi Debendra Road, Calcutta.  
 S. N. Manna & M. N. Manna (P) Ltd.—D/16, Jagannath Ghat, Calcutta.  
 S. Palchowdhury & Co. P. Ltd.—19, Maharshi Debendra Road, Calcutta.  
 Steel Traders (P) Ltd.—Stephen House, Room No. 27/1, Dalhousie Square, Calcutta.

### GARAGE EQUIPMENTS

**TECALEMIT (HIND) LTD.—Complete Range of Equipment for servicing all classes of vehicles including Tractors and Earthmoving Equipments; 8 & 12, C. R. Avenue, Calcutta-13, Phones: 236681, 236682 & 236683.**

### GASES

**INDUSTRIAL GASES LTD., THE.—15, Ganesh Chandra Avenue, P.O. Box 853, Calcutta 1. Phones: 233230, 239005, 239681, 237985 & 239981; Manufacturers & Suppliers of Oxygen, Liquid Oxygen, Acetylene, Nitrogen, Argon, Neon & Helium, Keypton, Xeonon, Methyl chloride, Cyclopropane, Ethylene etc.**

### GAS MANUFACTURING PLANTS

**INDUSTRIAL GASES LTD., THE.—15, Ganesh Chandra Avenue, P.O. Box 853, Calcutta 1; Phones: 233230, 239005, 239681, 237985 & 239981; Design Supply & Erection of Complete Plants for manufacture and distribution of Oxygen, Nitrogen, Carbon Dioxide, Acetylene and other gases.**

### GAS MANTLE MANUFACTURERS

**BENGAL SCIENTIFIC & TECHNICAL WORKS (PRIVATE) LTD.—20/3, Aswini Dutt Road, Calcutta-29; Manufacturers of Incandescent Gas Mantles of all types, Soft, Hard, Inverted Upright etc. & Stoves, Lamps for Liquefied Petroleum, Cool and Cowdng Gas.**

**SHAW B. K. MANTLE WORKS.—Manufacturers of Gas Mantles, both Soft and Hard of every description for Lamps and Lanterns, Domestic illumination, Street lighting & Light Houses; 3, Beadon Street, Calcutta-6; Phones: 563710 & 563474.**

### GAUGES & INSTRUMENTS

**ORIENTAL TRADING CORPORATION.—All kinds of Pressure & Vacuum gauges, Temperature, Thermometer etc.; 135, Canning Street, Calcutta-1; Phones: 222299 & 247331 (Works).**

**SEBI & CO.—Stockists of all kinds of Steam, Hydraulic, Water, Air and other Pressure & Vacuum Gauges; Recording Pressure Gauges and Instruments; 22, Canning Street, Calcutta-1; Phone: 226758.**

### GLASS BOTTLE & CORK MERCHANTS

Ananta Kumar Ghosh Pvt. Ltd.—9, Ezra Street, Calcutta.  
 Amritlal Chunder.—Room No. 4, Clive Bldgs., Calcutta 1.  
 Ashini Kumar Das & Co.—180, Lower Chittpore Road, Calcutta.  
 Ashoka Sales Agency.—P/40-45, Ezra Street, Calcutta.

Asiatic Glass Products.—6, Ezra Street, Calcutta.  
 Assam Glass Stores.—1-B, Sova Bazar Lane, Calcutta.  
 Associated Traders.—180, Lower Chittpore Road, Calcutta.  
 Basha Perfumery House.—8, Ezra Street, Calcutta.  
 Bejaya Glass Depot.—4, Jakson Lane, Calcutta.  
 Bhagya Laxmi Glass Agency.—P-33, Pollock Street, Calcutta.  
 Bhar & Co. P. Ltd.—20, N. Subhas Road, Calcutta 1.  
 Bimal Bottle Stores Pvt. Ltd.—130, Radha Bazar Street, Calcutta.  
 Bonfields Bottle Stores.—10-4-1, Bonfields Lane, Calcutta.  
 Britannia Glass Co.—7, Swallow Lane, Calcutta 1.  
 Continental Bottle Co. Pvt. Ltd.—24, Ezra Street, Calcutta.  
 Crown Cork Mfg. Co.—1, Umakanta Sen Lane, Calcutta 30.  
 Dhur & Co.—7, Swallow Lane, Calcutta.  
 Dilip & Co.—Pollock Street, Calcutta.  
 D. N. Agrawal & Sons.—202, Old China Bazar Street, Calcutta 1.  
 Durgashree Bottle Stores.—7, Ezra Street, Calcutta.  
 Eastern Traders Agency.—3, Chittaranjan, Avenue, Calcutta.  
 Essence & Glassware Supplying Co.—66, Ezra Street, Calcutta.  
 Gler Trading Co.—Agency, 4, Chattawala Galli, Calcutta.  
 Glass & Plywood Supply Agency.—40, Bowbazar Street, Calcutta 12.  
 Glass Supply Agency.—P-33, Pollock Street, Calcutta 1.  
 Gobindram Jessaram.—66, Ezra Street, Calcutta.  
 Gopinath Glass Supplying Co.—7 & 9, Ezra Street, Calcutta.  
 The Glass Syndicate Pvt. Ltd.—30/1/B, Grey Street, Calcutta.  
 Gujarat Trading Co.—P/40-45, Ezra Street, Calcutta.  
 Jagadish Trading Co.—16, Radha Bazar Lane, Calcutta.  
 K. P. Saha & Co.—4, Ezra Street, Calcutta.  
 Laboratory Requisites Suppliers.—P-33, Pollock Street, Calcutta.  
 Luxmi Bottle Stores.—17, Ezra Street, Calcutta.  
 Manick Chand Harlalka.—1, Protap Ghose Lane, Calcutta.  
 Narayan Bottle Stores.—18, Radha Bazar Lane, Calcutta.  
 Nath Brothers.—67, Ezra Street, Calcutta.  
 New Era Universal Traders.—22, Canning Street, Calcutta.  
 O. T. Kader Basha Saheb.—17, Ezra Street, Calcutta.  
 Pathak & Co.—6, Ezra Street, Calcutta.  
 Radhabaasar Bottle Stores.—15, Radhabazar St., Calcutta 1.  
 Radha Shyam Chandra & Co.—67, Ezra Street, Calcutta.  
 Ram Chandra Singha & Co.—6, Ezra Street, Calcutta.  
 R. Das & Co.—7, Ezra Street, Calcutta.  
 R. G. Ganeriwala & Co.—208, Old China Bazar Street, Calcutta 1.  
 R. K. Desai & Co.—61, Bentinck Street, Calcutta.  
 R. N. T. & Co.—18, Ezra Street, Calcutta.  
 Satya Charan Paul & Co.—190, Old China Bazar Street, Calcutta.  
 Sikri & Co. Pvt. Ltd.—9, Ezra Street, Calcutta.  
 S. K. Rahaman & Bros.—46, Ezra Street, Calcutta.  
 Subhas Trading Co.—66, Ezra Street, Calcutta.  
 Union Bottle Stores.—18, Ezra Street, Calcutta.  
 United Bottle & Perfumery Co.—9, Ezra Street, Calcutta.

### GLASS & GLASSWARE

Annapurna Glass Works Pvt. Ltd.—P-15, Bentinck Street, Calcutta 1.  
 Artistick Glass Works.—1-2, Tagore Castle Street, Calcutta 6.  
 Ashoke Glass Works.—9, Ezra Street, Calcutta.  
 Asiatic Glass Products.—30-B, Sahitya Parishad Street, Calcutta.  
**BASANT GLASS CO.—23, Canning Street, Calcutta-1; Phone: 226999; Leading Stockists & Order Suppliers of Window Glass, Sheet & Plate glass, Mirrors, Safety glass, Figured and Wired glass etc., Branch: S. N. Ganguly Road, Ranchi, Phone: 1123.**  
 Belur Glass Works Ltd.—203/1, Mahatma Gandhi Road, Calcutta 7.  
 Bharat Glass Works Private Ltd.—Belgharia, 24, Parganas.  
**BHARATI GLASS CO.—Suppliers to Government departments—Central & State; Stockists of Mirrors, Plate Glass, Window Glass, Triplex Ribbed, Coloured, Figures and other glasses and Glass Cutters etc., P-21, Swallow Lane, Calcutta-1; Phone: 229552.**  
 B. K. Shaw Industries Private Ltd.—P-3, B. K. Paul Avenue, Calcutta 5.  
 Calcutta Glass & Silicate Works (1936) Pvt. Ltd.—9, Kundu Lane, Belgachia, Calcutta 37.  
 Central Glass Industries Ltd.—7, Swallow Lane, Calcutta 1.  
 Cossipore Glass Blowing Works.—60, Satchasipara Road, Calcutta 2.  
 Fotie Lal Sea & Sons P. Ltd.—10, Swallow Lane, Calcutta 1.  
 Geeta Glass Works Pvt. Ltd.—9, Ezra Street, Calcutta 1.  
 Glass Syndicate P. Ltd.—30/1, Grey Street, Calcutta.  
 Gurjars Ltd.—55, Bentinck Street, Calcutta 1.  
 Hindusthan National Glass Manufacturing Co. Ltd.—2, Wellesley Place, Calcutta 1.  
 Hindusthan Pilkington Glass Works Ltd.—Hindusthan Bldgs., 4, Chittaranjan Avenue, Calcutta 13.  
 Hindusthan Safety Glass Works Pvt. Ltd.—7, Chittaranjan Avenue, Calcutta 13.  
 India Chemical and Scientific Glass Co.—23/1C, Beniapara Lane, Calcutta.  
 Indo Asiatic Glass Co. Ltd.—30, Chittaranjan Ave., Calcutta 13.  
 Krishna Silicate & Glass Works Ltd.—17, Radha Bazar Street, Calcutta 1.



K. Scientific Industries.—11, Ultadanga Road, Calcutta 4.  
 Medical Appliances Mfg. Co. Ltd.—20, N. Subhas Road, Calcutta 1.  
 Metro Glass Works Pvt. Ltd.—20, Netaji Subhas Road, Calcutta 1.  
 National Glass Industries P. Ltd.—17, Radhabazar St., Calcutta.  
 National Scientific Glass Works.—14, Mullick Street, Calcutta 7.  
 New Indian Glass Works (Calcutta) Pvt. Ltd.—7, Rawdon St., Calcutta 16.  
 Premier Scientific Glass Co.—26/2A, Prasad Kur Tagur Street, Calcutta.  
 Protecto & Insulation Materials P. Ltd.—69A, Ballygunge Place, Calcutta 19.  
 Ramkrishna Glass Works Pvt. Ltd.—Muratidhar Sen Lane, Calcutta 7.  
 Research Chemical and Glass Industries P. Ltd.—22, Prince Anwar Shah Road, Calcutta 6.  
**S. P. SINGH & CO.**—Importers, Sole Agents and Stockists for high quality Foreign Factory Finished Windscreens and Door glasses for Cars and Trucks of laminated (Triplex), Toughened and Curved Types in Wide Range; 62, Ganesh Chandra Avenue, Calcutta-13; Phone: 244975 & 242615.  
 Scientific Glass Apparatus Mfg. Co.—5-A, Prosanna Kumar Tagore Street, Calcutta 6.  
 Scientific Glass Apparatus Mfg. Co.—11-2, Harinath Dey Road, Calcutta 9.  
 Scientific Glass Works.—35, Gopal Chatterjee Road, Calcutta 2.  
 Scientific India Glass Co. Pvt. Ltd.—98, Christopher Road, Calcutta 14.  
 Seralkella Glass Works Pvt. Ltd.—Konnagar, Hooghly Dist.  
 Shiva Glass Works Co. Ltd.—Narayani Bldgs., 27, Brabourne Road, Calcutta 1.  
 Shree Gobindeo Glass Works Ltd.—9, Ezra Street, Calcutta 1.  
 Sodepur Glass Works Ltd.—P-11, Mission Row Extension, Calcutta 1.  
 Somany Glass Works.—2, Wellesley Place, Calcutta 1.  
 Victoria Glass Works Pvt. Ltd.—10, Clive Row, Calcutta 1.

### GLUE MANUFACTURERS

Bengal Paste Co.—10, Delhi Entally Road, Calcutta 14.  
 Dhappa Glue Factory.—24 Parganas, Calcutta.  
 Griplex (India) Ltd.—C-6, Gillander House, 8, Netaji Subhas Road, Calcutta.  
 King Perfumery Works.—13, Khetra Das Lane, Calcutta 12.  
 Unita Trading Co.—76, Lower Circular Road, Calcutta 14.

### GREY IRON CASTINGS

**JAY ENGINEERING WORKS LTD.**—183A, Prince Anwarshah Road, Calcutta-31; P.O. Box No. 2158, Calcutta; Manufacturers of Precision and thin section Grey Iron Castings to BSS 10/12.

### GUMS

**EASTERN INDUSTRIAL CORPORATION.**—Dextrines—Starch, 'Eastern' Gum Powder (Substitute for Gum Arabic): 142/1, Redha Bazar Street, Calcutta-1; Phone: 225508, Grams: "UNNAYAN"—Calcutta.

### HARDBOARDS

Anil Hardboards Ltd.—70/B, Ballygunge 2nd Lane, Calcutta 1.  
 Assam Hardboards Ltd.—18/58, Dover Lane, Calcutta.  
 Ali, S. M., P. Ltd.—40, Chittaranjan Avenue, Calcutta.  
 Madhavsingh Dwarkadas.—44-45, Ezra St., Calcutta 1.  
 National Stores.—263, Bowbazar St., Calcutta 12.  
 Ranvir & Co.—262, Bowbazar St., Calcutta 12.  
 Robsan & Co. P. Ltd.—P-14, Mission Row Extension, Calcutta 1.

### HARDWARE MANUFACTURERS

Agarwal Hardware Industries.—3, Munshi Sadruddin Lane, Calcutta 7.  
 Agarwal Hardware Works P. Ltd.—167, Chittaranjan Ave., Calcutta.  
 Assam Bengal Hardwares P. Ltd.—113, N. Subhas Road, Calcutta.  
 Bengal Hardware & Tin Seal Mfg. Co.—70, Netaji Subhas Road, Calcutta.  
 Bharat Hardware Industries.—138, Canning Street, Calcutta 1.  
 Chandni Charan Nayak P. Ltd.—124-1, Bowbazar Street, Calcutta 12.  
 C. D. Industries.—33, Dharamtolla Street, Calcutta.  
 Daw & Brothers.—14, Raja Woodmunt Street, Calcutta 1.  
 Gobindo Sheet Metal Works & Foundry—210, Harrison Road, Calcutta.  
 Golden Steel Corporation.—G. T. Road, Howrah.  
 M. Chowdhury & Co.—113-G, Netaji Subhas Road, Calcutta 1.  
 M. C. Mowjee & Co.—46, Ezra Street, Calcutta.  
 Purushottam Ramji & Sons Ltd.—12, Raja Woodmunt Street, Calcutta.  
 Shanker Industries.—192, Cross Street, Calcutta.

### HARDWARE MERCHANTS

A. D. Coomar & Sons.—12-C, Clive Row, Calcutta 1.  
 Ajit Brothers.—115, Netaji Subhas Road, Calcutta.  
 A. K. Dutta & Bros.—113, Netaji Subhas Road, Calcutta.  
 A. K. Mookerjee & Co.—79, N. Subhas Road, Calcutta 1.  
**A. N. HUSSUNALLY & CO.**—(Estd. 1917), 28, Strand Road, Calcutta-1; Agents and Stockists for Hand Tools for Carpenters, Plumbers, Blacksmiths, Bolts, Nuts, Rivets and Building Materials; Phone: 224140, 228568.  
 A. V. Joshi & Sons.—2, Maharshi Debendra Road, Calcutta.  
 B. C. Paul S. N. Dey & Co.—70, Netaji Subhas Road, Calcutta 1.  
 Bengal Hardware Mart.—69-A, N. Subhas Road, Calcutta 1.  
 Banwarilal & Co.—89, Netaji Subhas Road, Calcutta 1.  
 Bhartia Commercial Co. Ltd.—23-24, Radhabazar Street, Calcutta 1.  
 Biswanath Samanta.—2, Maharshi Debendra Road, Calcutta.  
 Bombay Hardware Mart.—79, Netaji Subhas Road, Calcutta.  
 Butto Kristo Dey & Gour Hari Rakshit.—113-E, Monohardas Chowk, Calcutta.  
 C. A. Mohammad.—26, Brabourne Road, Calcutta 1.  
 Calcutta Hardware & Metal Supply Co.—25, N. Subhas Road, Calcutta 1.  
 Calcutta Hardware Co.—8-A, Ramkrishna Das Lane, Calcutta 9.  
 Champaklal & Bros.—31, Ganesh Chandra Avenue (Kent House), Calcutta.  
 Commercial Stores Co.—37, Netaji Subhas Road, Calcutta 1.  
 Condoo Paul & Co.—20, Raja Woodmunt Street, Calcutta 1.  
 Crown Engineering Corporation.—71-A, Netaji Subhas Road, Calcutta 1.  
 Damodardas J. Vora.—47, Ezra Street, Calcutta 1.  
 Dass Laha & Co.—133, Monohardass Chowk, Calcutta 1.  
 Dattas India Private Ltd.—24, Strand Road, Calcutta 1.  
 Evershine Tools.—51, Canning Street, Calcutta 1.  
 Excel Steel Corporation.—67B, Netaji Subhas Road, Calcutta 1.  
 F. Hussain & Brothers.—28, Strand Road, Calcutta 1.  
 Gangoli & Mitra.—115, Netaji Subhas Road, Calcutta 1.  
 Ghose Mundal & Co.—71-A, Netaji Subhas Road, Calcutta.  
 Gopal Chunder Das & Co. Pvt. Ltd.—24, Raja Woodmunt Street, Calcutta.  
 Gopi Nath Paul & Sons.—210, Mahatma Gandhi Road, Calcutta.  
 Harrison Agency.—71-A, N. Subhas Road, Calcutta 1.  
 Hassanally & Sons.—50, Netaji Subhas Road, Calcutta 1.  
 Indestro (India) Agency.—38, Netaji Subhas Road, Calcutta 1.  
 India Hardware & Tools Co.—20, Netaji Subhas Road, Calcutta 1.  
 Industrial Importers Pvt. Ltd.—4, Dalhousie Square, Stephen House (Room No. 32), 2nd Floor, Calcutta.  
 I. N. Gangooly & Co.—71-A, Netaji Subhas Road, Calcutta.  
 International Hardware Co.—67-B, N. Subhas Road, Calcutta 1.  
 International (India) Agency.—70, Netaji Subhas Road, Calcutta.  
 International Hardware Ltd.—86-B, N. Subhas Road, Calcutta 1.  
 Jackeria Oosman & Co.—4, Rajmohan Street, Calcutta 1.  
 Jiban Krishna Dey & Bros.—102, Netaji Subhas Road, Calcutta.  
 Jostle Trading Co.—137, Canning Street, Calcutta.  
 Kadar Nauth Mookerjee & Sons.—34, Strand Road, Calcutta 1.  
 Kallash Hardware & Tools Co.—224, Mahatma Gandhi Road, Calcutta.  
 Kanji Pannachand Pvt. Ltd.—No. 8, Armenian Street, Calcutta.  
 Kaybee & Co.—13, Brabourne Road, Calcutta 1.  
 K. C. Mukerjee & Sons.—113-E, Monohardass Chowk, Calcutta.  
 K. D. Gangooly Co.—115, Netaji Subhas Road, Calcutta.  
 Khandelwal Bros. Pvt. Ltd.—33, Netaji Subhas Road, Calcutta.  
 Khemchand Rajkumar.—33, Netaji Subhas Road, Calcutta 1.  
 Kristo Dhone Gangooly & Co.—115, Netaji Subhas Road, Calcutta 7.  
 Lachmi Hardware Stores.—113, Monohardass Chowk, Calcutta 7.  
 Lall Behary Mullick & Co.—113, Monohardass Chowk, Barabazar, Calcutta 7.  
 Loke Nath Chatterjee & Sons.—18, Raja Woodmunt Street, Calcutta.  
 Machine Tools & Appliances (I) Co.—53, Netaji Subhas Road, Calcutta 1.  
 Madhabsingh Dwarkadas.—44/45, Ezra Street, Calcutta.  
 M. Mansukhlal & Co. Pvt. Ltd.—34, Netaji Subhas Road, Calcutta.  
 Marfatia & Co.—67, N. Subhas Road, Calcutta 1.  
 Mill Products.—7-G, Clive Row, Calcutta 1.  
 Miscellaneous Engineering Stores P. Ltd.—71-A, Netaji Subhas Road, Calcutta 1.  
 Morris Balfour & Co.—25, Netaji Subhas Road, Calcutta 1.  
 Motiram Agarwal & Co. Pvt. Ltd.—137, Canning Street, Calcutta.  
 Mukerjee & Co.—115, Netaji Subhas Road, Calcutta.  
 Nabo Krishna Dey.—113-E, Monohardass Chowk, Calcutta.  
 N. Solomon & Co. P. Ltd.—29, Strand Road, Calcutta 1.  
 Olympic Trading Corporation.—25, Swallow Lane, Calcutta 1.  
 Parkash Impex.—18, Netaji Subhas Road, Calcutta.  
 P. B. Shah & Co., Pvt. Ltd.—34, Netaji Subhas Road, Calcutta.  
 P. C. Dutt & Co.—71-A, Netaji Subhas Road, Calcutta 1.  
 Purshottamdas & Sons.—71-A, Netaji Subhas Road, Calcutta 1.  
 Rajendranath Mullick & Co. P. Ltd.—20, Maharshi Debendranath Road, Calcutta 7.  
 Rajkumar Brothers.—57, Clive Row, Calcutta 1.  
 Rasiklal & Brothers.—113-B, Monohardass Chowk, Calcutta 7.  
 Regent Engineering Stores.—42, Strand Road, Calcutta 7.  
 Reliable Tools & Hardware Co.—12/B, Clive Row, Calcutta 1.



Republic Trading Corporation.—91, Netaji Subhas Road, Calcutta.  
 Robson & Co. P. Ltd.—P-14, Mission Row Extn., Calcutta 1.  
 S. Abbas & Co.—12B, Clive Row, Calcutta 1.  
 Saraswati Chandra Doongershi.—32, Netaji Subhas Road, Calcutta.  
 S. F. Hatim & Co.—28-A, Netaji Subhas Road, Calcutta 1.  
 S. Kantilal & Co.—79, Netaji Subhas Road, Calcutta.  
 S. M. Dey & Co.—51-3D, Strand Road, Calcutta 7.  
 Soresh Chandra Mookerjee & Co.—71-A, Netaji Subhas Road, Calcutta 1.  
 Standard Metal Co.—101, Netaji Subhas Road, Calcutta 1.  
 Steel Tools (India).—67B, N. Subhas Road, Calcutta 1.  
 T. E. Thomson & Co. Ltd.—9-A, Esplanade East, Calcutta 1.  
 T. M. Fakhri & Co.—26E, N. Subhas Road, Calcutta 1.  
 United Hardware Stores.—90, Netaji Subhas Road, Calcutta.  
 Vasantrai Shantilal.—18, Pollock House, Brabourne Road, Calcutta.  
 Vulcan Electric & Engineering Co.—12-B, Lower Chitpur Road, Calcutta 1.  
 Western Tools & Hardware Co.—89, N. Subhas Road, Calcutta 1.  
 Wire Products Agency.—9, Brabourne Road, Calcutta.

### HEMP MANUFACTURERS

Chittagong Co. Ltd.—6, India Exchange Place, Calcutta.  
 Jagannath Brothers.—2, Ghosury Road, Salki, Howrah.  
 Jute Bailing & Trading Co., Ltd.—8, Dalhousie Square East, Calcutta.  
 L. N. Poddar & Co. Ltd.—“Stephen House”, R. No. 5, 4, Dalhousie Square East, Calcutta.  
 Sadhuram Tularam.—29, Sir Hari Ram Goenka Street, Calcutta.  
 Soorajmull Nagarmull.—8, Dalhousie Square East, Calcutta.  
 United Asian Trader Ltd.—2 Raja Woodmunt Street, Calcutta.

### HOSE PIPES

**BYSACK, K. L. & CO.**—20, Netaji Subhas Road, Calcutta-1 ;  
 Stockists & Distributors for ‘JAYASHREES’ Unlined Flax  
 Canvas Fire Hose Pipes for all purposes ; Also Cotton Canvas  
 and Rubber Hoses of all Specifications ; Phone : 222626.

### HOSPITAL EQUIPMENTS

Ashok Metal Industries Ltd.—157, Netaji Subhas Road, Calcutta 1.  
**BENGAL CHEMICAL & PHARMACEUTICAL WORKS LTD.**—  
 6, Ganesh Chandra Avenue, Calcutta 13 ; Pharmaceuticals,  
 Heavy & Fine Chemicals, High Class Toilet Products, Coal  
 Tar Distillation Products, Fire Extinguishers, Printing inks,  
 Driers, etc. Branch Offices : Bombay & Kanpur.  
 Chandra Industries Private Ltd.—59, Cotton Street, Calcutta 7.  
 Hospital Appliances Mfg. Co.—101-B, Chittaranjan Avenue, Calcutta  
 12.  
**M. A. J. Glass Works.**—296/1, Acharya Prof. Chandra Road, Calcutta.  
 9.  
 Medical Appliances Mfg. Co. P. Ltd.—20, N. Subhas Road, Calcutta 1.  
 Medico Scientific Appliances.—117, Dharamtolla St., Calcutta 13.

### HOTELS

Alkapuri Hotel.—101, Harrison Road, Calcutta 7.  
 Asian Hotel.—P-38, Princep Street, Calcutta 13.  
 Astor Hotel.—15, Theatre Road, Calcutta.  
 Astoria Hotel.—6/2/3, Sudder Street, Calcutta.  
 Biltmore Hotel.—105-C, Park Street, Calcutta.  
 Broadway Hotel.—P-34, Mission Row Extension, Calcutta 13.  
 Central Imperial Hotel.—42-A, Chittaranjan Avenue, Calcutta 12.  
 Chowringhee Hotel.—1, Chowringhee Road, Calcutta 13.  
 Continental Hotel.—2, Chowringhee Place, Calcutta 13.  
 Fair Lawn Hotel.—13-A, Sudder Street, Calcutta.  
 Great Eastern Hotel Ltd.—1, 2 & 3, Old Court House St., Calcutta 1.  
 Hotel Majestic.—4/C, Madan Street, Calcutta.  
 Hotel Minerva.—11, Ganesh Chandra Avenue, Calcutta 13.  
 Hotel Plassey.—127-A, Bow Bazar Street, Calcutta.  
 Hotel Royal.—47, Harrison Road, Calcutta.  
 Hotel Savoy.—27, Shahi Bhusan Dey Street, Calcutta.  
 Hotel West End.—25, Waterloo Street, Calcutta.  
 Hotel Zenith.—78, Harrison Road, Calcutta 7.  
 India Hotel.—62, Mirzapur Road, Calcutta.  
 Krishna Hotel.—1/2, Mechua Bazar Street, Calcutta 7.  
 Lytton Hotel.—14, Sudder Street, Calcutta 16.  
 Metropole Hotel Ltd.—4, Doctor's Lane, Calcutta.  
 Midland Hotel.—2/C, Nyat Khan Lane, Calcutta.  
 National Hotel.—88, Harrison Road, Calcutta.  
 New Bombay Hotel.—10A, Jatindra Mohan Ave., Calcutta.  
 New Central Hotel.—90, Chittaranjan Avenue, Calcutta.  
 New Tajmahal Hotel.—8/2, M. C. Road, Calcutta.  
 Oberoi Grand Hotel.—15, Chowringhee, Calcutta 13.  
 Raj Mahal Hotel.—76, Bentinck Street, Calcutta 1.  
 Royal Indian Hotel.—99, Lower Chitpur Road, Calcutta 1.  
 Russell Hotel.—12-B, Russel Street, Calcutta 16.  
 Sabir's Hotel.—71, Prinsep Street, Calcutta 13.

**SPENCERS HOTEL PVT. LTD.**—Fully Air-Conditioned, 4,  
 Wellesley Place, Calcutta 1.  
 Star Hotel.—26, Zakariah Street, Calcutta.

Star Hotel.—14/1, Upper Circular Road, Calcutta.  
 Tarun Hotel.—168, Bow Bazar Street, Calcutta 12.  
 Waverley Hotel.—11, Kyd Street, Calcutta 16.  
 Wedgwood Hotel.—5-A, Sudder Street, Calcutta 16.

### HUMIDIFICATION—VENTILATION

**AMERICAN REFRIGERATOR CO. LTD.**—Manufacturers of  
 ‘ARCO-BUSH’ Coils ‘ARCO’ Air-Conditioners & Water  
 Coolers, Cold Storage, Refrigeration Equipment, Industrial  
 Blowers ; Sole Distributors ‘TRANE & FRIGIDAIRE’ ;  
 Phone : 237841 (4 Lines).

**C. DOCTOR & CO. PRIVATE LTD.** (Estd. : 1915).—286, Bipin  
 Behari Ganguly Street, Calcutta-12. Grams : “DOCTORCO.”  
 Humidification & Ventilation Engineers and Textile Store  
 Suppliers.

### HYDRAULIC PRESS

Ashcroft Jute Press.—7, Dealerjung Road, Cossipore.  
 Atlas & Union Jute Press Co. Ltd.—2, Kaliprosanna Singhee Road,  
 Cossipore.  
 Bandaghat Jute Press.—4 & 6, Old Ghosery Road, Sulkea, Howrah.  
 Bhagwati Pressing Co. Ltd.—121, Jogendranath Mukerjee Road,  
 Sulkea, Howrah.  
 Chitpur Pressing Co. Pvt. Ltd.—15, Kaliprasanna Singhee Road,  
 Cossipore.  
 Cossipore Hydraulic Press.—15-A, Ratan Babu Road, Cossipore.  
 Empress of India Jute Press.—54, Ghosery Road, Sulkea, Howrah.  
 Hanuman Jute Press.—28, Old Ghosery Road, Sulkea, Howrah.  
 Hooghly & Ganges Hydraulic Press Co. Ltd.—1, Chitpore Ghat Lane,  
 Cossipore.  
 Imperial Jute Press Pvt. Ltd.—55, Ghosery Road, Sulkea, Howrah.  
 Lohia Jute Press Pvt. Ltd.—28, Barrakpore Trunk Road, Calcutta.  
 New India Jute Press.—4, Gun Foundry Road, Cossipore.  
 Ocean Jute Press.—2, Dealerjung Road, Cossipore.  
 Shiva Jute Pvt. Ltd.—4, Kaliprasanna Singhee Road, Cossipore.  
 Sri Durga Cotton Ginning and Pressing Factory.—2, Church Lane,  
 Calcutta.  
 Sulkea Jute Pressing Co., Pvt. Ltd.—57, Old Ghosery Road, Howrah.  
 Sun Jute Press Pvt. Ltd.—3, Cossipore Road, Cossipore.  
 Suraj Jute Press.—1-4, Gun Foundry Road, Cossipore.  
 Victoria Hydraulic Press.—111, Cossipore Road, Cossipore.  
 Vishnu Jute Press.—2, Turner Road, Cossipore.

### HYDRAULIC PUMPS & JACKS

**ORIENTAL TRADING CORPORATION.**—For all types of  
 Jacks, Hydraulic, Mechanical Screw, Traversing and Hy-  
 draulic Trolley ; 135, Canning Street, Calcutta-1 ; Phone :  
 222299 & 247331 (Works).

### ICE FACTORIES

**AMERICAN REFRIGERATOR CO. LTD.**—Manufacturers of  
 ‘ARCO-BUSH’ Coils, ‘ARCO’ Air-Conditioners & Water  
 Coolers, Cold Storage, Refrigeration Equipment, Industrial  
 Blowers ; Sole Distributors ‘TRANE & FRIGIDAIRE’ ;  
 Phone No. : 237841 (4 Lines).

### IMPORTERS & EXPORTERS

Abdul Karim Noor Mohamed & Co.—59, Canning Street, Calcutta.  
 Acharya Brothers.—P-23/24, Radha Bazar Street, Calcutta.  
 Adair, Dutt & Co. (India) Private Ltd.—Stephen House, 5, Dal-  
 housie Square East, Calcutta.  
 Agrawal Trading Corporation.—191, Harrison Road, Calcutta.  
 American Pipe Co.—135, Canning Street, Calcutta.  
 Aryan Mining & Trading Corporation Private Ltd.—61, Strand  
 Road, Calcutta 6.  
 Ashok Exporters & Importers.—4, Bhawanil Dutt Lane, Calcutta.  
 B. Patnaik (Mines).—33, Chittaranjan Avenue, Calcutta.  
 B. P. Khemka Ltd.—5, Clive Row, Calcutta.  
 Babulall & Co. Private Ltd.—13, Syed Sailey Lane, Calcutta.  
 Baljnath Sarda.—15-B, Clive Row, Calcutta.  
 Ballabhram Badrinarain.—135, Canning Street, Calcutta.  
 Banshidhar Purshottamdas.—178, Mahatma Gandhi Road, Calcutta.  
 Banwarilall Seth.—89, Netaji Subhas Road, Calcutta.  
 Basmall & Co. (1) Pvt. Ltd.—Bangur Avenue, Calcutta 28.  
 Bengal Minerals Supply Co.—71-A, Netaji Subhas Road, Calcutta 1.  
 Bharat Kala Bhandar Ltd.—8, Royal Exchange Place, Calcutta.  
 Bhikamchand Bolaram.—35, Armenian Street, Calcutta.  
 Biyani & Sons Ltd.—137, Canning Street, Calcutta.  
 Bridhichand Ridhikaran.—87, Old China Bazar Street, Calcutta.  
 Bubna More & Co.—5, Clive Row, Calcutta.  
 Central Trading Co.—137, Canning Street, Calcutta.  
 Champaklal & Brothers.—P-33, Mission Row Extension, Kent  
 House, Calcutta.  
 Chandl Prasad More & Co.—5, Clive Row, Calcutta.  
 Chhaganlal Hanumandas.—157, Netaji Subhas Road, Calcutta.  
 Chhaganlal Kasturchand.—16, Pollack Street, Calcutta.  
 Chonthmal Saraf.—62, Nalini Seth Road, Calcutta.



Chowgule & Co. (Hind) Private Ltd.—“Laha Paint House”, 7, Chittaranjan Avenue, Calcutta 13.

Christian Mica Industries Ltd.—4, Lyons Range, Calcutta.

D. A. Mehra.—89, Netaji Subhas Road, Calcutta 1.

D. N. Bakshi & Sons.—152-B, Mahatma Gandhi Road, Calcutta.

Dass & Co. (India) Private Ltd.—43, Dharamtolla Street, Calcutta.

Dawjee Dadabhoi & Co.—67, Canning Street, Calcutta 1.

Dayal & Sons.—22, Swallow Lane, Calcutta.

Dipak Trading Co.—15, Amratolla Lane, Calcutta.

Dulchand Kashiprasad.—18, Amratolla Street, Calcutta.

East Coast Export-Import Ltd.—“Rampooria” House, 3, Wood-bern Road, Calcutta 20.

East India Commercial Co. Ltd.—38, Netaji Subhas Road, Calcutta.

East India Commercial Corporation.—174, Mahatma Gandhi Road, Calcutta.

Eastern Cotton Co.—14/2, Old China Bazar Street, Calcutta.

Ess Lahiri & Co. (Private) Ltd.—2, Church Lane, Calcutta 1.

Gangadhar Ramchander.—402, Upper Chitpore Road, Calcutta.

Garg & Sons.—138, Canning Street, Calcutta.

Gopikishan Shrikishan.—55, Jummalal Bajaj Street, Calcutta.

Ganpatray Private Ltd.—2, Pretoria Street, Calcutta.

Hanumanbux Surajmull Ltd.—P-8, Mission Row Extension, Calcutta.

Hind Enterprises.—8, Dalhousie Square East, Calcutta.

Hind General Mercantile Agency Ltd.—8, Lyons Range, Calcutta.

Hinduk Trading Co. (India) Private Ltd.—3, Stephen House, Dalhousie Square East, Calcutta.

**HINDUSTHAN RUBBER WORKS LTD.**—14, Ballygunge Station Road, Calcutta-19. Manufacturers & Exporters. Government, Military and Railway Suppliers—“PALICAN” Raincoats, Gumboots, Hospital Sheetings, Hotwater Bottles, Ice Bags, Air Beds, Air Pillows, Swimming Rings, Rubber Floor Tiles & Moulded Mechanical goods etc.

Hira Trading Co.—514, Ezra Street, Calcutta.

India Steel Agencies.—67-B, Netaji Subhas Road, Calcutta 1.

Industrial Traders.—138, Canning Street, Calcutta.

International Exporters Ltd.—178, Mahatma Gandhi Road, Calcutta 7.

International Machines Corporation.—16, Canning Street, Calcutta-1.

Ishwardas Jhabarmal.—P-10, New Howrah Bridge Approach Road, Calcutta.

Jamnadas & Co.—27, Amratolla Lane, Calcutta.

Janikidas Ramgopal.—48, Canning Street, Calcutta.

Jeethmull Jaichand Lall.—113, Netaji Subhas Road, Calcutta.

Jiwanram Sheaduttrai.—30, Ganesh Chandra Avenue, Calcutta.

Jugalkishore Maheshwari.—12, Netaji Subhas Road, Calcutta.

K. N. Jain & Sons.—29, Strand Road, Calcutta.

Kajaria Sons Ltd.—32, Ezra Street, Calcutta.

Kalidas Maganlal Shah & Co.—4, Rupchand Roy Street, Calcutta.

Kamala Textile Agency.—113-B, Manohardas Katra, Calcutta.

**KAMALALAYA (EXPORT) PRIVATE LTD.**—14, Ballygunge Station Road, Calcutta 19. Manufacturers & Exporters. Government, Military and Railway Contractors; “KAMALA” Brand Readymade Clothings, Sola Hats and Helmets; “Swanback” Brand Rubberless Raincoats, Waterproofed Tarpaulins, Tents, Ground Sheets and Umbrellas, etc.

Kanji Pannachand Pvt. Ltd.—33, Armenian Street, Calcutta 1.

Kanodia & Co.—149, Cotton Street, Calcutta.

Kanoi Estates Ltd.—P-8, Mission Row Extension, Calcutta.

Kanoi (India) Ltd.—P-8, Mission Row Extension, Calcutta.

Kedarnath Parsotamdas & Co. Ltd.—37, Netaji Subhas Road, Calcutta.

Keshrimul Kundenmull.—46, Strand Road, Calcutta 7.

Khandalwal Thirani & Co. Ltd.—8, Royal Exchange Place, Calcutta.

Khemka & Co. (Agencies) Ltd.—31/32, Royal Exchange Place Extn., Calcutta.

Khubchand Bajjnath.—77, Netaji Subhas Road, Calcutta.

Kodamul Jatanmull Botra.—37, Armenian Street, Calcutta.

Krishna Galvanizing Works.—20, Bellur Road, Lileoah, Howrah.

Lakshmi Produce Co. Ltd.—14, Netaji Subhas Road, Calcutta.

Lakshmichand Bajjnath.—31, Cotton Street, Calcutta.

Lalchand Dharamchand.—6, Jummalal Bajaj Road, Calcutta.

Louis Dreyfus & Co. Ltd.—18-A, Brabourne Road, Calcutta 1.

Lotus Industries Ltd.—22, Zakaria Street, Calcutta.

M. B. Kharwan Bros.—7, Swallow Lane, Calcutta.

Mahilaram Bajaj & Co.—178, Mahatma Gandhi Road, Calcutta.

Metal Distributors Private Ltd.—38, Strand Road, Calcutta.

Misirilal Jain.—34-B, Ratu Sarkar Lane, Calcutta.

Mohanal Motilal.—14/2, Old China Bazar Street, Calcutta.

Mohatra Brothers.—19, British Indian Street, Calcutta.

Mothari Enterprises Private Ltd.—178, Mahatma Gandhi Road, Calcutta.

Motilal Hariprasad & Bros.—67/50, Strand Bank Road, Calcutta.

Murarka (Overseas) Ltd.—17, Noormal Lohia Lane, Calcutta.

Murlidhar Jhunjunwala Ltd.—22/24, Radha Bazar Street, Calcutta.

Nandlal Bajaj.—156, Jummalal Bajaj Street, Calcutta.

Nandram Hunatram.—8, Lyons Range, Calcutta.

O. H. Jagodia.—14, Netaji Subhas Road, Calcutta.

Okura Trading Co. Ltd.—80, Chittaranjan Avenue, Calcutta 12.

Orient Engineering & Commercial Co. Ltd.—9-A, Dalhousie Square, Calcutta.

Oswal Company Ltd.—14/2, Old China Bazar Street, Calcutta.

Pannalal Sagarmal.—10, Canning Street, Calcutta.

Photo Emporium.—71, Ganesh Chandra Avenue, Calcutta 12.

Piel Chatterjee & Co.—24, Mangoe Lane, Calcutta.

Pioneer Plastic Works Private Ltd.—9, Ezra Street, Calcutta 1.

Power Farming Ltd.—3, Jagmohan Mullick Lane, Calcutta.

Prayagdas Mathuradas.—43, Strand Road, Calcutta.

Punjab Cloth Mills Ltd.—20, Tarachand Dutt Street, Calcutta.

Purushottomlall Rajgarhia.—13, Harrington Street, Calcutta.

R. McDill & Co. Private Ltd.—343, Ratu Sarkar Lane, Calcutta 7.

R. L. Modi & Sons Ltd.—2, Dayehatta Street, Calcutta.

Radharam Sohanlal.—8, Mullick Street, Calcutta.

Raghunathrai Piyarelal.—15, Noormal Lohia Lane, Calcutta 7.

Rambilas Nandlall.—178, Mahatma Gandhi Road, Calcutta.

Rameshwari Lal Dedraj.—180, Mahatma Gandhi Road, Calcutta.

Ram Gopal Pasari.—23/24, Radha Bazar Street, Calcutta.

Ramjidas Shriram.—46, Upper Chitpore Road, Calcutta 7.

Ramial Roshanlal & Co.—2, Raja Woodmunt Street, Calcutta.

Ranglal Shreechand.—94, Lower Chitpore Road, Calcutta 7.

S. A. Torat & Co. (Export Dept.).—55, Canning Street, Block ‘C’, Mehta Buildings, Calcutta 1.

S. Lal & Co. Private Ltd.—15, Chittaranjan Avenue, Calcutta.

Satyanarayan Prasad Vishnudeo Prasad.—9, Jagmohan Mullick Lane, Calcutta.

Seth Nanakchand Shadiram.—Mohta House, 20, Strand Road, Calcutta.

Shevprakash Janakraj & Co.—160, Jummalal Bajaj Street, Calcutta.

Shevram Sitaram.—138, Jummalal Bajaj Street, Calcutta.

Shewbux Satyanarain.—30/31, Kalakar Street, Calcutta.

Shree Bajrang Trading & Supply Co.—22, Burtolla Street, Calcutta.

Shree Hanuman Mercantile Co. Pvt. Ltd.—178, Mahatma Gandhi Road, Calcutta 7.

Shree Kamala Agency.—23, Canning Street, Calcutta 1.

Shree Shew Sakti Oil Mills Ltd.—14, Netaji Subhas Road, Calcutta.

Shree Shivagouri Oil Mills.—234/2, Upper Circular Road, Calcutta.

Shri Niwas Co. Private Ltd.—14, Noormal Lohia Lane, Calcutta 7.

Shyam Sundar Ltd.—P-16, Kalakar Street, Calcutta.

Shyamsundar Agarwala.—173, Mahatma Gandhi Road, Calcutta.

Sonthalia & Company.—71, Jummalal Bajaj Street, Calcutta.

Standard Radio & Winding House Private Ltd.—1, Chandney Chowk Street, Calcutta 13.

Sukhdeodas Kishanlall.—178, Mahatma Gandhi Road, Calcutta 7.

Summerson Trading Co. Ltd.—201, Mahatma Gandhi Road, Calcutta.

Sundar Lal Golchha.—113, Manohardas Katra, Calcutta.

Sundarimal Pararam.—161, Chittaranjan Avenue, Calcutta.

Surajmull Hanumandas.—132, Cotton Street, Calcutta 7.

Surajmull Murlidhar.—28, Amratolla Street, Calcutta.

Swalke Vanaspati Products Ltd.—18-B, Brabourne Road, Calcutta.

Swadeshli Ayat Niryat Ltd.—33, Brabourne Road, Calcutta.

Swatantra Bharat Trading Co. Ltd.—208, Jummalal Bajaj Street, Calcutta.

Textile Store Dealers Ltd.—33, Netaji Subhas Road, Calcutta.

Tolaram Champalal.—183/1, Dharamtolla Street, Calcutta.

Umakant & Co. Private Ltd.—4, Mullick Street, Calcutta.

United India Trading Co.—159, Chittaranjan Avenue, Calcutta 7.

United Provinces Commercial Corporations.—6, Ganesh Chandra Avenue, Calcutta.

United Supply Agency Private Ltd.—38, Strand Road, Calcutta.

Universal Importers Co.—32-E, Jackson Lane, Calcutta.

Vasant Corporation Private Ltd.—28, Amratolla Street, Calcutta 1.

Vijoy & Company.—3, Chowringhee Road, Calcutta.

Wool Agents Ltd.—10, Armenian Street, Calcutta.

## INDUSTRIAL AND COMMERCIAL MANAGEMENT & COST CONSULTANTS

**IBCON PRIVATE LTD.**—Industrial and Management Consultants, Regd. Office: Adelphi House; 119, Queen's Road, Bombay-1; Consultancy Services for development of New Industries, Market Survey and Feasibility Studies Project Reports, Planning for Modernization and Expansion of Industries in respect of Paper, Chemicals, Rayons, Sugar, Cement, Textiles and Engineering etc., Building and Factory Design, Supervision of Civil Engineering Construction and Erection of Equipment and Commissioning; and help in obtaining optimum results in output and costs; Offices: 5, Russell Street, Calcutta-16; 18, Palace Road, Bangalore; Brady's Building, Mahatma Gandhi Road, Kanpur; D-24, Defence Colony, New Delhi-3; 14, Shivaganga Road, Madras 34; Sukhastan Gardens, Colombo-2; Grams: 'IBCO' Bombay, 'IBCOST', Calcutta, Bangalore, Kanpur, Colombo; Phone: 242052/3 (Bombay); 23-8891/2 (Calcutta); 24470 (Bangalore); 32961 (Kanpur); 75202 (New Delhi); 88176 (Madras).



## INK MANUFACTURERS

Bagchi, P. M. & Co.—19, Gulu Ostagar Lane, Calcutta 6.  
 Bandyo S. & Co.—P.O. Alambazar, Calcutta 35.  
 Bengal Miscellany Ltd.—174, Manicktolla Main Road, Calcutta 11.  
 Calcutta Miscellany.—12, Ghose Lane, Calcutta.  
 Chemproducts (India) Ltd.—12, Tamer Lane, Calcutta.  
 Duro Chemical Works.—14-2, Old China Bazar Road, Calcutta.  
 G. & B. Industrial Syndicate—20, Raja Nabakisan Street, Calcutta.  
**GANGES PRINTING INK FACTORY LTD.**—Gillander House, Block F-3, 8, Netaji Subhas Road, Calcutta-1. Branches at Bombay, Madras & Delhi.  
 Griper (India) Ltd.—Gillander House, 8, Netaji Subhas Road, Calcutta 1.  
 Hooghly Ink Co. Pvt. Ltd.—67/A, Ballygunge Circular Road, Calcutta 19.  
 Lily Chemical Works.—3, Ramkanta Sen Lane, Calcutta 4.  
 Lipika Ink Co.—Alambazar, Calcutta 35.  
 Pillet Ink Co.—171-B, Rashbehari Avenue, Calcutta.  
 Profile (India) Ltd.—Jadavpur Colony, Calcutta 32.  
 Rainbow Industries Pvt. Ltd.—2/2A, Armenian Street, Calcutta 1.  
 Rangoon Miscellany.—12, Tamer Lane, Calcutta.  
 Rapidol Industries Co.—24-E, Sura 3rd Lane, Beliagatta, Calcutta.  
 Ray Brothers.—78, Harrison Road, Calcutta 9.  
 Raz Brothers.—65-1, Harrison Road, Calcutta.  
 S. Karr & Co.—4D, Dharamtolla Road, Calcutta.  
 Shree Lakshmi Industries & Chemicals Ltd.—116/1/11, Harrison Road, Calcutta.  
 Sulekha Works Ltd.—Sulekha Park, Calcutta 12.  
 Super Toilet & Chemical Co. (Private) Ltd.—80, Cornwallis Street, Calcutta 6.  
 True Ink Mfg. Co.—79, Wellesley Street, Calcutta 13.  
 Unita Trading Co.—76, Lower Circular Road, Calcutta.  
 Zenith Ink & Gum Products.—29, Madan Mitra Lane, Calcutta.

## INSULATION MATERIALS

J. D. Jones & Co. Ltd. (Estd.: 1893).—C/5, Gillander House, 8, Netaji Subhas Road, Calcutta-1.  
 Navin Insulators.—6, Little Russell Street, Calcutta-16; Phone: 447556 & 352546 (Factory).

## INSURANCE COMPANIES

The All India General Insurance Co. Ltd.—B1, Clive Bldgs., 8, Netaji Subhas Road, Calcutta.  
 The Bombay Fire & General Insurance Co. Ltd.—23, Ganesh Ch. Avenue, Calcutta.  
 The British India General Insurance Co. Ltd.—National Tobacco Bldgs., 1 & 2, Old Court House Corner, Calcutta.  
 The Calcutta Insurance Ltd.—24, Chittaranjan Avenue, Calcutta.  
 The Concord of India Insurance Co. Ltd.—8, Clive Row, Calcutta.  
 The Central India Insurance Co. Ltd.—133, Canning Street, Calcutta.  
 Commercial Union Assurance Co. Ltd.—32, D. Square, Calcutta 1.  
 The General Assurance Society Ltd.—8, Dalhousie Square East, Calcutta 1.  
 Hercules Insurance Co. Ltd.—16, Hare Street, Calcutta.  
 Hindusthan General Insurance Society Ltd.—Hindusthan Bldg., 4, Chittaranjan Avenue, Calcutta.  
 Howrah Insurance Co. Ltd.—12B, Netaji Subhas Road, Calcutta.  
 Hukumchand Insurance Co. Ltd.—38, Netaji Subhas Road, Calcutta.  
 The Indian Globe Insurance Co.—22, Canning Street, Calcutta.  
 The Indian Mercantile Insurance Co. Ltd.—7, Old Court House St., Calcutta.  
 Indian Mutual General Insurance Society Ltd.—10, Clive Row, Calcutta.  
**INDIAN TRADE & GENERAL INSURANCE CO. LTD.**—Regd. Office: 25, Brabourne Road, Calcutta 1; Principal Office: Jehangir Building, Mahatma Gandhi Road, Bombay 1; Grams: "ADASTRA"; Phone 255101; Business Transacted—Fire, Marine, Motor and Miscellaneous.  
 Jayabharat Insurance Co. Ltd.—C/o Central India Ins. Co. Ltd., Chopra House, 133, Canning Street, Calcutta.  
 Jupiter General Insurance Co. Ltd.—6, India Exchange Place, Calcutta.  
 Marine & General Insurance Co., Ltd.—21, Strand Road, Calcutta.  
 National Insurance Co. Ltd.—7, Council House Street, Calcutta.  
 The National Security Assurance Co. Ltd.—B1, Clive Bldgs., 8, Netaji Subhas Road, Calcutta.  
 The New Asiatic Insurance Co. Ltd.—India Exchange, Calcutta.  
 The New Great Insurance Co. of India Ltd.—9, Brabourne Road, Calcutta.  
 New India Assurance Co. Ltd.—4, Lyons Range, Calcutta.  
 Oriental Fire & General Insurance Co. Ltd.—2, Clive Row, Calcutta.  
 Pandyan Insurance Co. Ltd.—5 & 7, Netaji Subhas Road, Calcutta.  
 Ruby General Insurance Co. Ltd.—India Exchange, Calcutta.  
 The Sentinel Assurance Co. Ltd.—13, Brabourne Road, 4th Floor, Calcutta.

South British Insurance Co. Ltd.—10, Netaji Subhas Road, Calcutta.  
 South India Insurance Co. Ltd.—23, Ganesh Ch. Avenue, Calcutta 1.  
 Standard General Assurance Co., Ltd.—Bombay Mutual Building, 9, Brabourne Road, Calcutta 1.  
 Sterling General Insurance Co.—4, Dalhousie Sqr. East, Calcutta.  
 Triton Insurance Co. Ltd.—18, Netaji Subhas Road, Calcutta 1.  
 Union Assurance Society Ltd.—32, D. Square, Calcutta 1.  
 Union Insurance Society of Canton, Ltd.—B2, Gilander House, 8, Netaji Subhas Road, Calcutta 1.  
 United India Fire & General Insurance Co. Ltd.—A3, Clive Bldgs., Calcutta.  
 Universal Fire & General Insurance Co. Ltd.—7, Old Court House Street, Calcutta.  
 Vulcan Insurance Co. Ltd.—7, Old Court House Street, Calcutta.  
 Zenith Assurance Co. Ltd.—National Tobacco Bldgs., 1 & 2, Old Court House Corner, Calcutta.

## IRON & STEEL

Ajodharam Mathuraram.—77, Kailash Bose Street, Calcutta.  
 Aminchand Payare Lal.—135, Canning Street, Calcutta 1.  
 Anandji Haridas & Co. (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
 Banerjee & Co.—5, Debendra Road, Calcutta.  
 Bansantal Ghansamdas.—8/5, Roopchand Roy Street, Calcutta.  
 Benimadhab Sett Satyacharan Sett.—D/44, Jagannath Ghat, Calcutta.  
 Bengal Corpn. (P) Ltd.—14, Netaji Subhas Road, Calcutta.  
 Bharat Overseas (P) Ltd.—18-B, Brabourne Road, Calcutta.  
 Bharati Private Ltd.—12, Netaji Subhas Road, Calcutta.  
 B. K. Shah & Co.—3, Maharshi Debendra Road, Calcutta.  
 Birmingham Iron & Steel Co.—8, Canning Street, Calcutta 1.  
 Calcutta Iron & Steel Co. Ltd.—65-A, Netaji Subhas Road, Calcutta 1.  
 Calcutta Iron Syndicate Ltd.—8-1, Maharshi Debendra Road, Calcutta 7.  
 Chatterjee Bhattacharya & Co. (P) Ltd.—306, Circular Road, Shibpur, Howrah.  
 Chatterjee Paul & Co.—26, Wellington Street, Calcutta.  
 Chandra Kanta Manna & Co. (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
 Chimanram Sewbhagwan.—192, Cross Street, Calcutta.  
 Choudhry Bhattacharjee & Co.—2, Maharshi Debendra Road, Calcutta.  
 D. N. Sett.—12, Maharshi Debendra Road, Calcutta.  
 D. N. Sircar & S. K. Das.—6, Maharshi Debendra Road, Calcutta.  
 Das Iron & Steel Co.—168-A, Cotton Street, Calcutta 7.  
**DINDAYAL RAMRUP.**—15-1, Sovaram Basak Street, Calcutta 7; Government Registered Stockists for Rounds, Joists, Angles, Channels, Plates, Sheets etc. & Dealers in Pipes & Pipe Fittings; Phone: 336927.  
 Dukhineswar Sarkar & Bros. (P) Ltd.—2, Maharshi Debendra Road, Calcutta.  
 G. C. Banerji & Co. (P) Ltd.—74/A, Nalini Sett Road, Calcutta.  
 G. P. Nundy & Sons.—93/3/3A, Hari Ghose Street, Calcutta.  
 Ganga Narayan Paul & Co.—22, Maharshi Debendra Road, Calcutta.  
 Ganges Agencies (P) Ltd.—32, Cross Street, Calcutta 7.  
 Gobardhan Sreemany.—12, Maharshi Debendra Road, Calcutta.  
 Gokul Chandra Dhar & Sons.—D/9, Jagannath Ghat Road, Calcutta.  
 H. K. Paul & Bros. (P) Ltd.—3/3, Maharshi Debendra Road, Calcutta.  
 Hemanta Kumar Deyasi & Bros. (P) Ltd.—21, Maharshi Debendra Road, Calcutta.  
 Howrah Metal Mart.—6, Maharshi Debendra Road, Calcutta.  
 Hrishikesh Rit.—12, Maharshi Debendra Road, Calcutta.  
 Imperial Iron & Steel Co.—28, Strand Road, Calcutta.  
 Indian Iron & Steel Co. Ltd.—12, Mission Row, Calcutta.  
 Indu Bhusan Dutta & Co.—D/7, Jagannath Ghat, Calcutta.  
 Ishan Chandra Chatterjee & Sons (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
 Jagabandhan Ram Dwarkaprosad.—77, Kailash Bose Street, Calcutta.  
 Jamnadas & Brother (P) Ltd.—55/58, Canning Street, Calcutta.  
 Jankidas Sewnarayan.—48, Canning Street, Calcutta.  
 Janson Iron & Steel Co.—80, Colootola Street, Calcutta.  
 Jeetnarain Ghose & Co.—36, Strand Road, Calcutta.  
 Jotindra Nath Nundy & Bros.—7/1, Maharshi Debendra Road, Calcutta.  
 K. C. Ghattack & Sons (Private) Ltd.—3, Maharshi Debendra Road, Calcutta 7.  
 K. C. Mookerjee & Sons.—27, Wellington Street, Calcutta.  
 K. N. Parul & Co.—11, Maharshi Debendra Road, Calcutta.  
 Kamala Prosad & Co.—170, Karnani Estate, 209, Lower Circular Road, Calcutta.  
 Krishna Chandra Nandy & Co.—20, Maharshi Debendra Road, Calcutta.  
 Kristo Dhong Gangooly & Co.—115, Netaji Subhas Road, Calcutta.



M. D. Panday & Co.—21, Maharshi Debendra Road, Calcutta.  
 Machino Techno (Sales) P. Ltd.—33, Netaji Subhas Road, Calcutta.  
 Makhan Lal Dey & Sons P. Ltd.—D/15, Jagannath Ghat, Calcutta.  
 Metal Import (P) Ltd.—18-D, Sukeas Lane, Calcutta 1.  
 Mohor Lal Sinha Private Ltd.—D-11, Jagannath Ghat, Lohapatty, Calcutta 7.  
 Mookerjee & Co.—17, Maharshi Debendra Road, Calcutta.  
 Mookerjee & Co.—25, Wellington Street, Calcutta.  
 N. C. Shaw & Co., P. Ltd.—D/24, Jagannath Ghat, Calcutta.  
 Narayan Chandra Sett.—12, Maharshi Debendra Road, Calcutta.  
 Narayandass & Co.—D/5, Jagannath Ghat, Calcutta.  
 Nagendra Nath Banerjee.—D/19, Jagannath Ghat, Calcutta.  
 Nagendra Nath Dey.—D/13, Jagannath Ghat, Calcutta.  
 Narayan Co.—174, Mahatma Gandhi Road, Calcutta.  
 Natabar Paul & Co. (P) Ltd.—19, Maharshi Debendra Road, Calcutta.  
 Natabar Sett.—8/1, Maharshi Debendra Road, Calcutta.  
 Nathmull Dwarkadass.—74/A, Nalini Sett Road, Calcutta.  
 Nathmull Girdharilal.—22, Burtolla Street, Calcutta.  
 National Iron & Steel Co. Ltd.—4, D. Square East, Calcutta 1.  
 National Rolling & Steel Ropes Ltd.—Nico House, Hare Street, Calcutta 1.  
 National Steel Corpn.—138, Canning Street, Calcutta 1.  
 Nepaul Chandra Sett.—9/1, Maharshi Debendra Road, Calcutta.  
 Nirajan & Co. (P) Ltd.—20/1, Maharshi Debendra Road, Calcutta.  
 Noin Behari Sett & Sons.—D/21, Jagannath Ghat, Calcutta.  
 Nundy Brothers (P) Ltd.—3/3, Maharshi Debendra Road, Calcutta.  
 Orissa Steel Corpn. P. Ltd.—29, Strand Road, Calcutta.  
 P. K. Mookerjee & Co. (P) Ltd.—D/1, Jagannath Ghat, Calcutta.  
 P. K. Roy & Co.—26, Wellington Street, Calcutta.  
 P. N. Mukherjee & Sons.—9/1, Maharshi Debendra Road, Calcutta.  
 P. Paul & Bros. (P) Ltd.—39/B, Wellington Street, Calcutta.  
 Panchcowri Sett Haradhone Paul.—D/2, Jagannath Ghat, Calcutta.  
 Paul & Co. Ltd. P.—20/2B, Maharshi Debendra Road, Calcutta 7.  
 Phanindra Nath Manna & Co. P. Ltd.—20, Maharshi Debendra Road, Calcutta.  
 Panchanon Shome.—9, Maharshi Debendra Road, Calcutta.  
 Rajendra Nath Mullick & Co. (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
 R. K. Ghose & Co.—41, Wellington Street, Calcutta.  
 Rakhal Chandra Dey & Co. (P) Ltd.—8/1, Maharshi Debendra Road, Calcutta.  
 Rakhaldas Mullick & Co.—D/14, Jagannath Ghat, Calcutta.  
 Ramkrishna Kulwant Rai.—33, Netaji Subhas Road, Calcutta.  
 Ranjan & Co. (Iron Mongers) P. Ltd.—22/1, Maharshi Debendra Road, Calcutta.  
 Rasick Lal Ghosh & Sons.—30, Wellington Street, Calcutta.  
 S. Dey & Brothers.—18, Maharshi Debendra Road, Calcutta.  
 S. K. Sett & Brothers.—7/1, Maharshi Debendra Road, Calcutta.  
 S. M. Bejoy & Co. (P) Ltd.—D/20, Jagannath Ghat, Calcutta.  
 S. Nundy & Co.—25, Wellington Street, Calcutta.  
 S. N. Nandy.—D/26, Jagannath Ghat, Calcutta.  
 S. Palchowdhury & Co. (P) Ltd.—19, Maharshi Debendra Road, Calcutta.  
 Saroj Iron & Steel Co. P. Ltd.—85-1, Upper Chitpur Road, Calcutta 6.  
 Saroj Kumar Sreemany.—3, Maharshi Debendra Road, Calcutta.  
 Santosh Kumar Mullick & Son P. Ltd.—D/5, Jagannath Ghat, Calcutta.  
 Satyandra Mohan Palodhy Kali Pada Nandy.—39, Wellington Street, Calcutta.  
 Sett & Sons Private.—B/5, Jagannath Ghat, Calcutta.  
 Seth Nanakchand Shadiram.—29, Strand Road, Calcutta.  
 Shaha Brothers.—9, Maharshi Debendra Road, Calcutta.  
 Sharma & Co.—2, Maharshi Debendra Road, Calcutta.  
 Shyam Lal Sil & Co.—D/26, Jagannath Ghat, Calcutta.  
 Shyamdas Nundy & Sons.—D/27, Jagannath Ghat, Calcutta.  
 Sontosh Kumar Dey.—19, Maharshi Debendra Road, Calcutta.  
 Sreenath Chandra Bera.—7/1, Maharshi Debendra Road, Calcutta.  
 Steel & Allied Products Ltd.—17, Brabourne Road, Calcutta 1.  
 Steel Traders (P) Ltd.—Stephen House, R. No. 27/1, Dalhousie Square, Calcutta.  
 Steelverse & Co. (1960) P. Ltd.—40, N. Subhas Road, Calcutta 1.  
 Sur Iron & Steel Co. P. Ltd.—15, Convent Road, Calcutta 14.  
 Surath Nath Manna Manmatha Nath Manna (P) Ltd.—D/16, Jagannath Ghat, Calcutta.  
 Surendra Nath Paul Basanta Kumar Sett.—19, Maharshi Debendra Road, Calcutta.  
 Surendra Nath Ghosh & Co.—D/12, Jagannath Ghat, Calcutta.  
 Surendra (Overseas) P. Ltd.—135, Canning Street, Calcutta.  
 T. D. Kumar & Bros. (P) Ltd.—20/1, Maharshi Debendra Road, Calcutta.  
 T. N. Mullick & Sons.—20/2B, Maharshi Debendra Road, Calcutta.  
 Tah Nundy & Co. (P) Ltd.—20, Maharshi Debendra Road, Calcutta.  
 Tarak Nath Nundy.—D/28, Jagannath Ghat, Calcutta.  
 Tata-Scob Dealers (Controlled Stock) Calcutta Ltd.—20, Strand Road, Calcutta.  
 Tinplate Dealers Association Pvt. Ltd.—138, Canning Street, Calcutta 1.  
 United Steel & Bearing Co.—5-B, Clive Ghat Street, Calcutta 1.  
 Upendra Nath Mullick & Co.—55, Nalini Sett Road, Calcutta.

Vora Brother (P) Ltd.—47, Ezra Street, Calcutta.  
 Woolverhampton Iron & Steel Co.—137, Canning Street, Calcutta.

## JUTE & JUTE GOODS

GARG & SONS.—Exporters and Dealers in Jute goods ; 15, Ganesh Chandra Avenue, Post Box 852, Calcutta-1 ; Phones: 233230, 239005, 239681 & 237985.

PUSHKAR LALL & CO.—121, Cotton Street, Calcutta-7 ; Phone: Office : 331503, Resi. : 662132 ; Dealers in Jute and Hessian goods ; Manufacturers of Jute Twine Rope, Hessian Bags of all sizes, Hessian Patties & Separation Cloth etc.

## JUTE MILL STORES

DEEPAK RUBBER INDUSTRIES.—36, Chakpara Road, P.O. Liloah (Howrah) ; Manufacturers of D.R.I. Duxonite bobbins (Patent applied for), and Conical Spools. Cones of Hollow-Cop Winder rubberised to match Imported quality ; Phone : 664215 ; City Office at 7, Lyons Range, Calcutta ; Phone : 228946.

## JUTE MILLS

Agarpara Co., Ltd.—Norton Bldgs., 1 & 2, Old Court House Corner, Calcutta.

Alexandra Jute Mills Ltd.—3, Netaji Subhas Road, Calcutta.

Alliance Jute Mills Co., Ltd.—3, Netaji Subhas Road, Calcutta.

Anglo-India Jute Mills Co., Ltd.—31, Netaji Subhas Road, Calcutta.

Angus Co., Ltd.—2 & 3, Clive Row, Calcutta.

Auckland Jute Co. Ltd.—Chartered Bank Bldgs., Calcutta.

Bally Jute Co. Ltd.—8, India Exchange Place, Calcutta.

Barnagore Jute Factory Co. Ltd.—4, Clive Row, Calcutta.

Belvedere Jute Mills Co., Ltd.—8, Clive Row, Calcutta.

Bengal Jute Mill Co., Ltd.—61, Harrison Road, or 8, Dalhousie Square East, Calcutta.

Birla Jute Mfg. Co. Ltd.—8, India Exchange Place, Calcutta.

Budge-Budge Jute Mills Co., Ltd.—8, Clive Row, Calcutta.

Calcutta Jute Mfg. Co. Ltd.—Stephen House, 4, Dalhousie Square, 4th Floor, Calcutta.

Caledonian Jute Mills Co., Ltd.—9, Brabourne Road, Calcutta.

Champdany Jute Co., Ltd.—Wellington Jute Mills.—2, Netaji Subhas Road, Calcutta.

Cheviot Mills Co. Ltd.—8, Clive Row, Calcutta.

Chitavalsah Jute Mills Co., Ltd.—3, Netaji Subhas Road, Calcutta.

Clive Mills Co. Ltd.—13, Old Court House Street, Calcutta.

Dalhousie Jute Co., Ltd.—Chartered Bank Bldgs., Calcutta.

Delta Jute Mills Co., Ltd.—8, Clive Row, Calcutta.

Eastern Mfg. Co. Ltd.—3, Netaji Subhas Road, Calcutta.

Empire Jute Co. Ltd.—3, Netaji Subhas Road, Calcutta.

Fort Gloster Industries Ltd.—21, Strand Road, Calcutta.

Fort William Jute Co., Ltd.—14, Netaji Subhas Road, Calcutta.

Ganges Mfg. Co., Ltd.—7, Council House Street, Calcutta.

General Industrial Society Ltd.—8, India Exchange Place, Calcutta.

Gourepore Co. Ltd.—2, Fairlie Place, Calcutta.

Hastings Mill Ltd.—14, Netaji Subhas Road, Calcutta.

Hooghly Mills Co., Ltd.—10, Clive Row, Third Floor, Calcutta.

Howrah Mills Co., Ltd.—4, Clive Row, Calcutta.

Hukumchand Jute Mills Ltd.—9, Brabourne Road, Calcutta.

India Jute Co. Ltd.—16, Strand Road, Calcutta.

Kamarhatty Co., Ltd.—4, Clive Row, Calcutta.

Kanknarrah Co., Ltd.—4, Clive Row, Calcutta.

Kanoria Co., Ltd.—18, Mullick Street, or Brabourne Road, Calcutta.

Kathar Jute Mills Ltd.—3, Chandmari Road, Howrah.

Kedarnath Jute Mfg. Co., Ltd.—13, Syed Sailey Lane, Calcutta.

Kelvin Jute Co., Ltd.—3, Netaji Subhas Road, Calcutta.

Khardah Co., Ltd.—7, Wellesley Place, Calcutta.

Kinnison Jute Mills Co., Ltd.—Chartered Bank Bldgs., Calcutta.

Lansdowne Jute Co. Ltd.—Chartered Bank Bldgs., Calcutta.

Lawrence Jute Co., Ltd.—Chartered Bank Bldgs., Calcutta.

Luxmi Jute Mills Ltd.—5, Clive Row, Calcutta.

Megna Mills Co. Ltd.—16, Strand Road, Calcutta.

National Co., Ltd.—P. N. B. House, 18A, Brabourne Road, Calcutta.

Naihati Jute Mills Co., Ltd.—33, Netaji Subhas Road, Calcutta.

Naskarpara Jute Mills Co. Ltd.—144/45, Old Ghusuri Road, Howrah or 8, Dalhousie Square East, Calcutta.

Nellmaria Jute Mills Co., Ltd.—3, Netaji Subhas Road, Calcutta.

New Central Jute Mills Co., Ltd.—11, Clive Row, Calcutta.

North Brook Jute Co., Ltd.—Chartered Bank Bldgs., Calcutta.

Nuddea Mills Co., Ltd.—2, Fairlie Place, Calcutta.

Orient Jute Mills Co., Ltd.—8, Clive Row, Calcutta.

Premchand Jute Mills Ltd.—81, Shova Bazar Street, Calcutta.

Presidency Jute Mills Co., Ltd.—3, Netaji Subhas Road, Calcutta.

Reliance Jute Mills Co., Ltd.—4, Clive Row, Calcutta.

Samnuggur Jute Factory Co., Ltd.—2 & 3, Clive Row, Calcutta.

Shree Ambica Jute Mills Ltd.—5, Clive Row, Calcutta.

Shree Ganesh Jute Mills Ltd.—5, Dalhousie Square East, 6th Floor, Suite No. 105, Calcutta.

Shree Gouri Shankar Jute Mills Pvt. Ltd.—10, Clive Row, Calcutta.

Shree Hanuman Jute Mills.—61, Harrison Road, or 8, Dalhousie Square East, Calcutta.



Shree Luchminarain Jute Mfg. Co. Ltd.—3, Chandmarl Road, Howrah.  
 Shree Mahadeo Jute Mills.—46, Strand Road, Calcutta.  
 Soorah Jute Mills Co., Ltd.—8, India Exchange Place, Calcutta.  
 Standard Jute Co., Ltd.—Chartered Bank Bldgs., Calcutta.  
 Titagur Jute Factory Co. Ltd.—2 & 3, Clive Row, Calcutta.  
 Union Jute Co., Ltd.—Chartered Bank Bldgs., Calcutta.  
 Victoria Jute Co., Ltd.—2 & 3, Clive Row, Calcutta.  
 Waverley Jute Mills Co., Ltd.—3, Netaji Subhas Road, Calcutta.  
 Wellington Jute Mills.—2, Netaji Subhas Road, Calcutta.

### KAPOK MANUFACTURERS

A. Bradeley & Co.—63, Radha Bazar Street, Calcutta.  
 Banthia Brothers.—61, Cross Street, Calcutta 7.  
 Basantlal Banka.—15, Bhawanidutt Lane, Calcutta 7.  
 Bhuramull Agarwalla.—2/1, Satyanarain Temple Road, Salkia, Howrah.  
 Bidhu Bhushan Chaudhury.—35, Sova Bazar Street, Calcutta 3.  
 Hurduttroy Gulabroy.—171/1, J. N. Mukherjee Road, Salkia, Howrah.  
 Indian Produce Exporters Co.—74, Cross Street, Calcutta 7.  
 Jagannath Brothers.—2, Satyanarain Temple Road, Salkia, Calcutta.  
 Kailash Chandra Dutta.—72/B, Durga Charan Mitra Lane, Calcutta 6.  
 Kalidas Saha.—14, Benia Tolla Street, Calcutta 5.  
 Kaushik Tibrewalla.—34, Burtolla Street, Calcutta 7.  
 Kedarnath Balmukund.—402, Upper Chitpore Road, Calcutta 7.  
 Khimjee Hunsraj.—165, Lower Chitpore Road, Calcutta.  
 Lalchand Mahadeblal.—7, Hazarimull Shah Road, Salkia, Howrah.  
 Madanlal Basak.—17/1, Gulu Ostagarh Lane, Calcutta 6.  
 Madanlal Sharma.—12, Ishwar Dutt Lane, Howrah.  
 Murlidhar Tibrewalla.—34, Burtolla Street, Calcutta 7.  
 Niranjana & Sons.—2/1, Satyanarain Temple Road, Salkia, Howrah.  
 Ram & Sons.—16, Satyanarayan Temple Road, Salkia, Howrah.  
 Sudhamoy Roy.—31, Bandhab Nagar Colony, Calcutta 28.  
 Tarak Chandra Bose, C/o H. C. Mukherjee & Co.—5, Mangoe Lane, Calcutta.  
 Upendra Nath Dass.—43, Ultadanga Main Road, Calcutta.

### LABORATORY CHEMICALS & EQUIPMENTS

ASSOCIATED INSTRUMENT MFRS. (INDIA) PRIVATE LTD.—B-5, Gillander House, Calcutta, Phone: 223304, Grams: "AIMIL".

BRITISH DRUG HOUSES (INDIA) PRIVATE LTD.—58/D, Chowringhee Road, Calcutta 16; Head Office: P.O. Box 9024, 8 Graham Road, Bombay 1.

DARBARA SINGH & SONS.—14, Bow Bazar Street, Calcutta-12; Sole Agents for "OLYMPUS" Student, Medical Research, Metallurgical & Stereoscopic Microscopes, Microtomes, Epidiascopes and Laboratory Equipments; Phone: 227785, 220102.

INDIAN CHEMICALS & SCIENTIFIC INSTRUMENT WORKS.—Manufacturers of all sorts of Physics, Chemistry, Biology, Psychology and Geography Instruments, Gas Plants, Laboratory Furniture etc., 208, Bepin Behari Ganguli Street, Calcutta-12; Phones: 348597, 348755 & 353939.

### LAMP (OIL PRESSURE) MANUFACTURERS

Dazzle Products Ltd.—138, Canning Street, Calcutta.  
 Essbee Engineering Works.—25-B, Beniatolla Lane, Calcutta.  
 Krudd Industries Ltd.—20-21, Stephen House, Dalhousie Square, Calcutta.  
 Shilpa-Peeth Ltd.—111/1, Gopal Lal, Thakur Road, Alambazar, Calcutta 35.

### LANTERN MANUFACTURERS

A. K. Sarkar Industries P. Ltd.—32-1, Dalhousie Square, Calcutta.  
 F. Racek & Co. P. Ltd.—57, Radhabazar Street, Calcutta 1.  
 Industrial Works Private Ltd.—55/1, Dharamtolla Road, Salkia, Howrah.  
 Krudd Industries Ltd.—4, Dalhousie Sqr., Calcutta.  
 Oriental Metal Industries Ltd.—77, Bowbazar Street, Calcutta 12.  
 Shilpa Peeth P. Ltd.—111-1, Gopal Lal Thakur Road, Calcutta.  
 Universal Lamp Manufacturing Co. Private Ltd.—93B, Ripon Street, Calcutta 16.

### LEAD MANUFACTURERS

Ashok Co.—157, Netaji Subhas Road, Calcutta.  
 Ashok Metal Industries Ltd.—157, Netaji Subhas Road, Calcutta.  
 Associated Pigments Ltd.—14, Netaji Subhas Road, Calcutta 1.  
 Chandra Industries Private Ltd.—58, Cotton Street, Calcutta 7.

### LEATHER & LEATHER PRODUCTS

A. Mohammed & Co.—26, Netaji Subhas Road, Calcutta 1.  
 ASSOCIATED INDUSTRIAL PRODUCTS CO.—'Grip well' Brand Beltings, Leather, Hair, Cotton and Weaving Loom, Leather accessories for Jute, Textile and Woollen Industries, Dixel Rope and General Mill Stores; 5, Mission Row, Calcutta-1; Phones: 239844, 239880 & 555774.

Atlas Leather Trading Co.—23, Central Avenue, Calcutta.  
 Basak & Co.—22, Raja Woodmunt Street, Calcutta 1.  
 Bata Shoe Co. Pvt. Ltd.—30, Theatre Road, Calcutta 16.  
 Bengal Mill Stores Co.—2, Kanai Seal Street, Calcutta 1.  
 Bengal Tannery Co.—31/14, Lower Chitpur Road, Calcutta.  
 Calcutta Leather House P. Ltd.—2-G, Bentinck Street, Calcutta.  
 Calcutta Tanneries Ltd.—Kankinarrah, 24 Parganas Dist.  
 Cottage Tanning Institute.—South Tangra Road, Calcutta.  
 De Lux Pvt. Ltd.—34-1-G, Ballygunge Circular Road, Calcutta.  
 Dutt, S. L. & Bros.—59, Netaji Subhas Road, Calcutta.  
 E. B. Leather Mfg. Co.—76-A, Upper Circular Road, Calcutta-9.  
 Ganesh Brothers.—22, Hidaram Banerjee Lane, Calcutta 12.  
 Glace Kid (India) Ltd.—2, Tangra 2nd Lane, Calcutta 15.

HINDUSTAN LEATHER WORKS.—82, Colootola Street, Calcutta 1.

Hindustan Tannery.—129, South Tangra Road, Dhapa P.O., 24 Parganas Dt.

India Exchange Corpn. P. Ltd.—26-B, Ezra Mansions, 10, Govt. Place East, Calcutta.

India Leather Corporation.—10, Lower Chitpur Road, Calcutta.  
 Industrial Leather & Rubber Works.—24, Strand Road, Calcutta.

Industrial Leathers Co.—3-1, Indra Roy Road, Calcutta 25.

Jardine Henderson Ltd.—4, Clive Row, Calcutta 1.

Kohinoor Leather Co.—14, Bentinck Street, Calcutta.

Leather Chemicals & Industries Ltd.—9, Muraripukur Road, Calcutta 4.

Leather & Steel Products.—26, Burtolla Street, Calcutta 7.

Mukherjee & Sons.—3, Ezra Street, Calcutta 1.

National Chamois Works Ltd.—6, Mangoe Lane, Calcutta.

National Tannery Co. Ltd.—Canal South Road, Calcutta 15.

Numehaong Tannery.—South Tangra Road, Calcutta.

Textile Leather Mfg. Co.—60/2, Dharamtolla Street, Calcutta.

United Tanning Industries.—16, Balikhur Lane, Calcutta.

Victory Leather Works.—167, Old China Bazar Street, Calcutta 1.

Zug—Grain & White Buck Iec Ltd.—5, Rife Range, Calcutta 19.

### LEATHER BUCKET MANUFACTURERS

Dutt, S. L. & Bros.—59, Netaji Subhas Road, Calcutta.  
 Industrial Leather & Rubber Works.—24, Strand Road, Calcutta.  
 Mukherjee & Sons.—3, Ezra Street, Calcutta.

### LIGHT RAILWAY MATERIALS

ACHARYA BROTHERS.—135, Canning Street, Calcutta-1; Dealers in Coal tubes, Tipping Wagons, Crossing Turntable, Fish Plates, Dog Spikes & all in Light & Heavy Materials; Grams: 'TIPPINGTUB', Phone: 220163 (Office) and 346512 (Residence).

### LOCK AND SAFE MANUFACTURERS & DEALERS

Agarwal Lock Co.—402, Upper Chitpur Road, Calcutta.  
 Bengal Iron Safe & Lock Works.—120, Sovabazar Street, Calcutta.  
 Bombay Safe & Steel Works P. Ltd.—56, N. Subhas Bose Road, Calcutta 1.  
 Calcutta Lock Factory.—P.O. Gopalpur, Bashirhat, Ry. Stn. Arballa, Dist. 24 Parganas.  
 Das Lock & Safe Mfg. Co. Private Ltd.—77-B, Rash Behari Avenue, Calcutta.  
 De's Lock Industries.—31, Haripada Dutta Lane, Calcutta 33.  
 Dhang Brothers & Co.—34, Strand Road, Calcutta.  
 East India Steel Works Ltd.—24, Netaji Subhas Road, Calcutta.  
 Economic Tanks Supply Co.—100, Harrison Road, Calcutta.  
 Ghose G. & Co.—101, Mahatma Gandhi Road, Calcutta 7.  
 Ghosh & Co.—96, Mahatma Gandhi Road, Calcutta 7.  
 Godrej & Boyce Mfg. Co. P. Ltd.—9, Brabourne Road, Calcutta.  
 Howrah Lock Mfg. Co. Ltd.—22, Raja Woodmunt Road, Calcutta.  
 Imperial Safe Mfg. Co.—105, Harrison Road, Calcutta.  
 Indian Metal & Steel Products Ltd.—20/1, Lall Bazar, Calcutta.  
 Nani Lall Dey.—70, Netaji Subhas Road, Calcutta.  
 Orient Safe & Cabinet Mfg. Co.—133, Canning St., Calcutta.  
 Patra N. N. & Co.—117, Netaji Subhas Road, Calcutta.  
 Ray G. & Co.—70-1, Netaji Subhas Road, Calcutta.  
 Sanial & Co.—22, Canning Street, Calcutta.  
 Shaw Bros. & Co.—Harrison Road, Calcutta 7.  
 Steelworks (I) Ltd.—17, Mangoe Lane, Calcutta 1.  
 Universal Safe & Tank Mfg. Co.—100, Mahatma Gandhi Road, Calcutta 7.  
 W. Bengal Lock Mfg. Co.—103, N. Subhas Road, Calcutta.

### LOCKS & FITTINGS

DE'S LOCK INDUSTRIES.—31, Haripada Dutta Lane, Tollygunge, Calcutta 33. Makers of Mortise Locks and Joinery Fittings, Door Closers & Floor Springs; Sole Selling Agents: Messrs. Healy & Gresham Ltd., Calcutta, Bombay, Madras, New Delhi.



**MACHINE PARTS MANUFACTURERS & DEALERS**

B. N. Pachal & Sons P. Ltd.—33-1-1, Natabar Pal Road, Howrah.  
 D. L. Sett & Brothers.—283, Belilios Road, Howrah.  
 East Indies Trading Corporation.—12-B, Clive Row, Calcutta 1.  
 L. Mullick & Co.—81, Netaji Subhas Road, Calcutta 1.  
 Machine Parts Manufacturing Co.—6A, Sultan Alam Road, Calcutta 33.  
 M. Chowdhury & Co.—113-G, Netaji Subhas Road, Calcutta 1.  
 Modern Engineering Works.—12, Jadu Pandit Road, Calcutta 6.  
 Monga Brothers.—4, Kyd Street, Calcutta 16.  
 New India Engineering Syndicate.—113-G, Netaji Subhas Road, Calcutta 1.  
 Oriental Engineering Co.—13 and 14, Danesh Molla Lane, Sibpore, Howrah.  
 Rajlakshmi Engineering Works.—151, Banaras Road, Salkia.  
 Regent Engineering Stores.—42, Strand Road, Calcutta 1.  
 S. A. Goolamally & Co.—77, Netaji Subhas Road, Calcutta 1.  
 Salkia Industrial Works.—195-1, Grand Trunk Road North, Ghursuri, Howrah.  
 Sree Durga Machinery Works.—161, Netaji Subhas Road, Howrah.

**MACHINE TOOLS**

A. Mohammed & Co.—Head Office: 26, Netaji Subhas Road, Calcutta 1.  
 Alfred Herbert (India) Pvt. Ltd.—13-3, Strand Road, Calcutta.  
 Armstrong Smith Ltd.—P-17, Mission Row Extension, Calcutta 13.  
 Associated British Machine Tool Makers (India) Ltd.—6, Old P.O. Street, Calcutta 1.  
 Bengal Iron & Steel Works.—8, Canning Street, Daga House, Calcutta.  
 Bengal Machine Tool Works.—112, Narsing Dutta Road, Howrah.  
 Bharatiya Machine Tools Ltd.—50, Stephen House, Calcutta 1.  
 B. S. Machine Tools Corporation.—435, Jessore Road, Calcutta 28.  
 Calcutta Machine Tools Corp.—10, Clive Row, Calcutta.  
 Continental Tools & Dies Mfg. Co.—2, Ripan Street, Calcutta.  
 D. C. De & Sons.—150, Narasingha Dutta Road, Howrah.  
 Duttan Engineering Corporation Pvt. Ltd.—5, Mahendra Chandra Garden Road, Dum Dum, Calcutta 30.  
 Eastern Machinery Corporation.—28, Strand Road, Calcutta 1.  
 Engel India Machine Tools Ltd.—6, Old P.O. Street, Calcutta 1.  
 Heatly & Gresham Ltd.—31, Chittaranjan Avenue, Calcutta.  
 Heroes Engineering Works Pvt. Ltd.—20, Paul Street, Calcutta 4.  
 Hind Enterprises.—4, Mission Row, Calcutta 1.  
 Hindusthan Machine Tools Corporation.—35, Netaji Subhas Road, Calcutta.  
 Hope Engineering Works.—126-1, Belilios Road, Howrah.  
 India Hard Metals P. Ltd.—Wimet House, Russell St., Calcutta 16.  
 India Machinery Co. Ltd.—29, Strand Road, Calcutta.  
 Indian Machine Tools Mfg. Co. Ltd.—A-3, Clive Bldg., Calcutta 1.  
 Industrial Gases Ltd.—138, Canning Street, Calcutta.  
 Industrial Tools & Mills Stores Co.—67-B, Netaji Subhas Road, Calcutta 1.  
 Kali Charan Mukherjee.—113, Monohardas Chowk, Burrabazar, Calcutta 7.  
 K. B. Paul & Co.—127, Belilios Road, Howrah.  
 Luxmi Engineering Co. Pvt. Ltd.—123, Narasingha Dutta Road, Howrah.  
 Machine Tools & Appliances (I) Co.—53, N. Subhas Road, Calcutta 1.  
 Machine Tools (I) Ltd.—Wimet House, Russell Street, Calcutta 16.  
 Machine Tools (Sales).—35, Chittaranjan Ave., Calcutta 12.  
 Machine Tools Traders.—25, Ganesh Ch. Avenue, Calcutta 13.  
 Machina Techno (Sales) Private Ltd.—33, Netaji Subhas Road, Calcutta 1.  
 Manekial & Sons (Calcutta).—23, Ganesh Chandra Avenue, Calcutta 13.  
 Maya Engineering Works Pvt. Ltd.—200A, Syamaprasad Mukherjee Road, Calcutta.  
 Metal & Alloy Corp.—38A, Belgachia Road, Calcutta 37.  
 Modern India Machine Tools Ltd.—18/1/6, Canal West Road, Garpar, Calcutta.  
 Mukherji Machine Tools P. Ltd.—32-A, Chittaranjan Ave., Calcutta.  
 National Machine Tools Co.—10-10, Brindaban Mullick Lane, Howrah.  
 New Bengal Engineering Works.—75, Belilios Road, Howrah.  
 New India Tools Mfg. Co.—Singhi Park, 48, Gariahat Road, Calcutta.  
 Oriental Machinery Supplying Agency Ltd.—P-12, Mission Row Extension, Calcutta.  
 Paul's Engineering Co.—P-7, Natabar Paul Road, Dassnagar (Dt. Howrah).  
 Phillips India Pvt. Ltd.—81, Chowringhee Road, Calcutta 16.  
 Power Tools and Implements Co.—71A, Netaji Subhas Road, Calcutta 1.  
 Prafulla Narayan Engineering Co.—P-14, Mission Row Extn., Calcutta 1.

Republic Traders Corp.—P-12, Mission Row Extn., Calcutta 1.  
 Salkia Industrial Works.—195-1, Grand Trunk Road, Ghursuri, Howrah.

Tool Suppliers Pvt. Ltd.—P. 34, India Exchange Place, Calcutta 1.

**T. M. FAKHRI & CO.—26-E, Netaji Subhas Road, Calcutta 1.**  
**Hardware, Machinery and Tools Merchants; also accredited Dealers for Wolf Portable Electric Tools as well as Stockists for Addison and STM Cutting Tools, TIMCO Hydraulic Pipe Bending Machines and Hydraulic Test Pumps.**

Ultra Engineering Co.—172-8, Madhusudan Pal Chowdhury Lane, Howrah.

**UNION TOOLS & AGENCIES PRIVATE LTD., 'Brabourne Court,' 1, Chandni Chowk Street, Calcutta-13.**

United Equipment & Stores Pvt. Ltd.—53, Radha Bazar St., Calcutta 1.

United Tools and Agencies P. Ltd.—Chandni Chowk, Calcutta 13.

Vulcan Machine Tool Co.—218, Manicktalla Main Road, Calcutta 11.

William Jacks & Co. Ltd.—16, Netaji Subhas Road, Calcutta 1.

**MACHINERY MANUFACTURERS & DEALERS**

Atlas Works Ltd.—119, Ripon Street, Calcutta 16.

Belrex (India) Ltd.—10, Prinsep Street, Calcutta 18.

Bengal Hardware & Tin Seal Manufacturing Co.—70, Netaji Subhas Road, Calcutta 1.

Bengal Machinery Co. Ltd.—9A, New Tangra Road, Calcutta 46.

Bery Brothers.—135, Canning Street, Calcutta 1.

B. M. S. Engineering Works P. Ltd.—3-1, Kaliprasad Chakravarty Lane, Kadamtala, Howrah.

Calcutta Engineering & Mfg. Co.—108-1, Benaras Road, Salkia.

Corporated Engineers P. Ltd.—7, Chittaranjan Avenue, Calcutta 13.

De's Metal Industries.—64-A, Mirzapore St., Calcutta 9.

**EAST ASIATIC CO. (INDIA) PRIVATE LTD., THE.—9-29, Mission Row Extension, Calcutta 13; Phones: 232114, 237221 & 239769; Grams: "EASTASIA"; P.O. Box 364; Manufacturers, Importers, Exporters and Engineers.**

Eastern Engineering Works.—P-12, Mission Row Extn., Calcutta 12.

Eastern Industrial Corporation.—142/1, Radhabazar Street, Calcutta 1.

Great Eastern Foundry Works.—138, Canning Street, Calcutta 1.

Great Eastern Machinery Co.—4, Naskarpara Bylane, Kasundiah, Howrah.

Hoodaty H. Ghose & Co.—163, Beliaghata Main Road, Calcutta 10.

Howrah City Engineering Co.—75, Panchanantola Road, Howrah.

Industrial Machines Corp.—138, Canning Street, Calcutta 1.

International Machines Corporation.—16, Canning Street, Calcutta 1.

**JAYEMS ENGINEERING CO.—22, Brabourne Road, Calcutta; Engineers, Machinery Merchants and Manufacturers' Representatives, Direct Importers of Machine Tools, Wood-working Machinery, Sheet Metal-working Machinery, Welding & Foundry Equipment etc., Head Office: Warden House, Sir P. M. Road, Bombay-1.**

Kamala Engineering Works.—124, Barrackpore Trunk Road, Calcutta 35.

Kusum Engineering Co. Ltd.—25, Swallow Lane, Calcutta 1.

Machine Craft Corporation.—138, Canning Street, Calcutta 1.

Machineries & Industries (I) Ltd.—3, Annada Neogi Lane, Calcutta 3.

Machinery Manufacturers Corp. Ltd.—207, L. Circular Road, Calcutta 17.

Meameco P. Ltd.—4, Clive Road, Calcutta 1.

Metalcraft (I) Ltd.—26, Strand Road, Calcutta 1.

Modern India Machine Tools Ltd.—18-1-6, Canal West Road, Garpar, Calcutta 9.

Oriental Electrical & Engg. Works Ltd.—1 & 2, Old Court House St., Calcutta 1.

P. Manna & Sons.—19/10, Ramkrishna Mandir Path, North Bantra, Howrah.

Precision Industries P. Ltd.—Calcutta 29.

Rockfield Corporation.—40B, Prinsep Street, Calcutta 13.

S. C. Dass & Co. Ltd.—178, Belilios Road, Howrah.

Shaw Engineering Works.—227-5, Manicktalla Main Road, Calcutta 11.

Shree Laxmi Iron & Steel Works Ltd.—P-16, Kalakar St., Calcutta 7.

Small Machineries Manufacturing Co.—22, R. G. Kar Road, Shambazar, Calcutta 4.

South End Engineering Co. P. Ltd.—22, Strand Road, Calcutta 1.

Sree Durga Engineering Co.—39, Upendra Chandra Banerjee Road, Calcutta 1.

Standard Machinery Co.—67-B, Netaji Subhas Road, Calcutta 1.

Vibromachines (I) P. Ltd.—P-33, Mission Row Extn., Calcutta 13.

Vulcan Machine & Tool Co.—218, Manicktalla Main Road, Calcutta 11.



## METAL LABELS

**EXCEL PROCESS PVT. LTD., BOMBAY-69.**—Manufacturers of Metal Labels, Scales, Dials, Badges, Tokens, Diagrams, Conversion Discs and Slide Tables, Advertising Gifts, Identity Cards in Anodised Aluminium and Stainless Steel; 10B, Eden Hospital Road, Calcutta-12; Phone: 346593.

## METAL AND METAL ALLOYS

Ashok Metal Industries.—157, Netaji Subhas Road, Calcutta 1.  
Binani Metal Works P. Ltd.—38, Strand Road, Calcutta 1.  
Chandra Industries P. Ltd.—59, Cotton Street, Calcutta 7.  
Eastern Metal & Alloy Corpn. Ltd.—38-A, Belgachia Road, Calcutta.  
Eyre Smelting Ltd.—Hide Road, Calcutta 23.  
Lilloah Steel & Wire Co. Ltd.—5-B, Mukhtarab Babu St., Calcutta 7.  
Metal & Alloy Corporation.—38-A, Belgachia Road, Calcutta 37.  
National Metal Industries Ltd.—23-B, Netaji Subhas Road, Calcutta 1.  
Non-Ferrous Metal Industries P. Ltd.—161-1, Harrison Road, Calcutta 7.  
Stannic Metals & Alloys Ltd.—New Taratolla Road, Calcutta 27.

## METAL MANUFACTURERS & MERCHANTS

Arun Sinha.—62/4/1A, Netaji Subhas Road, Calcutta.  
A. T. Gooyee & Co.—68/E, Netaji Subhas Road, Calcutta.  
Bengal Metal & Engg. Co.—20, Mullick Street, Calcutta 7.  
Bengal Metal Product Co.—43-8, Strand Road, Calcutta 1.  
Binani Brothers Pvt. Ltd.—43, Strand Road, Calcutta 1.  
Binani Commercial Corpn.—115, Netaji Subhas Road, Calcutta.  
Cally Kristo Pramanick.—62, Netaji Subhas Road, Calcutta.  
Chunilal Hemraj.—115, Netaji Subhas Road, Calcutta.  
Daga Metal Trading Co.—42, Netaji Subhas Road, Calcutta 1.  
Delta Engineering & Foundry Works.—195A, Mukhtarab Babu Street, Calcutta 7.  
Dey Bose & Co.—34, Strand Road, Calcutta.  
Friedlander Ores & Metals P. Ltd.—109, Stephen House, Calcutta 1.  
Ghose Mundal & Co.—71-A, Netaji Subhas Road, Calcutta.  
Gosto Behari Mullick & Sons.—113-N, Netaji Subhas Road, Calcutta.  
Hardware & Marine Stores Agency.—70, Netaji Subhas Road, Calcutta.  
Hind General Mercantile Agency Ltd.—8, Lyons Range, Calcutta 1.  
Jeet Narain Ghosh & Co.—38, Strand Road, Calcutta.  
J. K. Dey & Bros.—103, Netaji Subhas Road, Calcutta.  
Kristo Dhone Gangooly.—115, Netaji Subhas Road, Calcutta.  
Lucky Engineering Works Pvt. Ltd.—39, Strand Rd., Calcutta.  
Luner Engineering Works.—71/A, Netaji Subhas Road, Calcutta.  
Manton & Martin.—70, Netaji Subhas Road, Calcutta.  
Metal Distributors Ltd.—38, Strand Road, Calcutta-1.  
Metallizing Corporation P. Ltd.—9, Waterloo St., Calcutta.  
National Alloy & Metal Works Ltd.—Nobin Ch. Das Lane, Calcutta.  
National Sheet Metal Works.—Sahitya Parishad St., Calcutta.  
Nundon & Co., (P) Ltd.—62, Netaji Subhas Road, Calcutta.  
Orient Traders.—161/1, Mahatma Gandhi Road, Calcutta 7.  
Ramlal Mookerjee & Son Pvt. Ltd.—37, Strand Road, Calcutta.  
Ratanchand Joraji & Co.—1, Portuguese Church Street, Calcutta 1.  
Rolls Metal Products Co. Ltd.—6, Chowringhee Road, Calcutta.  
S. C. Kundu & Sons.—70, Netaji Subhas Road, Calcutta.  
Shewratan Co. Private Ltd.—14, Weston Street, Calcutta 13.  
S. Lahiri & Co.—12/2, Clive Row, Calcutta.  
Standard Metal Co.—101, N. Subhas Road, Calcutta 1.  
Stannic Metals and Alloy P. Ltd.—76, Wellesley St., Calcutta.  
Union Metal Industries Ltd.—59-A, C. N. Roy Road, Calcutta.  
United Metal Industries.—14, Noormull Lohia Lane, Calcutta 7.

## METALLIZING

**INDUSTRIAL ACCESSORIES SUPPLY CORPORATION.**—Importers and Stockists of Metallizing Gun-Equipment, Sand Blasting Machines, All kinds of Metallizing Wires, Steel Grit, Shots etc., Enquiry Solicited; 47, Kalidas Patitundi Lane, Calcutta-26; Phones: 46-2913 and 46-9141.

## MICA

Associated Mining Industries Ltd.—30, Strand Road, Calcutta 1.  
Bengal Ruby Mica Supply Co.—Basantlal Shah Road, Calcutta 33.  
B. K. Dey & Co.—14, Akshoy Dutta Lane, Calcutta 6.  
Calcutta Mica Corpn.—161, Mukhtarab Babu Street, Calcutta.  
Christian Mica Industries Ltd.—4, Lyons Range, Calcutta.  
Delux Mica Co.—8, Shahnagar Road, Calcutta 26.  
D. N. Ganguli & Co.—7, Nilambar Mukherjee Street, Shambazar, Calcutta.  
Hatim & Co.—P-39, Mission Row Extension, Calcutta 13.  
Hindustan Mica Dealers Ltd.—9, Brabourne Road, Calcutta 1.  
India Mica Supply Co. Ltd.—95, Lower Chitpur Road, Calcutta.  
Jankaria Osman & Co.—4, Rajmohan Street, Calcutta 1.  
Mica and Insulators Corporation.—7/5, Bejoygarh, Calcutta 2.

Mica Insulation Industries P. Ltd.—5-6, Hare St., Calcutta.  
Mica & Micanites (India) Private Ltd.—19, Strand Road (1st Floor), Calcutta 1.  
Mica Manufacturing Co. Pvt. Ltd.—161, Mukhtarab Babu Street, Calcutta 7.  
Mica and Ores of India.—2, Commercial Bldgs., N. Subhas Road, Calcutta 1.  
Mica P. Ltd.—2, Pretoria Street, Calcutta 15.  
Mica Products (I).—14, Gour Laha Street, Calcutta 6.  
Mica Mining & Trading Co.—12, Chowringhee Square, Calcutta.  
Premier Mica Mining & Mfg. Co.—32, Gopi Kristo Pal Lane, Calcutta 6.  
Shiv Shankar Mica Supply Co. Ltd.—100, Netaji Subhas Road, Calcutta.  
T. C. Dass & Sons.—32, Gopi Kristo Pal Lane, Calcutta.  
United India Minerals Ltd.—13, Harrington Street, Calcutta 16.

## MILLS (OTHER THAN JUTE)

Adarsha Cotton Spg. & Wvg. Mills Ltd.—41, Chowringhee Road, Calcutta 16.  
Anantapur Textiles Ltd.—58, Clive Street, Calcutta.  
Annapurna Cotton Mills Ltd.—P-10, New Howrah Bridge App. Road, Calcutta.  
Arati Cotton Mills Ltd.—29, Strand Road, Calcutta 1.  
Banga Sri Cotton Mills Ltd.—P. Sukchar, Sodepur, 24 Parganas.  
Bangeswari Cotton Mills Ltd.—63, Radha Bazar Street, Calcutta.  
Bangodaya Cotton Mills Ltd.—176, Cross Street, Calcutta 7.  
Basanti Cotton Mills Ltd.—24, Netaji Subhas Road, Calcutta 1.  
Bengal Fine Spg. & Wvg. Mills Ltd.—7, Bowbazar Street, Calcutta 12.  
Bengal Luxmi Cotton Mills Ltd.—7, Chowringhee Road, Calcutta 13.  
Bowreah Cotton Mills Co. Ltd.—21, Strand Road, Calcutta.  
Bhagyalaxmi Cotton Mills Ltd.—1A, S. N. Banerjee Road, Calcutta.  
Calcutta Woollen & Silk Mills Ltd.—Kumarpara, Lilloah, Howrah.  
Central Cotton Mills Ltd.—9, Brabourne Road, Calcutta.  
Dhakeswari Cotton Mills Ltd.—Kanak Bldgs., 41, Chowringhee Road, Calcutta 16.  
Dunbar Mills Ltd.—21, Strand Road, Calcutta 1.  
Durga Cotton Spg. Wvg. Mills Ltd.—135, Canning Street, Calcutta.  
Hindusthan Cotton Mills Ltd.—5, Clive Row, Calcutta.  
Howrah Cotton Mills Ltd.—Old Benaras Road, Belgachia, Howrah.  
Jatia Cotton Mills Ltd.—18, Netaji Subhas Road, Calcutta.  
Jay Shree Textiles Ltd.—Rishra, Hooghly.  
Jyoti Weaving Factory Pvt. Ltd.—P-11, New Howrah Bridge App. Road, Calcutta 1.  
Kantorla Industries Ltd.—59, Netaji Subhas Road, Calcutta.  
Kesoram Cotton Mills Ltd.—8, India Exchange Place, Calcutta.  
Luxminarain Cotton Mills Ltd.—4B, Garstin Place, Calcutta.  
Mahalaxmi Cotton Mills Ltd.—68, Nalini Sett Road, Calcutta 7.  
Manindra Mills Ltd.—P-49, B. K. Paul Avenue, Calcutta 7.  
Mohini Mills Ltd.—22, Canning Street, Calcutta.  
Onkar Industries Ltd.—18, Netaji Subhas Road, Calcutta.  
Oriental Cotton Cult. & Mills Ltd.—2, Waterloo Street, Calcutta 1.  
Orissa Cotton Mills Ltd.—P-7, Mission Row Extension, Calcutta.  
Orissa Textile Mills Ltd.—33, Chittaranjan Avenue, Calcutta 12.  
Pioneer Knitting Mills Ltd.—6/1A, Prannath Soor Lane, B.T. Road, Calcutta 2.  
Rampooria Cotton Mills Ltd.—147, Cotton Street, Calcutta 7.  
Siddheswari Cotton Mills Ltd.—58, Clive Street, Calcutta.  
Swadeshi Industries Ltd.—142-A, Jamunahai Bajaj Street, Calcutta 7.  
Victoria Cotton Mills Ltd.—370, Upper Chitpore Road, Calcutta.  
Vidyasagar Cotton Mills Ltd.—11, Colootola Street, Calcutta 1.

## MILL & GIN STORES SUPPLIERS

Allied Textile Agency.—63, Radhabazar Street, Calcutta 1.  
**ASSOCIATED INDUSTRIAL PRODUCTS CO.**—'Gripwell' Brand Beltings, Leather, Hair, Cotton and Weaving Loom, Leather accessories for Jute, Textile and Woollen Industries, Dixel Rope and General Mill Stores, 5, Mission Row, Calcutta-1; Phones: 239844, 239880 & 555774.  
B. C. Traders.—7, Swallow Lane, Calcutta 1.  
Bengal Engineering Co.—24, Netaji Subhas Road, Calcutta.  
Bengal Machinery Co.—24, Strand Road, Calcutta 1.  
Bengal Mill Stores Supply Co.—34, N. Subhas Road, Calcutta 1.  
**BHADURY SEN & CO. PRIVATE LTD.**—Dealers of Portable Electric Tools, Cables, Wires, Welding Cables, Grinding Wheels, Mill Stores and Accessories; Also undertake Manufacturing Job as per drawing and Specification; 135, Biplobi Rash Behari Bose Road, Calcutta-1; Phone: 221360.  
Bharat Hardware & Textile Syndicate.—14, Netaji Subhas Road, Calcutta.  
Bosco.—36, Strand Road, Calcutta 1.  
Chandi Charan Nayak P. Ltd.—124/1, Bowbazar St., Calcutta 12.  
Fenner J. H. & Co. India Ltd.—10/3A, Mercantile Bldgs., Calcutta 1.  
F. Husain & Brothers.—28, Strand Road, Calcutta.  
Gladstone Lyall & Co. Ltd.—4, Fairlie Place, Calcutta.  
Greentose Corporation (India).—37, Strand Road, Calcutta 1.  
Indusco Traders.—14/2, Old China Bazar Street, Calcutta 1.



Industrial Tools & Mill Stores Co.—67-B, Netaji Subhas Road, Calcutta 1.

International Trading Co.—22, Netaji Subhas Road, Calcutta 1.

Kilburn & Co. P. Ltd.—2, Fairlie Place, Calcutta 1.

Leather & Steel Products.—26, Burtolla St., Calcutta 7.

L. Mullick & Co.—81, N. Subhas Road, Calcutta 1.

Mehta Mill Stores Co.—Mercantile Bldgs., Lall Bazar, Calcutta 1.

Mundra & Co.—8, Canning Street, Calcutta.

Rajesh Trading Co.—10, Amartolla Lane, Calcutta 1.

**REX CORPORATION (INDIA).—Specialists for HAWK Conveyor Belt Fastener, HARRIS & JACKSON Belt Fastener, STEELACE Belt Lacing Belt Hook, Seamless Elevator Bucket and Chain Pipe Wrenches etc., 71-A, Netaji Subhas Road, Calcutta-1; Phone: 229807.**

Spinning Accessories Pvt. Ltd.—6, Nawab Dilar Jung Road, Calcutta 2.

Tant-O-Saranjan.—P-11, New Howrah Bridge Approach Road, Calcutta 1.

United Textile Agency.—198, M. Gandhi Road, Calcutta 7.

Winsome Trading Co.—23/24, Radha Bazar Street, Calcutta 1.

Wren & Co., D.—Wardley House, 25, Swallow Lane, Calcutta.

## MINERALS

**ALLIED TRADERS & SALES CORPN.—Gandhi House, 16, Ganesh Chandra Avenue, Calcutta-13; Dealers in Ferro-Alloys, Fluorspar, Aluminium & Nickel Shots, Foundry Minerals Graphite Powders and Crucibles, Welding Rods, Fluxes and Electrodes etc.; Phone: 239227 & 237542.**

Bengal Mineral Supply Co.—71-A, N. Subhas Road, Calcutta.

Bharat Mineral Sales Corpn.—1/A, Vansittart Row, Calcutta 1.

Calcutta Mineral Supply Co. P. Ltd.—31, Jackson Lane, Calcutta 1.

Chandi Charan Nayak P. Ltd.—124/1, Bowbazar St., Calcutta 12.

Hindustan Grinding Mills.—9, Ezra Street, Calcutta 1.

India Minerals & Associated Industries.—12-B, Netaji Subhas Road, Calcutta 1.

Indian Mineral Industries Ltd.—22-1, & 22-C, Dum Dum Road, Calcutta 2.

Indo-European Agency P. Ltd.—67, Ezra Street, Calcutta 1.

Minerals & Minerals Ltd.—71, Ganesh Ch. Ave., Calcutta 13.

N. S. Corporation.—22, Canning Street, Calcutta 1.

Refractories & Mineral Syndicate Pvt. Ltd.—20, Netaji Subhas Road, Calcutta 1.

R. M. Industries.—16, Shyamal Street, Calcutta 4.

**S. B. MINERAL INDUSTRIES.—Specialists in Hard Material grinding, Manufacturers and Suppliers of Lime Stone, Felspar, Quartz, Manganese Dioxide, Plumbago, Kieshelgubhar, Asbestos, French Chalk, Red and Yellow Oxide and Ochre, Silica Flour, Whiting Calcite, Dolomite, Bentonite, Chromite, Mica, All qualities of China clay, Fire clay, Plaster of Paris and other allied Mineral Ores and Powders; 48, Cowshala Road, Lillooah, Howrah; Phone: 664432.**

Star Mineral Syndicate P. Ltd.—33, Canning Street, Calcutta.

Swaika Oil Mills.—18-B, Brabourne Road, Calcutta 1.

Universal Graphite & Mineral Products.—11, Kishen Dayal Jalan Road, Ghosury P.O., Howrah.

## MINING EQUIPMENT

**GLACE KID (INDIA) PRIVATE LTD.—Mining & Safety Boots and Shoes, 7, Ganesh Chandra Avenue, Calcutta-13; Phone: 244331.**

## MOTOR (BUS & COACH) BODY BUILDING MATERIALS

**MOHAMEDALLY NOORBHAI & CO.—32-C, Dharamtolla Street, Calcutta 13; Phone: 24-3370; 144-148, Ibrahim Rahimtolla Road, Bombay 3; Phones: 333068, 333763; Grams: "CABRUBBER". Direct Importers; Dealers in Motor-Carriage, Bus Body Fittings & Accessories, Hood and Upholstery Materials, P.V.C. Leather Cloth, Aluminium Section & Circles, Celluloid Sheets, Rubber Matting, Flag Brand Cab Tyres. Branches at Madras & Lucknow.**

## NON-FERROUS METALS

Aluminium Corpn. of India Ltd.—7, Council House Street, Calcutta.

Ashok Metal Industries Ltd.—157, Netaji Subhas Road, Calcutta 1.

Bengal Ingot Co. (Private) Ltd.—5, Hide Road, Kidderpore, Calcutta 23.

**BHAGWANDAS & CO.—55, Ezra Street, Calcutta-1; Stockists & Dealers in Copper & Brass Rods, Pipes, Sheets, Strips, Tubes, Tin Lead Sheets, Phos. Bronze Rods, Core Rods, G. M. Rods & also Suppliers of Non-ferrous Metals; Phone: 344032, Grams: "GAILLARD".**

Binani Metal Works (P) Ltd.—38, Strand Road, Calcutta.

British Metal Corpn. (I) P. Ltd.—22, Chittaranjan Ave., Calcutta 1.

**CALCUTTA WIRE WORKS.—Non-Ferrous Metals, Brass, Copper, Zinc, Lead, Bronze, Aluminium Rods, Strips, Wires and Rods; 6, Tilgala Road, Calcutta-46; Phones: 447131-7132 & 441427; Showroom: 62/1A, Netaji Subhas Road, Calcutta-1; Phone: 339201.**

Eyre Smelting Pvt. Ltd.—5, Hide Road, Kidderpore, Calcutta 23.

Ganga Metal Refining Co. Pvt. Ltd., C/o Binani Traders Ltd.—43, Strand Road, Calcutta.

Gesco Suppliers Syndicate.—1, Bonefield Lane, Calcutta 1.

Gordhandas Madanlal.—178, Mahatma Gandhi Road, Calcutta 7.

Hindustan Metal Works.—48, Dum Dum Road, Calcutta 30.

Ideal Metal Industries.—5, Raja Subodh Mullick Square, Calcutta 13.

Indian Aluminium Co. Ltd.—31, Chowringhee Road, Calcutta 16.

Indian Cable Co. Ltd.—9, Hare Street, Calcutta.

Indian Oxygen Ltd.—48/1, Diamond Harbour Road, Calcutta 27.

**INTER SALES (INDIA).—Everything in Non-Ferrous Metals, Gas Welding Rods, Electrolytic Copper Bars, Strips, Brass, Phos. Bronze, Gun Metal, Aluminium, Ingots, Sheets, Wire, Tubes etc., 62, Netaji Subhas Road, Calcutta-1; Phones: 339031, 330146, 330370.**

Kamani Metals & Alloys Ltd.—30, Ganesh Ch. Ave., Calcutta 13.

Kedia & Co., T. B.—P3, Balakar St., Calcutta 7.

Lalchand Mahadeblal.—7, Hazarimull Shah Road, Salkia.

Metal Corpn. of India Ltd.—135, Canning Street, Calcutta.

Metals & Ores Co.—Ilaco House, 1 & 3, Brabourne Rd., Calcutta.

National Pipes & Tubes Co. Ltd.—Stephen House, 4, Dalhousie Square East, Calcutta.

National Screw & Wire Products Ltd.—Stephen House, 4, Dalhousie Square East, Calcutta.

Non-Ferrous Metal Industries Pvt. Ltd.—161/1, Mahatma Gandhi Road, Calcutta.

Orient Traders.—161/1, Harrison Road, Calcutta 7.

Ramlal Mookerjee & Sons P. Ltd.—37, Strand Road, Calcutta 1.

Ratanchand Joraji & Co.—1, Portuguese Church St., Calcutta 1.

Robsan & Co. Pvt. Ltd.—P-14, Mission Row Extn., Calcutta 1.

R. S. Julli Ram Shamal—19, Maharshi Debendra Road, Calcutta 7.

Saru Smelting & Refining Corpn. Private Ltd.—161/1, Mahatma Gandhi Road, Calcutta-7.

Srinath Bajaj.—178, Mahatma Gandhi Road, Calcutta 7.

## OFFICE STATIONERY & EQUIPMENTS

**ANAND METAL & STEEL WORKS.—Manufacturers of all kinds of Steel Furniture, Hospital and Office Equipments, Agricultural Implements and Structural; 137, Canning Street, Calcutta-1; Phone: 220315 (2 Lines).**

Bhebla Engineering Works.—22, Canal West Road, Calcutta 6.

Comptograph.—P-35, India Exchange Place, Calcutta 1.

Eastern Industries Co.—9/4, Pahratola Lane, Calcutta 9.

**REMINGTON RAND OF INDIA LTD.—Manufacturers of Remington Rand Business Equipment; Remington House, 3, Council House Street, Calcutta; Phone: 237401 (10 Lines). Grams: "REMINGTONS".**

**ROYSON TYPEWRITER CO. PRIVATE LTD.—For Office Appliances i.e. Typewriters, Calculators, Adding, Listing Machines, Time Recorders, Cheque Writers etc., 14, Ben-tinck Street, Calcutta-1; Phone: 234086.**

Standard Trading Co.—43, Ezra Street, Calcutta 1.

## OIL SEALS

**INDUSTRIAL COMPONENTS CORPORATION.—Dealers in Oil Seals, Bearings, Bright Bolts and Nuts, Rivets, Tractor Parts, Wire Ropes, Electrodes and Precision Components, 36, Ezra Street, (3rd Floor), Calcutta; Phone: 345430.**

## OPTICIANS & OPTICAL GOODS MFRS. & DEALERS

Basmall & Co.—Post Box 11435; 56-D, Beadon Street, Calcutta 6.

C. L. Basu & Co.—49, Raja Dinendra Street, Calcutta 9.

Calcutta Clinic.—38/2, Wellington Street, Calcutta 13.

Calcutta Optical Co. P. Ltd.—45, Amherst St., Calcutta 9.

City Opticians.—15/9, Chowringhee Road, Calcutta.

Darbara Singh & Sons (Calcutta).—14, Bowbazar St., Calcutta 12.

East India Optical Co.—11, Bowbazar Street, Calcutta.

Eastern Optical Co.—306, Bowbazar Street, Calcutta 12.

Globe Optical Co.—284A, Bowbazar Street, Calcutta.

James Murray & Co. P. Ltd.—5, Old Court House St., Calcutta 1.

J. Sur & Co. P. Ltd.—3, Dalhousie Square East, Calcutta 1.

Lawrence & Mayo India P. Ltd.—11, Govt. Place East, Calcutta 1.

Lens & Scientific Instruments Co. P. Ltd.—5/2, Old Court House Street, Calcutta 1.

Navin Optical House.—285/B, Bowbazar St., Calcutta 12.

Premier Optical Co.—287, Bowbazar Street, Calcutta.

Presidency Pharmacy.—205, Cornwallis St., Calcutta 6.

President Optical Co.—71, Canning Street, Calcutta.

Royal Optical Industries.—72, Canning Street, Calcutta 1.

Stephens & Co. P. Ltd.—23, Chowringhee, Calcutta 13.

Sun Optical Co.—24/1, Cornwallis Street, Calcutta 6.



## PACKING CASES

**BENGAL TIMBER CORPORATION.**—16/1, Canal East Road, Calcutta-4; Manufacturers of Quality Packing Cases, Shooks, Crates, Planks and Tea Chests Fittings; Also Kiln Seasoning; Phone: 356579; Resi.: 356460.

## PACKING MATERIALS

**NORTH BIHAR SAW MILLS.**—For any Size of Seasoned Pine, Mango, Semuel or Plywood Packing Cases, Crates, Barrels, Discs or Planks; Quality and deliveries guaranteed; P. C. Road-Chedda, Calcutta-27; Phone: 453624 & 457639.

**PAPER PRODUCTS LTD., THE.**—Laha Paint House, 7, Chittaranjan Avenue, Calcutta-13; Phone: 231693, Grams: "PRINT-PAK"; (For Details Please See Commercial firms section of Bombay).

## PAINTS, COLOURS, ENAMELS & VARNISHES ETC.

**Aditya Paint Colour & Varnish Co.**—Narkeldanga Main Road, Calcutta 11.

**Alkali & Chemical Corp'n. of India Ltd.**—34, Chowringhee, Calcutta 16.

**Ankhoy Coomar Laha.**—1, Dharamtolla Street, Calcutta.

**Associated Commercial Concerns.**—14, Bowbazar Street, Calcutta 12.

**Associated Pigments Ltd.**—14, Netaji Subhas Road, Calcutta.

**Basic Paints & Pigment Industries P. Ltd.**—135, Canning Street, Calcutta.

**Bengal Paint Supply Co.**—16, Bonfield Lane, Calcutta 1.

**Bengal Varnish Industries.**—94, Harrison Road, Calcutta 7.

**Bitumen Emulsions (India) Ltd.**—7-1, Hide Road, Kidderpore, Calcutta 23.

**BLUNDELL EOMITE PAINTS LTD.**—Eastern Sales Division, 3, Chowringhee Approach, Calcutta-13; Phone: 236792, 237216, Grams: "BLUNPAINTS"

**British Paints (India) Ltd.**—32, Chowringhee Road, Calcutta 16.

**CALCUTTA PAINT COLOUR & VARNISH WORKS.**—Makers of Quality Paints, Enamels, Varnishes, Distempers, Cement Colours, Roofing Compound, Wood Preservative, Phenyl etc. for Homes and Industries; 8, Chunapukur Le, Calcutta-12; Phone: 344279 and 347320; Grams: "HAFADUTTA"—Calcutta.

**Century Paint & Varnish Works.**—8/3, Canal Street, Calcutta 14.

**CHANDA P. C. & CO. LTD.**—Makers of Quality Paints, Enamels, Varnishes, Roofing & Road Compositions since 1932; Manufacturers in India of 'INERTOL' Products of World-wide repute; 2, Mission Row Extn., Calcutta-1; Phones: 23-3803, 236690 & 236699.

**Chandi Charan Nayak Pvt. Ltd.**—124/1, Bowbazar Street, Calcutta 12.

**C. L. Paint & Colour Works.**—5/3, Harinath Nayarathna Lane, Sibpur, Howrah.

**Delco Paints Corporation.**—7/1, Lower Circular Road, Calcutta.

**Eagle Paint & Pigment (India) Pvt. Ltd.**—135, Canning Street, Calcutta.

**East India Paints & Chemical Works Ltd.**—103-A, Surendranath Banerjee Road, Calcutta 14.

**Eastern Paint Works P. Ltd.**—36, Stand Road, Calcutta 1.

**Empire Chemical Co.**—37-1, Christopher Road, Entally P.O., Calcutta 14.

**Empire Chemicals.**—7/1, Lower Circular Road, Calcutta 17.

**G. C. LAHA PRIVATE LTD.**—Importers of High Class Paints, Enamels, Varnishes, Brushes, Gilding Powder etc. For Household and Industrial use, Artists' Colours & Material; 1, Dharamtolla Street, Calcutta-13; Phone: 233838 & 239651.

**Gladstone Lyall & Co. Ltd.**—4, Fairlie Place, Calcutta 1.

**Glazo Paint Works Pvt. Ltd.**—11, Bishwambhur Mullick Lane, Calcutta.

**Hadfields (India) Ltd.**—12, Mission Row, Calcutta.

**Hindustan Paint, Colour and Varnish Co.**—Strand Road, Calcutta.

**Hindustan Paint Supply Co.**—190, Lower Circular Road, Calcutta.

**Hoyle's Paints Ltd.**—2, Mangoe Lane, Calcutta 1.

**Hutchie Products Co.**—19, Dum Dum Road, Ghughudanga P.O., 24 Parganas.

**ICL Paint & Colour Works.**—5/3, Harinath Nayarathna Lane, Sibpur, Howrah.

**Imperial Paints & Pigments Industries.**—3, Chaupatty Road, Calcutta.

**India Colour Industries.**—1, Gour Mohan Mukherjee Street, Calcutta 6.

**India Paint, Colour & Varnish Co. Ltd.**—14, Netaji Subhas Road, Calcutta.

**India Paint & Varnish Chemical Works.**—14-2, Old China Bazar Street, Calcutta 1.

**Indian Chemical Colour Works.**—66, Simla Street, Calcutta 6.

**Industrial Paints Syndicate.**—73A, Ganesh Ch. Avenue, Calcutta.

**International Chemical Industries.**—Jadavpur, Calcutta.

**Jenson & Nicholson (India) Ltd.**—2, Fairlie Place, Calcutta 1.

**Kromalium Paints & Synthetic Finishes.**—60-B, Syed Amir Ali Avenue, Calcutta 19.

**Lakshmi Paint Works.**—14/2, Old China Bazar St., Calcutta.

**Leather Chemical Industries Ltd.**—9, Muraripukur Road, Calcutta.

**London Varnish & Enamel Co. Ltd.**—12-P, Park Street, Calcutta 16.

**Manick Lal Pal & Co.**—54, M. Gandhi Road, Calcutta 7.

**M. Chowdhury & Co.**—113-G, Netaji Subhas Road, Calcutta 1.

**M. L. Ghosh & Co.**—35, Mondal Para Lane, Cossipore P.O., Calcutta.

**Merlin Paint Works.**—14-2, Old China Bazar Street, Calcutta 1.

**M. Mumtaz & Co.**—11, Swinhoe Lane, Dhakuria P.O., 24 Parganas Dist.

**Murarka Paint & Varnish Works Ltd.**—Sodepur P.O., 24 Parganas Dist.

**Naiper Paint Works Pvt. Ltd.**—3, Moti Sil Street, Calcutta 13.

**Narayan Chowdhury & Bros. P. Ltd.**—4, Jahura Bazar Lane, Calcutta 42.

**Nilsin Co.**—37, Armenian Street, Calcutta 1.

**Olpherts Pvt. Ltd.**—1-2, Moti Sil Street, Calcutta 13.

**Oriental Varnish & Enamel Works.**—Madan Mitter Lane, Calcutta 6.

**P. C. Chanda & Co. Ltd.**—P-2, Mission Row Extn., Calcutta 1.

**PAINTS & LACQUERS.**—Makers of 'Ajanta' and 'Mistri' Paints, 'Woodguard' Ready Mixed Paints, 'Shinolac' Nitrocellulose Lacquers, Stoving Enamels and Industrial Finishes, Copal and Insulating Varnishes, French Polish, Bituminous Compositions, 'Roofguard' leak Proof Compound, Putties, Distemper and Colourcem Cement Paint, 17/1, Chandi Ghosh Road, Calcutta-40; Phone: 467702 (Office), 464707 (Res.).

**Pigments & Chemical Industries Pvt. Ltd.**—32, Armenian Street, Calcutta.

**Protective Lacquer Industries.**—11, Wellington Street, Calcutta 13.

**Rabi Paint & Chemical Works.**—29, Madan Mitter Lane, Calcutta 13.

**Royal Enamel & Varnish Works.**—78-79, Beadon Street, Calcutta.

**Ruby Paint & Varnish Works.**—96, Mahatma Gandhi Road, Calcutta 7.

**Salkia Paint Mfg. Co.**—40/1, Strand Road, Calcutta.

**Scientific Paint & Colour Works Ltd.**—P-468, Southern Avenue, Calcutta.

**Shalimar Paint, Colour & Varnish Co. P. Ltd.**—6, Lyons Range, Calcutta.

**Shekhar & Co. Pvt. Ltd.**—159, B. K. Paint Avenue, Calcutta 5.

**Solar Paint & Varnish Mfg. Co.**—Barrackpore Trunk Road, Belgharia P.O., 24 Parganas Dist.

**Standard Paint Works Ltd.**—44, Beadon Row, Calcutta 6.

**Sunglow Colour & Chemical Co.**—58, Shyamnagar Road, Calcutta 28.

**Swaika Paint, Colour & Varnish Co. Ltd.**—Pollock House, 28-A, Brabourne Road, Calcutta 1.

**Tropic Paint Works Ltd.**—7, Chittaranjan Ave., Calcutta 13.

**Waxpol Industries Ltd.**—16-A, Lake View Road, Calcutta 29.

**Xanthic Industries.**—14, Subhas Nagar Road, Calcutta.

## PAPER AND CARDBOARD CUTTING MACHINE, PAPER PUNCHING MACHINE

**Ananta Chatterjee & Sons.**—200, Belilios Road, Howrah.

**B. N. Pachal & Son P. Ltd.**—208, Belilios Road, Howrah.

**Harmond Engineering Co.**—21-1, Kantapukur 3rd Bylane, Howrah.

**K. R. Paul & Co.**—127, Belilios Road, Howrah.

## PAPER MERCHANTS

**A. C. Paul.**—96, Vivekananda Road, Calcutta 6.

**A. K. Banerjee & Bros.**—14/2, Old China Bazar Street, B. No. 102, Calcutta 1.

**A. K. Choudhury & Co.**—10, Jackson Lane, Calcutta 1.

**Arun & Co.**—14/2, Old China Bazar Street, B. No. 42, Calcutta 1.

**Ashok International P. Ltd.**—12, Jackson Lane, Calcutta.

**Ashok Stationery Works.**—140, Old China Bazar Street, Calcutta 1.

**Ashoka Marketing Ltd.**—11, Clive Row, Calcutta.

**Asian Trading Corp'n.**—72, Old China Bazar Street, Calcutta 1.

**Bahri Brothers.**—P-5, Canning Street, Calcutta 1.

**Basu & Co.**—118, Amherst Street, Calcutta 9.

**Bengal Paper Mill Co. Ltd., The.**—Raniganj, West Bengal.

**Bengal Paper Syndicate.**—14/2, Old China Bazar Street, Calcutta 1.

**Bengal Stationery Stores.**—10, Jackson Lane, Calcutta 1.

**Bhabani Paper Concern.**—P-7, Old China Bazar Street, Calcutta 1.

**Bharat Paper Syndicate Ltd.**—1-2, Jackson Lane, Calcutta 1.

**Bholanath Dutt Pvt. Ltd.**—Post Box No. 2427, 84-A, Brabourne Road, Calcutta.

**Bijon K. Banerjee & Bros.**—14/2, Old China Bazar Street, B. No. 39, Calcutta.

**Bilba Paper Pvt. Ltd.**—C-6, Gillander House, 8, Netaji Subhas Road, Calcutta.

**Birdhi Chand Baijanath.**—3, Portuguese Church Street, Calcutta 1.

**Birdhi Chand Giridharlal & Co.**—146-2, Old China Bazar Street, Calcutta 1.



B. Kumar & Co.—P-7, Old China Bazar Street, Calcutta 1.  
 Bose Paper Concern.—89, Mahatma Gandhi Road, Calcutta 7.  
 Bose & Paul.—70, Mahatma Gandhi Road, Calcutta 9.  
 Calcutta Corrugated Paper Co.—36, Brabourne Road, Calcutta 1.  
 Calcutta Paper House.—385, Upper Chitpore Road, Calcutta 7.  
 Calcutta Paper Mart.—14-2, Old China Bazar Street, R. No. 29, Calcutta 1.  
 Calcutta Paper Supply Co.—26, Amherst Street, Calcutta 9.  
 Calcutta Sales Syndicate.—14-2, Old China Bazar Street, Calcutta 1.  
 Chaman Industries Pvt. Ltd.—12, Jackson Lane, Calcutta 1.  
 Choudhury Bros.—10, Jackson Lane, Calcutta 1.  
 Chatterjee & Chakravarti (Paper) Ltd.—63-B, Radhabazar Street, Calcutta 1.  
 City Paper Stores.—P-23/24, Radhabazar Street, Calcutta 1.  
 Continental Paper Agents (India).—P-22, Swallow Lane, Calcutta.  
 C. Ratan & Co.—1, Mangoe Lane, Calcutta 1.  
 Dacca Paper House.—10, Dr. Kartick Bose Lane, Calcutta 9.  
 Datta & Co.—R. No. 11, 93, Old China Bazar Street, Calcutta.  
 Day Bros. & Co.—270, Chittaranjan Avenue, Calcutta 6.  
 Dhakeswari Paper Depot.—66-2, Mahatma Gandhi Road, Calcutta 9.  
 Dwarkadass Mangalchand.—8, Jackson Lane, Calcutta 1.  
 East India Paper Co.—24, Brabourne Road, Calcutta 1.  
 Eastern Paper Syndicate.—133, Canning Street, Calcutta 1.  
 Eastern Trading Co.—64-A, Dharmatolla Street, Calcutta 13.  
 Everest Paper Mart.—167, Old China Bazar Street, Calcutta 1.  
 General Equipment Merchants Ltd.—9, Mission Row, Calcutta 1.  
 Ghosh Brothers.—14-2, Old China Bazar Street, Calcutta 1.  
 Ghosh Paper House.—133, Canning Street, Calcutta 1.  
 Girja Paper Trading Co.—7, Khairu Lane, Calcutta 13.  
 G. M. Singh & Sons.—22, Canning Street, 4th Floor, Calcutta 1.  
 Gopi Nath Paul & Co.—109, Old China Bazar Street, Calcutta 1.  
 Gour Hari Saha.—23, Canning Street, Calcutta 1.  
 Hanuman Paper Co.—12, Jackson Lane, Calcutta 1.  
 Haran Chundar Banerjee & Sons.—7-C, Clive Row, Calcutta 1.  
 Hind Associated Corpn. Pvt. Ltd.—23-24, Radhabazar Street, Calcutta 1.  
 Hindusthan Paper & Board Co.—1, Synagogue Street, Calcutta 1.  
 H. K. Ghosh & Co.—25-A, Swallow Lane, Calcutta 1.  
 H. K. Sinha & Sons.—21, Netaji Subhas Road, Calcutta 1.  
 Imperial Paper House.—26-1-B, Sashi Bhushan Dey Street, Calcutta 12.  
 Indian Print & Paper Mart.—209, Old China Bazar Street, Calcutta.  
 International Linkers Pvt. Ltd.—P-22, Swallow Lane, Calcutta.  
 International Paper Co.—Saksena Bldgs., 1-2, Jackson Lane, Calcutta.  
 Jagannath Bajranglall.—32, Armenian Street, Calcutta 1.  
 J. B. Advani & Co. Pvt. Ltd.—P-38, Mission Row Extension, P.B. No. 87, Calcutta 1.  
 Jiban Krishna Dutta & Bros.—63-D, Beniatola Street, Calcutta 5.  
 J. N. Chatterjee & Bros.—28-19, Old China Bazar Street, Calcutta 1.  
 J. N. Mukherjee & Bros.—129, Canning Street, Calcutta 1.  
 J. N. Paul & Sons.—10, Jackson Lane, Calcutta 1.  
 J. N. Singh & Co. Pvt. Ltd.—149, Mahatma Gandhi Road, Calcutta 7.  
 John Dickinson & Co. Ltd.—6, Clive Row, Calcutta.  
 Kajaria Sons Pvt. Ltd.—32, Armenian Street, Calcutta 1.  
 Kanai Lal Mitra & Co.—14-2, Old China Bazar Street, R. No. 8, Calcutta 1.  
 K. C. Dang & Co.—2-A, Amratolla Lane, Calcutta 1.  
 Kishore Brothers.—P-23/24, Radha Bazar Street, Calcutta 1.  
 Kishore Paper House.—24, Brabourne Road, Calcutta 1.  
 L. K. Chowdhury & Bros.—14-2, Old China Bazar Street, Calcutta 1.  
 Lohia Trading Co.—133, Canning Street, Calcutta 1.  
 Louis Dreyfus & Co. Ltd.—Pollock House, P.B. No. 2010, 18-A, Brabourne Road, Calcutta.  
 Madan (Paper) Co. Ltd.—109, Upper Chitpore Road, Calcutta 6.  
 Maniklal Dutt (Paper) Ltd.—8, Khengraputty Street, Calcutta 7.  
 Merchants & Traders Pvt. Ltd.—32, Armenian Street, Calcutta 1.  
 M. Dhar & Co.—156-1/C, Radhabazar Street, Calcutta 1.  
 M. Dutta & Co.—14-2, Old China Bazar Street, Calcutta 1.  
 M. Kundu & Bros.—31, Jackson Lane, Calcutta 1.  
 Mukharji Dutt & Co.—31, Jackson Lane, Calcutta 1.  
 Nandlal Kezriwal.—146/2, Old China Bazar Street, Calcutta 1.  
 National Industrial Co.—103-A, S. N. Banerjee Road, Calcutta 13.  
 National Paper & Board Ltd.—22, Canning Street, Calcutta 1.  
 N. Banerjee & Co.—14-2, Old China Bazar Street, Calcutta 1.  
 New Bharati Trading Syndicate.—104, Old China Bazar Street, Calcutta 1.  
 New Card Board Industries.—R. No. 92 (Gr. Fl.), 14/2, Old China Bazar Street, Calcutta 1.  
 Norinco Pvt. Ltd.—14, Netaji Subhas Road, P.O. Box 2211, Calcutta.  
 N. R. Bose & Co.—21, W. C. Banerjee Street, Calcutta 6.  
 Panna Lal Seal & Co.—56-A-A, Radhabazar Street, Calcutta.  
 Paper & Board Supply Agency.—25-A, Swallow Lane, Calcutta 1.  
 Paper Centre.—38/C, Cornwallis Street, Calcutta 6.  
 Paper Emporium.—133, Canning Street, Calcutta 1.  
 Paper India Pvt. Ltd.—6, Clive Row, Calcutta 1.  
 Paper Mart.—68, Mahatma Gandhi Road, Calcutta 9.  
 Paper Palace.—9-A, Jackson Lane, P.O., Calcutta 1.  
 Paper & Stationery Co.—P-22, Radha Bazar Street, Opp. Radha-bazar Street, Calcutta 1.  
 Paper Stores Ltd.—14-2, Old China Bazar Street, Calcutta 1.

P. C. Basu & Sons.—Post Box 2503, 24, Brabourne Road, Calcutta 1.  
 P. C. Mitra & Co.—P-21/22, Radhabazar Street, Calcutta 1.  
 P. De & Co.—42-A, Beadon Row, Calcutta 6.  
 Pratap Paper Mart.—P-7, Old China Bazar Street, Calcutta 1.  
 Premier Suppliers Pvt. Ltd.—8, Royal Exchange Place, Calcutta 1.  
 Prokash Chandra Sinha & Sons.—65, Balihakkhanna Road, Calcutta 9.  
 Purna Chandra Kundu & Sons Ltd.—11-1, Protap Chatterjee Lane (College Street & Colootola Junction), Calcutta 12.  
 Purna Chandra Kundu & Co.—53, Harrison Road, Calcutta 9.  
 Queen Stationery Stores Pvt. Ltd.—63-E, Radhabazar Street, Calcutta 1.  
 Raghunath Dutt & Sons Pvt. Ltd.—32-B, Brabourne Road, Calcutta 1.  
 R. B. Shrivdasani Bros. (India).—22-6, Radha Bazar Street, Calcutta.  
 Royal Stationery Supply House.—46, Surjya Sen Street, Calcutta 9.  
 Seanfancia Paper Co. (Cal.) Ltd.—32A, Brabourne Road, Calcutta.  
 Sen Bros.—70, Mahatma Gandhi Road, Calcutta 7.  
 Shanker Brothers.—48, Jatindra Mohan Avenue, Calcutta 6.  
 Shiw Paper Exchange.—23, Canning Street, Room No. 34, Calcutta 1.  
 Shree Kamala Agency.—23, Canning Street, Calcutta 1.  
 Sree Krishna Trading Co.—2-A, Amratolla Lane, Calcutta 1.  
 Shree Vishnu Stores.—10, Jackson Lane, Calcutta 1.  
 S. K. Mitter & Sons.—24, Brabourne Road, Calcutta 1.  
 S. Mukherjee & Co.—P-22/4, Radhabazar Street, Calcutta 1.  
 S. N. Banerjee & Co. Pvt. Ltd.—14-2, Old China Bazar Street, Calcutta.  
 S. N. Ghose & Sons.—P-7, Old China Bazar Street, P.B. No. 2008, Calcutta 1.  
 S. N. Jhunjhunwalla.—P-39-40, Ezra Street, Calcutta 1.  
 Soorja Nath Nag & Sons.—117, Old China Bazar Street, Calcutta 1.  
 Sun Distributors Ltd.—14, Netaji Subhas Road, Calcutta 1.  
 Sunder Paper House.—146-2, Old China Bazar Street, Calcutta 1.  
 Surendra Paper House.—167, Old China Bazar Street, Calcutta 1.  
 T. C. Dutta & Sons.—P-23-24, Radhabazar Street, Calcutta 1.  
 Universal Paper Co.—47, Mahatma Gandhi Road, Calcutta 9.  
 Van Reekum-Gepacy Paper Pvt. Ltd.—P.O. Box No. 175, C-6, Clive Bldgs., Calcutta.  
 Varieties Paper Mart.—146-2, Old China Bazar Street, Calcutta 1.  
 Vasantraj Shantilal & Co.—13, Narain Prasad Babu Lane, Calcutta 7.  
 West Bengal Paper House Ltd.—72, Old China Bazar Street, Calcutta.  
 Wiggins Teape & Alex Pirie (Export) Ltd.—Pollock House, 18-B, Brabourne Road, Calcutta 1.

## PAPER MILLS

Ashok Paper Mills Ltd.—2, Brabourne Road, Calcutta 1.  
 Ballarpur Paper & Straw Board Mills Ltd.—25, Brabourne Road, Calcutta.  
 Bengal Paper Mill Co., Ltd.—14, Netaji Subhas Road, Calcutta 1.  
 Calcutta Paper Mills Ltd.—1-1, Vansittart Row, Calcutta.  
 India Paper Pulp Co., Ltd.—8, Clive Row, Calcutta.  
 J. K. Paper Mills.—2, Mangoe Lane, Calcutta.  
 Orient Paper Mills Ltd.—15, India Exchange Place, Calcutta.  
 Rohtas Industries Ltd.—11, Clive Row, Calcutta.  
 Shree Gopal Paper Mills Ltd.—26, Brabourne Road, Calcutta.  
 Sirpur Paper Mills Ltd.—8, India Exchange Place, Calcutta.  
 Star Paper Mills Ltd.—27, Brabourne Road, Calcutta.  
 Straw Products Ltd.—2, Mangoe Lane, Calcutta.  
 Titaghur Paper Mills Co., Ltd.—Chartered Bank Bldgs., Calcutta.  
 Tribeni Tissues Pvt. Ltd.—24 B, Park Street, Calcutta 16.  
 Union Paper & Board Mills Ltd.—18, Netaji Subhas Road, Calcutta.

## PAPER, PAPER BOARDS & PAPER PRODUCTS

Asiatic Paper & Board Industries.—Beerpara Lane, Ghughudanga, Calcutta 30.  
 Bengal Miscellany Ltd.—174, Maniktolla Main Road, Calcutta 11.  
 Bengal Paper Tube & Box Mfg. Co.—18, Park Street, Calcutta 16.  
 Eastern Paper Mills Ltd.—Dakhindari Road, Dum Dum, Calcutta.  
 Himalaya Paper & Board Mills.—20, Seven Tanks Lane, Ghughudanga, Calcutta 30.  
 Hindustan Cellulose & Paper Mills Ltd.—8, India Exchange Place, Calcutta 1.  
 Indian Card Board Industries Ltd.—2, Fairlie Place, Calcutta 1.  
 India Paper & Board Mills Co. Ltd.—74, Nagendra Nath Road, Calcutta 16.  
 Jindal Trading Co.—26, Shree Bhavan, Prasanna Tagore Street, Calcutta 6.  
 K. C. Dey & Co.—2-A, Amratolla Lane, Calcutta 1.  
 Mahabir Paper & Board Industries.—3, Canal Road, Tollygunge, Calcutta 33.  
 Modern Paper Industries.—29, Stephen House, Dalhousie Square, Calcutta.  
 Nav Bharat Vanijaya Ltd.—2, Mangoe Lane, Calcutta.



Paper Products Ltd.—7, Chittaranjan Ave., Calcutta 13.  
Pioneer Paper & Pulp Ltd.—1/1, Umakanta Sen Lane, Ghughudanga, Calcutta 30.  
Straw Products Ltd.—7, Council House Street, Calcutta 1.

### PATENT & TRADE MARK AGENTS

Datta, T. P. & Sons.—1-1, Rup Chand Mukherji Lane, Bhowanipur, Calcutta 25.  
DePenning & DePenning.—10, Government Place East, Calcutta 1.  
Lodge & Co., P.—85, Netaji Subhas Road, Calcutta 1.  
Remfry & Sons.—Stephen House, Dalhousie Square, Calcutta 1.

### PENCILS

Bharati Works.—2, Cornwallis Street, Calcutta 6.  
F. N. Goopu & Co.—12, Beliaghata Road, Calcutta.  
Indian Pen Allied Industries Co.—86, Bahim Sura Road, Beliaghata P.O., Calcutta 10.  
India Small Industries.—14, Jamini Kaviraj Road, Calcutta 4.  
N. Dutt & Sons.—Sreemanipara, Barnagore, Calcutta 36.  
Xanthic Industries.—28, Strand Road, Calcutta 1.

### PERFUMERY RAW MATERIALS

D. JAYANTILAL & CO.—Aromatic Chemicals, Natural and Synthetic Essential Oils, Perfumery Compounds, Essences, Drugs, Chemicals, Laboratory Chemicals, Saccharin, yeast, Provisions etc., 33, Canning Street, Calcutta-1; Phone: 229071.

### PERFUMES & COSMETICS

Bengal Chemical & Pharmaceutical Works Ltd.—6, Ganesh Chandra Avenue, Calcutta.  
Bengal Drug & Chemical Works.—7-1A, Nabin Sarcar Lane, Bagh-bazar, Calcutta.  
Bengal Perfume Co.—3-37 & 38, College Street, Market, Calcutta 12.  
Birla Laboratories.—2, Beerpara Lane, Ghughudanga P.O., Calcutta 30.  
Butto Kristo Paul & Co. Ltd.—1 & 3 Bonfield Cane, Calcutta 1.  
Calcutta Chemical Co. Ltd.—35, Pandit Road, Calcutta 29.  
Calcutta Essence Supply Co.—44-45, Ezra Street, Calcutta 1.  
Dabur (Dr. S. K. Burman) Ltd.—142, Rash Behari Avenue, Calcutta 29.  
Frank Ross & Co. Ltd.—35, Ripon Street, Calcutta.  
Himani Works Ltd.—Barrackpore Trunk Road, Rathtola, Belgharia, 24 Parganas Dist.  
Hindustan Lever Ltd.—63, Garden Reach, Calcutta.  
Lokenath Chemical Works.—31-1, The Mall, Dum Dum, Calcutta.  
Martin & Harris P. Ltd.—Mercantile Bldgs., Lalbazar, Calcutta.  
Md. Mustafa Hussain's Necktie Brand Zardah Factory.—141, Howrah Road, Howrah.  
P. Sett & Co. Ltd.—3, Ramakanta Sen Lane, Ultadanga, Calcutta 4.  
Smith Stanistreet & Co. Ltd.—18, Convent Road, Calcutta.  
Sterling Pharmaceutical Products Co. Ltd.—72-2, Shambhunath Pandit Street, Calcutta.

### PEST CONTROL

#### PEST CONTROL (INDIA) PRIVATE LTD.

Consulting Entomologists, Termite Control, Disinfection Fumigation Service.

10, Chowringhee Road, Calcutta-13.

H.O. : Yusuf Building, Mahatma Gandhi Road, Bombay-1.  
(For further details please see Bombay Commercial firm section.)

### PHARMACEUTICALS

Adco Ltd., Manufacturers of Drugs and Pharmaceuticals including injectable, Spirituous and non-spirituous B.P. Preparations and Patent Preparations, Fine Chemicals, oils, soft soaps, etc., P.O. Adconagar, Dist. Hooghly; City Office: 2, Jawaharlal Nehru Road, Calcutta 13; Phone: 238982.

BENGAL CHEMICAL & PHARMACEUTICAL WORKS LTD.—6, Ganesh Chunder Avenue, Calcutta 13; Pharmaceuticals, Heavy & Fine Chemicals, High Class Toilet Products, Coal Tar Distillation Products, Fire Extinguishers, Printing inks, Driers, etc., Branch Offices: Bombay & Kanpur.

BRITISH DRUG HOUSES (INDIA) PRIVATE LTD.—58/D, Chowringhee Road, Calcutta-16; Head Office: P.O. Box 9024, 8, Graham Road, Bombay-1.

EY'S MEDICAL STORES (MFG.) PRIVATE LTD.—Manufacturers of Antibiotics and other quality Pharmaceuticals; 62, Bondel Road, Calcutta-19; Phone: 443173 (4 Lines).

### PHOTOGRAPHIC MATERIAL DEALERS

Adair Dutta & Co. (I) Ltd.—Stephen House, 5, D. Square East, Calcutta 1.  
A. M. Doss & Co.—P-48, B. K. Paul Avenue, Calcutta 5.  
Artico.—4, Creek Row, Calcutta 14.  
Atul Chandra Dass & Sons.—36, Dharamtolla St., Calcutta 13.  
Basu & Sons.—153, Bowbazar Street, Calcutta 12.  
Bengal Photo Co. P. Ltd.—15/3, Chowringhee Road, Calcutta 13.  
Bengal Photo Concern.—262, Chittaranjan Avenue, Calcutta 6.  
Bombay Photo Stores P. Ltd.—33-34, Park Mansions, Park St., Calcutta 16.  
Bourne & Shepherd.—141, Surendra Nath Banerji Road, Calcutta 13.  
Calcutta Camera Stores.—8/2, Hospital St., Calcutta 13.  
Calcutta Paint & Photo Stores.—173/1, Dharamtolla St., Calcutta 13.  
Camera Exchange.—17/2A, Chowringhee Road, Calcutta 13.  
C. C. Saha Ltd.—45, Moti Sil Street, Calcutta 13.  
Central Photo Stores.—8/1, Hospital Street, Calcutta 13.  
Chimanlal Desai & Co.—54, Bentinck Street, Calcutta 1.  
Chokshi Brothers P. Ltd.—66, Ganesh Chandra Avenue, Calcutta 13.  
Chowringhee Camera Stores.—10 & 12, Chowringhee Road, Calcutta 13.  
City Camera Stores.—38, Dharamtolla Street, Calcutta 13.  
City Photo Co.—61/B, Serpentine Lane, Calcutta 14.  
Commercial Photo Service.—4-B, Chowringhee Road, Calcutta 13.  
Continental Photo Service.—1, Sadananda Road, Calcutta 26.  
Darbara Singh & Sons.—14, Bowbazar St., Calcutta 12.  
Daw Sen & Co. P. Ltd.—29, Dr. Suresh Sarkar Road, Calcutta 14.  
Deluca & Co.—14-B, Russa Road, Calcutta 26.  
Dey's Mercantile Stores.—A-13, Sir Stuart Hogg Market, Calcutta 13.  
D. Ratan & Co.—22/1, Cornwallis Street, Calcutta 6.  
Eastern Camera Stores.—9-A, D. Square East, Calcutta 1.  
Edna Lorenz P. Ltd.—30, Chowringhee Road, Calcutta 16.  
Grand Camera Stores & Studio.—9-B, Chowringhee Place, Calcutta 13.  
Harico.—3-B, Chowringhee Road, Calcutta 13.  
H. Paul & Co.—2, Chowringhee Road, Calcutta 13.  
J. C. Ghosh & Sons.—19-B, Bhupen Bose Avenue, Calcutta 4.  
Kamalayaya Stores P. Ltd.—156-A, Dharamtolla St., Calcutta 13.  
K. B. Photo Stores.—78, Baithakkhana Road, Calcutta 9.  
Kodak Ltd.—17, Park Street, Calcutta 16.  
L. C. Sett & Co. P. Ltd.—43, Dharamtolla St., Calcutta 13.  
Nan & Co. P. Ltd.—9-A, Dalhousie Sq. East, Calcutta 1.  
Narain Photographers.—20-H, Park Street, Calcutta.  
New Oriental Photographic Stores.—139-A, S. N. Banerji Road, Calcutta 13. Phone: 23-7962.  
Nizam & Co.—1, Chandni Chowk St., Calcutta 13.  
Novelty Photo Co.—169, Vivekananda Road, Calcutta 6.  
Photo Cine Stores.—3-B, Chowringhee Road, Calcutta 13.  
Photo Cine Sound Supplies.—4, Mission Row, Calcutta 1.  
Photo Concern.—158, S. P. Mukherji Road, Calcutta 26.  
Photographic Concern.—12, Bhupen Bose Avenue, Calcutta 4.  
Photographic Stores & Agency Co. P. Ltd.—154, Dharamtolla St., Calcutta 13.  
P. K. Bose & Co.—1, Sikdar Bagan St., Calcutta 4.  
Popular Camera Stores.—157-B, Dharamtolla St., Calcutta 13.  
Quick Photo Service Co. P. Ltd.—157-B, Dharamtolla St., Calcutta 13.  
Rege Cinefilms Ltd.—31, Chittaranjan Ave., Calcutta 12.  
Savoy Camera Stores.—4, Chowringhee Road, Calcutta 13.  
Taste & Co.—133, Circular Garden Reach Road, Calcutta 23.  
Vijay & Co.—3, Chowringhee Road, Calcutta 13.

### PIGMENTS

ASSOCIATED PIGMENTS LTD.—14, Netaji Subhas Road, Calcutta-1; Manufacturers of Red Lead (Non-Setting), Lead Suboxide, Litharge, Zinc Oxides (white seal), Zinc Dust; Phone: 220806, 220807; Grams: "SYNOXIDES".

### PIPE MANUFACTURERS

Bhagwati Industries.—192, Cross Street, Calcutta.

A. N. HUSSUNALLY & CO. (Estd. 1917).—28, Strand Road, Calcutta-1; Stockists for Pipes and Fittings for Steam, Water, Gas, Oil & Air; Distributors for Leader Valves; Phone: 224140, 228568.

ADVANCE ENGINEERING CORPORATION.—12-B, Clive Row, Post Box 2431, Calcutta-1; Manufacturers of Steel Pipe Fittings; Distributors: 'R' Brand M. I. Fittings; Stockists: All kinds of G.M. & C.I. Valves & Cocks Tested; Phone: 224956.

Indian Pan Works.—Ghusury, 227, G. T. Road, Howrah.  
M. Chandra & Co.—12, Lower Chitpur Road, Calcutta.  
Modern Pipe Works.—12, Lower Chitpur Road, R. No. 220, Calcutta.  
National Pipes & Tubes Co.—4, D. Square East, Calcutta 1.  
R. N. Kapoor & Co.—Sarasoona, Behala, Calcutta 8.  
Singal Iron Works.—224-24, G. T. Road (North), Howrah.

### PIPES (CAST IRON & STEEL) AND PIPE FITTINGS

A. G. Mondal.—225, Belillos Road, Howrah.  
Agarwal Hardware Works Pvt. Ltd.—167, Chittaranjan Avenue, Calcutta.



American Pipe Co.—135, Canning Street, Calcutta 1.  
 Aminchand Payare Lal.—135, Canning Street, Calcutta 1.  
 A. S. Abdullabhoj & Co.—12B, Clive Row, Calcutta.  
 Ashoka Steel Industries.—138, Canning St., Calcutta.  
 Asian Industries.—9, Upper Chitpur Road, Calcutta.  
 Atlas Industries Co.—13/C, Raja Rajkissen St., Calcutta 6.  
 Bagri Iron & Steel Co.—138, Canning Street, Calcutta.  
 B. Coomar & Co.—16, Raja Woodmunt Street, Calcutta 1.  
 Belur Iron Foundry & Engg. Works.—203/1, Harrison Road, Calcutta 7.  
 Bengal Hardware Mart.—69-A, Netaji Subhas Road, Calcutta 1.  
 Bengal Rolling Mills Ltd.—67-B, Netaji Subhas Road, Calcutta.  
 Bharat Hardware and Textile Syndicate.—14, Netaji Subhas Road, Calcutta 1.  
 Bharat Iron & Steel Industry.—11/1, B. K. Paul Temple Road, Belur, Howrah.  
 Bharat Steel & Metal Industries.—14/2, Old China Bazar St., Block, No. 169, Calcutta 1.  
 Calcutta Casting & Engineering Works.—243, Chittaranjan Avenue, Calcutta 13.  
 Calcutta Pipe Mfg. Co.—374, Upper Chitpur Road, Calcutta.  
 Castings Corporation India Pvt. Ltd.—45, Madhusudan Pal Chowdhury Lane, Howrah.  
 Central Hardware Mart.—63/1, Netaji Subhas Road, Calcutta 1.  
 Commercial Import & Export Pvt. Ltd.—40, Strand Road, Calcutta 1.  
 Cyma Engineering Co.—223, Bellillos Road, Howrah.  
 D. C. De & Sons.—150, Narasingha Dutta Road, Howrah.  
 Dewanchand Nikkamal.—71-A, Netaji Subhas Road, Calcutta 1.  
 Dey Brothers.—71-A, N. Subhas Road, Calcutta 1.  
 D. N. Singha & Co.—16, Sitanath Bose Lane, Salkia.  
 Great Eastern Mechanical Works Pvt. Ltd.—Ichapore Road, Santragachi (Dt. Howrah).  
 Hindustan Industrial Co.—102, Jamunadal Bazaz Street, Calcutta 7.  
 Howrah Engineering Concern Pvt. Ltd.—19, Maharshi Debendra Road, Calcutta 6.  
 Howrah Light Casting Co. P. Ltd.—213, Mahatma Gandhi Road, Calcutta 7.  
 Howrah Trading Co. Pvt. Ltd.—8, Dalhousie Sq. East, Calcutta.  
 Imperial Engineering Works Pvt. Ltd.—122, Bellillos Road, Howrah.  
 Indian Iron & Steel Co. Ltd.—12, Mission Row, Calcutta.  
 Indian Malleable Castings Ltd.—4, Lyons Range, Calcutta.  
 Indian Tube Co. Ltd.—41, Chowringhee Road, Calcutta 16.  
 Jai Hind Iron & Pipe Works.—1, Netaji Subhas Road, Calcutta.  
 Jain Brothers.—29, Strand Road, Calcutta.  
 Jindal (I) P. Ltd.—2/1, Ahmed Mamooji Street, Lilloah (Dt. Howrah).  
 Kedar Engineering & Trading Co.—34, Strand Road, Calcutta 1.  
**KEJRIWAL IRON & STEEL WORKS.—30/31, Kalakar Street, Calcutta 7; Grams: "HOLLYMEN" Calcutta; Phone: 334978 & 330294.**  
 Krishna Galvanizing Works.—20, Belur Road, Lilloah, Howrah.  
 L. Mullick & Co.—81, Netaji Subhas Road, Calcutta 1.  
 Laxmi Trading Co.—221/4, G. T. Road, North, Howrah.  
 Luxmi Engineering Co. Pvt. Ltd.—123, Narasingha Dutt Road, Howrah.  
 Machines Techno (Sales) Pvt. Ltd.—33, Netaji Subhas Road, Calcutta 1.  
 Madhavesingh Dwarkadas.—44-45, Ezra Street, Calcutta 1.  
 Maya Galvanizing Works.—9, Upper Chitpur Road, Calcutta 7.  
 M. Chandra & Co.—12, Lower Chitpur Road, Calcutta.  
 M. K. Steel & Metal Industries Pvt. Ltd.—7/2A, Annada Neogi Lane, Calcutta 3.  
 Narain Industries.—36/37, Ramlochan Shire St., Belur, Howrah.  
 National Pipe Bending Works.—196, Panchanantola Road, Howrah.  
 Pioneer Machinery Works.—12, Bechu Chatterji St., Calcutta 9.  
 Premier Iron & Steel Works Pvt. Ltd.—P-16, Nafar Pal Road, North Bandra, Howrah.  
 R. K. Industries.—144, Cotton Street, Calcutta 7.  
 Ramkrishna Engineering Works.—2, Sri Krishen Vakant Lane, Howrah.  
 Ramprosad Sagarmall.—34/2, Madhusudhan Pal Chowdhury Lane, Howrah.  
 Satish Chandra Karuri & Sons.—10-6, Brindaban Mullick Lane Howrah.  
 S. Abbas & Co.—12-B, Clive Row, Calcutta.  
 S. C. Panja.—206, Bellillos Road, Howrah.  
 Shivneoni & Co.—85, N. Subhas Road, Calcutta.  
 Shree Ambica Iron Works.—135, Canning St., Calcutta.  
 Shree Dhakalia Industries.—138, Canning Street, Calcutta.  
 Shree Hanuman Foundry Works.—8, Dalhousie Square East, Calcutta.  
 Shree Luxmi Industries.—46, Strand Road, Calcutta.  
 Spun Casting & Engg. Co. P. Ltd.—21/1, Ezra Mansions, Calcutta 1.  
**STEWARTS AND LLOYDS OF INDIA LTD.—Supply & Installation of fabricated Pipe-work of all Sizes for Gas, Water, Steam and Compressed Air etc., Casing for Tube Wells, Oil Country goods, Coils for Refrigeration and other Industrial use, Tubular Structures for Buildings, Pipe Bridges**

and Trestles, Pallets, Stillages and Trolleys for material Handling; Head Office: 41, Chowringhee Road, Calcutta-16; Works: 39, Hide Road, Kidderpore, Calcutta-23; Phone: 442311 (12 Lines), Regd. Office: 453515 (3 Lines) Works.  
 Swapna Engineering Works.—15/1, Salkia School Road, Salkia.  
 Tatanagar Foundry Co. Ltd.—4, Dalhousie Sq. East, Calcutta 1.  
 United Pipe & Tube Co.—1, Salimpura Road, Calcutta.  
 Vijay Iron Foundry.—4, Dalhousie Square East, Calcutta 1.

### PLASTIC PRODUCTS DEALERS

Askaran Srichand.—10, Armenian Street, Calcutta.  
 Benarsilal Kedia & Sons.—Room No. C-114, Bagree Market, 71, Canning Street, Calcutta 1.  
 Bharat Trading Co.—Room No. D-117, Bagree Market, 71, Canning Street, Calcutta 1.  
**CALCUTTA PLASTICS & VARIETY STORES.—44, Ezra Street, Calcutta-1; Plastic Containers transparent in various sizes and designs and Acid jars from 1½ to 75 litres available Ex-Stock; Phone: 34-2132.**  
 Chemicals & Tools Distributors.—38, Strand Road, Calcutta 1.  
 Chika Pvt. Ltd.—36, Ganesh Ch. Avenue, Calcutta 13.  
 Dipak Trading Company.—15, Amratolla Lane, Calcutta 1.  
 Eastern Plastics.—Room No. D-116, Bagree Market, 71, Canning Street, Calcutta 1.  
 G. C. Kedia & Co.—13, India Exchange Place, Calcutta 1.  
 General Traders.—Room No. 112, Bagree Market, 71, Canning Street, Calcutta 1.  
 General Trading Company.—Room No. C-206, Bagree Market, 71, Canning Street, Calcutta 1.  
 Gordhandas Madanlal.—178, Mahatma Gandhi Road, Calcutta 7.  
 Jamunadas Bihani.—Room No. C-110, Bagree Market, 71, Canning Street, Calcutta 1.  
 Kamal Engineering Corpn.—235, B. L. Saha Road, Tollygunge, Calcutta 33.  
 Metal Distributors Pvt. Ltd.—38, Strand Road, Calcutta 1.  
 Nopchand Punamchand Malu.—10, Jackson Lane, Calcutta.  
 N. V. Distributors.—Room No. 20, Bagree Market, 71, Canning Street, Calcutta 1.  
 Orion & Company.—4, Ramkumar Rakshit Lane, Calcutta 7.  
 Plastic Sales Emporium.—18, Armenian Street, Calcutta 1.  
 Plastics Distributors.—38, Strand Road, Calcutta 1.  
 Plastics & Machineries Ltd.—4, Upper Chitpur Road, Calcutta 7.  
 Ramchandra Bulakidas.—47, Khengraputty Street, Calcutta 7.  
 Sharna & Company.—300-A, Rai Bahadur Road, Tollygunge, Calcutta.  
 Shoodutray Srinivas.—26, Upper Chitpur Road, Calcutta 7.  
 Shirdutt Purohit.—235, B. L. Saha Road, Tollygunge, Calcutta 33.  
 Star Plastic Works.—8, Ramprasad Shaha Lane, Calcutta 1.  
 Sundersingh Ajitsingh.—17/D, Bagree Market, 71, Canning Street, Calcutta 1.  
 United India Agencies.—26, Upper Chitpur Road, Calcutta 7.  
 Virendra Shantilal Shah.—19, Armenian Street, Calcutta.

### PLASTIC PRODUCTS MANUFACTURERS

Atlanta Plastics P. Ltd.—134, A & B, Vivekananda Road, Calcutta 6.  
 All Fine Industries.—160, Lower Chitpur Road, Calcutta 1.  
 Angelo Bros. Ltd.—P.O. Box No. 68, Calcutta.  
 Ashok Plastics Pvt. Ltd.—116, Canning Street, Calcutta 1.  
 Asian Tool & Plastic Co.—1/4C, Khagendra Chatterjee Road, Cossipore, Calcutta 2.  
 Atlas Industries Co.—13/C, Raja Rajkissen Street, Calcutta 6.  
 Automatic Plastic Works.—8, Canning Street, Calcutta.  
 Bajaj Industries Pvt. Ltd.—71-1, Canal Circular Road, Calcutta 11.  
 Bharat Industrial Corporation.—150/C, Ram Dulal Sircar Street, Calcutta 6.  
 Binani Metal Works Pvt. Ltd.—38, Strand Road, Calcutta 1.  
**B. K. PLASTIC INDUSTRIES.—33, Burtolla Street, Calcutta 7. Manufacturers of Plastic Carboys for Acids, Containers for Pharmaceutical, Cosmetics and other items, Industrial Moulded Goods, Bottles, Jars, Stationery items etc.**  
 B. R. Products.—44/A, Masjidbari Street, Calcutta 6.  
 Calcutta Plastic Industries.—8, Sambhu Mullick Lane, Calcutta.  
 Calcutta Plastic Works.—26, Upper Chitpur Road, Calcutta 7.  
**CAPRIHANS (INDIA) PRIVATE LTD.—8A, Rawdon Street, Calcutta; Phone: 446359; H.O., Janmabhoomi Chambers, Fort Street, Fort, Bombay-1.**  
 Century Plastics.—31, Badur Bagan St., Calcutta 9.  
 Cipra Bakelite Company.—39, Russa Road, Tollygunge, Calcutta 33.  
 Circular Plastics.—2, Lansdowne Road, Calcutta 20.  
 Cottage Engineering Private Ltd.—69/2, Nimtolla Ghat Street, Calcutta 6.  
 Crown Pen Industries.—90, Phears Lane, Calcutta 12.  
 Dey's Home Industries.—37 & 440, Sovabazar St., Calcutta 5.  
 Eastern Plastic Syndicate.—26, Upper Chitpur Road, Calcutta.  
 Eastern Traders (Agencies).—3, Chittaranjan Avenue, Calcutta 13.



Ever-Bright Plastic Works.—7/1, Sukhlal Jahury Lane, Calcutta 7.  
 Evernew Private Limited.—149, Lower Chitpur Road, 1st Floor, Calcutta 1.  
 Extrusions.—243, Chittaranjan Avenue, Calcutta 6.  
 Fairway Trading Co.—No. 6, Karbala Mohd. Street, Calcutta 1.  
 Gliz Engineering Co.—42, Nalini Sett Road, Calcutta 7.  
 Hanuman Plastics Works.—46, Strand Road, Calcutta.  
 Harjitsing Khanna.—116, Chittaranjan Avenue, Calcutta 7.  
 Hind Plastic Works Ltd.—6, Pageyaputty Street, Calcutta 7.  
 Hindusthan Bangle Works.—5, Gurudas Bysack Lane, Calcutta 7.  
 Hindusthan Plastics Co.—1-4, Gun Foundry Road, Cossipore, Calcutta.  
 I. C. I. (India) Pvt. Ltd.—34, Chowringhee, Calcutta.  
 India Moulding Co.—C-2, Bharat Bhavan, Calcutta.  
 India Plastic & Moulding Co.—300, Bowbazar Street, Calcutta 12.  
 Industrial Plastic (India).—17, Park Street, P.B. No. 9072, Calcutta 16.  
 Indar Plastic Works.—65-A, Nimtolla Ghat Street, Calcutta 6.  
 Jupiter Pen Industries.—32, Kristo Das Pal Lane, Calcutta 6.  
 Keshavchandra Singhal & Co.—12, Lower Chitpur Road, Calcutta 1.  
 Kumar Plastic Works.—48-A, Mukhtar Babu Street, Calcutta 7.  
 K. N. Gupta & Co.—87, Khengraputty Street, Calcutta 7.  
 Ladla Plastic Works.—14-6, Sovaram Bysack Street, Calcutta 7.  
 Laharchand Sethia.—53, Netaji Subhas Road, Calcutta.  
 Law Industries & Co.—9, Clive Row, Calcutta 1.  
 Madan & Co.—65-A, Nimtolla Ghat Street, Calcutta 6.  
 Maheswari Plastic Works.—80-2, Pathuriaghata Street, Calcutta.  
 Modern Plastic Works.—128, Hazra Road, Flat No. 5, Calcutta 26.  
 Moyur Products.—Room No. A-41, Bagree Market, 71, Canning Street, Calcutta 1.  
 National Carbon Co. (India) Ltd.—Faraday House, P-17, Mission Row Extension, P. B. No. 2170, Calcutta.

**NATIONAL MOULDING CO. LTD.—Manufacturers of 'Lily' Brand quality Plastic Goods, Specially Hair Combs of Varieties, Toys and Various utility articles; 26, Upper Chitpur Road, Calcutta-7; Phone: 344525 (2 Lines).**

Orient Plastic Products.—5-1, Govind Chandra Dhar Lane, Calcutta.  
 Oriental Traders.—Room No. FN. 10, 1st Floor, 12, Lower Chitpur Road, Calcutta 1.

Peerless Plastics Industries Pvt. Ltd.—4, Upper Chitpur Road, Calcutta.

**PIONEER PLASTIC WORKS (PRIVATE) LTD.—Manufacturers of Polythene Pipes, PVC Tubings, Rung Bowls, Safety Helmets and a Wide Range of Plastic Utility Products, 14/1B, Ezra Street, Calcutta-1; Phone: 347884 (6 Lines).**

Plasteel Industries Corporation Pvt. Ltd.—15, Amratalla Lane, 1st Floor, Calcutta 1.

Plastic Concern.—20, Sir Hariram Goenka Street, Calcutta 7.  
 Plastic Corporation.—114, Princep Street, Calcutta 13.  
 Plastic Mfrs. Pvt. Ltd.—5, Dalhousie Sq. East, Calcutta.  
 Plastic Powders Pvt. Ltd.—6, Old P.O. Street, Calcutta 1.  
 Plastic Concern.—20, Sir Hari Ram Goenka Street, Calcutta 7.  
 Plastics Mfrs.—5, Dharamtolla Road, Calcutta.  
 Plastics Moulders Private Ltd.—38, Strand Road, Calcutta 1.  
 Plastic Moulding & Allied Industries.—135, Park Street, Calcutta 17.  
 Plasto International.—71, Canning Street, Calcutta 1.  
 Plasto-Iron (India) Ltd.—157, Jessore Road, Dum Dum, Calcutta 28.  
 Plastoweld.—394, Upper Chitpur Road, Calcutta 7.  
 Pradip Plastic Moulders.—12B, Lower Chitpore Road, Calcutta.  
 Prakash Industries.—116, Canning Street, Calcutta 1.

**RADHESHYAM PLASTIC INDUSTRIES.—Manufacturers of Plastic Toys, Acid Carboys of 500 c.c. to 75 Litres Bottles, Containers, Household articles, Components for Industries, Packings, All types of Plastic, Polythene, Nylon articles; 65-A, Nimtolla Ghat Street, Calcutta-6; Phone: 554836 and 558911.**

Ratan Plastics Pvt. Ltd.—43/1, Strand Road, Calcutta 1.  
 Sree Probhat Products.—99/B, Garpar Road, Calcutta 9.  
 Saigal Commercial Company.—1, Sun-Yet-Sen Street, Calcutta.  
 Sarada Brothers.—35, Chittaranjan Avenue, Calcutta 13.  
 Sree Luxmi Plastic Works.—6-A, Jagabandhu Boral Lane, Calcutta 7.  
 Shri Bijoy Industries.—24/25, Upper Chitpur Road, Calcutta 7.  
 Star Plastic Works.—8, Ramprasad Saha Lane, Calcutta.  
 Standard Plastic Works.—150, Lower Chitpur Road, Calcutta 1.  
 Sukhani Plastic Industries.—259, Chittaranjan Avenue, Calcutta 6.  
 Surana Industries.—1B, Haraprasad Dey Lane, Calcutta 7.  
 Surendra Stores.—Room No. C-7, Bagree Market, 71, Canning Street, Calcutta 1.  
 Swadeshi Industries Ltd.—142/A, Jamunatal Bajaj Street, Calcutta 7.  
 Synthetic Moulders Ltd.—58, Netaji Subhas Road, Calcutta.  
 Teko Pen Industries.—90, Phears Lane, Calcutta 12.  
 Unique Plastic Industries.—4, Canal Road, Tollygunge, Calcutta 33.  
 United Industries.—6, Canal Road, Tollygunge, Calcutta 33.  
 Universal Moulders.—5, Canal Road, Calcutta 3.  
 West Bengal Plastics (Pvt.) Ltd.—6, Old P.O. Street, Calcutta 1.  
 Western Plastic Company.—9, Gurusaday Road, Ballygunge, Calcutta 10.

## PLYWOOD

Albion Plywoods Ltd.—11, Clive Row, Calcutta.  
 Andaman Timber Industries Ltd.—2, D. Sq. East, Calcutta 1.  
 Asiatic Plywood Industries.—30, Strand Road, 1st Floor, Calcutta.  
 Assam Bengal Saw Mills.—4, Clive Ghat Street, Calcutta.  
 Assam Bengal Veneer Industries Pvt. Ltd.—9, Clive Row, Calcutta 1.  
 Assam Plywood Products Pvt. Ltd.—12, D. Sq. East, Calcutta 1.  
 Avarat Plywood.—86, Netaji Subhas Road, Calcutta.  
 B. S. & Co.—33, Brabourne Road, Calcutta 1.  
 Bando Plywood Works.—98, Masjidbar Street, Calcutta.  
 Bellaghata Timber Works Ltd.—8, Chawalpatty Road, Calcutta 10.  
 Bengal Bobbin & Plywood Mfg. Co.—44-46, Canning Street, Calcutta.  
 Benagal Veneer & Saw Mills.—Siliguri, Darjeeling Dist.  
 Bose Wood Works Pvt. Ltd.—9, Clive Row, Calcutta.  
 Calcutta Plywood Co.—29, Strand Road, Calcutta.  
 Crossley & Towers Private Ltd.—7A, Lower Circular Road, Calcutta 17.  
 Das & Co.—32, Chawalpatty Road, Calcutta 10.  
 Eagle Plywood Industries Ltd.—9, Royal Exchange Place, Calcutta.  
 East India Plywood Co. Ltd.—2, Netaji Subhas Road, Calcutta.  
 Eastern Plywood Mfg. Co. Ltd.—108, Prince Anwar Shah Road, Tollygunge P.O., Calcutta 33.  
 Enco Plywood & Saw Mills Industries.—5, Alipur Park Road, Calcutta 27.  
 Ganges Plywood Mfg. Co. Ltd.—37, Netaji Subhas Road, Calcutta.  
 Great Indian Plywood Mfg. Co.—76, Jessore Road, Calcutta 30.  
 Hindustan Timber Industries.—41, Chawalpatty Road, Calcutta.  
 India Plywood Co.—33, S. K. Deb Road, Pathi Pookar, Dum Dum, Calcutta.  
 Jayshree Plywoods.—India Exchange, Calcutta 1.  
 Jeypore Timber & Veneer Mills Ltd.—35, Chittaranjan Avenue, Calcutta.  
 Kamal Brothers.—20, Harish Neogi Road, Calcutta 4.  
 Kasipur Plywood Co.—2, Dalhousie Square (East), Calcutta.  
 Madarihat Veneer & Saw Mills.—Madarihat P.O., Jalpaiguri Dist.  
 Minerva Plywood Industries.—43-A, Chawalpatty Road, Bellaghata, Calcutta.  
 National Plywood Industries.—6, Cora Pada Sarkar Lane, Daspara, Calcutta.  
 National Timber Industries.—3, Rashmoni Bazar Road, Bellaghata, Calcutta.  
 Paharpur Timbers Pvt. Ltd.—Paharpur, Calcutta 23.  
 Plywood Mfrs. Co-operative Society Ltd.—1, Canal Circular Road, Calcutta.  
 Rajasthan Plywood & Drum Works.—29-D, Chawalpatty, Calcutta.  
 Rohtas Industries Ltd.—9, Dalhousie Square East, Calcutta.  
 Sarada Plywood Industries P. Ltd.—9, Ezra Street, Calcutta 1.  
 S. S. Mookerji.—29, Parkside Road, Calcutta 26.  
 Sree Gopal Plywood Works.—2, Pahehanan Mookerjee Road, Cossipore P.O., 24 Parganas Dist.  
 Surma Match & Industries Ltd.—67-B, Netaji Subhas Road, Calcutta.  
 Taj Plywood Products.—20, Ultadanga Main Road, P.O. Calcutta 4.  
 Union Plywood Products.—1, Commercial Bldgs., 102-B, Netaji Subhas Road, Calcutta.  
 Varat Plywood Factory.—67-B, Netaji Subhas Road, Calcutta.  
 Veneer Mills Pvt. Ltd.—62, Ballygunge Circular Road, Calcutta 19.  
 Wood Craft Products Ltd.—8, Royal Exchange Place, Calcutta.

## PNEUMATIC TOOLS

**MUKERJI & SHAHS.—36, Panditia Road, Calcutta-29; Manufacturers of Pneumatic Chisel, Riveting Snap, Moll Point, Spare Parts for Riveting Hammer, Chipping Hammer, Paying Breaker, Rock Drill etc., Phone: 463820, 464416, 460194.**

## POTTERIES, BRICK AND TILE WORKS

A.B.C. Floors.—13, Dalhousie Square, Calcutta 1.  
 Arco Ceramics.—16-J, Fern Road, Calcutta 19.  
 Art Tiles & Concrete Works P. Ltd.—11, Gobra Goristhan Lane, Entally, Calcutta 14.  
 Bengal Porcelain Co. Ltd.—1-2, Moti Sil Street, Calcutta 13.  
 Bengal Potteries Ltd.—45, Tangra Road, Calcutta 15.  
 Bharat Firebricks & Pottery Works P. Ltd.—33, Canning St., Calcutta 1.  
 Bharat Potteries.—91, Dharamtolla Street, Calcutta 13.  
 Calcutta Porcelain Works Ltd.—1-1, Bhim Ghosh Byelane, Calcutta 6.  
 Crown Brick Co.—Badartala, Calcutta 18.  
 Carrara Marble & Terrazo Co.—P-21, Mission Row Extension, Calcutta 13.  
 Eastern Brick Manufacturers.—Akrah, Calcutta 18.  
 Hindustan Potteries.—12, Shibkrishna Daw Lane, Calcutta 7.  
 India Potteries Ltd.—91, Dharamtolla Road, Calcutta 14.  
 Mitter Bricks P. Ltd.—Tollygunge, Calcutta 41.  
 National Brick Mfg. Co.—Akrah, Calcutta 18.  
 Nawn Potteries.—7, Bowbazar Street, Calcutta 12.



**POWER GENERATION & TRANSMISSION EQUIPMENT**

**INDUSTRIAL GASES LTD., THE.**—15, Ganesh Chandra Avenue, P.O. Box 853, Calcutta 1. Phones: 233230, 239005, 239681, 237985, 239981. Design, Supply and Erection of Complete Power Stations, Turbines, Generators, Motors, Diesel generating Sets, Transformers, Switchgears, Lighting Arresters, Voltage Regulators Relays, etc.

**PRINTING INK MFRS.**

**BENGAL CHEMICAL & PHARMACEUTICAL WORKS LTD.**—6, Ganesh Chunder Avenue, Calcutta 13; Pharmaceuticals, Heavy & Fine Chemicals, High Class Toilet Products, Coal Tar Distillation Products, Fire Extinguishers, Printing Inks, Driers, etc., Branch Offices—Bombay & Kanpur.

**PRINTING PRESSES**

Acme Printing & Process Works.—115C, Amherst Street, Calcutta 9.  
Adi Bengal Press.—H.O. and Press: 26, New Ballygunge Road, Calcutta-39. Phone: 444541.

A. T. De (Pvt.) Ltd.—21, Jhamapukur Lane, Calcutta 9.  
Alexandra Printing Works.—9A, Hari Pal Lane, Calcutta 9.  
All India Printing & Cardboard Box Factory.—58/1, Nimtola Ghat Street, Calcutta 6.

Anna Art Press (Pvt.) Ltd.—26, Dr. Suresh Sarkar Road, Calcutta 14.  
Argus Trading Co.—1, British Indian Street, Calcutta.

Art Printing House.—8, Crooked Lane, Calcutta 1.  
Art Union Printing Works (Pvt.) Ltd.—80/15, Grey Street, Calcutta 6.

Aryan Press.—309, Bowbazar Street, Calcutta 12.  
Aubrey Brothers & Co.—2/1, Old Court House Street, Calcutta 1.

Auto Print & Pub. House.—49, Baldeopara Road, Calcutta 6.  
B. M. S. Printing Works.—3, Amratola Street, Calcutta 1.

Babosa Banijya Press.—9/3, Ramanath Majumdar Street, Calcutta 7.  
Bani Press.—16, Hemendra Sen Street, Calcutta 6.

Baptist Mission Press.—41A, Lower Circular Road, Calcutta 16.  
Basanta Trading Co.—59, Mott Lane, Calcutta 13.

Basu Bhattachari & Co.—80/7, Grey Street, Calcutta 6.  
Basuaree Press.—80/6, Grey Street, Calcutta 6.

Bata Press.—30, Theatre Road, Calcutta 16.  
Bela Printing Works.—22, Sukeas Lane, Calcutta 9.

Bengal Autotype Co.—213, Cornwallis Street, Calcutta 6.  
Bengal Book Binding Co.—34/1, Beadon Street, Calcutta.

Bengal Cardboard Industries & Printers P. Ltd.—72, Tiljala Road, Calcutta 17.

Bengal Phototype Co. (Pvt.) Ltd.—46/1, Amherst Street, Calcutta 9.  
Bengal Stationery Concern.—14/2, Old China Bazar Street, Calcutta.

Bharatbansa Printing Works.—203/1/1, Cornwallis Street, Calcutta 6.  
Bharati Printing & Publishing Co. Ltd.—123, Lower Circular Road, Calcutta 14.

Bijlee Press Pvt. Ltd.—129, Shymaprasad Mukherji Road, Calcutta 26.  
Bijoya Art Press.—144, Dharamtola Street, Calcutta 13.

Blockman (Process).—77/1, Harrison Road, Calcutta 9.  
Bodhi Press.—5, Sankar Ghose Lane, Calcutta 6.

Bose Press Pvt. Ltd.—30, Brojo Mitra Lane, Calcutta 9.  
Brahmo Mission Press.—211, Cornwallis Street, Calcutta 6.

British India Stationery Supply Concern.—57, Radhabazar Street, Calcutta 1.

Calcutta Art Studio.—185/1, Bowbazar Street, Calcutta 12.  
Calcutta Art Printers Pvt. Ltd.—8B, Lalbazar Street, Calcutta.

Calcutta Chronotype Private Ltd.—1, Gibson Lane, Calcutta 1.  
Calcutta Exchange Gazette.—5, Mission Row, Calcutta 1.

Calcutta Job Press Pvt. Ltd.—35/B, Wellington Street, Calcutta 13.  
Calcutta Phototype Co. Pvt. Ltd.—6, Chowringhee, Calcutta 13.

Calcutta Press Pvt. Ltd.—1, Wellington Square, Calcutta 13.  
Campbell Printing Works.—8/1, Lalbazar Street, Calcutta 1.

Cardboard Box Mfg. Co.—38, Coolatola Street, Calcutta 7.  
Cardboard Box of India.—25A, Pallit Street, Calcutta 19.

Cardboard Material & Printing Co. (Pvt.) Ltd.—7, Convent Road, Calcutta 14.

Caxton & Co.—19, British Indian Street, Calcutta 1.  
Chitragupta Press.—205, Old China Bazar Street, Calcutta 1.

Classic Press.—21, Patuatola Lane, Calcutta 9.  
Clive Press.—14/2, Old China Bazar Street, Calcutta 1.

D. H. Kesh & Co. Pvt. Ltd.—16, Ramkanal Adhicari Lane, Calcutta 12.

Dabur (S. K. Burman) Pvt. Ltd.—142, Rashbehari Avenue, Calcutta 29.

Dass Bros., Printing Works.—14, Garanhata Street, Calcutta 6.  
Divine Printing Works.—142/2, Radha Bazar Street, Calcutta.

Doodh Nath Press.—95/1, Sambhu Halder Lane, Salkia, Howrah.  
Doshi Press Pvt. Ltd.—17, Armenian Street, Calcutta.

Eastern Printing House.—9, Dharamtola Street, Calcutta 13.  
Eagle Lithographing Co. Pvt. Ltd.—26B, Christopher Road, Calcutta 14.

Eastend Printers.—3, Dr. Suresh Sarkar Road, Calcutta 14.  
Eastern Type Foundry & Oriental Printing Works Pvt. Ltd.—18, Brindaban Basak Street, Calcutta 5.

Elm Press.—63, Beadon Street, Calcutta 6.  
Eton Press Pvt. Ltd.—41, Netaji Subhas Road, Calcutta 1.

Express Printers Pvt. Ltd.—20A, Gour Laha Street, Calcutta 6.

Fine Printers Pvt. Ltd.—42, Mahendra Gossain Lane, Calcutta 6.  
Forward Pressman (India) Ltd.—8, Indian Mirror Street, Calcutta 18.

Free India Printing Works.—47, Baldeopara Road, Calcutta 6.  
Ganges Printing Co. Ltd.—Shibpur, Howrah.

General Printers & Publishers Pvt. Ltd.—119, Dharamtola Street, Calcutta 13.

Ghose Printing House Pvt. Ltd.—17A, British Indian Street, Calcutta 1.

Glasgow Printing Co. Private Ltd.—Kadamtala, Howrah.  
Gocool Chandra Dutta & Co.—9/1, Dalhousie Square East, Calcutta 1.

Goocha Printing Works.—76, Bowbazar Street, Calcutta 12.  
Gordon & Co.—106, Narkeldanga Main Road, Calcutta 11.

Gossain & Co. Pvt. Ltd.—7/1, Grant Lane, Calcutta 12.  
Gouranga Press Pvt. Ltd.—5, Chintamori Das Lane, Calcutta 9.

Grand Press.—275, Bowbazar Street, Calcutta 12.  
Graphic Machinery & Appliances Pvt. Ltd.—3, Chittaranjan Avenue, Calcutta 13.

Gupta Press.—37/7, Beniatola Lane, Calcutta 9.  
Guru Press.—157A, Dharamtola Street, Calcutta 13.

Guxrat Printing Press.—50, Ezra Street, Calcutta 1.  
Headway Lithographing Co. Ltd.—4, Mari Ghosh Street, Calcutta 6.

Hibernian Press.—69, Bowbazar Street, Calcutta 12.  
Hindusthan Art Engraving Co. Pvt. Ltd.—24, Corris Church Lane, Calcutta 9.

Hind Paper Printers.—79/9, Lower Circular Road, Calcutta 14.  
Hind Press Works.—7, Sristidhar Dutta Lane, Calcutta 5.

Hindusthan Printing Works.—58/1/4A, Raja Dinendra Street, Calcutta 9.  
Hindusthan Printers.—52B, Raja Dinendra Street, Calcutta 9.

Homin Art Press.—52/9, Bowbazar Street, Calcutta 12.  
Hooghly Printing Co. Ltd.—41, Chowringhee Road, Calcutta 16.

Imperial Printing Works.—5/2A, Pitambar Bhattacharji Lane, Calcutta 9.

Indian Art Cottage.—P-7, C.I.T. Road, Calcutta 14.  
Indian Press Pvt. Ltd.—93A, Dharamtola Street, Calcutta 13.

Inland Printing Works.—60/3, Dharamtola Street, Calcutta 13.  
International Press.—46, Bowbazar Street, Calcutta 12.

J. C. Hui & Co.—12B, Netaji Subhas Road, Calcutta.  
Jackson Press.—22, Gangadhar Babu Lane, Calcutta 12.

Janabani Printers & Pub. Pvt. Ltd.—36, Baranashi Ghose Street, Calcutta 6.

Jnanoday Press.—17, Hayet Khan Lane, Calcutta 9.  
K. L. Dutta & Co.—10, Dalhousie Square East, Calcutta 1.

K. P. Basu Printing Works.—11, Mohendra Gossain Lane, Calcutta 6.  
Kalika Press Pvt. Ltd.—25, D. L. Roy Street, Calcutta 6.

Kalika Type Foundry Pvt. Ltd.—31, Ward Institution Street, Calcutta 6.

Kalpana Press Pvt. Ltd.—9, Shibnarain Das Lane, Calcutta 6.  
Kamala Printing Works.—3, Kashi Mitra Ghat Street, Calcutta 3.

Kanai Press.—194, Old China Bazar Street, Calcutta 1.  
Kattayani Machine Press.—39/1, Shibnarain Das Lane, Calcutta 6.

King Halfstone Co.—22, Wellington Street, Calcutta 12.  
Kohinoor Art Press.—3, Wellesley 1st Lane, Calcutta 16.

Krishna Art Press.—21B, Sikdar Bagan Street, Calcutta 4.  
Lakshmi Printing Works.—370, Upper Chitpur Road, Calcutta 4.

Leonard Cardboard Box Factory Pvt. Ltd.—20, Grey Street, Calcutta.

Limton Art Press.—148, Lower Chitpur Road, Calcutta 1.  
Lotus Press.—52/9, Bowbazar Street, Calcutta 12.

Loyal Art Press Pvt. Ltd.—164, Dharamtola Street, Calcutta 13.  
M. I. Press.—30, Grey Street, Calcutta 5.

Madona Press.—14, Bowbazar Street, Calcutta 12.  
Manager Press.—36A, Jatindas Road, Calcutta 29.

Misra & Co.—12, Grant Lane, Calcutta 12.  
Mohan Press.—2, Dr. Kartick Bose Lane, Calcutta 9.

Molin Press Pvt. Ltd.—3, Sooterkin Street, Calcutta 13.  
Monotype Corp. Ltd.—8, Mission Row Extension, Calcutta 1.

N. B. Dutta & Co.—15, Clive Row, Calcutta 1.  
N. K. Gossain & Co. Private Ltd.—7/1, Grant Lane, Calcutta 12.

Nabajiban Press.—66, Grey Street, Calcutta 6.  
Nabakumar Press.—47, Kailas Bose Street, Calcutta 6.

Nabamudran Pvt. Ltd.—170A, Upper Circular Road, Calcutta 4.  
Nabasakti Press.—123, Lower Circular Road, Calcutta 14.

Nalanda Press.—159 & 160, Cornwallis Street, Calcutta 6.  
National Art Press.—157/A, Dharamtola Street, Calcutta 13.

National Art Studio.—1, Chandney Chawh Street, Calcutta 13.  
National Halfstone Co.—68, Sitaram Ghose Street, Calcutta 9.

National Press.—14/2, Old China Bazar Street, Calcutta 1.  
National Press.—31, Keshab Sen Street, Calcutta 9.

National Press.—76, Bowbazar Street, Calcutta 12.  
National Printing Works.—58/1H, Raja Dinendra Street, Calcutta 9.

National Printing Works.—1, Gangadhar Babu Lane, Calcutta 12.  
National Printing Works.—33D, Madan Mitra Lane, Calcutta 6.

Navana Printing Works Pvt. Ltd.—47, Ganesh Chunder Avenue, Calcutta 13.

Navroz Printing Works.—29-30, Ezra Street, Calcutta 1.  
New Empire Printing Works.—23, Strand Road, Calcutta 1.

New India Printing & Publishing Ltd.—41A, Baldeopara Road, Calcutta 6.

New Sree Durga Press.—2/1, Cornwallis Street, Calcutta 6.  
Novelty Stationery.—5A, Bysack Street, Calcutta 7.



P. C. Banerji & Bros. Pvt. Ltd.—22, Sukeas Lane, Calcutta 1.  
 P. G. Press.—44, Santiram Rasta, Bally, Howrah.  
 P. M. Bagchi & Co.—19, Gulu Ostagar Lane, Calcutta 5.  
 Photographic Stores & Agency Co. Pvt. Ltd.—154, Dharamtola Street, Calcutta 13.  
 Pioneer Stereotype Co.—64A, Dharamtola Street, Calcutta 13.  
 Poddar Printers.—4A, Ramanath Majumdar Street, Calcutta 9.  
 Pooran Press.—21, Balram Ghose Street, Calcutta 4.  
 Popular Press.—92/A, Bowbazar Street, Calcutta 12.  
 Prabartak Printing & Halftone Ltd.—52/3, Bowbazar Street, Calcutta 12.  
 Printers Congress Pvt. Ltd.—3, British Indian Street, Calcutta 1.  
 Printers Corner Pvt. Ltd.—1, Gangadhar Babu Lane, Calcutta 12.  
 Print & Paper (Sales) Pvt. Ltd.—4/7A, Waterloo Street, Calcutta 1.  
 Queen Printing Works.—63E, Radhabazar Street, Calcutta 1.  
 Radiant Process.—6, A.S.N. Banerjee Road, Calcutta 13.  
 Raghunath Printing Works.—24A, Bagmari Road, Calcutta 11.  
 Reliance Printing Works.—219/A, Old China Bazar Street, Calcutta 1.  
 Reliable Printers.—170, Mahatma Gandhi Road, Calcutta 7.  
 Relief Roller Casting Co.—4, Girish Chandra Bose Road, Calcutta 14.  
 Reproduction Syndicate.—7/1, Cornwallis Street, Calcutta 6.  
 Rising Art Cottage.—103, Upper Circular Road, Calcutta 9.  
 Robin Press.—36, Strand Road, Calcutta 1.  
 Rupamudra Pvt. Ltd.—4, New Bowbazar Lane, Calcutta 12.  
 S. Antool & Co. Pvt. Ltd.—91, Acharya Prafulla Chandra Road, Calcutta 9.  
 S. M. Banerji & Sons.—106A, Narkeldanga North Road, Calcutta 11.  
 Sadhana Press Pvt. Ltd.—76, Bowbazar Street, Calcutta 12.  
 Sambhunath Dutta & Co.—14/2, Old China Bazar Street, Calcutta 1.  
 Saniranjana Press.—67, Indra Biswas Road, Calcutta 37.  
 Santi Press.—145, Cotton Street, Calcutta 7.  
 Saraswati Press Ltd.—32, Upper Circular Road, Calcutta 9.  
 Satabdi Press.—80, Lower Circular Road, Calcutta 14.  
 Satyacharan Banerji & Co. Pvt. Ltd.—34A, Weston Street, Calcutta 13.  
 Sen Press Pvt. Ltd.—6, Shibnarain Das Lane, Calcutta 6.  
 Sharma Block Works.—36, Baranashi Ghose Street, Calcutta 6.  
 Sliaparam Ltd.—4, Fordyce Lane, Calcutta 14.  
 Shree Biswanath Press.—46, Joy Mitra Street, Calcutta 5.  
**SREE SARASWATY PRESS LTD.**—32, Acharya Prafulla Chandra Road, Calcutta 9. Factory : 11, B. T. Road, Belgharia ; Grams : "QUALIPRINT" ; Phone : 35-4171 ; Letterpress, Offset Printers, Process Block Makers, Silk Screen Printers, Type Founders and Book Binders.  
 Sri Sakti Press.—5, Chowringhee Terrace, Calcutta.  
 Standard Photo Engraving Co.—1, Ramanath Majumdar Street, Calcutta 9.  
 Standard Press.—37A, Mott Lane, Calcutta 13.  
 Standard Printing Press.—6, Jaoynuddi Mistri Lane, Calcutta 27.  
 Star Printing Works.—30, Shibnarain Das Lane, Calcutta 6.  
 Style-o-Print.—4, Rammohan Roy Road, Calcutta 9.  
 Susama Press.—3, Ramkanta Sen Lane, Calcutta 4.  
 Susama Printing Works.—34A, Weston Street, Calcutta 13.  
 Swapna Press Ltd.—8/1, Lalbazar Street, Calcutta 1.  
 Tapashi Press.—30, Cornwallis Street, Calcutta 6.  
 Tarachand & Sons.—56, Chowringhee, Calcutta 16.  
 Technical Journals of India Pvt. Ltd.—24, Brabourne Road, Calcutta 1.  
 Timir Printing Works.—1, Chandney Approach, Calcutta 13.  
 Tower Halftone Co.—14C, Kapalitola Lane, Calcutta 12.  
 United Commercial Co.—30, Chandi Bari Street, Calcutta 6.  
 United Printing Works.—7, Old Mayor's Court, Calcutta 5.  
 United Trading Agency.—56, Radhabazar Street, Calcutta 1.  
 Usha Printing Works.—6/8, Ramanath Majumdar Street, Calcutta 9.  
 Venus & Co.—14/2, Old China Bazar Street, R. No. 23 & 81, Calcutta 1.  
 Venus Printing Works.—52/7, Bowbazar Street, Calcutta 12.

## PULLEYS

**REX CORPORATION (INDIA).**—For 'WORM' and 'SPUR' Geared Chain Pulley Blocks 1/2 to 10 tons Capacities and any Spare Parts of Chain Pulley Blocks for all models and Capacities ; 71-A, Netaji Subhas Road, Calcutta-1 ; Phone : 229807.

## PUMPS & PUMPING SETS

American Elec. & Pump Distributors.—4, Mission Row, Calcutta 1.  
 Asea United Traders & Industries P. Ltd.—P-40, Mission Row Extn., Calcutta 13.  
 A. T. Alihussain & Co.—29, Strand Road, Calcutta 1.  
 Bengal Iron Works Pvt. Ltd.—16-2, Chatterjee Para Lane, Howrah.  
 B. N. Pachal & Sons Pvt. Ltd.—208, Belilios Road, Howrah.  
 Bombay Engineering Works.—238, Belilios Road, Howrah.  
 B. G. H. & Co.—18, Raja Woodmunt Street, Calcutta 1.

**BRITISH ELECTRICAL & PUMPS PRIVATE LTD.**—1/1B, Mission Row, Calcutta-1 ; Self-Priming, Centripetal, Centrifugal, Agricultural, Sewage and Engine Driven Pumping Sets and Electric Motors ; Phone : 22-7826, 27 & 28.  
 British Standard Pumps & Co.—59L, Prodapaditya Road, Calcutta 26.  
 Commercial & Engineering Corporation.—138, Canning Street, Calcutta 1.  
 Continental Plant Machinery Co. Pvt. Ltd.—2, Justice Chandra, Madhab Road, Calcutta 20.  
 Darling Pump Mfg. Co.—58, Clive Street, Calcutta 7.  
**EAST ASIATIC CO. (INDIA) PRIVATE LTD.**—9-29, Mission Row Extension, Calcutta-13 ; Phone : 232114, 237221 & 239769, Grams : "EASTASIA" ; P. O. Box 364 ; Manufacturers, Importers, Exporters & Engineers.  
 East India Engg. & Agency Co.—63-1, Benaras Road, N. Bantra, Howrah.  
 Ebrahimji Hassanbhoy & Sons.—30, Strand Road, Calcutta 1.  
 Electrical Construction & Equipment Co. Ltd.—9, Kaliprasanna Singhee Road, Calcutta 2.  
 F. Husain & Brothers.—28, Strand Road, Calcutta 1.  
 Gopinath Ray & Co. Pvt. Ltd.—Panchanantola Road, Howrah.  
 Great Eastern Foundry Works.—138, Canning Street, Calcutta 1.  
 Hind Enterprises.—4, Mission Row, Calcutta 1.  
 Hindusthan Electric & Engg. Co.—64, Beadon Street, Calcutta 6.  
 Hindusthan Pump & Machinery Corporation.—3, N. C. Chowdhury Road, Kasba, Calcutta 42.  
 IMC Vogel Industries.—10/1, Princep Street, Calcutta 1.  
 Johnston Pumps India Ltd.—2, Fairlie Place, Calcutta.  
 Kundlia Industrial Corporation.—23, Canning Street, Calcutta 1.  
 Luxmi Engineering Co. Pvt. Ltd.—135, Canning Street, Calcutta.  
 Lynx Machinery Co.—104, Ultadanga Main Road, Calcutta 4.  
 Marshall, Sons & Co. India Ltd.—33/1, Netaji Subhas Road, Calcutta.  
 Maya Engineering Works P. Ltd.—200A, S. P. Mukherji Road, Calcutta 26.  
 Natwarlall P. Ltd.—24, Netaji Subhas Road, Calcutta 1.  
 P. N. Dey & Co.—34, Kalachand Nandy Lane, Howrah.  
 Power & Machinery India Ltd.—3, Mangoe Lane, Calcutta 1.  
 Progressive Engineering Works.—42, Russa Road East, Calcutta 33.  
 R. B. Rodda & Co. Ltd.—Jogendranath Mookherjee Road, Howrah.  
 Reliance Engineering Works.—233, Belilios Road, Howrah.  
 Republic Traders Corporation.—P-12, Mission Row Extension, Calcutta 1.  
 S. C. Dass & Co. Pvt. Ltd.—178, Belilios Road, Howrah.  
 Senapati Brothers Pvt. Ltd.—132, Belilios Road, Howrah.  
 S. K. Bhattacharji & Co.—138, Canning Street, Calcutta.  
 Ultra Engineering Co.—172-8, Madhusudan Pal Chowdhury Lane, Howrah.  
 United Provinces Commercial Corp.—6, Ganesh Chandra Avenue, Calcutta 13.  
 Varat Pump & Machinery Pvt. Ltd.—20, Netaji Subhas Road, Calcutta.  
 Victory Construction Co. Ltd.—Grosvenor House, 21, Old Court House Street, Calcutta 1.  
**WATER SUPPLY SPECIALISTS PRIVATE LTD.**—P.O. Box No. 424, Gujarat Mansion, Mission Row Extension, Calcutta 1 ; Head Office : 8, Hamam Street, Bombay 1 ; Phone : 252325 ; Grams : "PUMPMEN" ; Branches : Madras & New Delhi and Secunderabad ; Sole Agents for Myers Pumps, Manufacturers of "WASP" Pumping Sets etc.  
 Western India Industries P. Ltd.—10, Clive Row, Calcutta.  
 William Jacks & Co. Ltd.—16, Netaji Subhas Road, Calcutta 1.

## RADIO MANUFACTURERS & DEALERS

All India Trading Co.—1, Central Avenue, Calcutta.  
 Allied Radio Industries.—153A, Vivekananda Road, Calcutta.  
 Alpha Radios & Novelties Ltd.—8, Madan Street, Calcutta 13.  
 Associated Electronics.—10, Prinsep Street, Calcutta 13.  
 Betar Bhaban.—34, Ganesh Chandra Avenue, Calcutta.  
 Bhatia Radio Corporation.—4/1, Madan St., Calcutta 13.  
 Britannia Talking Machine Co. (Cal.)—184, Dharamtola Street, Calcutta.  
 Calcutta Radio Service.—34, Ganesh Chandra Avenue, Calcutta 13.  
 Calcutta Radio Stores.—4/1, Shambhu Nath Pandit St., Calcutta 20.  
 C. C. Saha Ltd.—45, Moti Sil Street, Calcutta 13.  
 Central Radio Service Pvt. Ltd.—25/A, Chittaranjan Avenue, Calcutta 13.  
 Cystophone Sound Corp. Ltd.—115-A, Amherst Street, Calcutta.  
 Debsons Pvt. Ltd.—2, Madan Street, Calcutta.  
 D. N. Nundy.—1, Dharamtola Street, Calcutta.  
 Dey & Sons, K.C.—161/1, Harrison Road, P.O.B. No. 6799, Calcutta 7.  
 Eastern Electric & Trading Co.—Hall & Anderson Bldg., 81, Chowringhee Road, Calcutta.  
 Eastern Trading Co.—2, Royal Exchange Place, Calcutta.  
 Electrical Distributors.—3, Mangoe Lane, Calcutta 1.  
 Electro Radio Emporium.—76/1, Cornwallis Street, Calcutta.  
**ELECTRO RADIOS PRIVATE LTD.**—10, Jawaharlal Nehru Road, Calcutta 13, and New Capital, Bhubaneswar (Orissa).  
 Wireless & Sound Engineers, Importers & Wholesalers.



Electronic Radio & Sound Agencies.—18, Chandni Chowk, Calcutta 13.  
 Elvoc Pvt. Ltd.—3, Panditiya Road, Calcutta.  
 Flashlight (1) Ltd.—135, Princep Street, Calcutta.  
 General Radio & Appliance Pvt. Ltd.—3, Madan Street, Calcutta 13.  
 General Radio Co.—6, Madan Street, Calcutta.  
 Ghosh & Co.—49, Chowringhee Centre, Calcutta 13.  
 Gramophone & Radio Dealers.—188, Dharamtolla Street, Calcutta 6.  
 Gramo Radio Emporium.—80B, Vivekananda Road, Calcutta 6.  
 Gramo Radio Stores.—54-A, Bhupendra Bose Avenue, Calcutta 4.  
 Harry's Music House.—18/2, Chowringhee Road, Calcutta.  
 Hindco Electric Co.—54, Ezra Street, Calcutta.  
 Hind Radio Pvt. Ltd.—51, Chittaranjan Avenue, Calcutta 12.  
 Hindustan General Electric Corp'n. Ltd.—Thapar House, 25, Brabourne Road, Calcutta.  
 Hindustan Musical Products Ltd.—6/1, Akrur Dutt Lane, P.O. Bow Bazar, Calcutta 12.  
 India Radio Mfg. Co.—18, Chandni Chowk Street, Calcutta 13.  
 International Radio Emporium Pvt. Ltd.—3/2, Madan Street, Calcutta 13.  
 Istaro.—20, Lindsay Street, Calcutta 16.  
 Lalwani Radio Corp'n.—6/3, Madan Street, Calcutta 13.  
 Megaphone Co.—77-1, Mahatma Gandhi Road, Calcutta 7.  
 Mehta & Co.—2, Lindsay Street, Calcutta 16.  
 Mehta & Sons, R. V.—14, Bentick Street, Calcutta.  
 Modern Radio Service.—48, Free School Street, Calcutta 16.  
 Modi Radio Co.—129/7, Harrison Road, Calcutta 7.  
 Nan & Co.—9A, Dalhousie Square East, Calcutta.  
 Nerode Baran Sen & Bros.—11, Bentick Street, Calcutta.  
 Oriental Radio Corp'n.—P-34, Mission Row Extension, Calcutta 18.  
 Parul Betar.—134/B, Cornwallis Street, Calcutta.  
 Phillips India Ltd.—7, Justice Chandra Madhab Road, Calcutta.  
 R. Shantilal & Co., Private Ltd.—31-C, Brabourne Road, Calcutta 1.  
 Radio & Accessories (India) Ltd.—3, Madan Street, Calcutta 13.  
 Radio Club.—89, Southern Avenue, Calcutta 29.  
 Radio Distributing Co.—1, Central Avenue, Calcutta 13.  
 Radio Electrics Corp'n. Pvt. Ltd.—2, Madan Street, Calcutta.  
 Radio Engineers & Co.—10, Lower Circular Road, Calcutta 17.  
 Radio & Photostores.—65, Ganesh Ch. Avenue, Calcutta.  
 Radio Manufacturers of India.—P-28, Ganesh Chandra Avenue, Calcutta.  
 Radio Museum.—164/3, Russa Road, Calcutta 25.  
 Radio Research Institute of Service Engineering.—73/3, Ekoalla Road, Calcutta 10.  
 Radio Spares.—8, Madan Street, Calcutta 13.  
 Radio Supply Stores Pvt. Ltd.—3, Dalhousie Square, Calcutta.  
 Radio Technics.—64/A, Jatindra Mohan Avenue, Calcutta 5.  
 Radiohms Agencies.—6, Madan Street, Calcutta 13.  
 Radios (India) Ltd.—11, Lindsay Street, Calcutta 16.  
 Recol's (India) Ltd.—2, Church Lane, Calcutta.  
 Rogers & Co., G.—12, Dalhousie Square, Calcutta.  
 Sen & Bros., N.B.—11, Esplanade East, Calcutta.  
 Senola Musical Products Co.—11, Esplanade East, Calcutta 1.  
 Sen's Radio Service.—133A, Rashbehari Avenue, Calcutta.  
 Shree Kamla Stores, (Pvt.) Ltd.—46, Upper Chitpore Road, Calcutta 7.  
 Singh Radio & Sound Engineering.—9, Chowringhee Road, Calcutta 13.  
 Singh Supply Stores.—41/1, Shambhu Nath Pandit Street, Calcutta 20.  
 Sonorous.—208, Rash Behari Avenue, Calcutta.  
 Southern Engineering Co., Ltd.—22, Strand Road, Calcutta.  
 Standard Radio & Winding House Pvt. Ltd.—1, Chandni Chowk Street, Calcutta 13.  
 Standard Radio Service.—8, Madan Street, Calcutta 13.  
 Swastika Radio Electric Stores.—12, Lower Chitpur Road, Calcutta.  
 Tarafdar & Sons.—36/2, Russa Road, Calcutta 26.  
 Thudurson Electronics.—10, Suren Sarkar Road, Calcutta 10.  
 United Agency Co.—141, Syamaprasad Mukherjee Road, Calcutta.  
 Utility Radio Co.—82/3, B, Cornwallis Street, Calcutta.

### RADIOS & ACCESSORIES

C. C. SAHA LTD.—Showroom, 170, Dharamtolla Street, H.O. 45, Moti Sil Street, Calcutta-13; Distributors for Eastern India for G.E.C. Radios, Supreme P. A. Equipment, Eveready Batteries; Phone: 234906 (3 Lines), Grams: "GOLDEY".  
 INDIA RADIO MANUFACTURING CO.—Manufacturers of 'Bani' Radio Sets and Parts; Transformers for Radio, Cinema, Medical and Industrial Equipments upto 10 KVA; 18, Chandni Chowk Street, Calcutta-13; Phone: 235925.

### RAZORS & RAZOR BLADES

Balubhai & Brothers.—87, Canning Street, Calcutta 1.  
 Harbans Lal Malhotra & Sons Private Ltd.—18, Netaji Subhas Road, Calcutta-1.  
 NATIONAL RAZORS & BLADES (PRIVATE) LTD.—35, Stephen House, 4, Dalhousie Square, Calcutta. Manufacturers of 'Bonzo', 'Ek Number', 'Metro', 'Prabhat' Blades and Metro Brand Safety Razors; Phones: Office: 23-5412, Factory: 573452. Grams: "INDMERSUP".  
 Panama Pvt. Ltd.—18, Netaji Subhas Road, Calcutta 1.

### RECTIFIERS

ELVOC PRIVATE LTD.—Manufacturers of 'ELVOC' Brand Selenium Metal and Silicon Rectifiers for AC to DC Conversion and Battery Charging Purposes to Customers' Specifications; 36, Pandita Road, Calcutta-29; Phone: 463820, 464416 & 460194.

### REDUCTION GEARS

BOSE INDUSTRIES PRIVATE LTD.—32, Shib Chandra Chatterjee Street, Belur (Howrah); Manufacturers of 'HIPOWER' Worm Reduction Gear Units upto 75 H.P. Capacity and 'BOSIND' Spun Reduction Gear Units upto 500 H.O. Capacity; Phone: 664871 (3 Lines).

### REFRIGERATING MACHINERY & COMPONENTS

NATIONAL REFRIGERATORS & ELECTRICAL WORKS.—Manufacturers, Designers of Air-Conditioners, Deep-Freeze, Bottle Cooler, Water Cooler and Cold Storage Machine; Head Office: 2,2, Harrington Street, Calcutta-16; Phone: 444132, Factory: 162-126, Prince Anwarsha Road, Calcutta-33; Phone: 462609; Show Room: 2 2A, Harrington Street, Calcutta-16; Phone: 445166.

### REFRIGERATORS (DOMESTIC)

AMERICAN REFRIGERATOR CO. LTD.—Manufacturers of 'ARCO-BUSH' Coils, 'ARCO' Air-Conditioners & Water Coolers, Cold Storage, Refrigeration Equipment, Industrial Blowers; Sole Distributors: 'TRANE & FRIGIDAIRE'; Phone: 237841 (4 Lines).

### ROAD BUILDING MACHINERY

SUR IRON & STEEL CO. PRIVATE LTD.—Manufacturers of 'Sisco' Stone Crusher and granulator; 15, Convent Road, Calcutta-14; Phone: 241307.

UNITED PROVINCES COMMERCIAL CORPORATION PRIVATE LTD.—Distributors in India for Agrind Moore Road Rollers and TAR Bitumen Distributors; 6, Ganesh Chandra Avenue, Calcutta; Phone: 2333291 (5 Lines), Telex-505 UPCC CA.

### ROPE MANUFACTURERS & DEALERS

Anadi Nath Manna.—62, Netaji Subhas Road, 2nd Floor, Calcutta.  
 Bally Rope Works.—59, Netaji Subhas Road, Calcutta.  
 Banerjee, G. D. & Co. Pvt. Ltd.—Bakulia House, Kidderpore, Calcutta.  
 Bengal Rope Works.—16-B, Ratan Neogy Lane, Calcutta 4.  
 Bengal Rope Works Pvt. Ltd.—18, Raja Monindra Road, Calcutta 37.  
 Calcutta Rope Mfg. Co., Ltd.—22, Raja Woodmunt St., Calcutta.  
 Ganges Rope Co. Ltd.—2, Fairlie Place, Calcutta.  
 G. D. Banerjee & Co. Pvt. Ltd.—Bakulia House, Kidderpore, Calcutta 23.  
 Gungadbur Banerjee & Co. Pvt. Ltd.—51-52, Benaras Road, Near Salkia, Howrah.  
 Harton, W. H. & Co. Ltd.—8, Dalhousie Square East, Calcutta.  
 Indian Twine Ball Factory.—12, Tamer Lane, Calcutta 9.  
 Manton & Martin.—70, Netaji Subhas Road, Calcutta.  
 Mullick S. C. & Co.—23-1, Strand Road, Calcutta.  
 Oriental Tape Mfg. Co.—301, Grand Trunk Road, Sibpore, Howrah.  
 Oriental Trading Agency.—301, G. T. Road, Sibpore, Howrah.  
 R. & R. Bros.—7, Swallow Lane, Calcutta 1.  
 Reliance Trading Co.—8B, Amratola Lane, Calcutta.  
 Shallmar Rope Works Ltd.—14, Netaji Subhas Road, Calcutta.  
 Sircar & Co. P. C.—67-1, Badridas Temple Street, Calcutta 4.  
 Victoria Steam Rope Works.—88, College Road, Howrah.

### ROSIN & TURPENTINE

BHAGWAN FINANCE CORPORATION PRIVATE LTD.—Manufacturers of Rosin, Ester Gum, Turpentine and Pine Oil; H.O.: 10, Clive Row, Calcutta-1; Phone: 229501 (2 Lines); Factory: Industrial Area, Rajpura, Punjab; Branch: Dharampore (Simla Hills).

### RUBBER GOODS MANUFACTURERS & DEALERS

A. H. Trading Co.—20/1/A, Eden Hospital Road, Calcutta 13.  
 ALBERT SMITH & CO.—P. B. No. 2786, Calcutta-1; Rubber (Neoprene and Synthetic), Ebonite and Bakelite Moulded goods, Industrial Leather goods, Felt Products, Paint Brushes, Hand Trolleys and Trolley Wheels, 'V' Belts and Industrial Beltings; Phone: 22-8806 & 22-2915 (Sales) & 22-6901.  
 American Rubber Mfg. Co.—9, Clive Row, Calcutta 1.  
 Asian Industries.—27, Tollygunge Circular Road, Calcutta 33.  
 Asiatic Rubber Industries.—45, N. Subhas Road, Calcutta.  
 Asiatic Rubber Works Ltd.—54-10, Chingrihatta Road, Calcutta.  
 Assam Bengal Rubber Works Ltd.—11, New Tangra Road, Calcutta 15.



Associated Engineering Stores.—20, Netaji Subhas Road, Calcutta 1.  
Associated Rubber & Plastic Works.—61, Bentinck Street, Calcutta.  
Banerjee & Co., A.N.—71-A, Netaji Subhas Road, Calcutta.

Bengal Waterproof Works (1940) Ltd.—32, Theatre Road, Calcutta 16.

Bharat Rubber Industries Pvt. Ltd.—17, Paymental Garden Lane, Calcutta.

Calcutta Rubber Mfg. Co.—92, Narkeldanga Main Road, Calcutta 1.

Central Rubber Works (Pvt.) Ltd.—20-B, Tangra Rd., Calcutta 15.

Cosmos India Rubber Works P. Ltd.—7, Waterloo Street, Calcutta 1.

Dunlop Rubber Co. (India) Ltd.—Dunlop House, 57-B, Free School St., P.B. No. 391, Calcutta 16.

East India Rubber Works Pvt. Ltd.—161, Chittaranjan Avenue, Calcutta.

Firestone Tyre & Rubber Co. of India Pvt. Ltd.—76, Lower Circular Road, Calcutta 14.

George Spencer Moulton & Co. (India) Pvt. Ltd.—239, Lower Circular Rd., Calcutta 20.

General Industrial Stores Supplying Co. P. Ltd.—10, Clive Row, Calcutta.

**GLOBE TRADE AGENCY.—Manufacturers' Agents and Stockists of Suction and Delivery Hoses (Water, Petrol, Air, Welding etc.), Canvas Hose, Sheets and Belting, Gloves and Shoes and General order Suppliers; 66, Canning Street, Calcutta-1; Phone: 346008.**

Goodyear Tyre & Rubber Co. of India Pvt. Ltd.—209, Lower Circular Rd., Calcutta.

Hind Rubber Works.—17, Bibi Bagan Lane, Calcutta 15.

**HINDUSTHAN RUBBER WORKS LTD.—Manufacturers and Exporters of 'PALICAN' Rain Coats, Gumboots, Hospital Sheetings, Hotwater Bottles, Ice Bags, Air Beds, Air Pillows, Swimming Rings, Rubber Floor Tiles and Moulded Mechanical Goods; 14, Ballygunge Station Road, Calcutta-19; Phone: 46-4340 and 46-3259, Grams: "RUBPROOF".**

India Rubber Goods Mfg. Co.—30-H-2, Canal East Road, Calcutta 11.

India Tyre and Rubber Co. P. Ltd.—1, Waterloo St., Calcutta.

Indian Rubber Goods Mfg. Co.—30-H-2, Canal East Road, Calcutta 11.

Indian Rubber Mfrs. Ltd.—4, Lyons Range, Calcutta.

Industrial Leather & Rubber Works.—24, Strand Road, Calcutta.

International Rubber Mfg. Co.—51, Radhanath Chowdhry Road, Tangra, Calcutta 15.

Radar Rubber Mfg. Co. Pvt. Ltd.—46-B, Theatre Road, Calcutta 16.

**KOHINOOR RUBBER WORKS.—35/1A, Canal East Road, Calcutta 11. Manufacturers and Exporters of Canvas & Rubber Shoes, Football Bladders, Hospital Rubber Sheetings.**

Krishna Rubber Industries.—3, Barratto's Lane, Calcutta 1.

Modern Rubber Mfrs. Pvt. Ltd.—12/1/B, Lindsay Street, Calcutta 16.

Mundra & Co.—8, Canning Street, Calcutta.

National Rubber Mfrs. Ltd.—Leslie House, 19, Chowringhee, Calcutta 13.

National Rubber Works.—171-A, Mahatma Gandhi Road, Calcutta 7.

National Tyre & Rubber Co. India Ltd.—Rowland Road, Calcutta 20.

Nundial Inderchand Ltd.—1, Canning St., Calcutta 1.

New India Rubber Works Pvt. Ltd.—34-A, Chingrighatta Road, Calcutta 15.

Olympia Rubber Works.—10, Paymental Garden Lane, Calcutta-15.

Oriental Rubber Works.—171-A, Mahatma Gandhi Road, Calcutta 7.

Popular Rubber Industries.—152/2B, Beliaghata Main Road, Calcutta.

R.B.S. Rubber Mills Pvt. Ltd.—3, Bentinck St., Calcutta.

Rubber Equipment & Engineering Co. P. Ltd.—4-C, Garstin Place, Calcutta 1.

Rubber Moulding Co.—39, Strand Road, Calcutta.

Rubber Products & Moulding Co.—9-A, Bechanlal Road, Calcutta 46.

Rubber Products Ltd.—20, Netaji Subhas Road, Calcutta 1.

**S. G. R. INDUSTRIES PRIVATE LTD.—10, The Mall, Dum Dum, Calcutta 28; Manufacturers of Mechanical Rubber Goods, Trolley Wheels, Rubber Seals, Diaphragm, Conveyor Belting, etc.**

United Tyres.—59-D, Chowringhee Road, Calcutta 20.

Wren & Co., D.—25, Swallow Lane, Calcutta 1.

## SANITARY ENGINEERS & SANITARY APPLIANCES MANUFACTURERS AND DEALERS

Advance Engineering Corporation.—12B, Clive Row, Calcutta.

Annapurna Metal Work.—3, Ashu Biswas Road, Calcutta 25.

Asoka Trading Corporation.—46, Dharamtolla St., Calcutta 13.

Atlas Industries Co.—13C, Raja Rajkissen St., Calcutta 6.

Bengal Machine Works.—112, Narasingha Dutt Road, Howrah.

Calcutta Constructors P. Ltd.—34, Strand Road, Calcutta 1.

D. C. De & Sons.—150, Narasingha Dutt Road, Howrah.

Emporia of Commercial Stores.—22, N. Subhas Road, Calcutta.

H. G. Fewkes & Co. Pvt. Ltd.—44B, Wellesley St., Calcutta 15.

J. M. Sain & Brothers.—110, College St., Calcutta 12.

National Planning & Construction Ltd.—16, Ganesh Ch. Avenue, Calcutta 13.

P. A. Govardhan Das.—5, Clive Ghat Street, Calcutta 1.

Pushupati Pan & Sons.—23, G. Russa Road, Kalighat, Calcutta 26.

Robson & Co. P. Ltd.—P-14, Mission Row Extension, Calcutta 1.

Sanitary & Plumbing Stores Ltd.—146, Shyama Prosad Mookerjee Road, Calcutta 26.

S. C. Bose.—309, Bowbazar Street, Calcutta 12. Phone: 22-5970.

S.D.M. Syndicate.—219, Bowbazar St., Calcutta 12.

**THAKURDASS SUREKA.—40, College Street, Calcutta 12.**

## SCIENTIFIC & SURGICAL APPARATUS & INSTRUMENTS MANUFACTURERS & DEALERS

Adair Dutt & Co. (India) Pvt. Ltd.—5, Dalhousie Sq. East, Calcutta.

Advani Pvt. Ltd.—3/D, Garstin Place, Calcutta 1.

Alcock W.J. & Co. Pvt. Ltd.—7, Hastings St., Calcutta.

Allen & Hanburys Ltd.—D-3, Gillander House, Netaji Subhas Road, Calcutta 1.

Allied Glass Industries.—28A, Fakir Chakrabarty Lane, Calcutta 6.

Anglo-Swiss Watch Co.—6 & 7, Dalhousie Sq. East, Calcutta.

Artico.—5, Dalhousie Sqr. (East), Calcutta.

Associated Elec. Industries (India) Pvt. Ltd.—6, Mission Row, Calcutta.

**ASSOCIATED INSTRUMENT MFRS. (INDIA) PRIVATE LTD.—B. 5, Gillander House, Calcutta; Phone: 223304. Grams: "AIMIL".**

Associated Scientific Corporation.—232-B, Upper Circular Road, Calcutta 4.

Atlas Scientific Corp.—12, Naya Ratna Lane, Calcutta 4.

Bajaj Electricals Ltd.—10, Ganesh Ch. Avenue, Calcutta.

Banka & Sons.—8, India Exchange Place, Calcutta 1.

Basmall & Co. (India) Pvt. Ltd.—296/98, Jessore Road, Calcutta 28.

Bell's Asbestos & Engg. (I) Pvt. Ltd.—24, Chittaranjan Avenue, Calcutta.

Bengal Chemical & Pharmaceutical Works.—6, Ganesh Chandra Avenue, Calcutta.

Bengal Scientific & Technical Works P. Ltd.—20-3, Ashwini Dutt Road, Calcutta 29.

Bien Artium Central Sciences P. Ltd.—6, Mangoe Lane, Calcutta 1.

Biological Supply Concern Pvt. Ltd.—14, Hare Street, Calcutta 1.

B. K. Shaw Industries P. Ltd.—P-3, B. K. Paul Avenue, Calcutta.

Bombay Surgico Medical Agency Ltd.—113, Chittaranjan Avenue, Calcutta 12.

Bysakh & Co.—55, W.C. Banerjee St., Calcutta.

Calcutta Scientific Mart.—21, Tamer Lane, Calcutta 19.

Chemical & Surgical Works Ltd.—186, Bowbazar St., Calcutta 12.

Chuckervertty Chatterji & Co. Ltd.—15, College Square, Calcutta 12.

Cossipore Glass Blowing Works.—60, Satchasipara Road, Cossipore, Calcutta 2.

Das, K. K. & Co.—14-2, Old China Bazar St., Calcutta.

Darbara Singh & Sons.—14, Bowbazar St., Calcutta.

Dawn Bros.—P-43, B. K. Pal Avenue, Calcutta 5.

Deformity Appliances and Hospital Stores.—3, College Square, Calcutta.

Eastern Scientific Co.—3-A, Beliaghata Main Road, Calcutta 10.

Economic Scientific Works.—97-A, Sree Ram Dhang Road, Salkia.

G.E.C. of India Ltd.—Magnet House, Chittaranjan Avenue, Calcutta.

Geologists' Syndicate Pvt. Ltd.—137, Canning St., Calcutta.

Gharpure & Co.—P/36, Royal Exchange Place Extension, Calcutta.

Gramophone Co. Ltd.—33, Jessore Road, Dum Dum.

H. Mukherji & Banerjee Surgical Pvt. Ltd.—39-1, College Street, Calcutta 12.

Hospital Supply Co.—111, Chittaranjan Avenue, Calcutta 12.

**INDIAN CHEMICALS & SCIENTIFIC INSTRUMENT WORKS — Manufacturers of all sorts of Physics, Chemistry, Biology, Psychology and Geography Instruments, Gas Plants, Laboratory Furniture etc., 208, Bepin Behari Ganguli Street, Calcutta-12; Phone: 348597, 348755 and 353939.**

Indian Glass Works Ltd.—262, Acharya Praf. Chandra Road, Calcutta 6.

Indian Oxygen Ltd.—48-1, Diamond Harbour Road, Calcutta 27.

Indian Scientific Accessories P. Ltd.—8, Abhoy Sarkar Lane, Calcutta.

Industrial Instrument Co.—30, Strand Road, Calcutta.

Instruments and Equipments.—35, Chittaranjan Avenue, Calcutta 12.

Instrument Research Laboratory.—309, Bowbazar St., Calcutta 12.

Instrument Works.—37B, Bosepara Lane, Calcutta 3.

James Murray & Co. Pvt. Ltd.—5, Old Court House Street, Calcutta 1.

Jayer & Co.—12, Netaji Subhas Road, Calcutta 1.

Jenny Christensen (Service Apartments) P. Ltd.—7, Pretoria St., Calcutta 16.

Johnson, S. U. & Co.—1-2, Jadu Mitra Lane, Calcutta 4.

Kay Orr & Brothers.—P-36, India Exchange Place Extn., Calcutta 1.

Kinlab Pvt. Ltd.—5, Marquis St., Calcutta 16.

Laboratory Requisite Suppliers.—P-33, Pollock Street, Calcutta 1.

Lens and Scientific Instruments Co. P. Ltd.—5, Old Court House St., Calcutta.

Luxmi Scientific Glass Works.—Ultadanga Main Road, Calcutta 4.

Mahindra Engg. Co. Pvt. Ltd.—51, Chowringhee, Calcutta.



Mansfield Oil Gas Co. Ltd.—16, Radhanath Choudhury Rd., Calcutta 15.  
 Medical Appliances Mfg. Co.—20, Netaji Subhas Road, Calcutta 1.  
 Medical Supply Concern Ltd.—197, Cornwallis Street, Calcutta.  
 Megna Industries Pvt. Ltd.—22, Canning Street, Calcutta 1.  
 Mercantile Union P. Ltd.—309, Bepin Behary Ganguly Street, Calcutta 12.  
 Model General Stores Co.—7-D, Indra Roy Road, Calcutta 25.  
 Mukherjee & Banerjee Surgical Ltd.—39-1, College St., Calcutta 12.  
 Nabanil & Co.—3, Chittaranjan Avenue, C-4, Bharat Bhavan, Calcutta 13.  
 N.G.B. Concern Ltd.—9, Nayan Chand Datta St., Calcutta 6.  
 New Indian Scientific Apparatus Co.—20, Radha Kanto Jew St., Calcutta 4.  
 Nundon, T. C. & Sons.—46-B, Kansaripara Rd., Bhowanipore, Calcutta 25.  
 Oster Chemical & Pharmaceutical Works Pvt. Ltd.—78-B, Manicktolla Street, Calcutta 6.  
 Paul's Scientific Industries.—3/1G, Chidam Mudi Lane, Calcutta 6.  
 Pharma Ortho Surgicals.—33, College St., Calcutta 12.  
 Phillips India Pvt. Ltd.—7, Justice Chandra Madhab Road, Calcutta.  
 Precision Instrument Corp. (India) Pvt. Ltd.—46, Dharamtolla Street, Calcutta 13.  
 Premier Surgical Dressing Co.—34, Bright St., Calcutta.  
 Purban Private Ltd.—37, Dharamtala Street, Calcutta-13.  
 Radio Lamp Works Ltd.—10, Ganesh Ch. Avenue, Calcutta 10.  
 Rimco.—15-B, Nalin Sircar St., Calcutta 4.  
 S. K. Biswas & Co.—137, Bipin Behary Ganguly Street, Kolay Buildings, Calcutta 12.  
 Scientific & Surgical Equipment Pvt. Ltd.—112, Chittaranjan Avenue, Calcutta 7.  
 Scientific Apparatus Mfg. Co. Ltd.—4, Rashmoni Bazar Road, Calcutta 10.  
 Scientific Glass Apparatus and Sintered Glasswares.—11, Ultadanga Road, Calcutta 4.  
 Scientific Glass Apparatus Co.—5A, Prasanna Kumar Tagore St., Calcutta 6.  
 Scientific Glass Apparatus Mfg. Co.—11-2, Hari Nath Dey Road, Calcutta 9.  
 Scientific Industries India P. Ltd.—34, Banerji Bagan Lane, Howrah.  
 Scientific Instrument Co. Ltd.—11, Esplanade East, Calcutta.  
 Scientific Instrument Manufacturing Co.—3, Sastitala Road, Narkeldanga, Calcutta 11.  
 Scientific Instruments Manufacturers and Repairers—24/1, Kedar Chatterjee Lane, Calcutta 34.  
 Scientific Miscellany Co.—15, Convent Road, Calcutta 14.  
 Scientific Repairs & Trading Co.—27, Beniapukur Road, Calcutta 14.  
 Scientific Supplies and Services.—P-39, Princep Street, Calcutta 13.  
 Scientific Supplies (Bengal) Co.—Town Office, C-37 & 38, College St., Market, Calcutta 12.  
 Siemens Engg. & Mfg. Co. of (India) Ltd.—24, Chittaranjan Avenue, Calcutta.  
 Sircar S. & Co. Ltd.—Esra Mansions, 10, Govt. Place East, Calcutta 1.  
 Technological Equipment Co. P. Ltd.—Industrial Estate, Calcutta 35.  
 Toshniwal Brothers P. Ltd.—11, British Indian St., Calcutta 1.  
 Uday Scientific Industries P. Ltd.—5, Bhabanath Sen Street, Calcutta 4.

### SCREW MANUFACTURERS & DEALERS

Allied Metal & Steel Industries.—16, Chhotelal Misra Road, P.O. Ghosuri (Howrah).  
 A. M. Mullick & Co.—84-A, Netaji Subhas Road, Calcutta 1.  
 Bengal Screw Mfg. Co.—2, Clive Row, Calcutta.  
 Capstan Wire Products Pvt. Ltd.—34, Netaji Subhas Road, Calcutta 1.  
 Jugal Kishore Karmoker & Bros.—12, Jadu Pandit Road, Beadon Street, Calcutta 6.  
 Modern Engineering Works.—12, Jadu Pandit Road, Beadon Street, Calcutta 6.  
 Standard Screws Industries.—280, G. T. Road, Howrah.  
 Steel & Allied Products.—Mukherji House, 17, Brabourne Road, Calcutta 1.

### SEWING MACHINES

Bose & Co.—149/1, Dharamtalla Street, Calcutta.  
 Don Watson & Co. Pvt. Ltd.—19, British Indian St., Calcutta 1.  
 Electrical Distributors.—3, Mangoe Lane, Calcutta 1.  
 Hind Sewing Machines Ltd.—14, Sircar Lane, Calcutta 7.  
**JAY ENGINEERING WORKS LTD.—183-A, Prince Anwarshah Road, Calcutta 31, P.O. Box No. 2158, Calcutta ; Phone: 463461 (9 Lines) ; Grams : "USHAKO"—Calcutta ; Manufacturers and Exporters of Usha Sewing Machines and Sewing Machine Motors.**  
 Kumar Sewing Machines Co.—94, Lower Chitpore Road, Calcutta.  
 Lotus Industries.—322, Armenian St., Calcutta 1.  
 Singer Sewing Machine Co.—29, Waterloo St., Calcutta.

**SINGER SEWING MACHINE CO.—Industrial Sewing Machines for all purposes, Manual and Power, Factory Organisation and Planning, Expert Mechanical Service, 29, Waterloo Street, Calcutta ; Phone : 232637.**

### SEWING THREAD MANUFACTURERS & DEALERS

India Ball Thread Co. Pvt. Ltd.—85, Burtalla St., Calcutta 7.  
 Mohta Trading Co.—4, Tonsook Lane, Calcutta 7.  
 Oriental Tape Mfg. Co.—301, Grand Trunk Road, Sibpur, Howrah.  
 Standard Sewing Thread Co.—3, Portuguese Church St., Calcutta.  
 Star Thread Agency.—P-3, Chandni Chowk Street, Calcutta.  
 Twin Ball Mfg. Co.—27, Fakir Chand Chakravarty Lane, Calcutta.

### SHAFTINGS

**ALLIED STEEL PRODUCTS.—Manufacturers and Stockists of Bright Bars-Rounds, Hexagons, Squares and Flats and Shaftings ; 11/1, Canal East Road, Calcutta-4 ; Phone : 353670, Grams : "BRIGHTBARS".**

**ASHOK STORES AGENCY.—24, Strand Road, Calcutta-1 ; Dealers in Bright Bars including free cutting to En-1A Specification, Carbon Steel Tool & Alloy Steel etc. ; Phone : 224453.**

### SHELLAC

**GARG & SONS.—Exporters and Dealers in Shellac ; 15, Ganesh Chandra Avenue, Post Box 852, Calcutta-1 ; Phone : 233230, 239005, 239681 & 237985.**

### SHEET METAL MACHINERY

**UNION TOOLS & AGENCIES PRIVATE LTD.—'Brabourne Court', 1, Chandni Chowk Street, Calcutta 13.**

### SHIP REPAIRERS

Calcutta Docking Engineering Co.—12, Government Place East, Calcutta-1 ; Phone : H.O. : 232878.

**EAST BENGAL ENGINEERING WORKS.—Managing Agents: Raja Sreenath Roy & Brothers Private Ltd., Ship Repairers, Ship Builders, Marine, Mechanical and General Engineers ; 2, Rustomjee Parsi Road, Calcutta-2 ; Phone: 562673 and 562674.**

### SILK FILATURES & MILLS

Calcutta Silk Mfg. Co. Ltd.—37, Vivekananda Road, Calcutta 7.  
 Calcutta Woollen & Silk Mills Ltd.—191, Harrison Road, Calcutta 7.  
 India Silk & Textiles Ltd.—3 & 4, Hare Street, Calcutta 1.  
 National Silk Mills.—32, Cross Street, Calcutta 7.  
 Provati Textile Mills.—Panihat, 24 Parganas Dist.  
 Silko Ltd.—80-B, Park Street, Calcutta 17.  
 Swadeshi Industries Ltd.—142-A, Jamunlal Bajaj Street, Calcutta 7.  
 Tollygunj Silk Products.—Tollygunj, Calcutta.

### SMALL TOOLS

Alex Miller (Merchants) P. Ltd.—137, Canning Street, Calcutta 1.  
 A. Mohammed & Co.—26, Netaji Subhas Road, Calcutta 1.  
**A. N. HUSSUNALLY & CO., (Estd. 1917).—28, Strand Road, Calcutta-1 ; Stockists and Distributors for Engineering and Precision Small Tools, Milling Cutters and thread forming Tools ; Phone : 224140, 228568.**  
 Asiatic Mfg. Co.—71-A, Netaji Subhas Road, Calcutta 1.  
 A. S. Abdullahhoy & Co.—81, Netaji Subhas Road, Calcutta 1.  
 Basmail & Co. (I) Ltd.—56-D, Beadon Street, Calcutta 6.  
 Bengal Iron & Steel Works.—8, Canning Street, Calcutta 1.  
 Buher (Asbestos) P. Ltd.—12, Netaji Subhas Road, Calcutta 1.  
 Burn & Co. P. Ltd.—P-10, Mission Row Extn., Calcutta 1.  
 Calcutta Hardware Co.—8-A, Ramkrishna Das Lane, Calcutta 9.  
 D. H. Brothers P. Ltd.—138, Canning Street, Calcutta 1.  
 Dhakuria Engineering Works P. Ltd.—23-24, Strand Road, Calcutta 1.  
 Edward Miller & Co.—20, Strand Road, Calcutta 1.  
 Great Eastern Cutlery Works.—20, Strand Road, Calcutta 1.  
 Harrison Agency.—71-A, Netaji Subhas Road, Calcutta 1.  
 Hassanally & Sons.—50, Netaji Subhas Road, Calcutta 1.  
 Hindustan Machine Tools Corp.—35, Netaji Subhas Road, Calcutta 1.  
 Indestro (India) Agency.—38, Netaji Subhas Road, Calcutta 1.  
 Indian Small Tools Co.—12A, Clive Row, Calcutta.  
 Indian Tools Corporation.—353, Upper Chitpore Road, Calcutta 6.  
 Machine Tools (I) P. Ltd.—Wimet House, Russell St., Calcutta 16.  
 Samuel Osborn (I) P. Ltd.—24, Chittaranjan Avenue, Calcutta.  
 S. K. Dutt.—20, Strand Road, Calcutta 1.  
 Subol Dutt & Sons P. Ltd.—13, Brabourne Road, Calcutta 1.  
 Small Tool Mfg. Co. of India Ltd.—8-1-3A, U. C. Banerjee Road, Calcutta 11.  
 S. Vanak & Co.—12-C, Clive Row, Calcutta 1.  
 T. H. Habib & Co.—67B, N. Subhas Road, Calcutta 1.  
 William Jacks & Co. Ltd.—16, Netaji Subhas Road, Calcutta 1.



## SOAP & TOILET MANUFACTURERS

- Asiatic Soap Co.—8, Dalhousie Sqr. East, Calcutta.
- BANGA LUXMI SOAP WORKS PRIVATE LTD.**—Manufacturers of High Class Toilet, Washing, Liquid, Jute Batching and Soft Soaps; 1, Chowringhee Road, Calcutta-13; Phone: 23-9869.
- Bengal Chemical & Pharmaceutical Works Ltd.—6, Ganesh Chandra Avenue, Calcutta 13.
- Bihar & Orissa Soap Factory.—28, Raja Brojendra St., Calcutta 7.
- Bharat Rabi Soap Works.—70-2-C, Gouribari Lane, Calcutta 4.
- Bharat Starch & Chemicals Ltd.—5, Royal Exchange Place, Calcutta 1.
- Calcutta Chemical Co. Ltd.—35, Pandit Road, Calcutta 29.
- Calcutta Soap Works.—“Calso” Park, Calcutta 39.
- City Soap Works (Pvt.) Ltd.—1, Motilal Bysack Garden Lane, Calcutta 11.
- Depilatory Soap Factory.—33, Bosepara, South, Bagh Bazar, Calcutta 3.
- Dey & Co., Ltd.—56, Netaji Subhas Road, Calcutta.
- Dibakar Industries.—7, Bhuban Dhar Lane, Calcutta.
- Golden Soap Factory Ltd.—15, Grand Trunk Road, Lillooah, Howrah.
- Grihalakshmi Soap Works.—23, Free School St., Calcutta 16.
- Himani Pvt. Ltd.—3, Khelat Babu Lane, Calcutta 2.
- Hindusthan Dev. Corpn. Ltd.—4, Chittaranjan Avenue, Calcutta 13.
- Hindustan Lever Ltd.—Ilaco House, 1 & 3, Brabourne Road, Calcutta.
- Howrah Soap Co., Ltd.—18, Netaji Subhas Road, Calcutta.
- Howrah Soap Works.—63, Jai Narain Babu's Lane, Khurunt, Howrah.
- Hutchison, J. & R. Ltd.—10, Clive Row, Calcutta.
- Ithothas Trading Co.—13, Netaji Subhas Road, Calcutta.
- Industrial Soap & Chemical Works.—226, Bagmari Road, Calcutta 11.
- John Paterson & Co. (India) Ltd.—96, Garden Reach Road, Calcutta 23.
- Kusum Products Ltd.—Bombay Mutual Bldgs., 9, Brabourne Road, Calcutta 1.
- Major Soap Co. Ltd.—25, Zakaria St., Calcutta.
- Mira Chemical Industries Ltd.—11-A, Prince Anwar Shah Road, Tollygunge, Calcutta 33.
- Model Soap Co.—Mehta Bldg., 55, Canning Street, Calcutta.
- New Bombay Soap Factory.—245/1, Manicktolla Main Road, Calcutta 11.
- Nawab Soap Co.—297/1, Upper Circular Road, Calcutta.
- Parijat Soap Works.—47-1, Hazra Road, Calcutta 26.
- Salim Soap Co.—17, Pollock St., Calcutta.
- Shine Bright Soap & Chemical Works.—6, Uttam Ghosh Lane, Salkia, Howrah.
- Sisir Soap Works.—12/1, Jessore Road, Dum Dum, 24 Parganas.
- Standard Chemical Industries.—378, G.T. Road, North, P.O. Belur Math, Howrah.
- Swaika Oil Mills.—18/B, Brabourne Road, Calcutta 1.
- Swaraj Perfumery & Soap Works.—237-P, Manicktolla Main Road, Calcutta 11.
- Vegetable Soapery.—1, Rajkumar Chatterjee Road, P.O. Cossipore, Calcutta 2.

## SPORTING AND ATHLETIC GOODS MFRS. & DEALERS

- B. Das Gupta & Co.—132-6, Cornwallis Street, Calcutta 4.
- Basu & Sons.—153/3, Bowbazar Street, Calcutta 12.
- Das Gupta & Brothers.—139-B, Cornwallis Street, Calcutta 4.
- Diana Agencies.—18-A, Chowringhee, Calcutta 13.
- G. K. SPORTS.**—For quality Sports goods, Gymnastic and Playground Apparatus, Games, Toys, Prams, Children's Cycles, and Tricycles, Air Guns and Lawn Mowers, Specialists in Tennis Stringing; 30, Jawaharlal Nehru Road, Calcutta 16; Phone: 235867.
- Ghosh & Co.—9/B, Ramanatha Majumdar Street, Calcutta 9.
- Indian Rubber Manufacturers Ltd.—11 & 12, Esplanade Mansions, Calcutta 1.
- Kingsing Sports Industries.—45, Bowbazar Street, Calcutta 12.
- Kridanuk & Co.—14, Surendranath Banerjee Street, Calcutta 36.
- Mercantile Agency Syndicate.—3/1, Chowringhee Square, Calcutta 13.
- Pioneer Sports (I) Ltd.—25, Chowringhee Road, Calcutta 13.
- Sethia Brothers.—4, Chowringhee Centre, Calcutta 13.
- Sharma Sports Co.—Lindsay Mansion, Lindsay St., Calcutta 16.
- SYMOND DISTRIBUTORS PRIVATE LTD.**—16, Netaji Subhas Road, Calcutta-1; Sole Distributors in India for the “SLA-ZENGER” Sportsgoods made in India. Phone: 22-4945/46. Grams: “FOURSQUARE.”
- Uberoi Ltd.—22/1, Chowringhee Road, Calcutta 13.
- United Trading Co.—2, Clock Tower, New Market, Calcutta 13.

## SPRING MANUFACTURERS

- A.C.A. Spring Mfg. Co.—34, Dr. Jagobondhu Lane, Calcutta.
- All Bengal Spring Mfg. Co.—17, Hidaram Banerji Lane, Calcutta 12.
- All India Eng. & Spring Mfg. Co.—2/1/1, Ram Moy Road, Bhowanipore, Calcutta 25.
- All India Spring Mfg. Co.—135, Netaji Subhas Road, Calcutta.
- All India Spring Mfg. Co.—22, Strand Road, Calcutta.
- Army Engineering Corpn.—42, Strand Road, Calcutta.
- BHABATARAN SARKAR & SONS.**—Stockists of Spring Steel Wire, Piano Wire, Stainless Steel Wire and all kinds of Black and G. I. wires and Spring Steel Strips; 62/1A, Netaji Subhas Road, Calcutta-1; Phone: 331807; Grams: “PIANO-STEEL”.
- Bharat Spring Manufacturing Co.—115, Netaji Subhas Road, Calcutta-1.
- British India Spring & Steel Co.—67-B, Netaji Subhas Road, Calcutta.
- Calcutta Spring Mfg. Co.—71-A, Netaji Subhas Road, Calcutta.
- CHICAGO SPRING MFG. CO.**—71A, Netaji Subhas Road, Gopu Mansions, Calcutta-1; Pioneers in Spring World; Specialists in all sorts of Springs, Spring Washers Valve-parts & Circlips etc.; Phone: 223200, 345376, 355351.
- Commercial Spring Mfg. Co.—1, Meerbahar Ghat Street, 1st Floor, Barabazar, Calcutta.
- Eastern Spring Mfg. Co.—10, Canning Street, Calcutta 1.
- Hardson Spring & Steel Co. of India.—Baidyapur, Dist. Burdwan.
- Henry Morgan & Co.—71-A, Netaji Subhas Road, Calcutta.
- Hindusthan Spring & Steel Co.—56, N. Subhas Road, Calcutta 1.
- India Spring & Industrial Co.—20, N. Subhas Road, Calcutta.
- India Spring & Steel Corporation.—5A, Clive Ghat Street, Calcutta 1.
- Indian Spring Mfg. Co.—159, Panchanantola Road, Howrah.
- Indo-British Spring Mfg. Co.—28, Christopher Road, Calcutta 14.
- Indo-Burma Spring Mfg. Co.—22, Strand Road, Calcutta.
- Industrial Steel Works.—29, Strand Road, Calcutta.
- Joy Narayan Spring Mfg. Co.—103, Howrah Road, Salkia, Howrah.
- Mahabir Spring & Steel Co.—11, I.R. Belilios Lane, Howrah.
- Mahalakshmi Spring Mfg. Co.—54, Christopher Road, Calcutta 46.
- Metropolitan Spring Mfg. Co.—23, Strand Road, Calcutta.
- Modern Engineering Works.—12, Jadupandit Road, Beadon St., Calcutta.
- New Dominion Eng. Works.—1/B, Pottery Road, Calcutta 15.
- Oriental Spring Mfg. Co.—8, Sil Lane, Calcutta 15.
- Pols Spring & Steel Co.—111-B, Netaji Subhas Road, Calcutta.
- Regular Spring Mfg. Co.—113-G, Netaji Subhas Road, Calcutta.
- Reliable Spring Mfg. Co.—91, N. Subhas Road, Calcutta 1.
- Reliance Spring & Steel Co.—15A, Pottery Road, Calcutta 15.
- Royal Spring & Steel Co.—P-58, Benares Road, Dassnagar, Howrah.
- Samson Industries P. Ltd.—22, N. Subhas Road, Calcutta.
- Samson Spring & Engineering Co.—62, Panchanantolla Road, Howrah.
- Sheffield Spring & Steel Co.—135, Canning St., Calcutta.
- Sirco.—4/10, Convent Lane, Calcutta 15.
- Spring Mfg. Co.—7C, Deb Lane, P.O. Entally, Calcutta 14.
- Spring Products & Steel Co.—6-2, Kamardanja Road, Calcutta 46.
- Swami & Co.—40-1, Strand Road, Calcutta.
- Swasti & Co.—5A, Clive Ghat Street, Calcutta.
- Swastik Spring & Steel Works.—P-36, India Exchange Place, Calcutta 1.
- Tapas Engineering Co.—19-8, Pottery Road, Calcutta 15.

## SPRING STEEL DEALERS

- BHABATARAN SARKAR & SONS.**—Stockists of Spring Steel Wire, Piano Wire, Stainless Steel Wire and all kinds of Black and G.I. wires and spring Steel Strips; 62/1A, Netaji Subhas Road, Calcutta-1; Phone: 331807; Grams: “PIANO-STEEL”.

## STAINLESS STEEL

- Amalgamated Universal Agencies (Cal.).—2nd Floor, Block C-211, 71, Canning Street, Calcutta 1.
- Ashok Metal Industries Ltd.—157, Netaji Subhas Road, Room No. 161, Calcutta-1.
- Chandra Industries Private Ltd.—59, Cotton Street, Calcutta-7.
- Corporated Engineers (I) Pvt. Ltd.—7, Chittaranjan Avenue, Calcutta 13.
- H. C. Giddings Pvt. Ltd.—B-1, Hide Road, Kidderpore, Calcutta.
- Krudd Industries Ltd.—20/21, Stephen House, Dalhousie Square East, Calcutta.
- Mepco & Co.—124, M. Gandhi Road, Calcutta 7.
- Pelican Engineers.—161, Upper Chitpore Road, Calcutta 5.
- Standard Steels (I) P. Ltd.—P-7, Mission Row Extension, Calcutta 1.

## STAINLESS STEEL FABRICATORS

- BLUE BIRD INDUSTRIES.**—180, Bocharam Chatterjee Road, Behala, Calcutta-34; Manufacturers of Stainless Steel Processing Tanks & Vats, Distilled Water Plants, Stirrers, S-S & Bronze Pumps, Rubber & Lead Lined Tanks, Vats; Phone: 455740, City Office: 346137.



## STATIONERY & OFFICE EQUIPMENT MFRS. & SUPPLIERS

A. P. Manufacturing Co.—7, Khairu Lane, Calcutta 13.  
 Asiatic Typewriter Co.—6, Hastings Street, Calcutta 1.  
 Bengal Stationery Concern.—14/2, Old China Bazar Street, Calcutta.  
 Bharat Carbon & Ribbon Mfg. Co. Ltd.—19, British Indian Street, Calcutta 1.  
 Bharat Sales Ltd.—19, British India Street, Calcutta 1.  
 B. Motiram & Co.—B-52/53, S. S. Hogg Market, Calcutta 13.  
 Bradma of India Ltd.—20/B, Park Street, Opp. Park Mansions Calcutta 16.  
 Ciciko Office Machines Pvt. Ltd.—300, Bowbazar Street, Calcutta 12.  
 Continental Commercial Co. Ltd.—8/1, Dalhousie Square East, Calcutta.  
 Cosmo Equipment Co.—41/19A, Russa Road, Calcutta.  
 Eastern Industries Co.—9/4, Patuatola Lane, Calcutta 9.  
 F. N. Gooptu & Co.—12, Beliaghata Road, Calcutta 15.  
 G. Atherton & Co. Ltd.—4, Mission Row, Calcutta.  
 General Equipment Merchants Ltd.—9, Mission Row, Calcutta.  
 Gocool Chunder Dutt & Co.—1, Mission Row, Calcutta.  
 H. Mukherjee & Co.—14/2, Old China Bazar Street, Calcutta.  
 International Computers & Tabulators (India) Pvt. Ltd.—2 & 3, Clive Row, Calcutta 1.  
 Jayantilal & Co.—55/131, Canning Street, Calcutta.  
 J. B. Traders (India).—10, Princep Street, Calcutta 13.  
 J. K. Business Machines Ltd.—2, Mangoe Lane, Calcutta 1.  
 J. Sur & Co.—3, Dalhousie Square East, Calcutta.  
 Kilburn & Co. Ltd.—4, Fairlie Place, Calcutta.  
 Korea (India) Ltd.—7, Canal Street, Calcutta 14.  
 Latham Abercrombie & Co. Pvt. Ltd.—30, Ganesh Chandra Avenue, Calcutta 13.  
 M. S. Ahmed & Co.—58/6, Canning Street, Calcutta.  
 National Cash Register Co.—4D, Dalhousie Square, Stephen House, Calcutta.  
 Nilmony Hidar & Co.—11, Chittaranjan Avenue, Calcutta 13.  
 Oriental Seal Wax Co.—31, Stephen House, Dalhousie Square East, Calcutta 1.  
 P. N. Ganeson & Sons.—P-35, India Exchange Place, Calcutta.  
 Pioneer Typewriter Co.—1, Netaji Subhas Road, Calcutta.  
 Pioneer Stationery House.—2/1, Old Court House Corner, Calcutta.  
 P. Sur & Co.—14/2, Old China Bazar Street, Calcutta.  
 Queen Stationery Stores P. Ltd.—63-E, Radha Bazar Street, Calcutta 1.  
 Rapidol Industries Co.—24-E, Sura Third Lane, Calcutta 10.  
 Remington Rand of (India) Ltd.—3, Council House Street, Calcutta.  
 Roneo Ltd.—P-13, Mission Row Extn., Calcutta.  
 Shree Lakshmi Industries & Chemicals Ltd.—116/1/1, Harrison Road, Calcutta 7.  
 Standard Sales Agency.—27-B, Chittaranjan Avenue, Calcutta 13.  
 Standard Trading Co.—43, Ezra Street, Calcutta 1.  
 Sulekha Works Ltd.—Jadavpur, Calcutta 32.  
 Super Toilet & Chemical Co.—80, Cornwallis Street, Calcutta 6.  
 W. Newman & Co., Ltd.—3, Old Court House Street, Calcutta.

## STEEL

**BHABATARAN SARKAR & SONS.**—Stockists of Spring Steel wire, Piano wire, Stainless Steel wire and all kinds of Black and G.I. wires and Spring Steel Strips; 62/1A, Netaji Subhas Road, Calcutta-1; Phone: 331807.

**MILLER & CO. (CALCUTTA) PRIVATE LTD.**—Importers & Stockists of all purpose Tool and Alloy Steels, Stainless Steels, High Speed Steels, Carbon Steels, Die Steels, Nickel chrome Steels, High Carbon High Chromium Steel etc., 24, Netaji Subhas Road, Calcutta-1; Phone: 227161 & 225175. Grams: 'HARDWARMAN'.

## STEEL DOORS & WINDOWS

**STEELWYN CORPORATION.**—Manufacturers of Steel Windows, Doors, Industrial Sashes as per B.S. or I.S. Specification or purpose-made; 286, Bepin Behari Ganguly Street, Calcutta-12; Phone: 229140.

## STEEL FURNITURE & FITTINGS

Acme Manufacturing Co.—"Jain House," 8/1, Esplanade East, Calcutta 1.  
 Allied Steel Merchandise Corporation.—5A, Clive Ghat St., Calcutta 1.  
**ANAND METAL & STEEL WORKS.**—Manufacturers of all kinds of Steel Furniture, Hospital and Office Equipments, Agricultural Implements and Structural; 137, Canning Street, Calcutta-1; Phone: 220315 (2 Lines).  
 Associated Steel Products Corpn.—23/24, Radhabazar Street, Calcutta 1.  
 Bengal Iron & Engg. Works.—39, Surendra Chandra Chatterji Lane, Salkia, Howrah Dist.

Bengal Iron & Steel Works.—8, Canning Street, Calcutta 1.  
 Bharat Sheet Metal Industries Ltd.—22, Beerpara Lane, Dum Dum, Calcutta.  
 Blackwoods India Ltd.—1, Taratolla Road, Calcutta.  
 Bombay Safe & Steel Works P. Ltd.—56, N. Subhas Road, Calcutta 1.  
 Bungo Steel Furniture P. Ltd.—57, Diamond Harbour Road, Behala, Calcutta.  
 Challenor Engineering Works.—26, Brabourne Road, Calcutta 1.  
 Commercial Syndicate.—22, Canning Street, Calcutta.  
 Cromelite (I) Pvt. Ltd.—P-35, India Exchange Place, Calcutta 1.  
 Electrical Distributors.—3, Mangoe Lane, Calcutta 1.  
 French Engineering Works.—150, Rash Behari Avenue, Calcutta 29.  
 General Engg. Corpn. of India.—29, Shammagar Road, Dum Dum, Calcutta.  
 Globe Agencies.—137, Canning Street, Calcutta 1.  
 Godrej & Boyce Mfg. Co. P. Ltd.—9, Brabourne Road, Calcutta.  
 Goodman & Co. I. Pvt. Ltd.—38, Netaji Subhas Road, Calcutta.  
 G. S. Agency.—88, Keshab Sen Street, Calcutta 9.  
 Hero Industries.—43/1, Strand Road, Calcutta 7.  
 Imperial Safe Mfg. Co.—105, Harrison Road, Calcutta 7.  
 India Industrial Mission.—Cossipore, Calcutta 2.  
 India Metal Industries Co.—243-D, Upper Circular Road, Calcutta 6.  
 India Metal & Steel Products.—21/1, Lalbazar St., Calcutta.  
 India Steel Furniture Mfg. Co.—95, M. Gandhi Road, Calcutta 7.  
 Indian Metal & Steel Products Ltd.—1, Ram Krishna Nasker Lane, Beliaghata, Calcutta.  
 Indian Stores Supplying Co.—137, Canning Street, Calcutta 1.  
 Indo Engineering Works.—125, S. N. Roy Road, Calcutta 38.  
 Jaiswal Industrial & Cutlery Mfg. (India) Ltd.—111-BT Road, Calcutta.  
 Kem Engineering Works.—7, Convent Road, Calcutta 14.  
 Metropolitan Structural Works.—2-B, Satya Dr. Road, Kidderpore, Calcutta.  
 Narayan Iron & Steel Co. P. Ltd.—23/B/1, Diamond Harbour Road, Calcutta 8.  
 Orient Safe & Cabinet Mfg. Co. P. Ltd.—133, Canning Street, Calcutta.  
 Raja Industrial Corpn., Pvt. Ltd.—No. 1, 7, Murlidhar Lane, Calcutta. 7, No. 2, Madhab Ghose Road, Salkia, Howrah.  
 Rassco Mfg. & Supplying Agency.—30, Wellington Street, Calcutta 12.  
 S. C. Karmarker & Co.—741, Hazra Road, Ballygunge, Calcutta.  
 Shankar Engineering Works.—52/1, Dr. A. Bani Datt Road, Howrah.  
 Shree Bajrang Electric & Steel Co., Ltd.—1, Kali Marumdar Road, Howrah.  
 Steel Furniture & Construction Co.—6, Brabourne Road, Calcutta 1.  
 Steel Products Ltd.—96, Garden Reach Road, Kidderpore, Calcutta.  
 Steelwyn Corporation.—P-11, Chitpur Road, Calcutta 7.  
 Sudsons Pvt. Ltd.—3, Esplanade East, Calcutta 1.  
 Victory Engineering Works.—40, Tangra Road, Calcutta 1.

## STEEL IMPORTERS

Aminchand Payarelal.—135, Canning Street, Calcutta.  
 Bajoria Agency Pvt. Ltd.—174, Mahatma Gandhi Road, Calcutta.  
 Bengal Corpn. (Pvt.) Ltd.—14, Netaji Subhas Road, Calcutta.  
 B. R. Herman & Mohatta (I) Pvt. Ltd.—19, British Indian Se., Calcutta.  
 Bharat Overseas (Pvt.) Ltd.—P.N.B. House, 18-B, Brabourne Rd., Calcutta.  
 Hope Prudhomme & Co. (Pvt.) Ltd.—7, Wellesley Place, Calcutta.  
 Industrial Importers (Pvt.) Ltd.—Stephen House, Calcutta 1.  
 J. S. Cohen & Co.—6-A, Sudder Street, Calcutta.  
 Kalinga Tubes Co., Ltd.—33, Chittaranjan Avenue, Calcutta.  
 Khandelwal Bros. (Pvt.) Ltd.—33, Netaji Subhas Road, Calcutta.  
 Khemchand Rajkumar.—33, Netaji Subhas Road, Calcutta.  
 Lakshminarayan Ramniwas.—18, Netaji Subhas Road, Calcutta.  
 Louis & Dreyfus & Co.—18-A, Brabourne Road, Calcutta.  
 Machino Techno (Sales) Pvt. Ltd.—33, Netaji Subhas Road, Calcutta.  
 Mahindra & Mahindra Ltd.—Hall & Anderson Bldg., Calcutta.  
 P. L. Bhatt & Co.—5, Clive Row, Calcutta.  
 Rallis India Ltd.—16, Rare Street, Calcutta.  
 Ramkrishna Kulwantra.—33, Netaji Subhas Road, Calcutta.  
 Raymon & Co. (I) Pvt. Ltd.—2, Brabourne Road, Calcutta 1.  
 Seth Nanakchand Shadram.—29, Strand Road, Calcutta.  
 Shree Krishna Pvt. Ltd.—20, Mangoe Lane, Calcutta.  
 Soorajmull Nagarmull.—8, Dalhousie Square, Calcutta.  
 Standard Stores & Agency Pvt. Ltd.—24, Chittaranjan Avenue, Calcutta.  
 Stores Supply (India) Agency.—5-A, Clive Ghat Street, Calcutta.  
 Surendra (Overseas) Pvt. Ltd.—135, Canning Street, Calcutta.  
 Thapar Industrial Corporation.—29-A, Chandra Nath Chatterji Street, Calcutta 25.  
 United Steel Co. (I) Pvt. Ltd.—P-13, Mission Row Extension, Calcutta.  
 Vasantrao Shantilal.—13, Narayan Prasad Babu Lane, Calcutta.  
 V. D. Swami & Co. Pvt. Ltd.—2, Mangoe Lane, Calcutta.



**STEEL RE-ROLLING MILLS**

- Agarwal Hardware Works Private Ltd. 167, Chittaranjan Avenue, Calcutta 7.  
 Bengal Rolling Mills Ltd.—67/B, Netaji Subhas Road, Calcutta.  
 Bhartia Electric Steel Co., Ltd.—4, Old Court House Street, Calcutta.  
 Bhartia Steel & Engineering Co. Pvt. Ltd.—61, Keshab Sen Street, Calcutta.  
 Bombay Steel Rolling Mills Ltd.—33, Netaji Subhas Road, Calcutta.  
 British India Rolling Mills.—1, Janaki Dass Lane, Calcutta 7.  
 Calcutta Iron, Steel & Non-Ferrous Metal Works.—22, Canning St., Calcutta.  
 Calcutta Steel Co. Ltd.—4, Old Court House Street, Calcutta.  
 Chaliha Rolling Mills.—5, Mission Row, Calcutta.  
 Dass Steel Industries of India.—19, Maharshi Devendra Road, Calcutta 7.  
 Guest, Keen, Williams Ltd.—41, Chowringhee Road, Calcutta.  
 Hindustan Iron & Steel Co.—8, Rajendra Deb Road, Calcutta.  
 Indian Iron & Steel Co., Ltd.—12, Mission Row, Calcutta.  
 Lalchand Mahadeblal.—7, Hazarimull Shah Road, Salkia.  
 Lilloah Steel & Wire Co. Pvt. Ltd.—5, Muktaram Babu Street, Calcutta.  
 National Engineering Co. Ltd.—33, Netaji Subhas Road, Calcutta.  
 National Iron & Steel Co., Ltd.—Stephen House, 4 Dalhousie Square, Calcutta 1.  
 National Rolling & Steel Ropes Ltd.—4, Stephen House, Calcutta.  
 Orient Iron & Steel Co. Pvt. Ltd.—2, Height Road, Lilloah, Howrah.  
 Rama Rolling Mills.—156, Manicktola Main Road, Calcutta.  
 Sangneria Co. Pvt. Ltd.—9, Jagmohan Mullick Lane, Calcutta.  
 Shree Bajrang Electric Steel Co. (Private) Ltd.—9, Waterloo Street, Calcutta.  
 Shree Hanuman Steel Rolling Mills Co. Ltd.—8, Dalhousie Sqr. East, Calcutta.  
 Shree Laxmi Iron & Steel Works Pvt. Ltd.—P/16, Kalakar St., Calcutta.  
 Sri Durga Rolling Mills.—197/1, G.T. Road, Ghosuri, Howrah.  
 Steel Equipment & Construction Pvt. Ltd.—22, G.T. Road, Lilloah, Howrah.  
 Steel Rolling Mills of Bengal Ltd.—2, Maharshi Devendra Road, Calcutta.  
 Steel Rolling Mills of Hindustan Private Ltd.—135, Canning Street, Calcutta.  
 Sun Rolling Mills Pvt. Ltd.—8, Cornwallis Street, Calcutta.  
 Swadeshi Industries Ltd.—142-A, Jamunalal Bajaj Street, Calcutta 7.  
 United Rolling Mills Pvt. Ltd.—160, Girish Ghosh Road, P.O. Belur Math, Howrah.

**STEVEDORES**

- A. C. Roy & Co., Pvt. Ltd.—5, Mission Row, Calcutta.  
 Alex Millers Pvt. Ltd.—7, Old Court House Street, Calcutta 1.  
 Balailal Mookerjee & Co. Pvt. Ltd.—Wardley House, 25, Swallow Lane, Calcutta.  
 Banerjee & Chatterji Pvt. Ltd.—10/1, Elgin Road, Calcutta 20.  
 Banerjee Santosh Ch. & Sons P. Ltd.—7, Swallow Lane, Calcutta 1.  
 Baney Madhab Mookerjee & Co.—74, Bentinck Street, Calcutta.  
 B. Bose Pvt. Ltd.—43, Dharamtala Street, Calcutta.  
 Butterworth & Farmer.—14, Alipore Park Road, Alipore.  
 Calcutta Supply Agency.—8, Canning Street, Calcutta 1.  
 Chatterji & Hazra Pvt. Ltd.—37, Canning Street, Calcutta 1.  
 Chinoy Chablani & Co.—13, Brabourne Road, Calcutta 1.  
 Darabshaw B. Cursetjee's Sons Pvt. Ltd.—13, Brabourne Road, Calcutta 1.  
 Eastern Co. P. Ltd.—114, Stephen House, D. Square East, Calcutta 1.  
 H. M. Coria & Son Pvt. Ltd.—35, Chittaranjan Avenue, Calcutta 1E.  
 J. N. Mukerjee & Co., Pvt. Ltd.—20, Strand Road, Calcutta.  
 Keshavlal P. Gorsia.—24, Strand Road, Calcutta.  
 M. Elias Pvt. Ltd.—18, Netaji Subhas Road, Calcutta.  
 Mookerjee Balailal & Co. P. Ltd.—25, Swallow Lane, Calcutta 1.  
 Nareshnath Mookerjee.—6, Clive Row, Calcutta 1.  
 P. E. Davis & Co.—Mezzanine Floor, 18, Strand Road, Calcutta.  
 P. Mukherjee & Co.—19, Strand Road, Calcutta 1.  
 Santos Chandra Banerjee & Sons Pvt. Ltd.—7, Swallow Lane, Calcutta.  
 Sarat Chatterjee & Co., Pvt. Ltd.—3, Mangoe Lane, Calcutta.  
 Sen Mukherji & Co.—P-20, Radhabazar Street, Calcutta 1.  
 Sharma & Co.—8-2, Fern Road, Calcutta 19.  
 T. C. Chatterjee & Co.—10, Canning Street, Calcutta 1.  
 T. P. Roy Choudhuri & Co. Pvt. Ltd.—4/B, Chowringhee Place, Calcutta 13.

**SUGAR MILL MACHINERY**

- A. C. Roy.—41-1, Belilios Lane, Howrah.  
 Bengal Iron Works P. Ltd.—16-2, Chatterjee Para Lane, Howrah.  
 B. N. Panchal & Sons P. Ltd.—208, Belilios Road, Howrah.

**BERRY BROTHERS.**—Manufacturers of Water Driven, High Speed Water Driven, Belt Driven and Electric Driven Sugar Centrifugals, Crystallizers, Cooling Coils, Magma, Molasses and Milk of Lime Pumps, Carbonation and Sulphitation, Vessels, Grass Hoppers and Screw Conveyors, Sugar Graders, Juice Heaters, Sugar Elevators, Filter Cloth Washing Machine, Megma Mixer etc., 135, Canning Street, Calcutta-1; Phone: 222420 & 226028.

- East India Engineering & Agency Co.—63-1, Banaras Road, North Bantra, Howrah.  
 D. K. Das & Co. P. Ltd.—233, Belilios Road, Howrah.  
 Fakir Chand Dass Mistry & Sons P. Ltd.—143/44, Belilios Road, Howrah.  
 Howrah Engineering Concern P. Ltd.—19, Maharshi Debendra Road, Calcutta 6.  
 Howrah Iron & Steel Works P. Ltd.—90, Banaras Road, Salkia.  
 India Weighing Scales & Engineering Co. P. Ltd.—233, Belilios Road, Howrah.  
 J. N. Puri.—206, Belilios Road, Howrah.  
 K. C. Dass.—32, Natabar Paul Road, Howrah.  
 Luxmi Engineering Co. P. Ltd.—123, Narasingha Dutt Road, Howrah.  
 Panchkori Ghosh & Sons P. Ltd.—166, Belilios Road, Howrah.  
 Senapati Brothers P. Ltd.—132, Belilios Road, Howrah.  
 Ultra Engineering Co.—172-8, Madhusudan Pal Choudhry Lane, Howrah.

**SURGICAL DRESSINGS**

**CALCUTTA SURGICAL COTTON CO.**—Manufacturers of Absorbent Cotton Wool, Sanitary Towels, Bandage, Gauge, Lint and all Varieties of Surgical Dressings; 115, Canning Street, Calcutta-1; Phone: 225070; Grams: "ROUNDS".

**SURGICAL INSTRUMENTS**

- Associated Rubber & Plastic Works —55, Bentinck Street, Calcutta.  
 Balahari Sardar & Bros.—7, Nalin Sarkar Street, Calcutta 1.  
**BENGLA CHEMICAL & PHARMACEUTICAL WORKS LTD.**—6, Ganesh Chunder Avenue, Calcutta 13; Pharmaceuticals, Heavy & Fine Chemicals, High Class Toilet Products, Coal Tar Distillation Products, Fire Extinguishers, Printing Inks, Driers, etc.; Branch Offices: Bombay & Kanpur.  
 Bengal Waterproof Works Ltd.—32, Theatre Road, Calcutta.  
 Bhattacharya Rubber Works Ltd.—174, Jessore Road, Dum Dum, Calcutta.  
 Calcutta Surgical Co.—33, Canning Street, Calcutta 1.  
 Dental Goods Supply Co.—Bowbazar St., Calcutta.  
 East India Rubber Works Ltd.—161, Chittaranjan Avenue, Calcutta.  
 Hindustan Rubber Works Ltd.—14, Ballygunge Station Road, Calcutta.  
 Jayer & Co.—12/A, Netaji Subhas Road, Calcutta 1.  
 P. Hematal & Co.—71, Canning Street, Room No. A-106, 1st Floor, Calcutta 1.  
 Premier Surgical Dressing Co.—34, Bright Street, Calcutta.  
 R.B.S. Rubber Mills Pvt. Ltd.—Lilloah, Howrah.

**SURVEYORS & QUALITY CONTROLLERS**

- N. T. KOTHARI & CO.**—290, Bepin Behari Ganguly Street, Calcutta-12; Cargo Surveyors & Loss Assessors—recognised by the Central Government of India, Insurance Companies and Bankers; Internationally recognised for export Superintending in respect of quality, quantity & Valuers; Grams: "SUPERCHECK".

**TANNERIES AND LEATHER GOODS MANUFACTURERS**

- Basak Sett & Co.—3, Abhay Ghosh Lane, Calcutta.  
 Brand S. B. & Co.—80, Pathuriaghat Street, Calcutta.  
 Chingsue Tannery.—P.O.B. No. 962, Calcutta.  
 Chowdhury & Sons.—18, Old China Bazar Street, Calcutta.  
 Cuthbertson & Harper (India) Ltd.—10, Govt. Place, Calcutta.  
 Dutt S. L. & Bros.—59, Netaji Subhas Road, Calcutta.  
 Ideal Leather Works.—40, Central Avenue, Calcutta 12.  
 Industrial Leather Co.—3-1, Indra Roy Road, Calcutta 25.  
 Jubilee Tannery.—54-A, Tiljala Road, Calcutta 10.  
 Modern European Tannery.—10, Topsia Road, Calcutta 15.  
 Morrison & Cottle, Pvt. Ltd.—30-G, Chowringhee Road, Calcutta 16.  
 National Tannery Co. Ltd.—Mercantile Bldgs., Lall Bazar St., Calcutta 1.  
 Reliance Tanneries.—3, Mangoe Lane, 2nd Floor, Calcutta 1.  
 Young & Co.—44, Chittaranjan Avenue South, Calcutta 12.

**TAPE & WEBBING MANUFACTURERS**

- Allied Trading Corporation.—71-A, Netaji Subhas Road, Calcutta.  
 Oriental Tape Mfg. Co.—801, Grand Trunk Road, Sibpore, Howrah.



**TARPAULIN MANUFACTURERS & DEALERS**

A. N. Mukherjee Ltd.—10, Shamlal Street, Calcutta 4.  
 Calcutta Proofing & Paulin Mfg. Co. P. Ltd.—62, Alipore Road, Calcutta 27.  
 Chandl Charan Nayak Pvt. Ltd.—124-1, Bowbazar Street, Calcutta 12.  
 Dharma Das Sen.—115, Netaji Subhas Road, Calcutta.  
 Hemraj Girdharimall.—56, Netaji Subhas Road, Calcutta 1.  
 Kilburn & Co. Pvt. Ltd.—2, Fairlie Place, Calcutta 1.  
 Madhoprasad Mahabirprasad.—9, Parsee Church Street, Calcutta.  
 Mukherji Pvt. Ltd., A. N.—10, Shamlal Street, Calcutta 4.  
 New India Mercantile Co. Pvt. Ltd.—8, India Exchange Place, Calcutta.  
 New India Proofing Co.—Calso Park, Tiljala, Calcutta 39.  
 Premier Canvas Co.—28, N. S. Bose Road, Calcutta.  
 Railway Supply Corpn. Pvt. Ltd.—P-31, Mission Row Extn., Calcutta.  
 Shew Prosad Bishnu Prosad.—11, Dinu Rakhit Lane, Calcutta 5.  
 Siroar Bro. Pvt. Ltd.—26-1, S. N. Roy Road, Calcutta 38.  
 Soobashah & Co.—12, Zakaria Street, Calcutta 1.  
 Tarachand Gupta & Co.—131, Cotton Street, Calcutta 7.  
 Textile Waste Co.—113G, Netaji Subhas Road, Calcutta.

**TEA AGENCY HOUSES**

Andrew Yule & Co. Ltd.—8, Clive Row, Calcutta 1.  
 Balmer Lawrie & Co. Ltd.—21, Netaji Subhas Road, Calcutta 1.  
 Brooke Bond Estates India Ltd.—2, Metcalfe Street, Calcutta 12.  
 Davenport & Co. Pvt. Ltd.—6, Church Lane, Calcutta 1.  
 Duncan Bros. & Co. Ltd.—31, Netaji Subhas Road, Calcutta 1.  
 Gillanders Arbuthnot & Co., Ltd.—Post Box No. 174, Gillander House, Calcutta 1.  
 James Finlay & Co. Ltd.—2, Netaji Subhas Road, Calcutta 1.  
 James Warren & Co. Ltd.—31, Chowringhee Road, Calcutta 16.  
 Jardine Henderson Ltd.—4, Clive Row, Calcutta 1.  
 Kettlewell Bullen & Co. Ltd.—21, Strand Road, Calcutta 1.  
 Kilburn & Co. Pvt. Ltd.—4, Fairlie Place, Calcutta 1.  
 Macneill & Barry Ltd.—2, Fairlie Place, Calcutta 1.  
 McLeod & Co. Ltd.—3, Netaji Subhas Road, Calcutta 1.  
 Octavius Steel & Co. Ltd.—14, Old Court House Street, Calcutta 1.  
 Shaw Wallace & Co. Ltd.—4, Bankshall Street, Calcutta 1.  
 Williamson Magor & Co. Ltd.—4, Mangoe Lane, Calcutta 1.

**TEA BROKERS & MERCHANTS**

Carritt Moran & Co. Pvt. Ltd.—9, Mission Row, Calcutta.  
 Figgis, A. W., & Co., Private Ltd.—D-6, Gillander House, Calcutta 1.  
 J. Thomas & Co. Pvt. Ltd.—8, Mission Row, Calcutta.  
 S. K. Chakraverty & Co.—8-A, Lall Bazar Street, Calcutta.  
 Sudhir Chatterjee & Co. Pvt. Ltd.—31, Mission Row Extn., Calcutta.  
 Tea Brokers Pvt. Ltd.—29, Ganesh Chandra Avenue, Calcutta.  
 W. S. Cresswell & Co. Pvt. Ltd.—3, Clive Row, Calcutta.

**TEA CHEST FITTINGS MANUFACTURERS**

Assam Metal Works.—35, Chittaranjan Avenue, Calcutta 12.  
 Assam Bengal Veneer Industries Pvt. Ltd.—9, Clive Row, Calcutta 1.  
 Assam Plywood Products.—76-A, Jatindra Mohan Avenue, Calcutta 5.  
 Beezee Industries.—72-5, Upper Circular Road, Calcutta 9.  
 Bengal Tea-chest Fittings Mfg. Pvt. Ltd.—180, Mahatma Gandhi Road, Calcutta 7.  
 B. S. & Co.—33, Brabourne Road, Calcutta 1.  
 Cassava (India).—122-D, Raja Dinendra Street, Calcutta 4.  
 Cassava (India).—21, Cour Laha Street, Calcutta.  
 Hind Metal Industries.—86, Basantlal Saha Road, Calcutta.  
 Indian Tea Chest Company.—7, Sagar Dutt Lane, Calcutta 12.  
 Iron & Steel Mfg. Syndicate.—8, Eden Hospital Road, Calcutta 12.  
 N. C. Chakraborty.—34-A, Chetla Road, Calcutta 27.  
 National Trading Corpn.—12-A, Netaji Subhas Road, Calcutta 1.  
 Oriental Supplier Syndicate.—36, Brabourne Road, Calcutta 1.  
 Rajasthan Metal Works.—4, Jagomohan Mullick Lane, Calcutta 7.  
 S. M. Ali Pvt. Ltd.—Post Box 2533, Calcutta 1.  
 Sk. Abed Ali, 9, McLeod Street, Calcutta 16.  
 Sk. Baker Ali & Company.—65, Phears Lane, Calcutta 12.  
 Sri Bengal Tea-Chest Fittings Mfg. P. Ltd.—180, M. Gandhi Road, Calcutta 7.  
 Star Fitting Works.—64, Pathuriaghata Street, Calcutta 6.  
 Venesta Folia Ltd.—Kamarhati (Dt. 24 Parganas).  
 Zeedoneil Industries (India) Pvt. Ltd.—20, Strand Road, Calcutta 1.

**TEA GARDEN STORES**

A. C. Roy.—41-1, Bellios Lane, Howrah.  
 A. S. Abdullahhoy & Co.—81, Netaji Subhas Road, Calcutta 1.  
 Barcoahs & Associates P. Ltd.—5, Mission Row, Calcutta 1.  
 Chandl Charan Nayak P. Ltd.—124/1, Bowbazar Street, Calcutta 12.  
 Corporated Engineers (India) Ltd.—7, Chittaranjan Avenue, Calcutta.  
 D. C. Auddy & Brothers.—30, Strand Road, Calcutta 1.  
 Dey Dhur & Co.—53, Netaji Subhas Road, Calcutta 1.  
 D. Wren & Co.—Wardley House, 25, Swallow Lane, Calcutta 1.  
 Eastern Economic Engineering Co.—24, Strand Road, Calcutta 1.  
 Elmec P. Ltd.—20, N. Subhas Road, Calcutta 1.

Ganguli & Co.—89, Netaji Subhas Road, Calcutta 1.  
 Gladstone Lyall & Co. Ltd.—4, Fairlie Place, Calcutta 1.  
 Goodman & Co.—44-1, Canal East Road, Manicktolla, Calcutta.  
 Great Eastern Cutlery Works.—20, Strand Road, Calcutta 1.  
 Gupta Enterprise.—24, Brabourne Road, Calcutta 1.  
 Hind Enterprises.—4, Mission Row, Calcutta 1.  
 Howrah Iron & Steel Works P. Ltd.—90, Benaras Road, Salkia.  
 International Stores.—73, Netaji Subhas Road, Calcutta 1.  
 J. C. Condoo & Sons.—22, Raja Woodmunt Street, Calcutta 1.  
 J. H. Fenner & Co. (I) Ltd.—10/3-A, Mercantile Buildings, Calcutta 1.  
 Kartick Churn Dutt & Co.—134, Canning Street, Calcutta 1.  
 Kaybee & Co.—13, Brabourne Road, Calcutta 1.  
 Lakshmi Narayan Engineering Works.—133, Bellios Road, Howrah.  
 M. Chowdhury & Co.—113-G, Netaji Subhas Road, Calcutta 1.  
 Mathew & Co.—5, Kasi Nath Dutt Road, Barnagore, Calcutta 36.  
 Morris Balfour & Co.—25, Netaji Subhas Road, Calcutta 1.  
 Mundra & Co.—8, Canning Street, Calcutta 1.  
 S. D. Garbis & Co.—83, Elliot Road, Calcutta 16.  
 S. P. Agarwala & Co.—161/1, M. Gandhi Road, Calcutta 7.  
 S. F. Products (I) Ltd.—P. Box 411, Calcutta.  
 Standard Stores & Agency P. Ltd.—34, Chittaranjan Avenue, Calcutta 12.  
 Tarachand Gupta & Co.—141, Cotton Street, Calcutta 7.  
 United Kerala Trading Corpn.—12/B, Netaji Subhas Road, Calcutta 1.  
 Water Supply Specialists P. Ltd.—Post Box 424, Calcutta 1.  
 Winsome Trading Co.—23/24, Radhabazar Street, Calcutta 1.

**TEA MERCHANTS**

All India Tea & Trading Co. P. Ltd.—E-3, Clive Bldgs., Calcutta 1.  
 A. Tosh & Sons.—P-32/33, Royal Exchange Place Extension, Calcutta.  
 Ajad Hind Tea Co.—28, Mechua Bazar Street, Calcutta.  
 B. K. Saha & Bros. Pvt. Ltd.—5, Pollock Street, Calcutta.  
 Barcoahs & Associates Pvt. Ltd.—5, Mission Row, Calcutta.  
 Bhansali & Co.—56, Ezra Street, Calcutta.  
 Chandmull Batia.—7, Canning Street, Calcutta.  
 Chhaganlal Kasturchand.—16 Pollock Street, Calcutta.  
 D. C. Ghose & Co. (Agents) Ltd.—11, Govt. Place East, 1st Floor, Calcutta.  
 D. Dayalbhaj & Co.—12-13, Amratolla Street, Calcutta.  
 Dilaverkhan Rahimkhan Co. Private Ltd.—12, Amratolla Lane, Calcutta.  
 Dwarkadas & Co.—37, Ezra Street, Calcutta.  
 Eastern Tea Co.—207-3, Mahatma Gandhi Road, Calcutta 7.  
 G. A. Randerian Ltd.—16, Ganesh Chandra Avenue, 5th Floor, Calcutta 13.  
 G. Ambalal (Export) Pvt. Ltd.—4, Mission Row Extension, Calcutta.  
 G. Patel & Co.—2, Brabourne Road, Calcutta.  
 Goenka & Sons.—25, Waterloo Street, Calcutta.  
 Gordhandas Lalji.—8, Parsee Church Street, 1st Floor, Calcutta.  
 Guganram Tarachand.—402, Upper Chitpur Road, Calcutta.  
 Hazara Singh Indersingh.—8, Amratolla Street, Calcutta 7.  
 Hindusthan Tea Sales Pvt. Ltd.—P-36, India Exchange Place Extn., Calcutta.  
 Hira Trading Co.—54, Ezra Street, Calcutta.  
 Indo-World Trading Co.—10, Armenian Street, Calcutta 1.  
 Ispahani Ltd.—51, Ezra Street, Calcutta.  
 James Finlay & Co., Ltd.—2, Netaji Subhas Road, Calcutta 1.  
 Jannadas Tribhovandas & Co.—46, Ezra Street, Calcutta.  
 Jayantilal Manilal & Co.—13, Pollock Street, Calcutta.  
 Jayshree Tea & Industries Ltd.—India Exchange Place, Calcutta.  
 K. Harkishondas & Co.—7, Swallow Lane, B. No. 45-46, 1st Floor, Calcutta.  
 K. Shashikant & Co.—55, Canning Street, F. Block, Calcutta.  
 Kanol (India) Pvt. Ltd.—P-8, Mission Row Extn., Calcutta.  
 Kesarla & Co.—19, Amratolla Street, Calcutta.  
 Keshowjee & Co.—3, Pollock Street, Calcutta.  
 Khandelwal Bros. Pvt. Ltd.—33, Netaji Subhas Road, Calcutta.  
 Krishna Tea Co.—72, Canning Street, Calcutta.  
 Krishna Trading Co.—14/2, Old China Bazar Street, R. No. 220-221, 3rd Floor, Calcutta.  
 Lokumal Lilaram & Co. Pvt. Ltd.—44-45, Ezra Street, Calcutta.  
 M. A. M. Kashani & Sons.—17, Mangoe Lane, Calcutta.  
 M. K. Sinha & Co.—22, Swallow Lane, 3rd Floor, Calcutta.  
 Madhu Jayanti Pvt. Ltd.—13, Pollock Street, Calcutta 1.  
 Maganlal & Co.—2, Portuguese Church Street, Calcutta.  
 Mahavir & Co.—54, Ezra Street, Calcutta.  
 Majumdar Bros.—9, Clive Row, Calcutta.  
 Orphan Tea Co.—18, Raja Woodmunt Street, Calcutta.  
 Parmanand Deepchand Hinduja.—1, Motilal Street, Calcutta.  
 Pararam Parumal & Co.—4, Ram Kumar Rakhit Lane, Calcutta.  
 Periwai Tea Co.—13, Narain Prasad Babu Lane, Calcutta.  
 Phoenix Tea Co.—12-B, Netaji Subhas Road, Calcutta.  
 Pioneer Agency.—167, Old China Bazar Street, Calcutta.  
 Power Farming Pvt. Ltd.—165, Lower Chitpur Road, Calcutta.  
 Pranjivan & Co.—14-2, Old China Bazar Street, R. No. 203, 3rd Floor, Calcutta.  
 Purushottam Umedbhai & Co.—55, Canning Street, G. Block, Calcutta.



Ramanand Kishanchand.—25, Burtolia Street, Calcutta.  
 S. C. Sanyal & Co. Pvt. Ltd.—11, British Indian Street, Calcutta.  
 Shivson Tea Trading Co.—5/2, Govind Dhar Lane, Calcutta.  
 South India Trading Co.—3, Ram Kumar Rakhit Lane, Ground Floor, Calcutta.  
 Srinath Bajaj.—178, Mahatma Gandhi Road, Calcutta 7.  
 Sureschchandra & Co.—10, Jackson Lane, Calcutta.  
 Suresh Kumar & Co.—14/2, Old China Bazar Street, Calcutta 1.  
 Tandon Brothers.—3, Sukhlal Jahuri Lane, Calcutta 7.  
 Tea Marketing Co. of India Pvt. Ltd.—161-1, Harrison Road, R. No. 55, Calcutta.

### TEXTILE ACCESSORIES

A. C. Roy.—41-1, Belilios Lane, Howrah.  
 Bharat Industries Corpn. Ltd.—88, Sambhu Halder Lane, Salkia Howrah Dist.  
 Bharat Textiles Co.—176, Cross Street, Calcutta 7.  
 Bengal Textile & Engg. Co.—40-1, Strand Road, Calcutta 1.  
 D. K. Dass & Co. Pvt. Ltd.—233, Belilios Road, Howrah.  
 Fakirchand Dass Mistry & Sons Pvt. Ltd.—143 & 144, Belilios Road, Howrah.  
 Indian Healds, Reeds & Hosiery Mfg. Co. Ltd.—42, Chowringhee Road, Calcutta.  
 Machine & Mill Stores Corpn. Pvt. Ltd.—68-D, Netaji Subhas Road, Calcutta 1.  
 Mondal & Karar Co.—177-1, Belilios Road, Howrah.  
 New Bengal Engineering Works.—75, Belilios Road, Howrah.  
 New India Mercantile Co. Pvt. Ltd.—8, India Exchange Place, Calcutta 1.  
 N. R. Ghosh & Co. Ltd.—2, Canal East Road, Calcutta.  
 Orient Textile Engineers Ltd.—24, Netaji Subhas Road, Calcutta 1.  
 Paul's Engineering Co.—207, Belilios Road, Howrah; P-7, Natabar Pant Road, Dassnagar.  
 Swastik Textile Trading Co. Pvt. Ltd.—23, Motilal Heerabhai Market, Calcutta.  
 Textile Machinery Corpn. Ltd.—8, India Exchange Place, Calcutta.

### TEXTILE AUXILIARIES MFRS.

C. DOCTOR & CO. PRIVATE LTD.—(Estd. 1915), 286, Bipin Behari Ganguly Street, Calcutta-12; Grams: "DOCTOR-CO"; Humidification & Ventilation Engineers and Textile Store Suppliers.

### TIMBER MERCHANTS

NORTH BIHAR SAW MILLS.—For any size of Seasoned Pine, Mango, Semul or Plywood Packing Cases, Crates, Barrels, Discs or Planks; Quality and deliveries guaranteed; P. C. Road—Chetia, Calcutta-27; Phone: 453624 & 457639.

### TIN BOX MANUFACTURERS

Associated Metal Industries of India Ltd.—16, Mangoe Lane, Calcutta 1.  
 Bengal Tin Box Mfg. Co. Pvt. Ltd.—1, Jadu Mitter Lane, Calcutta 4.  
 Calcutta Tin Factory.—14-2, Nirode Behary Mullick Road, Calcutta 6.  
 Containers & Closures Ltd.—2, Fairlie Place, Calcutta 1.  
 D. G. Industries Pvt. Ltd.—171, Prince Anwar Shah Road, Calcutta 33.  
 Dhur Tin Factory.—1, Sarat Ch. Dur Road, Barnagore, Calcutta 36.  
 Ganga Tin Factory.—5, Raja Rajkissen Street, Calcutta 6.  
 Ganpatray Ramnarain & Co.—107-A, Raja Dinendra Street, Calcutta 6.  
 Hind Tin Industries.—6, Jadulal Mullick Road, Calcutta 7.  
 India Toy & Metal Works Pvt. Ltd.—1-C, Raja Kali Kissen Lane, Calcutta 5.  
 Indian Tin Box & Metal Works P. Ltd.—137-A, Jessore Road, Calcutta 28.  
 The Metal Box Company of India Ltd.—Head Office: Barlow House, 59C, Chowringhee Road, Calcutta 20.  
 Metal Press Works Ltd.—3, Jagmohan Mullick Lane, Calcutta 7.  
 Metalwares & Printing Works.—243, Upper Circular Road, Calcutta 6.  
 Moitra Industries.—8/1A, Sarkar Byelane, Calcutta 7.  
 National Sheet & Metal Works Pvt. Ltd.—36-A, Sahitya Parishad Street, Calcutta 6.

### TINPLATE FABRICATORS

Balgopaldas Iron & Steel Co. Ltd.—5, Gopal Doctor Road, Kidderpore, Calcutta.  
 Bengal Tin Box Mfg. Co. Ltd.—1, Jadu Mitra Lane, Calcutta 4.  
 Calcutta Tin Factory.—14/2, Nirode Behary Mullick Road, Calcutta 6.  
 Colour Printing & Hollow Wares Ltd.—243, Upper Circular Road, Calcutta 6.  
 Containers & Closures Ltd.—2, Fairlie Place, Calcutta 1.  
 Containers (India) Pvt. Ltd.—18, G. C. Ghose Road, Calcutta 37.  
 Crown Cork Mfg. Co.—1, Umakanto Sen Lane, Calcutta 30.  
 D. G. Industries Pvt. Ltd.—171, Prince Anwarshah Road, Calcutta 33.  
 Gange Tin Factory.—5, Raja Rajkissen Street, Calcutta.

Hind Galvanising & Engineering Co. Pvt. Ltd.—11, Golo Road, Howrah.  
 Hind Tin Industries.—6, Jadulal Mullick Road, Calcutta 7.  
 Hindustan Metal Products Syndicate.—243, Upper Circular Road Calcutta 6.  
 Kamala Engineering Works.—124, Barrackpore Trunk Road Calcutta 35.  
 Kohinoor Mfg. Corpn. Pvt. Ltd.—5/1, Rosemare Lane, Howrah.  
 Metal Seamers & Printers Ltd.—81/3, Harish Chatterjee Street, Calcutta 25.  
 Metal & Tin Box Co. (I) Pvt. Ltd.—233, Gopal Lal Tagore Road, Baranagore, Calcutta 36.  
 Metalwares & Printing Works.—6, Jadulal Mullick Road, Calcutta 6.  
 Metro Engineering Works Ltd.—38-A, Kansari Pada Road, Calcutta 25.  
 M. L. Dey & Co.—9, In Har Cross 1st Lane, Calcutta 12.  
 National Alloy & Metal Works Ltd.—17, Nabin Chandra Das Lane, Baranagore, Calcutta 36.  
 National Sheet & Metal Works Ltd.—36-A, Sahitya Parishad Street, Calcutta.  
 Neo Metal Pvt. Ltd.—234, Gopal Lal Tagore Road, Calcutta 36.  
 Sheet Metal Products.—34-B, Ratu Sarkar Lane, Calcutta 7.  
 Shyamnagar Tin Factory Pvt. Ltd.—62, Sree Nagendra Nath Road, Satgachi, Dum Dum, Calcutta.  
 Sree Gopal Tin Factory.—109-B, Raja Dinendra Street, Calcutta 4.  
 Tin Plate Co. of India Pvt. Ltd.—4, Bankshall Street, Calcutta.

### TIN PRINTERS

METAL PRINTERS CO., THE.—Manufacturers of Metal Posters, Calendars, Decorated Containers, Trays, Toys, Clock Dials etc., 14, Princep Street, Calcutta-13; Phone: 234593.

### TOILETRIES

BENGAL CHEMICAL & PHARMACEUTICAL WORKS LTD.—6, Ganesh Chunder Avenue, Calcutta 13; Pharmaceuticals, Heavy and Fine Chemicals, High Class Toilet Products, Coal Tar Distillation Products, Fire Extinguishers, Printing Inks, Driers, etc., Branch Offices: Bombay & Kanpur.

### TOOL MANUFACTURERS & DEALERS

BHADURY SEN & CO. PRIVATE LTD.—Dealers of Portable Electric Tools, Cables, Wires, Welding Cables, Grinding Wheels, Mill Stores & Accessories; Also undertake Manufacturing Job as per drawing and Specification; 135, Biplabi Rash Behari Bose Road, Calcutta-1; Phone: 221360.

MUKERJI & SHAH.—36, Panditia Road, Calcutta-29; Manufacturers of Pneumatic Chisel, Riveting Snap, Moil Point, Spare Parts for Riveting Hammer, Chipping Hammer, Paying Breaker, Rock Drill etc., Phones: 463820, 464416 & 460194.

SUBOL DUTT & SONS PRIVATE LTD.—Accredited Dealers of 'Wolf' Portable Electric Tools; Also Importers and Manufacturers of Tools for all trades; Subol Dutt Bldg., 13, Brabourne Road, Calcutta-1; Phones: 222122, 222123, 223161.

### TOOL, ALLOY & SPECIAL STEEL

BATHIJA CORPORATION.—(House of Special Steels), Steel from all Global Sources, all purpose, all sections and all Specifications; 16, India Exchange Place, Calcutta-1; Phone: 220973, 220694 & 358573; Grams: "TITANIUM".

UNITED STEEL & BEARING CO.—(House of Metallurgy), Importers and Stockists of Tool, Alloy and Special Steels in High Speed, Die, Punch, Hot and Cold Working, Heat Resisting and Alloyed Constructional Categories; 5B, Clive Ghat Street, Calcutta-1; Phones: 223973, 333137 & 332268.

### TOY MANUFACTURERS & DEALERS

Eastern Toy Co.—14-2, Clive Row, Calcutta 1.  
 G. C. Dey & Co.—4, Raja Radha Kanta Deb Lane, Calcutta 5.  
 India Toy & Metal Works Ltd.—1-C, Raja Kali Kissen Lane, Calcutta 5.  
 India's Hobby Centre.—1-A, Russel Street, Calcutta 16.  
 Pradip Plastic Moulders.—12-B, Lower Chitpore Road, North Block, Calcutta 1.

### TRACTORS & SPARE PARTS

Amalgamated Universal Agencies (Calcutta).—71, Canning Street, Calcutta 1.  
 Associated Exports Imports Corporation.—8-B, Lal Bazar Street, Calcutta 1.  
 Components & Machinery Corpn.—Mercantile Bldg., Lal Bazar, Calcutta 1.  
 Gopal & Kumar.—14, Netaji Subhas Road, Calcutta 1.  
 Hind Enterprises.—4, Mission Row, Calcutta 1.



Jayems Engineering Co.—22, Brabourne Road, Calcutta.  
 Mechanical Engineering Co. Ltd.—25, Swallow Lane, Calcutta.  
 Marshall, Sons & Co. (India) Ltd.—33/1, Netaji Subhas Road  
 (P.O. Box No. 22), Calcutta.  
 Tractors (India) Ltd.—P. Box 323, Calcutta.  
 United Provinces Commercial Corporation.—6, Ganesh Chandra  
 Avenue, Calcutta 13.

### TRANSFORMERS

Associated Electrical Industries Mfg. Co. Ltd.—1, Taratolla Road,  
 Garden Reach, Calcutta.  
 Electric Construction & Equipment Co. Ltd.—35, Chittaranjan  
 Avenue, Calcutta.

ELVOC PRIVATE LTD.—Manufacturers of Transformers for  
 lighting, Distributor, Power, Telephone, Fitter, Neon Signs,  
 Audio, Lovolite, Welding and any light Electrical purpose;  
 36, Panditia Road, Calcutta-29; Phones: 463820, 464416 &  
 460194.

E. S. & E. CO. PRIVATE LTD.—Manufacturers of Transformer  
 for every purpose, Distribution, Power, Lighting, Mining,  
 Safety Instruments, High Voltage and High Current Testing;  
 59/6, Christopher Road, Calcutta-46; Phone: 445540.

General Electric Co. of India (Mfg.) Ltd.—58, Taratolla Road,  
 Garden Reach, Calcutta.

Gupta Engineering Co.—29, Ganesh Ch. Avenue, Calcutta 13.

Hindusthan Electric Co. Ltd.—184, J. N. Mukherjee Road, Salkia,  
 Howrah.

India Electric Works Ltd.—Diamond Harbour Road, Behala P.O.,  
 Calcutta.

INDIA RADIO MANUFACTURING CO.—'Bani' quality  
 Transformers for Electronic Equipments made to order  
 up-to 10 KVA., Suppliers to Government Educational and  
 Research Institutions; 18, Chandni Chowk Street, Calcutta-  
 13; Phone: 235925.

Indian Electric Transformers Co.—28, Waterloo Street, Calcutta.

### TRAVEL AGENTS

Jeena & Co.—Great Eastern Hotel, 29, Waterloo Street, Calcutta 1.

MERCURY TRAVELS (INDIA) PRIVATE LTD.—Head Office:  
 Oberoi Grand Hotel, Chowringhee, Calcutta-13; Phone:  
 236051 (3 lines); Branches: Oberoi Imperial Hotel, New  
 Delhi; Phone: 43001 (3 lines); 70, Forbes Street, Rampart  
 Row Corner, Fort, Bombay; Phone: 253948 (3 lines);  
 Ashoka Hotel, Antheon Road, Egmore, Madras-8; Phone:  
 85095; Oberoi Palace Hotel, Srinagar, Kashmir; Phone:  
 1045 Srinagar-19; National Motors Bldg., Mirza Ismail  
 Road, Jaipur, Phone: 77284. Grams: "MERCOTRAVEL".

N. JAMNADAS & CO.—8, Lyons Range Calcutta 1; Phone:  
 22-3264; Grams: "ENJAYTOURS." H.O.: Bombay; Branch:  
 New Delhi. Travel Agents & Tour Operators Recognised  
 by the Government of India; Reservation by Air, Sea and  
 Rail.

ORIENT EXPRESS CO. PRIVATE LTD., THE.—National  
 Tobacco Building, 1 & 2 old Court House Corner, Calcutta;  
 Phone: 22-1911 & 22-1358, Grams: "OREXPRESO".

Oriental Travel Service.—95A, Chittaranjan Ave., Calcutta 12.

### TUBES AND FITTINGS

Commercial Import & Export Pvt. Ltd.—40, Strand Road, Calcutta 1.

Indian Tube Co. Ltd.—41, Chowringhee Road, Calcutta 16.

J. M. Sain & Sons.—110, College Street, Calcutta 12.

STEWARTS AND LLOYDS OF INDIA LTD.—Supply and  
 Installation of fabricated Pipe-work of all Sizes for Gas,  
 Water, Steam and Compressed Air etc., Casing for Tube  
 Wells, Oil Country goods, Coil for Refrigeration and other  
 Industrial uses, Tubular Structures for buildings, Pipe  
 Bridges and Trusses, Pulleys, Stillages and Trolleys for  
 Materials handling; Head Office: 41, Chowringhee Road,  
 Calcutta-16; Works: 39, Hide Road, Kidderpore, Calcutta-23;  
 Phones: 442311 (12 Lines), 453515 (3 Lines) Works:

### TUBE WELLS

Basak & Co.—P. 9, Chidam Mody Lane, Calcutta 6.

Bharat Tubewell Co. P. Ltd.—118-A, Chittaranjan Ave., Calcutta 7.

Calcutta Constructors Pvt. Ltd.—34, Strand Road, Calcutta 1.

Commercial Import Export Pvt. Ltd.—40, Strand Road, Calcutta 1.

Economic Trading Co.—64, Bowbazar Street, Calcutta 12.

Expert Tubewell Co.—129-1, Bowbazar Street, Calcutta 12.

Imperial Tubewell Co.—161-1, Harrison Road, Calcutta 7.

India Water Supply Corporation.—203-1, Harrison Road, Calcutta 1.

Pioneer Tubewell Industries Pvt. Ltd.—Raja Subodh Mullick Square,  
 Calcutta 13.

S. D. M. Syndicate.—219, Bowbazar Street, Calcutta.

### TYPEWRITERS & ACCESSORIES

J. K. Business Machines Ltd.—2, Mangoe Lane, Calcutta 1.

PRECISION TYPEWRITER CO.—(Royal Specialists in India),  
 Dealers in Office Machines and Equipments, Repairs of  
 Typewriters, Calculators and Duplicators etc., Available  
 for sale and hire; 13/1, Ultadanga Road, Calcutta-4; Phone:  
 550134.

REMINGTON RAND OF INDIA LTD.—Manufacturers of  
 Remington Rand Business Equipment; Remington House,  
 3, Council House Street, Calcutta; Phone: 237401 (10 Lines),  
 Grams: "REMINGTONS".

### UMBRELLA & UMBRELLA FITTINGS

Fairway Trading Co.—40-A, Armenian Street, Calcutta 1.

India Tin Box & Metal Industries P. Ltd.—137-A, Jessore Road,  
 Calcutta 28.

Keshrimull Kundanmull's Umbrella Factory.—17, Grand Trunk  
 Road, Howrah.

Lilloah Engineering Industry.—Station Road, Lilloah P.O., Bally,  
 Howrah Dist.

Mohendra Lal Dutt & Sons.—49-B, Harrison Road, Calcutta 9.

National Metal Industries Ltd.—1, Bagzala Road, Dum Dum, 24  
 Parganas.

Sheik Elahi Bux Engineering Works.—55, Dr. Abani Dutt Road,  
 Salkia P.O., Howrah Dist.

### UMBRELLA RIB MANUFACTURERS

Amar Industries.—243, Chittaranjan Avenue, Calcutta 6.

Atta's Iron Foundry.—171, Grand Trunk Road, Salkia, Howrah.

Baldeoram Saligram Pvt. Ltd.—61, Strand Road, Calcutta 1.

Calcutta Rib Mfg. Co.—74, Cross Street, Calcutta 7.

Hind Engineering Works.—20-4-1, Burra Shitla Main Road,  
 Calcutta 38.

Kalyan Engineering Co.—33/1, Tiljala Road, Calcutta 17.

Keshrimull Kundanmull.—46, Strand Road, Calcutta 7.

Lilloah Engg. Industries.—2, Portuguese Church Street, Calcutta.

Madan Engg. Works.—2, Raja Woodmunt Street, Calcutta.

Navbharat Engg. Co.—13, Bethladanga Ist Lane, Calcutta 39.

### UTENSILS

Aluminium Corpn. of India Ltd.—Jaykaynagar, Near Asansol.

Bharat Sheet Metal Industries Ltd.—22, Beerpara Lane, Calcutta.

Bishnupur Metal Corpn. Ltd.—14, G. T. Road, Belur, Howrah Dist.

Crown Aluminium Works.—G. T. Road, Belur, Howrah Dist.

Dhur Galvanizing Works.—92, Ultadanga Main Road, Calcutta.

Empire Soap & Aluminium Works.—33, Mahinath Poral Lane,  
 Salkia P.O., Howrah Dist.

Jestmull Jalchandlall.—Nandan Konon, Station Road, Lilloah,  
 Howrah Dist.

Kamala Factory (1932).—13-3, Pathuria Ghat, Calcutta.

Sundsons Ltd.—29, Jessore Road, Calcutta.

Union Metal Works.—169, Andul Road, Howrah.

### V-BELTS

BOSE INDUSTRIES PRIVATE LTD.—32, Shib Chandra Chatter-  
 jee Street, Belur (Howrah); Manufacturers of Famous  
 "VETO" Link V-Belts of all Sizes and angles; Phone:  
 664871 (3 Lines).

### VACUUM EQUIPMENTS

ASSOCIATED INSTRUMENT MFRS. (INDIA) PRIVATE LTD.—  
 B-5, Gillander House, Calcutta; Phone: 223304, Grams:  
 "AIMIL".

### VEGETABLE PRODUCTS MANUFACTURERS

Bharat Vegetable Products Ltd.—117, Harrison Road, Calcutta 7.

Hindusthan Development Corpn. Ltd.—Hindusthan Bldgs., 4,  
 Chittaranjan Avenue, Calcutta.

Hindustan Lever Ltd.—Ilaco House, 1 & 3, Brabourne Road,  
 Calcutta.

Hindustan Vegetable Products Ltd.—47, Zakaria Street, Calcutta 7.

Kusum Products Ltd.—9, Brabourne Road, Calcutta.

Sisir Oil Industries, Ltd.—Belgharia, 24 Parganas.

Swaika Vanaspati Products Ltd.—Pollock House, 18-B, Brabourne  
 Road, Calcutta.

Tungabhadra Industries Ltd.—India Exchange, Royal Exchange  
 Place, Calcutta 1.

United Vegetable Mfrs. Ltd.—24, Finlay Road, Bishra, Hooghly.

Vanaspati Factory, No. 1.—Station Road, Tollygunge, Calcutta.

Vegetable Products Ltd.—Belgharia, 24 Parganas Dist.



## VETERINARY & POULTRY EQUIPMENTS

**CIRUGIA DE LUX PRIVATE LTD.**—Manufacturers of Veterinary Surgical Instruments, Livestock Breeding and Sterility Equipment, Poultry Incubators and Brooders, Microscopes; 24, Chowringhee Road, Calcutta-13; Phone: 235552; Branches: Bombay Mutual Annexe Bldgs., 4th Floor, 17, Gunbow Street, Fort, Bombay-1; 'Saketa', 1/30, Pantheon Road, Madras-8; H/89, New Delhi South Extension Part 1, Ring Road, New Delhi-3.

## VICE MANUFACTURERS

India Machinery Co. Ltd.—29, Strand Road, Calcutta 1.  
Indian Supercraft Industries.—21-A, Canning Street, Calcutta 1.  
International Mechanical & Electrical Works.—5, Braunfield Row, Alipur, Calcutta 27.  
S. P. Guchait & Sons.—2, Madhusudan Pal Chowdhury Lane, Bellilios Road, Howrah.  
Subol Dutt & Sons P. Ltd.—13, Brabourne Road, Calcutta 1.  
W. Leslie & Co.—B-5, Clive Buildings, N. Subhas Road, Calcutta 1.

## WATCHES & CLOCKS IMPORTERS & DEALERS

Abrecht & Co.—143, Radha Bazar Street, Calcutta.  
A. H. Watch Co.—107, Harrison Road, Calcutta 7.  
Allana Watch Co.—26A, Lindsay Street, Calcutta.  
Anglo Swiss Watch Co.—6 and 7, Dalhousie Square, Calcutta.  
Arora Watch Co.—170/1, Harrison Road, Calcutta.  
Ashok Watch Co.—15, Radhabazar Street, Calcutta.  
Comrade Watch Co.—10, Radhabazar Street, Calcutta 1.  
Calcutta Watch Co.—19, S. P. Mukherjee Road, Calcutta 23.  
Capital Watch Co.—12, Chowringhee, Calcutta 13.  
Dutex Clock Co.—29, Weston Street, Calcutta.  
East Indian Watch Co.—P-223, State Bank Road, Calcutta.  
Elgin Watch Co.—36, Brabourne Road, Calcutta.  
Empire Watch Co.—5, Radhabazar Street, Calcutta.  
Everest Watch Co.—20, Dharamtola Street, Calcutta.  
Favourite Watch Co.—1-A, Bankim Chatterjee Street, Calcutta.  
Favre Leuba & Co. P. Ltd.—Norton Buildings, Calcutta 1.  
Glamore Watch Co.—12S, S. Hogg Mark. Street, Calcutta.  
Great Western & Eastern Watch Co.—179, Dharamtola Street, Calcutta.  
H. M. Watch.—148, Radhabazar Street, Calcutta.  
Imperial Watch Co.—154, Radhabazar Street, Calcutta.  
India Watch Co.—73, Harrison Road, Calcutta.  
Indian Watch Co.—143, Radhabazar Street, Calcutta.  
Lorenzo Watch Co.—P/36, Radha Bazar Street, Calcutta 1.  
National Watch Co.—7/1, Dharamtola Street, Calcutta.  
New City Watch Co.—19/1, U. Circular Road, Calcutta.  
New Singer Watch Co.—160, Harrison Road, Calcutta.  
New Standard Watch Co.—152, Radhabazar Street, Calcutta.  
Noble Watch Co.—P-36, Radhabazar Street, Calcutta.  
Omega Watch Co.—5D, Cliva Building, Calcutta.  
Pioneer Watch Co.—318-A, Chittaranjan Avenue, Calcutta.  
Popular Watch Co.—105/1, S. N. Banerjee Road, Calcutta.  
Rolex Watch Co.—16/5, Chowringhee, Calcutta.  
S. A. Watch Co.—14, Radhabazar Street, Calcutta.  
Saini Watch Co.—129, Radhabazar Street, Calcutta.  
Swiss Watch Co.—84-B, D. H. Road, Calcutta.  
Swiss Record Watch Co.—86-2, D. H. Road, Calcutta.  
Tissot Watch Co.—D-5, Clive Buildings, Calcutta.  
Victoria Watch Co.—170, Harrison Road, Calcutta.  
Wallton Watch Co.—12, Chowringhee, Calcutta.  
Watson Watch Co.—7, Radhabazar Street, Calcutta.  
West Watch Co.—109, Netaji Subhas Road, Calcutta.

## WATER METERS

**KAYCEE INDUSTRIES LTD.**—2, Woodburn Court, 10, Elgin Road, Calcutta; Agents for Hind Rectifiers Ltd., Manufacturers of Selenium and Silicon Semiconductors, Electroplating Rectifiers, Battery Chargers, Silicon Power Plants for Electro-Chemical Industries, 'KAYCEE' Rotary, Toggle, Heat Control and Air-Conditioner Switches, 'Kaycee' Domestic and Bulk type Water Meters. Head Office: Kamani Chambers, Nicol Road, Ballard Estate, Bombay; Phone: 263521, Grams: "TURNRITE"; Branches: Delhi and Kanpur.

## WATERPROOF AND WATERPROOFING PRODUCTS

**ADHESIVES & ALLIED PRODUCTS.**—Manufacturers of Roof Water-proofing Compounds, Bitumen Emulsions, Expansion Jointings, Anti Corrosive Black Paint and Cold Sticker, 12, Netaji Subhas Road, Calcutta-1; Phone: 224841 & 242429.  
**Chemico Cement Waterproofing Industries P. Ltd.**—16, India Exchange Place, Calcutta 1.  
**Lloyd Bitumen Products.**—4-A, Royd Street, Calcutta 16.  
**Structural Waterproofing Co. P. Ltd.**, 21/1, Dover Road, Calcutta 19.

## WATER WORKS ACCESSORIES

Annapurna Metal Works.—8, Ashu Biswas Road, Calcutta 25.  
Associated Water Softeners.—7, Swallow Lane, Calcutta 1.  
Bengal Machine Tool Works.—112, Narasingha Dutta Road, Howrah.  
Bhutoria Engineering Works.—56, N.S.C. Bose Road, Calcutta 1.  
B. N. Pachal & Sons P. Ltd.—208, Bellilios Road, Howrah.  
D. H. Brothers P. Ltd.—138, Canning Street, Calcutta 1.  
East India Agency & Engineering Co.—63-1, Banaras Road, Howrah.  
Garg & Sons.—138, Canning Street, Calcutta 1.  
Industrial Engineering Works.—149, Bellilios Road, Howrah.  
J. N. Dass & Co.—167, Bellilios Road, Howrah.  
Reliance Engineering Works.—233, Bellilios Road, Howrah.

## WELDING SETS & ACCESSORIES

Associated Electrical Industries (India) Private Ltd.—Crown House, 6, Mission Row, Calcutta 1.  
Bosco—36, Strand Road, Calcutta 1.

**BHABATARAN SARKAR & SONS**, Stockists of Spring Steel wire, Piano wire, Stainless Steel wire, and all kinds of Black and G. I. wires and Spring steel strips; 62/1/A, Netaji Subhas Road, Calcutta-1; Phone: 331807.

**CALCUTTA WIRE WORKS.**—Manufacturers of all types of Bronze, M.S. Copper Coated Rods, Super Silicon Gas Welding Rods etc., 6, Tilqala Road, Calcutta-46; Phones: 447131-7132 & 441427; Showroom: 62/1/A, Netaji Subhas Road, Calcutta-1; Phone: 339201.

H. C. Giddings Pvt. Ltd.—B-1, Hide Road, Kidderpore, Calcutta.  
Hind Enterprises.—4, Mission Row, Calcutta 1.  
Indian Oxygen Ltd.—48-1, Diamond Harbour Road, Calcutta 27.

**INDUSTRIAL GASES LTD., THE.**—15, Ganesh Chandra Avenue, P.O. Box 853, Calcutta 1; Phones: 233280, 239005, 239681, 237985 & 239981; Manufacturers and Suppliers of all kinds of Welding & Cutting machines and equipment; Automatic, Resistance, Spot, Seam, Stud & Flash, Inert-Gas Shielded Arc, Submerged arc, Cutting Machines, Blowpipes, Regulators, Acetylene generators, Electrodes, Rods, Wires, Electrode-Holders etc.

J. N. Samanto & Co. Pvt. Ltd.—4/5, Grand Trunk Road, Howrah.

**K. K. TRADERS.**—Manufacturers and Stockists of all sorts of Welding Accessories such as Electrodes, Welding Rods, Cables, Screen Glasses, Electrode Holders, Gloves, Spark Lighters, Goggles etc., 5, Mission Row, Calcutta-1; Phone: 239844.

Philips India Ltd.—31, Chowringhee Road, Calcutta 16.

**POONAM TRADING CO.**—Leading Stockists of Welding Electrodes, Cast Iron, Mechanical and Non-mechanical Mild Steel, Stainless and Manganese Steel Bronze and Hard facing electrodes Stellite Rods etc., 133/C, Dharamtola Street, Calcutta 13; Phone: 245337.

**RELIABLE TRADING AGENCY.**—Dealers in all kinds of Gas & Electric ARC welding Requisites and Manufacturers of Electrode Holders, Helmets, Shields, Gloves, Aprons and other safety requisites; 23, Canning Street, Calcutta-1; Phones: 224774, 222277, 228562 and 348223.

Saru Smelting & Refining Corpn. Private Ltd.—161/1, Mahatma Gandhi Road, Calcutta-7.

**SUR IRON & STEEL CO. PRIVATE LTD.**—Manufacturers of 'Sur-Arc' Welding Transformers, Single and Multi-operator Welding Sets, D.C. Rectifier Welding Units, Diesel Welding Generators; 15, Convent Road, Calcutta-14; Phone: 241307 (2 Lines).

**VISHWA BHARATI TRADING CO.**—G.P.O. Box 2628, Calcutta-1; Phone: 336680, H.O. 45, Mint Road, P.B. 1052, Fort, Bombay 1; Phone: 266371 (all depts.). Grams: "VIBHACO"; Manufacturers and Stockists of Electric & Gas Welding Sets, Welding Accessories and Gas Welding Rods, Fluxes, Welding Transformers, Spot Welders, Soldering and Brazing Equipments and all metal Menders Requirements; Industrial safety Equipments, Industrial goggles, Gloves and Respirators etc.

## WEIGHING MACHINES & SCALES MANUFACTURERS & DEALERS

Asiatic Machinery Corpn. Pvt. Ltd.—10-1, Kallash Chandra Lane, Howrah.

Avenue Weighing Scales Co.—135, Netaji Subhas Road, Howrah.

Avery Co. of India Pvt. Ltd.—282, Waterloo Street, Calcutta 1.

Barnagore Scale Mfg. Co.—21, Bholanath Nath Street, Barnagore, Calcutta 36.

Bharat Weighing Scales and Engineering Syndicate.—75-1, Kala Chand Nundy Lane, Howrah.

Bharati Scales & Engineering Co.—4-1, Haldarpara Lane, Howrah.

Bhupendra Das & Brothers.—84-A, Netaji Subhas Road, Calcutta 1.

Crown Weighing Scales Co.—76, Narasinha Dutta Road, Howrah.



D. Saro & Co.—16, Biswas Nursery Lane, Calcutta 10.  
 Dey's Weighing Scales & Engineering Works.—233, Bellillos Road, Howrah.  
 Eastern Scales P. Ltd.—12, Guru Saday Road, Calcutta 10.  
 Girish Chandra Ghosh.—58, Clive Street, Calcutta 7.  
 Hindustan Scale Corporation.—56, Netaji Subhas Road, Calcutta 1.  
 India Machinery Co. Ltd.—29, Strand Road, Calcutta 1.  
 India Weighing Scales & Engg. Co. Pvt. Ltd.—233, Bellillos Road, Howrah.  
 K. P. Das & Co. Pvt. Ltd.—43, Circular Road, Howrah.  
 M. C. Dharma Engineering Works.—38, Kamarpara Lane, Barnagore, Calcutta 36.  
 O. K. Weighers (I) Ltd.—15, Madhusudan Pal Chowdhury Lane, Howrah.  
 Satish Chandra Das & Co.—113, Khangrapatti Street, Calcutta 1.  
 W. B. Scales Co.—10, Kailash Ch. Chandra Lane, Santragachi, Howrah.  
 Woomacharan Karmakar.—208, M. Gandhi Road, Calcutta 7.

### WINE, SPIRIT & BEER MERCHANTS

Calcutta Foreign Liquor Trading Co.—5, Dharamtolla Street, Calcutta.  
 Fairmacs Trading Co.—33, Bowbazar Street, Calcutta.  
 Grahams Trading Co. (India) Pvt. Ltd.—6, Lyons Range, Calcutta.  
 Great Eastern Stores Pvt. Ltd.—30 Chowringhee Road, Calcutta.  
 Herbertsons Pvt. Ltd.—5, Dalhousie Square, Calcutta.  
 M. C. Shaw.—125, Lower Circular Road, Calcutta.  
 Phipson & Co. Pvt. Ltd.—6, Old Court House Street, Calcutta.  
 Plummer Brothers & Co.—5-6, Fancy Lane, Calcutta.  
 R. D. & Sons Pvt. Ltd.—12, Hare Street, Calcutta.  
 Shaw Wallace & Co. Ltd.—4, Bankshall Street, Calcutta.  
 Spencer & Co. Ltd.—32, Chowringhee Road, Calcutta.  
 Turner Morrison & Co. Pvt. Ltd.—6, Lyons Range, Calcutta.

### WIRE NETTING (WELDED MESH)

Addison Wire Products Corporation.—71-A, Netaji Subhas Road, Calcutta 1.  
 Asian Agencies.—91, N. Subhas Road, Calcutta 1.  
 Bengal Wire Netting & Engg. Works.—71-A, N. Subhas Road, Calcutta.  
 Bengal Wire Netting Syndicate.—109, N. Subhas Road, Calcutta 1.  
 Bharat Engineers & Traders.—65/1, Maharshi Debendra Road, Calcutta 6.  
 Bharat Wire Netting Factory.—113, Netaji Subhas Road, Calcutta 1.  
 Biswas & Sons, R.P.—1-11, Barwaritala Road, Bellighata, Calcutta 10.  
 B. K. Naik & Bros. Ltd.—141, Netaji Subhas Road, Calcutta 1.  
 Calcutta Netting Works.—123 & 124, Chandni Chowk, Calcutta.  
 Dutt Brothers & Co.—39, Wellington Street, Calcutta 12.  
 Gulraj Kedarnath.—180, Mahatma Gandhi Road, Calcutta 7.  
 Indian Steel & Wire Products Ltd.—7, Wellesley Place, Calcutta.  
 Indian Wire Netting Factory.—24, Sastitolla Road, Narkeldanga, Calcutta 11.  
 Indo-Commercial Stores.—77-1, Netaji Subhas Road, Calcutta.  
 International Wire Netting Stores.—62, Netaji Subhas Road, Calcutta 1.  
 Jain Wire Netting Stores.—62, Netaji Subhas Road, Calcutta 1.  
 Jeetmull Jaichandlall.—113, Netaji Subhas Road, Calcutta 1.  
 Jibon Krishnas Dey & Brothers.—109, Netaji Subhas Road, Calcutta 1.  
 Kamala Kanta Sain.—113, N. Subhas Road, Calcutta.  
 Kiran Wire-Netting Co.—18, Raja Woodmunt Street, Calcutta 1.  
 Motiram Agarwal & Co. Ltd.—137, Canning Street, Calcutta 1.  
 Naik & Co.—68-A, Netaji Subhas Road, Calcutta 1.  
 New Wire Netting Factory.—82, Netaji Subhas Road, Calcutta 1.  
 R. P. Biswas & Sons.—1/11, Barwaitala Road, Bellaghata, Calcutta 10.  
 S. Nayak & Brothers.—13-A, Mohesh Barick Lane, Calcutta 11.  
 Spinning Accessories P. Ltd.—Nawab Dilarjang Road, Cossipore, Calcutta.

United Supply Corporation.—113, N. Subhas Road, Calcutta.  
 Wire Products Agency.—109, N. Subhas Road, Calcutta.

### WIRE & WIRE PRODUCTS MANUFACTURERS & DEALERS

Asoke Wire Products Ltd.—34, Bentinck Street, Calcutta.  
 Bengal Sheet Metal Works.—26, Pollock Street, Calcutta.  
 Bengal Wire Nails Co. Ltd.—6, Tiljala Road, Calcutta.  
 BHABATARAN SARKAR & SONS.—Stockists of Spring Steel wire, Piano Wire, Stainless Steel wire and all kinds of Black and G.I. wires and Spring Steel Strips; 62/1A, Netaji Subhas Road, Calcutta-1; Phone: 331807; Grams: "PIANOSTEEL".  
 Bharat Steel and Wire Agency.—57, Clive Street, Calcutta.  
 CALCUTTA WIRE WORKS.—Manufacturers of all types of Wires, Copper, Copper Alloys, Aluminium, Zinc, Brass—Various types of Bronze and Mild Steel (H.B. and Annealed); 6, Tiljala Road, Calcutta-46; Phones: 447131-7131- and 441427; Showroom: 62/1A, Netaji Subhas Road, Calcutta-1; Phone: 339201.  
 Hind Wire Industries Ltd.—India Exchange, Calcutta 1.  
 Hindustan Hoops and Wire Products.—62-A, Netaji Subhas Road, Calcutta.  
 Howrah Wire Industries.—55, Canning Street, Calcutta 1.  
 Indian Steel and Wire Products Ltd.—7, Wellesley Place, Calcutta.  
 Indian Wire Nail Mfg. Co.—7-1-1, Benaras Road, Salkia, Howrah Dist.  
 Indian Woven Wire Manufacturing Co.—15, Sitala Tala Lane, Calcutta.  
 J. Dass & Co.—7-D, Gour Sunder Sett Lane, Calcutta.  
 Machinery Manufacturers.—243, Chittaranjan Avenue, Calcutta 6.  
 Mathew & Co.—5, Kasinath Dutt Road, Barnagore, Calcutta 36.  
 M. C. Mowjee & Co.—46, Ezra Street, Calcutta.  
 Nettlefolds of India Limited.—P-35, India Exchange Place Extension, Calcutta 1.  
 Nippon Steel Products Ltd.—181-B, Chittaranjan Avenue, Calcutta 6.  
 Saru Smelting & Refining Corpn. Private Ltd.—181/1, Mahatma Gandhi Road, Calcutta-7.  
 Standard Metal Co.—101, Netaji Subhas Road, Calcutta 1.  
 Ultra Engineering Co.—172-8, Madhusudan Pal Choudhury Lane, Howrah.  
 Variety Industrial Works.—1, Kundan Lane, Lillooah, Howrah.  
 Wire Products Agency.—109, Netaji Subhas Road, Calcutta.  
 W. Leslie & Co.—B-3, Gillander House, Netaji Subhas Road, Calcutta 1.

### WOOD AND TEXTILE PRESERVATIVES

Ascu Wood Products.—7-A, Elgin Road, Calcutta 20.  
 Gladstone Lyall & Co. Ltd.—4, Fairlie Place, Calcutta.  
 Shalimar Tar Products Ltd.—6, Lyons Range, Calcutta 1.  
 Standard Paint Works Pvt. Ltd.—44, Beadon Row, Calcutta 6.

### X-RAY & ELECTROMEDICAL EQUIPMENTS

Adair, Dutt & Co. (India) Pvt. Ltd.—5, Dalhousie Square East, Calcutta.  
 Associated Electrical Industries (India) Pvt. Ltd.—Crown House, 6, Mission Row, Calcutta.  
 General Electric Co. of India Pvt. Ltd.—Magnet House, Chittaranjan Avenue, Calcutta.  
 Phillips India Ltd.—'Phillips House', 7, Justice Chandra Madhab Road, Calcutta.  
 Picker International Corporation.—15-1, Stephen House, Dalhousie Square East, Calcutta.

### ZINC OXIDE MANUFACTURERS

Kamanl Metallic Oxides Pvt. Ltd.—30, Ganesh Chandra Avenue, Calcutta.  
 Pigments & Chemical Industries Pvt. Ltd.—32, Armenian Street, Calcutta.  
 Pigments & Chemical Products.—10, Armenian Street, Calcutta.



# STATES ADMINISTRATIVE PERSONNEL

## ANDHRA PRADESH

Hyderabad

### ADMINISTRATIVE PERSONNEL

#### Governor

PATTON A. THANU PILLAI.

Secretary to the Governor, Dilsukh Ram.

Private Secretary to the Governor : P. Kedu Nair.

#### Ministers

Chief Minister in charge of General Administration, Finance, Major Industries, Power, Irrigation, Law & Order and Tribal Welfare, K. Brahmananda Reddy.

Minister for Agriculture and Animal Husbandry, P. Thimma Reddy.

Minister for Home and Commercial Taxes, A. C. Subba Reddy.

Minister for Revenue, Civil Supplies and Rationing, V. B. Raju.

Minister for Panchayat Raj, Bureau of Economics and Fisheries, Thota Ramaswamy.

Minister for Buildings, Highways, Ports, Public Gardens and City Water Works, J. V. Narsinga Rao.

Minister for Education, T. V. Raghavulu.

Minister for Labour, Information and Publicity and Tourism, Konda Lakshman Babuji.

#### Ministers of State

Minister for Health, P. V. Narasimha Rao.

Minister for Industries, B. V. Gurumurthy.

Minister for Municipal Administration, Housing, Forests, Accommodation Control and Town Planning, Chenchu Rama Naidu.

Minister for Co-operation, Co-op. Sugar Factories, Development of Ayacut Under Nagarjuna Sagar and Tungabhadra Projects, Vijaya Bhaskara Reddy.

Minister for Religious Endowments, R. Ramalinga Raju.

Minister for Medium and Minor Irrigation, B. Siddha Reddy.

Minister for Excise and Prohibitions, V. Satyanarayana Rao.

Minister for Social Welfare, Arige Ramaswamy.

Minister for Planning, Economic Affairs, Commerce, Law and Courts, K. V. Narayana Reddy.

Minister for Prisons & Wakfs, Mohammed Ibrahim Ali.

#### Secretariat

Chief Secretary to Government, General Administration, K. N. Anantaraman, I.C.S.

Secretary to Government, Revenue Department, Vacant.

Secretary to Government, Home Department, S. A. Iyengar, I.C.S.

Secretary to Government, Finance Department, M. A. Abbasi, I.A.S.

Secretary to Government, Law Department, D. Suryanarayana Swamy.

Secretary to Government, Public Works Department, A. Krishnaswamy.

Jt. Secretary to Government, Planning Department, M. B. Shabbir.

Secretary to Government, Education Department, N. Ramesan.

Secretary to Government, Health, Housing & Municipal Administration Departments, K. B. Lal.

Secretary to Government, Industries Department, V. K. Rao, I.C.S.

Secretary to Government, Food and Agriculture Department, S. A. Quader.

Secretary to Government, Panchayati Raj Department, A. Krishnaswamy Ayyangar, I.A.S.

#### Heads of Departments

Director of Agriculture, Dr. T. V. Reddy.

Chief Conservator of Forests, P. S. Rao.

Director, Bureau of Economics and Statistics, D. Rangaramanujam.

Director of Public Instruction, M. V. Rajagopal.

Director of Higher Education, L. Bulliah.

Director of Industries and Commerce, B. Pratapa Reddy, I.A.S.

Inspector General of Police, A. K. K. Namblar, I.P.

Director of Public Health, Dr. Ghulam Ahmed.

Director of Medical Services, Dr. Mohd. Abdul Khader.

Director of Social Welfare, H. Ali Khan.

Commissioner of Police, Prahlad Singh.

Commissioner, Hindu Religious and Charitable Endowments (Administration), G. Narayan Chetty, I.A.S.

Director of Women's Welfare, Smt. S. Sitharamamma.

Commissioner of Labour, Bharatchand Khanna, I.A.S.

Inspector General of Prisons, C. B. Patil.

Registrar of Co-operative Societies, B. N. Raman.

Director of Technical Education, T. R. Das.

Director of Information and Public Relations, T. Ramachandra Rao.

Director of Fisheries, I. Rammohan Rao.

Director of Civil Supplies, M. Gopalakrishnan.

Director of Employment & Try., M. B. Raja Rao.

### HIGH COURT

(Hyderabad).

Chief Justice, Pingle Jagan Mohan Reddy.

Judges, Justice P. Basi Reddy; Justice N. Kumarayya; Justice G. Chandrasekhara Sastri; Justice H. Anantanarayana Ayyar, Justice K. V. L. Narasimham, Justice Sharfuddin Ahmed; Justice E. Venkatesam; Justice Gopal Rao Ekbote; Justice Mohamed Mirza; Justice M. Krishna Rao; Justice S. Obul Reddi (Addl.).

Advocate-General, B. V. Subrahmanyam.

Registrar, Y. Venkateswara Rao.

### SOUTH CENTRAL RAILWAY

(GENERAL MANAGER'S Office—Himmatnagar, SECUNDERABAD-25)

General Manager, D. N. Chopra.

Senior Deputy General Manager, C. R. Sule.

Deputy General Manager (General), G. F. J. Lobo.

Chief Personnel Officer, M. A. Uthappa.

Chief Engineer, M. Thomas Lee.

Chief Engineer (Construction), T. A. Rao.

Chief Signal & Tele-communication Engineer, S. A. Srinivasan.

Chief Operating Superintendent, C. S. Parameswaran.

Chief Commercial Superintendent, T. N. Parthasarathy.

Chief Mechanical Engineer, H. R. Chopra.

Chief Electrical Engineer, I. C. Bhatt.

Controller of Stores, M. Sundaresan.

Financial Adviser & Chief Accounts Officer, M. A. Ashraf.

Chief Medical Officer, Dr. P. A. Menon.

Chief Security Officer, C. C. Rugson.

Chief Security Officer, C. C. Rugson.

Public Relations Officer, H. K. Rakhru.

### Public Service Commission

Hyderabad.

Chairman, K. Subba Rao, I.A.S.

Members, G. Simhadri, I.A.S. (Retd.); H. Ramalinga Reddy; Shankarjee.

Secretary, G. Satyanarayana, B.A., B.L.

## ASSAM

Shillong

### ADMINISTRATIVE PERSONNEL

#### Governor

VISHNU SAHAY

#### Personal Staff

Private Secretary, T. S. Krishnamurthi.

Military Secretary, Major S. Kapur.

#### Council of Ministers

Chief Minister, Appointment, Home, Political, General Administration, Secretariat Administration, Information & Public Relations, Minority

Affairs, Mines and Minerals, Industries including Cottage Industries, Town and Country Planning, Transport, Municipal Administration, Public Works (R & E), Planning and Statistics, General Coordination of all Department and matters not allotted to any Minister, B. P. Choudha.

Finance, Labour, K. P. Tripathi.

Tribal Affairs and Welfare of Backward Classes, Soil Conservation, C. S. Teron.

Education, J. B. Hagjer.

Revenue, Forests, Flood Control & Irrigation, Parliamentary Affairs, M. M. Choudhuri.

Supply, Trade & Commerce, Excise, R. C. Rana.

Agriculture, Veterinary, Live-stock, Panchayati Community Development and Co-operation, L. P. Goswami.

Health, Relief and Rehabilitation, Registration, Printing & Stationery, S. M. Deb.

Jails, Khadi & Village Industries, Sericulture & Weaving and Fisheries, M. N. Hamtka.

Law, Political Staffers, Social Welfare, Abdul Matlip Majumdar.

Industries, Mines & Minerals, Bhawdev Sharma.



**Ministers of State**

*Education, Wakf Property*, Syed Ahmed Ali.  
*Social Welfare, Relief and Rehabilitation*, Shrimati P. K. Gohain.  
*Transport and Parliamentary Affairs*, P. K. Choudhury.  
*Community Development and Panchayats*, D. N. Hazarika.  
*Revenue, Forests*, R. Basumatary.  
*Public Works (Roads & Buildings)*, Altaf Hussain Majumdar.

**Deputy Ministers**

*Tribal Affairs and Welfare of Backward Classes*, S. S. Terang.  
*Agriculture*, Dandi Ram Dutta.

**Secretariat**

*Chief Secretary*, A. N. Kldwal, I.C.S.  
*Addl. Chief Secretary and Dev. Commissioner & Secretary, Planning*, N. K. Rustomji.  
*Secretary, Finance Department*, R. S. Paramasivan, I.A.S.  
*Commissioner, Hills Division*, E. H. Pakintyn.  
*Secretary, Supply Transport Department*, M. Ahmed, I.A.  
*Secretary, Development Department (Panchayat and C.D.)*, B. K. Bhuyan, I.A.S.  
*Secretary, Revenue and Forests Departments*, J. N. Das, I.A.S.  
*Secretary, Industries Department*, P. H. Trivedy, I.A.S.  
*Jt. Secretary, Home Department*, T. S. Gill, I.A.S.  
*Secretary, Education Department*, S. M. Rahman, I.A.S.  
*Secretary, Labour, Excise, etc., Departments*, S. J. Das, I.A.S.

*Secretary, L.S.G., Town and Country Planning, Medical Departments*, G. C. Phukan, I.A.S.  
*Secretary, Agriculture, Veterinary, Pisciculture, Soil Conservation and Co-operation Departments*, M. Ahmed, I.A.S.  
*Secretary, Law Department*, Bisweswar Sarma.  
*Secretary (Ex-Officio), Tribal Areas Department*, R. Chandra, I.A.S.  
*Secretary, P.W.D. (Roads and Buildings Wing)*, K. Barua, B.E.  
*Secretary, P.W.D. (Flood Control and Irrigation Wing)*, K. L. Mazumdar.

**Heads of Departments**

*Commissioner of Plains Divisions*, S. M. L. Bhatnagar, I.A.S.  
*Commissioner of Agricultural Production*, D. Das, I.A.S.  
*Commissioner of Excise and Taxes*, R. Z. Ahmed, I.A.S.  
*Commissioner of Labour*, H. P. Duara, B.Com. (Leeds).  
*Director of Agriculture*, K. K. Phukan, I.A.S.  
*Director of Industries*, A. D. Adhikari.  
*Director of Public Instruction*, S. C. Rajkhowa, M.A.  
*Director of Health Services and Inspector-General of Prisons*, Dr. A. B. Roy.  
*Director of Economics and Statistics*, S. C. Sarma, M.Sc., M.A.  
*Director of Information and Public Relations*, D. C. Bhuyan, M.A., B.L.  
*Director of Supply*, S. Sarkar, I.A.S.  
*Director of Civil Defence*, M. N. Gogoi.  
*Director of Technical Edn.*, S. K. Barua.  
*Director of Inland & Water Transport*, K. Gogoi.  
*Registrar, Co-operative Societies*, A. K. Roy, I.A.S.  
*Chief Conservator of Forests*, P. Barua.  
*Legal Remembrancer*, Bisweswar Sarma.  
*Inspector General of Police*, B. K. Barua, I.P.S.  
*Commissioner, State Transport*, R. H. Shaw, I.A.S.

**High Court  
Gauhati.**

*Chief Justice*, C. Sanjeeva Row Nayudu.  
*Preside Judges, Justice* S. K. Dutta, Justice P. K. Goswami.  
*Registrar*, S. C. Barua.  
*Advocate-General*, B. C. Barua, M.Sc., LL.B., A.J.S.

**North-East Frontier Agency  
Shillong.**

*Adviser to the Governor*, P. N. Luthra.  
*Financial Adviser*, S. Krishnan.  
*Security Commissioner*, Brig. R. Khating.  
*Development Commissioner*, L. B. Thanga.  
*Inspector-General, Assam Rifles*, Maj.-General S. N. Bhatia.

**NORTH-EAST FRONTIER RAILWAY  
Maligaon, Gauhati 11.**

*General Manager*, N. S. Swaminathan.  
*Dy. General Manager & Chief Vigilance Officer*, S. Varadarajan.  
*Dy. General Manager (General)*, A. N. Sur.  
*Dy. General Manager, Katihar*, M. K. Majumdar.  
*Chief Personnel Officer*, Vacant.  
*Chief Engineer*, B. B. Dutta.  
*Chief Operating Superintendent*, A. K. Sarkar.  
*Chief Mechanical Engineer*, K. Vaidyanath.  
*Financial Adviser & Chief Accounts Officer*, G. M. Gidvani.  
*Chief Medical Officer*, A. Lakshminarayanan.  
*Chief Electrical Engineer*, D. S. Mehta.  
*Controller of Stores*, A. K. Rao.  
*Chief Signal & Telecommunication Engineer*, P. C. Bhattacharyya.  
*Engineer-in-chief (Surrey & Constructions and Broad Gauge Construction Project)*, B. K. Mitra.  
*Chief Commercial Superintendent*, K. N. Chennabasappa.  
*Chief Security Officer*, P. C. Barbora.

**BIHAR****Patna****ADMINISTRATIVE PERSONNEL****Governor.**

M. ANANTHASAYANAM AYYANGAR.

**PERSONAL STAFF.**

*Secretary to Governor*, B. N. Basu.  
*Aide-de-Camp*, Lt. A. Singh.

**Ministers**

*Chief Minister (Political Appointment, Heavy Industries Sugar Cane and Jail)*, Mahamaya Prasad Sinha.  
*Deputy Chief Minister (Finance and Education)*, Kapoori Thakur.  
*P.W.D., Mines and Minerals*, Kamakhya Narayan Singh.  
*Community Development and Police*, Ramanand Tiwari.  
*Food and Civil Supplies*, Kapil Deva Singh.  
*Irrigation and Power*, Chandra Shekhar Singh.  
*Revenue*, Indra Dip Sinha.  
*Forest and Excise*, Dr. Basant Narayan Singh.  
*Information and Law*, Habibur Rehman.  
*Labour and Industries Excluding Heavy Industries*, Basawan Singh.  
*Local Self Government and Tourism and Housing*, Bhola Prasad Singh.  
*Agriculture, Medium and Minor Irrigation*, Bijay Kumar Mitra.  
*Co-operation*, Ramdeo Mahto.

*Transport, Public Health Engineering and Animal Husbandary*, Srikrishna Singh.  
*Health and Family Planning*, B. P. Mandal.

**Ministers of State**

Mahabir Baswan.  
 Rudra Pratap Sarangi.  
 Sabha Pati Singh.  
 Ramapati Singh.  
 Tej Narayan Jha.  
 Upendra Nath Verma.

**Secretariat \***

*Chief Secretary to Government*, B. D. Pande, I.C.S.  
*Food Commissioner*, S. V. Sohoni, I.C.S.  
*Civil Defence Commissioner*, T. C. Puri, I.C.S.  
*Addl. Chief Secretary to Government*, S. N. Singh, I.A.S.  
*Secretary Political Department (Special Sec.)*, M. K. Mukherjee, I.A.S.  
*Secretary, Political Department (General)*, S. K. Sinha, I.A.S.  
*Secretary, Political (Police and Appointment)*, K. K. Srivastava, I.A.S.  
*Development Commissioner*, B. Prasad, I.A.S.  
*Secretary to Government, Finance Department*, H. Prasad, I.A.S.  
*Secretary to Government, Revenue Department*, S. K. Chakravarti, I.A.S.  
*Secretary to Government, Labour Department*, B. S. Mandal, I.A.S.  
*Secretary to Government, P.W.D.*, Ramchandra Sinha, I.A.S.

*Secretary to Government, Education Department*, M. Alam, I.A.S.  
*Secretary to Government, Local Self Government Department*, R. N. Pande, I.A.S.  
*Secretary to Government, Community Projects and Panchayat Department*, R. P. Khanna, I.A.S.  
*Secretary to Government, Electricity and Irrigation Department*, N. P. Sinha, I.A.S.  
*Secretary to Government, Law Department*, B. P. Singh.  
*Secretary to Government, Welfare Department*, S. K. Ghosh, I.A.S.  
*Secretary to Government, Agriculture and Animal Husbandry Department*, Karam Singh.  
*Secretary to Government, Industries Department*, R. T. Sinha, I.A.S.  
*Secretary to Government, Co-operative and Cane Department*, L. Dayal, I.A.S.  
*Secretary to Government, Supply and Commerce Department*, S. C. Mishra, I.A.S.  
*Secretary to Government, Housing Department*, R. N. Pande, I.A.S.

**HEADS OF DEPARTMENTS**

*Chief Administrator, River Valley Projects*, B. N. Sinha, I.C.S.  
*Chief Conservator of Forests*, S. P. Sahi.  
*Chief Engineers, P.W.D.*, Y. K. Lal, B. K. Dubey.  
*Chief Inspector of Factories*, Atma Nand Singh.  
*Commissioner of Labour*, F. Ahmad.  
*Director of Agriculture*, B. P. Akhauri.



*Director of Animal Husbandry*, Y. Prasad.  
*Director of Industries*, R. Nath.  
*Director of Health Services*, Dr. S. M. Hasan.  
*Director of Public Relations*, C. B. Prasad, I.A.S.  
*Director of Public Instruction*, Kalimuddin Ahmed.  
*Inspector-General of Police*, S. Akhauri, I.P.  
*Inspector-General of Prisons*, B. Singh, I.A.S.  
*Registrar of Co-operative Societies*, R. D. Pandey, I.A.S.  
*Director of Employment and Trg.*, R. P. Sinha, I.A.S.  
*Chief Engineer (Irrigation)*, B. N. Chatterjee.  
*Chief Engineer (Kosi Project)*, B. L. Singh.  
*Chief Engineer (Gandak and Sone Projects)*, P. R. Guha.  
*Chief Engineer, Electricity*, A. S. Srivastava.

*Director of Tourism*, Umanath.  
*Transport Commissioner*, R. N. Roy.  
*Cane Commissioner*, J. Prasad.  
*Director, Statistics*, Dr. L. Narain.  
*Director, Gram Panchayat*, S. K. Chandra, I.A.S.  
*Director, National Employment Service*, O. W. Francis.  
*Chief Engineer, (Tenughat Dam Project)*, A. P. Prasad.

#### Public Service Commission

15, Bayley Road, Patna.

*Chairman*, B. N. Rohatgi.  
*Members*, J. N. Sahay, B. Prasad, S. B. Ahmad, D. P. Singh.  
*Secretary*, N. C. Ray.

#### HIGH COURT

PATNA.

*Chief Justice*, R. L. Narasimhan, I.C.S.

#### PUISNE JUDGES

*Justice Satish Chandra Misra*, *Justice Rati Kant Choudhary*, *Justice Kamla Sahai*, *Justice Ujjal Narain Sinha*, *Justice Nand Lal Untwalia*, *Justice Harihar Mahapatra*, *Justice Tarkeswar Nath*, *Justice Anant Singh*, *Justice Shyamnandan Prasad Singh*, *Justice Ramratna Singh*, *Justice G. N. Prasad*, *Justice Sarjoo Prasad Singh*, *Justice A. B. Sinha*; *Addl. Judges* *Justice Ranbir Jang Bahadur*, *Justice Saiyid Anwar Ahmad*, *Justice Kamala Dutta*.

*Registrar*, Syed Wasiuddin.

#### ADMINISTRATIVE PERSONNEL

##### Lt. Governor

A. N. JHA.

*Chief Executive Councillor*, Vijay Kumar Malhotra.  
*Chief Secretary*, K. Kishore, I.A. & A.S.  
*Financial Adviser-cum-Housing Commissioner*, A. V. Venkatasubban.  
*Development Commissioner*, L. S. Titus.  
*Judicial Secretary*, R. K. Baweja.  
*Finance Secretary*, R. S. Krishnan.  
*Deputy Commissioner*, B. N. Tandon, I.A.S.  
*Inspector-General of Police*, B. B. Banerjee, I.P.  
*Director of Education*, B. D. Bhatt.  
*Director of Industries*, B. K. Sharma.

*Director of Public Relations*, Madan Mohan Singh.  
*Director of Training and Employment*, Ainul Abidin.  
*Sales Tax and Excise Commissioner*, S. R. Deva.  
*Labour Commissioner*, Gangesk Misra.  
*District and Sessions Judge*, Jagjit Singh.

#### HIGH COURT, DELHI

*Chief Justice*, K. S. Hegde.  
*Judges*, Inder Dev Dua, Hans Raj Khanna, Satinder Kumar Kapur, Hardayal Hardy, N. Andley, T. V. R. Tatachari, Jagjit Singh.

#### Northern Railway

Baroda House, New Delhi.

*General Manager*, P. Sahai.  
*Sr. Deputy General Manager*, L. D. Pankey.

*Chief Operating Supdt.*, B. D. Mehra.  
*Chief Commercial Supdt.*, T. S. Parthasarathy.  
*Chief Engineer*, M. Srinivasan.  
*Chief Engineer (Const.)*, S. S. Surana.  
*Engineer-in-Chief (Const.) (Chopan)*, D. S. Tomar.  
*F. A. & C. A. O.*, M. N. Datta.  
*Chief Mechanical Engineer*, V. S. Chopra.  
*Controller of Stores*, P. C. Vaish.  
*Chief Signal and Tele-Comm. Engineer*, P. A. D'Souza.  
*Chief Personnel Officer*, S. Chatterjee.  
*Chief Electrical Engineer*, V. S. Gupta.  
*Chief Security Officer*, S. M. Ali Qadir.  
*Chief Medical Officer*, Dr. J. R. Gadeock.  
*Chief Public Relations Officer*, O. D. Agnihotri.

#### GOA

Panaji

#### ADMINISTRATIVE PERSONNEL

*Lt. Governor of Goa, Daman and Diu (Concurrently Administrator of Dadra and Nagar Haveli)*, Nakul Sen.

##### Ministers

*Chief Minister in charge of Gen. Admn., Special Deptt., Home, Planning and Development and Finance*, Dayanand Bhandodkar.  
*Law, Industries and Labour and Agriculture*, Anthony D'Souza.

*Education, Public Health, Medical Services, Public Works, Information and Tourism*, Prof. Gopal Mayenkar.  
*Dy. Minister in charge of Planning and Development and Finance*, Achyut Usgaonkar.  
*Chief Secretary*, G. K. Bhanot.  
*Collector of Daman*, H. K. Khan, I.A.S.  
*Civil Administrator of Diu*, M. S. Bijlani.  
*Judicial Commissioner*, V. S. Jetley.  
*Additional Judicial Commissioner*, R. S. Bindra.

*Development Commissioner*, S. P. Balasubramanyam, I.A.S.  
*Secretary Law, Legislative Assembly*, P. B. Venkatasubramanian.  
*Finance Secretary & Secretary, Revenue*, N. Subramanian.  
*Secretary, Industries and Labour*, B. K. Chowgule, I.A.S.  
*Secretary to Lt. Governor*, B. R. Basu, I.A.S.  
*Director of Information & Tourism*, V. G. Deshmukh.

#### GUJARAT

Ahmedabad

#### ADMINISTRATIVE PERSONNEL

##### Governor

NITYANAND KANUNGO

*Secretary*: Pardumansinhji, I.A.S.

##### Ministers

*Chief Minister, in charge of General Administration, Planning, Home, Information and Industrial Policy*, Hitenra Desai.  
*Panchayat, Community Projects, Co-operation, Agriculture, Forests and Sarvodaya*, Thakorebhai Desai.  
*PWD, Civil Supplies and Electricity*, Babubhai J. Patel.  
*Finance and Industry*, Jashwant Mehta.

*Education and Municipalities*, Gordhandas Chokhawala.  
*Health, Fisheries and Jail*, Fatehsinhrao Gackwad.  
*Revenue, Law and Judiciary, Ports, Accommodation Control, Printing and Stationery, Gold Control and Repatriates from Mozambique, Burma and Zanzibar*, Premjibhai B. Thakkar.  
*Labour, Social Welfare, Prohibition, Excise, Rehabilitation and Housing*, Shantilal R. Shah.  
*Road Transport, Parliamentary Affairs, Public Relations, Sports and Cultural Activities*, Chimanbhai Patel.

##### Deputy Ministers

*Agriculture, Panchayat, Co-operation and Sarvodaya*, Madhavlal Shah.  
*Public Works (excluding Irrigation) and Health*, Mrs. Urmilaben Bhatt.

*Home, Information, Irrigation, Electricity and Civil Supply*, Dairam Patel.  
*Revenue*, Shantilal S. Shah.  
*Social Welfare, Prohibition and Excise*, Himatbhai M. Rajwadi.  
*Parliamentary Secretary to the Chief Minister*, A. A. Mirza.

##### Secretariat

*Chief Secretary*,\* V. L. Gidwani, I.C.S.  
*Secretary Finance Department*, F. N. Rana, I.A.S.  
*Secretary, Agriculture Department*, S. M. Dudani.  
*Secretary, Legal Department*, S. M. Vidyarthi.  
*Secretary, Public Works Department*, L. B. Dalal, I.C.S.  
*Secretary, Health and Industries Department*, K. T. Sattarawala, I.A.S.

\* Also Additional Chief Secretary.



Secretary, Education and Social Welfare Department, M. D. Rajpal, I.A.S.  
 Secretary, Panchayats & Health Department, J. G. Shah.  
 Secretary Revenue, A. S. Gill.  
 Secretary, Home and Civil Supplies Department, F. J. Heredia, I.A.S.

#### Principal Officials

Director of Agriculture, Dr. G. A. Patel.  
 Director of Public Health & Medical Services, Dr. T. B. Patel.  
 Director of Transport and I. G. Prisons, R. V. Chandramouli, I.A.S.  
 Director of Education and Archives, K. G. Badlani.  
 Director of Technical Education, T. A. Desai.  
 Director of Industries, S. M. Ghosh.  
 Director of Information, Tourism and Examiner of Books and Periodicals, M. H. Shah.  
 Director of Printing and Stationery and Civil Supplies, G. T. Gonsalves.  
 Director of Prohibition, V. R. Patel.  
 Director of Social Welfare, P. R. Chauhan, I.A.S.  
 Director of Fisheries, K. V. Navathe.  
 Director of Bureau of Economics and Statistics, P. B. Buch.  
 Director of Languages, Anantrao Raval.  
 Director of Ports, B. C. Mehta.  
 Director of Drugs Control, B. V. Patel.  
 Director of Cottage Industries, Registrar of Co-Societies and Registrar of Money Lenders, H. M. Joshi.

Chief Conservator of Forests, R. D. Joshi.  
 Director of Employment Exchange and Commissioner of Labour, R. B. Shukla.  
 Commissioner of Sales Tax, V. R. Mehta.  
 Chief Inspector of Factories, R. P. Patel.  
 Controller of Accommodation, H. M. Bhatt.  
 Registrar of Firms, M. G. Shah.  
 Inspector General of Police, Imdad Ali.  
 Commissioner of Police, Ahmedabad, E. F. Deboo.

#### Stationary Bodies

State Fertilizer Co. Ltd., Ambika Nivas, Ashram Road, Ahmedabad.  
 Chairman, Jaykrishna Haridas Vallabhadas.  
 Managing Director, K. R. Shrivastava, I.A.S.  
 Gujarat State Small Industries Corpn. Ltd.  
 Chairman, Chinubhai Manilal Shah, Managing Director, B. D. Shah.  
 Gujarat Public Service Commission, New Civil Hospital, Asarwa, Ahmedabad 16.  
 Chairman, R. T. Leuva, Members, R. S. Parikh, N. B. Trivedi.  
 Chairman, Sales Tax & Co-operative Tribunal (Shantisadan, Mirzapur, Ahmedabad 1), J. A. Baxi.  
 Chairman, Gujarat S.S.C. Board (Sadhna Press Bldg., Palace Road, Baroda), M. M. Shukla.  
 Chairman, Gujarat State Electricity Board (Race Course, Baroda), Kurlen.  
 Chairman, Industrial Tribunal (Shanti Sadan, Mirzapur, Ahmedabad 1), I. G. Thakore.

Chairman, Revenue Tribunal (Shanti Sadan Mirzapur, Ahmedabad 1), P. B. Mehta.  
 Chairman, Gujarat State Social Welfare Advisory Board (Bansari Bldg., Sarkhes Road, Ahmedabad), Smt. Pushpababen Mehta.  
 Chairman, Gujarat State Housing Board (New Mental Hospital, Ahmedabad), Madan Mohan Mangaldas. Housing Commissioner, P. N. Desai.  
 Chairman, Gujarat State Road Transport Corporation (Vahan Vyavhar Bhavan, Gita Mandir Road, Ahmedabad), K. P. Shah.  
 Chairman, Gujarat State Cooperative Housing Finance Society Ltd. (Bank of Baroda Bldg., Fuvara, Gandhi Road, Ahmedabad), Dr. C. J. Patel.  
 Chairman, Gujarat State Khadi & Village Industries Board (Green Villa, Old Vadaj, Ahmedabad 13), Babubhai J. Patel.  
 Chairman (Ayurved & Unani System of Medicine Board, New Civil Hospital, Ahmedabad 16), G. H. Valdia.

#### High Court

Chief Justice, N. M. Miabhoy.  
 Judges, Justice V. B. Raju, Justice P. N. Bhagwati, Justice B. J. Divan, Justice A. R. Bakshi, Justice N. K. Vakil, Justice J. B. Mehta, Justice M. U. Shah, Justice N. G. Shelat (Additional), Justice Akbar S. Sarela (Additional), Justice A. D. Desai (Additional).  
 Registrar, C. V. Rane.

## HARYANA

### Chandigarh

Governor  
 Vacant

#### COUNCIL OF MINISTERS

Chief Minister, in charge of General Administration (including Political Sufferers, Home, Vigilance, Elections, Industries and Industrial Training, Town and Country Planning, Colonization, Food and Supplies, Rao Birendra Singh.  
 Revenue, Consolidation of Holdings, Rehabilitation, Welfare of Scheduled Castes, Agriculture, Animal Husbandry, Dairy Development, Chand Ram.  
 Finance, Excise and Taxation, Administration of Justice, Mool Chand Jain.  
 Education, Languages, Sports, Cultural Affairs, Planning, Legislative Affairs, Parliamentary Affairs, Technical Education, Hardwar Lal.  
 Development and Panchayats, Forests, Fisheries, Wild Life Preservation, Partap Singh Daulta.  
 Health, Social Welfare and Wakf, Shreyo Nath.  
 Irrigation and Power (excluding Rural Electri-

fication), Jails, Housing, Printing and Stationery, Mani Ram Godara.

Transport, Public Relations and Tourism, Lachhman Singh.  
 Local Government, Labour and Employment, Harpal Singh.

#### Minister of State

Co-operation Agriculture, Animal Husbandry, Dairy Development, Multan Singh.  
 Public Works, Architecture and Welfare of Scheduled Castes and Backward Classes, Phool Chand.  
 Rural Electrification and Food and Supplies, Amir Singh.  
 Development and Panchayats, Irrigation and Power and Jails, Housing, Printing and Stationery, Shamsher Singh.

#### Deputy Ministers

Health, Social Welfare, Wakf and Parliamentary Affairs, Jaswant Singh.  
 Public Works, Public Health excluding Technical Education and Architecture, Local Government,

Labour and Employment, Ram Parshad.

#### Officials

Chief Secretary, Saroop Krishan, I.C.S.  
 Financial Commissioner (Revenue), B. S. Grewal, I.C.S.  
 Financial and Planning Secretary, B. S. Manchanda, I.A.S.  
 Home Secretary, S. K. Chhibber, I.A.S.  
 Secretary, Industries and Food & Supplies, Labour, Planning & Stationery, Sube Singh, I.A.S.  
 Secretary, Irrigation, Power and P.W.D., Ishwar Chandra, I.A.S.  
 Education Secretary, (Also Secretary, Medical & Health Dept.), P. N. Bhalla, I.A.S.  
 Agriculture Secretary, B. N. Chopra, I.A.S.  
 Director of Industries, J. D. Sharma, I.A.S.  
 Director of Food & Supplies, D. Sharma.  
 Director of Public Relations, I. E. N. Chauhan, I.A.S.  
 Provincial Transport Controller, P. L. Chhabra.  
 Inspector-General of Police, B. S. Roshia.

## HIMACHAL PRADESH

### Headquarters, Simla 4.

#### ADMINISTRATIVE PERSONNEL

Lt. Governor  
 LT. GEN. BAHADUR SINGH

#### Ministers

Chief Minister, in charge of General Administration, Home and Vigilance, Planning and Development, Forests, Industries, Publicity and Tourism and Transport, Y. S. Parmar.  
 Medical and Public Health, Excise and Taxation and Civil Supplies, Lal Chand Parthi.  
 Law, Local-self Government, Elections and Panchayats, Hari Ram.  
 Co-operation, Education and Agriculture and Animal husbandry, Ram Lal.  
 Finance, Public Works Department, Multipurpose Projects and Labour and Welfare, Sukh Ram.

#### Deputy Ministers

Menga Singh, Kartar Singh are attached to the Departments under the Chief Minister.  
 Nek Ram Negi is attached to the Departments under the Minister of Health and Daulat Ram Sakhyan is attached to the Departments under the Law Minister.

#### Secretariat

Chief Secretary and Financial Commissioner, Secretary, Appointment, Administration, Home, Revenue, Transport and Public Relations Departments, M. C. Sharma, I.A.S.  
 Development Commissioner, Ex-Officio Secretary, Development, Industries, Animal Husbandry, Welfare, Panchayats, Agriculture Depts., Bhagwati Saran Singh, I.A.S.  
 Finance Secretary and Secretary, Excise & Tourism, P. R. Mahajan.  
 Secretary, Judicial, Law, Evacuee Property, Relief and Rehabilitation and Local Self-Govt., Legal Remembrancer, Custodian of Evacuee Property and Chief Electoral Officer, D. B. Iall.  
 Secretary to Lt. Governor and Secy., Border, L. N. Saklani, I.A.S.  
 Ex-Officio Secretary, Civil Supplies and Co-operatives, also Registrar, Co-operatives, H. R. Mahajan, I.A.S.  
 Ex-Officio Secretary, Public Works Department and also Chief Engineer P.W.D., V. Rama Verman.  
 Ex-Officio Secretary, Medical and Public Health, and also Director of Health Services and Inspector General of Prisons, Dr. Mrs. A. C. Parmar.

Ex-Officio Secretary, Forests and also Chief Conservator of Forests, V. P. Agarwala.  
 Ex-Officio Secretary, Education and also Director of Education, K. L. Sethi.  
 Ex-Officio Joint Secretary, Transport and General Manager, Himachal Govt. Transport, P. P. Srivatsava, I.A.S.  
 Ex-Officio Joint Secretary, Revenue and Excise and Taxation Commissioner, V. S. Sharma, I.A.S.  
 Ex-Officio Joint Secretary, Planning & Development and Deputy Development Commissioner, A. N. Dixit, I.A.S.  
 Ex-Officio Joint Secretary, Agriculture and Animal Husbandry and Director of Agriculture Department, Dr. L. S. Negi.  
 Judicial Commissioner, O. P. Agnihotri.  
 Land Reforms Commissioner, C. L. Kapila, I.A.S.  
 Director of Industries and Controller of Printing and Stationery, P. K. Mattoo, I.A.S.  
 Director of Welfare, Bishan Das.  
 Inspector General of Police, M. G. Singh, I.P.S.  
 Director of Economic & Statistics, R. L. Khanna.  
 Director of Public Relations, H. K. Mittoo.  
 Director of Civil Supplies, Parkash Chand.  
 Director of Civil Defence, Rajinder Singh.



# JAMMU AND KASHMIR

## Srinagar

### ADMINISTRATIVE PERSONNEL

#### Governor

BHAGWAN SAHAY, I.C.S.

Secretary, Jalal-ud-Din.

### COUNCIL OF MINISTERS

**Chief Minister, in charge of General Adm., Services, Cabinet Work, Civil Secretariat, Law and Order, Tawaza and Reception, Education, Academy of Arts, Culture and Languages, Tourism, Ghulam Mohd. Sadiq.**

**Minister for Revenue, Evacuee Property, Consolidation of Holdings, Relief and Rehabilitation, Information & Publicity, Stationery & Printing, Law and Judiciary, Franchise & Legislation, G. L. Dogra.**

**Minister for Finance, Planning, Agriculture, Excise & Taxation, Agriculture, Animal Husbandry, Community Development & Co-operation, Irrigation, Durga Prashad Dhar.**

**Minister for Health, Local Govt., Social Welfare, Scheduled Castes and Backward Classes, Mohd. Ayub Khan.**

**Minister for Industries & Commerce, Labour, Power, Ladakh Affairs, Pir Ghiasudin.**

**Minister for Public Works, Transport, Housing, Ranjit Singh Jamwal.**

**Minister of State without Portfolio attached to the Chief Minister, Ghulam Rasul Kar.**

**Minister of State for Finance, Abdul Ghani Goni.**

#### Deputy Ministers

**Education and Tourism, Noor Mohammed.**

**Consolidation and Rehabilitation, Gurmukh Singh.**

**Information & Publicity, Mohd. Din Bandey.**  
**Agriculture & Cooperation, Mufti Mohammed Syed.**  
**Animal Husbandry Comm. Development and NES, Ch. Mohammed Shaffi.**  
**Transport, Parmanand.**

#### Secretariat

**Chief Secretary, E. N. Mangat Rai, I.C.S.**  
**Secretary, Finance Department, Dwarka Nath Gupta.**  
**Secretary, General Department, Sheikh Ghulam Ahmad.**  
**Secretary Home Department, G. R. Renzu.**  
**Secretary Education Department, Ghulam Mohammad Zargar.**  
**Secretary Revenue Department, Yog Dhian.**  
**Special Secretary Rehabilitation, A. N. Dhar.**  
**Secretary Housing and P.W.D. Departments, Chaudri Bharat Bushan.**  
**Secretary Health Department & L. S. Govt., Srinivasvardhan.**  
**Secretary Agricultural Department, Noor Mohammad.**  
**Secretary Stationery Printing & Information Department, K. N. Kaul.**  
**Secretary Supplies & Transport Department, S. A. S. Qadiri.**  
**Secretary Public Service Commission, O. N. Dhar.**  
**Secretary Tourism Department, Sardar Teja Singh.**  
**Secretary Industries Department, R. C. Raina.**

#### Heads of the Departments

**Divisional Commissioner, Kashmir Province, Anwar Karim.**

**Divisional Commissioner, Jammu Province, Sardar Amarsingh.**  
**Inspector General of Police, E. S. Moodak.**  
**Director of Education, Noor-ud-Din.**  
**Director of Industries, R. C. Raina.**  
**Director of Information, G. D. Sharma.**  
**Director of Health Services, Dr. R. N. Parihar.**  
**Jt. Director of Tourism, S. K. Kak.**  
**Director of Geology & Mining, S. S. Malhotra.**  
**Director of Animal Husbandry, Ghulam Mohi-ud-Din.**  
**Director of Local Bodies, S. L. Kaul.**  
**Director of Agriculture, B. S. Jogi.**  
**Director Fisheries, G. M. Malik.**  
**Financial Commissioner, Aga Nasir.**  
**Transport Commissioner, Ghanshyam.**  
**Labour Commissioner, M. Andrabi.**  
**Excise & Taxation Commissioner, Surrender Nath Dogra.**  
**Chief Conservator of Forests, G. Naqashband.**  
**Chief Engineer, P.W.D. (R. & B.) Kashmir Province, Qazi Mohammed Afzal.**  
**Chief Engineer, P.W.D. (R. & B.) Jammu Province, H. K. Gandotra.**  
**Chief Engineer Irrigation, Pirzada Ghulam Nabi.**  
**Chief Engineer Designs, B. N. Mengi.**  
**Chief Engineer Electricity, Mrs. S. L. Sadhu.**  
**Controller, Tawaza, P. N. Madan.**  
**Registrar, Co-operative Societies, Hari Ram Sharma.**

### HIGH COURT

Srinagar.

**Chief Justice, Janki Nath Wazir.**  
**Puisne Judges, Justice Syed Murtaza Fazl Ali; Justice J. N. Bhat; Raja Jaswant Singh.**

# KERALA

## Trivandrum

### ADMINISTRATIVE PERSONNEL

**Governor, V. Viswanathan, I.C.S.**

#### MINISTERS

**Chief Minister, in charge of General Administration, Planning, Home, Information and Publicity, E. M. S. Namboodiripad.**

**Revenue, Law and Legislation, Food & Civil Supplies, Social Welfare, Mrs. K. R. Gowri.**

**Transport and Communications, E. K. Imbichi-Bava.**

**Forests and Harijan Welfare, M. K. Krishnan.**  
**Agriculture & Animal Husbandry, M. N. Govindan Nair.**

**Industries and Commerce, T. V. Thomas.**  
**Irrigation & Co-operation, Devaswom, P. R. Kurup.**

**Finance, P. K. Kunju.**  
**Education, C. H. Mohamed Koya.**

**Fisheries, Community Development and Panchayats, Abamed Kurikkal.**

**Public Works & Tourism, T. K. Divakaran.**  
**Health, B. Wellington.**

**Labour and Employment, Mathai Manjooran.**

**Chief Secretary, N. M. Patnaik, I.A.S.**

**Secretary, Finance Department, R. Gopalaswamy.**

**Commissioner for Agricultural Production and Rural Development, K. K. Ramankutty, I.A.S.**

**Addl. Secretary, Agriculture Department, A. K. Kunnikannan Nambiar.**

**Secretary, Industries Department, N. Chandrabhanu, I.A.S.**

**Secretary, Public Works Department, S. Ananthakrishnan.**

**Secretary, Public Department, G. Bhaskaran Nair.**

**Secretary, Home Department, M. K. Devassy, I.A.S.**

**Secretary, Health & Labour Departments, C. K. Kochukoshy.**

**Secretary, Revenue Department, A. S. Menon.**

**Secretaries, Law Department, P. Unnikrishna Kurup, P. Sankara Elayath (Special), P. K. Lakshmanan (Addl. Secy.).**

**Jt. Secretary, Election Department, S. Naganathan.**

**Secretary, Education Dept., P. K. Abdulla, I.A.S.**

#### PRINCIPAL OFFICIALS

**Chief Engineer, Bldgs. & Roads, P. S. Narayanaswamy.**

**Chief Conservator of Forests, Vacant.**

**Chief Engineer (General and Irrigation), T. P. Kuttiammu.**

**Chief Engineer (Public Health), P. S. Rajagopalan.**

**Chairman, Electricity Board, U. Chanthu Nair.**  
**Director of Agriculture, M. Janardhanan Nair.**

**Director of Animal Husbandry and Vet. Services, Dr. M. N. Menon.**

**Director of Public Instruction, P. K. Uma Shankar.**

**Director of Industries and Commerce, V. Venkitanarayanan.**

**Director of Health Services, Dr. V. S. Gopalakrishnan.**

**Director of Public Relations, M. Divakaran.**

**Director of Fisheries, P. Gopinatha Pillai.**  
**Director of Statistics, Dr. P. K. Gopalakrishnan.**

**Chairman, Transport Corporation, P. I. Jacob, I.A.S.**

**Director of Civil Defence, M. Gopalan.**

**Inspector-General of Police, N. Rama Iyer, I.P.S.**  
**Inspector-General of Prisons, V. Baghavan Nair.**

**Registrar of Co-operative Societies, Zachariah Mathew.**

**Director of Collegiate Education, Dr. K. Bhaskaran Nair.**

**Director of Technical Education, S. Rajaram.**  
**Director of Tourism, Vacant.**

**Director of Indigenous Medicine, M. N. Kesava Pillai.**

**Superintendent of Census Operations, M. K. Devassiah (Ex-Officio).**

**Director of Municipalities, Vacant.**

**Director of Museums and Zoos, K. Parameswaran Pillai.**

**Director of Panchayats, R. Kesavan Nair.**

#### DISTRICT COLLECTORS

**Trivandrum, P. D. Kuruvilla; Quilon, S. Narayanaswamy; Kottayam, S. Gopalan, I.A.S.; Alleppey, C. P. Ramakrishna Pillai; Ernakulam, K. Ramunni Menon, I.A.S.; Trichur, N. Sreedharan Nair; Palghat, K. V. Ravindran Nair; Cannanore, R. Ramachandran Nair; Kozhikode, U. Malabhala Rao.**

### HIGH COURT

Ernakulam.

**Chief Justice, M. S. Menon.**

**Judges, P. T. Raman Nayar; S. Velu Pillai, Smt. Anna Chandu; P. Govinda Menon; T. C. Raghavan; M. Madhavan Nair; P. Govindan Nair, K. K. Mathew; V. P. Gopalan Nambiyar, T. S. Krishnamoorthy Iyer, K. Sadasivan.**

**Registrar, T. M. Krishnan Nambiar.**

**Advocate-General, Dr. V. A. Seyid Muhammed.**

#### PUBLIC SERVICE COMMISSION

Thulasi Hill, Pattom, Trivandrum 4.

**Chairman, V. Mariarputham.**

**Members, A. P. Udayabhannu, V. K. Kunjan, E. P. Narayana Pillay, P. P. Ummner Koya.**  
**Secretary, A. Padmanabha Poduval.**



# MADHYA PRADESH

Bhopal

## ADMINISTRATIVE PERSONNEL

**Governor**

K. C. REDDY.

## PERSONAL STAFF

Secretary, V. S. Krishnan.

Private Secretary, G. S. Gadgil.

## MINISTERS

Chief Minister, in charge of Home, General Administration, Planning and Development and Publicity, D. P. Mishra.

Minister for Finance, K. L. Dubey.

Minister for Commerce and Industry, Dr. S. D. Sharma.

Minister for Tribal Welfare, Rajnaresh Chandra.

Minister for Public Health, V. R. Ulkey.

Minister for Land and Revenue & National Resources, K. B. L. Guru.

Minister for Education, Parmanand Bhai Patel.

Minister for Harijan Welfare, Vedram.

Minister for Agriculture, S. N. Mushran.

Minister for Irrigation, S. C. Shukla.

Minister for Public Works, G. R. Tiwari.

Minister for Food and Civil Supplies, K. L. Shukla.

## MINISTERS OF STATE

Labour and Housing, Devi Singh.

Law and Co-operation, R. G. Tiwari.

Local Govt. (Urban), K. P. Singh.

Local Govt. (Rural), S. Tiwari.

Forests, G. C. Tamot.

Electricity, Narendra Singh.

Social Welfare, Amolakchand Jain.

Jails, Tumanlal.

## SECRETARIAT

Chief Secretary, R. P. Noronha, I.C.S.

Additional Chief Secretary, R. P. Nalk, I.C.S.

Finance Secretary, R. N. Malhotra, I.A.S.

Revenue Secretary, M. S. Chaudhari, I.A.S.

Local Self-Government Secretary, Faqir Chand, I.A.S.

Secretary, Public Health, Faqir Chand, I.A.S.

Agriculture Secretary, S. C. Verma, I.A.S.

Commerce and Industry Secretary, Devendra Nath, I.A.S.

Education Secretary, R. C. Rai.

Public Works Secretary, M. A. Khan, I.A.S.

Law Secretary, R. S. G. Trivedi.

Tribal Welfare Secretary, B. K. Dubey, I.A.S.

Food Secretary, B. R. Mandal, I.A.S.

## COMMISSIONERS OF DIVISIONS

Indore, M. P. Shrivastava, I.A.S.; Bilaspur, K. G.

S. Pisarody, I.A.S.; Jabalpur, M. P. Dubey,

I.A.S.; Gwalior, L. C. Gupta, I.C.S.; Bhopal,

P. D. Chatterji, I.A.S.; Raipur, Maharaj

Virbhadra Singh, I.A.S.; Rewa, S. L. Verma,

I.A.S.

## HEADS OF DEPARTMENTS

Inspector-General of Police (Bhopal), B. M. Shukla, I.P.S.

Director of Health Services (Indore), Dr. R. Subrahmanian.

Inspector-General of Prisons (Bhopal), L. S. Naidu.

Chief Engineer (Irrigation), P.W.D. (Raipur), K. L. Handa.

Chief Conservator of Forests (Rewa), K. N. Mishra.

Director of Public Instruction (Bhopal), Dr. A. N. Mishra.

Director of Information & Publicity (Bhopal), I. S. Parihar.

Director of Economics and Statistics (Bhopal), Dr. K. B. L. Bhargava.

Director of Social Welfare, G. L. Shukla, I.A.S.

Director of Civil Supplies, R. N. Bisaria.

Director of Food (Bhopal), B. R. Mandal, I.A.S.

Excise Commissioner (Gwalior), Sankhdar Singh, I.A.S.

Director of Industries (Bhopal), Devi Sahai, I.A.S.

Labour Commissioner (Indore), S. B. Lal, I.A.S.

Director of Agriculture (Bhopal), Dr. T. S. Gill.

Director of Tribal Welfare (Bhopal), B. K. Dube, I.A.S.

Registrar, Co-operative Societies (Indore), R. P. Mishra.

Director of Veterinary Services (Bhopal), N. C. Kaushash.

## HIGH COURT

Judges at Jabalpur, P. V. Dixit (Chief Justice), Justice T. P. Nalk, Justice P. K. Tare, Justice

K. L. Pandey, Justice Shivdayal, Justice N. M.

Golvalker, Justice S. P. Bhargava, Justice

R. J. Bhawe, Justice Surajbhan.

Judges at Indore, Justice V. R. Newaskar,

Justice H. R. Krishnan, Justice S. B. Sen,

Justice M. A. Razzaque.

Judge at Gwalior, Justice A. H. Khan.

## PUBLIC SERVICE COMMISSION

(Indore)

Chairman, K. Radhakrishnan, I.C.S.

Members, R. C. Murab, Manohar Singh Mehta.

Secretary, N. P. Pashine.

# MADRAS

Madras

## ADMINISTRATIVE PERSONNEL

**Governor**

SARDAR UJJAL SINGH

Comptroller, Governor's Household, A. Rangana-

than.

Private Secretary, K. V. Subramaniam.

## MINISTERS

Chief Minister, in charge of Finance and Home, C. N. Annadurai.

Minister for Education and Industries, V. R. Nedunchezhiyan.

Minister for Public Works, M. Karunanidhi.

Minister for Food and Revenue, K. Mathiasagan.

Minister for Agriculture, A. Govindaswami.

Minister for Harijan Welfare and Information, Mrs. Sathiyavanimuthu.

Minister for Labour, Law and Co-operation, S. Madhavan.

Minister for Public Health, S. J. Sadig Pasha.

Minister for Local Administration, M. Muthu-

## SECRETARIAT

Chief Secretary, C. A. Ramakrishnan, I.C.S.

## RURAL DEVELOPMENT AND LOCAL ADMINISTRATION DEPARTMENT

Secretary, N. Ananthapadmanabhan, I.A.S.

## REVENUE DEPARTMENT

Secretary, K. S. Sivasubramaniam, I.A.S.

## INDUSTRIES, LABOUR AND CO-OPERATION DEPARTMENT

Secretary, T. N. Lakshminarayanan, I.A.S.

## FOOD AND AGRICULTURE DEPARTMENT

Secretary, P. K. Nambiar, I.A.S.

Secretary, Agriculture, V. Karthikeyan, I.A.S.

## FINANCE DEPARTMENT

Secretary, G. Ramachandran, I.A.S.

## EDUCATION AND PUBLIC HEALTH DEPARTMENT

Secretary, S. Krishnaswamy, I.A.S.

## HOME DEPARTMENT

Secretary, A. Venkatesan, I.A.S.

## PUBLIC WORKS DEPARTMENT

Secretary, R. Thirumalai, I.A.S.

## LAW DEPARTMENT

Secretary, K. Rajasekaran.

## PRINCIPAL OFFICIALS

Director of Agriculture, K. V. Ramanathan, I.A.S.

Director of Animal Husbandry, I. Manthra-

moorthy.

Registrar of Co-operative Societies, V. K. Appandaraman, I.A.S.

Director of Public Instruction, (Higher Education), S. V. Yakub.

Director of Public Instruction (Secondary Educa-), V. Titus.

Director of Information and Publicity, R. Kulandaiyelu.

Chief Conservator of Forests, T. Jayadev.

Director of Harijan Welfare, P. Sankaran.

Director of Women's Welfare, Kumari M. S. Ramesh, I.A.S.

Commissioner of H. R. and C. E., M. S. Saranga-

pant Mudaliar.

Director of Industries and Commerce, E. U. P. Prabhakar, I.A.S.

Commissioner of Labour, M. G. Balasubramaniam, I.A.S.

Director of Medical Services, Kumari A. V. Marikar, M.D., D.G.O.

Director of State Transport, T. V. Venkataraman, I.A.S.

Inspector General of Police, F. V. Arul.

Commissioner of Police, M. Singaravelu.

Director of Public Health, Dr. Mrs. H. H. Sharma.

Inspector General of Prisons, M. Balakrishna Menon.

Director of Handlooms, C. I. Mahadevan, I.A.S.

Director of Statistics, G. D. Nandagopal.

## HIGH COURT

Chief Justice, M. Anantanarayanan, I.C.S.

Judges, Justice K. Veeraswami; Justice K. Srinivasan, I.C.S.; Justice T. Venkatadri;

Justice P. Ramakrishnan, I.C.S.; Justice P. S.

Kalliasam; Justice R. Sadasivam; Justice K. S. Venkataraman, I.C.S.; Justice K. S.

Ramamurti, Justice M. Natesan; Justice N. Krishnaswamy Reddy; Justice Ramaprasad

Rao; Justice A. Alagiriswami (Addl.).

Registrar, P. Chandrasekhara Menon.

Advocate-General, K. Narayanaswamy Mudaliar.

Sheriff of Madras, P. Maruthai Pillai.

## PUBLIC SERVICE COMMISSION

MADRAS 2.

Chairman, J. Sivanandam, I.A.S.

Members, S. Chinnappan, E. Athikesavan.

Secretary, D. Philip Devaprasad.

## RAILWAY SERVICE COMMISSION

Cathedral Road, Madras 6.

Chairman, N. S. Hirannayya.

Member, T. Venugopal.

Secretary, J. Thilagaranjan.

## SOUTHERN RAILWAY

(General Manager's Office, Park Town, Madras 3).

## ADMINISTRATIVE PERSONNEL

General Manager, O. S. Murthy.

Senior Dy. General Manager, M. M. Bam.

Dy. Gen. Manager (General), T. V. K. Sarma.

Chief Personnel Officer, E. S. Muthukrishna.

Chief Engineer, S. Ramamurthy.

Chief Engineer, Construction, T. R. Vachha.

Chief Signal and Tele-communication Engineer, E. B. O. McAniffie.

Chief Operating Superintendent, S. Rajagopalan.

Chief Commercial Superintendent, K. J. Chandy.

Chief Mechanical Engineer, R. D. Nadirshah.

Chief Electrical Engineer, D. V. K. Sastry.

Controller of Stores, V. C. Paranjape.

Financial Adviser and Chief Accounts Officer, J. Rama Rao.

Chief Medical Officer, Dr. A. Ramdas.

Chief Security Officer, M. Jal Singh.

Engineer-in-Chief (Projects), Bangalore, P. V. Rajagopal.

Minister without portfolio, M. P., Arjun Singh.



# MAHARASHTRA

## Bombay

### ADMINISTRATIVE PERSONNEL

#### Governor

DR. P. V. CHERIAN.

#### Personal Staff

Secretary to the Governor : R. B. Chari.  
Asstt. Secretary : S. D. Sawant.  
Private Secretary : J. M. Shapoorjee.  
Addl. Private Secretary : V. Subramanian.  
Comptroller : C. X. Fonseca.

#### Ministers

Chief Minister-in-Charge of General Administration, Home and Planning : V. P. Naik.  
Revenue : D. S. Desai.  
Irrigation, Power & Generation of Electricity, S. B. Chavan.  
Rural Development : G. B. Khedkar.  
Agriculture : P. K. Sawant.  
Co-operation : Vinayakrao Patil.  
Urban Development : P. G. Kher.  
Finance, Law and Judiciary and Small Savings : S. K. Wankhede.  
Education and Forests : M. D. Chaudhari.  
Labour : N. M. Tidke.  
Public Health and Wakfs : Dr. Rafiq Zakaria.  
Industries, Electricity and Printing Presses : R. A. Patil.  
Housing & State Road Transport Corporation : Y. J. Mohite.  
Social Welfare and Tourism : M. A. Vairale. @  
Food, Civil Supplies, Khar Lands and Fisheries : H. G. Vartak.  
Prohibition : B. M. Yagnik.

#### Deputy Ministers

Irrigation, Power and Agriculture : B. J. Khatal.  
Home, Food and Civil Supplies : K. P. Patil.  
Buildings and Communications, Fisheries, Labour, Khar Lands and Legislative Affairs : D. S. Jagtap.  
Revenue and Co-operation : S. B. Patil.  
Urban Development, Housing, State Road Transport and Small Savings : Madangopal Agarwal.  
Rural Development and Electricity : V. B. Hiray.  
Education and Industries : S. A. Solanke.  
Public Health and Prohibition : Mrs. Pratibha Patil.

#### Sachivalaya

#### GENERAL ADMINISTRATION DEPARTMENT

Chief Secretary : \* D. R. Pradhan, I.C.S.  
Addl. Chief Secretary : B. B. Paymaster, I.C.S.  
Special Secretary : S. Sankaran, I.A.A.S. (Retired).  
Additional Secretary and Additional Development Commissioner : N. G. Abhyankar, I.A.S.  
Addl. Secretaries : S. M. Kamruddin, I.A.S., M. W. Desai, I.A.S. (Also Dir. of Relief & Rehabilitation) ; V. S. Tambay, I.A.S. (Also Chief Electoral Officer).  
Deputy Secretaries : B. G. Deshmukh, I.A.S. ; Smt. Malati Tambe Vaidya, I.A.S. ; K. P. Nadkarni ; S. H. Fernandez, J. C. Fernandez, B. C. Cariapa, I.A.S.

#### REVENUE, FOREST DEPARTMENT

Secretary : L. G. Rajwade, I.C.S.  
Deputy Secretaries : K. A. Gafoor, I.A.S., M. P. Pande, I.A.S. ; N. B. Jangle.

#### AGRICULTURE AND CO-OPERATION DEPARTMENT

Secretary : Dr. A. U. Shaikh.  
Additional Secretary : Nizamuddin Ahmed, I.A.S.  
Deputy Secretaries : S. B. Kazi, I.A.S. ; S. S. Shukre, I.A.S. ; V. V. Masarekar.

#### FOOD AND CIVIL SUPPLIES DEPARTMENT

Secretary : M. N. Heble, I.A.S.  
Directors of Civil Supplies and Deputy Secretaries : B. S. Sheshgiri, V. T. Chari, I.A.S.  
Deputy Secretaries : J. G. Rajadhyaksha, S. P. Mondkar.  
Chief Accounts Officer and Deputy Secretary : V. R. Ramamurthi, I.A. & A.S.  
Director of Civil Supplies : V. Nair, I.A.S.  
Controller of Rationing : J. G. Kanga, I.A.S.

#### INDUSTRIES AND LABOUR DEPARTMENT

Secretary : Vacant.  
Joint Secretary : H. Nanjundiah, I.A.S.  
Deputy Secretaries : V. Srinivasan, I.A.S., V. N. Pimenta.

#### HEADS OF DEPARTMENTS

Industries Commissioner, Bombay : S. V. Bhawe, I.A.S.  
Director, Government Printing and Stationery, Bombay : J. W. D'Souza.  
Director of Geology and Mining, Nagpur : C. N. Chari.  
Director of Employment, Bombay : C. Thomas.  
President, Industrial Court, Bombay : R. N. Bilgrami.

#### HOME DEPARTMENT

Secretary, Home Department and also State Press Adviser : Vacant.  
Additional Secretary : Jasjit Singh, I.A.S.  
Deputy Secretaries : N. V. Sundararaman, I.A.S., S. S. Mone, I.A.S., J. R. Cabral, G. R. Donde.  
URBAN DEVELOPMENT, PUBLIC HEALTH AND HOUSING DEPARTMENT  
Secretary : R. C. Joshi, I.C.S.  
Deputy Secretaries : S. L. Ogale, I.A.S., W. G. Pathak, I.A.S. (Also Director of Municipal Adm.), Y. D. Jael, P. N. Palnitkar, P. M. Nadgauda (Spl. Engineer, Reclamation).

#### IRRIGATION AND POWER DEPARTMENT

Secretary : N. S. Pardasani, I.A.S.  
Chief Engineers & Jt. Secretaries : N. C. K. Murti, V. B. Manerikar, N. V. Khursale, S. V. Natu.  
Deputy Secretaries : V. H. Kelkar, S. T. Khare, K. V. Nevagi, S. C. Sahasrabuddhe, R. D. Gupte, M. D. Deshmukh.

#### FINANCE DEPARTMENT

Secretary to Government : Vacant.  
Director of Accounts & Treasuries and Joint Secretary to Government : D. Ramachandra Rao, I.A. & A.S.  
Director, Regional Transport Survey, Maharashtra State, Finance Department & Secretary Pay Commission : P. S. Nadkarni, I.A.S. (Retired).  
Financial Adviser to Government : K. Ramakrishna Ayyar, I.A. & A.S.  
Deputy Secretaries to Government : G. H. Lalwani, I.A.S., V. K. Chaudhari, I.A.S., M. Misbah, George Hurry, G. B. Hosangadi, H. J. M. Desai, D. G. Tungare.

#### RURAL DEVELOPMENT DEPARTMENT

Secretary : R. G. Salvi, I.A.S.  
Deputy Secretaries : A. K. Majumdar, I.A.S. ; V. Prabhakar, I.A.S. ; S. A. Shinde.

#### BUILDINGS & COMMUNICATIONS DEPARTMENT

Secretary : K. C. Nayar, I.A.S.  
Chief Engineers & Jt. Secretaries : K. V. Joglekar, D. K. Date.  
Supdt. Engineer : S. G. Borwankar.  
Deputy Secretaries : Y. S. Kasbekar, P. S. Shinde, C. B. Joshi.

#### LAW AND JUDICIARY DEPARTMENT

Secretary to Government and Remembrancer of Legal Affairs : B. P. Dalal, I.C.S. (Retd.).  
Addl. Secretary : S. B. Palekar.  
Jt. Secretaries : S. W. Dhurandhar, N. S. Bhupali.  
Solicitor to Government and Ex-Officio Joint Secretary to Govt. : R. D. Nigudkar.  
Solicitor (Mofussil Litigation) : G. U. Rijhsinghani.  
Addl. Solicitor (Mofussil Litigation) : A. V. Patkar.

#### EDUCATION & SOCIAL WELFARE DEPARTMENT

Secretary : M. V. Deo, I.A.S.  
Deputy Secretaries : V. B. Mandlekar, D. M. Sukhtankar, I.A.S., V. B. Parulkar.

#### MAHARASHTRA LEGISLATURE SECRETARIAT

Council Hall, Bombay 1.  
Secretary : S. H. Belavadi.  
Deputy Secretaries : S. R. Kharabe, A. B. Palekar.

#### SOME HEADS OF DEPARTMENTS

Vigilance Commissioner : Vacant.  
(Office : Old Secretariat, Bombay 32).  
Accommodation Controller : R. V. Chavan.  
Director of Education (Poona) : E. R. Dhongde.  
Director of Public Health (Poona) : Dr. P. D. Bhawe.  
Director of Agriculture (Poona) : Dr. V. G. Vaidya.  
Director of Fisheries (Bombay) : Dr. C. V. Kulkarni, M.Sc., Ph.D.  
Director of Animal Husbandry, Poona : M. M. A. Rahman.  
Director of Archives & Historical Monuments (Bombay) : Dr. M. G. Dixit.  
Director, Anti-Corruption and Prohibition Intelligence Bureau (Bombay) : C. J. V. Miranda, I.P.S.  
Settlement Commissioner & Director of Land Records & Inspector-General of Registration (Poona) : Mohd. Abdulla, I.A.S.  
Registrar of Firms (Bombay) : R. S. Barve.  
Chief Ports Officer (Bombay) : V. V. Jawadekar.  
Chief Conservator of Forests (Poona) : S. S. Bult.  
Superintendent of Parks & Gardens (Bombay) : Kumari Sarojini S. Pawar.  
Director of Ayurved (Bombay) : Vaidya Sharat Chandra M. Vasekar, Ayurvediya Visharad (Tilak).  
Director of Social Welfare (Poona) : B. K. Halve, I.A.S.  
Examiner of Books & Publications (Bombay) : P. S. Thorat.  
Director, Forensic Science Laboratory (Bombay) : Dr. H. S. Mahal.  
Charity Commissioner : C. P. Godsay.  
Director, Haffkine Institute, Bombay 12 : Dr. H. I. Jhala.  
Director of Technical Edn. : Prof. G. V. Sapre.  
Commandant General, Home Guards, Aviation and Fire Adviser & Director of Civil Defence (Secretariat Annex, M. Gandhi Road, Bombay 1) : M. J. B. Maneckji.

\* Is also Chairman, Govt. Textile Corporation.  
† (New Dy. Minister in charge of Social Welfare & Forests).

@ Is also Minister for Bldgs. & Communications. B. M. Bhavaskar (New Minister in Maharashtra Cabinet in charge of Social Welfare & Forests).



**POSTMASTER-GENERAL'S OFFICE  
(CENTRAL)**

*Postmaster-General, Bombay* : Madan Kishore.  
*Director of Telegraphs* : A. S. Muthuswamy Iyer.  
*Directors of Postal Services, Bombay* : K. R. Murthy, V. J. S. Perianayagam.  
*Director of R.M.S.* : R. K. Saiyed.  
*Presidency Postmaster, Bombay* : C. T. David.  
*Director, Foreign Posts* : P. V. Tamhankar.

**INDIAN AUDIT DEPARTMENT**

*Accountant-General's Office, 101, Maharshi Karve Road, Bombay 1.*  
*Accountant General* : K. R. Nair.  
*Sr. Dy. Acctt. General* : A. V. Subramaniam.  
*Sr. Dy. Acctt. General, Nagpur* : V. R. Katey.

**CENTRAL EXCISE**

*Central Excise Building, Maharshi Karve Road, Bombay 1.*  
*Collector of Central Excise* : A. K. Roy.  
*Deputy Collectors of Central Excise (O.S.D.)* : R. B. Sinha, I.R.S., G. Sankaran, N. B. Sanjana.

**CUSTOMS DEPARTMENT (CENTRAL)**

*New Custom House, Ballard Road, Bombay.*  
*Collector of Customs* : M. A. Rangaswamy.  
*Appellate Collector of Customs* : M. N. Mathur.  
*Addl. Collector of Customs* : R. N. Shukla.  
*Dy. Collector of Customs* : G. Sankaran.

**BOMBAY PORT TRUST**

*Ballard Road, Bombay.*  
*Chairman* : L. M. Nadkarni.  
*General Manager* : P. R. Subramaniam.  
*Secretary* : S. D. Chittar.  
*Dy. Secretary* : D. M. Desai.  
*Chief Accountant* : I. B. Das Gupta.  
*Addl. Chief Accountant* : D. A. Screwvala.  
*Chief Engineer* : R. P. E. Vazifdar.  
*Addl. Chief Engineer (I.D.A. Project)* : R. N. Vinekar.

**INCOME-TAX DEPARTMENT, BOMBAY  
CITY I, II AND III**

*Aayakar Bhavan, Maharshi Karve Road, Bombay 1.*  
*Commissioner of Income-tax, Bombay City I* : M. B. Palekar.  
*Commissioner of Income-tax, Bombay City II* : C. G. Ganapathy.  
*Commissioner of Income-tax, Bombay City III* : V. Satyasmurthi.  
*Commissioner of Income Tax, Central, Bombay* : O. V. Kuruvilla.  
*Public Relations Officer* : R. K. Gavaskar.

**INCOME-TAX, BOMBAY SOUTH**

*12, Connaught Road, Poona.*  
*Commissioner of Income-tax, Poona* : H. D. Bahl.

**HIGH COURT OF JUDICATURE**

*Fort, Bombay No. 1.*  
*Chief Justice* : S. P. Kotval.  
**PUISNE JUDGES** : Justice N. A. Mody ; Justice V. M. Tarkunde ; Justice D. V. Patel ; Justice V. S. Desai ; Justice K. K. Desai ; Justice V. A. Naik ; Justice N. L. Abhyankar ; Justice M. G. Chitali ; Justice Y. V. Chandrachud ; Justice D. G. Palekar ; Justice R. M. Kantawala ; Justice V. G. Wagle ; Justice V. D. Tulzapurkar ; Justice B. D. Bal ; Justice B. N. Deshmukh ; Justice M. V. Paranjpe ; Justice G. A. Thakker ; Justice D. B. Padhye ; Justice J. B. Vimadalal (Addl.).

**GAZETTED OFFICERS (Appellate Side), BOMBAY**

*Registrar* : N. D. Kamat.  
*Additional Registrar* : N. M. Shanbhag.  
*Special Officer (Inspection)* : K. N. Vani.  
*Deputy Registrar* : C. S. Trivedi.

**GAZETTED OFFICERS (Appellate Side), NAGPUR.**

*Special Officer* : M. V. Gokhale.  
*Additional Special Officer* : S. R. Bhawe.

**OFFICERS, ORIGINAL SIDE (BOMBAY).**

*Prothonotary and Senior Master* : Sarosh H. A. Vakil.  
*Master and Assistant Prothonotary* : B. N. Nakra.  
*Commissioner for Taking Accounts* : K. A. Mehta.  
*Court Receiver* : G. V. Dalvi.  
*Official Assignee* : N. R. D. Romar.  
*Official Liquidator* : B. J. Rele.  
*Taxing Master* : M. D. Daru.  
*Insolvency Registrar* : J. D. Gangal.

**SHERIFF'S OFFICE.**

*Sheriff of Bombay* : H. H. Ismail.  
*Dy. Sheriff of Bombay* : S. V. Kondaskar.

**LAW OFFICERS.**

*Advocate-General* : H. M. Seervai.  
*Govt. Pleader* : V. H. Gumaste.  
*Solicitors to the Government of Maharashtra* : Little and Co., Bombay.  
*Public Prosecutor for Bombay* : M. B. Vora.  
*Administrator-General and Official Trustee* : M. W. Pradhan.  
*Editor, Indian Law Reports, Bombay* : T. R. Pendharkar.

**CITY CIVIL AND SESSIONS COURT,  
GREATER BOMBAY**

*Principal Judge and Sessions Judge* : P. C. Kapadia ; *Judges* : K. H. Nagrani, A. T. Zambre, G. V. Mainkar, N. B. Naik, P. S. Malvankar, G. A. Desai, B. A. Chandiramani, S. K. Desai, R. D. Hattangadi, D. M. Rege, B. Lentin.  
*Officers* : A. P. Yajnik, Registrar, City Civil Court ; V. K. Kulkarni, Registrar, City Sessions Court.

**COURT OF SMALL CAUSES**

*Carnac Road, Bombay 2.*  
*Off. Chief Judge* : Narayan Mulchand Shah.  
*Judges* : Arthur Isalah Samson, Shiv Mohan Khatri, Sitaram Dagdo Patil, Ahmedali Abbasali Syed, Martand Vasudeo Purandare, Shantinath Gagaram Borde, Alfred Joseph Pinto, Sadashiv Bhaskar Ranade, Narayan Shrinivas Deshpande, Chaturlal Bhagwandas Shah, Vinayak Prabhakar Thosar, Ganjanan Sadashiv Dhavale, Anandrao Krishnarao Thorat, Thakorbhai Ranchodji Desai, Madanlal Nanabhai Shah, M. M. Daruv, Tulsi Ram Shankar Bhole, Vishvanath Keshav Patil.  
*Registrar* : Ganpatrao Bhaurao Upadhyay.  
*Additional Registrar* : Balkrishna Dwarkanath Gavaskar.

**PRESIDENCY MAGISTRATES, GREATER  
BOMBAY**

*Chief Presidency Magistrate* : V. M. Gehani.  
*Additional Chief Presidency Magistrate* : J. H. A. Vakil.

**PRESIDENCY MAGISTRATES :**

J. S. Sawda, M. M. Valand, K. S. Dhurandhar, U. S. Ursekar, V. V. Athalye, D. J. Soni, B. J. Abhyankar, M. Y. Guppte, B. L. Gadkari, A. S. Rangnekar, B. P. Saptarshi, V. G. Sirnaik, G. K. Nilkanth, C. S. Kotwal, L. J. Cordeiro, S. V. Gokarn, N. B. Akhujkar, R. M. Deore, B. Y. Risbud, J. P. Sawe, S. S. Shinde, S. G. Ghugare, P. W. Kenkre, L. V. Kapse, M. A. Deshpande, G. S. Wagle, D. C. Gupte.

*Presidency Magistrate, Juvenile Court, Bombay* : Mrs. A. H. Kulkarni.

*Registrar and Presidency Magistrate, Bombay* : K. G. Chawdhari.

**OFFICE OF THE INSPECTOR-GENERAL  
OF POLICE**

*Old Secretariat Bldg., II Floor, Bombay.*  
*Inspector-General of Police* : S. Majeedullah, I.P.S.  
*Assistant Inspectors-General of Police* : S. V. Tankhiwale, I.P.S., M. S. Heble, I.P.S., M. G. Gaval, I.P.S.  
*Superintendent of Police, State Traffic Branch* : J. N. Mehra, I.P.S.

**GREATER BOMBAY POLICE FORCE**

*Office—Dadabhai Naoroji Road, Opp. Jyotiba Phule Market, Bombay.*  
*Commissioner of Police, Greater Bombay* : A. G. Rajadhyaksha, I.P.  
*Deputy Commissioners of Police* : G. Krishnaswami, I.P.S. (Headquarters) ; M. P. Medhekar, I.P.S. (Special Br. II, C.I.D.) ; D. S. Soman, I.P.S. (Port) ; S. Ramamurthi, I.P.S. (Zone III) ; A. R. Dagle, I.P.S. (Special Br. I, C.I.D.) ; V. R. Dravid (Armed Forces & Motor Transport) ; J. A. Scott, (Zone IV) ; S. V. Chavan, (Prohibition) ; V. Sami, (Crime) ; J. T. F. Gurr (Traffic) ; J. J. Jameson, (Zone II) ; M. G. Korde, (Zone I) ; S. N. Sawant, (S.B.I., C.I.D.) ; E. C. Scott, (Zone II) ; H. G. Abhyankar, I.P.S., (Special Duty).  
*Assistant Commissioner of Police* : M. C. Garud (Headquarters).

**PROHIBITION BRANCH**

*Asstt. Commissioners of Police* : M. K. Diwate, (South) ; E. G. Durne, (North).

**CRIME BRANCH, C.I.D.**

*Asstt. Commissioner of Police* : R. B. Nalawade (I) ; B. S. Bagwe, (II).

**SPECIAL BRANCH I, C.I.D.**

*Asstt. Commissioner of Police* : G. M. Nadkarni, (I) ; M. G. Patwardhan, (II) ; P. M. Date, (III).

**SPECIAL BRANCH II, C.I.D.**

*Asstt. Commissioner of Police* : K. D. Kothawala, (I) ; H. S. Ghale, (II).

**ANTI-CORRUPTION BUREAU**

*Asstt. Commissioner of Police* : E. A. Fernandez.

**LAI DIVISION**

*Asstt. Commissioner of Police* : J. B. Taraporewalla.  
*Principal, Police Training School, Naigaum* : P. M. Datar.

**LAII DIVISION**

*Asstt. Commissioner of Police* : A. S. Dhamankar.

**LAIII DIVISION**

*Asstt. Commissioner of Police* : S. B. Dastoor.

**MOTOR TRANSPORT SECTION**

*Asstt. Commissioner of Police* : K. V. Sidhaye.

**CONTROL ROOM**

*Asstt. Commissioner of Police* : V. B. Bhagwat.

**COMMISSIONER OF LABOUR**

*Commerce Centre, 6th & 7th Floor, Tardeo, Bombay 34.*  
*Commissioner of Labour and Director of Employment* : D. G. Kale.  
*Dy. Commissioners of Labour* : V. V. Joshi, T. R. Bhagwat, G. K. Dutla.  
*Asstt. Commissioner of Labour and P. A. to Commissioner of Labour* : G. K. Joshi.



**Chief Govt. Labour Officer :** D. G. Deshpande.  
**Chief Inspector of Factories :** N. L. Gadkari.  
**Chief Inspector of Steam Boilers and Smoke Nuisances :** K. D. Bhatena.  
**Director, Bombay Labour Institute :** B. S. Bhir.  
**Deputy Commissioner of Labour, Nagpur :** B. M. Maruf.  
**Deputy Commissioner of Labour, Poona :** C. B. Dingare.  
**Asstt. Commissioner of Labour, Aurangabad :** R. D. Rangnekar.

**MAHARASHTRA SALES TAX TRIBUNAL**  
*New Sales Tax Bldg., 7th Floor, Mazagaon, Bombay 10.*

**President :** T. P. Ghogale.  
**Members :** R. K. Ranade, V. K. Sathe, K. V. Tamhane, C. A. Phadkar, F. F. Coutinho.  
**Assessor :** K. V. Kalghatgi.  
**Registrar :** R. D. Lad.

### DIRECTORATE OF PUBLICITY

*Sachivalaya, Bombay 32.*

**Director of Publicity :** Y. H. Pitke.  
**Dy. Director of Publicity (News) :** D. R. Samant.  
**Dy. Director of Publicity (Public Relations) :** M. I. R. Mathur.  
**Dy. Director of Publicity (Publications) :** G. S. Patke.  
**Dy. Director of Publicity (Films) :** Kumarsen Samarth.  
**Jt. Director (Tourism) :** Jalabuddin Siddiqui.  
**Dy. Director of Publicity (Exhibition) :** A. K. Kanitkar.

### DIRECTORATE OF PROHIBITION AND EXCISE

*Old Custom House, Bombay 1.*

**Director of Prohibition and Excise :** D. T. Ghatpande.  
**Deputy Director of Prohibition & Excise (Administration) :** M. F. Siddiqui.  
**Deputy Director of Prohibition and Excise (Inspection) :** C. A. Forage.

### MAHARASHTRA STATE CO-OPERATIVE TRIBUNAL

*Old Secretariat Bldg., Ground Floor, Mayo Road, Bombay 32.*

**President :** B. D. Nadkarni.  
**Member :** G. S. Jadhav.  
**Registrar :** G. V. Koimbattur.

### MAHARASHTRA LABOUR WELFARE BOARD

*Jambori Maidan, Worli, Bombay 18.*

**Welfare Commissioner :** Dr. M. S. Sabnis.  
**Secretary :** S. G. Mangaonkar.

### HOME GUARDS

*Secretariat Annexe, Mahatma Gandhi Road, Bombay 1.*

**Commandant General, Home Guards, Aviation & Fire Adviser & Director of Civil Defence :** M. J. B. Maneckli.

### OFFICE OF THE DAIRY DEVELOPMENT COMMISSIONER

*Old Secretariat, Bombay 32.*

**Dairy Development Commissioner :** G. S. Godbole.  
**Dy. Dairy Development Commissioner (T. & M.) :** Dr. V. M. Patil.  
**Dairy Development Officer (Hq.) :** N. R. Paranjpe.  
**Dairy Engineer (M) :** N. Laxminarayana.  
**Regional Dairy Development Officer, Poona :** R. K. Thakar.  
**Regional Dairy Development Officer, Nagpur :** K. V. Ghurye.

### OFFICE OF THE DIRECTOR, GREATER BOMBAY MILK SCHEME

*Wakefield House, Ballard Estate, Bombay 1.*

**Director, Greater Bombay Milk Scheme :** Y. V. Salpekar.  
**Controller of Milk Accounts and Financial Adviser :** W. D. Madhekar.  
**Public Relations Officer :** S. V. Sankholkar.

**WORLI DAIRY, WORLI, BOMBAY-18.**

**Controller, Milk Transport, Greater Bombay Milk Scheme :** N. G. Pandit.  
**General Manager (Aarey & Worli Dairies) :** N. S. Dave.

**AAREY MILK COLONY, AAREY, BOMBAY-65.**  
**Chief Executive Officer (Colony) :** Dr. D. R. Chavan.

### DIRECTORATE OF DRUGS CONTROL ADMINISTRATION

*Manekji Wadia Bldg., 127, M. Gandhi Road, Bombay.*

**Director :** M. K. Rangnekar.  
**Asstt. Directors :** V. C. Sane (Cos.), V. N. Solanki (Bombay), C. G. Rao (Advtg.).

### SECONDARY SCHOOL CERTIFICATE EXAMINATION BOARD

*Ganeshkhind Road, Poona 10.*

**Chairman :** C. G. Sahasrabudhe.  
**Secretary :** W. B. Mehendale.

### DIVISIONAL COMMISSIONERS

**Divisional Commissioner, Bombay Dn. :** G. A. Sharma, I.A.S.  
**Divisional Commissioner, Poona Dn. :** S. V. Chavan, I.A.S.  
**Divisional Commissioner, Aurangabad Dn. :** L. N. Bongirwar, I.A.S.  
**Divisional Commissioner, Nagpur Dn. :** Dr. M. N. Desai, I.A.S.

### BOMBAY COLLECTORATE

*Old Custom House Yard, Fort, Bombay.*

**Collector of Bombay and B.S.D. :** S. G. Suradkar, I.A.S.  
**Addl. Collector of B.S.D. :** A. M. Deosthale.  
**Addl. Collector of Bombay and B.S.D. for the Recovery of Income-tax :** S. S. Malpathak.  
**Mamlatdar, Kurla :** B. V. Puntambekar.  
**Mamlatdar, Borivli :** S. G. Mathure.  
**Mamlatdar, Andheri :** L. S. Kamble.

### MAHARASHTRA HOUSING BOARD

*Esplanade Maidan, Cruickshank Road, Bombay.*  
**Chairman :** N. S. Patil.

**Housing Commissioner and Secretary, M.H.S. :** D. S. Borkar.

**Assistant Housing Commissioners :** F. K. Daver (West), N. P. Panjabi (East) and P. J. Tipnis (Estate Management).

**Administrative Officer :** B. J. Desai.  
**Public Relations Officer :** P. N. Indurkar.

### COMMISSIONER OF SALES TAX

*New Sales Tax Bldg., 7th Floor, Mazagaon, Bombay 10.*

**Commissioner of Sales Tax, Maharashtra State, Bombay :** H. B. Munshi.  
**Additional Commissioner of Sales Tax :** H. B. Munshi.  
**Deputy Commissioner of Sales Tax (Headquarters) :** M. G. Sabnis.

**Government Agent before the Maharashtra Sales Tax Tribunal, Maharashtra State, Bombay :** V. H. Gore.

**Deputy Commissioners of Sales Tax, Bombay City Division :** V. B. Kulkarni, (Adm. I); P. V. Patankar, (Adm. II); N. Jayaraman, I.A.S., (Adm. III); V. Venkatesan, I.A.S. (Enforcement); H. A. Sawian, I.A.S., (Appeals III).

*21, Dr. Ambedkar Road, Poona-1.*

**Deputy Commissioner of Sales Tax, Central Division, Poona :** V. N. Chandorkar.

*Opp. High Court, Nagpur.*

**Deputy Commissioner of Sales Tax, Eastern Division, Nagpur :** P. L. Joglekar.

### MAHARASHTRA PUBLIC SERVICE COMMISSION

*Bank of India Building, Mahatma Gandhi Road, Bombay 1.*

**Chairman :** Dr. D. Y. Gohokar.  
**Members :** D. V. Chauhan, Brig. N. D. Bilimoria.  
**Secretary :** R. A. Kodkani.

### MAHARASHTRA STATE ROAD TRANSPORT CORPORATION

*Maharashtra Vahatuk Bhavan, Byculla, Bombay 8.*

**Chairman :** R. G. Saraiya.  
**Vice-Chairman :** D. B. Kamble.  
**General Manager :** R. G. Shinde.  
**Chief Accounts Officer :** P. C. Roy.  
**Dy. General Manager (Mech. Engg.) :** S. N. Chawla.  
**Dy. General Manager (Traffic) :** R. E. Wates.  
**Dy. General Manager (Ins. Org. and Methods) :** I. S. Nanjiani.  
**Divnl. Controller (Adm.) :** V. D. Shirke.  
**Dy. General Manager (Stores & Purchase) :** M. K. Mantri.  
**Chief Civil Engineer :** H. B. Francis.  
**Secretary, M.S.R.T. Corpn. :** K. S. Prabhudesai.  
**Public Relations Officer and Editor, "Maharashtra S.T. Samachar" :** D. M. Nadkarni.  
**Chief Labour Officer :** C. N. Bagwe.  
**Secretary, Service Board & Secy. to Vice-Chairman :** D. A. Jadhav.

### INSPECTOR-GENERAL OF PRISONS

*Maharashtra State, Poona.*

**Inspector-General of Prisons :** D. J. Jadhav, I.A.S.  
**Dy. Inspector-General of Prisons :** S. R. Thorat.  
**Dy. I. G. of Prisons, E. Region and Superintendent, Nagpur Central Prison :** V. K. Toraskar.  
**Dy. I. of Prisons, W. Region and Superintendent, Yeravda Central Prison :** L. Blake.  
**Principal, Jail Officers' Training School, Yeravda, Poona 6 :** S. S. Khanolkar.  
**Superintendent, Nasik Road Central Prison :** V. R. Nicholas.  
**Superintendent, Aurangabad Central Prison :** D. Y. Chavan.

### MAHARASHTRA REVENUE TRIBUNAL

*Old Secretariat Annexe, Bombay 32.*

**President :** J. R. Dhurandhar.  
**Members :** P. R. Patil, P. H. Abhyankar, B. A. Bhonsale.  
**Register :** V. R. Bhoras.

### BUREAU OF ECONOMICS & STATISTICS

*D. D. Bldg., Old Custom House, Bombay 1.*

**Director :** S. M. Vidwans.  
**Joint Director :** S. P. Gothoskar.  
**Deputy Directors :** V. D. Mahajan, D. S. Kulkarni, B. W. Chavan, S. S. Chitney, N. V. Mohod, S. G. Moghe, S. D. Diwanji, U. K. Koundinya.



**COMMISSIONER FOR WORKMEN'S  
COMPENSATION**

Old Secretariat Building, Ground Floor, Near  
Kala Ghoda, Fort, Bombay 1.

Commissioner : V. B. Potdar.

Addl. Commissioners : A. M. Sayed, B. A. Ekbote,  
S. R. Dolphode.

Registrar : P. S. Gavaskar.

Addl. Registrar : S. M. Kamat.

**DIRECTORATE OF INDUSTRIES,  
MAHARASHTRA STATE**

Sachivalaya Annex, Bombay 32.

Industries Commissioner, Director of Industries,  
Statistics Authority, Central Stores Purchasing  
Officer, Controller of Building for the City of  
Bombay and Thana Taluka, Coal Controller,  
State Textile Controller, Controller of Weights  
& Measures & Addl. Secy. to Govt., Industries  
& Labour Dept. : S. V. Bhawe, I.A.S.

**REGISTRAR OF CO-OPERATIVE  
SOCIETIES**

Central Building, Poona-1.

Registrar of Co-operative Societies : V. Subra-  
maniam, I.A.S.

Joint Registrar, Co-operative Societies (Sugar) &  
Director of Agri. Marketing, Poona : A. W.  
Khan, I.A.S.

Jt. Registrars : S. Ramakrishnan, I.A.S. (Ind.  
Co-ops.), S. S. Tinalkar, I.A.S. (Consumers),  
P. S. Nadkarni (Lift Irrigation), M. B. Ghor-  
pade (Mktg.), N. Y. Kher (Adm.), B. R. Vani  
(Audit).

**GOVT. OF INDIA TOURIST OFFICE**

123, Queen's Road, Bombay 1.

Director : S. P. Tewari.

Asstt. Directors : Miss V. Maneklal, E. Pereira,  
B. N. Lahiri.

**PRESS INFORMATION BUREAU**

United India Bldg., Sir Pherozeshah Mehta Road,  
Fort, Bombay 1.

Deputy Principal Information Officer : P. N. V.  
Rao.

Information Officer : T. K. Jhuremalani.

Assistant Information Officers : V. S. Varkhedkar  
(Films); M. N. Padte (Marathi); M. L.  
Kulkarny (Marathi).

**NATIONAL PRODUCTIVITY COUNCIL**

Regional Directorate, Novelty Chambers, Grant  
Road, Bombay-7.

(This Directorate is the Headquarters of Fuel  
Efficiency Service).

Regional Director : Dr. V. Ramchandran.

Deputy Director : A. A. Niazi.

**BOMBAY MUNICIPAL  
CORPORATION**

Mayor : Dr. J. Leon D'Souza.

Chairman, Standing Committee : Raj Mirashi.

Improvements Committee : M. H. Bedi.

Education Committee : Prakash Mohadikar.

Works Committee : Dr. B. M. Kalgutkar.

B.E.S.T. Committee : R. K. Ganatra.

Medical Relief and Public Health Committee :  
Dr. M. C. Bilpodiwala.

Municipal Works Committee (Suburbs) : H. J.  
Correa.

**PRINCIPAL MUNICIPAL OFFICERS**

Municipal Commissioner for Greater Bombay : J.  
H. Patwardhan, I.A.S.

Dy. Municipal Commissioner : S. M. Y. Sastry.

Dy. Municipal Commissioner : V. C. Vaidya.

Dy. Municipal Commissioner : C. Soares.

Dy. Municipal Commissioner : M. R. Natarajan.

Dy. Municipal Commissioner, (Labour) : R. J.  
Tamboli.

City Engineer : V. D. Desai.

Hydraulic Engineer : D. R. Bhise.

Executive Health Officer : Dr. R. B. Fondekar.

Dean, K.E.M. Hospital and G. S. Medical  
College : Dr. S. V. Joglekar.

Dean, B.Y.L. Nair Charitable Hospital & Topi-  
wala National Medical College : Dr. T. H.  
Rindani.

Superintendent, Lokmanya Tilak General Hospi-  
tal : Dr. (Smt.) Ahilya S. Punde.

Medical Superintendent, Kasturba Gandhi Memo-  
rial Hospital : Dr. R. S. Deshpande.

Medical Superintendent, R.P.T.B. Hospital,  
Sevres : Dr. S. A. Shah.

Dean, Nair Hospital Dental College, Lamington  
Road : Dr. M. S. N. Unwala.

Chief Accountant : R. G. Gulgule.

Officer on Special Duty : G. W. Shiveshwarkar.

Assessor & Collector : P. R. Bhatkhande.

Controller of Stores : Franklin D'Souza.

Dy. Assessor and Collector (Octroi) In Charge of  
Elections : B. H. Prabhavalkar.

Superintendent of Licences : C. K. Patel.

Insecticide Officer : M. A. Samuel.

Dy. Chief Inspector, Shops & Establishments : A.  
A. Munshi.

Administrative Officer (Estates) : M. S. Dixit.

Labour Officer : Smt. Freney A. Iranl.

Public Relations Officer, & Editor, "Bombay Civic  
Journal" : N. A. Mistri.

Municipal Secretary : P. C. Pandya.

Municipal Analyst : Dr. V. Sadashivan.

Municipal Medical Examiner : Dr. D. D. Bamji.

Executive Engineer (Development Plan) : P. A.  
Umrigar.

Executive Engineer (Mechanical), Municipal  
Workshops, Foras Road, Bombay 8 : V. R.  
Gadre.

Superintendent, Vaccination Department : Dr. M.  
K. Vaidya.

Education Officer : Dr. Smt. Madhuri R. Shah.

Supdt., Municipal Gardens, Victoria Gardens,  
Bombay 27 : G. S. Hegde.

Supdt. of Markets & Slaughter Houses, Mahatma  
Jyotiba Phule Market, Bombay 1 : Dr. Victor  
Periyar.

**FIRE BRIGADE**

Headquarters : Byculla Bridge

Chief Officer, Fire Brigade : S. Fredilis.

Deputy Chief Officers : E. M. Jacob, P. T. Samant.

Fire Brigade Stations.

Headquarters, Byculla Bridge; Alexandra  
Docks, Frere Road; Gowalia Tank; Sewree;  
Fort; Colaba; Shivaji Park; Worli; Dadar;  
Memonwada; Mandvi; Andheri; Vikhroli;  
Chembur.

**B.E.S.T. UNDERTAKING**

BEST House, Bombay 1.

General Manager : J. B. D'Souza, I.A.S.

Secretary : K. P. Dhuru.

Controller of Stores : N. K. Dari.

Chief Accounts Officer : G. J. Gadre.

Chief Engineer (Supply) : K. N. Rao.

Chief Engineer (Transport) : S. G. Laud.

Distribution Engineer : A. P. Shenoy.

Services Engineer : P. B. Parikh.

Chief Traffic Manager : C. D. Jeffereis.

Traffic Manager : H. A. Printer.

Engineer-in-Charge (Way & Works) : P. G.  
Patankar.

Personnel Officer : S. R. Paranjpe.

Public Relations Officer : J. D. Joglekar.

**CENTRAL RAILWAY**

Hqrs. Office :—Victoria Terminus, Bombay.

General Manager : B. S. D. Baliga.

Senior Deputy General Manager : A. N. Mukerji.

Officer on Special Duty : S. Rodrigues.

Deputy General Manager (General) : F. C. Bhan-  
dari.

Statistical Officer : P. Jehangir.

Compilation Officer : P. B. Vallabhadas.

Chief Public Relations Officer : K. S. J. Dalal.

Public Relations Officer : R. B. Manelkar.

Assistant Public Relations Officer : M. S. Purohit.

Chief Auditor : S. Manzur-e-Mustafa.

Chief Personnel Officer : M. J. Patel.

Chief Engineer : C. B. Sule.

Chief Engineer (Construction) : P. Krishna Raju.

Chief Operating Superintendent : V. Ramanathan.

Chief Commercial Superintendent : M. Fasihuddin.

Chief Mechanical Engineer : S. S. Lal.

Chief Signal & Tele-Communication Engineer :  
R. S. Mehta.

Chief Electrical Engineer : S. S. Kochak.

Controller of Stores : G. C. Basavaraaj.

Financial Adviser & Chief Accounts Officer : P.  
R. K. Menon.

Chief Medical Officer : Dr. R. C. Vevaina.

Chief Security Officer : M. G. Heblikar, I.P.S.

**WESTERN RAILWAY**

HEADQUARTERS OFFICE, CHURCHGATE,  
BOMBAY.

General Manager : G. S. Khosla.

Senior Deputy General Manager : D. B. Patel.

Dy. General Manager (General) : F. Da Costa.

Public Relations Officer : D. P. S. Ahuja.

Statistical Officer : A. Araujo.

Law Officer : V. D. Thatte.

Executive Engineer (Vigilance Cell) : B. N. Dutta.

Senior Accounts Officer (Vigilance Cell) : J. S.  
Dhupia.

Chief Personnel Officer : S. Wahabuddin Ahmed.

Financial Adviser & Chief Accounts Officer : G.  
F. Penn Anthony.

Chief Engineer : Vacant.

Chief Engineer (Survey & Construction) : N. K.  
Mehra.

Engineer-in-Chief (KOTA) : V. Giridharadas.

Engineer-in-Chief (Construction), Ahmedabad :  
U. H. Mehta.

Chief Signal and Telecommunication Engineer :  
K. N. Kinra.

Chief Electrical Engineer : T. S. Vishwanathan.

Chief Mechanical Engineer : J. F. Muncherjee.

Chief Operating Supdt. : P. K. Madhava Menon.

Chief Commercial Supdt. : V. B. Kevalramani.

Controller of Stores : Gulshan Rai.

Chief Medical Officer, Bombay : Dr. S. L.  
Malhotra.

Chief Security Officer : B. L. Shrivastava.

**RAILWAY SERVICE COMMISSION,  
BOMBAY**

(Churchgate Station Bldg., 1st Floor, Bombay 1).

Chairman : S. G. Pothan.

Members : B. P. Hira, M. B. Patel.

Secretary : S. V. Sivaraman.



## MANIPUR

Imphal

### ADMINISTRATIVE PERSONNEL

**Chief Commissioner, Baleswar Prasad.**

**Chief Minister, in charge of Confidential, Cabinet, Home, Appointment and Services, Transport, PWD, and Food and Civil Supplies, Koireng Singh.**

**Finance, Forest and Revenue, Sibho Larho.**

**Education, Local Self-Government and Law, N. Tombi Singh.**

**Health, Industries and Labour, Goukhenpau.**

**Planning and Development, Agriculture and Animal Husbandry and Veterinary, including Dairy, Mohammed Allimuddin.**

**Chief Secretary, A. N. Snegal.**

**Judicial Commissioner, Rajvi Roop Singh**

**Deputy Commissioner, K. T. Khuma.**

**Secretary, Development, T. Kipgen.**

**Secretary, Law, R. C. Deo Sharma.**

**Secretary (Medical), S. Gourhari Singh.**

**Secretary (Finance), S. Subramanian.**

**Development Commissioner, V. V. Mongla.**

**Addl. District Magistrate, V. K. Kapoor.**

**Dist. and Sessions Judge, O. Thambal Singh.**

**Publicity Officer, S. Gopendra Sharma.**

**Director, Medical & Health Services, W. C. Malhotra.**

**Inspector-General of Police, J. B. Chhabra.**

**Commandant, Manipur Rifles, A. N. Banerjee.**

**Registrar, Co-operative Societies, K. Lamphei Singh.**

**Director of Agriculture, Harinder Singh.**

**Director of Industries, Abdul Bari.**

**Chief Forest Officer, R. K. Bijoychandra Singh.**

**Chief Fisheries Officer, M. Radheshyam Singh.**

## MYSORE

Bangalore

### Governor

G. S. PATHAK.

**Secretary, D. S. Raghavendrchar.**

### MINISTERS

**Chief Minister, in charge of General Administration, Agriculture, Industries and Commerce, S. Nijalingappa.**

**Transport and Tourism, Mohamed Ali.**

**Law, S. R. Kanthi.**

**Food and Civil Supplies, B. D. Jatti.**

**Home, M. V. Rama Rao.**

**Municipal Administration, R. M. Patil.**

**Public Works Department and Electricity, Veerendra Patil.**

**Revenue and Forest, B. Rachiah.**

**Finance, Planning, Excise and Prohibition, Ramakrishna Hegde.**

**Health and Housing, K. Puttuswami.**

**Animal Husbandry, Fisheries, Sericulture and Publicity, Devaraj Urs.**

**Social Welfare, G. Narayana Gowda.**

**Education, K. V. Shankara Gowda.**

**Co-operation, Panchayat Raj and Community Development, P. M. Nadagouda.**

### Deputy Ministers

**Finance, Abdul Gaffar.**

**Minor Irrigation, Alur Hanumanthappa.**

**Sericulture, Dayanda Sagar.**

**Revenue, G. B. Shankara Rao.**

**Transport, H. C. Boriah.**

**Industries, K. P. Appanna.**

**Animal Husbandry and Fisheries, Y. Ramakrishna.**

**Agriculture, D. Pawar.**

### SECRETARIAT

**Chief Secretary, K. Balachandran, I.C.S.**

### SECRETARIES TO GOVERNMENT

**Development Commissioner & Commissioner for Agricultural Production & Spl. Secretary to Govt., Planning & Agricultural Production, G. V. K. Rao.**

**Revenue Department, B. S. Srikanthaiya.**

**Finance Department, M. Veeraraj Urs.**

**Public Works & Electricity Deptt., Chandappa Patel.**

**Planning, Housing and Social Welfare Dept., M. K. Venkatesan.**

**Food Department, N. Narasimha Rau**

**Public Health, Labour and Municipal Administration Department, N. S. Ramachandra.**

**Agriculture and Forest Department, R. Seshadri.**

**Commerce and Industries Department, M. Subramanyam.**

**Law Department, R. Sanjeevalu.**

**Education Department, B. R. Verma.**

**Development, Panchayat Raj & Co-operation, R. Bharaniah.**

### HEADS OF DEPARTMENTS

**Commissioner for Religious and Charitable Endowments, R. S. Nanjunde Gowda; Chief Conservator of Forests, N. S. Kalkini; Inspector General of Prisons, Shahabuddin Ahmed; Inspector-General of Police, S. N. Hosali, I.P.; Director of Public Health, C. Gopalraj Chetty; Director of Public Instruction, S. V. Javoor; Director of Technical Education, B. L. Shantamallappa; Director of Collegiate Education, D. J. Davar; Director of Agriculture, Dr. H. R. Arakeri; Director of Animal Husbandry & Veterinary Services, P. M. N. Naidu; Director of**

**Industries & Commerce, T. Shamanna; Commissioner of Labour & Ex-Officio Director, National Employment Service, B. C. Channaraj Urs; Director of Social Welfare, Zafar Saifullah; Commissioner for Transport, Vazir Ahmed; Registrar of Co-operative Societies & Ex-Officio Chief Marketing Officer, C. J. Jamkhandimath; Director of Sericulture, V. R. Uthaman; Director of Archaeology, M. Seshadri; Director of Publicity and Information, M. D. Mariputtanna; Director of Statistics, L. Mohammed Abdul Wali; Director of Fisheries, G. Laxman Rao; Vigilance Commissioner, Mir Iqbal Hussain; Director of Vigilance, Dr. B. V. Iyenger; Secretary, Mysore Govt. Ins. Dept., T. Ramakrishna, Commissioner of Civil Supplies, K. Balasubramanyam, Commissioner of Labour, V. Hanumanthappa, Director, Employment & Training, R. Sampat-kumaran, Director of Food Supplies, Mani Narayanaswamy.**

### HIGH COURT

**Public Office Bldgs., Bangalore 1.**

**Chief Justice, H. Hombe Gowda; Judges, A. B. Somnath Iyer; M. Sadasivayya; A. Narayana Pai; Ahmed Ali Khan, B. M. Kalagate; G. K. Govinda Bhat, T. K. Tukol, K. R. Gopi Vallabha Iyengar, D. M. Chandrashekar, M. Santosh, C. Honniah, K. Bhimian.**

**Registrar, P. Subramaniam.**

**Advocate-General, Tumbe Krishna Rao.**

### MYSORE PUBLIC SERVICE COMMISSION

**'Atara Kacheri', Bangalore 1.**

**Chairman, B. Chennigaramalah.**

**Members, S. A. L. Razvi, K. R. Marudewa Gowda, I.A.S., S. D. Kothavale, M. L. Manjara-raja Urs.**

**Secretary, Cecil Noronha, I.A.S.**

## NAGALAND

Kohima

### EXECUTIVE COUNCIL

#### Governor

VISHNU SAHAY

#### MINISTERS

**Chief Minister, in charge of Home, Information and Publicity and Tourism. Any other matter not allotted to any Minister: T. N. Angami.**

**Finance and Revenue, Medical and Public Health, Planning and Co-ordination: Hokishe Sema.**

**Forest, Transport, Excise and Electricity: Jasokie Angami.**

**Agriculture, Law and Parliamentary Affairs, Industries and Commerce: R. C. Chiten Jamir.**

**Tuensang Affairs, Community Development, Co-operation: Akum Imlong.**

**Education, Social Welfare, Research, Town and Country Planning: Rhondamo Kithan.**

#### Ministers of State

**Public Works Department: N. L. Odyuo.**

**Supply, Relief and Rehabilitation: Ihezhe Sema. Veterinary and Animal Husbandry: P. Demo.**

#### Deputy Ministers

**Electricity: Netsutso Theyo.**

**Information & Publicity and Jails: Zulutemba Ao.**

#### SECRETARIES

**Chief Secretary: U. N. Sharma.**

**Development Commissioner: H. Zopianga.**

**Secretary, Home Department, Information & Publicity, Relief and Tourism Dept.: R. H. M. D'Silva.**

**Secretary, P.W. Department, Electricity Dept., and Transport Department: O. Kathipri.**

**Secretary, Agriculture Dept., Forest Dept., Veterinary and Animal Husbandry Dept.: A. H. Scott.**

**Secretary, Medical Dept., Public Health Dept., Supply Dept., Industry and Commerce Dept. and Ex-Officio Chief Electoral Officer, Nagaland: I. Sashimeren Aler.**

**Secretary, Finance Department: Dhiyan Singh.**

**Jt. Secretary, Education Department, Research Dept., Co-operative Dept., Social Welfare Department and Ex-Officio Registrar of Co-operative Societies, Nagaland: Z. Obed.**

**Dy. Secretary, Judicial: I. Longkumar.**

#### GENERAL ADMINISTRATION

**Commissioner and Ex-Officio I.G.P.: L. Lungalang.**

**Dy. Commissioner, Kohima District: S. C. Dev.**

**Dy. Commissioner, Mokokchung Dist.: N. I. Jamir.**

**Dy. Commissioner, Tuensang Dist.: T. A. Imti.**

**Director of Forests: L. Rynjah.**

**Director of Agriculture: J. Panger Ao.**

**Director of Education: Rajkumar S. Gubain.**

**Director of Health Service: Dr. T. Ao.**

**Director of Information & Publicity: H. B. Rattan.**



# ORISSA

Bhubaneswar

## Administrative Personnel

### Governor

Dr. A. N. KHOSLA

### PERSONAL STAFF

Secretary to Governor : R. N. Das, I.A.S.

Personal Secretary to Governor : Kanwar Sain.

### MINISTERS

Chief Minister, in charge of Finance, Home, Planning and Co-ordination, Rajendra Narain Singh Deo.

Deputy Chief Minister, in charge of Political and Services, Education, Mining and Geology, Pabitra Mohan Pradhan.

Community Development and Panchayati Raj, Labour and Tourist Traffic (Home), Agriculture and Animal Husbandry, Raj Ballabh Misra.

Revenue, Irrigation and Power, Surendranath Patnaik.

Industries, Commerce, Forestry, Co-operation and Fisheries, Harihar Patel.

Tribal and Rural Welfare and Excise, Santanu Kumar Das.

Supply, Cultural Affairs, Nityananda Mahapatra.

Health, N. Ramaseshaiah.

Law and Urban Development, Haraprasad Mahapatra.

Works and Transport, Dayanidhi Nayak.

### Deputy Ministers

Revenue, Irrigation and Power, Hilmansu Sekhar Padhi.

Tribal and Rural Welfare, Man Mohan Tudu.

Forestry, Co-operation and Fisheries, Murari Prasad Misra.

Community Development and Panchayati Raj, Ananta Narayan Singh Deo.

Finance and Home, Kartik Chandra Majhi.

### Officials

Chief Secretary, A. K. Barren, M.C., I.A.S.  
Member, Board of Revenue, V. Ramanathan, I.C.S.

Additional Chief Secretary and Development Commissioner, R. P. Padhi, I.A.S.

Member Administrative Tribunal, Iswar Chandra Mishra, M.A., B.L.

Commissioner, Central Division, Pramod Singh, I.A.S.

Commissioner, Northern Division, D. D. Suri, I.A.S.

Commissioner, Southern Division, K. C. Ray, I.A.S.

Secretary, Political and Services Department, A. K. Barren, M.C., I.A.S.

Secretary, Home Department, V. Natrajan, I.A.S.

Secretary, Mining and Geology Department, K. S. Ramchandran, I.A.S.

Secretary, Education Department, K. K. Samal, I.A.S.

Secretary, Planning and Co-ordination Department, R. P. Padhi, I.A.S.

Secretary, Labour Department, Amar Singh, I.A.S.

Secretary, Finance Department, K. S. Bawa, I.A.S.

Secretary, Supply Department, P. K. Chakraverti, I.A.S.

Secretary, Industries Department, S. M. Patnaik, I.A.S.

Secretary, Health Department, U. C. Agarwala, I.A.S.

Secretary, Commerce Department, Gnan Chand, I.A.S.

Secretary, Revenue and Excise Department, B. K. Mishra, I.A.S.

Secretary, Works and Transport Department, B. R. Patel, I.A.S.

Secretary, Agriculture and Animal Husbandry Department, M. Ahamed, I.A.S.

Secretary, Co-operation and Forestry Department, Gnan Chand, I.A.S.

Secretary, C. D. & P. R. Department, B. C. Tripathy, I.A.S.

Secretary, Cultural Affairs Department, K. K. Samal, I.A.S.

Secretary, Irrigation and Power Department, K. S. Ramchandran, I.A.S.

Secretary, Legislative Assembly Department, Nilakantha Rath, B.A., B.L.

## Heads of Departments at Bhubaneswar

Director of Health Services, Dr. G. Mohapatra, M.B.B.S.

Registrar of Co-operative Societies, B. B. Bath, I.A.S.

Director of Gram Panchayats, A. Das, I.A.S.

Inspector General of Prisons, Dr. S. Bath, M.B.B.S.

Director of Agriculture and Food Production, K. S. Chandra Sekharan, I.A.S.

Director of Public Relations, S. B. Mishra.

## Heads of Departments at Cuttack

Director of Public Instruction, B. Samanta Rai.

Inspector General of Police, R. K. Padhi.

Director of Animal Husbandry and Veterinary Services, Dr. H. S. Bawa.

Chief Conservator of Forests, D. N. Choudhury.

Director of Fisheries, P. Mohapatra.

Transport Controller, J. C. Ghosh, I.P.

Director, Bureau of Statistics and Economic, Dr. C. Mishra.

Land Reforms Commissioner, V. V. Anantakrishnan, I.A.S.

Director of Employment, J. N. Mohantany.

## HIGH COURT

Cuttack.

Chief Justice, S. B. Barman, Bar-at-Law.

Judges, Justice G. K. Misra, M.A., B.L., Justice R. K. Das, B.A., B.L.

Registrar, A. Mishra.

## PUBLIC SERVICE COMMISSION

Cuttack

Chairman, Motilal Pandit.

Members, Prof. B. C. Das, U. Das.

Secretary, K. Padhi.

# PONDICHERRY

Pondicherry

## ADMINISTRATIVE PERSONNEL

### Lt-Governor

S. L. SILAM

### MINISTERS

Chief Minister, in charge of Cabinet Department, Labour Appointments, Industries, Revenue, Finance and business not allocated to other Ministers, M. O. H. Farook Maricar.

Development and Labour, Local Administration, Statistics, Medical and Public Health and Town Planning, M. K. Jeevarathina Odayar.

Education Agriculture, Legislation, Fisheries and Ports, Manickavasaga Reddiar.

Public Works, PWD, Electricity and Co-operation, K. R. Subramania Padayachi.

Animal Husbandry, Social and Child Welfare, Harijan Welfare, Information and Publicity, Government Press, Civil Supplies, Rationing and Food, Community Development and Local Development Works, G. Nagarajan.

### SECRETARIAT

Chief Secretary, U. Vaidyanathan, I.A.S.

Secretary, General Administration Department, Surjeet Singh Mamak.

Secretary, Finance Department, T. B. Nagarajan, I.A. & A.S.

Secretary, Legislature & Judicial Department, G. Gopala-Krishnan.

Secretary to the Administrator, C. Ramou.

### PRINCIPAL OFFICIALS

Inspector General of Police, P. Paramaguru, I.P.S.

Chief of Contributions Department, A. Subbaraya Pillai.

Collector of Customs & Central Excise, K. Purushotham.

Controller of Imports & Exports, K. M. R. Menon.

Chief of Political Affairs Bureau, M. Palani.

Director of Public Works Department, Vincent Jeyaraj.

Director of Electricity, A. M. Moraes.

Director of Public Instruction, M. R. Perumal Mudaliar.

Director of Medical Services, Dr. S. N. Ganapathi.

Pay & Accounts Officer, R. Srinivasachari.

Commissioner of Labour & Director of Employment : B. Kamichetty.

Public Relations Officer : Vacant.

Publicity Officer : V. Krishnamurti.

Director of Industries : Santhaseelan.

Director of Agriculture, K. A. Shaikat Ali.

Director of Fisheries, E. Palani.

Director of Animal Husbandry, Dr. Swaminathan.

Registrar of Co-operative Societies, A. S. Natarajan.

Superintendent of Police, Pondicherry, G. R. Ahmed.

Superintendent of Police, Karikal, C. J. Dharmathan.

Employment Officer, Syed Kabir Ahmed.

Director of Statistics & Evaluation, S. Muthu Basavan.

Labour Officer, F. R. Ramanathan.

Deputy Commissioner (Sales Tax), E. Govindarajan.

## JUDICIAL SERVICE

Chief of Judicial Service, Presiding Judge, Superior Court of Appeal, and Principal Sessions Judge, S. Maharajan.

Public Prosecutor, Kolandaivelu.

Procureur de la Republique, Abel Clovis.

Judge, Labour Court and additional member of the Tribunal Supérieur d'Appel, David Annousami.

Judges, Superior Court of Appeal and Additional Sessions Judges, R. Krishnamurti & C. J. R. Paul.

President of the Court of First Instance & Assistant Sessions Judge, J. Gnanl.

## ADMINISTRATORS

Administrator of Karikal, J. R. Ramanathan.

Administrator of Mahe : Narasingrao Kallurkar.

Administrator of Yanam : Francois Andonlesamy.



## PUNJAB

### Chandigarh

#### ADMINISTRATIVE PERSONNEL

**Governor**

Vacant

**Secretary, P. L. Sondhi, I.A.S.**

#### COUNCIL OF MINISTERS

**Chief Minister, in charge of General Administration, Parliamentary Affairs, Home, Vigilance, Elections including Administration of Sikh Gurdwaras Act, 1925, Jails, Administration of Justice, Legislative, Transport, Medical Education, Public Relations, Tourism and Cultural Affairs, Gurnam Singh.**

**Finance, Planning, Statistics, Small Savings, Excise & Taxation, Industries, Cottage Industries, Industrial Training and Industrial Co-operatives and Health, Dr. Baldev Prakash.**

**Irrigation & Power, Rural Electrification, Building & Roads, Public Health, Engineering, Technical Education, Architecture, Colonisation, Town and Country Planning, Urban Estates, Education and Languages, Lachhman Singh Gill.**

**Revenue, Land Reforms, Consolidation of Holdings, Relief and Rehabilitation, Cooperative—excluding Industrial Co-operative, Welfare of Defence Services, Civil Aviation, Forests, Agriculture, Animal Husbandry, Dairy, Fisheries, Sports & Wild Life Preservation, Gen. Rajinder Singh Sparrow.**

**Labour and Employment, Printing and Stationery, Housing, Slum Clearance, Social Welfare, Welfare of Scheduled Castes & Backward Classes and Political Sufferers, Piara Ram Dhanowali.**

**Local Government, Community Development, Panchayati Raj, Food and Supplies, Satya Pal Dang.**

#### Deputy Ministers

**Finance and Planning, Food and Supplies**  
Bashamber Nath.

**Irrigation & Power, Rural Electrification, Building and Roads, Public Health Engineering, Community Development and Panchayati Raj,**  
Darbara Singh.

**Industries, Cottage Industries, Industrial Training & Industrial Co-operatives, Faqir Chand.**

**Medical Education, Jails, Elections including Administration of Sikh Gurdwaras Act, 1925 and Administration of Justice, Excise & Taxation, Satnam Singh Bajwa.**

#### Chief Parliamentary Secretary

**Parliamentary Affairs, Legislative, Transport, Public Relations, Tourism and Cultural Affairs,**  
Gurcharan Singh.

#### SECRETARIAT

##### ADMINISTRATIVE SECRETARIES

**Financial Commissioners, H. B. Lal (Revenue); R. S. Randhawa (Development).**

**Chief Secretary to Government, G. S. Kahlori, I.C.S. Financial & Planning Secretary, K. S. Narang, I.A.S.**

**Home Secretary, A. N. Kashyap, I.A.S.**

**Secretary, Industries and Food Supplies, Labour, Planning & Stationery, I. C. Puri.**

**Secretary, Education and Medical and Health Department, C. D. Kapur, I.A.S.**

**Agriculture Secretary, S. S. Grewal, I.A.S.**

**Secretary, Irrigation, Power & F.W.D., Sapuran Singh, I.A.S.**

#### HEADS OF DEPARTMENTS

**Director, Public Relations, N. N. Vohra, I.A.S.**

**Economic and Statistical Advisor to Government, J. S. Dhillon.**

**Director of Panchayats, S. Parshad.**

**Director of Industries, Paramjit Singh, I.A.S.**

**Director, Food and Supplies and Deputy Secretary to Government, Kulwant Singh, I.A.S.**

**Inspector-General of Police, Kanwar Shamsher Singh.**

**Inspector-General of Prisons, Sube Singh, I.A.S.**

**Director, Vigilance, Amar Singh, P.C.S.**

**Commandant General, Home Guards and Director, Civil Defence, J. C. Vachher, I.P.S.**

**Director of Public Instruction, J. D. Sharma, I.A.S.**

**Director, Land Reclamation and Irrigation and Power Research Institute, Amritsar, Dr. H. L. Uppal.**

**Labour Commissioner, D. D. Sharma, I.A.S.**

**Director, Employment, Jitendra Lal.**

**Director, Sports, Har Narani Singh.**

**Director, Health Services, Lt. Col. D. Bhatia.**

**Registrar, Co-operative Societies, V. P. Johar, I.A.S.**

**Director of Agriculture, Amrik Singh Cheema.**

**Director, Animal Husbandry, M. S. Malhi.**

**Chief Conservator of Forests, D. P. Singh.**

**Director and Warden of Fisheries, A. K. Kawatra.**

**Director, Health Services, Punjab, Lt.-Col. D. Bhatia.**

**Director, Research and Medical Education, Dr. Santok Singh.**

**Director, Social Welfare, S. C. Pandit.**

**Director, Welfare of Scheduled Castes and Backward Classes, Avtar Singh Sandhu, P.C.S.**

**Director, Technical Education, Kewal Krishen.**

**General Manager, Bhakra Dam Administration, Nangal Township, B. B. Palta.**

**General Manager, Beas Project, Talwara Township, R. S. Gill.**

#### HIGH COURT

##### Chandigarh

**Chief Justice, Mehar Singh.**

**Puisne Judges, Justice E. B. Capoor; I.C.S.; Justice R. P. Khosla; Justice A. N. Gover; Justice I. D. Dua; Justice Harbans Singh; Justice D. K. Mahajan; Justice J. S. Bedi; Justice Shamsher Bahadur, Justice P. C. Pandit, Justice Gurdev Singh, Justice P. D. Sharma, Justice Hansraj Khanna, Justice Jindra Lal, Justice S. K. Kapur (Addl.), Justice R. S. Narula (Addl.), Justice J. N. Kaushal (Addl.).**

**Registrar, Ranjit Singh Sarkaria.**

#### PUBLIC SERVICE COMMISSION

##### Patiala.

**Chairman, Jaswant Singh Basur.**

**Members, Darbari Lal Gupta, Dalbir Singh,**

**Mohan Singh, Bhim Singh.**

**Secretary : L. C. Kapur.**

## RAJASTHAN

### Jaipur

#### ADMINISTRATIVE PERSONNEL

**Governor**

HUKAM SINGH.

**Secretary to Governor : R. D. Khanna, I.A.S.**

#### Ministers

**Chief Minister, in charge of Appointments, General Administration Department (including Tourism), and Political Department, Mohanlal Sukhadia.**

**Home, Civil, Defence, Jails and Medical Department, Damodar Lal Vyas.**

**Industries including Khadi and Village Industries, Mines, Irrigation, Power and Public Relations, Harideo Joshi.**

**Revenue including Relief and Rehabilitation, Colonisation, Famine Relief, Devasthan, Labour and Bhasha Vibhag, Brij Sunder Sharma.**

**Education, Law and Judicial Department, Legislative Assembly, Election and Waqf, A. Barkat Ullah Khan**

**Agriculture, Animal Husbandry, Co-operatives, Panchayat, Community Development and Food, Pras Ram Maderna.**

**P.W.D., Transport, Printing Presses and Stationery, Aminuddin Ahmed.**

**Local Self-Government, Housing, Urban Improvement Trust, Public Health, Social Welfare, Forests, and Ayurveda, Narnain Singh Masuda.**

#### Deputy Ministry

**Industries, Mines, Irrigation and Colonisation, Manphool Singh.**

**Education, Medical and Public Health, Law and Judiciary Legislative assembly, Revenue, Famine, Dhir Singh.**

**Relief, Appointments and General Administration, Ganga Ram Chowdhury.**

#### Secretariat

**Chief Secretary to Government, Cabinet, Planning, G.A.D., Evaluation, Organisation, Appointments, Confidential Branch, K. P. U. Menon.**

**Secretary, Police, Transport, Printing & Stationery, Jails, Visa & Passports, Electricity, Publicity, Shiv Shankar, I.A.S.**

**Secretary, Industries, Civil Supplies of Mines Department, T. N. Chaturvedi, I.A.S.**

**Additional Chief Secretary, Finance Department, Forests, Rehabilitation and Colonisation & Devasthan Department, S. D. Ujjwal, I.A.S.**

**Secretary, Education, Social Welfare & Language Departments, Vishnu Dutt, I.A.S.**

**Secretary, Finance (Revenue & Economic affairs) Departments, J. M. Lalwani, I.A.S.**

**Secretary, Medical & Health, Labour and L. S. G. Departments, Sher Singh, I.A.S.**

**Special Secretary, Appointments, Secretariat Administration Department (Appointment, Accounts & Records), Ashok Roy, I.A.S.**

**Development Commissioner and Ex-Officio Administration Secretary, Agricultural Productions (Agriculture, Animal Husbandry & Cooperation), R. D. Mathur, I.A.S.**

**Special Secretary, Agr., Animal Husbandry & Cooperation Departments, J. S. Mehta, I.A.S.**

**Secretary, Law & Judicial and Legislative Department & Ex-Officio Legal Remembrancer, Dharmendra Parihar.**

**Commissioner for Food & Famine: Z. S. Jhala.**

**Commissioner for Betterment Levy : Khem Chand, I.A.S.**

**Director, Public Grievances : Brij Bahadur I.A.S.**

**Financial Commissioner : M. Mukherji, I.A.S.**

#### PRINCIPAL OFFICIALS

**Administrator, Rajasthan Canal Board, Yadav Mohan.**

**Inspector General of Police, Goverdhan Sharma.**

**Inspector General of Police, Hanuman Sharma.**

**Director of Medical and Health Services, H. C. Mehta.**

**Director, Animal Husbandry, G. S. Rathor.**

**Chief Engineer, Building and Roads, B. D. Mathur.**

**Chief Engineer, Irrigation, Kishori Lal Mathur.**

**Chief Engineer, Health, K. N. Bhargava.**

**Jagir Commissioner, Goverdhan Singh.**

**Addl. Development Commissioner, Ram Singh.**

**Director of College Education, V. V. John.**

Krishan Lal is the Minister-cum-Leader of the Leg. Council, Punjab. The Punjab Cabinet has further been expanded by the addition of Balwant Singh (Cabinet-rank Minister), Balco Ram & Gurmeet Singh (Ministers of State) and T. J. Singh & Shiv Chand (Dy. Ministers). Minister for Planning, Finance, Taxation & Excise, (Rajasthan), Mathuradas Mathur.



*Addl. Director of Primary and Secondary Education, A. Bordia.*  
*Director of Technical Education, V. G. Garde.*  
*Director of Agriculture, T. C. Kala.*  
*Director of Industries and Supplies, J. P. Arora.*  
*Chief Conservator of Forests, G. K. Bohra.*  
*Commissioner, Excise, J. S. Singhvi.*  
*Labour Commissioner, S. N. Shukla.*  
*Registrar, Co-operative Societies, Niranjan Singh.*

*Director of Economics and Statistics, K. K. Sehgal.*  
*Director of Public Relations, D. S. Mehta.*  
*Director of Tourism, Narain Saxena.*  
*Director of Social Welfare, Parmanand.*

**Public Service Commission**  
**Vivek Marg, Ajmer.**

*Chairman, R. C. Chowdhury.*  
*Members, R. N. N. Hawa.*  
*Secretary, J. R. Sharma.*

**High Court**  
**Jodhpur.**

*Chief Justice, Durga Shankar Dave.*  
*Judges, Inder Nath Modi, Daulat Mal Bhandari, Jagat Narayan, Lakshmi Narayan Chhangani, Chandra Bhan Bhargava, Bhagwati Prasad Beri, Prakash Narain Singh, Ved Pal Tyagi (Addl.), Kan Singh (Addl.).*  
*Registrar, Sukh Deo Mirdha.*  
*Advocate-General, Gulab Chand Kasliwal.*

## TRIPURA

### Agartala

#### ADMINISTRATIVE PERSONNEL

*Chief Commissioner, U. N. Sharma.*  
*Chief Secretary, H. S. Dubey.*  
*Development Commissioner, B. K. Dev Barma.*  
*Secretaries, C. P. K. Eradv (Finance), N. G. Chowdhury (Judicial), N. L. Deb Barman (Tripura Leg. Assembly).*  
*Judicial Commissioner, Rajvi Roop Singh.*

*District & Sessions Judge, S. B. Laskar.*  
*District Magistrate, P. M. Mazumdar.*  
*Superintendent of Police, P. G. Bhattaryya.*  
*Commandants, Armed Police, H. K. Deb Barma, R. C. Kochhar.*  
*Director of Education, G. N. Chatterjee.*  
*Director of Agriculture, N. C. Bhattacharjee.*

*Director of Industries, C. R. Bhattacharjee.*  
*Chief Forest Officer, N. C. Bhattacharjee.*  
*Registrar of Co-operative Societies & Director of Panchayat, P. K. Dev Barma.*  
*Public Relations Officer, S. C. Bhattacharyya.*  
*Labour Officer, M. M. Deb Barma.*  
*Sr. Statistical Officer, J. L. Saha.*

## UTTAR PRADESH

### Lucknow.

#### ADMINISTRATIVE PERSONNEL

##### Governor

**B. GOPALA REDDY.**

##### PERSONAL STAFF

*Secretary to the Governor, G. Bagchi, I.A.S.*

##### MINISTERS

*Chief Minister in Charge of General Administration, Home, Planning, Economics and Statistics, Civil Defence and Home Guards, Charan Singh.*  
*Deputy Chief Minister, Education, Technical Education, Harijan and Social Welfare, Cultural Affairs and Scientific Research, Ram Prakash Gupta.*  
*Animal Husbandry, Fisheries, Forests, Ram Chandra Vikal.*  
*Agriculture including Cane Development, Community Development and Panchayati Raj, Jai Ram Verma.*  
*Food and Civil Supplies, Jharkhande Rai.*  
*Industries and Labour, Prabhu Narain Singh.*  
*Co-operation, Ganga Bhakt Singh.*  
*Revenue, Scarcity and Relief & Rehabilitation, Udit Narain Sharma.*  
*Irrigation and Power, Tambreshwar Prasad.*  
*Finance, Sales Tax, Registration, Stamps and Court Fees, Ram Swaroop Verma.*  
*Medical and Health, Pratap Singh.*  
*P.W.D. and Government Estate Office, Mangal Deo Visharad.*  
*Excise and Muslim Waqfs, Akhtar Ali.*  
*Judicial, Legislative and Information, Shayam Lal Yadav.*  
*Transport and Tourism, Man Singh Verma.*  
*L.S.G., Municipal, Housing, Sri Badrinath Temple Committee and Charitable Endowment, Varmeshwar Pande.*

#### SECRETARIAT

*Chief Secretary, B. B. Lal.*  
*Commissioner and Secretary for Agricultural Production and Rural Development, M. A. Quraishi, I.C.S.*  
*Commissioner and Secretary, Finance Department and Director, Small Savings, B. N. Maheshwari, I.A.S.*  
*Commissioner and Secretary, Excise, Public Works, Food and Civil Supplies, B. H. Chishti, I.A.S.*  
*Secretary, Irrigation and Power Departments and Spl. Secy., Agri. Production & Rural Development, S. P. Bhatnagar, I.A.S.*

*Commissioner and Secretary, Home, Jails and Appointments, Confidential and Vigilance (Also Principal, Officers' Trg. School), B. P. Joshi, I.A.S.*  
*Secretary Revenue, G. C. Chaturvedi, I.A.S.*  
*Secretary, Legislative Deptt. and Legal Remembrancer to Govt. & Ex-Officio Director of Elections (Local Bodies) & Chief Electoral Officer, K. C. Puri.*  
*Secretary, Judicial Branch and Legal Remembrances to Government, K. C. Puri.*  
*Secretary, Planning, Evaluation and Economic and Statistics Deptt., S. K. Sarkar, I.A.S.*  
*Commissioner and Secretary, Education, B. K. Talwar, I.A.S.*  
*Secretary, Information and also Secretary to Chief Minister, S. S. Siddhu, I.A.S.*  
*Secretary, Local Self Government, Muhammad Mushfique, I.A.S.*  
*Secretary, Industries Department, H. C. Saxena, I.A.S.*  
*Secretary, Labour, Medical and Public Health, Uma Shankar, I.A.S.*  
*Secretary, Animal Husbandry and Forest Developments, R. A. Siddiqi, I.A.S.*  
*Secretary Relief and Rehabilitation and also Secretary Transport Deptt. and Civil Defence Deptt., M. L. Dave, I.A.S.*

#### Public Service Commission

**Allahabad.**

*Chairman, Dr. Rama Misra.*  
*Members, Habib Ahmad Siddiqi; Chandra Mohan Nath Chak, Jagdishwar Prasad Mital.*  
*Secretary, Janardan Das Shah.*

#### North-Eastern Railway

**Gorakhpur.**

*General Manager, J. B. Rao.*  
*Dy. General Manager (Vig.), D. S. Sethi.*  
*Dy. General Manager (G), K. M. Mall.*  
*Chief Personnel Officer, Manmohan Singh.*  
*Public Relations Officer, R. S. P. Kedia.*  
*Chief Engineer, Inder Singh.*  
*Chief Optg. Superintendent, Vacant.*  
*Dy. Chief Optg. Supdt. (C), S. N. Srivastava.*  
*Dy. Chief Optg. Supdt. (G), T. V. Srinivasani.*  
*Transportation Superintendent (Safety), G. P. Srivastava.*  
*Chief Comm'l. Superintendent, H. P. Varma.*  
*Chief Mechanical Engineer, C. S. Lall.*  
*Financial Adviser & Chief Accounts Officer, A. Sahul Hamid.*

*Chief Signal & Telecommunication Engineer Laljee Singh.*  
*Telecommunication Engineer (Construction), V. Ramaswamy.*  
*Chief Electrical Engineer, C. L. Pasricha.*  
*Controller of Stores, S. G. Ghosalkar.*  
*Chief Medical Officer, Dr. S. K. Bose.*  
*Chief Security Officer, Nag K. Gupta.*  
*Chief Auditor, S. P. Narayana Chetty.*

#### RAILWAY SERVICE COMMISSION

**10, Sardar Patel Marg, Allahabad 1.**

*Chairman, N. Y. Manohar.*  
*Member, L. N. Kaula.*  
*Secretary, E. W. Comfort.*

#### HIGH COURT, ALLAHABAD.

*Chief Justice, V. G. Oak.*  
*Judges, Mr. Justice Jadish Sahai; Mr. Justice Bishambhar Dayal; Mr. Justice Jawahar Nath Takru; Mr. Justice Bishan Narain Nigam, I.C.S.; Mr. Justice Shanti Swarup Dhawan; Mr. Justice Shashi Kant Verma; Mr. Justice William Broome, I.C.S.; Mr. Justice Dhatri Saran Mathur, I.C.S.; Mr. Justice Debi Prasad Unval; Mr. Justice Surendra Narayan Dwivedi; Mr. Justice Ram Aray Misra; Mr. Justice T. Ramabhadran, I.C.S.; Mr. Justice Shiv Chander Manchanda; Mr. Justice B. D. Gupta; Mr. Justice K. B. Asthana; Mr. Justice S. N. Katju, Mr. Justice G. Kumar; Mr. Justice R. S. Pathak; Mr. Justice Durgeshwar Dayal Seth; Mr. Justice Mahesh Chandra; Mr. Justice Mirza Hamedullah Beg, (Additional); Mr. Justice Ram Nath Sharma, (Additional); Mr. Justice Gursaran Das Sahgal (Additional); Mr. Justice Shanker Dayal Khare, (Additional); Mr. Justice Gyan Chand Mathur, (Additional); Mr. Justice Gangeshwar Prasad, (Additional); Mr. Justice Chand Behari Kapoor, (Additional); Mr. Justice Satish Chandra, (Additional); Mr. Justice Harish Chandra Pati Tripathi, (Additional); Mr. Justice Lakshmi Prasad Nigam, (Additional); Mr. Justice Surendra Narain Singh, (Additional); Mr. Justice Uma Shanker Srivastava, (Additional); Mr. Justice Rameshwar Chandra; Mr. Justice Rajeshwar Prasad; Mr. Justice Yeshoda Navdan.*  
*Registrar, B. B. Misra.*  
*Joint Registrar, M. L. Agarwal.*  
*Advocate-General, Kanhaiya Lal Misra.*  
*Administrator General & Official Trustees, Jagdish Kishore Srivastava.*

\* List of Ministers not received at the time of going to press.



# WEST BENGAL

Calcutta.

## ADMINISTRATIVE PERSONNEL

### Governor

DHARMA VIRA.

### Secretary

D. W. Telang, I.A.S. (Secy. to Governor, Raj Bhavan, Calcutta).

### Cabinet Ministers

Chief Minister in charge of Home and General Administration, Ajoy Kumar Mukherjee.

Deputy Chief Minister in charge of Finance and Transport, Jyoti Basu.

Information and Publicity, Parliamentary Affairs and Local Self-Govt., Somnath Lahiri.

Food and Agriculture, Dr. P. C. Ghosh.

Public Works and Housing, Hemanta Kumar Basu.

Planning and Development, Forests, Jehangir Kabir.

Land and Land Revenue, Harekrishna Konar.

Irrigation and Waterways, Biswanath Mukherjee.

Commerce and Industry, Community Development, Sushil Kumar Dhara.

Law and Excise, Amar Prasad Chakravorty.

Health, Nani Bhattacharyya.

Refugee Relief and Rehabilitation and Home (Jails), Niranjan Sen.

Panchayat and Social Welfare, Bibhuti Bhusan Dasgupta.

Tribal Welfare, Deo Prakash Rai.

Education, Jyoti Bhattacharyya.

Labour, Subhodh Banerjee.

Relief and Co-operation, Nishith Nath Kundu.

### Secretariat

Chief Secretary, M. M. Basu, I.C.S.

Commissioner For Home Affairs, K. K. Ray, I.C.S.

Financial Commissioner, J. L. Kundu, I.A.S.

Secretary, Refugee Relief and Rehabilitation Dept., S. N. Banerjee, I.A.S.

Commissioner of Agr. & Comm. Development & Ex-Officio, Secretary, Agr. & Community Development, G. D. Goswami, I.A.S.

Secretary, Commerce and Industries, S. Dutta Mazumdar, I.A.S.

Secretary, Education Dept., Dr. B. Dutta.

Secretary, Public Health, A. K. Datta.

Legal Remembrancer, S. K. Chakravarti.

Transport Commissioner & Secy., Inf. & Public Relation's Dept., S. K. Banerjee.

Chairman, State Transport Corporation, A. B. Ganguli, I.C.S.

Commissioner, Animal Husbandry, Fisheries & Veterinary Services, Dr. B. K. Bhattacharyya, I.A.S.

Secretary, Irrigation & Waterways & Co-operation Dept., Vacant.

Member, Board of Revenue and ex-Officio Secy., Land and Land Revenue and Tribal Welfare Dept., K. Sen, I.C.S.

Secretary, Public Works Dept., B. B. Mondal, I.A.S.

Secretary, Labour Dept., M. M. Kushari I.A.S.

Vigilance Commissioner, Subimal Dutt.

Commissioner, Food, B. R. Gupta.

Development Commsnr. and Ex-Officio Secy., Development Dept., S. K. Banerji, I.A.S.

Secretary, Forests Dept., S. K. Mukherji, I.A.S.

Jt. Relief Commissioner and Ex-Officio Secy., Relief Dept., J. K. Roy, I.A.S.

Managing Director, Durgapur Projects & Ex-Officio Secretary, Development Department, A. Niyogi, I.A.S.

Financial Adviser & Ex-Officio Secretary, Finance Department, P. K. Bose.

Secretary, Judicial Department, A. K. Sen.

Secretary, Legislative Department, S. N. Sen Gupta.

Jt. Development Commsnr. and ex-Officio Jt. Secy., Development Dept., H. C. Dutt, I.A.S.

## DEPARTMENTAL OFFICIALS

Inspector-General of Police, U. Mukherjee, I.P., J.P.

Addl. Inspector-General of Police, S. M. Ghosh, I.P., J.P.

Commissioner of Police, P. K. Sen, I.P.

Inspector-General of Prisons, S. B. Bhattacharyya.

Labour Commissioner and Registrar of Trade Unions and also Chief Inspector of Shops and Establishments, D. Chatterjee, I.A.S.

Registrar of Co-operative Societies, S. S. Verma, I.A.S.

Commissioner, Workmen's Compensation, A. P. Das.

Chief Conservator of Forests, K. Lahiri.

Administrator-General and Official Trustee, A. K. Dutta, Attorney-at-Law.

Chairman, Calcutta Improvement Trust, S. Mullick, I.C.S.

Director of Agriculture, Dr. H. K. Nandy.

Director of Industries, U. Chatterjee.

Director of Public Instruction, P. C. Mukherjee.

Director of Information, A. K. Mukherjee.

Director of Fisheries, G. S. Banerjee, I.A.S.

Director, Civil Defence, K. Sen, I.C.S.

## Public Service Commission

Anderson House, Calcutta 27.

Chairman, S. M. Bhattacharji, I.A.S.

Members, A. W. Mahmood, B. N. Sen, Dr. H. K. Nandi, J. N. Mondal.

Secretary, B. C. Mukherjee.

## Eastern Railway

Fairlie Place, Calcutta.

General Manager, V. T. Narayanan.

Sr. Dy. General Manager, Rajendra Dev.

Financial Adviser & Chief Accounts Officer, D. C. Vevaina.

Chief Operating Superintendent, K. K. Mukerji.

Chief Commercial Superintendent, V. V. Bhide.

Chief Engineer, H. K. D. Capoor.

Chief Engineer (Cons.), N. S. Tyabji.

Chief Signal & Tel. Com. Engineer, R. D. Stephenson.

Chief Personnel Officer, B. L. C. Sastri.

Controller of Stores, S. N. Biswas.

Chief Security Officer, R. N. Sinha.

Chief Mechanical Engineer, H. M. Chatterjee.

Chief Electrical Engineer, J. D. Malhotra.

Chief Medical Officer, Dr. S. S. L. Verma.

Public Relations Officer, M. K. Varma.

## South-Eastern Railway

11, Garden Reach Road, Calcutta 43.

General Manager, Jagjit Singh.

Senior Deputy General Manager, H. H. Banerjee.

Financial Adviser & Chief Accounts Officer, K. P. Taimni.

Financial Adviser & Chief Accounts Officer (Construction), M. B. Jagannathan.

Chief Operating Superintendent, B. M. Kaul.

Chief Commercial Superintendent, A. S. Latif.

Chief Engineer, S. S. Mukherjee.

Chief Engineer (Construction), N. K. Hazra.

Chief Engineer (Project & Development), M. T. Lee.

Chief Signal & Telecom. Engineer, I. B. Bose.

Controller of Stores, R. K. Tandon.

Chief Security Officer, H. S. Kohli.

Chief Mechanical Engineer, P. N. Mathur.

Chief Electrical Engineer, S. P. Tonse.

Chief Personnel Officer, S. P. Chatterjee.

Chief Medical Officer, B. P. S. Agarwal.

Public Relations Officer, A. Shukla.

Commercial Publicity Officer, B. B. Gupta.

## Railway Service Commission

Clem Browne Railway Institute, Sealdah, Calcutta 14.

Chairman, S. K. Guha.

Members, L. N. Kaula, P. K. Kapila.

Secretary, Radhey Shiam.

## HIGH COURT

Chief Justice, Deep Narayan Sinha, Bar-at-Law.

Puisne Judges, Prasanta Bihari Mukharji, Bar-at Law; Paresh Nath Mookerjee; Sushil Kumar Datta, B. N. Banerjee, A. N. Ray, S. P. Mitra, Kamallesh Chandra Sen, Purushottam Chatterjee, Amaresh Chandra Ray, Chandra Narayan Laik, Bijayesh Mukherji, Arun Kumar Mukherjee, R. N. Dutt, A. C. Sen, B. C. Mitra, D. Basu, T. P. Mukherji, A. C. Gupta, Sved Sadat Abul Masud, A. K. Das, A. N. Sen, Sisir Kumar Mukherjee (Addl.), S. N. Bagchi (Addl.), A. N. Chakrabarti (Addl.), S. C. Ghosh (Addl.).

Advocate-General, Vacant.

Sheriff, Saradindu Gupta.

Registrar (Appellate Side), H. N. Sen.

Registrar (Original Side), Saral Kumar Banerjee.



# GOVERNMENT OF INDIA PERSONNEL

## PRESIDENT

**Dr. Zakir Husain**

### PRESIDENT'S SECRETARIAT

Rashtrapati Bhavan, New Delhi 4.

*Secretary*, Dr. Nagendra Singh.  
*Deputy Secretary*, V. J. Moore.  
*Public Relations Officer*, A. M. Abdul Hamid.  
*Addl. Private Secretary*, A. R. Gupta.  
*Mily. Secretary & Chief Commandant, President's Bodyguard*, Maj.-Gen. G. S. Gill.  
*Surgeon*, Maj. Gen. S. S. Maitra.  
*Dy. Mily. Secy. & Comptroller of the Household*, Lt.-Col. M. L. Bhatia.

## VICE-PRESIDENT

**V. V. Giri**

### VICE-PRESIDENT'S SECRETARIAT

*Private Secretary to the Vice-President*, Vinayak D. Phadke.  
*Asstt. Private Secretary*, V. K. S. Iyengar.

### MEMBERS OF THE CABINET

*Prime Minister and Minister of Atomic Energy*, Smt. Indira Gandhi.  
*Deputy Prime Minister, Finance*, Morarji B. Desai.  
*Industrial Development and Company Affairs*, Fakhruddin Ali Ahmed.  
*External Affairs*, M. C. Chagla.  
*Home Affairs*, Y. B. Chavan.  
*Commerce*, Dinesh Singh.  
*Labour and Rehabilitation*, Jaisukh Lal Hathi.  
*Food and Agriculture*, Jagjivan Ram.  
*Tourism and Civil Aviation*, Dr. Karan Singh.  
*Planning, Petroleum and Chemicals and Social Welfare*, Asoka Mehta.  
*Law*, P. Govinda Menon.  
*Railways*, C. M. Poonacha.  
*Parliamentary Affairs & Communications*, Dr. Ram Subhas Singh.  
*Transport and Shipping*, Dr. V. K. R. V. Rao.  
*Steel, Mines and Metals*, Dr. M. Chenna Reddy.  
*Education*, Dr. Triguna Sen.  
*Information and Broadcasting*, K. K. Shah.  
*Minister without Portfolio*, Satyanarayan Sinha.  
*Defence*, Swaran Singh.

### MINISTERS OF STATE

*Defence*, B. R. Bhagat.  
*Health and Family Planning*, Dr. S. Chandrasekhar.  
*Railways*, Parimal Ghosh.  
*Social Welfare*, Mrs. Phulrenu Guha.  
*Works, Housing and Supply*, Jagannath Rao.  
*Labour and Rehabilitation*, L. N. Mishra.  
*Finance*, K. C. Pant.  
*Petroleum and Chemicals*, K. Raghuramaiah.  
*Irrigation and Power*, Dr. K. L. Rao.  
*Industrial Development and Company Affairs*, Raghunatha Reddy.  
*Steel, Mines and Metals*, P. C. Sethi.  
*Education*, Prof. Sher Singh.  
*Food and Agriculture*, Anna Sahib Shinde.  
*Home Affairs*, V. C. Shukla.  
*Education*, B. J. Azad.  
*Depl. of Parliamentary Affairs*, I. K. Gujral.  
*Food & Agriculture*, M. S. Gurupadaswamy.

### DEPUTY MINISTERS

*Transport and Shipping*, Bhakt Darshan.  
*Department of Parliamentary Affairs*, Rohanlal Chaturvedi.

*Law*, D. R. Chavan.

*Department of Parliamentary Affairs*, M. Mohan Dharia.

*Food and Agriculture*, D. Ering.

*Tourism and Civil Aviation*, Mrs. Jahanara Jaipal Singh.

*Railways*, S. C. Jamir.

*Attached to Prime Minister*, Dr. (Miss) Sarojini Mahishi.

*Health and Family Planning*, B. S. Murthy.

*Commerce*, Mohd. Shafi Qureshi.

*Home Affairs*, K. S. Ramaswamy.

*Department of Parliamentary Affairs*, J. B. Muthyal Rao.

*Information and Broadcasting*, Mrs. Nandini Satpathy.

*Industrial Development and Company Affairs*, Bhanu Prakash Singh.

*Works, Housing and Supply*, Sardar Iqbal Singh.

*External Affairs*, Surendra Pal Singh.

### PRIME MINISTER'S SECRETARIAT

*Secretary to the Prime Minister*, P. N. Haksar.  
*Joint Secretary*, S. Banerji.  
*Information Adviser*, B. G. Verghese.  
*Director*, V. B. Eswaran.  
*Private Secretaries (Personal)*, N. K. Seshan, V. P. R. Kapoor.  
*Private Secretary (Public)*, R. K. Goel.

### CABINET SECRETARIAT

(DEPARTMENT OF CABINET AFFAIRS)

Rashtrapati Bhavan, New Delhi 4.

*Secretary to the Cabinet*, D. S. Joshi, I.C.S.  
*Hon. Statistical Adviser to the Cabinet*, Prof. P. C. Mahalanobis.  
*Additional Secretary to the Cabinet*, N. Sahgal, I.C.S.  
*Joint Secretary*, Rajeshwar Prasad, I.A.S.

### DEPARTMENT OF STATISTICS

Patel Bhavan, Parliament Street, New Delhi.  
*Joint Secretary (Ex-Officio)*, Dr. K. R. Nair.

### CENTRAL STATISTICAL ORGANIZATION

*Secretary*, D. C. Das.  
*Director*, Dr. K. R. Nair.

### DIRECTORATE OF NATIONAL SAMPLE SURVEY

*Chief Director*, S. P. Pande.

### CENTRAL STATISTICAL ORGANISATION (INDUSTRIAL STATISTICS WING)

1, Council House Street, Calcutta 1.

*Joint Director*, K. L. Saxena. •

### RAJYA SABHA SECRETARIAT

*Chairman*, V. V. Giri.  
*Secretary*, B. N. Banerjee.

### LOK SABHA SECRETARIAT

*Speaker*, N. Sanjiva Reddy.  
*Deputy Speaker*, R. K. Khadilkar.  
*Secretary*, S. L. Shakhder.  
*Joint Secretary*, N. N. Maliya.

### DEPARTMENT OF ATOMIC ENERGY, APOLLO PIER ROAD, BOMBAY 1

*Minister*, Mrs. Indira Gandhi.  
*Chairman, Atomic Energy Commission, and Secretary to the Government of India*, Dr. Vikram A. Sarabhai.

*Member for Finance*, S. Jagannathan, I.C.S.

*Members*, J. R. D. Tata, L. K. Jha, H. N. Sethna.

*Addl. Secretary to Govt.*, R. Bhaktavatsalu.

*Joint Secretaries to Govt.*, H. K. Kochar, M. A. Hadl.

*Chief Vigilance Officer*, G. H. Rajadhyaksha.

### PUB. DIVISION

*Head, Pub. Division*, P. K. Nagarajan.

### TARAPUR ATOMIC POWER PROJECT

*Project Administrator*, M. N. Chakravarti.

### RAJASTHAN ATOMIC POWER PROJECT

*Project Administrator*, S. S. Jaggla.

### MADRAS ATOMIC POWER PROJECT

*Officer on Special Duty & Ex-Officio Jt. Secretary*, N. S. Silva.

### JADUGUDA MINES PROJECT

*Gen. Manager*, S. V. Subrahmanyam.

### ATOMIC MINERALS DIVISION, NEW DELHI

*Geological Adviser*, Dr. D. N. Wadia, F.R.S.

### INDIAN NATIONAL COMMITTEE FOR SPACE RESEARCH

*Chairman*: Dr. Vikram A. Sarabhai.

### THUMBA EQUATORIAL ROCKET LAUNCHING STATION, TRIVANDRUM

*Test Director*, H. G. S. Murthy.

### EXPERIMENTAL SATELLITE COMMUNICATION EARTH STATION, AHMEDABAD

*Director*, P. J. Rodgers.

### TROMBAY TOWNSHIP PROJECT

*Project Engineer*, S. P. Namasivayam.

### ATOMIC ENERGY ESTABLISHMENT, TROMBAY, BOMBAY

*Offg. Director*, H. N. Sethna.

### SCIENTIFIC OFFICERS/ENGINEERS

*Director, Engineering Group*, H. N. Sethna.  
*Director, Electronics Group*, A. S. Rao.  
*Director, Metallurgy Group*, Dr. Brahm Prakash.  
*Director, Biology Group*, Dr. A. R. Gopal-Ayengar.  
*Director, Physics Group*, Dr. R. Ramanna.  
*Director, Medical Division*, Lt.-Gen. C. C. Kapila.  
*Head, Nuclear Physics Division*, Dr. P. K. Iyengar.  
*Head, Technical Physics Division*, C. Ambasankaran.  
*Head, Analytical Division*, Dr. V. T. Athavale.  
*Head, Chemistry Division*, Dr. J. Shankar.  
*Head, Spectroscopy Division*, Dr. N. A. Narasimham.  
*Head, Metallurgy Division*, Dr. Brahm Prakash.  
*Head, Radiochemistry Division*, Dr. M. V. Ramaniah.  
*Head, Isotope Division*, Dr. V. K. Iya.  
*Head, Atomic Fuels Division*, Dr. N. K. Rao.  
*Head, Reactor Engineering Division & Reactor Operations Division*, V. N. Meekoni.  
*Head, Electronics Division*, G. H. Vaze.  
*Head, Electronics Production Division*, V. Rama Rao.  
*Head, Health Physics Division*, Dr. A. K. Ganguly.  
*Chief Engineer, Architecture & Civil Engineering Division*, C. M. Govas.  
*Head, Chemical Engineering Division*, S. Fareeduddin.



*Head, Waste Treatment Division*, K. T. Thomas.  
*Head, Fuel Reprocessing Division*, N. Srinivasan.  
*Head, Biochemistry & Food Technology Division*,  
 Dr. A. Sreenivasan.  
*Head, Biology Division*, Dr. A. R. Gopal-Ayengar.

#### ADMINISTRATION

*Controller*, E. C. Allardice, I.C.S. (Retd.).  
*Head, Personnel Division*: S. V. Kulkarni;  
*Head, Accounts Division*: S. M. Patankar; *Head*  
*Purchase and Stores Division*: P. S. Mani.

#### Department of Communications

*Minister*, Ram Subhag Singh.  
*Secretary*, L. C. Jain, I.C.S.  
*Dy. Secretary*, T. R. Mantan.  
*Wireless Adviser*, Chaman Lal.

**India Meteorological Department, Headquarters,**  
 Lodi Road, New Delhi 3

#### OFFICE OF THE DIRECTOR-GENERAL OF OBSERVATORIES

*Director-General of Observatories*, Dr. L. S. Mathur.  
*Dy. Director General of Observatories (Adm.)*, K. N. Rao.  
*Director, Aviation Services*, Dr. S. N. Sen.  
*Director, Seismology*, Dr. A. N. Tandon.  
*Director, N. Hemisphere Analysis Centre*, Dr. P. K. Das.

#### OFFICE OF THE DY. DIRECTOR-GENERAL OF OBSERVATORIES (Instruments), NEW DELHI

*Dy. Director-General of Observatories (Instruments)*, Vacant.

#### OFFICE OF THE DY. DIRECTOR-GENERAL OF OBSERVATORIES (Forecasting), METEOROLOGICAL OFFICE, GANESHKHIND ROAD, POONA 5

*Dy. Director-General of Observatories (Forecasting)*, Dr. R. Ananthakrishnan.

#### OFFICE OF THE DY. DIRECTOR-GENERAL (Climatology & Geophysics), METEOROLOGICAL OFFICE, GANESHKHIND ROAD, POONA 5

*Dy. Director-General of Observatories (Climatology and Geophysics)*, Vacant.

#### INSTITUTE OF TROPICAL METEOROLOGY, RAM DURG HOUSE, GANESHKHIND ROAD, POONA 5.

*Director*, Dr. P. R. Pisharoty.

#### CENTRAL SEISMOLOGICAL OBSERVATORY, SHILLONG

*Meteorologist*, Vacant.

#### OFFICE OF THE DIRECTOR, AGRICULTURAL METEOROLOGY, METEOROLOGICAL OFFICE, GANESHKHIND ROAD, POONA 5

*Director, Agricultural Meteorology*, M. Gangopadhyaya.

#### OFFICE OF THE DIRECTOR, REGIONAL METEOROLOGICAL CENTRE, NEW DELHI

*Director*, Dr. N. Ramalingam.

#### OFFICE OF THE DIRECTOR, REGIONAL METEOROLOGICAL CENTRE, ALIPORE, CALCUTTA

*Director*, Dr. Y. P. Rao.

#### OFFICE OF THE DIRECTOR, REGIONAL METEOROLOGICAL CENTRE, BOMBAY

*Director*, Dr. T. M. K. Nedungadi.

#### OFFICE OF THE DIRECTOR, REGIONAL METEOROLOGICAL CENTRE, MADRAS

*Director*, N. C. Rai Sarkar.

#### OFFICE OF THE DIRECTOR, REGIONAL METEOROLOGICAL CENTRE, CIVIL AERODROME, SONEGAON, NAGPUR

*Director*, Dr. C. G. Pendse.

#### OFFICE OF THE DIRECTOR, COLABA AND ALIBAG OBSERVATORY, BOMBAY

*Director*, B. N. Bhargava.

#### OFFICE OF THE DIRECTOR, ASTROPHYSICAL OBSERVATORY, KODAIKANAL

*Director*, Dr. M. K. Vainu Bappu.

#### Posts & Telegraphs Board

*Chairman (Ex-Officio)*, L. C. Jain, I.C.S. (D.G.P. & T.).

*Senior Members*, M. Dayal (*Posts*); S. K. Kanjilal (*Telecom-Operations*); S. D. Nargolwala (*Finance*); B. D. Sud (*Adm.*); *Secretary*, M. H. Din.

*Members*, S. C. Jain (*Banking & Insurance*); C. P. Vasudevan (*Telecom. Development*); *Secretary*, Dr. J. C. Kundra.

#### POSTAL

##### Deputy Directors-General:

L. K. Narayanswami (*Inspection*), R. P. Singh (*Vigilance*), B. Lall (*PE*).

##### Directors:

M. R. Krishnan (*SB*); A. M. Narula (*Mails*); R. R. Savor (*Staff*); T. R. Sundararaman (*O.S.D. Accts.*); P. B. Das (*Accounts*); S. L. Rajan (*Inspection*); K. Pichumani (*Postal Planning & Research*); I. J. Burman (*Chairman*, S. S. B.); Daljinder Singh (*Postal Technical*); S. K. Ghosh (*Complaints*); S. Srinivasan (*PLI*).

##### Controller, P. & T. Motor Service:

H. L. Puri.

#### TELEGRAPHS

*Director of Research*, N. V. Shenoi.

*Deputy Directors-General*, S. M. Agarwal (*T*); S. N. Ranganathan (*S. & M.*); B. S. Rau (*Planning*); Marcus De Lima (*Planning*).

*Director of Phones*, K. R. Nayar.

*Director of Telephone Traffic*, D. F. D. Joshi.

*Director of Inspection (Telegraphs)*, B. S. Benegal.

*Controller of Telegraph Traffic*, S. K. Banerjee.

#### Heads of Circles

*Postmasters-General*, Madan Kishore (*Maharashtra Circle*); S. R. Bhashyam (*Madrass Circle*); S. M. Ghosh (*U. P. Circle*); Rama Kant (*Punjab Circle*); H. K. Rao (*Gujarat Circle*); S. B. Velankar (*M.P. Circle*); G. N. Rebello (*West Bengal Circle*); A. Swaminathan (*Andhra Circle*); M. B. Sarangapani (*Mysore Circle*); K. R. D. Iyengar (*Assam Circle*); K. L. Bhola (*Bihar Circle*); S. R. Krishnamurthi (*Kerala Circle*); A. N. Biswas (*Orissa Circle*); P. A. Sankara Narayan (*Rajasthan Circle*).

*Director of Postal Services (Delhi Circle)*, G. S. Bhatia; *Director of Posts & Telegraphs*, J. & K., S. L. Desai.

#### Heads of Administrative Offices

*General Manager, Bombay Telephone District*, M. S. Muthanna.

*Addl. General Manager*, K. D. Vaidya.

*General Manager, Calcutta Telephone District*, J. R. Sen Gupta.

*General Manager, Delhi Telephone District*, D. N. Ramchandani.

*Additional Chief Engineer, T & D Circle*, S. Krishnan.

*General Manager, Rly. Electrification Circle, Calcutta*, Shanti Swarup.

*General Manager, Madras Telephone District*, C. J. Clement.

*District Manager, Hyderabad Telephone District*, K. L. Reddi.

*District Manager, Bangalore Telephone District*, K. Swaminathan.

*General Manager, P. & T. Workshops*, I. K. Gupta.

#### BOMBAY TELEPHONES, TELEPHONE BHAVAN, COLABA, BOMBAY-5.

*General Manager*, M. S. Muthanna.

*Addl. General Manager*, K. D. Vaidya.

*Dy. General Managers*, V. P. Kanetkar, M. M. Kint, E. V. Philip, William Vaz.

*Chief Accounts Officer*, Louis Gonsalvez.

*Vigilance Officer*, J. M. Gandhi.

#### CALCUTTA TELEPHONES, 'TELEPHONE BHAVAN', 34, DALHOUSIE SQUARE, CALCUTTA

*General Manager*, K. N. R. Pillai.

*Dy. General Managers*: Sitansu K. Roy (*A*), M. M. Misra (*M-N*), R. N. Basu (*M-S*), A. Subramanian (*P*).

#### Overseas Communications Service Industrial Assurance Bldg., Bombay 1.

*Director General*, S. N. Kalra.

*Chief Engineer*, K. M. Balchandani.

*Officer on Special Duty*, Dr. S. P. Luthra, Radio House, Apollo Bunder, Bombay 1.

*Dy. Director General (Tfc.)*, M. S. Gharse.

*Director (Adm.)*, J. B. F. deSa.

#### CENTRAL TRAFFIC OFFICE, C.T.O., Bombay 1.

*Director*, M. J. Gandhi.

#### BEAM WIRELESS STATION, DIGHI, Poona 15.

*Director*, P. M. Kakodkar.

#### BEAM WIRELESS STATION, DHOND. Engineer-in-Charge, N. F. Allana.

#### NEW DELHI CENTRE.

N.I.C. Bldg., Parliament Street, New Delhi.

*Director*, G. D. Gokarn.

#### CALCUTTA CENTRE.

Narayani Bldg., 4th Floor, Brabourne Road, Calcutta 1.

*Director*, B. S. Dutt.

#### MADRAS CENTRE

Ghordia Mansion, 3rd Floor, 150A-2 Mount Road, Madras 2.

*Engineer-in-Charge*, G. Seshadri.

#### DEPARTMENT OF PARLIAMENTARY AFFAIRS, 90, PARLIAMENT HOUSE, NEW DELHI 2

*Minister*, Dr. Ram Subhag Singh.

*Minister of State*, I. K. Gujral.

*Dy. Ministers*, R. Chaturvedi; Mohan Dharla; J. B. Muthyal Rao.

*Secretary*, Kailash Chandra.

#### DEPARTMENT OF SOCIAL WELFARE

*Minister*, Asoka Mehta.

*Minister of State*, Mrs. Phulrenu Guha.

*Secretary*, Vacant.

*Joint Secretary*, M. Ramakrishnayya.

*Director, Backward Classes Welfare*, N. Sunda-



**Office of the Commissioner for Scheduled Castes and Scheduled Tribes.**

West Block No. 1, Wing No. 7, 1st Floor,  
Ramakrishnapuram, New Delhi 22.

*Commissioner for Scheduled Castes and Scheduled Tribes*, S. C. Sen Gupta.

*Deputy Commissioner for Scheduled Castes and Scheduled Tribes*, Vimal Chandra.

*Administrative Officer*, B. T. Vazirani.

*Deputy Commissioner for Assam (Plains Districts), Manipur and Tripura, Shillong*, B. D. Pugh.

*Deputy Commissioner for Assam (Hill Districts & NEFA) and Nagaland, Jorhat*, R. Yusuf Ali.

*Deputy Commissioner for Andhra Pradesh, Hyderabad*, H. S. Saksena.

*Deputy Commissioner for Bihar, Ranchi*, R. N. Kwatra.

*Deputy Commissioner for Madhya Pradesh (West), Bhopal*, K. K. Leuva.

*Deputy Commissioner for Madhya Pradesh (East), Bilaspur*, Vacant.

*Deputy Commissioner for Gujarat, Dadra & Nagar Haveli, Baroda*, P. C. Dave.

*Deputy Commissioner for Maharashtra and Goa, Daman & Diu, Poona*, S. L. Dubey.

*Deputy Commissioner for Madras & Pondicherry, Madras*, R. Subramanian.

*Deputy Commissioner for Mysore, Bangalore*, D. Krishna.

*Deputy Commissioner for Orissa, Bhubaneswar*, R. M. Mohanty.

*Deputy Commissioner for Punjab, Chandigarh*, C. B. M. Tripathi.

*Deputy Commissioner for Rajasthan & Delhi, Jaipur*, S. K. Kaul.

*Deputy Commissioner for Himachal Pradesh & Jammu & Kashmir, Simla*, M. S. Negi.

*Deputy Commissioner for Uttar Pradesh, Lucknow*, M. V. S. Dhesi.

*Deputy Commissioner for West Bengal and Andaman & Nicobar Islands, Kalyani*, N. Das.

*Deputy Commissioner for Kerala & Laccadive, Minicoy & Amindive Islands, Trivandrum*, K. V. Kumaran.

**Central Social Welfare Board, Jeevan Deep Building, Parliament Street, New Delhi**

*Chairman*, Mrs. Masuma Gecum.

*Secretary*, M. A. Soundararajan.

**Employees' State Insurance Corporation.**

ESIC Bldg., Kotla Road, New Delhi.

*Director-General*, V. N. Rajan, I.C.S.

*Insurance Commissioner*, N. Varma.

*Medical Commissioner*, Dr. J. K. Thanawala.

*Chief Accounts Officer*, T. P. Khosla.

*Actuary*, V. R. Natesan.

*Jt. Insurance Commissioner*, A. N. Ambo.

*Adm. Medical Officer*, Dr. O. P. Sharma.

**REGIONAL OFFICE, 64, GANESH CHANDRA AVENUE, CALCUTTA 13.**

*Regional Director*, S. Narayan.

**EMPLOYEES' STATE INSURANCE CORPORATION, REGIONAL OFFICE 136, PETERS ROAD, MADRAS 14.**

*Regional Director*, A. N. Bidani.

**REGIONAL OFFICE, E.S.I. CORPORATION, E.S.I.C. BUILDING, COLABA ROAD, BOMBAY 5.**

*Regional Director*, B. K. Agrawal.

**REGIONAL OFFICE, ASHRAM ROAD, AHMEDABAD.**

*Regional Director*, V. A. Mutatkar.

**REGIONAL OFFICE, KOTLA ROAD, NEW DELHI 1.**

*Regional Director*, M. M. Tuli.

**REGIONAL OFFICE, 7/202, SWARUP NAGAR, KANPUR**

*Regional Director (Offg.)*, I. C. Sarin.

**REGIONAL OFFICE, BRAHMA VIHAR, 5, NEW PALASIA, INDORE.**

*Regional Director*, L. P. Gupta.

**REGIONAL OFFICE, 5-9-23, HILL FORT ROAD, SAJJABAD, HYDERABAD.**

*Regional Director*, A. V. Subrahmanyam.

**REGIONAL OFFICE, HATHIBABUKABANG, RLY. STATION ROAD, JAIPUR.**

*Regional Director*, Surjit Singh.

**REGIONAL OFFICE, 1016-A/XIII, CIRCULAR ROAD, AMRITSAR.**

*Regional Director*, B. D. Chopra.

**REGIONAL OFFICE, NORTH SWARAJ ROUND, TRICHUR**

*Regional Director*, M. Venkataramiah.

**REGIONAL OFFICE, 13, KUMARA PARK EAST EXTENSION, BANGALORE.**

*Regional Director*, K. C. Aggarwal.

**REGIONAL OFFICE, PRASAD MANSION, SARKAR LANE, RAJENDRA PATH, PATNA 1**

*Regional Director*, P. L. Marwaha.

**REGIONAL OFFICE, 10, CANTONMENT ROAD, CUTTACK**

*Regional Director*, P. C. Sarin.

**REGIONAL OFFICE, DR. D. B. BUILDING, DR. B. BAROOAH ROAD, GAUHATI.**

*Regional Director*, N. B. Vyas.

**Coal Mines Provident Fund Commissioner, Dhaobad.**

*Coal Mines Provident Fund Commissioner*, Prakash Chandra.

*Regional Commissioners*, R. Kumar, S. A. Molz, O. P. Sharma.

*Assistant Commissioners*, B. K. Sinha, N. G. Vandi, R. K. Verma, O. P. Sharma, B. K. Verma.

**Office of the Central Provident Fund Commissioner, 50, Golf Links, New Delhi 3.**

*Central Provident Fund Commissioner*, E. V. Rama Reddi, I.A.S.

*Regional Provident Fund Commissioners (Hqrs.)*, P. S. Dhotrekar, V. Hemachandra Rao.

*Asstl. Provident Fund Commissioners*, I. B. Biswas, D. S. Thukral, S. P. Jain, A. B. Bhattacharya, P. N. Ghal.

**MINISTRY OF COMMERCE**

*Minister of Commerce*, Dinesh Singh.

*Dy. Minister of Commerce*, Mohd. Shafi Qureshi.

*Secretary*, K. B. Lall, I.C.S.

*Special Secretary*, B. N. Banerji.

*Commissioner of Civil Supplies*, G. C. L. Joneja.

*Joint Secretaries*: D. K. Srinivasachar; A. V. Venkateswaran; B. D. Jayal; A. C. Banerjee; V. K. Ahuja; S. Ramachandran.

*O.S.D.*, K. S. Ganapathi.

*Regional Director (F.T.)*, R. D. Pradhan.

*Directors*, M. P. Sathaye, J. Banerjee, C. N. Modawal.

*Chairman, Tariff Revision Committee*, S. Subramaniam.

*O.S.D., Tariff Revision Committee*, S. Venkatesan.

**Office of the Chief Controller of Imports and Exports, New Delhi.**

*Chief Controller*, P. D. Kasbekar, I.A.S.

*Joint Chief Controllers*, D. P. Karnik; T. M. B. Nedungadi, D. Chatterjee, Mrs. P. Chandrasekhar, J. S. Bedi.

*Director (Statistics)*, P. V. Raghavan.

**OFFICE OF THE JT. CHIEF CONTROLLER OF IMPORTS AND EXPORTS, CENTRAL LICENSING AREA, NEW DELHI**

*Jt. Chief Controller of Imports & Exports*, S. K. Sen.

*Controllers of Imports & Exports*, G. S. Sharma; B. L. Verma; N. L. Sharma; M. G. Gomber; A. T. Mukerjee.

**OFFICE OF THE JT. CHIEF CONTROLLER OF IMPORTS AND EXPORTS**

New C.G.O. Bldg., South East Wing,  
Churchgate, Bombay 1.

*Jt. Chief Controller*, N. H. Nagarwalla.

*Joint Director (Export Promotion)*, Ram Murti Sharma.

**OFFICE OF THE JOINT CHIEF CONTROLLER OF IMPORTS AND EXPORTS**

4, Esplanade East, Calcutta 1.

*Joint Chief Controller*, Amar Kanta Sen.

**OFFICE OF THE JOINT CHIEF CONTROLLER OF IMPORTS AND EXPORTS, POST BOX NO. 1842, CUSTOM HOUSE LABORATORY BLDGS., MADRAS 1**

*Joint Chief Controller*, E. C. Sankar.

*Dy. Dir. (Export Promotion)*, P. C. Kurian.

**OFFICE OF THE DY. CHIEF CONTROLLER OF IMPORTS AND EXPORTS,**

T. D. ROAD, ERNAKULAM 1.

*Dy. Chief Controller*, P. Madhavan Nair.

**OFFICE OF THE CONTROLLER OF IMPORTS & EXPORTS, DESAI BLDG., BHUPENDRA ROAD, RAJKOT**

*Controller of Imports and Exports*, P. J. Joshi.

**OFFICE OF THE CONTROLLER OF IMPORTS & EXPORTS, AMRITSAR**

*Controller of Imports & Exports*, K. R. Dheer.

**OFFICE OF THE ASSISTANT CONTROLLER OF IMPORTS & EXPORTS, SHILLONG**

*Assistant Controller*, E. W. Lyngdoh.

**Office of the Controller of Enemy Firms and Enemy Trading & Custodian of Enemy Property**

Kaiser-I-Hind Bldg., Currimbhoy Road,  
P. B. No. 689, Bombay 1.

*Controller of Enemy Firms and Enemy Trading and Custodian of Enemy Property*, S. Banerjee.

*Dy. Custodian for Enemy Property*, M. K. Rangachari.

**Forward Markets Commission, 'Everest', 3rd Floor, 100, Marine Drive, Bombay-2**

*Chairman*, A. S. Nalk, I.C.S.

*Members*, S. V. Kogekar, T. R. Visvanathan.

*Secretary*, K. S. Mahadevan.

**The Rubber Board, Kottayam (Kerala State)**

*Chairman*, P. S. Habeeb Mohamed, I.A.S.

*Director of Research*, Dr. K. T. Jacob.

*Secretary*, T. V. Joseph.

*Development Officer*, A. K. Rajapadmanabhan.

*Dy. Rubber Production Commissioner*, P. P. Cherian.



**Tea Board, 14, Brabourne Road, Calcutta 1***Chairman*, Bhagwan Singh, I.A.S.*Dy. Chairman*, S. N. Roy, I.A.S.*Secretary*, B. N. Chatterjee.*Director of Tea Promotion*, K. S. Varma.*Director of Tea Development*, S. S. Nandkeolyar.*Controller of Licensing*, P. V. Govindan.*Finance Officer*, G. C. Iyer.*Research Liaison Officer*, Dr. K. K. Mitra.**Coffee Board, P. Box No. 302, Bangalore 1***Chairman*, A. S. E. Iyer.*Secretary*, A. N. Balaram.*Chief Coffee Marketing Officer*, D. Balagopalan, I.A.S.*Director of Propaganda*, V. Balu.*Development Officer*, M. M. Kalappa.*Director of Research*, Dr. M. S. Sarma.**Coir Board, Post Box 80, Ernakulam***Chairman*, V. M. Srikumaran Nayar.*Secretary*, John Chandy (Ag.).*Director, Central Coir Research Institute*, G. N. Prabhu.*Chief Research Officers*, John Chandy (Statistics), K. B. Unnithan (Economics).**Office of the Textile Commissioner,  
New C. G. O. Bldg., New Marine Lines, P. B.  
No. 10004, Bombay 1.***Textile Commissioner*, R. Doraiswamy.*Jt. Textile Commissioner*, B. V. Vora.*Industrial Adviser*, I. B. Dutt.*Adviser (Cotton)*, R. D. Shah.**COTTON TEXTILE INDUSTRY BRANCH**  
*Director*, Dr. K. I. Narasimhan.**WOOLLEN INDUSTRY BRANCH**  
*Director*, D. N. Dikshit.**TEXTILE MACHINERY BRANCH**  
*Dy. Director*, R. K. Dakshit.**SURVEY BRANCH**  
*Director*, Dr. U. Bhattacharya.**FINANCIAL SURVEY SECTION**  
*Inspecting Officer*, Dr. M. S. Srinivasan.**COTTON BRANCH**  
*Director*, R. Viswanathan.**HANDLOOM BRANCH**  
*Secretary*, H. N. Satyanarayanan.**ECONOMIC & STATISTICS BRANCH**  
*Director*, K. R. Aravamuthan.**PLANNING AND CO-ORDINATION  
BRANCH**  
*Dy. Textile Commissioner*, R. Parameswar.**CONTROL (ENFORCEMENT) BRANCH**  
*Dy. Textile Commissioner*, J. Innocent.**ART-SILK INDUSTRY BRANCH**  
*Deputy Director*, D. H. Vora.**EXPORT PROMOTION BRANCH**  
*Deputy Director*, A. N. Ramachandran.**ADMINISTRATION BRANCH**  
*Deputy Director*, S. S. Aggarwal.**REGIONAL OFFICES***Bombay*: *Director*, P. N. Maltra; *Ahmedabad*: *Director*, B. C. Mathur; *Calcutta*: *Director*, A. K. Dasgupta; *Coimbatore*: *Sr. Enforcement Officer*, Shri M. M. Nayagam; *Madras*: *Asstt. Director*, K. K. Dominic; *Kanpur*: *Asstt. Director*, N. C. Bandyopadhyaya; *Amritsar*: *Deputy Director*, M. P. Avasthy; *Ludhiana*: *Asstt. Director*, D. D. Bhandari.**All-India Handloom Board, Secretariat, P.B.  
No. 10004, New Central Govt. Office Bldg.****Marine Lines, Bombay 1***Chairman*, R. Doraiswamy.*Vice-Chairman*, B. V. Vora.*Hon. Handlooms Adviser*, Smt. Pupul Jayakar.*Secretary*, H. N. Satyanarayana.**WEAVERS' SERVICE CENTRES***Bombay*: *Director*, H. R. Rao; *Madras*: *Director*, Dr. V. P. Kulkarni; *Calcutta*: *Asstt. Director-in-Charge*, H. D. Naik; *Varanasi*: *D. S. V. Iyer*; *Bangalore*: *Dy. Director*, A. V. Ramamurthy; *Indore*: *Asstt. Director*, B. B. Majumdar; *Delhi*: *Dy. Director*, Niren Ghosh; *Kancheepuram*: *Asstt. Director*, N. Veerappan.**INDIAN INSTITUTE OF HANDLOOM  
TECHNOLOGY***Salem*: *Principal*, S. Srinivasan; *Varanasi*: *Principal*, D. S. V. Iyer.**Department of Commercial Intelligence and  
Statistics, 1, Council House Street, Calcutta 1**  
*Director-General of Commercial Intelligence and  
Statistics*, Dr. S. G. Rao.*Deputy Directors-General*, D. C. Biswas; V. Bhanukoti; A. K. Roy; K. V. S. Prakasa Rao.**Tariff Commission, Central Govt. Offices Bldgs.  
101, Queen's Road, Bombay 1***Chairman*, M. P. Pai, I.C.S. (Retd.).*Members*, Dr. B. G. Ghate, I.A.S. (Retd.); M. Zaheer I.A.S.; Prof. K. T. Merchant.*Secretary*, Dr. P. V. Gunishastri.**Trade Marks Registry, Central Govt. Bldg.  
Queen's Road, Bombay***Controller General of Patents, Designs and Trade,  
Marks*, Dr. A. Jogarao.*Jt. Registrar of Trade Marks*, M. L. Kapoor.*Deputy Registrar (Coordination)*, V. G. Nair.**BRANCH, CALCUTTA***Deputy Registrar of Trade Marks*, A. P. Maltra.**BRANCH, MADRAS***Asstt. Registrar of Trade Marks*, K. U. Narasinga  
Rau.**BRANCH, DELHI***Asstt. Registrar of Trade Marks*, P. Narayanan.**Central Silk Board, Meghdoot, 95-B, Marine  
Drive, Bombay 2***Chairman*, R. Doraiswamy.*Secretary*, S. R. Ullal.*Deputy Secretary, (Tech)*, A. R. S. Gopalachar.*Asstt. Secy. (Tech)*, & Editor, "Indian Silk"  
T. S. Sundaramurthy.*Export Promotion Officer*, M. V. Abhyankar.**All India Handicrafts Board, Science Pavilion,  
Exhibition Grounds, Mathura Road, New Delhi 1***Chairman*, Smt. Kamaladevi Chattopadhyay.*Vice-Chairmen*, Smt. Kitty Shiva Rao, D.  
Sreenivasan.*Member-Secretary*, L. C. Jain.*Chief Executive Officer*, S. N. Dandona.*Directors of Handicrafts*, Bharat Sahay, Ajit  
Mukherji.**Khadi and Village Industries Commission, Irla  
Road, Vile Parle (West), Bombay 56***Chairman*, U. N. Dhebar.*Vice-Chairman*, K. Arunachalam.*Member-Secretary*, A. K. Karan.*Members*, Dhwa Prasad Sahu, S. Vedalamkar.*Financial Adviser*, S. R. Mukerji.*Chief Executive Officer*, G. F. Mankodi, I.A.S.*Director of Publicity*, J. N. Verma.**MINISTRY OF DEFENCE***Minister*, Swaran Singh.*Minister of State*, B. B. Bhagat.*Secretary (Defence Production)*, H. C. Sarin.*Secretary (Defence Supplies)*, B. B. Patel.*Additional Secretaries*, G. L. Sheth and D. D.  
Sathe.*Joint Secretaries*, R. J. Rebello, D. B. Kohli,  
S. S. L. Kakkar, M. M. Sen, R. B. Vaghai-  
walla, S. Y. Ranade, H. T. Sadhwani, L. S.  
Lulla, S. Krishnaswami and M. P. Cariappa.*Director, Military Lands & Cantonment*, Gajendra  
Singh.*Scientific Adviser to Defence Minister*, Dr. S.  
Bhagwantam.*Director-General of Inspection & Planning*, Rear  
Admiral B. N. Lele.*Chief Controller, Research & Development Orga-  
nisation*, Maj. Gen. J. R. Samson.*Chief Administrative Officer*, V. Subrahmanyam**DEFENCE FORCES****Indian Army***Chief of the Army Staff*, Gen. P. P. Kumara-  
mangalam, D.S.O.*Vice Chief of the Army Staff*, Lt.-Gen. K. S.  
Katoch, M.C.*Dy. Chief of the Army Staff*, Lt.-Gen. G. G.  
Bewoor.*General Officer Commanding-in-Chief, Eastern  
Command*, Lt.-Genl. S. H. F. J. Manekshaw,  
M.C.*General Officer Commanding-in-Chief, Southern  
Command*, Lt.-Gen. Moti Sagar.*General Officer Commanding-in-Chief, Western  
Command*, Lt.-Gen. Harbaksh Singh.*General Officer Commanding-in-Chief, Central  
Command*, Lt.-Gen. J. S. Dhillon.*Adjutant-General*, Lt.-Gen. M. S. Pathania.*Quartermaster-General*, Lt.-Gen. R. S. Paintal.*Master-General of the Ordnance*, Lt.-Gen. A.  
C. Iyappa.*Military Secretary*, Maj.-Gen. Kalyan Singh, M.C.*Engineer-in-Chief*, Maj.-Gen. K. N. Dubey.**Indian Navy***Chief of the Naval Staff*, Vice-Admiral A. K.  
Chatterji.*Vice Chief of the Naval Staff*, Rear-Admiral  
S. N. Kohli.*Flag Officer Commanding, Indian Fleet*, Rear-  
Admiral S. M. Nanda.*Flag Officer, Bombay*, Rear-Admiral R. S.  
David.*Commodore-in-Charge, Cochin*, Commodore J. D.  
Mody.*Commodore, East-Coast, Visakhapatnam*, Commo-  
dore D. St. J. Cameron.*Chief of Material*, Commodore P. S. Mahindroo.*Chief of Personnel*, Rear Admiral K. R. Nair.*Chief of Naval Aviation*, Commodore N.  
Krishnan.**Indian Air Force***Chief of the Air Staff*, Air Chief Marshal Arjan  
Singh, D.F.C.*Vice Chief of the Air Staff*, Air Marshal R. Raja  
Ram.*Deputy Chief of the Air Staff*, Air Vice-Marshal  
M. M. Engineer, M.V.C., D.F.C.*Air Officer Commanding-in-Chief, Western Air  
Command*, Air Vice-Marshal Shivadev Singh.*Air Officer Commanding-in-Chief, Central Air  
Command*, Air Vice-Marshal H. C. Dewan.*Air Officer Commanding-in-Chief, Eastern Air  
Command*, Air Vice-Marshal Ranjan Dutt.*Air Officer Commanding-in-Chief, Maintenance  
Command*, Air Vice-Marshal H. N. Chatterjee.*Air Officer Commanding-in-Chief, Training Com-  
mand*, Air Vice-Marshal T. S. Visk.*Air Officer-in-Charge, Administration*, Air Vice-  
Marshal Y. V. Malshe.*Air Officer-in-Charge, Maintenance*, Air Vice-  
Marshal O. P. Mehra.



**Directorate-General, Ordnance Factories**  
6, Esplanade East, Calcutta

*Director General*, R. M. Muzumdar.  
*Addl. Directors-General*, S. S. Jauhari, M. M. Thomas, L. B. Thairani.  
*OSD/Trucks and Tractors*, Brig. T. M. G. B. Poduval.

**Directorate of National Cadet Corps**  
West Block No. 4, Ramakrishnapuram, New Delhi 22

*Director-General*, Maj.-Gen. D. Prem Chand.

**Office of the D.G., AFMS.,**  
D.H.Q. P. O., New Delhi 11

*Director-General, Armed Forces Medical Services*, Lt.-Gen. A. K. Dev.  
*Deputy Director General, Armed Forces Medical Services*, Maj. Gen. K. K. Menon.

**Directorate of Public Relations**  
(Ministry of Defence)

*D.P.R.*, R. L. Handa.  
*D.D.P.R.*, Colonel V. Longer, Gp.-Capt. S. R. Mullick.  
*A.D.P.R.*, Lt.-Col. B. B. Moltra, Commander U. Narsingh.  
*Editor-in-Chief "Sainik Samachar"*, Vacant.

**Hindustan Aeronautics Ltd.,**  
Bangalore Division, Bangalore 17.

*Chairman*, S. S. Khera.  
*Managing Director*, Air Marshal P. C. Lal.  
*General Manager*, P. M. Reddy.  
*Dy. General Managers*, Dr. V. M. Ghatage (*Design & Dept.*), Air Cdr. S. M. Rikh (*Engine*).  
*Controller of Finance*, K. A. Lakshminarayana.  
*Divisional Secretary*, S. Jayaraman.

**Canteen Stores Department (India)**  
Adelphi, 119, Queen's Road, Bombay 1

*General Manager & Chairman, Board of Administration*, Capt. M. U. Hatengadi, I.N. (Retd.).

**Institute of Armament Technology, Dapodi**  
POONA 12.

*Dean*, Commodore M. K. Lele, I.N.  
*Director of Studies (Army)*, Col. R. L. Jetley.  
*Director of Studies (Navy)*, Capt. P. K. Sinha, I.N.  
*Director of Studies (Air)*, Gp. Capt. U. K. Nair.

**MINISTRY OF EDUCATION**

*Minister*, Dr. Triguna Sen.  
*Minister of State*, Prof. Sher Singh, B. J. Azad.  
*Secretary & Educational Adviser*, P. N. Kirpal.  
*Additional Secretary*, G. K. Chandramani.  
*Joint Secretaries*, Dr. A. M. D'Rozario, G. P. Pandey.  
*Joint Educational Advisers*, L. S. Chandrakant, Dr. P. D. Shukla, A. B. Chandramani, N. D. Sundravadivelu.  
*Adviser on Museums*, Dr. (Mrs.) Grace Morley.  
*Adviser on Libraries*, B. S. Kesvan.

**Central Board of Secondary Education**  
17-B, Indraprastha Marg, New Delhi 1

*Chairman*, L. R. Sethi.  
*Secretary*, R. P. Singhal.  
*Education Officer*, L. N. Agarwal.

**National Archives of India, Janpath, New Delhi**

*Director*, K. D. Bhargava.  
*Administrative Officer*, Bhawani Dass.

**National Library, Belvedere, Calcutta 27**

*Librarian*, Y. M. Mulay; *Dy. Librarians*, C. R. Banerji, A. B. Sen Gupta; *Administrative Officer*, B. N. Gupta.

**Dept. of Adult Education**  
National Fundamental Education Centre,  
National Institute of Education, National  
Council of Educational Research & Training  
38A, Friends Colony, Mathura Road, New Delhi 14.

*Director*, T. A. Koshy.  
*Field Adviser (Tribal Edn. Unit)*, L. R. N. Srivatsava.  
*Assistant Director*, N. A. Ansari (Literacy Unit).

**National Fitness Corps**  
4/14, Asaf Ali Road, New Delhi 1.  
*Director-General*, Anant Singh Pathania, Maj.-Gen. (Retired), MVC, MC.  
*Director*, Mahmood Ali.

**University Grants Commission**  
University Grants Commission Building,  
Bahadur Shah Zafar Marg, New Delhi-1.  
*Chairman*, Prof. D. S. Kothari.  
*Secretary*, K. L. Joshi.  
*Joint Secretary*, Dr. P. J. Philip.

**Botanical Survey of India, 14, Madan Street, Calcutta 12.**

*Director*, Rev. Fr. H. Santapau, S.J.  
*Jt. Director*, Dr. K. Subramanyam.  
*Dy. Directors*, Dr. J. Sen (*Indian Botanic Garden, Shibpur*); K. S. Srinivasan (*Hqrs.*).  
*Administrative Officer*, D. G. Mookerjee.  
*Keeper, Central National Herbarium*, Dr. S. K. Mukherjee.  
*Botanist, Central Botanical Laboratory, Calcutta*, Dr. R. P. Patil.

**Regional Botanists :—**

*Western Circle, Poona* R. S. Rao.  
*Northern Circle, Dehra Dun*, Dr. M. A. Rau.  
*Central Circle, Allahabad*, Dr. G. Panigrahi.  
*Southern Circle, Coimbatore*, Dr. K. M. Sebastine.  
*Eastern Circle, Shillong*, Dr. A. S. Rao.

**SCHOOL OF PLANNING AND ARCHITECTURE, INDRAPRASTHA ESTATE, NEW DELHI 1.**

*Director*, T. J. Manickam.  
*Registrar*, B. R. Umarji.

**Anthropological Survey of India, Indian Museum, 27, Jawaharlal Nehru Marg, Calcutta 12.**

*Director & Anthropological Adviser to the Govt. of India*, Dr. D. K. Sen.

**Archaeological Survey of India, New Delhi 11.**

*Director-General of Archaeology*, A. Ghosh.  
*Jt. Dir.-Gen. of Archaeology*, B. B. Lal.  
*Director, School of Archaeology*, M. N. Deshpande.  
*Director, Exploration*, B. K. Thapar.  
*Director, Monuments*, Mrs. D. Mitra.  
*Director, Administration*, K. R. Baliga.  
*Archaeological Engineer*, R. Sengupta.

**Indian Institute of Technology, Kharagpur.**  
*Director*, S. B. Sen Gupta.  
*Dy. Director*, Prof. V. N. Prasad.  
*Registrar*, K. C. Chakravarty.

**Council of Scientific & Industrial Research**  
Rafi Marg, New Delhi.

*Vice-President*, Dr. Triguna Sen.  
*Director-General*, Dr. Atma Ram.  
*Secretary*, K. G. Krishnamurthi.

**CENTRAL INDIAN MEDICINAL PLANTS ORGANISATION, N.B.H. COMPOUND, LUCKNOW.**

*Scientist-in-Charge*, Dr. S. C. Datta.

**CENTRAL SCIENTIFIC INSTRUMENTS ORGANISATION,**  
Sector 30, Chandigarh 20.

*Director*, Dr. P. S. Gill, F.N.I.  
*Adm. Officer*, A. P. Jain.

**CENTRAL BUILDING RESEARCH INSTITUTE, ROORKEE.**

*Director*, Dinesh Mohan.  
*Administrative Officer*, Rajendra Narain.

**CENTRAL DRUG RESEARCH INSTITUTE CHATTAB MANZIL PALACE, LUCKNOW.**

*Director*, Dr. M. L. Dhar.

**CENTRAL ELECTROCHEMICAL RESEARCH INSTITUTE, CECRINAGAR, P.O. KARAIKUDI, 3, SOUTH INDIA.**

*Director*, Dr. K. S. G. Doss.

**CENTRAL ELECTRONICS ENGINEERING RESEARCH INSTITUTE, PILANI.**

*Director*, Dr. Amarjit Singh.  
*Deputy Directors*, Dr. D. L. Subrahmanyam, Dr. O. P. Gandhi.  
*Administrative Officer*, A. N. Zutshi.

**CENTRAL FOOD TECHNOLOGICAL RESEARCH INSTITUTE V. V. MOHALLA, MYSORE 2.**

*Aims and Objectives*: To augment food supplies through better conservation and more efficient utilization, and to develop and process new types of foods with a view to raise the nutritional standards of the people. Research projects cover the fields of biochemistry; protein technology; cereal and confectionery technology; food engineering, process development and packaging technology; fruit and vegetable technology; infestation control and pesticides; meat, fish and poultry technology; species and flavour technology; microbiology and nutrition; and applied nutrition and dietetics.

The Institute has eight Experiment Stations located at Bombay, Nagpur, Kodur, Jammu, Trichur, Lucknow, Simla and Mangalore. They serve as centres not only for dissemination of scientific information but also for analysing and identifying regional food problems on which research is undertaken.

*Director*, Dr. H. A. B. Parpia.

**CENTRAL FUEL RESEARCH INSTITUTE, P.O., F.R.I., DHANBAD, BIHAR.**

*Director*, Dr. A. Lahiri.  
*Dy. Directors*, Dr. N. G. Basak, S. Bagchi (*Coal Survey*); S. K. Das Gupta (*Engineer-in-Chief*).

**CENTRAL GLASS & CERAMIC RESEARCH INSTITUTE, P.O. JADAVPUR UNIVERSITY CALCUTTA 32.**

*Director*, Vacant.  
*Dy. Director*, K. D. Sharma.

**CENTRAL LEATHER RESEARCH INSTITUTE, ADYAR, MADRAS 20.**

*Director*, Dr. Y. Nayudamma.  
*Scientists*, Dr. S. K. Barat, Dr. N. Ramathan, A. Ganesan.  
*Adm. Officer*, J. Guruswami.

**CENTRAL PUBLIC HEALTH ENGINEERING RESEARCH INSTITUTE**

Nehru Marg,  
Nagpur.

*Director*, R. S. Mehta.  
*Administrative Officer*, N. Ahmed.

**CENTRAL ROAD RESEARCH INSTITUTE DELHI-MATHURA ROAD, NEW DELHI 20.**

*Director*, Prof. S. R. Mehra.  
*Deputy Director*, Dr. R. K. N. Iyengar.



**CENTRAL SALT & MARINE CHEMICALS RESEARCH INSTITUTE, BHAVNAGAR 2.**  
*Director* Dr. D. S. Datar.

**NATIONAL AERONAUTICAL LABORATORY**  
 Kodihalli, Bangalore 17.

*Director*, Dr. S. B. Valluri.  
*Officer on Special Duty*, K. G. Krishnamurthi.  
*Administrative Officer*, M. G. Thakar.

**NATIONAL ATLAS ORGANISATION**  
 1, Acharya Jagadish Bose Road, Calcutta 20.  
*Director*, Prof. S. P. Chatterjee.  
*Deputy Director*, S. P. Das Gupta.

**NATIONAL MUSEUM**  
 Janpath, New Delhi 1.

*Director*, C. Sivaramamurti.  
*Asstt. Director*, T. R. Gairola.  
*Administrative Officer*, H. S. Jassal.

**NATIONAL BOTANIC GARDENS, LUCKNOW.**

*Director*, Dr. L. B. Singh.

**NATIONAL CHEMICAL LABORATORY, POONA 8.**

*Director*, Dr. B. D. Tilak.  
*Dy. Director*, Dr. J. Gupta.  
*Administrative Officer*, R. P. Pathak.

**NATIONAL GEOPHYSICAL RESEARCH INSTITUTE, HYDERABAD 7**

*Director*, Dr. Hari Narain.  
*Dy. Director*, Dr. A. Roy.

**NATIONAL METALLURGICAL LABORATORY, JAMSHEDPUR 7.**

*Scientist-in-Charge*, Dr. T. Banerjee.

**NATIONAL PHYSICAL LABORATORY, HILLSIDE ROAD, NEW DELHI 12.**

*Director*, Dr. A. R. Verma.

**INDIAN INSTITUTE OF EXPERIMENTAL MEDICINE**  
 4, Raja S. C. Mullick Road, Calcutta 32.

*Director*, Prof. R. B. Arora.  
*Administrative Officer*, K. D. Banerjee.

**INDIAN INSTITUTE OF PETROLEUM**  
 P.O. I.I.P., Dehra Dun.

*Director*, Dr. M. G. Krishna.  
*Dy. Director*, Dr. J. S. Ahluwalia (Indian Institute of Petroleum, Projects Division, A9, Ring Road, Lajpat Nagar III, New Delhi-14).  
*Administrative Officer*, B. S. Sinha.

**Indian School of Mines, Dhanbad.**

*Director*, Prof. D. N. Prasad.  
*Registrar*, Vacant.

**Central Mining Research Station**  
 Barwa Road, Dhanbad.

*Director*, Dr. K. N. Sinha.

**Survey of India, Headquarters, Dehra Dun, U.P.**  
*Surveyor General*, Brig. J. S. Paintal.  
*Deputy Surveyor Generals*, Lt. Col. N. B. Nayar, Lt. Col. B. Sarin.

**MAP PUBLICATION DIRECTORATE, HATHIBARKALA, DEHRA DUN.**

*Director*, Colonel C. M. Sahni.

**NORTHERN DIRECTORATE, DEHRA DUN**  
*Director*, Col. K. S. L. Khosla.

**EASTERN CIRCLE DIRECTORATE, 13, WOOD STREET, CALCUTTA.**  
*Director*, Colonel J. C. Sikka.

**SOUTHERN CIRCLE DIRECTORATE, 22, RICHMOND ROAD, BANGALORE.**

*Director*, Col. J. N. Sinha.

**TRAINING DIRECTORATE, HYDERABAD.**  
*Director*, Colonel J. A. F. Dalal.

**WESTERN CIRCLE, ABU**

*Director*, Col. M. L. Chopra.

**CENTRAL CIRCLE, JABALPUR.**

*Director*, L. J. Bagnall.

**DECCAN CIRCLE HYDERABAD.**

*Director*, Col. D. N. Sharma.

**DY. DIRECTOR, SURVEY (AIR), NEW DELHI.**

*Dy. Director*, Col. N. K. Sen.

**NORTH WESTERN CIRCLE, DEHRA DUN.**

*Director*, Lt. Col. Y. L. Khular.

**GEODETIC AND RESEARCH BRANCH, DEHRA DUN.**

*Dy. Director*, R. S. Chhug.

**Zoological Survey of India, Jabukusam House, 34, Chittaranjan Avenue, Calcutta 12.**

*Director*, Dr. A. P. Kapur.  
*Deputy Director*, Dr. M. S. Mani.  
*Administrative Officer*, S. C. Sircar.

**MINISTRY OF EXTERNAL AFFAIRS**  
 New Delhi 11.

*Minister*, M. C. Chagla.  
*Dy. Minister*, Surendra Pal Singh.  
*Foreign Secretary*, C. S. Jha, I.C.S.\*  
*Secretaries*, T. N. Kaul (EAI), @M. A. Hussain (EAI).

*Joint Secretaries*, A. G. Meneses, S. K. Roy, K. M. Kannampilly, A. K. Dar, A. B. Bhadkamkar, J. S. Mehta, Dr. K. Krishna Rao, A. N. Mehta, S. Bikram Shah (Chief of Protocol).

*Legal Adviser (Hony.)*, B. Sen.

*Directors*, V. Doraiswamy, M. R. Thadani, Smt. K. Rukimini Menon, P. K. Guha, Romesh Bhandari, J. C. K. Ajmani, K. S. Bajpai, T. T. P. Abdullah, N. Krishnan.

**EXTERNAL PUBLICITY DIVISION**

*Directors*, S. D. Kalelkar, K. L. Panjabi.

**HISTORICAL DIVISION**

*Director*, B. K. Basu.

**LEGAL & TREATIES DIVISION**

*Joint Secretary*, Dr. K. Krishna Rao.

**CONFERENCE DIVISION**

*Joint Secretary*, Vacant.

**CENTRAL PASSPORT AND EMIGRATION ORGANISATION**

*Director (PV)*, V. A. Kidwai.  
*RPO, New Delhi*, D. C. Mukherjee.  
*RPO, Madras*, D. N. Manjeshwar.  
*RPO, Bombay*, R. P. Ghatge.  
*RPO, Calcutta*, P. C. Bhattacharjee.  
*RPO, Lucknow*, D. P. Asthana.

**MINISTRY OF FINANCE**

*Minister*, Morarji R. Desai.  
*Minister of State*, K. C. Pant.

**Department of Economic Affairs**

*Secretary*, S. Jagannathan, I.C.S.  
*Additional Secretary*, S. S. Shiralkar.  
*Joint Secretaries*, C. S. Swaminathan, A. R. Shirali, A. T. Bambawale, Y. T. Shah, N. R. Reddy.  
*Chief Economic Adviser*, Dr. I. G. Patel.

**Department of Expenditure**

*Secretary*, T. P. Singh, I.C.S.  
*Addl. Secretaries*, H. N. Ray, I.C.S., S. D. Nargolwala.  
*Joint Secretaries*, G. C. Katoch, D. J. Madan, S. K. Majumdar, S. Vasudevan, F. H. Valibhoy, P. N. Jain, R. S. Gupta, K. S. Bhandari, M. S. Sundara.  
*Chief Cost Accounts Officer*, N. Krishnan.

**Department of Revenue & Insurance**

*Secretary, Department of Revenue*, T. P. Singh, I.C.S.  
*Gold Control Administrator & Joint Secretary*, M.F.(DOR&I), Jasjit Singh.  
*O.S.D. & Ex-Officio Joint Secretary*, A. Rajagopalan.

**CENTRAL BOARD OF EXCISE AND CUSTOMS**

*Chairman, Central Board of Excise and Customs and Ex-officio Additional Secretary, Ministry of Finance (Department of Revenue & Insurance)*, B. N. Banerji.  
*Members Central Board of Excise and Customs and Ex-Officio Joint Secretaries, Ministry of Finance (Department of Revenue & Insurance)*, D. P. Anand, T. C. Sheth, S. K. Bhattacharjee.

**CENTRAL BOARD OF DIRECT TAXES**

*Chairman, Central Board of Direct Taxes and Ex-Officio Addl. Secretary, Ministry of Finance (Department of Revenue & Insurance)*, S. A. L. Narayana Row.  
*Members, Central Board of Direct Taxes & Ex-Officio Joint Secretaries Ministry of Finance, (Dept. of Revenue & Insurance)*, G. S. Srivatsava, R. N. Muttou.

**Enforcement Directorate**

North Block, Central Secretariat, New Delhi.  
*Director*, C. D. Venkataramanan.  
*Delhi Branch—Reserve Bank of India, 2nd Floor, New Delhi.*  
*Dy. Director*, A. J. Rana.  
*Bombay Branch—Laxmi Building, Sir Phiroze Shah Mehta Road, Bombay.*  
*Dy. Director*, S. G. Sahasrabhojane.  
*Calcutta Branch—8, Lindsay Street, Calcutta 16.*  
*Dy. Director*, S. N. Banerji.  
*Madras Branch—5/6, Mount Road, Madras 2.*  
*Dy. Director*, R. Swaminathan.  
*Hyderabad Branch: 412/1/1, Gagan Mahal Road, Hyderabad.*  
*Chief Enf. Officer*, A. K. Roy Chowdhry.

**AHMEDABAD BRANCH**

*Ellis Bridge, Chandra Colony, Ahmedabad-6.*  
*Chief Enforcement Officer*, R. N. Chopra.  
**Defence Accounts Department (D. H. Qrs. Post Office, New Delhi 11)**  
*Controller General of Defence Accounts*, H. L. Wadera.  
*Addl. Controller-General of Defence Accounts*, B. L. Jain.

**Office of the Controller of Insurance, Kennedy Cottage, Simla 4**

*Controller of Insurance*, C. S. Anantapadmanabhan.

**Comptroller and Auditor-General of India, Bahadur Shah Zaffar Marg, New Delhi**

*Comptroller and Auditor General of India*, S. Ranganathan.  
*Deputy Comptroller & Auditor General*, P. N. Bhandari.  
*Addl. Dy. Comptroller & Auditor General (Rlys.) and Ex-Officio Director of Railway Audit*, A. K. Mukherji.  
*Addl. Dy. Comptroller & Auditor General (Rep.)*, G. Mathias.  
*Addl. Dy. Comptroller & Auditor General (Head Qrs.)*, R. K. Khanna.

\* Has been appointed Ambassador to France.

@ Is expected to be the next Ambassador to Switzerland from Sept. 1967.



**India Government Mint, Mint Road, Bombay**  
*Mint Master, V. J. Joshi.*  
*Asstt. Mint Master, G. R. Kahate.*  
*Works Manager, C. V. Rao.*  
*Dy. Works Manager (E. & M.), H. W. Hardinge.*  
*Dy. Works Manager (Melting), F. R. Tanksalwalla.*

**India Government Mint, Calcutta 27**  
*Master of the Mint, P. K. Tikku.*  
*Dy. Master, B. M. Mistry.*  
*Bullion Registrar, K. S. Subramaniam (Offg.)*

**India Government Mint, Hyderabad, A.P.**  
*Mint Master, D. C. Mukherjee.*  
*Bullion Registrar, Rasheed Ahmed.*  
*Dy. Works Manager, H. Narayana Rao.*

**India Security Press, Nasik Road**  
 (Including Currency Notes Press and Central Stamp Store).

*Master, India Security Press and Controller of Stamps, M. S. Pathak.*  
*Deputy Master, P. M. Rau.*  
*Dy. Controller of Stamps, T. K. Gupte.*  
*Dy. Master, N. P. Sarnaik.*  
*Labour Officer, M. W. Warty.*

**Office of the Accountant-General, Central Revenue, Indraprastha Estate, New Delhi 1**

*Accountant General, D. D. Dhingra.*  
*Sr. Deputy Accountants General, R. S. Maunder, Miss Amrita Grover.*  
*Deputy Accountants General, R. M. Kantharajan, M. N. Doraswamy, M. A. Sounderajan, B. Sen Gupta, Mrs. Janaki Kathpalia.*

**Office of the Accountant-General, Posts and Telegraphs, Simla 3**

*A.G., S. L. Bhalla.*  
*D.A.G., P. S. Bhagal.*

**National Savings Commissioner for India, Post Box No. 96, Nagpur**

*National Savings Commissioner for India, N. V. Nayudu.*  
*Deputy National Savings Commissioner, R. G. Khedekar.*  
*Director, (Hq.), I. B. Prasad.*  
*Regional Directors, K. Chandriah, (Andhra Pradesh, Hyderabad), A. Chaudhury, (Assam, Shillong), J. H. Kothari, (Bihar, Patna), G. Ramachandran, (Delhi), P. J. Pathak, (Gujarat, Ahmedabad), A. H. Siddiqui, (J & K, Jammu), S. R. Narasimpur, (Kerala, Trivandrum), Lachmi Narain, (Madhya Pradesh, Indore), K. Ganesan, (Madras), R. G. Patil, (Maharashtra, Bombay), M. J. Prabhu, (Mysore, Bangalore), S. S. Tewari, (Orissa, Cuttack), S. M. Mathur, (Punjab, Jullundur), Ajit Singh, (Rajasthan, Jaipur), Mohi-Uddin Ahmed, (Uttar Pradesh, Lucknow), M. M. Mojumder, (West Bengal, Calcutta).*

**Narcotics Department, Morar, Gwalior.**  
*Narcotics Commissioner, B. S. Chawla.*  
*Asstt. Narcotics Commissioner, A. P. Agarwal.*

**UTTAR PRADESH UNIT, GHAZIPUR**  
*Deputy Narcotics Commissioner, H. N. Raina.*  
*Asstt. Narcotics Commissioner, M. M. Sethi.*

**MADHYA PRADESH UNIT**  
*Neemuch, M.P.*  
*Asstt. Narcotics Commissioner, S. C. Mukhopadhyaya.*

**RAJASTHAN UNIT**  
*Kota*  
*Asstt. Narcotics Commissioner, R. P. Sethi.*

### Reserve Bank of India

**CENTRAL OFFICE, POST BOX 406, BOMBAY 1**

*Governor, L. K. Jha.*  
*Deputy Governors, A. Bakshi, J. J. Anjaria, P. N. Damry, B. N. Adarkar.*  
*Executive Directors, N. D. Nangia, R. K. Seshadri.*  
*Chief Manager, D. N. Malsute.*  
*Chief Accountant, K. C. Mittra.*  
*Secretary, M. L. Gogtay.*  
*Legal Adviser, B. N. Mehta.*  
*Chief Officers, Department of Banking Operations & Development, M. S. Nadkarni (Banking Operations), A. R. Thanawala (Inspections).*  
*Chief Officer, Agricultural Credit Department, K. C. Cheriyan.*  
*Controller, Exchange Control Department, V. A. Rao.*  
*Economic Adviser, V. G. Pendharkar.*  
*Manager, Bombay, G. Balasubramanian.*  
*Manager, Calcutta, J. S. Jaspal.*  
*Manager, Madras, P. C. Sood.*  
*Manager, New Delhi, M. M. Mehra.*  
*Manager, Kanpur, K. N. Mehta.*  
*Manager and Currency Officer, Bangalore, C. K. Bhaskaran.*  
*Manager, Nagpur, J. X. Lobo.*  
*Manager, Patna, M. M. Ghosh.*  
*Manager, Hyderabad, P. L. Jain.*  
*Manager, Jaipur, M. G. Chacko.*  
*Manager, Byculla, J. S. Narula.*

**INDUSTRIAL DEVELOPMENT BANK OF INDIA**

(Wholly owned subsidiary of the Reserve Bank of India)

*Reserve Bank Building, Mint Road, Bombay 1.*  
*Chairman, L. K. Jha.*  
*General Manager, S. L. N. Sinha.*  
*Deputy General Manager, P. K. Dasgupta.*

**State Bank of India**  
 Apollo Street, Bombay 1.

*Central Office :*

*Chairman : V. T. Dehejia.*  
*Vice-Chairman, K. T. Desai.*  
*Managing Directors : R. N. Chettur, N. Ramnand Rao.*  
*Secretary (Development) : A. H. Elias.*

*Ahmedabad Circle :*

*Secretary & Treasurer : S. G. Sheth.*

*Bengal Circle :*

*Secretary & Treasurer : Ram Rakha.*

*Bombay Circle :*

*Secretary & Treasurer : R. K. Talwar.*

*Delhi Circle :*

*Secretary & Treasurer : V. G. Mahadevan.*

*Hyderabad Circle :*

*Offg. Secretary & Treasurer : T. R. Varadachary.*

*Kanpur Circle :*

*Offg. Secretary & Treasurer : R. L. Magon.*

*Madras Circle :*

*Secretary & Treasurer : S. D. Mehra.*

**Life Insurance Corporation of India**

*Central Office : 'Yogakshema', Madame Cama Road, Bombay 1.*

*Chairman, M. R. Bhide.*  
*Managing Director, S. D. Srinivasan.*  
*Executive Director (General Insurance), V. H. Vora.*  
*Executive Director (Finance & Accounts), T. S. Swaminathan.*

*Executive Director (Personnel), M. V. Sohoni.*  
*Chief Actuary, D. D. Markan.*  
*Chief Internal Auditor, C. D. Jhamb.*  
*Zonal Manager, Bombay, R. M. Mehta.*  
*Zonal Manager, New Delhi, K. L. Gupta.*  
*Zonal Manager, Kanpur, R. C. Bhalla.*  
*Zonal Manager, Calcutta, K. R. Puri.*  
*Zonal Manager, Madras, G. H. Thakore.*

**MINISTRY OF FOOD AND AGRICULTURE**

*Minister, Jagjivan Ram.*  
*Ministers of State, Anna Sahab Shinde, M. S. Gurupadaswami.*  
*Dy. Minister, D. Erulgi.*

**DEPARTMENT OF AGRICULTURE**

*Secretary, B. Sivaraman, I.C.S.*  
*Additional Secretary, S. J. Majumdar.*  
*Director General I.C.A.R. and Ex-officio Additional Secretary, Dr. B. P. Pal.*  
*Director-General of State Agricultural Farms, & Ex-Officio, Addl. Secy., Raja Surendra Singh.*  
*Joint Secretaries, Godwin Rose, J. C. Mathur, I. J. Naidu, K. Ramamurthy, Saran Singh.*  
*Inspector General of Forests and Ex-Officio Joint Secretary, Hari Singh.*  
*Assistant Director General, State Farms, I. J. Broughton.*  
*Economics & Statistical Adviser, J. S. Sarma.*  
*Extension Commissioner, D. V. Reddy.*  
*Animal Husbandry Development Commissioner, Dr. P. Bhattacharya.*  
*Irrigation Adviser, Mahabir Prasad.*  
*Joint Commissioner (S.L.), G. V. Chalam.*  
*Livestock Development Adviser, G. C. Juneja.*  
*Adviser on Soil Conservation (S & A), Dr. R. V. Tamhane.*  
*Secretary, Central Forestry Commission, K. K. Nair.*  
*Fisheries Development Adviser, G. N. Mitra.*  
*Dairy Development Adviser, Dr. N. N. Dastur.*  
*O.S.D. (Dairy Farms), S. N. Mohan.*  
*O.S.D. (Fertiliser), M. Subramanian.*  
*Agricultural Production Commissioner, Dr. A. S. Cheema.*

**Central Council of Gosamvardhana**

*Thakar Bapa Smarak Sadan, New Link Road, Jhandewalan, New Delhi.*  
*President, U. N. Dhebar.*  
*Vice-President, A. P. Shinde.*  
*Official Secretary, Dr. P. Bhattacharya.*

**Department of Community Development & Co-operation**

*Krishi Bhavan, New Delhi.*

*Secretary, Vacant.*  
*Addl. Secretary, I. D. N. Sahi.*  
*Joint Secretaries, N. P. Chatterji; S. M. H. Burney; A. C. Bandopadhyaya.*  
*Orientation and Study Centres :*  
*Principals : S. S. Gill (Lucknow); A. Syam (Junagarh); J. Bose (Nilokheri); W. Shaiza (Kalyani); R. Michael (Bharanisagar).*  
*Tribal Orientation and Study Centres :*  
*B. M. Pande (Ranchi); J. N. Misra (Jabalpur); A. C. Mohapatra (Bhubaneswar); M. L. Kakar (Udaipur).*

**National Institute of Community Development**  
 RAJENDRANAGAR, HYDERABAD 30

*Dean, Dr. G. Jacob.*

**DEPARTMENT OF FOOD**

*Secretary, A. L. Dias, I.C.S.*  
*Director General (Food), J. A. Dave.*  
*Joint Secretary (Sugar), K. L. Paricha, I.A.S.*  
*Joint Secretary (Policy), R. Balasubramanian, I.A.S.*



*Managing Director, Central Warehousing Corporation, C. S. Ramachandran, I.C.S.*

*Chief Director of Mout., Vacant.*

*Chief Director of Purchase, Col. P. C. Khanna.*

*Dy. Directors-Gen. (Food), Rana K. D. N. Singh, I.A.S., S. K. Bedekar.*

*Director (Budget & Finance Coordination), H. S. Mac, I.A. & A.S.*

*Director of Storage & Inspection, Dr. S. V. Pingale,*

*Director of Ports & Depots, K. D. Narayan.*

*Directors (A.P.O.), S. Swarup, R. Chandra.*

*Director (Procurement), Vacant.*

*Executive Director, Dr. P. K. Kymal.*

*Director (S.T.), S. P. Chandra.*

#### **Central Inland Fisheries Research Institute, Barrackpore, (Dt. 24 Parganas).**

*Sub Stations: Cuttack, Allahabad, Tungabhadra Dam, Units: Chikla Investigation Unit, Balugaon (Orissa); Krishna Godavari Unit, Rajahmundry 3; Narbada Tapi Unit, Hoshangabad; Coldwater Fisheries Research Unit, Kangra; Pulicat Unit, Ponneri, Madras; Ganga Survey Unit, Bhagalpur; Experimental Fish Farm: Janakpur, Panna (M.P.); Estuarine Fisheries Research Centres: (1) 47/1 Strand Road, Calcutta 7; (2) Kakawip P.O. (Dt. 24 Parganas).*

*Director & Head of the Dept., Dr. V. G. Jhingran.*

#### **Central Marine Fisheries Research Institute, Marine Fisheries P.O., Mandapam Camp (S. India)**

*Director, Dr. S. Jones, D.Sc., F.N.G.S., F.A.Sc., F.Z.S.I.*

#### **Central Institute of Fisheries Technology P.B. No. 39, Chittoor Road, Ernakulam 1.**

*Sub-Stations: Verval (Gujarat), Kakinada (Andhra Pradesh), Gobindsagar (Punjab) and Goa.*

*Units: Bombay, Calicut, Gobindsagar and Goa.*

*Director, Dr. A. N. Bose.*

*Senior Research Officers, G. K. Kuriyan, R. Venkataraman, Dr. V. Krishna Pillai, R. L. Roy Chowdhury.*

#### **Central Potato Research Institute (MAIN INSTITUTE, SIMLA)**

*Director, Dr. Pushkarnath, M.Sc., Ph.D., Assoc. I.A.R.I.*

#### **Central Rice Research Institute, Cuttack 6, Orissa**

*Director, S. Y. Padmanabhan.*

#### **Central Tractor Organisation, New Pusa, New Delhi 12**

*Asstt. Adm. Officer, S. P. Nakra.*

#### **Directorate of Marketing and Inspection, New Secretariat Bldg., Nagpur.**

*Agricultural Marketing Adviser to the Government of India, R. T. Mirchandani.*

*Dy. Agricultural Marketing Advisers, B. D. Joshi, V. P. Anantanarayanan, R. N. Chaturvedi.*

#### **Directorate of Plant Protection, Quarantine and Storage, 4-19, Asaf Ali Road, New Delhi.**

*Plant Protection Adviser to the Govt. of India, Dr. Sardar Singh.*

#### **Central Mechanised Farm Suratgarh (Rajasthan).**

*Director, Goverdhan.*

*Operational Manager (Agri.), S. R. Roy.*

*Operational Manager, (Mechanical), O. S. Gupta.*

*Administrative Officer, T. S. Malhotra.*

#### **Forest Research Institute & Colleges, P.O. New Forest, Dehra Dun**

*President, T. N. Srivastava.*

*Director of Forest Education, R. C. Kaushik.  
Registrar, Parkash Chand.*

*Publicity & Liaison Officer, S. Raghavan.*

*Director of Forest Products Research, N. J. Masani.*

*Director of Biological Research, Dr. A. Purushotham.*

*Director of Forestry Research, I. M. Qureshi.*

#### **COLLEGES**

*Dean, Indian Forest College, H. C. Dey.*

*Principal, Northern Forest Rangers College, Dehra Dun, M. Y. Sowani.*

*Principal, Southern Forest Rangers, College, Coimbatore, M. B. Peter.*

#### **Forest Research Laboratory Malleswaram, Bangalore 3.**

*Head, Dr. P. S. Rao.*

#### **REGIONAL OFFICE (COTTON DEVELOPMENT)**

*14, Nicol Road, B. Estate, Bombay 1.*

*Adviser, Dr. B. L. Sethi.*

*Director, Avtar Singh.*

*Deputy Directors: (Marketing & Planning), M. S. Natesan, (Development I), P. P. Chandra. (Economic Research & Statistics), M. V. Pavate, (Development II), K. Ramachandran.*

#### **TECHNOLOGICAL LABORATORY**

*Adenwala Road, Matunga, Bombay 19.*

*Director, Dr. R. L. N. Iyengar.*

*Administrative Officer, S. B. Tipnis.*

*Senior Scientific Officers, Dr. V. Sundaram, Jai Prakash, Dr. S. M. Betrabet, R. P. Neogi.*

#### **Regional Office, Tobacco Development 3, Eldams Road, Teynampet, Madras 18**

*Secretary, K. C. Chetty.*

*Dy. Director (Development), Dr. G. J. Patel.*

#### **Indian Council of Agricultural Research Krishi Bhawan, Dr. Rajendra Prasad Road, New Delhi.**

*Director General and Vice President, Dr. B. P. Pal.*

*Deputy Director General (Crop Science), Dr. A. B. Joshi.*

*Deputy Director General (Education & Centre State Relations), Dr. O. P. Gautam.*

*Deputy Director General (Soils, Agronomy & Engineering), Dr. J. S. Kanwar.*

*Deputy Director General (Animal Science), Dr. K. K. Iya.*

*Secretary, K. P. A. Menon.*

*Statistical Adviser, Dr. G. R. Seth.*

#### **National Dairy Research Institute, Karnal (Punjab).**

*Director of Dairy Research, Dr. Noshir N. Dastur.  
Principal, Dairy Science College, Dr. I. S. Verma.*

#### **SOUTHERN REGIONAL STATION OF THE NATIONAL DAIRY RESEARCH INSTITUTE BANGALORE**

*Officer-in-charge, Dr. C. P. Anantkrishnan.*

#### **WESTERN REGIONAL STATION OF THE NATIONAL DAIRY RESEARCH INSTITUTE AAREY MILK COLONY, BOMBAY-65**

*Officer-in-Charge, Dr. H. Larminarayana.*

#### **EASTERN REGIONAL STATION OF THE NATIONAL DAIRY RESEARCH INSTITUTE CALCUTTA**

*Officer-In-Charge, Dr. S. N. Ray.*

#### **National Sugar Institute, Kanpur**

*Director, Suresh Chandra Gupta.*

#### **Indian Institute of Sugarcane Research, Rae Bareli Road, P. O. Dilkusha, Lucknow**

*Director, R. R. Panje.*

*Adm. Officer, A. S. Charan.*

#### **Sugarcane Breeding Institute Coimbatore 7.**

*Director, Dr. J. Thuljaram Rao, M.A., M.Sc., Ph.D.*

#### **CENTRAL ARID ZONE RESEARCH INSTITUTE, JODHPUR.**

*Director, Dr. P. C. Raheja.*

*Administrative Officer, W. R. Pandit.*

#### **Regional Office, Lac Development Circular Road, Ranchi, Bihar**

*Director, A. Haidery.*

*Dy. Director, A. K. Sharan.*

*Director, Indian Lac Research Institute, Namkum, Dr. G. S. Misra.*

#### **Indian Veterinary Research Institute, Mukteswar, Kumaon, U.P.**

*Director, C. M. Singh.*

*Asstt. Administrative Officer, B. L. Sah.*

*Asstt. Director (Izafnagar), Dr. H. D. Srivatsava.*

#### **Directorate, Sugar & Vanaspati, Jamnagar House, New Delhi.**

*Chief Director, K. P. Jain.*

*Addl. Chief Director, Gyan Chandra.*

*Officer on Special Duty, (Mis-Managed Factories), J. P. Goel.*

*Director (Sugar Control), S. D. Oberoi.*

*Director (Sugar Technical), N. S. Jain.*

*Officer on Special Duty (Exports), K. P. Misra.*

*Adm. Officer, S. Rajagopal.*

#### **MINISTRY OF HEALTH & FAMILY PLANNING**

*Minister, Dr. S. Chandrasekhar.*

*Dy. Minister, B. S. Murthy.*

#### **DEPARTMENT OF HEALTH**

*Secretary, A. K. Ghosh.*

*Jt. Secretaries, Gian Prakash, I.A.S., B. N. Madhok, I.A.S.*

*Honorary, Dental Adviser, Health Services, Col. N. N. Bery.*

*Hon. Adviser in Homeopathy, Dr. K. G. Saxena.*

#### **Department of Family Planning**

*Secretary, Govind Narain, I.C.S.*

*Joint Secretary, K. N. Srivastava, I.A.S.*

*Commissioner, Family Planning, Dr. Dipak Bhatia.*

#### **Directorate-General of Health Services**

*Director-General of Health Services, Dr. K. N. Rao.*

*Addl. Director General of Health Services, Vacant; Dy. Directors-General of Health Services, Dr. T. R. Tewari, Dr. A. S. Sen (Small Poz), S. Rajagopalan (P. Health Engg.), Dr. A. P. Ray.*

*Drugs Controller, S. K. Borkar.*

*Director Administration, A. S. Bawa.*

*Directors (Central Health Education Bureau). Dr. V. Ramakrishna, (Central Bureau of Health Intelligence), Dr. K. C. Patnaik, Civil Defence (Medical), Brig. V. Sivasankaran, (Bureau of Planning), Dr. S. L. Dhir.*

*Advisers, (Nutrition), Dr. Kalyan Bagchi, (Tuberculosis), Dr. N. L. Bordia, (V.D.), Dr. R. B. Tampl, (Maternity & Child Welfare), Dr. (Miss) E. Sebastian.*



**All-India Institute of Hygiene and Public Health**  
110, Chittaranjan Avenue, Calcutta 12

Director, Dr. (Mrs.) Muktha Sen.  
Dy. Director, Dr. S. K. Datta.  
Administrative Officer, A. K. Banerjee.

**Central Drugs Laboratory, 3 Kyd Street,**  
Calcutta 16

Director, Dr. D. Ghosh.

**Central Research Institute, Kasauli**

Director, Dr. A. K. Thomas.  
Asstt. Directors, Dr. A. L. Bhatia, Dr. P. S. Menon, Dr. A. N. Rai Chaudhuri, Dr. (Miss) P. Devi, Dr. S. C. Chatterjee.  
Adm. Officer, J. D. Montani.

**Central Drugs Standard Control Organisation,**  
Ministry of Health, New Delhi

Drugs Controller (India), S. K. Borkar.  
Dy. Drugs Controller (India), P. S. Ramachandran.  
Asstt. Drugs Controllers, R. Balasubramanyam, S. H. Mernbant.

**OFFICE OF THE ASSISTANT DRUGS**  
CONTROLLER, BOMBAY.

Assistant Drugs Controller, Dr. V. A. Moghe.

**OFFICE OF THE ASSISTANT DRUGS**  
CONTROLLER, MADRAS.

Asstt. Drugs Controller, B. L. Nalk.

**OFFICE OF THE ASSISTANT DRUGS**  
CONTROLLER, CALCUTTA.

Assistant Drugs Controller, T. S. Venkataraman.

**CENTRAL DRUGS CONTROL ORGANISATION,**  
COCHIN

Technical Officer, Vacant.

**All India Institute of Medical Sciences**  
Ansari Nagar, New Delhi 16.

Director, Dr. K. L. Wig.  
Dy. Director (Administration), N. B. Chatterji.

**Hospital for Mental Diseases**  
P.O. Kanke, Ranchi 6 (Bihar).

Medical Supdt., Dr. K. Bhaskaran.  
Dy. Med. Supdt., Dr. B. K. Jha.

**Institute for Ayurvedic Studies & Research**  
P.O. Bag 513, Jamnagar.

Director, V. N. Dwivedi.  
Dy. Director, B. D. Sharma.

**National Institute for Communicable Diseases**  
22, Alipore Road, Delhi 6

Director, Dr. J. B. Shrivatsav.  
Deputy Directors, Dr. A. K. Krishnaswami, B. L. Wattal, Dr. Satya Prakash, Dr. D. Subramanyam, Dr. D. K. Murty, Dr. S. Pattanayak.

Administrative Officer, Durga Dass, B.A., J.D.  
SOUTHERN, INDIA BRANCH, COONOR.  
Assistant Director, Dr. D. S. Choudhury.

**PLAGUE****INVESTIGATION FD. STATION KOLAR.**

Assistant Director, Dr. S. N. Ray.

**NATIONAL FILARIA CONTROL**  
PROGRAMME, DELHI.

Deputy Director, Dr. P. C. Basu.

**FILARIASIS TRAINING CENTRE, CALICUT.**  
Assistant Director, Dr. K. Bhaskaran.**NATIONAL FILARIA CONTROL**  
PROGRAMME, FILARIASIS TRAINING  
CENTRE, RAJAHMUNDRY

Assistant Director, Dr. S. K. Dhar.

**NATIONAL FILARIA CONTROL**  
PROGRAMME, FILARIASIS TRAINING  
CENTRE, VARANASI

Assistant Director, Dr. J. N. Putatunda.

**Office of the Port Health Officer, Madras**

Port Health Officer, Dr. P. C. Biswas, M.B.  
D.P.H.

Asstt. Airport Health Officer, Dr. Ranjit Roy,  
M.B.B.S.

**Port Health Office, Pattan Swasthya Bhavan,**  
7, Mandalik Road, Bombay 1

Port Health Officer, Dr. K. R. Vasudeva.

**Port Health Organization**

'Marine House', Hastings, Calcutta 22.

Port Health Officer, Dr. T. P. Roy.

**MINISTRY OF HOME AFFAIRS**

Minister, Y. B. Chavan.

Minister of State, V. C. Shukla.

Dy. Minister of Home Affairs, K. S. Ramaswamy.

Secretary, L. P. Singh, I.C.S.

Addl. Secretary & Commissioner of Public  
Grievances, R. L. Mehta.

Joint Secretaries, P. K. Dave, Fateh Singh,  
Asoka Sen, A. D. Pande, R. D. Thaper, S. P.  
Mukerjee, G. Jagathpathi, W. V. Oak, K. R.  
Prabhu, B. Venkataraman.

Establishment Officer and Ex-Officio Joint Secy.,  
C. P. Gupta, I.A.S.

Central Vigilance Commissioner, N. Srinivasan  
Rau.

**Registrar General & Census Commissioner.**

Kotah House Annexe, 2/A, Mansingh Road,  
New Delhi 11.

Registrar General & Ex-Officio Census Commis-  
sioner : A. Mitra, I.C.S.

Dy. Registrar-General (Vital Statistics), P. N.  
Nayer.

Officer on Special Duty, A. Chandrasekhar, I.A.S.

Central Tabulation Officer, K. D. Ballal, I.A.S.

Adm. Officer, D. N. Krishnamurthy.

**NATIONAL ACADEMY OF ADMINISTRATION,**  
CHARLEVILLE, MUSSOORIE.

Director, M. G. Pimpulkar, I.C.S.

Jt. Director, J. C. Agarwal, I.A.S.

Dy. Directors, R. P. Khosla, I.A.S., C. S. Sastry,  
I.A.S.

**CENTRAL BUREAU OF INVESTIGATION,**  
HEADQUARTERS OFFICE

East Block No. 7, Ramakrishnapuram,  
New Delhi 22.

Director, CBI & IGP, SPE, D. P. Kohli, I.P.

Addl. Director, CBI & SPL, IGP, S.P.E., S.  
Balakrishna Shetty, I.P.

Joint Director, CBI & Spl. IGP, SPE, D. Sen,  
IPS.

Joint Director, CBI & Spl. IGP, SPE, P.  
Kandaswamy, IPS.

Dy. Is.G., M. P. Singh, IPS., R. K. Raisinghani,  
IPS., A. B. Chaudhury, IPS., P. V. Hingorani,  
IPS., R. L. Bhinge, IPS., K. R. Shenai, IPS.

Deputy Directors, S. Venugopala Rao, IPS., H.  
K. Chakravati, IPS.

Legal Adviser, V. V. Vaze.

Administrative Officers, Badri Nath, G. P.  
Bansal.

**Central Forensic Science Laboratory**  
30, Gorachand Road, Calcutta 14.

Director, Dr. N. Keshava Iyengar.

**Central Finger Print Bureau**  
(Intelligence Bureau)

30, Gorachand Road, Calcutta 14.

Offg. Director, T. K. Lahiri.

**Commissioner for Linguistic Minorities**  
40, Hamilton Road, Allahabad, 2.

Commissioner, Vacant.

Dy. Commissioner, G. N. Dike, I.A.S.

Asstt. Commissioner, D. N. Bajpai.

**MINISTRY OF INDUSTRIAL DEVELOPMENT**  
AND COMPANY AFFAIRS

Minister, Fakhruddin Ali Ahmed.

Minister of State, Raghunatha Reddy.

Dy. Minister, Bhanu Prakash Singh.

Secretary, N. N. Wanchoo.

Spl. Secretary, N. Subramanyam.

Joint Secretaries, O. N. Misra, D. R. Sundaram,  
R. V. Subramaniam, A. K. Roy.

Director-General of Technical Development, Dr.  
B. I. Kalelkar.

Officers on Special Duty, K. V. Venkatachalam,  
S. M. Dutt, G. P. Kane, K. S. Sharma, P. P.  
Dani.

**The Patent Office**

214, Lower Circular Road, Calcutta.

Controller General of Patents, Designs & Trade  
Marks, Dr. A. Jogarao.

Jt. Controller, R. V. Pai.

Adm. Officer, T. H. Radhakrishnan.

**Small Scale Industries, Udyog Bhavan,**  
Maulana Azad Road, New Delhi

Development Commissioner, K. L. Nanjappa.

Joint Development Commissioner, N. Khosla,  
I.A.S.

**Small Industries Service Institute, Opp. Okhla**  
Industrial Estate, New Delhi 20

Director, H. A. Shah.

Industrial Designers, P. Kalianpur, B. Dayal.

**Small Industries Service Institute**

Kurla-Andheri Road, Saki Naka, Bombay 70

Director, R. N. Gandhi.

**Small Industries Service Institute, 4, Camac**  
Street, Calcutta 16

Director, Dr. B. P. Ghosh.

**Small Industries Service Institute,**

65/1, Grand Trunk Road, Guindy, Madras 32

Director, T. R. V. Chari.

**Heavy Electricals (India) Limited,**  
Post Box No. 46, Bhopal

Chairman & Managing Director, K. C. Lall.

Director (Technical) & Chief Engineer, S.  
Swayambu.

Chief Engineer (Construction), S. N. Wadhwa.

Commercial Manager, T. V. Parthasarathy.

Works Manager, I. Saran.

Financial Adviser & Chief Accounts Officer, S.  
Ramler.

Manager, Purchasing & Main Stores, S. Pearey.

Personnel Manager, S. K. Ray.

Secretary, R. C. Gupta.

Manager, Publicity & Public Relations, V. C.  
Tandon.

Chief Security Officer, C. S. Tiwari.

**Hindustan Cables Ltd.**

P. O. Hindustan Cables, Dist. Burdwan,  
W. Bengal

Managing Director, N. K. Sen Gupta.

Chief Technical Manager, P. Mukundan.

Chief Operation Manager, G. D. Saha.

Secretary, D. D. Banerjee.

Sr. Administrative & Personnel Officer, B. B.  
Ganguly.



**Hindustan Machine Tools Limited, H.M.T.  
P.O., Bangalore 31.**

*Chairman, K. B. Mathur.*  
*Managing Director, S. M. Patil.*  
*Jt. Gen. Manager, HMT I & II, Bangalore, K. R. S. Gowda.*  
*General Managers, P. S. Banerjee (H.M.T. III—Pinjore), J. K. Jesudasan (H.M.T. IV Kalamassery), B. Ramachandra (H.M.T. V Hyderabad).*  
*Sales Manager, E. Isaac.*  
*Publicity & Public Relations Manager, P. M. Raje.*

**Office of the Salt Commissioner,  
P. Box No. 139, Jaipur**

*Salt Commissioner, K. L. Gambhir.*  
*Dy. Salt Commissioner, C. L. Malhotra.*

**OFFICE OF THE DEPUTY SALT  
COMMISSIONER, EXCHANGE BLDG.,  
SPROTT ROAD, BALLARD ESTATE,  
P. BOX NO. 1561, BOMBAY 1.**

*Dy. Salt Commissioner, K. Swaminathan.*

**OFFICE OF THE DEPUTY SALT  
COMMISSIONER, NO. 94, GOPATHI  
NARAYANASWAMI CHETTY ROAD,  
THEOGAROVANAGAR, POST BOX No. 1424,  
MADRAS 17.**

*Dy. Salt Commissioner, B. K. Roy, A.I.S.M.*

**OFFICE OF THE ASSISTANT SALT  
COMMISSIONER, 13, LINDSAY STREET,  
6TH FLOOR, CALCUTTA 16.**

*Assistant Salt Commissioner, Joginder Singh.*

**Department of Company Affairs, Reserve Bank  
Building, Parliament Street, New Delhi**

*Secretary, Department of Company Affairs and  
Chairman, Company Law Board, S. K. Datta,  
I.C.S.*  
*Joint Secretaries, Department of Company Affairs  
& Members, Company Law Board, B. M.  
Mitra, I.R.S., R. R. Desai.*  
*Secretary, Company Law Board, B. P. Roy.*  
*Director of Inspection & Investigation, R. M.  
Bhandari.*  
*Director, Research & Statistics, Baldev Datta,  
I.E.S.*  
*Chairman, Companies Tribunal, B. N. Gokhale.*  
*Member, Companies Tribunal, P. K. Rau.*  
*Registrar, Companies Tribunal, M. P. Saxena.*

**NORTHERN REGION**

*Regional Director, Kanpur, C. P. Yadava, I.R.S.*  
*Registrar of Companies, Kanpur, K. M. Bhonsle.*  
*Registrar of Companies, Jullundur, R. P.  
Khandpur.*  
*Registrar of Companies, Delhi, S. Rajagopalan.*  
*Registrar of Companies, Jaipur, Daulat Ram.*

**WESTERN REGION**

*Regional Director, Bombay, M. V. Warerkar.*  
*Registrar of Companies, Bombay, S. M. Yousuf.*  
*Registrar of Companies, Gwalior, P. S. Mathur.*  
*Registrar of Companies, Ahmedabad, M. A.  
Rasheed.*

**EASTERN REGION**

*Regional Director, Calcutta, P. B. Menon.*  
*Registrar of Companies, Calcutta, J. P. Mukherjee.*  
*Registrar of Companies, Shillong, B. K. Chatter-  
jee.*  
*Registrar of Companies, Cuttack, A. C. Sarkar.*  
*Registrar of Companies, Patna, B. K. Gupta.*

**SOUTHERN REGION**

*Regional Director, Madras, T. J. Gondhalekar.*  
*Registrar of Companies, Madras, S. V. Vijaya-  
raghavan.*  
*Registrar of Companies, Hyderabad, S. P. Khanna.*  
*Registrar of Companies, Ernakulam, S. Krishna-  
murthy.*  
*Registrar of Companies, Bangalore, S. Narayanan.*

**MINISTRY OF INFORMATION AND  
BROADCASTING**

*Minister, K. K. Shah.*  
*Dy. Minister, Mrs. Nandini Satpati.*  
*Secretary, Asok Mitra.*  
*Registrar of Newspapers, K. N. Bamzai.*  
*Chief Press Adviser, K. N. Bamzai.*  
*Joint Secretaries, Y. N. Verma, P. K. Samal.*  
*Director, Publications, Division, U. S. Mohan Rao.*  
*Director, Field Publicity, R. K. Chatterjee.*  
*Director, Song & Drama Division, Col. H. V.  
Gupte.*  
*Director, Research & Reference Division, G.  
Trivedi.*

**DIRECTORATE OF ADVERTISING  
& VISUAL PUBLICITY**

*B. Block, Curzon Road, New Delhi 1.*  
*Director, Brig. R. Streenivasan.*  
*Deputy Director (Advtg.), V. B. Prasad.*  
*Dy. Director (Visual Publicity), Biswanath  
Mukerji.*  
*Dy. Director (Admn.), Shri Bhagwan.*  
*Media Executive, Advertising Wing, K. B. Nair.*  
*Art Executive, Visual Publicity Wing, S. C. Paul.*

**Central Board of Film Censors,  
"Bharat Bhuvan," 91, Walkeshwar Road,  
Bombay 6.**

*Chairman, B. P. Bhatt.*  
*Regional Officer, Uma Shankar.*  
*Addl. Regional Officer, Smt. V. Mulay.*  
*Regional Office, New A.I.R. Bldgs., Eden  
Gardens, Calcutta 1.*  
*Regional Officer, B. N. Nundee.*  
*Regional Office, 53, Usman Road, T. Nagar,  
Madras 17.*  
*Regional Officer, R. Rangarajan.*

**Films Division**

*24, Pedder Road, Bombay 26.*  
*Controller of the Films Division, S. N. Limaye,  
I.A.S.*  
*Chief, K. L. Khandpur.*  
*Public Relations Officer, V. S. Varkhedkar.*

**Directorate-General, All-India Radio  
Akashwani Bhavan, Parliament Street,  
New Delhi.**

*Director General, Dr. V. K. Narayana Menon.*  
*Chief Engineer, S. S. Aiyar.*  
*Deputy Director General (Prog.), K. S. Mullick.*  
*Deputy Director General (Admn.), S. N. Pandit.*  
*Deputy Director General (Inspection), A. K. Sen.*  
*Director of Programmes (Policy), B. S. Anand.*  
*Directors of Programmes, V. Krishnamurthy  
(Personnel), M. M. K. Aga (Development),  
R. C. Rajasekhar (Plan Publicity), P. N. Dar  
(Kashmir), K. D. Dixit (Emergency).*  
*Director, Listener Research, S. C. Parashar.*  
*Director, Frequency Assignment, R. Raghava-  
chari.*  
*Director, Staff Training School, Romesh Chander.*  
*Director of News, Services, G. G. Mirchandani.*  
*Director, External Services, K. P. Shungloo.*  
*Transcription & Programme Exchange Service  
Director, S. C. Basu.*  
*Television Centre: Director, S. N. Murti.*  
*Director, Farm & Home, Sher Singh.*  
*Maintenance Engineer, D. C. Bhattacharji.*

**ALL-INDIA RADIO STATIONS**

*Station Directors: P. S. Bhatia (Delhi); P. C.  
Chatterji (Calcutta); H. R. Luthra (Bombay); S.  
V. Natarajan (Madras); D. K. Sengupta (Luck-  
now); S. B. Singh (Patna); M. A. Amin (Nagpur);  
U. L. Baruah (Gauhati); G. H. Vyas (Ahmedabad);  
G. P. S. Nayar (Trivandrum); M. S. Gopal  
(Tiruchirapalli); N. L. Chowla (Srinagar); D. N.  
Dixit (Bangalore); S. K. Bose (Cuttack); Gopal  
Das (Jaipur); R. Viswanathan (Kurseong); M.  
G. Vaidya (Goa); N. Iqbal Singh (Port Blair);  
R. K. Acharya (Kohima); Smt. S. R. Venkata-  
raman (Poona); Pratap Krishan (Bhopal); A. N.  
Kaul (Allahabad); T. R. Murlidharan (Calicut);  
V. S. Sastri (Imphal); S. A. Thakore (Bhuj); M.  
B. Nagarkar (Indore); G. K. Mathur (Jullundur);  
Ashfaq Hussain (Vijayawada); V. Balasundaram  
(Hyderabad); Shailendra Shankar (Jammu); A.  
N. Kapur (Simla).*

*Assistant Station Directors: G. K. Menon  
(Rajkot); P. Dharmagnani (Dharwar); B. M. Lal  
(Ranchi).*

**Press Information Bureau**

*Akashwani Bhawan, Parliament Street, New  
Delhi.*

*Principal Information Officer, M. L. Bharadwaj.*  
*Directors of Public Relations, Dr. A. R. Bajji, C.  
L. Bhardwaj.*  
*Senior Deputy Principal Information Officer, G.  
N. S. Raghavan.*  
*Deputy Principal Information Officers, G.  
Govindan, N. Sethi, B. R. Bowry and P. M.  
M. Menon.*

**DEFENCE WING (SOUTH BLOCK)**

*Director Public Relations: R. L. Handa.*

**INFORMATION CENTRE, NEW DELHI  
(Tropical Buildings, Connaught Circus).**

*Asstt. Information Officer, K. S. Virk.*

**BOMBAY OFFICE**

**(UNITED INDIA BUILDING, SIE PHI-  
ROZSHAH MEHTA ROAD, FORT,  
BOMBAY)**

*Deputy Principal Information Officer, P. N. V.  
Rao.*

**CALCUTTA OFFICE**

**(A. I. R. BLDG., EDEN GARDENS,  
CALCUTTA 1).**

*Deputy Principal Information Officer, Madan  
Gopal.*

**MADRAS OFFICE**

**(122, MOUNT RD., P. Box No. 703, MADRAS 6)**  
*Deputy Principal Information Officer, Pratap  
Kapoor.*

**JULLUNDUR OFFICE**

**(G. T. Road, Opp. Nehru Garden)**  
*Information Officer, K. G. Chadha.*

**BANGALORE OFFICE**

**(First Floor, No. 112—Gm. Brigade Road,  
Bangalore).**  
*Asstt. Information Officer, R. Rajappasetty.*

**LUCKNOW OFFICE**

**(Mayfair Extension Bldg., First Floor, Lal Bagh,  
Lucknow.)**  
*Assistant Information Officer, T. B. Chaturvedi.*

**ERNAKULAM OFFICE**

**Kumari Mandir, Warriam Road, Ernakulam 1.**  
*Asstt. Information Officer, M. A. Kuruvilla.*

**GAUHATI OFFICE**

**(No. 4, Bhuban Chandra Road, Uzan Bazar,  
Gauhati.)**  
*Information Officer, B. C. Pathak.*



**CUTTACK OFFICE**

(No. 3, Cantonment Road, Cuttack 1.)  
Asstt. Information Officer, G. K. Das.

**SRINAGAR OFFICE**

Residency Road, Opp. Pratap Park, Srinagar.)  
Dy. Principal Information Officer, B. P. Mathur.

**PATNA OFFICE**

("Sunshine," Exhibition Road, Patna.)  
Asstt. Information Officer, J. N. Sinha.

**VARANASI OFFICE**

(C. K. 36/7 Chowk, Varanasi.)  
Asstt. Information Officer, Hari Singh.

**NAGPUR OFFICE**

(Theatre Panchsheel Building, 1st Floor, Wardha Road, Nagpur.)  
Asstt. Information Officer, M. S. Wasalkar.

**JAIPUR OFFICE**

(Ruby House, Subhas Marg, C-Scheme, Jaipur, Rajasthan.)  
Assistant Information Officer, Prem Sunder.

**HYDERABAD OFFICE**

(Taladrussyan No. 6-1/1, Hussainsagar Bund, Hyderabad 22.)  
Asstt. Information Officer, B. N. Murthy.

**AHMEDABAD OFFICE**

(First floor, Akhandanand House, Bhadra, Ahmedabad.)  
Asstt. Information Officer, R. B. Patel.

**BHOPAL OFFICE**

1st Floor, Old Municipal Building, in front of Sardar Manzil, Bhopal.  
Asstt. Information Officer, A. K. Wanchoo.

**POONA OFFICE**

Chitrakuti, Narayan Peth, Poona 9.  
Asstt. Information Officer, M. L. Kulkarni.

**JAMMU OFFICE**

Jail Road, Jammu  
P.R.O., Army, Maj. V. P. Puri.

**MINISTRY OF IRRIGATION AND POWER**

Minister, Dr. K. L. Rao.  
Secretary, K. P. Mathrani.  
Officer on Special Duty (D.V.C.), T. Sivasankar, I.O.S. (Retd.).  
Joint Secretary (A), K. G. R. Iyer, I.A.S.  
Commissioner for Indus Waters and ex-officio Joint Secretary, P. B. Ahuja.  
Director (FEP), B. C. Gangopadhyay, I.A.S.  
Additional Indus Waters Commissioner, Dr. J. K. Malhotra.

Central Board of Irrigation and Power, Curzon Road, New Delhi.

Secretary, K. L. Bhatia.  
Dy. Secretary, M. M. Sharma.

Central Water and Power Commission (Water Wing), R. K. Puram, New Delhi 22.

Chairman, D. B. Anand.  
Member, A. R. Venkataraman.  
Chief Engineers, P. N. Kumra; G. K. Vij.  
Secretary, B. N. Chawla.

Central Water and Power Commission (Power Wing), Bikaner House, Shahjahan Road, New Delhi.

Vice-Chairman, K. L. Vij.  
Member (Utilisation), V. Venugopalan.  
Directors, N. Venkatasen, C. K. Chandran, K. Mrityunjayan, H. K. Bansal.

CENTRAL WATER AND POWER COMMISSION (POWER WING), R. K. PURAM, NEW DELHI 22.

Members, A. K. Ghose (Thermal), H. V. Narayana Rao (Hydro-Electric).

CENTRAL WATER AND POWER COMMISSION (POWER WING), JAMNAGAR HOUSE, NEW DELHI.

Directors, R. L. Butall, C. K. V. Rao, S. Ram-mohan, K. M. Sankaran, K. C. Krishna-murthy.

CENTRAL WATER AND POWER COMMISSION (POWER WING), JOR BAGH, NEW DELHI.

Director, S. S. Murthy.

CENTRAL WATER AND POWER COMMISSION (POWER WING), LENON HOUSE, 5, VENKATANARAYANA ROAD, MADRAS 17.

Director, K. R. Radhakrishnan.

REGIONAL LOAD SURVEY OFFICE, 34, MAHIM HALDAR STREET, P.O. KALIGHAT, CALCUTTA-26.

Deputy Director, M. L. Malik.

REGIONAL LOAD SURVEY OFFICE, 2ND FLOOR, KITAB MAHAL, DADABHOY NAOROJI ROAD, BOMBAY-1.

Deputy Director, S. D. Kushare.

POWER RESEARCH INSTITUTE, BANGALORE 1

Deputy Director, A. P. Seethapathy.

POWER RESEARCH INSTITUTE, SWITCHGEAR DEVELOPING AND TESTING STATION, PIPLANI, P.O., BHOPAL-1

Deputy Director, N. S. N. Murthy.

STEAM POWER STATION, TRAINING INSTITUTE (SOUTH) NEYVELI POST OFFICE

Director, M. B. P. Sarathy.

TRANSMISSION DIRECTORATE, NEIGHBOURHOOD 4, FARIDABAD.

Director, K. R. S. Iyengar.

Damodar Valley Corporation, Anderson House, Alipore, Calcutta 27.

Chairman, Vacant.  
General Manager, N. K. Prasad, I.A.S.  
Dy. General Manager, J. K. Lahiri, I.A.S.

**MINISTRY OF LABOUR, EMPLOYMENT & REHABILITATION**

Department of Labour & Employment

Minister, Jalsukh Lal Hathl.  
Minister of State, L. M. Mishra.  
Secretary, P. C. Mathew, I.C.S.  
Addl. Secretary, P. M. Nayak.  
Joint Secretaries, N. N. Chatterjee, I.A.S., K. I. Vidyanagar, I.A.S.  
Officer on Special Duty & Jt. Secretary, S. K. Mallick.  
Labour & Employment Adviser, B. N. Datar.

**DEPARTMENT OF REHABILITATION**

Secretary, V. Nanjappa, I.C.S.  
Addl. Secretary, B. P. Bagchi.  
Joint Secretaries, G. D. Kshetrapal, Anil De.  
Director, K. N. Butani.  
Liaison Officer, H. S. Butalla.  
Agricultural Adviser, Dr. A. K. Dutt.  
Jt. Director, P. L. Gupta.

Chairman, Dandakaranya Development Authority, Dr. Mono Mohan Das.

Chief Administrator, Dandakaranya Project, Koraput (Orissa), S. C. Roy.

Chief Settlement Commissioner & Custodian General of Evacuee Property, G. D. Kshetrapal.  
Jt. Chief Settlement Commissioner, H. B. Nair.

Regional Settlement Commissioner, I. L. Panjani, Delhi; N. P. Jaisinghani, Bombay; J. D. Jain, Jaipur; J. M. Tandon, Jullundur.

Officer-in-charge, Central Claims Organisation, B. L. Goswami.

Custodian of Deposits, A. G. Vaswani.

**Planning Commission**

Yojana Bhavan, Parliament Street, New Delhi.

Chairman, Mrs. Indira Gandhi.  
Minister of Planning, Asoka Mehta.  
Secretary, G. R. Kamat, I.C.S.  
Addl. Secretary, Dr. S. C. Sen.

Advisers, C. S. Ramachandran, R. R. Bahl, M. R. Yardi, P. K. J. Menon, K. B. Rao, B. N. Nag, Dr. K. S. Krishnaswamy, Chnedilal, M. V. Desai, A. C. Joshi, Maj.-Gen. Harkirat Singh, P. Pant, K. Mitra, B. N. Datar.

Jt. Secretaries, M. Butt; K. A. P. Stevenson; B. S. Seth, J. M. Kitchlu.

Director, Programme Evaluation Organisation, P. K. Mukherjee.

**National Development Council**

To strengthen and mobilise the effort and resources of the nation in support of the Five Year Plan, to promote common economic policies in all vital spheres, and to ensure the balanced and rapid development of all parts of the country, on the recommendation of the Planning Commission, the Government of India set up a National Development Council.

Its functions are: 1. to review the working of the National Plan from time to time; 2. to consider important questions of social and economic policy affecting national development; 3. to recommend measures for the achievements of the aims and targets set out in the National Plan, including measures to secure the active participation and cooperation of the people, improve the efficiency of the administrative services, ensure the fullest development of the less advanced regions and sections of the community and, through sacrifice borne equally by all citizens, build up resources for national development.

The Council makes recommendations to the Central and State Governments. It is composed of the Prime Minister of India, Chief Ministers of all States and the Members of the Planning Commission. The Council meets as often as is necessary and in any case at least twice in a year.

The Secretary of the Planning Commission acts as the Secretary of the Council.

Chairman: Mrs. Indira Gandhi, Prime Minister of India.

Secretary, G. R. Kamat, I.C.S.

**Directorate-General of Employment and Training**

Shram Bhavan, Rafi Marg, New Delhi-1.  
D. G. E. & T. & Joint Secretary, S. A. Qadri, I.A.S.

O.S.D. & Joint Secretary, S. K. Mallick.

DIRECTORATE OF EMPLOYMENT EXCHANGES  
Directors, K. B. Sharma, J. H. Rijvi.

**DIRECTORATE OF TRAINING**

Director, Col. S. G. Pendse.  
Addl. Director, A. S. Lall.

**Labour Bureau  
Claremont, Simla 4.**

Director, Dr. K. C. Seal.  
Jt. Director, K. K. Bhatia.  
Dy. Directors, K. D. Chattarjee, B. N. Srivatsava, Dr. V. Agnihotri.



### Mines Dhanbad.

*Director-General of Mines Safety*, G. S. Jabbi.  
*Addl. Director-General*, R. G. Deo.  
*Deputy Director-General*, S. D. Prasad.

### FIELD OFFICERS (Eastern Inspection Zone)

*Jt. Director*, S. S. Prasad.

(Northern Inspection Zone)

*Jt. Director*, H. B. Ghose.

(Central Inspection Zone)

*Jt. Director*, I. J. Badhwar.

(Southern Inspection Zone)

*Jt. Director*, B. M. Bhat.

### OFFICE OF THE CHIEF LABOUR COMMISSIONER (C), SHRAM SHAKTI BHAVAN, RAFI MARG, NEW DELHI-1.

*Chief Labour Commissioner (Central)*, O. Venkatachalam.

*Administrative Officer*, P. R. Nayar.

*Regional Labour Commissioner (Verification)*, H. H. Quraishi.

### CENTRAL INSTITUTE FOR TRAINING IN INDUSTRIAL RELATIONS, KIRTI NAGAR, NEW DELHI-15.

*Dy. Chief Labour Commissioner (Central)*, S. C. Gupta.

*Regional Labour Commissioner (Training)*, R. P. Bartaria.

*Regional Labour Commissioners (Central)*, Bombay—G. B. Chavan, Calcutta—N. K. Chaddha, Madras—R. Venkatesan, Kanpur—V. P. Gupta, Jabalpur—D. Panda, Dhanbad—P. C. Rai, Hyderabad—B. K. Jayarama Rao.

### Central Board for Workers' Education

1400, West High Court Road, Gokulpeth, Nagpur.

*Chairman*, P. M. Nayar.

*Director*, Dr. M. A. Chansarkar.

*Deputy Director (Edn.)*, H. C. Gupta.

### CENTRAL TRAINING INSTITUTE FOR INSTRUCTORS, CALCUTTA, DASNAGAR P. O. (Dt. Howrah).

*Principal*, B. M. Bose; *Registrar*, S. V. Ranganathan.

### Coal-mines & Mica Mines Labour Welfare Fund

*Organisation*, Jagjivan Nagar P.O., Dhanbad

*Welfare Commissioner*, S. K. Sinha, I.A.S.

*Dy. Welfare Commissioners*, A. P. Connolly, N. M. Khanwarsi.

### CENTRAL LABOUR INSTITUTE

Off Eastern Express Highway, Sion, Bombay 22.

*Director General*, N. S. Mankiker.

*Dy. Director General*, S. R. Bhise.

*Director (Research)*, Dr. M. N. Gupta.

*Director (Training)*, H. J. Bakhru.

*Director (Factory Advice Service)*, B. J. Ramrikhani.

*Dy. Chief Adviser Factories (Productivity)*, K. Ramamurthy.

*Dy. Director (Staff Trg.)*, M. M. Mandalia.

*Asstt. Director (Ind. Psychology)*, Dr. T. Ganguly.

*Dy. Director (Safety, Health and Welfare Centre)*, J. R. Ovalkar.

*Dy. Director (Industrial Medical Section)*, Dr. S. K. Chatterjee.

*Dy. Director (Industrial Hygiene Laboratory)*, Dr. C. R. Harihara Iyer.

*Asstt. Director (Industrial Physiology)*, Dr. R. N. Sen.

### MINISTRY OF LAW

*Minister for Law*, P. Govind Menon.

*Dy. Minister*, D. R. Chavan.

### Department of Legal Affairs

*Secretary*, Rustom S. Gae.

*Joint Secretaries and Legal Advisers*, G. A. Shah, V. S. Deshpande, R. M. Mehta, D. B. Kulkarni, K. S. Pandalai, P. G. Gokhale (at Branch Sectt., Bombay).

*Chairman, Law Commission*, J. L. Kapur.

### Other Officers

*Attorney-General of India*, C. K. Daphtary.

*Solicitor-General of India*, Vacant.

*Addl. Solicitor-General of India*, Niren De.

### Legislative Department

*Secretary*, S. P. Sen Varma.

*Joint Secretary & Leg. Counsel*, V. N. Bhatia, G. R. Bal.

*Chairman, Official Language (Leg.) Commission*, C. P. Sinha.

### Election Commission, Talkatora Road, New Delhi 1.

*Chief Election Commissioner*, K. V. K. Sundaram.

*Deputy Election Commissioner*, P. S. Subramanian, N. D. Buch.

*Secretary*, Prakash Narain.

### Income-Tax Appellate Tribunal

(HEADQUARTERS, BOMBAY)

Central Govt. Offices Building,

Queen's Road, Bombay 1.

### BOMBAY BENCHES, BOMBAY

*President*, T. P. Mukherjee.

*Accountant Members*, B. S. Kasbekar, H. M. Jhala, V. Gopinathan.

*Judicial Members*, C. S. Vidyasankaran, P. Sriramulu, V. Ramaswamy Iyer.

*Registrar*, G. N. Jerath.

### ALLAHABAD BENCH

31, Thornhill Road, Allahabad.

*Judicial Member*, P. R. Sunkersett.

*Accountant Member*, P. D. Mathur.

### DELHI BENCHES

Rail Bhavan, Raisina Road, New Delhi.

*Judicial Members*, V. R. Srinivasan, S. P. Sinha, R. C. Desai.

*Accountant Members*, K. D. Dholakia, Harnam Shankar, J. Sen.

### MADRAS BENCH

New Income-Tax Building, 22, Nungambakkam High Road, Madras 34.

*Judicial Member*, M. R. A. Ansari.

*Accountant Member*, K. Sadagopachari.

### CALCUTTA BENCHES

20/1, Gurusaday Road, Calcutta 19.

*Accountant Members*, J. Das, N. Srinivasan.

*Judicial Member*, K. L. Roy.

### HYDERABAD BENCH

3-5-900, Himayatnagar, Hyderabad.

*Accountant Member*, S. B. Roy.

*Judicial Member*, S. Ranganathan.

### PATNA BENCH

Incometax and Central Excise Bldg., Patna-I.

*Accountant Member*, L. P. Bagaria.

*Judicial Member*, R. L. Kapur.

### MINISTRY OF PETROLEUM AND CHEMICALS

*Minister*, Asoka Mehta.

*Minister of State*, K. Raghuramaian.

*Secretary*, P. R. Nayak, I.C.S.

*Joint Secretary, Department of Chemicals*, B. B. Lall.

*Joint Secretary, Department of Petroleum*, M. V. Rajwade.

### Oil and Natural Gas Commission

Post Box No. 20, Tel Bhavan, Dehra Dun.

*Chairman*, L. J. Johnson, I.C.S.

*Members (Finance)*, A. P. B. Nayar; (*Production*), L. T. Madnani; (*Exploration*), B. S. Negi; (*Part-time*), P. K. J. Menon.

*Chief of Engineering Services*, S. S. Raina.

*Chief of Geological Services*, Dr. B. G. Deshpande.

*Chief of Vigilance & Control*, Major General P. N. Kirpal.

*Adviser & Director of Research & Training Institute*, L. P. Mathur.

*Director of Administration*, Brig. S. C. Vyas.

*Director of Stores & Purchase*, Col. K. B. Menon.

*Director of Finance & Accounts*, M. S. Sarna.

*Director of Hindoil Design Institute*, L. A. Mezlumov.

*Director of Production*, A. M. Dolgushin.

*Director of Drilling*, A. K. Kuksov.

*Director of Geophysics*, S. N. Sen Gupta.

*Director of Offshore Operation*, Dr. G. Ramaswami.

*Additional Director of Geology & Chief Geologist*, S. N. Talukdar.

*Secretary*, K. K. Dhar.

*Chief Engineer (Civil)*, N. C. Chakravarty.

*Chief Engineer (Production)*, N. D. Mahant.

*General Manager (Western Region)*, Brig. Sukhdev Singh.

*General Manager (Central Workshop)*, C. D. Mirchandaney.

*Manager, Ankleshvar Project*, R. L. Sarna.

*Manager, Ahmedabad Project*, Brig. K. S. Dhillon.

*Manager, Cambay-Navagam Project*, N. Vishwanathan.

*Manager, Hoshiarpur & Jawalamuchi Project*, Lt. Col. V. N. Bahl.

*Manager, Jaisalmer Project, Jodhpur*, Group Capt. P. J. Mathew.

*Manager, Assam Project, Sibsagar*, Brig. Harbhajan Singh.

*Manager, Cauvery Project, Madras*, Brig. Ram Singh.

*Joint Manager, Lakwa Project, Assam*, I. P. Kaushik.

### Indian Oil Corporation

254-C, Dr. Annie Besant Road, Worli, Bombay 18.

*Chairman*, N. N. Kashyap, I.C.S.

*Financial Director*, M. V. Rao.

*Public Relations Officer*, B. V. Ranganath.

*Secretary*, B. D. Puri.

### Marketing Unit:

*Managing Director*, Kamaljit Singh.

*General Manager*, S. D. Bhambri.

*Dy. General Manager*, J. C. Goyle.

*Financial Controller*, B. M. Menon.

*Engineering Manager*, S. P. Bhatnagar.

*Planning, Research & Statistics Manager*, B. S. Nangla.

*Chief Personnel Officer*, V. H. Dhopeshwarker.

*Branch Manager, Bombay*, D. N. Sharma.

*Branch Manager, Delhi*, T. Kumaran.

*Branch Manager, Calcutta*, Indu Vira.

*Branch Manager, Madras*, J. V. K. Rao.



**Branches :**

**Western Branch :** Clarke Road, Mahalaxmi, Bombay 34.  
**Northern Branch :** Nehru House, 4, Bahadurshah Zafar Marg, New Delhi-1.  
**Eastern Branch :** "Gagan Tara", 13, Camac Street, Calcutta-16.  
**Southern Branch :** "Khivraj Mansion", 150A, Mount Road, Madras 2.

**REFINERIES DIVISION**

Link House, 1st Floor, Mathura Road, New Delhi-1.

**Managing Director,** Maj. Gen. Sarda Nand Singh (Retd.).  
**Financial Controller,** B. M. Prabhu.  
**Chief Adm. Officer,** Daulat Singh.

**Gauhati Office :**

Gauhati Refinery, P.O. Noonmati, Gauhati (Assam).

**General Manager,** Chand N. Das.

**Barauni Office :**

Barauni Refinery Project, P.O. Hathidah, Dt. Patna.

**General Manager,** Balwant Singh.

**GUJARAT REFINERY**

P.O. Gujarat Refinery, Dist. Baroda.

**Deputy General Manager,** C. R. Das Gupta.

**PIPELINE DIVISION**

18, Jor Bagh, New Delhi.

**Director-in-Charge,** S. K. Guha, I.A.S.

**Indian Drugs & Pharmaceuticals Ltd.**

National Insurance Building, 5, Parliament Street, New Delhi 1.

**At the Head Office:**

**Chairman and Managing Director,** Vacant.  
**Financial Adviser and Chief Accounts Officer and Secretary,** B. K. Chandrasekharan.  
**Controller of Central Purchases,** K. J. Shenoy.  
**Secretary,** K. N. Bhanot.

**At the Projects :**

**Project Administrator, Antibiotics Project,** Rishikesh, S. C. Singha, I.A.S.  
**Project Administrator, Synthetic Drugs Project,** Hyderabad, Dr. L. K. Behl.  
**Project Administrator, Surgical Instruments Project,** Madras, H. G. V. Reddy, I.A.S.

**THE FERTILIZER CORPORATION OF INDIA LTD.**

**Head Office—F-43, South Extension Area, Part I, Ring Road, New Delhi-3**

**Board of Directors :**

**Chairman and Managing Director,** Satish Chandra.  
**Financial Adviser,** O. K. Ghosh.  
**Industrial Relations Adviser,** B. L. Wadehra.  
**Transportation Adviser,** L. V. P. Albuquerque.  
**Secretary,** P. B. Jajodia.  
**Public Relations Adviser,** S. M. Wasi.  
**Chief Training & Education Officer,** O. P. Agarwal.  
**Planning & Development Division, the Corporation's Central Technical Organisation based at Sindri, General Manager,** Dr. K. R. Chakravorty.  
**Unit—Sindri, General Manager,** K. C. Sharma.  
**Unit—Nangal, General Manager,** N. R. Sehadri.  
**Unit—Trombay, General Manager,** Dr. S. K. Mukherjee.  
**Division—Durgapur, General Manager,** R. Hasan.  
**Division—Gorakhpur, General Manager,** B. K. Khanna.  
**Division—Namrup, General Manager,** M. N. Phukan.

**Coal Controller**

1, Council House Street, Calcutta.

**Coal Controller,** A. C. Bose.

**Dy. Coal Controller (Production),** A. K. Mitra.

**Dy. Coal Controller (Distribution),** Premnath.

**Geological Survey of India, 27, Chowringhee Road, Calcutta 13.**

**Director-General,** G. C. Chatterji.

**Director of Adm. & Suptdg. Geologist (Tech. Adm.),** S. P. Nautiyal.

**REGIONAL DIRECTORATES**

**Director,** P. C. Hazra. (Eastern Region—5, Middleton St., Calcutta). **Supdtg. Geologist,** Southern Region, Ali Bhawan, Near Masab Tank, Hyderabad 28, M. S. Balasundaram.

**MINISTRY OF RAILWAYS**

**Minister,** C. M. Poonacha.

**Minister of State,** Parimal Ghosh.

**Deputy Minister,** S. C. Jamir.

**Railway Board, New Delhi**

**Chairman,** G. D. Khandelwal.

**Financial Commissioner,** B. Mukerji, I.C.S.

**Member Mech. Engg.,** G. P. Bhalla.

**Member Staff,** B. C. Ganguli.

**Member Engineering,** Vacant.

**Additional Member Finance,** D. U. Rao.

**Additional Member Mech.,** H. M. Chatterjee.

**Additional Member Works,** V. S. Sathe.

**Additional Member Staff,** P. C. Mathew.

**Additional Member Commercial,** R. Gopalkrishna Iyer.

**Additional Member Vigilance,** S. W. Shrivastava.

**Secretary, Railway Board,** B. D. Gaur.

**Director of Finance,** K. V. Kasturi Rangan.

**Director, Civil Engg.,** Vacant.

**Director, Traffic Trans.,** B. M. Kaul.

**Director, Establishment,** B. D. Gaur.

**Director, Railway Stores,** R. N. Mubayi.

**Director, Planning,** M. N. Berry.

**Director, Signal & Tele. Com.,** L. C. Mohindra.

**Director, Stat. & Econ.,** K. R. R. Aiyangar.

**Director, Health,** Dr. Banwari Lal.

**Director, Security/I.G., R.P.F.,** S. N. Aga.

**Director, Wagon Production,** K. C. Chopra.

**Director, Accounts,** K. S. A. Padmanabhan.

**Director, Electrical Engg.,** Vacant.

**Director, Res. (Hot Boxes),** N. N. Tandon.

**Director, Mech. Engg. (Prod.),** I. C. Bahree.

**Director, Safety,** N. S. Swaminathan.

**Director, Efficiency Bureau,** G. P. Warriar.

**Economic Adviser,** Dr. A. K. Ghosh.

**Director Mech. Engg.,** Vacant.

**Director, Rail Coord.,** K. N. Krishnan.

**Adviser, Vigilance,** K. N. Sinha.

**Research, Designs & Standards Organisation, Alambagh, Lucknow 5.**

**Director-General,** K. C. Sood.

**Dy. Director General,** N. N. Setty.

**Director Standards (Mechanical),** R. Krishnamurti.

**Director Standards (Civil),** K. K. Rao.

**Director, Research,** T. A. Rao.

**Director, Standards (Electrical),** M. M. Agerwala.

**Addl. Director Standards (Mechanical),** M. L. Puri.

**Addl. Director (Architectural),** L. G. Toye.

**Addl. Director Standards (S & T),** M. M. Agerwala.

**Railway Rates Tribunal**

'Adyar House', Madras 28.

**Chairman,** S. Ganapathia Pillai.

**Members,** M. C. Munshi, V. K. Rangaswami.

**Secretary,** V. N. Gopala Desikan.

**Chittaranjan Locomotive Works, Post Chittaranjan, District Burdwan, West Bengal.**

**General Manager,** E. G. Kotiswaran.

**Chief Mech. Engr.,** M. M. Bam.

**Financial Adviser & Chief Accounts Officer,** M. Sunderraj.

**Officer on Special Duty,** C. G. Devaya.

**Dy. General Manager,** J. Y. Marathe.

**Public Relations & Estate Officer,** O. A. Nayar.

**Integral Coach Factory**

Perambur, Madras 38.

**General Manager,** P. S. Venkataraman.

**Financial Adviser and Chief Accounts Officer,** D. Sandilya.

**Chief Mechanical Engineer,** R. Rajagopalan.

**Dy. Chief Mechanical Engineer (Shell),** K. C. Bausal.

**Dy. Chief Mechanical Engineer (Furnishing),** P. V. Ramamurthy.

**Dy. Chief Mechanical Engineer (Designs),** V. A. Kamath.

**Dy. Chief Electrical Engineer,** S. Sarath.

**Dy. Controller of Stores,** Sudershan Lal.

**MINISTRY OF STEEL, MINES & METALS**

**Minister,** Dr. M. Chenna Reddy.

**Minister of State,** P. C. Sethi.

**Secretary,** H. Lal, I.C.S.

**Joint Secretaries,** N. P. Mathur, I.A.S., P. Saba-nayagam, I.A.S.

**Director,** Maheshwar Prasad, I.A.S.

**Hindustan Steel Ltd.,**

P.O. Hinoo, Dt. Ranchi, Bihar State.

**Chairman,** M. S. Rao.

**General Managers,** A. N. Banerjee, (Rourkela Steel Plant), Purtej Singh, (Bhilai Steel Plant),

Dr. D. P. Chatterjee, (Alloy Steels Project), R. K. Chatterjee, (Durgapur Steel Plant).

**Advisers,** D. S. Nakra (Finance), Dr. P. Prasad (Economic).

**Secretary,** H. Bhaya.

**Public Relations Officer,** H. R. Rakshit.

**Iron & Steel Control Organisation, 33, Netaji Subhas Road, Calcutta**

**Iron & Steel Controller,** S. Sahay.

**Price & Accounts Officer,** N. K. Mukherjee.

**Dy. Iron & Steel Controllers,** S. C. Mukherjee, P. R. Nair, C. B. Mathur.

**Regional Office, Bombay**

**Deputy Iron and Steel Controller,** N. Banerji.

**Regional Office, Madras**

**Asstt. Iron and Steel Controller,** K. Senthilappan.

**Regional Office, Delhi**

**Asstt. Iron & Steel Controller,** S. B. Basu.

**DEPARTMENT OF MINES AND METALS**

**Secretary,** N. C. Shrivastava, I.C.S.

**Joint Secretaries,** N. D. Gupta, I.A.S., R. N. Vasudeva, I.A.S.

**Coal Mining Adviser,** K. S. R. Chari.

**Indian Bureau of Mines, Nagpur.**

**Controller,** G. V. D. Upadhyaya.

**Controller of Mines (South),** A. K. Bose.

**Controller of Mines (North),** K. S. Mahapatra.

**Superintending Officer (Ore-Dressing),** V. S. Pradhan.

**Mineral Economist,** M. C. Basu.

**Mineral Economist (Statistics),** V. K. Ramabhadran.

**Regional Offices :**

**Regional Controller of Mines, Nagpur,** P. N. Sinha.

**Regional Controller of Mines, Calcutta,** G. V. Rao.



*Regional Controller of Mines, Ajmer, Dr. S. C. Singhal.*  
*Deputy Controller of Mines, Bangalore, S. Balgopal.*  
*Asstt. Controller of Mines, Jammu, M. Mukherjee.*

### MINISTRY OF TRANSPORT & SHIPPING

*Minister, Dr. V. K. R. V. Rao.*  
*Dy. Minister, Bhakt Darshan.*  
*Secretary, S. Chakravarti.*  
*Jt. Secretary, Chairman, Inter-State Transport Commission, K. C. Madappa, I.A.S.*  
*Director-General (Road Development) and Addl. Secretary, H. P. Sinha.*  
*Development Adviser, K. N. Srinivasan.*  
*Secretary, Border Roads Development Board and ex-Officio Joint Secretary, S. K. Mukherjee.*  
*Chief Controller of Chartering & Ex-Officio Jt. Secretary, E. Kolet.*  
*Chief Engineer, Inland Water Transport, Kehar Singh.*  
*Director-General of Border Roads, Major-Gen. R. A. Loomba.*  
*President, Maritime Freight Commission, Y. N. Sukhtankar.*  
*Chairman, National Shipping Board, Raghunatha Singh, M.P.*

### MAJOR PORT AUTHORITIES

*Chairman, Calcutta Port Commissioners, Calcutta, B. B. Ghosh.*  
*Chairman, Madras Port Trust, T. K. Palaniappan, I.A.S.*  
*Chairman, Bombay Port Trust, L. M. Nadkarni.*  
*Chairman, Cochin Port Trust, K. P. K. Menon.*  
*Chairman, Kandla Port Trust, S. K. Chatterjee.*  
*Chairman, Visakhapatnam Port Trust, C. R. Reddy.*  
*Chairman, Mormugao Port Trust, E. H. Simoes.*  
*Chief Engineer and Administrator, Tuticorin Harbour Project, J. I. Coil Pillai.*  
*Chief Engineer and Administrator, Mangalore Harbour Project, Iftikhar Ahmed.*  
*Chief Engineer & Administrator, Paradeep Port Project, Kartar Singh.*  
*Chief Engineer, Sethusamudran Project, C. V. Venkateswaran.*  
*Senior Marine Surveyor, Lt. Commander R. L. Kaushal.*

### Directorate General of Shipping.

*'Commerce House', Ballard Estate, Bombay.*  
*Director-General of Shipping, K. C. Madappa.*  
*Addl. Director-General of Shipping, Govind H. Seth.*  
*Deputy Directors-General of Shipping, T. K. Sarangan, N. K. Gopalan Nair, P. N. Anand, C. R. Govindarajan, (Hqrs. New Delhi).*

### TECHNICAL OFFICERS

*Nautical Adviser to the Government of India, Capt. G. S. Singh.*  
*Chief Surveyor with the Government of India, B. P. Gupta.*  
*Dy. Nautical Adviser to the Government of India, Capt. M. S. Patel.*  
*Dy. Chief Surveyor with the Government of India, A. Krishnan.*  
*Dy. Chief Ship Surveyor, R. C. Karnik.*

### NAUTICAL & ENGINEERING COLLEGE

*Hay Bunder, Tank Road, Bombay 33.*  
*Principal, Capt. P. Alexander.*  
*Vice-Principal, Capt. M. G. Datar.*

### DIRECTORATE OF MARINE ENGINEERING TRAINING

*P. 19, Taratolla Road, Calcutta, 53.*

*Branch: Azad Maidan, Waudby Road, Bombay 1.*

*Director, T. K. T. Srisaillam.*

### MERCANTILE MARINE DEPARTMENT

*Bombay-Central, Govt. Offices Bldg.—South Wing, Queen's Road, Bombay.*  
*Principal Officer, Registrar of Indian Ships and Chairman, Deck Passenger Welfare Committee, T. Berry.*  
*Calcutta—Marine House, Hastings, Calcutta 22.*  
*Principal Officer, S. K. Kumarhia.*  
*Madras—Old High Court Bldgs., Madras.*  
*Principal Officer, K. Parthasarathy.*  
*Visakhapatnam—Engineer & Ship Surveyor, P. K. Banerjee.*  
*Cochin—Engineer & Ship Surveyor, C. Pinto.*  
*Jamnagar—"Tej Prakash Bhuvan", Bedi Road, Jamnagar, Surveyor-in-Charge, B. Mehrotra.*  
*Panjim, Goa—Nautical Surveyor and Captain of the Ports, A. M. Pagarkar.*  
*Marmugao—Engineer & Ship Surveyor and Dy. Capt. of the Ports, R. R. Potnis.*

### DECK PASSENGER WELFARE OFFICE

*Welfare Officer, Vacant.*

### TRAINING SHIP "BHADRA"

*H-Berth, King George's Dock, Calcutta 43.*

*Captain Superintendent, Capt. Indrajit Singh.*  
*Executive Officer, S. K. S. Chaudhry.*  
*Engineer Officer, J. Pestonjee.*

### TRAINING SHIP "DUFFERIN", OFF MAZGAON PIER, BOMBAY 10.

*Captain Superintendent, Captain D. G. Hazari, M.I. Mar. Tech., J.P.*  
*Chief Officer, A. P. Kothurkar, A.M.I., Mar. Tech.*

### TRAINING SHIP 'NAU LAKSHI', NAVLAKHI (GUJARAT STATE)

*Captain Superintendent, Capt. D. P. Srivastava.*  
*Engineer Officer, Om Prakash.*

### TRAINING SHIP "MEKHALA", VIZAGAPATAM PORT

*Captain Superintendent, Capt. N. K. Kershaw.*  
*Executive Officer, M. P. Karanjia.*  
*Engineer Officer, R. S. Grewal.*

### SEAMEN'S WELFARE OFFICE

*Bombay—Nau Bhavan, Nicol Road, Ballard Estate, Bombay.*

*Principal Seamen's Welfare Officer, B. K. Shroff.*  
*Calcutta—Marine House, Hastings, Calcutta 22.*  
*Principal Seamen's Welfare Officer, M. L. Aggarwal.*

*Madras—Old High Court Bldg., Madras 1.*  
*Seamen's Welfare Officer, K. V. Sugavaneswaran.*

### Lighthouse and Lightships Department

*Director General of Lighthouses & Lightships and Chief Inspector of Lighthouses in India, Commodore G. S. Kapoor.*  
*Administrative Officer, M. L. Chopra.*  
*Executive Officers, Raghu Nath, Mohinder Singh, M. C. Bhargava.*  
*Directors of Lighthouses and Lightships, R. Swaminathan (Madras), B. R. Karnick (Calcutta), C. V. Chaubal (Port Blair), N. R. Gopalaswami (Bombay), M. D. Basu (Jamnagar), J. N. Mankad (Panaji).*  
*Marine Officers, M. M. Kaul (Delhi), Amarjit Singh (Port Blair).*  
*Master, M.S. 'PRADEEP', S. K. Sharma.*

### COMMISSION OF RAILWAY SAFETY

*B-125, Nirala Nagar, Lucknow.*  
*Commissioner of Railway Safety, A. K. Gupta.*  
*Additional Commissioners of Railway Safety: Western Circle, Bombay, P. B. Albara; Eastern Circle, Calcutta, H. S. Hart; Construction Circle, Calcutta, H. S. Hart; Northern Circle, Lucknow, Arya Bhushan; Southern Circle, Bangalore, Arya Bhushan.*

### MINISTRY OF TOURISM CIVIL AVIATION

*North Block, New Delhi.*

*Minister, Dr. Karan Singh.*  
*Dy. Minister, Mrs. Jahanara Jaipal Singh.*  
*Secretary, R. C. Dutt.*  
*Joint Secretary, J. N. Goyal.*  
*Director-General of Civil Aviation, B. M. Gupta.*  
*Deputy Director-General (A), S. C. Bose.*  
*Deputy Director-General (T), G. C. Arya.*  
*India's Representative on the Council of the I.C.A.O., Montreal, M. C. Dikshit.*

### ADMINISTRATION DIRECTORATE

*Director of Administration, S. P. Joshi.*

### AIR ROUTES AND AERODROMES DIRECTORATE

*Director of Air Routes and Aerodromes, D. S. Jung.*

### TRAINING AND LICENSING DIRECTORATE

*Director of Trg. & Licensing, J. Sen.*

### AIR TRANSPORT DIRECTORATE

*Director, Vacant.*

### AIR SAFETY DIRECTORATE

*Director of Air Safety, Y. R. Malhotra.*

### INFORMATION AND REGULATIONS DIRECTORATE

*Director of Information and Regulations, B. S. Gidwani.*

### AERONAUTICAL INSPECTION DIRECTORATE

*Director of Aeronautical Inspection, M. L. Sodhi.*

### AIRCRAFT INSPECTION

*Director, A. V. Vartak.*

### AERONAUTICAL COMMUNICATION DIRECTORATE

*Director of Communication, Dr. S. Datta.*

### RESEARCH AND DEVELOPMENT DIRECTORATE

*Director of Research and Development, S. Ramamritham.*

### AIR ROUTES AND AERODROMES ORGANIZATION

*Controllers of Aerodromes, S. C. Deshpande (Bombay); S. K. Godbole (Madras); J. C. Puri (New Delhi); G. B. Singh (Dum Dum).*

### AERONAUTICAL INSPECTION

*Controllers of Aeronautical Inspection, V. N. Puri (New Delhi); G. C. Datta (Dum Dum); N. C. Banerjee (Bombay); J. Dayaram (Bangalore).*  
*Dy. Director, Central Examination Organisation, Lucknow, M. D. Nalk.*

### COMMUNICATION ORGANIZATION

*Controllers, K. N. Bhal (Dum Dum); R. Misra (Bombay); C. R. Thirumalai (Madras); C. L. Ahuja (Delhi).*  
*Controller, Central Radio Stores Depot, New Delhi, K. N. Gopalakrishna.*  
*Controller, Radio Constr. and Dev. Units, New Delhi, Vacant.*  
*Principal, Civil Aviation Training Centre, Allahabad, Vacant.*

### MINISTRY OF WORKS, HOUSING AND SUPPLY

*Minister, Jagannath Rao.*  
*Dy. Minister, Sardar Iqbal Singh.*  
*Secretary, Prem Krishen, I.C.S.*  
*Joint Secretaries, B. F. Isar, I.C.S., V. Kumar, I.C.S., Savitri Prasad.*



### Central Public Works Department (Central Office, New Delhi).

*Chief Engineer*, N. G. Dewan.  
*Director of Administration*, B. M. Agarwal, I.A.S.  
*Sr. Counsel*, P. Venugopal.  
*Superintending Engineer (T)*, B. Manekshaw.  
*Chief Architect*, S. K. Joglekar.  
*Director of Horticulture*, J. B. Mathur.

### Department of Explosives, Old High Court Buildings, Nagpur.

*Chief Inspector of Explosives in India*, S. N. Lahiri.  
*Dy. Chief Inspector of Explosives*, S. C. Roy.

#### Senior Inspectors of Explosives

*Hq., Nagpur*, M. P. Mukherjee, *South Circle*,  
*Madras*, K. Sankaran; *East Circle*, *Calcutta*,  
V. A. Chandrasekharan; *West Circle*, *Bombay*,  
B. N. De.

### Directorate General of Supplies and Disposals (Headquarters Office)

N.I. Bldg., Parliament Street, New Delhi.

*Director-General of Supplies & Disposals*, J. S. Lall.

#### ADMINISTRATION BRANCH

*Director (Administration)*, R. C. Ghel.

#### STATISTICS DIRECTORATE

*Officer on Special Duty, Statistics*, M. S. Gokhale.

#### SUPPLIES WING

*Addl. Director-General (Supplies & Disposals)*,  
J. S. Mathur.

### OIL, PAINTS & CHEMICAL STORES DIRECTORATE

*Director of Supplies*, S. S. Puri.

### TIMBER, WOOL & LEATHER STORES DIRECTORATE

*Director of Supplies*, P. Kapoor.

### WORKS PROGRAMME DIRECTORATE

*Director of Supplies*, S. P. Chatterjee.

### MISCELLANEOUS & HARDWARE STORES DIRECTORATE

*Director of Supplies*, K. L. Bhala.

### ENGINEERING STORES DIRECTORATE

*Director of Supplies*, S. S. Venkatakrishnan.

### RAILWAY STORES DIRECTORATE

*Director of Supplies*, B. C. Chowdiah.

### PROJECT DIRECTORATE

*Director of Supplies*, B. N. Biswas.

### O & M & COORDINATION

*Director*, R. K. Singhal.

### COMPLAINTS & PUBLIC RELATIONS

*Director*, A. D. Rao.

### PROGRESS WING

*Director (Progress-General)*, S. C. Mungai.  
*Directors (Progress-Defence)*, V. Subramanian.

### FINALIZATION WING

*Control Officer*, I. S. Abuja.

### CIVIL ARMAMENT DIRECTORATE

*Director*, B. Sen Gupta.

### VEHICLES DIRECTORATE

*Director of Supplies*, Lt. Col. S. Sahai.

### DISPOSALS DIRECTORATE

*Director of Disposals*, B. N. Khauria.

### DIRECTORATE OF SUPPLIES AND DISPOSALS

6, Esplanade East, Calcutta.

*Director of Supplies & Disposals*, H. H. Ahuja.

### DIRECTORATE OF SUPPLIES AND DISPOSALS

Sapt Building, Graham Road, Ballard Estate,  
Bombay.

*Director of Supplies & Disposals*, J. Maneksha.

### DIRECTORATE OF SUPPLIES (TEXTILES), 5TH FLR., NEW CENTRAL GOVT. OFFICE BLDG., NEW MARINE LINES.

*Director of Supplies (Textiles)*, S. C. Agarwal.

### DIRECTORATE OF SUPPLIES AND DISPOSALS, INDIAN MUTUAL BLDGS., 10, MOUNT ROAD, MADRAS.

*Director of Supplies and Disposals*, N. K. Vinayagam.

### DIRECTORATE OF SUPPLIES & DISPOSALS, KANPUR

*Director*, K. N. Rao.

### GOVERNMENT TEST HOUSE, 11/1, JUDGES' COURT ROAD, ALIPORE, CALCUTTA

*Director*, S. N. Mukerji.

### INSPECTION WING (HEADQUARTERS OFFICE)

L.I.C. Bldg., Parliament Street, New Delhi.

*Dy. Director-General (Inspection)*, V. S. Savakoor.

### CALCUTTA INSPECTION CIRCLE

1, Ganesh Chandra Avenue, Calcutta 13.

*Director of Inspection*, S. R. Ray.

*Director of Inspection (Spl.)*, M. M. Bose.

### BOMBAY INSPECTION CIRCLE

New Marine Lines, Bombay 1.

*Director of Inspection*, P. L. Das.

### MADRAS INSPECTION CIRCLE

18 A, Woods Road, Madras 2

*Director of Inspection*, S. K. Lahiri.

### METALLURGICAL INSPECTORATE TATANAGAR

*Director of Inspection*, E. K. N. Nambiar.

### METALLURGICAL INSPECTORATE Burnpur.

*Director of Inspection*, B. R. Nagar.

### NORTHERN INSPECTION CIRCLE 4/286, Nawabganj, Kanpur.

*Deputy Director of Inspection*, D. P. Bhatia.

### NORTHERN INSPECTION CIRCLE

Travancore House Hutments, Canning Road,  
New Delhi.

*Director of Inspection*, I. L. Patel.

### Printing and Stationery Department, 'B' Wing, Nirman Bhawan, New Delhi.

*Chief Controller of Printing and Stationery*, T. N. Bahel.

*Controller of Administration*, P. S. L. Sarma.

*Controller of Printing*, B. C. Sen Gupta.

### SUPREME COURT OF INDIA, HARDINGE TILAK MARG, NEW DELHI

*Chief Justice of India*, K. N. Wanchoo.

*Judges*, Justice M. Hidayatullah; Justice J. C. Shah; Justice S. M. Sikri; Justice R. S. Bachawat; Justice V. Ramaswami; Justice J. M. Shelat; Justice V. Bhargava; Justice G. K. Mitter; Justice C. A. Vaidialingam.

*Registrar*, Y. D. Desai.

*Dy. Registrars*, Guru Datta, C. M. Rao.

*Editor*, K. B. Nambiar.

### UNION PUBLIC SERVICE COMMISSION

Dholpur House, P. Box 186, Shahjahan Road,  
New Delhi 4.

*Chairman*, K. R. Damle.

*Members*, Batuk Singh; N. L. Ahmad, Mrs. B. Khongmen, Desraj Mehta, Dr. A. Appadorai, M. S. Doraiswami, R. C. S. Sarkar, Hari Sharma.

*Secretary*, Rajendra Lal.

*Controller of Exams.*, Harish Chandra.

## INDIAN POLITICAL REPRESENTATIVES ABROAD

| Country or Town  | Name                 | Designation                                                         | Address                                                         | Station       |
|------------------|----------------------|---------------------------------------------------------------------|-----------------------------------------------------------------|---------------|
| <b>EMBASSIES</b> |                      |                                                                     |                                                                 |               |
| AFGHANISTAN ..   | Gen. P. N. Thapar .. | Ambassador ..                                                       | Embassy of India, Shahr-e-Nau, Kabul                            | Kabul.        |
| ALGERIA ..       | Mohammed Yunus ..    | Ambassador ..                                                       | Embassy of India, 119 ter, Rue Didouche Maurad, Algiers.        | Algiers.      |
| ARGENTINA ..     | I. S. Chopra ..      | Ambassador (Also Ambassador to Paraguay and Ambassador to Uruguay). | Embassy of India, Lavalle 42 (5th floor), Buenos Aires.         | Buenos Aires. |
| AUSTRIA ..       | R. G. Rajwade ..     | Ambassador ..                                                       | Embassy of India, 1, Opernring, Vienna 1.                       | Vienna.       |
| BELGIUM ..       | T. Swaminathan*      | Ambassador (Concurrently Ambassador to Luxembourg).                 | Embassy of India, 585, Avenue Louise, Square de Bois, Brussels. | Brussels.     |

\* Additionally the Ambassador is India's Special Representative for Economic, Financial and Commercial Affairs, and is also accredited to the European Economic Community and the European Coal and Steel Community.



| Country or Town                         | Name                            | Designation                                                                                      | Address                                                                        | Station         |
|-----------------------------------------|---------------------------------|--------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------|-----------------|
| BOLIVIA .. ..                           | B. K. Acharya .. ..             | Ambassador (Concurrently Ambassador to Brazil and Venezuela. Resident in Rio de Janeiro).        |                                                                                |                 |
| BRAZIL .. ..                            | B. K. Acharya .. ..             | Ambassador (Also Ambassador to Bolivia & Venezuela).                                             | Embassy of India, Rua Barao de Flamengo 22, Aptos 801-802, Rio de Janeiro.     | Rio de Janeiro. |
| BULGARIA .. ..                          | A. S. Mehta .. ..               | Ambassador (Also Ambassador to Rumania).                                                         | Resident in Bucharest.                                                         |                 |
| BURMA .. ..                             | Vice-Admiral R. D. Katari .. .. | Ambassador .. ..                                                                                 | Embassy of India, Oriental Assurance Bldgs., 545-47, Merchant Street, Rangoon. | Rangoon.        |
| BURUNDI .. ..<br>(Kingdom of)           | K. R. P. Singh .. ..            | Ambassador (Also Ambassador to the Republic of Rwanda & High Commissioner to Uganda).            | Resident in Kampala.                                                           |                 |
| CAMBODIA .. ..                          | P. N. Menon .. ..               | Ambassador .. ..                                                                                 | Embassy of India.                                                              | Phnom Penh      |
| CAMEROON &<br>DAHOMEY<br>REPUBLICS      | S. G. Ramachandran .. ..        | Ambassador (Also Ambassador to Togo & High Commissioner to Nigeria, resident in Lagos).          |                                                                                |                 |
| CHILE .. ..                             | B. K. Massand .. ..             | Ambassador (Concurrently Ambassador to Colombia & Peru).                                         | Embassy of India, 871, Triana, Santiago.                                       | Santiago.       |
| CHINA .. ..                             | R. D. Sathe .. ..               | Minister & Charge-d' affaires.                                                                   | Embassy of India, 32, Tung Chiao Min Min Hsiang, Peking.                       | Peking.         |
| COLOMBIA .. ..                          | B. K. Massand .. ..             | Ambassador (Also Ambassador to Chile & Peru).                                                    | Resident in Santiago (Chile).                                                  |                 |
| CONGO .. ..                             | V. Siddharthacharry .. ..       | Ambassador .. ..<br>(Also Ambassador to Gabon).                                                  | Embassy of India, 18, Avenue 8 eme Armees, Leopoldville.                       | Leopoldville.   |
| CUBA .. ..                              | P. Ratnam .. ..                 | Ambassador (Concurrently Ambassador to Panama and Mexico. Resident in Mexico City).              |                                                                                |                 |
| CZECHOSLOVAKIA                          | J. N. Dhamija .. ..             | Ambassador .. ..                                                                                 | Embassy of India, Valdestejnska 6, Prague 7.                                   | Prague.         |
| DENMARK .. ..                           | A. H. Safrani .. ..             | Ambassador .. ..                                                                                 | Embassy of India, 8-11, Amergertorv, Copenhagen.                               | Copenhagen.     |
| ETHIOPIA .. ..                          | K. L. Mehta .. ..               | Ambassador .. ..                                                                                 | P.O. 528, Addis Ababa.                                                         | Addis Ababa.    |
| FINLAND .. ..                           | B. K. Kapur .. ..               | Ambassador (Also Ambassador to Sweden. Resident in Stockholm).                                   | Embassy of India, Satama Katu 4, Helsinki.                                     |                 |
| FRANCE .. ..                            | R. Dayal@ .. ..                 | Ambassador .. ..                                                                                 | Embassy of India, 15, Rue Alfred Dehodencq, Paris, 16.                         | Paris.          |
| GABON .. ..                             | V. Siddharthacharry .. ..       | Ambassador (Also Ambassador to Congo).                                                           | Resident in Leopoldville.                                                      |                 |
| GERMANY .. ..<br>(Federal Republic of). | S. K. Banerji .. ..             | Ambassador .. ..                                                                                 | Embassy of India, 262, Koblenzstrasse, Bonn.                                   | Bonn.           |
| GREECE .. ..                            | J. K. Atal .. ..                | Ambassador (Also Ambassador to Yugoslavia).                                                      | Resident in Belgrade.                                                          |                 |
| GUINEA .. ..                            | R. R. Sinha .. ..               | Ambassador .. ..                                                                                 | Embassy of India, Conakry.                                                     | Conakry.        |
| HUNGARY .. ..                           | J. C. Kakar .. ..               | Ambassador .. ..                                                                                 | Embassy of India, Buzavirag Uta. Budapest II.                                  | Budapest.       |
| INDONESIA .. ..                         | K. N. Kannampilly .. ..         | Ambassador .. ..                                                                                 | Embassy of India, P. Box No. 118, 44 Kebon Serih, Djakarta.                    | Djakarta.       |
| IRAN .. ..                              | K. V. Padmanabhan .. ..         | Ambassador .. ..                                                                                 | Embassy of India, 301, Pahalvi Avenue, Tehran.                                 | Tehran.         |
| IRAQ .. ..                              | Mahboob Ahmed .. ..             | Ambassador .. ..                                                                                 | 22/12AI, Tahari Street, Waziriah, Baghdad.                                     | Baghdad.        |
| IRELAND .. ..                           | R. K. Tandon .. ..              | Ambassador .. ..                                                                                 | 60, Fitz William Square, Dublin.                                               | Dublin.         |
| ITALY .. ..                             | I. J. Bahadur Singh .. ..       | Ambassador (Also High Commissioner to Malta).                                                    | Embassy of India, via Francesco Dense, 36, Rome.                               | Rome.           |
| IVORY COAST .. ..                       | K. R. F. Khilnani .. ..         | Ambassador (Also Ambassador to Senegal, Mauretania & Upper Volta & High Commissioner to Gambia). | Resident in Dakar.                                                             |                 |
| JAPAN .. ..                             | B. F. H. B. Tyabji* .. ..       | Ambassador .. ..                                                                                 | Embassy of India, No. 1, 2-Chome, Kudan, Chiyodaku, Tokyo.                     | Tokyo.          |
| JORDAN .. ..                            | Khub Chand .. ..                | Ambassador (Also Ambassador to Lebanon and Kuwait and High Commissioner to Cyprus).              | Resident in Beirut.                                                            |                 |
| KUWAIT .. ..                            | Khub Chand .. ..                | Ambassador (also Ambassador to Jordan & Lebanon and High Commissioner to Cyprus).                | Resident in Beirut.                                                            |                 |

@ C. S. Jha will take over as Ambassador to France shortly. \* V. C. Trivedi is expected to take over as the next Ambassador to Japan in September 1967.



| Country or Town                | Name                                        | Designation                                                                                           | Address                                                                       | Station      |
|--------------------------------|---------------------------------------------|-------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------|--------------|
| LAOS .. ..                     | B. K. Sanyal .. ..                          | Ambassador .. ..                                                                                      | Indian Embassy.                                                               | Vientiane.   |
| LEBANON .. ..                  | Khub Chand .. ..                            | Ambassador (Also Ambassador to Jordan & Kuwait and High Commissioner to Cyprus).                      | Embassy of India, Sahamrani Bldg., Rue Kantri, Beirut.                        | Beirut.      |
| LIBERIA .. ..                  | S. V. Patel .. ..                           | Ambassador (Also High Commissioner to Ghana and Sierra Leone and Ambassador to Mali).                 | Resident in Accra.                                                            |              |
| LIBYA .. ..                    | Apa B. Pant .. ..                           | Ambassador (Also Ambassador to U.A.R. & Yemen).                                                       | Resident in Cairo.                                                            |              |
| LUXEMBOURG .. ..               | T. Swaminathan .. ..                        | Ambassador (Also Ambassador to Belgium. Resident in Brussels).                                        | —                                                                             |              |
| MALAGASAY .. ..                | C. J. Stracey * .. ..                       | Ambassador .. ..                                                                                      | P.O. Box 1108, Tananarive.                                                    | Tananarive.  |
| MALI .. ..                     | S. V. Patel .. ..                           | Ambassador (Also Ambassador to Liberia and High Commissioner to Ghana and Sierra Leone).              | Resident in Accra.                                                            |              |
| MAURITANIA .. ..               | K. R. F. Khilnani .. ..                     | Ambassador (Also Ambassador to Senegal, Ivory Coast and Upper Volta and High Commissioner to Gambia). | Resident in Dakar.                                                            |              |
| MEXICO .. ..                   | P. Ratnam .. ..                             | Ambassador (Also Ambassador to Cuba & Panama).                                                        | Embassy of India, Avenida, Tennyson, 67 Col. Polango, Mexico 5, D.F.          | Mexico City. |
| MONGOLIA .. ..                 | Kewal Singh .. ..                           | Ambassador (Also Ambassador to U.S.S.R.).                                                             | Resident in Moscow.                                                           |              |
| MOROCCO .. ..                  | Yogendra Krishna Puri .. ..                 | Ambassador (Also Ambassador to Tunisia).                                                              | 11, Rue Descartes, Rabat.                                                     | Rabat.       |
| NEPAL .. ..                    | Shritman Narayan .. ..                      | Ambassador .. ..                                                                                      | Embassy of India, Kathmandu.                                                  | Kathmandu.   |
| NETHERLANDS .. ..              | S. N. Haksar .. ..                          | Ambassador .. ..                                                                                      | Embassy of India, Buitenvoortweg 2, The Hague.                                | The Hague.   |
| NORWAY .. ..                   | R. S. Mani .. ..                            | Ambassador .. ..                                                                                      | Embassy of India 48, Professor Dahls Gate, Oslo.                              | Oslo.        |
| PANAMA .. ..                   | P. Ratnam .. ..                             | Ambassador (Also Ambassador to Cuba & Mexico).                                                        | Resident in Mexico City.                                                      |              |
| PARAGUAY .. ..                 | I. S. Chopra .. ..                          | Ambassador (Also Ambassador to Argentina and Ambassador to Uruguay).                                  | Resident in Buenos Aires.                                                     |              |
| PERU .. ..                     | B. K. Massand .. ..                         | Ambassador (Also Ambassador to Chile and Columbia. Resident in Santiago).                             | —                                                                             |              |
| PHILIPPINES .. ..              | G. S. Malik .. ..                           | Ambassador .. ..                                                                                      | Embassy of India, 1856, Nebraska, Malate, Manila.                             | Manila.      |
| POLAND .. ..                   | V. M. M. Nair .. ..                         | Ambassador .. ..                                                                                      | Embassy of India No. 16, Niegolewskiego, Warsaw.                              | Warsaw.      |
| RUMANIA .. ..                  | A. S. Mehta .. ..                           | Ambassador (Also Ambassador to Bulgaria).                                                             | Aleea Alexandru, 41 Bucharest 3.                                              | Bucharest.   |
| RWANDA .. ..<br>(Republic of). | K. R. P. Singh .. ..                        | Ambassador (Also Ambassador to the Kingdom of Burundi & High Commissioner to Uganda).                 | Resident in Kampala.                                                          |              |
| SAUDI ARABIA .. ..             | Vacant .. ..                                | Ambassador .. ..                                                                                      | Embassy of India, Sulaiman-Al-Turkey House, Al Sharafia, Boghdadia, Jedda.    | Jedda.       |
| SENEGAL .. ..                  | K. R. F. Khilnani .. ..                     | Ambassador (Also Ambassador to Ivory Coast, Mauretania & Upper Volta & High Commissioner to Gambia).  | Embassy of India, P. Box 398, Dakar.                                          | Dakar        |
| SOMALIA .. ..                  | Dr. S. Sinha .. ..                          | Ambassador .. ..                                                                                      | Embassy of India, Mogadiscio.                                                 | Mogadiscio.  |
| SPAIN .. ..                    | Maharaja Sawal Man Singh Bahadur of Jaipur. | Ambassador .. ..                                                                                      | Alfonso XII, 46 (First Floor), Madrid.                                        | Madrid.      |
| SUDAN .. ..                    | P. L. Bhandari .. ..                        | Ambassador .. ..                                                                                      | Ismail Pasha Road, P. Box No. 707, Khartoum.                                  | Khartoum.    |
| SWEDEN .. ..                   | B. K. Kapur .. ..                           | Ambassador (Concurrently Ambassador to Finland).                                                      | Embassy of India, V. Tradgardsgatan 15, 47 IV, Stockholm.                     | Stockholm.   |
| SWITZERLAND .. ..              | V. C. Trivedi @ .. ..                       | Ambassador (Concurrently accredited as Ambassador to the Vatican).                                    | Embassy of India, 20, Kalchegeweg, Berne.                                     | Berne.       |
| SYRIAN ARAB REPUBLIC .. ..     | V. A. Kidwai .. ..                          | Ambassador .. ..                                                                                      | Embassy of India, 4046, Yasin Nuwal Lati Bldg., Avenue Adnan Malka, Damascus. | Damascus.    |
| THAILAND .. ..                 | Dr. K. R. Narayanan .. ..                   | Ambassador .. ..                                                                                      | Embassy of India, 139, Pan Road, Bangkok.                                     | Bangkok.     |

\* Is also Consul-General of India to Comores & Reunion Islands.

@ M. Azim Husain is expected to take over as the next Ambassador to Switzerland in September 1967.



| Country or Town                | Name                        | Designation                                                                                                           | Address                                                                      | Station     |
|--------------------------------|-----------------------------|-----------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------|-------------|
| TOGO .. ..                     | S. G. Ramachandran .. ..    | Ambassador (Also Ambassador to Cameroun and Dahomey Republics and High Commissioner to Nigeria). Resident in Lagos.   | Embassy of India, Lome.                                                      |             |
| TUNISIA .. ..                  | Yogendra Krishna Puri .. .. | Ambassador (Also Ambassador to Morocco. Resident in Rabat, Morocco).                                                  | —                                                                            |             |
| TURKEY .. ..                   | Vacant .. ..                | Ambassador .. ..                                                                                                      | Embassy of India, No. 50, Kizilirmak Sokok, Kocetepo, Ankara.                | Ankara.     |
| UNITED ARAB REPUBLIC .. ..     | Apa B. Pant .. ..           | Ambassador (Concurrently Ambassador to Libya, Yemen).                                                                 | Embassy of India, 5, Sharia Mahad, El Swissri, Zamalak, P.O. Box 718, Cairo. | Cairo.      |
| UNITED STATES OF AMERICA .. .. | B. K. Nehru .. ..           | Ambassador .. ..                                                                                                      | Embassy of India, 2107 Massachusetts Avenue, N.W. Washington 8, D.C.         | Washington. |
| UPPER VOLTA .. ..              | K. R. F. Khilnani .. ..     | Ambassador (Also Ambassador to Senegal, Mauritania and Ivory Coast & High Commissioner to Gambia. Resident in Dakar). |                                                                              |             |
| URUGUAY .. ..                  | I. S. Chopra .. ..          | Ambassador. (Also Ambassador to Argentina and Paraguay.                                                               | Resident in Buenos Aires.                                                    |             |
| U.S.S.R. .. ..                 | Kewal Singh .. ..           | Ambassador (Concurrently accredited as Ambassador to Mongolia).                                                       | Embassy of India, Nos. 6 and 8, Ulitsa Obuka, Moscow.                        | Moscow.     |
| VATICAN .. ..                  | V. C. Trivedi @ .. ..       | Ambassador (Concurrently accredited Ambassador to Switzerland. Resident in Berne).                                    | —                                                                            |             |
| VENEZUELA .. ..                | B. K. Acharya .. ..         | Ambassador (Concurrently accredited as Ambassador to Brazil & Bolivia, Resident in Rio de Janeiro.                    | —                                                                            |             |
| YEMEN .. ..                    | Apa B. Pant .. ..           | Ambassador. (Also Ambassador to U.A.R. and Libya).                                                                    | Resident in Cairo.                                                           |             |
| YUGOSLAVIA .. ..               | J. K. Atal .. ..            | Ambassador (Concurrently accredited as Ambassador to Greece).                                                         | Embassy of India, Proleter Skeh Brigade 9, Belgrade.                         | Belgrade.   |

## HIGH COMMISSIONS

|                   |                            |                                                                                                           |                                                     |               |
|-------------------|----------------------------|-----------------------------------------------------------------------------------------------------------|-----------------------------------------------------|---------------|
| AUSTRALIA .. ..   | Vacant .. ..               | High Commissioner .. ..                                                                                   | 63, Mugga Way, Red Hill, Canberra.                  | Canberra.     |
| CANADA .. ..      | Gen. J. N. Chaudhuri .. .. | High Commissioner .. ..                                                                                   | 200, McLaren Street, Ottawa 4, Ontario.             | Ottawa.       |
| CEYLON .. ..      | Y. D. Gundevia .. ..       | High Commissioner .. ..                                                                                   | 7, Kollupitiya Station Road, Colombo-3.             | Colombo.      |
| CYPRUS .. ..      | Khub Chand .. ..           | High Commissioner (Also Ambassador to Jordan, Kuwait and Lebanon).                                        | Resident in Beirut.                                 |               |
| GAMBIA .. ..      | K. R. F. Khilnani .. ..    | High Commissioner (Also Ambassador to Senegal, Ivory Coast, Mauritania & Upper Volta). Resident in Dakar. |                                                     |               |
| GHANA .. ..       | S. V. Patel .. ..          | High Commissioner (Also Ambassador to Liberia & Mali and High Commissioner to Sierra Leone).              | P. Box 3040, Accra.                                 | Accra.        |
| GUYANA .. ..      | Munl Lal .. ..             | High Commissioner (Also High Commissioner to Jamaica & Trinidad & Tobago & Consul-General to Surinam).    | Resident in Port of Spain.                          |               |
| JAMAICA .. ..     | Mun Lal.. ..               | High Commissioner (Also High Commissioner to Trinidad & Tobago & Guyana & Consul-General to Surinam).     | Resident in Port of Spain.                          |               |
| KENYA .. ..       | Prem Bhatia .. ..          | High Commissioner .. ..                                                                                   | Jeevan Bharati Bldg., Coronation Avenue, Nairobi.   | Nairobi.      |
| MALAWI .. ..      | D. S. Kamtekar .. ..       | Ag. High Commissioner .. ..                                                                               | High Commission of India, P. Box No. 398, Blantyre. | Blantyre.     |
| MALAYSIA.. ..     | M. A. Rahman .. ..         | High Commissioner .. ..                                                                                   | P. Box No. 59, 19, Malacca St., Kuala Lumpur.       | Kuala Lumpur. |
| MALTA .. ..       | I. J. Bahadur Singh .. ..  | High Commissioner (Concurrently Ambassador to Italy).                                                     | Resident in Rome.                                   |               |
| NEW ZEALAND .. .. | S. N. Chopra .. ..         | High Commissioner .. ..                                                                                   | 49, Willis Street, Wellington.                      | Wellington.   |

\* Also Ambassador to Maldives.

@ M. Azim Hussain will take over from Sept. 1967.



| Country or Town            | Name                           | Designation                                                                                                                                                                                                                      | Address                                                                                          | Station        |
|----------------------------|--------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------|----------------|
| NIGERIA .. ..              | S. G. Ramachandran .. ..       | High Commissioner (Also Ambassador to Cameroon, Dahomey and Togo Republics).                                                                                                                                                     | Private Mail Bag 2322, Lagos, Nigeria.                                                           | Lagos.         |
| PAKISTAN .. ..             | Samarendra Sen .. ..           | High Commissioner .. ..                                                                                                                                                                                                          | India House, 3 Bonus Road, Karachi.                                                              | Karachi.       |
|                            | U. S. Bajpai .. ..             | Dy. High Commissioner .. ..                                                                                                                                                                                                      | —                                                                                                | —              |
| DACCA .. ..<br>(E. Bengal) | A. K. Ray .. ..                | Dy. High Commissioner .. ..                                                                                                                                                                                                      | 6/3, Topkhana Road, Segun Begicha, Dacca.                                                        | Dacca.         |
| SIERRA LEONE ..            | S. V. Patel .. ..              | High Commissioner (Also High Commissioner to Ghana and Ambassador to Liberia and Mali).                                                                                                                                          | Resident in Accra.                                                                               |                |
| SINGAPORE .. ..            | Surendra Singh of Alrajipur .. | High Commissioner .. ..                                                                                                                                                                                                          | India House, 31, Grange Road, Singapore.                                                         | Singapore.     |
| TANZANIA .. ..             | N. Venkatesh Rao .. ..         | High Commissioner .. ..                                                                                                                                                                                                          | 28, Independence Avenue, Dar-es-Salaam.                                                          | Dar-es-Salaam. |
| TRINIDAD & TOBAGO ..       | Muni Lal .. ..                 | High Commissioner (Concurrently accredited as High Commissioner to Jamaica; High Commissioner to Guyana, Barbados, Antigua, Grenada, Dominica, St. Kitts, St. Lucia, St. Vincent, Montserrat, and as Consul-General to Surinam). | P. Box No. 530, Port of Spain (Trinidad).                                                        | Port of Spain. |
| UGANDA .. ..               | K. R. P. Singh .. ..           | High Commissioner (Also Ambassador to the Kingdom of Burundi & Republic of Rwanda).                                                                                                                                              | Bank of India Bldg., Kampala Road, Kampala.                                                      | Kampala.       |
| UNITED KINGDOM.            | Vacant .. ..                   | High Commissioner .. ..                                                                                                                                                                                                          | India House, Aldwych, London, W.C. 2.                                                            | London.        |
|                            | D. N. Chatterji .. ..          | Deputy High Commissioner.                                                                                                                                                                                                        |                                                                                                  |                |
| ZAMBIA .. ..               | S. Krishnamurthi .. ..         | High Commissioner .. ..                                                                                                                                                                                                          | High Commission of India.                                                                        | Lusaka.        |
| <b>SPECIAL MISSIONS</b>    |                                |                                                                                                                                                                                                                                  |                                                                                                  |                |
| BHUTAN .. ..               | N. B. Menon .. ..              | Political Officer (Also Political Officer in Sikkim. Resident in Gangtok).                                                                                                                                                       |                                                                                                  |                |
| INDO-CHINA:                |                                |                                                                                                                                                                                                                                  |                                                                                                  |                |
| (a) VIETNAM (South)        | K. P. Lukose .. ..             | Chairman and Leader of Indian Delegation.                                                                                                                                                                                        | International Commission for Supervision and Control in Indo-China, Saigon.                      |                |
| (b) VIETNAM (North)        | D. R. Kawatra .. ..            | Political Adviser .. ..                                                                                                                                                                                                          | International Commission for Supervision and Control in Indo-China, Hanoi.                       |                |
| (c) CAMBODIA ..            | K. L. Bindra .. ..             | Alternate Delegate-cum-Adviser.                                                                                                                                                                                                  | International Commission for Supervision and Control in Indo-China, Phnom Penh.                  |                |
| (d) LAOS .. ..             | G. L. Puri .. ..               | Chairman, I.C.S.C. and Leader of Indian Delegation.                                                                                                                                                                              | International Commission for Supervision and Control in Indo-China, Vientiane.                   |                |
| SIKKIM .. ..               | N. B. Menon .. ..              | Political Officer in Sikkim (Also Political Officer in Bhutan).                                                                                                                                                                  | Gangtok via Siliguri (West Bengal).                                                              | Gangtok.       |
| UNITED NATIONS             | G. Parthasarathy .. ..         | Permanent Representative of Government of India at the United Nations Headquarters (with rank of Ambassador).                                                                                                                    | Permanent Mission of India to the United Nations, New India House, 3-East 64th Street, New York. | New York.      |
| <b>COMMISSIONS</b>         |                                |                                                                                                                                                                                                                                  |                                                                                                  |                |
| ADEN .. ..                 | S. H. Desai .. ..              | Commissioner for the Government of India.                                                                                                                                                                                        | Office of the Commissioner for the Government of India, Aden.                                    | Aden.          |
| FIJI .. ..                 | D. Murugesan .. ..             | Commissioner for the Government of India.                                                                                                                                                                                        | G. P. O. Box 405, Nina Street, Suva.                                                             | Suva.          |
| HONG KONG ..               | J. K. Ganju .. ..              | Commissioner for the Government of India.                                                                                                                                                                                        | Tower Court, 11th Floor (Near Sunring House), Hysan Avenue, Hong Kong.                           | Hong Kong.     |
| MAURITIUS ..               | Avtar Singh .. ..              | Commissioner for the Government of India.                                                                                                                                                                                        | Fere Felix de Valois Street, Port Louis, Mauritius.                                              | Port Louis.    |



| Country or Town                            | Name                          | Designation                                                                                                                                                                          | Address                                                                                                                                                      | Station        |
|--------------------------------------------|-------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------|
| <b>CONSULATES-GENERAL &amp; CONSULATES</b> |                               |                                                                                                                                                                                      |                                                                                                                                                              |                |
| ATHENS .. ..                               | L. E. Vafiadiaz .. ..         | Consul .. ..                                                                                                                                                                         | Consulate of India.                                                                                                                                          | Athens.        |
| BASRAH .. ..                               | R. N. Joshi .. ..             | Consul .. ..                                                                                                                                                                         | —                                                                                                                                                            | Basrah.        |
| BERLIN .. ..                               | N. P. Jain .. ..              | Consul-General .. ..                                                                                                                                                                 | Consulate General of India,<br>Joachimstaler Street, 28<br>(First Floor), Berlin 15.                                                                         |                |
| CANARY ISLANDS                             | C. Boolchand .. ..            | Consul .. ..                                                                                                                                                                         | Consulate of India, Las Palmas.                                                                                                                              |                |
| COMORES .. ..                              | C. J. Stracey .. ..           | Consul-General (Also Ambas-<br>sador to Malagasy<br>Republic. Resident in<br>Tananarive).                                                                                            |                                                                                                                                                              |                |
| COPENHAGEN ..                              | Victor P. Strand .. ..        | Consul-General for India.                                                                                                                                                            | 36, Kronprinsessegade, Copen-<br>hagen.                                                                                                                      | Copenhagen.    |
| FRANKFURT ..                               | P. Das Gupta .. ..            | Consul-General (Consular<br>jurisdiction includes the<br>State of Hessen, and<br>Saarland).                                                                                          | Consulate General of India,<br>33, Kaiser Street, Frankfurt.                                                                                                 | Frankfurt.     |
| FRENCH<br>SOMALILAND ..                    | S. J. Kothari .. ..           | Consul .. ..                                                                                                                                                                         | Consulate of India, Djibouti.                                                                                                                                |                |
| GENEVA .. ..                               | Vacant .. ..                  | Consul-General (Concurrently<br>accredited as Permanent<br>Representative to the<br>European Office of the<br>United Nations and other<br>International Organizations<br>at Geneva). | Consulate-General of India,<br>Place Edesaux-Vives, Geneva.                                                                                                  | Geneva.        |
| GENOA (Italy) ..                           | Jack Clerici .. ..            | Consul .. ..                                                                                                                                                                         | Consulate of India.                                                                                                                                          | Genoa.         |
| GHENT (Belgium)                            | Robert Desprechina .. ..      | Consul .. ..                                                                                                                                                                         | Consulate of India.                                                                                                                                          | Ghent.         |
| HAMBURG .. ..                              | D. J. Sen Gupta .. ..         | Consul-General .. ..                                                                                                                                                                 | 14, Burchardstrasse, Sprinken-<br>hof, Hamburg. Consular juris-<br>diction includes the States of<br>Hamburg, Bremen Schleswig<br>Holstein and Lower-Saxony. | Hamburg.       |
| HAWAII (Honolulu)                          | Mrs. J. Watumull .. ..        | Consul .. ..                                                                                                                                                                         | Consulate of India, 2227-A,<br>Kalakana Avenue, Honolulu.                                                                                                    | Honolulu.      |
| KOBE .. ..                                 | T. V. Ramakrishna Rao .. ..   | Consul .. ..                                                                                                                                                                         | Consulate of India, 1/2, Yama-<br>notodori, 9-Chome, Ikuta-Ku.                                                                                               | Kobe.          |
| KHORRAMSHAHR                               | M. L. Puri .. ..              | Consul .. ..                                                                                                                                                                         | Consulate of India, Khorram-<br>shahr.                                                                                                                       | Khorramshahr.  |
| MANDALAY .. ..                             | Tirath Singh .. ..            | Consul .. ..                                                                                                                                                                         | Consulate of India.                                                                                                                                          | Mandalay.      |
| MEDAN .. ..                                | P. B. Nambisan .. ..          | Consul .. ..                                                                                                                                                                         | Consulate of India, D. J.<br>Tjokroamite, 19, Medan<br>(Indonesia).                                                                                          | Medan.         |
| MUNICH .. ..                               | P. H. V. Mitter-Wallner .. .. | Consul-General .. ..                                                                                                                                                                 | Consulate General of India, 27,<br>Residenzste.                                                                                                              | Munich.        |
| MUSCAT .. ..                               | S. L. Chitter .. ..           | Consul-General .. ..                                                                                                                                                                 | —                                                                                                                                                            | Muscat.        |
| NEW YORK .. ..                             | S. Gupta .. ..                | Consul-General for India .. ..                                                                                                                                                       | Consulate-General of India, 3-<br>East, 64th Street, New York.                                                                                               | New York.      |
| ODESSA (U.S.S.R.)                          | J. Barua .. ..                | Consul .. ..                                                                                                                                                                         | Consulate of India,<br>31, Kirov Street,                                                                                                                     | Odesa.         |
| OHIO (Cleveland) ..                        | Col. George P. Bickford .. .. |                                                                                                                                                                                      | Consulate of India, 1144, Union<br>Commerce Bldg., Cleveland.                                                                                                | Ohio.          |
| PANAMA .. ..                               | I. S. Wadhwa .. ..            | Consul .. ..                                                                                                                                                                         | Consulate of India.                                                                                                                                          | Panama City.   |
| PABAGUAY .. ..                             | Dr. P. M. Vargas .. ..        | Consul .. ..                                                                                                                                                                         | Consulate of India.                                                                                                                                          | Asuncion.      |
| (Asuncion).                                |                               |                                                                                                                                                                                      |                                                                                                                                                              |                |
| SAN FRANCISCO ..                           | Vacant .. ..                  | Consul-General for India .. ..                                                                                                                                                       | Consulate-General of India, 215,<br>Market Street, San Francisco 5.                                                                                          | San Francisco. |
| SAN MARINO<br>(REPUBLIC OF)                | M. H. Siddiqui .. ..          | Consul-General .. ..                                                                                                                                                                 | Resident in Rome.                                                                                                                                            |                |
| STUTTGART .. ..                            | Dr. R. Kissel .. ..           | Hon. Consul-General .. ..                                                                                                                                                            | Consulate General of India, 17,<br>Charlottenplatz.                                                                                                          | Stuttgart.     |
| SURINAM .. ..                              | Muni Lal .. ..                | Consul-General (Also High<br>Commissioner to Trinidad<br>and Tobago, Guyana and<br>Jamaica).                                                                                         | Resident in Port of Spain.                                                                                                                                   |                |
| VIET NAM (Demo-<br>cratic Republic of).    | A. S. Dhawan .. ..            | Consul-General .. ..                                                                                                                                                                 | 58, Tran Hung Dao, Hanoi.                                                                                                                                    | Hanoi.         |
| VIET NAM (South).                          | P. S. Kotda Sangani .. ..     | Consul-General .. ..                                                                                                                                                                 | Consulate-General of India, 213,<br>Rue Catinat, Saigon.                                                                                                     | Saigon.        |
| <b>VICE-CONSULATES</b>                     |                               |                                                                                                                                                                                      |                                                                                                                                                              |                |
| JALALABAD<br>(Afghanistan).                | H. K. Malhotra .. ..          | Vice-Consul for India .. ..                                                                                                                                                          | Vice-Consulate of India, Jalala-<br>bad.                                                                                                                     | Jalalabad.     |
| KANDAHAR<br>(Afghanistan).                 | K. N. Madan .. ..             | Vice-Consul for India .. ..                                                                                                                                                          | Vice-Consulate of India, Kan-<br>dahar.                                                                                                                      | Kandahar.      |
| ZAHIDAN .. ..                              | M. L. Chowdhry .. ..          | Vice-Consul for India .. ..                                                                                                                                                          | Vice-Consulate of India, Zahi-<br>dan (East Iran), via Teheran.                                                                                              | Zahidan.       |



# INDIAN GOVERNMENT TRADE REPRESENTATIVES ABROAD

Designation and address.

Sphere of activities.

## Europe.

Minister (Economic), High Commission of India in U.K., Aldwych, London, W.C.2.  
 First Secretary (Commercial), Embassy of India, No. 2, Rue Godot de Manroy, Paris, 9c.  
 First Secretary (Commercial), Embassy of India, via Francesco, Denze 36, Rome.  
 Counsellor (Com.), Embassy of India, 262, Keblenzer-Strasse, Bonn.  
 Consul-General of India, 608/5, Sprinkenhof, Hamburg.

Consul-General of India, 33, Kaiser-Strasse, Frankfurt.  
 First Secretary (Com.), Embassy of India, 585, Avenue Louise, Brussels.  
 First Secretary (Com.), Embassy of India, Vastra Tradgardsgetan, 15, Stockholm.  
 Third Secretary (Com.), Embassy of India, Valdstejska, 6, Mala Strana, Prague 1.  
 Second Secretary (Com.), Embassy of India, 22, Kalcheggweg, Berne.  
 First Secretary (Com.), Embassy of India, Prolelerskeh, Brigade 9, Belgrade.  
 Counsellor (Com.), Embassy of India, 38, Lomonosovsky Prospect, Moscow.  
 First Secretary (Com.), Embassy of India, No. 3, Aleje Roz, Warsaw.  
 Second Secretary (Commercial), Embassy of India, 41, Aleea Alexandru, Bucharest.  
 Second Secretary (Commercial), Embassy of India, Buzavirag Utca, Budapest.

## United States of America.

First Secretary (Com.), Embassy of India, 2107, Massachusetts Avenue, N.W. Washington 8 D.C.  
 Consul, Consulate General of India, 417, Montgomery Street, San Francisco.  
 First Secretary (Com.) & Dy. Consul-General, Consulate General of India, 3, East 64th Street, New York N. Y. 10021.

## Canada.

Second Secretary (Com.), High Commission of India, 200, MacLaren Street, Ottawa-4.  
 Indian Trade Commissioner, Suite 804, Standard Building, 310 W-Hastings Street, Vancouver-B.C.

## Australia & New Zealand.

Indian Trade Commissioner, Caltex House, 10th Floor, 167-87, Kent Street, Sydney.  
 High Commission of India, 40, Willis Street, Wellington (New Zealand).

## Africa.

First Secretary, High Commission of India, Private Mail Bag 2322, Lagos, Nigeria.  
 Counsellor (Commercial), Embassy of India, Post Box No. 475, Cairo.  
 First Secretary (Commercial), High Commission for India, Corporation Avenue, Jeevan Bharti, P. Box No. 30074, Nairobi (Kenya).  
 Third Secretary (Commercial), High Commission for India, 2, Inglis Street, Box No. 2684, Noor Manzil, Dar-es-Salam (Tanzania).  
 Second Secretary (Commercial), Embassy of India, 119-ten Rue Didonche Manrad, Algiers.  
 Second Secretary (Commercial), Embassy of India, Dakar.  
 Third Secretary (Commercial), Embassy of India, 10, Place Mohammed V, Rabat, Morocco.  
 First Secretary (Commercial), Embassy of India, Post No. 707, Khartoum.  
 Second Secretary (Com.), Embassy of India, Post No. 528, Addis Ababa.  
 First Secretary (Com.), Embassy of India, No. 6, Bis Rue Maasena, Tunis.  
 First Secretary (Commercial), High Commission of India, P. Box No. 8049, Accra.  
 Commercial Attache, High Commission for India, Kampala.  
 First Secretary (Commercial)/C.D.A., Embassy of India, Amman.

## Asia.

First Secretary (Com.), Embassy of India, 11-90, No. 2-Chome, Kudan, Minami, Chiyoda-Ku, Tokyo.  
 First Secretary (Com.), Nadaraja Building, Kollupitiya Station Road, Colombo-3.  
 Second Secretary (Com.), Embassy of India, Oriental Assurance Buildings, 547-47, Merchant Street, P.O. Box 751, Rangoon.  
 Second Secretary (Com.), High Commission of India, India House, 3, Bonus Road, Karachi.  
 Second Secretary (Com.), Deputy High Commission, Bazakak Rail Road, Dacca.  
 First Secretary (Commercial), Embassy of India, 37, Phya Thai Road, Bangkok.  
 Second Secretary (Com.), Embassy of India, Sulaiman-al-Turkey House, Al-Sharafia, Bogudadia, Jeddah.  
 Second Secretary (Com.), Embassy of India, Taha Sheet, Najeeb Pasha, Adhamiya, Baghdad.  
 Second Secretary (Commercial), Embassy of India, Yasin Nowellati Bldg., Malki Avenue, Damascus.  
 First Secretary (Commercial), Embassy of India, Beirut.  
 Second Secretary (Com.), Embassy of India, P. Box No. 188-44, Kebon Serih, Djakarta.  
 Second Secretary (Commercial), Embassy of India, 1866, Jerge C. Bocobo Street, Malate, Manila.  
 Commissioner for India, Commission of India, Steamer Point, Aden.  
 First Secretary (Com.), Embassy of India, 301, Pahlani Avenue, Teheran.  
 First Secretary (Com.), Commission for India, Tower Court, 11th Floor (Near Sunning House), Hysan Avenue, Hong Kong.  
 Second Secretary, Embassy of India, Phnom Penh.

U.K. and Ireland.  
 France.  
 Italy.  
 West Germany.  
 State of Hamburg, Bremen and Scheleswig Holstain.  
 State of Hasse.  
 Belgium.  
 Sweden and Finland.  
 Czechoslovakia.  
 Switzerland.  
 Yugoslavia and Greece.  
 U.S.S.R.  
 Poland.  
 Rumania.  
 Hungary.

U.S.A.

Canada.  
 British Columbia.

Australia.  
 New Zealand.

Nigeria, Cameroun, Togo,  
 Dahomey and Niger.  
 U.A.R. and Libya.  
 Kenya & Zanzibar.

Tanganyika.

Algeria.  
 Senegal.  
 Morocco.  
 Sudan.  
 Ethiopia.  
 Tunisia.  
 Ghana, Liberia & Sierra Leone.  
 Uganda.  
 Jordan.

Japan & South Korea.  
 Ceylon.  
 Burma.

Pakistan.  
 East Pakistan.  
 Thailand.  
 Saudi Arabia.  
 Iraq.  
 Syrian Arab Republic.  
 Lebanon, Jordan and Cyprus.  
 Indonesia.  
 Philippines.  
 Aden.  
 Iran.  
 Hong Kong.

Cambodia.

N.B. - In places where there are no Commercial Representatives, our Diplomatic and Consular Officers look after India's trade interests.



# EMBASSIES IN INDIA

| Country.                     | Station.     | Designation.  | Name.                                 | Address.                                                               |
|------------------------------|--------------|---------------|---------------------------------------|------------------------------------------------------------------------|
| AFGHANISTAN ..               | New Delhi .. | Ambassador .. | M. Kabir Ludin.                       | 24, Ratendone Road, New Delhi 11.                                      |
| ALGERIA ..                   | New Delhi .. | Ambassador .. | Ali Lakhdari.                         | 13, Sundar Nagar, New Delhi 11.                                        |
| ARGENTINA ..                 | New Delhi .. | Ambassador .. | Adolfo A. Bollini.                    | 13, Panch Sheel Marg, Chanakya-puri, New Delhi 21.                     |
| AUSTRIA ..                   | New Delhi .. | Ambassador .. | Dr. Johanna Nestor.                   | 3A, Nyaya Marg, Diplomatic Enclave, New Delhi 21.                      |
| BELGIUM ..                   | New Delhi .. | Ambassador .. | Jean Leroy.                           | 7, Golf Links, New Delhi 3.                                            |
| BRAZIL ..                    | New Delhi .. | Ambassador .. | Renato Firmino Maia de Mendonca.      | 8, Aurangzeb Road, New Delhi 11.                                       |
| BULGARIA ..                  | New Delhi .. | Ambassador .. | Christo Dimitrov.                     | 198, Golf Links Area, New Delhi 2.                                     |
| BURMA ..                     | New Delhi .. | Ambassador .. | Maha Thiri Thudhamma Daw Khin Kyi.    | 3/50-F, Shantipath, Chanakya-puri, New Delhi 21.                       |
| CAMBODIA ..                  | New Delhi .. | Ambassador .. | Nong Kimny.                           | 25, Golf Links, New Delhi 3.                                           |
| CHILE ..                     | New Delhi .. | Ambassador .. | Julio Barrenechea P.                  | C108, New Delhi South Extn. Part II, New Delhi 16.                     |
| CHINA ..                     | New Delhi .. | Ambassador .. | Vacant.                               | 28, Prithviraj Road, New Delhi.                                        |
| COLOMBIA ..                  | New Delhi .. | Ambassador .. | Col. Manuel Agudelo G.                | 188, Jor Bagh, New Delhi 3.                                            |
| CUBA ..                      | New Delhi .. | Ambassador .. | Vacant.                               | 40, Ratendone Road, New Delhi 11.                                      |
| CZECHOSLOVAKIA               | New Delhi .. | Ambassador .. | Ing. Jaroslav Kohout.                 | 45-48, Sundar Nagar, New Delhi 11.                                     |
| DENMARK ..                   | New Delhi .. | Ambassador .. | E. Bartels.                           | 6, Golf Links Area, New Delhi 3.                                       |
| ETHIOPIA ..                  | New Delhi .. | Ambassador .. | Aseffa Gabre Mariam.                  | 29, Prithviraj Road, New Delhi 11.                                     |
| FINLAND ..                   | New Delhi .. | Ambassador .. | Asko Ivalo.                           | 43A, Prithviraj Road, New Delhi 11.                                    |
| FRANCE ..                    | New Delhi .. | Ambassador .. | Jean Daridan.                         | 2, Aurangzeb Road, New Delhi 11.                                       |
| GERMANY, FEDERAL REPUBLIC OF | New Delhi .. | Ambassador .. | Frelherr Dietrich Von Mirbach.        | No. 6, Block 50-G, Shanti Path, Chanakya-puri, New Delhi 21.           |
| GREECE ..                    | New Delhi .. | Ambassador .. | John Phrantzas.                       | B. No. 123, Ashoka Hotel, New Delhi 21.                                |
| HUNGARY ..                   | New Delhi .. | Ambassador .. | Janos Nagy.                           | 15, Jor Bagh, New Delhi 3.                                             |
| INDONESIA ..                 | New Delhi .. | Ambassador .. | Mohammad Hafiz                        | 50-A, Chanakya-puri, New Delhi 21.                                     |
| IRAN ..                      | New Delhi .. | Ambassador .. | Dr. Jalal Abdoh.                      | 5, Barakhamba Road, New Delhi 1.                                       |
| IRAQ ..                      | New Delhi .. | Ambassador .. | Dr. Jasim el-Wahabi.                  | D-24, New Delhi South Extn. Part II, New Delhi 16.                     |
| IRELAND ..                   | New Delhi .. | Ambassador .. | M. L. Skentelbery.                    | 55, Sundar Nagar, New Delhi 11.                                        |
| ITALY ..                     | New Delhi .. | Ambassador .. | Dr. Michele Lanza.                    | 7, Jor Bagh, New Delhi 3.                                              |
| JAPAN ..                     | New Delhi .. | Ambassador .. | Yujiro Iseki.                         | Plot Nos. 4 & 5, Block 50-G, Shanti Path, Chanakya-puri, New Delhi 11. |
| JORDAN ..                    | New Delhi .. | Ambassador .. | Kemal Homoud.                         | 154, Malcha Marg, Chanakya-puri, New Delhi 21.                         |
| KUWAIT ..                    | New Delhi .. | Ambassador .. | Yacoub Abdul Aziz Al-Rushaid.         | 19, Friend Colony West, New Delhi 14.                                  |
| LAOS ..                      | New Delhi .. | Ambassador .. | Phagna Oun Hueun Norasingh.           | 4, Circular Road, Chanakya-puri, New Delhi 11.                         |
| LEBANON ..                   | New Delhi .. | Ambassador .. | Mahmoud Hafez.                        | 23/48 Panch Sheel Marg, Chanakya-puri, New Delhi 21.                   |
| MEXICO ..                    | New Delhi .. | Ambassador .. | Octavio Paz.                          | 136, Golf Links, New Delhi.                                            |
| MONGOLIAN PEOPLE'S REPUBLIC. | New Delhi .. | Ambassador .. | Oyuny Khosbayar.                      | 21, Panch Sheel Marg, New Delhi 21.                                    |
| MOROCCO ..                   | New Delhi .. | Ambassador .. | Hassan Hajovi.                        | 199, Jor Bagh, New Delhi 3.                                            |
| NEPAL ..                     | New Delhi .. | Ambassador .. | Y. N. Khanal.                         | Barakhamba Road, New Delhi.                                            |
| NETHERLANDS ..               | New Delhi .. | Ambassador .. | Hubert Th. A. M. Van Rijke-vorsel.    | 4, Ratendone Road, New Delhi 11.                                       |
| NORWAY ..                    | New Delhi .. | Ambassador .. | Haakon Nord.                          | Kantilya Marg, Chanakya-puri, New Delhi 21.                            |
| PERU ..                      | New Delhi .. | Ambassador .. | Eduardo Sarmiento C.                  | D-290, Defence Colony, New Delhi.                                      |
| PHILIPPINES ..               | New Delhi .. | Ambassador .. | Leon Ma. Guerrero.                    | Thapar House, 124, Janpath, New Delhi 1.                               |
| POLAND ..                    | New Delhi .. | Ambassador .. | Romuald Spasowski.                    | 22, Golf Links, New Delhi 3.                                           |
| RUMANIAN PEOPLE'S REPUBLIC.  | New Delhi .. | Ambassador .. | Aurel Ardeleanu.                      | 48, Golf Links, New Delhi 3.                                           |
| SAUDI ARABIA ..              | New Delhi .. | Ambassador .. | Shalikh Mohamed Al-Hamad Al-Shubaili. | 6, Tilak Marg, New Delhi 1.                                            |



| Country.                            | Station.  | Designation.            | Name.                          | Address.                                          |
|-------------------------------------|-----------|-------------------------|--------------------------------|---------------------------------------------------|
| SPAIN .. ..                         | New Delhi | Ambassador .. ..        | Miguel Teus.                   | 12, Prithviraj Road, New Delhi 11.                |
| SUDAN .. ..                         | New Delhi | Ambassador .. ..        | Sayed Ahmed Salah Bukhari.     | 147, Sunder Nagar, New Delhi 11.                  |
| SWEDEN .. ..                        | New Delhi | Ambassador .. ..        | Prof. Gunnar E. Heckscher.     | Nyaya Marg, Chanakyapuri, New Delhi 21.           |
| SWITZERLAND ..                      | New Delhi | Ambassador .. ..        | Dr. Rene Faessler.             | Nyaya Marg, Chanakyapuri, New Delhi 21.           |
| SYRIAN ARAB REPUBLIC                | New Delhi | Ambassador .. ..        | Omar Abou Riche.               | 10, Panch Sheel Marg, Chanakyapuri, New Delhi 21. |
| THAILAND ..                         | New Delhi | Ambassador .. ..        | Chitti Sucharitakul.           | 56-N, Nyaya Marg, Chanakyapuri, New Delhi 21.     |
| TURKEY .. ..                        | New Delhi | Ambassador .. ..        | Osman Oclay.                   | No. 27, Jor Bagh, New Delhi 3.                    |
| UNION OF SOVIET SOCIALIST REPUBLICS | New Delhi | Ambassador .. ..        | Vacant.                        | Shanti Path, Chanakyapuri, New Delhi 21.          |
| UNITED ARAB REPUBLIC                | New Delhi | Ambassador .. ..        | Issa Abdul Latif Serag El-Din. | 26, Jor Bagh, New Delhi 3.                        |
| UNITED STATES OF AMERICA            | New Delhi | Ambassador .. ..        | Chester Bowles.                | Shanti Path, Chanakyapuri, New Delhi 21.          |
| URUGUAY ..                          | New Delhi | Charge d'Affaires .. .. | José D. Lissidini.             | 104, Golf Links, New Delhi 3.                     |
| YUGOSLAVIA ..                       | New Delhi | Ambassador .. ..        | Vacant.                        | 3/50G, Niti Marg, Chanakyapuri, New Delhi 21.     |

## LEGATIONS IN INDIA

| Country.      | Station.  | Designation.                | Name.                        | Address.                               |
|---------------|-----------|-----------------------------|------------------------------|----------------------------------------|
| HOLY SEE.. .. | New Delhi | Apostolic Internuncio .. .. | The Most Rev. James R. Knox. | Niti Marg, Chanakyapuri, New Delhi 21. |

Mr. Benjamin Delgado is the Ambassador for Venezuela to India and is resident outside India.

## HIGH COMMISSIONS IN INDIA

| Country.       | Station.    | Designation.                         | Name.                             | Address.                                                   |
|----------------|-------------|--------------------------------------|-----------------------------------|------------------------------------------------------------|
| AUSTRALIA ..   | New Delhi   | High Commissioner .. ..              | Sir Arthur Harold Tange, C.B.E.   | Australian High Commission, Chanakyapuri, New Delhi 21.    |
| BRITAIN .. ..  | New Delhi   | High Commissioner .. ..              | The Rt. Hon. John Freeman, M.B.E. | Shanti Path, Chanakyapuri, New Delhi 21.                   |
|                |             | Deputy High Commissioner (Minister). | D. A. Scott, C.M.G.               |                                                            |
|                | Calcutta .. | Deputy High Commissioner ..          | I. F. Porter, C.M.G., C.B.E.      | 1, Harrington Street, Calcutta 16.                         |
|                | Bombay ..   | Deputy High Commissioner ..          | A. Wooller.                       | Mercantile Bank Building, Mahatma Gandhi Road, Bombay.     |
|                | Madras ..   | Deputy High Commissioner ..          | C. B. B. Heathcote-Smith, C.B.E.  | Local Library Authority Bldg., 150-A, Mint Road, Madras 2. |
| CANADA .. ..   | New Delhi   | High Commissioner .. ..              | Vacant.                           | 4, Aurangzeb Road, New Delhi 11.                           |
| CEYLON .. ..   | New Delhi   | High Commissioner .. ..              | Siri Perera.                      | 25/39, Kautilya Marg, Chanakyapuri, New Delhi 21.          |
| GHANA .. ..    | New Delhi   | High Commissioner .. ..              | Maj. Gen. S. J. A. Otu.           | 2, Golf Links, New Delhi 3.                                |
| MALAYSIA ..    | New Delhi   | High Commissioner .. ..              | Zaiton Ibrahim bin Ahmad.         | 143, Sunder Nagar, New Delhi 11.                           |
|                | Madras ..   | Asstt. High Commissioner ..          | Anaitullah bin Karim.             | 110/1, Mount Road, Teynampet, Madras.                      |
| NEW ZEALAND .. | New Delhi   | Ag. High Commissioner ..             | J. E. Farrel.                     | 39, Golf Links, New Delhi 3.                               |
| NIGERIA .. ..  | New Delhi   | High Commissioner .. ..              | George Dove-Edwin.                | D-7, South Extn. Part II, Ring Road, New Delhi 16.         |
| PAKISTAN ..    | New Delhi   | High Commissioner .. ..              | M. Arshad Hussain.                | Shanti Path, Chanakyapuri, New Delhi 21.                   |
|                |             | Deputy High Commissioner ..          | Abdur Rauf Khan.                  | 7, Friends Colony, New Delhi.                              |
|                | Calcutta .. | Deputy High Commissioner ..          | H. Imam.                          | 9, Circus Avenue, Calcutta 5.                              |
| TANZANIA ..    | New Delhi   | High Commissioner .. ..              | Salim Ahmed Salim.                | 42, Golf Links, New Delhi 3.                               |
| UGANDA .. ..   | New Delhi   | High Commissioner .. ..              | George W. M. Kamba.               | E-23, Defence Colony, New Delhi 3.                         |

Maurice Baker has been appointed as the first High Commissioner of Singapore to India.



# FOREIGN CONSULAR OFFICES IN INDIA

| Country.                              | Station.       | Designation.                                    | Name.                             | Address.                                                                 |
|---------------------------------------|----------------|-------------------------------------------------|-----------------------------------|--------------------------------------------------------------------------|
| AFGHANISTAN ..                        | Bombay ..      | Consul-General ..                               | Gholam Mohamad Nekzad.            | 115, Walkeshwar Road, Bombay 6.                                          |
| AUSTRIA ..                            | Calcutta ..    | Hon. Consul ..                                  | L. R. Patel.                      | 16, Netaji Subhas Road, Post Box No. 369, Calcutta 1.                    |
|                                       | Bombay ..      | Hon. Consul-General ..                          | Murarji J. Vaidya.                | United Bank of India Bldg., 2nd Floor, Sir P. Mehta Road, Bombay 1.      |
|                                       |                | Hon. Vice-Consul ..                             | Mrs. Alice Khan.                  | 8, Cuffe Parade, Colaba, Bombay 5.                                       |
|                                       | Madras ..      | Hon. Consul ..                                  | A. N. Sattanathan.                | 2, Monteith Lane, Emore, Madras 8.                                       |
|                                       |                | Hon. Vice-Consul ..                             | Mrs. Christel Warwick-Stelzhamer. |                                                                          |
| BELGIUM ..                            | Bombay ..      | Vice-Consul in-charge ..                        | Th. De Graff.                     | "Morena", 11, Carmichael Road, Cumballa Hill, Bombay 26.                 |
|                                       | Calcutta ..    | Vice-Consul in-charge ..                        | H. Boudry.                        | 6, Camac Street, Calcutta 16.                                            |
|                                       | Madras ..      | Consul (Honorary) ..                            | M. Nevens.                        | 1-E, Spurtank Road, Chetput, Madras 31.                                  |
| BOLIVIA ..                            | Calcutta ..    | Hon. Consul-General ..                          | J. K. Gora.                       | 7, Wellesley Palace, Calcutta 1.                                         |
| BRAZIL ..                             | Calcutta ..    | Honorary Consul ..                              | J. R. Antonio Viegas.             | 8/6, Alipore Park Road, Calcutta 27.                                     |
| BURMA ..                              | Calcutta ..    | Consul-General ..                               | U Ba Set.                         | 12, Dalhousie Square East, Calcutta 1.                                   |
|                                       | Madras ..      | Vice-Consul ..                                  | U Ba Htay.                        | 3, Murray Gate Road, Teynampet, Madras 18.                               |
| COSTA RICA ..                         | Bombay ..      | Consul-General ..                               | I. A. Makani.                     | Standard Bldg., 346, Dadabhoy Naoroji Road, Bombay 1.                    |
|                                       | Madras ..      | Vice-Consul ..                                  | Roy E. Chambers.                  | 6-A, Waddels Road, Madras 10.                                            |
| CZECHOSLOVAKIA                        | Bombay ..      | Consul-General ..                               | Dr. Josef Fabik.                  | "Marcopia", 5, Pedder Road, Cumballa Hill, Bombay 26.                    |
|                                       | Calcutta ..    | Consul-General ..                               | Josef Sima.                       | 127, Southern Avenue, Calcutta 29.                                       |
| DENMARK ..                            | Bombay ..      | Hon. Consul-General ..                          | E. B. Mogensen.                   | Eros Cinema Building, 124-D, Queen's Road, Bombay.                       |
|                                       | Calcutta ..    | Hon. Consul ..                                  | J. Svane-Christensen.             | 18-G, Park Street, Calcutta.                                             |
|                                       | Cochin ..      | Ag. Consul ..                                   | Emil Fjermeros.                   | Indo-Norwegian Project, 70, Mahatma Gandhi Road, Ennakulam.              |
|                                       | Madras ..      | Hon. Consul ..                                  | F. Korner.                        | Mercantile Bank Building, 1st Line Beach, Madras.                        |
| D O M I N I C A N<br>REPUBLIC         | Bombay ..      | Consul-General ..                               | H. H. Ismail.                     | 208, D. Wachha Road, Mistry Court, Opp. C.C.I., Bombay 1.                |
| EL SALVADOR ..                        | Calcutta ..    | Consul ..                                       | Karanjaksha Bonerjee.             | 12, P. K. Tagore Street, Calcutta 6.                                     |
| ECUADOR ..                            | Calcutta ..    | Consul ..                                       | Kalyan Sen.                       | 10/1, Elgin Road, Calcutta 20.                                           |
| ETHIOPIA ..                           | Bombay ..      | Hon. Consul-General ..                          | Ismail M. Kanga.                  | Crescent Chambers, Tamarind Lane, Fort, Bombay.                          |
| FINLAND ..                            | Bombay ..      | Hon. Consul ..                                  | C. H. Campbell.                   | Chartered Bank Building, Post Box No. 73, Mahatma Gandhi Road, Bombay 1. |
|                                       | Calcutta ..    | Hon. Consul ..                                  | S. R. Stephens.                   | P.O. Box 209, 2, Netaji Subhas Road, Calcutta.                           |
| FRANCE ..                             | Bombay ..      | Consul-General ..                               | Georges Meunier.                  | Vulcan Insurance Building, 5th Floor, Churchgate Reclamation, Bombay 1.  |
|                                       | Calcutta ..    | Consul-General ..                               | Michel Removille.                 | 26, Park Mansion, Park Street, Calcutta 16.                              |
|                                       | Madras ..      | Consul-General ..                               | René Gros.                        | 7, Cenotaph Road, Teynampet, Madras.                                     |
|                                       | Pondicherry .. | Consul-General ..                               | Robert Duvauchelle.               | Rue de la Marine, Pondicherry.                                           |
| GERMANY (FED-<br>ERAL REPUB-<br>LIC). | Bombay ..      | Consul-General ..                               | Dr. Richard Kunisch.              | Dugal House, Road No. 3, Backbay Reclamation, Bombay 1.                  |
|                                       | Calcutta ..    | Consul-General ..                               | Elgar von Randow.                 | Ilaco House, 1/3, Brabourne Road, Calcutta 1.                            |
|                                       | Madras ..      | Consul-General ..                               | Dr. Edgar Reichel.                | 51, Mount Road, Madras 2.                                                |
| GREECE ..                             | Bombay ..      | Consul-General ..                               | A. D. Mango.                      | Ralli House, 21, Ravelin St., Bombay 1.                                  |
|                                       | Calcutta ..    | Consul-General ..                               | M. Gora.                          | Wellesley House, 7, Wellesley Place, Calcutta.                           |
| HAITI ..                              | Calcutta ..    | Consul ..                                       | Murari Churn Law.                 | No. 2, Bidhan Sarani, Calcutta 6.                                        |
| HONDURAS<br>REPUBLIC                  | Bombay ..      | In charge of Consular Affairs ..                | A. R. H. Ismail.                  | Mistry Court, 208, D. Wachha Road, Opp. C.C.I., Bombay 1.                |
| INDONESIA ..                          | Bombay ..      | Consul ..                                       | R. Taintomo.                      | 17, Altamont Road, Cumballa Hill, Bombay 26.                             |
| IRAN ..                               | Bombay ..      | Minister Plenipotentiary and<br>Consul-General. | Vacant.                           | Baldota Bhavan, Queen's Road, Bombay 1.                                  |



| Country.                                | Station.        | Designation.                                       | Name.                              | Address.                                                                 |
|-----------------------------------------|-----------------|----------------------------------------------------|------------------------------------|--------------------------------------------------------------------------|
| IRAQ .. ..                              | Bombay .. ..    | Consul-General .. ..                               | Hakki Barazanji.                   | "Panorama", 203, Walkeshwar Road, Bombay 6.                              |
| ISRAEL .. ..                            | Bombay .. ..    | Consul .. ..                                       | Reuven Dafni.                      | 50, Pedder Road, Cumballa Hill, Bombay 26.                               |
| ITALY .. ..                             | Calcutta .. ..  | Ag. Consul-General .. ..                           | Tommaso Ferrante.                  | 3, Raja Santosh Road, Alipore, Calcutta 27.                              |
|                                         | Bombay .. ..    | Consul-General .. ..                               | Adm. Umberto Del Grande.           | Vaswani Mansion, Dinshaw Wachha Road, Fort, P.O. Box No. 1521, Bombay 1. |
| JAPAN .. ..                             | Calcutta .. ..  | Consul-General .. ..                               | I. Katakami.                       | 12, Pretoria Street, Calcutta 16.                                        |
|                                         | Bombay .. ..    | Consul-General .. ..                               | N. Okuchi.                         | Kashmir House, 19, Nepean Road, Bombay 6.                                |
|                                         | Madras .. ..    | Consul-General .. ..                               | T. Kikkawa.                        | No. 2/20, Pantheon Road, Madras 8.                                       |
| KOREA (DEMOCRATIC PEOPLE'S REPUBLIC OF) | New Delhi .. .. | Consul-General .. ..                               | Li Jang Hwa.                       | 4, Tees January Marg, New Delhi 11.                                      |
| KOREA (REPUBLIC OF)                     | New Delhi .. .. | Consul-General .. ..                               | Woong Fang Choe.                   | 28, Prithviraj Road, New Delhi 11.                                       |
| KUWAIT .. ..                            | Bombay .. ..    | Consul-General .. ..                               | Faisal Essa Yousuf.                | Vaswani Mansions, Flat No. 2, 120, Dinshaw Vatcha Road, Bombay 1.        |
| LIBERIA .. ..                           | Calcutta .. ..  | Consul-General (Jurisdiction includes Nepal also). | P. K. Bonerjee.                    | 7-2-P, Jamir Lane, Calcutta 19.                                          |
| LUXEMBOURG .. ..                        | Bombay .. ..    | Vice-Consul of Belgium In-charge                   | Th. De Greeff.                     | "Morena", 11, Carmichael Road, Bombay 26.                                |
| MONACO .. ..                            | New Delhi .. .. | Consul-General .. ..                               | R. Chattaram.                      | 14/15F, Connaught Place, New Delhi.                                      |
| NEPAL .. ..                             | Calcutta .. ..  | Consul-General .. ..                               | Mal. Gen. Gehendra Shamsher Thapa. | 19, Woodlands, Sterndale Road, Alipore, Calcutta 27.                     |
| NETHERLANDS .. ..                       | Bombay .. ..    | Consul-General .. ..                               | J. H. Delgorge.                    | 298, Bazargate Street, City Ice Building, P.O. Box 260, Fort, Bombay 1.  |
|                                         | Calcutta .. ..  | Consul-General .. ..                               | B. Potjer.                         | 5 & 7, Netaji Subhas Road, Calcutta.                                     |
|                                         | Madras .. ..    | Consul .. ..                                       | H. D. Dolg.                        | Chordia Mansion, 150-A-2 Mount Road, Madras-2.                           |
|                                         | Cochin .. ..    | Consul .. ..                                       | S. S. Koder.                       | Princess Street, Fort, Cochin 11.                                        |
| NICARAGUA .. ..                         | Bombay .. ..    | Consul .. ..                                       | J. K. Rege.                        | Alice Building, Dr. Dadabhoy Naoroji Road, Bombay 1, (BR.).              |
|                                         | Calcutta .. ..  | Consul .. ..                                       | K. C. Dey.                         | 6-1, Bright St., Ballygunge Calcutta 19.                                 |
| NORWAY .. ..                            | Bombay .. ..    | Consul-General .. ..                               | Bebel Kolding.                     | Nowroji Mansion, 31, Wodehouse Road, P. Box No. 294, Bombay 1.           |
|                                         | Calcutta .. ..  | Vice-Consul .. ..                                  | Carsten Gylseth.                   | 14, Netaji Subhas Road, Calcutta.                                        |
|                                         |                 | Consul-General .. ..                               | Sverre Gylseth.                    |                                                                          |
|                                         |                 | Vice-Consul .. ..                                  | Jorgen Svane-Christensen.          |                                                                          |
| PANAMA .. ..                            | Cochin .. ..    | Consul .. ..                                       | Emil Ejermeros.                    | P.B. No. 137, Ernakulam.                                                 |
|                                         |                 | Consul .. ..                                       | R. C. Shearer.                     | Post Box No. 42, Madras.                                                 |
|                                         |                 | Consul .. ..                                       | Dr. Virgilio A. Ponce.             | Flat No. E, 6th Floor, "Giri Raj," Altamont Road, Bombay 26.             |
|                                         | Bombay .. ..    | Consul-General .. ..                               | Mrs. Nidia D. de Porce.            | 8/6, Alipore Road, Calcutta 27.                                          |
| PERU .. ..                              | Calcutta .. ..  | In charge of the Consulate-General.                | J. R. Antonio Viegas.              |                                                                          |
| PHILIPPINES .. ..                       | Bombay .. ..    | Hon. Consul-General .. ..                          | K. M. Modi.                        | Liberty Building, 41/42, Marine Lines, Bombay 1.                         |
|                                         | Calcutta .. ..  | Hon. Consul General .. ..                          | K. B. Patel.                       | 10-B, Lall Bazar St., Calcutta 1.                                        |
| POLAND .. ..                            | Bombay .. ..    | Consul .. ..                                       | A. Wojcik.                         | Manavi Apartment, Ridge Road, Malabar Hill, Bombay 6.                    |
|                                         | Calcutta .. ..  | Consul .. ..                                       | Z. Tomeryk.                        | 13, Camac Street, Calcutta 16.                                           |
| SPAIN .. ..                             | Bombay .. ..    | Vice-Consul and Trade Commissioner.                | Napoleon Fernandez.                | "Oceana", 153, Marine Drive, Bombay.                                     |
|                                         | Calcutta .. ..  | Vice-Consul .. ..                                  | Pritindra Nath Ray Chowdhury.      | 10, Old Post Office Street, Calcutta.                                    |
|                                         | Madras .. ..    | Vice-Consul .. ..                                  | Gilbert Augustine Pais.            | "Lawdale", 5, Nimmo Road, San Thome, Mylapore, Madras.                   |
| SUDAN .. ..                             | Bombay .. ..    | In-charge .. ..                                    | Sayed Gmer Yousef Biriedo.         | "Kasopa" Malcolm Baug, Jomeshwari, Bombay 60.                            |
| SWEDEN .. ..                            | Bombay .. ..    | Consul-General .. ..                               | J. O. Guthe.                       | Indian Mercantile Chambers, Nicol Road, Ballard Estate, Bombay.          |
|                                         | Calcutta .. ..  | Vice-Consul .. ..                                  | A. F. Mody.                        | 7, Wellesley Place, Calcutta.                                            |
|                                         |                 | Consul .. ..                                       | A. C. Daphtary.                    | 38C, Mount Road, Madras 6.                                               |
|                                         |                 | Consul .. ..                                       | M. M. Taiwar.                      |                                                                          |
| SWITZERLAND .. ..                       | Bombay .. ..    | Consul-General .. ..                               | O. Risht                           | Manekji Wadia Building, 127, Mahatma Gandhi Road, Fort, Bombay.          |



| Country.                                                 | Station.        | Designation.                | Name.                    | Address.                                                       |
|----------------------------------------------------------|-----------------|-----------------------------|--------------------------|----------------------------------------------------------------|
| SWITZERLAND—(Contd.)                                     |                 |                             |                          |                                                                |
|                                                          | Calcutta .. ..  | Vice-Consul in-charge .. .. | F. Luethi.               | 4, Wood Street, Calcutta 16.                                   |
|                                                          | Cochin .. ..    | Consular Agent .. ..        | R. Nievergelt.           | C/o Volkart (India) P. Ltd.,<br>P.O. Box No. 3, Cochin.        |
| SYRIA .. ..                                              | Bombay .. ..    | Consul-General .. ..        | Sobhi Elejel.            | Belha Court, Strand Road, Fort,<br>Bombay 1.                   |
| THAILAND .. ..                                           | Calcutta .. ..  | Ag. Consul-General .. ..    | Pholman Khamhiran.       | 56, Gariahat Road, Ballygunge,<br>Calcutta 19.                 |
| TURKEY .. ..                                             | Bombay .. ..    | Consul-General .. ..        | Rahim Karim Mistry, J.P. | 208, Dinshaw Wachha Road,<br>Backbay Reclamation, Bombay<br>1. |
|                                                          | Calcutta .. ..  | Consul-General .. ..        | S. Fazal Ellahi.         | 4, Kanai Seal St., Calcutta 1.                                 |
|                                                          | Madras .. ..    | Consul-General .. ..        | M. Mustafa Hussain, J.P. | 115, Lloyds Road, Cathedral<br>P.O., Madras 6.                 |
| UNITED ARAB<br>REPUBLIC.                                 | Calcutta .. ..  | Consul-General .. ..        | Salah Zaghroui.          | 8/6, Alipore Park Road, Alipore,<br>Calcutta 27.               |
| UNITED STATES<br>OF AMERICA.                             | Bombay .. ..    | Consul-General .. ..        | Daniel M. Braddock.      | "Lincoln House", 78, Bhulabhai<br>Desai Road, Bombay 26        |
|                                                          | Calcutta .. ..  | Consul-General .. ..        | William K. Hitchcock.    | 5/1, Harrington Street, Calcutta<br>16.                        |
|                                                          | Madras .. ..    | Consul-General .. ..        | Albert B. Franklin.      | 150-B, Mount Road, Madras 2.                                   |
| U.S.S.R. .. ..                                           | Bombay .. ..    | Consul-General .. ..        | Vladimir K. Lobachev.    | "Palm Beach", 42, Nepean Sea<br>Road, Malabar Hill, Bombay-3.  |
|                                                          | Calcutta .. ..  | Consul-General .. ..        | Vadim A. Zharkov.        | 31, Shakespeare Saranee,<br>Calcutta 16.                       |
|                                                          | Madras .. ..    | Consul-General .. ..        | G. I. Kaverin.           | 3rd Left Street, Rly. Service<br>Commission Road, Madras 6.    |
| VIET-NAM (DEMO-<br>CRATIC RE-<br>PUBLIC OF).             | New Delhi .. .. | Consul-General .. ..        | Nguyen Hoa.              | 62, Golf Links Area, New Delhi.                                |
| VIET-NAM (RE-<br>PUBLIC OF).                             | New Delhi .. .. | Consul-General .. ..        | Nguyen-Trien-Dan.        | 147, Jor Bagh, New Delhi 3.                                    |
| YUGOSLAVIA (FE-<br>DERAL SOCIA-<br>LIST REPUBLIC<br>OF). | Bombay .. ..    | Consul-General .. ..        | Zivojin Bulat.           | 120/4, Vaswani Mansion, Din-<br>shaw Wachha Road, Bombay<br>1. |
|                                                          | Calcutta .. ..  | Consul .. ..                | Aleksandar Stanic.       | 6, Ballygunge Park Road.                                       |

## U. N. BODIES IN INDIA

### UNITED NATIONS

21, Curzon Road, New Delhi.

#### United Nations Development Programme

By a resolution of the General Assembly of the United Nations, the Technical Assistance Board and the UN Special Fund have merged into the United Nations Development Programme with effect from 1 January 1966, and is responsible for the co-ordination of United Nations aid programmes, in particular the Expanded Programme of Technical Assistance and the Special Fund Programme.

*Resident Representative* : John McDiarmid.

*Dy. Resident Representative* : Nessim Shallon.

*World Food Programme Officer* : John P. Bradford.

#### United Nations Information Service

The United Nations Information Service maintains a close working relationship with national and local information media, educational institutions, governmental information services and non-governmental organisations on matters relating to the dissemination of information about the United Nations and the specialized agencies.

*Director* : Rudolf Stajdnhar.

### U. N. CHILDREN'S FUND (UNICEF)

*Address* :—Regional Office for India, Afghanistan, Ceylon, Nepal and Mongolia, UNICEF House, 11, Jorbagh, New Delhi-3.

Ever since UNICEF became a permanent body of U.N. Organization in 1953, its principal objective has been the furtherance of mother and child health through long range programmes e.g., giving equipment to Primary Health Centres in Community Development Blocks, improving nutrition through Milk Plants, and applied nutrition projects, etc. UNICEF assistance is requested by the Governments concerned and the UNICEF Executive Board consisting of 30 Nations meets once a year to consider these requests.

*Director* : Dr. Charles A. Egger.

### INTERNATIONAL BANK FOR RECONSTRUCTION AND DEVELOPMENT

Office address : Reserve Bank of India Building (Second Floor), Parliament Street, New Delhi.

*Acting Resident Representative* : Romano Patanali.

*Projects Dept. Representative* : Eduardo de Alba.

*International Labour Office (India Branch), Mandi House, New Delhi.*

The Branch Office was established in 1928. It maintains close relations with the Government authorities and employers' and workers' organisations, and acts as a clearing house of information on questions concerning labour and social policy.

It publishes a "News Service" in English and Hindi, dealing with the current activities of the International Labour Organisation. The Office has a good reference library. It also undertakes the sale of I.L.O. publications.

*Director* : P. M. Menon.

United Nations Educational, Scientific and Cultural Organisation : Office of the UNESCO Chief of Mission in India and South Asia Science Cooperation Office, N-1, Ring Road, South Extension 1, New Delhi 3.

*Chief of Mission & Director, South Asia Science Cooperation Office* : Dr. A. G. Evstafiev.

*Deputy Director, South Asia Science Cooperation Office* : F. J. C. Pala.

### UNESCO RESEARCH CENTRE ON SOCIAL AND ECONOMIC DEVELOPMENT IN SOUTHERN ASIA

University Enclave, Delhi 7.

The object of the UNESCO Research Centre is to bring the resources of the social sciences to bear upon the solution of problems connected with the social and economic development of the countries of South and South-East Asia. Studies are undertaken either by the Centre itself, or in co-operation with universities and research institutes. Seminars and regional meetings are also organized to discuss these problems. The Centre maintains a specialized library and a documentation service. Research fellows are proposed by the UNESCO National Commissions in member States of UNESCO. Serial titles, *Research Information Bulletin* and *Social Science Bibliography*; occasional publications resulting from research studies, Conference reports, etc.

*Director* : Prof. Janusz Ziolkowski.



**FAO Regional Office for Asia and the Far East (Western Zone)—Ceylon, India and Nepal.**

1, Ring Road, Kilokri, New Delhi 14

Deputy Regional Representative: Cedric Day.

Information Officer: David Mason.

**World Health Organisation Regional Office for South-East Asia: World Health House, Indraprastha Estate, Ring Road, New Delhi 1.**

Regional Director: Dr. C. Mani.

Director, Health Services: Dr. H. Richards.

Chief, Office of Administration & Finance: W. R. Hornett.

WHO Representative to India: Dr. E. A. Gillis.

## TRADE COMMISSIONS

### AUSTRALIA

New Delhi—A. R. Taysom, Commercial Counsellor and Trade Commissioner.

Address: 34, Golf Links Road, New Delhi, P.O. Box 3033.

Bombay—R. Fletcher, Trade Commissioner.

Address: Mercantile Bank Building, 52/55, Mahatma Gandhi Road, Bombay, P.O. Box 217.

Calcutta—D. R. McPhee, Trade Commissioner.

Address: 2, Fairlie Place, P.O. Box 303, Calcutta.

### BRITAIN

Delhi—E. A. Midgley, C.M.G., M.B.E., Minister (Economic and Commercial).

G. L. Simmons, Counsellor (Commercial); J. D. Rimington, First Secretary (Commercial); G. Feast, First Secretary (Commercial); B. Abbott, O.B.E., First Secretary (Commercial).

Address: British High Commission, Shantipath, Chanakyapuri, New Delhi-21.

Calcutta—J. N. McKelvie, Counsellor (Commercial).

Address: 1, Harrington Street, Calcutta-16.

Bombay—J. H. Fawcett, First Secretary (Commercial).

Address: Mercantile Bank Building, Mahatma Gandhi Road, Fort, Bombay-1.

Madras—M. W. R. Mustoe, Secretary (Commercial).

Address: 150-A, Mount Road, Madras 2.

### CANADA

New Delhi—Commercial Counsellor: B. R. Parlour.

Address: Office of the High Commissioner for Canada, 13, Golf Links Area, New Delhi 3, P.O. Box 11.

### CEYLON

Ceylon Govt. Trade Commissioner: B. A. M. C. Wanigaratne.

Address: Ceylon House, Bruce Street, Fort, Bombay.

### JAMMU AND KASHMIR

Trade Agent: Dr. S. S. Nishat.

Address: Manekji Wadia Building, 129, Mahatma Gandhi Road, Bombay 1.

Trade Agent, Kashmir House, Court Road, Amritsar: Hans Raj Avasthi.

Trade Agent, Pathankot: D. N. Kachroo.

Trade Commissioner, 5, Prithviraj Road, New Delhi: S. K. Raina.

### NEW ZEALAND

Trade Commission in India—Marketing Officer, K. L. Khanna.

Address: New Zealand High Commission, 39, Golf Links, New Delhi 3.

### AUSTRIA

Austrian Trade Representative in India: Robert Schmidt.

Address: Queen's Mansions, Bastion Road, P.O. Box 1385, Bombay 1. Telephone: 263483.

Ag Austrian Trade Representative in Calcutta: Dr. H. Kampitsch.

Address: 2/2, Harrington Street, Calcutta 16.

### BULGARIA

Trade Representation of the People's Republic of Bulgaria in India:

Address: 150, Golf Links Area, New Delhi 3.

Office of the Trade Commission for the People's Republic of Bulgaria in Bombay, "Ashutosh",

Flat 21, 33-A, Nepean Sea Road, Bombay-6 (WB).

Trade Commissioner: Nikolas V. Ivanov.

### CZECHOSLOVAKIA

Commercial Counsellor & Trade Representative: Ing. Z. Mizersa.

Commercial Attache—Deputy Trade Representative: V. Loakot.

Address: 65, Golf Links Area, New Delhi 3.

Trade Commissioner: Jaroslav Skokan.

Address: Kasturi Bldg., Jamshedji Tata Road, Bombay 1.

Trade Commissioner: J. Bocek.

Address: 24, Park Street, 4th Floor, Calcutta 16.

Trade Commissioner: D. Fatara.

Address: 11, Rutland Gate, 4th Street, Madras.

### DENMARK

Address: Pallonji Mansion, New Cuffe Parade, Colaba, Bombay 6.

### FINLAND

Trade Commissioner: Raimo Waltasaari.

Address: Chartered Bank Building, Mahatma Gandhi Road, P.O. Box 73, Bombay 1.

### FRANCE

New Delhi—The Commercial Counsellor to the French Embassy, 130, Jor Bagh.

Bombay—The Trade Commissioner for France, "Adelphi", Queen's Road.

Calcutta—The Trade Commissioner for France, 13, Park Mansions, Park Street.

Madras—The Trade Commissioner for France, 18, Wallace Gardens, 1st Floor, Madras 6.

### GERMAN DEMOCRATIC REPUBLIC

Trade Representation:

Head Office: New Delhi, 1, Kautilya Marg. Herbert Fischer, Head of the Trade Representation.

Branch Office, Bombay: 122, Dinshaw Wacha Road. Vacant, Regional Trade Representative.

Branch Office, Calcutta: P-17, Mission Row Extension. A. Frotcher, Regional Trade Representative.

Branch Office, Madras: 1/1, Kodambakkam High Road Nungambakkam. K. Bumbell, Regional Trade Representative.

### GERMANY (FEDERAL REPUBLIC)

Chief Economic Officer: Klava Zeller.

Assistant Economic Officer: Werner Frank.

Address: Dugal House, Road No. 3, Backbay Reclamation, Bombay 1.

### HUNGARY

Trade Representation of the Hungarian People's Republic:—

Commercial Counsellor & Trade Representative: T. Huszar.

Address: 18, Golf Links Area, New Delhi.

Trade Commissioner: J. Feher.

Address: 11-A, Wodehouse Road, Bombay.

Trade Commissioner: G. Czizany.

Address: 6/2, Gurusaday Road, Calcutta-20.

### ITALY

Consul General for Italy with Jurisdiction over Commercial matters: Adm. Umberto Del Grande.

Address: Vaswani Mansion, Dinshaw Wacha Road, Fort, Bombay 1.

Commercial Counsellor, New Delhi: Dr. Francesco Lo Prinz.

Address: Italian Embassy, Commercial Section, 7, Jor Bagh, New Delhi 3.

Consul for Italy, Calcutta, with Jurisdiction over Commercial matters: T. Ferrante (Ag. Consul).

Address: 3, Raja Santosh Road, Allpore, Calcutta.

### JAPAN

Consulate-General: Bombay.

Consul General: N. Okuchi.

Address: Kashmir House, 19, Nepean Road, Bombay 6.

Consulate-General: Calcutta.

Consul General: I. Katahara.

Address: 12, Pretoria Street, Calcutta 16.

Consulate-General: Madras.

Consul-General: T. Kikkawa.

Address: 2/30, Pantheon Road, Madras 3.

### POLAND

New Delhi—Commercial Counsellor: W. Zawadzki. Address: 42/44 Sundar Nagar, New Delhi.

Bombay—Consul: A. Wojcik. Address: Manavi Apartment, Ridge Road, Malabar Hill, Bombay 6.

Calcutta—Consul: Z. Tomczyk. Address: 13, Camac Street, Calcutta 16.

### RUMANIA

Trade Representation of the Socialist Republic of Rumania in India, 61, Golf Links, New Delhi.

Trade Representation of the Socialist Republic of Rumania in India, Steelcrete House, Dinsha Wacha Road, Churchgate Reclamation, Bombay-1.

Trade Representation of the Socialist Republic of Rumania in India, 11 Rajendra Nath Mukherjee Road (8th Floor), Calcutta 1.

### SWEDEN

Office of the Trade Commissioner for Sweden. In charge, M. P. Saldanha.

Address: Shangri La, Carmichael Road, Bombay 26.

Calcutta: Mans Chr. Hegraeus, Trade Commissioner for Sweden, 13A, Govt. Place East, Calcutta.

### THAILAND

Commercial Attache to the Royal Thai Embassy: Aran Sachavets.

Address: E-17, Ring Road, Defence Colony, New Delhi 3.

### U.S.A.

Economic Section.

Address: American Consulate-General, "Lincoln House," 78, Bhulabhai Desai Road, Bombay 26.

### U.S.S.R.

Trade Representation of U.S.S.R. in India, Plots Nos. 6 and 7, Block 50-E, Nynya Marg, Chanakyapuri, New Delhi 21.

Calcutta Branch and Calcutta Showrooms of the U.S.S.R. Machinery and Equipment: 1, Bishop Lefroy Road (Larger Bldg.), Calcutta 20.

Bombay Branch: "Avantika," 46, Pedder Road, Bombay 26.

Bombay Showrooms of the U.S.S.R. Machinery and Equipment: Vasundhara House, Bhulabhai Desai Road, Bombay 26.

Madras Branch: 50-A, St. Mary's Road, Alwarpet, Madras 18.

### YUGOSLAVIA

Trade Commissioner, D.M. Peric, Vaswani Mansion, 120/4, Dinshaw Wacha Road, Bombay 1.



## WHO'S WHO IN INDIA

**ABDOH, H.E. Dr. Jalaludin**, Ambassador of Iran to India. *b.* Nov. 19, 1908 in Tehran; *Educ.*: Law graduate from the Tehran Univ.; a certificate of studies in criminology from the Faculty of Law, Paris; Doctor of Law, Eco., Pol. Sc. of the Paris Univ. Served in the Min. of Justice, 1927-34; joined the Min. of Foreign Affairs, 1934; Dy. Chairman, Iranian Permanent Mission to the U.N., 1951-53; Political Adv. to the Min. of Foreign Affairs, 1953-54; High Counsellor to the Min. of Foreign Affairs and Head of the Directorate-Gen. of Pol. Affairs, 1954-55; Permanent Rep. of Iran to the U.N.O. with the rank of Amb., 1955-59; Foreign Minister and Member of the High Political Council, Iran, 1959-61; Roving Ambassador, 1961-65; a member of the Iranian delegation to the various U.N. Gen. Assembly Sessions. *Address*: 5, Barakhamba Road, New Delhi.

**ABDUL QADIR, Syed, I.A.S.**, Dir.-Gen. of Employment & Trg. and Ex-Officio Jt. Secy., Min. of Labour, Rehab. & Employment since 1956. *b.* Dec. 1, 1907; *Educ.*: Aligarh, Andhra and Madras Univs., Joined Govt. Service, Madras 1928; Collector and Dt. Magistrate and Regional Dir. of Resettlement & Employment, Madras region, 1947-54; Leader, National Productivity Team on Supervisory and Operatives Trg. to Japan, U.S.A., & W. Germany, Sept.-Nov. 1960. Studied Vocational Trg. in the U.S.S.R., Sept.-Oct., 1961; Chairman, Meeting of the I.L.O. Panel of consultants on problems of young workers, Geneva, Oct.-Nov. 1961; Participant, Intl. Seminar on the Plng. of Vocational Trg. in Developing countries, W. Germany, 1963; External Collaborator, I.L.O. Asian Seminar on National Plng. of Vocational Trg., Kuala Lumpur, 1964. *Address*: 28, Akbar Road, New Delhi.

**ABDULLAH, Sheikh Mohamad**, ex-Prime Minister, Jammu and Kashmir. *b.* 1905, in Soura, near Srinagar; *Educ.*: Srinagar; graduated with distinction from Lahore: M.Sc., Aligarh Univ. Campaigned for responsible Government and formed the Kashmir Muslim Conference which later became the National Conference in 1933; launched the 'Quit Kashmir' movement, 1946, for the complete democratisation of Kashmir; was put in prison; elected Pres., All-India States Peoples' Conference; released, 1947; was the Head of the Emergency Administration, Kashmir; member, Kashmir Delegation from India to the U.N.O.; M.P. for Kashmir till 1952; was detained for 4½ years from Aug. 9, 1953; released, Jan. 8, 1958; detained again, April 29, 1958 under the Preventive Det. Act; released on April 8, 1964 on withdrawal by Kashmir Govt. of the case against him; placed under restricted movements within the municipal limits of Ootacamund under the Defence of India Rules for his anti-national activities outside India, May 1965; transferred to Kodaikanal, July 14, 1965. *Address*: C/o Soura, P.O. Noushera, Srinagar.

**ABID ALI, M.P.**, Vice-Pres., I.N.T.U.C. Pres., Rashtriya Mill Mazdoor Sangh, Bombay. *b.* 1900. Joined non-co-op. movement, and Khilafat org. 1921; Secy.: Wardha Khilafat and Congress Cttees., C.P.P.C.C. 1923, All India National Flag Satyagraha Cttee., 1923; joined Bardoli struggle, 1928; Gen. Secy.: B.P.C.C., 1929-34; member: A.-I.C.C.; M.L.A., Bombay, 1949-52; M.P., Rajya Sabha, since 1952; Chairman, Dvn. Cttee., Bombay State Transport Corp.; jailed several times for participation in national struggles; Trade Unionist; has worked in Kanpur Mill at the age of 13; was founder of the I.N.T.U.C., 1947; Pres., Bombay Prov. I.N.T.U.C., 1948-51; Dy. Labour Min., Govt. of India, 1952-62; Indian Workers' rep. at Intl. Cfces., Montreal, 1946; San Francisco, 1948; Ceylon, 1950 and Geneva, 1963-64; Intl. Rep. of I.N.T.U.C.

since 1963; member: I.L.O. Governing Body since March 1965; I.C.F.T.U. Exec. Board, since Feb. 1965, I.C.F.T.U. Exec. Cttee., since July 1965 representing Asia; Leader, Indian Delegation to I.L.O. Cfce., Geneva, 1953 and 1961, and Asian Reg. Cfces., Tokyo, 1953, Delhi, 1957; widely travelled. *Address*: Mazdoor Manzil, Parel Tank Road, Parel, Bombay 12.

**ACHARYA, H.E. Mr. Bejoy Krishna, B.A.** (Hons.) (Econ.) (Calcutta), Ambassador to Brazil, Bolivia and Venezuela since 1966. *b.* May 1, 1912; *Educ.*: Calcutta and London Univs. Joined I.C.S., 1936; held charge of important Bengal dists. like Howrah, 24 Parganas, Bakarganj & Darjeeling; Dewan of Tripura & Dy. Chief Commr., Himachal Pradesh; Dy. Indian High Commr. at Dacca; Indian Minister in Cambodia; Jt. Secy., Min. of Ext. Affairs; Amb. to: Czechoslovakia & Rumania, 1959-62; Morocco & Tunisia, 1962-64. High Commr. to Canada, 1964-66. *Address*: C/o External Affairs Ministry, New Delhi.

**ADANI, Ratubhai Mulshankar**, Ex-Min. for Co-op., Community Projects, Panchayats, Roads and Bldgs., Gujarat State. *b.* at Bhanwad in Halar Dist. Left studies early in 1930 to join Satyagraha Movement; was often imprisoned; started constructive work at Tarawada after his release from jail in 1934; went underground in 1942 and was active in the Quit India Movement; was C.-in-C., Arazi Hakumat organised in 1947 to liberate Junagadh from Pakistan; member, Saurashtra Leg. Assembly in 1951 from Keshod Constituency and apptd. Min. for Deypt. and Plang., 1951; Min. for Prohibition, Village Panchayat, and Cottage Industries, Bombay State, 1956-60; Min. for P.W.D., R.D.D. & Labour, Gujarat, 1960-62; Min. for R.D.D., Roads and Bldgs., Gujarat, 1962-63. *Address*: Gandhigram, Junagadh.

**ADARKAR, Bhaskar Namdeo, M.A. (Cantab.)**, B.A. (Bombay Univ.), M.B.E. (1946), Deputy Governor, Reserve Bank of India, since June 1965. *b.* May 18, 1910; *Educ.*: Wilson Coll., Bombay; Gonville and Caius Coll., Cambridge. Dy. Eco. Adv. to the Govt. of India, 1945-49; Member: Indian Tariff Board, June-Nov., 1949 and 1950-52; Indian Tariff Commn. 1952-57; Officer on Spl. Duty, Fin. Min., 1957; Delegate to E.C.A.F.E. and U.N. Gen. Assembly (1959); Exec. Dir., I.M.F., 1957-61; Min., Indian Embassy, Washington, 1958-61; Jt. Secy., the Union Commerce & Industry Ministry, 1961-63; Addl. Secy., Eco. & Defence Co-ordination Min., Feb.-Aug. 1963; served on the Adv. Cttee. of the Eco. & Social Council of the U.N. at New York in March 1963; Addl. Secy., Min. of Fin.: Dept. of Co-ordination, Sept. 1963; Deptt. of Econ. Affairs, 1963-65. *Publications*: *Indian Tariff Policy*; *Devaluation of the Rupee*; *The Gold Problem*; *History of the Indian Tariff*. *Address*: Reserve Bank of India, Bombay 1.

**ADARKAR, Vishnu Namdeo, G. D. Art (Ptg.)**, 1930, F.C.I.A.D., Lond. ("Honoris Causa"), 1947; I.S.A. Award (1962), Padma Shri (1965), J.P., (1966), Art Educationist; Director of Art, Maharashtra State. *b.* Aug. 23, 1908; *Educ.*: Sir J. J. School of Art, Bombay. Pioneer in the field of applied art educ. in India; Artist, L. A. Stronach & Co. Ltd., 1930; Sr. Artist, *The Times of India*, 1932-38; Dy. Dir., Sir J. J. School of Art, 1939-40 and 1942-48; deputed to the U.K. and Europe to study the devpt. of art educ., 1946-47; Hon. Life Fellow, Central Inst. of Art & Design, London ("Honoris Causa"), 1947; Suptd. and Head of the Dept. of Applied Art, Sir J. J. School of Art, 1948-58; Prof., Principal and Dean, Sir J. J. Inst. of Applied Art; first Dir. of Art, Maharashtra Sta e, 1965; Chairman: All India Board of Tech. Studies in Applied Art, Govt. of India; Printing Tech.

Cttee., since 1958; Industrial Design Cttee., 1965; member of several official and non-official orgs. connected with art and art educ. including the philatelic adv. cttee., Govt. of India and the Gen. Council of the Lalit Kala Akademi, New Delhi; designed the 'Raj Mudra' for Maharashtra State, 1960; founder member, 'Kala Nagar Artists' Colony, Bombay. *Publications*: *Art Education*; *Industrial Design*. *Address*: Director's House, School of Art Compound, Dr. D. N. Road, Bombay 1.

**ADHIKAR, Mitradav Mahanta, L.T.**, Rashtrapati Award (1961), Writer. *b.* June 23, 1895; *Educ.*: Cotton Coll., Gauhati; L.T. in 1925. Served in the Educ. Deptt., Assam, as Asstt. Teacher, Supdt. and Head Master, 1915-50; presided over Assam Sahitya Sabha's annual Cfce., at Digboi, 1964; recipient of two prizes from Central Govt. for juvenile literature; initiated as the Adhikar of Letugram Satra, Sarbaibondha, Jorhat, Assam, 1950. *Publications*: *Dhruba*; *Kukuri Kaia*; *Chandrarah*; *Via Viparyaya*; *Mow Mahabharata*; *Geeti Shatadal*; *Jun Juni*; *Vaideti Vijoga*; *Balichalan*, *Prachanna Pandava*; *Cheneha Jari*; *Mohon Bhoga*, etc. *Address*: Letugram Satra, P.O. Jorhat (Assam).

**ADVANI, Pritamdas Bhojraj, M.Sc.** Tech. (Manch.), M.I.E. (India), Consulting Engr. and Industrial Advr.; Dir.: Automobile Products of India Ltd.; J. K. Chemicals Ltd., Gangapur Sugar Mills Ltd., etc.; Chairman, New India Fisheries Ltd.; *b.* May 21, 1891; *Educ.*: Hyderabad, Sind & Manch. Univ. Engr., Metropolitan Vickers in their Manchester Works and Bombay till 1921 and then Mgr., Bombay Region till Aug. 1928; Dir. of Industries, Bombay Govt. 1928-44; Chairman, Board of Dir.s for Tech. Educ. and Industrial Trg., Bombay till Oct. 1944; Chairman, Board of Trustees, V.J.T.I., Bombay, 1938-48; M.L.C., Bombay, 1932-36; on Spl. duty in U.S.A., 1939 in connection with proposal for the establishment of the automobile industry in Bombay; Member: Senate, Bombay Univ., 1931-45; Central Board of Irrigation and Power; Electrical Commr., Govt. of Bombay, 1944-51; Pres., Indian Council of Foreign Trade, 1964-65. *Address*: "OCEANA," Netaji Subhas Road, Bombay.

**ADVANI, Tillamal Menghraj, M.A., LL.B.**, Vice-Chancellor, Jammu and Kashmir Univ., since July 1963. *b.* March 26, 1888; *Educ.*: D. J. Sind Coll., Karachi; Govt. Law Coll., Bombay; Sind Scholar and Dakshina Fellow, D. J. S. Coll., Karachi. Prof. of English: D. A. V. Coll., Lahore, 1912-14; S. P. Coll., Srinagar, March-June 1914; D. S. J. Coll., Karachi, 1914-47; Principal, D. S. J. Coll., Karachi, 1947-48; Founder-Principal, Jal Hind Coll., Bombay, 1948-63; Vice-Chancellor, Bombay Univ., 1957-60; visited Univs. in the U.K., Canada, United States, France, Germany and Switzerland. *Publications*: Articles on literary and academic subjects, and commentaries on many English classics—Carlyle's Heroes, Shakespear's Plays etc. *Address*: Vice-Chancellor, Jammu and Kashmir University, Srinagar Jammu.

**AHMAD, Muzaffar**, Member, Central Cttee. of Communist Party of India and of the Secretariat, West Bengal State Cttee., C.P.I. *b.* 1889; *Educ.*: Noakhali Zilla School and Bangabasi Coll., Calcutta. Member, C.P.I. since its inception, 1921; convicted in Kanpur Communist Conspiracy Case, 1924; convicted in Meerut Communist Conspiracy Case (1929-33) for transportation for life, but reduced to three years' R.I. by Allahabad High Court; detention without trial, 1948-51; Nov. 1962-Sept. 1963; Oct. 30, 1964-May 5, 1966 under D.I.R. *Publications*: *A Treatise on Agrarian Question in India*, *Reminiscences of poet Nasrul Islam in Bengali*; 'Qazi Nasrul



*Islam: Smriti Katha; The Communist Party of India and its Formation Abroad* in Bengali and English; contributes articles to papers. Address: 61, Karaya Road, Calcutta 19.

**AHMAD, Nayer Laiq., M.A., B.Litt., Member,** Union Public Service Commn., since June 1, 1963. b. April 26, 1902; Educ.: Aligarh and New Coll., Oxford. Asstt. Prof. of History, Patna Coll., Patna, 1927-30; Prof. of History, Ismail Yusuf Coll. and Elphinstone Coll., Bombay, 1930-45; Prof. of History and Principal, Gujarat Coll., Ahmedabad, Ismail Yusuf Coll., Bombay and Elphinstone Coll., Bombay, 1945-57; served as Pres., Medieval Indian History Sect. of Indian History Cong.; Chairman, Univs. Coordination Cttee. apptd. by the Bombay Govt.; Fellow, Univs., of Bombay, Poona and Gujarat. Member Maharashtra Public Service Commn., 1957-62; Fellow of the Royal Soc. of Arts. Publications: Papers on Mughal history, art and culture. Address: 9, Teen Murti Lane, New Delhi-11.

**AHMAD, H.E. Mr. Zaiton Ibrahim Bin,** Malaysian High Commn. in India and Ambassador to Nepal. b. May 25, 1921 at Talping, Perak; Educ.: High School, Klang, 1939, attended Raffles Coll., Singapore; graduated from the Univ. of Wales, Cardiff; London School of Economics, 1954-55. Apptd. to the Malay Adm. Service, F.M.S., 1945 and to the Malayan Civil Service, 1952. First Secy., U.K. High Commn., Karachi, 1955; Charge d'Affaires and Counsellor, Embassy of Malaya in Djakarta, 1957; Principal Asstt., Secy. (Political and Information), Min. of Ext. Affairs, Malaya, 1957; Dy. Secy., 1959-62; Malaya Ambassador to the Philippines, 1962-63; attended the Gen. Assembly of the U.N. as a member and advr. to the Malayan Delegation, 1959; member, Prime Minister's goodwill delegation to Viet Nam, 1958, Thailand, 1959 and Canada and U.S.A., 1960; Min. of Ext. Affairs, Malaysia, 1963-64. Address: 143, Sundarnagar, New Delhi-11.

**AHMED, Fakhruddin Ali, B.A. (Cantab.),** Bar-at-Law. Min. for Industrial Development & Company Affairs, Govt. of India, since March 1967. Member, Cong. Wkg. Cttee. and All India Parly. Board, since 1964. b. May 13, 1905; Educ.: Govt. High School and St. Stephen Coll., Delhi; History Tripos, Cambridge Univ., 1927; called to the Bar from the Inner Temple, London, 1928. Enrolled as Advocate, Punjab High Court, 1930 and later of Assam High Court and as a Senior Advocate, Supreme Court of India; member: Indian National Cong., since 1928; Assam P.C.C., its Exec. Cttee. and A.I.C.C., 1937-57; Cong. Wkg. Cttee., 1946-47; courted jail in freedom struggle; M.L.A., Assam, 1937-45; was Min. for Fin. and Revenue in the Bardoloi cabinet; Advocate-Gen., Assam, 1946-52; M.P., Rajya Sabha, 1954-57; leader, Indian Lawyers' delegation to the U.S.S.R., 1955; member, Indian delegation to the U.N. Gen. Assembly, 1957; M.L.A. from Janta constituency, 1957 and 62; Min., 1958-62; Min. for Fin., Assam State, 1962-66. Min. for Irrigation & Power, Govt., of India, Jan. 66-Mar. 67. Address: New Delhi.

**AJWANI, Lalsingh Hazarisingh, M.A., Ellis Scholar and Gangadas Scholar, Sindhi Writer; Principal and Professor of English, D. & H. National and W. A. Science Coll., Bombay. b. July 17, 1899; Educ.: D. J. Coll., Karachi; Bombay Univ.; first class first in B.A. in English, 1919. Professor of English for over 40 years; Chairman, Cttee. of Post-Graduate Teachers in English, Bombay Univ.; Convener, Sindhi Advisory Board, Sahitya Akademi, Delhi. Publications: *Immortal India*; and Sindhi books *Vichar, Umang*, etc. Address: National College, College Road, Bandra, Bombay 50.**

**AKHTAR-UL-IMAN, M.A.,** Cine Writer & Poet. b. Nov. 12, 1915; Educ.: Delhi Coll. & Aligarh Univ. After graduation worked for a year as Editor of a literary magazine;

was a clerk in supply Deptt.; Staff Artist, A.I.R.; became a Cine Writer and Dialogue Writer; wrote short stories too; started writing poetry, 1933; joined Shalimar Pictures, Poona, 1944. Publications: Poems; *Girdab*, 1940; *Tareek Sayyara*, 1946; *Sab Rang*, 1947. *Aab Joo* 1955; *Yaden*, 1963; *Binte-Lamhat* under print. Got Sahitya Akademi Award for *Yaden*, 1963. Address: 2, Hill View, 2nd Floor, 241, Hill Road, Bandra, Bombay 50.

**AKILANDAM, P. V. alias AKILON, Tamil** Novelist and Short Story Writer. b. Feb. 7, 1923; Educ.: Maharajah's Coll., Pudukkottai. Participated in the freedom movement, 1941-44; took to writing; a social worker; attends coll. meetings as a speaker, etc.; broadcasts on radio; literary works are being filmed for the Tamil screen; awarded first prize for his novel by the Tamil Academy; won the 1963 Sahitya Akademi Award for his novel *Venjaiyin Maindhan*. Publications: 30 books; contributes to leading journals in Tamil Nad. Producer, Spoken-word, All-India Radio, Madras. Address: 171, Lloyds Road, Madras 14.

**AL. Valliaapa, Writer of children's books** in Tamil; Member: Cttee. for the devpt. of children's literature; Madras Govt.; Founder, Children's Writers' Assoc., Madras. Pres. Tamil Writers' Assoc. 1966; b. Nov. 7, 1922; Educ.: Pudukkottai, Madras State. Former Editor, *Poonjolai*, a monthly Tamil magazine for children; has been working for the growth of children's literature for the past 24 years; surveyed 'Juvenile Reading habits in Tamil' for the UNESCO; awarded a silver shield by the Vice-President of India, on behalf of Children's Writers' Assoc., 1963. Publications: *Malarum Ullam*, a collection of 135 poems for children; got the Central Govt. award and also the Madras State award 1957; got the Madras State award for his story book for children *Nalla Nanbarkal*, 1955. Biographies: *Periyar Vazhve*, *Chinnanchiru Vayadil*, 1958; Novel: *Manikku Mani*; Poems: *Malarum Ullam* Vol. II; and other 40 books. Address: 10, Vaidyaramier Street, Madras 17.

**ALEXANDER, M. P.,** Chairman, Marine Export Promotion Council of India. b. Feb. 14, 1910; Educ.: M.A., Madras Christian Coll.; B.L., Law Coll., Trivandrum. Joined the Central Govt. Service, 1944; served as Supdt. and Asstt. Collr., Central Excise and Customs; Jt. Chief Collr. of Imports and Exports; Under Secy. and Dy. Secy., Min. of Commerce and Industry, New Delhi; Chairman, Collr Board, 1962-66. Address: World Trade Centre, Mahatma Gandhi Road, Ernakulam 6.

**ALI, J. Sultan,** Exhibition Officer, Lalit Kala Akademi, New Delhi. b. Sept. 12, 1925; Educ.: Govt. School of Arts and Crafts, Madras; 1st Class Diploma in painting, 1945; Textile Inst., Madras, 1946; British Inst. of Photography, Madras, 1st Class Diploma, 1949. Instructor in Painting, Govt. School of Arts and Crafts, Madras, 1947-48; worked with Gemini Film Studio, Madras, 1949-50; Art Master, Rishi Valley School, Andhra Pradesh, 1951-54; awarded President's Gold Plaque for the best exhibit, in the 33rd Annual Art Exhibition by All India Fine Arts & Crafts Soc., New Delhi; won National Award of the Lalit Kala Akademi, 1966; represented India: at the "Art Now From India" exhibition, Commonwealth Art Festival, London, 1965; the IX International Exhibition of Drawings and Engravings, Switzerland, 1966, the 33 Biennale of Venice, 1966. Works exhibited in various museums in India, besides private collections in India and abroad. Address: Lalit Kala Akademi, Rabindra Bhavan, New Delhi 1.

**ALI, Mr. Justice Syed Murtaza Fazl, B.A. (Hons.), B.L.,** Judge, High Court, Jammu and Kashmir State, since April 8, 1958. b. Dec. 20, 1920; Educ.: St. Joseph's Convent, Patna; Patna Univ., Patna; Muslim Univ.,

Aligarh. Enrolled as an Advocate, Patna High Court, Nov. 7, 1944, and Federal Court, Dec. 1949; worked on the panel of lawyers for the State of Bihar in the Patna High Court from 1950; conducted cases on civil, criminal, constitutional and revenue side. Publications: *Ten Years' Questions and Answers of the Patna University on Hindu Law, Mohammadan Law, Contract Act, Torts and Criminal Law*. Address: 2, Silk Factory Road, Srinagar.

**ALI YAVAR JUNG BAHADUR, Dr. Nawab (Mirza Ali Yar Khan), B.A., Hons. (Oxford), Padma Bhushan (1959), Vice-Chancellor, Aligarh Muslim Univ.; member, Univ. Grants Commn., since Feb. 1966, member, standing Cttee., Inter-Uni. Board & Governing Board, School of International Studies. b. Feb. 16, 1905; Educ.: Nizam Coll., Hyderabad; Queen's Coll., Oxford. Dir. of Information; then Secy. to Govt., Constitutional Affairs, and Home, Hyderabad Govt., 1934-45; Vice-Chancellor, Osmania Univ., 1945-46; Min. for Constitutional Affairs, Local Govt., Health and Educ., 1946-47; delegate to U.N., 1946, 1950, 1952, 1953; Dy. Chairman of the Indian Delegation, 1954, 1955, 1956, 1957, 1960; Vice-Chancellor, Osmania Univ., 1948-52; Ambassador to Argentina and Min. Plenipotentiary to Chile, 1952-54; Amb. to Egypt and Min. Plenipotentiary to Lebanon & Libya, 1954-58; Ambassador to Yugoslavia, Greece and Min. Plenipotentiary to Bulgaria, 1958-61; Chairman, U. N. Ad Hoc Cttee. for SUNFED, 1956; Doctor of Laws Honoris Causa, Osmania Univ., 1956; Indian Amb. to France, 1961-64. Publications: *Hyderabad in Retrospect*. Address: Aligarh Muslim University, Aligarh.**

**ALKAZI, Ebrahim Hamed,** Graduate of The Royal Academy of Dramatic Arts, London, Sangeet Natak Akademi Award as Best Producer of the year (1962), Dir., National School of Drama and Asian Theatre Inst., since 1962; awarded Padma Shri, 1966 for his contribution to the theatre. b. Oct. 18, 1925; Educ.: The Royal Academy of Dramatic Arts, London. Associate, Drama Board of Great Britain; awarded the Starred Certificate for outstanding work, by the British Drama League; won the B.B.C. Broadcasting Award, 1950; First Pres., Theatre Group, Bombay, 1947; Founder, Theatre Unit's School of Dramatic Arts, Bombay; founder-Editor, Theatre Unit Bulletin; Principal, Natya Academy, Bombay, till June 1962. Address: Rabindra Bhavan, Ferozeshah Road, New Delhi-1.

**ALVA, Joachim, B.A., LL.B., Ex-M.P. (Lok Sabha),** Journalist and Advocate, b. Jan. 21, 1907, at Udipi, Mysore; Educ.: St. Aloysius Coll., Mangalore; St. Xavier's, Elphinstone and Law Colls., Bombay. Twice imprisoned in freedom movement suffering 3 years in jail; started *FORUM*, 1943; member, Stg. Cttee., A.I.N.E.C.; Sheriff of Bombay, 1949; twice member, Exec. Cttee., Congress Parly. Party; Member, A.I.C.C., 1956-57 and 1958; member, Parly. Consultative Cttees. of Ext. Affairs, Defence, Fin. and Atomic Energy, 1957-61; member: Prov. Parliament of India, 1950-52; First Business Adv. Cttee., Air India Intl.; Estimates Cttee., 1962-64; Court of the Instt. of Sc.; IMMTS "Dufferin" Cttee. and Merchant Navy Board. M.P. 1952-67, Kanara Constituency, Mysore State; travelled extensively abroad. Publications: *Men and Supermen of Hindustan* (Thackers). Permanent Address: "Forum," Bombay.

**ALVA, Smt. Violet, M.A., LL.B.,** Dy. Chairman, Rajya Sabha since April 19, 1962 (first woman to be elected as Dy. Chairman of the Rajya Sabha). b. April 24, 1908; Educ.: St. Xavier's Coll.; Govt. Law Coll., Bombay. Jailed in the "Quit India" Campaign 1943; M.L.C., Bombay, 1947-52; first woman member elected to the Stg. Cttee. of the A.I.N.E.C., 1952; elected to the Exec. Cttee. of the Cong. Party in Parliament, 1953, 1955; member: Public Accounts Cttee., Indian



Parliament, 1954-56; Vice-President, Intl. Federation of Women Lawyers of India, from 1953; Pres., Intl. Fed. of Women Lawyers, 1962; represented India in U.N. seminars, 1961, 1962; member, Indian Parly. Delegation to: Nigeria 1963; U.S.A., 1964; W. Germany, U. K. and Philippines 1965; Australia 1965; also visited Japan; Dy. Min. for Home Affairs, Govt. of India, 1957-62; Pres.: Y.W.C.A. of India, 1964; Business and Professional Women's Club, Delhi, 1964. Address: 3, Asoka Road, New Delhi.

**AMERASINGHE, \*H.E. Mr. Hamilton Shirley**, B.A. (Hons.) (Lond.), High Commr. for Ceylon in India, since Sept. 1963. b. March 18, 1913; Educ.: Royal Coll., Colombo; Ceylon Univ. Coll. Joined the Ceylon Civil Service, Jan. 1937; Secy. to the Min. of Health under the Donoughmore Constitution, 1941-46; Resident Mgr., Gal Oya Devpt. Board, 1950-52, Counsellor, Embassy of Ceylon, Washington D.C., 1953-55; Delegate to the Fifth Cttee., U.N. Gen. Assembly, 1957; Permanent Secy., Min. of Nationalised Services and Road Transport, and Chairman, Port (Cargo) Corp., Colombo, Sept. 1958; Secy. to the Treasury, 1961-63; Permanent Secy. to the Min. of Fin., Member, Monetary Board and Alternate Governor for Ceylon, I. B. R. D., June 1961. Address: 25/39, Kautilya Marg, New Delhi.

**AMIN, Ramanbhai B.**, Business man; Pres., F.I.C.C. & I., 1966-67; Chairman, Alembic Group of Industries. b. May 19, 1913 at Baroda; Educ.: Course in Mechanical Engg. in Germany. Joined Alembic, the family concern, 1934; started the Jyoti Ltd. and the Alembic Antibiotic Plant without any foreign collaboration; connected with many commercial organisations; has served on tech., educnl., devlpt. and civic cttees. in Baroda; is Chairman, Alembic Chemical Works Co. Ltd., Alembic Glass Industries Ltd., Baroda Industrial Corp., Devpt. Ltd., Shreno Ltd., Baroda, and Alembic Distributors Ltd., Bombay; Vice-Chairman, Baroda Dist. Industrial Co-op. Bank Ltd., Baroda; Dir.: Gujarat State Fertilizers Co. Ltd., Shri Sayaji Prakashan Ltd., New Great Ins. Co. of India Ltd., Tensile Steel Ltd., Baroda; Gujarat Machinery Mfrs. Ltd., Karamsad and Central Pulp Mills Ltd., Poona; Pres., Gujarat Flying Club; member, Exec. Cttee., All India Assoc. of Industries, Bombay and Fed. of Gujarat Mills & Industries, Baroda. Address: Alembic Chemical Works Co. Ltd., Alembic Road, Baroda 3.

**ANAND, Dev**, B.A. (Hons. in English), Film Actor and Producer. b. Sept. 26, 1924; Educ.: B.A. Govt. Coll., Lahore. Started acting in movies, 1946; acted in *Baazi*, *Taxi Driver*, *Pocket Maar*, *C.I.D.*, *Teen Devian*, *Tere Gharke Samne*, *Hum Dono*, etc.; won the Filmfare award for best acting (*Kala Pani*) 1958; and (*Guide*) 1966; best picture award for (*Guide*) 1966; now produces his own movies as well; the latest movie is *Guide*, the English version of which was made in collaboration with Pearl S. Buck of the U.S.A., & released in America; is now producing and acting in *Jewel Thief*. Address: 2, Iris Park, Juhu, Bombay.

**ANAND, Mulk Raj**, B.A. (Hon.), Ph.D., Padma Bhushan (1967), Author, Novelist and Critic; Editor, *Marg* Magazine. b. Dec. 12, 1905; Educ.: Punjab, London and Cambridge Universities. Sometime Tagore Prof. of Art and Literature, Chandigarh Univ., Punjab; Editor of various magazines; visiting Prof. of Art, Indian Institute of Advanced Study, Simla; member, Sahitya Akademi; Chairman, Lalit Kala Akademi, 1966-71. Publications: *Seven Summers*, *The Big Heart*, *The Sword and the Sickle*, *Across The Black Waters*, *The Village*, *Two Leaves And A Bud*, *Coolie*, *Untouchable*, *Apology for Heroism*, *Lines Written to an Indian Air*, *Hindu View of Art*, *Persian Painting*, etc. Address: 25, Cuffe Parade, Colaba, Bombay.

**ANASUYA DEVI, Smt. Avasaraala**, B.A., Musician and Cine Music Dir. b. May 12, 1923; Educ.: P. R. Coll., Kakinada. Gives public

concerts of lyric and folk music from the A.I.R. since 1938; and records in H.M.V. and Columbia; music director: the Canarese picture, 'Mahatma Kabir' and other pictures in South Indian languages and Hindi; member: Sangeet Natak Akademy, Andhra Pradesh, 1958-63; Central Audition Board for Sugam Sangeet, Madras, Vijayawada and Hyderabad; a pioneer music composer with spl. emphasis on light and folk music of Andhra; started composing light classic and folk tunes early in life; gave lyric and folk music concerts at Rashtrapathi Bhavan, 1953; UNESCO Seminar, New Delhi, 1956; Tata's Diamond Jubilee Celebrations, Jamshedpur, 1958; Inauguration of Andhra Pradesh, Hyderabad, 1956, etc. Address: 32, Raman Street, T. Nagar, Madras 17.

**ANDERSON, George Lloyd**, B.A., Mg. Dir., Firestone Tyre & Rubber Co. of India Pvt. Ltd., since July 1959. b. Jan. 12, 1908; Educ.: Miami Univ., Oxford, Ohio, U.S.A.; B.A., June 1928. At Firestone Plants in Akron, Ohio, U.S.A., Wkg. in various deptts. securing broad background and comprehensive knowledge of Firestone products, 1928-31; engaged in setting up Mfg. processes, Firestone: Buenos Aires, Argentina, 1931-32; Bilbao, Spain, 1933-34; Basle, Switzerland 1935-39; Production Mgr., Firestone, Bombay, 1940-Oct. 1945; Plant Dir. Firestone, Bombay, Nov. 1945 to June 1959; Pres., I.R.T.D.A. Address: Marble Arch, Pedder Road, Bombay 26.

**ANEY, Dr. Madhao Shrihari**, B.A., B.L., Ex-Governor of Bihar. b. Aug. 29, 1880; Educ.: Morris Coll., Nagpur. Joined Bar 1908 at Yeotmal; Vice-Pres., Indian Home Rule League; Pres., Berar P.C.C., 1921-30; joined C.D. Movement; Ag. Pres., Indian National Congress, 1933; M.L.A. for Berar, 1924-26, 1927-30 and 1935; member, Cong. Wkg. Cttee., 1924-25 and 1931-34; member, Nehru Cttee.; Vice-Pres., Responsivist Party; Gen. Secy., Cong. Nationalist Assembly Party, 1935; member, Viceroy's Exec. Council (Indians Overseas), 1941-43; Rep. of the Govt. of India in Ceylon, Aug. 1943-July 1947; Member, Constituent Assembly of India, July 1947-Jan. 1948; Governor of Bihar, 1948-June 1952; M.P., Lok Sabha, 1959-66. Publications: Collection of writings and speeches in Marathi and English. Address: C/o A. S. Bobde, Advocate, Civil Lines, Nagpur 1.

**ANGAMI, Jasokie**, Minister for Forests, Transport, Excise & Electricity, Nagaland. b. 1927; Educ.: Matriculated from Kohima High School, 1948; B.Sc. from St. Edmund's Coll., Shillong, 1952. Went underground in the Naga independence movement, 1953; was Publicity Officer and Ag. Secy., Naga National Council; broke away from Phizo on the question of violence and organised the Naga People's Convention which demanded separation from Assam and the formation of Naga Hills Tuensang Area, 1957; Secy., Naga delegation to New Delhi to discuss the formation of Nagaland with Mr. Nehru, Oct. 1960; was Gen. Secy., N.P.C. till the formation of the State of Nagaland; Exec. Councillor in Charge of Medical & Public Health, Excise, Forests, Jails, Commerce & Industry, 1961-63. Address: Kohima.

**ANGAMI, T. N.**, Chief Minister, Nagaland, since Aug. 1966. b. in Jotsoma village near Kohima. Has been closely associated with social and political activities from 1946; is an active member in the political life of Nagaland from 1950; was an Exec. member of the Naga National Council; broke away from it in 1955 on the question of violence, and helped the formation of the Naga People's Convention; member: Select Cttee. since the inception of Naga People's Convention, 1957; Wkg. Cttee. of N.P.C.; Chairman, Interim Body, Nagaland, 1961-63; Speaker, Leg. Assembly, Nagaland, Feb. 1964-Aug. 1966. Address: Kohima.

**ANNADURAI, Conjeevaram Natarajan**, M.A. (Econ. & Politics), Chief Minister, Madras, since March 6, 1967. b. Sept. 15, 1909; Educ.: Conjeevaram and Pachaiappa's Coll., Madras. After taking M.A. degree, plunged into Justice Party politics; was Sub-editor, the *Justice* founded by the late Dr. T. M. Nair; arrested by the first Rajaji Ministry for participating in the anti-Hindi campaigns; started his own weekly the *Dravidanadu*, 1942; was editor, *Viduthalai*; was editing the Tamil weekly *Kanchi* till March 1967; started the English weekly *Homeland*, 1957; founded another weekly *Homerule*; left Dravida Kazhagam due to difference of opinion with Periyar and started Dravida Munnetra Kazhagam, Sept. 15, 1949; elected to the Rajya Sabha, 1962; elected M.L.A., Madras from Kancheepuram Assembly Constituency and also to the Lok Sabha, 1967; elected leader of the D.M.K. Leg. Party, March 6, 1967; courted jail seven times during his public life; served for a brief period as an Assistant in Conjeevaram municipality and then as a teacher; is a journalist, social reformer and a prolific writer. Publications: several books including plays, stories and political articles; has also written scripts for several Tamil films. Address: Avenue Road, Nungambakkam, Madras 34; Fort St. George, Madras 9.

**ANSARI, Abdul Qaiyum**, Ex-Minister for Public Health and Jails, Bihar Govt., b. July 1, 1905, at Dehri-on-Sone (Bihar); Educ.: Sasaram and Dehri High Schools; Aligarh Muslim, Calcutta and Allahabad Univs. Joined the N. C. Movement, 1920; a staunch Congressman; often imprisoned during the freedom struggle; started the Momin Movement to counteract the communal propaganda and the Two-Nation theory of the Muslim League, 1938; Pres.: Bihar Provincial Jamiat-ul-Momineen, 1938-47; All-India Momin Cfee., since 1947; M.L.A. (Congress), Bihar, 1946, 1952 and 1962; Chairman: Zoological Soc. of Bihar, etc. Member: A.I. C.C.; Cong. Wkg. Cttee., 1959-61; Pres.: Indian Muslim Youth Kashmir Front; Min. for Public Works, Bihar Govt., 1946-52 and 1955-57; Editor, *Tahzeeb*, an Urdu Monthly; Fellow, Patna Univ., 1940-51; Pres., B.P.C.C., till 1963; Minister for Public Health, Bihar, 1963-67. Address: Patna and Dehri-on-Sone.

**ANTHONY, Frank Reginald**, B.A. Nagpur Univ., M.P., Pres., Anglo-Indian Assoc.; member: National Defence Council; National Integration Council, 1961; Viceroy's Gold Medallist in English, Univ. Prizeman and Scholar, Bar-at-Law of the Inner Temple, London. b. Sept. 25, 1908; Educ.: Nagpur Univ. and London. Leading criminal lawyer in M.P.; Pres.-in-Chief, Anglo-Indian and Domiciled European Assoc., All-India and Burma, 1942; nominated to the Central Leg., 1942 and 1946; member: Viceroy's National Defence Council; Sapru Conciliation Cttee., etc.; Central Pay Commn.; one of India's Delegates to the U.N. Gen. Assembly, 1946; India's rep. to the Commonwealth Parly. Cfee., 1948; member, Constituent Assembly of India; nominated to the Lok Sabha under Spl. provision in the Constitution for the Anglo-Indian Community since 1952; represented India at the Commonwealth Parly. Cfee., New Delhi, Dec. 1957; advocate, Supreme Court and Circuit Bench, Punjab High Court, New Delhi. Address: New Delhi and Jabalpur.

**AO, P. Shila**, Ex-Chief Minister Nagaland. b. Dec. 15, 1916; Educ.: Matriculation in first divn., 1939; B.A., B.T., St. Edmund's Coll., Shillong. Served in the Euec. Deptt. for six years; Assam Civil Service, 1951-60; took prominent part in the social welfare and political activities in Nagaland; an organiser of the Naga National Council formed at Wokha in June 1946; resigned from service and got elected as a member, Interim Body from Ao area; and subsequently to the Exec. Council; Chief Exec. Councillor, Nagaland, Mar. 16, 1961-Nov. 30, 1963, Chief Minister, Dec. 1, 1963-Aug. 11, 1966. Address: Kohima.



**APPARAO, Dr. Ponanagi Sri Rama, M.A.,** Ph.D., National Award, 1961, Telugu Writer. b. July 21, 1923; *Educ.*: M.A., Andhra Univ.; Ph.D., Osmania Univ. Lecturer in Telugu in various colls., 1946-56; Govt. of India Research Scholar in Humanities, Osmania Univ., 1956-59; Officer-in-Charge of Nationalisation of Text-books in Andhra Pradesh, since 1959; Hon. Secy., A. P. Sangeeta Nataka Akademi, since 1961; recipient, National Award for his publication *Natya Sastramu*, 1961; Cultural Relations Officer, Govt. of A.P., since April, 1966. *Publications*: *Tajmahal*, Drama, 1942; *Venuvu*, Poetic Prose, 1952; *Vinoabharati*, Novel, 1946; *Natya Sastramu*, 1959. *Address*: Cultural Relations Officer, Education Secretariat, Hyderabad 22.

**ARDELEANU, H.E. Mr. Aurel,** Amb. Extraordinary and Plenipotentiary of the Socialist Republic of Romania to India, since March 3, 1964. b. Sept. 27, 1924 in the village of Teaca, Cluj Region, Romania. *Educ.*: The Bucharest Inst. for Economic Sciences and Ling.; graduated in 1948. Dir. in the Council of Min., 1953; Dy. Min., of Home Trade, 1954; Vice Chairman, Central Union of Co-op., 1955; Secy., Central Cttee. of Trade Unions, 1960; Dir. Ext. Affairs Min., 1963; awarded different Orders and Medals by the Govt. *Address*: Embassy of the Socialist Republic of Romania, New Delhi.

**ARMSTRONG, James Ridley, A.M.I. Mech. E.,** Mg. Dir., Richardson & Cruddas Ltd., Engrs., Bombay and Madras, since 1962. b. June 18, 1902, at Bosworth, Leicestershire; *Educ.*: Latymer Upper School, London; Kilmarnock Tech. Coll., Ayrshire; Heriot Watt Coll., Edinburgh; Pupil with The Kilmarnock Engg. Co. Ltd., Scotland. Joined Richardson & Cruddas and came to India, 1925; became Partner, 1946; and Gen. Mgr., 1950; Officer in Royal Artillery A.F. (I), 1926-30; Officer Commanding, Royal Engrs. A.F. (I), Bombay, 1939-40. *Address*: —Res.: B-3, Mafatlal Park, Warden Road, Bombay 26; *Office*: Byculla Ironworks, Bombay 8.

**ATAL, H.E. Raja Jai Kumar, B.A. (Hons.)** (Oxon), I.C.S., Indian Amb. to Yugoslavia. b. Jan. 19, 1914; *Educ.*: Winchester and Balliol Coll., Oxford-B.A. (Hons.), 1935. Joined I.C.S., 1936; Dy. Commr., Yeotmal, Nagpur, Chanda and Saugor, 1937-46; Pvt. Secy. to Maulana Abul Kalam Azad, Dy. Secy., Ministries of Educ., Transport and Ext. Affairs, 1946-48; Dy. High Commr. to Pakistan, 1952-54; Min., Indian Embassy, Washington, 1954-56; Jt. Secy., Min. of Ext. Affairs, 1957-59; Amb.: Turkey, 1959-63; Ethiopia, 1963-66. *Address*: Atal Ban, Jaipur; C/o Ministry of External Affairs, New Delhi.

**ATREYA, Dr. Bhikhan Lal, M.A., D., Litt.** Padma Bhushan, 1957, Knight Commander, Italy, 1949, etc., Philosopher and writer; Editor: *Darshana International*; *Psychics International*; *Garvesha* (Hindi); Hon. Director, Child Guidance Clinic, Varanasi; Pres.: Indian Philosophical Cong., 1958; Akhil Bharatiya Darshan Parishad. b. Sept. 24, 1897; *Educ.*: Schooling at Saharanpur and Muzaffarnagar; Banaras Hindu Univ.; Coll. of Sc., Calcutta Univ. Prof., Banaras Hindu Univ., 1923-57; Birla Visiting Prof. of Indian Philosophy and Culture to Thailand, China, Japan, U.S.A., England, Poland, etc., 1948, 1951, 1952, 1954 and 1964; member: Editorial Board, Great English Indian Dictionary, etc.; Hon. Dir., Intl. Research Inst., Dehra Dun. *Publications*: *Shankar's Doctrine of Maya* (Hindi); *The Philosophy of Yogavasiṣṭha*; *Sri Vasistha Darshanam* (Sanskrit); *The Spirit of Indian Culture*, *An Intro. to Parapsychology*, *A History of Indian Ethics* (Hindi), etc. *Address*: Atreya Niwas, P.O. Hindu University, Varanasi 5.

**AUNG SAN, Her Excellency Madam (Maha Thiri Thudamma Daw Khin Kyi),** Ambassador Extraordinary and Plenipotentiary of Burma to India, concurrently Ambassador to Nepal, since July 1960. b. April 16, 1911. Member of Parliament, 1947-48; Chief Commr., Burma Girl Guides Assoc.; Dir., Junior Red Cross; Lady Supdt.-in-Chief, Burma Ambulance Brigade; Vice-Pres., Ramakrishna Mission Hospital & Library; elected Pres., W.H.O. Regional Conference, Colombo, 1950; led Burmese delegation to World Health Assembly, Geneva, 1950, 1951 & 1952; has travelled widely in Europe, the Far East and the U.S.A.; awarded Mother of Burma from U.S.A., 1950; Maha Thiri Thudamma, 1951; Yugoslav Star Class II, 1955; Noble Order of the Crown of Thailand Class II, 1955. *Address*: Burma House, 24, Akbar Road, New Delhi.

**AYYANGAR, M. Ananthasayanam, Law** Graduate, Madras Univ., Governor of Bihar, since May 12, 1962. b. Feb. 4, 1891 at Thiruchanoor, Chittoor Dist.; *Educ.*: Devasthanam High School, Tirupati; Pachaiappa's Coll. and Law Coll., Madras. Member: Fiscal Commn.; Constituent Assembly of India; Steering Cttee. of Indian Constituent Assembly; Andhra P.C.C.; A.I.C.C.; Central Adv. Board of Educ.; Dy. Speaker, Lok Sabha; Chairman: Criminal Tribes Enq. Cttee.; Estimates Cttee., 1950-54; Pres.; Harijan Sevak Sangh; D.C.C., Chittoor; Secy., Constitution Club; often jailed during freedom movement; Doctorate of Literature, Sri Vaishnava Theological Univ., Brindavan, 1954; Speaker, May 1957. Chairman, Commonwealth Parly. Assoc., 1957; Leader, Indian Parly. delegation to East European Countries, 1959; Speaker, Lok Sabha, 1956-62. *Publications*: *Kamala Lectures on Culture and Indian Religious Thought*; *Our Parliament*. *Address*: Tirupati, Andhra; Raj Bhavan, Patna.

**AYYAR, Mr. Justice H. Anantanarayana, B.A., I.C.S.,** Judge, High Court, Andhra Pradesh, since Feb. 9, 1962. b. Nov. 24, 1907; *Educ.*: Tirunelveli; Tiruchirappalli, London. Joined I.C.S., 1931; Asstt. Collr. in Madras State, Dec. 1932; Sub-Collr., Sept. 1934-Oct. 1936; prepared the Adm. Report of Madras Presidency, Oct. 1936-Jan. 1937; Sub-Collr., 1937-41; took judicial training, 1941-43; Dist. Judge, 1943-53; allotted to Andhra State, in the partition of Madras, 1953; Chairman, Tribunal for Disciplinary Proceedings for Andhra, 1953-55; Secy. to Govt., A.P. Law Dept., Hyderabad, 1957-58; Chief Judge, City Civil Court, Hyderabad, 1959; Addl. Judge, High Court, Andhra Pradesh, Hyderabad, 1959-62. *Address*: Hyderabad.

**AZAD, Brajnandan, B.A. (Hons.),** Editor. *The Indian Nation* (daily), Patna. b. April; 1908. Was a Reporter, *The Searchlight*, 1931; 35; Sub-editor, *The Searchlight*, 1935-37; Reporter, *The Indian Nation*, 1937-44; Editor, *The Aryavarta* (Hindi daily), 1944-48; London Correspondent of *The Indian Nation* & *The Aryavarta*, 1948-50; Editor, *The Indian Nation Evening News*, 1951-53; Jt. Editor, *The Indian Nation*, 1953-64; Associate Editor, *The Indian Nation*, 1965; has visited Western Europe, U.S.A., Japan, Burma etc. *Address*: Muzharul Haque Path, Patna.

**BACHAWAT, Mr. Justice Ranadhir Singh, M.A., Cal., LL.B.,** Lond., Judge, Supreme Court of India since 1964. *Educ.*: St. Xavier's Coll., Calcutta; B.A., 1925; was awarded the Jubilee Post Graduate Scholarship, Bankim Behari Sen Gold Medal and Sarveswara Purna Chandra Gold Medal; M.A., Calcutta Univ., 1927; LL.B., London Univ., 1931; called to the Bar by the Inner Temple, 1931. Enrolled as an Advocate, Calcutta High Court, 1931. Judge, Calcutta High Court, 1950-64. *Address*: Supreme Court, New Delhi.

**BACHCHAN, Harbans Rai, M.A. (Alld.), Ph.D.,** (Cantab.), Member, Rajya Sabha, Indian Parliament, since April, 1966. b. Nov. 27, 1907; *Educ.*: Allahabad, Banaras and Cambridge. Lecturer, English Dept., Alld. Univ., 1941-52; research student at the Cambridge Univ., U.K., 1952-54. Producer, A.I.R., Allahabad, 1955; Officer on Special Duty (Hindi), External Affairs Ministry, New Delhi, 1955-65; a popular Hindi poet; has been writing since 1929. *Publications*: About 40, *Madhusala*, 1935; *Nishanimantran*, 1939; *Bengal Ka Kal*, 1943; *Khadi Ke Phul*, 1948 (Tributes to Mahatma Gandhi); *Jan-Gita* (Translation of *The Gita* into Avadhi—Doha-Chaupai, *Tri-bhanga* (Collection of Poems), 1961; *Nai-Purane Jharokhe* (Collection of essays), 1962; *Char Kheme Chaunsath Khunte* (Collection of Poems), 1963; *Do Chottanen*, 1965; *W. B. Yeats & Occultism* (English), 1965; etc. *Address*: 13, Willingdon Crescent, New Delhi 11.

**BAHADUR, Raj,** Ex-Minister of State in the Ministry of Information and Broadcasting, b. Aug. 21, 1912; *Educ.*: Bharatpur; Maharaja's High School and Maharaja's Coll., Jaipur; Agra Coll. and St. John's Coll., Agra. Member, Central Adv. Cttee., Bharatpur State, 1939-42; Mun. Commr., Bharatpur, 1941-42; participated in the Quit India Movement; imprisoned 1945, 46 and 47; elected to State Rep. Assembly, 1943; Secy., Assembly, Praja Parishad Party, 1943-48; Gen. Secy., Matsya Union Cong. Cttee., 1948-49; Vice-Pres., Bharatpur D.C.C.; Pres., Bar Assoc., Bharatpur, 1948-51; visited Turkey, Italy, France, Switzerland, U. K., Netherlands, U.S.A., Venezuela, Trinidad, W. Germany, Japan, Thailand and Malaya; elected to the Indian Constituent Assembly, 1948; Secy., Cong. Party in Parliament, 1951-52; member: Rajasthan P.C.C.; A.I.C.C.; Dy. Min. for Communications, 1951-56; Leader, I.C.A.O. Assembly at Trinidad, 1956; Min. in the Min. of Communications, Feb. 14-Dec. 7, 1956; Min. for Communications, 1956-57; Min. of State in the Min. of Transport and Communications, 1957-62; M.P. 1952-66; Min. for Shipping, 1962-63; Min. of Transport, Govt. of India, 1964-66. *Address*: C/o 9, Akbar Road, New Delhi.

**BAHADUR, Mr. Justice Shamsher, B.A.** Hon., Econ., Punjab, M.A., History, Punjab, B.Sc. Econ., Hons., Lond., Barrister-at-Law, Judge, Punjab High Court, since May 11, 1959. b. Nov. 15, 1907; *Educ.*: Central Model School, Lahore; Govt. Coll., Lahore; London School of Economics, London; Middle Temple, London. A Univ. Prof. in Political Science; started practice in the Punjab High Court, 1933; was Reader of Law, Law Coll., and Hailey Coll. of Commerce, Lahore; on partition shifted to the East Punjab High Court, Simla; Dist. and Sessions Judge, Punjab, 1950; Chairman, Election Tribunals, 1952-53; Legal Remembrancer and Secy. to Punjab Govt., 1954-59. *Address*: Judge, Punjab High Court, Chandigarh.

**BAHADUR Singh, Indarjit, M.A. Oxon., B.Litt.,** Oxon., Bar-at-Law, Indian Ambassador to Italy since March 1967. b. June 12, 1914; *Educ.*: Queen's Royal Coll., Trinidad; Oxford Univ. Broadcasting Officer, British Embassy, Chungking, 1944-45; Indian Consul, Shanghai, 1946-47; First Secy., Indian Embassy, Tokyo, 1947-48. India's Rep. on the U.N. Temporary Commn. on Korea, 1948; Dy. Secy., Ext. Affairs Min., 1949-50; First Secy., and later Counsellor, Indian Embassy, Washington, 1950-53; Indian Consul Gen., New York; Pol. Adv. to the Indian Chairman of the Neutral Nations' Repatriation Commission in Korea 1953-54; Counsellor and Charge D'Affaires, Indian Embassy, Peking, 1955-58; Commr. for the Govt. of India in British East Africa, the Federation of Rhodesia and Nyasaland and Consul Gen. of India in the Belgian Congo and Ruanda Urundi, 1958-61; Political Officer, Sikkim and Bhutan, 1961-63. Jt. Secy. Min. of Ext. Affairs, 1964-67. *Address*: C/o The Ministry of External Affairs, New Delhi.



**BAIG, Abbas Ali, P.P.E. Oxon., Cricketer.** b. March 19, 1939; *Educ.*: Osmania Univ., Felsham House, Suffolk and Univ. Coll., Oxford. Captained Hyderabad Schools side in cricket, 1954; made his debut in Ranji Trophy when 15, scored 105 runs against Mysore in the 2nd match, 1955, went to England, 1956; joined Oxford, 1959; holds Oxford records for highest aggregate on Parks ground, 5th wicket partnership and highest individual score since war; scored centuries against Lancashire and Yorkshire in a week; joined the Indian touring team and scored centuries in 1st match against Middlesex and his first test match, for which got visitor's award: six centuries in 1959 and over 1,000 runs in 1959-61. Capped by Somerset, 1960. Has played against England, Australia, Pakistan and Ceylon; toured W. Indies with Swanton's team and Africa, Greece and Far East with Roberts Commonwealth XI; In 1966: scored 3 centuries in 1st matches and almost 1,000 runs; is Manager, Sales Office, Hindustan Ferodo Ltd. *Address*: 133, C. C. I. Chambers, Bombay 1.

**BAJAJ, Karnalnayan, Economics Tripos PT. I, Cambridge Univ., Hindi Visharad, Prayag, M.P., business man and industrialist.** b. Jan. 23, 1915; *Educ.*: Sabarmati Ashram, Gujarat Vidyapeeth, Ahmedabad, Satyagraha Ashram, Wardha, under Mahatma Gandhi and Acharya Vinoba Bhave; Colombo and Cambridge Univ., England. Chairman and Mg. Dir., Bachhraj & Co. Ltd.; Chairman: Punjab National Bank Ltd.; Mukand Iron & Steel Works Ltd.; Bajaj Electricals Ltd.; Bajaj Auto Ltd.; Dir.: several sugar, cement, banking and ins. companies, etc.; Trustee and member, Exc. Cttee., Gandhi Smarak Nidhi, etc.; Pres., Employers' Assoc. of Rajasthan; Mg. Cttee. Member: Rajasthan Chamber of Commerce and Industry, several educ., social and cultural instts. and assoc.; Chairman, Jannalal Bajaj Seva Trust and Shiksha Mandal, Wardha; a Congress M.P., Lok Sabha, Wardha Constituency, since 1957; Treasurer, Indian Parly. Group. *Address*: 51, Mahatma Gandhi Road, Bombay 1.

**BAKER, H. E. Mr. Maurice, High Commissioner of the Republic of Singapore to India.** b. at Alor Star, Kedah (W. Malaysia), 1920; *Educ.*: Graduated from Raffles Coll., Singapore and King's Coll., London; holds Cert. of Edn. from Inst. of Edn., London. Started academic career, 1946; became Director and Head of the Deptt. of Extra Mural Studies, Univ. of Singapore, 1964; has held chairmanship of several public orgns. such as National Theatre Trust, Adult Edn. Board, etc.; Pres., Academic Staff Assoc., Univ. of Singapore, since 1964. *Address*: High Commission of the Republic of Singapore, New Delhi.

**BAKSHI, Ghulam Mohammed, M.L.A. (Jammu & Kashmir), Ex-Prime Minister, Jammu and Kashmir.** b. July 21, 1907. Began life as a school teacher; served with the Local Branch of the All India Spinners Assoc.; was imprisoned four times during the freedom movement in the State; jailed for 16 months, 1934; worked underground during the movement for Responsible Govt. in Kashmir, 1938; took a prominent part in mobilising Indian opinion from outside the State during the "Quit Kashmir" movement; organised the Peace Brigades and Border Scouts in Kashmir and Jammu during the tribal raids of 1947; Dy. Prime Minister in charge of Police, Militia, Transport, Supplies and P.W.D., Emporia in the Sheikh Abdulla Cabinet till Aug. 8, 1953; re-elected Leader, National Conference Parly. Party, after the General Elections in the State, 1957 and 1962; Prime Minister, J. & K. State, 1953-63; resigned under the "Kamaraj Plan" for Party Work, Sept. 1963; arrested and detained under D.I.R. on Sept. 22, 1964; released on health grounds, Dec. 1964; elected M.L.A., J. & K., on National Conference ticket, Feb. 1967. *Address*: Srinagar

**BALAMANI Amma, Smt. N., Writer.** b. July 19, 1909; *Educ.*: Privately. Literary career: awarded 'Sahitya Nipuna' Medal instituted by the Maharaja of Cochin, Feb. 1963. Won the Kerala Sahitya Academy award, 1964 and Central Sahitya Academy award, 1966, for the book, *Muthassi*. *Publications*: *Mother* and 15 books of poems. *Address*: C/o Mathrubhumi, Calicut, Kerala.

**BALIGA, B. S. D., General Manager, Central Railway, since March 1, 1967.** b. Sept. 29, 1914. Joined the East Indian Rly. as Asstt. Bridge Engineer, May 1937; worked in several responsible capacities such as Exec. Engineer, Officer on Special Duty (Regrouping) and Dy. Chief Engineer, Ganga Bridge Project; Divisional Supdt., 1958-59; visited the United Kingdom and France under U.N. Fellowship for the study of bridge engineering and modern railway track; appointed Engineer-in-Chief, North East Frontier Rly., March 20, 1959; later became Chief Engineer, D. B. K. Rly. Projects; Director, Research, Designs and Standards Organisation, 1962; Chief Engineer (Construction), Eastern Railway, 1962-65; Director, Civil Engineering, Railway Board, 1965-67. *Address*: General Manager, Central Railway, Bombay 1.

**BALIGA, B. Vaikunta, B.A., B.L., Speaker, Mysore Leg. Assembly, since March 15, 1962.** b. April 10, 1895 at Bantwal; *Educ.*: Basel Evangelical Mission School and St. Aloysius Coll., Mangalore; Pachappa's Coll., Madras; won MacDonald Gold Medal for 1916-17; Law Coll., Madras. Set up practice in Mangalore; Dir., Canara Banking Corp. Ltd., 1926-57; was Chairman, Board of Directors, Canara Mutual Assurance Co. Ltd., till it was nationalised; Pres., Academy of General Edn. at Manipal; Hon. Life Member, Canara Chamber of Commerce; Pres. of the Chamber for one year; Chairman, Board of Directors, General Investment Trust Ltd. and the Pres., Deenabandhu Seva Sangha, Mangalore; member of the Dist. Board and the Leader of the Congress Party, 1942; elected M.L.A., Madras, from Panemangalore Constituency, 1952; was member, Hospital Advisory Cttee., Mangalore; a member of the Development Board of S. Canara; elected M.L.A., Mysore from Mangalore 1 Constituency, 1957; Min. for Labour and Legal Affairs, Mysore, 1957-58; Min. for Law and Labour, 1961-62; re-elected from Belthangadi constituency, 1962 & 1967. *Address*: Speaker, Mysore Leg. Assembly, Vidhan Soudha, Bangalore 1.

**BALIGA, Bantval Vittal, B.A., D.I.I.Sc. E.T., D.I.I.Sc., Commn., Member Brit. I.R.E., Sr. Mem. I.R.E., Fellow, I.T.E., Mg. Dir., Bharat Electronics Ltd., Bangalore.** b. June 13, 1909; *Educ.*: Madras Christian Coll., Madras; Indian Inst. of Sc., Bangalore. Installation Engr., A.I.R., 1937-39; Asstt. Chief Engr., A.I.R., 1939-45; Chief Engr., A.I.R., 1945-52; Wireless Advr., Min. of Communications, 1952-53; Chief Engr., A.I.R., 1953-58; Chairman, Electro Tech. Dvnl. Council of Indian Stds. Instn.; Member: Bd. of C.S.I.R.; Exec. Council, N.P.L.; Court and Council, Indian Inst. of Sc.; Radio Research Cttee., etc. *Address*: Bel House, Jalahalli, Bangalore.

**BAM, Arvind Shankar, B.Sc. (Bombay), B.Sc. (Hons.) (London), I.C.S., Chairman, Indian Airlines Corporation, since Dec. 1966.** b. March 12, 1918; *Educ.*: B.Sc. from Fergusson Coll., Poona, 1939; B.Sc. (Hons.) from King's Coll., London, 1941. Entered Indian Civil Service, 1941; Asstt. Collector, Dharwar, 1942-March 1944; Special Officer, Civil Supplies, Darjeeling, 1944-45; Dist. Controller of Civil Supplies, Jalpaiguri, 1945-46; Asstt. Collector, Broach, July 1946-April 1947; Under Secy., Home Deptt., Govt. of Bombay, April-Aug. 1947; Deputy Secy., Aug. 1947-Aug. 1949; First Collector and District Magistrate, Kolhapur, Aug. 1949-Dec. 1952; Dy. Secy., Govt. of India, Ministry of Rehabilitation, Calcutta, Dec. 1952-March

1957; Iron & Steel Controller, 1957-61. Chairman, Tea Board, Govt. of India, till Dec. '65; led the Indian Tea Delegation to the U.S. & Canada, and also to Australia, New Zealand and Singapore, 1962. *Address*: Airlines House, 113, Gurdwara Rakabganj Road, New Delhi.

**BAMZAI, Kashi Nath, B.A., LL.B. Registrar of Newspapers for India, since July 1966.** b. July 1, 1915; *Educ.*: Sri Pratap Coll., Srinagar; Lucknow Univ. Courtied jail in Kashmir Bread Movement, 1932; Pres., Jammu & Kashmir Students Union, 1937-38; joined the editorial staff of the *National Herald*, 1939; mem., Working Cttee., All India Students Congress, 1941-42; started legal practice at Kashmir, 1943; enrolled as active member, Jammu & Kashmir National Conference; with the *Daily National Standard*, Bombay, 1944-45; attended Udaipur and Gwalior sessions of the State Peoples' Conference; Asstt. Editor, *Blitz* and then its special correspondent at Delhi, 1946; Director of Information, Jammu & Kashmir Govt., Delhi, 1948; Officer on Special Duty (Kashmir Publicity), Min. of I. & B. Govt. of India, 1949-65; Chief Press Adviser, 1965-66. *Address*: 91, Lodi Estate, New Delhi.

**BANDODKAR, Dayanand B., Chief Minister, Goa, Daman & Diu.** b. 1911. A staunch nationalist; participated in the Quit India Movement, 1942; was arrested by the Portuguese for his nationalistic activities, May 13, 1956 and imprisoned for three months; helped the underground workers during Goa's freedom struggle; is the first Chief Min. of Goa, Daman & Diu; a philanthropist; helped many families of political sufferers; a linguist, knowing Portuguese, French, Hindi & Marathi; has a flair for literature; is a lover of sport, specially cricket; is connected with several social activities in Goa; is a leading mine owner of Goa. *Address*: Panaji, Goa.

**BANERJEE, Bhabendra Nath, B.Sc., LL.B., Cal., LL.M., London, Barrister-at-Law, Secy., Rajya Sabha, since Oct. 1963.** b. Jan. 8, 1916; *Educ.*: Scottish Churches School and Coll.; Univ. Law Coll., Calcutta; London School of Economics; Inner Temple. Joined Bengal Judicial Service, 1942; Asstt. Solicitor, Min. of Law, Govt. of India, 1950-52; Asstt. Legal Adv. & Legal Adv. to the Indian High Commr. in London, 1952-55; Dy. Secy., Min. of Law, Govt. of India, 1956; Dy. Secy., Rajya Sabha Secretariat, 1956-59; Jt. Secy., Rajya Sabha Secretariat, 1960-63. *Address*: Parliament House, New Delhi.

**BANERJEE, Mr. Justice Binayaknath, M.A., LL.B., Judge, High Court, Calcutta, since 1957.** b. June 1906; *Educ.*: Presidency Coll., Scottish Church Coll., Univ. Law Coll., and Post Graduate in Arts, Univ. of Calcutta; B.A. with Honours, 1928; M.A. (Univ. Gold Medallist), 1930; LL.B., 1931. Enrolled as an Advocate of the Calcutta High Court, 1933; Lecturer, Univ. Coll. of Commerce, 1949-57. Treasurer, Asiatic Society, Bengal, 1959; Vice-Pres., Zoological Gardens, Calcutta 1964; *Publication*: *Natural Justice and Social Justice before the Supreme Court (1950-59)*. *Address*: 5, Shyamanda Road, Calcutta 25.

**BANERJEE, Dr. T., D.Sc. (Dacca), Ph.D. (Lond.), F.I.C., F.R.I.C., F.I.M., F.N.I., Director, National Metallurgical Laboratory, since Aug. 23, 1966.** b. Aug. 1907, at Manikganj in East Pakistan; *Educ.*: Dacca; B.Sc. (Hons.) degree in Chemistry, 1929; M.Sc. degree in Physical Chemistry, standing 1st in 1st Class in both; awarded a Gold Medal; D.Sc., 1936; King's Coll., 1945; Ph.D. (Lond.), 1947. Was awarded Govt. scholarship for the period 1930-35 and was Lecturer, Dacca Univ., 1933-36; Lecturer in Physical Chemistry, Dacca Univ., 1937; Asstt. Director, National Metallurgical Laboratory, 1948-57; is the Convenor or member of several Corrosion Cttees., Metals Cttee., C.S.I.R.; his contribu-



tions to fundamental research cover a wide range, e.g., induced anisotropy of inorganic colloids, phase transformations in electrolytic alloys, etc.; with late Prof. Allmand formulated a mechanism for the phase transformation in electrolytic alloys; awarded Cooper Memorial Medal for the year 1955 and for his work on the production of electrolytic manganese and manganese dioxide; Dr. K. G. Naik Gold Medal for 1958 by the Syndicate of the M. S. Univ. of Baroda for his outstanding contribution in scientific and industrial research; was deputed to France on observation tour for six weeks under the Indo-French Technical Cooperation Scheme for visiting various industries and institutions in France, Oct. 1961. *Publications*: 122 papers and 16 patents. *Address*: National Metallurgical Laboratory, Jamshedpur 7.

**BANERJI, Asoka Nath**, Gen. Manager, Bournkela Steel Plant, since Jan. 1964. b. Dec. 19, 1917; *Educ.*: Muzaffarpur, Bihar, Patna and Calcutta. Was in the Army, Nov. 1941-47; joined I.A.S., 1947; Dist. Magistrate in West Bengal; Chief Passport & Visa Officer for India at Dacca in 1952; Dy. Gen. Mgr., Durgapur Steel Project, July 1956-April 1960; Secy., Hindustan Steel Ltd., Ranchi, 1960-61; Iron & Steel Contr., Govt. of India, 1961-64. *Address*: 33, Bournkela, Orissa.

**BANERJI, S. K.**, B.A., Ambassador to West Germany, since Dec. 1964. b. Oct. 21, 1913; *Educ.*: Allahabad Univ. and New Coll., Oxford. Joined I.C.S., 1937; Dy. Commr. in Khandwa, Balaghat, Nagpur and Akola upto 1946; Secy., Civil Supplies, 1946-47; First Secy. and later, Charge d'Affaires, Indian Embassy, Tehran, 1947-49; Dy. Secy., Min. of Ext. Affairs, 1949-51; Indian Dy. High Commr., Lahore, 1951-54; Consul-Gen. of India, San Francisco, 1954-56; Chairman, U.N. Visiting Mission to British and French Togolands, 1955; Min. of India to Syria, 1956; Indian Amb. to Syria, 1957-58; High Commr. for India to Malaya and Commr. to Singapore, Sarawak, Brunel and North Borneo, 1958-59; Joint Secy., Ext. Affairs, Min. 1960; Chief of Protocol, March 1961-Oct. 1964 and Addl. Secy., Ext. Affairs Min., Jan.-Oct. 1964. *Publications*: Official Reports. *Address*: C/o Ministry of External Affairs, New Delhi.

**BANSAL, Chamandi Lal**, M.A., LL.B., Secy.-Gen., Federation of Indian Chambers of Commerce and Industry; ex-Dir., Central Board, the State Bank of India. b. Dec. 3, 1914; *Educ.*: A. V. Mission School, Ranikhet; Govt. Coll., Almora; Lucknow Univ. Represented Intl. Chamber of Commerce at 5th Session of ECAFE; attended Intl. Labour Cfs., Geneva, 1950, 1951; toured U.S.A. as Leader Specialist on American Govt. Invitation; Congress M.P., Jhajjar-Rewari constituency, 1952-57; member, Govt. Delegations to GATT, 1953, 1954; delegate to the 12th Session of ECAFE; member, Indian Industrial Delegation to Europe and America, 1957; Delegate to the U.N. Cfs. on Trade and Devpt., 1964; Indian Govt. Rep. on the Steering Cttee. of World Bank Study Team on Local Transportation, 1965; *Publications*: *India and Pakistan—An analysis of economic, mineral and agricultural resources*. *Address*: 28, Ferozeshah Road, New Delhi.

**BARMAN, Mr. Justice Satyabhushan**, B.A. (Hons.) (Econ. & Pol. Science), Barrister-at-Law, Chief Justice, Orissa High Court, Cuttack, since June, 1966. b. May 1, 1907; *Educ.*: Mitra Institution, Bhowanipur, Calcutta; Presidency Coll., Univ. Coll. and Law Coll., Calcutta; King's Coll. & Birbeck Coll., London; Lincoln's Inn, London; called to the Bar (1932). Research in the treatment of young criminals in London with particular reference to the English Borstal system under the aegis of the Home Office in London (1932-34); Chairman, Cttee. of Enq. into the Wkg. of the House of Detention and the Central Children Court, Calcutta (1948); Advocate, Supreme Court (1953); Judge, Orissa High Court, since

1958; practised in Calcutta High Court (1935-58); Chairman, Enq. Commn., Mahanadi Bridge Accident, 1963; Commn. of Enq., Students' Agitation, Orissa, 1964. *Publications*: *The English Borstal System*; Report on the results of enq. into the House of Detention and the Central Children Court, Calcutta. *Address*: No. 1, Cantonment Road, Cuttack.

**BARUA, Hem, M.A., M.P.**, Writer in Assamese and English. b. April 22, 1915; *Educ.*: Calcutta Univ. M.A. in 1938. Joined B. Barooah Coll., Gauhati, 1944. Jailed in Quit India Movement, 1942; M.P. since 1957; visited Burma, 1950; U.S.A., U.K., France, Switzerland and Italy, 1953-54, Soviet Union, 1958, Israel, 1965, Thailand, Cambodia, Laos, Malaysia, Singapore, 1965. *Publications*: Assamese: *Sagar Dekhicha*; *Sanmihali*; *Ae Gaon Ae Gil*; *Adhunik Sahitya*; *Sahitya Aru Sahitya*; *Balichanda*; *Ranga Karabir Phul*; *Konnaki*; *Cupid Aru Psyche* etc. etc.; English: *August Revolution in Assam*; *Fairs and Festivals of Assam*; *Modern Assamese Poetry*, (An Anthology); *The Red River and the Blue Hill*; *Idle Hours* 1961; *Folk songs of India*. Assamese Literature, Lashminath Bezbaroa. *Address*: 83-D, South Avenue, New Delhi.

**BASANT, Tirth**, Sahitya Akademi Award (1959), G. J. W. Foundation Award & Gold medalist (1962), Sahityakar. b. Sept. 7, 1909; *Educ.*: Sind. Business Exec. in Japan, 1929; Business & Teaching profession in Persia, 1931-35; Secy., Rural Reconstruction, Sind, 1939; Municipal Councillor, Hyderabad Sind, 1941-43; Editor *Advance India* 1940; Head master, English Adult School, Hyderabad; Editor, *Sharnai*, 1962-65; Pres., Sindhu Samaj, Delhi, 1963-65. *Publications*: *Chingoon*; *Vasant Vakha*; *Kanwar*; *Sahitya-Saar*; *Ras-golo*; *Kutta-shalla*; *Yatri*; *Shair-Jo-Janaajo*; *Ujoro*. *Soul Force: Light of Life* etc.; Translated Nehru's *Autobiography*, Tagore's *Chitra*, Shakespeare's *Antony & Cleopatra*. *Address*: B-7/98, Lodi Colony, New Delhi-3.

**BASAVAPUNNAIAH, Makineni**, left Communist Leader, ex-member, Secretariat; ex-M.P. b. Dec. 14, 1914; *Educ.*: Noble Coll., Masulipatam; A. C. Coll., Guntur; studied upto B.A. Class. Secy., Guntur Dist. Communist Cttee., 1939-42; Secy., Andhra Prov. Students' Federation, 1937-39; Secretariat member, Andhra Communist Cttee., 1942-56; Secy., Andhra Provincial Cttee., 1957-58; member, Central Cttee., C.P.I., 1948-58. *Publications*: A number of political pamphlets. *Address*: No. 4, Windsor Place, New Delhi.

**BASU, Jyoti, B.A.**, Bar-at-Law, Communist leader, M.L.A. (West Bengal); Dy. Chief Min. in charge of Finance & Transport, West Bengal, since March '67, b. July 8, 1914; *Educ.*: St. Xavier's Coll. and Presidency Coll., Calcutta, Barrister, Calcutta High Court; member: Communist Party of India, since 1940; Central Exec. Cttee. and National Council, C.P.I.; member, West Bengal Cttee., C.P.I.; detained without trial and imprisoned as undertrial on several occasions since 1948; was leader of the opposition, West Bengal Leg. Assembly. *Address*: 55, Hindusthan Park, Calcutta 29.

**BASU, Dr. K. S.**, Fellowship of the International Academy of Management (1960), Charat Ram Foundation Award (1965), Wallace Clark International Award for his contribution to scientific management in the international field (1966), Sir Jehangir Ghandy Medal for Industrial Peace (1967). Director, Jagnalal Bajaj Institute of Management Studies, Bombay. b. Feb. 8, 1915; Medical practice, 1939-48; with Hindustan Lever Ltd., Bombay, as Chief Medical Officer, 1948-52; Personnel Manager, 1952-56; Personnel Director and Member of the Board, 1956-65; Pres., All India Management Assoc., 1963-66; Bombay Management Assoc., 1961-64; Bombay Productivity Council, 1960-63; Indian Institute of Personnel Management, 1964; Vice-Pres., Employers' Federation of India,

1962-64; Vice-Pres. and Pres.-Elect of Indo Pacific Management Association (IPCCIOB); led the Indian Management delegation to the Twelfth Confee. of Scientific Management, Sydney and Melbourne, 1960; 14th at Rotterdam, 1966; IPCCIOB Confee., Tokyo, 1965; visited Taipei, Okhinawa, Hong Kong, United States, New Zealand, Australia, on invitation to run Management seminars, 1966-67. *Address*: 164, Backbay Reclamation, Bombay 1.

**BASU, Manoj, B.A.**, Bengali Writer. Recipient: Saratchandra Chatterji Memorial Prize and Medal (Calcutta Univ.), 1960 for the best Bengali fictions published during the preceding three years; Narsingdas Prize (Delhi Univ.), 1954 for the Travelogue 'Chin Dekhe Elam'. b. July 26, 1901; *Educ.*: Calcutta. Joined N. C. movement in student days; visited Ceylon, China, Russia and Central Asian countries and almost all parts of Europe. *Publications*: *Bagh*; *Natun Manush*; *Nishi Kutumba*; *Chhabi or Chhabi*; *Jal Jangal*; *Natun Jatra*; *August 1942*; *Bristi Bristi Bhuli Nai*, *Manush Garar Karigar*, *Rupabati*, *Bankete Basat*, *Rajkanyar Sayambar*, *Kingsuk*; *Kachar Akash*; *Khadyol*, *Sesh Lagna*; *Dak Hambo*; *Nutan Prabhat*, *Plaban*, etc.; *Chin Dekhe Elam*; *Soviet Deshe Deshe*; *Natun Europe*, *Natun Manush*, etc.; works have been translated into English and Hindi. *Address*: P560, Lake Road, Calcutta 29.

**BATRA, Ratan**. b. Sept. 14, 1912 in Amritsar; *Educ.*: In Lahore and later in the Mayo School of Art. Joined the "Times of India," Art Deptt., 1933; started freelance commercial art service in 1936; established full fledged advertising agency, 1952; promoter, Commercial Artists' Guild and Society of Advertising Practitioners. *Address*: Haco House, Sir Phirozeshah Mehta Road, Bombay 1.

**BEDI, Mr. Justice Tikka Jagjit Singh**, B.A. (Punjab), M.A. (Cantab.), Barrister-at-Law, Judge, Punjab High Court, since May 11, 1959. b. Jan. 19, 1907; *Educ.*: Aitchison Chiefs' Coll., Lahore; Govt. Coll., Lahore; B.A., 1926; Corpus Christi Coll. of the Cambridge Univ. (England); M.A., 1930; called to the Bar, 1930; awarded gold medal by the Aitchison Coll., Lahore, for being first in diploma exam.; an all round sportsman at Cambridge Univ. Practised at the Bar at Montgomery and Lahore, 1931-43; Dist. & Sessions Judge, 1943-59; elevated to the Bench, Punjab High Court, May 11, 1959; confirmed, Dec. 15, 1961. *Address*: Judge, Punjab High Court, Chandigarh.

**BENDRE, Narayan Shridhar**, B.A., Agra Univ., G. D. Art, Bombay, Painter; Vice-Pres., National Academy of Art, New Delhi, since 1962. b. Aug. 21, 1910; *Educ.*: Holkar Coll., Indore; formal trg. at School of Art, Indore, under the guidance of Sri D. D. Deolalikar; trg. in Graphic Arts at Art Students' League, New York, U.S.A. and in Ceramic art at Y.W.C.A., New York, 1947. Artist-cum-Journalist at Visitors' Bureau, Kashmir, 1936-39; Free lance artist at Bombay, 1939-50; visited U.K., Middle European countries, and U.S.A., 1947-48 and West Asia, 1958; member, First Indian Cultural Delegation to China, 1952; member, Gen. Council and Exec. Board, Lalit Kala Akademi; Pres., Art Soc. of India, Bombay, 1957; has won numerous prizes at major Art Centres in India; held one man shows at Bombay, 1913, 1950, 1957 and 1959, Dean, Faculty of Fine Arts, M.S. Univ., Baroda, 1959-66. *Address*: 10, Kala Nagar, Bandra-East, Bombay.

**BERI, Mr. Justice Bhagwati Prasad**, B.A., LL.B., Judge, Rajasthan High Court, Jodhpur, since Aug. 16, 1960. b. Feb. 17, 1913; *Educ.*: Govt. Coll., Ajmer; Lucknow Univ., Lucknow. Joined the bar at Ajmer, 1938; enrolled as Advocate, Supreme Court of India, 1950; Senior Counsel, Western Rly., 1950-60; member: Agra Univ. Senate, 1945-54; Agra



Univ. Faculty of Law, 1945-54; Municipal Cttee., Ajmer, 1948-53; served as Convener, various sub-cttees. of the Ajmer Municipality; Senior Vice-Chairman, Ajmer Municipality, 1953; member: Ajmer State Jail Reforms Board, 1951; Bar Council, Rajasthan, 1958-60; Pres., Rotary Club, Jodhpur, 1964-65. Address: Jodhpur.

**BHABHA, C. H., M.A., B.Com., J.P.,** Vice-Chairman, Central Bank of India Ltd.; Dir.: Investment Corp. of India; Tata Engg. and Locomotive Co. Ltd.; Andhra Valley Power Supply Co. Ltd.; Swadeshi Mills Co. Ltd.; Spencer and Co. Ltd. b. July 22, 1910; Educ.: St. Xavier's Coll. and Sydenham Coll. of Commerce, Bombay; Fellow and Lecturer in Banking Law and Practice, Sydenham Coll. of Commerce, Bombay (1932-33); J. P., since 1938; Commerce Member, Interim Govt. of India, Sept. 1946; Member, Works, Mines & Power, Govt. of India, Nov. 1946; Commerce Min., Govt. of India, 1947; resigned, April 1948; Leader of the Indian Delegation to and elected Vice-Pres. of World Trade Ctee., Havana, Nov. 1947; Vice-Chairman, Rural Banking Enquiry Ctee.; Chairman, Indian Banks Assoc. (1955-61); Ex-Chairman, National Shipping Board. Address: 49, Cuffe Parade, Colaba, Bombay 5.

**BHAGAT, Dhanraj,** Sculptor; Incharge, sculpture Section, Delhi Polytechnic, Delhi. b. Dec. 20, 1917; Educ.: Lahore (West Pakistan). Won Governor's Gold Medal at Akademi of Fine Art, Calcutta; exhibited all over India and abroad; visited U.S.A. on Rockefeller fellowship and toured throughout the continent and England; executed several works for Govt. and semi-Govt. buildings; held group shows and six one man shows of sculpture; competed in an international competition for unknown political prisoners; some important works have been acquired by the Prime Minister of India; member, Govt. Artist Delegation to the birthday celebration of King Mahendra of Nepal, 1963. Address: 22, Hardinge Avenue, New Delhi.

**BHAGAVADACHARYA, Panditara] Sarasvat Saravabhauma, Swami,** Sanskrit Poet and Philosopher; disciple of Swami Rama Manohara Prasada Acharya, Ayodhya. b. 1880 at Sialkot; Educ.: Ayodhya, Kasi, Mithila. A Sanyasi of the Shri Ramanand Sampradaya; initiated into the order by the great Acharya Swami Shri Rama Manohara Prasadaji of the Shri Bindugadi of Ayodhya. Publications: about 100 in various languages incl. authoritative writings on the Vedas, Upanishads, Vedants, etc. and epics in Sanskrit language like *Bharataparjaya*, *Parjaya Saurabham* and *Ramananda Digvijayam*, *Soma Samskara Bhashyam on Samasam*; *Yajuh Samskar Bhashyam on Yajurveda*; *Vaidic Bhashyam and Ramananda Bhashyam on Brahmasutram* of Vyasa; *Bhagavadgita Bhashyam of Bhagavadgita*. Address: Vishishtadwaitadarshanam, Rajnagar Society, Ellis Bridge, Ahmedabad 7.

**BHAGAVANTAM, Dr. S., M.Sc. (Madras) (Hon.),** D.Sc. (Andhra), Scientific Adv. to Defence Min. and Dir. Genl., Defence Research and Devpt., since July 1961; Chairman, Bharat Electronics Ltd., Ltd., Hindustan Aeronautics Ltd., Chairman, Cttee. on Organization of Scientific Research. b. Oct. 14, 1909; Educ.: Nizam Coll., Hyderabad; Indian Assocn. for the Cultivation of Sc., Calcutta. Prof. of Physics and Principal, Andhra Univ., Waltair, 1932-48; Indian Scientific Liaison Officer, B.C.S.O. and Scientific Adviser to High Commissioner for India, London, 1943-49; Dir., Physical Laboratories, Osmania Univ., Hyderabad, 1949-52; Pres., Physics Sec., Indian Sc. Cong., 1946; Vice-Chancellor, Osmania Univ. 1952-57; Dir., Indian Inst. of Sc., Bangalore, 1957-62. Publications: several scientific papers & three books, viz. *Scattering of Light and Raman Effect*, *Theory of Groups and Its Application to Physical Problems and Crystal Symmetry and Physical Properties*. Address: 177, South Block, New Delhi.

**BHAGVAT, Smt. Durga Narayan, M.A.,** Marathi Writer. b. Feb. 10, 1910; Educ.: Bombay, Poona, Ahmednagar, Dharwar and Nasik. Fellow, St. Xavier's Coll., Bombay, 1932-34; Research Fellow, School of Economics and Sociology, 1937-40; started independent career in Anthropology, Sociology, Philology and Folklore, 1942; Head of the Dept. of Sociology, Gokhale Institute, Poona, 1958-60; has specialised in literary essays and cultural stories in Marathi; awarded first prize for her Marathi treatise, an outline of Indian folklore and for her literary essays, viz. *Rituchakra* and *Bhavamudra Publications*; English: *Early Buddhist Jurisprudence*; *A Primer of Anthropology*; *An Outline of Indian Folklore*, etc. Marathi: *Lokasahityachi Ruprekha*; *Rituchakra*; *Bhavamudra*; *Ramaram Shastri Bhagwat Yanche Charitra*; *Maharashtracha Itihas*; *Tulsiachi Lagna*, *Vyasaparna*; *Ranazara*. Address: Javeri Villa, Golder Lane, Bombay 8; Gokhale Institute, Poona 4.

**BHAGWATI, Mr. Justice Prafullachandra Natvarlal, B.A. (Hons.) (Maths.), LL.B.,** Judge, Gujarat High Court, since July 21, 1960. b. Dec. 21, 1921; Educ.: Elphinstone Coll. and Govt. Law Coll., Bombay; B.A. (Hons.) 1st Class, 1941; LL.B., 1945; was Dakshina Fellow in Elphinstone Coll. Participated in the 1942 freedom movement; courted jail; worked underground; apptd. fellow in Govt. Law Coll., Bombay; started practice, Bombay High Court, Feb. 1948; also practised in the Supreme Court and other High Courts. Address: Gujarat High Court, Navrangpura, Ahmedabad 9.

**BHAKTAVATSALAM, M.,** Ex-Chief Min., Madras. b. 1897. Gave up practice at the Bar, 1927; was connected with "India", a Tamil daily; Dy. Mayor, Madras Corpn., 1936; member and Vice-Pres., Chingleput Dist. Board, 1932-38; Vice-Pres., Tamil Nad Cong. Cttee., 1935; Secy., Tamil Nad Cong. Cttee. for a number of years; Member, AICC; Parly. Secy. to the Min. for Local Adm. in the first Congress Min., 1937; Public Works Min., Madras, 1946-52; Convener, Bharat Sevak Samaj (Tamil Nad Branch); Min. for Agr. and Community Projects, 1953-54; Min. for Agr., 1954-57; Min. for Home, 1957-62; Min. for Fin. and Educ., 1962-63; elected Leader, Madras Leg. Cong. Party, Sept. 24, 1963. Address: "Mallika", Mylapore, Madras.

**BHANDARI, Mr. Justice Doulat Mal, M.A., LL.B.,** Judge, Rajasthan High Court, since July 26, 1955. b. Dec. 16, 1907; Educ.: Maharaja Coll., Jaipur; Canning Coll., Lucknow. Started practice in Jaipur City, 1930; took part in Independence movement of 1942; elected member, Leg. Council of the former Jaipur State, 1945; elected leader of the Praja Mandal Party in the Council; Development Minister, former Jaipur State, 1947-49; nominated member, All-India Bar Cttee.; elected member of the Lok Sabha, 1952; Chairman, Rajasthan Revenue Laws Commission. Address: 2, Museum Road, Jaipur; C-23, Poota Road, Jodhpur.

**BHANDARI, His Excellency Mr. Parshotam Lal, B.Sc. (Punjab),** Indian Ambassador to Sudan since March 1967. b. May 22, 1911; Educ.: Govt. Coll., Lahore. Asstt. Editor, *Civil and Military Gazette*, Lahore, and Lecturer in Journalism, Punjab Univ. 1932-42; joined Govt. of India 1943; Information Officer, Toronto, 1946-47; Public Relations Officer, London, 1947-48; Dir. of Inf. Services, New Delhi, 1949; First Secy., Embassy of India, The Hague, 1949-50; Public Relations Officer, Washington-D.C., 1950-54; Counsellor, Djakarta, 1955-56; Dy. High Commr. for India, Lahore, 1957-58; Min. of Ext. Affairs, New Delhi, 1959-60; Amb. to Mexico and concurrently Amb. to Panama and Cuba, 1961-64; member: Indian Delegation, Gen. Assembly, Paris, 1948; I.L.O. Geneva, 1950; Indian rep. on U.N. Sub-Cttee. on Freedom of Information, New York, 1951;

High Commr. for India in Nigeria, and concurrently Amb. to the Cameroon Republic, Dahomey and Togo, April 1964-March 65. Address: C/o External Affairs Ministry, New Delhi.

**BHANOT, G. K., M.A., I.A.S.,** Chief Secretary, Govt. of Goa, Daman & Diu, since Jan. 25, 1966. b. March 12, 1927; Educ.: Lahore, Delhi. Joined I.A.S. Jan. 2, 1950; Jt. Magistrate, Varanasi, 1950-52; S.D.O. & S.P. Chakia, Dt. Varanasi, July-Dec. 1952; Karsuli, Rajasthan, 1953-54; Collr. & Jt. Magistrate, Bundi, 1954-55; Dy. Secy. Irrigation, Agri. & Co-op. & Social Welfare, May-Aug. 1955; Industries, Mines, Labour, Civil Supplies & Rehab. 1955-57; Gen. Adm. Home (Passports & Visas), 1957-59; J. Devpt. Commr., Panchayats & Ex-Officio Dy. Secy. to Govt., 1959-61; Chief Executive Officer & Ex-Officio Secy. to Govt. of Rajasthan, 1960-62; Spl. Secy., Appnts. (Rajasthan) 1962-64; Dir. for Removal of Public Grievances and Ex-Officio Secy. to Govt. of Rajasthan, March 1964-Jan. 1966. Address: Panaji, Goa.

**BHARDE, Trimbak Shivram, B.A., LL.B.** Speaker, Maharashtra Leg. Assembly, since March 17, 1962. b. May 25, 1914; Educ.: Ahmednagar; had a brilliant academic career. Joined Congress, 1936; courted jail in a freedom movement; became Editor, *Sangshakti*, weekly, 1946; was Chairman, Receipt Cttee., Bombay State Journalists' Conference, Ahmednagar; was later Pres., Journalists Assoc.; introduced many reforms as Chairman, Exec. Cttee., Ahmednagar Dist. School Board. Hon. Secy., Ahmednagar Education Society; was Secy., Maharashtra Regional Council Cttee.; elected M.L.A., Bombay from Ahmednagar, 1957; Minister for Co-operation, Bombay State, till April 1960 and of Maharashtra, 1960-62; is Chairman: Maharashtra State Bharat Sevak Samaj; Working Group Khadi & Village Industries Board, Maharashtra; Samyukta Sadachar Samiti, Maharashtra; Working Chairman, Citizens' Defence Cttee. Address: "Nandanvan," 4, L.R. Gibbs Road, Malabar Hill, Bombay 6.

**BHARGAVA, Krishna Dayal, M.A.,** Director of Archives, Govt. of India. b. Oct. 3, 1911; Educ.: Govt. Coll., Ajmer, Allahabad Univ. Served as Lecturer in History, Govt. Coll. Ajmer; joined the National Archives of India 1942; Narrator, Historical Section, Ministry of Defence, 1945-50; Dy. Director, Research & Reference Division and Dy. Director (Editorial), Publications Division till the end of 1955; Dy. Secy., Ministry of Education, 1960-62. Publications: *A Survey of Indian Culture and Institutions: Biome Correspondence*; Joint author of *Campaigns in South East Asia and the Reconquest of Burma*, Vol. I, *The Teachings of the Buddha* (1956). Chief Editor, *The Indian Archives*. Address: 29, Rouse Avenue, New Delhi.

**BHARGAVA, Mr. Justice Vashishtha, B.S. (Hons.), M.Sc. (Allahabad),** Judge, Supreme Court, since Aug. 1966. b. Feb. 5, 1906; Educ.: Govt. High School, Meerut; Govt. High School, Pratapgarh; Ewing Christian Coll., Allahabad; Allahabad Univ. Joined the I.C.S., 1930; Magistrate and Asstt. Collector, U.P., 1934-36; Civil and Sessions Judge, U.P., 1936-40; Dist. and Sessions Judge, 1937-47; Asstt. Commr., Food & Civil Supplies, 1947-49; Judicial Secy. & Legal Representative, U. Govt., 1948-49; Judge, 1949-Jan. 66; Chief Justice, Feb. 1966-July 66, High Court, Allahabad. Address: Supreme Court, New Delhi.

**BHASIN, Prem, M.A. (Political Science),** Gen. Secy., Praja Socialist Party, since Jan. 31, 1965. b. Dec. 27, 1914, at Rawalpindi; Educ.: D.A.V. School, College, Rawalpindi, and M.A. from I. Singh Coll. Lahore, 1939. Joined the Communist Party, 1937; courted jail in freedom movement; elected to the National Exe., Socialist Party of India, 1947; Secy., Socialist Party of India, 1948-50; Jt. Secy., Praja Socialist Party, Oct. 19



Secy., First Asian Socialist Cttee., Rangoon, Jan. 1953; toured Sweden, Norway, Denmark, United Kingdom, France, Switzerland, West Germany, Austria, Yugoslavia, Italy, Israel, & Pakistan, July-Oct. 1953; P.S.P. rep. on the Asian Socialist Cttee. Bureau, 1954-57; Gen. Secy., P.S.P., 1963-64; member, Central Parly. Board, Samyukta Socialist Party, 1964-65. *Publications*: *Pakistan and its Implications*—1947, Lahore. *Address*: 13, Windsor Place, New Delhi.

**BEAT, Atmaram Raoji, M.Com., Editor**, "Samapada", Marathi Commercial monthly, Poona. b. 1905; *Educ.*: Sydenham Coll. of Commerce and Economics, Bombay; Sir James Begbie Commerce Scholar, 1925-27 and Govt. Fellow, 1927-29; joined the *Kesari*, 1929 and retd. as business mgt., 1952; founded the Maharatta Chamber of Commerce and Industries, Poona, 1934; its Hon. Secy. and Trustee, since then; Pres.: Indian Languages Newspapers' Assoc., since 1949; Federation of Assocs. of Small Industries of India, since 1959; member: Bombay Leg. Council, 1952-64; Textile Enq. Cttee., 1952-54; Press Commn., 1952-54; National Productivity Council since 1955 and its Governing Body since 1961; Central Adv. Council of Industries, since 1965; Cotton Textile Adv. Cttee. since 1959; Central Small Scale Industries Board since 1957; UNESCO meeting on Mass Media Devpt., Bangkok, 1960; Intnl. Press Inst. Seminar on Small Business Devpt., Tokyo, Nov. 1964; Export-Import Adv. Council since 1964; Export Inspection Council, since 1963; Power-loom Enq. Cttee., 1963-64; Small Newspapers Enq. Cttee., 1964-65; Dir., National Small Industries Corp., since 1961. *Address*: 256, Sadashiv, Poona 2.

**BHATIA, H. E., Mr. Prem Narain, B.A.**, High Commr. for India in Kenya, since Aug. 1965. b. Aug. 11, 1911; *Educ.*: D. A. V. High School, Lahore; Govt. Coll., Lahore, Panjab Univ., B.A. in English (Honours). Started life as a journalist on the *Civil & Military Gazette*, Lahore, 1934; News Editor, A.I.R. 1939-42; Indian Army, 1942-45 (rose to be Lieut.-Colonel & saw service in Burma & the Middle East); Dir. of Public Information, Govt. of Bengal, 1945-46; Pol. Correspondent & Asstt. Editor of the *Statesman*, Calcutta & New Delhi, 1946-58; Editor, *The Tribune*, 1959; Delhi Editor: *The Times of India*, 1960-62; *Indian Express*, 1963-65; simultaneously India Correspondent of the (Manchester) *Guardian*; had a brief spell as a diplomat in 1948 as Public Relations Adv. to the Indian Amb. in Moscow; extensively travelled in Europe, Asia, the Middle East & the USA (incl. two long lecture tours in the U.S.A.) *Address*: High Commissioner for India in Kenya, P.O. Box 30074, Nairobi, Kenya.

**BHATT, Jyotindra Manishanker, Post-Diploma in Painting, President's Gold Plaque (1956), Painter**. b. March 12, 1924; *Educ.*: Fine Arts Coll., M.S. Univ. of Baroda, Baroda; Diploma in Painting, 1954 and Post-Diploma (Specialization), 1956; has been a painter; awarded President's Gold Plaque under the auspices of the Lalit Kala Akademi, 1956 and a National Award, 1963; recipient of the Cultural Scholarship of Govt. of India in Painting (1957-59) under the guidance of Prof. N. S. Bendre at Baroda; was Secy., Baroda Group of Artists, 1956-61; Recipient, Italian Govt. Scholarship for painting, 1961-62; teaches painting in the Deptt. of Painting, Faculty of Fine Arts, M. S. Univ., Baroda; awarded Fulbright Scholarship, U.S.A., 1965. *Address*: Fine Arts College, University Road, Baroda 2.

**BHATT, Ravishanker Santoshram, B.A.**, Bombay, B.A. (Hons.), Lond., M.A., Lond., Chairman, Unit Trust of India, Bombay. b. Dec. 13, 1909; *Educ.*: Samaldas Coll., Bhavnagar; Bombay School of Economics and Sociology; B.A. (Hons.), 1932; M.A., London School of Eco. and Pol. Sc., London, 1936. Secy., Industrial Investment Trust, 1936-40; Secy., Diwan's Office, Bhavnagar, subse-

quently Nayab Diwan (Fin. and Rly.), 1940-47; Fin. Officer, Oriental Govt. Security Life Assurance Co., 1948-53; Mg. Dir., Bombay State Fin. Corp., Nov. 1953-May 1957; member, Tariff Commn., 1957-60; Exec. Dir., Indian Investment Centre, Dec. 1960-April 1964. *Publications*: Literary essays and Spl. studies on Economics and financial subjects in various journals. *Address*: Ewart House, Bruce St., Fort, Bombay 1.

**BHATTACHARJEE, Jyotish, Diploma in Commercial Art, Painter; Art Exec., Directorate of Commercial Publicity, Min. of Commerce, Govt. of India**. b. Nov. 3, 1922, at Chittagong (E. Pakistan); *Educ.*: Govt. School of Arts and Crafts, Calcutta. Participated in several exhibitions in India and abroad; held one-man shows in New Delhi, Calcutta and Italy; worked with the Intnl. Artist Assoc., Rome, 1957-59; member, Governing Council, All India Fine Arts and Crafts Soc., New Delhi; President's plaque in 1959 and Gold Medal in 1960 for the best exhibit of the year; National Award of the Lalit Kala Akademi in 1963; paintings acquired by National Gallery of Modern Art; Lalit Kala Akademi; Beux Arts Soc., Cairo and by several others in India and abroad. *Publications*: Author of short stories and articles on art. *Address*: 15A/31, Western Extn. Area, Karol Bagh, New Delhi 5.

**BHATTACHARYA, Dr. Shabani, B.A. Hons. Ph.D. (Lond.), Writer and Journalist**. b. Nov. 12, 1906; *Educ.*: Patna and London Univ. Press Attache, Embassy of India Washington, 1949-50; member, first cultural delegation to the U.S.S.R., 1951; Harvard Univ., U.S.A., 1959; delegate to: Harvard-Japanese Intnl. Seminar, Tokyo, 1960; State guest of the Australian Govt., 1962; received Prestige Award from the Univ. of New Zealand, 1962; invited by West German Govt. and the British Council, 1963; Member, Adv. Board for English, Sahitya Akademi; Secy., Tagore Commemorative Volume Society. *Publications*: *Some Memorable Yesterdays*; *Indian Canals*; *The Golden Boat* (Translations from Tagore); *Novels: So Many Hungers!*; *Music For Mohini*; *He Who Rides A Tiger*; *A Goddess Named Gold*; *Shadows From Ladakh*; work translated into 26 languages, including 15 European languages; Editor of a selection of Tagore essays sponsored by Ford Foundation, *Towards Universal Man*. *Address*: "Godhuli", Bezouabagh, Nagpur.

**BHATTACHARYA, Jyotibhusan, Indian scholar, political leader (Workers' Party of India), Minister for Education, W. Bengal**, since Mar. 1967. b. May 1, 1926 at Calcutta; *Educ.*: Calcutta and Leeds; stood first in First Class at the M.A. exam. in English, Calcutta Univ., 1948; M.A. degree from the Univ. of Leeds, specialising in Shakespeare and Phonetics. Served as teacher of English, Santiniketan, Gauthati Univ. and Calcutta Univ.; joined active politics during the 1942 movement; imprisoned three times by the Congress Govt. in food, civil liberties and peace etc. movements; elected to the W. Bengal Leg. Assembly, 1967. *Address*: Minister for Education, W. Bengal, Calcutta.

**BHATTACHARYA, Sushil, B.A. (Cal.), Secretary, the Revolutionary Socialist Party of India; Vice-Pres. U.T.U.C.; member: National Productivity Council; Labour Adv. Board, Delhi**; b. Nov. 15, 1908; *Educ.*: Cal. Univ. Joined the secret revolutionary movement while a student; arrested and jailed, 1931-38; joined Cong. Socialist Party 1939; was its Orgz. Secy. at Delhi; broke away from the party and joined the R.S.P., 1940; arrested at Allahabad as orgn. of the R.S.P., 1941; figured prominently in the Lucknow-Barrabanki conspiracy case; released, May 1946; went to China as leader of the U.T.U.C. delegation to the May Day celebration, 1955. *Publications*: Hindi Book on R.S.P. *Hi Kyaun*; *Manav Samaj Ka Vikas* (Hindi); Articles in *The Call* and *Mehnatkash* (Hindi weekly). *Address*: 780, Ballimaran, Delhi 6.

**BHATTACHARYYA, Birendra Kumar, B.Sc., M.A., Sahitya Academy Award (1961), Journalist and Writer in Assamese and English; Editor, Sadinaya Narayug**. b. March 1, 1924; *Educ.*: B.Sc. from Cotton Coll., Gauhati-1945; M.A. from Gauhati Univ. Asstt. Editor, *Banki*, a literary monthly in Assamese, 1945-46; Editor, *Janata* (Assamese), 1947-50; Science Teacher, Uktul (Naga) High School, Manipur, 1951-53; Editor, *Ramdhenu*, 1953-63; translated Tagore short stories under Sahitya Akademi Scheme. *Publications*: *Rajpalthe Ringrai* (The call of the main street); *AI* (Mother) (Novel); *Kolong Ajit Bui*, *Iyaringam* (Novel), 1961, *Satsari* (short stories) 1964; *Shatghni* (Novel) 1964. *Address*: Editor, *Narayug*, Kherghuli, Development Area, Gauhati.

**BHATTACHARYYA, Chapalakanta, M.A., B.L., M.P. (Lok Sabha), b. Jan. 1901; Educ.**: Orthodox Sanskrit Schools; Calcutta Aryan Inst.; Presidency Coll., Cal. Univ. Advocate Calcutta High Court; edited an English weekly "The New Era"; editorial staff of "Forward" of late Deshbandhu C. R. Das; Congress worker since 1920; member, Provincial Cttee. and the A.I.C.C.; Indian Cultural Academy; Intnl. Sanskrit Inst. Pres., All India, Newspaper Editors' Conf.; Dean of Faculty and Head, Dept. of Journalism; member, Senate and Syndicate, Calcutta Univ.; Vice-Pres., Sanskrit Sahitya Parishad, Bengal Akhil Bharat Devabhasa Parishad; was Editor, *The Ananda Bazar Patrika* and Editor-in-Chief, *The Jananarak*. *Publications*: *Congress in Evolution*; *Rudhife Award—a case for Revision in English*; and several works in Bengali. *Address*: 24A, Hemendra Sen Street, Calcutta 6.

**BHAVE, Acharya Vinoba, Social Worker**. b. Sept. 11, 1905, in Gogoda, Kolaba Dist., Maharashtra; *Educ.*: Gogoda; Baroda Coll., Baroda. At the age of 19, took a vow of celibacy and dedicated his life to the service of the country; joined the Satarmati Ashram, 1916; was made the head of the new Ashram at Wardha; started another hermitage at Paunar, near Wardha; was named by Gandhiji as his first rep. in the individual C. D. movement, 1940; imprisoned in the Freedom movement; staunch advocate of a new order of Soc. based on non-exploitation and non-violence; originator of the Bhodan Yagna Movement; successfully persuaded the landlords to donate land, for the landless poor; has travelled on foot over 4,000 miles since Sept. 1951 to promote the cause of Bhodan which has now reached the phase of Gramdan and Gram Rajya; has studied all religions; is a linguist, knows all Indian languages; is an effective speaker; undertook peace mission in the dacoit infested area of Bidar and Morena, 1960 when 19 dacoits surrendered; toured in Nagpur and Dindapur dist., East Pakistan, 1962 in connection with Bhodan Movement. *Publications*: several Marathi and Hindi Books of deep scholarly nature. *Address*: Sarva Seva Sangh, Rajghat, Varanasi P.O. (U.P.).

**BHAVE, Purushottam Bhasker, B.A., LL.B.**, Marathi author, journalist, play and screen play writer. b. April 12, 1910; *Educ.*: Hishop Coll. and the Univ. Coll. of Law, Nagpur. Practised as lawyer at the Nagpur Bar, 1939-42; Co-editor, the weekly *Sansadhan*, Nagpur, 1925-39; worked actively for the C.P. Marathi Hindu Sabha, 1964-48; held various offices in the org. from Vice-Pres. to the Gen. Secy.; edited the weekly *Adesh*, Nagpur, 1946-48. *Publications*: Story books, plays, novels, and essay collections. *Address*: West Park Road, Dhantoli, Nagpur 1; Watwe's Bungalow, Dombivli, Thane Dist., Maharashtra.

**BHIDE, M. R., B.Sc., Nagpur, B.A., Cantab. I.C.S. (Retd.), Chairman, Life Insurance Corporation of India, since Jan. 12, 1967**. b. Dec. 6, 1907; *Educ.*: Nagpur and Cambridge. Indian Civil Service; Jt. Secy., Deptt. of Eco. Affairs, Govt. of India, Dec. 1955-June 1957; Jt. Secy., Central Ping Commn., June 1957-March 1958; Adviser, Ping. Commn.



March 1958-Jan. 1959. Addl. Secy. to the Union, Deptt. of Co-op., Jan. 1959-April 1960; Secy., Union Min. of Community Devpt., Panchayat Raj and Coop., April 1960-Feb. 1964, was Dy. Governor, Reserve Bank of India, 1964-67. *Publications*: *Marketing of Sugarcane in United Provinces*. Address: 6-B, Jeevan Jyoti, Setalvad Road, Bombay 6.

**BHOGLAL, Pratap, M.A., Industrialist.** b. Oct. 25, 1918; *Educ.*: M.A. (Economics), Bombay Univ., 1938; V.J.T.I., Bombay. Joined the Batliboi & Co. P. Ltd.; associated with cotton textile industry; Cttee. member, Millowners' Assoc.; served on its Labour Sub-Cttee.; its Chairman for two years; Cttee. member: Indian Merchants' Chamber; Indian Cotton Mills Federation; Telephone Advisory Cttee.; Bombay Textile Research Assoc.; Mg. Dir., Shree Ram Mills Ltd., Bombay; Dir., Batliboi & Co. P. Ltd., Dir. of many leading banking, investment, ins., engg., textile, chemical and manufacturing companies; Trustee, Bombay Port Trust; member: State Council of Tech. Educ.; Board of Management, V.J.T.I., Bombay; Vice-Pres., Indian Merchants' Chamber for 1967; travelled abroad for business contacts in the fields of raw cotton, textiles, machinery and trade. Address: 26, Ridge Road, Bombay 6.

**BHOOTHALINGAM, Subramanya, M.A.** (Cantab.), I.C.S., O.B.E., Jan. 1945, Secy., Deptt. of Economic Affairs, Min. of Fin., Aug. 1964-66. b. Feb. 22, 1909; *Educ.*: Caius Coll., Cambridge. Joined I.C.S., Oct. 14, 1931; served in Madras till 1938; Officer in Charge, Agrl. Credit, Reserve Bank, 1938-40; Under Secy., Deptt. of Supply, Govt. of India, Jan. 1940; served as Dy. Secy., Jt. Secy., Spl. Secy., and Secy., Govt. of India in the Mins. of Industry till June 1955; Chairman, Hindustan Steel, Aug. 1955 to April 1958; Secy. Min. of Steel, Mines and Fuel, 1955-61; Secy., Fin. Min. Dept. of Expenditure, 1961-62; Secy., Min. of Econ. and Defence Co-ordination, Nov. 1962-Aug. 1963; Secy., Dept. of Co-ordination, Min. of Fin., Sept. 1963-Aug. 1964; member, Univ. Grants Commn., 1961-65. Address: C/o 25, Tughlak Road, New Delhi 11.

**BHUSHAN, Vidya, G. D. Art (Bombay),** Diploma in Mosale and Fresco (Belgrade), Artist; Head of Painting Deptt., Govt. Coll. of Fine Arts, Hyderabad. b. June 15, 1923; *Educ.*: Udgir (Dist. Osmanabad); G. D. Art (Bombay), 1944 and Diploma in Mosale and Fresco (Belgrade), 1955. Won several prizes in A.I. art competitions, held one man shows in Hyderabad and Delhi; did Murals for Nizam's palace, Delhi; did several life size portraits for Govt. Buildings in Hyderabad and Delhi; won Gold Medal in Hyderabad, 1942, was free-lance artist till 1952; won President's Gold Plaque in the National Exhibition of Art at Delhi, 1957; won Silver medal in the International Exhibition of Art in Moscow, July 1957; was a Kathak dancer; member, Music and Dance Academy; Hon. Secretary, Hyderabad Art Society. Address: Gagan Mahal Co-operative Colony, Hyderabad-Dn.

**BILLIMORIA, Smt. Gulestan Rustom, M.A.,** Licentiate, Trinity Coll. of Music, London; Sheriff of Bombay (1957), Social Worker, Fellow, Bombay Univ. and member of its Academic Council and Syndicate. Chairman, Junior Red Cross; Pres.: United Women's Orgs. Cttee.; Women's Home Industries Depot; Hon. Secy., All-India Cfee. of Social Work, 1949-56; Asstt. Treasurer, Intl. Cfee. of Social Work, 1954-60 and member of its Permanent Cttee.; Secy., Welfare, Amenities and Rehabilitation Cttee., of the Citizens' Defence Cttee.; Treasurer: "Sangam" Cttee.; World Asscn. of Girl Guides; Central Social Welfare Board; travelled in Europe and America, led delegations to Intl. Cfees.; awarded Kaiser-i-Hind Silver Medal. *Publications*: Jt. Author of *Governance of India*; *Constitution Functions and Finance of Indian Municipalities*. Address: Thoburn House, Apollo Bunder, Bombay.

**BIRLA, B. M., Industrialist.** b. 1904, at Pili, Rajasthan. One of the founders, Indian Chamber of Commerce. Pres.: I.C.C., 1936 and 1944, F.I.C.C. and I., 1954; Founder and Pres.: Indian Sugar Mills Assoc.; Indian Paper Mills Assoc.; Ex-member, Fiscal Commn., Govt. of India; formerly Dir., Central Board of the Reserve Bank of India; Chairman; Hindustan Motors Ltd.; Ruby General Insurance Co., Ltd.; India Exchange Ltd.; Managing Director, Birla Brothers Pvt. Ltd.; Director: Atul Products Ltd. and various other concerns. Address: 15, India Exchange Place, Calcutta 1.

**BIRLA, Ghanshyamdas, Padma Vibhushan** (1957), Hon. Doctor of Laws (B.H.U.) (1967). b. 1894. Mg. Dir. of Birla Gwalior Pvt. Ltd.; member, 2nd Indian Leg. Assembly; resigned in 1930 as a protest against legislation for Imperial Preference; Pres.: Indian Chamber of Commerce, Calcutta, 1924; F.I.C.C. and I., 1929; has been responsible for the founding and maintenance of a large number of educt. and other public instts. in various parts of the country; member: Indian Fiscal Commn.; Bengal Leg. Council; Royal Commn. on Labour; Delegate, Labour Cttee. at Geneva, 1927; member, 2nd Round Table Cfee., 1930; Unofficial Advisor to Govt. of India for Indo-British Trade Negotiations, 1936-37. Address: 15, India Exchange Place, Calcutta 1; Birla House, New Delhi.

**BIRLA, Lakshminiwas, Industrialist; President,** Federation of Indian Chambers of Commerce & Industry for 1967-68. b. 1909, at Pili, Rajasthan; *Educ.*: at Coll., 1924-27. Director: Cotton and Jute Mills, Engg., Industries, etc., Mg. Dir., Birla Brothers Pvt. Ltd. controlling various industries; connected with various Cttees. related to trade and industry sponsored by Govt. and F.I.C.C.I. *Publications*: Books in Hindi and English covering poetry, folk-tales, short stories and novels; contributor in various imp. dailies and periodicals of India and abroad. Address: Residence: Birla Niket, Raja Santosh Road, Calcutta 27. Office: 15, India Exchange Place, Calcutta.

**BIRLA, Rameshwardas, Chairman:** Birla Bombay Pvt. Ltd., Bank of Baroda Ltd., b. 4th May 1892. Address: Industry House, Churchgate Reclamation, Bombay 1.

**BISHI, Pramathanath, M.A., M.L.C., Bengali** Writer: Rabindra Nath Tagore, Prof. of Bengali Literature, Calcutta Univ. b. June 11, 1901; *Educ.*: Viswabharati Univ.; Calcutta Univ. Lecturer in Bengali, Ripon Coll. for ten years; Asstt. Editor, *Ananda Bazar Patrika*, Calcutta for four years. *Publications*: About 80 books on various subjects in almost every form. *Carey Shaheer Munshi* (novel); *Rabindra Kavya Probaha* (criticism); *Chitra Chaitra* (biography of an age); *Yukta Veni* and *Uttar Megh* (poems); *Monchake Dhill* (drama); *Lal Kella* (Novel); awarded Ravindra Prize for his novel *Carey Shahiber Munshi*, 1960; Address: 162/36, Prince Anwarshah Road, Lake Gardens, Calcutta 45.

**BOLLINI, H. E. Adolfo A., B.A., Argentine** Amb. to India & Nepal, since 1966. b. May 11, 1905 in Buenos Aires; *Educ.*: B.A., Buenos Aires and Linguistic Studies in Canada & Switzerland. Entered foreign service & apptd. Vice-Consul in New York, 1931; Consul in Baltimore, Chicago & Liverpool, 1933-38; Consul Gen. in London, Sydney, Marseilles & Hong Kong, 1950-56; Min. Plenip. in Sofia, Bulgaria, 1956-59; Amb. in Japan and China, 1961-64; was Dir., East European Desk; Dir.-Gen. in charge of Consular Affairs & Mem., Personnel Classification Board in the Foreign Office; was awarded the Order of the Rising Sun (Japan), Cedars of Lebanon & Brilliant Star (Republic of China). Address: Office: 137-A, Jorbagh, New Delhi. Res.: 13, Panchsheel Marg, Chanakyapuri, New Delhi 21.

**BOSE, Debaki Kumar, Sangeet Natak Akadami Award** (1957), Padma Shri (1958), Motion Picture Producer and Dir. b. Nov. 25, 1898; *Educ.*: Metropolitan Inst., Central Coll., and Vidyasagar Coll., Calcutta. Joined the non-co-op. movement while taking B.A. degree exam.; managed and edited a nationalist weekly for some time; came to films as a story-writer, then turned actor and dir.; directed his first film "Blind God" 1929; has so far directed 43 pictures. Address: 5, Dr. Satyananda Roy Road, Calcutta 29.

**BOSE, Satyendra Nath, M.Sc., F.R.S., D.Sc. (Cal.), D.Sc. (Allahabad), F.N.I., D.Sc. (Hony.) (Jadavpur), Padma Vibhushan, D.Sc. (Hony.) (Banaras Hindu Univ.) (1967);** (ex-M.P., Rajya Sabha), has been National Professor. b. Jan. 1, 1894; *Educ.*: Presidency Coll., and Univ., Calcutta; took M.Sc. degree, 1915; worked with Madame Curie, 1924-25 and with Albert Einstein, 1925-26. Lecturer, Calcutta Univ., 1916-21; Reader, Dacca Univ., 1921-24; Professor, Dacca Univ., 1926-45; Professor, Calcutta Univ., 1945-56; Vice-Chancellor, Visva-Bharati Univ., 1956-58. Address: 22, Iswar Mill Lane, Calcutta 6.

**BOSE, Sunil Kumar, Scholar-musician,** West Bengal; Station Director, A.I.R., Cuttack. b. June 23, 1914. *Educ.*: Post Graduate studies, Calcutta Univ. Learned classical music since childhood from outstanding musicians; Radio & Gramophone Artist, since 1928; recipient of "Best Man" Gold Medals at All-India Music Competitions in Calcutta and Banaras, 1933; participated in All-India Music Conferences (1934-38); Music Director, Calcutta Films (1933-35); joined A.I.R. (1939); invented one musical instrument "Ballaki" (substitute for Cello) in AIR, Dacca (1941); member: Music Curriculum Cttee., Baroda Univ. (1950); Nagpur Univ., 1957-59; Examiner for music, Cal. Univ. (1955-56); delivered convocation address at Vishnudigambar Gandharv Mahavidyalaya, Poona (1960); toured E. & W. Europe. *Publications*: Many articles on Music in different languages. Address: A.I.R., Cuttack.

**BOWLES, His Excellency Chester, U.S.** Ambassador to India, since July 19, 1963. b. April 5, 1901, Springfield, Massachusetts; *Educ.*: Yale Univ. Founded the advertising firm of Benton and Bowles, 1929; Rationing Administrator, "State of Connecticut, 1942; State Dir., Price Adm., 1942; Gen. Mgr., O.P.A., Washington, July to Oct. 1943; Price Adm. for the nation, 1943-46; Dir., Eco. Stabilization, Feb.-July 1946; Delegate, UNESCO Cfee., Paris, 1946; made official U.N. visits to England, France, Italy, Austria, Hungary, Czechoslovakia and Poland, 1948; Governor of Connecticut, 1949-51; Amb. to India and first American Amb. to Nepal, 1951-53; elected to: the U.S. House of Rep., 1958; was selected for the House Foreign Affairs Cttee.; Chairman, Democratic Platform Cttee., July 1960; Under Secy. of State, Kennedy Adm.; Pres. Kennedy's Spl. Rep. and Adv. on African, Asian and Latin American Affairs; Dir.: Instt. for Intl. Educ.; American Council of Learned Societies and the Fund for Peaceful Devpt. of Atomic Energy; Trustee: Fletcher School of Law and Diplomacy; Franklin D. Roosevelt Foundation; Woodrow Wilson Foundation; Rockefeller Foundation. *Publications*: *Tomorrow Without Fear*; *Ambassador's Report*; *The New Dimensions of Peace*; *Africa's Challenge to America*; *The Coming Political Breakthrough*; *The Making of a just Society*; *American Politics in a Revolutionary World*. Address: Shanti Path, Chanakyapuri, New Delhi 21.

**BRAHMAYYA, Gottipati, Chairman, Andhra Pradesh Leg. Council,** since July 1964. b. Dec. 3, 1898; *Educ.*: Noble High School, Machilipatnam, Krishna Dist. Pres.: Dist. Congress Cttee., 1921-22; Khadi Board, 1923-29; Andhra Ryot Cong. 1936-37; Andhra P.C.C. 1962-64; Mg. Dir., Hindustan Ideal



Ins. Co., Masulipatam, 1937-40, Dist. Orgr., Harijan Uplift Movement, 1933-34; Gen. Secy., Andhra Prov. Congress, 1937-40; Vice-Pres., A.P.C.C., 1951-52; presided over Andhra Political Cong., Nandyalu, 1937; Member: Village Officers Enquiry Cttee., 1958; member, Leg. Council from Assembly Constituency, since 1958. Address: "Raghava Sadan", Somajiguda, Hyderabad-4, A.P.

**BROKER, Gulabdas Harjivandas, B.A.,** Bom., Gujarati Playwright and Short Story Writer. b. Sept. 20, 1909; Educ.: Porbandar High School, Bharda New High School, Elphinstone Coll., Bombay. Courtied jail in Satyagraha Movement; member, B.P.C.C. and its Exec. Cttees., till 1936; began writing while in jail; won the Govt. of Bombay first prize for best drama written during 1947-54; member, Advisory Board for Gujarati Sahitya Akademi, Delhi; Exec. and Jt. Hon. Secy., Sahitya Parishad, Gujarat; Vice-Pres., Gujarati Natya Mandal; member, Exec. Cttee., P.E.N. All-India Centre; Pres.: Nalanda, Bandra; Vile Parle Sahitya Sabha; Editor, "Parab." Publications: 27 books of short stories, plays and criticism. Address: 26, Swami Vivekanand Road, Vile Parle-West, Bombay.

**BUTCHI BABU, Sivarama Venkata Subbarao, M.A.,** Telugu Writer, Artist, Programme Exec., All India Radio. b. June 14, 1916; Educ.: Presidency Coll., Madras. Held one man show of paintings under the auspices of Andhra Academy of Arts, 1964. Publications: *Chaitanya Sravanti*; *Asapriya*; *Ame Needa*; *Nagajumeda*; *Kumudam Katha*; *Rayala Karuna Krutyam*; *Omar Kayyam*; *Karya Dars Kathani*; *Atmavanchana*, adjudged the best play 1950, by the Andhra Nataka Kala Parishad (Kakinada); *Oke Nidra Enno Kalalo*, the best Telugu Play on 'Indian Quest for Unity' Competition conducted by Govt. of India, 1963 a volume of essays; won the Andhra Pradesh Sahitya Akademi Award for the best work on Shakespeare, 1965. Address: Programme Executive, All India Radio, Hyderabad.

**CAPOOR, Mr. Justice Shyam Bihari, B.A.,** Bar-at-Law, I.C.S., Ag. Chief Justice since June 1, 1967 and Judge, Punjab High Court, since Aug. 5, 1957. b. Jan. 15, 1907; Educ.: Allahabad Univ.; Oxford Univ.; Middle Temple, London. Joined I.C.S., 1931; held various posts in the Punjab and Delhi incl. Dist. and Sessions Judge, Legal Remembrancer to the Govt., Joint Secy. to the Govt. of India in the Ministries of Rehab. and Law. Address: Chandigarh.

**CARIAPPA, General K. M., O.B.E. (1945),** Ex-High Commr. in Australia and New Zealand and Ex-Commander-in-Chief, Indian Army. b. Jan. 28, 1900, in Coorg, South India; Educ.: Central High School, Mercara; Presy. Coll., Madras. Commissioned from Daly Coll., Indore, Dec. 1919; served in Iraq (Arab Rebellion), 1920-21 and on the N.W.F.P., 1922-25, 1928-30 and 1946; first Indian Officer to enter the Staff Coll., Quetta, 1933; saw service in Iraq, Syria and Iran, 1941-42 and in Burma (Arakan), 1943-44; Imperial Defence Coll., Lond., 1947; promoted Major-Gen., Aug. 1947; Chief of the Gen. Staff for some time, G.O.C.-in-Chief, Eastern Command, Dec. 1947; G.O.C.-in-Chief, (later Western Command), D.E.P. Command, Jan. 1948; Commander-in-Chief, Army, Jan. 1949 to Jan. 1953 in the full rank of a Gen.; conferred "Legion of Merit," Degree of Chief Commander by Pres. Truman, Aug. 31, 1949; awarded the Hon. rank of a full Gen. in the Nepalese army by H.M. the King of Nepal, Oct. 1952; conferred the Hon. Degree of Doctor of Sci. of the Agra Univ., Jan. 1953. Indian High Commr. in Australia and in New Zealand, July 1953-April 1956. Address: The Roshanara, Mercara, Coorg, Mysore State.

**CASE, G. P. A.B. (Colgate Univ.),** Gen. Mgr., Esso India, since Nov. 1965. b. Nov. 26, 1915; Educ.: A.B. Colgate Univ., Hamilton, N.Y., U.S.A., 1937. In oil business for over 28 years;

came to India, 1938; held a series of marketing positions in India and Africa until return to New York, 1947; re-assigned to India, 1951-54; Gen. Mgr. in Viet Nam and Thailand during the last 10 years, Regional Coordinator for Southeast Asian Esso Std. Eastern's New York Hqs.; Asstt. Regional Coordinator for the Far East, East and South Africa Std. Oil Co., New Jersey. Address: Esso Building, 17, Jamshedji Tata Road, Bombay 1.

**CASSAD, Dhunjisha Pestonji Ruttonji, M.Sc. (Eng.) (Lond.), B.Sc. (Bom.), F.R.S.H. (Lond.), M.M.G.I., M.I.E., F.Am.Soc.C.E., M.A.I.M.E.,** Chartered Engr. (Civil & Mining). Business man; Chairman and Mgr. Dir.: The Nagpur Electric Light & Power Co. Ltd., Nagpur; C. P. Syndicate (P) Ltd., Bombay & Nagpur, etc. b. Sept. 16, 1907; Educ.: St. Paul's European High School, Rangoon; Decan & Fergusson Colls., Poona; Banaras Hindu Univ. and Univ. Coll., London. Conducted researches in London and Berlin in water filtration and rigid frame structures; connected with the electric power distribution and Mining Industry for Coal and Manganese in M.P., Maharashtra and Gujarat States and Iron ore mining, Orissa; Pres.: Assoc. of Electricity Undertakings, Western and Central India, Member: Nagpur Univ. Court; Adv. Board, Indian School of Mines & Applied Geology, Dhanbad; Pres. Instt. of Engrs. (1) 1957-58. Publications: Determination of the Temperature Coefficient in Water Filtration (*Water and Water Engineering Journal*), July 1936; Typical Design for a R.C.C. Chimney—320 ft. high and 12 ft. dia. (*Indian Concrete Journal*), Sept. 1941. Address: The C. P. Syndicate (P) Ltd., 'Dolly Dale', Byramji Town, Nagpur; Residence: 'Currimbhoy Manor', 41, Warden Road, Bombay 26.

**CHACKO, I. C., B.Sc. Lond., B.A., A.R.S.M., A.R.C.S. Lond., K.S.G.,** Malayalam Writer. b. Dec. 25, 1875; Educ.: Govt. School, Alleppey; Maharaja's Coll., Trivandrum; Imperial Coll. of Sci., England; Royal School of Mines, England. Was State Geologist in Travancore; Director of Industries, 1922-31; a linguist, knows Sanskrit, Urdu, Greek, French, German, Latin & Tamil. Publications: In Malayalam: *Paniniya Pradyotham*, First Central Academy Award Winner; *Mar Louis Pazheparambil*; *Sir Thomas Moore Valmikyude Lokathil*; *Krishni Vishayangal*; *Jeevitha Smaranakal*. Address: Retired Dir. of Industries, Pulincunnu P.O., Alleppey Dist., Kerala.

**CHADHA, Dr. Manohar Singh, M.B.B.S., Pb., F.R.C.P., Edin., D.P.H. Lond., D.T.M. & H. Eng.,** Dir. National Instt. of Health Adm. and Educ. since March, 1965. b. Oct. 22, 1904; Educ.: Lahore, London & Edinburgh. Joined the Indian Medical Service, June 1934; served as Medical Officer and later as a Specialist in Pathology, 1934-45; served during the Second World War in Sudan and Egypt, Aug. 1940 to Dec. 1942; transferred to I.M.S. (Civil), May, 1945; Chief Health Officer, Delhi, 1947-48; Dy. Dir. of Health Services, Dehi, 1948-53; Dir. of Health Services, Delhi, 1953-58; Addl. Dy. Dir. Gen. and then Dy. Dir. Genl. of Health Services, 1958-62; Dir.-Genl., Health Services, 1962-65. Publications: Articles of scientific interest in various journals and papers. Address: Patiala House, New Delhi.

**CHAGLA, Mahomedali Currim, B.A. (Oxon.),** Bar-at-Law, Hon. Fellow, Lincoln Coll., Oxford, Hon. Doctor of Laws (B.H.U.) (1967); Min. for External Affairs, Govt. of India, since Nov. 13, 1966; leader of the House in Rajya Sabha, since March 6, 1964; Pres., Indian Council for Cultural Relations; Vice-Pres., Sahitya Akademi, since May 1967. b. Sept. 30, 1900; Educ.: St. Xavier's High School and Coll., Bombay; Lincoln Coll., Oxford; called to the Bar (Inner Temple), 1922. Prof. of Constitutional Law, Govt. Law Coll., Bombay, 1927-30; Hon. Secy., Bar Council, High Court of Judicature at Bombay, 1933-41; Delegate to U.N. to fight the cause of Indians in South Africa, 1946;

Puisne Judge, Bombay High Court, 1941-47; Chief Justice, 1947-58; Vice-Chancellor Bombay Univ., April-Nov. 1947; Pres., Asiatic Soc. of Bombay, since 1947; member Law Commn.; Governor of Bombay, Oct. 14-Dec. 10, 1956. *Ad Hoc* Judge, Intl. Court of Justice, The Hague, 1957; Chairman, L.I.C. Cttee. of Enq., Feb.-March 1958; Member, Punjab Commn., 1962; Leader, Indian Delegation to the Security Council Debate on Kashmir, Feb. and May 1964 & Sept. 1965; Commonwealth Educ. Cfee., Ottawa, Aug. 1964; UNESCO's Gen. Cfee., Oct. 1964; received Hon. Degree of Doctor of Laws from the Univ. of Hartford, the Temple Univ., the Boston Univ. and Dartmouth Coll.; Leningard Univ. (USSR), 1964; Punjab Univ., 1964; Amb. in U.S.A., 1958-61; Indian High Commr. in London & Amb. to Ireland, 1961-63; M.P. (Rajya Sabha); was Min. for Educ., Govt. of India, Nov. '63-Nov. '66. Publications: *The Indian Constitution* (1929); *Law, Liberty & Life*; *The Individual and the State*; *An Ambassador Speaks*. Address: 5, Duplex Road, New Delhi.

**CHAITANYA DEVA, B., B.Sc. (Hon.), Ph.D.,** Sangeet Acharya 1954, Sangeet Visharad 1959, Sangeet Alankar, 1961, Spl. Officer (Music), Sangeet Natak Akademi, New Delhi, since 1962. b. Dec. 31, 1922; Educ.: National Theosophical High School, Adyar, Madras; Rishi Valley School, Andhra; Madras Christian Coll., Madras; Banaras Hindu Univ.; Shantiniketan; Poona Univ. Has been conducting research in the psychoacoustics of music and speech for more than a decade. Had trg. in Hindustani vocal music in Santiniketan and under musicians like Pt. Vinayakrao Patwardhan, Ustad Amanalli Khan and Pt. Keshavbua Ingale; Head, Deptt. of Applied Physics and Chemistry, Sir Cusrow Wadia Instt. of Tech., Poona, 1957-62; member, Faculty of Music, Delhi Univ.; visiting lecturer on music in various Indian Univs. Publications: Psychoacoustics and Music and Speech; more than 20 research papers published both in India and in intl. journals. Address: 16A/15, W.E.A., New Delhi-5.

**CHAKIAR, P. Mani Madhava, Natyacharya** 1934, Vidooshaka Ratnam, 1960, President's Award, 1964, "Veerasrinkhalas" from Taliparamba Temple, Zamorin Raja of Calicut, Jagadguru Sankaracharya of Kanchi-kamakotipeedam, etc., a leading exponent of Chakiar Koothu and Koodiyattam. b. Feb. 15, 1899; Educ.: Studied Sanskrit under Vidvan Sankaran Nambudiripad of Killikurissimangalam; higher studies in Alankara Shastra under the late His Highness Parikshit Thampuran, the Maharaja of Cochin. Had his Arangettam at the age of 14; played the principal role in several traditional Koodiyattam plays; earned numerous titles and awards from the rulers of Kerala and also from temples; Sanskrit Teacher in the Sanskrit Patasala Mangalam; is a specialist in Rasabhinaya. Publications: *Atta Prakara for Kalidasa's Sakunthalam*, 2nd Canto (not published); Sanskrit verses on the Deity of the historic temple of Taliparamba. Address: Killikurussi Mangalam, P.O. Lakkidi, Kerala.

**CHAKRABARTY, Amar Prasad, M.A., LL.B.,** Minister for Judicial, Legislative, Excise and Home (Press & Passport) Deptts., West Bengal, since March 1967. b. 1921; Educ.: Barama T.M.H.E. School; Chittagong Govt. Coll.; Sir Ashutosh Coll. and Univ. of Calcutta. Joined Forward Bloc, 1939; Pres., Forward Bloc Students' Bureau; arrested and detained on charge of fifth column activities and on allegation of contact with Netaji Subhas Chandra Bose, 1942-45; sentenced to death; but was saved by the intervention of Dr. Shyama Prasad Mukherjee; Pres., All Bengal Students' Congress, 1947-52; was council member, B.P.C.C.; left Congress on the issue of partition of India; visited the socialist countries in Europe including Russia, Poland, Hungary, Yugoslavia, Czechoslovakia and Austria, Germany and England on trade union goodwill tour; is connected with trade



union movements as Secy. or President; Secy., Forward Bloc for about seven years; is Advocate, Calcutta High Court and member, Bengal Leg. Council. Address: Writers' Building, Calcutta.

**CHAKRAVARTY, Dr. Amiya, M.A. (Patna), Ph.D., Oxford, Desikottama Visvabharati Univ.,** Writer in Bengali and English, Prof. of Comparative Oriental Religions and Literature, Boston Univ., since 1953. b. April 10, 1901, at Serampore; Educ.: B. A. (First Class Hons.), 1921, M.A., 1926, Patna Univ.; D. Phil., Oxford Univ., 1937; Rockefeller Foundation scholar, 1950; Fellow, Inst. for Advanced Study, Princeton, Taught at Intl. Univ. of Tagore, Santiniketan; Woodbrooke Coll., Selly Oak; Univ. of Calcutta, Howard, Yale, Kansas and Michigan; Literary Secy., to Dr. Rabindranath Tagore, 1926-33; accompanied him to Asia, Middle East, Europe, U.S.S.R. and U.S.A.; joined Mahatma Gandhi in his peace marches during communal disturbances, 1946-48; Official Adv. to the Indian delegation, U.N., 1950-51; visited Dr. Albert Schweitzer in Alsace and Equatorial Africa; Cfee. member, on Philosophy at UNESCO, Paris, 1955 and 1957; inaugurated the Tagore Chair of Humanities, Madras Univ. and also gave lectures as the first occupant of the Chair, 1963; won UNESCO prize for travel book *Chalo Jai* (in Bengali), Jan. 1964; awarded a grant and the citation by the National Academy of Letters, New Delhi, for the book of poems *Ghare Ferar Din* (Bengali), April 1964; visited Thailand, Malaysia, Viet Nam and Japan to study social and religious cross-currents in Asia, 1964. Publications: Several volumes of prose and poetry in Bengali; *The Dynasts and Post-war Poetry*, 1934; *The Saint at Work*, 1950; *The Indian Testimony*, 1952; Edited A Tagore Reader, 1961, and "Housewarming" 1964, both published in U.S.A. contributes to several journals. Address: Office—745, Commonwealth Avenue, Boston.

**CHAKRAVARTY, Jatin, B.A., B.L. Calcutta, M.L.C.; West Bengal; Politician; Secy., United Trades Union Congress, since 1949.** b. Nov. 9, 1911; Educ.: Calcutta, Hare School, Scottish Churches Coll., Ripon Coll. & Ripon Law Coll.; B.A., 1932; B.L., 1936; A Unionist, since 1945; went to the U.K. under Colombo Plan Fellowship, 1952; visited U.S.S.R. & Eastern European countries as a delegate to the W.F.T.U., 1954; and again in 1961 as a member of the productivity team of the N.P.C. in 1961; visited U.S.A. & Japan as a member of a productivity team, 1964; represented U.T.U.C. on tripartite Cttees. & Cfee.; member, Governing Body, National Productivity Council, since its formation, 1958; R.S.P. M.L.A., West Bengal, 1957. Publications: Articles on Labour Problems published in Industrial Relations Journals. Address: 249, Bowbazar Street, Calcutta 12.

**CHALAMAYYA, Akurati, Author and Publisher, Santinilaya Grandhamala. b. Jan. 1, 1901; Educ.: Santiniketan under Gurudev Rabindranath Tagore for 11 years: Supdt. in the Philanthropic institutions at Pithapuram, 1927-40; Orphanage at Kakinada till 1946. Publications: Mahatma Gandhi's Jeevan Veda, Netaji Bose's biography, letters and lectures; Children's Series—stories, biographies and general knowledge—Visva Kavi—Tagore's life and ideals; Santiniketan—Tagore's discourses; Buddha's life and ideals in stories; Bharat Bhaskar—Tagore's life and literature; awarded Tagore birth centenary special prize by Dr. S. Radhakrishnan at the International Literary Seminar held in New Delhi, 1961. Address: Kakinada.**

**CHALIHA, Bimalaprasad, Chief Minister, Assam, since Dec. 1957. b. March 26, 1912, at Sibsagar; Educ.: Sibsagar Govt. High School; City Coll., Calcutta; left studies when he was in I.Sc. class, to join the national movement. Arrested in 1932 and jailed for six months; invented a mech. automatic spg. wheel and obtained a patent for it; deputed by Mahatma**

**Gandhi for trg. in Khadi under Shri Mathuradas Purushottam, Bihar; elected Secy., All India Spinners' Assoc., Assam Branch till 1942; detained for two years as security prisoner during 1942 Movement; elected M.L.A., Assam, from Sibsagar West, 1946; apptd. Parly. Secy., 1947; was the first Chairman, Assam Co-op. Apex Bank and Assam Co-op. Cottage Industries Assoc.; Gen. Secy., A.P.C.C., 1950; Pres., A.P.C.C., 1952; won by-election from Sibsagar to become Member, Lok Sabha, 1953; Regional Orgr. for constructive work, A.I.C.C. for Eastern Zone, 1952; elected Chairman, Reception Cttee. of the 63rd Session of the Indian National Cong.; resigned, Dec. 1957; was member, Nagaland Peace Mission. Address: Shillong.**

**CHAND, H. E. Khub, B.A. (Hons.), I.C.S., Indian Amb. to Jordan, Kuwait and Lebanon and High Commr. in Cyprus, since July 1966. b. Dec. 16, 1911; Educ.: Univ. of Delhi; Orie. Coll., Oxford. Joined the I.C.S., 1935; was first at the I.C.S. competition in India; Dist. Magistrate, Azamgarh and Regional Food Contrl., Banaras Region, 1943-47; Dy. Secy., Min. of Defence, 1947-48; Head, Indian Military Mission, Berlin with military rank of Major-Gen., 1948-50 and Head, Indian Mission in Bonn with rank of Min. Plenipotentiary, 1949-50; Dy. High Commr. for India in Pakistan, Sept. 1950; acted as High Commr., in Pakistan, Nov. 1950-Aug. 1951; Min. in Iraq and Jordan, 1952-55; Jt. Secy., Min. of Ext. Affairs, 1955-57; Amb. in Italy and concurrently Min. to Albania, 1957-60; High Commr. in Ghana & Sierra Leone, Commr. in Nigeria and Amb. to Liberia, Guinea & Mali, 1960-62, Amb. to Sweden & Finland, 1962-66. Address: C/o External Affairs Ministry, New Delhi.**

**CHAND, Dr. Tara, M.A. (Alld.), D. Phil. (Oxon.) Member, Rajya Sabha, since 1958. b. 1888; Educ.: St. Stephen's Mission School, Delhi; Meerut Coll., Meerut; Muir Central Coll., Allahabad; Queen's Coll., Oxford. Prof. of History, Kayastha Pathshala Coll., Allahabad; Principal, K.P.U. Coll., 1925-45; Prof. of Politics, Allahabad Univ., 1945-47; Vice-Chancellor, Allahabad Univ., 1947-48; Secy. & Educl. Adv., Union Min. of Educ., 1948-51; Pres., Indian History Cong.; Amb. to Iran, 1951-56. Publications: A Short History of the Indian People; Influence of Islam on Indian Culture; Hindustani; Growth of Islamic Thought in India, History of Eastern and Western Philosophy; History of the Freedom Movement in India, Vol. I; State and Society in the Mughal Period; Dara Shikoh's Sirr-i-Akbar (Persian). Address: 8, Tughlak Road, New Delhi.**

**CHANDRA, Kailash, B.A., LL.B., Punjab, Secy., Deptt. of Parliamentary Affairs, Govt. of India, since 1958. b. Dec. 8, 1915; Educ.: Govt. Coll., Jhang; Forman Christian Coll., S. D. Coll., and Univ. Law Coll., Lahore. Advocate, Lahore High Court upto Aug. 1947; editor The Chenab (monthly), 1935-37; The National Weekly, Lahore, 1944-46; political and social worker before independence; member D.C.C., 1938-47; Punjab Youth League, 1938-47; Cong. Workers Convention, Lahore, 1945; Gen. Secy., Punjab Refugees Reh. Cttee., Birla Mandir, New Delhi, 1947-48; Hon'y. Secy., Motilal Nehru Centenary Cttee., 1963-66; member, Lala Lajpat Rai Centenary Cttee; served in the Facts Finding Org. to assist Justice G. D. Khosla of the Punjab High Court to write on partition disturbances on Govt. assignment; held different posts, viz., Dy. Facts Finding Officer, Dy. Custodian of Evacuee Property, Officer on Spl. Duty, Dy. Collr., Rent Control and Eviction Officer, Sub-Divnl. Magistrate, Under Secy.; has visited, U.K., France, Switzerland, W. Germany, Italy, U.A.R., U.S.S.R. and E. Germany etc. Publications: (1) Tragedy of Jinnah three editions; (2) India's Parliament 1958; (3) Hamari Parliament 1960, Articles and Essays on Indian Parliamentary Practice. Address: Off.: 14, Parliament House, New Delhi-1; Res.: 6, Lytton Lane, New Delhi-1.**

**CHANDRA, Prabodh, M.A., Ex-Minister for Educ., Punjab State. b. Oct. 24, 1911; Educ.: Govt. Coll., Multan; Khalsa Coll., and Hindu Sabha Coll., Amritsar; Dyal Singh Coll., and F. C. Coll., Lahore, 1933-37. Started political career at the age of 16; a founder member of the students movement in the country; was often jailed in the freedom struggle; elected M.L.A., Punjab, 1945-46; elected as the Sole Representative of the Indian students to the World Youth Congress, Budapest, 1938; but was arrested; Mg. Editor, All-India Students' Tribune Monthly Journal, 1936-38; has visited, Western Europe and Russia; ex-Speaker, Punjab Vidhan Sabha; resigned, June 22, 1966. Publications: Students' Movement in India, 1939; Sixty Years of Congress, 1946; Rape of Rawalpindi, 1947; Pilgrims Progress, 1955. Address: Chandigarh.**

**CHANDRA, Romesh, B.A. (Hons.), Member, National Council and Central Exec. Cttee. and Central Secretariat of the Communist Party of India. (Central Cttee. member, since 1951); Journalist; Chairman, Org'l. Commn. of All India Peace Council. b. March 30, 1919; Educ.: Bishop Cotton School, Simla; Govt. Coll., Lahore; Trinity Coll. Cambridge. Joined the national movement as a student; Pres. Cambridge Univ. Indian Majlis, 1938; Exec. member, Cambridge Univ. Union, 1938-39; Joint Secy., All India Students' Federation, 1942; Spl. Correspondent and Sub-Editor, Communist Party Central Newspapers People's War and People's Age 1944-48; detained under Preventive Detention Act, 1948-49; Genl. Secy., All India Peace Council, 1952-63; member, Presidential Cttee. of World Peace Council, since 1963; Editor, New Age, 1963-66. Publications: Operation Asylum; Salute to Kashmir; Panchashila; several pamphlets on international issues. Address: 6, Jamna Bhawan, Asaf Ali Road, New Delhi.**

**CHANDRACHUD, Mr. Justice Yeshwant Vishnu, B.A., LL.B., Judge, High Court of Bombay. b. July 12, 1920; Educ.: Mostly at Poona except two years in Bombay; LL.B., Bombay Univ., 1942, won the Judge Spencer Prize; Gussie K. Kanga Scholarship; Sir Mangaldas Nathubhai Legal Scholarship; passed both Law exams in 1st Class; First class first in 2nd LL.B. exam. Address: High Court, Bombay 1.**

**CHANDRASEKARAN, Chidambara, M.Sc. Nagpur, Ph.D. Lond., M.P.H. Johns Hopkins, U.N. Regional Demographic Advr. at ECAFE, Bangkok, since Aug. 1965. b. Oct. 30, 1911; Educ.: Nagpur, London and Johns Hopkins Univs. Rockefeller Fellow, 1947-48; Dir., U.N. Office for Population Studies, New York, 1950-54; Discussion leader for U.N. Population Seminar, Bandung, 1955; Pres., Intn'l. Union for the Scientific Study of Population; Prof. of Statistics, All-India Instt. of Hygiene & Public Health, till July 1959; Pres., Statistics Sec., 1962 Indian Sc. Cong.; U.N. Resource Person to the Asian Population Cfee., 1963; Dir., Demographic Trg. and Research Centre, Bombay, 1959-65; Research Centre, Bombay, 1959-65; recipient of C. J. Watumull Memorial Prize in Family Plng., 1964. Publications: Over 60 original papers on Mathematical Statistics, Demography, Family Plng. and Medical and Public Health Statistics; Report of the Co-op. project of the U.N., Govt. of India on the Mysore Population Study. Address: Bangkok.**

**CHANDRASEKHAR, Dr. Sripati, M.A., M. Litt. Madras, M.Sc. Columbia, Ph.D. New York, D. Litt. Honoris Causa, Redlands Univ., Min. for Health & Family Planning, Govt. of India, since March 1967. b. Nov. 22, 1918; Educ.: American Mission Voorhes High School, Vellore; Madras, Columbia, New York and Princeton Univs., Dir. of Demographic Research, UNESCO, Paris, 1947-49; Editor, Population Review, Madras; under the auspices of the Grannary Fund, American Foundation, lectured in all the Middle Eastern and African Countries,**



1960; lectured before 30 American Univs., 1960 and 40 American Univs. on Chinese aggression, Winter 1962; Visiting Prof. of Economics, Pittsburgh Univ., 1961; Demography, California Univ. 1964-65; delivered the National Sc. Foundation Lectures, U.S.A., 1964; elected M.P. (Rajya Sabha) from Madras, 1964; was Dir., Indian Inst. for Population Studies, Madras. *Publications*: *India's Population* (New York, 1948); *Indian Emigration* (Madras, 1948); *Census and Statistics in India* (1948); *Hungry People and Empty Lands* (Bombay, 1952); *Hungry People and Empty Lands* (London, 1953); *Population and Planned Parenthood in India* (London, 1955); *Infant Mortality in India* (London, 1959); *China's Population* (Oxford, 1959); *Communist China today* (Asia 1961); *Red China: An Asian View* (New York, 1961); *American Aid and India's Economic Development* (New York, 1965). *Address*: Gandhinagar, Madras; New Delhi.

**CHANDY, Smt. Justice Anna, M.A., B.L.**, Judge, High Court, Kerala, since Feb. 1959. *b.* 1905; *Educ.*: Trivandrum; was one of the two lady students in the first batch in the Law Coll., Trivandrum. Enrolled as the first lady Advocate in Kerala, 1930; built up a good practice especially on the criminal side; member, Travancore Leg. Council, 1932-34 (the second lady member in its history); was appointed District Munsiff, the first woman judicial officer in India, 1938; promoted Additional District and Sessions Judge, 1943; Dist. & Sessions Judge, 1948-59; the first woman to be appointed to a High Court in India; (there are no women High Court Judges in the Commonwealth); Founder-Editor, *Shreemathy*, the first women's journal in Kerala. *Address*: High Court, Ernakulam.

**CHARLTON, Alfred Evan, Editor, The Statesman**, Calcutta and New Delhi. *b.* June 9, 1912; *Educ.*: St. Paul's School, London. Joined the Statesman, in 1936, after working on various London Suburban Newspapers as a Sub-Editor, joined the Indian Army, 1940; served with the 3/16th Punjab Regiment; rejoined the Statesman, 1946; became Resident Editor in Delhi, Dy. Editor, and Editor in 1964. *Publications*: *Go and Order the Drums—a novel* (Collins 1964). *Address*: C/o The Statesman, Calcutta.

**CHATTERJEE, Nirmal Chandra, M.A., P.R.S., LL.B., Bar-at-Law, M.P., Senior Advocate, Supreme Court of India; Ex-Pres., Hindu Mahasabha; Pres., All India Civil Liberties Council; Vice-Pres., Indian Branch of the Intnl. Commn. of Jurists.** *b.* Oct. 19, 1895; *Educ.*: Calcutta and London Univ. and Middle Temple. Ex-Judge, Calcutta High Court; member, Lok Sabha, 1952-57; presided over Bhopal, Hyderabad and Jodhpur sessions of All-India Hindu Mahasabha, 1952-57; led Kashmir Satyagraha movement along with late Dr. Syama Prasad Mookerjee; represented the Bar Assoc. of India at the Salzburg Cfee., 1960 3rd Commonwealth Cfee. at Sydney, 1965; Supreme Court Bar at Commonwealth Cfee. at London, 1955; Dy. Leader, Indian Lawyers' Delegation to Moscow 1959; a member of the Intnl. Commn. of Jurists on Tibet; M.P., Lok Sabha, Burdwan Constituency, 1963; Counsel for India at Kutch International Tribunal in Geneva. *Publications*: *Awakening of New India*. *Address*: 7-B, Pusa Road, New Delhi; P-514, Raja Basanta Roy Road, Calcutta 29.

**CHATTERJI, Vice-Admiral Adhar Kumar**, Chief of Naval Staff, Indian Navy, since March 4, 1966; Hon. A.D.C. to the President of India. *b.* Nov. 22, 1914; *Educ.*: Ravenshaw Collegiate School, Cuttack, 1926-30; Brojo Mohan Coll., Baisak, 1930-32; Presidency Coll., Calcutta, 1932. Joined the Navy, 1933; received initial training in the U.K., 1933-35; Lieutenant, 1938; qualified in Anti-Submarine Warfare in H.M.S. Osprey, 1940; war service in the Atlantic and Indian oceans; Lieutenant-Commander, 1943; commanded H.M.I.S. Kathiawar, 1944-45; commanded H.M.I.S. Chamak, 1945-46;

passed Staff Course at R.N. Coll., Greenwich, 1947; Commander, 1947; Dir. of Naval Plans, 1947-49; Commander, I.N.S. Delhi, 1949-50; Captain, I.N.S. Delhi, 1950; Naval Adv., London, 1950-53; Captain, I.N.S. Delhi, 1953-54; Commodore-in-Charge, Bombay, 1954-56; Imperial Defence Coll., London, 1957; Rear Admiral, 1959; Dy. C.N.S., Indian Navy, 1958-62; Flag Officer Commanding, Indian Fleet, 1962-64; Commandant, National Defence Coll., 1964-66. *Address*: Naval Headquarters, New Delhi.

**CHATTERJI, Gopal Chandra, B.Sc. (Hons.) (Geology), A.I.S.M., Director-General, Geological Survey of India**, since Sept. 1966. *b.* Sept. 26, 1911; *Educ.*: Pres. Coll., Calcutta; Indian School of Mines, Dhanbad; U.S.A., 1949-51. Geology Teacher, Indian School of Mines, 1937-39; joined the Geological Survey of India, 1939; promoted as Supdtg. Geologist, 1953; organised the Groundwater Exploration Wing of the G.S.I.; was Supdtg. Geologist-in-Charge, Northern Region of the G.S.I.; later became Regional Director; leader, Indian delegation to the ECAFE Conference on "Mineral Resources Development", Bangkok, 1966; elected the first Chairman, Inaugural Session of the Hydrogeology Section of the XXII International Geological Congress, New Delhi, 1964; is member: panel of Experts of Arid Zone Research Cttee., UNESCO; Cttee. on Hydrology of the International Union of Geology and Geophysics; Geohydrological Commn. of the International Union of Geological Sciences. *Publications*: About 40 original papers encompassing various aspects of geological problems. *Address*: Geological Survey of India, 27, Jawaharlal Nehru Road, Calcutta 13.

**CHATTERJI, Dr. Sunil Kumar, M.A. Cal., D.Litt. Lond., Hon. D.Lit. Rome, Hon. D.Litt., Delhi; Hon., F.A.S., Hon. Member, Société Asiatique, Paris 1946, American Oriental Society, 1947, Royal Siam Soc. 1955, Oslo Academy of Sci., 1956, American Linguistic Soc., 1959; Padma Bhushan, 1955, Padma Vibhushan, 1963; Philologist; Ex-Chairman, West Bengal Leg. Council, 1952-65; National Prof. of India in Humanities, since Feb. 1965. *b.* Nov. 26, 1890; *Educ.*: Motilal Sil's Free Coll., Scottish Churches Coll. and Presidency Coll., Calcutta; Univ. Coll. and School of Oriental Studies, London; Univ. of Paris and Ecole Française des Langues vivantes Orientales, Paris. Govt. of India Linguistic Scholar in Europe, 1919-22; Khaira Prof. of Indian Linguistics and Phonetics, Calcutta Univ., 1922-52; Visiting Prof., School of South Asia Studies, Univ. of Pennsylvania, Philadelphia, U.S.A., 1951-52; Chairman, Govt. of India Sanskrit Commn., 1956-57. *Publications*: *Origin and Development of the Bengali Language*, 1926; *Indo-Aryan and Hindi*, 1960; *Kirata-jana-kriti*, 1951; *Africanism: The African Personality* 1960, *Indianism & Its Synthesis*, 1962; *Langs and Its of Modern India* (1963), *Dravidian* (1965); etc. and Volumes on Travel and papers on linguistic, historical and cultural subjects in English, Bengali and Hindi. *Address*: "Sudharma," 16, Hindusthan Park, Calcutta 29; National Library Campus, Belvedere, Calcutta 27.**

**CHAUDHARI, Madhukar Dhanaji**, B.Com., Nagpur, M.Com., Nagpur, Minister for Educ. and Forests, Maharashtra since Feb. 19, 1964. *b.* June 16, 1928, at Nasik; *Educ.*: Janata Shikshan Mandal, Khiroda; Municipal High School, Faizpur; D. S. High School, Bhusawal; G. S. Coll. of Commerce and Economics, Wardha; B.Com., 1951; M.Com., 1953, Sanchalak, Jalgaon Dt. Sarvodaya Kendra, Khiroda, 1953; participated in the "Quit India" movement, 1942; organized co-op. movement in East-Khandesh Dist.; worked for The Harijan Sevak Sangh and Adivasi Seva; associated with the Dist. Devpt. Board, Dist. Industrial Assoc., Maharashtra Samajik Parishad, Maharashtra Seva Sangh, etc.; M.L.A., Bombay legislature, Raver Constituency, E. K. Dist., 1957; Dy.

Min. for Irrigation, Bombay State, 1957-60; Dy. Min. for Revenue, Maharashtra, 1960-62; Min. for Pub. Health, Nov. 1962-Dec. 1963; Min. for Educ., Bldg. & Communications, Dec. 1963-Feb. 1964. *Publications*: Thesis on 'A Five Year Plan for the Socio-Economic Development of Village Mahakal'. *Address*: Satpuda, 20, Nepean Road, Malabar Hill, Bombay 6.

**CHAUDHURI, General Joyanto Nath, O.B.E.**, title of "Genl. of Royal Nepalese Army" by King Mahendra of Nepal, June 9, 1963; awarded 'Grand Cordon of the Order of Merit' by U.A.R. Pres., 1964; Padma Vibhushan, 1965, Indian High Commr. in Canada, since July 1966. *b.* June 10, 1903; *Educ.*: Hastings House, Bishops Coll. and St. Xavier's Coll., Calcutta; Highgate School, London and Royal Military Coll., Sandhurst, England. Commnded, Feb. 2, 1928; during World War II saw service in the Middle East Far East; was senior Instructor at Staff Coll. Quetta; commanded 16th Light Cavalry in Burma; was mentioned in despatches three times; at end of war was Brigadier, I/c Adm., Malaya; commanded the Indian Victory Contingent to U.K., 1946; attended Imperial Defence Coll., 1947; Officiating Chief of Genl. Staff 1948 and later Commander, 1st Armoured Dvn.; Military Governor, Hyderabad State, till Dec. 1949; Adjutant-Gen. and Chief of Genl. Staff in Army H.Qs., 1952-55; Corps Commander, 1955-58; Overall Commander, Goa operations, Dec. 1961; Colonel Commandant, Corps of E.M.E. and 16th Light Cavalry and Hon. Colonel of the Brigade of Guards; G.O.C.-in-C., Southern Command, May 1959-Nov. 1962. Chief of the Army Staff, Indian Army, Nov. 20, 1962-June 10, 1966; was Hon. A.D.C. General to the President. *Publications*: *Operation Polo*. *Address*: N. and G. Bank (Lloyds Branch), New Delhi; C/o External Affairs Ministry, New Delhi.

**CHAUDHURI, Naranarain alias Sankho**, B.A. (Calcutta), Dip. in Fine Arts, (Viswa Bharathi), Sculptor; Professor of Sculpture, M.S. Univ., Baroda, since 1951. *b.* Feb. 25, 1916; B.A. in 1939 and Dip. in Fine Arts, 1945, from Santiniketan. Started as a freelance artist in Bombay, 1947; held his first one man show in Bombay, 1949; went on a study tour of Europe, 1949-50; participated in various exhibitions in India and has won several awards including the National Award in 1956; has also participated in some of the exhibitions sponsored by the Govt. of India in other countries; held his second one-man show in Delhi, 1957; elected to the Lalit Kala Akademi, 1956; represented India in the International Symposium of Sculptors held in Yugoslavia in 1961; participated in the Sao Paulo Biennale, 1961; visited Poland on a lecture tour under the culture exchange programme sponsored by the U.G.C., Govt. of India, and visited U.S.S.R. as a guest of the Artists Union; March 1965. *Address*: Dept. of Sculpture, M.S. Univ. of Baroda, Baroda 2.

**CHAUDHURI, Pratul Kumar, B.Sc. (Cal.)**, Secretary, Central Cttee. of the Revolutionary Socialist Party, since 1950. *b.* Feb. 9, 1913; *Educ.*: Chatkhil Panchgaon Gupta H. E. School, Noakhali; Comilla Victoria Coll., Tipperah; Vidyasagar Coll., Calcutta; B.Sc., 1934. Was arrested under the B.C.L.A., May 1934; was in several detention camps, 1934-38; became a Marxist while in camp; delegate; Congress session, Tripuri, 1939, Anti-Compromise Cfee., Ramgarh, 1940; joined the R.S.P. from its inception; member, Prov. Exec. Cttee., R.S.P., 1946-48; started trade union work in Calcutta-Howrah-Hooghly, Sept. 1947; took charge of the Central Office of the R.S.P., Dec. 1948; elected to its Central Cttee., 1948; Mgr., *The Call*, R.S.P.'s organ; its Mg. Editor, since 1957; visited Russia as Rep. of the U.T.U.C. May 1965; member, Wkg. Cttee., U.T.U.C., since 1948. *Publications*: Articles in *The Call*, *Mehnatkash* (a Hindi political weekly) and *Ganavarta* (a Bengali weekly). *Address*: 780, Ballimaran, Delhi-6.



**CHAUDHURI, Sachindra, M.A. (Cantab.),** LL.B. (Hons.) (Cantab.), Barrister-at-Law, Ex-Minister for Fin., Govt. of India, b. Feb. 24, 1903; *Educ.*: Matriculation, Rani Bhabani School, Calcutta with scholarship; intermediate with scholarship from Presidency Coll., Calcutta; degree with honours in Moral science 1923 and LL.B. (Hons.), 1924, both from Fitzwilliam Hall, Cambridge; called to the Bar from Lincoln's Inn, Jan. 1925; M.A., Cambridge, 1927. Joined the Calcutta High Court, 1925; built up a handsome practice; often assisted the Union Govt. in many intricate cases; appeared in most of the major industrial tribunals in W. Bengal, 1948-57; delegate to the U.N. Gen. Assembly, 1949 and 1951; was on the board of dirs. of many large Corps.; was Pres., Calcutta Board of the State Bank of India; was member, the State Bank of India's Central Board; M.P., Lok Sabha from Ghatal constituency, Midnapur dist., 1962-67; was a member of the Law Commn.; has widely travelled. *Address*: New Delhi.

**CHAUDHURI, Tridib Kumar, M.A. (Econ.),** C.U., M.P. (Lok Sabha), General Secy., R.S.P.; Author, journalist and political worker. b. Dec. 1911; *Educ.*: K. N. Coll., Berhampore, West Bengal; obtained B.A. & M.A. degrees while in detention. Member, Indian National Cong. prior to May 1947; Cong. Socialist Party prior to May 1940; detained without trial as a suspected revolutionary and member, underground Anushilan Samiti, 1931-33 and 1939-46; resigned from Cong. 1947 with the R.S.P. group; imprisoned by Portuguese authorities in Goa, July 1955-Feb. 1957; Dy. Leader, United Progressive Parliamentary Group; M.P., Lok Sabha, since 1952; is connected with several unions and their welfare org. in West Bengal; Vice-Pres., United Trade Union Cong. *Publications*: *Swing Back* (1950); *Nineteen Months in Salazar's Prison* (1953); *About the R.S.P.*; *An outline of Socialism*; etc. *Address*: Revolutionary Socialist Party, Central Office, 780, Balimaran, Delhi 6.

**CHAUDHURY, M. Moinul Haque, B.A.,** (Hons.); M.A., LL.B., Minister for Revenue and Forests, Govt. of Assam, since March, 1967. b. July, 1923; *Educ.*: Cotton Coll., Gauhati; Presidency Coll., Calcutta; Aligarh Univ.; B.A. (Hons.), 1944, M.A. first class first in History and Political Sc. 1946; LL.B. (first class), 1946. Joined Legal profession and became a leader; was member, Silchar Local Board and Municipal Board; connected with many educ. instts.; twice under detention for political activities; Congress M.L.A., Assam, 1952; re-elected, 1957 and 1962; member: exec. Cttee., Assam P.C.C.; Assam Cong. Parly. Party; A.I.C.C., since 1959; travelled in Italy, Germany, France, Belgium, U.K., U.N. Gen. Assembly, 1961. Minister for Agr., Community Devpt., Panchayat, Fisheries, Parly-Affairs, Wakf, P.W.D. (Irrigation), Veterinary, Assam, 1957-67. *Address*: Shillong, Assam.

**CHAVAN, Dajisaheb Ramrao, M.A., LL.M.,** Bombay, Deputy Minister for Law, Govt. of India, since March, 1967. b. Aug. 22, 1916; *Educ.*: Kolhapur. Member, Dist. Local Board, Satara, 1942-44; Bombay Leg. Council, 1954-56; Lok Sabha, 1957-62; M.P., Lok Sabha from Karad Constituency, 1962; Dy. Min. for Defence, Govt. of India, May 1962-June 1964; Dy. Min. for Food and Agr., Govt. of India, June 1964-Jan. 1966; Png., Jan. 24-Feb. 13, 1966, was an advocate in the Dist. Courts of Satara, Sangli and Kolhapur; Dy. Minister for Labour, Employment and Rehab., Govt. of India, 1966-67. *Address*: 21, Asoka Road, New Delhi.

**CHAVAN, Shankarrao Bhosrao, B.A.,** Madras, LL.B. Osmania, Minister for Irrigation and Power, Govt. of Maharashtra, since May, 1967. b. 1920; *Educ.*: Palthan (Anangabad District); City Coll., Hyderabad; Nizam Coll., Hyderabad. Connected with several

social, educ., co-op. and other activities in the Marathwada area; was member, Minimum Wages Board, apptd. by Union Govt. Vice-Pres., Central Co-op. Bank at Nanded for five years; was Dir., Hyderabad State Co-op. Bank; was on the exec. body of the State Co-op. Land Mortgage Bank; Chairman, Nanded Municipality, 1952-56; member, Exec. Body of All India Federation of Local Authorities; entered politics, 1945; gave up practice to be a full time Cong. worker, 1946; Secy., Nanded D.C.C., 1950-53; Gen. Secy., Hyderabad P.C.C. for about 2 years; elected M.L.C., Bombay, 1956; M.L.A., Bombay since 1957; Dy. Min. for Revenue, bilingual Bombay, 1956-60; Min. for Irrigation and Power, Maharashtra State, 1960-62; Min. for Irrigation, Power & Urban Devpt., 1962-64; Min. for Irrigation, Power, Bldgs. and Communications, Govt. of Maharashtra, Feb. 1964-67. *Address*: Ramtek, Narayan Dabholkar Road, Malabar Hill, Bombay 6.

**CHAVAN, Yashwantrao Balwantrao,** Min. for Home, Govt. of India, since Nov. 13, 1966; Leader of the Congress Party in Rajya Sabha, since Aug. 1963. b. March 12, 1913, at Devrashtre, Satara Dist.; *Educ.*: Tilak High School, Karad; won several prizes in elocution competition; was a voracious reader; orgd. students movement, 1930; participated in the C.D. Movement 1932; imprisoned for his political activities 1930; matriculated, 1934; B.A., Rajaram Coll., Kolhapur 1938; LL.B., Law Coll., Poona, 1941. Started practice at Karad; was a Royist first, but later dissociated himself from that movement in 1939 on the issue of the Second World War; Pres., D.C.C., 1941; directed underground movement in Satara Dist., Aug. 1942-May 1943 until his arrest at Phaltan, 1944; member, Maharashtra P.C.C., since 1940; was its Secy., 1948, 1949 and 1950; elected M.L.A., Bombay, 1946; apptd. Parly. Secy., 1946; took active part in orging Home Guards; started a Marathi daily, *Prakash* at Satara, 1948; in early days also started the Marathi weekly *Lokkranti*; apptd. Min. for Civil Supplies, Bombay, 1952; as Civil Supplies Min. succeeded in introducing progressive decontrol; was Min. for Local Self-Govt. and Forests, Bombay; was also in charge of Community Projects; elected leader, Cong. Leg. Party of the New Bilingual Bombay State, Oct. 1956; after 1957 elections was unanimously re-elected leader of the Cong. Leg. Party; Chief Min., Bombay State, Nov. 1956-Nov. 62; elected leader, Maharashtra Leg. Cong. Party, 1962 general elections; elected unopposed to the Lok Sabha in Nasik by-election, 1964; Minister for Defence, Govt. of India, 1962-66; visited U.S.A., U.S.S.R., U.K., 1964 in connection with the programmes of military assistance to India; participated in the Indo-Pakistan peace talks at Tashkent, Jan. 1966. *Address*: 1, Race Course Road, New Delhi.

**CHAVDA, Shrivasth Dhanjibhai, G.D. Art** (Bombay), Diploma in Fine Arts, Practising Artist. b. Dec. 11, 1914 in Gujarat; *Educ.*: C.J.N.Z. Madrasa High School, Navsari; Sir J. J. School of Art, 1930-35; Slade School, London, 1938; worked at the Academie de la Grande Chamere, Paris; learned stage designing under the well-known Russian artist Polunin at the Slade School; also studied in St. Martin's School of Art, London. Rep'd in the UNESCO Exhibition in Paris, 1947, the Exhibition of Indian Art at Burlington House, London, 1948, the Salon de Mai, Paris & Exhibition of Indian artists in the U.S.A., Exhibition of Indian Art at Villa Hugel, Germany, 1959; rep'd. at San Paulo Biennale Exhibition, 1961; Venice Biennale, 1962; Intn'l Exhibition of Drawings and Engravings at Lugano, Switzerland, 1964; held 20 one-man shows in and outside India—Djakarta, Singapore, 1951, London, 1955, Paris, 1955, Zurich, 1956 and New York 1965. Travelled widely in Bali, Europe, U.S.A. and Malaya. *Publications*: *Chanda* (contemporary Series of Indian Art published by Lalit Kala Akademi). *Address*:

Master Chambers, 1, Cinema Road, Dhobitalao, Bombay 1.

**CHEEMA, Capt. Autar Singh, Padma Shri** (1965), Sena Medal for 'extra courage and devotion to duty', Mountaineer. b. Jan. 15, 1938; *Educ.*: Govt. Coll., Ludhiana. Joined, I.M.A., July 1958; got commn., June 12, 1960; had been trekking in Kashmir, Lahaul valley, Garhwal hills and Kumaon hills, 1955-62; Skiing Courses, Jan-April 1961. Climbed Pauchuli IV & V (Virgin Peaks), in one day in May 1964; climbed Rathong (Virgin Peak), Oct. 1964; climbed Everest (first batch), May 20, 1965; recipient of Arjuna Award, July 1966. *Address*: 7th Bn., The Parachute Regt., C/o 56 A.P.O.

**CHERIAN, Dr. P. V., M.B.B.S., D.L.O. (R.C.S.),** F.R.F.P.S.G., F.R.C.S.E., Papal Honour "Knight Commander of the Order of St. Gregory the Great", Governor of Maharashtra since Nov. 14, 1964. b. July 9, 1893; *Educ.*: C.M.S. Coll., Kottayam; Madras Medical Coll.; London, Glasgow and Edinburgh. Temporary Commn. in the I.M.S., 1917-22; was in Iraq, 1918-22; Asstt. to Prof. of Surgery, Madras Medical Coll., 1923-25; specialised in diseases of the Ear, Nose and Throat in London, Glasgow, Edinburgh and Vienna, 1925-27; Surgeon, Genl. Hospital and Prof. Medical Coll., Madras, 1927-48; Principal, Madras Medical Coll., 1945-48; acted as Surgeon-Gen., Madras, 1947; retired, Aug. 1948; member, Syndicate of Madras and Annamalai Univs.; Mayor of Madras, 1950; Ag. Vice-Chancellor, Annamalai Univ., March-May 1955; Chairman, Madras Leg. Council, 1952-64. *Address*: Raj Bhavan, Bombay 6.

**CHERIAN, Smt. P. V., B.A. (Madras), Padma** Bhushan (1967), Ex-Mayor of Madras, Social worker; Chairman, Welfare, Amenities & Rehab. Cttee., Maharashtra b. May 28, 1913, in Madras; *Educ.*: Women's Christian Coll., Madras. Member: Senate, Madras Univ.; Pres.: Adv. Board for the Hospital for Women and Children, Egmore, for over 20 years; delegate, Eastern Regional org. of Public Admn., Tokyo, 1961; was member, School Health Commn. apptd. by the Union Govt.; Vice-Pres., Indian Cfee. of Social Work and was in charge of State Cttee. concerning the visit of three cultural delegations from the U.S.S.R., China and Uzbekistan; received the title of Bene Merenti from the Pope; the first lady to become the Mayor of Madras; orgd. the Mayor's School Children Midday Meal Fund; Pres., All Mayor's Cfee., Hyderabad, June 1958; member: All India School Health Council; was Dir.: L.I.C.; I.A.C.; Regional Programmes Adv. Cttee., A.I.R.; Chairman, Handicrafts Cttee., Small-Scale Industries and Handicrafts Board. *Address*: 5, Victoria Crescent, Madras 8; Raj Bhavan, Bombay 6.

**CHETTIAR, Dr. A. Chidambaramanthe, M.A.,** Ph.D., M.L.C., Principal, Thiagarajan Coll., Madurai. Vice-Pres., U.N. Assn., Madras and Indo-Soviet Cultural Soc., Pres., State Tamil Teachers' Assn.; b. April 3, 1907; *Educ.*: Govt. Coll., Kumbakonam; Annamalai Univ. Lecturer, Govt. Muslim Coll., Madras, 1930-33; Ag. Vice-Chancellor, Annamalai Univ., 1948; Prof. of Tamil and Head, Deptt. of Tamil (Arts), Annamalai Univ., 1946-58. Member: Board of Studies in Tamil, Madras, Kerala Univ.; M.L.C., Madras, since 1958; Chief Editor, English-Tamil Dictionary Deptt., Madras Univ., 1959-65; visited Britain and U.S.S.R. *Publications*: *History of Tamil Prosody*; *Life of Sir Thomas Munro*; *Life of Booker T. Washington*; *Dr. Albert Schweitzer*; *Mun Panikalam* (a book of Lity. Essays); *Tamil Orasi*; *Veetu Tirumakal*; *Tamil Kattum Ulaqu*. *Address*: Tirunagar, Madurai 6.

**CHETTIAR, L. P. KR. Ramanathan,** Panditha Vidwan, Panditha (Madura Tamil Sangam), Vidwan, Madras Univ., conferred titles of Muttamil Vittakar, Ikkkiya Vitthakar and Panditamani; Prof. and Head of the Dept.



of Tamil (Oriental), and Dean, Faculty of Oriental Studies, Annamalai Univ., since June 1953. *b.* Nov. 6, 1915; Winner, King George V. Thousand Rupee Prize, Madras Univ. Serves on various academic bodies of the Univs. of Annamalai, Madras, Mysore, Osmania, Sri Venkateswara, Andhra and Kerala, and on Spl. Cttees. constituted by the Govt. of India and of Madras and the Annamalai Univs.; Secy.: Tamil Music Research Cttee. of the Madras Tamil Isai Sangham from 1949; compiled the National Bibliography—Tamil Sec. for Sahitya Academy; member, Syndicate, Senate and Academic Council, Annamalai Univ.; visited univs. and other educ. instts in U.S.A., Canada, Malaysia, U.K. and other European countries. *Publications:* Several papers and books such as *Katturai Kovai*; *Annamalai Arasar*; *Sanga Kala Tamilar Valaru*; *Vazhakkai Valam*; *Tholkappiya Chelvam*; compiled twenty books on Tamil music. *Address:* Annamalai-nagar.

**CHETTIAR, T. Sundaram, B. Com., Mg. Dir.,** East India Corpn. Ltd., cotton merchants and owners of several ginning factories in the South. *b.* 1915, at Madurai; *Educ.:* B.Com., Calcutta Univ., 1938. Mg. Agent: The Sree Meenakshi Mills Ltd., Madurai; Sarnja Mills Ltd., Coimbatore, Sree Rajendra Mills Ltd., Salem; Sri Sarda Mills Ltd., Podanur; Vijayamohini Mills Ltd., Trivandrum, and other mills; Dir., Madura Insurance Co. Ltd., Madurai, visited the U.S.A., U.K. and the Continent, 1948, 1961; Correspondent, Thiagarajar Coll., Madurai; Pres.: Sri Visalakshi Kalasalai High School; A. Thekkur Visalakshi-Thiagarajar Girls' High School; member: Thiagarajar Trust; Thiagarajar Coll. Endowment Trust; Thiagarajar Educl. Trust. *Address:* 'Menakshi Nilayam', Tirupparankundaram Road, Madurai.

**CHHANGANI, Mr. Justice Lakshmi Narayan, M.A., LL.B., Judge, Rajasthan High Court, Jodhpur, since Sept. 1, 1959. b.** Oct. 13, 1910; *Educ.:* Sumer Pushtikar High School, Jodhpur; Jaswant Coll., Jodhpur; Univ. Law Coll., Nagpur; Hislop Coll., Nagpur. Enrolled as First Grade Vakil, 1933 and as Advocate, Jan. 1940; Part-time Lecturer, Jaswant Coll., Jodhpur, 1947-59; Govt. Advocate, Rajasthan, 1953-59; Part-time Lecturer, R. A.S. Trg. Coll., 1957-58; elected Pres., Bar Assoc., 1953; member, Jodhpur Municipality for some years; Member, Bar Council, 1953-59, and was Chairman of number of Bar Council Tribunals. *Address:* Inside Jalori Gate, Jodhpur.

**CHINAI, Babubhai Maneklal, L.T.M., V.J. T.I.,** Padma Bhushan 1966, M.P. (Rajya Sabha), Ex-Pres.: F.I.C.C.I., New Delhi; Indian Merchants' Chamber, Bombay; The All India Assoc. of Industries, Bombay; International Chambers of Commerce, New Delhi; Trustee: Lalji Naranji Memorial I.M.C. Bldg. Trust; Sardar Vallabhbhai Patel Memorial Trust; Shri S. K. Patil Public Trust; Shri Brihand Bharatiya Samaj; B.P.C.C. Properties Trust; People's Jilha Hall Trust; Business man. *b.* April 1913, at Ahmedabad; *Educ.:* Seth Anandilal Podar High School; Sir Parsuram Bhau Coll., Poona; V.J.T.I. Bombay. Joined his family firm of Nagindas Fulchand Chinai; is mainly concerned with the establishment and development of rayon industry in India; courted arrest in freedom movement; Hon. Treasurer, Mahatma Gandhi National Memorial Fund (Bombay Cttee.); member: A.I.C.C.; B.P.C.C.; member of several delegations abroad; Dir.: National Standard Duncun Ltd., Poddar Projects Ltd.; and several other companies; Chairman: Sindhu-Hochtief (India) Ltd.; Usha Forgings & Stampings Ltd.; Gandhidham Spg. & Mfg. Co. Ltd.; Usha Spg. & Wvg. Mills Ltd. *Address:* Residence: St. Jame's Court, Netaji Subhas Road, Bombay 1; Office: 130-32, Apollo Street, Bombay 1.

**CHINAI, Rasiklal J., Industrialist. b.** Aug. 21, 1914; *Educ.:* Panchgani Hindu High School and Bharda New High School; underwent a course of engg. incl. spg. & wvg. in mech. and textile under pvt. tutors at Ahmedabad. Joined Nagindas Fulchand Chinai, family firm dealing in Art Silk and Raw Silk in India, China and Japan, 1932; established National Art Silk Mills (P) Ltd., 1936; started the National Rayon Corpn. *Publications:* Articles in trade magazines. *Address:* 'Mount Pleasant', Swami Vivekananda Road, Andheri.

**CHINYOY, Sir Sultan Meherally, Kt. (1939). b.** Feb. 16, 1885; *Educ.:* Bharda New High School and Elphinstone Coll., Bombay. A pioneer in the Motor Car and Petroleum trade in India; introduced Wireless Telegraphy in India on a commercial scale and founded the Indian Radio and Cable Communications Co., Ltd. (now nationalised by Govt.); Mayor of Bombay, 1938-39; organised Pageant in 1937 in aid of funds of Red Cross and again in 1940 in aid of the Amenities for Troops Fund, Bombay Presidency. *Publications:* *Pioneering in Indian Business*. *Address:* Meher Bldg., Chowpatty, Bombay 7.

**CHOPRA, H.E. Lt.-Col. Inder Sen, O.B.E.,** Indian Ambassador to Argentina, Uruguay, and Paraguay, since December 1964. *b.* 1909; *Educ.:* Bishop Cotton School, Simla; Govt. Coll., Lahore; Royal Military Coll., Sandhurst. Commissioned, Indian Army, 1930; served with 1st Bn., East Surrey Regt., Probyn's Horse (K.E.O. Lancers), and 16th Light Cavalry; selected to join Indian Political Service, 1936; served as Asstt. Political Agent, Loralai; Asstt. Political Agent and Colonisation Officer, Nasirabad; Dir. of Food and Civil Supplies and Secy., Revenue, Baluchistan Govt.; Secy. to the Agent to the Governor-General and Resident in Baluchistan; Secy., Indian Embassy, Washington, 1946; Counsellor, 1948; Deputy Secy., Ministry of External Affairs, 1949; Joint Secy., May 1950; Joint Secy. and Chief of Protocol, Dec. 1950; Minister to Sweden, Denmark and Finland, Aug. 1955; Ambassador to Sweden, 1956; Ambassador to Denmark, 1958; Amb. to Iraq and Jordan, 1958; Jordan, 1960-62; Lebanon, 1962; High Commr. in Cyprus, 1962; Amb. to Kuwait, 1963. *Address:* C/o Ministry of External Affairs, New Delhi.

**CHOPRA, Mulk Raj, Civil Engg.,** Higher Grade, Roorkee; Member, American Society of Civil Engrs. I.S.E., Padma Bhushan (1967), Vice-Chancellor, Roorkee University; Chairman, Central Water and Power Commn., 1962-66. *b.* Aug. 18, 1906; *Educ.:* Govt. Coll., Lahore, 1923-26; Thomason Engg. Coll., Roorkee; had a brilliant academic career. Joined the Punjab Irrigation Branch, 1930; was Exec. Engr. in charge of heavy construction and runing dvn.s; Under-Secy. to Govt., Punjab, Irrigation Branch; promoted Supdtg. Engr., 1948; led a team of engr.s to U.S.A. for designing the Bhakra Dam, 1948; planned construction of Harike Barrage; selected 1st Secy., Bhakra Control Board and sent to U.S.A., 1950; took over construction of Bhakra Dam, 1953; promoted Dy. Gen. Mgr. and then Gen. Mgr., Bhakra Dam and Beas Project, 1960-62 and Secy., Punjab Govt., Bhakra Dam, Admn. 1958-62; led a team of engr.s to France, U.S.A., Canada & Japan for plng. of machinery for Beas Project, and several Indian delegations to technical confs. and meets abroad. *Address:* Roorkee University, Roorkee.

**CHOPRA, H. E. Mr. Surinder Nath, M.A., B.Sc.,** High Commissioner of India in New Zealand, since June 1, 1965. *b.* May 29, 1916. Dir. of Programmes, A.I.R., Delhi; Spl. Correspondent, *Hindustan Times*, New Delhi; Information Officer, Min. of Ext. Affairs, Govt. of India; Dy. Secy., Min. of Ext. Affairs; Consul-Gen. for India, Madagascar; Dir., Min. of Ext. Affairs. *Address:* High Commission of India, 49, Willis St., Wellington (New Zealand); C/o External Affairs Ministry, New Delhi.

**CHOUDHARY, Mr. Justice Rati Kant, B.A. B.L.,** Judge, High Court, Patna, since April 4, 1953. *b.* Jan. 1, 1907; *Educ.:* T. N. J. Coll., Bhagalpur; Law Coll., Patna. Enrolled as an advocate of Patna High Court, Feb. 1935; Lecturer in Patna Law Coll., 1939-46. *Address:* Patna.

**CHOWDHURY, Devi Prasad Roy, M.B.E.** Padma Bhushan (Oct. 1958), Sculptor; Ex-Ch. irman, L. lit Kala Akademi, New Delhi. *b.* June 15, 1899; *Educ.:* Privately. Principal, Govt. School of Arts, Madras, 1929-57; Director, Regional Arts Seminar org. nised by UNESCO at Tokyo, 1955; won 1st prize in the National Modern Sculpture Exhibition, sponsored by the Govt. of India; executed large group composition in the bronze—Martyrs Memorial, Bihar; Triumph of Labour (Delhi & Madras); reproduction of his paintings were published at the London Studio, New York International Studio, Moscow and other places. *Publications:* About eight books consisting of short stories in Bengali. *Address:* 63, Shaubunath Pandit Street, Calcutta 25.

**CHUNDRA, Bimal Kumar, M.B., B.S. (Calcutta), 'Distinction Award' and 'Diploma'** exam. of Royal Life Saving Socy., Lond. (1959), Swimmer. *b.* Nov. 19, 1927; *Educ.:* Scottish Church Collegiate School, Scottish Church Coll. and R. G. Kar Medical Coll. Learnt swimming at the age of 9 at the Central Swimming Club, Calcutta; Calcutta Univ. Inter-Collegiate swimming champion, 1944-50; West Bengal State Champion, 1946-54; All-India Aquatic Champion in 400 metres and 1,600 metres Free Style, 1947-52; represented India in Swimming: in XIV World Olympic Games, London, 1948, and in the 1st Asian Games, New Delhi, 1951; awarded Bronze Medal being 3rd in 400 metres Free Style; swam in the river Ganges for seven hours and covered 27 miles; first Indian to swim the English Channel successfully from France to England in 13 hrs. 50 minutes at the first attempt, Sept. 1959; participated in the Cleveland Intn'l Programme in U.S.A. 1962; Life member, Royal Life Saving Soc., London. *Address:* 46/1, Ramdulal Sircar Street, Calcutta 6.

**CONTRACTOR, Noman Lookmanji,** Businessman. *b.* August 17, 1918; *Educ.:* Privately. Mg. Dir.: Rainbow Ink & Varnish Mfg. Co. Pvt. Ltd.; Popular Fine Art Litho Works Pvt. Ltd.; Partner: The Union Research Laboratories and Messrs. Noman Brothers; Founder-member and Pres.: All India Printing Ink Mfgs. Assoc. Ltd., 1963-64; Hon. Gen. Secy., All India Federation of Master Printers, 1963-64; is its Pres.; Hon. Gen. Secy., Bombay Master Printers' Assoc.; A.I.M.O.; Indian Merchants' Chamber; Indo-Arab Soc.; Panel for devpt. of Printing Machinery Industry; Chemical and Allied Trades Export Promotion Council; Paper, Printing, Packaging and Allied Trades Research Assoc., England; Intn'l Assoc. of Printing House Craftsmen Inc., U.S.A.; All India Playing Card Mfrs. Assoc.; Bombay Industries Assoc., etc.; a Free Mason and a J.P. Has travelled extensively in India, U.S.A., Japan, Europe and Middle East. *Publications:* Articles published in various printing and allied trades magazines. *Address:* 'Firdaus', 133-C, Vakola Pipe Line, Santa Cruz, Bombay 55 A.S.

**COOPER, Jal Manekji, F.R.G.S., Member,** British Philatelic Assoc. Ltd.; Hon. Secy., The Empire of India Philatelic Socy. *b.* March 29, 1905. Member, Glasgow Philatelic Socy., Philatelic Traders' Socy., The Air Mail Socy., etc.; Editor and Publisher of "India's Stamp Journal" (a monthly Philatelic Magazine); Auctioneer and Philatelic Valuer; Dealer in Rare Stamps and all kinds of Philatelic accessories. *Publications:* *Indian Rocket Mails*, *Early Indian Cancellations*, *Stamps of India*, *India used in Burma*, *India used Abroad*, and *Specialised Catalogue of Indian Stamps*. *Address:* Standard Building, Dadabhoj Nao-roji Road, Bombay.



**COOPER, Dr. Rustom Cavasjee, M. Com.,** Ph.D. (Econ.), F.C.A., F.S.A.A. (Hons.), Partner, P. C. Hansotia & Co., and Touche, Ross, Bailey & Smart; Pres., Indian Merchants' Chamber for 1967. *b.* Aug. 18, 1922; *Educ.*: Sydenham Coll. of Commerce & Economics, Bombay; Univ. School of Economics, Bombay & British Coll. of Accountancy, London. Practising Chartered Accountant since 1948; Member, Mg. Cttee., Indian Merchants Chamber, since 1954; Member, Senate, Bombay Univ., since 1954; Central Council, Instt. of Chartered Accountants of India, since 1958; Pres., The Instt. of Chartered Accountants of India, 1963-64; Member: Central Direct Taxes Adv. Cttee., since 1964; Research Programmes Cttee., Finance Ministry since 1960; Chairman, Bennett, Coleman & Co. Ltd., 1964-66; Dir.: Victor Gaskets India Ltd.; Navsari Cotton & Silk Mills Ltd.; Caekwar Mills Ltd.; Firth Sterling Steel Corp. of India Ltd.; Ramon & Demm Ltd., etc.; Hon. Treasurer, Indian Red Cross Socy.; Specialist in Taxation and Management Consultant; Member, Local Board, State Bank of India; is Vice-Chairman, Bhavan Intl.; Vice-Pres., Indian Merchants Chamber for 1966. *Publications*: *Bombay Public Trust Act and Handbook of Estate Duty*. *Address*: 51, Mahatma Gandhi Road, Jehangir Wadia Bldg., Bombay 1.

**DAHANUKAR, Dattatreya Mahadeo,** Chairman and Dir., The Maharashtra Sugar Mills Ltd.; Dir.: Schrader-Scovill Duncan Ltd.; M. L. Dahanukar and Co. P. Ltd.; Mg. Dir., Arun Dahanukar & Co. P. Ltd. *b.* Dec. 21, 1911; *Educ.*: Bombay. Member: The Indian Merchants' Chamber, Bombay; Bombay Chamber of Commerce & Industry, Bombay; The Maharashtra Chamber of Commerce, Bombay; Bombay Management Assoc., Bombay; F.I.C.C. & I., New Delhi. *Address*: Office: Industrial Assurance Building, Churchgate, Bombay 1. Res.: "Bakhtawar", Narayan Dabholkar Road, Malabar Hill, Bombay 6.

**DAHANUKAR, Mahadeo Laxman, Mg. Dir.,** M. L. Dahanukar & Co. Pvt. Ltd.; Mg. Agents, The Maharashtra Sugar Mills Ltd. & The Belvandi Sugar Farm Pvt. Ltd.; Dir., Dahanukar Sons Pvt. Ltd.; N.U.C. Pvt. Ltd.; Worli Chemical Works Pvt. Ltd.; ex-Sheriff of Bombay; ex-Pres., The Maharashtra Chamber of Commerce; Employers' rep. to the Intl' Labour Cfce., Geneva, 1939; Ex-member: Cttee. of the Indian Merchants' Chamber, Bombay; the F.I.C.C.J.; Indian National Cttee. of the Intl' Chamber of Commerce; All-India Org. of Industrial Employers; Provincial Housing Adv. Cttee.; Regional Disposal Adv. Cttee., Bombay & other Govt. Bodies; Employers' Federation of India; Councillor, Bombay Municipal Corpn., 1932-39; and Bandra Municipality, 1930-34; takes part in commercial, industrial & social activities. *Address*: Shree Sadan, 4A, Carmichael Road, Cumballa Hill, Bombay; Industrial Assurance Building, opp. Churchgate Station, Bombay 1.

**DALAL, Manockji Nadirshaw, Ex-Chairman,** Council of State. *b.* Jan. 7, 1905. Sheriff of Bombay; Vice-Pres., Indian Branch of the Commonwealth Parly. Assoc.; Member of the Court, Delhi Univ.; served on all Adv. Cttees. of Ministries of the Govt. of India, Supply & Munitions Production Cttee., Central Adv. Council, Railway Board, Civil Defence Cttee., Food Cttee., Roads Cttee., Commonwealth Relations Cttee. etc.; Dir.: Sepulchre Bros. (India) Ltd.; Intl' Road Federation; member, Exec. Cttee., Indian Merchants' Chamber; Chairman: Elpro Intl' Ltd.; Tractors (India) Ltd.; Coles Cranes of India Ltd.; Tractors & Equipment Corpn. Ltd.; Cranes & Equipment Corpn. Ltd.; Adv., New India Assurance Co. Ltd.; Fellow, Incorporated Assoc. of Architects & Surveyors (London); Fellow, Royal Soc. of Arts (London); member, Royal Instt. of Civil Engrs. (Lond.); Honourably mentioned for the Charles Hawkesley Prize, 1931, by the Royal Instt. of Civil Engrs. (London). *Address*: Nepean House, Ridge Road, Bombay 6.

**DALMIA, Jaidayal. b.** Dec. 1904, younger brother of Seth Ramkrishna Dalmia; *Educ.*: Privately. A leading industrialist and an able Executive; has wide knowledge of machinery and plant; keenly interested in mass literacy, labour problems and maternity welfare; has travelled in India and Europe; has visited workshops of many important machinery manufacturers in Great Britain and the Continent and has good experience of different processes of cement manufacture; keenly interested in engineering; Chairman, Orissa Cement Ltd. *Address*: No. 2, Tilak Marg, New Delhi.

**DALMIA, Seth Ramkrishna. b.** April 7, 1893. Industrialist; his ancestors, noted for their love of spiritual service, belonged to Dalma, a village in the Punjab State, from where they migrated to Rajputana; *Educ.*: Without the help of a tutor, by reading books in leisure time, practical experience and natural gift, acquired knowledge specially in finance, banking, commerce, economics and philosophy; also acquired good knowledge of Hindi, Bengali, Gujarathi and English all of which he speaks well and with ease; well read in Hindu scriptures; started career at the age of 12 on Rs. 10 per mensem, as an apprentice with his maternal uncle; is the founder of the Dalmia-Jain Group of Industries consisting of many companies including banks, insurance and investment companies, chains of cement and sugar factories, chemicals, biscuit factories, aviation companies, railways, collieries, publishing house and newspapers; has now distributed most of the concerns between his brother and son-in-law, keeping just a few in his hands; had numerous ups and downs in his career but his steadfastness and strong will power raised him to his present position; his centres of activity have grown into self-sufficient towns, named after his ancestors and relations—Dalmianagar (Bihar), Dalmiapuram (South India), Dalmia-Dadri (Punjab), Ramkrishna Lok, Sawal Madhopur (Rajasthan), and Shantinagar (Karachi, Pakistan); one of the biggest philanthropists, his charities include schools and other institutions such as hospitals, widows' homes, poor houses, and religious institutions being run by Charity Trusts; since 1951 has lived on fruit and fruit juice, has vowed not to take cereals until cow slaughter is abolished; wears simple clothes and is frugal in his personal expenses; is on terms of friendship with religious and social leaders; orthodox in his living and having implicit faith in his own religion, has strong belief in the Supreme Power of Goddess "Jagadamba" who pervades and controls the Universe. *Address*: Dalmia House, New Delhi.

**DALMIA, Vishnu Hari, Industrialist. b.** May 1924; *Educ.*: Privately. From young age, began taking active interest in various concerns owned and/or managed by the Dalmia Group like Bharat Bank Ltd., Bharat Fire & General Insurance Ltd and Bharat Insurance Co., Ltd. Chairman: Dalmia Cement (Bharat) Ltd.; Raza Buland Sugar Co., Ltd.; The Rampur Distillery & Chemical Co., Ltd.; Director, Orissa Cement Ltd., Bharat General Reinsurance Ltd. etc.; Member: Main Cttee. of Indian Sugar Mills Assoc.; Cement Mfrs. Assoc.; All India Organisation of Industrial Employers; was a member, of the first Central Wage Board (Cement); widely travelled in Europe, Japan and U.S.A.; keenly interested in cultural activities, welfare programmes for employees and religious literature; as a strict vegetarian, takes active interest in propagation of vegetarianism. *Address*: 4, Scindia House, New Delhi 1 (Office); 2, Tilak Marg, New Delhi 1 (Residence).

**DAMLE, Kashinath Raghunath, B.Sc. (Hons.)** (Allahabad and London), I.C.S., Chairman, Union Public Service Commission, since March 1967. *b.* March 3, 1900; *Educ.*: Allahabad Univ.; King's Coll., London. Joint Magistrate & Dist. & Sessions Judge in various places in U.P. & Ajmer (1930-44); Secy. to

High Commr. for India in Australia, also Acting High Commr. (1944-48); Jt. Secy. & Offg. Secy. to Govt. of India & Vice-Pres., Indian Council of Agrl. Research (1949-55); Chairman, Tariff Commr., 1955-58; Secy.: Union Min. of Food & Agr., 1958-62; Union Min. of Mines & Fuel, 1962-63; Min. of Petroleum & Chemicals, 1963-64; Secy. to the Pres., Oct. 1964-Feb. 1965, Lt. Governor of Goa, Daman & Diu & Admor., Dadra & Nagar Haveli, 1965-67. *Address*: Union Public Service Commission, Dholpur House, New Delhi.

**DANDEKAR, Gopal Neelkanth, Marathi Novelist. b.** July 8, 1917; *Educ.*: Upto 5th standard at Nagpur; left school and house to join national movement of 1930; wandered all over India in company of Sages for a period of 15 years. *Publications*: Novels: Marathi: *Binduchi Katha*; *Tudavlele Gharkul*; *Padma*; *Sindhukanya*; *Shitu*; *Jagannatha Pandit*; *Pavnakathacha Dhondi*; *Padghavli*; *Purnamaychi Lekre*; *Kuna Ekachi Bhraman Gatha*; *Kisi Ekachi Bhraman Gatha* (Hindi); *Machivarala Budha*; *Aamhi Bhageerathache Putra* (a novel about Bhakra Dam); *Hum Bhageerath Kee Santan*; *Anandwanbhuwan* (a novel about lepers); *Shree Karnayan*; *Udoni Hans Chalila*; *Ajoon Nahee Jagen Gokul*; *Bhawartha Jnaneshwaree*; Dramas, Collections of stories, 75 books of various nature in Hindi and Marathi. *Address*: Talegaon-Dabhada, District Poona.

**DANDEKAR, Ramchandra Narayan, M.A.** (Sanskrit), M.A. (Ancient Indian Culture), Ph.D., Padma Bhushan, 1962, Sanskrit Scholar, Prof. of Sanskrit & Head of the Deptt. of Sanskrit & Prakrit Languages, Univ. of Poona; member: Central Archaeology Board, Govt. of India; Maharashtra State Board for Literature & Culture; Language Adv. Board. *b.* March 17, 1909; *Educ.*: Deccan Coll., Poona; Heidelberg Univ. (Germany); Hon. Secy., Bhandarkar Oriental Research Instt., Poona, since 1939; Gen. Secy., All India Oriental Cfce., since 1946; attended Intl. Congresses of Orientalists, Paris, 1948, Istanbul, 1951, Cambridge, 1954, Moscow, 1960, Vice-Pres., Intl' Union of Orientalists; member, Sahitya Akademi; Editor, Critical Edition of Mahabharata; Editor, *Annals of B.O.R.I.*, *Journal of University of Poona*, *Erasmus. Publications*: *Der vedische Mensch*, *A History of the Guptas*, *Vedic Mythological Tracts*, *Vedic Bibliography*, *Salyaparan*, *Rasaratnapradipika*, *Progress of Indic Studies*, *Srautakosa*, *Anus' a Sanaparan*. *Address*: University of Poona, Poona 7.

**DANDEKER, Narayan, B.Sc. (Econ.)** (Hons.), London, B.Com. (Hons.), London, F.C.A., Eng., F.C.A. India, I.C.S. (Retd.), M.P., Chartered Accountant; Dir., Punjab National Bank Ltd.; Chairman, Indian Oxygen Ltd., Dir. & Financial adv. to various companies. *b.* June 24, 1908; *Educ.*: St. Mary's European High School, Madras; Univ. Coll., Colombo, Ceylon; London School of Economics, London; School of Oriental Studies, London. Joined the I.C.S., 1931; Commr., Income, Tax 1941-44 at Calcutta & then in Punjab, Delhi & N.-W.F. Provinces, 1944-46; on spl. duty with the Central Board of Revenue 1946-47; Commsnr. of Income-Tax, Bengal, 1947-48; Member, Central Board of Revenue 1948; Jt. Secy., States Min., 1948; member, Cttee. on Federal Fin. Integration, 1948-49; Chief Exec., Scindia Steam Navigation Co., Ltd., Bombay, 1949-54; Mg. Dir., Cement Agencies Ltd., 1954-61; Chairman, Council for Econ. Educ., 1958-62; Pres.: Bombay Chamber of Commerce, 1959-60; All-India Management Assocn., 1960-63; member, Bonus Commn., 1961-64. *Address*: Southlands, 177, Upper Colaba, Bombay 5.

**DANG, Satya Pal, Minister for Local Govt.,** Community Development, Panchayati Raj., Food and Supplies, Punjab, since March 1967. *Educ.*: Graduated from Punjab Univ. Gave up studies to join the freedom movement; was an outstanding leader of the student movement in India; and was General Secy., All-India Students' Federation, for a number of



years; made valuable contribution to Punjab's working class movement; elected to the Punjab Vidhan Sabha from Amritsar West Constituency on Communist Party ticket, 1967 elections; settled down in Chhehrata after freedom; organised the Workers there; elected Pres., Chheharta Municipal Cttee. for 11 years. *Address*: Minister for Local Government and Food and Supplies, Punjab, Chandigarh.

**DANGE, Shripad Amrit, M.P.**, Chairman, National Council, C.P.I., since April 29, 1962; Gen. Secy., All India Trade Union Congress. *b.* Oct. 10, 1899; *Educ.*: Bombay. Member, Central Exec. Cttee. of the C.P.I. & also member, Secretariat; Vice-Pres., World Federation of Trade Unions; courted jail for over 17 years under the British Govt. & the Cong. Govt. for conducting strikes, struggles & political activities on behalf of the Communist Party; M.P., Lok Sabha, 1957-62; again elected to the Lok Sabha from Central Bombay Constituency, 1967. *Publications*: *India from Primitive Communism to Slavery*, 1949; *Hell Found*, 1928; *Gandhi vs. Lenin*, 1921, etc. *Address*: 9, Kohinoor Road, Dadar, Bombay 14; 7/4, Asaf Ali Road, New Delhi.

**DAPHTARY, Chandra Kisan, M.A.** (Cantab.), Bar-at-Law, Padma Vibhushan (1967), Attorney-Gen., Govt. of India, since March 1963. *b.* April 1, 1893; *Educ.*: St. Paul's School, London; Magdalene Coll., Cambridge; called to the Bar, Jan. 1917; Advocate O.S., High Court; Advocate-General, Bombay, till July 1951; Solicitor-General, Govt. of India, 1951-63. *Address*: 3, Hastings Road, New Delhi.

**DARSHAN, Bhakt, M.A.** (Allahabad). Dy. Min. in the Ministry of Transport and Shipping, Govt. of India, since March 18, 1967. *b.* Feb. 12, 1912; *Educ.*: D. A. V. Coll., Dehra Dun; Vishwa Bharati, Shantiniketan; Allahabad Univ. Took active part in Congress movements & was imprisoned four times; founded & edited the *Karma Bhumi* (a Hindi weekly newspaper from Landsdowne, Garhwal); was Chairman, Rural Devpt. Assoc.; Pres., Dist. Board & Dist. Plng. Officer, Garhwal for several years; M.P., Lok Sabha from Garhwal (U.P.) since 1952; Dy. Min. of Education, Govt. of India, 1963-67. *Publications*: *Suman-Smriti-Granth*; *Garhwal-Ki-Divangat-Vibhutiyan* (both in Hindi). *Address*: Jaiharikal, Landsdowne, Dt. Garhwal (U.P.); 10, Hastings Road, New Delhi.

**DAS, Biswanath, B.A., B.L.**, Ex-Governor of Uttar Pradesh. *b.* March, 1881, in Ganjam Dist., Orissa; *Educ.*: B.A. Ravenshaw Coll., Cuttack; B.L., Univ. Law Coll., Calcutta. First elected Pres., Chhatapur Taluqa Board (Ganjam), the only elected non-official office then open to Indians, in Madras; practised in Ganjam Dist., 1919-21; joined Congress, 1921; started Kisan Sangh in Madras Presidency, 1920; elected M.L.A., Madras Council from Ganjam Dist., 1920-29; resigned obeying Cong. call for Salt Satyagraha, 1929; often imprisoned in the freedom movement; elected M.L.A., Orissa, 1936; was elected leader, Cong. Assembly Party, 1937; Chief Min. of Orissa, 1937-39; resigned on the War issue; Member, Constituent Assembly, 1947-51; was member, A.I.C.C. for many years; Pres., Utkal P.C.C. for 3 terms; was M.P., Rajya Sabha for two terms; again elected M.L.A., Orissa; Governor of U.P., 1962-67. *Address*: C/o Raj Bhavan, Lucknow, U.P.

**DAS, Debesh Chandra, B.A.** (Hons.) in English with First Class First, I.C.S., Secretary, Deptt. of Statistics, Cabinet Secretariat, Govt. of India. *b.* Sept. 1, 1911; *Educ.*: Calcutta & London Univs.; Middle Temple; B.A. (Hons.), 1931. Joined I.C.S., 1934; Under Secy., Home & Political Deptt., Assam Govt., 1938; held imp. posts in Assam & Govt. of India till he

became Chief Secy., Assam; Secy., U.P.S.C., 1951-54; Jt. Secy., Union Min. of Communications, 1955-61; Mg. Dir., C.W.C., Min. of Food, 1961-64; led Indian delegations abroad for: Civil Aviation Agreement, 1956, Commonwealth Telecom. Agreement & World-wide Submarine Cables Cttee., 1958; Jt. Policy Cttee. of UNICEF & FAO, 1965; ECAFE, ECOSOC Cfce., Bangkok, 1966; Pres., All India Bengali Literary Cfce., since 1952; Secy. to Govt. of India for Social Security, 1964-66. *Publications*: *Europa*; *Prema Raj*; *Rajwara* (received award of sword); *Rajast, Rome Theke Ramna*; *Sei Chirakal*; *Pratham Dharechhe Kali*, *Paschimer Janla*, *Sudur Banshari*, *Sei Kolkata*, *Baktarag*, etc. Translated in several Indian and foreign languages & exhibited in World Book Exhibition. *Address*: 3, Raisina Road, New Delhi 1.

**DAS, Durga**, Editor in Chief, *India News and Feature Alliance*, since Nov. 1959. *b.* Nov. 23, 1900, at Aur (Punjab); *Educ.*: Jullundur & Lahore. Parly. Correspondent & Editor, Associated Press of India, New Delhi-Simla, 1918-37; Special Rep. of the *Statesman*, 1938-43; Jt. Editor, the *Hindustan Times*, 1944-57 & Chief Editor, 1957-59; studied working of the Press and Parliaments in Europe and the U.K., 1931; visited the Middle East, Italy & the U.K. as War Correspondent, 1945; Pres., U.P. Press Cttee., 1946; Chairman, Press Gallery Cfce., Indian Parliament, 1951-59 & 1962-63; Delegate to the Commonwealth Press. Cfce., Ottawa, 1951; Pres., All-India Newspaper Editors' Cfce., 1959-61; Pres., Press Club of India, New Delhi, 1959-62; member, Small Newspapers Enq. Cttee. made round-the-world tours, 1957 & 1959. *Publications*: *India & The World*; *Ram Rajya in Action*; *Infra Press And Advertisers Year Book*. *Address*: 2, Tolstoy Lane, New Delhi 1.

**DAS, Dr. Nabagopal, I.C.S.** (Retd.), Ph.D. (London), Life Member, Royal Eco. Soc., Author; Eco. Adv. & Vice-Pres., Hindustan Motors, Ltd., Calcutta, since 1964. *b.* Feb. 20, 1910; *Educ.*: Presidency Coll., Calcutta; London School of Economics. Entered the I.C.S., 1931; Dir.-Gen. of Resettlement & Employment & Jt. Secy., Union Min. of Labour, 1947-52; Secy. to Govt. of West Bengal, Commerce & Industries, Irrigation & Waterways & Home Deptts., 1952-58; Dir. Gen., Employers' Federation of India, Bombay, 1959-63; attended the I.L.O. Sessions in San Francisco, 1948 & Geneva, 1949 & 1950, on behalf of Govt. of India & in Cologne 1959, on behalf of Indian Employers; Founder-member, Indian P.E.N. *Publications*: *Industrial Enterprise in India*; *Unemployment, Full Employment and India*; *The Public Sector in India*; *Experiments in Industrial Democracy*; also novels and collections of short stories in Bengali. *Address*: 4, Jubilee Park, Tollygunge, Calcutta-33.

**DAS, Dr. Pandit Nilakantha, M.A., D.Litt.**, Padma Bhushan, Ex-Speaker, Orissa Legislative Assembly; Poet and Writer. *b.* Aug. 5, 1884. Appointed by Calcutta University to Post-graduate Professorship in 1920; imprisoned in N. C. movement; was Provincial Congress President, Utkal, several times from 1934-39 and President, Utkal All-Party Conference; elected Chairman, Reception Committee, I.N. Congress, Puri Session, 1931-32; Member, Delhi University Court for 6 years from 1924; Chairman, Orissa University Committee; M.L.A. (Central), 1924-30, again from 1935-45; M.L.A. (Orissa), 1952-57; Pro-Chancellor, Utkal Univ., 1955. *Publications*: Books for children on new lines; Critical Treatises, Essays, etc.; a new thesis on the Gita with commentary; *Evolution of Oriya Literature*; research articles on Vedic Language and Culture, Jagannatha and other similar institutions; Pres., Orissa Sahitya Akademi, 1957. *Address*: Village and P.O. Sriramchandrapur, Dist. Puri.

**DAS, Santanu Kumar**, Minister for Tribal & Rural Welfare and Excise, Orissa, since March 1967. *b.* Sept. 1917; *Educ.*: Jajpur High School. Elected to the Orissa State Assembly, 1942, 1946, 1952, 1957, 1961 from Salepur, Jajpur-Binjharpur and Jajpur (East); elected member, Constituent Assembly, till 1950; Dy. Min., 1957-59; took up social work among the criminal tribes under the guidance of Thakkar Bapa and worked with him, 1936 and 1938 floods; Councillor, Jajpur Municipality, 1938; courted jail in the freedom movement; while in jail, was elected M.L.A., in a bye-election; joined Jana Congress Party, 1966; got elected on Jana Congress ticket, 1967; member, Bharatiya Depressed Classes League; Founder Pres., Orissa Depressed Classes League; member: State Tribes Advisory Board; Harijan Welfare Board; State Transport Communication Board; State Writers' Assocn.; Chairman, State Scavengers Welfare Cttee.; *Publications*: *Bhai Bhai*; *Ahwan*; *Bhitamati* in Oriya; contributes to newspapers. *Address*: P.O. Box No. 89, Bhubaneswar (Orissa).

**DAS, Dr. Sudhi Ranjan**, Barrister-at-Law, LL.D., *Honoris Causa* of Allahabad & Calcutta Univs., Ex-Chief Justice of India. *b.* Oct. 1, 1894; *Educ.*: Tagore's School, Santiniketan, Bangabasi Coll., Calcutta Univ., Coll., London; Graduated, Calcutta Univ., 1915; LL.B. (Lond.), 1st class 1st, 1918; called to the Bar, Gray's Inn, 1918. Joined Calcutta Bar, 1919; Lecturer, Univ. Law Coll.; Addl. Judge, Calcutta High Court, 1942-44; Puisne Judge, Calcutta High Court, 1944-49; Chief Justice, East Punjab High Court, 1949-50, Judge, Supreme Court of India, 1950-55; Chief Justice of India, 1956-59; Fellow, Univ. Coll., London; Member, Univ. Grants Commn., 1962-65; Vice-Chancellor, Visva Bharati Univ., 1959-65. *Address*: Swapanpuri, Kalimpong, West Bengal.

**DAS GUPTA, Bibhuti Bhusan**, Minister-in-charge of the Dept. of Panchayats & Social Welfare, West Bengal, since March 1967. *b.* Jan. 1904; *Educ.*: Rajendra Coll., Faridpur (now in E. Pakistan). Gave up studies and joined Gandhiji's Non-Cooperation Movement and Congress, 1921; suffered imprisonment, during the freedom movement 1921, 1923, 1929, 1932, 1941, 1942; was a detenu in Bengal for his revolutionary activities, 1935; was Secy., Manbhum Dt. Congress Cttee.; member, Bihar P.C.C. and A.I.C.C. upto 1948; Vice-Chairman, Purulia Municipality, 1939; left Congress and became Proddhan Sachib of Lok Sevak Sangha formed and led by late Atul Chandra Ghose; elected in the Lok Seva, 1957-62; elected to the W. Bengal Assembly as a candidate of Lok Sevak Sangha, 1967; was Editor, *Mukti*, a Bengali Weekly published from Purulia. *Address*: 9/3, Raipara Road, Calcutta 50.

**DAS GUPTA, Bimal**, Diploma in Commercial Art, leading painter; Asstt. Director (Publicity), National Bldgs. Organisation, Ministry of Works, Housing & Rehabilitation, Govt. of India, *b.* Dec. 28, 1917; *Educ.*: Govt. College of Arts and Crafts, Calcutta. Won several prizes in all India poster competitions; also gold and silver medals as best water colourist in various exhibitions in India; awarded the national prize by the President of India, 1955; paintings exhibited in the principal cities of the world; held one man exhibitions of paintings in Delhi, Sept. 1955, Sept. 1957, Nov. 1960, Nov. 1962 and in Calcutta, Feb. 1957; his latest experiments are in unconventional *gouche* paintings; a water colour "Sacks and Sands" preserved in the Hermit Art Gallery, U.S.S.R.; visited Poland, Germany, France, England, Italy and Greece on a cultural exchange programme, 1961. *Address*: E-13, Moti Bag, New Delhi 5.

**DAS-GUPTA, Dr. Harendra Nath, M.Sc.** (First-class) (Silver medalist), D.Sc. Retd. Professor and Head of the Deptt. of Silicate Tech. &



Ag. Principal, Coll. of Tech., Banaras Hindu Univ. b. Nov. 1904; *Educ.*: Calcutta Univ. Awarded a Post-graduate Research Scholarship by the Bengal Govt. for original investigation on organo-arsenic drugs, 1930-33; Council Member, Indian Chem. Soc., 1948-50; Prof. of Chemistry, Fuel & Metallurgy, Indian School of Mines & Applied Geology, Dhanbad; presided over the sec. of Engg. and Metallurgy of the 48th Session of Indian Sc. Cong., Roorkee, 1961; member, Laboratory Glassware & related Apparatus Sectional Cttee. of the Indian Std.s Instt. *Publications*: Published papers on investigations in the organo-arsenic compounds; glass & silicates; sulphur, phosphorus, analytical chemistry and metallurgy. *Address*: 5/3, Kali Charan Dutta Road, Calcutta 8.

**DAS-GUPTA, Niraj Nath, M.Sc. (Cal.), Ph.D. (Lond.), F.N.I., Educationist.** b. Feb. 1, 1909; *Educ.*: Hindu School, Presidency College; College of Science, Calcutta Univ.; King's College, London Univ. (1935-38); Cal. Univ. Gold Medalist (1931); Mahendralal Sircar Research Medalist (1938); Research Fellow, Cal. Univ. (1938-40). Physicist Tata Memorial Hospital, Bombay (1940-42); Lecturer Calcutta Univ. (1942-45); Research Associate, Stanford Univ., California (1945-46); Reader in Biophysics, Cal. Univ. (1946-53); Professor and Head of Biophysics Division, Saha Institute and Professor, Cal. Univ. since 1953. Member: American Physical Society; Biophysical Society, U.S.A.; National Institute of Sciences, India; National Committee for Biophysics, India; Executive Committee of International Federation of Societies for Electron Microscopy, 1966; Gen. Secretary; Indian Physical Society (1951-54), Secretary: Biophysics Research Committee C.S.I.R. (1955-58); President: Electron Microscope Society of India since 1962. Research interests: Electron microscopy of macromolecules and microorganisms, application of tracers in medical research, radiation biology. *Publications*: over thirty papers in biophysics, electron microscopy and radiation biology and a monograph on Wilson Cloud Chamber translated into Russian. *Address*: 44, Hazra Road, Calcutta 19.

**DAS GUPTA, Prodosh Kusum, B.A., F.R.S.A. (Lond.) (1955), Director, National Gallery of Modern Art, New Delhi, since July 1957.** b. Jan. 10, 1912, Dacca; *Educ.*: B.A. from Scottish Church Coll., Calcutta, 1932; Govt. School of Arts and Crafts, Lucknow, and Madras; awarded Guru Prasanna Ghose Travelling Scholarship by the Calcutta Univ. in 1938 to study sculpture in Royal Academy of Arts, London; L.C.C. Central School of Arts and Crafts, London; Ecole De Grand Schaumere, Paris. Practised as a professional sculptor till 1950; went twice to South East Asian countries, 1950-51; Reader and Head, Deptt. of Sculpture, Baroda Univ., 1950; Prof. of Sculpture, Govt. Coll. of Arts and Crafts, Calcutta, 1951-57; represented India in the International Sculpture Competition, London, 1953; President Elect, International Association of Plastic Arts, UNESCO, Vienna Session, 1960; member: Exec. Cttee. of International Assoc. of Plastic Arts; Exec. Board, Lalit Kala Academy. *Publications*: *My Sculpture* (1956); many articles on Art in various magazines, periodicals and dailies both in English and Bengali. *Address*: Jaipur House, New Delhi.

**DAULATA, Partap Singh, B.A., LL.B., Development Minister, Haryana, since March 24, 1967.** b. April 14, 1919; *Educ.*: B.A. from D.A.V. Coll., Lahore, 1941; LL.B. from Univ. Law Coll., Lahore, 1944. Vice-Pres.; Punjab Students Union, 1939-41; Kisan Sabha, Punjab, 1953-55; Pres., Young Zamindars Assoc. (Students' Organisation) of the Unionist Party of Punjab, 1941-44; member, Lok Sabha, 1957-62; enrolled as an advocate, Supreme Court, 1962, Senior Advocate, 1964;

elected to Haryana Vidhan Sabha, 1967. *Address*: House No. 90, Sector 2, Chandigarh.

**DAVE, Mr. Justice Durga Shanker, B.A., LL.B., Chief Justice, High Court of Rajasthan, since June 1, 1963.** b. Dec. 18, 1906; *Educ.*: Darbar High Schools, Bundi and Jhalawar; B.A. Banaras Hindu Univ.; LL.B., Agra Univ. Apptd. City Magistrate, Bundi, 1930; Dist. Magistrate and Civil Judge, 1931-37; Dist. and Sessions Judge, Bundi, 1937-47; High Court Judge, Bundi, 1948; High Court Judge in former Rajasthan, 1948-Jan. 25, 1951; Judge, Industrial Tribunal, 1951-52; Judge, Rajasthan High Court, 1952-63. *Address*: 42, Railway Road, Jodhpur.

**DAVE, R. M., Industrialist.** b. Jan. 1, 1918; *Educ.*: Baroda Univ.; Sheriff of Madras 1960-61; Member: Cttee. of the F.I.C.C. & I., 1960-61; Pres., Hindustan Chamber of Commerce, 1956-59; member: Wkg. Cttee., Hindustan Chamber of Commerce; T.N.C.C.; Trustee, Madras Port Trust Board, Central Excise Cttee.; Madras; Pres., Sri Mambalam Gujarati Samaj, Madras; is connected with several social, educ. and cultural activities; deals in Cotton, Iron & Steel, Engg. tools, Cement, Hardware, Cycles and accessories; Dir.: Sovereign Spg. & Wvg. Mills Ltd., Madras, Raka Chemical & Food Products Ltd., Hindustan Shipyard Ltd., Visakhapatnam; Steel & Structural Machinery Ltd., Madras. Widely travelled. *Address*: Office: Broadway, Madras 1; Res.: 22, Boag Road, Madras 17.

**DAVE, Shantilal Somnath, Post Diploma in Painting, Artist.** b. Sept. 25, 1931; *Educ.*: Premier High School, Ahmedabad; Fine Arts Coll., Baroda. Awarded Lalitkala Akademi Prize, 1956, '57 and '58; Governor's Prize—Bombay Art Society, 1956, '58; 3rd major prize, S.E. Asian Art Exhibition at Manila, 1957 for paintings; Recipient of a cultural Scholarship of Govt. of India for 1957-59 to study under the guidance of Prof. N. S. Bendre, Faculty of Fine Arts, M. S. Univ.; Calcutta Academy of Fine Arts, Governor's Gold Medal, 1959; Bombay State Art Exhibition, Tamra Patra and cash prize of Rs. 1,000, 1959; Murals, for Air-India International—Frankfurt, New York, Los Angeles, New Delhi, Bombay and Taj Mahal, 1960; conducted one-man show in Los Angeles; London; Bombay (twice); Delhi (thrice). *Address*: E-61, South Ext. Part 1, New Delhi 3.

**DAYAL, Mr. Justice Bishambhar, B.A., LL.B., Judge, High Court of Judicature at Allahabad, since May 6, 1957.** b. Sept. 14, 1910; *Educ.*: C. A. V. Int. Coll., Allahabad; St. John's Coll., Agra; Agra Coll., Agra; passed school final, 1926; Intermediate, 1928; B.A., 1930 and LL.B., 1932. Practised at Nainital and Allahabad, 1933-57; joined the High Court Bar, 1946. *Address*: 37, Thornhill Road, Allahabad.

**DAYAL,\* Rajeshwar, M.A., I.C.S., Amb. to France, since June 1965.** b. Aug. 12, 1909, at Naini Tal, U.P.; *Educ.*: Naini Tal, Allahabad and Oxford Univs. Entered I.C.S., 1933; Home Secy., U.P., 1946-48; Counsellor, Min., Embassy of India, Moscow, 1948; Charge d'Affaires, 1948-49; Alternate Rep. of India to Security Council with rank of Min., 1950; was Chairman, Cttee. of 12 on Disarmament; Permanent Rep. of India to the U.N., 1952-54; often negotiated with Dr. Graham on the Kashmir Question; was founder member, Asian-African group of countries; Amb. in Yugoslavia, 1954-58; concurrently first Envoy Extr. & Min. Plenipotentiary to Rumania and Bulgaria, 1955-58; concurrently Indian Amb. to Greece, Jan. to June 1958; member, U.N. Observer Group in the Lebanon, June-Dec. 1958; U.N. under Secy. and Rep. of the U.N. Secy.-Gen. in the Congo, 1960-61; High Commr. in Pakistan, 1958-62; Spl. Secy., Min. of Ext. Affairs, 1962-65; Commonwealth Secy., Feb.-May 1966. *Address*: C/o External Affairs Ministry, Govt. of India, New Delhi.

**DE, Biren, Artist.** b. Oct. 8, 1926; *Educ.*: Studied up to Intermediate Sc.; later at Calcutta Govt. Coll. of Arts & Crafts, 1944-49. Practised as free-lance artist; executed many Commend portraits of distinguished people and mural decoration at convocation hall, Delhi Univ.; held several one-man shows; participated in many exhibitions abroad, Paris, 1951; San Paulo Biennale, Brazil, 1961; Tokyo Biennale, Japan, 1960 and 1962; Venice Biennale, 1962; ten Indian Painters Exhibition touring the U.S.A. and S.E. Asian Countries; won National Award for painting, 1958 and 1964; worked on Fulbright Grant in New York, 1959-60. *Address*: Kumar Gallery, 11, Sundar Nagar Market, New Delhi; *Residence*: 1, Ramkishore Road, Civil Lines, Delhi.

**DE, Sushil Kumar, M.A., Premchand Roychand Scholar, Calcutta Univ., D. Litt. London Univ., Hon. F.R.A.S. (England), 1964, Sarojini Gold Medalist for researches in Bengali (Calcutta Univ.), Prof. Emeritus, Jadavpur and Calcutta Univs.; Member, Sanskrit Commn., Govt. of India.** b. 1890; *Educ.*: Presidency Coll., Calcutta; School of Oriental Studies, London; invited by the Univ. of Chicago to inaugurate Tagore Centenary Memorial Lectures, 1961. *Publications*: *Bengali Literature in the 19th century*; *History of Sanskrit Poetics 2 vols., Early History of the Vaisnava Faith and Movement in Bengal*; *History of Sanskrit Kavya Literature*; Joint Editor, BORI edition of the Mahabharata, Poona; *Bengali Proverbs*; etc.; several articles and monographs in various Oriental Journals, European and Indian etc. *Address*: 19-A, Chaudhuri Lane, Calcutta 4.

**DEHEJIA, Venilal Tribhovandas, B.Sc., Chairman: State Bank of India; State Banks of Bikaner and Jaipur, Hyderabad, Indore, Mysore, Patiala, Saurashtra and Travancore.** b. July 23, 1908; *Educ.*: Wilson Coll., Bombay, Royal Coll. of Sc., London; Pragji Thackersey Mulji prize for standing first in the Univ. in B.Sc., Dakshina Fellow, Wilson Coll. I.C.S., 1931-66; was Collr. of Ahmednagar, Jacobabad, Kaira, Dharwar and Poona; reorg.d. Excise Adm. in Sind; served in the Central Secretariat and in Sind and Bombay Secretariats; was Chief Secy., Sind and Saurashtra; Secy. in Charge of Org. Methods and State Reorg.; member, Sales Tax Enq. Cttee.; Spl. Commr., Baroda; Secy.: Home Deptt., Bombay, 1947-52; Fin. Deptt., 1952-56; Spl. Secy., Political & Services Dept., 1956-59; Chairman, Bombay Port Trust, 1959-60; Secy., Union Min. of Fin., 1960-65; Vice-Pres., Instt. of Bankers. *Address*: 5, Harkness Road, Bombay 6.

**DENNIS, H. D., Vice-Pres., Caltex (India) Ltd., and Mg. Dir., Caltex Oil Refining (India) Ltd.** b. Aug. 7, 1909, at Seattle, Washington; *Educ.*: Univ. of Washington; Degree in Civil Engg. Served in various capacities in China, Japan, Ceylon, Australia and New York before coming to India in 1955 as Gen. Mgr. *Address*: Sorrento, Mt. Pleasant Road, Bombay-6.

**DESAI, Dajiba Balavantrao, B.A. (Hons.), LL.B., Ex-M.P. (Rajya Sabha), General Secretary: Peasants and Workers Party, since 1955 and Samyukta Maharashtra Samiti; Editor, Rashtraveer (weekly);** *Educ.*: Maratha Mandal's High School and Gilgichi Artel High School, Belgaum; Lingaraj Coll., Belgaum; Bajaram Coll., Kolhapur; Raja Lakshmagauda Law Coll., Belgaum. Joined Peasants and Workers Party, 1948; member: Central Committee of P. & W. Party, since inception; Political Cttee. of P. & W. Party; elected General Secy., P. & W. Party in Latur Conference, 1955; detained in prison, April 1956; released, Oct. 1956; member: Secretariat of Samyukta Maharashtra Central Cttee.; Parliamentary Board and Policy Cttee.; Action Cttee. of Maharashtra Ekikaran Samiti, Belgaum; Goa Vilinikaran Sahayak Samiti; Secretary, Border Action Cttee. *Publications*: Marathi: *Jamin Konachi? Kusel Tyachi Ki Vitat*

\* It is reported that he is being succeeded by Mr. C. S. Jha, who is now Foreign Secretary (June 1967).



**Ghenaryachi.** Address: 42, Vijaynagar—Hindalaga, Belgaum.

**DESAI, Doulatrao Shripatrao, B.A., LL.B.,** Min. for Revenue, Maharashtra State, since March, 1967. b. March 10, 1910, at Marali near Patan, Dist. North Satara; *Educ.*: Rajaram High School, Rajaram Coll. & Sykes Law Coll., Kolhapur. Commenced practice at Karad & Patan, 1939; twice elected Pres., Rural Devpt. Board, Taluka Patan, 1940; Pres., Dist. Local Board, Satara, 1941-52; member: Provincial Commodity Board since its foundation; Provincial Edu. Board; Provincial Physical Edu. Board; Soldiers', Sailors', and Airmen's Board, Satara (N); Maharashtra Pradesh Social Edu. Board; Bombay State Road Transport Corpn., 1955-57; Pres., Central Adv. Cttee. of Regulated Markets in Maharashtra; Gen. Secy., P.C.C., 1952-57; Chief Whip, Congress Leg. Party; M.L.A., Bombay from Patan Constituency since 1952; Min., P.W.D., Bombay Govt., 1957-60; Edu. Min., Maharashtra, 1960-62; Min. for Agr., March 1962-Dec. 1963. Min. for Home, Maharashtra State, Dec. 1963-March 1967. Address: "Meghdut," Narayan Dabholkar Road, Bombay 6.

**DESAI, Hitendra Kanaiyalal, B.A., LL.B.,** Chief Min., in charge of Home, Png., Gen. Adm., Information, Gujarat State, since March 1967. b. Aug. 9, 1915, at Surat; *Educ.*: Surat and Bombay; awarded "Cobden Club Medal" for obtaining highest marks in Econ. Hons. at Bombay Univ.; was Fellow for a year; LL.B., 1939. Started practising law & made a mark in legal profession; courted jail during freedom movement; member, Surat Borough Municipality 1946; Chairman: Law Cttee., 1946-49; Stg. Cttee., since 1949; Vice-Pres. and Chairman, Stg. Cttee., since 1952; member, Senate, Gujarat Univ. and Rural Advisory Cttee. of All India Radio; is interested in the students movement and has worked hard in the social sphere; M.L.A., Bombay from the Mangrol Constituency, 1957; Min. for Edu.: Bombay State, 1957-60; Gujarat State, 1960-62; Min. for Edu., Social Welfare, Rehab., Agr. & Forest, Excise and Prohibition; elected Dy. Leader, Gujarat Leg. Congress Party, Sept. 19, 1963; Min. for Home, 1963-65; apptd. leader of the House, since Feb. 17, 1964 and Chief Min. from Oct. 1, 1965. *Publications*: Several popular booklets on political, economic and social topics. Address: Sachivalaya, Ahmedabad 15.

**DESAI, Mr. Justice Kapil Kalyandas, B.A., LL.B.,** Judge, High Court, Bombay, since Aug. 18, 1958. b. Oct. 28, 1910; *Educ.*: Gurukul (Boarding School); B.A. from Elphinstone Coll., Bombay, 1932; LL.B. from Govt. Law Coll., Bombay, 1934; awarded Arnold scholarship, Judge Spencer's prize and several other scholarships. Commenced practising on the Original Side, High Court, Jan. 19, 1938; had lucrative practice. Address: 56, Ridge Road, Malabar Hill, Bombay.

**DESAI, Khandubhai Kasanji, Snatak** (Gujarat Vidyapith, Ahmedabad), M.P. (Rajya Sabha), Ex-Min. for Labour, Govt. of India, b. Oct. 23, 1898; *Educ.*: Bular Bai Avabai High School; Wilson Coll., Bombay. Joined the N. C. Movement, 1920; Gen. Secy., Textile Labour Assoc., Ahmedabad; established a net-work of unions throughout Gujarat; elected M. L. A., Bombay, 1937; as member, Textile Labour Enq. Cttee., assisted in the first legislation of Industrial Disputes in Bombay Assembly; elected to the Constituent Assembly, 1946; was Vice-Chairman, B.P.C.C.; member, A.I.C.C. and Congress Wkg. Cttee. for several years; Board of Trade, New Delhi; National Defence Council, Govt. of India; was Dir., Industrial Fin. Corpn.; member, Employees' State Ins. Corpn.; led the workers' delegation to I.L.O., 1950; founder of the I.N.T.U.C., 1947 and its first Gen. Secy.; was its Pres. successively for three years; Chairman: Board of Dir., Oil India Ltd.; Public Sector Award Cttee.;

member, High Powered Cttee. to assess progress of the khadi & village industries; visited China; Attended I.C.F.T.U. World Congress, Berlin. Address: Textile Labour Assocn., Gandhi Majoor Sevalaya, Bhadra, Ahmedabad.

**DESAI, Morarji Ranchhodji, B.A.,** Deputy Prime Minister and Min. for Finance, Govt. of India, since March, 1967. Chairman Adm. Reforms Commn., Govt. of India, Jan. 1966-March 1967. b. Feb. 29, 1896; *Educ.*: Bular, Bular Dist., Gujarat; Wilson Coll., Bombay. Entered Provincial Civil Service of the Govt. of Bombay, 1918; resigned to join the C.D. Movement, 1930, and was convicted, 1930-34; Secy., Gujarat P.C.C., 1931-37 and 1939-46; Min. for Revenue, Co-op., Agr. and Forests, Bombay, 1937-39; convicted, 1940-41 and detained in prison, 1942-45; Min. for Home and Revenue, Bombay, 1946-52; Chief Min. of Bombay, 1952-56; Min. for Commerce and Industry, Govt. of India, 1956-58; Treasurer, A.I.C.C., 1950-58; Hon. Fellow, Coll. of Physicians and Surgeons, Bombay, 1956; Hon. Doctor of Laws, Karnatak Univ., 1957. Visited London, Washington, New York, Montreal, Aug.-Sept. 1958, in connection with foreign loans for India; visited France, Switzerland, U.K., U.S.A. and Japan for foreign aid to India and also to attend the Commonwealth Fin. Ministers' Cfee. in London, Sept.-Oct. 1959; visited Yugoslavia, Poland, Czechoslovakia, West Germany, the Soviet Union and Egypt in connection with financial aid to India, June-July 1960; attended the Commonwealth Fin. Ministers' Cfee. in Lond., Sept. 1960; attended the annual meetings of the World Bank and I.M.F. to discuss the prospects of American assistance for India's Third Plan, Sept.-Oct. 1960; went on a three-week tour to capitals of Europe viz., Brussels, Bonn, Geneva, Paris and Rome to mobilise foreign assistance for the Third Five Year Plan, July 1962; again visited Washington, Ottawa and Tokyo for aid for the eco. devpt. in India, Sept.-Oct. 1962; Union Fin. Min., 1958-63; resigned the Ministership under the Kamaraj Plan, Aug. 1963; Chancellor, Gujarat Vidyapeeth, Ahmedabad; Chairman: Navjivan Trust; All-India Prohibition Council; Adv. Board of Hindustani Prachar Sabha; The Collected Works of Mahatma Gandhi; Trustee: Gandhi Smarak Nidhi; Gandhi Peace Foundation; Kasturba Trust; associated with various other constructive and cultural Orgs.; elected to the Lok Sabha from Surat, 1967. Address: 7, Thyagaraj Marg, New Delhi.

**DESAI, Ranjit Ramchandra, Sahitya** Acadami Award 1964, Marathi short story writer. b. April 8, 1928; *Educ.*: Vidyapith, J. C. H. High School, Kolhapur, Rajaram Coll., Kolhapur. Has introduced different forms of short stories in Marathi Literature such as rural, social, and historical stories. Started his career at the age of 16; has recently been writing novels; historical novel *Swami* was awarded the Sahitya Acadami Award, 1964. Presided over the 28th session of the Marathi Wangamaya Parishad, Baroda, 1965. *Publications*: Has nearly 200 short stories to his credit. Short Story Collections: *Rup Mahal*; *Madhumati*; *Kanav*. Jan. Novels: *Bari*; *Maza Gaon*. *Swami*. Address: Taluk Chandgad, Post Kowad, Dist. Kolhapur (Maharashtra).

**DESHMUKH, Mr. Justice Balkrishna Narhar, M.A., LL.B.,** Judge, High Court of Bombay, Nagpur Bench, since June 8, 1965. b. Nov. 19, 1918; *Educ.*: Primary & Secondary educ. at Ahmednagar; Coll. education at Poona. M.A. & LL.B., 1941. Practised in Civil & Criminal Courts with his father at Ahmednagar till 1955; Asstt. Judge, Nasik and Poona, April 1955-Oct. 1957; Joint Judge at Thana and Ahmedabad; Dist. & Sessions Judge, Sangli, Sept. 1958-Nov. 1960; Judge in City Civil Court and Addl. Sessions Judge for Bombay, Nov. 1960-Nov. 1963; Dist. & Sessions Judge, Poona, Jan. 1964-June 7, 1965. Address: Civil Lines, Nagpur.

**DESHMUKH, Chintaman Dwarkanath, B.A.** (Cantab.), Bar-at-Law, Hon. Doctor of Laws by Univs. of Princeton, New Jersey and Leicester, U.K. (1963); by Univs. of Mysore, Osmania, Hyderabad, (1957); Hon. D.Sc. by Univs. of Calcutta (1957), Karnatak, Dharwar (1963); Indian Statistical Instt., Calcutta (1965); Hon. Doctor of Letters by Univs. of Annamalai (1957), Allahabad (1958); Hon. D. Litt. by Univs. of Nagpur and Punjab (1959). Vice-Chancellor, Delhi Univ., since Feb. 28, 1962; Chairman, Adm. Staff Coll., Hyderabad, since Jan. 1960; Pres., India International Centre since March 1959; member, Bd. of Trustees of the U.N. Instt. for Trg. and Research, since 1965; elected Vice-Chairman, 1966; nominated member, Court of the Aligarh Muslim Univ., since 1965; Ex-Pres., Indian Statistical Instt., 1946-64; Ex-Chairman, National Book Trust, 1957-Sept. 1960. b. Jan. 15, 1896; *Educ.*: Elphinstone Coll., Bombay & Jesus Coll., Cambridge, Natural Sc. Tripos., Part I, B.A., Cambridge in 1917. Passed U.K. Bar Exam., 1919 and called to the Bar as a member of the Inner Temple in 1963. Entered the I.C.S. Nov. 1919; Financial Secy., C. P. and Berar, 1933-39; Jt. Secy., Govt. of India, Dept. of Educ., Health and Lands, May-July 1939; Officer on Spl. Duty, Fin. Dept., Govt. of India and Custodian of Enemy Property, 1939; Secy., Central Board, R.B.I., 1939-41; Dy. Governor, Dec. 1941-Aug. 1943; Governor, 1943-49; India's delegate to the World Monetary Cfee., Bretton Woods, 1944; Governor for India on I.M.F. & I.B.R.D., from 1946; Financial Rep. of India in Europe and America, 1949-50; member, Png. Commn., March 1950; Chairman, I.M.F. & I.B.R.D., Sept. 1950; M.P. and Union Min. of Fin., June 1950-July 1956; Chairman: Univ. Grants Commn., 1956-60; Indian Inst. of Public Adm., 1964. Address: 40, Lodi Estate, New Delhi 3.

**DESHMUKH, Dr. Smt. Durgabai, M.A., B.L.,** Hon. Doctor of Laws by Andhra Univ. (1963), Chairman, Central Social Welfare Board; Founder Pres., Andhra Mahila Sabha, Madras & Hyderabad. Advocate, Supreme Court of India; Hon. Dir., Council for Social Devpt., India Intl. Centre, New Delhi. Member, Advisory Cttee. of Experts for the prevention of Crimes and Treatment of Offenders, of the U.N., 1965. b. July 1910; *Educ.*: Banaras, Andhra and Madras Univs. Member, Constituent Assembly and Provisional Parliament of India 1946-52; practised as lawyer, 1942-52; Member: Png. Commn., 1952-53; Chairman, Central Social Welfare Board, 1953-62; Chairman, National Cttee. on Girls' and Women's Edu., apptd. by the Govt. of India; 1958-61; Chairman: Editorial Cttee. for *Social Welfare in India and Social Legislation*; Editorial Board on *Encyclopaedia of Social Work in India*; was Chairman, National Council for Women's Educ. Address: 40, Lodi Estate, New Delhi 3.

**DESHPANDE, Atmaram Raoji, B.A.** (Hons.), LL.B., Marathi Poet; Adv., Social Educ., Min. of Educ., 1961-65; Vice-Pres., Indian Adult Educ. Assocn.; member, Exec. Council of Sahitya Akademi. b. Sept. 11, 1901; *Educ.*: Hindu High School, Amravati; Fergusson Coll., Poona; B.A. (Hons.), 1923, LL.B., 1925. Lawyer (1925-28); Civil Judge & Dist. & Sessions Judge 1920-47; Dy. Dir. of Public Instruction in Charge of Social Educ. Nagpur, 1948-52; Spl. Officer, Social Educ. Community Projects Adm., 1952-56; UNESCO Fellowship (1956); Dir., National Fundamental Edu. Centre, 1956-61, delegate, Seminar on Adult Edu. W. Germany, 1961; Chairman, Cttee. of Literary Experts, UNESCO, Paris, 1962, led Indian Literary delegation to U.S.S.R., 1963. *Publications*: Three collections of poems besides two longer poems; several articles on literary criticism & social education. Address: 88, West Park, Dhantoli, Nagpur 1.

**DESHPANDE, Purushottam Laxman, M.A., LL.B.,** Padma Shri (1966), Writer, Actor & Producer of Plays in Marathi. b. Nov. 8, 1919;



**Educ.**: Bombay & Poona. Is interested in literature, histrionics & music; was a Prof. in Marathi, Kirtli Coll., Bombay & R.P.D. Coll., Belgaum; wrote scripts, acted & directed music in Marathi films; was the first Chief Producer, A.I.R. Television, Delhi; was trained in the B.B.C.; left A.I.R., 1961; began doing one-man shows on the Marathi stage; *Batalyachi Chawl*, first of its kind was a success; estd. a charitable foundation, 1966, Pu. La. Deshpande Foundation, to promote cultural & national activities; *Vyakti Ani Valli*, a collection of pen-portraits, won the Sahitya Akademi award, 1966. **Publications**: Plays, travellogues, collection of humorous articles & sketches. **Address**: Mukangan, 15/B, Sarojini Naidu Road, Santa Cruz, Bombay 54.

**DESHPANDE, Purushottam Yashawant**, M.A., LL.B., Sahitya Akademi Award 1962, Writer. b. Nov. 10, 1900; **Educ.**: M.A. Poona, 1924; LL.B. Nagpur, 1926. Lawyer, Civil Judge for some time and later writer and journalist; has taken part in politics; jailed during the freedom movement; M.P., 1950-52. **Publications**: Seven novels; his book called *Anamikachi, Chintanika*, secured Sahitya Akademi Award, 1962; among many other books three volumes on Saint Dnyanadeva's *Anubhavamruta*. **Address**: Ramdas Peth Park, Nagpur.

**DESHPANDE, Vishnu Ghanashyam**, M.A., Morris Memorial Fellow of Nagpur Univ. (1934-37), Sir Arthur Blenner Hasset Medalist (Nagpur Univ.), Ex-Pres., Hindu Mahasabha; Editor, *Free Hindustan*. b. Nov. 17, 1912; **Educ.**: Sakarkherda, Mehkar, Khamgaon and Nagpur; took M.A. degree, 1934. Joined the Hindu Mahasabha, 1939; elected Gen. Secy.: M.P. Hindu Mahasabha 1939; All-India Hindu Mahasabha, 1940; imprisoned several times in connection with his activities in the Hindu Mahasabha, 1939, '41, '42, '47, etc.; imprisoned 5 times during Jammu Movement, 1953; was elected to the Lok Sabha from two constituencies, 1952; was the first M.P. to offer satyagraha in Goa; was imprisoned; participated in Samyukta Maharashtra movement; led the first batch of Satyagrahis who offered satyagraha near Flora Fountain, Bombay; was the Chief Whip of the National Democratic Party in Lok Sabha; was Editor, *Adesh and Hindu Outlook*. **Address**: C/o Hindu Mahasabha Bhavan, Reading Road, New Delhi.

**DEVA, B. C.** (See under Chaitanya Deva, B.).

**DEVARAJALU, G. K.**, A leading industrialist; Chairman, Indian Cotton Mills Federation, 1965-67. b. Dec. 7, 1912. Mg. Agent & Dir.: Lakshmi Machine Works Ltd.; Lakshmi Mills Co. Ltd., Coimbatore Cotton Mills Ltd., Mg. Dir., South India Viscose Ltd.; Dir.: The Madras Aluminium Co., Ltd., Lakshmi Card Clothing Mfg. Co., Pvt. Ltd., Lakshmi Machine Works Ltd.; Indian Overseas Bank Ltd.; Premier Mills (CBE) Ltd., Sivananda Mills Ltd., Kothari Textiles Ltd., Vijayeswari Textiles Ltd., Sri Lakshminarayana Textile Ltd., all in Coimbatore District. Mg. Trustee, G. Kuppaswamy Naidu Memorial Trust for Edu. & Medical Relief; Chairman: South India Textile Research Assoc., Coimbatore; Chairman; Indian Cotton Mills Federation, Bombay; Exec. Cttee. member, F.I.C.C. & I., New Delhi, widely travelled in Europe, America and Far East countries. **Address**: 'Shell House', Avanashi Road, Coimbatore.

**DEVI, Smt. Bindhya Basini**, Musician; Folk Music Producer, A.I.R., Patna. b. 1918 at Muzaffarpur; **Educ.**: Visharad, Hindi Univ., Aligarh; Sahitya Bhushan, Hindi Vidyapeeth, Deogarh; four years vocal musical course at Bhatkhande Sangeeth Vidyapith, Lucknow. Was Mistress, Arya Kanya Vidyalaya, Patna for 10 years; founded with her husband, Vindhya Kala Mandir, Patna, 1949; a pioneer of folk songs, folk dance and folk drama of

Bihar; started composing and research of folk songs, ballets and dances of Bihar from 1935; elected member, Gen. Council, Sangeet Natak Akademi, New Delhi, for seven years; awarded title of "Lok Sangeet Vishardha" by the late Acharya Seopujan Sahay; her folk songs were recorded by H.M.V. and Regional Pictures of Bihar. **Publications**: *Manaw; Lok Sangeet Sagar; Vaishali Mahima*; several folk stories. **Address**: C/o Vindhya Kala Mandir, Kankarbagh, Patna 7.

**DEADDA, Siddha Raj**, M.A. (Pol.), LL.B., Social Worker; Vice-Pres., Intn'l. Confederation for Disarmament and Peace; Editor, *Bhoodan Yagna* (Hindi Weekly); Trustee, Sarva Seva Sangh; Vice-Chairman, Rajasthan Sevak Sangh; b. Feb., 1909; **Educ.**: Maharaja's Coll., Jaipur; Canning Coll., Lucknow Univ. and the Allahabad Univ. Secy., Indian Chamber of Commerce, Calcutta and various other Assocs., 1934-42; has been connected with various pol., social and cultural orgs; was arrested at Banaras and detained, 1943-45, 'Quit India' movement; Founder and Chief Editor, *Daily Lokvani* from Jaipur, 1946-49; Gen. Sec., Rajputana P.C.C., 1947-48; State Min. for Industries and Commerce, 1949-51; resigned from Congress, Aug. 1951, has since been working in the Sarvodaya Movement. **Publications**: *Decentralised Economic Order* (Hindi); *Contributes to English, Hindi periodicals*. **Address**: Chaura Rasta, Jaipur.

**DHAMIJA, Jagan Nath**, M.A. (Cantab.), Barrister-at-Law, Ambassador to Czechoslovakia, since Oct. 1966. b. Aug. 17, 1913; **Educ.**: Emmanuel Coll., Cambridge; Lincoln's Inn, London; Cambridge Tennis Blue, 1936-39; Indian Political Service, June 1944; served as Asstt. Commr., Dera Ismail Khan, Under-Secy., to the Agent to the Governor-Gen., Baluchistan, Asstt. Political Agent and Dy. Commr. of Gilgit Agency; Under-Secy., Foreign and Political Deptt., Govt. of India, 1946-49; Secy. and Adviser, Indian Delegation to U.N. General Assembly Session, Sept. 1948; First Secy., Indian High Commn. in Australia, 1949-52; was Acting High Commr.; Officer on Spl. Duty. Ext. Affairs Min., 1952; Dy. Secy., Min. of States, (later Min. of Home Affairs), July 1953-March 1958; Commr. for India in Mauritius, Oct. 1958-June, 1960. Amb. to Afghanistan, July 1960-July 1964; Chief of Protocol and Conlir. Gen. of Emigration, Government of India, Min. of Ext. Affairs, 1964-66. **Address**: C/o Ministry of External Affairs, Govt. of India, New Delhi.

**DHANNOWALI, Piara Ram**, Minister for Labour and Employment, Printing and Stationery, Housing, Slum Clearance, Social Welfare, Welfare of Scheduled Castes and Backward Classes and Political Sufferers, Punjab, since March 1967. b. 1927. Is Gen. Secy. Punjab Branch of the Republican Party of India; has a good record of service to the backward section of the society; has been taking active part in the various movements in support of Harijan Welfare; elected to the Punjab Vidhan Sabha from Kartarpur (Reserved) Constituency, 1967 General Elections on the ticket of the Republican Party of India. **Address**: Minister for Labour and Employment, Punjab, Chandigarh.

**DHARMAKUMARSINHJI, R. S.**, F.Z.S., M.B.O.U., M.Z.S., Vice-Chairman and Regional Secy., Indian Board for Wild Life. b. April, 1917; **Educ.**: Harrow (Public School); Samaldas Coll., Bhavnagar. Served the erstwhile State of Bhavnagar as Adv. on Wild Life Conservation; member, Indian delegation to UNESCO Ctee. at Lake Success, 1949; Spl. Officer on duty, Min. of States, Govt. of India, to make rapid survey of wild life and game in the State Unions, 1950; Vice-Chairman, I.B.W.L., 1952; joined the Bombay State Forest Deptt. as Wild Life Preservation Officer, 1955; elected Pres.; Bombay Aquarium Soc., 1957, member, Natural History Sect. Cttee., Prince of Wales Museum. **Publications**: *Birds of Saurashtra*, 1954; won 1st

prize for the best book with illustrations of the year, Govt. of India; *A Field Guide to Big Game Census in India*. **Address**: 26, Lotus Court, Jamshedji Tata Road, Bombay 1.

**DHEBAR, Uchhrangrai Navalshanker**, Chairman, Khadi & Village Industries Commn.; Ex-Pres., Indian National Congress; High Court Pleader. b. Sept. 21, 1905; **Educ.**: Rajkot and Bombay. Practised as a lawyer in the Court of Western India States Agency, Rajkot, 1929; abandoned practice for active Cong. work, 1936. Secy., Kathiawar Political Ctee., 1937-48; Secy., Gujarat Provincial Cong. Cttee., 1945-47; imprisoned thrice for taking part in Rajkot Satyagraha, 1938-39; for individual Satyagraha for 6 months, 1941; in the Quit India movement, 1942-45; Chief Min., Saurashtra, 1948-54; elected Pres., Indian National Cong. for the 3rd term during the 63rd Session of Cong., Nov. 1957-Feb. 1959; Member: A.I.C.C., Wkg. Cttee., 1955-63; Chairman, Scheduled Areas & Scheduled Tribes Commn., 1960-61; was M.P. **Address**: Irla Road, Bombay 56.

**DIAS, Anthony Lancelot**, B.A. (Econ. Hons.) Bombay, B.Sc. (Econ.) London, I.C.S., Secy., Dept. of Food, Min. of Food & Agr., since Aug. 1964. b. March 13, 1910; **Educ.**: Deccan Coll., Poona; London School of Economics, London; Magdalene Coll., Cambridge; Dakshina Fellow, Gobden Club Medal (Bombay Univ.), The Hugh Lewis Prize (London School of Economics). Entered I.C.S., 1933, served in various capacities as Asstt. Collr., Collr., Dir. of Land Records & Settlement Commr., Secy. & Supply Commr., Food & Civil Supplies Deptt., 1947-52; Secy., Edu. Deptt. 1952-55; Secy. Agr. Deptt., 1955-57; Home Deptt., 1957-60; Chairman, Bombay Port Trust, 1960-64. **Address**: New Delhi.

**DIGVIJAI NATH, Mahant**, Vice-Pres., All India Hindu Mahasabha. b. 1894 in Shishodia family in Udaipur; **Educ.**: St. Andrew's Coll., Gorakhpur; while a student, joined N.C. movement, 1919. Joined Congress, 1921; resigned, 1928; installed Mahant of Shri Gorakhnath Temple, Gorakhpur, 1935; joined Hindu Mahasabha, 1937; arrested and detained in 'Quit India' movement on charge of harbouring Cong. rebels, 1942-43; Pres., U.P. Hindu Mahasabha, 1945-48; arrested in Direct Action movement of the U.P. Hindu Mahasabha against U.P. Govt., 1947; Secy., All-India Hindu Mahasabha, 1950-51; Vice-Pres., 1951-60; Pres., Shimoga and Gwalior Session, All-India Hindu Mahasabha, 1960 & 1961; estd. Maharana Pratap: Inter Coll., Degree Coll. along with Women Section, Polytechnic and Shishu Shiksha Vihar; Founder Vice-Pres., Gorakhpur Univ.; Digvijaynath Junior High School, Maharajganj and Gorakhnath Sanskrit Vidyapith; Pres., Barapanth Avdhut Yogi Mahasabha. **Address**: Gorakhnath Temple, Gorakhpur, U.P.

**DIMITROV, H.E. Mr. Christo**, "9th of September" order (1959), Amb. Extraordinary and Plenipotentiary of the People's Republic of Bulgaria to India. b. July 15, 1912; **Educ.**: Higher educ. in Sofia. First Secy., Bulgarian Legation in Rome, 1948-50; Chief of a Divn., Min. of Foreign Affairs, 1950-56; Envoy Extraordinary and Min. Plenipotentiary to Syria, 1956-58; Amb. Extraordinary and Plenipotentiary to Indonesia, 1958-61; served with the Min. of Foreign Affairs in Sofia before coming to India. **Address**: 36, Ratendone Road, New Delhi.

**DINKAR, Ramdhari Sinha**, B.A. (Patna), D.Lit. (H. Causa), 1962, Vidya Vachaspati (H. Causa), 1965; Padma Bhushan (1959), Vice-Chancellor, Bhagalpur Univ., 1964-65; Hindi Adv. to the Union Govt., Vice-Chairman, Hindi Salahkar Samiti, since June 1965; Hindi Poet. b. Sept. 29, 1908. Prof. of Hindi, 1950-52; Congress M.P., Rajya Sabha, 1952-64; awarded Sahitya Akademi Prize (1960) for "*Sanskriti ke char Adhyay*"; represented Indian poetry in the Intn'l. Ctee. of Poets,



Poland, 1955; visited China at the invitation of the Writers' Union of China, 1957; visited U.S.S.R., 1961. *Publications*: 18 volumes of Hindi poems and 10 volumes of prose besides some books for children. *Address*: Bhagalpur.

**DIVAN, Gautam Ramanlal**, B.Com., A.C.A., a leading Table-Tennis Player; Partner, Chandabhoj & Jassoobhoj, Chartered Accountants, Bombay. *b.* July 22, 1940; *Educ.*: St. Xavier's High School, & Sydenham Coll. of Commerce & Economics, Bombay. National Champion in Table-Tennis 1956-57, 1964-65; rep. India in Intn'l. Competitions, 1957-66; connected with Org. of Table-Tennis in Maharashtra since 1961; is Treasurer, Maharashtra State Table-Tennis Assoc. *Address*: Kalewar Mansion, Babulnath Road, Bombay-7(WB).

**DIWAKAR, Ranganath Ramachandra, M.A.**, Chairman: Gandhi Smarak Nidhi, since Sept. 1957; Gandhi Peace Foundation since 1959; Editorial Cttee., *Karnatak Through the Ages*, Ex-Governor of Bihar (1952-57). *b.* Sept. 30, 1894 in Dharwar; *Educ.*: Belgaum, Hubli, Poona and Bombay. Joined N.C. Movement in 1921; was Gen. Secy., Karnatak P.C.C. and Editor, 'Karamveer' upto 1930; Pres., K.P.C.C., 1930-34; often jailed in the freedom movement; started National Literature Publication Trust now known as People's Educ. Trust at Hubli, 1935; member, P.E.N.; author of numerous books (inc. translations) in Kannada, Hindi and English; was M.P.; was member, A.I.C.C.; Union Min. of State, Information and Broadcasting, Dec. 1948-April 1952; Governor of Bihar, 1952-57; Sole Trustee, P.E. Trust; Editor, *Samyukta Karnatak* (daily), *Kasturi* (monthly). *Publications*: (Eng.) *Satyagraha, History and Technique*; *Glimpses of Gandhiji*; *Upanishads in Story and Dialogue*; *Satyagraha Pathway to Peace*; *Mahayogi*; *Paramahansa Sri Ramkrishna*; etc. *Address*: 2, Residency Road, Bangalore 25.

**DIXIT, Mr. Justice Purushottam Vinayak**, B.A. (Cantab.), B.Sc., Bar-at-Law, Chief Justice, Madhya Pradesh High Court, since Sept. 22, 1959. *b.* March 19, 1907 at Nagpur; *Educ.*: Patwardhan High School, Nagpur; B.Sc., Nagpur Univ. in first divn.; Christ's College, Cambridge; called to the Bar, 1931. Practised at Nagpur bar for 10 years; Codification Officer, Gwalior State, 1940-41; Judge, Gwalior High Court, 1941-42; Law Secy. and Foreign and Political Secy., Gwalior, 1942-45; Gwalior High Court Judge, 1945-46; Adv. to the Foreign and Political Ministers, 1946-47; Chief Justice, Gwalior High Court, 1946-48; Judge, M.B. High Court, 1948-56; Pres., Batlam incidents Enq. Commn., 1949; presided over Gwalior Firing Enq., 1950; acted as Chief Justice, M.B. High Court in 1954; Judge, M. P. High Court, 1956-59. *Address*: Jabalpur.

**DOGRA, Pandit Girdhari Lal**, B.A., LL.B., Minister for Revenue, Relief and Rehabilitation, Jammu and Kashmir, since March 1967. Ex-Chairman, Jammu and Kashmir Bank Ltd. *b.* July 1915; *Educ.*: Hindu Sabha Coll., Amritsar; Law Coll., Lahore. Joined Jammu Bar, 1942; Advocate, Jammu and Kashmir High Court and Supreme Court of India; took prominent part in the movements started by the National Conference from time to time for democratisation of the State; was Emergency Officer, Kathua Dist. during the Tribal raid from Pakistan into Kashmir in 1947; elected member, Jammu & Kashmir Constituent Assembly, 1951; Pres., Provincial National Conference, Jammu; Chairman, Dogra Art Gallery, Jammu; Chairman of the Drafting Cttee. of the Constituent Assembly of State; Min., J. & K. State, 1947-57 & 1961-63. Minister for Finance & Industry, Jammu-Kashmir, 1964-67. *Address*: Srinagar.

**DORAISWAMY, R.**, B.A. (Hons.) Madras, M.Sc. (Econ.), Lond., I.A.S., Textile Commr., Govt. of India, since Sept. 1962. *b.* March 11, 1914; *Educ.*: Madras and London. Chief Research Officer to the Eco. Adv. to the Union

Govt., Aug.-Dec. 1945; Secy., Reconstruction Policy Cttee. on Shipping, Deptt. of Commerce, Govt. of India, 1945-46; Officer on Duty, Min. of Commerce, 1947-48; Under Secy., 1948-49; Secy., Indian Tariff Board, 1949-50; Jt. Chief Conlrr. of Imports & Exports and ex-officio Dy. Secy. to the Union Min. of Commerce & Industry, 1950-51; I.A.S. Trg. School, Jan.-April 1952; Secy., Devpt. & Plng. Deptt. & Devpt. Commr., Saurashtra, April-Aug. 1952; Addl. Fin. Secy., 1952-53; Fin. Secy., 1953-55; Member, Forward Markets Commn., Govt. of India, 1955-57; Chairman, 1957-58; Chief Adm. Officer, Air-India Intn'l (On foreign service), 1957-60; Chairman: Forward Markets Commn., 1960-62. *Address*: Kalpana, Plot No. 14, Sewri-Wadala Road, Matunga, Bombay 19.

**DOSS, K. S. Gururaja**, D.Sc., F.R.I.C. (Lond.), F.Inst. P. (Lond.), F.A.Sc., F.N.I. Dir., Central Electrochemical Research Instt., Karaikudi, since 1958. *b.* Aug. 10, 1906; *Educ.*: Mysore Univ., B.Sc. (Chemistry Main) and M.Sc. (Physical Chemistry) I Rank. Lecturer and later Asstt. Prof. of Chemistry, Central Coll., 1928-43; Physical Chemist, Prof. of Sugar Chemistry and Offg. Dir., Indian Instt., of Sugar Tech., Kanpur, 1943-57; Dy. Dir.-in-Charge, Central Electrochemical Research Instt., 1957-58; Discoverer of (a) Activated Accumulation, (b) Theory of Contact Angles, (c) Redoxokinetic effect, (d) Resistance heating of masseccutes. *Publications*: Author of over 150 research publications in scientific journals, relating to theoretical and applied physical chemistry and sugar technology. *Address*: Cecrinagar, Karaikudi 3.

**DOVE-EDWIN, H. E., Mr. George**, High Commr. for the Fed. Rep. of Nigeria in India, since Sept. 1966. *b.* July 30, 1928; *Educ.*: Hope Waddell Trg. Instt., Calabar; Leeds Univ., England. Served in various capacities in Min. of Labour & Welfare, 1948-58; Secy., Nig. Observer Delegations to I.L.O. Cfces., Geneva, 1957 & '58; transferred to Foreign Service of Nigeria, 1958; served in Nig. Liaison Office, Washington, D.C., 1958-60; First Secy, Nig. High Commn. in Sierra Leone, 1960-61; Counsellor, Emb. of Nigeria: Wash. D.C., 1961-62; Cairo, 1962-64; Adv., Nigerian Deleg. to 17th Session of U.N. Gen. Assembly; Head of Adm. Min. of Ext. Affairs, Nig., 1964; Counsellor i/c, Functional Dvan., Min. of Ext. Affairs, 1965. *Address*: 5, Golf Links, New Delhi.

**DRAVID, Vyanktesh Vishnu**, B.Sc., Pres., I.N.T.U.C.; Ex-Min. for Agr., Labour, Housing and Chambal Hydro-electric Project, Madhya Pradesh. *b.* Aug. 10, 1913; *Educ.*: Victoria Coll., Gwalior. After graduation, conducted research in the Plant Instt., Indore; later took part in the labour movement in Indore and Ahmedabad with Mr. Gulzarilal Nanda; sent to jail for taking part in the Freedom Movement; on release was appointed Min. for Labour and Local Self-Govt. in Indore State; apptd. Min. for Commerce, Industries and Labour, M.B., 1948; attended the I.L.O. Cfce. at Geneva thrice, as a delegate, Leader of the Indian Delegation and Govt. delegate respectively in 1959; Elected M.L.A., M.B., in the Gen. Elections; was Devpt. and Labour Min., M.B.; Min. for Agr., Chambal Projects, Labour and Housing, M.P., 1956; resigned in Feb. 1964 to undertake the Org.l work of INTUC; Pres.: Indian National Textile Workers Federation, M.P., I.N.T.U.C. and Indore Mill Mazdoor Sangh. *Address*: Shram Shibir, Indore.

**DUBEY, Kunji Lal**, B.A., LL.B., Padma Bhushan (1964), Min. for Finance, Madhya Pradesh, since March 1967. *b.* March 1897; *Educ.*: Jabalpur and Allahabad. Practised at the Jabalpur Bar; Prof. of Law, Jabalpur, 1935-40; Secy., Tripuri Session of the Indian National Congress; courted jail in individual satyagraha; detenu in 1942 struggle; M.L.A., Madhya Pradesh, 1946-52; re-elected M.L.A. 1952; Chief Parly. Secy., 1946; Chairman,

Inter-Univ. Board of India, 1950; Speaker, M.P. Assembly, 1952; Vice-Chancellor, Nagpur Univ., 1947-Jan. 1956. Rep. of Inter-Univ. Board of India at the meeting of the Exec. Council of the Assoc. of Univ. of the British Commonwealth at Kingston, Ontario (Canada), 1954; re-elected Speaker, M.P. Vidhan Sabha, 1957, 1962; apptd. first Vice-Chancellor, Jabalpur Univ., June 1957; Speaker, M.P. Vidhan Sabha, 1957-67. *Address*: Bhopal.

**DUTT, Rabindra Chandra, B.A. (Econ.)**, (Hons.) (Calcutta), Econ. Tripos (Cantab.), I.C.S., Secy., Min. of Tourism and Civil Aviation, Govt. of India, since May, 1967. *b.* Nov. 5, 1912; *Educ.*: Presidency Coll., Calcutta; Corpus Christi Coll., Cambridge; passed I.C.S., 1936. Joined service in Bengal, Nov. 1937; Dist. Magistrate, Bankura 1943-45; Dy. Secy. to the Govt. of Bengal, Health Deptt., 1945-47; Labour Commr., West Bengal, Aug.-Dec. 1947; Dy. Secy., Home Min., Govt. of India, 1947-53; Dy. Commr., Jalpaiguri, 1950; Jt. Secy., Home Min., from 1953; Establishment Officer, Govt. of India, 1956-58; Mg. Dir., and subsequently Chairman, National Coal Devpt. Corpn., 1959-64; Secy., Min. of Fin., Deptt. of Company Affairs & Ins., 1964-65, Rev. & Ins., since Nov. 10, 1965; Secy., Rev. and Ins., Min. of Fin. and Dir. Gen., Bureau of Public Enterprises, Govt. of India, 1966-67. *Address*: Central Secretariat, North Block, New Delhi.

**DUTTA, Mr. Justice Sarat Kumar, B.A.**, (Cal.), B.Sc. (Lond.), Barrister-at-Law, Judge, Assam and Nagaland High Court, since 1961. *b.* Jan. 31, 1908; *Educ.*: Dibrugarh Govt. High School; B.A. (Hons.), Presidency Coll., Calcutta, 1928; B.Sc., Univ. Coll., London, 1932; called to the Bar from Middle Temple, London, 1933. Practised in Calcutta High Court, 1933-37; Principal, Govt. Law Coll., Gauhati, 1937-48; Dean, Faculty of Law, Gauhati Univ., 1948-50; Legal Remembrancer and Secy., Leg. and Judicial Deptts., Govt. of Assam, 1950-55; Dist. and Sessions Judge, 1955-61; member, Court and Exec. Council, Gauhati Univ., 1948-61. *Publications*: *Prolegomena to the New Reforms*; Edited (a) History of Assam, (b), History of Jayantia. *Address*: Gauhati (Assam).

**DWARKA: His Holiness the Jagadguru Shankaracharya Swami Shri Abhinava Sachchidanand Teerthji Maharaj of Sharada Peeth**, of. Is an outstanding spiritual Head of western India. *b.* Sept. 25, 1919; *Educ.*: Studied privately. Took holy orders, 1934; installed at Dwarka on the holy seat of Shri Shankaracharya of western India, June 20, 1945; is a scholar and linguist; usually keeps moving about the whole of India delivering sermons on Religion, Culture and Philosophy; visited Holy Himalayan high peaks and Holy Mount Kailas and sacred lake Mansarovar in Tibet. Pres.: All-India Dharma Sangh Cfce., several times; recognised by the Govt. as the Shankaracharya of Dwarka and a Prime of Hinduism; Founded and is the Pres. of: a Univ. type society called Shri Sharada Peeth Vidyasabha which conducts Arts Coll., Research Inst., Sanskrit Vidya Peeth, Museum etc.; Dwarka-Samsthan-Adhyatma Kendra at Bangalore, 1965; and a Philosophical Cfce. inaugurated by the President of India, May, 1966. Is a patron of, and addressed the Hindu Vishva Parishat at Allahabad. *Publications*: Several books in Gujarati, English, Kannada, Sanskrit and Hindi; "Nav-Bharati" a Gujarati monthly. *Address*: Dwarka (W. Rly.).

**DWIVEDY, Surendranath, M.P. (Lok Sabha)**; *b.* Feb. 11, 1913. Joined C.D. movement and the Congress 1930; courted jail in the freedom movement; Foundation member, Congress Socialist Party, 1934; a working journalist, 1934-42; Founder and editor for several years of Oriya weekly 'Krishak'; elected Secy., Cuttack Dist. Congress Cttee., 1940; member, A.I.C.C.



1940-48; General Secy., Utkal P.C.C., 1946-47; resigned primary membership of the Congress, 1948; elected member, National Exec., Socialist Party, 1947 and of P.S.P. every year; was Provincial Secy. and Chairman, Utkal P.S.P. and S.P. for a number of years; member, Rajya Sabha, 1952-56; elected member, Lok Sabha, 1957; member, Lok Sabha, 1957-62 and also elected in 1962 from the same constituency; Dy. Chairman, P.S.P., 1958-62; member of the Panel of Chairmen of the Lok Sabha and leader, P.S.P. in Parliament; visited U.S.A. and Japan, 1963; visited England, European countries and Israel on invitation by the respective Governments. *Publications*: Oriya translations of Mr. Nehru's Autobiography and Glimpses of World History; other Oriya publications: *National Movement in India*; *Asia on the Path of Socialism*, etc. *Address*: Telengalazar, Cuttack 1, Orissa; 21, Canning Lane, New Delhi.

**ERING, D., I.F.A.S.,** Dy. Min. for Food and Agriculture, Govt. of India, since March 1967. *b.* 1930; *Educ.*: Sadiya Govt. H. E. School and Cotton Coll., Gauhati, Assam. Pres., ADI-MISING Students' Union, 1947-51; Member, Students' Cong., Cotton Colls.; Language Officer, 1952-54; A.P.O. II, 1954-60; A.P.O. I in cadre of the Indian Frontier Adm. Service, 1960-61; Patron & Patron-in-chief associated with a number of regd. social/cultural orgs.; nominated M.P., Lok Sabha, March 1961; Parl. Secy., Min. of Ext. Affairs, till Oct. 1965; Exec. Chairman, Indian Federation of UN Assoc., 1966-67; Parly. Secy., Min. of Home Affairs, Govt. of India, Nov. 1965-67. *Address*: P. O. Pasighat, N.E.F.A.; 16, Dr. R. P. Road, New Delhi.

**FAESSLER, H. E., Mr. Rene,** Ambassador of Switzerland to India, Nepal & Ceylon, since 1965. *b.* St. Gall (Switzerland), 1913; *Educ.*: St. Gall, Univ. of Berne, Vienna & Geneva. Started career with an insurance company in Paris; then Paris Stock Exchange; practised as a lawyer, 1939-43; entered Foreign Service in Swiss Legation, Berlin, 1943; Foreign Interests Divn., in Berne, 1945-49; economist secretary & first collaborator at Swiss Legation, Cairo, 1949-53; Economist Counsellor & Head of the Economic Sec. at the Swiss Embassy in London, 1954-61; Amb. to Peru & Bolivia, 1961-65; Military rank: Captain. *Address*: Embassy of Switzerland, Nyaya Marg, Chanakyapuri, New Delhi 21.

**FIRAQ, Raghupati Sahai, M.A.,** Urdu writer. *b.* Aug. 29, 1896; *Educ.*: Govt. Jubilee High School, Gorakhpur; graduated from Muir Central Coll., Allahabad; selected for I.C.S. 1918; M.A. First Class First in English literature, 1930; winner of Ranade medal and Seshadre medals, 1930. Joined freedom struggle, 1919; courted Jail, 1920-22; Under-Secy., A.I.C.C., 1924-27; since 1927 Lecturer, Reader and Asstt. Prof. of English, Allahabad Univ.; has been writing lyrical poetry in Urdu continuously for forty years; has introduced in his lyrics cosmopolitan features; is ranked with leading Urdu poets; is a critic of Urdu literature; Akademi award for Gule-Naghma, 1961. *Publications*: Six volumes of Urdu lyrics; three volumes of critical essays. *Address*: 8/4, Bank Road, Allahabad.

**FREEMAN, H. E. Mr. John, B.A. (Oxon),** M.B.E. (1943), Croix de Guerre (1944), Member of H. M. Privy Council (1968), British High Commissioner in India, since 1965. *b.* Feb. 19, 1915; *Educ.*: Westminster School; Brasenose Coll., Oxford. Advertising Consultant in London, 1937-40; War Service in British Army, 1940-45; Member, British House of Commons (Labour), 1945-55; Asstt. Editor, *New Statesman*, 1951; Deputy Editor, 1956; Editor, 1961; Journalist & Broadcaster. *Address*: British High Commission, Chanakyapuri, New Delhi 21.

**GADE, Hari Ambadas, B.Sc., B.T., G.D. Art, A.M.,** Painter, art educationist. *b.* Aug. 15, 1917; *Educ.*: Nagpur and Bombay. Held several one man's exhibitions in imp. art centres. Went on a study tour to European countries, 1955-56; represented in public and private collections in India and abroad. *Address*: 70 T. Central Avenue, Chembur, Bombay 71; Central Institute of Education, Delhi 6.

**GADGIL, Dr. Dhananjay Ramchandra, M.A. M.Litt. (Cantab), D.Litt.,** Vice-Chancellor Univ. of Poona, since March 1966; Vice-Chairman, Economists' Panel of the Png. Commission. *b.* 1901; *Educ.*: Patwardhan High School, Nagpur & Queen's Coll., Cambridge. Addl. Asstt. Secy., Finance Deptt., Bombay, 1924-25; Principal, M. T. B. Coll., Surat, 1925-30; Dir., Gokhale Inst. of Politics & Economics, from 1930; member, Bombay Textile Enq. Cttee., 1937-40; Chairman, Agrl. Fin. Sub-Cttee., Govt. of India, 1944-45; member: Commodities Prices Board, 1947; National Income Cttee., 1950-52; U.N. Group on Devpt. of Underdeveloped Countries, 1951; Cttee. of Direction, Rural Credit Survey, 1951-54; Pres., Indian Eco. Assoc., 1940; Agrl. Eco. Confce., 1954; Chairman: Programme Cttee., Intl. Instt. of Pacific Relations, 1950-54; Bombay State Fed. of Co-op. Sugar Factories, 1956-59; Maharashtra State Co-op. Bank Ltd.; member: Central Board of Dirs., State Bank of India; Board of Directors, Agrl. Re-Finance Corp. of India; Pres., National Fed. of Sugar Co-op. Factories; National Co-op. Union of India; member: Board of Trade; National Co-op. Devpt. Corp.; Adv. Cttee., Intl. Instt. of Labour Studies; Research Programmes Cttee., Png. Commission; *Publications*: 24 books & many articles & papers; *Salaries of Public Officials in India* (1931); *Regulation of Wages & other problems of Industrial Labour in India* (Reprint 1954); *Federating India* (1945); *The Federal Problem in India* (1947). *Address*: 129-B, Erandavana, Poona 4.

**GADGIL, Gangadhar, M.A.,** Marathi Writer; Principal and Prof. of Economics, Narsee Monjee Coll., Bombay. *b.* Aug. 25, 1923; *Educ.*: Bombay Univ., did courses in literature and creative writing at Harvard and Stanford Univs. under Rockefeller Foundation Fellowship, 1957. Has created a new style in short story writing; awarded first prize in the Marathi short story competition held under the auspices of the *New York Herald Tribune*; awarded prizes for his books *Talavatalen Chandane*, *Ole Unha* and *Sata Samudra Palikade* by the Bombay Govt., 1956, 1958, 1960. *Publications*: Plays: *Vedjancha Choukon*; *Jyotsna ani Jyoti*; Novel: *Lileche Phool*; Travelogue: *Gopuranchya Pradeshat*; Collections of short stories: *Kadoo ani Goad*; *Talavatalen Chandane*; *Bandoo and ten others*; Literary Criticism: *Khadak ani Panee*; *Sahityache Manadanda*; has written for children; his stories have been translated into English, Italian, Hindi, Gujarati and other Indian languages; *Address*: A-4, Hirji Govindji Blocks, New Nagpada Road, Bombay 8.

**GAEKWAD OF BARODA: Hony. Lt. Col. His Highness Maharaja Fatesinghrao, Fuzand-I-Khas-I-Dowlat-I-Englishia, Sena Khas Khel Shamshere Bahadur,** Min. for Health and Fisheries, Govt. of Gujarat, since March 1967. Chancellor, Maharaja Sayajirao Univ., Baroda, since 1951; Chairman: Gaekwad Investment Corp.; Baroda Rayon Corp.; Electro Equipment Corp.; and dir. of several companies. Pres., Board of Control for Cricket in India; Trustee, the National Rifle Assoc. of India. *b.* April 2, 1930; *Educ.*: Privately. Does social work in the former Baroda State; M.P., Lok Sabha, 1957-67; Parly. Secy. to Defence Min., 1957-62; member: Indian Board of Wild Life; Exec. Cttee., Congress Party in Parliament; Public Accounts Cttee. in Parliament, 1963-64; member, C.C.I., and M.C.C. (Eng.); Chairman, Board of Governors, National

Instt. of Sports, 1962-63. *Address*: Laxmi Vilas Palace, Baroda; Sachivalaya, Ahmedabad 15.

**GAJENDRAGADKAR, Dr. Pralhad Balacharya, M.A., LL.B., LL.D.,** Vice-Chancellor Bombay Univ., since March 21, 1966. *b.* March 16, 1901. *Educ.*: Bombay Univ.; Dakshina Fellow in Deccan Coll., 1922-24; Jhala Vendant Prize and Bhagwandas Parshottamdas Sanskrit Scholarship 1924. Dean of Law Faculty, Bombay Univ.; joined Bombay Appellate Side Bar, 1926; edited the "Hindu Law Quarterly"; Sir Lalubhai Shah Lecture Series on 'Law of Adoption' 1950; Karnataka Univ. Extension lectures on Hindu Code Bill, 1952; Pres.: Maharashtra Social Cfee., Poona, 1953, Jalgaon 1954; Chairman, Bank Award Commn., 1955; Judge, Bombay High Court, 1945-57; Judge, Supreme Court, 1957-64; Lajpat Rai Memorial Lecture Series, Delhi, 1964; delivered lectures mostly on legal topics and the Indian Constitution during visits to U.S.A., U.K., U.S.S.R. etc., 1965. Connected with Univs., educ. and social instts. in India; Chief Justice of India, 1964-66; Chairman, Dearness Allowance Commn., 1966-67. *Publications*: Sanskrit Text of Nanda Pandit's *Dattak Mimamsa* and its English Translation; *Law, Liberty & Social Justice*; many other articles and forewords. *Address*: Bombay University, Bombay 1.

**GANDHI, Smt. Indira,** Prime Minister of India, since Jan. 24, 1966; is the first woman Prime Min. of the largest democracy in the world and the second woman Prime Min. in the world. *b.* Nov. 19, 1917, at Anand Bhavan, Allahabad; *Educ.*: Allahabad, Poona, Bombay, Visva Bharati Univ., Santiniketan, Switzerland and Somerville Coll., Oxford; learnt world history through letters written to her by her father. Her favourite occupation as a very small child of three in 1920 was to deliver thunderous speeches to the servants, standing on a high table; at four, attended her first Congress session, 1921; at the age of 12, organised a Charkha Sangh & "Vanar Sena" of young boys and girls to help the C. D. movement in many ways and to promote it with a strong young base, 1930; has been active in student movements in England and India; took an active part in the India League headed by Mr. V. K. Krishna Menon; played an important role in the 1937 Elections; became a member of the Congress, 1938; was actively associated with the independence movement; courted imprisonment for 13 months with her husband in Naini Central Prison during the 1942 "Quit India" movement soon after her marriage; has been active in elections and village mass contact work with spl. reference to women; worked under Mahatma Gandhi's direction in the riot affected areas of Delhi 1947; after independence in 1947, became Jawaharlal Nehru's hostess and later, his closest political aide; occupied this unique position for 17 years, 1947-64; accompanied her father on his official visits to several countries; had the opportunity to meet all the world's leading personalities—Chou En-lai, Krushchev, Pres. Tito, Pres. Nasser, four American Presidents—Truman, Eisenhower, Kennedy and Johnson, and others; later she went on her own on a goodwill mission to several African countries and also to the Soviet Union; became member, Wkg. Cttee., A.I.C.C., 1955; Pres., Women's Deptt., A.I.C.C.; member, Central Election Cttee. and Central Parly. Board of the A.I.C.C.; is connected with several welfare organisations; member: Exec. Board of UNESCO; Central Adv. Board of Edu.; various Trusts and Hospital Cttees.; Mountaineering Instt.; Pres., Bal Bhavan sponsored by the Union Ministry of Edu.; Pres., Indian Council for Child Welfare; has founded a co-op. centre in Delhi for the welfare of women and children; Pres. and Founder: Bal Sahyog, New Delhi; Kamala Nehru Vidyalaya, Allahabad; Vice-Pres., Intl. Union for Child Welfare; elected Pres., Indian National Cong., Feb. 1959; was the third in three generations of the



Nehru family to succeed to the *gadi* of the national org.; was the fourth woman in the country elected to this high office; as Pres., Indian National Cong., played an imp. role in the bifurcation of bilingual Bombay into Maharashtra and Gujarat; it was due to her initiative that the first Communist Party Govt. in Kerala was pulled down from office on July 1, 1959; her extensive tour in the country as Pres. of the Cong. and as Chairman of the National Integration Cttee. brought her into intimate touch with the masses and their problems; had a hand in forging the coalition which defeated the Communists at the polls in Kerala in Feb. 1960 when the Cong., P.S.P. and the Muslim League combined to defeat the Communists; after the death of Mr. Rafi Ahmed Kidwai, Jawaharlal Nehru began to lean more on his daughter's suggestions about the conduct of his policy; thus she became not only his confidante but also his confidential advr.; was member, Youth Adv. Board of the A.I.C.C.; took interest, out of compassion for the underprivileged, in various orgs. dealing with social welfare; Trustee, Indian Intl. Centre; Patron: Foreign Students' Assoc.; Children's Little Theatre; during the Chinese aggression, flew to the border areas and addressed public meetings there; kept up the morale of the jawans and the public in those areas; as Chairman, Citizens' Central Council, formed after the Chinese attack, has had an opportunity of assessing national sentiments; visited the U.S.A. shortly before her father's death in May 1964 and met Pres. Johnson; Min. for Information and Broadcasting, Govt. of India, June 1964-Jan. 24, 1966; apptd. member, Emergency Cttee. of the Central Cabinet and National Defence Council, July 1964; elected to the Rajya Sabha unopposed from the U.P. Vidhan Sabha Constituency, Aug. 21, 1964; attended the Commonwealth P.Ms. Cfee., 1964; visited the U.K., Yugoslavia and U.S.S.R., Oct. 1964; Chairman, Third Int'l. Film Festival Cttee., Jan. 8-21, 1965; Chairman, Sangeet Natak Akademi, since Dec. 14, 1965; received: Mother's Award, U.S.A., 1953; Yale Univ. Howland Memorial Prize, 1960; award for "her dedication to the freedom of communication in the world" was presented to her in Chicago by three leading professional journalism societies of the U.S., Jan. 30, 1965; awarded the "Isabella D'este" prize for outstanding ability by the Italian Govt., Nov. 1965; Doctor of Literature (*honoris causa*) at the Agra Univ. Convocation, Dec. 4, 1965; awarded the key to the freedom of the city of Syracuse (New York), July 1966; elected leader, Cong. Parly. Party, Jan. 19, 1966; went on a nine-day foreign tour that took her to four capitals, Paris, Washington, London and Moscow, 1966; Chancellor, Visva-bharati Univ. for three years from April 1966. elected to the Lok Sabha from Rae Bareilly, Feb. 1967; after the 1967 General Elections, again elected Leader, Cong. Parly. Party, March 12, 1967. Address: 6, Maulana Azad Road, New Delhi.

**GANDHI, Pravinchandra Varjivan**, Fellow, Indian Inst. of Bankers, Mg. Dir., Dena Bank Ltd., since 1943. b. Aug. 25, 1922. Educ.: Elphinstone Coll., Bombay. Joined Dena Bank in 1939; member: All India Asscn. of Industries; Mg. Cttee.: Indian Banks Asscn. and Indian Merchants' Chamber; Adv. Council, Bankers' Trg. Coll.; Exec. Cttee.: FICC & I; Bombay Telephone Adv. Cttee.; Central Direct Taxes Adv. Cttee.; Plng. Adv. Board, Gujarat State; Maharashtra Transport Adv. Cttee.; Programme Adv. Cttee., AIR; Governing Council, All India Balkanji Bari; Council member, Indian Inst. of Bankers; Dir.: Maharashtra State Fin. Corpn.; Gujarat State Fin. Corpn.; Export Credit & Guarantee Corpn.; Trustee: Bombay Port Trust; Lalji Naranji Memorial Indian Merchants' Chamber Bldg. Trust; Bharatiya Vidya Bhavan, Devkaran Nanjee Banking Co. Ltd.; Shri Pranlal Devkaran Nanjee Smarak Fund, etc.; Mg. Trustee, Swadeshi League Trust; Indian National Theatre. Address: Devkaran

Nanjee Bldgs. 17, Horniman Circle, Fort, Bombay; 'Amelfi', Nepean Road, Bombay 6.

**GANESAN, Sivaji**, Padma Shri, 1966; a leading Cine Artiste. b. Oct. 1, 1928. Joined a Drama Troupe at the age of six; gradually estd. reputation as an actor; his outstanding performance in the role of Shivaji earned him the title Shivaji; his title role in the tamil picture 'Para Sakthi' brought him to the limelight; is the only Indian artiste who has finished 100 pictures in the main role in 12 years from 1952; Best Actor Award at the Afro-Asian Film Festival, Cairo, 1960, for the picture, 'Veera Pandiya Kattabomman'; has donated liberally to public and charitable instts.; owns a drama troupe, 'Sivaji Nataka Manram'; took part in the National Defence Documentaries (Anti-Chinese) 'Thal Nadu' (Motherland), 'Singa Natham Ketkuthu' (The Lion's roar is heard) and a full length picture 'Baktha-Thilakam'; was the first artiste from India to go to the U.S. in the Cultural Exchange Programme as India's Cultural Amb.; received recognition for 12 pictures from President of India; winner of the Best Actor Award from Cinema Kadir from 1958-63. Address: 11, Boag Road, T. Nagar, Madras 17.

**GANGULI, Bankim Chandra**, B.E., Member (Staff), Railway Board, since Jan. 23, 1967. b. Jan. 16, 1914; Educ.: Bengal Engg. Coll., Sibpur, stood first, B.E., 1935; awarded the Calcutta Univ. Gold Medal and the Ambika Charan Chowdhury Gold Medal; was Sibley Research Scholar, Calcutta Univ.; Asstt. Engr., Assam-Bengal Rly., 1937-43; Exec. Engr., Bengal-Assam, Assam, Assam Rail Link, East Indian and Northern Railways, 1943-53; one of the Exec. Engr. s, responsible for the construction of the famous Assam Rail link; promoted as Divl. Supdt., 1953; was Dy. Chief Engr., Northern Rly. and Dy. Chief Engr. and then Dy. Gen. Mgr., Chittaranjan Locomotive Works; Jt. Dir. and the Dir., Civil Engg., Railway Board, 1953-57; Engr.-in-Chief and Chief Engr., Construction of the North-East Frontier Rly., 1957-62; Gen. Mgr., North-East Frontier Railway, Jan. 1962-Jan. 64. Gen. Mgr., Southern Railway, Nov. 1964-Jan. 67. Address: Railway Board, New Delhi.

**GANIGA, Haradi Rama**, Rajya Prashasti 1962, Rashtra Prashasti in Yekshagana dance drama, 1964, Dancer in Yekshagana. b. May 27, 1902. Joined the Mandarthi Yekshagana Mela as a Dancer and playwright, 1920; and served there for 40 years; was a dancer for some time in other Melas; was a hero actor from the early age of 20; participated in several drama competitions and had won prizes and awards from various instts. for his imp. character roles like Karna, Bhishma, Angaravarma, Arjuna, Chitrasena, Jambava; is an excellent speaker and expert in dramatisation. Address: P.O. Salekere, Brahmawar (Mysore).

**GARGI, Balwant**, M.A. (English Literature), Sahitya Akademi Award winner for his book 'Rang Manch' in Punjabi (1962), Writer. b. Dec. 4, 1918; Educ.: Forman Christian Coll., Lahore. Wrote his first play 'Loha Kut' (The Blacksmith) (1944) for a village theatre, and soon became a playwright; writer of 35 short plays, and ten full-length plays; travelled abroad and studied theatre in Europe, 1954-56; attended Moscow Art Theatre's rehearsals and watched Bertolt Brecht at work in Berlin (1956); Founder-member, Delhi Art Theatre; his play 'Keero' was staged in Poland (1955), in Germany—Ankelem Theatre (1958), in Tajikistan (1959), in Tokyo (1962-63); 'Sohni Mahiwal', a six-act song and dance packed play was staged by Gypsy Theatre, Moscow (1958-63). 'Kanak di Balli' (The Mango Tree) was staged by East-West Center, Honolulu (1963); went to U.S.A.; lectured at Columbia, Denver and Indiana Universities, 1962. Publications: *Loha Kut*, *Sail Pathar*, *Keero*, *Kanak di Balli*, *Rang Manch*, *Kwari Teesi*, *Do Pase*, *Pattan di Beri*. Sketches: *Nimm*

*de Patte. English - Theatre in India. Address:* 27, Curzon Road, New Delhi-1.

**GARWARE, B. D.**, J.P., Industrialist, b. 1903. Started business, 1921; Chairman: Garware Plastics Pvt. Ltd.; Plastics Packaging Pvt. Ltd.; Garware Nylons; Garware Motors & Engrs. Pvt. Ltd.; Garware Fin. Corpn. Pvt. Ltd.; Garware Filament Corpn. Pvt. Ltd.; Maharashtra State Fin. Corpn.; Adv. Cttee. for Distribution of Iron & Steel; Dir.: State Bank of India; Central & Local Boards (apptd. by the Govt. of India); Sutlej Cotton Mills Ltd.; Khandelwal Ferro Alloys Ltd.; Khandelwal Udyog Ltd.; Baja! Electricals Ltd.; Member: Adv. Cttee., Indian Airlines Corpn.; Maharashtra State Industries Adv. Cttee.; Bombay Port Export Adv. Cttee.; Maharashtra Labour Welfare Board; State Board for Export Promotion; is on the Exec. Cttees. of eco. and industrial bodies as Chairman and active member, travelled widely in Europe, the U.S.A., and the Far East. Address: Chowpatty Chambers, Sandhurst Bridge, Bombay 7.

**GEORGE, Thayil Jacob Sony**, M.A., Associate Editor, *Free Press Journal*, since Aug. 15, 1966. b. May 6, 1928; Educ.: Univ. Coll., Trivandrum; Madras Christian Coll.; M.A. in 1949. Worked on *Free Press Journal*, Bombay, in various editorial capacities, 1949-62; broke off for a year to work on an Indian cargo ship on the U.K.—Continent run, 1952; worked on a newspaper in Pennsylvania, U.S.A., 1957; apptd. by the Intn'l. Press Instt. as its first Asian editorial consultant, 1963; Editor, *The Searchlight*, 1963-66. Publications: *Krishna Menon, A Biography* (Jonathan Cape), 1964. Address: *Free Press Journal*, 21, Dalal Street, Bombay 1.

**GHANDY, Sir Jehangir Jivaji**, Kt., Cr., 1945, C.I.E., 1941, Padma Bhushan, 1958. Dir.: Tata Sons Pvt. Ltd., since 1959; Chairman: Indian Tube Co. Ltd.; Belpahar Refractories Ltd.; Tata Robins-Fraser Ltd.; West Bokaro Ltd.; The 'Statesman' Ltd. b. Nov. 18, 1896; Educ.: B.A. (Hons.), B.Sc. (Hons.), Bombay Univ., B.S., School of Business, Columbia Univ. U.S.A.; M.Met. (Eng.), Carnegie Technological Instt., U.S.A. Member: Inst. of Engrs. (India) and Iron and Steel Inst. (Great Britain); Fellow, Inst. of Fuel (Great Britain), Dir.: Tisco, Ltd., 1953; Tinplate Company of India, Ltd., 1960; The 'Statesman' Ltd., 1963; Chairman: Exec. Council, Nat. Metallurgical Laboratory; Eastern Regional Cttee., All-India Council for Tech. Edu.; Metals Cttee., C.S.I.R.; All India Board of Tech. Studies in Management; Vice-Prs., The Indian Standards Inst.; member, Governing Body & Fin. Sub-Cttee. of C.S.I.R.; Court of Governors, Adm. Staff Coll., India; Pres.: Intl. Org. for Standardization, Jan. 1965, Associate Knight of the Venerable Order of St. John of Jerusalem; Hon. Col. in the Territorial Army. Address: TISCO, Ltd., Jamshedpur; 10, Office Road, Jamshedpur.

**GHATAGE, Dr. Vishnu Madhav**, M.Sc., D.Phil. FRAES, MIE, FASC, FNI, FAAIA, MAESI, C.ENG.; Padma Shri, Scientist; Dy. Gen. Mgr., Design & Devpt., Hindustan Aeronautics Ltd., Bangalore, since 1947. b. Oct. 24, 1908; Educ.: Kaiser Wilhelm Instt.; Göttingen, Germany. Designed a Troop carrying Glider at HAL, 1941/42; Prof. of Aeronautical Engg., Indian Instt. of Sc., 1942-47; Chief Designer HAL; indigenously designed, developed and productionised (i) HT-2—Trainer Aircraft, (ii) Pushpak—Light Trainer Aircraft (iii) Krishak and (iv) "KIRAN"—Basic Jet Trainer for the I. A. F. Flying Clubs, Civil Aviation Depts. etc.; also designed and developed a Turbojet Engine (HJE-2500) for the Jet Trainer; toured Europe, U.S.A. and Australia. Publications: *Model Versuche Über die gegenseitige Bewegung von Luftmassen verschiedener Temperaturen*, Dissertation Göttingen, 1936; *Research & Development in Aeronautical Industry and Role of High Performance Aircraft in Defence*, in Defence Sc. Journal;



*Ring Aerofoils and their possible use*, Proceedings of the First Congress on Theoretical and Applied Mechanics, Nov. 1955; *Design and Manufacture of Aircraft in India*, Sir M. Visvesvariah Lecture; *Measurement of Turbulence Pitch of Airstream in 5' x 7' Tunnel*, in Indian Instt. of Science Journal. Address: Dy. Gen. Manager, Design and Development, Hindustan Aeronautics Ltd., Bangalore Division, Bangalore 17; *Residence*: No. 10, Ali Asker Road, Bangalore 1.

**GHATE, Vithal Dattatray, M.A., B.T., T.D.**, (Lond.), Marathi writer; member, Sahitya Akademi, New Delhi. b. Jan. 18, 1895; *Educ.*: B.A., Holkar Coll., Indore, 1917; M.A., Christian Coll., Indore, 1919; B.T., S.T. Coll., Bombay, 1925; T.D., London Day Trg. Coll., London, 1930. Joined Bombay Educl. Service, 1922; held imp. posts in the Edu. Deptt., 1927-45; Princ., S. T. Coll., Belgaum, 1946; Dy. Dir. of Edu., Bombay State, 1946-49. *Publications*: Dramatised History of Maharashtra in Marathi, 1925; *People of many lands*, Marathi, Gujarati and Hindi, 1930; *Teaching of History*, English (O.U. Press), 1937; *Kanhi Mhatre Va Eka Mhatari*, Pen Portraits, 1936; *Pandhare Kes Hiravi Mane*, 1959; *Madhu-Madhav* (Collection of poems), 1924; *Divas Ase Hote*, autobiography, 1961; *Yeshwantrao Holkar* (a drama 1964); *Baji and Daddy* (1964), Manogate, personal essays, 1966. Address: "Sushama", Deccan Gymkhana, Poona 4.

**GHEEVALA, Chhotalal Lallubhai, M.A.**, Secy., Indian Merchants' Chamber, Bombay, since 1959. b. April 15, 1907; *Educ.*: Bombay Univ., M.A., first class, 1933; had a distinguished academic career. Prof. of History and Economics, Indian Women's Univ., Bombay, 1933-38; prof. and a recognised Post Graduate Teacher for eight years, S.L.D. Arts Coll., Ahmedabad; is a keen student of social and eco. problems. Joined Indian Merchants' Chamber, Bombay, 1946; Trustee & Hon. Secy., Brihad Bharatiya Samaj; Hon. Secy., Bharatiya Vidya Bhavan; Hon. Treasurer, Bombay Civic Trust; Member, State Implementation and Evaluation Cttee., Maharashtra Govt.; attended the ECAFE Cfce. at Bangkok, 1962, and the Preparatory Meeting of the U.N. Expert Cttee. on Intn'l. Commercial Arbitration, Paris, 1964. *Publications*: Articles on socio-eco. problems. Address: Sethna House, Alexandra Road, Gamdevi, Bombay 7.

**GHOSE, Santidev, Scholar in music and dance**; Principal, Sangit-Bhavana & Head of the Deptt. of Tagore Music and Dance, Visva Bharati Univ., Santiniketan. b. May 7, 1910; *Educ.*: Trg. in Rabindra music, Rabindra drama and dance under the direct guidance of Gurudeva Rabindranath and late Dinendranath Tagore at Visvabharati; studied various forms of dances of India and abroad. Producer (Music Composer) for the Tagore Centenary Unit under the D.G., A.I.R., 1960-61; awarded Medal by a cultural org. in Moscow; has been associated with A.I.R., Min. of Scientific Research and Cultural Affairs, Sangeet Natak Akademi and Sahitya Akademi, New Delhi, and several cultural orgs. in the country as Adv., member of Cttee., etc.; visited Ceylon, Burma, Indonesia and U.S.S.R. to study the dance and music of those countries. *Publications*: *Rabindra Sangit*; *Java O Balir Nritya Git*; *Rupakar Nandalal*; *Bharatiya Gramin Sanskriti*; *Gramin Nritya O Natya*; contributed articles on Rabindra Music, Folk songs, etc. in dailies and periodicals in India and abroad. Address: Visva Bharati, Santiniketan, W. Bengal.

**GHOSE, Surendra Mohan, Ex-Dy. Leader**, Congress Parly. Party, Rajya Sabha, b. April 22, 1893; *Educ.*: Mritunjay High School and Ananda Mohan Coll., Mymensingh (East Pakistan). Participated in the revolutionary movement, 1908-38; joined Congress, 1920; arrested and deported to Mandalay jail 1924; suffered imprisonment for 23 yrs. in

the freedom movement; member: Jugantar Party of Bengal, 1908-38; Swarajya Party, 1923-29; A.I.C.C., 1922-24; '28-30; '38-40; '45-51; Pres.: Bengal P.C.C., 1939-50; member: Shri Aurobindo Univ. Fund Cttee., Pondicherry, since 1951; Constituent Assembly of India, 1946-50; Stg. Fin. Cttee., Central Leg. Assembly, 1947-50; Prov. Parliament, 1950-52; Lok Sabha, 1952-56; Visvabharati Univ. Court, 1956; Member Secy., Board of Editors, History of Freedom Movement in India, 1952-55; elected to the Rajya Sabha, 1956 and 1962; Pres., World Union, Pondicherry; Chairman, Shri Aurobindo Society, Delhi Branch; re-elected Dy. Leader since 1963. Address: 21, Janpath, New Delhi 1; 17-B, Rammoy Road, Calcutta 25.

**GHOSH, Ajoy Kumar, B.Sc. (Lond.), I.C.S.**, Secy., Dept. of Health, Min. of Health and Family Planning, Govt. of India, b. April 14, 1908; *Educ.*: St. Paul's School, Darjeeling; King's Coll., London. Joined the I.C.S., 1931; served in undivided Bengal as Asstt. Magistrate, Jt. Magistrate and Dist. Magistrate until 1942; Dy. Secy. and Jt. Secy. to the Bengal Govt., 1942-49; Chief Commr., Andaman and Nicobar Islands, 1949-53; Mg. Dir., Bharat Electronics Ltd., Bangalore, 1953-58; was Secy., (Science), Union Min. of Edu. Address: 13, Safdarjung Road, New Delhi.

**GHOSH, Amalananda, M.A., Padma Shri** 1962, Dir.-Gen. of Archaeology, Govt. of India, since 1953. b. March 3, 1910; *Educ.*: A. B. H. School, and Queen's Coll., Banaras; Allahabad Univ. Asst. Supdt., Archaeological Survey of India, 1937-44; Supdt., 1944-49; Dy. Dir.-Gen., Exploration, 1949-52; Jt. Dir.-Gen., Archaeology, 1952-53; excavated at Ahichchhatra, Taxila, Arikamedu, Harappa, etc.; conducted exploration in Bikaner and other places. *Publications*: Numerous articles on Indian history and Archaeology. Address: Janpath, New Delhi-11.

**GHOSH, Atulya, M.P., Political Leader**. b. Aug. 27, 1904, at Pathuriaghata in Calcutta. Joined the Non-Co-operation movement while a student; became a live wire of the Hooghly's political life; elected Asstt. Secy., Hooghly D.C.C., 1925; became a member, B.P.C.C., 1925; Secy., P.C.C., 1948-50; unanimously elected Pres., West Bengal P.C.C., 1950; became member, Congress Working Cttee., 1950-51; is Treasurer, A.I.C.C.; courted jail several times in the freedom movement; has been at the head of the State Congress organisation for a long time and member, Lok Sabha, since 1952; was Chairman, Hooghly Dist. Board and Hooghly Dist. School Board for many years; Editor, *Jana-sevak* a daily newspaper of Calcutta; Chairman, W. Bengal State Council of Sports; Pres.: Indian Football Assoc., Calcutta; Calcutta Blind School and the Bengal Deaf & Dumb Assoc.; is a voracious reader. *Publications*: Several books on Gandhian philosophy; occasionally contributes articles on socio-economic problems of the country in different papers and periodicals. Address: Congress Bhawan, 59-B, Chowringhee Road, Calcutta 20.

**GHOSH, Benoy Bhushan, M.Sc. (Calcutta)**, Chairman, Calcutta Port Commr's. b. March 15, 1905; *Educ.*: Presidency Coll., Calcutta. Joined Indian Audit & Accounts Service, 1930; Fin. Deptt., Govt. of India, 1939; Jt. Secy., Min. of Defence, 1947; Secy., Deptt. of Food, Union Min. of Food & Agr., 1956-62. Address: Calcutta Port Commissioners, Calcutta.

**GHOSH, Principal Devaprased, M.A., B.L.**, Ex-Pres., Bharatiya Jan Sangh. b. March 15, 1894; *Educ.*: Mitra Instt., Calcutta; Deoghar H. E. School; Braja Mohan Instt., Barisal; City Coll., Presidency Coll., and Ripon Law Coll., Calcutta; Fellow, Calcutta Univ. upto 1967. Advocate, Calcutta High Court; linguist, knows Bengali, Hindi, Sanskrit, English; German, French and Italian; member: Congress, 1915-22;

Nationalist Party, 1923-32; Hindu Mahasabha, 1933-51; Jansangh since its inception 1951; elected to the Rajaya Sabha on Jan Sangh ticket, 1952; Pres., West Bengal Jan Sangh, since 1955; Vice-Pres., All-India Jan Sangh, 1955, 1960-63 and 1965; Pres., All India Jan Sangh, 1956-59 and 1963-64; *Publications*: Several books on Mathematics, literary and political subjects, e.g., *Shifting Scenes*; *Hindu Kon Pathe* (Whither Hindus?); *Tarunima*; *Salera Vatsar Pare*; *Bangla Bhasha O Banan* (Bengali language and spelling—incl. his famous exchange of letters with Poet Tagore); *Trairashik*. Address: 59-B, Upper Circular Road, Calcutta 9.

**GHOSH, Parimal, M.A., J.P.**, Minister of State for Railways, Govt. of India, since March 13, 1967. b. March 15, 1917; *Educ.*: St. Paul's Coll., Calcutta; Univ. of Calcutta. Has been engaged in business—manufacture of paper, paperboard, millboard, strawboard etc. and machineries for paper and paperboards; Director: Himalay Paper & Board Mills Pte. Ltd., Himalay Paper (Machinery) Ltd., P. Ghosh & Co. and Card Board and Printing & Processing Industres Ltd., till Jan. 1967; elected member, Lok Sabha, 1967, general election. Address: 20, Seven Tanks Lane, Calcutta 30.

**GHOSH, Surendra Nath, M.A., LL.B.**, Journalist; Editor, *The Pioneer*, Lucknow, since 1946. b. May 20, 1904; *Educ.*: Allahabad Univ., Started as a reporter; later became News Editor and subsequently Chief Asstt. Editor of *The Pioneer*; Pres., U.P. Press Adv. Cttee.; Member: U.P. Png. Commn.; Stg. Cttee. of the All-India Newspaper Editors' Cfce.; Member, Leg. Council, U.P. Address: Lucknow.

**GHOSH, Tushar Kanti, Padma Bhushan (1964)**, Editor and Mg. Dir., *Amrita Bazar Patrika*, Calcutta; Mg. Dir., *Jugantar*. b. Oct. 4, 1899; *Educ.*: Calcutta Univ., Bangabasi & Vidyasagar Coll. Started as sub-editor, 1920; founded: *Jugantar* (Calcutta), Bengali daily; *Allahabad Patrika*, English daily and *Amrita*, a Bengali Weekly at Calcutta. Pres.: All India Newspaper Editors' Cfce., 1946-47; Indian and Eastern Newspapers Soc., 1948-49; Ex-Chairman, P.T.I.; U.N.I.; Chairman, Audit Bureau of Circulations; Ex-member, Central Board of Film Censors; Trustee, Press Instt. of India; Vice-Pres. and member, Exec. Cttee., Intn'l. Press Instt.; Chairman, Indian Sect., Commonwealth Press Union; attended Intn'l. Press Cfces. in many countries and travelled extensively all over the world. Address: Editor, *Amrita Bazar Patrika*, Calcutta; Chief Editor, *Northern India Patrika*, Allahabad.

**GILL, Sardar Lachhman Singh, Minister for Irrigation and Power Rural Electrification, Buildings and Roads, Public Health, Engineering, Technical Education, Architecture, Colonisation, Town and Country Planning, Urban Estates, Education and Languages**, Punjab, since March 1967. b. June 18, 1917. Had been a Govt. contractor of the Central Public Works Deptt. since 1937; entered politics subsequently; elected to the Punjab Vidhan Sabha from Jagraon Constituency on Akali ticket in 1962 general elections; fought and re-elected to Punjab Assembly, from Dharamkot Constituency on Akali Dal (Sant) ticket, in 1967 General Elections; has been associated with a number of social and cultural activities in the State; has been General Secy., Shiromani Gurudwara Parbandhak Cttee. for a number of years. Address: Minister for Irrigation and Power, Punjab, Chandigarh.

**GIRI, V. V.**, Barrister-at-Law, Vice-President of India since May 6, 1967. b. Aug. 10, 1894, in Berhampore; *Educ.*: National Univ., Ireland. Trade Union leader for many years; General Secy. and Pres. of the All-India Railwaymen's Federation; twice Pres. of the All-India Trade Union Congress; Indian Workers' delegate to



the Intn'l Labour Cfce., Geneva 1927; Workers' Rep. at the Second Round Table Cfce., London, 1931; Member, Central Leg. Assembly for several years; Minister for Labour, Industries and Co-op. in the Madras Min., 1937-39; Min. Madras Govt. in 1946; Indian High Commr. in Ceylon; Union Min. for Labour, May 1952-Sept. 1954; M.P., Lok Sabha, 1952-57; Elected Pres., Indian Cfce., of Social Work, 1958; Governor of U.P., 1957-60; Founder Pres., Indian Soc. of Labour Economics; Governor of Kerala, 1961-65; Governor of Mysore, 1965-67. *Publications*: *Industrial Relations: Labour Problems in Indian Industry*. Address: 3, Dr. Rajendra Prasad Road, New Delhi.

**GOENKA, Rai Bahadur Sir Badridas, Kt.**, C.I.E., B.A., Industrialist. b. July 30, 1883 at Calcutta; *Educ.*: Graduated from the Presidency Coll., Calcutta, 1905. Chairman: Shakti Shipping Ltd.; K. P. Goenka & Sons Ltd.; Dir.: R. B. I. (Central Board), 1934-41; Imperial Bank of India, 1941-55; State Bank of India, 1955-57; Hindustan Motors Ltd.; Nagaisuree Tea Co. Ltd.; Killcott Tea Co., Ltd.; Pres.: F.I.C.C.I., 1945-46; Marwarl Assoc., 1928-30; Indian Chamber of Commerce, 1941; Trustee: Calcutta Improvement Trust, 1928-40; Victoria Memorial Hall, Calcutta; M.L.C., Bengal, 1923-35; Sheriff of Calcutta, 1932-33; made Rai Bahadur, 1925, C.I.E., 1928 & Knight Bachelor, 1934. Address: "Goenka Niwas," 19, Belvedere Road, Alipore, Calcutta 27.

**GOENKA, Keshav Prasad**, Industrialist. b. 1912. Sheriff of Calcutta (1950-51); Pres., F.I.C.C.I. (1964-65); Cttee. of the All-India Org. of Industrial Employers; Indian National Cttee. of the Intn'l Chamber of Commerce; Export Promotion Adv. Council, Govt. of India; Cttee. of the Indian Chamber of Commerce (1948-49), (1956-57); ex-Commr. for the Port of Calcutta; Chairman: Duncan Bros. & Co., Ltd.; Anglo India Jute Mills Co., Ltd.; Birpara Tea Co., Ltd.; Phillips Carbon Black Ltd.; Schrader-Seovil Duncan Ltd.; National Std. Duncan Ltd.; Asian Cables Corp. Ltd.; Shakti Shipping Co. Ltd.; Dir.: Reserve Bank of India (1948-49); Bank of Baroda Ltd.; etc.; National Tobacco Co. of India, Ltd.; Woolcombers of India Ltd.; Triton Ins. Co. Ltd.; India Exchange Ltd.; Manybong and Kyel Tea Estates. Address: 31, Netaji Subhas Road, Calcutta 1; *Residence*: "Goenka Niwas," 19, Belvedere Road, Calcutta.

**GOKAK, Vinayak Krishna, M.A.** (Bomb. & Oxon.), First Class in English, B.A., and M.A., First Class in English Language and Literature at Oxford, Padma Shri, 1961, Kannada writer; Vice-Chancellor, Bangalore Univ. b. Aug. 10, 1909; *Educ.*: Majid High School, Savanur; Karnatak Coll., Dharwar; Jesus Coll., Oxford. Principal: M. N. Coll., Visnagar (1946-49); Rajaram Coll., Kolhapur, 1949-52; & Karnatak Coll., Dharwar; Pres., Univ. Sect., All India Educ. Cfce., Madras, Dec. 1957; Kannada Literary Cfce., Bellary, 1958; Leader, Indian delegation to America to study systems of exam., 1958; Sahitya Akademi Award for Kannada 1961; Pres., All-India English Teachers' Cfce., 1961; Vice-Pres., Commonwealth Cfce. on the Teaching of English, Uganda, 1961. *Publications*: *The Song of Life, The Poetic Approach to Language* (O.U.P.); *English in India* (Asia), In Life's Temple, a novel, three plays and collections of lyrics, letters and essays in Kannada. Address: Bangalore

**GOKHALE, Bhalchandra Krishna, M.A.** (Bombay), B.A. (Cantab.), I.C.S. (Retd.), C.S.I. (1st Jan. 1946), C.I.E. (1st Jan. 1942), Chairman, Tungabhadra Board. b. July 23, 1892; *Educ.*: Fergusson Coll., Poona, Wilson Coll., Bombay; Fitz-William Hall, Cambridge. Secy. to the Govts. of Bihar and Orissa; Commr. of Bhagalpur and Patna Divs.; Adv. to H.E. the Governor of Orissa; Administrator,

Damodar Project, Hazaribagh; Secy., Govt. of India, Min. of Works, Production and Supply; Secy. to the Pres. of India; Amb. to Nepal; Chairman: Inland Water Transport Cttee.; Central Water & Power Commn. Reorg. Cttee. *Publications*: Final report of the Survey and Settlement operations in Manbhum Dist., 1927; Final report of Revision Survey and Settlement operations in Kodarma Government Estate. Address: Vihar, 759/36, Deccan Gymkhana, Poona 4.

**GOKHALE, Bhalchandra Narayan, M.A.**, LL.B., Chairman, Companies Tribunal,\* New Delhi, since July 1, 1964. b. July 16, 1901. *Educ.*: Elphinstone High School, 1914-18; Elphinstone Coll., 1918-22; First Class Hons. first in Economics winning James Taylor Prize & first in Economics in M.A. winning Telang Gold Medal & Sir William Wedderburn Scholarship & Prize. Govt. Law Coll., 1923-25; Research Fellow, School of Economics, Bombay Univ., 1925-26. Joined the Bar, 1926; member, Bombay Bar Council, 1947-50; Pres., W. India Advocates' Assoc., 1950-53; Judge, High Court of Bombay, 1955-61; apptd. as the Court in the Investigation into the Alitalia D.C. 8 Aircraft Disaster near Junnar in Poona Dist., 1962-63; Fellow of Senate & member, Syndicate; Bombay Univ., 1936-47; & 1963-64; Dean, Faculty of Law, 1962-64; Fellow of Senate & member, Syndicate of S.N.D.T. Women's Univ., since 1950; Chairman, Indian Instt. of Scientific Studies for the Prevention of Alcoholism; Vice-Pres.; Social Service League, Swastik League and Mumbai Marathi Sahitya Sangh, *Publications*: *The Story of The High Court of Judicature at Bombay after Independence* (1947-62). Address: 5, Safdarjung Lane, New Delhi 11. Permanent: "Gokhale Bldg.," 157-59, Girgaum, Bombay 4.

**GOLWALKAR, Madhav Sadashiv, M.Sc.** (Zoology), LL.B., Sarsangchalak (Chief Organizer), Rashtriya Swayamsevak Sangh (R.S.S.). b. Feb. 18, 1906; *Educ.*: Hislop Coll., Nagpur; Banaras Hindu Univ. Joined Banaras Hindu Univ. as a Prof., 1930; at B.H.U. came in contact with Dr. Keshav Baliram. Hedgewar, the founder of R.S.S. and started taking interest in their work; returned to Nagpur where he became a regular visitor to Ramkrishna Mission, 1932; joined Ramkrishna Mission Ashram, Sargachhi, 1936; was initiated by Swami Akhandanandji; after Swamiji's death returned to Nagpur and devoted his attention to R. S. S. work; after the death of Dr. Hedgewar, was apptd. the head of R.S.S. *Publications*: *We or our Nationhood Defined* (English, Marathi, Hindi); *Speeches of Swami Vivekanand at the Chicago Conference* (Marathi). Address: Dr. Hedgewar Bhavan, Nagpur.

**GOMBU, Nawang, Padma Shri** (1964). Mountaineer; Dy. Dir. of Field Training, Himalayan Mountaineering Instt., Darjeeling. b. 1934, in Solokhumbu village. Worked as an high altitude Sherpa in 1953 British Expedition; after the successful expedition, came to Darjeeling permanently; appointed as an Instructor and went to Switzerland for training, 1954; climbed Sakang peak, Koptang, Frey peak, Rathong; was member of successful Mt. Everest expedition and reached the top of the Everest in the first summit party, 1963; was member of the successful Indian Expedition to Nanda Devi and climbed the highest peak in India, 1964; was member of the successful Indian Expedition in 1965 and reached the top in the first summit party. Address: Himalayan Mountaineering Institute, Darjeeling.

**GOPAL, Dr. Sarvepalli, M.A., B.L.** (Madras), M.A. (Oxon.), D. Phil. (Oxon.), Reader in South Asian History, Oxford Univ.; Hon. Historical Adv., Ext. Affairs Min. b. April 23, 1923; *Educ.*: Madras Univ.: M.A., 1942; B.L., 1944; Oxford Univ.: M.A., 1947; D. Phil., 1951. Lecturer and Reader in History, Andhra Univ., Waltair (1948-52); Asstt. Dir.,

National Archives of India (1952-54); Dir., Historical Dvn., Ext. Affairs Min., 1954-66. *Publications*: *The Permanent Settlement in Bengal and its Results* (London, 1949); *The Viceroyalty of Lord Ripon* (Oxford, 1953); *The Viceroyalty of Lord Irwin* (Oxford, 1957); *British Policy in India 1858-1905* (Cambridge, 1965); and articles in *History*, *History Today* and the *Encyclopaedia Britannica*. Address: Patiala House, New Delhi.

**GOPALAN, A. K., M.P.**, Communist Leader, b. Oct. 1, 1904; *Educ.*: Tellicherry, Malabar and Madras. Political worker; joined Congress, 1927; courted jail for 13 yrs., 4 months; Pres., Kerala Cong. Cttee and member, A.I.C.C. for six years; joined Cong. Socialist Party, 1934; hunger march from Malabar to Madras, 1937; March on foot from Kasargod to Trivandrum at the head of a peasant jatha to press for the implementation of Kerala Agrarian Relations Bill; M.P., Lok Sabha, since 1952; Pres., All India Kisan Sabha, 1956; went on fast in defence of peasants at Amravati, 1961 and Keerithode, 1962; toured U.S.S.R., 1952 and 1956 and China, 1952; leader of the opposition in the first and third Parliament; elected member, Polit. Bureau, C. P. I., 1964; arrested on Dec. 30, 1964 under DIR and detained at Central Jail, Trichur. Address: 4, Ashoka Road, New Delhi 1.

**GOPALASWAMY, Kurma Venu, B.A.** Madras, M.A. (Oxon.), Bar-at-Law, Telugu and English writer. b. Dec. 19, 1903; *Educ.*: C.M.S. High School, Ellore; Christian Coll., Madras; Balliol Coll., Oxford; Inner Temple, London. Advocate, High Court of A.P., Hyderabad; Pres.: The Telugu Little Theatre, Vijayawada; member: Indian Sahitya Akademi, 1954-56; Andhra Pradesh Sangeet Natak Akademi; A. P. Sahitya Akademi; Orgr.: U.N. Volunteer Correspondent Speakers' Unit, Waltair; U.N.E.S.C.O. Club, Waltair; Leader, Govt. of India Delegation of Univ. Administrators to U.S.A. and U.K., 1958; *Publications*: *Limitations of Diarchy as a First Step Towards Representative Government*; Editor, *Best One Act Plays*, in Telugu; *Short History of Telugu Literature*. Co-author of Telugu Stories and Plays. Address: 10-1-128/1/1, Masab Tank, Hyderabad-28.

**GOPAL-AYENGAR, Anekal Ramaswamiengar, M.Sc.** (Mysore), M.A. (Toronto), Ph.D. (Toronto), Padma Shri (1967), Director, Biology Group, Bhabha Atomic Research Centre, Trombay, since 1962. b. Jan. 1, 1909; *Educ.*: Univ. of Mysore & Toronto. Lecturer in Botany, Mysore Univ. 1933-38; Toronto Univ., Vincent Massey Fellow, 1938-39; Elizabeth Ann Wintercorbyn award, 1941. Senior Instructor, 1941-45, Kettering Research Fellow, Barnard Skin & Cancer Hospital & Research Associate, Washington Univ., St. Louis, Mo., 1945-47; Tata Memorial Hosp., Bombay; Chief Research Cytologist, 1947-51; Head, AEC Unit on Cell Biology, 1948-51; J. H. Bhabha Prize-man, 1948; Senior Intn'l Research Fellow, Lady Tata Trust, Chester Beatty Research Inst., London & Inst. for Cell Research, Karolinska Inst., Stockholm, 1951-53; Chief Scientific Officer & Head, Biol. & Med. Divs., AEET, 1960-61. Associated with Intn'l Soc. for Cell Biology, N.Y. Acad. of Sci., American Assoc. for Cancer Research, Fellow, Indian Academy of Sci., Chairman, U.N. Scientific Cttee. on Atomic Radiation since 1956; WHO Expert Radiation Cttee., 1958-68; Member of Council: Intn'l Org. for Pure & Applied Biophysics, 1961-67; Rep. for S.E. Asia on Genetics Sect. of the Intn'l Union of Biological Sci., 1958-68; Intn'l Cell Research Org., 1963-66; Councillor, Intn'l Assocn. Radiation Research; Chairman, National Cttee. for Biophysics; Pres.: Ind. Soc. of Genetics & Plant Breeding, 1963-64; Commn. on Radiation Biophysics, IOPAB; Editorial Board: *Radiation Botany: Biophysics*; Research interests: gene duplication & chromosome synthesis, properties of malignant

\* A bill has been introduced in the Parliament for the abolition of the Companies Tribunal (June 12, 1967).



systems, human chromosomes, biological investigations in high radiation areas, etc. Publications in cytology, cytochemistry, cancer research, radiation biology. Address: Framroz Court, Marine Drive, Bombay-1.

**GORAY, Narayan Ganesh, B.A., LL.B.** Chairman, Praja Socialist Party. b. June 15; 1907, at Hindla village, Ratnagiri Dist.; Educ.: Fergusson Coll., Poona. Social worker; joined Congress and Satyagraha campaign, 1930; was member: National Exec. of the Congress Socialist Party, 1934; All India Congress Cttee.; Jt. Secy., Socialist Party, 1948, when it severed its connection with the Congress; General Secy., P.S.P., 1953-54; elected to the Court of the Univ. of Poona from the Trade Unions Constituency, 1949-1962; led the first batch of Satyagrahis in Goa, May 1955; was sentenced to 10 years' imprisonment by the Portuguese Govt.; released, Feb. 1957; Critic, essayist, story writer and translator; often imprisoned during India's freedom movement; was elected to the Lok Sabha from Poona (1957-62); Gen. Secy., P.S.P., 1963. Publications: *History of the United States of America*; Short Stories, Essays, Translations, etc. in Marathi. Address: 1813, Sadashiv Peth, Poona 2.

**GOSWAMI, Trailokya Nath, M.A., B.L.** Writer; Principal, Nalbari Coll., Assam. b. March 3, 1906; Educ.: Nalbari & Gauhati (Assam); Matriculation, obtaining the Fuller Silver Medal, 1926; B.A. Hons. in Philosophy, 1930; M.A. in English, Calcutta Univ., 1932; B.L., Earle Law Coll., 1935. Asstt. Lecturer, Cotton Coll., Gauhati and Murarichand Coll., Sylhet; joined Nalbari Coll. as founder Princ., 1945; Pres.: Assam Coll. Teachers' Assoc., 1954-56; Assam Sahitya Sabha, 1960-63; Kamrup Sanskrit Sanjibani Sabha. Publications: *Aruna: Marichika*; *Silpir Janma* (collection of short stories); *Jia Manuh* (a satiric novel); *Sahitya Alochana, Adhunik Gulpa Sahitya*, a critical study of modern story literature. Address: Principal, Nalbari College, Nalbari (Assam).

**GOVINDACHARI, Dr. Tuticorin Raghavachari, M.Sc., Ph.D., F.N.I., F.A.Sc.** Shanti Swarup Bhatnagar Award for Chemical Ses. (1960), Scientist; Dir., CIBA Research Centre, Bombay, since Jan. 1963. b. July 30, 1915; Educ.: Presidency Coll., Madras; Univ. of Illinois, U.S.A. Research Asstt., C.S.I.R.—Scheme on Electrolytic Reduction of Nitro Compounds under Dr. B. B. Dey—1940-46; Addl. Prof. of Chemistry, Presidency Coll., Madras 1950; Prof. of Chemistry, 1951; Chief Prof. of Chemistry, 1952; Principal, Presidency Coll., Madras, 1961, 1962. Publications: Over 150 publications in the field of alkaloids, terpenoids and other natural products and also in the synthesis of heterocyclic compounds. Address: CIBA Research Centre, Goregaon East, Bombay 62.

**GOVINDDAS, Doctor, Sahitya Vachaspati, LL.D., Padma Bhushan 1961, M.P., Lok Sabha. b. Vijay Dashmi Day, 1896; Educ.** Privately upto M.A. Entered politics, 1919; elected to the Central Assembly, 1923, 1934, & 1946, Council of State, 1925, Constituent Assembly, 1947 and Lok Sabha, since 1952; member, A.I.C.C., since 1921; Pres., Mahakoshal P.C.C. for 20 years; Pres., All-India Hindi Sahitya Sammelan 1948; Leader, Delegation to Commonwealth Parly. Cfee., New Zealand 1950; member, Cong. Wkg. Cttee., 1950-51 & 1958; elected first Pres., M.P.C.C. of reorgd. M.P., 1957; apptd. Speaker, Lok Sabha till the election of permanent Speaker in 1957 and 1962; awarded the degree of Doctor of Laws by the Jabalpur Univ., 1960. Publications: Has written 109 plays in Hindi, one novel *Indumati* and 4 travel books and Autobiography in three vols. Address: 33, Ferozshah Road, New Delhi 1; Raja Gokuldas Palace, Jabalpur (M.P.).

**GOWDA, G. Narayana, B.A., Min. for Social welfare, Mysore Govt. since March, 1967. b. 1910; Educ.** Govt. High School, Kolar; Maharaja's Coll., Mysore. Has been a Congressman since 1937; participated in the Flag & K.G.F. Satyagraha and the Quit India Movement and was jailed; detailed in the "Chalo Mysore" movement, 1947; member: Mysore Rep. Assembly from 1936; State Constituent Assembly, 1947; Mysore Leg. Assembly, 1940-57; Univ. Senate, 1945-47; Syndicate, 1958-61; Secy., Mysore State Coop. Devpt. Board, 1958-60; Pres., D.C.C. Kolar and Jt. Secy., Mysore P.C.C., 1953-56; is member, Exec. Cttee., Mysore P.C.C.; elected M.L.A., Mysore from Sreenivasapur, 1962; Min. for Agriculture, 1962-67; is interested in Harijan uplift and social welfare. Address: Bangalore.

**GOYAL, Air Vice-Marshal Suren, M.B.E.** Commandant, National Defence Academy, Khadakvasla, since Aug. 10, 1967. b. Dec. 11, 1917; Educ.: Allahabad Univ., 1935; R.A.F. Coll., Cranwell (U.K.), 1936; Staff Coll., Bracknell (U.K.), 1946. Dir. Air Hqrs., Commandant, Air Force Academy, Principal Staff Officer, Air H.Q., Commandant, School of Land-A, Warfare; was Air Officer Commanding-in-Chief, Trg. Command, Indian Air Force. Publications: *Air Power in Modern Warfare* (Thackers, Bombay, 1952). Address: National Defence Academy, Khadakvasla.

**GRACIAS, His Eminence Valerian Cardinal, D.D., M. Agg., Padma Vibhushan (1966), Archbishop of Bombay since Dec. 1, 1950. b. Oct. 23, 1900; Educ.** St. Patrick's High School, Karachi; St. Joseph's Seminary, Mangalore; The Papal Seminary, Kandy, Ceylon and The Gregorian Univ., Rome. Secy. to the Archbishop (1929-1936); Chancellor of the Archdiocese, 1929; Editor, of *The Messenger of the Sacred Heart* (1935); Co-Editor, *The Examiner* 1938; rector of the Pro-Cathedral, Dec. 1941; Titular Bishop, of Tannis and Auxiliary to the Archbishop of Bombay, April 11, 1946; created Cardinal, Jan. 12, 1953; Consultor to the Sacred Congregation for the Oriental Churches, The Sacred Congregation of the Sacraments and the Sacred Congregation for the Propagation of the Faith; Pres., Catholic Bishops' Cfee. of India, is the first Cardinal to be the host of a reigning Pope, Dec. 1964. Publications: *Features of Christian Life*; *Heaven and Home*; *The Vatican and International Policy*; *The Decline of Public Morals*. Address: Archbishop's House, Bombay 1.

**GROVER, Mr. Justice Amar Nath, M.A., LL.B. (Cantab.), Barrister-at-Law, Puisne Judge, Punjab High Court, since Nov. 21, 1959. b. Feb. 15, 1912; Educ.** Govt. Coll., Lahore; Christ's Coll., Cambridge, M.A. (Hist.), Punjab, 1932; Law Tripos, Cambridge, 1935; LL.B., Cambridge, with First Class, 1936; awarded 1st Prize in Law by Christ Coll., Cambridge and elected Hony. Scholar of the Coll., 1936; called to the Bar by the Middle Temple, 1936. Started practice as an Advocate, High Court, 1937; member, Punjab Bar Council, 1954-57; Addl. Judge, Punjab High Court, 1957-59. Address: Punjab High Court, Chandigarh.

**GUHA, Arun Chandra, B.A. (Calcutta), Journalist, Publisher, Author. b. May 1892; Educ.** B. M. School and Coll., Barisal (East Bengal). Joined the 'Yugantar Party'—the revolutionary party; after graduating, went underground during the First World War in connection with the Indo-German conspiracy; was in jail for over 28 years under Regulation III of 1818 as a State prisoner at several places; Gen. Secy., Bengal P.C.C., 1940-41; member: A.I.C.C. since 1938; Constituent Assembly, 1946; Provisional Parliament; elected M.P., 1952, 1957 & 1962; Min. of State for Finance, 1954-57; Chairman, Estimates Cttee. and member, Public Accounts Cttee. of the Parliament; Min. for Revenue and Defence Expenditure, Govt. of India (upto April 1957); Publications: has written

short stories, novels and books on History, Politics and Cultural and Juvenile topics. Editor, *Mandira*, Bengali literary monthly and Dir., *Forward*, political and cultural English weekly. Address: 32, Acharya Prafulla Chandra Road, Calcutta-9.

**GUHA, Dr. (Smt.) Phulrenu, M.A. (Calcutta), D. Litt. (Sorborne), Minister of State in the Deptt. of Social Welfare, Govt. of India, since March 13, 1967. b. Aug. 13, 1911 at Calcutta. Educ.** Sylhet, Calcutta, London and Paris. Participated in the freedom movement since her early days; took a leading part in student movements in schools and colleges; has been actively associated with relief, social and children's welfare, family planning, defence aid, moral and social hygiene and women's organisations, especially during the Bengal famine, 1943; in Noakhali, 1946; was Secy., United Council of Relief and Welfare for W. Bengal; has been actively connected with Social Welfare Board in W. Bengal from its very inception; elected to Rajya Sabha, April 1964. Address: Minister of State, Deptt. of Social Welfare, Govt. of India, New Delhi.

**GUJRAL, Inder Kumar, M.A. B.Com., Minister of State for Communications and Parliamentary Affairs, Govt. of India, since March 1967. b. Dec. 4, 1919, at Jhelum; Educ.** Forman Christian Coll. and Hailey Coll. of Commerce, Lahore (W. Pakistan); took M.A. and B. Com. from Punjab Univ. Shifted to Delhi during partition; helped in the rehabilitation of displaced persons; was Vice-Pres., New Delhi Municipal Cttee. for five years; member, All India Central Citizens' Council; is Secy., Resources Sub-Cttee. of the Council; has travelled widely in Europe, Asia, Africa and Australia; represented the Indian Parliament at the Inter-Parliamentary Union Cfee. in Canberra; is the Founder-Pres., Delhi Arts Theatre and Treasurer, Federation of Film Societies of India; Vice-Pres., Lok Kalyan Samiti; is a Rotarian; Pres., Rotary Club and Co-chairman, Asian Regional Cfee. of Rotary International, 1958. Address: 21, Tilak Marg, New Delhi.

**GUJRAL, Satish, Govt. Diploma in Art (1944), Diploma in Advance Painting, Mexico (1954), Painter. b. Dec. 24, 1925; Educ.** The Mayo School of Arts, Lahore; J. J. School of Arts, Bombay; Palacio Nacional de Bellas Artes, Mexico City, and at various art workshops at New York, Paris and London. Was Art Executive, Punjab State Govt., and Vice-Principal, Govt. School of Arts, Simla; went to Mexico on a Mexican Govt. Fellowship; studied and travelled extensively in central and north America and in Western Europe, for three years; held one-man-shows in Delhi, Bombay, Mexico City, New York, London, Amsterdam, Montreal; won Academy Awards, 1956, 1957. Is now engaged on various mural projects with the Govt. of India. Publications: Articles on art and culture in Indian and Mexican journals. Address: C II, 41, Tilak Marg, New Delhi.

**GUNDEVIA, Yezderard Dinshaw, B.A. (Hons.) (Philosophy) (Bom.), I.C.S., High Commissioner in Ceylon, since Dec. 30, 1966. b. June 19, 1908; Educ.** Bharda New High School, Bombay; Wilson Coll., Bombay; called to the Bar from Middle Temple, London. Entered the I.C.S., 1930; held various imp. posts in U.P., 1931-45; Secy. to Rep. of the Govt. of India in Burma, 1945-47; Counsellor in the Embassy of India, Rangoon, 1948; Jt. Secy. and Control-Gen. of Emigration, Ext. Affairs Min., 1948-50; Min.-Counsellor, Moscow, 1950-53; Amb. Extraordinary and Plenipotentiary for India in Switzerland and also Min. Plenipotentiary and Envoy Extraordinary in Austria and the Holy See, 1953-54; Dy. Indian High Commr. in U.K. with rank of Amb., 1954-56; High Commr. to Ceylon, 1957-60; Spl. Secy., Ext. Affairs Min., June 1960; Commonwealth Secy., Dec. 1960; Foreign Secy., Dec. 1963-Feb. 1965; Secy. to the President, 1965-66. Address: C/o External Affairs Ministry, New Delhi.



**GUPTA, Bhupesh, B.A.** (Calcutta), LL.B. (Lond.), Barrister-at-Law, M.P. (Rajya Sabha), Member, National Council and Central Secretariat of the C.P.I.; Editor, *New Age*, Monthly, since Jan. 1966. b. Oct. 1914; *Educ.*: Calcutta and London Universities, Middle Temple; passed Intermediate and B.A. examinations while in detention without trial in Berhampore Detention Camp, 1933-36. Has been a whole time political worker. *Publications*: A critique of the Second Five Year Plan and of political pamphlets. *Address*: G7, Govt. Housing Estate, Karaya Road, Calcutta 19; 5, Feroze Shah Road, New Delhi.

**GUPTA, Biraja Madhab, A.M.R. Ac. S.** (London), Director-General of Civil Aviation, Govt. of India, since Sept. 30, 1965. b. March 19, 1910; *Educ.*: Held German Pilot Ais Licence, British Pilots 'B' Licence, British Ground Engrs. 'A' and 'C' Licences; Diploma of the Coll. of Aeronautical Engg., London. Joined the Civil Aviation Deptt. as Aerodrome Officer, July 1, 1936; served at various stations in different capacities; apptd. Regional Aerodrome Officer, March 1946; Rep. of India on the Council of Intn'l. Civil Aviation Org., Jan. 13-Dec. 10, 1947; was Dir. of Air Routes and Aerodromes; Principal, Civil Aviation Trg. Centre, Allahabad; Dir. of Air Transport, and Dy. Dir. Gen., till Sept. 30, 1965. *Address*: 7, Lodi Gardens, New Delhi 3.

**GUPTA, Chandra Bhanu, M.A., LL.B.**, Politician; Ex-Chief Min., Uttar Pradesh. b. July 14, 1902; *Educ.*: Lucknow Univ. Practised Law, 1925; member: U.P.C.C. and A.I.C.C., since 1926; Municipal Board, Lucknow, 1928; often courted jail in C.D. movement; elected to the court and the council of Lucknow Univ., 1927, its Treasurer, 1947; Lucknow Improvement Trust 1937; Board of Intermediate Educ., U.P., 1937; Pres., Dist. Cong. Cttee., Lucknow, 1929-44; member, Exec. Council, Lucknow Univ., 1929-59; and Treasurer, member, A.I.C.C., 1926-59; Treasurer, U.P. P.C.C., 1946-58 (Vice-Pres., 1958); member, U.P. Leg. Assembly, 1937-62; Parly. Secy. to Chief Min., U.P. Govt., 1946; Min. for Food and Civil Supplies, Public Health, Industries & Plng., 1948-57; elected Pres., P.C.C. in Oct 1960; Chief Min., U.P., 1960-63; resigned under the "Kamaraj Plan", Aug. 1963. *Address*: Seva Kutir, Pandariba, Lucknow.

**GUPTA, Maithili Sharan, Hon. D. Litt.**, Agra, Allahabad & Varanasi Univs., Sahitya-Vachaspati, Hindi Writer. b. Aug. 3, 1886, at Chirgaon, Dist. Jhansi. Ex-Pres., Nagri Pracharini Sabha, Varanasi; ex-member, Hindustani Academy, Allahabad; Pres., Sahityakar Sansad, Allahabad; has been M.P. (Rajya Sabha). *Publications*: (Hindi) *Saket*; *Gurukul*; *Yashodhara*; *Dwapar*; *Siddharaj*; *Hindoo*; *Bharat*, *Bharti*; *Jayadrath-Vadha*; *Jhankar*; *Anagh*; *Kisan*; *Shakuntala*; *Vishwa-Vedana*; *Kaba Aur Karbala*; *Kunal Git*; *Arjan Aur Visarjan*; *Vaitalik*; *Prithivi-Putra*; *Hidimba*; *Panchavati*; *Ajit*; *Anjali Aur Arghya*; *Chandras*; *Mangal Ghat*; *Jay Bharat*; *Raja Praja*; *Bhoomi Bhag*; *Vishnu-Priya*; *Leela*; *Uchhuas*; *Ratnavali*, etc.; translated "Meghnad Vadh", "Palashi Ka Yuddha", "Virahni Brajangna", "Ruhaiyat-i-Omar Khayam", "Vratra Samhar", etc. *Address*: Chirgaon (Jhansi), U.P.

**GUPTA, Ram Gopal, ex-M.P.**; Industrialist and Social Worker. b. July 21, 1920. Chairman and Dir. of several concerns, incl. Textiles, Engg., Sugar etc. Associated with educ., social and cultural activities apart from commercial interests. Trustee, B.R. Charitable Trust, and H.S.J.S. Coll.; Pres., Shri Ram Lila Society; Chairman, Employers' Assoc. of Northern India; Member, Exc. Cttee.: U. P. Cotton Textile Millowners' Assoc.; Indian Lamp Mfrs. Assoc., Calcutta; Vice-Pres.: Upper India Chamber & Foundries and Engg. Works Assoc., Kanpur; A keen Freemason widely travelled. *Address*: Behari Niwas, Kanpur.

**GUPTA, Ram Prakash, M.Sc.**, Deputy Chief Minister and Minister of Education, Uttar Pradesh. *Educ.*: M.Sc., degree in Mathematics from Allahabad Univ. Is Convener of Uttar Pradesh Jan Sangh Parliamentary Board; is also the Organising Secy., U.P. Jan Sangh; dedicated himself whole-heartedly to the public service and became a Pracharak of R.S.S.; did organisational work in many districts, particularly in Prayag; has worked on many responsible posts in the Jan Sangh; elected member, Leg. Council from Assembly constituency, 1964; was the Party's election organiser in the 1967 General Elections; was Deputy Mayor of Lucknow Nagar Mahapalika. *Address*: Deputy Chief Minister, Uttar Pradesh, Lucknow.

**GUPTA, Suresh Chandra, B.Sc. (Agra), (A.H.B.T.I.), (F.I.I.S.T.), F.R.I.C., (Lond.), F.I.C. (India), M.I.I. Chem. E., Dir., National Sugar Inst., Kanpur, since 1964.** b. July 7, 1913; *Educ.*: D.A.N. Coll., Dehra Dun, Meerut Coll., Meerut; H.B.T.I. & I.I.S.T., Kanpur. Chief Sugar Technologist (Ext.) to Govt., 1958-63; Dir., National Federation of Co-op. Sugar Factories; member, Devpt. Council for Sugar Industry, since 1964; I.S.S.C.T. since 1956; Sugar Eng. Commn.; Sugar Technologists' Asscn., Royal Instt. of Chemistry; etc. Tech. member, Govt. delegation to I.S.S.C.T., 1962; Ex-Officio member of 18 cttees. of Govt. and semi-Govt. Departments, since 1964. Invented the Defacto Melt Crystallization process for manufacture of sugar without the use of sulphur; widely travelled. *Publications*: Published a number of Papers: *Design and Working of Process Equipments*, *Fuel and Steam Economy* etc. *Address*: National Sugar Institute, Kalyanpur, Kanpur.

**GURUPADASWAMY, M. S., M.A., LL.B.**, Minister of State, Ministry of Food and Agriculture, Govt. of India, since June 5, 1967. b. Jan. 8, 1923; *Educ.*: B.A. (Hons.) from Mysore Univ. and M.A., LL.B. from Lucknow Univ. Joined the freedom struggle at a very young age; Pres., Political Science Assoc., Mysore Univ., 1943-44; practised law at the Bangalore Bar, 1946-48; Editor, *Prajamata*, Bangalore, 1948-53; elected Pres., Mysore State Journalists Assocn., 1950 and 1951; was elected to the Lok Sabha on P.S.P. ticket, 1952; member, National Exec. of the P.S.P., 1957-63; Chairman, Mysore State P.S.P., 1958-60; played a significant role in the merger of one wing of P.S.P. with Congress in 1964; was Secy., Parliamentary group of the P.S.P., elected to the Rajya Sabha, 1960 and 1966; member, informal consultative cttees. of M.Ps. attached to the Ministries of External Affairs and Finance; has been member, Chanda Cttee. on Media of Mass Communications and also of Public Undertaking Cttee. of Parliament; was Min. of State, Dept. of Atomic Energy, Govt. of India (March-June 1967); had been to France, U.K., Germany, Switzerland, Italy, U.S.S.R., Israel, Iran and some African countries; Editor, *Parliament Studies*, a monthly published from Delhi. *Publications*: *International Studies*; *Political Pilgrimage and Communalism*. *Address*: Deptt. of Atomic Energy, Govt. of India, New Delhi.

**GWALIOR: H.H. The Maharani Vijaya Raje Scindia of: M.L.A.**, Social worker. b. Oct. 12, 1919; *Educ.*: Privately at home and at Besant Coll., Banaras; awarded D. Litt., Vikram Univ. Devoted to social and child welfare work and female educ.; Founder Pres., Shishu Mandir, a Montessori School for small children and Scindia Kanya Vidyalaya; Pres., Board of Governors: Scindia Public School, Gwalior; Madras Engg. Coll., Gwalior; Samrat Ashok Technological Instt., Vidisha; member: Board of Governors of Laxmibai Coll. of Physical Educ.; Syndicate of Vikram Univ., India Intn'l Centre; Central Board of Film Censors. Pres., M. P. Branch of Social and Moral Hygiene; was Chairman, M. B. State Adv. Board of the Women's Small Savings

Campaign and of the Indian Council of Child Welfare, M.B. Branch; was twice elected Vice-Pres., All India Women's Cfee. and has been all along the Pres. of its Gwalior branch; member, Citizens' Central Council; Chairman, Relief Rehab. Cttee. of the Council. Pres., Maratha Mandir, Bombay; M.P., Lok Sabha from Guna Constituency in 1957 and from Gwalior Constituency in 1962; M.L.A. from Karera Constituency on Kranti Kari Vidhayak Dal ticket, 1967. *Address*: Jai Vilas, Gwalior; Samudra Mahal, Worli, Bombay 18.

**HAFEZ, H.E. Mr. Mahmoud, B.A., LL.B.**, Amb. of the Republic of Lebanon in India, Ceylon, Thailand, Nepal and Indonesia, since 1963. b. 1915; *Educ.*: American Univ. of Beirut; Faculte de droit de Paris. Professor, American Univ. of Beirut, 1934-45; Second Secy., Embassy of Lebanon, Washington D.C., 1945-46; Charge d'Affaires in Buenos Aires (Argentina), 1947-49; Counsul-General in Jerusalem (Jordan), 1950-53; Counsellor in Cairo, 1953-56; Dir. of Palestine Affairs and U.N. Affairs, Min. of Foreign Affairs, 1956-57; Counsul-Gen. of Lebanon in Marseille, 1957-60; Amb. in Saudi Arabia, 1960-63. *Address*: Embassy of the Republic of Lebanon, 23/48, Panchsheel Marg, Chanakyapuri, New Delhi.

**HAKSAR, Parmeshwar Narain, M.Sc., Barrister-at-Law (Lincoln's Inn), I.F.S.**, Secy. to the Prime Minister, since May 1967. b. Sept. 4, 1913; *Educ.*: Allahabad Univ.; London School of Economics and Univ. Coll., London. Practised Law at Allahabad High Court; Officer on Spl. Duty, Min. of Ext. Affairs, 1947; Adviser, Indian delegation to the Security Council on Kashmir; Secy., High Commn. of India (Ext. Dept.), London, May 1948; delegate, Diplomatic Cfee., Geneva, 1949; Adv. and later Alternate delegate, Sixth Session, Gen. Assembly, U.N., Paris; Counsellor, Indian High Commn., London, Aug. 1952; Adv. and later Alternate Chairman, Neutral Nations' Repatriation Commn., Korea, 1953-54; Dir., Ext. Publicity Dvn., Min. of Ext. Affairs, 1955-58; Member, U.N. Expert Cttee. on Public Information, 1958; Jt. Secy., Min. of Ext. Affairs, 1959-60; High Commr. in Nigeria, Sept. 1960; Amb. in Republics of Dahomey and Togo, 1962-64; Amb. to Austria, 1964-65. Dy. High Commr. in U.K. 1965-67. *Address*: Prime Minister's Secretariat, New Delhi.

**HAKSAR, His Excellency Sundar Narain, M.A., B.Sc.**, Indian Amb. to the Netherlands since July 1966. b. Dec. 4, 1909; *Educ.*: St. Stephen's Coll., Delhi. Joined the I.C.S., 1933; served in various capacities in the Punjab; transferred to the I.F.S., 1948; Counsellor in Embassy at Cairo, 1948-49; Jt. Secy., Min. of Ext. Affairs, 1950-March 1953; Min. in Embassy at Washington, Aug. 1953-Sept. 19, 1954; Amb.: at Ankara, Nov. 1954-Nov. 1956; in Afghanistan, 1957-60; to Italy, 1960-64; to the U.A.R., 1964-66. *Address*: C/o External Affairs Ministry, New Delhi.

**HALDULKAR, Ramakant Kesheorao, Gen. Secy.**, All India Forward Bloc, since 1955. b. Jan. 4, 1916, at Bijakwara Village, M.P.; *Educ.*: Nagpur; Hindi Bhashi Sangh High School; City Coll., Nagpur. Arrested on 11th Nov. 1934 in connection with the Sitabaldi Bomb Case and was released after an undertrial period of 7 months on 4th May 1935 without conviction; started first Trade Union in coal mine area of Chhindwara Dist., June 9, 1940; secured various awards for mine workers; took part in the freedom movement; was detained in Quit India movement, 1942-45; joined the All India Forward Bloc, 1939; is Pres.: M.P. Mine Workers' Union, Bombay Pradesh Mine Workers' Union, Bellapur, Maharashtra; was Vice-Pres., A.I.T.U.C.; resigned, Aug. 15, 1958; elected Pres., A.I. Mine Workers' Federation, 1959; Editor and Publisher, *Inquilab* (Weekly), Chhindwara, since Nov.



1958; started Janata Publications. *Address*: General Secretary, All India Forward Bloc, Subhash Ward No. 2, Chhindwara, Madhya Pradesh.

**HAMIED, Dr. K. A., B.Sc., M.A., Ph.D.,** (Berlin), F.C.S., F.S.C.I., F.R.I.C. (Lond.). Member, American Chemical Soc., F.I.A.Sc. (Ind.), J.P.; ex-M.L.C., Maharashtra State; Fellow: Bombay Univ.; Court of Aligarh Univ. & member, Exec. Council; Hon. Prof., Aligarh Univ., Industrialist. b. Oct. 31, 1898; *Educ.*: Allahabad Univ.; took part in freedom movement; established business in chemical and pharmaceutical products in Bombay; started Cipla Ltd., 1935; is its Chairman and Tech. Expert; had been a Congress member of the Bombay (later Maharashtra) Leg. Council for over 25 years. Dir.: of several firms in Bombay; Pres., Indian Chemical Mfrs. Assoc., 1945-48 and 1949-50; Leader, Indian Chemical Delegation to U.K. and U.S.A., 1945-46; Sheriff of Bombay, 1952-53; Member: Governing Body of the Council of Scientific & Industrial Research; Stg. Adv. Cttee. for Industries, Bombay; Pharmaceutical & Drugs Research Cttee., Govt. of India; Maharashtra State Industrial Research Cttee. *Address*: 289, Bellasis Road, Byculia, Bombay 8.

**HANNA, J. B.,** Graduate in Petroleum Engg., Univ. of Pittsburg, Mg. Dir., Esso Standard Refining Co. of India, Ltd. and Asstt. Gen. Mgr. (Mfg.), Esso India, since 1964. b. April 24, 1911; *Educ.*: Pittsburg Univ., U.S.A. Joined Esso Std. Oil Company; worked at Esso's Bayway Refinery, 1935-51; transferred to South Africa as Refinery Mgr. of Stanvac's Durban Refinery, 1952; later became its Mg. Dir.; returned to New York for a Spl. assignment in Refining Coordination Dvn., 1956; Mg. Dir., Stanvac Bombay Refinery, 1957-59; re-assigned to New York in 1959, in charge of Refining Coordination Dvn.; later apptd. Regional Coordinator, South Asia Region and Regional Coordinator for Japan. *Address*: Esso Building, 17, Jamshedji Tata Road, Bombay 1.

**HANUMANTHAIYA, Kengal, B.A., LL.B.,** M.P., Dy. Leader, Congress Parliamentary Party, since April 1967; Ex-Chief Min. Mysore; member: Exec. Cttee., Cong. Party in Parliament; All-India Council of Instts. of Tech.; Spl. Consultative Group for Adm.ive Reforms, Govt. of India. b. 1908; *Educ.*: Maharaja's Coll., Mysore; Law Coll., Poona; B.A., 1930; LL.B., 1932. Pres., Bangalore D.C.C. for 10 years; imprisoned 7 times during freedom struggle; started "Palace Satyagraha" movement in 1948 to achieve democratic Govt. in Mysore State; Pres., Bangalore City Municipal Council, 1942; Leader, Cong. Party, Mysore Rep. Assembly, 1945-49; Dy. Leader, Cong. Party, Mysore Constituent Assembly, 1948-49; Pres., Mysore P.C.C., 1950-52; delegate, Inter Parly. Cfce.s: Stockholm, 1948; Dublin, 1950; Brazil, 1962; Chief Min., Mysore, March 1952-Sept. 1956; as Chief Min. introduced several reforms in the State; nationalised Kolar Gold Mines; integrated Karnataka; re-elected to Mysore Leg. Assembly, 1956; elected Member, Lok Sabha, 1962 & 1967; Chairman, the Punjab Adm.ive Reforms Commn., 1964-65; Member & later Chairman, Adm. Reforms Commission. *Address*: "Kengal Krupa", Bangalore 6; New Delhi.

**HATHI, Jaisukhlal,** Minister for Labour & Rehabilitation, Govt. of India, since March 1967. b. Jan. 19, 1909. Passed Law Exam. Enrolled as Advocate, Bombay High Court; for some time Dist. & Sessions Judge, Rajkot State; elected member, Constituent Assembly, 1946-47; was member, Prov. Parliament; apptd. Chief Secy., Saurashtra, Feb. 1948; was Secy. in-charge, election org. of the Saurashtra Cong. Cttee, 1952. M.P., Rajya Sabha from Saurashtra; whip of the Cong. Party in the Rajya Sabha; M.P., Lok Sabha, 1957; M.P. Rajya Sabha, 1962; Chairman: Bhartiya Vidya Bhavan; Pres.: Saraswati

Samaj; All India Anuvrat Samiti; Union Dy. Min. for Irrigation and Power, 1952-62; Union Min. of State for Labour, April-Nov. 1962; Min. of Supply Nov. 1962-March 1964, Minister of State, Min. of Home Affairs, Govt. of India, also Min. of Defence Supplies, Min. of Defence, 1964-67. *Address*: New Delhi.

**HAZARI, Captain Durgdas Gehisingh,** Master Mariner (F.G.), Member of Inst. of Marine Technologists, Member of Company of Master Mariners, J.P. (Greater Bombay), Captain Suptd., Trg. Ship "Dufferin" since Sept. 1962. b. Dec. 3, 1916; *Educ.*: P. N. Anglo-Sanskrit High School, Patna, 1921-31; Trg. Ship "Dufferin", 1931-33; Merchant Navy, Dec. 1933-June 1943; Exec. Officer, Trg. Ship "Dufferin", June 1943 to May 1950; Chief Officer Trg. Ship "Dufferin", May 1950 to Dec. 1954; Captain Suptd., Trg. Ship "Nau Lakshi", Navlakshi, Saurashtra, Dec. 1954-Oct. 1959; Captain Suptd., Trg. Ship "BHADRA", Calcutta, Oct. 1959-Sept. 1962. *Address*: Training Ship "Dufferin", Off Mazagaon Pier, Bombay-10.

**HEBBAR, Kattingeri Krishna, Padma Shri** 1961, Artist. b. June 15, 1912; *Educ.*: Gen. Christian High School, Udipl, S. Kanara; Sir J. J. School of Art, Bombay and Academy Julian, Paris. Held one-man shows in India, London, Paris, Switzerland and New York; travelled widely in Europe, U.S.S.R., Poland, U.S.A., Mexico & Japan; member, Lalit Kala Akademi, New Delhi; Winner of several imp. top awards in exhibitions; paintings in several museums and pvt. collections in India and abroad. *Publications*: *Hebbar Drawings and Paintings* (Nalanda Publications, Bombay); *Hebbar's Lalit Kala Akademi*, New Delhi, 1960; *Drawings 'The Singing Line'* (Peacock Publications, Bombay). *Address*: Sunshine, 81, Cadell Road, Mahim, Bombay 16.

**HECKSCHER, H. E. Dr. Gunnar E., Ph.D.** (Political Science), Amb. of Sweden to India. b. July 8, 1909; *Educ.*: took Doctor Phil. (Political Science), 1934. Served as a Prof. in Political Sc. at the Univ.s of Uppsala and Stockholm; member, Swedish Parliament, 1956-65; leader of the Conservative Party in Sweden 1961-65; served in the U.N. as an expert. *Publications*: Many treatises and books mainly on political science. *Address*: Swedish Embassy, New Delhi 21.

**HEGDE, Doddamane Ramakrishna, M.A.,** LL.B. Minister for Fin., Excise, Prohibition, Information and Publicity, Mysore State, since June 7, 1965. b. Aug. 29, 1927 in Siddapur Taluk, N. Kanara Dist.; *Educ.*: School education in Siddapur and Sirsi; B.A., Kashi Vidyapith, Banaras; M.A., LL.B., Lucknow Univ. Started practice at Sirsi; Pres., North Kanara D.C.C. 1954-57; Dy. Min. for Plng. & Devpt. 1957-58; Gen. Secy., M.P.C.C. 1958-62; re-elected M.L.A., Mysore, 1962 from the Sirsi Constituency; Min. for Dev., Panchayati Raj and Co-op. 1962-65. *Address*: Bangalore 1.

**HEGDE, Mr. Justice Kawdoor Sadananda,** M.A., B.L. (Madras), Chief Justice, High Court, Delhi since Nov. 1, 1966; was Judge, High Court of Mysore. b. June 11, 1909; *Educ.*: St. Aloysius, Coll., Mangalore; Presidency Coll. and Law Coll., Madras. Advocate from 1936; Public Prosecutor and Govt. Pleader, Aug. 1947-Sept. 1951; M.P., April 1952-Aug. 1957; represented India in the U.N. as an alternate delegate, 1954. *Address*: High Court, Delhi.

**HIDAYATULLAH, Mr. Justice M., B.A.,** (Nagpur), M.A. (Cantab.), Barrister-at-Law, O.B.E. (1946), Judge, Supreme Court of India, since Dec. 1, 1958. b. Dec. 17, 1905; *Educ.*: Govt. High School, Raipur, Phillip's Scholar, Morris Coll., Nagpur 1926; Trinity Coll., Cambridge, 1927-30, English and Law Tripos, Lincoln's Inn, Bar-at-Law 1930. Advocate, Nagpur High Court, 1930-46; Advocate-Gen., Madhya Pradesh 1948-46; Pilsne Judge,

1946; member: Nagpur Univ. Exec. and Academic Councils Court, etc. 1934-53; Dean of the Faculty of Law, 1949-53; Chief Commr., Madhya Pradesh Bharat Scouts and Guides, 1950-53; awarded the highest award Silver Elephant, 1950; member: Faculty of Law, Saugar Univ.; Univ. Court, Vikram Univ. and Aligarh Muslim Univ., 1954; Faculty of Law, Aligarh Muslim Univ.; Chief Justice, Nagpur High Court, 1954-56; M.P. High Court, 1956-58. *Publications*: *Democracy in India & the Judicial Process*, Mulla's Mohammedan Law Editor 16th Edn., Miscellaneous papers. *Address*: 2, Teen Murti Marg, New Delhi.

**HOMOU, H. E. Mr. Kemal,** Diploma in Int'l Affairs, London, Amb. of Jordan in India, since Oct. 3, 1964. b. Dec. 26, 1920; *Educ.*: Univ. Coll., Aly, Lebanon. Chief of Protocol, Royal Palace, 1951-54; Min. Jordan Legation, Santiago De Chief; Amb. of Jordan in Iran, 1962-63. *Address*: 154, Malcha Marg, Chanakyapuri, New Delhi 21.

**HUSAIN, Dr. Iqbal, M.A., B.L., Ph.D.,** Persian Scholar. Dir., Khuda Bakhsh Oriental Public Library, Patna. b. Nov. 22, 1905; *Educ.*: Patna and Law Colls., Patna; Univ. Prizeman, Gold Medalist and Research Scholar. Was in Bihar Educl. Service, 1935-60; Dean of Faculty of Arts, Patna Univ.; Principal, Patna Coll. and Prof. and Head of the Deptt. of Persian, Patna Univ., 1944-61. Member: Senate, Syndicate, Academic Council and Faculties of Arts and Law, Patna Univ.; member: Bihar Madrasa Exam. Board, 1938-44 and 1952-62; Pres. of the Board since 1966; Governing Body, Madrasa-i-Shamsul Huda; Language expert of the Bihar Hindustani Cttee.; rep. of Patna Univ. in the Indian Council of Cultural Relations, Govt. of India, 1953-61; member: Bihar Public Service Commn., 1961-65; All-India Oriental Cfce.; Governing Body of Govt. Urdu Library; Art Purchase Cttee., Govt. of India. *Publications*: *Tuhfa-i-Sami*; *The Early Persian Poets of India*, and *Selected Qasidas of Urfi*. *Address*: Exhibition Road, Patna 1.

**HUSAIN, Mohammad Azim,\* B.A. (Punjab),** B.A. (Oxon.), M.A. (Cantab.), Bar-at-Law (Lond.), I.C.S., Secy., Min. of External Affairs, Govt. of India, since May 24, 1965. b. Oct. 5, 1913; *Educ.*: Punjab; United Kingdom. Joined I.C.S., 1937; served in the Punjab, 1937-42; Under Secy., Defence Ministry, 1942-44; Dy. Secy., I & B. Min., 1945-48; Secy.-Genl. to the Indian Delegation to the Gen. Assembly, U.N., 1946; Adviser to Indian Delegation to the Third Session of the General Conf. of UNESCO, 1948; Dy. Secy., Ext. Affairs Min., 1948-52; Consul-General, San Francisco, 1952-54; Jt. Secy., Ext. Affairs Min., 1954-57; Dy. High Commr., London, 1957-60; Alternate Delegate to the Tenth General Conf. of UNESCO, 1958; Amb. to U.A.R. and concurrently to Libya, since 1960 and Min. to Lebanon; Delegate to Cairo Preliminary Conf. of Non-Aligned Countries, 1961; Delegate to UN General Assembly, 1962; concurrently accredited to Yemen, May 1963; Delegate to Colombo Preparatory Conf. of Non-Aligned Countries, 1964; Dy. Leader, Delegation to Djakarta Ministerial Conf. of Afro-Asian Countries; Delegate to Cairo Conf. of Non-Aligned Countries, 1964; Addl. Secy. and F.S.I., Min. of Ext. Affairs, 1964-65. *Address*: Ministry of External Affairs, New Delhi.

**HUSAIN, Saliyd Ehtesham, M.A. (Urdu),** Gold Medalist, Urdu Critic; Prof. in Urdu, Allahabad Univ., since Nov. 1961. b. July 11, 1912; *Educ.*: Wesley High School, Azamgarh (U.P.); Govt. Intermediate Coll., and Allahabad Univ., Allahabad; M.A. in Urdu, 1936. Apptd. in the Persian and Urdu Deptt., Lucknow Univ., 1938; Fellow of the Rockefeller Foundation (U.S.A.) to study 'Sociology & Literary Criticism' in U.S.A. & Europe, Sept. 1952-July 1953; member, Sahitya Akademi, Hindustani Academy, National Book Trust; etc. *Publications*: *Viranay*; *Tangidi Jaas*;

\* Indian Ambassador to Switzerland and Vatican from Sept. 1967.



*Ravayet Aur Baghawat; Adab Aur Samaj; Tanqid Aur Amali Tangid; Zaug-e-Adab Aur Shaoor; Urdu Sahitya Ka Itihas; Urdu Ki Kahani; Aks aur Aaine; Afkor-o Masael; Elbar-e-Nazar*; Translated the Japanese classic *Tale of Genji* by Lady Murasaki, *Kalki* by Dr. S. Radhakrishnan and Romain Rolland's (abridged) *Ramakrishna & Vivekanand* in Urdu. Address: Allahabad.

**HUSAIN, Dr. Zakir, MA., Ph.D. (Berlin)**, D.Litt. honoris causa (Delhi, Calcutta, Allahabad, Aligarh and Cairo), Padma Vibhushan (1954), Bharat Ratna (1963), President of India, since May 9, 1967; was Vice-President of India, May 1962-April 1967. Chancellor, Delhi Univ. since 1962. b. Feb. 8, 1897, at Hyderabad-Deccan; Educ.: Islamia High School, Etawah (U.P.); M.A.O. Coll., Aligarh; Univ. of Berlin. Vice-Chancellor, Jamia Millia, Delhi 1926-48; Pres., Hindustani Talimi Sangh, Sevagram, 1938-50; Vice-Chancellor, Aligarh Muslim Univ. 1948-56; Chairman: Int'l Students Service, India Cttee. till 1955; World Univ. Service, Geneva, 1955-57; Central Board of Secondary Educ. till 1957; Basic National Educ. Cttee., 1937; Member, Univ. Grants Commn., till June 1957; Rajya Sabha, till 1957; Exec. Board, UNESCO, Paris, 1956-58; Univ. Educ. Commn., 1948-49; Indian Press Commn., Educl. reor. Cttees. of Bihar, U.P. & M.P.; Patel Memorial Lectures on Principles of Educl. Reconstruction in India 1958; Mavalankar Memorial Lecture on Ethics and the State, 1960; Governor of Bihar. July 1957-May, 1962; visited U.A.R., Morocco, Algeria and Tunisia, July 1964; 22 days goodwill tour of Kuwait, Saudi Arabia, Jordan and Greece, May-June 1965; visited Moscow, Aug. 7, 1965. Publications: *Shiksha (Hindi)*; *Capitalism*; *An Essay in Understanding*; translation into Urdu of Plato's *Republic*. Fr. List's *National System of Economics*, Edwin Cannan's *Elements of Economics*; Lectures on the scope and method of Economics (Hindustani Academy, U.P.); *Educational Discourses* (Urdu); *Dynamic University*. Address: Rashtrapati Bhavan, New Delhi.

**HUSSAIN, H.E. Mr. Arshad, B.A. (Cantab)**, Bar-at-Law, High Commr. for Pakistan in India since Oct., 1963. b. Jan. 1910. Educ.: Cambridge Univ. Advtg. Consultant to the Govt. of India 1943-47; after independence apptd. Dir., Deptt. of Films and Publications, Govt. of Pakistan; joined Pakistan Foreign Service, Jan. 1950; worked as Dy. Secy., Min. of Ext. Affairs; attended a course at the Imperial Defence Coll., London, 1952; acted as Counselor-Charge d'Affaires of Pakistan in Belgium, 1954-56; Dy. High Commr. in New Delhi with rank of a Min., 1956-57; apptd. Pakistan's Amb. to Sweden and concurrently accredited to Norway, Denmark and Finland, 1959; Amb. for Pakistan to U.S.S.R. and concurrently accredited to Czechoslovakia, 1961-63. Address: 8B, Hardinge Avenue, New Delhi.

**IBRAHIM, Hafiz Mohd., B.A., LL.B.**, Padma Vibhushan (1967), Ex-Governor of Punjab. b. 1889; Educ.: Aligarh Muslim Univ.; Univ. of Allahabad. Practised as an Advocate at Nagina, Bijnor and Moradabad for over 21 years; elected member, U.P. Leg. Council, 1928 and joined Swaraj Party; worked for the organisation of Muslim Waqfs of U.P.; opposed the White Paper in 1933 and the Report of the Jt. Parliamentary Cttee. on Constitutional Reform in 1934; appointed Minister in the first Congress Cabinet of U.P., 1937; resigned Nov. 1939; sentenced to one year, 1940-41; detained, Aug. 1942; has fought vehemently for Hindu-Muslim unity and accord; one of the main founders, Muslim Majlis, 1943; convened All India Muslim Conference under the presidency of Maulana Azad at Lucknow, which called upon the Muslims of the country to give up communal political organisations, 1947; Minister for Finance, Power, Industries, etc. U.P., 1937-39 and 1946-58; was Minister for

Irrigation and Power, Govt. of India, April 1958-June 1963; was member, A.I.C.C., Working Cttee., Central Parliamentary Board and U.P. Congress Cttee. Address: C/o Raj Bhavan, Chandigarh.

**IMLONG, K. Akum**, Minister for Tuensang Affairs, Com. Development and Co-operation, Nagaland, since March, 1967. b. March 1935, in Mokokchung; Educ.: Matriculation from Mokokchung Govt. High School, 1954; Intermediate Exam., 1956 from St. Paul's Coll., Calcutta, 1956; St. Stephen Coll., Delhi Univ., 1956-59; member, Working Cttee., Naga People's Convention; Circle Officer, Nagaland, 1960; resigned; elected member, Interim Body by Chang Tribe of Tuensang Dist., 1960; elected as a member of the Exec. Council, Feb. 1961; re-elected to the Nagaland Legislative Assembly, Dec. 1963; Min. for Tuensang Affairs, Information, Publicity and Tourism, 1964-67. Address: Kohima.

**INDORE, Her Highness Shrimant Saubhagyawati Maharani Indirabai Holkar**. Educ.: Privately. Takes keen interest in charitable instts. and is connected with Ahilya Sadan of Indore, Rajawade Historical Research Instt., Ramdas Research Instt. of Dhulla, Maharashtra Sahitya Parishad, Vedic Research Soc., Poona, Dharmakosha Karyalaya of Wai, All India History of Indian Philosophy, Village Uplift & the Red Cross Soc.; managed the Educ., Medical, Charitable and Household Depts. of the State during 1923-24; Chairman, Reception Cttee., A.I.W.C. Silver Jubilee Session held at Poona, May 1953. Address: Shree Wasudeobag, Indore.

**ISMAL, H. H., J.P.**, Social Worker; Sheriff of Bombay for 1967; Consul-General for Dominican Republic, since 1954. b. Aug. 20, 1906, at Amrell; Educ.: Panchgani High School; Davar's Coll. of Commerce, Bombay; Commercial Institute, New York. Hon. Consul for the Dominican Republic, 1947-54; is Pres.: Memon Chamber of Commerce; Bombay Labour Bureau & G. B. Pant Library on Scientific Management; Indo-Afghan Friendship Society, etc.; was Pres., Flag Day Cttee.; is Chairman, Maharashtra Friendship Society and Maharashtra U.N. Assoc.; is Vice-Pres.: International Club of India; Indian Council of Management Executives; Indo-Arab Society; Indo-German Cultural Society, etc.; is Hon. Treasurer, Shilpi Kendra; joined his father's business, 1928; has travelled extensively round the world; is connected with several social and cultural organisations as Pres., Vice-Pres., Chairman or Secys. Address: 702, Prabhu Kunj, 5, Pedder Road, Bombay 26.

**IVALO, H. E. Mr. Asko**, Bach. of Law, Amb. of Finland in India, since Sept. 1, 1964, (concurrently Bangkok, Colombo, Jakarta, Rangoon). b. June 24, 1901; Educ.: Helsinki Univ. Entered Finnish Foreign service, 1926; Attache, Secy., Counsellor, Legations, Tallinn, Stockholm, Moscow, Budapest (with residence in Istanbul), Paris, 1927-41; Dir., Political Affairs, Foreign Min., Helsinki, 1941-47; Min.: The Hague, 1947; Ankara, 1951 (Concurrently Teheran, Karachi); Rome, (Concurrently Cairo), 1954-59; Amb., Rome 1955, (Concurrently Min., Tirana 1956-59, Tunis and Rabat 1959-61); Dir., Adm. Affairs, Foreign Min., Helsinki, 1961, Acting Secy. Gen., 1964. Address: Embassy of Finland, New Delhi.

**IYA, Dr. Krishnaswamy Kilara**, Ph.D. (Wisconsin), A.I.L.Sc., I.D.D. (Hons.), Deputy Director-General (Animal Science), Indian Council of Agricultural Research, Govt. of India, since July 1966. b. June 26, 1920; Educ.: St. Xavier's Coll., Bombay; A.I.L.Sc., Indian Instt. of Sci., Bangalore; Ph.D., Univ. of Wisconsin; I.D.D. (Hons.), Imperial Dairy Instt., Bangalore; B.Sc. (Microbiology). Organised bacteriological research laboratories, supervised research programmes on bacteriological aspects of milk

and milk products handling; Founder-member and Vice-Pres., Indian Dairy Sc. Assoc.; member, Dairy Sc. Cttee. and other Scientific Cttees., I.C.A.R., I.C.A.E., I.S.I.; etc.; Official correspondent for Dairying, Commonwealth Agril. Bureau; Rotarian; Govt. delegate, F.A.O. Cfee. on Hydrogen Peroxide, Interlaken, Switzerland, Sept. 1957; F.A.O. Cfee. on Animal Production, Bangkok, Thailand, Dec. 1961; FAO World Food Cong., Washington, July 1963; member, W.H.O. Expert Adv. Panel on Environmental Sanitation; and F.A.O. Panel on Milk Hygiene; Dir., National Dairy Research Instt., Karnal, 1957-65; Dairy Devpt. Adv. to the Govt. of India, Min. of Food and Agr. 1965-66. Publications: Over 50 Scientific papers and 25 popular articles. Address: Krishi Bhavan, New Delhi.

**IYENGAR, K. R. Srinivasa, M.A., D.Litt.**, Vice-Chancellor, Andhra Univ.; University Professor of English, Andhra Univ., Waltair, since June 1947 and President, Faculty of Arts. b. April 17, 1908; Educ.: Hindu College, Tirunelveli; St. Xavier's College, Palamcottah. Taught in Ceylon (1928-31); Professor of English, Lingaraj College, Belgaum (1933-44); Vice-Principal, Basaveswar College, Bagalkot (1944-47); Visiting Prof., Leeds Univ., 1959. Publications: *Lyttton Strachey: A Critical Study*, 1938; *Indo-Anglian Literature*, 1943; *Literature and Authorship in India*, 1943; *Sri Aurobindo*, 1945; *The Indian Contribution to English Literature*, 1946; *A New Deal for Our Universities*; *The Mind and Heart of Britain*, 1955; *Indian Writing in English and The Adventure of Criticism* (1962), *Francois Mauriac* (1964), *Shakespeare: His World & His Art* (1964), *Rabindranath Tagore* (1965), and other books. Address: University Campus, Uplands, Waltair.

**IYER, Mr. Justice Arni Ramaswami Somanath, B.A., LL.B.**, Judge, High Court of Mysore, since July 11, 1957. b. Dec. 30, 1907; Educ.: Central Coll., Bangalore; Law Coll., Poona. Enrolled as an Advocate, Feb. 3, 1930; also Advocate, Supreme Court; Advocate Gen., 1950-53. Address: 'Annapurna', High Grounds, Bangalore 1.

**IYER, K. N. Chinnaaswamy**, Sangeetha Kalanidhi 1960, Sangeetha Natak Akademi Award 1964, Violinist. b. 1882 at Karur, of a family of distinguished violinists; Educ.: trained by his father in his earlier years & later by his brother Vidwan Devudu Iyer. Has given solo recitals & accompanied leading vocalists in India & abroad; has given programmes in Malaya, Burma and Ceylon; was honoured by the Maharaja of Mysore, 1904; awarded the titles of 'Ghanarva' and 'Sangeetha Kalanidhi'. Address: Karur.

**IYER, Maharajapuram Viswanatha**, Sangeetha Bhupathi (1939), Sangeetha Kalanidhi (1945), a leading musician and vidwan in Carnatic music. b. Sept. 15, 1896 in Maharajapuram, Tanjore Dist.; Educ.: had training under the great music Vidwan Umayalpuram Swaminatha Iyer; received training in the 'Laya' aspect of music from the Mridanga Vidwan Sri Rangappa Iyer of Palni. Gave his maiden public performance in Kodavasal temple, near Kumbakonam, 1909; is a master in Kshetrakgna Padams, Ganam Krishna Iyer's Padams, Purandaradasa's compositions, etc.; has given a number of performances throughout the country; is good at abhinaya. Address: Police Quarters Road, Usman Road Bus Terminus, T. Nagar, Madras 17.

**IYER, Mudikondan C. Venkatarama**, President's Award 1961, Karnatic Musician; Principal, Teachers' Coll. of Music, Madras. Began career as a vocal musician; honoured by Mysore & Travancore Maharajas; was conferred the titles of Ganasagara, Gayaka Vidwat Sekhara at Masulipatam, Sangita Chandroday by Udipi Swamiji & Sangita Kalanidhi by the Madras Music Academy, 1949; was member, Board of Studies in Music and Examiner in Madras, Annamalai and Delhi



Univ. for many years; is a leading exponent of Ragam, Tanam, Pallavi & Swara singing. Demonstrated Pallavi in Simhanandana tala and Shatkala Pallavi. *Publications*: *Maha Bharata Chudamani*, 4th part on Music; contributes articles to souvenirs, journals, etc. *Address*: Principal, The Teachers' College of Music, Music Academy, Mowbray's Road, Madras 14; Mudikondan, S.O. Tanjore District.

**IYER, Sangeetha Kalanidhi Musiri Subrahmanya**, Karnatic Musician; ex-Principal, Central Coll. of Karnataka Music, Madras. b. 1899 in Musiri, Tiruchi Dist.; *Educ.*: Took initiation in Karnatic music from the late Vidwan Sabesa Iyer. Recorded 12 songs, 1932; is an authority on Thyagaraja compositions; has a distinct style and originality of his own, popularly known as the "Musiri style"; acted the title role in the film 'Tukaram'; Pres., annual Cfce. of the Madras Music Academy, 1939; won the President's award for the best Carnatic musician (vocal) for 1957; is a leading exponent of the Karnata Sampradaya Sangeetha in India & one of the prominent living masters of Sasthreya Sangeetha in South India. *Address*: 18, Oliver Road, Mylapore, Madras.

**JABBI, Gurbachan Singh**, A.I.S.M. (Min. Eng.), F.C.C. (Coal), (Met.), M.M.G.I., Dir. Gen. of Mines Safety, Govt. of India, since April 1961; member, Coal Board, since 1961; Chairman, National Council for Safety in Mines, since Aug. 1963. b. May 19, 1908; *Educ.*: Forman Christian Coll., Lahore; Indian School of Mines, Dhanbad. Joined Deptt. of Mines, 1937; Dy. Chief Inspector of Mines, 1954-58; Addl. Chief Inspector of Mines, 1958-61; Pres., Coal Mines Rescue Stations Cttee., 1950-51 and 1954-58; T.C.M. Fellow to the U.S.A., 1951-52; member, First Indian UNTAA Team of Engrs. to U.S.S.R., 1955; visited France and the U.K. to study mining methods, 1962 and Poland, Hungary and France, 1963; Chairman: Mine Safety Edn. Cttee., 1960; Mine Safety Equipment Cttee., 1960-61; Cttee. on Vocational Trg. of Mine Entrants, 1961; Chairman: Boards of (Coal and Met.) Mining Exams, since 1961; Pres., Mining, Geological & Metallurgical Instt. of India, 1961-62; awarded Dewan Bahadur D. D. Thacker Gold Medal for 1962. *Address*: Hirapur House, Dhanbad.

**JACKSON, Richard Owen**, Gen. Mgr., Burmah-Shell Marketing Co. since Jan. 1966. b. Sept. 26, 1925; *Educ.*: Southend-on-Sea High School, Essex; Queen's Coll., Cambridge. Served with R.A.F.V.R. in England & Egypt, April 1944-Sept. 1947; joined Burmah-Shell, Sept. 1949; held various positions in Burmah-Shell before taking an apptt. in Shell Intn'l. Petroleum Co., London, in 1962 as Head of Hong Kong, China, Thailand, Vietnam, Cambodia and Laos Dvn. in the org. of the Area Co-ordinator Oil, Far East; Mg. Dir. and Chairman, Shell Ghana Ltd., Feb. 1964-Jan. 1966. *Address*: 1-A, Altamount Road, Cumballa Hill, Bombay-26.

**JADHAV, Smt. Mary Clubwala**, A.T.C.L., Padma Shri, 1955, M.L.C., 1946-66; J.P., Social Worker. b. June 10, 1908, at Wellington, Nilgiris; *Educ.*: Nazareth Convent, Ootacamund. Founder, Hon. Secy.: Madras School of Social Work; Seva Samajam Boys' and Girls' Inst. and Girls' Trg. Inst. Vocational Centre; Indian Hospitality Cttee.; Vice-Pres., Madras Parsi Anjuman; Chief Commr., Guides, 1957-60; is Pres., Indian Cfce. of Social Work; Hon. Family Plng. Edn. Leader; member, U.N. Mat. Corr. Com. on Correction and Crime; Pres., National Council of Women in India; first woman Sheriff of Madras, 1956-57; Vice-Pres. & Chairman, Guild of Service; member: Central Social Welfare Board; Exec. Cttee.; T. B. Assn. of India; Permanent Cttee. of the Intn'l. Cfce. of Social Work; After Care Cttee. of the Central Social Welfare Board, etc.; Life Member: Indian Council for Child Welfare, New Delhi; Indian Cfce. of Social work; Chairman: After Care Home for Males; member, Amenities to Troop Relief Fund

Cttee., Madras State; Hon. Secy. and Founder, Juvenile Guidance Bureau, Sea Cadet Corps, Madras; travelled widely. *Publications*: Articles on organizations in India and abroad in connection with children's work. Had televised & broadcasted. *Address*: "Philroy", Madras 34.

**JAGANNATHAN, K. V.**, M.A., Vidwan, Vagheesa Kalanidhi, Sentamil Selvar, Tamil Kavi Bhushanam Tamil Perum Pulavar, Upanyasa Kesari etc., Tamil Essayist & short story writer; Editor, *Kalaimagal*; Vice-Pres., All-India Tamil Writers' Assocn. b. April 11, 1906; *Educ.*: Kulitalai & Madras. Member: Sahitya Akademi, Tamil Research Council, Tamil Academy & Gandhi Works Publishing Sangh; Chairman, Amudha Nilayam Ltd.; Children's Film Soc.; Pres., Tamil Writers' Co-op. Soc., etc. *Publications*: Nine books of short stories in Tamil, literary essays and research, a collection of poems, altogether 150 books in Tamil. *Address*: Kaanta Malai, Kalyananagar, Madras 23.

**JAGDISH SAHAI, Mr. Justice**, M.A., LL.B., Judge, High Court, Allahabad, since May 6, 1957. b. May 19, 1909; *Educ.*: Theosophical National School; Banaras Hindu Univ., Banaras; B.A., 1929; LL.B., 1931, M.A., 1932 from the Allahabad Univ. Started practice in Shahjahanpur, 1933; then shifted to Allahabad High Court, Dec. 1945. *Address*: 33, Thorn Hill Road, Allahabad.

**JAGTAP, Dhondiram Shidhoji**, B.A., LL.B., Dy. Min. for Bldgs. and Communications, Fisheries and Labour, Maharashtra, since March 1967. b. 1921, at Karad; *Educ.*: Satara; Baroda Coll., Baroda; Rajaram Coll., Kolhapur; Sykes Coll., Kolhapur. Set up legal practice at Karad; left it to take up social work; Pres., Satara Dist. Local Board, 1952-57; was Vice-Chairman, Dist. Devpt. Board, Satara; was member: Rural Adv. Cttee., A.I.R., Poona; Employment Exchange Cttee., Poona, for five years; member, Poona Univ. Court, b. 1921, at Karad; *Educ.*: Satara; Baroda Coll., Baroda; Rajaram Coll., Kolhapur; Sykes Coll., Kolhapur. Set up legal practice at Karad; left it to take up social work; Pres., Satara Dist. Local Board, 1952-57; was Vice-Chairman, Dist. Devpt. Board, Satara; was member: Rural Adv. Cttee., A.I.R., Poona; Employment Exchange Cttee., Poona, for five years; member, Poona Univ. Court, 1953-58; Chairman, Dist. School Board, Satara and Shri Shivaji Educ. Soc., Karad; member: Regional Transport Authority, 1952-59; Divl. Adv. Cttee., State Transport, Poona Divn. for five years; Maharashtra State Road Transport Corp. for 3-4 years; M.L.A., Maharashtra from Satara, 1962; Dy. Min. for Urban and Rural Devpt. and Leg. Affairs, Maharashtra, 1962-67. Chief Whip, Maharashtra State, Leg. Cong. Party. *Address*: B-7, Foreshore Road, Bombay 1.

**JAISKISHAN, Panchal**, Music Director in Films. b. Nov. 4, 1932; *Educ.*: Bansda State (Gujarat). Started career from R.K. Film's *Barsat*, 1946; has so far given music in approximately 80 films; has recorded over 800 songs; won Filmfare Award five times for best music direction in *Chori Chori*, *Dil Apna Prit Parayi*, *Chhoti Behen*, *Professor & Suraj*; four Cinegoers Award, a certificate of merit for best compositions in *Basant Bahar*; presented by H.M.V. a silver shield for the valued service in the field of music by him with Shankar; a recording company of U.S.A. has made an L.P. of Shankar-Jaishikan songs taken from *Barsat*, *Awara* and *Shri 420*, sung by Egyptian singers; was responsible for collecting for Defence Fund and Small Savings about Rs. 18 crores by arranging a series of musical programmes known as "Shankar-Jaishikan Nite" at Delhi, Bombay and Ahmedabad. *Address*: Govind Mahal, 4th Floor, Marine Drive, Bombay.

**JAIN, Ajit Prasad**, M.A., LL.B., Ex-Governor of Kerala. b. 1902, *Educ.*: Lucknow Univ. Advocate; Chairman: Rural Urban Relationship Cttee.; Board of Management,

U.P. Agrl. Univ., 1960-64; Leader, Plan Projects Agrl. Team; member: Constituent Assembly of India 1946-50; A.I.C.C. continuously for many years; Union Min. for Relief and Rehab., 1950-54; Union Min. for Food and Agr., 1954-59; Pres., U.P.C.C., 1961-64; Governor of Kerala, April 1965-Feb. 1966. *Publications*: *U. P. Agrarian Laws*; *Rafi Ahmad Kidwai—Memoirs of His Life and Times*; several contributions to publications on current subjects. *Address*: C-36, N. D., South Extension, Part II, New Delhi 16.

**JAIN, Lakshmi Chandra**, B.Sc., I.C.S., Secy. to the Govt. of India, Deptt. of Communications, since Oct. 1963 and Dir.-Gen., Posts and Telegraphs and Chairman, P. & T. Board, since Nov. 1962. b. June 30, 1910; *Educ.*: Christ Church Coll., Kanpur, Allahabad Univ.; School of Oriental Studies, London. After serving in various capacities at Aligarh, Lalitpur, Nainital, etc. apptd. Chief Secy., Hyderabad, Oct. 23, 1948; Chief Labour Commr., Min. of Labour, 1951; Dir.-Gen. of Resettlement and Employment and Ex-officio Jt. Secy., Min. of Labour and Labour Commr., 1952; D.G., Civil Aviation, Min. of Transport and Communications, 1953; Offg. Commr., Meerut Dvn., 1958-61; Chief Secy., U.P., 1961-62. *Address*: 15, Tughlak Road, New Delhi.

**JAIN, Mool Chand**, B.A., LL.B., Finance Minister, Haryana, since March 1967. b. Dec. 7, 1915, at Sikandarpur Majra; *Educ.*: LL.B. from Univ. Law Coll., Lahore, 1936; was first in Punjab Univ. Joined the Congress at the age of 22; courted arrest in the freedom movement; was Gen. Secy., Dist. Congress Cttee. Karnal for several years; took leading part in the land reforms legislation in Punjab and in the Bhoodan Movement; elected M.L.A., Punjab on Congress ticket from Smalkha Constituency, 1952; Pres., D.C.C., Karnal, 1955-56; was Minister, composite Punjab State; was elected M.P. from Kaithal Constituency, 1957; worked on All India Co-operative Farming Board, All India Direct Taxes Advisory Cttee., etc.; Gen. Secy., Lajpat Rai Birthday Centenary Celebrations, 1965; elected Gen. Secy., All Party Haryana Action Cttee., 1965; elected to the Haryana Vidhan Sabha from Gharaunda Constituency, 1967; has been a leading lawyer in Karnal Dist. *Address*: Chandigarh.

**JAIN, Sahu Shriyans Prasad**, J.P., Industrialist; ex-M.P. (Rajya Sabha), 1952-58. b. 1908 in the Sahu family of Najibabad—(Ganesh Sadan), renowned for its traditional liberality and public service; has rendered invaluable services to the people of his town and district; has given large sums in charity and takes keen interest in all matters of social reform and public enlightenment; has done pioneering work in the field of girls' education, Seva Samitis and public libraries for the welfare of his district in particular and the State in general; President, Education Committee of the District Board, Bijnor; and Vice-Chairman, Municipal Board, Najibabad, for many years; has outstanding executive ability and a knack for big business; Chairman: Dhrangadhra Chemical Works Ltd.; Director: Carona Sahu Co. Ltd.; The Dawn Mills Co., Ltd.; Podar Mills Ltd.; Bajaj Electricals Ltd.; The New Swadeshi Mills of Ahmedabad Ltd.; The Amitabh Textile Mills Ltd.; Sahu Rubber Private Ltd.; The Premier Automobiles Ltd.; The Gwalior Rayon Silk Manufacturing (Wvg.) Co., Ltd.; Bombay Oxygen Corporation Ltd.; Indequip Engineering Ltd.; The Simplex Mills Co. Ltd.; Ex-President: Alkali Manufacturers Association of India, Federation of Indian Chambers of Commerce & Industry; All India Digamber Jain Parishad; Bharat Jain Mahamandal; Pres. for two years of Afro-Asian Econ. Conference and presided over the Conference held at Karachi in Dec. 1963; member: Indian Industrial Delegation to the U.S.A., the U.K. and the Continent, sponsored by F.I.C.C.I. 1957; M.P., 1952-58; ex-member: Bombay Telephone Advisory Cttee.; Mill-Owners' Assocn.;



member, Indian Merchants' Chamber, Bombay; Assoc. of Indian Trade & Industry, Bombay; All India Assocn. of Industries. Address: 100, Mount Unique, Pedder Road, Bombay 26.

**JAIN, Shanti Prasad**, B.Sc., Industrialist. b. 1912 at Najibabad, Dt. Bijnor, U.P.; Educ.: Banaras Hindu Univ. and Agra Univ. Has 25 years' close association with and knowledge of working and management of important industries like Cement, Sugar, Jute, Paper, Coal, Chemicals, Fertilisers, Vanaspathi, Asbestos Cement Sheets, Cycles, Plywood, Light Railway, Newspapers and Periodicals and controls a chain of industries situated in Bihar, U.P., Rajasthan, West Bengal and Kashmir; a keen student of Economics and Finance and deeply interested in statistical studies; strives for and believes in all-round industrial development through Indian enterprise for improvement in the people's standard of living; visited the Dutch East Indies (1936), Australia (1945) and U.S.S.R. (1954) as member, Indian Trade and Industrial Delegations; also visited the European countries, U.S.A., Canada, Japan, Norway, Sweden, etc.; Chairman and Director: Sahu Jain Ltd., Rohtas Industries Ltd., The Jaipur Udyog Ltd., President: Bihar Industries Assoc., Patna; Shri Ahimsa Prachar Samity, Calcutta; Ex-Pres.: Federation of Indian Chambers of Commerce and Industry, New Delhi; All-India Organisation of Industrial Employers, New Delhi; Indian Chamber of Commerce, Calcutta; Bihar Chamber of Commerce, Patna; Indian Sugar Mills Assoc., Calcutta; Indian Paper Mills Assoc., Calcutta; Rajasthan Chamber of Commerce & Industry, Jaipur; Eastern U.P. Chamber of Commerce & Industry, Allahabad; Employers Assocn., Calcutta; Chairman-Trustee: Gobind Ballabh Pant Bhawan Trust, Calcutta; Rajendra Chhatrabas Samity, Calcutta; Trustee: Sahu Jain Trust; Founder Trustee, Bharatiya Gyan Peeth (Academy), Varanasi. Address: 11, Clive Row, Calcutta.

**JAIN, Surendra Kumar**, B.A. (Hons.), M.A. (Econ.), LL.M., Regional Coordinator for Asia, International Labour Office (I.L.O.), Bangkok. b. Dec. 22, 1922; Educ.: Govt. Coll., Lahore; Univ. of Lucknow. Lecturer in Law, Univ. of Delhi (1945-46); joined permanent staff of International Labour Office, Geneva (1946); member, Cooperative Section (1946-49); Secy., I.L.O., Indian Branch (1949-51); member, I.L.O. Mission to Far East (1948-49); member, Technical Assistance Division (1951-56); Chief of Director General's Cabinet (1957-58); Dir., I.L.O. Middle East Office, Istanbul (1959-62); numerous missions to countries of Asia and the Near and Middle East to plan, negotiate and inspect I.L.O. technical assistance projects; Secy. to a number of I.L.O. Cttees.; represented I.L.O. at various national and international conferences. Publications: Contributions to the *International Labour Review* and other publications and periodicals. Address: Bangkok Bank Building, 300, Silom Road, Bangkok (Thailand); I.L.O., New Delhi or Geneva.

**JAIN, Takhatmal** (See under Jalori, Takhatmal).

**JALAN, Nandkishore**, Industrialist. b. March 8, 1921. Educ.: Privately. Entered business at the early age of 18; Partner, Soorajmull Nagarmull; looks after the management of the Bengal Jute Mill Co., Ltd.; Naskarpara Jute Mills Co. Ltd.; The Elphinstone Spg. & Wvg. Mills Co., Ltd., & the Bombay Gas Co., Ltd.; Member: Port Export Promotion Adv. Cttee.; Exec. Cttee., The Coal Consumers' Assocn. of India; Bengal National Chamber of Commerce & Industry; Rajasthan Chamber of Commerce & Industries, Jaipur; Chairman, Calcutta Jute Fabric Shippers' Assocn., 1956-58; Trustee, The Howrah Improvement Trust, 1957-60; Cttee. Member: Indian Chambers of Commerce, 1955;

Pres., Indian Soc. for Quality Control, 1961-65; is a Commr. of the Port of Calcutta; Dir.: J. K. Chemicals; The Ganges Mfg. Co., Ltd.; Shahjahanpur Electric Supply Co., Ltd.; W. H. Harton & Co. Ltd.; The New Great Eastern Spg. & Wvg. Co. Ltd.; Life Member, Indian Red Cross Soc. Address: Soorajmull Nagarmull, 8, Dalhousie Square East, Calcutta 1.

**JALORI, Takhatmal**, Chairman, Study Team on Dist. Admn., nominated by the Admive. Reforms Commr., Govt. of India; Ex-Min. for Ping., Devpt., Irrigation and Power, Madhya Pradesh. b. 1895, at Basoda. Practised at the State Bar, 1913-43; member, Wkg. Cttee., Gwalior State Congress, 1939; Convener, first meeting of Public Workers of Gwalior State, which resulted in the formation of State Cong.; the first non-official Min. for Rural Welfare and Local Self-Govt., Gwalior State; resigned, 1942; again apptd. Min. as Cong. nominee, 1947; Founder, Trustee, Chairman or Vice-Chairman of several educl. instts.; was Fin. Min. in the Responsible Govt. in Gwalior State, 1948 & later in Madhya Bharat State, 1948; Chairman: Transport Nationalisation Cttee., Madhya Bharat, 1949; Harijan Disabilities Enq. Cttee.; Chief Min., M.B., 1950-52 and April 1955-Oct. 1956; Pres., Madhya Bharat P.C.C., 1953; Chairman: M.B. Land Reforms Cttee., 1954; Commerce, Industries & Agr. Min., M.P., Nov. 1, 1956-Aug. 1958; Gen. Secy., A.I.C.C., 1958-60. Address: 1, Char Bungalow, Bhopal (M.P.).

**JAMBUNATHAN, M. R.**, Tamil writer. b. Aug. 23, 1896; Educ.: Madras. Editor of *Vedas* & *Upanishads* in Tamil; Short Story Writer, biographer, translator, Indologist, & research worker. Publications: *Life and Teachings of Mazzini*; *A. B. C. of Vedas*; Translation of *Sama, Yajur and Atharva Vedas*. Address: Radha Niwas, 375, First Road, Khar, Bombay-52.

**JAMIR, R. C. Chittin**, M.A., LL.B., L.S.G.D., Minister for Agriculture, Law, etc., Nagaland, since Jan. 1964. b. in Mokokchung Dist., Feb. 1926; Educ.: Matriculation from Mokokchung High School, 1948 and Intermediate from Gauhati, 1950; M.A., LL.B. from Allahabad Univ., 1951-57. Active in Political field since 1946 in student movement; joined Naga National Council, 1946; broke way from Phizo on use of violence; participated in first conference of Naga People's Convention, 1957, elected member, Select Cttee. of the Convention; visited Delhi as member, N.P.C. delegation, 1957; elected member, Exec. of N.P.C. (Naga People's Convention), 1959; member of Naga delegation to New Delhi, 1960; elected to the Interim Body, 1961; Member, Executive Council, Naga Interim Body 1961-63; returned uncontested in the Gen. Election to Nagaland Leg. Assembly, 1963. Address: Kohima; Mokokchung, Nagaland.

**JAMIR, S. Chubatoshi**, B.A., LL.B., Dy. Min. for Railways, Govt. of India, since March 1967. b. Oct. 17, 1931; Educ.: Univ. of Allahabad. Secretary, S.C.M., 1957; Pres., S.C.M., at Allahabad, 1958; Secy., Naga People's Convention which made settlement with the Govt. of India for the creation of Nagaland State; member: Negotiating Body, N.P.C.; Interim Body, Nagaland, 1961; Chairman, Boundary Commission for Nagaland; elected to the Lok Sabha from Nagaland, 1962 & 1967; Parly. Secy. to the Min. of External Affairs, 1962-67; member, Indian delegation to the 17th session of the U.N. Address: Mokokchung, Nagaland; Ministry of Railways, New Delhi.

**JAMMU and KASHMIR, Maharaja Karan Singh**, Maharaja of (See under Karan Singh, Maharaja).

**JATTI, B. D.**, B.A., LL.B., Min. for Food, Mysore State, since June 7, 1965. b. Sept. 10, 1912, at Savalgi, Jamkhandi Taluka, Bijapur Dist.; Educ.: Bijapur Govt. High School; Rajaram Coll. and Sykes Law Coll., Kolhapur. Practised as a pleader at Jamkhandi

for five years; elected member, Jamkhandi State Leg.; was apptd. Min., Jamkhandi State under the diarchy Govt.; became its Chief Min.; reverted to legal practice March 8, 1948; nominated M.L.A., Bombay to represent the merged areas; Parly. Secy. to Mr. B. G. Kher, then Chief Min. of Bombay; Dy. Min. for Health and Labour, Bombay, 1952; M.L.A., Mysore after the reorg. of States; Chairman, Land Reforms Cttee.; Chief Min., Mysore State, 1958-62; re-elected to the Leg. Assembly from Jamkhandi constituency, 1962; Min. for Fin., July 1962-June 1965; again elected M.L.A., 1967. Address: Bangalore.

**JAYKRISHNA Harivallabhdas**, Industrialist; Chairman: Gujarat State Fertilizer Co. Ltd.; Shri Ambica Mills Ltd.; S. L. M. Manekial Industries Ltd.; Shri Ambica Tubes Ltd. b. Oct. 31, 1919; Educ.: Calcutta and Ahmedabad. Joined his father's business, 1936; on the demise of his father, took over management of Shri Ambica Mills Ltd.; Dir.: New India Industries Ltd.; Vulcan Ins. Co., Ltd., Central Bank of India Ltd.; Congress, M.L.A., Bombay from Ahmedabad City, 1952; donated about Rs. 20,00,000 to Ahmedabad Educ. Soc., Gujarat Univ. and other instts.; has toured extensively abroad to know the industrial devpt. there; attended the I.L.O. Cfce. at Geneva as Employers' Rep. on behalf of the Govt. of India; Pres.: Gujarat Chamber of Commerce, 1961-62; Ahmedabad Mill Owners Assoc., 1956-57; 1960-61; member: Adv. Board of the Industries Devpt., Gujarat State; Mayor, Ahmedabad, 1961-65. Address: Shahibag, Ahmedabad 4.

**JEJEEBHOY, Sir Jamsetjee** (Bart), B.A. (Cantab), J.P., Business man. b. May 10, 1909; Educ.: Cathedral & John Connon High School, Bombay; Gonville & Caius Coll., Cambridge. Is the 6th Baronet; Dir.: Bombay Dyeing & Mfg. Co. Ltd., the Central Bank of India Ltd., and several jt. stock companies; Chairman: Sir J. J. P. B. Instt.; N. M. Wadia Charities, Bombay Pinjrapole; Member: Bombay Municipal Corpn.; 1934-35; Trustee, Willingdon Sports Club, Bombay; first Pres., Progressive Group, Bombay, 1936-39. Address: Sett Minar, Pedder Road, Bombay 26.

**JHA, Aditya Nath**, B.A. (Hons.) M.A., LL.B., I.C.S., Lt. Governor, Delhi, since Sept. 1966. b. Aug. 18, 1911; Educ.: Allahabad and Oxford. Joined the I.C.S. in 1936 at Faizabad, U.P.; worked in the Foreign & Political Deptt. of the Govt. of India 1939-42; worked in different capacities as Secy.: Agr., Irrigation, Ping.; Food Production Commr., Devpt. Commr., in U.P. till 1954; Chief Secy., Govt. of U.P., 1954-58; Vice-Chancellor, Sanskrit Univ., Varanasi, 1958-60; Dir., National Academy of Admn., Mussoorie, 1959-62; Secy. Ping. Commn., 1962-63; Secy., Union Deptt. of Defence Production, 1963-64; Secy., I. & B., Govt. of India, 1964-66. Address: Maya, George Town, Allahabad (U.P.); New Delhi.

**JHA, Binodanand**, Ex-Chief Minister, Bihar, b. 1900; Educ.: Calcutta. Entered freedom movement, 1917; jailed five times during his political activities; elected Commissioner, Deoghar Municipality; elected M.L.A., Bihar, 1936; Parliamentary Secy., 1937-39; Minister, for L.S.G. and Public Health, Bihar, 1946; presided over the Agricultural Engineering Cttee. and Unemployment Enquiry Cttee.; Leader, Indian delegation to the 44th Session of the I.L.O., 1960; nominated member, All-India National Integration Cttee.; Revenue Minister, Bihar till he was elected leader of the Bihar Legislature Congress Party, Feb. 8, 1961; Chief Min., Bihar, 1961-63; resigned under the "Kamraj Plan", Aug. 1963; has been taking active interest in trade union movement. Address: Patna.

**JHA,\* Chandra Shekhar**, O.B.E., I.C.S., Foreign Secy., Govt. of India, since Feb. 1965. b. 1909; Educ.: M.Sc. & LL.B., Patna Univ., School of Oriental Studies, London. Joined the I.C.S., 1933; Secy., Supply

\* It is reported that he is appointed Ambassador to France in succession to Mr. Rajeshwar Dayal and is expected to assume in Sept. 1967.



& Transport Deptt., Govt. of Orissa, 1943-46; Dy. Secy., Govt. of India, Commonwealth Relations Deptt., March 1946-May 1947; apptd. Jt. Secy., Min. of Ext. Affairs, May 1947; Charge d'Affaires, Embassy of India, Ankara, 1950-51; Indian Amb. to Turkey, Oct. 1951; member, Indian Delegations to the U.N. Gen. Assembly, 1946-49; Jt. Secy., Min. of Ext. Affairs, May 1954; member, Indian Delegation to the Asia-African Cfee. in Bandung, 1955; the first Suez Cfee. in London, 1956; Indian Amb. to Japan, May 1957-Jan. 1959; Chairman: Human Rights Commn., 1961-62; U.N. Cttee. of Contributions, 1960-62; U.N. Spl. Cttee. on the ending of Colonialism, 1962; permanent Rep. for India in U.N., 1959-62; Indian High Commr. in Canada, 1962-63; Commonwealth Secy., Govt. of India, 1964-65; led Indian Delegation to Afro-Asian Cfee., Algiers, June 1965 and Oct. 1965. *Address*: Ministry of External Affairs, New Delhi.

**JEA, Lakshmi Kant, B.A. (Cantab.), I.C.S.,** M.B.E. (1946), Governor, Reserve Bank of India, since July, 1967. *b. Nov. 22, 1913; Educ.*: Hindu Univ., Banaras and Trinity College, Cambridge. *Dy. Secy., Govt. of India Supply Deptt., 1942-46; Chief Conlrr. of Imports and Exports, 1947-50; Chairman of the Contracting Parties to the G.A.T.T., 1957-58; Chairman, U.N. Interim Cttee. for Co-ordination of Intn'l. Commodity Arrangements, 1959-61; Jt. Secy., Min. of Commerce and Industry, 1950-56; Secy., Min. of Heavy Industries, 1956-57; Addl. Secy., Min. of C. & I., 1957-60; Secy., Dept. of Economic Affairs, Union Fin. man, U.N. Interim Cttee. for Co-ordination of Min., 1960-64; Secy. to the Prime Minister, 1964-67. *Publications*: *India's Foreign Trade, Parts I & II. Address*: 9, Reserve Bank of India, Bombay 1.*

**JHALA, Harshadray Ishverlal, M.D.** (Bom.), F.C.P.S. (Bom.), D.T.M. (Cal.), F.A. M.S., Dir., Haffkine Instt., Bombay, since 1957. *b. Jan. 13, 1919; Educ.*: Baroda High School; B. J. Medical School, Ahmedabad; Madras Medical Coll.; School of Tropical Medicine, Calcutta; Grant Medical Coll., Bombay; M.D. (Bom.), 1947; F.C.P.S. (Bom.), 1945; D.T.M. (Cal.), 1941, F.A.M.S. Started as tutor in Bacteriology, B. J. Medical School, Ahmedabad, 1941; Clinical Pathologist, Grant Medical Coll., 1944; Asstt. Prof. of Pathology, 1946; Prof. of Pathology: B. J. Medical Coll., Ahmedabad, 1948-51; Grant Medical Coll., Bombay, 1951-57. *Publications*: Several contributions in scientific journals. *Address*: Haffkine Institute, Bombay 12.

**JHAVERI, Mansukhlal Maganlal, M.A.,** Gujarati Poet & Critic; Ex-Principal, Navyug Arts & Commerce Coll., Porbandar. *b. Oct. 3, 1907, at Jamnagar, Saurashtra; Educ.*: Nawanagar High School, Jamnagar; St. Xavier's Coll., Bombay; Samaldas Coll., Bhavnagar; Fellow, Bombay Univ., 1949-59. Member: A. C., since 1954; Board of studies in Gujarati of the Univs. of Bombay, Poona, S.N.D.T., Baroda & Gujarat; member: Adv. Board, for Gujarati & Gen. Council, Sahitya Akademi, New Delhi; Producer, Spoken Word, Gujarati, A.I.R., Bombay, 1956-59. *Publications*: *Poems: Chandradoot; Phool Dol; Aradhana; Abhisar; Kavyasushama*; Criticism: *Thoda Vivechan Lekho; Paryeshna Kavyarimarsha*; Literary History: *Gujarati Sahityanun Rekha Darshan*; Translations of *Abhijnana Shakuntalam* and *Hamlet*. *Address*: 1/7, Samant Block, Cama Road, Andheri, Bombay 58.

**JOHNSON, Leslie James, M.A. (Punjab),** I.C.S., Chairman, Oil and Natural Gas Commn., since May 1966. *b. Sept., 8, 1914; Educ.*: St. Fidelis' School, St. George's Coll., Mussoorie, U.P.; Govt. Coll., Lahore. Joined the I.C.S., 1939; did I.C.S. probation at New Coll., Oxford; Asstt. Commr., Banaras, 1939; Jt. Magistrate, Agra, 1940-42; Asstt. Commr. and Jt. Magistrate, Ranikhet, 1942-45; Town Rationing Officer and A.D.M., Kanpur, 1945, 1947; Regional Food Conlrr., 1947-48;

Dt. Magistrate, Banda, 1948-50; Dir. of Civil Supplies, Delhi, 1950-52; Chief Secy., Delhi State, 1952-54; Dy. Secy., Min. of Rehab., 1954-55; Chief Settlement Commr. and Jt. Secy., Govt. of India, 1955-59; Chief Adm'or., Dandakaranya Project, Dec. 1959-June 1964; Dir.-Genl. of Relief, Min. of Rehab., 1964-65; Addl. Secy., Union Deptt. of Rehab., 1965-66. *Address*: Tel Bhavan, Dehra Dun.

**JONES, Wilson Lionel Garton, Padma Shri,** (1965), leading Billiards Player, since 1950. *b. May 2, 1922; Educ.*: Bishop's High School & St. Vincent's High School, Poona. Munition Factory, Kirkee, 1939-46; Mazagon Dock, Bombay, 1947-50; National Billiards Champion of India, 1950-52, 1955, 1957, 1960, 1961, 1963-65; National Snooker Champion of India, 1948, 1952, 1954, 1958, 1960; represented India in World Billiard Championships, 1951, 1952, 1954, 1958, 1960, 1962, 1964 & World Snooker Championships in 1963; World Billiards Champion (Calcutta) 1958, (Auckland) 1964; Arjuna Award, 1963. *Address*: No. 2, Wallace Flour Mills Co., Ltd., Sleater Road, Bombay.

**JOSHI, Dr. Amar Chand, D.Sc., F.N.I., Advr.,** Plng. Commn., since July 1965. *b. Sept. 18, 1908. Educ.*: Lahore. Prof. of Botany: Banaras Hindu Univ., 1931-45; Govt. Coll., Lahore, 1945-47; Govt. Coll., Hoshiarpur, 1947-51; Principal, Govt. Training Coll. for Teachers, Jullundur, 1951-53; Dir. of Public Instruction and Secy. to the Govt., Punjab, 1953-57; Vice-Chancellor, Kurukshetra Univ., 1956-March 1959; member: Univ. Grants Commn., 1960-65; Adm. Board, Intn'l. Assocn. of Univs., Paris; Vice-Pres., National Instt. of Sciences of India, 1963 and 1964; member: National Plng. Council; Central Adv. Board of Educ.; Vice-Chancellor, Punjab Univ., 1957-65. *Address*: Planning Commission, New Delhi.

**JOSHI, Harideo, Min. for Industries, Mines** and Irrigation, Rajasthan, since May 6, 1967. *b. Dec. 17, 1921. Started career as an ordinary teacher of Sewa Sangh in Dungarpur; took active part in politics, 1942-46; entered State politics; member, A.I.C.C. and P.C.C., 1949; Gen. Secy., Rajasthan P.C.C., 1950-60; M.L.A., Rajasthan, since 1952, now from Ghatol Constituency; Chief Whip, Rajasthan Assembly Cong. Party, 1957-63; Chairman, P.A.C., Rajasthan Assembly, 1957-65; Founder Editor, Daily 'Navyug', Jaipur; also wkg. Pres., Rajasthan P.C.C., since May, 1962; Min. for Publicity, Public Health, Rajasthan, 1965-67. *Address*: Nal Abadi, Banswara; B-4, M.L.A. Quarters, Jaipur.*

**JOSHI, Puran Chandra, M.A., LL.B.,** Communist Leader and member, National Council, C.P.I.; Journalist. *b. April 14, 1908; Educ.*: Allahabad Univ. Joined the C.P.I. as a student, Dec. 1928; arrested in Meerut Conspiracy case, 1929 and convicted for five years; member, Central Cttee. and Gen. Secy., 1934-47; was in the Central Cttee. since Palghat Cong. of the C.P.I. 1956; Convenor of the History Commn. set up by the National Council of the Party; Editor, *New Age*, till Jan. 1966. Withdrew from the Central Cttee. because of political differences. *Publications*: *Communist Reply to Working Committee*; 1857 *Rebellion*, and numerous pamphlets published by the C.P.I. *Address*: 7/4, Asaf Ali Road, New Delhi.

**JOSHI, Ramchandra Bhikaji, M.A. (Bom.),** Kavyatirtha (Cal.), Marathi Writer; Prof. of English, Siddharth Coll. of Commerce, Bombay; ex-Principal, Dr. Ambedkar Coll., Mahad (Kolaba). *b. June 26, 1903; Educ.*: Holkar Coll., Indore; Allahabad Univ.; Bombay Univ.; Kavyatirtha (in Sanskrit Poetry and Drama). Started writing in 1932-33; member, P.E.N., All India Centre. *Publications*: Two volumes of short stories in Marathi & two stories translated from Urdu; two volumes of Travelogues in Marathi; a volume of essays in criticism in Marathi;

a novel translated from Urdu. *Address*: Shalwala Building No. 1, College Street, Bombay 28.

**JOSHI, Shridhar Mahadev, B.A., LL.B.,** Chairman, Samyukta Socialist Party; Social Worker. *b. Nov. 12, 1904; Educ.*: Primary educ. at Golap in Ratnagiri; New English School, Fergusson Coll. and Poona Law Coll., Poona; B.A., 1929, LL.B., 1934. Secy., Youth League, Poona, 1929; Jt. Secy., Presidency Youth Cfee., 1928; joined Congress, 1930; often jailed in the freedom movement; convicted for salt satyagraha, May 11, 1930 for six months; again arrested on Jan. 7, 1932 and after detention, convicted under 124A on March 23, for two years and released in Nov., 1933; went underground, 1942; detained, 1943-46; Founder Mem., Cong. Socialist Party; Member, Bombay Assembly, 1952-62; Gen. Secy., Samyukta Maharashtra Samiti; Gen. Secy., All India Defence Employees Federation. *Address*: 1170, Sadashiv, Poona 2.

**JOSHI, Umashankar Jethalal, M.A.,** Gujarati Poet, Critic, Essayist; Editor, *Sanskriti*, Gujarati monthly, 1947; Dir., School of Languages, Gujarat Univ., 1954. *b. July 21, 1911; Educ.*: Banna; Idar High School; Gujarat Coll.; Elphinstone Coll., M.A. First Class. Post-graduate Teacher, Gujarat Vidya Sabha, Ahmedabad, 1939-46; member: Sahitya Akademi, Gen. Council and Exec. Board; visited: China, Indonesia, Malaya, 1952; U.S.A. and U.K. as a member, Govt. of India Team to study Gen. Educ., 1956; attended the 29th World P.E.N. Congress, Japan, 1957; member, Indian Cultural delegation to U.S.S.R., 1961. *Publications*: *Vishva Shanti; Gangotri; Nisheet; Gul-e-Poland (Tr.); Prachina; Atithya; Sapna Bhara; Shaheed; Shrivani Melo; Visamo; Goshthi; Ughadi Bari; Sama-Samvedan; Akho: a Study; Abhiruchi; Kavini Sadhana, Shri ane Saurabh; Gujarat in the Puranas*; Translations: *Uttar-Ramacharita, Sakuntala. Address*: 'Setu', 12, Sardar Patel Nagar, Ahmedabad 6.

**JOSHI, Vishwanath Janardan, B.Sc. (Elec. & Mech. Eng.), M.S. (Met. Eng.) (MONT U.S.A.)** Master of the Mint, India Government Mint, Bombay, since March 15, 1966. *b. May 8, 1918; Educ.*: Elphinstone Coll., Bombay; Banaras Hindu Univ.; Montana Univ., U.S.A. Joined the Tata Iron & Steel Co. Ltd., Jamshedpur, as 'A' Class apprentice, 1941; Stores Officer, Tisco, 1943-48; awarded Govt. Scholarship for advanced studies overseas, 1948-50; Asstt. Dir., of Industries, Govt. of Bombay, 1951-53; Asstt. Mint Master, Bombay and Calcutta, 1954-57; Deputy Mint Master, Hyderabad Mint, 1957-60; General Manager, India Govt. Silver Refinery, Calcutta, 1960-66. *Address*: Mint House, Ballard Road, Bombay No. 1.

**JOSHUA, Gurram, Ubhaya Bhasha Praveena** (Andhra), M.L.C., Telugu Poet. *b. Sept. 28, 1895; Educ.*: Vinukonda, Guntur Dt. Started career as a school teacher; worked for some time as an interpreter with a movie cinema touring talkies; was playwright with a drama company till 1920; Telugu Pandit, 1920-42; Song Publicity Officer, Govt. of Madras, 1942-45; Producer, A.I.R., Madras, 1956-60; awarded the titles of Kavita Visarada, Kavi Kokila, Madhura Srinadha, Nava Yuga-Kavi-Chakravarthi, Viswa-Kavi-Samrat, etc.; All India Sahitya Akademi's award for the best work in Telugu Literature for his book *Kristu Charitra*, 1965; member, A.P. Sahitya Akademi. *Publications*: *Piradausi; Gabbilamu; Rupuji; Netaji; Kolla Lokam; Kristu Charitra; Khanda Kavyalu* (7 parts), etc. *Address*: Gopalakrishnalal Tota, Guntur 2.

**KABIR, Humayan, M.A. (Cal.), M.A. (Oxon.),** Univ. Gold Medals, Prizes, etc. (1926 & 1928), State Scholar, 1927, Exeter College Foundation Prize, 1931, M.P. (Lok Sabha). Formerly Educl. Adv. to the Govt. of India; Ex-Chairman, Univ. Grants Commn. *b. Feb. 22, 1906*; Secy., Oxford Union Soc., 1930; Pres., Jowett Soc., Oxford, 1931; Leader, Peasants Party,



Bengal Leg. Council; Pres., All-India Students Cong.; Pres., Indian Council of Cultural Relations, 1958-64; Pres.; All India Educ. Cfee., 1955; Indian Philosophical Cong.; Indian Sc. Cong., 1964; Intn'l. Cong. of Orientalists, 1964; Consultant to the Fund for the Advancement of Educ., New York; Min. of Civil Aviation, 1957-58; Union Min. for S.R.C.A., April 1958-Nov. 1963; Union Min. for Petroleum & Chemicals, Nov. 1963-Jan. 1966. *Publications*: *Swapna-Sadh* (Bengali); *Poems* (Basil Blackwell), *Kant on Philosophy in General*; *Immanuel Kant* (Bengali); *Poetry Monads and Society*; *Sarat Chandra Chatterjee*; *Muslim Politics*, 1906-42; *Mahatma and other Poems*; *Men and Rivers*; *The Indian Heritage*; *Marx Vad*, 1948; *Nadi-O-Naree*, 1950; *Science, Democracy and Islam, Education in New India, Indian Philosophy of Education*, etc. (Several works translated into European languages). *Address*: New Delhi.

**KAJROLKER, Narayan Sadoba**, Harijan leader and public worker. b. 9th July 1896. Is interested in the uplift of the Depressed and Backward Classes; General Secretary and Trustee, the Depressed Classes Mission Society of India; member, Harijan Sevak Sangh, Central Board, Delhi; Pres., Provincial Board of Bombay; Pres. and Trustee, Rohidas (Chambhar) Samaj; President: Anand Vihar Housing Society; Producers' Co-operative Society; Butter Manufacturers' Association; Vice-Pres., Bharatiya Depressed Classes League; Member of Parliament, 1952-67; Central Harijan Board, Home Ministry; member, Panel for Leather and Leather Goods, Commerce Ministry. *Address*: 112, Meadows Street, Bombay.

**KAKAR, H.E. Mr. Jagdish Chandar**, B.A. (Hons.), Amb. to Hungary from April 1966. b. Jan. 1, 1915; *Educ.*: Bishop Cotton School, Simla; Govt. Coll. Lahore; Univ. Coll., London. Indian Air Force (Administrative and Special Duties Branch), 1941-47; I.F.S., since 1948; First Secy.: Kabul, Karachi, Washington; Dir., Min. of Ext. Affairs; Counsellor, London; High Commr. for India in Ghana (concurrently accredited as High Commr. to Sierra Leone and Amb. to Liberia, Guinea and Mali), 1962-66. *Address*: C/o Ministry of External Affairs, New Delhi.

**KAKATI, Satis Chandra**, B.A. (Hons) (Econ.), Concurrently Editor, *The Assam Tribune* (English Daily) since 1963 & *Asam Bani* (Assamese Weekly), since 1954. b. Oct. 1914; *Educ.*: Govt. Cotton Coll., Gauhati; B.A. (Hons.) in Economics, 1936. Asstt. Headmaster, Kamrup Academy, Gauhati, & Correspondent of Hindustan Standard and U.P., 1936-47; Asstt. Dir. of Publicity, Govt. of Assam, 1948-51; Asstt. Editor, *Assam Tribune* 1951-63; Chairman, Gauhati Municipal Board, 1962-63; Pres., Assam Wkg. Journalists Assoc., 1963-64; Member, Stg. Cttee., AINEC, 1963-64; travelled in U.K., 1959, U.S.A., 1960, West Germany, U.K. and France, 1963. *Publications*: *Jawaharlal Nehru*; *Discovery of Assam*. *Address*: Hillside Road, Uzanbazar, Gauhati, Assam.

**KALELKAR, Dattatreya Balkrishna**, (Acharya Kakasaheb), Padma Vibhushan, 1964; Sahitya Vachaspati; B.A. (Bombay), Academician. b. Dec. 1, 1885; *Educ.*: Ferguson Coll., Poona. Educationist; Vice-Chancellor, Gujarat Vidyapith, 1928-34; Edited Mahatma Gandhi's Weeklies & Magazines; worked for the spread of Hindi in India; Pres., Hindustani Talimi Sangh (Basic Educ. till 1957), Hindustani Prachar Sabha; Chairman, Backward Classes Commn. apptd. by the President of India, 1953-55; was one of the Vice-Pres., Indian Council of Cultural Relations, New Delhi; Pres.: Gujarat Sahitya Parishad, 1959; Gandhi Hindustani Sahitya Sabha, New Delhi; M. P. (Rajya Sabha) 1952-64; knows 7 languages; travelled extensively all over the world. *Publications*: 50 books in Gujarati, Marathi, Hindi and English—some books being translated into other languages; won National Award, 1966, for his book *Jeevan Vyavastha*. At present editing

*Mangal Prabhat*—a Hindi fortnightly. *Address*: Sannidhi, Rajghat, New Delhi.

**KAMALADEVI Chattopadhyay, Smt.**, Politician and Social Worker; Chairman, All-India Handicrafts Board. b. 1903; *Educ.*: Mangalore, Bedford Coll., School of Economics, London. Participated actively in freedom struggle, 1929-44; imprisoned several times; member, All India Cong. and Wkg. Cttee., 1946-49; Orgg. Secy., then Pres., All India Women's Cfee.; founded Indian Coop. Union to rehabilitate refugees from Pakistan in coops.; active in field of arts and crafts; Vice-Pres., World Crafts Council; founder, Indian National Theatre Centre of the Intn'l. Theatre Instt.; travelled extensively; represented India at Intn'l. Cfees., United Nations Comms. Magsaysay award for Community Leadership, 1966. *Publications*: Nine books including *Indian Handicrafts*; *Socialism and Society*; *Awakening of Indian Womenhood*; *Towards a National Theatre*, etc. *Address*: 2, Canning Lane, New Delhi.

**KAMARAJ, K.**, Pres., Indian National Congress; Ex-Chief Min., Madras State. b. 1903; *Educ.*: Virudhunagar, Ramnad Dist., Madras. Entered public life, 1920 during Salt Satyagraha; convicted for two years; elected member, Wkg. Cttee., Tamil Nad Cong., and member, A.I.C.C., 1931; convicted for one year R.I. in 1932 movement; one of the accused in Virudhunagar bomb case, 1934; later acquitted; elected Secy., Tamil Nad Cong. Cttee., 1935; elected to Madras Legis. Assembly, 1937 and again in 1946; detained during the individual Satyagraha Movement, 1941; while in detention was elected Chairman, Virudhunagar Municipality, 1941; under detention, 1942-45; elected to the Constituent Assembly of India, 1947; chosen as a member, All-India Cong. Wkg. Cttee., 1949; elected to Parliament, 1951; Pres., T.N.C.C., 1939-54; elected Leader, Madras Legis. Cong. Party, March 30, 1954, 1957 and 1962; Chief Min., Madras, 1954-63; sponsored the "Kamaraj Plan" which was passed by the A.I.C.C. for revitalising the Cong. org.; resigned under this plan for party work, Oct. 2, 1963; visited U.S.S.R., Bulgaria, Hungary, Czechoslovakia, East Germany and Yugoslavia, July-Aug. 1966. *Address*: Tirumalai Pillai Road, Tyagaraya Nagar, Madras 17.

**KAMATH, Hari Vishnu**, B.Sc. (Hons.), ex-M.P., Lok Sabha, Politician. b. July 13, 1907; *Educ.*: Mangalore, Presidency Coll., Madras; I.C.S., 1929. Served in the I.C.S., 1930-38; resigned for political reasons; joined Congress, then the National Ping. Cttee. as Secy. and subsequently the Forward Bloc as its Gen. Secy.; was in prison, 1940-45; elected member, Constituent Assembly, 1946; re-elected to Lok Sabha on P.S.P. ticket, May 1955; elected to the National Exec. of the P.S.P., Dec. 1953; elected Chairman, P.S.P., M.P., Feb. 1958; Delegate: The Session of the Council of the Socialist Intn'l Haifa (Israel), April, 1960; Belgrade Cfee. of the Socialists Alliance of Wkg. People of Yugoslavia, April 1960; visited W. Germany, Berlin (East West) and Italy, July/Aug. 1960; elected to Lok Sabha, 1962; visited U.S.A. at the invitation of Friends of India Cttee., June-Aug. 1963. Visited U.K. and U.S.A. to observe the Gen. Election and Presidential election, respectively, 1964; apptd. member, Adm. Reforms Commn., Jan. 1966; was Chairman, Parly. Board, PSP. *Publications*: *Communist China Colonizes Tibet, Invades India*, Oct. 1959. *Address*: Dhantoli, Nagpur.

**KAMTEKAR, D. S.**, M.A., LL.B., Ag. High Commr. of India in Malawi, since Sept. 1964. b. Dec. 18, 1928; *Educ.*: Bombay. Apptd. to the I.F.S., April 2, 1952; postings in Switzerland (Embassy of India, Berne), Oct. 1955-Dec. 1956; Min. of Ext. Affairs, Jan. 1957-June 1958, Iraq, Jordan, Kuwait and Bahrain, Aug. 1958-Jan. 1961, Germany (Frankfurt, Hamburg, Berlin), Feb. 1961-Sept. 1964. *Address*: High Commission of India, P.O. Box No. 398, Blantyre (Malawi).

**KANE, Pandurang Vaman**, M.A., LL.M., D.Litt. (Allahabad and Poona Univs., Honoris Causa), Bharat Ratna (1963), Hon. Degree of Doctor of Laws, Bombay Univ., 1963, Rabindranath birth Centenary plaque by the Asiatic Society, 1967, Sanskrit Scholar; Advocate; National Research Prof. of Indology, since Aug. 15, 1959. b. May 7, 1880; *Educ.*: S.P.G. Mission High School, Ratnagiri Dist.; Wilson Coll. and Govt. Law Coll., Bombay. Life member and for many years Vice-Pres., Bombay Asiatic Soc.; Vice-Chancellor, Bombay Univ., 1947-49; Fellow, London School of Oriental Studies; Govt. of India's rep. to the Intn'l. Cong. of Orientalists at Paris, 1948, Istanbul, 1951 Cambridge, 1954; nominated M.P., 1953-59; awarded the Rs. 5,000 prize for his 4th volume of the *History of Dharmasastra*, as the best work on Sanskrit Literature during 1953-56, by the Sahitya Akademi, 1956; awarded a certificate of merit, a robe and a Sannad for a pension of Rs. 1,500 per year for life, for his works in Sanskrit, Aug. 1958. *Publications*: *History of Sanskrit Poetics*, *History of Dharmasastra*, Vols. I-V (two parts), *Hindu Customs and Modern Law and others*. *Address*: Angre's Wadi, Bombay 4.

**KANERIA, Raghav**, Diploma in Sculpture, Professional Sculptor. b. March 19, 1936 at Anida, Saurashtra. *Educ.*: Fine Arts College, Baroda, 1955-60; Govt. of India Scholar, 1960-62. Exhibited in the Paris Biennale, 1959; Commonwealth Art Exhibition, London, 1962; won several awards the most important being Lalit Kala Akademi Award 1959 and 1963; *Tamra Patra*—Bombay State Art Exhibition 1959, Poona and Ahmedabad, 1960; Silver Medal of the Indian Sculptors' Association, 1960; Silver Medal of the All India Fine Arts and Crafts Society, Delhi 1961; First prize at the Gujarat State Art Exhibition, Surat, 1962; Gold medal of the Bombay Art Society, 1962; Silver medal and Governor's Prize of Bombay Art Society, 1962; Prize at the Gujarat State Art Exhibition, Rajkot, 1963; One-man show at Bombay, 1963. *Address*: C/o Jyoti Bhatt, Fine Arts College, Baroda 2.

**KANTAWALA, Mr. Justice Ramanlal Maneklal**, M.A., LL.B., Judge, Bombay High Court, since Jan. 1962. b. Oct. 6, 1916; *Educ.*: Elphinstone Coll. and Govt. Law Coll., Bombay. B.A., first class, 1938; Duke of Edinburgh Fellowship, Bombay, and other prizes; Dakshina Fellow, Elphinstone Coll., 1938-40; M.A., 1940; LL.B., 1941. Enrolled as Advocate, High Court, Sept. 1941. *Address*: 'Mahavir', Ridge Road, Malabar Hill, Bombay 6.

**KANTHI, Shivalingappa Rudrapa**, B.A., LL.B., Min., for Law, Mysore State, since March, 1967. b. Dec. 21, 1908; *Educ.*: Karnatak Coll., Rajaram Coll., and Sykes Law Coll., Kolhapur. Enrolled at the Bagalkot Bar, 1935; is interested in the organisation of Harijans, ryots and weavers; member, K.P.C.C. and A.I.C.C., 1939; Pres., Bijapur D.C.C., 1940-46; orgd. the "Individual Satyagraha" in the Bijapur Dist., 1940-41; arrested and sentenced to 10 months S.I., 1941; arrested and detained in the 1942 Aug. Movement; participated in famine relief work; Wkg. Pres., Dist. Ryots' Cfee., Feb. 1946; Parl. Secy., Govt. of Bombay, 1946-52; Dy. Speaker, Bombay Leg. Assembly, 1952-56; Leader, Indian delegation to West Germany, 1961; Speaker, Mysore Leg. Assembly, 1956-62; elected Leader, Mysore Legis. Cong. Party, March 1962; Chief Min., March-June 1962; *Educ. Min.*, June 1962-67. *Address*: P.B. No. 74, Vidhana Soudha, Bangalore 1.

**KANUNGO, Nityanand**, B.A., B.L., Governor of Gujarat, since Aug. 1, 1965. b. May 4, 1900; *Educ.*: Ravenshaw Coll., Cuttack, Univ. Coll., Calcutta. Min. for Home, Law, Industries and Agr., Orissa Govt., 1937-52; Secy., All-India Spinners' Assoc., Local Branch, 1939-42; Pres., All-India Village Industries Assoc., Orissa, 1946; Chairman, Cotton Textile Enq.



Cttee., 1952; Leader, Indian delegation to Intn'l. Rice Commn., 1952; Dir., State Co-op. Bank, Orissa, 1952-54; member, A.I.C.C.; Union Dy. Min., Commerce and Industry, Sept. 1954-Aug. 1955; Union Min. for Industries, Aug. 1955-June 1956; Min. of C. & I., 1956-1957; Union Commerce Min., 1957-62; Min. of Industry, 1962-64; Union Min. of Civil Aviation, June 1964-Aug. 1965. Address: Raj Bhavan, Ahmedabad.

**KAPADIA, Gopaldas Padamsey, B.Com.** (Bombay), F.C.A., J.P., Chairman, I.M.C. Economic Research and Trg. Foundation; Pres., Indian Merchants' Chamber, 1958; Senior Partner, G. P. Kapadia and Co., Chartered Accountants. b. Feb. 2, 1905; Educ.: Elphinstone High School, Elphinstone Coll. and Sydenham Coll., Bombay. Was elected the first Pres., Inst. of Chartered Accountants of India for three years; led the Indian Delegation to the Intn'l. Cong. on Accounting, London, 1952; served on imp. Cttees. apptd. by the Govt. such as the Stock Exchange Enq. Cttee., the Visakhapatnam Shipyard Cttee., The Company Law Cttee. and the Direct Taxes Adm. Enq. Cttee.; member, Sales Tax Enq. Cttee.; Publications: Paper read at Intn'l. Cong. on Accounting in London, 1952; *Incidence of Taxation*; several contributions on taxation matters and eco. subjects. Address: Hamam House, Hamam Street, Fort, Bombay 1.

**KAPOOR, Prithviraj, B.A. (Punjab)**, Fellow, Sangeet Natak Akademi, Actor. b. Nov. 3, 1906; Educ.: Middle School, Samundari; Khalsa School, Lyalpur; Edward's Coll., Peshawar. Worked with Imperial Films, Bombay, 1929-32; acted in the first Indian talkie *Alamara*; Grant Anderson's Indian National Theatre, Bombay, 1932-33; toured with Rep. troupe of 14 plays Shakesperian and others—Poona, Hyderabad, Bangalore, Mysore and Calcutta; New Theatres, 1933-39; worked in 12 N. T. films *Vidyapati*, *Manzil*, *Seeta*, etc.; joined Ranjit Studios, Bombay, 1939; worked in seven films like *India Today*, *Vish Kanya*, etc.; has worked as freelance artist in films like *Ujala*, *Ishara*, *Vikramaditya*, *Rustom Sohrab*, *Awara*, etc.; got the special award for acting in *Aasman Mahal* from the National Academy of Arts and Muses Czechoslovakia, July 1966; ran his own theatre company Prithvi Theatres comprising 90 artists, technicians and musicians for 16 years; produced eight plays—*Shakuntala*, *Pathan*, *Paisa*, etc. Prithvi Theatre Publications. *Dewar*, *Ahuti*, *Kalakar*, *Paisa*. Address: 26, Janaki Kutir, Juhu Church, Bombay 54.

**KAPOOR, Ranbir Raj Kapoor**, Producer, Dir., Actor and Editor. b. Dec. 14, 1924; Educ.: Calcutta and Bombay. Produced the films: *Aag*, *Barsaat*, *Awara*, *Shree-420*, *Boot Polish*, *Aah*, *Jagte Raho*, *Jis Desh Men Ganga Behti Hai*, *Sangam*, *Mera Nam Joker* under production; won the Filmfare award for best acting (*Anari*), 1959, (*Jis Desh Men Ganga Behti Hai*), 1961; direction (*Sangam*), 1964; editing (*Sangam*), 1964. Address: Devnar Cottage, Devnar Farm, Trombay Road, Chembur, Bombay 71.

**KAPUR, H. E., Mr. Bairaj Krishna**, Ambassador of India to Sweden and Finland, since Sept. 1966. b. Jan. 12, 1910; Educ.: Govt. Coll., Lahore; Royal Military Coll., Sandhurst. Joined Indian Army, 1930; Indian Pol. Service, 1934; held various adm. and pol. appts. in North West Frontier Province and Baluchistan; did Land Revenue Settlements of the Kurram Agency and of the Quetta-Pishin Dist.; Delegation to the U.N. Gen. Assembly, 1946; Dy. and then Jt. Secy., Ext. Affairs Min., 1946-50; Foreign Service assignments as Min., Amb. and High Commr., in Iran, Sikkim, The Netherlands, Ghana, Nigeria and Ceylon, 1951-64; Secy., Min. of Ext. Affairs, 1965-66. Address: Embassy of India, V. Tradgardsgatan 15, Stockholm, Sweden.

**KAPUR, Malik Jeevan Lal, B.A. (Punjab)**, M.A., LL.B. (Cantab.), Chairman, Delimitation Commn., 1963; Law Commn., India, since Dec. 23, 1961; Commn. of Inq. (Exodus of Minorities from East Pakistan), since Jan. 8, 1965. b. Dec. 13, 1897; Educ.: Govt. Coll., Lahore (Punjab Univ.); Magdalene Coll., Cambridge; Inner Temple, Barrister-at-Law; B.A., Punjab Univ., 1917; B.A. (Cantab.), 1920; LL.B., 1921; M.A. (Cantab.), 1924. Practised at Lahore High Court, 1922-47; Vice-Pres., All India Postmen's Union, 1926-47; Member, F.P.S.C., New Delhi, 1947-49; Judge, Punjab High Court, 1949-57; Judge, Supreme Court of India, 1957-62. Publications: *Law of Adoption in India and Burma*. Address: 11, York Road, New Delhi.

**KARAN SINGH, Maj.-Gen. Maharaja Dr.**, M.A., Ph.D., Hon. Doctor of Letters, Banaras Hindu Univ. (1967), Min. for Tourism and Civil Aviation, Govt. of India, since March, 1967. b. March 9, 1931; Educ.: Doon School; Univ. of J. & K.; Delhi Univ. Appointed Regent, J. & K., 1949; elected Sadar-i-Riyasat (Head of State) by J. & K. Leg. Assembly, Nov. 1952; recognised by the President of India and assumed office, Nov. 17, 1952; re-elected, 1957 & 1962; Chancellor, Univ. of J. & K.; Chancellor, Banaras Hindu Univ.; Chairman, Central Sanskrit Board; Secy., Jawaharlal Nehru Memorial Fund, 1967; Governor, J. & K. State, April '65-March '67; elected, to the Lok Sabha from Udhampur Constituency, 1967. Address: The Palace, Srinagar; The Palace, Jammu; New Delhi.

**KARANJIA, Russy K., B.A. (Hons.)**, Publisher & Journalist. Editor-in-Chief, *Blitz, News Magazine* (Weekly), published in English, Hindi & Urdu. b. Sept. 15, 1912; Educ.: St. Xavier's High School & Wilson Coll., Bombay. Took Trg. in journalism in India & U.K. Commenced journalistic career as reporter, sub-editor, spl. correspondent with the *Times of India* publications; joined *Sunday Standard* as Dy.-Editor and later became Editor-in-Chief of the *Sunday Standard & Morning Standard* (today *Indian Express*); started *Blitz* in Feb. 1941; Editor & Dir., *Blitz* Publications; Author of *How Others See Us*, *Seato*, *Arab Dawn*, *Dawn or Darkness*; *The Mind of Mr. Nehru*, *The Philosophy of Mr. Nehru*, *How Nasser Did It*, etc.; his intimate interviews with revolutionary leaders like Jawaharlal Nehru, Nikita Khrushchov, Fidel Castro & Gamal Nasser earned him the title of "Chronicler of revolutions & biographer of revolutionaries"; was honoured with the gift of a machine-gun named "Port Said" by Pres. Nasser of U.A.R. & the award of the Republican Order of Merit (Grade I), the highest honour of the State. Address: Ffamroze Court, Netaji Subhas Road, Bombay.

**KARANTH, K. Shivarama**, Hon. Doctorate of Letters, Karnatak Univ. and Mysore Univ., 1963, Kannada Author and Publisher. b. Oct. 10, 1902; Educ.: Board High School, Coondapoor, South Kanara, Joined the N.C.O., Feb. 1922; took to writing, 1924; editor of a Kannada monthly, 1924-29; made experiments in child education, drama and dance; pursued literary profession. Publications: Wrote a large number of plays and novels; wrote *Balaprapanch*, 3 Vols. —Encyclopaedia for children. Published 1936-39, some 20 novels, 20 or more plays, Kannada-Kannada dictionary, a monogram on Yakshagana dance drama, Popular Science Encyclopaedia in Kannada. Address: Puttur (S. Kanara).

**KARMARKAR, Vinayak Pandurang**, Padma Shri, 1964, Sculptor. b. Oct. 2, 1891; Educ.: School of Art, Bombay, 1910-13; Royal Academy, London, 1920-22. Visited Italy, France, Hungary, 1932; professional visit to U.S.A., 1949; member, Gen. Council of Lalit Kala Akademi; National Academy of Art, New Delhi; Vice-Pres., Bombay Art Soc.; Ex-Pres., Art Soc. of India, Bombay. Publications: Occasional articles in Marathi and Presidential Address; fellowship from Lalit Kala Academy, 1962. Address: 7, Union

Park, Chembur, Bombay 71; Studio, Deonar Road, Chembur.

**KARUNANIDHI, M.**, Minister for Public Works, Madras, since March 1967. b. June 8, 1924, at Thirukkuvilai, Thanjavur Dist.; Educ.: Thiruvavur Board High School. While a student, joined the Dravida Kazhagam; organised the Students movement of the Dravida Kazhagam, 1942; left the party and founded with Shri Annadurai and others, the Dravida Munnetra Kazhagam; is founder-Editor, *Murasoli*, a political Tamil daily; a popular playwright and is widely known as 'Kalaingnar'; courted jail several times; has written scripts for a number of Tamil films; represented Kulittalai in the State Assembly, from 1957-62, Thanjavur, 1962-67; returned from Saidapet in Madras City, 1967; was Dy. Leader, D.M.K. Party in the last Assembly; acted as the leader of the opposition. Address: Minister for Public Works, Fort St. George, Madras 9.

**KARVE, Dattatreya Gopal, M.A. (Bombay)**, Exec. Dir., Homi Bhabha Fellowship Council; Hon. Advisor on Trg., R.B.I. b. Dec. 24, 1898; Educ.: New English School and Fergusson Col., Poona. Cobden Club Medalist, 1921; Wedderburn Scholar, 1923. Secy., Deccan Educ. Soc., Poona, 1940-44; Mem., Bombay Local Board of R.B.I., 1952; Dir., Programme Evaluation, Plng. Commn., 1952-55; Dir., Indian Inst. of Public Adm., 1954-55; Chairman: Village and Small-Scale Industries (2nd Five Year Plan) Cttee., 1955; Pres., Indian Soc. of Agrl. Economics, 1960-62; member, Co-op. Devpt. and Warehousing Board; Vice-Chancellor, Poona Univ., 1959-61; Vice-Chairman, State Bank of India, 1960-62; Dy. Governor, R.B.I., 1962-64; Member, Fourth Finance Commn., 1965; Chairman, I.C.A., Intl. Commn., 1965-66. Publications: *Indian Federal Finance*, 1929; *Poverty and Population in India*, 1936; *Democracy and Capitalism*, 1936; *The New Indian Constitution, Prospects and Principles*, 1940; *Ranade, The Prophet of Liberated India*, 1942; *Population Planning in India*, 1948; *Public Administration in a Democracy*, 1950; *Administrative Implications of Planning*, 1956; *Rural Development*, 1957, and others. Address: 'Suyog', 899/1, Shivajinagar, Poona 4.

**KASBEKAR, Dr. Gajanan Shantaram**, M.Sc. (Bombay), Ph.D. (Manchester), Patuck Prize (Manchester Univ.), F.R.I.C. (Lond.), M.I.I.Chem. E. (India), M.I. Chem. E. (Lond.), Mg. Dir., Hindustan Organic Chemicals Ltd., Panvel. b. Nov. 15, 1909; Educ.: Wilson Coll., Bombay; Coll. of Technology, Victoria Univ., Manchester. Lecturer, Wilson Coll. & Prof., Ramnarain Ruia Coll., Bombay, 1933-41; Sr. Research Officer, Forest Research Inst., Dehra Dun, 1948-49; Supdt., High Explosives Factory & Explosives Project, Kirkee, 1949-55; Asstt. Dir., Gen. Ordnance Factories, Calcutta, 1956-58; Dy. Dir. Gen., Ordnance Factories, Calcutta, 1959-61; Project Officer, New Explosives Factory, Bhandara, 1961-62; Mg. Dir., Hindustan Antibiotics Ltd., Pimpri, 1962-65. Pres., Indian Instt. of Chemical Engrs., 1958-60. Publications: Over 25 scientific publications in recognised scientific journals in India and abroad, on "Action of Nitric Acid on Metals", "Swelling of Cellulose", "Manufacture of Explosives" etc. Address: Managing Director, Hindustan Organic Chemicals Ltd., P.O. Rasayani, Dt. Kolaba, Maharashtra.

**KATARI, Vice-Admiral Ram Dass, I.N.**, i.d.c., Indian Amb. to Burma since June 1964; Ex-Chief of Naval Staff, Indian Navy. b. Oct. 8, 1911; Educ.: Mahboob College, Secunderabad; Nizam Coll., Hyderabad; Trg. Ship, "Dufferin", Bombay; Hooghly River Survey for a few years; then Indian Navy; War Service in Atlantic & Indian Oceans; several sea-command since; Chief of Personnel at Naval Hqrs., 1949-51; Imperial Defence Coll., London, 1953; Dy. Chief of the Naval Staff, I.N., 1954-55; Flag Officer Commanding Indian Fleet, Oct. 1956-April 1958; Chief of



Naval Staff, I.N., 1958-62; Chairman, Andhra Pradesh State Road Transport Corp., Nov. 1962-June 1964. Address: C/o Ministry of External Affairs, Govt. of India, New Delhi.

**KATJU, Dr. Kailas Nath, M.A., LL.D., D.Litt.,** Ex-Chief Minister, Madhya Pradesh. b. June 17, 1887; Educ.: Barr High School, Jaora (M.P.); Forman Christian College, Lahore; Muir Central College, Allahabad. Practised at Kanpur (1908-14); joined High Court Bar, Allahabad, 1914; Advocate, Allahabad High Court (1921); member, Council of U.P.C.C. and A.I.C.C. till 1946; elected Chairman, Allahabad Municipal Board (1935-37); Chancellor, Prayag Mahila Vidyapith; Editor, *Allahabad Law Journal* (1918-46); member, Executive Council, B.H.U., and Constituent Assembly of India (1946-47); Minister of Justice, Industries and Development, U.P. Govt., 1937-39 and 1946-47; courted jail in freedom movement; Governor of Orissa, 1947-48; West Bengal, 1948-51; Minister for Home Affairs and Law, 1951-52; Minister for States and for Home Affairs, 1952-55; Defence Minister, 1955-57; Chief Minister, M.P., 1957-62; elected to the Leg. Assembly, M.P., 1962. Publications: *My Parents*, 1950; *Reminiscences and Experiments in Advocacy*, 1952; *My memorable cases*; *Main Bhool Nahin Sakta*; *Rural Development through Self-help*, revised edition, 1957; *The Days I Remember*, 1961. Address: 25, Edmonstone Road, Allahabad.

**KATRE, Dr. Sumitra Mangesh, M.A., Ph.D.** (London), Dir., Deccan Coll. Post-graduate and Research Inst., Poona, since 1942; Editor, Dictionary of Sanskrit on Historical Principles. b. April 11, 1906; Educ.: Ganapathi High School and Govt. College, Mangalore; Presidency Coll., Madras; School of Oriental Studies, London Univ., Orientalisches Seminar, Univ. of Bonn. Prof. of Sanskrit Languages, N. Wadia Coll., Poona, 1933-34; S. P. Coll., Poona, 1937-39. Prof. of Indo-European Philology, Deccan Coll. Post-graduate and Research Inst., Poona (1939-42); Hon. Treasurer, Linguistic Soc. of India, 1954-65; visiting Prof. of Linguistics, Texas Univ., 1966. Publications: Founder-Editor, *New Indian Antiquary and Oriental Literary Digest*, & of several commemorative volumes; *Formation of Konkani*; *Introduction to Indian Textual Criticism*; *Prakrit Languages and their Contribution to Indian Culture*. Address: Deccan College, Poona 6.

**KATT, Balbirsingh**, Diploma in Fine Arts (Santiniketan), Sculptor. Educ.: Bombay, Punjab; Visvabharati Univ., Santiniketan, 1960-64. Indl. cultural scholar, 1965-67; cert. in French language; won gold medal in sculpture at Akademy of Fine Arts, Calcutta, 1963-64 for 'next shift'; silver medal in graphics at W. B. Youth festival in honour of World Youth Congress at Helsinki, 1962; first prize in sculpture at Gujarat State Art Exhibition, 1966 for 'Monument to Silence'; participated in all major art exhibitions of the country including national exhibitions of Lalit Kala, All India Fine Arts and Crafts Arts Society's annuals, Akademy of Fine Arts (Calcutta) annuals, Indian Akademy of Fine Arts, Amritsar, Silpa Parishad (Patna) and participated in the First Bombay's Art Festival, Bombay, 1966. Publications: Writes frequently for literary and art periodicals. Address: Shirikewara, Kothi Road, Baroda.

**KAUL, Triloki Nath, B.A. (Hons.) (Punjab), LL.B. (Alld.), LL.M. (London),** Fellow, Royal Soc. of Arts, London (1963), Hony. Fellow, Kings Coll., London Univ., I.C.S., Secy., External Affairs Min., since June 1966. b. Feb. 8, 1913; Educ.: S. P. Coll., Srinagar; Prince of Wales Coll., Jammu; Law Faculty, Allahabad; King's Coll. & School of Oriental Studies (London Univ.). Passed I.C.S., 1936; Secy., Indian Council of Agril. Research, Govt. of India, 1945-47; First Secy., Indian Embassy, Moscow, 1947-49; Dy. Secy.-Genl., Indian Delegation to U.N., 1947; First Secy., Indian Embassy, Washington, 1949-50;

Counsellor, Indian Embassy, Peking, 1950-52; Min., Indian Embassy, Peking, 1952-53; Jt. Secy., Min. of Ext. Affairs, Govt. of India, 1953-56; member of delegation which negotiated the Sino-Indian Agreement on Tibet, 1954; Chairman, Intn'l Commn. and leader, Indian delegation, Viet Nam, 1957-58; Amb. to Iran, 1958-60; Dy. and Ag. High Commr., London, 1960-62; Amb. to U.S.S.R. and Mongolia, Dec. 1962-June 1966. Address: C/o Ministry of External Affairs, New Delhi.

**KAUR, Smt. Prabhjot, B.A.,** Punjab, Padma Shri (1967), member, Legis. Council, Punjab; Sahitya Akademi Award, 1964, Rajya Kavi by Punjab Govt., 1963, Sahitya Shiremani, 1963, Poet and writer. b. July 6, 1927; Educ.: Punjab Univ., Lahore. Member, National Commn. of India for UNESCO; is associated with many social and welfare orgs.; her works have been translated into Persian, French, Russian, English, Italian and Rumanian; has rendered into Punjabi works as Dr. Radhakrishnan's *My Search for Truth* and *An Idealist View of Life*; *Life of Vivekananda* by Romain Rolland, on behalf of Sahitya Akademi; rep. of the Punjabi language and the women writers of India at national and intn'l literary seminars and cfes. Publications: Poetry: *Lat Lat Jot Jage*, 1943; *Pabbi, Ban Kapasi, Pankheru, Do Rang*; Short Story: *Kinke, Aman De Nan*; has published about 30 works so far. Address: C/o Brigadier Narendra Singh, Military Attache, Indian Embassy, Paris.

**KESAVAN, B. S., M.A. (Lond.),** Diploma in Librarianship (Lond.), Padma Shri (1960), Director, Indian National Scientific Documentation Centre, National Physical Laboratory. b. May 10, 1909; Educ.: Mysore and London Univs. Served on the English Faculty, Univ. of Mysore for seven years; recruited as Education Officer, Govt. of India; Curator, Central Bureau of Education for a short while; Librarian, National Library for nearly 15 years; Scientific and Industrial Research Asstt. Secy., C.S.I.R.; member, International Advisory Cttee. on Bibliography, Documentation and Terminology appointed by the UNESCO; has been Pres., Indian Library Assoc., Vice-Pres., Indian Assoc. of Special Libraries and Information Centres; Hon. Member, Indian Assoc. of Special Libraries & Information Centres; was member, Advisory Commission on Libraries. Publications: *National Library of India*. Address: Director, INSDOC, National Physical Laboratory, Hillside Road, New Delhi 12.

**KESKAR, Dr. Balkrishna Vishwanath, D.Litt. (Paris),** 1935, Chairman: National Book Trust, India, since June 4, 1962; Cement Corp. of India; Road Transport Taxation Enq. Cttee., Union Min. of Transport, since Sept. 1965. b. 1903; Educ.: Poona, Hyderabad, Banaras (Kashividyapith) and Paris. Congress worker in the U.P. since 1920; Gen. Secy., Indian National Cong., 1946; elected to the Constituent Assembly from U.P., Jan. 1948; Member, Indian delegation to the U.N. Gen. Assembly, 1950; widely travelled in America, Europe and the Far East; M.P., Lok Sabha from Sultanpur Dist. (U.P.), Feb. 1952; re-elected from Musafirkhana constituency (U.P.), 1957. Dy. Min. for Ext. Affairs, 1948-52; Min. of Information and Broadcasting, 1952-62; member, Foreign Affairs Sub-Cttee. of Cabinet, 1958-62. Address: 3, Kushak Road, New Delhi 11.

**KHADILKAR, R. K., B.A., LL.B.,** Deputy Speaker, Lok Sabha, since March 28, 1967. b. Dec. 15, 1905; Educ.: Fergusson and Law Colls., Poona, Univ. of Bombay. Social and political worker, Publicity Secy., Falzpur Session, Indian National Congress 1936; member, Poona Municipality, 1945-50; Poona Univ. Court; Indian National Congress, 1930-48; M.P.C.C.; Founder-member, Congress Socialist Party, 1934; Editor, Marathi language dailies *Lokmat* and *Navbharat*, 1938-39; *Lokmat*, Progressive Weekly, 1947-48; Mg. Editor, *Lokshakti*, Congress Daily, 1939-40;

served several terms of imprisonment, 1930-45; left Congress and organised All India Peasants and Workers Party, 1948; its Gen. Secy., 1953; took leading part in forming the All India Mazdoor Kisan Party; Secy.-Convenor, Central Cttee. of the Organization; member, Exec. Cttee., Poona branch of the Indian Council of World Affairs; rejoined Congress, 1962; member, Lok Sabha; 1957-62, 1962-67; and since 1967; member and Chairman, Public Accounts Cttee., Lok Sabha; Chairman, Study Team appointed by the Govt. to examine the Iron & Steel Control Organisation; visited U.S.A. as member, Parliamentary Delegation, 1963; delegate to the Middle Eastern Countries, 1965; at the invitation of the Supreme Soviet visited U.S.S.R. and German Democratic Republic, 1966; visited Gr. Britain, France, Germany, Switzerland, Czechoslovakia; Italy, U.S.S.R., U.S.A., Japan, China and German Democratic Republic. Publications: *Nava Cheenchya Nirmitichi Roopresha*. Address: 'Pushpak', Laxmi Road, Poona 2; New Delhi.

**KHAIRAGARH, Rani Padmawati Devi, Rani** of: M.P., Social worker; ex-Min. for Local Govt., Madhya Pradesh, since Dec. 1964. b. July 17, 1918, at Pratagarh, U.P.; Educ.: Privately. Founded Indira Sangit Vidyalaya, Khairagarh, 1944, which deved. into Indira Kala Sangit Viswavidyalaya in 1956; is a social worker; Founder Pro-Chancellor of the Viswavidyalaya; member: Hindi Sahitya Sammelan, M.P.; Univ. Court, Khairagarh; Board of Governors, Scindia K. nya Vidyalaya, Gwalior; Governing Body, All-India Women's Educ. Fund Assoc.; Pres.: Mahila Vibhag, Rashtra Bhasha Prachar Samiti, M.P.; Patron-in-Chief, Mahakoshal Women's Hockey Assoc., has widely travelled in India and abroad; attended, Plenary Session, 13th and 14th World Health Assemblies, Geneva, 1960, New Delhi, 1961; elected M.L.A. from Bori-Deokar Constituency, M.P., 1952; returned uncontested from Birendranagar Constituency, 1957 & 1962; Min. for Social Welfare, M.P., 1963-64; leader, Intn'l Cfee. of Social Work, Athens, 1964; elected to Lok Sabha from Rajnandgaon Constituency, 1967. Address: "Palace" Khairagarh, M.P.; M.P. House, Kautaliya Lane, New Delhi.

**KHAITAN, Matadin, Business man.** b. May 1913. Is Cttee.-member, Calcutta Stock Exchange Assoc.; Indian Sugar Mills Assoc.; Life-member: Indian Red Cross Soc.; member, Devpt. Council for the Sugar Industry, Govt. of India; Dir.: Matadin Khaitan & Co., Ltd.; East End Paper Industries Ltd.; Bangasri Cotton Mills Ltd.; Vegetable Products Ltd.; Hind Sugar Co. Ltd.; Tulsipur Sugar Co. Ltd.; Trustee: Matadin Khaitan Charitable Trust; Gyan Bharati; travelled widely in Japan, Far East, U.S.A. and Europe. Visited U.S.A., Germany, U.K., in National Productivity Council Marketing & Distributing Team, 1960. Address: Khaitan House, 27, Vivekanand Road, Calcutta 7.

**KHAN, Ahmed Jan, Thirkwa, Padma Shri, Sangeet Marthand,** a leading tabla artist; Prof., Lucknow Music Coll. b. 1891; Educ.: Bombay and Moradabad by Muneer Khan Sahir. Has been playing tabla since the age of nine; learned the instrument regularly for 30 years from Muneer Khan, Sher Khan, Fiyaz Khan and Haji Sahib, etc.; served the Ghandharva Natak Company of Poona for some years; was attached to the Rampur State for about 20 years. Address: 61, Victoria St., Lucknow.

**KHAN, Akhtar Ali, B.A., LL.B.,** Minister for Excise and Muslim Wakfs, Uttar Pradesh, since April 1967. b. 1930; Educ.: B.A. and LL.B. from Lucknow Univ. Joined the bar at Rampur; gave up practice after some time; took to agriculture and horticulture; a keen rotarian; is Secy., Rotary Club of Rampur; is Vice-Pres., District Sports Council, Rampur; is associated with many social and educational institutions in Rampur was Chairman,



Rampur Municipal Board for three years; elected to the State Vidhan Sabha on Swatantra ticket from Rampur, 1967. Address: Minister for Excise and Muslim Wakfs, Uttar Pradesh, Lucknow.

**KHAN, Allaiddin, D.Mus. (1944), Sangeet Nayak and Sitare Hind, Aftabe Mouseque, Sangeet Samrat, Bharat Gourab Sangeet Acharya, Jind of Music, Musician, awarded title of Padma Bhushan (1958), Hon. Principal, Govt. Music College, Maihar. Educ.:** Under many ustads and gurus of music, namely Ahmad Ali Khan, Mohd. Hussain Khan and Vazir Khan, for forty years; learned on Indian instruments like Sarod, Vina, Suraringar, Rabab, Sitar, Shahnai, Mridang, Tabla and Dhol and English instruments like Violin, Cornet and Clarinet; has given many music performances at important places in India and abroad specially European countries; invented new string instruments, viz., Sur-Sitar and Chandrasarang. Address: Maihar, Madhya Pradesh.

**KHAN, Bafat, Musician, unique in Dholak; Staff Artist, All India Radio, Lucknow, since 1957. b. June 16, 1917; Educ.:** Jhansi; learned music from his forefathers who were experts in the line. Won many awards for his performances in Dholak; has a fairly good knowledge of tabla in theory and practice. Address: All India Radio, Lucknow.

**KHAN, Barkatullah, B.A., LL.B., Minister for Education and Law, Rajasthan, since March 1967. b. Aug. 25, 1920; Educ.:** Jodhpur & Lucknow Univ. Min., former Jodhpur State, 1948; Resident Rep. of former Jodhpur State in Delhi; Pres., Municipal Board, Jodhpur, 1951; M.P., 1952-67; M.L.A., Rajasthan, 1957; Dy. Min. for Planning, Power, Tech. Educ., State Enterprises and Tourism, Rajasthan, 1959-62; Min. for Local Self-Govt., Tourism, Housing, Linguistic Minorities & Wakfs, Rajasthan, 1962-67; has been an active member of Cong. and has held various offices in the org. Address: 49, Civil Lines, Jaipur.

**KHAN, Dr. Jehangir, a leading Tabla Player, b. Jan. 11, 1869, at Banaras; Educ.:** Banaras, Bareilly, Delhi and Lucknow; had trg. in tabla under late Ustad Mubarak Khan Sahib, Abid Hussain Khan Sahib of Lucknow and Chhannu Khan Sahib of Bareilly; attained proficiency in the tabla styles of Ajiradal Purab and Delhi. Obtained President's Award, March 1959; degree of Doctor of Music was conferred by Indira Kala Music Univ. of Khairagarh. Address: 21, Tukoganj, Safed Kothi No. 1, Indore.

**KHAN, Mohd. Ayub, B.A., Minister for Health, Social Welfare and Local Self Govt., Jammu and Kashmir, since March 1967. b. Jan. 1923; Educ.:** Graduated from Amar Singh Coll., Srinagar, 1944. Worked in Kashfi Kohistani Anjuman in Pogal Paristan, 1944-47; Dist. Rehabilitation Officer, 1947-51; elected M.L.A. in the State Constituent Assembly, 1951; Parliamentary Secy., 1952; Dy. Speaker, 1957; elected Chief, National Confce., Jammu Province, 1957; was Pres., Central Co-op. Bank, Jammu; was Works and Transport Minister, 1963; Transport, Housing and Excise Minister, 1964. Address: Minister for Health, Jammu and Kashmir, Srinagar.

**KHAN, Ustad Bismillah, Padma Shri. (1961), Musician. b. March 21, 1916 at Dumraon, Shahabad Dist., Bihar; Educ.:** Received Shahnade training under his uncle Ali Bux Khan and father Paigamber Khan. Gave his first public performance at the age of 14 at the All India Music Conference at Allahabad, 1930; again appeared at the Music conference at the Lucknow Exhibition, 1934, and awarded gold medals; awarded three gold medals at the All India Music Conference, Calcutta, 1937; gives frequent performances at the A.I.R. stations in India; awarded Academy Award for Hindustani

Instrumental Music by late President Rajendra Prasad, April 1956. Address: C. K. 46/62, Sarai Harha, Banaras.

**KHANAL, H.E. Mr. Y. N., M.A. (Cal.), B.Sc. (Cal.), Dip. in Educ. (Lond.), Gorkha Dakshin Bahu 1st Class, Amb. of Nepal to India. b. 1915; Educ.:** Calcutta and London. Prof., Trichandra Coll., Kathmandu, 1943; Member-Secy., Nepali Delegation to the Asian-African Cfee., Bandung, 1955; Home Secy., 1956; member: Plng. Commn., 1958; Nepali delegation to the 14th and 15th sessions of the U.N. Gen. Assembly, 1959 and 1960; Tribhuvan Univ. Senate and Syndicate, 1960; Nepalese Delegation to the Belgrade Cfee. of the Heads of Non-aligned States, 1961; Foreign Secy., 1961; has travelled over Western Europe, Asia, North America, Japan and the Middle East; member: Kathmandu Municipality, 1949; Exec. Cttee., Nepal Council of Asian Relations and World Affairs, 1953-56; Pres.; U.N. Assoc. of Nepal, 1961. Publications: *Principles of Criticism* (Nepali); *Reflections on Nepal-India Relations* (English); several articles in English and Nepali on intn'l questions as well as on literary and educational subjects. Address: Royal Nepalese Embassy, Barakhamba Road, New Delhi.

**KHANDEKAR, Vishnu Sakharan, Marathi Writer; Pres., Marathi Sahitya Sammelan, 1941. b. Jan. 11, 1898; Educ.:** Sangli High School, Sangli; Fergusson Coll., Poona. Headmaster, T. E. School, Shiroda (Dt. Ratnagiri), 1920-38; Screenplay Writer to Huns Pictures, Navyug Pictures & Prafulla Pictures, 1936-47; Author, Short Story Writer, Critic, Novelist, Essayist. Publications: About 60 books in Marathi, many of which have been translated into Gujarati, Tamil, Hindi, etc.; Sahitya Akademi Award for his Novel *Yayati* (1961). Address: 7, Rajarampuri, Kolhapur.

**KHANDELWAL, Goverdhan Das, M.A., Chairman, Railway Board and ex-Officio Principal Secy., Govt. of India, Min. of Rlys., since Jan. 21, 1967. b. Jan. 7, 1912; Educ.:** Allahabad Univ. Joined the former East Indian Rly. as Probationer Transportation (Traffic) Officer, Sept. 1935; promoted to senior scale, 1942; confirmed as Commercial Supdt., 1947; Dy. Chief Operating Supdt., Eastern Rly., 1952-54; Regional Transportation Supdt., Bilaspur, 1954-55; Jt. Dir., Traffic (Transportation), Rly. Board, 1955-56; Dvnl. Supdt., Eastern Rly., 1956-58; Chief Operating Supdt., 1958-59; Chief Operating Supdt., South-Eastern Rly., 1959-61; Dir., Bokaro Steel Ltd.; Gen. Mgr., South Eastern Rly., 1961-66; Member (staff), Rly. Board, 1966-67. Address: Railway Board, New Delhi.

**KHANNA, Dinesh, B.Sc. Engg. (1st Class), Arjuna Award (1966), leading badminton player; Asstt. Engr., I.O.C. b. Jan. 4, 1943. Educ.:** Amritsar, Chandigarh. Had an interest in badminton from an early age; played in the National Championships as a junior, 1956; rep. Indian students team in Malaysia, 1962 and won the team championship; has rep. India in the Thomas Cup Matches and various test matches; toured New Zealand, Australia, Malaysia, Singapore and Bangkok, 1963 with the Thomas Cup team; rep. India and won the Men's Single's Title in the Asian Badminton Championships, Nehru Memorial and Central India Singles Titles, 1965; ranked India's No. 1 for 1965-66; reached the semi-finals in the all England Championship, 1966; toured various other European countries too; rep. India in the Commonwealth Games at Jamaica and won a bronze medal in men's singles. Address: 12, Ram Nagar, Race Course Road, Amritsar.

**KHANOLKAR, Dr. Vasant Ramji, B.Sc., M.D. (London), Hon. LL.D. (Melbourne), Hon. F.R.C.P. (Edin.), F.A.Sc., F.N.I., Hon. LL.D. (Bomb.) (1965), Padma Bhushan (1955), Scientist; National Research Prof. in Medicine, since April 1963. Ex-Vice-Chancellor, Bombay Univ. b. April 18, 1895;**

**Educ.:** Bombay; London Univ.; M.D. (Pathology), London Univ., 1923. Prof. of Pathology, Grant Medical Coll., Bombay, 1924-25; Seth G. S. Medical Coll., Bombay, 1925-41; has done pioneering work on cancer in India; elected Chairman, Intn'l. Cancer Research Commn., 1950; elected Pres., Intn'l Union against Cancer for four years, July 1958; member, U.N. Scientific Cttee. on the Effects of Atomic Radiation, since 1956; apptd. Vice-Chairman, June 1958; received citation from the Cancer Cytology Foundation of America, 1960; Hon. Member, Austrian Cancer Soc., 1960; member, Academy of Medical Services, U.S.S.R.; Hon. Fellow, Royal Soc. of Medicine, Lond.; Dir., Indian Cancer Research Centre, 1950-63; Fellow & Pres., Indian Academy of Medical Sc.; Pres., National Instt. of Scs. of India, 1965. Publications: 118 scientific publications, including a book entitled "A Look at Cancer". Address: 66, Padmalaya, Sion East, Bombay 22.

**KHARE, Dr. Narayan Bhaskar, B.A., M.D. b. 1884. Ex-Chief Min. & M.L.C., M.P., 1923; Imprisoned in 1930 C.D. Movement; M.L.A. (Central), 1935-37, where he placed on the Statute the "Ariya Marriage Validation Bill"; 1st Prime Min. of M.P., 1937-38; member, Viceroy's Exec. Council, Dept. of Commonwealth Relations, 1943-46; responsible for securing citizenship rights for Indians domiciled in America, saving lives of Indians accused of high treason in Malaya, for commutation of life sentences on Chimur accused & for various steps taken against South Africa; Prime Min., Alwar State, 1947-48; elected Pres., All-India Hindu Mahasabha at its Calcutta Session, Dec. 1949 & Poona Session, Dec. 1950 & Jaipur Spl. Session, April 1951; elected to Lok Sabha, 1952. Publications: *My Defence* (English), 1938; *Autobiography in Marathi and Hindi, 1956 and English, 1959; Nehru as I Know, 1957; Khare Vs. Nehru and Azad's Autobiography Autopsied 1961; Khare-Darshan* (Marathi), 1964. Address: Indira Mahal, Dhantoli, Nagpur.**

**KHATAL, Bhikajirao Jijaba, B.A. (Hons.), LL.B., Dy. Minister for Irrigation, Power and Agriculture, Maharashtra. b. March 26, 1919; Educ.:** Sangamner, Baroda and Poona. Was an advocate at Sangamner, Ahmednagar Dt.; apptd. as Civil Judge, Junior Dvn.-cum-Magistrate; Pres., Municipal Labour Union, Sangamner; Adviser, Bidi Workers' Union, and member, Dist. Devpt. Board; Chairman: Sangamner Oil Mill; Akola Market Cttee. and of several other instts.; an active social worker in the coop. & educl. field; elected M.L.A., Maharashtra from Sangamner Constituency, 1962. Dy. Min. for Coop., Maharashtra, 1962-63; Dy. Min. for Coop., Food and Civil Supplies, Maharashtra, 1963-67. Address: Sachivalaya, Bombay 32.

**KHEDKAR, Gopalrao Bajirao, Min. for Rural Devpt., Maharashtra, since March 8, 1962. b. 1900, in Khed Village, Amravati Dist. Left secondary school at Gandhiji's call to join the freedom struggle; often imprisoned; was founder & consolidator, Congress Seva Dal, Vidarbha; Pres., Vidarbha Cong. Cttee., 1948-57; founder and promoter of several educl. instts.; closely associated with Shivaji Educ. Soc., Vidarbha; estd. a net-work of primary schools in Akola Dist.; elected M.L.A., Madhya Pradesh, 1947; Pres., Vidarbha P.C.C., 1948-58; elected to Lok Sabha, 1952 & 1957; was member, Nine-Member Cttee. apptd. by Cong. Wkg. Cttee. for reorg. of Bombay State; elected Pres., M.P.C.C., 1960; elected M.L.A., Maharashtra, 1962 and 1967. Address: 'Deogiri', N. Dabholkar Road, Malabar Hill, Bombay 6; Civil Lines, Akola.**

**KHER, Atmaram Govind, B.A., LL.B., Chairman: U.P. Bharat Sevak Samaj, Bhoodan Yoga Samiti & Samyukta Sadachar Samiti, U.P. b. Sept. 25, 1894; Educ.:** Jhansi; Central Hindu Coll., Banaras, and Law Coll., Allahabad. Chairman, Municipal Board,



Jhansi, for 3 terms; member, Dist. Board, Jhansi, for 10 years; thrice member, Legis. Assembly; member, Dist., Provincial and All-India Cong. Cttee.s, several times; imprisoned for political activities five times; twice Parly. Secy. to Min. of Health & Local Self-Govt.; Min. for Local Self-Govt.; Speaker, U.P. Assembly, 1952-52; Pres.: Bharat Scouts and Guides, U.P. Address: D-13, Park Road, Lucknow.

**KHER, Prof. P. G., B.A., LL.B.,** Minister for Urban Development, Maharashtra, since March 1967. b. Aug. 20, 1911 at Ratnagiri. Courtied jail during the freedom movement; was Pres., B.P.C.C.; member: Bandra Municipality, 1945-50; Bombay Municipal Corpn., 1952-57; Chairman: Standing Cttee., Bombay Municipal Corpn., 1956-57; Minimum Wages Cttee. on Glass Industry, Printing Press Industry, Potteries and Cinema Industries, since 1962; Estimates Cttee., State Legislature, 1961-64; elected M.L.A. from Bandra (Bombay), 1957; member: Bombay Univ. Senate, since 1957; Regional Planning Cttee., 1964; is connected with several social, educational and cultural organisations, Bombay; has been a Professor of Law; was Univ. teacher for LL.M. and M.Com. classes; practised at the Bombay High Court for 17 years; Chief Organiser, Rashtra Seva Dal of B.S.D., 1940-47; Pres., National Library, Bandra; Ex-Secy. Genl. and Treasurer, All India Balkanji-Ji-Bari; elected M.L.A., on Congress ticket from Bandra, 1967. Address: Sachivalaya, Bombay 32.

**KHILNANI, H.E. Mr. Khemchand Rewachand Fatechand, M.A. (Hons.), (Econs. Tripos) (Cantab.),** Bar-at-Law (Lincoln's Inn), F.R.E.S., Indian Ambassador to Senegal, Upper Volta and Mauritania and High Commissioner to Gambia. b. Feb. 6, 1913; Educ.: D. J. Sind Coll., Karachi; Elphinstone Coll., Bombay; Trinity Hall, Cambridge. Bar-at-Law (Senior Counsel), Chief Court of Sind, 1936-48; joined I.F.S., 1948; Under Secy., Min. of E.A., 1948-49; Asstt. Commr.-Gen. for eco. affairs for Europe, Paris, 1949; served as First Secy. in Prague, concurrently Bulgaria, Rumania, Albania, Hungary, Poland, Colombo, Rome, concurrently Yugoslavia and Greece, 1949-57; Counsellor, Cairo, 1957-59, concurrently, Lebanon, Libya, Cyprus & Syria; Jt. Secy. to the Govt. of India in charge of Foreign Trade, 1959-61; Dir., S.T.C. and Dir., Shipping Corpn. of India, 1959-61; Commr. for India in East and Central Africa and Consul-Gen. to Ruanda-Urundi, 1961-63; Chairman, ECAFE Cttee. on Trade, 1961; Leader, India's Trade Delegations to Western Asian and Eastern European countries, 1959-61; Amb. to Rumania, Sept. 1963-67 & Concurrently Amb. to Bulgaria, 1964-67. Publications: Languages: Foreign: Persian, German, French, Italian, Arabic and Rumanian. Indian: -Gujarati, Sindhi, Punjabi and Hindi. Address: C/o The Ministry of External Affairs, New Delhi.

**KHOBARAGADE, Bhaurao Dewaji, B.A. (Nagpur),** Barrister-at-Law (Lincoln's Inn), M.P., Founder & Gen. Secy., Republican Party of India, since Oct. 1957. b. Sept. 25, 1925; Educ.: Govt. Jubilee High School, Chanda; Coll. of Science, Nagpur; B.A., Morris Coll., Nagpur, 1945; Bar-at-Law, Lincoln's Inn, 1949. From early life interested in uplift and emancipation of the untouchables; Secy., Scheduled Castes Students' Federation (M.P.), 1943-44; Vice-Pres., Municipal Cttee., Chanda, 1952-56; Pres., Nagpur Pradesh S. C. Federation, 1953-55; Gen. Secy., All India S. C. F., Aug. 1955-Dec. 1956; elected Pres., All India S.C.F., Dec. 1956-Oct. 1957; Founder Pres., Presidium, an org. to control the various educ., religious and social instts. started by late Dr. B. Ambedkar; Pres., Bombay Pradesh Bidi Majoor Sangh; Founder Pres., Siddharth Shikshan Sahayyak Sanstha (Nag-Vidarbha); elected to Rajya Sabha, 1958 & 1966; attended world Buddhist Cfee. at Bangkok, 1958; offered satyagraha

in favour of landless labourers of Maharashtra, 1959; member, Public Accounts Cttee., 1963-64. Address: Chanda.

**KHOSBAYAR, H. E. Mr. Oyuny, Amb.** of the Mongolian People's Republic to India, since Sept. 1964. b. Dec. 1923; Educ.: Univ., Ulanbator, Mongolia. First Secy., Mongolian Embassy, Peking, 1955; First Secy., Mongolian Embassy, New Delhi, 1956; Dir., Political Deptt., Min. of Foreign Affairs, 1957-59; Mongolian Amb. to Hanoi, 1960-61; Dir., Political Deptt., Min. of Foreign Affairs, 1961-62; Dy. Foreign Min., 1963-64. Address: 21/48, Panch Sheel Marg, New Delhi 21.

**KHOSLA, Dr. Ajudhia Nath, B.A. Engg. (Hons.), C.E. (Hons.) (Roorkee), Dr. Instt. (Honorary), Rennselaer Polytechnic Instt., U.S.A., Dr. Engg. (Honoris Causa), Roorkee Univ., D.Sc. (Honoris Causa), Punjab Univ. (1961), Padma Bhushan (1955),** Governor of Orissa, since Sept. 15, 1962; Vice-Chancellor, Roorkee Univ., 1954-59; M.P., 1958-59. b. Dec. 11, 1892; Educ.: D.A.V. Coll., Lahore; Thomason Coll. of Engg., Roorkee. Spl. Secy., Govt. of India, Min. of Irrigation & Power, 1953; Founder Pres., Intn'l Commn. on Irrigation and Drainage, 1950; Hony. Pres., since 1954; Chairman, Bhakra Board of Consultants since 1952; Beas Board of Consultants since 1961; Chairman: Board of Consultants for Sabarigiri (Kerala); Ramganga and Yamuna Projects (U.P.); Pres., National Instt. of Science, 1961-62; Member, Plng. Commn., 1959-62. Publications: *Levelling of precision across Rivers—Evolved the Khosla Disc; Design of Weirs on Permeable Foundations; Silting of Reservoirs; Rainfall and Runoff; Pressure observations under Dams; Precast Concrete Through Roofs.* Address: Governor's Camp, Bhubaneswar, Orissa.

**KHOSLA, G. S.,** General Manager, Western Railway, since Jan. 1967. b. 1912. Rose to the present position after 31 years of service during which he served seven major railway systems; was Chief Optg. Supdt.: Western Railway, 1961-63; Northern Railway, 1963-64; Director (Safety), Railway Board, 1964-65; organised the first exhibition of railways in India, 1965; Director (Traffic) (Transportation), 1965-67. Address: Western Railway, Churchgate, Bombay 1.

**KHOSLA, Jagan Nath, B.Sc. (Econ.), (London), Ph.D. (Econ.), (London),** Barrister-at-Law, Dir., Indian Instt. of Public Adm., New Delhi, since Jan. 1964. b. Jan. 28, 1906; Educ.: Srinagar, Lahore, London and Paris. Editor, *Indian Journal of Political Science*, 1945-48; Fellow, Punjab Univ., 1947-48; represented India at several Intn'l Cfees.; Head, Consular Deptt., High Commn. of India, London, 1948-51; Charge d'Affaires of the Indian Embassy, Rome and concurrently at Belgrade, 1951-52; Head of the Historical Divn., Min. of Extn. Affairs, 1953-54; Pres., Intn'l Commn. for Control and Supervision, Laos, Indo-China, 1954-55; Amb. to Czechoslovakia, 1955-58 and concurrently to Rumania, Feb.-Oct. 1958; Amb. to Indonesia, 1958-61; Amb. to Yugoslavia, Bulgaria and Greece, 1961-64. Publications: Scientific papers in journals. Address: Indian Institute of Public Administration, Indraprastha Estate, Ring Road, New Delhi.

**KILACHAND, Ambalal, Business man.** b. July 23, 1912; Educ.: Elphinstone High School, Bombay and in England. Dir., Kilachand Devchand & Co. Private Ltd., and their associated companies as also other private & public limited concerns including the Kesar Sugar Works Ltd., The New Great Ins. Co. of India Ltd., The Indian Dye-stuff Industries Ltd., Polychem Ltd.; Bombay Suburban Electric Supply Ltd.; Trustee, Bombay Port Trust, 1957-60; member: Bombay Customs Advisory Cttee.; Cttee. member, F.I.C.C. & I., New Delhi; Pres., Indian Merchants' Chamber, 1953-54; was member, Import Advisory

Council set up by the Govt. of India since its inception up to 1956; Press, All India Plastic Mfrs. Assocn., 1963; has extensively travelled in the U.K., Europe, the Far Eastern countries; U.S.A., E. Africa and Japan; Address: Office: 45/47, Apollo Street, Fort, Bombay 1; Resi.: 95, Nepean Sea Road, Bombay 6.

**KILACHAND, Chinubhai, Business man.** b. June 20, 1919; Educ.: Fellowship High School and St. Xavier's, Bombay and in England. On his return from England, joined the family firm of Kilachand Devchand & Co. Pvt. Ltd., 1939; developed its Foreign Cotton Deptt.; Dir.: Kilachand Devchand & Co. Pvt. Ltd. & its associated companies; also of other public companies; Jt. Mg. Dir., Premier Automobiles Ltd.; Bombay; has travelled widely in the U.K., Europe and in the United States of America in connection with the devpt. of the business of his firm. Address: Office: 45/47, Apollo Street, Fort, Bombay 1; Residence: 95, Nepean Sea Road, Bombay 6.

**KILACHAND, Ramdas, Business man;** J.P. b. Sept. 18, 1909; Educ.: Elphinstone High School, Bombay and in England. On his return from England, joined his family firm of Kilachand Devchand & Co., Ltd., 1926; developed the Company's cotton and oilseeds export business; Dir., East India Cotton Assoc. Ltd., for over 25 years; is its Vice-Chairman; Pres., Bombay Oilseeds & Oils Exchange Ltd. for more than 25 years; Chairman, Polychem Ltd.; is Dir.: Kesar Sugar Works, Ltd.; Synthetics & Chemicals Ltd., etc. Ex-Trustee, Bombay Port Trust; Pres., Indian Merchants' Chamber, 1948-49; member: Indian Devpt. Oilseeds Devpt. Council; Indian Central Cotton Devpt. Cttee.; was member, Export Promotion Adv. Council set up by the Govt. of India; elected M.L.A., Bombay in 1952, as an Independent from Mehsana Dist. in north Gujarat; Trustee, Bombay. Panjrapole; Pres., Commerce Graduates' Assoc., 1964-66; has widely travelled in the U.K., Europe, U.S.A. and the Far East. Address: Office: 45/47, Apollo Street, Fort, Bombay 1; Residence: 95, Nepean Sea Road, Bombay 6.

**KILACHAND, Tulsidas, Business man.** b. July 1, 1906; Educ.: Elphinstone High School, Bombay, & privately in England. Joined his father's firm Kilachand Devchand & Co., Ltd., at the age of 18, is now its Chairman; is Chairman, Bagalkot Cement Co. Ltd.; Vice-Chairman, Premier Automobiles Ltd.; Dir., Walchandnagar Industries Ltd.; Chairman, Bank of Baroda, 1932-65; Leader, Govt. of India's Trade Mission to Japan, 1947; was member: Export Adv. Council of the Govt. of India; Three-Man High Power Import Control Inq. Cttee.; member: Plng. Commn. Adv. Board, 1950-51; Stg. Cttee., Indian Council of Agrl. Research; Stg. Cttee. of the Export Promotion Adv. Council; Pres., F.I.C.C. & I., New Delhi, 1950-51; Chairman, Indian Banks' Assocn., 1961-65; is a Governor, Adm. Staff Coll. of India, Hyderabad. elected M.P. in 1952 as an independent from Mehsana Dist.; has widely travelled in the U.K., Europe, U.S.A., and the Far East. Address: Office: 45/47, Apollo Street, Fort, Bombay 1; Residence: 95, Nepean Sea Road, Bombay 6.

**KIRLOSKAR, Shantanu Lakshman, B.Sc. (M.I.T.), Padma Bhushan (1965),** Industrialist; Pres., F.I.C.C. & I., 1965-66. b. May 28, 1903, at Sholapur; Educ.: Massachusetts Inst. of Tech., U.S.A., 1926. Chairman: Indian Diesel Engine Mfgs. Assoc., Poona; Chairman, Board of Dirs.: Kirloskar Oil Engines Ltd., Poona; Kirloskar Pneumatic Co. Ltd., Poona; Kirloskar Cummins Ltd., Poona; Kirloskar Consultants Ltd., Poona; Swastice Rubber Products Ltd., Poona; Padamjee Pulp & Paper Mills Ltd., Poona; The Central Pulp Mills Ltd., Poona; Bank of Maharashtra Ltd., Poona; Dir.: Kirloskar Bros. Ltd., Kirloskarwadi; The Mysore Kirloskar Ltd., Harihar; Kirloskar Electric Company Ltd., Bangalore; Kirloskar Asea Ltd., Bangalore; The Lakaki Works Pvt. Ltd., Lonavla; The



Ahmedabad Electricity Co. Ltd., Bombay; Bajaj Auto Ltd., Bombay; Delhi Cloth & Gen. Mills Co. Ltd., Delhi; Bharat Ball Bearing Company Ltd., Delhi; Escorts Ltd., New Delhi; The Jay Engg. Works Ltd., Calcutta; Nominated member: The Central Adv. Council of Industries; The Board of Trade; The Indian Standards Instt.; The Koyna Control Board; The Maharashtra State Adv. Council of Industries; Pres.: The Maharashtra Chamber of Commerce & Industries, Poona; Cttee. member: Maharashtra Chamber of Commerce, Bombay. Address: Office: Kirloskar Oil Engines, Ltd., Elphinstone Road, Kirkee, Poona 3.; Res.: 'Lakaki', Poona 16.

**KIRPAL, P. N., M.A.** (Punjab and Oxford), B.A., LL.B., Secy. & Educl. Adv., Govt. of India, since 1960. b. April 30, 1909; Educ.: Univ. of the Punjab, Lahore; Balliol Coll., Oxford Univ. Lecturer in History, Lahore, 1934-38; Prof. of History and Pol. Sc., Lahore, 1938-45; Educl. Adv. to the High Commr. for India in the U.K. 1945-48, Dy. Secy. to Union Min. of Educ. and Secy. Gen., Indian National Commn. for UNESCO, 1948-52 and 1957-60; Seconded to UNESCO Deptt. of Cultural Activities for apptt. as Dy.-Dir. and later as Dir. (1952-57); member: All India Council of Sports; Univ. Grants Commn., Exec. Board, UNESCO; Chairman, UNESCO Programme and Ext. Relations Commn.; Dir., National Council of Educl. Research & Trg., since 1962. Indian Educ. Commn., July 1964. Address: Ministry of Education, Government of India, New Delhi.

**KNOX, Most Rev. James R.,** Titular Archbishop of Melitene; Apostolic Internuncio to India, since 1957. b. March 2, 1914; Educ.: Urban Coll. "de Propaganda Fide", Rome-Vice-Rector, Coll. "de Propaganda Fide", 1945-48; attached to Secretariat of State of His Holiness Pope Pius XII, 1948-50; Secy. of the Apostolic Internunciature, Tokyo, Japan, 1950; nominated Apostolic Delegate, British East and West Africa, 1953. Address: Apostolic Internunciature, Chanakya Puri, New Delhi 21.

**KOHOUT,\* H. E. Ing. Jaroslav,** Amb. of the Socialist Republic of Czechoslovakia to India. b. Feb. 19, 1915, in Prague; Educ.: graduated from the Economics Faculty of the Prague Univ. Joined the Min. of Foreign Trade, 1947; has been Dy. Min. of Foreign Trade, since 1955; has represented his country in many intn'l cfces. and inter-State negotiations; was elected one of the Vice-Pres. of the Geneva U.N. Cfce. on Trade & Devpt., 1964; Vice-Chairman, Trade & Devpt. Board of the UNCTAD in 1964 & 1965; has received Czechoslovak & Polish awards and decorations. Address: 45-46, Sundar Nagar, New Delhi 11.

**KOLTE, V. B., M.A., LL.B., Ph.D.,** Marathi Writer; Vice-Chancellor, Nagpur Univ., Nagpur. b. June 22, 1908; Educ.: Govt. High School, Khamgaon; B.A., 1929; M.A., Morris Coll., and LL.B., Univ. Coll. of Law, Nagpur, 1931; K. B. Malak Gold Medal, 1931; N. K. Behare Gold Medal, 1931. Asstt. Prof. of Marathi, King Edward Coll., Amraoti, 1931-44; Morris Coll., Nagpur, 1944-56; Pres., Vidarbha Sahitya Sangh and Sammelan, 1948; Reader in Marathi, Nagpur Mahavidyalaya, 1956-59; held charge as Principal, 1956-58; member: Marathwada Univ. Cttee. 1957; Sahitya Akademy, 1957-62; Maharashtra State Language Adv. Board, since 1961; Maharashtra State Anglo Indian Edn. Cttee., 1962; Dean, Faculty of Arts, Nag. Univ. 1961-64; Principal: Nagpur Mahavidyalaya, 1959-64; Vidarbha Mahavidyalaya, Amravati, 1964-66. Publications: *Lavhali* (poems); *Sad-Chitthi* (Drama); *Bhaskar Bhatta Borikar*, *Mahanubhaan Tatvadnyan*; *Mahanubhaan-cha Achardharma*; *Marathi Santonka Samajik Karys* (Hindi); edited: *Uddhao Geeta Ruk-*

*mini Swayamwar*, *Shishupal Wadh*, etc. Address: C/o Nagpur Univ., Nagpur.

**KOTHARI, Daulat Singh, M.Sc.** (Allahabad), Ph.D. (Cambridge), F.N.I., Chairman, Univ. Grants Commn., since Feb. 1961; Prof. of Physics, Delhi Univ., and Scientific Adv. to the Min. of Defence, Govt. of India. Chairman, Union Educ. Commn., since July 1964. b. 1906; Educ.: Udaipur, Indore, Allahabad and Cambridge; studied physics under Dr. Megh Nath Saha at Allahabad Univ. Apptd. on the staff of Physics Dept., Allahabad Univ., 1928; joined Delhi Univ., 1934 and the Min. of Defence, 1948; has been Pres., Indian Physical Soc.; is Vice-Pres., National Instt. of Scs. of India. Gen. Pres., Indian Sc. Cong. Golden Jubilee Session, 1963. Publications: Papers in Indian and foreign scientific journals on Statistical Thermodynamics. Theory of White Dwarf Stars, and other Physical and Astrophysical subjects; showed that atoms can be ionized (broken down) by the application of pressure alone; *Nuclear Explosions and their Effects*. Address: New Delhi.

**KOTHARI, Dayanand Chandulal, M.A.** (Madras), Business man, Share & Stockbroker, Industrialist & Mg. Agent. b. Feb. 23, 1914. Educ.: Madras Christian Coll. Was Pres.: All India Org. of Industrial Employers; United Planters' Asscn. of S. India; Madras Stock Exchange Ltd.; was Chairman, Southern India Millowners Assoc.; Cttee. member: F.I.C.C. & I.; Cotton Textile Loan Advisory Cttee.; Indian Sugar Mills Assoc.; Indian Cotton Mills Federation, Indian National Cttee. of the Intn'l Chamber of Commerce; Ex-Sheriff of Madras; Dir.: Kothari Textiles Ltd.; Adoni Spg. & Wvg. Co. Ltd.; The Investment Trust of India Ltd., Madras Aluminium Company and several others; Partner, Kothari & Sons, Madras; South Indian Sugar Mills Asscn. Publications: *Investors Hand Book of India*, etc. Address: "Kothari House", 3, Kothari Road, Nungambakkam, Madras 34.

**KOTHARI, Harshad Chandulal, Share,** Stock Exchange Broker & Dir. & Mg. Agent; Partner, Kothari & Sons, Madras. b. April 18, 1918; Educ.: Madras Christian Coll. Member: Tea Board; Coffee Board; Sugar Devt. Council; Madras Land Board; is Dir.: Adoni Spg. & Wvg. Co. Ltd., Adoni; Investment & Fin. Corpn. Pvt. Ltd., Madras; Kothari Mehta & Co. Pvt. Ltd.; Kothari & Sons, (Agencies) Pvt. Ltd. and several others; was Pres.: Madras Stock Exchange Ltd.; Pres., United Planters' Asscn. of Southern India, Coonoor; Dir., Madras Industrial Investment Corpn. Ltd.; Ex-Sheriff of Madras; has travelled extensively in the Continent, States and Indonesia. Address: Office: Oriental Buildings, Armenian Street, Madras 1; Residence: 4-A.A., Nungambakkam High Road, Madras 34.

**KOTHARI, Hemraj, B.Sc., D.W.P.** (Lond.), A.C.C.G.I. (Lond.), etc., Chartered and Incorporated Engr., Journalist and Management Consultant; Founder-Editor, *Who's who in Indian Engineering Industry*; *Compact weekly*; *What's on in Calcutta* (fortnightly); *Professional Engineer and the Director*; Founder-Organiser: The Assoc. of Indian Engrs. (U.K.), Instt. of Dir's (India) and The Engrs. Guild (India); Founder Pres., Instt. of Intn'l Affairs. b. Nov. 10, 1933, at Sujargarh; Educ.: Delhi, Calcutta, Darjeeling, London and Oslo. Partner, Kothari & Sons Calcutta, since 1955; Founder-Proprietor, Kothari Org.; life Fellow: British Interplanetary Soc.; Geological, Mining & Metallurgical Soc.; Instt. of Dir.s, (Lond.), etc.; life Member: National Academy of Scs.; New York Academy of Scs.; Indian Sc. Cong.; Indian Inst. of Public Adm.; member: Indian and Eastern Newspaper Soc.; Intn'l Chamber of Commerce—India National Cttee., Pres., All India Small and Medium Newspaper Editors' Asscn., W. Bengal branch Intn'l Pres. Assn. for study of overseas problems (Paris); Television Soc., etc.; has widely travelled in Europe and Middle East. Publications: *Who's Who*

*In Indian Science*; *Professional & Trade Organisations in India*; *Kothari's World of Reference Works*; *Technological Education*; *Directory of Directors*; *Who's who in India*. Address: Office: 12, India Exchange Place, Calcutta 1; Home: Sujargarh-Rajasthan; 58, Upper Chitpore Road, Calcutta.

**KOTHARI, S. S., C.A.,** Business man; Senior Partner, S. S. Kothari & Co., Calcutta; nominated by the Govt. of India to the Central Council of the Institute of Chartered Accountants of India, New Delhi; Fellow and Chairman, Employment Cttee. and Member, Research and Taxation Cttees.; nominated by the Council as one of the Institute's delegates to the Ninth International Congress of Accountants taking place in Paris, Sept. 1967; Associate of the Institute of Taxation, London; member, Governing Body, Calcutta Productivity Council; nominated by the Govt. of West Bengal to the State Savings Advisory Board (1963-65); the Smoke Nuisances Commission and Governing Body of the Goenka Coll. of Commerce and Business Administration; is closely associated with leading Chambers of Commerce in Calcutta; member, Exec. Cttee. and Chairman, Programmes Sub-Cttee., Eastern Study Group, Calcutta. Publications: Contributes articles on taxation, company law and economic subjects to the *Statesman*, *Capital*, *Economic Times* and others; has read papers at seminars. Address: India Steamship House, 21, Old Court House Street, Calcutta 1.

**KOTVAL, Mr. Justic Peshotan Sohrab, B.A.** LL.B., Chief Justice, High Court, Bombay, since July 31, 1966. b. Sept. 27, 1910; Educ.: Billimoria High School, Panchgani (1919-26); Morris Coll., Nagpur (1926-30); Univ. Coll. of Law, Nagpur (1930-32); *Jakardar Elocution Prizeman*, Nagpur Univ. 1929; Hussonji Gold Medal for debates, 1930. Lecturer in Jurisp. and Constl. Law, Univ. Coll. of Law, Nagpur (1939-46); Advocate, C. P. & Berar and M. P. High Courts (1932-55); Judge, High Court, 1955-56; Judge, Bombay High Court, 1956; one-man Commission to inquire into the cases of Police fring in Ahmedabad, 1958; member: Court of the Nagpur Univ. since 1935; Academic Council, Nagpur Univ. (1942-64), Dean, Faculty of Law and Member of Exec. Council, Nagpur Univ. 1956-64; Vice-Chancellor, Nagpur Univ. (1962-64). Address: "Shivneri", Powai Road, Off Mt. Pleasant Road, Malabar Hill, Bombay 6.

**KRIPALANI, Acharya J.B., M.A.** (History and Economics), M.P.; Director, Shri Gandhi Ashram, Village and Khadi Organisation, U.P., Delhi. b. 1888. General Secretary of Indian National Congress, 1934-46; elected Pres., Indian National Congress, Oct. 1946; resigned Nov. 1947; Educ.: M.A., 1912. Joined Mahatma Gandhi in Champaran Satyagraha, 1917; Private Secretary to Pandit Madan Mohan Malaviya, 1918; organised Gandhi Ashram; started Khadi and Village work, 1920, through the Gandhi Ashram, Banaras; courted jail in freedom movement several times; Member, Constituent Assembly of India, 1946-51; formed the Congress Democratic Front, 1951; resigned from Congress and formed Kisan Mazdoor Praja Party, 1951; merged K.M.P.P. with the Socialist Party, Oct. 1951; was Chairman, P.S.P. till Dec. 1954; and Railway Corruption Enquiry Committee, 1954-55; elected to Lok Sabha, 1952, 1957, 1963 & 1967; Chairman, Language Cttee., U.P., 1962-63; has resigned from the P.S.P. Publications: *The Gandhian Thought*, *The Non-Violent Revolution*, *The Indian National Congress*, *The Politics of Charkha*, *The Future of the Congress*, *The Fateful Year*, *Gandhi the Statesman*, *The Latest Fad*, *Basic Education*, *Where are we going*, *The Second Plan*, *The Gandhian Critique*, *Planning, Pomp and Poverty*, *Voice of Vigilance*, *Current Affairs*. Address: Shri Gandhi Ashram, Lucknow.

\* It is reported that Mr. Richard Dvorak has been nominated the next Ambassador to India (June 1967).



**KRIPALANI, Smt. Sucheta, M.A.** (Delhi Univ.), Ex-Chief Min. Uttar Pradesh *b.* 1908; *Educ.*: Lahore and Delhi. Acted as Secy., Women's Deptt., A.I.C.C., 1941-42; imprisoned in connection with the freedom struggle, 1940-41 and 1943-45; appointed Organising Secy., Kasturba Memorial Trust, 1945; elected member, Constituent Assembly, 1946; subsequently elected M.P.; delegate to the Gen. Assembly of the U.N.O., 1949; Member, Cong. Wkg. Cttee. (National Exec.), 1948-51; resigned from the Cong. June 1951; joined the Kisan Mazdoor Praja Party; was member, National Exec. of the Party; was elected member, National Exec., P.S.P. Elected to Lok Sabha in 1952 and 1957; rejoined the Cong.; Gen. Secy., Indian National Cong., 1958-60; re-elected M.L.A., U.P., 1962; Min. for Labour, U.P., 1960-63; elected Leader, U.P. Legis. Cong. Party, Sept. 21, 1963; Chief Minister, U.P., 1963-67. *Address*: 11, Gautam Pali, Lucknow.

**KRISHEN, Prem, B.A.** (Hons.) (History) (Delhi), I.C.S., Secy. to the Govt. of India, Min. of Works, Housing and Urban Development, since June 1964. *b.* Nov. 20, 1911; *Educ.*: St. Stephen's Coll., Delhi; Christ Church Coll., Oxford. Joined I.C.S., Sept. 4, 1935; starting as Asstt. Collector and Magistrate, Muzaffarnagar in 1935, held important positions in U.P. and Govt. of India till he became Dy. Secy., Dept. of Health in 1945; First Secy., Embassy of India: Moscow, 1947-48; Kabul, 1948; Dy. Secy., Min. of External Affairs, 1948-50; Head of the Indian Military Mission in Berlin, 1950-52; Envoy Extr. and Min. Plenipot., Legation of India, Bonn, 1951-52; Min. Charge d'Affaires, Embassy of India: Rome, 1952; Prague, 1953; Jt. Secy., Min. of Ext. Affairs, 1953-56; Commissioner for India in British East and Central Africa and Consul-General for India in Belgian Congo and Ruanda Urundi, 1956-58; Jt. Secy.; Min. of Rehab., 1959-62; Min. of Works, Housing and Rehab., 1962; Min. of Works and Housing, 1962-64; Addl. Secy., Min. of Works and Housing, 1964. *Address*: 2-A, Kautilya Marg, Chanakyapuri, New Delhi.

**KRISHNA, Kanwal, Painter**; Head of the Art Deptt., Modern School, New Delhi, since June 1953. *b.* Jan. 3, 1910 in Montgomery, West Punjab; *Educ.*: Lahore; Engg. Coll., Banaras; School of Art, Calcutta, was the first Indian war artist to be Commended by the Army to paint the battle scenes during the Kashmir operations, 1948; three of his new experiments on the technique in etching and engraving were exhibited in the Intl. Graphic Art Exhibition, Switzerland, 1958; awarded Governor's Gold Medal for experiments in Graphic Art, 1961; held exhibitions of his graphics in Nepal, 1916; Afghanistan, 1962, Japan (Museum of Modern Art of Tokyo), Nov. 1962; held solo-exhibition of his paintings, Calcutta, Dec. 1962. Participated in the Intl. exhibition of graphics in Yugoslavia and Australia, 1963; in the Intl. biennale exhibition of art at Sao Paulo in Brazil and won an award, 1963; invited by the N. Y. Univ. on a lecture-cum-demonstration tour of U.S.A., 1964. *Publications*: Contributed several articles to imp. journals in India and abroad. *Address*: Head, Art Department, Modern School, New Delhi.

**KRISHNAMACHARI, Tiruvallur Thattai, Ex-Min. for Fin., Govt. of India**; Ex-Member, Ping. Commn. *b.* Nov. 26, 1899; *Educ.*: Madras Christian Coll., Madras. Entered business, 1921; was elected rep. of the Indian Commerce Constituency to the Madras Leg. Assembly, 1937 and played a prominent part in leg. and other work in the Madras Assembly during the time of the Cong. Min.; elected to the Central Assembly in Oct. 1942 in bye-election for Tanjore-Trichinopoly non-Mohammedan Rural Constituency and was a prominent member in the last Central Assembly; elected member, Constituent Assembly of India, 1946; member, Drafting Cttee. of the

Indian Constitution; Min. for Commerce and Industry, Govt. of India, May 1952-Aug. 31, 1956; was Min. for Iron and Steel in addition, June 1955 to April 1957; Union Fin. Min., Sept. 1, 1956-Feb. 14, 1958; resigned Ministership, Feb. 14, 1958; elected unopposed to Lok Sabha from Tiruchendur Constituency, Feb. 1962; Union Min. without portfolio, June 8 to Nov. 14, 1962; Union Min. for Eco. & Defence Coordination, 1962-63; Union Min. for Fin., Aug. 1963-Dec. 1965; resigned from the cabinet, Dec. 31, 1965; has extensively travelled abroad; attended the Commonwealth Prime Ministers' Cfee. in London, July 1964; attended the meeting of the World Bank and the I.M.F., Aug. 1964. *Address*: Tambaram (East), Madras 59.

**KRISHNAN, Mr. Justice Harikesanalar Ramasastry, B.A.** (Madras), M.Sc. (Banaras), I.C.S., Judge, High Court, M.P., since 1958. *b.* Jan. 9, 1910; *Educ.*: T. H. School, Ambasamudram; Hindu Coll., Tirunelveli; Presidency Coll., Madras; Banaras Hindu Univ.; Sidney Sussex Coll., Cambridge. Joined the I.C.S., 1935; S.D.O. and Dt. Judge at different places in Bihar; Law Secy. to the Orissa Govt., Judicial Commr., Vindhya Pradesh, 1950-53; Jt. Secy., Union Min. of Law, (1953-57). *Publications*: Occasional articles in newspapers and magazines. *Address*: Indore.

**KRISHNAN, M. K., Minister for Forests and Harijan Welfare, Kerala, since March 1967.** *b.* 1924; *Educ.*: Completed B.Sc. course. Took part in politics and social work while a student; was active in the Students Federation; joined the Communist Party of India as a full-time worker, 1947; went underground to evade arrest, 1948-50; worked for some time as an Asstt. Chemist in Bangalore, 1951; Pres., Edavanakkat Panchayat, 1953-61; detained in jail, Feb. 1965 to April 1966; is Secretariat member, Ernakulam Dist. Cttee., C.P.I. (Marxist); elected to the Kerala Assembly from Kunnathunad Constituency, 1967. *Address*: Minister for Forests and Harijan Welfare, Kerala, Trivandrum.

**KRISHNAN, Dr. Maharejapuram Sitaram, M.A.** (Madras), A.R.C.S., D.I.C., Ph.D. (London), Hon. Prof. of Geology, Osmania Univ., Hyderabad. *b.* Aug. 24, 1893; *Educ.*: St. Joseph's Coll., Tiruchirappalli; Presidency Coll., Madras; and Imperial Coll., of Sc. and Tech., London. Dir., Indian Bureau of Mines, 1948-51; Fellow of the National Instt. of Scs. of the Indian Academy of Scs. and of several geological and mineralogical societies at home and abroad; member of several Govt. Research Cttees.; Dir., Geological Survey of India, 1951-55; Gen. Pres., Indian Sc. Cong., 1956; Jt. Secy., Min. of Nat. Resources, 1955-57; Dir., Indian School of Mines, 1957-58; Head, Dept. of Geophysics, Andhra Univ. 1959-61; Dir., National Geophysics Research Instt., 1961-63. *Publications*: *Geology of India and Burma* (Madras 1943, 4th edition, 1960); *Introduction to the Geology of India* (Madras 1944, 1951, 1959); *Geology of Gangpur State, Orissa* (1938); *Mineral Resources of Madras* (1952); *Structural & Tectonic History of India* (1953); More than 100 other papers on geological topics. *Address*: C/o Geology Dept., Osmania University Campus, Hyderabad 7.

**KRISHNAN, Ramanathan, M.A., Padma Bhushan** (1967), Helms World Trophy for the Foremost sportsman from Asia of 1966, a leading tennis player; Gen. Mgr., Madras Cylinder Gas Co. *b.* April 11, 1937; *Educ.*: Loyolla Coll., Madras. National Lawn Tennis Champion of India, 1954, 1957, 1959, 1960, 1961, 1963, 1964 & 1965. Wimbledon Junior Lawn Tennis Champion, 1954. Won the London Grass Court Championship, & the American Hard Court Championship, 1959; won the Lawn Tennis Championship of Asia, 1959, 1963, 1964 & 1965; was the first Indian to enter semi-finals at Wimbledon, 1960 & 1961; has played for India in the Davis Cup since 1953; ranked as India's No. 1 since 1953.

*Address*: 'Ram Nivas,' 37, Thiruvengkatam Street, Raja Annamalaipuram Post, Madras 28.

**KULKARNI, K. S., G.D. Art, Painter & Sculptor.** *b.* April 7, 1918; *Educ.*: G.D. Art from Sir J. J. School of Art, Bombay, 1940; was mural decoration scholar awarded by Bombay Govt.; Research Scholar, Sir Ratan Tata Trust for Indian Painting, 1940-41; held one man shows of his paintings in India & in the United States & European Countries; represented India at the Intl. Arts Programme in the U.S.A., 1950-51; has travelled widely and exhibited his works in the Middle-East, Europe, America, South America, Canada, Mexico, Japan and South-East Asia, 1958-59; a Founder member and Chairman of the Delhi Silpi Chakra; executed imp. mural and sculpture work in India and abroad—Art adv. to the Children's Book Trust; Dir., Art Dept. and Founder-member, Triveni. *Publications*: *Human form in Indian Sculpture*. *Address*: Triveni, Tansen Marg, New Delhi.

**KULKARNI, Waman Laxman, M.A., B.T., Marathi Writer**; Prof. & Head of the Deptt. of Marathi, Marathwada Univ., since 1959; Chairman, Board of Editors, Marathwada Univ. Journal. *b.* April 6, 1911; *Educ.*: Govt. High School, Nasik; Wilson Coll., Bombay; won the Chiplunkar Marathi prize. Elected: Sectional Chairman, Criticism Sec., 39th All India Marathi Sahitya Sammelan, Aurangabad, 1957; Chairman, Fiction Sec., 40th A.I.M.S.S., Malwan, 1958; Pres., 43rd AIMSS, Hyderabad, 1965; Prof. and Head of the Dept. of Marathi, Wilson Coll., Bombay, 1944-59; member, State Board of Literature & Culture, Maharashtra; member, Univ. Broadcasts Consultative Panel etc. *Publications*: *Woman Malhar*; *Wangmaya-darshan*; *Wangmayatil Wadasthale*; *Wangmayeen Male ani Malabhed*; *Wangmayeen Teepa ani Tippani*; *Wangmayeen Drishhti ani Drishtikon*; *Sahitya ani Sameeksha*; *Natakhar Khadilkar*; *Ek Abhyasa*; *Marathi Dnanaprasarak Itihasa Ani Wangmaya-Vichara*, etc. *Address*: Marathi Dept., Marathwada University, Aurangabad (Dn.).

**KUMAR, Jitendra, B.A. (Hons.) (Calcutta), Viswabharati Diploma in Fine Arts, Sculptor**; Head, Fine Arts & Music Deptt., Gorakhpur Univ. *b.* June 25, 1922, at Nalibabad; *Educ.*: Shiksha Bhavan & Kala Bhavan, Santiniketan; Viswabharati. Held his 1st one man show at Mussoorie, 1952; won All-India prizes for his sculptures in wood at Bombay, 1955, '57 & '58; awarded by Lalit Kala Akademi the President's award for his sculpture 'Dipping Hair', 1956; also won State Lalit Kala Akademi Award 1964 for the sculpture 'Toilet'; member, cultural delegation to China, 1956; two of his sculptures have been sent by the Govt. of India to S. E. Asia & Europe for touring exhibition; works in stone, wood, concrete, oil, water colour, etchings & woodcuts; member: Adv. Cttee., Govt. Coll. of Arts & Crafts, Lucknow; Board of Studies, Fine Arts, Banaras Univ.; ex-member, Faculty of Fine Arts, Banaras Univ. *Address*: C/o Gorakhpur University, Gorakhpur, U.P.

**KUMAR, Naresh, B.Com., Leading tennis player**; Business man. *b.* Dec. 22, 1928; *Educ.*: St. Xavier's Coll., Calcutta; Govt. Coll., Lahore. National Junior Tennis Champion, 1945, 1946; ranked India's No. 1, 1951-52; member of Indian Davis Cup Team, 1952-53-54-55-56-57-58-59-60-61; Captain, Indian Davis Cup Team, 1955-56-57-58-59-60; winner of Irish Championships, 1952 & 1953; ranked India's No. 2, 1955-56, 1958-59; Winner of: Essex Championships, 1957; National Championships of India in doubles with R. Krishnan, 1956-57-58-59 & 64 and with S. P. Misra, 1965; North of England Championships, 1957, 1958, and 1959 in doubles; Mixed Doubles Championships with Mrs. K. Singh, 1956-57-58-59; reached mixed doubles quarter-finals at Wimbledon with



Miss E. Buding (Germany), 1957; reached men's doubles quarter-finals with R. Krishnan, Wimbledon after beating holders G. Mulloy & B. Patty, 1958; won doubles championships of Moscow with A. Huber (Austria), 1957; Asian Doubles Champion with Krishnan, 1962-63 & 1963-64; received the Arjuna Award, 1962 in Lawn Tennis from the Govt. of India. *Address*: 1-A, Russell Street, Calcutta.

**KUMARAMANGALAM, Gen. P. P.**, D.S.O., Chief of the Army Staff, Indian Army, since June 10, 1966. *b.* July 1, 1913. Commissioned in the Indian Army, Aug. 29, 1933; attended a course at Larkhill, U.K., 1933-34; intelligence course at Poona, 1937 & basic para course at Chakala, 1947; was imprisoned twice in the West Asian operations; was a prisoner of war in Italy, 1942; escaped and again imprisoned in Germany; returned to India, 1945; member, Briggs. Cttee. as Lt. Col., 1945; commanded 9 Independent Heavy Anti-Aircraft Regt. and 12 Parachute Field Regt. 1945-47; attended the advance artillery officers' course at the Field Artillery School, Oklahoma, U.S., 1947-48, apptd. Commandant, Artillery School, Deolali in the rank of Brigadier, July 1948; Brigadier, Artillery Hqrs., Western Command, Aug. 1950; Dir. of Artillery, Army Hqrs., 1950-55; Commander of an independent para brigade, 1955-56; promoted Maj.-Gen. and apptd. Commander of an infantry divn., 1956-59; Commandant, Defence Services Staff Coll., Wellington, 1959; Adjutant Gen. in the rank of Lt.-Gen., Army Hqrs., Oct. 1959-May 1963; G.O.C.-in-C, Eastern Command, May 1963-Nov. 1964; Dy. Chief of the Army Staff, Nov. 1964-Jan. 15, 1965; awarded Distinguished Service Order for his role in the operations in the Second World War; Vice-Chief of the Army Staff, Indian Army, Jan. 15, 1965-June 10, 1966; visited U.S.S.R., Sept. 1966. *Address*: Army Headquarters, New Delhi.

**KUMARAYYA, Mr. Justice Nampalli, B.A.**, LL.B., Judge, High Court of Andhra Pradesh, Hyderabad, since October 23, 1957. *b.* June 15, 1909; *Educ.*: B.A. from Osmania Univ., Hyderabad, 1929. Munsif Magistrate, Hyderabad, 1935; Divisional and Sessions Judge, 1948; entrusted with various additional duties, 1949-55; appointed Special Judge for Lalk Ali's escape case and other Ex-Ministers' case; Pres.: Industrial Tribunal, 1949-50; Election Tribunal; Agricultural Income-tax Tribunal; Advisory Board under Hyderabad Public Security Measures; member, Advisory Board to the Govt. constituted under the Preventive Detention Act; Chairman, Wage Board for some of the industries in Hyderabad State; Judge, Hyderabad High Court, 1955. *Address*: 14-A, Maredpally East, Secunderabad.

**KUNDU, Dr. B. C.**, M.A., Ph.D. (Leeds), F.L.S., F.B.S., F.N.I., Jt. Dir., Bose Research Inst., Calcutta, since 1965. *b.* April 1905; *Educ.*: Calcutta Univ., Calcutta; Leeds Univ., England; Sir Rash Behari Ghosh Research Scholar, Calcutta Univ., 1928-30. Prof. of Botany Presidency Coll., Calcutta & Hon. Lecturer, Calcutta Univ., 1939-45; Dir., Jute Agri. Res. Inst., 1946-60; Pres., Botany Sec., Indian Sc. Cong., Hyderabad Session, 1954; Bengal Botanical Soc., since 1957; member: Council, National Inst. of Sci. of India, since 1958; Council, Indian Sc. Cong., 1955-57; Cttee., Indian Sc. News Assoc.; Medical Plants Cttee., I.C.A.R.; Head of the Dvn. of Botany, Central Drug Research Inst., Lucknow, 1960-65. Has toured S. African & North American countries. *Publications*: Several text-books on botany and biology; *Jute in India—a monograph*; monograph on Indian Charophyta; about 150 papers on Plant Anatomy, Plant Breeding, Systematic Botany, Medicinal Plants, etc. *Address*: 332, Lake Town, Calcutta 28.

**KUNJU, P. K.**, Minister for Finance, Kerala State, since March 1967. *b.* 1906, in Kayamkulam. *Educ.*: Aligarh Univ. Even while a

student participated in the historic "Vaikom Satyagraha"; joined the Indian National Congress at an early age; imprisoned in the Travancore State Congress Movement; was Pres., Travancore Labour Assoc.; was D.C.C. Pres., and Chief Whip of the Congress Assembly Parl. Party, 1939; took active part in the freedom struggle; Jt. Secy., All Travancore Joint Political Congress (Samyukta Party) and the whip of its Parl. Party in the Assembly, 1937; resigned from the Congress, 1945; Gen. Secy. and Pres., Travancore State Muslim League; Pres., Travancore-Cochin Muslim League, 1952; joined the P.S.P., 1953; was elected its Treasurer; Minister for Labour, Medical and Local Bodies, Travancore-Cochin, 1954; Treasurer, P.S.P., Kerala State, 1957-61; elected Dy. Leader, Parl. Party of the P.S.P.; elected to the Leg. Assembly six times; was Chief Editor, *Rajyabhimani* and *Swaraj* (weeklies) and *Kerala Janatha* (daily); elected Vice-Chairman, All India Coir Board, 1960; elected Chairman, Kerala Wakf Board, 1960-65; elected to the Assembly, 1967. *Address*: Trivandrum.

**KUNTE, Dattatraya Kashinath, B.A., LL.B.** (Bom.), Davar Gold Medalist for standing 1st in the 1st LL.B. Examination, 1929, Social Worker. *b.* Oct. 27, 1908; *Educ.*: John Elphinstone High School, Alibag; B.A. from Wilson Coll., Bombay, 1928 and LL.B. from Govt. Law Coll., Bombay, 1930. Joined C.D. Movement, 1930; courted jail in 1930, 1932, 1940 and 1942 Movements; Secy., Maharashtra Provincial Conference, Panvel, 1932; Member, A.I.C.C., 1934-36 and 1946-56; Pradesh Exec. 1946-56; organised 'Rashtratej' a weekly at Alibag, 1935; elected M.L.A., Bombay, from Kolaba Constituency, 1937-40 and 1946-52; took leading part in the passing of Tenancy Act and the Agricultural Debtors Relief Act; Secy., Leg. Congress Party, 1939; Parl. Secy. to the Chief Minister, Bombay State, 1946-52; organised Home Guards, Dist. Rural Devpt. Boards and ran the Accommodation Control Deptt.; member; Senate, Univ. of Bombay, 1937-40; Exec. Council, Univ. of Poona, 1948-52; elected to the State Legislature from Alibag, 1952; Speaker, Bombay Leg. Assembly, 1952-56; attended Commonwealth Parliamentary Association Meeting at Montreal, Canada, 1952; Pres., Indian National Theatres, 1952-59; did trade union work in Bombay State, 1957-62; Chairman: Maharashtra Housing Board, 1962-64; India Films Awards Cttee., Bombay, 1963; Member, Working Group for the Fourth Plan, Khadi and Village Industries, 1964; Secy., 1961-63 and Vice Pres. since 1963, Asiatic Society of Bombay; Vice-Pres., Bombay Marathi Grantha Samgrahalay, since 1961; Chairman, Bennett, Coleman & Co. Ltd., since Oct. 1966. *Address*: 10, Jes Ville, 3rd Floor, Opp. Liberty Cinema, Bombay.

**KUNZRU, Pandit Hriday Nath, B.A., B.Sc., LL.D. (Hon.)**, Pres., Servants of India Soc., since 1936. *b.* 1887; *Educ.*: Allahabad Univ.; London School of Economics. Joined the Servants of India Soc., 1909; member: U.P. Leg. Council, 1921-23; Indian Leg. Assembly, 1927-30; Indian Constituent Assembly and the Prov. Parliament; Council of State, 1937-46; Pres., East African National Cong., 1929; National Liberal Federation, 1934; member, States Reorg. Commn.; Leader, Indian Delegation to: South Africa, 1950; Member (Rajya Sabha) 1952-62; Pres.: 1955; Indian Council of World Affairs, Indian School of Int'l Studies, 1948; Anjuman-e-Tarraque-e-Urdu, India; Gen. Secy., All India Seva Samity; member: Univ. Grants Commn.; Exec. Councils of Delhi and Banaras Univs.; National Commr., Bharat Scouts and Guides 1950-57 & 1961-63; Chairman, Rly. Accidents Cttee. (1962); Vice-Pres., Univ. Film Council & Bharatya Adamjati Sevak Sangh. *Address*: Sapru House, Barakhamba Road, New Delhi; 1, P. D. Tandon Road, Allahabad, U.P.

**KURUP, G. Sankara, Jnanpith Award (1965)**, Sahitya Salahkar, AIB, Malayalam Writer; Editor, *Thilakam*; Pres., Kerala Sahitya Samithi; Member: Kerala Sahitya Akademi; Adv. Board of Sahitya Akademi. Hon. member, P.E.N. (India). *b.* June 1901; *Educ.*: mostly privately after High School Course. Joined service as teacher, 1921; began publishing poems from the 17th year; was Malayalam Prof., Maharaja's Coll., Ernakulam; got the National Award from the Central Sahitya Akademi for the collection of poems 'Viswadarsanam' in 1964; won the Bharatiya Jnanpith award of Rs. One lakh for his book 'Odakkuzhal', Dec. 29, 1965. *Publications*: Poems: *Sahitya Kautukam*; *Viswadarsanam*; *Moon-naruvayum oru Puzhayum*; *Vanagayakan*; *Suryakanti*; *Patheyam*; *Odakkuzhal*; *Navathithi*; *Muthukal*; *Ithalukal*; *Antardaham*; *Nimisham*; etc.; Translations: *Meghachaya*. Megha Dutha; *Vilasahari*, Omar Khayyam, Gitanjali and Ekotharasathi from Bengali; One Act Plays: *Irutinumunpu*; *Sandhya*; etc.; Prose: *Gadyopaharam*; *Lekhamala*; *Rakknyilukal*; *Muthum Chippiyum*; Children's poems: *Ilamchundukal*. *Address*: Bhadrarayam, Ernakulam.

**KURUP, Thakazhi Poyippilli Kalathi Kunju, Padma Shri (1965)**, Kathakali Natyaachariyan, Kalathilakam by the Zamorin of Kozhikode. *b.* March 20, 1880; *Educ.*: About 12 years at Thakazhi, under Chabbakkulam Sanku Pillai and another 12 years under M. M. J. Namboodiripad. Is a leading Kathakali dancer in India; spent the early part of his life in Travancore and then settled down in Malabar with Kathakali as his chief profession; worked with late Poet Mahakavi Vallathol; got appreciation from Tagore, Nehru, Prithviraj Kapoor; prominent disciples—Ramgopal, Mrinalini Sara Bai, Gopinath, Tara Chowdri, Ananda Sivaram, Kalamandalam Madhavan, Kalamandalam Krishnan, Santa Rao, Hari; conducts a Kathakali School at Kottayam. *Address*: Lakshmi Vilas, P.O. Kottayam, (via) Palghat.

**KUTCH Lt.-Col. H. H. Maharaja Dhiraj Mirza Maharao Shri Madansinhji Savai Bahadur, Maharao of b. Oct. 12, 1909**; Heir-Apparent, Maharaj Kumar Shree Prithvirajsinhji; *Educ.*: Privately. Transferred Kutch State to the Govt. of India on June 1, 1948, following the independence of India on Aug. 15, 1947 and in conformity with the policy of the unification of the States with the Indian Union; has travelled widely in Europe, U.S.A. and Africa; served for 3½ years with the Indian High Commn. in London with rank of Min.; India's first Amb. to Norway, 1956-60; Amb. to Chile, 1960-61. *Address*: Bhuj, Kutch.

**LAHIRI, Dr. Adinath, M.Sc., Ph.D. (Lond.)**, F. Inst. Fuel, F. Inst. Pet., F.R.I.C., M.I.E., F.N.I., Padma Sri (1960), Dir., Central Fuel Research Instt. of India, since April 1954. *b.* Aug. 24, 1916; *Educ.*: Presidency Coll., Calcutta; Imperial Coll. of Sc. and Tech. as Sir T. N. Palit Foreign Scholar for higher research. Conducted research at Royal Coll. of Sc., 1938-42; Senior Scientific Officer, Royal Aircraft Estab., Farnborough, U.K. 1942-45; Council of Scientific & Industrial Research of India, Central Fuel Research Instt., 1945; member, Council of Instt. of Engrs. India; Chairman: Commonwealth Fuel Research Cttee. (1963-68); Instt. of Fuel (U.K.) in India; Dir.: Board of Durgapur Projects Ltd. (W. Bengal); Board of National Coal Devpt. Corp'n. Ltd. *Publications*: Over 400 Research papers on various aspects of Fuel Technology and in Geochemistry, Physical Chemistry, Geology, etc. *Address*: Central Fuel Research Institute, Dhanbad Dist., Bihar.

**LAJDAWALA, Dhansukhlal Tulsidas, M.A., LL.B., Ph.D.**, Director, Deptt. of Economics, Univ. of Bombay, since 1966. *b.* Oct. 4, 1916; *Educ.*: Bombay. Prof. of Economics, since 1954; was Hon. Dir., Economic Survey of Greater Bombay; Consultant at ECAFE to the Economic Survey Branch, 1962; Hon.



Secy. & Treasurer, Indian Economic Assoc.; Pres., Indian Economic Assoc., 1964; Chairman, Cost of Living Index Cttee., Govt. of Maharashtra; has worked as member and Chairman of several other Cttees. appointed by Central & State Govts.; is member: Central Wage Board for Port & Dock Workers; Review Cttee. for the Tariff Commission; Board of Directors, L.I.C.; Local Board, State Bank of India; Editor, *Indian Economic Journal*; Thesis on "Justice in Taxation in India" (with special reference to Gujarat), 1943; twice the recipient of Dadabhoi Naoroji Award for meritorious work in the field of Economics. *Publications*: Books: *Taxation & the Plan, Small Industry in a Big City, Work, Wages and Well-being in a Metropolitan City (Jointly)*, etc. several articles. *Address*: Deptt. of Economics, Univ. of Bombay, Bombay.

**LAKSHMANAN, Major-General Cheruvai Kottith, L.M.S. (Mad.), M.R.C.S. (Lond.), D.T.M. & H. (Lond.), D.P.H. (Eng.), Padma Bhushan (1967), Secy.-Genl., Indian Red Cross Soc.; Hon. Secy., Hind Kusht Nivaran Sangh. b. April 5, 1898; Educ.: Madras Christian Coll.; Madras Medical Coll., St. Bartholomew Medical Coll. and Hospital, London. In the I.M.S., 1925-47; Dir., All-India Instt. of Hygiene & Public Health, Calcutta; Spl. Consultant to U.N.I.C.E.F. to assess child health needs in South East Asia; member, Indian Delegation to World Health Assembly at Geneva, 1950, 1954, 1957 and Mexico, 1955; Delegate to the Sessions of W.H.O. Regional Cttee. for S. E. Asia held in Ceylon, 1950, Rangoon, 1951, Bandung (Indonesia), 1952 and New Delhi, 1954; attended the first and second sessions of the W.H.O.'s Expert Cttee. on Int'l Quarantine at Geneva, 1953 and 1954; Dir. Genl. of Health Services, Govt. of India, June 1952-Feb. 1958. *Address*: 1, Red Cross Road, New Delhi 1.**

**LAKSEMIKANTEAM, Pingali, M.A. (Madras), Telugu Writer. Prof. and Head of the Dept. of Telugu, S. V. Univ., Tirupati. b. Jan. 10, 1894; Educ.: Hindu High School, Masulipatam; Noble Coll., Masulipatam. Research Fellow, Madras Univ.; and Head of the Deptt. of Telugu, Andhra Univ.; Member, Gen. Council of the National Academy of Letters; elected as a member of the Exec. Board of the Academy; Literary Producer, A.I.R., Vijayawada. *Publications*: *Poetry Tolakari* (Lyric) and *Soundaranandam* (Epic) (both in collaboration with Katuri Venkateswararo). *Prose*: *Gouthama Vyasamulu* (Essays); *Goutama Nighantu* (English-Telugu Dictionary); *Palanati Veera Charitra* (Historical Ballad of 15,000 lines); *Madhura Pandita Rajam* (Poetry). *Address*: Sri Venkateswara Univ., Tirupati.**

**LAL, Muni, M.A. (Philosophy), High Commr. for India, Port of Spain, Trinidad. b. Jan. 11, 1913; Educ.: Punjab Univ. Was on the Editorial Staff of the Civil and Military Gazette, Lahore; joined the I.F.S., 1947; served in Pakistan, Australia, U.S.A., Indonesia and in the U.K.; was Dir. Indian Information Service, London and Washington; Dir. Min. of Ext. Affairs, 1961; played regularly for Northern India in the cricket Championship of India for the Ranji Trophy, 1932-47; repd. his State against all foreign visiting teams, 1932-47; captained the Punjab Univ., 1935; Vice-Captain, Northern India Cricket Assoc. team, 1936-37; captained the Govt. Coll. Cricket team, 1935. *Publications*: *Schopenhaur, the Sage of the West. Address*: High Commissioner for India, 3rd Floor, Salvatori Building, Port of Spain, Trinidad.**

**LAL, Air Marshal Pratap Chandra, Padma Bhushan, Mg. Dir., Hindustan Aeronautics Ltd., since Sept. 1966. b. Dec. 6, 1916, at Ludhiana. Educ.: Delhi; graduated from King's Coll., London. Obtained amateur pilot's licence, 1934; Commnd. in the I.A.F., in Nov. 1939. Navigation and Flying Instructor, No. 1 Service Flying Trg. School and No. 152,**

Operational Trg. Unit; posted to No. 7 Squadron, Oct. 1943; assumed command of the squadron, June 1944; took it into Burma for a second tour, 1945; was mentioned in despatches and awarded D.F.C. for his part in the operations of 1944 and 1945 from north Burma to Rangoon; did a course at the RAF Staff Coll., Andover; held several senior appts. including those of Dir. of Plans at Air Hqrs., Dy. Secy. (Military) to the Cabinet and A.O.C. Trg. Command; was a member of several Govt. Missions abroad; Gen. Mgr., Indian Airlines Corp., 1957-62; was concurrently member, Board of Dir.s, IAC and Air India; returned to the I.A.F., 1963; held the posts of Air Officer incharge of Maintenance at Air Hq., A.O.C.-in-C., Western Air Command, was Vice Chief of the Air Staff till Sept. 1966; awarded Padma Bhushan for distinguished service of a high order during the recent Indo-Pakistan conflict. *Address*: Bangalore; New Delhi.

**LALBHAI, Kasturbhai, Industrialist and Banker; Director of 20 concerns, such as Textile, Insurance, Electricity, Steamship etc.; All India Council for Technical Educ. from 1955; Planning Cttee., W. Region, Govt. of India from 1955; Chairman, Governing Body of Ahmedabad Educ. Society. b. Dec. 19, 1894; Educ.: Govt. R.C. High School and Gujarat Coll., Ahmedabad. Pres.: Ahmedabad Mill-owners' Assoc., 1933-35, F.I.C.C.I., 1934-35; Council of Adm. of the Ahmedabad Textile Industry's Research Assoc. since 1947; Chairman, West Coast Kandla Port Devpt. Cttee., appointed by the Govt. since 1948; Member: C.S.I.R. Board and Governing body from 1940; Senate, Gujarat Univ. from 1950; Leader and Pres., Jain Community in India; Leader of the Indian Delegation, Industrial and Agricultural Delegation to the U.S.S.R., 1954; Patron, Ahmedabad Educ. Society 1935-60; Dir., Reserve Bank of India, 1937-49 and 1957-60; Chairman: Indian Instt. of Tech., 1955; Governing Trustees, Kasturba Gandhi National Memorial Trust, 1957; member: Indian Investment Centre, 1960; Cotton Textile Consultative Board; leader of delegation for discussions with the Cotton Board, Lanchashire, 1964 & 1965. *Address*: Pankore's Naka, Ahmedabad; Shahibag, Ahmedabad.**

**LALCHAND HIRACHAND, B.A., Industrialist; Pres.: Indian Merchants Chamber, 1959; Maharashtra Chamber of Commerce, 1960-64; Maharashtra Economic Devpt. Council, 1962-63; Chairman: The Premier Automobiles Ltd., Indian Hume Pipe Co., Ltd.; Bombay Cycle and Motor Agency Ltd., etc.; Dir.: The Premier Construction Co. Ltd., Hindustan Construction Co. Ltd., Walchandnagar Industries Ltd., Cooper Engg. Ltd., etc., Pres.: Indian Sugar Mills' Assoc., 1943-44; Deccan Sugar Technologists' Assoc., 1943-50; Chairman, Deccan Sugar Factories Assoc., 1943-45; Pres.: The Automotive Manufacturers' Assoc. of India, 1954-59; Assoc. of Indian Automobile Mfrs., 1960-61; member: Bombay Leg. Council, 1939; Rajya Sabha, 1952-58; was member: Import Advisory Council of the Govt. of India. *Address*: Office: Construction House, Ballard Estate, Bombay 1; Residence: Neela House, Pedder Road, Bombay 26.**

**LALL, Diwan Chaman, B.A. (Oxon.), Bar-at-Law, M.P. (Rajya Sabha), Ex-Ambassador of India in Turkey. b. Oct. 30, 1892. Educ.: Jesus Coll., Oxford; Middle Temple, London; Paris. Started as a journalist; was editor, *Coterie*, London, Asstt. Editor and chief leader writer, *Bombay Chronicle*; founded the A.I.T.U.C., 1920; Pres., A.I.T.U.C., 1927; Founder and ex-Pres., Federation of Posts and Tele. Unions, All India Telegraph Workmen's Union, and many other all India Trade Unions; M.L.A. (Central), 1924-31 and 1945-48; member, Constituent Assembly of India, 1946-48; M.L.A., Punjab, 1937-45; Pres., Indo-Afghan Friendship Society and other similar organisations. Chairman: Cttee. of**

Indian Parliamentarians for Peace; All-India Peace Council, 1964; member, India's Parliamentary Conference Delegation to U.K., 1962; led goodwill mission to Socialist Countries, 1963. *Publications*: Author of *Coolie—The Story of Capital and Labour in India* (2 Vols.); *Visiting the Soviet Union*; Poems: *Old and New*; *The Nehru Doctrine and India's Role in the Contemporary International World. Address*: 30, Prithvi Raj Road, New Delhi 1.

**LANZA, H. E. Mr. Michele, Ph.D. (Turin), Ambassador of the Republic of Italy in India, since May 1965. b. June 8, 1906. Educ.: Doctor of Law, Turin, 1928. Joined the diplomatic service, 1930; Consular Attache, Moscow, April 1931-May 1934; Fourth Secy., London, 1934-37; Consul in Tunis since 1937 till posted as Second Secy., Italian Embassy, Berlin; interned by the Nazi authorities, Sept.-Dec. 1943; served in the Political Sec. of the Min. of Foreign Affairs, 1945-47; First Secy., Ankara, 1950-53; Min. Plenip. in Baghdad, 1954-58; Amb. in Rabat, 1958-64; with the Italian Delegation to the UNCTAD Cfee. in Geneva, March-June 1964. *Address*: 15/B, Motilal Nehru Marg, New Delhi.**

**LEONARD, Antony James William Simpson, M.C., Chief of Burmah-Shell Companies in India, and Chairman, Burmah-Shell Refineries Ltd., since March 1966. b. Jan. 16, 1917; Educ.: Scotland. After serving in the Army and Civil Service joined the Royal Dutch/Shell Group at the end of 1957 in the finance function; Finance Manager, Burmah-Shell of India 1964-66; Cttee. Member, Punjab & Delhi Chamber of Commerce; Governor, Adm. Staff Coll., Hyderabad. *Address*: 17, Aurangzeb Road, New Delhi.**

**LEROY, H. E. Mr. Jean, Doctor of Law, Licentiate in Economic and Political Sciences, Bachelor in Thomist Philosophy, Ambassador of Belgium in India and in Nepal, since March 26, 1965; Ambassador-Designate to Afghanistan. b. in Brussels, July 29, 1910; Educ.: Univ. of Louvain, Belgium. Entered Belgian Diplomatic Service, Jan. 1, 1945; First Secy., 1945; Counsellor, 1950; Permanent Rep. of Belgium to the European Bureau of U.N. and Specialized Agencies, Geneva, June 14, 1952; Charge d'Affaires in Bucharest, Dec. 3, 1956; Min. Plenip., Sept. 1, 1958; Amb. Extra. and Plenip. to Israel, Oct. 1, 1959; holds several Belgian and foreign hon. distinctions. *Address*: 24, Hardinge Avenue, New Delhi 1.**

**LOHIA, Dr. Rammanohar, M.P., founder, Socialist Party; Ex-Gen. Secy., P.S.P. b. 1910; Educ.: Bombay, Banaras and Calcutta; Doctor of Philosophy of the Berlin Univ. was leader of the Congress Socialist Party; Editor, *Congress Socialist* till 1939; organised the Foreign Deptt. of the A.I.C.C. at the invitation of Mr. Nehru; elected to the A.I.C.C., 1936; prosecuted for sedition in Calcutta, 1938; led 1942 underground movement; initiated Goa and Nepal struggles, 1946; Chairman, Congress Socialist Cfee., 1946; Gen. Secy., P.S.P., 1954; imprisoned for taking active part in the freedom movement; founded and formed the Socialist Party of India, 1956; elected to the Lok Sabha in bye-election from Farrukhabad constituency in May 1963; elected M.P. Lok Sabha from Kanauj Constituency, 1967; Chairman, Editorial Board, *Mankind and Jan* (Hindi monthly). Formulated theories of: *Twin origins of capitalism and imperialism*; *Small-unit machine*; *Equal irrelevance*; *The Third Camp*; *Immediacy*; *Oscillation between class and caste*; *Efficiency, total or maximum*; *Physical and cultural Approximation of mankind*, etc. *Publications*: Several books amongst them: *Wheel of History*; *Will to Power*; *Marx, Gandhi & Socialism*; *Gandhi & Socialism*; *Guilty Men of India's Partition*; *Address*: 7, Gurudwara Rakabganj Road, New Delhi.**

**LOKANATHAN,\* Dr. Palamadai S., M.A. (Madras), D.Sc. (Econ.), London, the Most Noble Order of the Crown of Thailand First Class, Dir.-Genl., National Council of Applied**

\* Is due to retire shortly as Dir. Genl., National Council of Applied Economic Research.



Economic Research, since 1956; Chairman, National Productivity Council, New Delhi, since Feb. 16, 1964. *b.* Oct. 10, 1894; *Educ.*: St. Joseph's Coll., Madras Univ., London School of Economics, Univ. of London. Prof. of Econ., Madras Univ.; Editor, *Eastern Economist*, 1943-47; Exec. Secy., U.N. Economic Commn. for Asia and Far East, Bangkok, 1947-56; Visiting Prof., Luxembourg Univ.; Chairman: Asian Productivity Organisation 1963; Advisory Board, Demographic Research and Trg. Centre; Export Incentives Cttee., Bd. of Trade; All India Board of Tech. Studies in Commerce, etc.; Pres., Madras Educ. Assn., New Delhi; Vice-Pres.: Indian Cttee. of the Afro-Asian Council; Indian Council of World Affairs; member: Court of Governors, Adm. Staff Coll. of India, Hyderabad; Devpt. Centre, O.E.C.D., Paris; Export-Import Advisory Council, Govt. of India; Adv. Cttee. on Economic Policy, Planning Commn.; Indian Instt. of Management, Calcutta; on Distribution of Income & Levels of Living, Png. Commn.; Bd. of Governors, Indian School of Intn'l Studies. *Publications*: *Industrial Welfare in India*; *Industrial Organisation in India*; *Indian Industry*; *The Supply of Entrepreneurs & Technologists*; *A Study of Saving in India*; *Indian Economic System*; *Report on Sales-Tax in Madras*; *Report on Taxation in Orissa*; *Report on Taxation in Andhra Pradesh*. Address: National Productivity Council, New Delhi 1; Res.: 5-B, Pusa Road, New Delhi 5.

**MADAN, Dr. Bal Krishna, M.A., Ph.D.** Executive Director representing India, Board of the I.M.F., since Jan. 1967. *b.* July 13, 1911; *Educ.*: Univ. of Punjab; Economic Adviser, Punjab Govt., 1940-41; Dir. of Research, R.B.I., Bombay, 1941-45; Secy., Indian Delegation to Intn'l Monetary Conf., Brettonwoods; Dy. Secy., Indian Tariff Board, 1945; Exec. Dir., I.M.F., 1948-50; Economic Adviser to R.B.I., 1950; member: Finance Commn., Indian Govt., 1952; Taxation Enquiry Commn. 1953-54; U. N. Experts Group on SUNFED, 1955; Principal Adviser, R.B.I., 1957-59; Dir., Indo. Fin. Corp. of India, 1959-64; member: Governing Body of Indian Investment Centre, since 1960; Exec. Dir., R.B.I., 1959-64; Pres., Indian Economic Assoc., 1961. Dy. Governor, the Reserve Bank of India and Vice-Chairman, Ind. Dev. Bank of India, 1964-66. *Publications*: *India and Imperial Preference—A Study in Commercial Policy*, 1939; *Aspects of Economic Development and Policy*, 1964. Address: International Monetary Fund, Washington.

**MADGULKAR, Vyankatesh Digambar,** Marathi Writer; Producer, Rural and Farm Forum Programmes, A.I.R., Poona. *b.* July 7, 1927; *Educ.*: Atpadi (South Satara). Published his first book, 1949; was awarded first prize thrice by the State for best books; has written extensively about village folk; his novel Banagarwadi has been translated into English entitled *The Village had no Walls*, Hindi and Gurumukhi. Many of his short stories have been translated into Hindi, Gujarati, etc. *Publications*: *Mandeshi Manse*; *Gavakadchya Gosti*; *Bangarwadi*, etc.; stories and screenplays for over a dozen Marathi pictures and a few folk plays staged in villages of Maharashtra. Address: Akshar, 110/10, Erandvana, Poona 4.

**MADIA, Chunilal Kalidas, B.Com. (Bom.),** Gujarati Writer of short stories, plays, novels etc.; Adv. member, Sahitya Akademi; Life Member, P. E. N. Intn'l; Film Writers Assoc.; Founder and Editor of *Ruchi* (a Gujarati Magazine). *b.* Aug. 12, 1922, at Dhoraji, Saurashtra; *Educ.*: Bhagvatsinhji High School, Dhoraji; H.L. Coll. of Commerce, Ahmedabad. Took to journalism and fiction writing while at college; awarded Narmand Gold Medal for best contribution to play-writing (*Rangada*) for the period 1947-51; travelled Europe, U.K. and U.S.A., 1955-56; Bombay Govt.'s first prize of Rs. 2,000 for best collection of short stories TEJ ANE

TIMIR, 1956; awarded Ranjitram Gold Medal by Gujarat Sahitya Sabha for outstanding achievements in creative literature, 1957. *Publications*: *Vyajano Varas*; *Liludi Dharati*; *Ghooghvatan Pur*; *Antasrola*; *Plays Rangada*; *Shoonyashesh*; *Jai Girnar*; *Aa Par, Pele Paar*; *Granthagarima*; *Chopatine*; *Bankadethi*; *Shreshtha Natikao*; Some novels screened into motion pictures. Address: B-213, 'Chandralok' Manav Mandir Road, Bombay 6.

**MAHAJANI, Dr. Ganesh Sakharan, B.A., (Bom.), M.A. (Cantab.), Ph.D. (Cantab.),** Smith's prizeman (1926), Vice-Chancellor, Udaipur Univ., since Nov. 1963; Life-member, Deccan Educ. Society, Poona; Ex-M.L.C., Bombay *b.* Nov. 27, 1898; *Educ.*: High School, Satara, Fergusson Coll., Poona, St. John's Coll., Cambridge; Duke of Edinburgh Fellow. Foundation Fellow of the Indian Academy of Sciences, Bangalore, and of the National Instt. of Science, Calcutta; Dean of the Faculty of Science, Bombay Univ., 1936-38. Principal and Prof., Fergusson Coll., Poona, 1929-45; Vice-Chancellor: Rajputana Univ., 1947-53; Delhi Univ., 1953-57; member, U.P.S.C., 1957-63. *Publications*: *An Introduction to Pure Solid Geometry, Contribution to Theory of Ferromagnetic Crystals* (published in the Transactions of the Royal Society, London); political pamphlets, e.g., *The Liberal Outlook, Liberals and the Congress, The problem of the Minorities and Constitutional Democracy as its Solution, Education and Democracy and The Defence Problem of India* and several others. Address: Udaipur University, Udaipur.

**MAHALANOBIS, Prof. Prasanta Chandra, M.A. (Cantab.), D.Sc. (honoris causa), F.R.S., Hon. D.Sc. (Cal. Univ.) 1957, (Delhi Univ.) 1964, Hon. Fellow, King's Coll. (Cambridge) 1958, Hon. Statistical Adv. to the Cabinet, since 1949; Hony. Secy. and Hony. Dir., Indian Statistical Instt., Calcutta, since 1931; member, Png. Commn., Govt. of India, since 1955. *b.* June 29, 1893, at Calcutta; *Educ.*: B.Sc. (Hons.) in Physics, Presidency Coll., Calcutta Univ., 1912; M.A., Cambridge Univ., 1915; Hon. Deshikottama (Visva Bharati) 1961; D.Sc. (Sofia State Univ. Bulgaria) 1961; F.R.S. 1945; Weldon Medal and Prize, Oxford Univ., 1944; Sir Debasprasad Sarbadhikari Gold Medalist of Cal. Univ. 1957; Foreign Member, U.S.S.R. Academy of Scs., 1958; Fellow, American Statistical Assoc., 1961; Foundation Fellow, National Instt. of Sc., India; its Pres. 1957-58; Chairman: U.N. Statistical Commn., 1954-58; Founder-Editor, "Sankhya", The Indian Journal of Statistics, since 1933; made scientific tours and gave lectures and held cfcs. at Univs., laboratories and other instts. in several foreign countries; Leader, Indian Delegation: Intnl. Statistical Cfee., 1947, '49, '51, '53, '55, '57, '58, '60, '61, '63, '65; Cong. of Mathematicians, 1950; Scientific delegation to the U.S.S.R. Academy of Scs., Moscow, 1951, '52, '54, '62. Address: 204, Barrackpore Trunk Road, Calcutta 35; 8, King George Avenue, New Delhi.**

**MAHAPATRA, Mr. Justice Harihar, B.A. (Hons.), M.A., B.L.,** Judge, Patna High Court. *b.* Nov. 3, 1904; *Educ.*: Ravenshaw Coll., Cuttack; Patna Coll.; Patna Law Coll.; B.A. (Hons.), 1925; M.A., 1927; B.L., 1931. Joined Bar at Cuttack, Orissa, 1931; Member of Senate and Syndicate, Utkal Univ., 1945-61; Delegate to World Univs. Cfee., Montreal, Sept.-Oct. 1958; visited several Univs. and High Courts in Canada, U.S., U.K., France, Germany, Denmark, Holland, Switzerland, Greece, Austria, Rome and Egypt; was Advocate-Gen., Orissa; Pres., Council of World Affairs, Patna; English Speaking Union of Commonwealth, Bihar Branch. Edited a vernacular monthly literary magazine, *JUGABINA*, 1932-38. *Publications*: *Sabuj Kabila* (Poem); *Basantl* (Novel). Address: Stoney Road, Cuttack 2; High Court, Patna.

**MAHARAJ, Birju, President's Academy Award (1964), Dir., Kathak Ballet Deptt., Bharatiya Kala Kendra, New Delhi; Dancer. *b.* 1937; *Educ.*: Vidyant Coll., Lucknow. Started learning dancing at the age of five from his father, late Achchan Maharaj; after his father's death, had also trg. from his uncles; gave his first performance at the age of seven at Jubilee Talkies, Delhi; became Teacher, Sangit Bharati, New Delhi, 1952; later joined the Bharatiya Kala Kendra; has danced in almost all places in India; toured Russia, U.S.A., Ceylon, Japan, Laos, Hongkong, Burma, Nepal, Afghanistan, etc. leading a delegation of the Kala Kendra troupe of dancers. Address: Jhanlal Phul, Bhaironji Road, Lucknow; Bharatiya Kala Kendra, 2, Mata Sundari Road, New Delhi.**

**MAHAPATRA, Nityananda, Minister for Supply & Cultural Affairs, Orissa, since March 1967. *b.* July 17, 1912. Joined Mahatma Gandhi's Salt Satyagraha (1930); was imprisoned several times during the freedom movement; Pres., Bhadrak Union Board, 1939; member, Balasore Dist. Board, 1946; courted imprisonment for taking part in S.R.C. movement, 1956; elected to State Assembly, 1957, 1961 & 1967; Editor: Daily Asha 1945-46; *Dagora*, monthly, since 1937. *Publications*: Novels & short stories:—*Bhool*; *Jibanar Lakhya*; *Jianta Manisa*; *Hida-mati*; *Bhange Hada*; *Sukhara Sandhane*; *Egarta*; *Khyankika*; *Dhalagara-Kalagara*. Belles letters:—*Patra-O-Pratima*; *Kabipriyasu*. Drama:—*Harijan Mandir Prabesh*; Political Literature:—*Swarajya*, *Pala*; *Bhoo-Mahatmya*; *Mausi*. Address: Minister for Supply and Cultural Affairs, Orissa, Bhubaneswar.**

**MAHESHWARI, Panchanan, D.Sc. (1931), F.N.I. (1936), F.A.Sc. (1934), F.B.S. (1950), F.N.A. Sc., (1963), F.R.S., (1965), Hon. D.Sc., (McGill Univ., Montreal, (1959), Scientist; Prof. and Head, Deptt. of Botany, Univ. of Delhi, since 1949. *b.* Nov. 9, 1904; *Educ.*: Jaipur and Allahabad; travelled abroad and visited botanical institutions. Pres.: Botany Section, Indian Science Congress (1950); Indian Botanical Society (1952); Embryology Section, Intnl. Botanical Congress, Paris (1954); Intnl. Society of Plant Morphologists (1954, 1965); The Indian Assn. of Biological Scs. (1965); Vice-Pres., Intnl. Botanical Congress, Edinburgh (1964); Fellow: Indian Academy of Scs.; National Instt. of Scs.; Foreign Fellow; American Academy of Arts & Scs.; Indian Botanical Society; National Academy of Scs.; American Botanical Society; Leopold Academy of Scs.; Royal Dutch Botanical Soc.; recipient of the Birbal Sahni Memorial Medal by Indian Botanical Society; Hora Memorial Medal by National Instt. of Sc.; Pres., National Academy of Scs., India (1964, 1965); Editor: Phytomorphology since 1951. *Publications*: Author of *Embryology of Angiosperms: Monograph on Gnetum* (with Vinla Vasil); *Recent Advances in the Embryology of Angiosperms: Dictionary of Economic Plants in India* (with U. Singh); Editor of *Publications*, National Instt. of Sc.; and about 200 papers on Botany particularly on plant morphology, and embryology. Address: 29, Probhyn Road, Delhi 7.**

**MAHTAB, Harekrushna, Ex-Dy. Leader of the Congress in Parliament. *b.* Nov. 1899; *Educ.*: Ravenshaw College, Cuttack. Elected M.L.A., Bihar and Orissa, 1924; was editor, *Prajatantra*, and also *Rachana*; courted jail several times in the freedom movement; Pres., Utkal P.C.C., 1930 and 1937; member, Congress Working Cttee., 1938-46; Leader, Congress Assembly Party, Orissa; Chief Minister, Orissa, 1946-50; was conferred Honorary Degree, Doctor of Literature by the Andhra Univ. in 1950, Utkal Univ., 1956 and Sagar Univ., 1958; Minister for Commerce and Industry, Government of India, 1950-52; Secretary-General, Congress Parliamentary Party, 1952-54. Governor of Bombay, 1955-56; Chief Minister: Orissa,**



1957-60; Editor, *The Jhankar*, a monthly literary journal of Orissa. *Publications*: Popular novels; dramas; *History of Orissa*, the only authentic history of the Province. *Address*: New Delhi.

**MAHTO, Ramdeo**, M.Sc. (Statistics), Minister for Co-operation, Bihar, since March 11, 1967. *b.* Jan. 29, 1931; *Educ.*: Patna Univ.; B.Sc. in Phy. Chemistry and Mathematics; M.Sc. in Statistics, 1961. Joined R.S.S. 1947; worked in the Deptt. of Industries, Govt. of Bihar, 1956-66; elected Member, Bihar Leg. Assembly from Patna East Constituency in the 1967 General Elections; took keen interest in social activities like campaigning for mass literacy, library and youth confce. etc. during his student days. *Address*: Krishnabagh, Patna 8.

**MAJID, Abdul**, B.A., Urdu Writer and Broadcaster. *b.* 1892; *Educ.*: Lucknow and Aligarh. Editor, *Sidq* (weekly), Lucknow, since 1925; member, Hindustani Academy Council, Allahabad; Pres., Shibli Academy, Azamgarh; member, A.I.R. Adv. Cttee., Lucknow; Chairman, Urdu Prize-books Cttee., U.P. Govt. Examiner, Indian Univ. *Publications*: Author of about 30 books mostly in Urdu. In Urdu: *Commentary on the Holy Quran* (7 vols.); *Popular Psychology*; *Logic*; in English: *Psychology of Leadership*; translation into Urdu of: *Lecky's History of European Morals* (2 Vols.); *Buckle's "History of Civilisation in England"*. *Address*: P.O. Daryabad, Bara Banki, U.P.

**MAJITHIA, Sardar Sir Surendra Singh**, Kt. (1946), Industrialist; Chairman, Saraya Sugar Mills Pvt. Ltd. and Saraya Engg. Works Pvt. Ltd. *b.* March 4, 1895; *Educ.*: Khalsa Collegiate High School, Khalsa Coll., Amritsar. Proprietor, Saraya Estate; Dir.: The Punjab and Sind Bank Ltd., Dehra Dun; U.P. Pulp and Paper Mills Ltd., Manserpur; Vice-Pres., All India Badminton Assoc.; Pres.: Working Cttee., Maharana Pratap Inter-Coll., Gorakhpur; Buddha Degree Coll. Asian Languages, Kushinagar, Deoria; Member: Council of Khalsa Coll., Amritsar; Advisory Cttee.; N.E. Rly. Zonal Users' Consultative Cttee.; U.P. Tuberculosis Assoc., Lucknow; Cttee., Deoria Mahavidyalaya Degree Coll.; and several other educational and cultural assoc. *Address*: Saraya Sugar Mills Pvt. Ltd., P.O. Sardarnagar, Dist. Gorakhpur (U.P.).

**MAZUMDAR, Smt. Lila**, M.A. (1st Class 1st), Bengali writer; Jt. Editor, *Sandesh* a children's monthly. *b.* Feb. 26, 1908; *Educ.*: Loreto Convent and Diocesan Coll., Calcutta. Lecturer: Shant Niketan, 1931-32; Ashutosh Coll. for Women, 1932-33; is associated with Nari Seva Sangh, A.I.W.C., etc.; Pres., Bengal Women's Educ. League, 1939-45; Hon. Secy.: P.E.N. (Calcutta), Santiniketan Ashramik Sangha, etc., 1946-56; Producer, A.I.R.; won Indian Govt. Children's Literature prizes, Sangit Natak Academy Award, 1956-63, Ananda Puraskar, 1966. *Publications*: Children's Books: *Din Dupurey*; *Podi Pishi*; *Gupir Gupta Katha*; *Bok Dharmik*; *Bokbadh*; *Halde Pakhir Palak*; *Bagher Chokh*; *Taka Gachh*; *Lanka Dahan*, etc.; Stories and Novels: *Shrimati*; *Jonaki*; *Ishtakutum*; *Monikuntala*; *Jhamptal*; *Nalghar*; *Aina*; etc.; Essays and Biographies: *Ei Ja Dekha*; *Upendrakishor*; *Abanindranath*, etc. *Address*: Suite 8, 30, Jawaharlal Nehru Road, Calcutta 16.

**MALAVIYA, Pt. Keshav Deva**, M.Sc., Ex-Minister of Mines and Fuel, Govt. of India. *b.* June 11, 1903, at Allahabad; *Educ.*: M.Sc. from the Allahabad Univ.; completed short-term course in Oil Technology from the Harcourt Butler Technological Institute, Kanpur, 1929. Joined the Congress movement, 1921; courted jail several times; Secy., City Congress Cttee., Allahabad; Gen. Secy., U.P.P.C.C. for many years; Organiser of the first General Elections of the Congress in 1937 as Gen. Secy., Congress Parliamentary Board; M.L.A., U.P., 1946-51;

Parliamentary Secy., U. P. Govt., 1946; Minister of Development and Industries, 1947; resigned from the Ministry, Aug. 1951; Parl. Secy., Govt. of India, June 3-Aug. 11, 1952; Dy. Minister, Natural Resources and Scientific Research, 1954-57; Minister of Mines and Oil, 1957-62; Min. for Mines & Fuel, 1962-63; Member, Lok Sabha, till 1967. *Address*: C/o 2, Safdarjung Lane, New Delhi.

**MALI, Gobind P.**, LL.B., Sindhi Novelist. *b.* Aug. 5, 1921; *Educ.*: L. B. High School, Tharushah, Sindh; D. J. Sind Coll., Karachi; S. C. Shahani Law Coll., Karachi. Started writing poems and articles at the age of 15; took active part in school and college literary and debating societies; jailed in Quit India Movement, 1942-43; organised Sindhi writers in Sindhi Abadi Sangat; became its Gen. Secy., 1946; one of the pioneers of Sindhi Sahit Mandal; its Gen. Secy., 1948-49, 1952-53, 1953-54; member, Sahitya Akademi's Advisory Board for Sindhi, since 1957. *Publications*: Novels: *Desi Sena Kajan* (1958); *Jin Suri Bhain Seja* (1959), etc.; two novels translated and published in Hindi—*Sharam Booti* (1959), *Pakhiara Valar Khan Vichhudi* (Panchhi Blehhud Gae, 1960); *Dehi Pardehi Thia* (1961); *Pyar ji Shikast* (1962); *Sharambooti*; about 25 short stories & about 20 dramas; many articles besides translations and adaptations of novels, dramas and stories. *Address*: E-7, Sindhi Colony, Iraniwadi, Kandivli, Bombay 67.

**MALIK, Dr. Bidhubhusan**, M.A., LL.B., Barrister-at-Law, Vice-Chancellor, Calcutta Univ. since Nov. 1, 1962. *b.* Jan. 11, 1895; *Educ.*: Central Hindu Coll., Banaras; Ewing Christian Coll., and Univ. School of Law, Allahabad; The Hon. Society of Lincoln's Inn, London. Vakil, Allahabad High Court, 1919, called to the Bar, 1923; enrolled as Advocate, Allahabad High Court, Jan. 1924; Judge High Court, Allahabad, March 1944; Chief Justice, 1947-55; Acting Governor, 1949; Indian Rep. on the Federation of Malaya Constitutional Commn., 1956; Commr. for Linguistic Minorities in India, 1957-62; member, Air Transport Council of India, 1955-62; Constitutional Adviser, Lancaster House Cfee. on Kenya, 1962; Organisation des Nations Unico an Congo, 1962; Constitutional Advisor to Kenya Govt., London Cfee., 1963. *Publications*: 10th Edition of Woodroffe and Ameer Ali's Evidence Act; *The Art of A Lawyer*. Sohoni's Criminal Procedure Code, 15th edition. *Address*: 23, Muir Road, Allahabad.

**MALIK, H. E., Mr. Gunwantsingh Jaswantsingh**, B.Sc. (Bombay), M.A. (Cantab.), Amb. of India to Philippines, since Dec. 1965. *b.* May 29, 1921; *Educ.*: R. C. High School and Gujarat Coll., Ahmedabad; Hamburg; Zurich; Downing Coll., Cambridge. Physicist, British Industrial Plastics, England, 1941-42; Royal Air Force retiring as Flt. Lt. in the Tech. Branch, 1943-46; joined I.F.S., 1947; Second Secy.: Brussels, 1948-50; Addis Ababa, 1950; Under Secy., Min. of Ext. Affairs, 1950-52; First Secy. & Charge d'Affaires, Buenos Aires, 1952-56; First Secy., Tokyo, 1956-59; Asstt. Commr. & Commercial Counsellor, Singapore, 1959-63; attended Adm. Staff Coll., Hyderabad, 1959-63; Dir., Min. of Commerce & led Indian Trade Delegation to S. America, 1963-64; Jt. Secy., Ext. Affairs Min., 1964-65; attended ECAFE Session in Wellington. *Address*: 21-A, Nizamuddin West, New Delhi; 2320 Taft Avenue, Manila.

**MALLIK, Umesh**, Film Producer and Script writer. *b.* 1916. Entered film industry as Asstt. Dir. and Script Writer, Calcutta, 1942; won literary awards while studying in the Calcutta Univ.; trained in Denham and Elstree studios, London, as an observer in various units for several years; co-produced, in England, 1940, "The Man Who Couldn't Walk" from his own story and script first Indian to produce English films in England with entirely British casts, technicians; promoted and presented ballet and a variety of shows in the West End,

London, Dublin, Paris, etc.; broadcast numerous talks; produced another film entitled "A Guy called Caesar" in Ardmore Studios, Dublin, 1962; from his own story and script for Columbia Picture Corp. Distribution; sold film script, "Treason And Trumpets", (Clive of India), 1963. Chairman: Mallikon Film Productions Ltd.; Molliko Films (Lond.) Ltd. *Publications*: Author of many books, short stories, etc. *Address*: 63, South Audley St., Mayfair, London W. 1.

**MALPEKAR, Smt. Anjanibai**, Fellow of The Sangeet Natak Akademi (Awarded, 1958), Musician. *b.* April 22, 1883; *Educ.*: Academic education in Marathi, Urdu, Gujarati and English; learnt Music from Ustad Nazir Hussein Khan (Bhendibazarwale) for 36 years and occasionally from Ustads Chajjukhan and Khadim Hussain. Received many honours and cash gifts from Nepal, Indore and Baroda Rulers; has been a leading figure in the music world; recipient of Honorarium from Maharashtra Govt. *Address*: 11A, New Bhatwadi Cross Lane, Awantikabai Gokhale Road, Bombay 4.

**MANCHANDA, Mr. Justice Shiv Chander**, M.A., B.A. (Hons.) (Cantab.), Judge, Allahabad High Court, since Aug. 1961. *b.* June 20, 1905; *Educ.*: Queen's Coll., Cambridge; Lincoln's Inn, London; B.A. (Hons.), 1927; M.A., Cambridge Univ., 1929; called to the Bar, 1929. Advocate of the Supreme Court and the High Court, Lahore, 1929-46; In 1946 and again in 1948 appointed Pres., Election Petitions Commn.; appointed Judicial Member, Income-tax Appellate Tribunal, 1950; Pres., Income-tax Appellate Tribunal. *Publications*: *Law and Practice of Income-tax*; *Law and Practice of Divorce*; *Law and Practice of Elections & Election Petitions*. *Address*: Allahabad.

**MANDAL, Bindeyeshwari Prasad**, Minister for Health and Family Planning, Bihar, since March 1967. *b.* 1918; *Educ.*: Shrish Institution, Madhipura; Raj School, Darbhanga, Patna Coll. Member, Bhagalpur Dist. Board, 1943-49; Hon. Magistrate, Madhipura, for three years; M.L.A., Bihar, 1952-57 and 1962-67; left Congress and crossed floor in the House (Assembly), Dec. 13, 1966; joined S.S.P.; returned to the Parliament on S.S.P. ticket. *Address*: Patna.

**MANE, Pratap Vishnurao**, B.Sc. Agri. (Hons.), Editor, *Plant Food Review*, since 1961; *b.* Nov. 29, 1928; *Educ.*: College of Agriculture, Poona. Asstt. Editor, *Indian Farming* and other periodicals of the Indian Council of Agricultural Research, New Delhi, 1953-56; Editor, *Fertiliser News* and Public Relations Officer, Fertiliser Assoc. of India, New Delhi, 1956-61; Sales Dir., Swati Industries P. Ltd., Bombay, since 1961; Adviser to the Indian Delegation, Intl. Fertiliser Devpt. Cfee., ECAFE, 1963; member of the Council, Indian Society of Soil Science, May 1965. *Publications*: Nearly 100 scientific papers and articles. *Address*: Vithal Nivas, V. P. Road, Bombay 4.

**MANEKLAL, Premchand**, Financier. *b.* Sept. 7, 1889; *Educ.*: Bombay. Chairman, Industrial Investment Trust Ltd.; Dir.: Alcock Ashdown & Co. Ltd., Premier Construction Co. Ltd., Ahmedabad Mfg. & Calico Ptg. Co. Ltd., Shree Niwas Cotton Mills Co. Ltd., Bombay Dyeing & Mfg. Co. Ltd., West Coast Paper Mills Co. Ltd., Walchandnagar Industries Ltd., Century Spg. & Mfg. Co. Ltd., Western India Match Co. Ltd., Kohinoor Mills Co. Ltd., McKenzies Ltd., Modern Mills Ltd., Belapur Co. Ltd., Mysore Spg. & Mfg. Co., Ltd., Azofen Ltd., Oudh Sugar Mills Ltd., Killick Industries Ltd., Coorla Spg. & Wvg. Co. Ltd. *Address*: 63, Apollo Street, Fort, Bombay 1.

**MANEKSHAW, Lieut-Gen. Sam Hormuzji Framji Jamshedji**, G.O.C. in-C., Eastern Command, since Nov. 16, 1964. *b.* April 3, 1914; *Educ.*: Sherwood Coll., Naini Tal; Indian Military Academy, Dehra Dun. Commissioned,



4 Feb. 1934; awarded Military Cross; graduated from Staff Coll., Quetta, 1943; served as Brigade Major of the Razmak Brigade in Waziristan, 1943-44; Instructor, Staff Coll., Quetta, 1944; active service in Burma and French Indo-China, 1945-46; General Staff Officer Grade 1, Military Operations Directorate, A.H.Q., 1946-47, promoted Brig., '47; Dir. of Military Operations, 1948-52; commanded 167 Infantry Brigade, 1952-54; Dir. of Military Trg. until Jan. 1955; took over command of the Infantry School at Mhow, 1955; attended Imperial Defence Coll., Lond., 1957; promoted Major Gen. and appointed Commander of 26 Infantry Dvn. in Jammu and Kashmir, Dec. 1957; Commandant, Defence Services Staff College, Nilgiris, Oct. 1959—Nov. 1962; G.O.C. IV Corps 1962-63; Colonel of the 8th Gorkha Rifles, since April 1953; G.O. C-in-C., Western Command, 1963-64. Address: C/o The National and Grindlays Bank Ltd., Bombay, New Delhi.

**MANGALDAS, Madanmohan, B.A. (Bom.).** Industrialist and business man, Ahmedabad. b. Oct. 5, 1917. Dir. of various cotton, textile mills and associate concerns; Dir., Bank of India Ltd.; Pres., Ahmedabad Millowners' Assoc. 1955 and 1958; was mainly responsible for the five years' Bonus Pact of the cotton textile industry in Ahmedabad; elected M.L.A., Bombay, from Ahmedabad, 1951; rep. of employers on Employees' State Insurance Corp. and its standing Cttee.; member: Council of Adm., ATIRA; Cotton Textile Loan Advisory Cttee. of The National Industrial Devpt. Corp.; Cttee. of F.I.C.C. & I. and also its Stg. Cttee.; Adv. Cttee. (Textiles) of Ind. Fin. Corp. of India; Board of Governors, Indian Instt. of Management, Ahmedabad; Chairman, Gujarat Housing Board; Dir.: Mahindra Uguine Steel Co. Ltd.; Dy.-Chairman, Indian Cotton Mills Federation; its Chairman for 1967; was member, Indian Industrial Delegation to U.S.A. and Europe sponsored by F.I.C.C.I., 1957; was invited to the Prime Minister's Cfee. with Industrialists; April, 1966. Address: Mangal Bag, Ellis Bridge, Ahmedabad 6.

**MANGAT Rai, Edward Nirmal, B.A. (Hons.)** (History), M.A. (History), I.C.S., Chief Secy., Jammu & Kashmir State. b. March 30, 1915; Educ.: Prince of Wales Royal Indian Military Coll., Dehra Dun; St. Stephens Coll., Delhi; Oxford Univ., England; Harvard Univ., U.S.A. I.C.S. 1938; held various positions mostly in the Punjab State, including those of Plng. & Devpt. Commr., Finance Secy., Chief Secy., Dir.-Gen., Food and Fin. Commr., Devpt. Publications: *Civil Administration in Punjab—An Analysis of a State Government* (Harvard University Press); *How Indian Federalism Works* (Harvard University Press). Address: Srinagar.

**MANI, Annakavoor Doraiswamy, M.A.** (Madras), M.P. (Rajya Sabha), Mg. Editor, *The Hitavada*, Nagpur, since 1936; Vice-Pres., The Servants of India Society. b. April 8, 1910; Educ.: Wesley Coll. and Presidency Coll., Madras. Editorial apprentice on *New India* edited by Dr. Besant, 1930; joined *Hitavada*, 1933; Secy., Provincial Branch of the Editors' Conference, 1942-48; General Secy., A.I.N.E.C. 1949; member, its Standing Cttee. from 1940; Representative on the 3rd Cttee. of U.N. General Assembly, 1952; Member, Indian Press Commission, 1952-54; Re-elected President, A.I.N.E.C., 1954; started simultaneous edition of *Hitavada* in Bhopal, 1957; Chairman, P.T.I. 1959-60; member: Parl. Consultative Cttee. of Ministries of Commerce & Industry, Home, Finance and Exl. Affairs; Governing Body, Indian Council of Cultural Relations; Home Ministry Adm. Reforms Cttee.; Home Ministry Vigilance and Anti-Corruption Cttee.; Governing Body, Indian Institute of International Studies; Defence Cttee., M.P.; Working Group on Panchayati Raj; Consultative Council on Panchayati Raj; travelled extensively

abroad. Publications: *Of Yanks and Others*. Address: Wardha Road, Nagpur; Hitavada House, Vidya Vihar, Bhopal; 20, Western Court, New Delhi.

**MANKAD, Dolarray Rangildas, M.A.,** Author. b. Jan. 23, 1902; Educ.: Jodiya; Rajkot; Bahauddin Coll., Junagadh; D.J. Sind Coll., Karachi. Lecturer & Prof. of Gujarati and Sanskrit, and Principal of various Colleges, 1927-64; awarded Ranjitram Gold medal by Gujarat Sahitya Sabha, 1946; Sahitya Akademi Award and Gujarat State Award for his book *Naivedya* in Gujarati 1962; Pres., History Section, XXI All India Oriental Cfee., Srinagar, 1961; Dean, Faculty of Arts, Gujarat Univ., 1962-63; member, Senate and Academic Council, Gujarat Univ.; Chairman, Board of Studies for Sanskrit, Gujarat Univ.; member, Task Forces of the Educ. Commn., Govt. of India, 1964; member State Council of Educ. Gujarat; Dir., Haribhi Research Instt., Aliabada, since 1960. Publications: Gujarati: *Literary Criticism; Naivedya*, 1962; *Gujarati Kavyaprakaro* 1964, etc. Poems: *Bhagavan-ni lila*, 1948; Education: *Vikramorvasiyam*, 1958; English: *The Purani, Chronology*, 1951; *A Monk and a Monarch*. 1944, several other publications. Address: Gangajala Vidyapith, Aliabada, Jamnagar Dist., Gujarat.

**MANSINHA, Dr. Mayadhar, M.A., Ph.D.,** Padma Shri (1967), Poet essayist and educationist of Orissa; Editor-in-Chief of the Oriya Encyclopaedia Project of the Utkal Univ. b. Nov. 11, 1905. Ph.D., Durham Univ., Gr. Britain, 1939, on his thesis *Kalidas and Shakespeare*. Served the Orissa Govt. as Inspector of Schools, Social Educ. Officer and Principal of a Govt. College; life member, World Mahabodhi Society. Publications: *History of Oriya Literature* (National Sahitya Akademi), about 50 volumes in Oriya and English covering educ., poetry, essays, fiction and drama; contributor to "Encyclopaedia Britannica", and other magazines. Address: Mansinha Lane, Cuttack 1, Orissa.

**MARICAR, M.O.H. Farook, Chief Minister,** Pondicherry, since March 1967. b. Sept. 6, 1937 at Karaikal; Educ.: Primary education at St. Mary's School, Karaikal; high school education at Calve Coll., Pondicherry; Univ. education at Loyala Coll., Madras. Joined the nationalist movement while a student; was active in the Students' Congress during college days; was member, Dt. Congress and Secy., Town Congress Cttee.; elected to the Pondicherry Leg. Assembly on Congress ticket in Aug. '64 elections from Karaikal (North Constituency); elected Speaker, Pondicherry Leg. Assembly, Sept 19, 1966; resigned, March 20, 1967; was unanimously elected leader of the Leg. Congress Party, March 1967. Address: 31, Kailasanathar Koil St., Karaikal; Chief Minister, Pondicherry.

**MASANI, Minocher Rustom, M.P.,** author, management consultant, Gen. Secy., Swatantra Party. b. Nov. 20, 1905 in Bombay; Educ.: B.A. (Bom.), LL.B. (Lond.); Bar, Lincoln's Inn in 1928. Founder and Jt. Secy., Congress Socialist Party, 1934-39; member of the Bombay Municipal Corpn, 1935-45; Mayor of Bombay, 1943-44; member, Indian Leg. Assembly, 1945-47; member, Constituent Assembly of India, 1947-48; Amb. of India in Brazil, 1948-49; M.P., 1949-52 and 1957-62; Chairman, U.N. Sub-Commn. on Discrimination and Minorities, 1950-52; patron, Liberal Int'l; Pres., Management Consultants' Assoc. of India; Exec. Cttee., All-India Management Assoc.; Head of Personnel and Productivity Services, Management Consultants; elected to Lok Sabha in bye-election from Rajkot Constituency, May 1963; again elected to Lok Sabha from Rajkot, 1967. Publications: *India's Constitution at Work*, 1939; *Our India*, 1940; *Socialism Reconsidered*, 1944; *Your Food*, 1944; *Picture of a Plan*, 1945; *A Plea for the Mixed Economy*, 1947; *Our Growing Human Family*, 1950; *Our India*, 1953; *The Communist Party of India—A Short History*,

1954. Address: 68, Bhulabhai Desai Road, Bombay 26.

**MASANI, Sir Rustom Pestonji, Kt. (1943),** M.A., b. 23rd Sept. 1876. Vice-Pres.: Bhandarkar Oriental Instt.; Society for the Protection of Children in Western India; All-India Centre, P.E.N.; Ex-Vice-Chancellor, B'bay Univ.; Municipal Secy., Dy. Municipal Commr. and Municipal Commr., Bombay; Chairman, Oriental Industrial Investment Corpn.; Medalist, Asiatic Society, Bombay; Editor, *Kaiser-Hind* and *Indian Spectator*. Publications: *Child Protection; Folklore of the wells; The Law and Procedure of the Municipal Corporation, Bombay; The Conference of the Birds; A Sufi Allegory; Evolution of Local Self-Govt. in Bombay; The Religion of the Good Life; Zoroastrianism; Court Poets of Iran and India; Dadabhai Naoroji, The Grand Old Man of India; Education for World, Understanding; The Role of Wealth in Society; The Five Gifts; Story of Bhodan; N. M. Wadia and His Foundation; Britain in India*; works in Gujarati. Address: 49, Merewether Road, Bombay 1.

**MASCARENHAS, William Xavier, J.P.; B.E.** (Bom.) M.I.E. (India), M.I.C.E. (London), Member, Plng. Board for Goa, Daman and Diu. Educ.: St. Xavier's Coll., Bombay and Govt. Col. of Engg., Poona. Appointed to Indian Service of Engrs., 1926; Important positions held:—Principal, Coll. of Engg., Poona 1938-45; Dir., of Agricultural Engg., 1947-48; Chief Engr. in Charge, Plng. and Execution of N.D.A. Project, Khadakvasla, 1948-54; Chief Engr. and Jt. Secy. to Govt., P.W.D., Bombay 1955-58; Secy., Visveswaraya Irrigation Enquiry Cttee. (Bombay State) 1937-38, Member, Auchinleck War Memorial Cttee. (Govt. of India), 1946-47; Chairman, River Valley Projects Tech. Personnel Cttee. (Govt. of India), 1954; Bombay Govt. Delegate to the Intl. Road Congress, Istanbul, 1955; Pres., Indian Roads Congress, 1958; Chief Engr. and Exec. Dir. (Engg.), L.I.C., 1958-60; Member, Board of Tech. Educ. and Board of Tourism, Govt. of Maharashtra. Address: Southlands, Colaba Road, Bombay 5.

**MASSAND, H.E. Mr. Bhagvan Khemchand,** B.Sc. (Hons.), LL.B., Amb. of India in Chile, Peru and Colombia, since 1965. b. Sept. 10, 1913; Educ.: D. J. Sind Coll. and S. C. S. Law Coll., Karachi, Univ. of Bombay. Practised at the Bar for about a year; joined business in an exec. capacity; Attache, High Commn. of India, Karachi, 1947-48; entered I.F.S., 1948; First Secy., High Commn. of India, Karachi, 1948-49; Officer on Spl. Duty, Min. of Commerce, Jan. 1950; First Secy. (Commercial), High Commn. of India, Colombo 1950-53; First Secy., Indian Embassy, Ankara, May 1953–April 1954; Charge d'Affaires, Ankara, May-Oct. 1954; First Secy.: Ankara, 1954-55; Indian Embassy, Washington, 1956-57; Counsellor, Embassy of India, Cairo, 1957-59; Counsellor/Charge d'Affaires, Indian Embassy, Budapest, 1959-62; High Commr. for India; New Zealand, 1962-63; Australia, 1962-65. Address: C/o Ministry of External Affairs, New Delhi; Ambassador of India, Santiago (Chile).

**MASTER Mansukhlal Atmaram, B.A.,** LL.B. b. Nov. 11, 1884; Educ.: Elphinstone Coll., Bombay. Pres.: Indian Merchants' Chamber, 1945; F.I.C.C. & I., 1947; Trustee, Port of Bombay, 1937-56; Chairman: Minor Ports Devpt. Cttee. of the Govt. of Bombay; member: Shipping & Trade Integration Cttee., Maritime Trg. Facilities Cttee., Shipping Policy Cttee., Governing Body, Trg. Ship "Dufferin", Central Adv. Cttee. for Light-houses, Governing Body I.L.O., National Harbour Board 1951-60; National Shipping Board, 1965; Premier Automobiles Ltd.; Senate, Bombay Univ.; Govt. of India delegate: Intl. Cfee. of Safety of Life at Sea (London), 1929 & 1948; Employers' Adviser and then as Employers' Delegate; Intl'l Maritime Cfee. at Geneva; Chairman, Govt. of India Cttee. for Trg. of Civil Air Pilots;



Govt. Delegate—Trade Negotiations with Czechoslovakia & Switzerland. *Publications*: Several pamphlets on shipping and other matters of importance to commerce and industry. *Address*: "Raj Mahal", Juhu (Bombay 54).

**MASUD, Husain Khan, M.A., Ph.D. (Allg.),** D.Litt. (Paris), Urdu Writer; Prof., Urdu Deptt., Osmania Univ., since 1962. *b.* Jan. 28, 1919; *Educ.*: Jamia Millia, Delhi; M.A., 1st Class, Aligarh Muslim Univ., 1941; Ph.D., 1945; D.Litt., from Sorbonne, Paris, 1953. Urdu Lecturer, Aligarh Muslim Univ., 1943-54; Reader, 1954-62. *Publications*: *Tarikh-e-Zaban-e-Urdu* (A History of Urdu Language); *Do Neem* (Poems); *Urdu Zaban aur Adab* (Literary and Linguistic essays), etc. *Address*: Head, Deptt. of Urdu, Osmania University, Hyderabad, Andhra Pradesh.

**MATHAI, Samuel, M.A. (Bombay & Oxford),** Vice-Chancellor, Kerala Univ., since Jan. 1963. *b.* Feb. 26, 1908; *Educ.*: Wilson Coll., Bombay; Hertford Coll., Oxford, Dakshina Fellow, Wilson Coll., Bombay. Taught English Language & Literature at Fergusson Coll., Poona, 1930-31, and Forman Christian Coll., Lahore, 1931-40; Head, English Deptt., St. Stephen's Coll., Delhi, 1940-48; Reader in English, Delhi Univ., 1941-48; Secy., Inter-Univ. Board of India, 1948-53; Secy., Univ. Grants Commn., 1953-63; Delegate to: Congress of Univs. of Commonwealth, Oxford, 1948, Cambridge, 1953 and London, 1963; First Commonwealth Educ. Cfee., Oxford, 1959; Guest Speaker, Third Commonwealth Edn. Conference, Ottawa, 1964; member, Exec. Cttee., World Council of Y.M.C.A.s; Danforth Visiting Lecturer, U.S.A., 1962. *Publications*: Several articles and broadcasts on educational, literary, social and religious subjects. *Address*: Vice-Chancellor, University of Kerala, Trivandrum-1.

**MATHURANI, Kewalram Pribhdas, B.Sc. (Hons.) (Engg.) (Edin.), I.C.S., Secy., Min. of Irrigation and Power, Govt. of India.** Since Dec. 1965. *b.* Aug. 21, 1911; *Educ.*: Edinburgh and London Univs. Joined the I.C.S., 1936; held various posts under the Govt. of Bombay; was Secy., Fin. Deptt., Govt. of Saurashtra and Secy., Fin. Deptt., Govt. of Bombay; Jt. Secy., Union Min. of Rehabilitation, 1952-56; in charge of reorganisation of the Bombay State as Secy., Political & Services Deptt., 1956-57; Secy., Industries and Co-op. Deptt., Govt. of Bombay, 1958; Jt. Secy. to the Central Cabinet and Dir., Union Organisation and Methods Dvn., 1958-59; Addl. Secy., Min. of Fin., Dept. of Eco. Affairs, 1959-61; Chairman, National Industrial Devpt. Corpn. Ltd. and Industrial Fin. Corpn. of India, 1961-64; Secy., Min. of Rehab., Govt. of India, 1964-65. *Address*: 11, Teen Murti Lane, New Delhi 11.

**MATHUR, Mr. Justice Dhatri Saran, C.E. (Hons.) (Roorkee), I.C.S., Judge, High Court, Allahabad,** since Jan. 15, 1959. *b.* Nov. 13, 1912; *Educ.*: Agra Coll., Agra; Thomason C. E. Coll., Roorkee; Balliol Coll., Oxford. Joint Magistrate and Civil and Sessions Judge, U.P., 1936-44; Dist. and Sessions Judge, 1944-47, 51-55 and 1957-58; Regr., Allahabad High Court, 1947-50; Chairman, Election Tribunal, 1952-53 and 1957; Judicial Commisr., Bhopal, 1955-56. *Address*: 9, Hastings Road, Allahabad-1.

**MATTHAI, Smt. Achamma John, B.A. (Hons.),** Padma Shri (1955), Social Worker; Pres., Y.W.C.A. of India; Chairman, Central Social Welfare Board, 1962-66. *b.* Feb. 21, 1898; *Educ.*: Trivandrum; Calcutta: B.A. (Hons.), 1920. Pres.: Y.W.C.A. of India 1940, 1947, 1955-59; Indian Cfee. of Social Work, 1947; Hon. Dir., Women Section of the Min. of Rehabilitation, New Delhi, 1947-50; Hon. Chairman, Cttee. for the Welfare of Displaced Women & Children, Bombay, 1951-54; Convenor, Bombay Pradesh Bharat

Sevak Samaj, 1953-56; member: Central Board, Bharat Sevak Samaj, New Delhi, since 1953; Central Social Welfare Board, 1954-56; Plng. Board, Kerala, 1960; Cttee. on National Instt. for Higher Educ. & Trg. of Women, Union Min. of Educ., 1960; Central Citizens' Cttee.; Chairman: Women's Wing, Indian Co-op. Union, New Delhi; Reorganisation Cttee., Kerala Handicrafts Emporium, Delhi; Pres.: Y.W.C.A. of Bombay; was member, Central Adv. Board, Women's Savings Campaign; was Vice-Pres., Indian Council for Child Welfare. *Address*: Matthalpuram, Aranattukara, Trichur, Kerala.

**MAZUMDAR, Dwijendra Lal, B.A. (Hons.) (Econ.) (Calcutta), B.A. (Tripos in Economics) (Cantab), M.A. (Econ.) (Cal.), Dir., India Intnl. Centre, New Delhi,** since 1964. *b.* Jan. 25, 1905; *Educ.*: Hindu School, and Presidency Coll., Calcutta; Jesus Coll., Cambridge. Entered the I.C.S., 1929; held various posts in the West Bengal Govt. till he became Dy. Secy., Min. of Labour, Govt. of India, 1943-45; Jt. Secy., Min. of Works, Mines and Power, Govt. of India, 1945-49; Member-Secy. Indian Fiscal Commn., 1949-50; Import Control Enquiry Cttee., 1950; Expert Cttee. on Company Law, 1950-52; Jt. Secy., Min. of Fin., 1954; Secy., Dept. of Company Law Adm., Min. of Fin., 1955-63; retired, August 1964; member: Indian Council of World Affairs; Indian Instt. of Public Adm.; Indian Society of Intnl. Law, etc. *Publications*: Author and Co-author of several Econ. and Financial reports. *Address*: 40, Lodhi Estate, New Delhi 3.

**MAZUMDAR, Smt. Lakshmi, B.Sc. (Cal.),** Padma Shri (1965), Social Worker. *b.* Aug. 30, 1912; *Educ.*: Brahm Girls' High School, Calcutta; Bethune Coll., Calcutta. Secy., All Bengal Women's Home, 1935-42; joined Women's voluntary service, 1942-43; Commissioner of Girl Guides, India, 1961-64; National Commissioner of Bharat Scouts and Guides, since 1964; Chairman, World Centre for Guides in the Asian Region located in Poona, since 1962; member: World Cttee. of Girl Guides since 1957; Hon. Secy., Lady Irwin School, Delhi, since 1943; Chairman, Delhi Children's Little Theatre, since 1955; attended many International conferences, including 17th International Scout Conference, 1959; represented India at the Adult Education Conference of the UNESCO in the U.K., 1958; represented the World Association of the Girl Guides at the UNESCO Conference in Delhi, 1957; has travelled in Asia, Europe, U.S.A. and Latin America. *Address*: C/o D. L. Mazumdar, I.C.S. (Retd.), 40, Lodhi Estate, New Delhi 3.

**MEADOWS, Stanley Fincham, Manager,** William Jacks & Co. Ltd., Calcutta. *b.* Feb. 5, 1916; *Educ.*: St. Wilfred's School, Seaford, Sussex and Cranleigh School, Surrey. William Jacks & Co. Ltd., Madras, Calcutta, Karachi; Indian Army 1940-46; Major, Indian Cavalry; mentioned in Dispatches (Burma). *Address*: 16, Netaji Subhas Road, Calcutta 1.

**MEDHI, Bisnu Ram, B.Sc. (Hons.), M.Sc., B.L.,** Ex-Governor of Madras; Advocate. *b.* April 1888 in the village of Hajo (Kamrup—Assam); *Educ.*: Presidency College, Calcutta. Enrolled as Pleader, Gauhati Bar, 1914 and Advocate, Calcutta High Court, 1931; joined the Non-Co-op. Movement and was imprisoned in 1921; unanimously elected Pres. of Assam P.C.C. after Lahore Congress and since then continuously elected Pres. till 1939; member, A.-I.C.C.; imprisoned in 1930 and 1940 in connection with C. D. and Satyagraha Movements for about two years and again detained in jail for over 3 years in connection with 1942 movement; popularly known as the 'Iron Man' of Assam; Min. of Fin., Revenue and Legislation, Assam, Feb. 1946-Aug. 1950; Chief Min., Assam, Aug. 1950-Jan. 1958; Governor of Madras, 1958-64; elected M.L.A., Assam from Hajo Constituency, 1967. *Address*: Uzan Bazar, Gauhati, Assam.

**MEENAKSHISUNDARAN, T. P., M.A. (His.), B.L., M.O.L. (Tamil),** Diplomas in Economics, French and German, Palkalai-c-elvar by Dharmapuram Mutt, 1952, Panmoli-p-pulavar by Tiruvannamalai Mutt of Kunrakuti, 1955, Tamil scholar and writer; Vice-Chancellor, Madurai Univ., since Feb. 1966. *b.* Jan. 8, 1901; *Educ.*: Pachalyappa's Coll., Law Coll., Univ. of Madras; Councillor/Alderman/Corporator, Madras (1924-1940); courted Jail in freedom movement; founded the Madras Tamil Sangam, 1942; Chief Prof. of Tamil, Presidency Coll., Madras; has been Pres., All India Oriental Cfee. (XVIII) (Tamil section), 1955; All India Bengali Cfee. (Tamil Section), Madras, 1955; Saiva Siddhanta Cfee. at Jaffna, 1956 and at Trivandrum, 1958; Pres.: Linguistic Society of India 1957; Bureau of Tamil Publications, Govt. of Madras; was Head Deptt. of Tamil (Arts) and Linguistics, Annamalai Univ. and Dir., Centre for Advanced Study in Linguistics. *Publications*: 18 books in Tamil and five works in English. Tamil: *Manata Catirum*; *Anpu muti*; *Valluvarum Makalirum*; *Cekkilarum Tirukkannapparam*; *Cumana-tamil Ilakkiya varalaru*; *Kavi Ravindranatha Tagore*, etc.; English: *Mullai-p-pattu*; *A history of Tamil literature*; *A history of Tamil Language: Lectures on Saiva Siddhanta*. *Address*: Vice-Chancellor, Madurai Univ., Madurai.

**MEHDI, Nawaz Jung, Padma Vibhushan** (1965), Ex-Governor of Gujarat; has been Chairman, Lalit Kala Akademi. *b.* May 1894, at Hyderabad. Joined Hyderabad Civil Service, 1916; held several important posts in the Hyderabad Govt. including that of the Secy. to the Cabinet, 1926-37; Municipal Commr., Hyderabad and Head, Office for Codification of Municipal Law, 1937-42; Secy., Commerce and Industries, 1942-46; Agent for Hyderabad State in Nagpur, 1947-48; Min., Andhra Pradesh 1952-60; was founder-member, Hyderabad Arts Society; Chairman, Salar Jung State Management Cttee.; was Pres.: Bharat Scouts and Guides, Indian Cfee. of Social Work Andhra Pradesh; was connected with the foundation, in Hyderabad, of the Cancer Hospital and the Niloufer Hospital for Women and Children; Founder: Hyderabad Commercial Corpn.; Hyderabad Agricultural Co-op. Assoc.; Hyderabad Central Co-op. Union, Patron, Bharat Scouts & Guides, Gujarat State; Pres.: Indian Cfee. of Social Work, Gujarat State branch; T. B., Family Plng. and Cancer Societies. *Address*: Banjara Hills, Hyderabad, A.P.

**MEHRA, Sita Ram, C.E. (Roorkee), M.I.E. (India), M.I.C.E. (England), F.N.I., Dir.,** Central Road Research Instt., New Delhi, since 1955. *b.* Aug. 20, 1905; *Educ.*: Govt. Coll., Lahore, Thomason Coll. of Engg., Roorkee and Imperial Coll., London. A pioneer in the field of soil stabilisation in India; Chairman, Ind. Nat. Soc. of Soil Mechanics and Foundation Engg. India, 1956-58; member, Indian Scientists delegation to the U.S.S.R., 1958; expert to UNESCO symposium on Arid Zone Problems, Paris 1960; expert to Ceylon on "Low Cost Roads and Road Research", 1960; Pres., Indian Road, Congress, 1964; Govt. of India delegate to: Int. Soil Cfee., Tokyo, 1963; Int. Roads Congress, Rome, 1964; Spl. Colombo Plan invitee to Australia, 1964; member: Low Cost Roads Cttee. of Intnl. Roads Congress, UNESCO Working Group on Low Cost Roads, Paris, 1965; expert on Asian Highway for research and trg. in ECAFE Region, Bangkok, 1965. *Publications*: Many research papers on roads and buildings. *Address*: Director, Central Road Research Institute, P.O. CRRI, New Delhi-20.

**MEHTA, Asoka, Economist and Politician;** Min. for Planning, Petroleum & Chemicals & Social Welfare, Govt. of India, since March 1967. *b.* Oct. 24, 1911; *Educ.*: Wilson Coll. and Univ. School of Economics, Bombay. Interrupted studies to enter politics; im-



prisoned five times; Founder member of Congress Socialist Party, 1934; Editor of party weekly, 1934-39; Gen. Secy., 1950-53; Chairman, Praja Socialist Party, 1959-63; member of national exec. for continuous period of 30 years; elected to Lok Sabha twice, 1954 and 1957; was Dy. Leader of P.S.P. group; Prominent trade unionist, founder of Hind Mazdoor Sabha (1949) and its first Gen. Secy.; Chairman, Foodgrains Enquiry Cttee. and Powerloom Enquiry Cttee.; Dy. Leader, Indian delegation to United Nations, 1963; Dy. Chairman, Plng. Commn., 1963-66. Min. for Planning, Govt. of India since Jan. 24, 1966. *Publications*: *The Communal Triangle in India*; *Who Owns India*; *Political Mind of India*; *Democratic Socialism*; *Politics of Planned Economy*; *Socialism and Peasantry*. *Indian Shipping*; *Studies in Asian Socialism*; *Address*: 5, Dadyseth Road, Babulnath, Bombay 7; New Delhi.

**MEHTA, Sir Chunilal Bhaichand, Kt.** (1942), Cotton and bullion merchant. *b.* Jan. 19, 1888; *Educ.*: Bhavnagar and Bombay, Dir.: Scindia Steam Navigation Co. Ltd.; Investment Corp. of India Ltd.; Alcock, Ashdown & Co. Ltd. and several other commercial concerns; Sheriff of Bombay, 1935-36; Pres.: Indian Merchants' Chamber, 1940; F.I.C.C. & I., New Delhi, 1941-42; Bombay Shroffs' (Indigenous Bankers) Assoc., 1934-43; Bombay Bullion Exchange and Assoc. Ltd., 1933, '43, '56, '57; Red Cross Society, 1948-49; Vice-Pres., Indian Central Cotton Cttee., 1942-47; member: Governing Body, Imperial Council of Agricultural Research, 1935-38; Leader, Indian Delegation to Intn'l Business Cfee., Rye, New York, 1944. *Address*: 52, Ridge Road, Malabar Hill, Bombay 6.

**MEHTA, Sir Chunilal Vijbhucandas, M.A., LL.B., Kt., K.C.S.I.** (1928), Business man, industrialist. *b.* Jan. 12, 1881; *Educ.*: St. Xavier's Coll., Bombay. Captain, Hindu XI. Elected to the Bombay Municipal Corpn. 1907; Chairman, Stg. Cttee., 1912; Pres. of the Corpn. 1916; elected to the Bombay Leg. Council by the Corpn., 1916; City Improvement Trust, 1918; Chairman, Indian Merchants' Chamber, 1918 and 1931; Bombay Port Trust, 1920; ex-Chancellor, Indian Women's Univ.; ex-Provincial Scout Commr.; Min., Bombay Govt., 1921-23; member, Exec. Council of Govt. of Bombay, 1923-28; Dir.: Western India Match Co., Ltd.; Tata Power Co. Ltd., The TISCO; The ACC; etc.; Pres., Indian Territorial Force, 1946. *Address*: 42, Ridge Road, Malabar Hill, Bombay.

**MEHTA, Desraj, B.A. (Hons.), C.E., M.B.E.** (1939), O.B.E. (1943), Member, Union Public Service Commission, since Jan. 1964. *b.* Nov. 21, 1902; *Educ.*: D.A.V. Coll., Lahore; Thomason Engg. Coll., Roorkee. A Civil Engr. and a member of the Indian Service of Engrs., 1925-57; Chief Engr., Irrigation & Tubewells, Bihar, 1950-56; Chief Engr. (Floods), Govt. of India, 1956-58; Chief Engr., Exploratory Tubewells, Union Min. of Food & Agriculture, 1958-62; awarded U.N.O. Fellowship on Irrigation & Land uses in Australia, 1953-54; elected Pres.: Central Board of Irrigation & Power, 1955, Instt. of Engrs. (Bihar centre) for three years in succession. *Address*: 12, Lodi Estate, New Delhi-3.

**MEHTA, Gaganvihari L., M.A. (Bom.),** Padma Vibhushan (1959), Chairman: I.C.I.C.I. Ltd., Bombay; Indian Investment Centre; member: Air India and Indian Airlines Corpn., since Jan. 15, 1965, Chairman: Indian Instt. of Tech., Pawai, Nov. 1965; Indian Council & World Affairs, Bombay Branch, since 1966. *b.* April 15, 1900; *Educ.*: Bombay; London School of Economics. Hon. Degree, LL.D. Rollins Coll. (Winter Park Flo), Simpson Coll. (Indianola, Iowa) (1953); Coll. of Educ., Providence, Rhode Island, 1956. Asstt. Editor, *Bombay Chronicle*, 1923-25; Manager, Scindia Steam Navigation Co., Ltd., Calcutta, 1928-47; held various adv. or adm. positions such as

Pres., Indian Chamber of Commerce and F.I.C.C.I.; member: Constituent Assembly; Plng. Commn., 1950-52; Pres., Indian Tariff Board, Bombay 1947-50; Chairman, Tariff Commn., Jan.-Sept. 1952; Hindustan Shipyard, 1958-62; National Shipping Board, 1959-63; Indian Amb. to the U.S.A. and Mexico, Sept. 1952-May 1958; Indian Min. to Cuba, 1956-58. *Publications*: Frequently contributes to daily and weekly journals in India and abroad; *Conscience of a Nation* (1932); *From Wrong Angles* (1935); *Perversities* (1942); *Understanding India* (1959). *Address*: C/o The Industrial Credit and Investment Corporation, 136, Backbay Reclamation, Third Road, Bombay 1.

**MEHTA, Gunvantrai Umiasanker, Business man**, Mg. Dir.: Vakil & Sons Pvt. Ltd., Bombay, since 1951. *b.* Aug. 2, 1917. *Educ.*: Morvi, Saurashtra and St. Xavier's Coll., Bombay. Joined family business in South Africa, 1936; represented All India Federation of Master Printers at the Intn'l. Printing and Allied Trades Exhibition, London, 1955; elected Pres., Bombay Master Printers, Assoc. for 1961-62; visited the U.K., U.S.A. and Japan to study productivity in the printing industries, as member, the Indian Productivity Team on Printing Industry, 1961; elected Pres., All India Fed. of Master Printers, 1962-63; appointed member, Central Adv. Publicity Cttee. for the Directorate of Advertising & Visual Publicity, 1962; visited U.S.A. 1964 under a grant from Council on Leaders and Specialists, sponsored by the Deptt. of State, U.S.A. *Address*: Narandas Building, Sprott Road, 18, Ballard Estate, Bombay 1.

**MEHTA, Smt., Hansa Manubhai, B.A. (Philosophy, (Hons.), Padma Bhushan, 1959, D.Lit. Allahabad Univ., 1958, D.Lit., Baroda Univ. 1959, LL.D., Leeds Univ., 1965, Ex-Vice-Chancellor, Baroda Univ. b. July 3, 1897; Educ.: Baroda. Pres., B.P.C.C., 1930; Fellow of the Senate, Bombay Univ., 1931-46; member: Senate and Syndicate of the Indian Women's Univ.; Leg. Council, 1937 and 1940; Parliamentary Secy., Educ. and Health, 1937-39; Vice-Pres., A.I.W.C., 1930; member: Constituent Assembly 1947-50; All India Council of Secondary Educ., 1955; Pres.: A.I.W.C., 1945-46; Indian Cfee. of Social Work, 1954-57. Member, Exec. Board, UNESCO, 1958-60; leader, Indian delegation to the Tenth Intn'l. Cfee. of Social Work, Rome. *Publications*: In Gujarati, *Tran Natak*, (translations), *Hamlet, Venice no vepari, Bal Kand, Ayodhya Kand, 1956; Sunder Kand, 1957; In English, Adventures of King Vikram, Women under the Hindu Law of Marriage and Succession, Tract on Post-War Educational Reconstruction and Civil Liberties, etc. Address*: C/o The Bank of Baroda Ltd., Fort, Bombay.**

**MEHTA, Dr. Jivraj Narayan, L.M. & S. (Bom.), M.D. (Lond.) (Univ. Medal), M.R.C.P. (Lond.), F.C.P.S. (Bom.), ex-Chief Minister, Gujarat. b. Aug. 29, 1887; Educ.: Amreli, Gujarat State, Grant Medical Coll., Bombay and London Hospital. Dean, K.E.M. Hospital and G. S. Medical Coll., Bombay, 1925-42; Pres., Indian Medical Assoc., 1930, '43 and '45; member: Medical Council of India, 1938-43, and 1947-64; Board of Scientific and Industrial Research, India, 1942-62; C.S.I.R., 1960-62; ex-Secy., Union Health Min.; Chief Adviser to Govt. of India and Govt. of Bombay on Baroda Affairs, June-August 1949 and Adviser, Min. of Health, India, 1949; courted jail in freedom movement; Dir.-Gen. of Health Services, Govt. of India, 1947-48; Prime Min., Baroda State, June 1948-49; Member, Syndicate, Baroda Univ., 1949-60; P.W.D. Min., Bombay, 1949-52; Min. for Fin., Govt. of Bombay, 1952-60; Chief Min., Gujarat, 1960-63; resigned, Sept. 1963. Indian High Commissioner to U.K., Dec. '63-Feb. 1967. *Publications*: "Studies regarding presence of glycogen in Suprarenal Bodies"; "The Height, Weight & Chest Measurements Enquiry relating to some School Children in Bombay". *Address*: C/o The Bank of Baroda Ltd., Fort, Bombay 1.**

**MEHTA, Mohanlal Tulsidas Sopan, Editor, Sukani (News Weekly) & Jeevanmudhuri, since its inception, Jan. 1957. b. Jan. 14, 1910; Educ.: Karachi. Took active part in national struggle from 1930-47; joined as Editor, Weekly *Pravasi*, Dec. 1940; *Janmabhoomi* (Daily), 1948-61; also became Editor, *Nootan Gujarat*, daily and *Akhand Anand*, monthly; was Pres., Gujarati Natya Mandal; member: State Prohibition Board, Maharashtra; Press Accreditation Cttee., Maharashtra. *Publications*: 45 publications in Gujarati: Story, Novel, Biography, Sociology and Politics; Some of his books have been translated into English, Hindi, Sindhi, Tamil and Malayalam; visited U.S.S.R., 1958 and other European countries, U.S.A., Japan, etc., 1959. *Address*: Gulbahar, Barrack Road, Dhobi Talao, Bombay 1.**

**MEIYAPPAN, A. V., Business man, Studio Owner and Film Producer; Sole Proprietor, A.V.M. Studios, Madras. b. July 28, 1907; Educ.: Karaikudi, Madras State. Built up a firm for making gramophone records under the name and style of Saraswathi Stores at Madras, 1932; soon after took to film production; subsequently built up his own Studio; travelled widely in India and abroad in Japan, Hong Kong, U.S.A., England, U.S.S.R., Malaya, Singapore and Ceylon for business and study. *Address*: A. V. M. Studios, Madras 26.**

**MENON, Gopal Rajagopal, B.A. (Madras), Mg. Dir. Indian Rare Earths Ltd., since Jan. 1, 1962. b. Aug. 11, 1912; Educ.: Madras and Trivandrum. Commissioned in the Army (Infantry), June 29, 1937, and served there for about 14 years holding the appointments of Quartermaster, Adjutant, Field Security Officer, Second-in-Command and Commandant of an Infantry Unit; retired as Lt.-Col., April 1951; Chief Adm. Officer, Indian Rare Earths Ltd., 1951-61. *Address*: Office: C/o Indian Rare Earths Ltd., Pil Court, 111, Queen's Road, Bombay-1; Residence: 21, Hampton Court, 125, Wodehouse Road, Colaba, Bombay 5.**

**MENON, Dr. K. B., M.A., Ph.D. (U.S.A.), Politician. b. June 18, 1897; Educ.: Christian Coll., Madras; Sydenham Coll., Bombay; the Univs. of Colorado and California. Joined the Nizam's Educ. Service; was sent for higher studies in the U.S.A.; took the M.A., Economics and the Doctorate of Philosophy in Sociology, 1936; took charge of the Indian Civil Liberties Union as Gen. Secy., 1937; appointed one of the Secretaries of the Indian States Peoples Cfee., 1940; took active part in the 1942 struggle and was sentenced to 10 years R.I.; joined the P.S.P.; M.L.A., Madras from Trithala Constituency, 1952; M.P., Lok Sabha, from Badagara, 1957; Pres., The Trithala High School, Trithala; Secy.-Manager, Aftercare Home Wood Work Shop for cured lepers, Calicut, 1963. *Address*: Cheruthuruthy, Trichur Dt., Kerala State.**

**MENON, K. P. Kesava, B.A., Bar-at-Law, Padma Bhushan (1966), Chief Editor, MATHRUBHUMI, Kozhikode, since Oct. 1952. b. Sept. 1, 1886, in Kerala; Educ.: Madras; called to the Bar 1915. Set up practice in Calicut; joined the Indian National Congress; Secy.: Malabar Dist. Congress; Home Rule League started by Mrs. Annie Beasant; gave up practice to join the 1921 Non-Co-op. Movement; Secy., Kerala P.C.C.; founded the MATHRUBHUMI, Malayalam Daily, 1923; led the famous Vaikam Satyagraha movement in Travancore to establish the right of the untouchables to walk along public roads, 1924; imprisoned and released 1924; set up practice in Singapore, 1927; took active part in the Indian associations and labour organisations; imprisoned by the Japanese, 1944; released after the liberation; Pres., Aikya Kerala Cttee., 1949; was member, Stg. Cttee. of the All-India Newspaper Editors' Cfee.; High Commr. for India in Ceylon, 1951-52; Vice-Pres., Kerala Sahitya Akademi, 1957-62. *Publications*: Various books in Malayalam. *Address*: Kozhikode.**



**MENON, K. P. S., M.A. (Oxon.), C.L.E., Padma Bhushan (1958), I.C.S. (Retd.), Ex-Indian Amb. to Russia; Chairman, Bhavan Intn'l. b. Oct. 18, 1888; Educ.: Christian Coll., Madras; Christ Church, Oxford, I.C.S., 1921. Addl. Dy. Secy. to the Govt. of India, Foreign and Political Dept.; Under-Secy. to the Hon. Resident at Hyderabad; also on the Frontier for 3 years; Agent to the Govt. of India in Ceylon, 1929-33; deputed by Govt. of India on Spl. Mission to Zanzibar, Kenya & Uganda, to enquire into the position of Indians there, 1934; Dewan of Bharatpur State for about 3 years; attended the San Francisco Cfee., 1945; attended the Gen. Assembly of the U.N., 1946; Agent-Gen. of the Govt. of India in China, 1943-47; Ambassador for India in China, March 1947; Chairman, U.N. Commn. on Korea, 1948; Forgn. Secy., Govt. of India, May 1948-Sept. 1952; Amb. to U.S.S.R., Hungary & Poland, 1952-61. Publications: *Delhi-Chungking*; *Russian Panorama*; *The Flying Troika*; *Many Worlds*. Address: Palat House, Ottapalam, Kerala State.**

**MENON, Smt. Lakshmi N., M.A., L.T. (Madras), T.Dip. (Lond.), LL.B. (Lucknow), Padma Bhushan (1957), Ex-Minister of State for Ext. Affairs, Govt. of India, Educ.: H. H. Maharaja's School, Coll. for Women and Arts Coll., Trivandrum, Lady Willingdon Trg. Coll., Madras, Maria Grey Trg. Coll., London. Member, All-India Women's Cfee.; Lecturer in various colleges, 1922-33; attended the 3rd, 5th, 8th and 9th sessions of U.N. Gen. Assembly. Chief of Sect. on the Status of Women in the Human Rights Divn. U.N. Secretariat at Lake Success, 1949-50; State Commr. for Guides in Bihar, since 1952; worked on the 3rd and 4th Ctees. of the U.N.O. dealing with social, cultural, humanitarian trusteeship and non-self-governing territories' questions. Pres., All-India Women's Cfee., 1955-59; Parly. Secy. to Prime Min., 1952-57; Dy. Min. of Ext. Affairs, 1957-62; Min. of State for Ext. Affairs, 1962-66; M.P., Rajya Sabha, 1952, 1954 and 1960; Indian rep., U.N. Working Group on Status of women, Bangkok; attended the Triennial Cfee. of Intn'l Federation of Univ., Women, Mexico, 1962; leader, Indian Delegation to ECAFE Cfee., Manila, 1963; widely travelled abroad. Address: Plain View, Trivandrum.**

**MENON, Dr. Mambillal Govind Kumar, M.Sc. (Bombay), Ph.D. (Bristol), Fellow of the "Indian Academy of Sciences". Padma Shri (1961), Dir. Tata Instt. of Fundamental Research, Bombay, since Feb. 1966. b. Aug. 28, 1928; Educ.: J. A. S. Coll., Jodhpur (1942-46); Royal Instt. of Science, Bombay (1946-49); Univ. of Bristol, England (1949-55). Research career: Research Associate, Bristol Univ., (1952-53); held Senior Award of the Royal Commn. for the Exhibition of 1951 (1953-55); since 1955, at the T.I.F.R., Bombay—as Reader (1955-58), Associate Prof. (1958-60); Professor, 1960-64, Senior Prof. and Dy. Dir. (Physics), 1964-66; invited delegate at "Intn'l Union of Pure and Applied Physics", Cfee.s on Cosmic Rays and High Energy Physics; received S. S. Bhatnagar Award of C.S.I.R. for Physical Sciences for 1960. Publications: About forty-five on Cosmic Ray and Elementary Particle Physics. Address: 17, Jenkins House, Henry Road, Bombay 1.**

**MENON, Mr. Justice M. S., M.A., Barrister-at-Law. Chief Justice of Kerala, since Jan. 20, 1962. b. June 12, 1907; Educ.: Christian Coll., Madras; and Lincoln's Inn; called to the Bar, June 17, 1931. Enrolled as Advocate: High Court of Cochin, Oct. 29, 1931, Madras High Court Nov. 23, 1931; Legal Adv. to the Port of Cochin, 1932-53, and to the Armed Services at Cochin during World War II; Member and Hony. Secy. of the Bar Council for many years; Judge, High Court of Travancore-Cochin, Jan. 29, 1953, Judge, High Court, Kerala, Nov. 1, 1956, Actg. Chief Justice, Kerala, Oct. 1, 1961. Address: Sudharma, Ernakulam; Aranyaka, Pallivasal.**

**MENON, Panampilli Govinda, M.A., B.L., Minister of Law, Govt. of India, since March 1967. b. Oct. 1, 1908; Educ.: St. Thomas Coll., Trichur; M.A., St. Joseph's Coll., Trichinopoly, 1929; B.L., Law Coll., Madras, 1931. Became Food Min., Cochin State, Sept. 1948; Member, Constituent Assembly, April 1947; Educ. Min., Travancore-Cochin State, July 1949; Indian rep. to the I.L.O. Cfee., Geneva, 1953; Chief Min., Travancore-Cochin State, Feb. 1955; Member, 3rd Fin. Commn., 1961; M.P., Lok Sabha from Mukundapuram, Kerala, 1962 and 1967; Leader, Indian Parly. delegation to the Inter Parly. Cfee., Belgrade, 1963; Chairman Parly. Cttee. on Public Undertakings, 1964 Min. of State for Food, Govt. of India, Jan. '66—Feb. '67. Address: Pullepati Road, Ernakulam; New Delhi.**

**MENON, Puthethath Raman, B.A., B.L., Sahitya Kusalani. Advocate, High Court, Kerala. Malayalam Writer; Pres., Kerala Sahitya Akademi. b. Nov. 1889; Educ.: Trichur, Ernakulam and Madras. Dist. Court Advocate for 21 years; Public Prosecutor for one year; Sarvadhikaryakkar to the Maharajah of Cochin, 3 years; Dist. Judge for 4 years; Actg. High Court Judge for one year; retired, 1944; is a scholar, good orator; is a humorous writer. Publications: Author of over 36 popular books including *Sakthan Thampuran*, pertaining to the history of Cochin and the biography of its great Ruler Sakthan. Address: Trichur 1.**

**MENON, V. K. Krishna, B.A. (Madras), B.Sc. (Econ.), London, M.A. London, M.Sc. (Econ.), Diploma in Educ. (Lond.), Bar-at-Law, Middle Temple, King's Inns, Dublin (Honoris Causa), LL.D., Glasgow (Honoris Causa), LL.D. (Honoris Causa); New Brunswick (Canada), Saugor (M.P.), Osmania (Hyderabad), Utkal (Orissa), D. Litt. (Mysore), Padma Vibhushan (1954). Ex-Min. for Defence, Govt. of India. b. 3rd May 1896; Educ.: Tellicherry and Kozhikode (Kerala), Madras and London, National Univ., Adyar. Lecturer, 1919-22; Boy Scout Commr., Madras and Cochin, 1918-24; Teacher, St. Christopher School, Latchworth, England; Secy., The India League, 1929-47; Councillor, St. Pancras, London, 1934-47; Chairman, Arts Council, St. Pancras; Labour Parly. Candidate, Dundee, Scotland, 1939-42; Spl. rep. of Indian Govt., 1946-47; Alternate delegate at the U.N. Gen. Assembly meeting at Lake Success, 1946-47; Indian rep. at various Intn'l Congresses on behalf of Indian National Congress from 1936; visited various European capitals as Pandit Nehru's Personal Rep. and made preliminary arrangements for establishing diplomatic relations; High Commr. for India in London, 1947-52; India's Amb. to Ireland, 1949-52; Chairman of the Indian Delegation to the Gen. Assembly of the U.N., 1952-53, '54 to '62; without Portfolio, Govt. of India, 1956-57; Defence Min., 1957-62. Pres. Indian Society of Intn'l Law & Diplomacy; Senior Advocate, Supreme Court of India; M.P., Lok Sabha, from North Bombay Constituency, 1957 and 1962. Publications: First Editor, Pelican Books; Editor, 20th Century Library (Bodley Head); Pamphlets and Articles such as *India, Britain and Freedom*; *Why must India Fight*; *Britain's Prisoner: Nehru*; *Unity with India against Fascism*; *Independence*, in collaboration with the Ellen Wilkinson, *The Condition of India*. Address: 19, Teen Murti Marg, New Delhi.**

**MERCHANT, Salim Mahomedbhai, B.A. LL.B., Presiding Officer, Central Govt. Industrial Tribunal and National Industrial Tribunal since Aug. 1962 and Chairman, Central Wage Board for Coal Mining Industry, Bombay. b. Jan. 13, 1907; Educ.: Bharda New High School, Elphinstone Coll., and Govt. Law Coll., Bombay. Started practice as Advocate, High Court, Bombay, 1931; appointed Adjudicator, Industrial Tribunal, 1948 and later as Member, Industrial Court, Bombay, 1955; Member, Labour Appellate Tribunal of India, 1956-57; Central Govt. Industrial**

**Tribunal, Dhanbad, 1960; transferred as Central Govt. Industrial Tribunal, Bombay. Address: 'Dinshaw Lodge', 18, Turner Road, Bombay 50.**

**MERCHANT, Vijay Madhowji, B.Com. (Bombay), Veteran Cricketer; Mg. Agent, Thackersey Group of Mills. b. Oct. 12, 1911; Educ.: Bharda New High School & Sydenham Coll. of Commerce & Economics, Bombay, Joined Thackersey Group of Mills, 1932; is Dir.-in-charge, Hindoostan Mills and Sirdar Carbonic Gas Co. Ltd.; actively associated with the blind instts in Bombay, Maharashtra Soc. for the Donation of Eyes and J. J. Group of Hospitals Blood Bank; played for India in intn'l cricket, 1933-34; figured in 10 Test matches for India—all against England; visited England, 1936 and 1946; ret'd. from first class cricket, 1951; average in first class cricket, 72.23, only next to that of Don Bradman. Publications: 50 years of Indian cricket; *Duleep, The Legend and the Man*. Address: 81r Vithaldas Chambers, 16, Apollo Street, Fort, Bombay 1.**

**MIABHOY, Mr. Chief Justice Nomanbhai Mahmedbhai, B.A., LL.B., Chief Justice, High Court, Gujarat since Feb. 1966. b. Sept. 16, 1905; Educ.: Gujarat Coll., Ahmedabad; B.A., Elphinstone Coll., Bombay, 1927; LL.B., 81r Lallubhai Shah Law Coll., Ahmedabad, 1929. Practising Advocate at Ahmedabad, 1929-41; joined Judicial Service as an Asstt. Judge, Dec. 15, 1941; Permanent Dist. Judge, Dec. 27, 1942—March 1957; Judge: Bombay High Court, 1957-60; Gujarat High Court, 1960-66. Address: Ahmedabad.**

**MICHAEL, JOHN, Trade Union Leader; Member, A.I.C.C.; President: Indian National Iron & Steel Workers' Fed.; Indian National Mineworkers' Fed.; and Colliery Mazdoor Sangh. b. Nov. 29, 1903, at Vepary, Madras; Educ.: Dufton Coll., Madras. Courtied imprisonment for political and trade union activities, 1941, 1942-45; Pres., I.N.T.U.C., 1952, 1953, 1960-61, 1961-62 and of its Bihar and Orissa branches; Vice-Pres.: Miners' International Federation, London; Member: Bihar Legislative Assembly, 1946-52; Rajya Sabha 1957-62; National Productivity Council; Central Advisory Council of Industries; Central Cttee. of International Metalworkers' Federation; Standing Labour Cttee.; Dev. Council for I.C.E. & Pumps; National Savings Central Advisory Board; Central Wage Board for Iron & Steel Industry; Iron Ore Mines Industry; Tripartite Standing Cttee. & Evaluation & Implementation, Bihar; Bihar Regional Employees Prov. Fund Commission; Indian Institute of Management, Calcutta; Dir.: Hindustan Steel Ltd.; Hindustan Shipyard Ltd. Address: 17/27, K. Road, Jamshedpur, Bihar.**

**MIR QASIM, M.A., LL.B., Pres., Jammu & Kashmir Pradesh Congress. b. Aug. 1921; Educ.: Aligarh. Entered political career, 1943; was arrested during Quit Kashmir movement, 1946; Advocate, Kashmir High Court; member: Kashmir Constituent Assembly, 1951-56; Chief Parly. Secy. in 1952; Secy. Basic Principles Cttee. and Drafting Cttee. of Kashmir Constituent Assembly; Kashmir Leg. Assembly, since 1957; became Revenue and Rehabilitation Min. in Bakshi's Cabinet, 1953; left the organisation in 1957 and formed the opposition group of the Democratic National Cfee.; again joined the organisation in 1960; Min. for Law, Irrigation & Power, Jan. 1961-April 1962; Min., Revenue & Rehab., 1962-63; Ex-Min. for Revenue, Rehab., Food & Agriculture. J. & K. State; was Gen. Secy., National Cfee., J. & K.; Min. without Portfolio, J. & K., Sept. 1965-Feb. '66; represented India in UNO, Sept. 1965. Address: Dooru, Anantnag, Kashmir; Garibal, Srinagar, Kashmir.**

**MIRAJKAR, Shantaram Savlaram, Trade Unionist; Pres. All-India Trade Union Congress since 1958; member, Presidential Committee, All India Peace Council b. Feb. 8,**



1902; *Educ.*: Maratha High School, Girgaum, Bombay. Trade Unionist since 1920; Secy.: Workers' and Peasants' Party (1927); Girmi Kamgar Union (Red Flag) (1928); Founder Member, C.P.I., (1926); Vice-Pres., A.I.T.U.C., (1948-57); Member, Bombay Municipal Corpn. (1939-48; 1957); Chairman, Stg. Cttee., Bombay Municipal Corpn. (1957-58); Mayor, Greater Bombay, 1958-59. *Publications*: Various Tracts and Marathi Publications. *Address*: New Municipal House, Sion (East), Bombay 22.

**MISHRA, Pt. Dwarka Prasad, B.A., LL.B., D.Litt. (Honoris Causa),** Chief Min., Madhya Pradesh, since Oct. 1963. *b.* Aug. 5, 1901; *Educ.*: St. Paul's High School, Raipur, Christ Church Coll., Kanpur; Robertson Coll., Jabalpur (B.A.); Law Coll., Allahabad (LL.B.). Elected to the Indian Leg. Assembly, 1926; Pres., Municipal Cttee., Jabalpur, 1932; Min., C.P. & Berar, 1937; Home Min., M.P. Govt., 1946; Vice-Chancellor, Univ. of Sagar, 1956-61; Leader, M.P. Leg. Congress Party, Sept. 24, 1963. *Publications*: *Krishnayan* (Life of Lord Krishna in Hindi Verse). *Address*: Nishat Manzil, Bhopal, MP.

**MISHRA, Lalit Narayan, M.A. (Econ.),** Min. of State for Labour & Rehab., Govt. of India, since March 1967. Congress worker, since 1939; courted jail in freedom movement; Secy., Bihar Provincial Students' Congress, 1944-46; its Pres., 1946-48; Fellow, Patna Univ. Senate, 1948-49; as a research scholar of Patna Univ. did research on the 19th century colonial policy of British Empire; member, A.I.C.C., 1950-53 and 1963-66; member, Lok Sabha, 1952-57; member: Lok Sabha Estimates Cttee., 1955-56; National Adv Cttee. for Small Savings, 1956-57; Parly. Secy. to Min. for Png., Labour and Employment, 1957-60; Dy. Min. for Labour, Employment and Png., 1960-62; Dy. Min. for Home Affairs, Govt. of India, Feb. 1964-Jan. 1966; Chairman, National Projects Construction Corpn., 1962-64; Gen. Secy. Bharat Sevak Samaj, 1962-64; member, Working Cttee., Bihar I.N.T.U.C. & All India Gen Council, I.N.T.U.C.; Editor, *Congress Forum* 1962-64; M.P., Rajya Sabha from Bihar, since Feb. 1964. Dy. Min. for Fin. & Planning Govt. of India, Jan. '66-Feb. 67. *Publications*: *An Armed League of unarmed Nations*; a brochure of international peace and several articles on current economic and political affairs in periodicals and journals. *Address*: 10, Tughlak Road, New Delhi; P.O. Baluabazar, via Forbaganj, Dt. Saharsa, Bihar.

**MISHRA, Pandit Raghunath, M.L.A.,** Politician & Social Worker. *b.* June 30, 1916; *Educ.*: Ravenshaw Coll., Cuttack; expert in Sanskrit Literature, Vedic Lore and Vedantic Culture. Taught Sanskrit and English (1942-45); led student movements during student career; a prominent social reformer; launched satyagraha against animal sacrifices in temples, 1950; Gen. Secy., Ganatantra Parishad, 1957-60; member: Exce. Cttee., Swa. Party, Orissa Unit till April 1965; Leg. Assembly, Orissa, 1961; Dy. leader of the Opposition, 1961-65; member, State Board of Homoeopathic Medicine. *Publications*: Books on Oriya grammar and literature and also Oriya and Sanskrit textbooks for schools. *Address*: P.O. Banpur, Dist. Puri (Orissa); Kesharpur, Cuttack 1.

**MISHRA, Raj Ballabh,** Minister for Community Development, Panchayati Raj, Agriculture, Animal Husbandry, Labour and Tourism, Orissa, since March 1967. *b.* May 11, 1917; *Educ.*: Keonjhar H. E. School, Keonjhar (Orissa). While a student, joined the Prajamaandal Movement and gave up studies, 1931; member, Orissa and Chhatisgarh Regional Council, 1946-48; formed the Koshal Utkal Praja Parishad and became its Secy., 1948; was Secy., Vice-Pres. and Pres., Ganatantra Parishad, from 1950 till it merged with the Swatantra Party; Dy. Leader of the Opposition, 1957; Minister, Tribal and Rural Welfare, Labour and Housing, 1959-61; Editor, Oriya

Weekly *Ganatantra*, 1953-58; member, Board of Editors, Oriya Daily *Swaraj* for some time in 1966 and 1967; Vice-Pres., Swatantra Party, Orissa Unit. *Address*: Bhubaneswar 1.

**MISRA, Mr. Justice Ram Asray, M.A., LL.B.,** Judge, Allahabad High Court, since July 14, 1959. *b.* June 15, 1907; *Educ.*: Govt. Jubilee Inter Coll., Lucknow; Christian Coll., Lucknow; Lucknow Univ. Joined Bar, 1932; practised mostly on the criminal side; Special Counsel: to prosecute several cases against Tehsildar Singh and others (Man Singh's gang), 1955-56; for S.P.E., Govt. of India, to prosecute H. D. Mundhra in a case under Sec. 420 I.P.C., 1958. *Address*: Gopal Sadan, Canning Street, Lucknow.

**MISRA, Shambhu Maharaj, Padma Shree,** Dancer; Rashtrapati Golden Award through Sangeet Natak Akadami, March 27, 1955. Senior Professor of Dancing; Teacher of Dancing to Govt. scholarship holders in Bhartiya Kala Kendra, Delhi. *b.* Nov. 15, 1907; *Educ.*: Learned music under Ustad Rahimudin Khan in Faizabad, 1920-21; had training in dancing under his brother and Guru Jagannath Parsad alias Achan Maharaj, Rampur State, 1921-25. Started dancing career in 1925; spread the Kathak Natvari Nirtya from Lucknow; danced at Lucknow Music Conference, 1925; danced in the following cities where music conferences were held: Ajmer, Jaipur, Calcutta, Bombay, Baroda and Allahabad; was honoured as 'Nirta Samrat' in Dehra Dun, 1936; awarded Padma Shree, Oct. 27, 1958. *Address*: 6A/6, W.E.A., Karol Bagh, New Delhi 5.

**MITRA, Asok, B.A. (Cal.), I.C.S. Registrar** General & Census Commr., India, since July 1958; Secy., Min. of Information & Broadcasting, since March 1960. *b.* March 1, 1917; *Educ.*: Presidency Coll., Calcutta; Merton Coll., Oxford. Served in Bengal in various capacities, 1940-50; Supdt. of Census Operations, West Bengal, 1950-52; Jt. Devpt. Commr. & Devtp. Commr., West Bengal, 1952-54; Secy., Commerce & Industry, Cottage and Small Industry and Co-op. Deptts., West Bengal, 1955-June 1958; Addl. Secy., Png. Commn., 1965-66; Editor, *The Folk Dances of Bengal and District Records of West Bengal Districts* (a series). *Publications*: *The Tribes and Castes of West Bengal*; a short history of European painting in Bengal called *Paschim Europer Chitrakala*; a concise history of Indian painting in Bengali called *Bharater Chitrakala*; *Four Painters*; *Calcutta: India's City*. *Address*: 8, Grove Lane, Calcutta 26; 15, Pandit Pant Marg, New Delhi 1.

**MITRA, Dr. Bhupendra Nath, ex-Colonel, D.Sc. (Dacca), Ph.D. (Minnesota), F.R.I.C., Sigma XI, Emeritus Scientist,** Indian Instt. of Experimental Medicine, Calcutta, since Dec. 1965. *b.* 1905; *Educ.*: Dacca, Minnesota, Rothamsted Experimental Station, England; awarded Rockefeller Foundation Fellowship 1936-37; invited to attend Intn'l Congress for microbiology, New York, 1939 and for pure and applied chemistry, London 1947; visited research instts. in U.S.A., U.K. and Europe; appointed in Forest Research Instt. and Colls, Dehra Dun, 1929-30; Indian Research Fund Assoc., 1931-39; commissioned in the Indian Army 1940-57; and held a number of key positions in armament technology; Asstt. Dir. Gen. C.S.I.R. (1958-59); Dir., Regional Research Laboratory, Jorhat 1959-64. Dir., Central Indian Medical Plants Organization, Lucknow, 1964-65. *Publications*: Research papers in chemistry, biochemistry and allied subjects; special studies in protein chemistry: author of military explosive PEK. *Address*: 83/1A, Ballyganj Place, Calcutta-19.

**MITRA Biren, B.A., Ex-Chief Minister of** Orissa. *b.* Nov. 20, 1917; *Educ.*: Ravenshaw Coll., Cuttack. Has been taking keen interest in the amelioration of the down-trodden from his early life; was an outstanding leader of students' movement; imprisoned while leading the medical students' strike; courted jail in

'Quit India' movement, 1942; took active part in labour movement; elected to the Orissa Assembly for the third term from Cuttack City Constituency during the mid-term election, 1961; Deputy Chief Minister in charge of Political and Services, Health (Local Self Govt.), Planning & Co-ordination, Law and Community Development and Panchayati Raj, 1961-63; elected leader of the Congress Leg. Party, Sept. 1963; Chief Minister, 1963-65. *Address*: Katgorasahi, Cuttack.

**MITRA, Gajendra Kumar,** Bengali writer; Editor, *Kathasahitya*, a monthly journal. *b.* Nov. 11, 1908; *Educ.*: Central Kashi Instt., Anglo-Bengali School; Banaras; Jagatbandhu Instt.; St. Xavier's Coll., Calcutta. Began editing mss. magazines at the age of eight; a professional publisher; made a hit picture "Kangan"; based on *Rajanigandha* and later more short stories and novels filmed. *Publications*: Contributes to magazines; *Bharate Bari*; *Ratir Tapasya*; *Janmechi Ei Deshe*; *Nari O Niyati*; *Sohagpura*; *Parush O Ramani*; *Malachandan*; *Kalkatar Kuchi*; *Akademi award* (1959-60). *Akashkupi*; *Nul-kanthi*; *Danan-O-Dipti*; *Rabindra Memorial Prize*, 1964; *Prithivir Itihas*, etc. *Address*: Beni Bannerjee Avenue, Dhakuria, Calcutta 31.

**MITRA, Mr. Justice Sankar Prasad, M.A. (Cantab.), Barrister-at-Law, Judge, High Court, Calcutta,** since Dec. 1957. *b.* Dec. 26, 1917; *Educ.*: Calcutta, Cambridge and London. While studying in U.K., 1938-43, participated in Indian Independence Movement; was Pres., Cambridge Majlis; Gen. Secy., Indian Students' Federation in U.K.; Secy., Swaraj House, London. Joined Calcutta High Court, 1944; M.L.A., West Bengal, 1952-57; visited China as member, Cultural Delegation, 1954; appointed Minister-in-charge of the Land & Land Revenue, Judicial and Leg. Deptt., West Bengal, 1956; studied the legal system and cultural instts. in U.S.A., 1958; is connected with many voluntary and charitable organisations in West Bengal; is interested in legal research; is the Exec. Chairman, Indian Law Instt., W. Bengal unit. *Address*: 5, Mahatma Gandhi Road, Calcutta 9.

**MITRA, Sombhu,** Akademi Award as the Best Stage Dir. (1959), Actor and Stage Dir. *b.* Aug. 22, 1915; *Educ.*: Ballyganj, Govt. High School, and St. Xavier's Coll., Calcutta. Joined the Public Stage of Bengal, 1939; actor in the Public Stage, 1939-42; Producer-Director, Actor, Indian People's Theatre Assoc., 1943-46; organized a Theatre Unit, Bohurupee, 1948; successfully produced the following plays, viz., *Four Chapters*, *Red Oleanders*, *Sacrifice*; also adapted and produced plays of Ibsen, Sophocles and other Masters—*A Doll's House*, *Oedipus-Rex*; won the Grand Prix award for his film "Under the Cover of Night" (Ek Din Ratre) at the Carlovsky Vary Film Festival, 1957. *Publications*: *Abhinay-Natak Mancha*; *Putul Khela*; *Kanchanranga*. *Address*: 11A, Nasiruddin Road, Park Circus, Calcutta-17.

**MITTER, Mr. Justice Gopendra Krishna, B.Sc. (Hons.) (Patna), Bar-at-Law, Lincoln's Inn, Judge, Supreme Court of India,** since Aug. 29, 1966. *b.* Sept. 24, 1906; *Educ.*: Zilla School, Muzaffarpur; Patna Coll., Patna; The Univ. Coll., London. Started practising in the courts at Muzaffarpur, 1931; practised at the Bar of the Calcutta High Court, 1934-52; Judge, Calcutta High Court, 1952-66. *Address*: Supreme Court of India, New Delhi.

**MODAK, Narayan Vinayak, C.I.E. (Jan. 1945), B.E. (Civil) (1911), member of the** Instt. of Civil Engrs., (London) (1936), Fellow of the Royal Society of Health, Member, Instt. of Municipal Engrs., Member, Municipal Public Health Engrs. (U.S.A.), Consulting Public Health Engr. since Sept. 1961. *b.* Dec. 1890. Was Adviser, Union Min. of Health for Delhi's Water Supply, sewerage and sewage disposal



Schemes; elected Fellow, Bombay Univ. for over 25 years; ex-Chairman, Engg. and Metallurgy section, Indian Sc. Congress; worked as Dy. City Engr., Hydraulic Engr., City Engr., Ag. Municipal Commr., Spl. Engr. — (author of Vaitarna-cum-Tansa Scheme) and Consulting Engr., Bombay Municipal Corpn., 1930-61; worked on expert Cttee.s of W.H.O.: (a) drinking water supply standards and (b) public health aspects of Housing; worked on the 'Housing' and 'Public Health' Panels of the Plng. Commn.; Chairman of the Panels on (a) Slum clearance, and (b) National Water Supply and Sanitation programme of the Building Projects Team — Plng. Commn. Address: "Udyam," Shivaji Park, Bombay 28.

**MODI, Rai Bahadur Seth Gujarmal**, Chairman, Modi Industries Ltd., Modinagar (Meerut), U.P. b. August 1902, Patiala State; Educ.: Privately. Entered business at a young age; founder, 'Modinagar', in Dt. Meerut, U.P.; established industries like Modi Vanaspati Mfg. Co., Modi Gas & Chemicals, Modi Paint and Varnish Works, Modi Arc Electrodes Co., Modi Spg. & Wvg. Mills Co. Ltd., Modi Steels, at Modinagar and in the Punjab and U.P.; Chairman, Modi Charitable Fund Society and R. B. Multinational Charitable Trust; Founder, Western U.P. Chamber of Commerce; Pres.: Western U. P. Productivity Council; Indian Sugar Mills Assocn.; All-India Org. of Industrial Employers; Member; Exo. Cttee., F.I.C.C.I.; State Plng. Board, U.P.; State Tech. Educ. and Trg. Board, U.P.; Dev. Council, Art Silk Industry Govt. of India; is a great philanthropist; built an Industrial Colony 'Govindpuri', with Govt. aid, to rehabilitate the displaced persons. Address: P. O. Modinagar (Meerut), UP.

**MODI, Mr. Justice Inder Nath, B.A., LL.B.**, Judge, Rajasthan High Court, since Jan. 29, 1953. b. Aug. 3, 1905. Educ.: Allahabad Univ.; had a brilliant academic career, Gen. Secy., Jodhpur State, 1930-33; Joined the Bar, 1935; enrolled as Senior Advocate, Supreme Court of India, 1951; Pres., Jodhpur Bar Assoc., 1938, '39, '42, '43, '48, '49 and '51; member, Jodhpur Municipality, 1937, '39 and '44; first elected Pres., Jodhpur Municipality, 1940-41; Dir., Local Self-Govt., Jodhpur State, 1945-46; member: Marwar Leg. Assembly, 1947-48; Rajasthan Leg. Assembly, 1952; served on numerous Cttees. and instts., 1937-52; Life member and Pres., Red Cross and other allied Societies, Jodhpur, 1950-52 and 1959-66; Pres., Indian Council of World Affairs, Jodhpur Br., 1964-66. Address: Jodhpur, Rajasthan.

**MODY, Sir Homi, M.A., LL.B., K.B.E.** (1935), Grand Commander, Order of George I of Greece, Treasurer, Swatantra Party, Ex-Governor of U.P., Ex-Dir., Tata Sons Ltd. b. Sept. 23, 1881; Educ.: St. Xavier's Coll., Bombay. Pres., Bombay Municipal Corpn., 1923-24; Chairman, B'bay Millowners' Assoc., 1927 and 1929-34; Pres.: Indian Merchants' Chamber, B'bay, 1928; Employers' Federation of India; member, Indian Leg. Assembly, 1929-43 and Constituent Assembly 1948-49; member, First R.T.C. 1929 and Reserve Bank Cttee. of the Cfee., 1934; Member for Supply, Viceroy's Exec. Council, 1941-43; Governor of B'bay, Sept. 1947; Chairman: Central Bank of India; Indian Hotels Co. Ltd.; Sir Dorab Tata Trust; Life Pres.: Indian Council of World Affairs, B'bay Br.; Fellow, Royal Society of Arts; Governor of U.P., May 1949-June 1952. Hon. LL.D., Banaras, Aligarh and Poona Univs.; D.Litt., Agra Univ. Publications: *The Political Future of India*; *Biography of Sir Pherozeshah Mehta*; *Reflections, Wise and Otherwise*. Address: "Spirosporo," Carmichael Road, Cumballa Hill, Bombay 26.

**MODY, Mr. Justice Nalinikant Ambalal, B.A., LL.B.**, Judge, High Court, Bombay. b. March 2, 1910; Educ.: Elphinstone High School; St. Xavier's College (1925-27);

Elphinstone Coll. (1927-29). Joined the Bar, 1935; Chairman, Life Insurance Tribunal. Address: Neermulah, Mt. Pleasant Road, Malabar Hill, Bombay 6.

**MOGENSEN, Erik Brannich, M.Sc.**, Civil Engineer. b. Sept. 8, 1906 in Denmark; Educ.: Copenhagen Univ. Hon. Consulting Engr. (Cement) to the Govt. of India, 1945-56; Consul for Denmark, 1950; Consul-General, 1957; Chairman, F. L. Smith & Co., B'bay, Pvt. Ltd., Bombay Madrigal Singers Assoc.; Vice-Chairman Cement Machinery Mfg. Assoc.; Dir., Engg. Construction Corpn. Ltd. Address: Shangrilla, Carmichael Road, Bombay.

**MOHAMMED, Bakshi Ghulam** (See under Bakshi Ghulam Mohammed).

**MOHAMED KOYA, C. H.**, Minister for Education, Kerala, since March 1967. b. July 15, 1928; Educ.: Up to Intermediate. Entered politics and joined the Muslim League, 1945; member, Indian Union Muslim League Working Cttee.; was Pres., Malabar Dist. Muslim Students' Federation Scholarship Cttee.; Secy., Kerala State Muslim League Cttee.; Leader: Municipal Muslim League party, 1952-59; Muslim League Leg. party in Kerala Assembly, 1957-59; elected M.L.A., Kerala, 1960; elected Speaker, Legislative Assembly, June 1961; resigned, Nov. 1961; elected to the Lok Sabha from Kozhikode, 1962-67; member: Wakf Board; Haj Cttee.; Pres., Tirurangadi Orphanage Cttee.; was Chief Editor, *Chandrika*, Malayalam Daily from Kozhikode. Publications: *My Haj pilgrimage*, *Cauz London Cairo*, *My Malaysia tour*, *Muslim Rule in India*, *Assembly Procedure*, etc. Address: Trivandrum.

**MOHAN, Yadava, C.E. (Hons.)**, M.I.E. Vice-Pres., Intn'l Commn. for Irrigation and Drainage 1963-68; Chairman and Administrator, Rajasthan Canal Board, since July 1962; member, Boards of Tech. Consultants for Beas and Banganga multipurpose projects. b. July 20, 1908; Educ.: Meerut Coll., Meerut; C.E. (Hons.) from Thomason Coll. of Civil Engg., Roorkee, 1928. Civil Engr. in various capacities (Asstt. Exec.; Exec., Supdtng. and Chief Engr.) in the Irrigation Dept. of U.P., on deputation in U.S.A. on U.S. Bureau of Reclamation, Army Corps of Engrs., TVA, etc. Chief of the Natural Resources Devpt. Dvn., Plng. Commn., New Delhi, 1953-58; Secy., Adv. Cttee. for Irrigation and Power Projects for the Second Plan, 1953-58; member, Plng., Central Water and Power Commn., 1958-62. Secy. Genl. the Intn'l Commn. for Irrigation and Drainage, 1957-63. Publications: Articles of Engg. interest and humanities in engg. magazines and newspapers. Address: A-3, Gandhinagar, Jaipur 9.

**MOHANTY, Gopi Nath, M.A., O.A.S. (I)**, Oriya Novelist; Story writer and literary critic, Oriya Adv. Board of the Bharat Sahitya Akademi. b. April 20, 1914; Educ.: Patna High School, Patna; Ravenshaw Coll., Cuttack. Made a thorough study of the Adivasi tribes of Orissa; collected their languages, songs and myths; awarded the Rashtrapati Award, 1955, for his novel *Amrutara Santana* in Oriya (translated into Hindi and Telugu by the Sahitya Akademi). Publications: Novels: *Harijana*; *Danapani*; *Siba Bhai*, *Paraja*, *Laya Bilaya*, etc.; Stories: *Ghasara Fula*; *Chhai Alua*, etc.; Dramas: *Mahapurusha*, etc.; Essays: *Premara Niyati*, etc.; Biography—*Dipam Jyoti*; Literary Researches: Date and place of birth of Sarola Dasa; Adivasi researches: *Kuvi Kondh Bhasa Tattwa*; *Kondh Paraja Stotra O Sangita*; Poems in Kondh: *Kuvi Lokuti Nehi Panbu*. Address: Plot No. 200, Unit III, Bhubaneswar.

**MOHI-UD-DIN, Akhtar, B.A.**, Senior Editor, *Kashmiri & Chaman*; The J. & K. Academy of Art, Culture & Languages, Srinagar. b. April 17, 1928; Educ.: Srinagar. Started writing in

Urdu, 1951 and in Kashmiri, 1953; awarded 2nd Prize for Urdu short story 'Pondrich' in a competition for selecting an Indian short story for Intn'l contest, 1954; won Sahitya Akademi award for a Kashmiri short stories book, 'Sat Sangar', 1958; represented Kashmir at writers cfee.s at Delhi, Hyderabad, Mysore and Kerala; Editor, Dictionary of the Kashmiri Languages under preparation; deputed to the Field Survey Org., J. & K. Govt., Srinagar. Publications: In Kashmiri: Short Stories: *Sat Sangar*; Novel: *Dod Dug, Soenal*; compiled and edited five books in Kashmiri; wrote numerous plays in Kashmiri for stage as well as for radio. Address: Sekidafar, Srinagar 2.

**MOOKERJEE, Sir Biren, M.A. (Cantab.)**, M.I.E. (Ind.), Kt. (1942), Governing Director, Martin Burn Ltd., Calcutta. b. Feb. 14, 1899; Educ.: Hastings House and Sibpur Engineering Coll., Calcutta; Trinity Coll., Cambridge. Joined Martin & Co. as an Assistant, 1924; made partner, Burn & Co., 1931 and Martin & Co., 1934; was closely associated with the negotiations which led to the formation of The Steel Corporation of Bengal Ltd., 1937 and the subsequent construction of the steel works at Napuria alongside the Hirapur Works of The Indian Iron & Steel Co. Ltd.; during World War II, appointed to the Munitions Board and the Defence Council; elected Sheriff of Calcutta, 1940; was Chairman: Calcutta Board, former Imperial Bank of India, Governing Body, Sibpur Engineering Coll.; Fellow, Faculty of Engineering of the Calcutta Univ.; was member, Indian Mission which negotiated Rs. 15 crore loan from the World Bank to the Indian Iron & Steel Co. Ltd.; Chairman, Indian Iron & Steel Co., Calcutta. Address: 7, Harrington Street, Calcutta 16.

**MOOLGAOKAR, Sumant, B.Sc. (Hons.)** (Lond.), J.P., Business Executive. b. March 5, 1906; Educ.: St. Xavier's High School and St. Xavier's Coll., Bombay; Imperial Coll., London. Started career with the A.C.C. Ltd.; served the cement industry in various tech. and managerial capacities, 1930-48; Mg. Dir., TELCO Ltd., 1949; was Chairman, Engg. Capacity Survey Cttee.; Machine Tools Devpt. Cttee.; member: Indian Defence Delegation to Washington, 1963; National Plng. Council, Plng. Commn.; Adv. Bd., Coll. of Mily. Engg., Poona; Dir.: Tata Industries Pvt. Ltd.; Tata Sons Pvt. Ltd., TISCO Ltd.; Tata Engg. and Locomotive Co. Ltd.; Tata Hydro-Electric Agencies Ltd.; A.C.C. Ltd.; Tata Johnson Ltd.; ACC-Vickers-Babcock Ltd.; Cement Agencies Ltd., Heavy Engg. Corpn., Ranchi etc. Address: Bombay House, Fort, Bombay.

**MORAES, Dominic, M.A. (Oxon.)**, Writer. b. July 19, 1933; Educ.: St. Mary's High School, Bombay; Jesus Coll., Oxford. Contributed to several English Papers and Magazines, Author of *A Beginning* (1957) which took the 'Hawthornden Prize'; awarded 'Lamont Prize' 1958; Travel books on India. *Gone Away* (1960) and *Poems* are Book Society's and Poetry Society's Choice for their year. Address: C/o Curtis Brown Ltd., Library Agents, 13, King's St., London-W.C.1.

**MORAES, Francis Robert, M.A. (Oxon.)**, B.A. (Bombay), Bar-at-Law, Editor-in-Chief, *The Indian Express*, Delhi, since Dec. 9, 1957; Sheriff of Bombay 1961-62. b. Nov. 12, 1907; Educ.: St. Xavier's Coll., Bombay and Oxford Univs. Asstt. Editor, *The Times of India*, 1938-46; Editor of *The Times of Ceylon*, 1946-48; War Correspondent, Burma-China, 1942-45; Actg. Editor, *The Times of India*, April 11-Aug. 14, 1949; Dy. Editor, *The Times of India* till March 1950; Editor, *The National Standard*, March-Nov. 1950; was member, Indian Cultural Delegation to China, April-June 1952; Editor, *The Times of India*, Bombay, 1950-57. Publications: *Story of India*; *Introduction to India with Robert Stimson*; *Report on Mao's China* (Macmillan, New York 1953);



**Jawaharlal Nehru** (Macmillans, New York, 1956); *Yonder One World* (Macmillans, New York, 1957); *Sir Purshothamdas Thakurdas* (Asia Publishing House, 1957); *The Revolt in Tibet* (Macmillans, New York, 1960); *India Today* (Macmillans, New York, 1960); *Nehru-Sunlight and Shadow*, 1964; *The Importance of Being Black* (Macmillans, New York 1965). Address: 142 Golf Links, New Delhi.

**MORARKA, Rodheshyam Ramkumar**, B. Com., ex-M.P. (Lok Sabha); Chairman. Public Accounts Cttee., May '64—Feb. 67. b. March 26, 1923; *Educ.*: Sydenham Coll. of Commerce and Economics, Bombay; was gold Medalist of the Bombay Univ. in Advanced Banking and Banking Law; was Fellow, Sydenham Coll. of Commerce, Bombay. Is keenly interested in economics, planning, company management, public undertakings, etc.; visited Europe several times; member, Lok Sabha since 1952, member Estimates Cttee., 1955-56 and 1956-57; member of various Select Cttees. and other Parliamentary Cttees, since 1952. Address: 24B, Carmichael Road, Bombay.

**MUDALIAR, Sir A. Lakshmanaswami**, M.D., LL.D., D.C.L., D.Sc., Padma Bhushan (1954), Padma Vibushan (1963), M.L.C., Madras, Vice-Chancellor, University of Madras, since Aug. 1942. b. Oct. 14, 1887; *Educ.*: Christian and Medical Colleges, Madras. Prof. of Obstetrics and Gynaecology, Medical Coll., 1934-42; Supdt., Govt. Hospital for Women and Children, Egmore and Principal, Medical Coll., 1939-42; Member, Syndicate, Madras Univ., since 1925; member: Indian Medical Council, since its inception; All-India Council of Technical Education; All-India Council of Scientific and Industrial Research; and of its Governing Body; Exec. of the Assoc. of Commonwealth Univs., since 1948; Chief Commissioner, Madras Prov. Boy Scouts Assoc.; Chairman: Secondary Education Enquiry Commission, 1952-53; Exec. Board, W.H.O.; Exec. Board, UNESCO, 1955; President, 14th World Health Assembly, 1961; Chairman, Health Survey & Planning Cttee., 1959-61. Publications: *Clinical Obstetrics: Ante-Natal and Neo-Natal Mortality of Infants*; *Case-book for Midwives*. Address: 'Kensington,' Kilpauk, Madras.

**MUDALIAR, Sir A. Ramaswami**, Diwan Bahadur, Kt., K.C.S.I. (1942), Ex-Vice-Chancellor, Travancore University. b. October 14, 1887; *Educ.*: Christian, and Law Colleges, Madras. Advocate, Madras; member: Leg. Council, Madras, 1920-26; Pres., Municipal Council, Madras, 1928-30; member: Council of State, 1930; Indian Leg. Assembly, 1931-34; R.T.C. Federal Structure Cttee.; and Indian Franchise Cttee.; Indian Reserve Bank Committee; member: Special Textile Tariff Board; India Council; Hon. Editor, *Justice*, 1927-35; Member, Viceroy's Executive Council for Commerce Dept., 1939-42; Supply Member, 1943; Leader, Indian Delegation, San Francisco, 1945; elected Pres. of the Economic and Social Council of the U.N.O., 1946, 1947; Leader, Indian Food Delegation to U.K. and U.S.A., 1946; Hon. D.C.L.: Oxford Univ., 1946; Durham, 1953; Senior Vice-Pres., Economic and Social Council, 1950, 1951; Chairman: U. N. Cttee. on Forced Labour; International Civil Service Board of U.N.O.; Dewan, Mysore State, 1946-49; Member, Rajya Sabha; Member, I.L.O. Conventions Cttee.; Chairman: India Steamship Co. Ltd.; Tube Investments of India Ltd. Address: 'Kensington,' Kilpauk, Madras.

**MUDHOLKAR, Janardan Rangnath**, B.A., LL.B. (Cantab), Bar-at-Law, Chairman, Press. Council of India, since July, 1966. b. May 9, 1902; *Educ.*: Elphinstone High School, and Elphinstone Coll., Bombay; Sidney Sussex Coll., Cambridge; Lincoln's Inn, London. Practised at the Bar, 1925-41; Dist. & Sessions Judge, Sept. 1941-June 1948; Judge, Nagpur High Court, June 1948-Oct. 1956; Bombay High Court, Nov. 1956-Sept. 1960; acted as

Chief Justice, Bombay High Court, Aug.-Sept. 1960. Judge, Supreme Court of India, Oct. 1960-June 1966. Address: 31, Aurangzeb Road, New Delhi.

**MUGALI, Dr. Ranganath Shrinivas, M.A.**, B.T. (Bom.), D. Litt. (Poona), Kannada writer; Prof. of Kannada and English and Principal, Willingdon Coll., Sangli. b. July 15, 1906; *Educ.*: P. D. J. High School, Bijapur; Karnatak Coll., Dharwar. Life member, D. E. Society, since 1937; elected member, Karnatak Univ. Senate, 1950; Academic Council, 1952; Univ. Teacher for Ph.D., Poona Univ. since 1951; Sahitya Akademi Award for *Kannada Sahitya Charitre*, 1958. Publications: *The Heritage of Karnataka*; Poems: *Basiya*; *Aparakarune*; *Om Ashantih*; Novels: *Baluri*; *Karanapurusha*; *Anna*; Drama: *Namadhari*; *Vijaya Samrajya*; *Manorajya*; *Ritida Kai* etc.; Short story: *Kanasina Keladi*; Criticism: *Sahityopasane*; *Kannada Sahityada Itihasa*, etc. Address: Deptt. of Literary & Cultural Development, Ravindra Kala Kshetra, Bangalore 2.

**MUKERJEE, Hirendra Nath, M.A.** (Calcutta et Oxon.), B.Litt. (Oxon.), Barrister-at-Law, M.P., Communist leader and Educationist. b. Nov. 23, 1907; *Educ.*: Calcutta and Oxford. Head of the Dept. of History, Surendranath Coll., Calcutta, since 1936; member: A.I.C.C., 1938; Jt. Secy., Congress Socialist Party, Bengal, 1938; Bengal Provincial Cttee., C.P.I., 1947-49; detained without trial (1948-49); M.P. from Calcutta North-East, Jan. 1952, Calcutta Central, 1957; and again in 1962; Dy. Leader, Communist Party group since 1952 and after secession of the Left, leader, 1964; member: National Council, C.P.I.; Calcutta Univ. Senate, 1953 and 1957; Press Consultative Cttee., 1962; All India Council of Sports; Enq. Cttee. on Small Newspapers, 1964. member, Exec. cttee., Jawaharlal Memorial Trust; Shastri National Memorial Trust; National Cttee. for Gandhi Centenary. Publications: *An Introduction to Socialism* (1939); *China Calling* (1942); *Under Marx's Banner* (1944); *India Struggles for freedom* (1946); *Gandhiji: A Study* (1958); *Himself a True Poem, A Study of Tagore*; *India and Parliament*; *The Gentle Colossus: A study of Jawaharlal Nehru*; and other volumes in English and in Bengali. Address: 14, Indian Mirror Street, Calcutta 13.

**MUKERJI, Sashadhar, M.Sc.**, Padma Shri (1967), a leading Film Producer; Chairman, Filmalaya Pvt. Ltd. b. Sept. 29, 1909; *Educ.*: Allahabad. Joined Bombay Talkies, 1935; produced *Kangan*, *Bandhan*, *Jhoola*, *Naya Sansar*, and *Kismet*; founded Filmistan, 1943 and produced *Shikari*, *Sindoor*, *Shahnai*, *Sargam*, *Actress*, *Anand Math*, *Samadhi*, *Sajan*, *Do Bhai*, *Shaheed*, *Anarkali*, *Nagin*, *Nastik*, *Shabnam*, *Jagriti*, *Munimji*, *Paying Guest*, and *Tum Sa Nahin Dekha*; left Filmistan, May 1958; opened Filmalaya Pvt. Ltd.; produced *Dil Deke Dekho*, *Love in Simla*, *Hum Hindustani* in colour and *Ek Musafir Ek Hasina*. Address: "Grotto Villa", 2nd Hasanabad Lane, Santa Cruz West, Bombay 54.

**MUKHERJEE, Ajoy Kumar**, Chief Minister, West Bengal, since March 1967. b. April 15, 1901; *Educ.*: Hamilton School, Tamuk; Uttarpara Coll., Hooghly; Presidency Coll., Calcutta. Left college while preparing for the B.Sc. exam. in response to Mahatma Gandhi's call and joined the non-cooperation movement, 1921; suffered imprisonment several times during the freedom movement; was Supreme Leader, in the "National Govt." established in Tamuk during the "Quit India" movement; returned to the West Bengal Assembly from his home constituency of Tamuk in all the four general elections; Minister for Irrigation, 1952-63; left the Ministry in pursuance of the Kamaraj Plan, Sept. 1963 and devoted himself entirely to organisational work and rural uplift; became Pres., West Bengal P. C. C., 1964 left the organisation because of serious

differences with his colleagues, Jan. 1966; formed the Bangla Congress, 1966; is its Pres.; returned to the West Bengal Leg. Assembly from two assembly constituencies, 1967. Address: Chief Minister, West Bengal, Calcutta.

**MUKHERJEE, Hemant Kumar**, Music Director, Playback Singer and Picture Producer. b. June 16, 1922 at Varanasi; *Educ.*: Calcutta; Self-instruction in music at home. Was an artiste in the A.I.R.; rendered voice for Sailesh Dutta Gupta, 1937; composed for a Bengali film, *Purbaraag*, 1945; was closely associated with the I.P.T.A.; joined Filmistan, 1951, his assignments being *Anandmaath*, *Shaart*, etc.; rendered voice for Naushad, S. D. Burman, C. Ramchandra and Shanker Jaikishen; Filmfare Award for him in Nagin, 1954; Shaap, Mochan and Miss Mary were his next assignments; produced 'Neel Akasher Neechey', 1958; 'Bees Saal Bad', 1962, 'Kohraa', 1964, all acclaimed as having great artistic skill in the filmdom. Address: Gitanjali, 14th A Road, Khar, Bombay 52; 26/2A, Rupnarayan Nandan Lane, Calcutta 25.

**MUKHERJEE, Sudhir Krishna, B.A.** (Hons.), (Econ.), M.A. (Econ.) (Calcutta), Univ. Gold medalist, Secy., Border Roads Devpt. Board, and ex-officio Jt. Secy., Min. of Transport, since March 1960. b. Jan. 3, 1915. *Educ.*: Presidency Coll. and Calcutta Univ. (1930-37); Joined Indian Defence Accounts Service, Nov. 27, 1940; served in various capacities in the Defence Accounts Deptt., including a year in the N.W. F.P.; Asstt. Military Accountant-Gen. (Adm.), 1944-47; Asstt. Fin. Adviser (Min. of Fin./Defence), 1947-50 and Dy. Fin. Adv. and Jt. Fin. Adv., 1952-56; Controller of Defence Accounts (Southern Command), Poona, 1956-60. Address: 96, Shahjehan Road, New Delhi 11.

**MUKHERJI, Balai Chand, M.B., B.S.**, Bengali Writer and Pathologist. b. 1899; *Educ.*: Patna and Calcutta; passed matriculation, 1918, I.Sc. 1920 M.B.B.S., 1927. Took up literary career from 1918 and wrote under the pen-name 'Bonophul'; started as a pathologist in Bhagalpur, 1929. Publications: 70 books: Poems, dramas, short stories, novels, satires and essays. Address: Gole-Kuthi, Adampur, Bhagalpur (Bihar).

**MUKTIAR, Moni Ram Dutta**, Bayana, Muktar, Dancer and musician. b. May 1881 Jestha 22, 1803 Sakabda; *Educ.*: Sree Sree Kamalabari Satra, Sibsagar Dist. Represented Satriya before All India Dance Seminar, New Delhi, 1958; received Sangeet Natak Academy award 1963 and Assam Sangeet Natak Academy award, 1961 by the Assam Sahitya Sabha; offered felicitations for outstanding work in popularising the Satriya Art and Culture, 1963. Address: P. O. Kamalabari, Mujuli, Dist. Sibsagar, Assam.

**MUKTIBODH, Sharadchandra Madhav, M.A., LL.B.**, Marathi Poet, Critic and Novelist; Lecturer, Nagpur Mahavidyalaya, Nagpur. b. Jan. 21, 1921; *Educ.*: Holkar Coll., Indore (M.P.). Commenced writing verse while at school; has been accorded an important place in contemporary Marathi poetry. Publications: *Navi Mahat* (Poetry); *Yatrik* (Poetry); *Kshipra* (Novel); *Sarhadda* (Novel); *Kahi Nibandh* (Criticism). Address: Shankar Nagar, Nagpur.

**MULLA, Anand Narayan, M.A., LL.B.**, Sahitya Akademi Award (1964). Urdu Writer; Advocate, Supreme Court. b. Oct. 24, 1901, at Lucknow; *Educ.*: Govt. Jubilee High School and Canning Coll., Lucknow. Started writing poems in English, 1917; switched over to Urdu, 1926; practised law at Lucknow, 1926-46; Chairman, Indo-Pak Military Pensions Appeals Tribunal, 1946; rejoined profession, March 1952; Judge, Allahabad High Court, 1954-58; Senior Judge, Lucknow Bench, 1958-61; resumed practice, 1961; takes active part in political, civic and cultural



activities. *Publications*: *Mazamin-E-Nehru* (1938); Translation in Urdu of Pandit Nehru's selected articles; collection of poems: *Jus Sheer* (1949); *Kuch Zarre Kuch Tare* (1959); *Meri Hadise Umre Gurezan* (1963), which won Sahitya Akademi Award, 1964. *Address*: 2, China Bazar Road, Lucknow.

**MUNDASSERY, Joseph, M.A.**, Politician and Malayalam Writer; Principal, Co-op. Coll., Trichur. *b.* 1902. Recipient of titles from H.H. The Maharaja of Cochin for literary work.—Sahityakusala and Sahityanipuna; visited China, Soviet Union and European countries; entered active politics, 1948; member, World Peace Council; has been associated with educational activities for several years; has been in the forefront of the Progressive movement in Literature; was M.L.A. for about 10 years; Minister for Education, Kerala, 1957-60; was Editor of various literary journals and also a daily. *Publications*: Has produced more than thirty volumes including fiction, travel, biography, literary criticism and general essays; Some Books: *Professor, Konthayilinnukurisilekku, China Forward, Mattoli, Manadandam, Vayanasalayil, Manushyakathanugayikal*, etc. *Address*: Trichur.

**MUNSHI, Kanaiyalal Maneklal, B.A., LL.B.**, D.Litt., LL.D., Ex-Governor of U.P. (1952-57), Founder, Pres., Bharatiya Vidya Bhavan, since 1938. *b.* 30th Dec. 1887; *Educ.*: Baroda Coll. Advocate, Bombay High Court, 1913; Fellow of the Univs. Bombay and Baroda; M.L.A., Bombay, 1927-46; member: Working Cttee., Indian National Congress, 1930; A.I.C.C., 1930-36 and 1947; Secy., Congress Parly. Board, 1934; Home Min., Govt. of Bombay, 1937-39; member, Constituent Assembly of India and of its Drafting Cttee., Parliament, 1947-52; Agent Genl. to the Indian Govt., Hyderabad, 1948; Chairman, Instt. of Agriculture, Anand, since 1951. Trustee: Birla Educ. Trust and other trusts, since 1948; Food and Agriculture Min., Union Govt., 1950-52; Chairman, Sanskrit Vishva Parishad, since 1951; Exec.-Chairman, Indian Law Instt., 1957-60; Vice-Pres., All-India Swatantra Party; often imprisoned in the freedom movement. *Publications*: (Gujarati): Over 50 books, incl. Novels, Plays, Essays, Memoirs; (English): *Gujarat and its Literature: Bhagwad Gita and Modern Life; Creative Art of Life; Saga of Indian Sculpture; End of an Era—Hyderabad Memories; Warnings of History; Reconstruction of Society through Trusteeship; Foundations of Indian Culture*, etc. *Address*: Bharatiya Vidya Bhavan, Chowpatty, Bombay.

**MUNSHI, Srimati Lilawati**, Chairman, The Women's Adv. Cttee. of Indian Std., Inst., 1964; Vice-Pres., Bharatiya Vidya Bhavan, Bombay, Delhi, Kanpur and Gujarat, since their inception; Pres.: Bharatiya Sangit Shiksha Pith of Bharatiya Vidya Bhavan; All India Women's Central Food Council, New Delhi, 1950-64; Harijan Sevak Sangh, Bombay, 1943-52; Coll. of Catering and Instt. Management, 1954-64; Bharatiya Stree Seva Sangh, 1948-64; Vice-Pres.: National Council of Women in India, 1953-58; Friends of the Trees, 1958-64; member: Small Scale Industries Board 1962-64; National Campaign Cttee., 1963-64; Senate, Sardar Vallabhbhai Vidyapith, since 1956 and its Syndicate, 1962-64; organised Swadeshi Market and was elected its Pres.; thrice imprisoned in the freedom movement; M. P. (Rajya Sabha) 1952-58; Chairman, Instt. of Catering Tech. and Applied Nutrition, 1963-64. *Publications*: *Rekhachitro Ane Bija Lekho; Kumaradevi; Jeevamathi Jadeki; Rekha Chitro—Juna Ane Nava*; miscellaneous articles. *Address*: Bharatiya Vidya Bhavan, Chowpatty, Bombay.

**MURTHY, B. S.**, B.A., B.Ed., Dy. Minister for Health and Family Ping., Govt. of India, since Jan. 24, 1966. *b.* Oct. 29, 1907; *Educ.*: Govt. Arts Coll., & Training Coll., Rajahmundry; Christian Coll. and Law Coll., Madras. Journalist; M.L.A., Madras, 1937; Parly.

Secy. for Labour and Industry, Madras, 1937-39 and 1946-47; Chief Whip, Madras Leg. Congress Party, 1946-47; Pres.: Andhra Provincial Agricultural Labour Congress since 1946; Andhra Provincial Harijan Sewak Sangh, 1940-49; courted Jail, 1940-42; member, Exec. Cttee., Gandhi Smarak Nidhi, since 1959; led Indian delegation to XIth Intn'l Cfce. of Social Work held at Rio de Janeiro, 1962; Editor, the *NAVJIWAN*—a Telugu weekly, M.P. Lok Sabha, since 1952; member, Parly. Delegation to China, 1956; Pres., All-India Depressed Classes League, 1959; visited: Europe & U.K., 1949, U.S.A. & Japan, 1962; Union Dy. Min., C. D. and Co-op., 1962-66. *Publications*: *Revolt of Six Cross; Agony; Andhra Virakumar*. *Address*: No. 5, Ashoka Road, New Delhi.

**MURTHY, Onkar Srinivasa, B.A., B.E.** (Hons.), M.I.E. (India), A.M.I. Struct.E. (London), Padma Shri (1959), Gen. Manager, Southern Railway, since Feb. 1967. *b.* June 26, 1911; *Educ.*: Madras. Selected to the I.R.S.E., March 1936; held various assignments in former G.I.P. Rly., till 1947; designed and completed construction of: Chittaranjan Locomotive Works, 1948-50; Integral Coach Factory, Perambur (Madras), 1951-56; Engineer-in-Chief, Metre Gauge Factory and Locomotive Component Works, Varanasi, 1956-58; Dir., Ping., Rly. Board, 1958; responsible for formulation of the Railways' Five Year Plans; leader, Indian Delegation to the meetings of Intl Std.s Org. Working Group, Dusseldorf, 1963, London, 1965, Gen. Manager W. Rly., July '62—Jan. '67. *Publications*: Paper on: *Factory Project*. General Manager's Office S. Factory Project. *Address*: General Manager's Office, S. Rly. Park Town, Madras 3.

**MURTHY, Ramnathpur Venkatesa, M.A.**, Editor, *Records & Statistics*. *b.* Nov. 12, 1906; *Educ.*: Mysore and Bombay. Joined the editorial staff of *Commerce*, March 1936; became its first Indian editor; resigned, 1951; Chief Editor, *The Bharat*, 1951; after a few months, appointed Spl. Rep., *Eastern Economist*; after the Second World War, went to the U.K. to make an on the spot study of post-war industrial conditions and prospects of Indo-British eco. relations edits *Daily Cotton and Textile Market Review*; broadcasts often from the A.I.R. on eco' subjects; is connected with many educational and cultural instts.; is Chairman, Press Guild of India. *Publications*: Has edited and published a number of specialised publications, including *The History of Tech. Educ. in India and Industrial India*; contributes to leading journals, in India and abroad. *Address*: 5, Ratan Lodge, Bombay 19.

**MUSAFIR, Giani Gurmukh Singh**, ex-M.P.; was member, Executive, Congress Party in Parliament, Ex-Pres., Punjab Pradesh Congress Cttee., *b.* Jan. 1899; *Educ.*: Rawalpindi and Training Coll., Lahore. Took active part in Akali movement, Jathedar Akal Takhat; Gen. Secy., S.G.P.C. and Shiromani Akali Dal; devoted to poetry and journalism; joined Congress, 1923; courted jail in almost every movement; member, A.I.C.C. since 1930; Constituent Assembly, 1947; Working Committee, 1952-57; Chairman, Jallianwala Bag Trust Managing Cttee.; Chairman, Reception Cttee., 61st Session of the Indian National Congress; member, Delegation to Stockholm Peace Conference, 1954; visited Japan, Russia and continental countries. *Publications*: Poetry, short stories, etc. in Punjabi. *Address*: C/o 21, Feroze Shah Road, New Delhi.

**MUTHANNA, Mysore Sundararaja, B.E.**, M.I.E., M.I.T.E., Gen. Manager, Bombay Telephones, since 1961. *b.* March 19, 1919; *Educ.*: Bangalore. Joined the Indian Posts & Telegraphs Deptt. as Asstt. Divl. Engr., Telegraphs, 1943; Divl. Engr., Telegraphs, Indore and Asstt. Chief Engr., P. & T. Directorate, New Delhi, 1948-52; Dir. of Telegraphs: Nagpur, 1953-55; Bihar Circle, Patna,

1955-59; Dir. of P. & T., Assam P. & T. Circle 1959-61; introduced 12 new telephone exchanges in Bombay in 3½ years and increased the rate of giving telephone connections from 60 in 1961 to 1,100 per month in 1965; was instrumental in linking Bombay on the National Telex Grid. *Address*: General Manager, Bombay Telephones, Telephone Bhavan, Colaba, Bombay 5.

**MUTHIAH Chettiar of Chettinad, Dr. Rajah Sir Muthiah Annamalai, Kt., B.A., D.Litt., M.L.C.**, Pro-Chancellor, Annamalai Univ.; Chairman: The Indian Bank Ltd., Madras; Chettinad Cement Corp. Ltd., Madras. *b.* 1905; *Educ.*: Presidency Coll., Madras. Member: Madras Leg., 1930-62; Madras Franchise Cttee., 1931; Hony. D. Litt., Annamalai Univ., 1955; member: Syndicate, Madras Univ., 1940-46; Indian Constituent Assembly, 1946-50; Chief Whip and Chairman, Justice Party; Mayor of Madras, 1932-33 and 1934-35; Educ. and Public Health Min., Madras and Pro-Chancellor, Madras Univ. 1936-37; Local Self-Govt. Min., Madras, 1937; Pres.: Southern India Chamber of Commerce, 1941; F.I.C.C. & I., 1943-44; Local Board, former Imperial Bank, Madras; Trustee, Pachaiyappa's Coll. Board, 1928-63; its Pres., 1942; Dir.: former Imperial Bank; India Reinsurance Corp. Ltd., Bombay; Punalur Paper Mills Ltd., Kerala; Binny & Co. Ltd., Madras; etc. *Address*: Chettinad House, Rajah Annamalaiapuram, Madras 28.

**MUTHUSWAMY, M., B.A., B.T.**, Minister for Local Administration, Madras, since March 1967. *b.* 1929; *Educ.*: Namakkal; was a High School teacher; resigned his job to contest the election; was returned to the Madras Legislative Assembly from Namakkal, Salem District, 1967; was implicated in the anti-Hindi agitation in 1965 and was arrested, tried and acquitted; was Pres., Namakkal Circle Teachers' Union and the Salem Dist. Teachers' Union; is a good speaker. *Address*: "Riverside", Greenways Road, Adyar, Madras 28.

**MYSORE, His Highness Maharaja Sri Jaya Chamaraja Wadiyar Bahadur, G.C.B.** (1946), G.C.S.I. (1945), LL.D. (1942), D.Litt. (1955), LL.D. (1962); LL.D. Queensland Univ. (Australia) 1963; Maharaja of *b.* July 18, 1919; *Educ.*: Maharaja's College Mysore; passed B.A. from the Mysore Univ., 1938. Has travelled extensively in the Far East, Europe and East Africa, Australia and South America; went on lecture tour of U.S.A., 1959, 1960, 1961, 1962, 1963 and 1965; was Raj Pramukh and subsequently Governor of Mysore State till May 1964. Governor of Madras, May '64—May '67. *Publications*: *Dattatraya; The Gita and Indian Culture*. *Address*: The Palace, Mysore.

**NADKARNI, Laxmikant Madhavrao, B.A.** (Hons.) (Bombay), M.Sc. (Econ.) (London), I.C.S., Chairman, Bombay Port Trust, since Sept. 1964. *b.* March 3, 1915; *Educ.*: Elphinstone Coll., Bombay; London School of Economics, London. Asstt. Collector, Dharwar/East Khandesh & Ahmednagar, 1939-42; Under-Secy., Gen. & Educ. Depts., Govt. of Bombay, 1943; Collector, Broach, 1945; Dy. Secy., Revenue Dept. & Passport Officer, Govt. of Bombay, 1946; Secy. to the Governor of Bombay, 1948-52; Municipal Commr., Poona, 1952-55; Collector, Kolhapur/Bombay, 1956-57; Commr., Bombay Dvn., Nov. 1956 to Feb. 1957; Jt. Secy., Min. of Defence & Min. of Home Affairs, Govt. of India, Feb. 1957 to June 1963; Adm. Officer/Chairman, Mormugao Port Trust, June 1963 to Sept. 1964. *Publications*: *District Administration in Bombay Province—1948*. *Address*: North End, 7, Carmichael Road, Bombay-26.

**NAG, Balwant Singh, I.S.E., C.E.** (Hons.) (Roorkee), M.I.E., Padma Shri (1959), Adv. Irrigation & Power, Ping. Commn., Govt. of India. *b.* May 1, 1906; *Educ.*: Khalsa Coll., Amritsar; and Thomason Coll. of Civil Engg., Roorkee, Honours, 1929, won the Harcourt



Butler Cup for "the best student at work and play." Selected for the Indian Service of Engrs., 1930; served in the U.P. Irrigation Deptt. till 1941; served during the War; was the first Indian to be a Commander, Royal Engrs.; was Project Officer, Central Water and Power Commn., and later Dir., Designs, and Dir., Tech. Exam.; Chief Engr. and Secy. to Govt., Assam, 1954-57; member, High Level Cttee. on Floods, 1957-58; has toured Japan, Australia and Europe. Address: No. 11, Safdarjang Road, New Delhi.

**NAGENDRA, M.A. (English), M.A. (Hindi), D. Litt., Rasa Sidhanta (Sahitya Akademi Award 1965), Prof. & Head of the Deptt. of Hindi, Delhi Univ., since Sept. 1955. b. March 1915. Educ.: St. John's Coll., Agra. Dean, Faculty of Arts, Delhi, Univ., 1958-60; Pres., Bhartiya Hindi Parihad, 1960-62. Publications: Sumitranandan Pant; *Ahunik Hindi Natak*; *Vichar aur Vishleshan*; *Adhunik Hindi Kavita ki Mukhya Pravrityan*; *Riti Kavya ki Bhoomika*; *Bharatiya Kavya-shastra ki Bhumika (Parts I & II)*; etc.; Edited: *Hindi Dhvanyaloka*; *Bharatiya Kavya-shastra ki Parampara*; *Bharatiya Natya Sahitya*; *Hindi Sahitya ka Brihat Itihas*; *Indian Literature (English)*; etc. Address: Department of Hindi, University of Delhi.**

**NAGPUR, John William Sadiq, M.A., B.D. (Hons.), Bishop of. b. July 18, 1910; Educ.: St. John's Coll., Agra, First Class M.A. in Persian; B.D. and B.D. (Hons.) exams. of the Serampore Coll. Teacher, St. John's School, Agra, 1933-34; Secy., Student Christian Movement, 1934-35; taught Persian, Wilson Coll., Bombay, 1935-46; Secy., National Christian Council, 1946-57; William Paton Lecturer, Selly Oak Colls., Birmingham, England, 1950-51; Secy., Bible Society, May-Sept. 1957; Consecrated Bishop, Poona, Sept. 15, 1957; Bishop of Nagpur, Oct. 6, 1957; Chairman, Dvn. of World Mission and Evangelism of the World Council of Churches; Regional Officer of the Anglican Communion with respectability for India, Ceylon and Pakistan. Publications: Pamphlets dealing with Devotional Life, on Youth and Family Life. Address: Cathedral House, Nagpur 1.**

**NAGY, H. E. Mr. Janos, Amb. of Hungary to India. b. 1927; Educ.: Univ. of Sciences, Budapest. Joined foreign Service, 1948; Attaché and later Secy., to the Hungarian Legation in London, 1949-51; Head of Near and Middle Eastern Deptt., Min. for Foreign Affairs, 1951-55; Charge d' Affaires, Hungarian Legation in Washington and member, Hungarian Delegation to the U.N. Gen. Assembly, 1955-56; Min. and then Amb. of Hungary to Indonesia, 1957-60; Head of Deptt., Min. for Foreign Affairs, 1960-63; twice-holder of Order of Labour, and holder of Medal of Labour. Address: 15, Jor Bagh, New Delhi-3.**

**NAIDU, Gopalaswami Doraiswamy, M.I.S.E., A.S.M.E., M.S.A.E., Industrial Scientist. b. March 23, 1893. Founder, U.M.S. Transport Co.; inventor of many mechanical devices; often travelled round the world; member: State Aid to Industries Board (Madras), State Industries Devpt. Cttee., Board of Industries (Andhra), American Society of Mechanical Engrs., New York; Society of Automotive Engrs., New York; All-India manufacturers' Org.; Adviser: U.M.S. Radio Factory; U.M.S. Works; Partner, Universal Radiators; Pres., The Industrial Labour Welfare Assoc. Ltd.; Dir. of many Transport Cos. in Coimbatore. Address: "Gopal Bagh", Avanashi Road, Coimbatore.**

**NAIDU, Mopuri Reddeppa, Painter; Art Designer, All India Handloom Board (Weavers Service Centre), Madras Centre. b. Oct. 10, 1932; Educ.: P.B. Coll., Kakinada; Govt. School of Arts and Crafts, Madras; First Class diploma in painting, 1960. Govt. of India Research Scholar, 1960-62; won prizes at**

Hyderabad and Bombay Art Society's Exhibitions, 1961; National Award at National Exhibition of Art, New Delhi, 1962; awarded Gold Medal at Hyderabad, 1963; first one-man show at Ooty, 1958; Represented: the collection of Lalit Kala Akademi, New Delhi; National Gallery of Modern Art, New Delhi; Govt. Collection at Kuala Lumpur, Malaya. Collection of Ministry of Educ., Govt. of India. Address: 7, Perumal Naicken St., Purasawalkam, Madras 7.

**NAIK, Atmaram Shridhar, B.Sc. (Bombay), M.A. (Cantab.), I.C.S., Chairman: Forward Markets Commn., Bombay, since Feb. 8, 1963; Indian Motion Pictures Export Corp., Ltd., Bombay, since Sept. 19, 1963; Dir., Film Finance Corp., since Oct. 1966. b. May 19, 1917; Educ.: Poona and Cambridge. Joined the I.C.S., 1941; worked as Secy., Industrial Plang. Cttee., Madras; Collector and Dist. Magistrate, Bijapur, Sholapur, Bombay and Bombay Suburban Dist., Bombay State; Jt. Secy., Educ. Deptt., Govt. of Bombay; Dir. of Industries, Bombay; Jt. Secy., Govt. of India, Min. of Community Devpt. and Co-op., Min. of Works, Housing & Supply and Min. of Commerce & Industry; Chairman, Hindustan Housing Factory, New Delhi. Address: St. James' Court, Marine Drive, Bombay 1.**

**NAIK, Vasantrao Phulsing, B.A., LL.B., Chief Min., Maharashtra State, since Dec. 5, 1963. b. July 1, 1913, at Gahuli, Yeotmal Dist.; Educ.: Neil City High School, Nagpur; B.A., Morris Coll.; LL.B., Univ. Coll. of Law, Nagpur. Received Social Educ. Commemoration Certificate; Dy. Min. in the old M.P. Govt.; had been member, Vidarbha Pradesh Congress; Dir. M.P. Co-op. Central Bank, 1951-52; M.L.A., M.P. in 1952; was Dy. Min. for Revenue, M.P. Chairman, former M.P. Housing Board; was also Dy. Chairman, M.P. Land Reforms Cttee.; was Chairman, Matric Cttee. appointed by the M.P. Govt.; Min. for Co-op., Bombay, 1956-57; Member, A.I.C.C.; Delegate to the Intl. Rice Commn. and F.A.O. meetings at Tokyo (Japan), 1958; Min. for Agriculture and Aarey Milk Colony, Bombay State, 1957-60; Min. for Revenue, Maharashtra State, 1960-63; Chairman: Cttee. on Democratic Decentralisation, 1960-61; Textile Control Adv. Cttee. Address: "Varsha" Mount Pleasant Road, Malabar Hill, Bombay.**

**NAIR, Dr. Keshavan Raghavan, M.A., M.Sc., Ph.D., D.Sc., F.N.I., Dir., Central Statistical Org., ex-officio Jt. Secy., Statistics Deptt., Cabinet Secretariat, Govt. of India. b. May 13, 1910, at Parur, Kerala; Educ.: M.A. Madras Univ., 1932; Research Scholar, Madras Univ., 1934-36; M.Sc., Statistics, Madras Univ., 1939; Post-Graduate Research Scholar, London Univ., 1945-47; Ph.D., London, 1947; D.Sc., London, 1954. Fellow, Royal Statistical Soc., London, since 1945; Statistician, Indian Statistical Inst., Calcutta, 1936-44; Statistician, Forest Research Inst., 1947-59; Fellow, American Statistical Assoc. in 1951 with the citation "one of the World's leaders in the construction and properties of incomplete block designs"; Pres., Statistical Sec. 41st Session of Indian Sc. Congress, Hyderabad, 1954; Jt. Dir., C.S.O., 1959-63; Indian delegate to the Cfee. of Asian Statisticians, ECAFE, Bangkok, 1960, '63 and '66. Publications: Several articles in Scientific journals. Address: Central Statistical Organisation, Yojana Bhavan, Parliament St., New Delhi 1.**

**NAIR, Lajpat Rai, M.A. (History) (Punjab), Dir., Indian Instt. of Mass Communication, since Jan. 1966. b. Jan. 9, 1908; Educ.: Forman Christian Coll., Lahore. Prof. of History, Dyal Singh Coll., Lahore; Production Officer, Asstt. Dir. (Publicity), Dir., Public Relations, Punjab Govt. 1945-53; Advertising Consultant to Govt. of India, Adv., Five Year Plan (Publicity), Dir. of Advertising and Visual Publicity, Govt. of India, 1953-63; Principal Information Officer, P.I.B., Govt. of India, 1963-66. Publications: *How India is***

*Governed*; *Sir Sikandar Hayat Khan*; and Co-author of *History of India up to Medieval Period*; *Wisdom of Modern India*; *Sardar Dyal Singh Majithia*; *Half-an-Hour with Japan*, *Manav aur Uski Duniya*; *Sir William McNaughton's Correspondence relating to Tripartite Treaty*. Address: C-1/1, Hardinge Avenue, New Delhi.

**NAIR, M. N. Govindan, B.A., Minister for Agriculture, Animal Husbandry, Dairy Development & Electricity, Kerala, since March 1967. b. Dec. 10, 1910; Educ.: Univ. Coll., Trivandrum; Law Coll., Trivandrum. Began life as a teacher; has been active in Harijan uplift work; started a school for Harijans; spent a year in Gandhiji's Ashram at Wardha; Secy., Radical Party within the Congress; spent a long period of his life underground and in jail; played a prominent role in building trade union movement in and around the Quilon industrial belt; was Secy., Travancore-Cochin Communist Party of India; Secy., Kerala State Council of the C.P.I. and member, C.P.I. Central Secretariat; is member, C.P.I. National Executive; member, Travancore-Cochin Assembly, 1952-54; Rajya Sabha, 1962-67; elected to the Kerala Assembly, 1967. Address: Sriniketan, Near Plamoodu Junction, Trivandrum.**

**NAIR, N. Sreekantan, M.A., M.P., Politician and Trade Unionist; Member and Secy., Central Secretariat of the R.S.P.; Pres., AIUTUC, since 1959. b. June 14, 1915; Educ.: Arts Coll., Trivandrum. Joined Travancore State Congress (1938); convicted several times during 1938-52 for political offences; Working Cttee. Member, Trav. State Congress, 1942-46; resigned and joined Congress Socialist Party, 1946; left C.S.P. and started the Kerala Socialist Party, Sept. 1947; merged into the R. S. P., 1950; M.P. (Lok Sabha), 1952-57; Gen. Secy., R.S.P., 1953-57; elected M.P. from Quilon, 1962 & 1967. Publications: *The Chinese Puzzle*—English; several literary and political treatises in Malayalam. Address: "Janaky Sadanam", Ambalapuzha, Kerala State; Office: Revolutionary Socialist Party, Kerala Committee Office, Quilon, Kerala.**

**NAKUL SEN, B.A. (Hons.), I.C.S., Lt. Governor of Goa, Daman & Diu, since April 18, 1967. b. Aug. 14, 1910; Educ.: Govt. High School & Hindu Coll., Delhi. Joined the I.C.S., 1935; as Asstt. Commr., held several posts till he became Jt. Secy., Min. of Reh., Oct. 1, 1951; Offg. Secy., May-Aug., 1953 and May-Sept., 1954; Commr., Jullundur Dvn., Jan. 17, 1955; Chief Secy., Govt. of Punjab, Jan. 1956; Fin. Cmmr., Revenue, and Secy., Revenue Excise and Taxation, Forests and Game Preservation Deptts., 1957; on deputation to the G.O.I., since Oct. 1958; Jt. Secy., Min. of Transport and Communication (Deptt. of Transport) upto Feb. 1960; O.S.D. in the Min. of Ind. & Commerce upto April 1961; Chairman & Mg. Dir., Indian Drugs & Pharmaceuticals Ltd., 1961-64; Secretary, Deptt. of Chemicals, Ministry of Petroleum & Chemicals, Aug. 1964-Dec. 1966; Secy., Deptt. of Social Welfare Dec. 1966-Mar. 67. Address: Cabo Raj Niwas, Caranzalem, Goa.**

**NAMBIAR, K. Kunhiraman, B.E., C.E. (Hons.), M.I.E. (Ind.), F.Inst. H.E., M.I.Mun. E., F.Am.Soc.C.E., Research & Devpt. Mgr., A.C.C. Ltd., and Chief Engr., The Concrete Assoc. of India, Bombay, since 1958. b. Dec. 14, 1902; Educ.: Madras. Was Supdng. Engr. & later Chief Engr. (Highways), Madras till 1957; Council Member: Indian Roads Congress (Past Pres.); Instt. of Engrs. (India); Indian Instt. of Road Transport; Indian Roads and Transport Devpt. Assoc.; Indian Stds. Instt. and on its various tech. Cttees.; Building Dvnl. Council; Central Road Research Instt.; Metropolitan Transport Team, Plng. Commn.; Chairman, Local Qualifications Cttee., American Soc. of Civil**



Engrs.; Editor: "The Indian Concrete Journal". Address: Flat No. 4, C.C.I. Chambers, Dinshaw Vatchha Road, Backbay Reclamation, Bombay 1.

**NAMBOODIRIPAD, E. M. S.**, Chief Minister, Kerala State, since March 1967; Gen. Secy., Left C.P.I.; ex-Gen. Secy., Central Exec., C.P.I. b. June 14, 1909; Educ.: St. Thomas' Coll., Trichur. Left College while in B.A. Class to join 1932 C.D.; formed along with others Congress Socialist Party in Kerala, 1934; joined C.P.I. later; Secy., Kerala Provincial Congress, 1938-40; Congress M.L.A., Madras, 1939-40; Member, Central Cttee., C.P.I. from 1941; Member, Politbureau, from 1950; Actg. Gen. Secy., June-Dec. 1953, July-Dec. 1954 and 1955-56; elected M.L.A., Kerala in the Gen. Elections, 1957; Chief Min., Kerala, 1957-59; elected to Kerala Leg., 1960, '65 & 1967; Gen. Secy. C.P.I. 1962-63; detained under D.I.R., Feb. 1, 1966. Publications: Many books in Malayalam and in English; *Short Story of Peasant Movement in Kerala*; *Peasant Question in Kerala*; *National Question of Kerala*; *On Agrarian Question*; *Food, Achilles Heel*; *Peasant in National Reconstruction*; *Two Policies on Agrarian Question*; *Social Democracy and Communism*; *On Organisation*; *The Mahatma and The Ism* (in English). Address: Plot 10, Nandavaram Housing Colony, Trivandrum, Kerala State.

**NANDA, Gulzari Lal, M.A., LL.B., M.P.** (Lok Sabha), Ex-Min. for Home Affairs, Govt. of India. b. July 4, 1898. Joined the N. C. movement 1921; Prof. of Economics, National Coll. Bombay; Secy., Textile Labour, Assoc., Ahmedabad, 1922-46; member, National Ping Cttee.; imprisoned for Satyagraha, 1932, 1942-44; Parl. Secy., Govt. of Bombay (Labour & Excise), 1937-39; Labour & Housing Min., Govt. of Bombay, 1946-50; Trustee, Kasturba Memorial Trust; Secy., Hindustan Mazdoor Sevak Sangh; Chairman: Bombay Housing Board, 1946-48; Stg. Cttee., Ahmedabad Municipality, 1940-42; visited Sweden, France, Switzerland, Belgium and England and studied the labour and housing conditions there; largely instrumental in organising Indian National Trade Union Congress in May 1947; delegate, 30th Session of the Intl. Labour Cfee., June-July 1947 (Geneva); Dy. Chairman, Ping. Commn., 1950-51; Ping. Min., 1951-52; elected member, Eco. Programme Cttee. of the A.I.C.C.; Leader, Indian Delegation to the Colombo Plan Consultative Cttee., Singapore, 1955; led the Indian Delegation to the I.L.C. held at Geneva, 1959; Chairman: Bharat Sevak Samaj; Adv. Cttee., Bharat Sadhu Samaj; Min. for Ping., Irrigation and Power, 1952-57; Min. for Ping., Labour and Employment, 1957-63; visited W. Germany, Yugoslavia and Austria, 1959; initiated Congress Forum for Socialist Action, May 13, 1962; Dy. Chairman, Ping. Commn., 1960-63; Union Min. for Labour and Employment, 1962-63; acted as Prime Minister of India, May 27-June 11, 1965 and Jan. 11-24, 1966; Min. for Home Affairs, Govt. of India, 1963-66. Publications: *Some Aspects of Khadi*; *History of Wage Adjustment in the Ahmedabad Textile Industry*; *Approach to the Second Five Year Plan*; *Some Basic Considerations* (Aug. 1955). Address: No. 6, Hastings Road, New Delhi.

**NANDA, Rear-Admiral Sardarilal Mathradas, I.D.C.**, Vishisht Seva Medal Class II (April 1962), Vishisht Seva Medal Class I (Jan. 1966), Flag Officer Commanding, Indian Fleet, since June, 1966. b. Oct. 10, 1915; Educ.: Karachi. Served with the Port Trust; joined the R.I.N.V.R., Oct. 1941; joined the Navy's first cruiser I.N.S. DELHI in the U.K., as her first Lieutenant, 1948; Director of Personnel Services, Naval Hqrs., 1949-51; commanded the Destroyer RANJIT and also the Frigate Squadron; appointed Chief of Personnel, and was promoted Commodore; commissioned the Cruiser I.N.S. MYSORE in U.K., 1957; Dir. Gen., Naval Dockyard Expansion Scheme, Bombay; was Chief

of Material at N.H.Q., New Delhi; has undergone a course at the Imperial Defence College, London; Dy. Chief of Naval Staff, May 1962-Dec. 1964; Mg. Dir., Mazagon Dock Ltd., Dec. 1964-May 1966. Address: C/o. Fleet Mail Office, Bombay 1.

**NANJAPPA, Smt. Rani, B.A.** (Painting & Drawing), Painter. Educ.: Madras Univ.; First Class Diploma in Advance Painting, 1962; Sculpture (Clay Modelling) Course, Govt. Coll. of Arts & Crafts, Madras, 1962-64. Has been regularly exhibiting paintings in Madras, Delhi, Bombay, Calcutta, Bangalore, Mysore and Kerala, since 1957; also in exhibitions conducted by Progressive Painters' Assoc., South Indian Soc. of Painters and Young Painters & Sculptors Assoc.; paintings have been acquired by the Nat. Mod. Art Gallery, New Delhi; State Lalith Kala Akademi, Madras; Fred Harvey Gallery, Bangalore and several for pvt. collections in India and abroad; exhibited paintings at various exhibitions; a painting was selected for display in the Contemporary Indian Art Exhibition at the Commonwealth Art Festival, London, 1965; is Lecturer, History of Arts, Coll. of Arts & Crafts, Madras. Address: Special Plot No. 26, Shastrinagar, Madras 20.

**NANJAPPA, Venkatasubramanier, B.Sc.** (Hons.), I.C.S., Secy., Govt. of India, Deptt. of Rehab., since Dec. 1965; ex-Chairman, Dandakaranya Devpt. Authority. b. Jan. 28, 1911; Educ.: Govt. High School, Bangalore; Univ. Coll., London and Jesus Coll., Oxford; I.C.S., Nov. 1934. Several posts held in Western India, 1934-45; Services placed at the disposal of the Govt. of India and appointed Civilian Lecturer for troops in the Overseas Commands; Adm. for Kolhapur, March, 1949; Insp. Genl. of Prisons, Poona, Aug.-Sept. 1949; on deputation to the Govt. of India, Min. of States, Sept. 12, 1949; Chief Commr., Tripura, 1951-55; Textile Commr., Bombay, 1955-58; Jt. Secy., Deptt. of Atomic Energy, Bombay, 1958-60; Dir. Gen., Posts & Telegraphs & Ex-officio Chairman, P. & T. Board and Addl. Secy. to the Govt. of India, 1960-62. Special Secy., Defence Production, 1962-63; Secy., Min. of Irrigation & Power, 1963-65. Address: 15, Safdarjang Road, New Delhi 11.

**NARAIN, Govind, B.Sc. (Hons.), M.Sc.**, I.C.S., Secy., Family Ping. Deptt., Min. of Health & Family Planning, Govt. of India. b. May 5, 1917; Educ.: A. P. Mission High School, Mainpuri; Govt. Intermediate Coll., Etawah; Allahabad Univ.; Balliol Coll., Oxford. Several posts held till he became Home Secy., U.P. Govt., Feb. 1948-March 1951; Adviser-cum-Secy. to H.M. the King of Nepal, March 1951-April 1954; Secy. to U.P. Govt., P.W.D., Power & Information Deptts., July 1954-Sept. 1955; Devpt. Commr. and Secy. to Govt., U.P., Ping., Eco. & Statistics & Information Deptt., Sept. 1955-Feb. 1958; Chief Secy., U.P. Govt., 1958-61, also Commr., Uttarakhand Dvn.; Mg. Dir., S.T.C. of India, Sept. 1961-May, 1963; Chairman: S.T.C. of India, May-Oct. 1963; Minerals & Metals Trading Corp. of India Ltd., Oct. 1963-April '66; Adviser to the Govt. of Kerala, Jan.-April 1965. Publications: Series of 8 talks on Community Devpt. and Five Year Plans. Address: 2B, Wellesley Road, New Delhi.

**NARASIMHAM, Mr. Justice Ramaswamy Lakshmi, M.A.** (Madras), B.A. (Hons.) (Oxford), Diploma in Economics (Madras), I.C.S., Chief Justice, Bihar High Court, b. Sept. 27, 1906; Educ.: Presidency Coll., Madras and New Coll., Oxford. Joined the I.C.S., Bihar & Orissa, 1931; after holding various administrative posts, joined the Judiciary, March 1939; officiated as Dy. Secy., Leg. Deptt., Govt. of India, May-Sept. 1945; Law Secy. to the Govt. of Orissa, Oct. 1945-June 1948; Judge, Orissa High Court, 1948-56; Chief Justice, Orissa, 1956-65. Address: Patna.

**NARAVANE, Vishwanath Sridhar, M.A.**, D.Phil., Writer; Prof. and Head, Philosophy Deptt., Poona Univ. b. Jan. 5, 1922; Educ.: Un v. of Allahabad; B.A. (1940), M.A., Philosophy (1942), D.Phil. (1946). Reader in Philosophy, Univ. of Jodhpur for a few months; associated with AIR, Sahitya Akademi and the Indian Council for Cultural Relations; delivered extension lectures at many Indian Univs.; invited by the Govts. of U.A.R., France and West Germany on cultural visits, 1963-64; visiting Prof., Colby Coll., Maine, U.S.A. for one year. Publications: *Rabindranath Tagore: A Philosophical Study*; *Stories from the Indian Classics*; *The Elephant and the Lotus: Essays in Philosophy and Culture* (in the Press); *Modern Indian Thought*. Address: 37/2, Prabhat Road, Poona 4.

**NARAYAN, Jayaprakash, Sarvodaya leader.** b. Oct. 11, 1902; Educ.: Bihar and U.S.A. Founder Secy., Socialist Party (India); Head of Labour Dept., Indian National Congress, 1931; imprisoned several times; was member, Congress Working Cttee.; resigned membership due to difference of opinion; Ex-Pres., All-India Railwaymen's Federation, also Pres., All India P. & T. Employees' Union and the All India Ordnance Employees' Fed.; made a statement in Oct. 1957 that he had finally renounced politics; Pres., Assoc. of Voluntary Agencies for Rural Devpt.; presided over the Afro-Asian Convention on Tibet, 1960; elected Pres., All-India Panchayat Parishad; a Chairman, World Peace Brigade; founder and Chairman, India-Pakistan Reconciliation Group, 1962; Dir., Gandhian Instt. of Studies; member, Nagaland Peace Mission; Chairman, Report on the welfare of the weaker section; winner of Ramon Magsaysay Award for public service 1965. Address: Kadam Kuan, Patna 3, Bihar.

**NARAYAN, Rasipuram Krishnaswamy, B.A.** (Mysore), Padma Bhushan (1964), Author. b. Oct. 10, 1906; Educ.: Christian Coll., Madras; Maharaja's High School and Maharaj's Coll., Mysore; Publications: Novels in English:—*Swami and Friends*; *The Bachelor of Arts*; *The Dark Room*; *The English Teacher*; *Teacher*; *An Astrologer's Day*; *Mr. Sampath*; *The Financial Expert*; *Waiting for the Mahatma*; *The Guide*; *Gods, Demons and others*—republished in the United States and translated into French, German and other European languages; *The Man-Eater of Malgudi*; collections of short stories contributed to important Indian and foreign journals. Address: Yadavagiri, Mysore 2.

**NARAYAN, Shriman, M.A. (English), M.A.** (Econ.), Indian Amb. to Nepal, since Nov. 1964. b. June 15, 1912; Educ.: A. P. Mission High School, Mainpuri; Agra Coll., Agra; Allahabad Univ. Undertook world tour to propagate Gandhian ideology, 1949; Gen. Secy., Indian National Congress and Chief Editor, A.I.C.C. Econ. Review, 1952-53; Chairman: Ping. Commn's Prohibition Enq. Cttee 1954-55; Stg. Cttee. on Basic Educ. 1957-60; member, All-India Khadi and Village Industries Commn., 1956-59; Pres., All-India Nature-Cure Assoc., 1960-64; member, Ping. Commn., 1958-64. Publications: *Gandhian Plan of Economic Devpt. for India*; *Gandhian Constitution for Free India*; *One Week With Vinoba*; *Gandhian Plan reaffirmed*; *England through Indian Eyes*; *Constructive Programme for Students*; *Towards a Socialistic Economy*; *Socialist Pattern of Society*; *India and China*; *India's Current Problems*; *Principles of Gandhian Ping.*; *Trends in Indian Ping.*; *Socialism in Indian Ping.*; *Tragedy of a Wall*; *On Education*; *Hindi*; *Amar Asha*; *Manav*; *Roti Ka Rag*; *Jugnoo*; *Rajni-men-Prabhat-ka-Ankur*. Address: C/o External Affairs Ministry, New Delhi.

**NARAYANAN, K. P., M.A.** (Madras), Editor, *Madhya Pradesh Chronicle*, English Daily, Bhopal; Rep. of the *Hindu* (Madras), at Bhopal. b. June 14, 1909; Educ.: St. Thomas Coll., Trichur; Presidency Coll., Madras; member, Stg. Cttee. of A.I.N.E.C. and of



Prov. Pres. Adv. Cttee., for number of years; former Editor, *Nagpur Times*; Pres.: Working Journalists Union, M.P.; M.P. Branch of Editors Cfee., 1953; member, Rly. Users Consultative Cttee. (Dvnl.), 1953-56; member, Programme Adv. Cttee., A.I.R., Indore-Bhopal; Jt. author of book, "Journalism in Modern India", edited by Prof. Wolseley. Address: Gitanjali, S.N. 6, Civil Lines, Bhopal.

**NARENDRA, KUMAR, M.A.** (Punjab), Editor, *Daily Pratap*, and *Vir Arjun*, New Delhi. b. April 24, 1914; Educ.: Govt. Coll., Forman Christian Coll., and Law Coll., Lahore. Joined the *Pratap*, 1939. Address: 6, Keeling Road, New Delhi.

**NARLIKAR, Dr. Jayant Vishnu, M.A.**, Adams Prize of Cambridge Univ., May 5, 1967, Ph.D. (Cantab.), Padma Bhushan (1965); Fellow, King's Coll., Cambridge; Scientist. b. July 19, 1938; Educ.: The Univ. Children's School, Varanasi, Banaras Hindu Univ.; Cambridge Univ.; B.Sc., Banaras Hindu Univ., 1957; B.A., 1960, M.A., 1964 and Ph.D., 1963, Cambridge Univ. Admitted to Fitzwilliam House, Cambridge, 1957; elected Berry-Ramsey Fellow of King's Coll., Jan. 1963; awarded the Tyson Medal, 1960 and the Smith's Prize, 1962 by Cambridge Univ.; Tata Scholar, 1957-63; elected Fellow of the Royal Astronomical Soc., 1963; awarded Padma Bhushan by the Govt. of India, 1965; Publications: Scientific papers in the Proceedings of the Royal Society, the Monthly Notices of the Royal Astronomical Society, Nature, The Astrophysical Journal, Observatory etc. Address: King's College, Cambridge, U.K.

**NATH, Prof. Dr. Madhab Chandra, D.Sc.**, F.N.I., F.R.I.C., F.I.C., Chitnavis Prof. and Head of Biochemistry Deptt., Nagpur Univ., Nagpur, since 1946. b. Oct. 1905 at Hashara, Dacca; Educ.: Jagannath Intermediate Coll., Dacca; Univ. of Dacca; Lady Tata Memorial Scholar, 1934-37. Awarded Elliot Prize for Chemistry for 1941 by the Royal Asiatic Society of Bengal; elected member: American Assoc. for the Advancement of Sc., Washington 1948; Soc. Expt. Biol. and Med., New York, 1950; Pres., Physiology Sect. Indian Sc. Congress Session, 1964; recipient of Watumull Memorial Prize for 1964 in Biochemistry; visited U.S.S.R. Biochemical Instts. Mar.-April 1965 under the Indo-Soviet Cultural Exchange Programme. Publications: 191 original papers on various problems of Biochemical importance published in India and outside; *Carbohydrate metabolism with special reference to the cause, prevention and treatment of diabetes*; *Biosynthesis of Vitamins*; *Steroids, Enzymes, Nutrition*; *Lipid Metabolism with special reference to experimental atherosclerosis etc.*, etc. Address: Nagpur University, Nagpur.

**NATH, Mr. Justice Tarkeshwar, B.A., B.L.**, Judge, High Court, Patna, since July 14, 1959. b. Sept. 6, 1907; Educ.: Patna, B.L., 1929. Enrolled as: Pleader, Nov. 1929; Advocate, Patna, High Court, July 1931; Advocate, Federal Court, May 1944; member, Bar Council, Patna High Court, 1955-61. Address: Judge, Tarkeshwar Nath Road, Patna-1.

**NAYUDAMMA, Dr. Yelavarthy, B.Sc.** (Industrial Chemistry) (Banaras), M.Sc., Ph.D. (Chem.) (Lehigh), F.I.C. (India), Fellow Indian Academy of Sciences, Dir., Central Leather Research Instt. b. Sept. 10, 1922; Educ.: Banaras Hindu Univ.; Lehigh Univ., U.S.; Coll. of Leather Tech., Northampton, England. Actively participated in the various Cfees. of the Intn. Society of Leather Trade's Chemists; Hony. Prof., Leather Tech., Madras Univ.; member: Academic Council, Senate and Univ. Cttees. connected with tech. educ.; Board of Governors, I.I.T., Madras; Plng. Body, Regional Research Laboratory, Orissa; Board of Scientific and Industrial Research etc.; Chairman: Board of Visitors, Instt. of Leather Tech., Madras; Leather, Sectional Cttee., Indian Stds. Instt.; Dir.: Mysore Chrome Tanning Co.; National Research Dev.

Corpn; Pres., Indian Leather Tech. Assoc.; Adv., Indian Investment Centre; Editor, *Leather Science*; awarded K. C. Naik Gold Medal for his work in industrial chemistry by the Maharaja Sayaji Rao Univ., Baroda. Publications: Over 215 publications. Address: Director, Central Leather Research Institute, Adyar, Madras.

**NAYUDU, Mr. Justice Canakapalli Sanjeeva Row, B.A., B.L.**, Rao Sahib (1941), Judge, High Court, Assam and Nagaland, since Dec. 1, 1963. b. March 8, 1906; Educ.: Pachaiyappas High School, Presidency Coll., and Law Coll., Madras. Advocate, Madras High Court, since 1929; Senior Advocate, Supreme Court of India; practised in the Supreme Court, 1950-58. Served as a King's Commissioned Officer, on the Assam Burma front 1943-45; recipient of Burma Star, 1939-45 Star, War Medal and Independence Medal; served in the Judge Advocate General's Deptt., 1945-50; Judge-Advocate, Indian Navy, New Delhi, 1950-1958; Judge, Andhra Pradesh High Court, 1958-62; Judge, High Court, Assam, 1962-63. Publications: *Handbook of Military Law*. Address: Rajeev Nivas, Upper Strand Road, Gauhati, Assam.

**NEDUNCHEZHIAN, V. R., M.A.**, Minister for Education and Industries, Madras, since March 1967. b. July 11, 1920 at Vadakalathur in Thanjavur Dist.; Educ.: Pattukottai Board High School; M.A. Degree from Annamalai Univ. Was in Dravida Kazhagam, 1944-49; assisted Annadurai in forming the D.M.K.; Asstt. Gen. Secy., D.M.K., 1949-55; Gen. Secy., 1955-60; Chairman, Party's General Council, since 1960; courted imprisonment several times in his public life; elected M.L.A., Madras from the Triplicane constituency, 1962 and 1967; was Leader of the Opposition in the last Assembly; was Chairman, Public Accounts Cttee. and Ex-Officio member, Estimates Cttee., 1962-67; was Editor, *Nam Nadu*, the party daily for the past nine years and a tamil weekly *Manram*; visited the U.K., W. Germany and other European countries as member, Commonwealth Parliamentary Delegation, 1966; delegate to the World Tamil Confce., Kuala Lumpur, 1966. Address: Minister for Education and Industries, Fort St. George, Madras 9.

**NEHRU, H.E. Mr. Braj Kumar, B.Sc.** (Allahabad), B.Sc. (Econ.) (London), Bar-at-Law; I.C.S., Amb. in U.S.A. b. Sept. 4, 1909; Educ.: Allahabad Univ.; London School of Economics; Balliol Coll., Oxford; Inner Temple, Joined the I.C.S., 1934; Hon. LL.D. Missouri Valley Coll., Miss. 1963; Hon. Litt.D., Jacksonville U., Florida 1964; Asstt. Commr., Punjab, 1934-39; Under-Secy. to the Govt. of India, Dept. of Educ., Health and Lands, 1929; Officer on Spl. Duty, R.B.I. and Under-Secy., Fin. Dept., 1940; Dy. Secy., 1941; Jt. Secy., 1947; Exec. Dir., I.B.R.D., and Min., Indian Embassy, Washington, 1949-54; Jt. Secy., Dept. of Eco. Affairs, 1954-57; Secy., 1957-58; Commr.-Gen. for Eco. Affairs, Washington, 1958-61; member: U.N. Adv. Cttee. on Adm. and Budgetary Questions, 1951-53; U.N. Investments Cttee., since 1961; Indian rep. at the Reparations Cfee., 1945; Commonwealth Fin. Ministers' Cfee., 1949-50, 1955-56, 1958; U.N. Gen. Assembly, 1949-52, 1960; F.A.O. 1949-50; Sterling Balance Cfees., 1947-48-49 and at the Bandung Cfee., 1955. Publications: *Speaking of India*. Address: Washington, D.C., U.S.A.

**NEHRU, Ratan Kumar, B.A.** (Oxon.), Vice-Chancellor, Allahabad Univ., since 1965. b. Oct. 10, 1902; Educ.: Allahabad and Oxford. Joined I.C.S., 1925; Dy. Commr., M.P.; Dy. Secy. to Govt. of India; Collr. of Customs, Bombay, 1938; Commr., Central Excises, Northern India, 1939-42; Jt. Secy., Supply and Commerce, 1942-46; Rep. on U.N. Comms., 1947; Addl. Secy., Fin., 1947; Chairman, C.B.R., 1947; Secy., Communications Min., 1947; Min. in Washington, 1948; Amb. of India, Envoy Extraordinary and Min. Plenipotentiary of India in Sweden,

Finland and Denmark till Sept. 1951; was Foreign Secy. Govt. of India; Amb. to China, 1955-58; Amb. to the U.A.R. and Amb. Extraordinary & Min. Plenipotentiary to Libya and Lebanon, 1958-60; Secy.-Gen., Min. of Ext. Affairs, 1960-63; member: Board of Trade; National Defence Council; Spl. Amb. and India's Rep. on Disarmament Cfee., and U.N. Trade and Devpt. Cfee., Geneva, 1964. Address: Senate Hall, Allahabad.

**NEOG, Dr. Maheswar, B.A. Hons. (English)**, (Calcutta), M.A. First Class First (Calcutta), D. Phil. (Gauhati), Poet, essayist, art and literary critic; Jawaharlal Nehru Prof., Gauhati Univ., since July 1957. b. 1918; Educ.: Sibsagar, North Lakhimpur, Jorhat, Gauhati Cotton Coll. member: Gen. Council of the Central Sangeet Natak Akademi, Central Sahitya Akademi; Exec. Cttee. and Pres. elect, Tech. sciences and Fine Arts Sect., All India Oriental Cfee.; Pres., All Assam Library Assocn.; Editor and compiler of anthologies of Assamese poetry and folk songs. Publications: *Sankaradeva* (literary biography); *Sankaradeva and His Times* (English); critical editions of old Assamese texts *Bhaktipradipa*, *Kirtanaghosha*, etc.; author, *Asamiya Gitisahitya*; *The Art of Painting in Assam*; *Asamiya Premgatha*; *Asamiya Sahityar Ruparekha*; contributes to leading research journals. Address: "Vaijayanti, Uttar Saraniya, Gauhati 3, Assam.

**NEOGI, Provat Chandra, B.E. (Civil)**, M.I.E., M.I. Mech. E. M.I. Loco. E., Resident Dir., Durgapur Projects Ltd., since Jan. 1964. b. Jan. 1906; Educ.: Hindu School & Presidency Coll., Calcutta; Bengal Eng. Coll., Sibpur, West Bengal. Joined Indian Rly. Service of Engrs. and posted to North-Western Rly., June 1929; Exec. Engr., 1943-45; Dy. Chief Engr., 1948-54; Dvnl. Supdt., 1954-55; Chief Engr., 1955-58; Dir.-Gen. Rly., Research, Design and Stds. Org., 1959-61; Genl. Mgr., Hindustan Steel Plant, Durgapur, 1960-63; had extensive experience in design construction, bridge work and maintenance of Indian Rlys. Address: Bungalow-AN-2, First Avenue, Coke Oven Colony, P.O. Durgapur, Burdwan District, West Bengal.

**NIGAM, Mr. Justice Bishan Narain, M.A.**, LL.B., Judge, High Court, Allahabad (Lucknow Bench), Lucknow, since 1958. b. April 4, 1906; Educ.: Govt. High School, Christ Church Coll., Kanpur; Allahabad Univ.; M.A., 1928 and LL.B., 1929; School of Oriental Studies, London, 1929-31. Passed I.C.S., 1929; Asstt. Magistrate, Banaras and Nainital, 1931-33; Jt. Magistrate, Bahraich, Gonda and Barabanki, 1933-37; Dy. Commr., Barabanki, 1937; Civil and Sessions Judge, Bareilly, 1937-39; Dist. and Sessions Judge, Farrukhabad, Sitapur, Banaras and Meerut, 1939-49; member: Election Tribunal, 1946-47; U.P., Adm. Tribunal, 1949-50; Dist. and Sessions Judge, Bareilly (1950); Registrar, High Court of Judicature and Member, U.P. Adm. Tribunal 1951-52; Judicial Commr., State of Ajmer, 1952-56; Dist. and Sessions Judge, Agra, Lucknow, 1956-57; Addl. Judge, High Court, Nov. 1957. Permanent 1958; Chairman, Mohri Rly. Accident Enq. Commn., 1958. Address: 39, Butlerganj, Lucknow 1.

**NIJALINGAPPA, Siddavvanahalli, B.A.**, LL.B., Chief Min., Mysore, since June 21, 1962. b. Dec. 10, 1902; Educ.: Central Coll., Bangalore and Law Coll., Poona. Enrolled as Advocate of the Mysore High Court, 1926; joined Indian National Congress, 1926; political prisoner, 1939; debarred from practice, 1940; political detenu, 1942, 1944 and 1947; member, Mysore Congress Working Cttee., 1939-51; Pres.: Mysore P.C.C., 1945-46; Karnataka P.C.C., 1946-54; member, Working Cttee. and Parly. Board, Indian National Congress, 1948-53 & 1960; Constituent Assembly, 1946-52; M.P., 1952-56; Mysore Constituent Assembly, 1948-50; elected Leader, Mysore Leg. Congress Party, Oct. 21



1956; Chief Min., Mysore State, 1956-58; Chairman, Indian Oil Co. Ltd., upto Dec. 1962; Pres., Mysore P.C.C., 1960-62, M.L.A., Bye-election in 1962; elected M.L.A. unopposed, 1967. Address: Bangalore.

**NIJHAWAN, Bal Raj, B.Sc. (Met.)** (Banaras), Ph.D. (Met.) (Sheffield), F.I.M. (Lond.), F.N.I., Padma Shri (Jan. 26, 1958). Inter-regional Senior Advisor to the United Nations Industrial Development Organisation, since March 1967. b. Sept. 22, 1915; Educ.: Punjab, Banaras and Sheffield (England). Assistant Director, N.M.L., Jamshedpur, 1948-53; Dy. Dir., 1953-56; Pres., The Instt. Indian Foundrymen; Vice-Pres., S.M.D.C. of Indian Stds. Instt.; Dir.: Hindustan Steel Ltd.; Nat. Res. Dev. Corp. of India; Nat. Minl. Dev. Corp. Ltd.; Gujarat Minl. Dev. Corp. Ltd.; Kamani Industrial Corp.; Leader N.P.C. Study Team on Non-ferrous Metal Industry, U.S.A. & U.K., 1962; presided over the Tech. Session of the U.N. Inter-regional Cfee. on "the application of modern tech. practices in the Iron & Steel Industry to developing countries" in Prague and Geneva, Nov. 1963. Official guest at the spl. meeting of the British Iron & Steel Instt., July 1964; member, Japan Iron and Steel Instt.; awarded gold medal for his contribution in the field of metallurgy by the Iron & Steel Instt., Japan, April 1965; awarded Shanti Swarup Bhatnagar Memorial Award by the CSIR, 1965; Dir., National Metallurgical Laboratory, Jamshedpur, 1956-67. Publications: Over 260 research and technical review papers on metallurgical research and industrial subjects singly or jointly; author of several patents on metallurgical subjects including nickel-free austenitic chromium-manganese and nitrogen stainless steels. Address: New York.

**NIMBKAR, Mrs. Kamala Vishnu, B.A.** (Columbia), F.T.C. (Froebel Union—London), O.T.R. (American Occupational Therapy Assoc.), Social Worker in the field of Occupational Therapy and Rehab. of the Handicapped. b. Jan. 5, 1900; Educ.: George School (Quaker Prep. School), Drexel Instt. (Phila.); Bernard Coll. of Columbia Univ.; Selly Oak Coll. (Birmingham, Eng.); Phila. School of Occupational Therapy. Member: Central Adv. Council for the Educ. of the Handicapped, Dept. of Social Welfare, Govt. of India, since 1955; Adv. to the Govt. of Maharashtra Local Self Govt. and Health Deptt. for Occupational Therapy and Rehab.; also Social Welfare Directorate since 1958; Editor: *Indian Journal of Occupational Therapy*, 1955-59; *Journal of Rehabilitation in Asia*, since 1959; Secy., Gen. Ind. Soc. for Rehab. of the Handicapped; received the 1965 Intl. Award from the Spanish National Assoc. of Civilian Handicapped. Publications: *Service for the Disabled and Handicapped*; *Occupational Therapy for Medical Conditions and What the Doctor should expect of an Occupational Therapist*. Address: The Amerind, 15th Road, Khar, Bombay 52.

**NIMBKAR, Vishnu, B.Sc., M.E. (N.Y. Univ.), M.A.S.M.E. (U.S.A.), A.M.I.Mech.E. (London), A.I.Loco.E. (London), Hon. Presidency Magistrate, Chairman, Machine Tool Devpt. Council, Min. of Supplies and Tech. Devpt.** b. June 25, 1900; Educ.: Deccan Coll., Poona, New York Univ., U.S.A. and Columbia Univ., N.Y., U.S.A. Service Engr., Consolidated Pneumatic Tool Co. Ltd., Bombay, 1929-32; Mgr. for Bombay, 1932-34; Actg. Gen. Mgr. for India, 1939-42 and apptd. Resident Gen. Mgr., 1943; Gen. Mgr., 1945; Gen. Mgr., India & Pakistan, 1948-57; Mg. Dir., Consolidated Pneumatic Tools Co. (India) Pvt. Ltd., 1957-58; Dir.: Mineral Mining Co. Pvt. Ltd., Madras; Ogale Glass Works Ltd., Ogalewadi; Fuel Injections Ltd., Bombay; Kirloskar Oil Engines Ltd., Poona; Std. Batteries Ltd., and several other companies; Mg. Dir., Hindustan Mineral Products Pvt. Ltd., Bombay, member, Governing Council, Central Machine Tool Instt., Bangalore. Address: 'Amerind', 15th Road, Khar, Bombay 52.

**NORD, H. E. Mr. Haakon, Cand. jur.,** Officer of the Royal Order of St. Olav (1958), GC. Lib.O., GC. Tun. Rep. O., GC.M. Ouissam Alaouite, Amb. of Norway in India, concurrently accredited to Rangoon and Colombo, since 1964. b. July 21, 1911; Educ.: Univ. of Oslo. Joined Norwegian Foreign Service, 1938; various postings including post of Permanent Rep. to the Council of Europe, 1938-58; Min., later Amb. to Morocco, 1958; jointly accredited at Tunis, Algiers and Tananarive. Address: Royal Norwegian Embassy, New Delhi-11.

**NORGAY, Sherpa Tenzing, Padma Bhushan** (1959), Mountaineer, Dir. of Field Training, The Himalayan Mountaineering, Darjeeling. b. 1914, in Solo Khumbou village, Eastern Nepal. Participated in expeditions; has taken part in more Everest expeditions than any other person; first visited Everest as a youth of 21 when he accompanied Shipton's Reconnaissance Party, 1935; participated in the expedition under Ruttledge, 1936; reached a height of 28,210 ft. with Raymond Lambert, May 28, 1952; conquered the summit of Mount Everest with the New Zealand mountaineer Sir Edmund Hillary under the leadership of Sir John Hunt of the British Expedition, May 29, 1953; presented by the King of Nepal with the Nepal Pratap Bardat, June 1953; awarded George Medal by Queen Elizabeth; awarded Iran's highest sports medal by the Shah of Iran and another gold medal from France; presented with a gold medal by Dr. Rajendra Prasad, President of India for extraordinary courage and heroism in the Everest Expedition; awarded the U. S. Hubbard Medal, the medal of the National Geographical Society of America, March 16, 1954; awarded the highest medal for outstanding achievement in the fields of sports by the Union of Sports Societies of the Soviet Union in 1962. Address: Darjeeling, West Bengal.

**OAK, Mr. Justice Vidyadhar Govind, B.Sc. (Hons.), I.C.S., Chief Justice, High Court Allahabad,** since June 4, 1967. b. May 18, 1909; Educ.: Jaipur, Indore, Allahabad; passed B.Sc. (Hons.), 1929. Joined I.C.S., 1931; served in U.P. as Jt. Magistrate and as Dist. Judge; Judge, Allahabad High Court, 1955-67. Address: High Court, Allahabad.

**OCLAY, H. E., Mr. Osman, Ambassador of Turkey to India.** b. 1924; Educ.: graduated from the Saint Joseph Lyceum, Istanbul, 1941 and Faculty of Political Sciences, Univ. of Ankara, 1945. Joined the Ministry of Foreign Affairs, 1945; Third Secy. at the first personnel deptt., 1945-47; Vice-Consul, London, 1947-51; Second Secy., Turkish Embassy, London, 1951-52; Second and First Secy., Deptt. of International Economic Affairs, 1952-53; First Secy. and Counsellor, Turkish delegation to the Nato, Paris, 1953-59; Deputy Dir.-Gen., Deptt. of Nato, 1959-60; Director-Gen., Deptt. of Nato, 1960-63; Asstt. Secy. Genl. for Nato Affairs, 1963-64; Turkish Ambassador to Finland, 1964-66. Address: Turkish Embassy, New Delhi.

**PADMANABHAN, H.E. Mr. K. V., M.A.** (Madras) LL.B. (Delhi), Indian Amb. to Iran, since Feb. 1967. b. Feb. 13, 1911; Educ.: Presidency Coll., Madras; Law Coll., Delhi. Supdt., Federal Court, 1944-46; Asstt. Secy., Constituent Assembly of India, 1946-47; Under Secy., June 1947; First Secy., Embassy of India, Paris, 1949-51; Dy. Secy., Min. of Ext. Affairs, 1952-54; First Secy., Embassy of India, Stockholm, 1954-55; Consul-Gen. of India, Geneva, 1955-58, with concurrent accreditation as Permanent Rep. of India to the European Hqrs. of the U. N. and other Intl. Orgs. at Geneva; Member, Indian Delegation to I.L.O., W.H.O. GATT, Intl. Cttee. of Red Cross, etc., 1955-58; Dy. High Commr. for India, Karachi, 1958-60; Jt. Secy., Min. of Ext. Affairs, 1960-63; Ambassador to Thailand, Feb.-1964-Feb. 1967. Publications: Co-author of *Dominion Constitution of India*, 1948; *Federal Court Rules and*

*Procedure*, 1949. Address: C/o External Affairs Ministry, New Delhi.

**PAI, Laxman, G.D.Art (Bombay), Mayo Medal (1948), Artist-Painter and Graphic Artist.** b. Jan. 21, 1926; Educ.: Bombay. Exhibitions: Individual shows in Bombay, 1950, 1954, 1957, 1959, 1962; New Delhi, 1953, 1955, 1958, 1962; Calcutta, 1962; Paris: Eight individual shows between 1952 and 1960; London, 1952, 1959; Munich, 1953, Bremen (Germany), 1961; New York, 1957; has exhibited in several important exhibitions in India and abroad; National awards, 1961, 1963; Collections in Museum of Modern Art, Paris; Lalit Kala Akademi, National Gallery of Modern Art, New Delhi, New York Public Library and in several public and private collections in India and abroad; Other Contributions—Paintings from: *Gita-Govinda*, *Ramayana*, *Life of Mahatma Gandhi*; *Life of the Buddha*, *Kalidasa's Ritusamharu*. Address: C/o Bhulabhai Institute, 89, Bhulabhai Desai Road, Bombay 26.

**PAI, Mangalore Purushotham, B.A. (Madras), B.A. (Hons.) (London), I.C.S. (Retd.).** Chairman, Tariff Commn., since July 1, 1964. b. Dec. 1, 1906; Educ.: Madras, London & Oxford, Controller of Coffee, Indian Coffee Board, 1940-42; Prov. Textile Commr., Madras, 1942; Controller of Supplies, S. I. Circle, Govt. of India, 1942-45; Jt. Secy., Min. of Industry & Supply, 1946-49; Jt. Secy., Min. of Works and Supply, 1949-52; Offg. Mg. Dir., Sindri Fertilisers and Chemicals Ltd., April-July 1952 and Feb.-Sept. 1953; Jt. Secy., Min. of Production, Govt. of India, 1952-53; Member, Board of Revenue, Andhra, 1953-56 and of Andhra Pradesh, 1956-57; Chief Secy., Andhra Pradesh Govt., May 1957-Mar. 1964. Address: 101, Queen's Road, Bombay 1.

**PAI, Nath, B.A., Bar-at-Law, M.P. (Lok Sabha),** Political worker. b. Sept. 1924; Educ.: Vengurla, Belgaum, Poona and London. Courted jail in the Freedom Movement; worked in the Congress Youth Movement and the Student Movement; won Inter-collegiate and All India Eloquence Competitions, 1940 and 1941; joined the first Goa Freedom Movement, 1946; founded the Indian Socialist Group in London; elected Pres.: London Majlis, 1950 & 1951; Socialist Youth Intl. at Copenhagen, 1954; worked in the 2nd Goa Movement, 1955; elected to the Lok Sabha, 1957, 1962 & 1967; led Central Govt. employees in the 1957 strike; joined the P.S.P. National Exec., 1957; Indian rep. at Warsaw I.P.U. Cfee.; jailed again for leading the Central Govt. Strike, 1960. Address: 29, Shah Nagar, New Delhi; Sir J. J. School of Art Bungalow, Bombay 1.

**PAI, Dr. Tonse Madhava Anantha, M.B.B.S., Padma Shri (1965),** Educationist; Pres. & Registrar, The Academy of General Education, Manipal; Chairman, Syndicate Bank Ltd., Manipal. b. April 30, 1898; Educ.: Christian High School, Udipi; St. Aloysius' Coll., Mangalore; M.B.B.S. from the Madras Medical Coll., 1925. Set up practice at Udipi; served the rural areas; a founder, the Syndicate Bank Ltd., 1925; was its Mg. Dir. for 36 years; in 1942 founded The Academy of Gen. Educ. at Manipal as a community enterprise who has sponsored 30 educ. inatts.; has also founded a number of commercial and industrial concerns; is associated with many civic and business orgs. Publications: *Tax-Free State or Taxless Society*; *Lake City University*. Address: Central Avenue, Manipal, South Kanara, Mysore State.

**PAL, Dr. B. P., M.Sc. Hons. (Rgn.), Ph.D. (Cantab.), F.L.S., F.R.H.S., F.B.S., F.N.I.,** Padma Shri (1958), Rafi Ahmed Kidwai Prize for Agricultural Botany (1960), Birbal Sahni Medal for Botany (1962), Srinivasa Ramamujan Medal, 1964, Dir. Genl., Indian Council of Agri. Research, New Delhi. b. May 26, 1906. Leader, Indian Delegation to the Intl. Botanical Congress, Paris, 1954; Official



Delegate to the Intl. Genetics Symposia, Japan, 1956; member, Indian Delegation to Commonwealth Scientific Cttee. Meetings, New Zealand, 1964; member of various Scientific Orgs. and Cttees.; has been Pres., Botany & Agrl. Sec. of the Indian Sc. Congress, Indian Botanical Soc., Indian Soc. of Genetics & Plant Breeding, Horticultural Society of India; Pres., Rose Soc. of India and Delhi, Agrl. Soc.; Vice-Chairman, All India Fine Arts & Crafts Soc.; was Dir., Indian Agrl. Research Instt. Address: Indian Council of Agricultural Research, New Delhi 12.

**PALSIKAR, Shankar Balvant, G.D.** Art (Painting), Painter; Lecturer, Deptt. of Fine Art, Sir J. J. School of Art, Bombay. b. May 17, 1916; Educ.: Sir J. J. School of Art, Bombay; took G.D. Art (Painting), 1947. Awarded gold medal of Bombay Art Soc. and Academy of Fine Art, Calcutta, 1950; exhibited paintings in leading exhibitions in India and abroad, Russia, America, Japan, England; through Lalit Kala Akademi represented India at the Intl. Assoc. of Plastic Arts, London, June 1965. Address: B-9, Officers' Quarters, Bldg. No. 13, Haji Ali Park, Bombay 34, W.B.

**PANDEY, Mr. Justice Kanhaiyalal, B.Sc., LL.B.,** Judge, High Court of Madhya Pradesh, Jabalpur, since Sept. 20, 1958. b. Sept. 20, 1909; Educ.: Bilaspur, Nagpur, Jabalpur and Allahabad, B.Sc., 1930, LL.B., 1932, placed 2nd in order of merit in Allahabad Univ. Sub-Judge, Oct. 16, 1934-Nov. 1947; Addl. Dist. & Sessions Judge, Nov. 17, 1947-56; Legal Remembrancer and Secy. to the Govt. of Madhya Pradesh in the Law Deptt., Dec. 2, 1957. Address: Civil Lines, Jabalpur.

**PANDEY, Varmeshwar, B.A., LL.B.,** Minister for Local Self-Govt., Municipal, Housing, Shri Badrinath Temple Cttee., and Charitable Endowments, Uttar Pradesh, since April 1967. b. 1927. has been a leading advocate, practising Income Tax Law at Varanasi; was Chairman, State Unit of Bhartiya Mazdoor Sangh; is a leader of many unions of Varanasi; was Chief of Varanasi Dist. Jan Sangh; was imprisoned thrice; occupied various offices of the Dist. Unit of Jan Sangh; elected to the State Vidhan Sabha from Varanasi Cantt., 1967. Address: Minister for Local Self-Govt., Uttar Pradesh, Lucknow.

**PANDEYA, Gayanacharya Avinash Chandra, M.A. (I), B.Com., J. D.,** Public Relations Consultant, Musicologist and Danceologist. b. Aug. 26, 1923; Educ.: in London, and Univ. of Lucknow, Punjab (old) and Agra; Disciple of the late Ustad Allabande Khan of Alwar (in music) and Guru Shambhu Maharaj, Padma Shri and Guru Gopinath (in dancing). Culture study tour of East Indies, etc., 1938-39; Editor, *Music & Dancing*, 1941-42; Staff and Spl. Correspondent of *The Hindustan Times*, *The Amrita Bazar Patrika*, *U.P.I.*, etc., 1943-46; Publicity Officer, Modi Industries, 1947-48; Central Information Service, since 1948; participant delegate to British Pub. Relations Cfee., Brighton, 1960; Extension lecturer, London Univ. Mural Studies, 1960-61; Rapporteur, Second World Congress of Pub. Relations, Venice, 1961 (at which was awarded "Diploma di Merito"); delegate, Third Pub. Relations World Congress, Montreal, 1964. Publications: *The Art of Kathakali*, Ray Darshan (I) co-edited; *Bharatiya Nrityakala*, Dhruv (I) pad, *The Art of Bharat Nritya* (Natiwari), etc. Address: F-84, Green Park, New Delhi 16.

**PANDIT, Chintaman Govind, M.B.B.S.** (Bombay), Ph.D. (Lond.), D.P.H. (Lond.), D.T.M. (Lond.), Padma Shri (1956), O.B.E. (1943), Dir., Indian Council of Medical Research, New Delhi, since 1948. b. July 25, 1905; Educ.: Bombay & London. Dir., Medical Research Instt. and Pasteur Instt., Shillong, 1933, 1935 and 1940; Pres., Medical Sect. of the Indian Sc. Congress, 1942;

Member: WHO/OIHP/Expert Groups, Cholera, Smallpox, Trachoma; W.H.O. Expert Group, Cholera, Rabies; awarded Minto Medal for Medical Research, 1937; Lady Brahmachari Reader in Medicine, Calcutta Univ., 1957; member: Indian Assoc. of Leprologists, Indian Assoc. of Pathologists, Indian Public Health Assoc., Fellow of the National Instt. of Sciences and Indian Academy of Medical Sciences. Publications: Over 70 original publications on: Plague, Cholera, Virus Diseases, Fluorosis, etc. Address: Indian Council of Medical Research, Medical Enclave, P.O. Box 404, New Delhi.

**PANDIT, Mr. Justice Prem Chand, B.A.** (Hons.), LL.B., Judge, Punjab High Court, since March 4, 1960. b. Feb. 14, 1913; Educ.: D. A. V. High School, Coll., Govt. Coll. and Law Coll., Lahore; had a brilliant academic career; awarded several prizes and medals in inter-collegiate debates; LL.B., 1933; participated in sports especially hockey and tennis. Started practice at Lahore High Court, 1937; shifted practice to Chandigarh; rose to be one of the leaders of the bar; was member, Punjab Bar Council; was Secy., D. A. V. Coll. Mg. Cttee., Lahore. Address: 6, Judge's House, Sector IV, Chandigarh.

**PANDIT, Smt. Vijaya Lakshmi, M.P., Ex-Governor, Maharashtra State.** b. 18th August 1900; Educ.: Privately by tutors and governesses. Member, Allahabad Municipal Board, 1936; elected to U.P. Assembly, 1936 & 1946; Min. of Local Self-Govt. and Public Health, U.P. (first woman in India to hold ministerial rank); piloted the Panchayat Raj Bill during her term of office; Pres., All-India Women's Cfee., 1940-42; Vice-Pres., Women's Intl. League for Peace and Freedom; attended Pacific Relations Cfee. at Hot Springs, Virginia, U.S.A., as leader of Indian delegation appointed by the Indian Council of World Affairs; toured extensively in U.S.A.; was present in San Francisco during the first meeting of the U.N. where she challenged the right of the British-appointed Indian delegation to speak for India and voiced India's claim to independence outside the Cfee. hall; Leader, Indian delegation to the U.N.O., 1946, 1947, & 1963; imprisoned thrice in connection with C.D. Movements 1932, 1941 and 1942; Indian Amb. to: U.S.S.R., 1947-49; U.S.A., 1949-52; Pres., U.N. Gen. Assembly, 1953-54; Governor of Maharashtra, 1962-64; M.P., Lok Sabha from Phulpur, 1964 & 1967; has received 16 honorary doctorates from Indian and foreign univs. and a number of awards for work on the intl. bodies. Address: New Delhi. e

**PANICKER, K. Chathunni,** Kathakali Guru, Darpana Akademi, Ahmedabad. b. 1922 of the illustrious Kavingal family of Kathakali actors in Kerala. Even as a child, showed great interest in the dance, always following Kathakali troupes from village to village; began to take part in Kathakali performances from the age of 14; joined Mrinalini Sarabhai's troupe, 1945; his popular roles are Ravana, Hanuman, Bhima and Narasimhan; has popularised Kathakali in Western and Eastern countries; works in close collaboration with Mrinalini Sarabhai in her choreographic experiments. Address: Darpana Akademi, Chidambaram, Ahmedabad 13.

**PANIGRAHI, Kalindi Charan, B.A. (Patna), Oriya Novelist;** Programme Producer, spoken words, A.I.R., Cuttack. b. 1901; Educ.: Ravenshaw Coll., Cuttack; B.A., Patna Univ., 1925. Member, Exec. Board, Sahitya Akademi; Organiser, the Sabuj (Green) Group of writers; Pres. of several literary and cultural Assocs.; is a poet, playwright, novelist, essayist and short story writer, among the progressive group of modern times; writer of children's literature. Publications: *Man-enahin*; *Kshyanika Satya*; *Sesha Rashmi*, *Amara Chitra*, *Sahitya Samachar*, *Piyadasi*, *Padmini*; *Bhaktakabi Madhusudan*. (Novel

*Matir Manisha* has been published by Sahitya Akademi in all Indian languages). Address: 'Swapnapuri,' Pithapur, Cuttack-1, Orissa.

**PANIKKAR, Dr. N. Kesava, M.A., M.Sc., D.Sc., F.A.Sc., F.N.A.Sc., F.N.I., F.R.S.A., F.Z.S.I.,** Dir., National Instt. of Oceanography, (CSIR), since Jan. 1966; Scientist. b. May 17, 1913. Educ.: Kottayam and Madras Christian Coll.; Univ. of Madras, London and Cambridge. Lecturer with many univs., 1936-44; Overseas Scholar, Royal Commn. for Exhibition of 1851 at Univs. of London and Cambridge and Marine Lab., Plymouth, 1938-43; Dir., Univ. Zoological Lab., Madras, 1944-46; various fisheries positions, 1946-50; Dir., Central Marine Fisheries Research Instt., Mandapam, 1956-57; Fisheries Devpt. Adv. to the Union Govt., 1957-62; Dir., Indian Ocean Expedition, CSIR, 1962-65; Chairman, Indo-Pacific Fisheries Council, 1954-57; Pres.: Zoological Sect., Indian Sc. Congress, 1952; Inter-Govt. Oceanographic Commn., since 1964; Chairman, Union Cttee. on Fisheries Educ., 1958-60; Secy., National Instt. of Scs. of India, since 1964; Indian rep. at many intl. cfees. on Fisheries and Oceanography since 1949. Publications: Several research papers in Zoology, Comparative Physiology, Fisheries and Oceanography. Address: National Instt. of Oceanography, CSIR, Rafi Marg, New Delhi 1.

**PANJWANI, Ram Partabrai, B.A.,** Sahitya Akademi Award for his reminiscences *Anokha Azmooda*, (1964), Sindhi novelist, dramatist, poet and singer. Member, Board of Studies in Sindhi, Prof. and Head of the Deptt. of Sindhi, Jai Hind Coll., Bombay, since 1948. b. Nov. 20, 1911; Educ.: D. J. Sind Coll., Karachi; Graduated, 1935. Exponent of folklore of Sind; has written dialogues for Sindhi pictures 'Abana and Rai Dyach'; member: Academic Council, Bombay Univ., 1954-1966; Students' Welfare Board, Bom. Univ.; Sindhi Adv. Board, Sahitya Akademi, since 1957. Publications: *Qaidi*, *Sharmila*, *Latifa*, *Sindh Ja Sat Natak*; *Padma*; *Adabi Ghuncho*. *Shirin Shair*, *Chund Kalam*, *Sindh Ji Sookhri* and *Sika Ji Soghat*, etc. Address: 8, Qureshi Mahal, Bombay 16.

**PANT, H. E. Mr. Apasaheb Balasaheb, B.A.** (Bombay), M. A. (Oxon.), Bar-at-Law, Padma Shri, 1954, Indian Amb. to U.A.R., since July 1966. b. Sept. 11, 1912, of the family of the Pratinidhis of Aundh; Educ.: Deccan Coll. Poona, Oxford (B. N. C.); Lincoln's Inn. Served as Educ. Min., Aundh State; first elected Prime Min., for four years till the State was merged into Bombay State, March 1948; member A.I.C.C., 1948; an alternate delegate at U.N., 1951 and 1952; Indian Commr. in British East Africa, 1948-54; appttd. Consul-Gen. to Belgian Congo & Ruanda-Urundi, Nov. 1950 & Commr. to Central Africa and Nyasaland, Dec. 1950; Officer on Spl. duty, Ext. Affairs Min., 1954-55; Political Official Officer in Sikkim and Bhutan with control over Indian Missions in Tibet, 1955-1961; Amb. of India to Indonesia, Oct. 1961-June 1964; Indian Amb. to Norway, June 1964-June 1966. Address: Amral Camp, Deccan Gymkhana, Poona 4; C/o External Affairs Ministry, New Delhi.

**PANT, Krishna Chandra, M.Sc.,** Minister of State in the Ministry of Finance, Govt. of India, since March 13, 1967. b. Aug. 10, 1931 in Bhowali, Nainital Dist.; Edu.: M.Sc. from Lucknow Univ. 1954 obtaining the Chancellors Gold Medal for the best all-round student of the year; a delegate of students and teachers to the Soviet Union, 1954; studied in Germany for two years. Elected to the Lok Sabha from Nainital Constituency in U.P., 1962-1967; was Secy., Congress Parliamentary Party, 1965-66 and 1966-67; has been member, U.P.C.C. and A.I.C.C.; member, Indian delegation to the U.N., 1965; elected member, Human Rights Commission, 1965; its Vice-Chairman, 1966-67; has travelled widely abroad in the U.S.S.R.



W. Germany, U.K. and U.S.A. Address: Ministry of Finance, Govt. of India, New Delhi.

**PANT, Sumitranandan, Padma Bhushan** (1961), Hindi Poet; Sahitya Akademi, All India Radio. b. 1900, Kosani, Almora Dist.; Educ.: Early education at Almora; Banaras; Allahabad Univ. Has studied Sanskrit, English, Bengali and Hindi literature; Shelley and Tagore were among the early influences in moulding his poetic career; is a principal architect of the Chhayavad (romantic) school of poetry in Hindi; became Chief Producer, Hindi (Spoken Word) programmes, A.I.R., 1955. Publications: *Vina; Granthi; Jyotsna; Yugvani; Pallava; Gunjan; Gramya; Swarnadhooli; Swarna Kirana; Yug Path; Uttara; Atima; Shilpi; Sauvarna; Vani; Kala Aur Burha Chand* Akademi Award (1961); Lokayatan (Epic) 1964. Address: 18/B-7, K. G. Marg, Allahabad.

**PARECATTIL, Most Rev. Dr. Joseph, B.A., D.D., Archbishop of Ernakulam.** b. April 1, 1912, at Kidangoor, Ankamaly; Educ.: Papal Seminary, Kandy, Ceylon. Ordained priest, 1939; worked as Asstt. and Vicar in some parishes; Editor, *Satyadeepam* for 6 years; consecrated Titular Bishop of Arethusa and Auxiliary to the Archbishop of Ernakulam by His Eminence Cardinal Tisserant, Nov. 30, 1953. Installed as Archbishop, Jan. 9, 1957; Invested with the Sacred Pallium by H. H. Pope Pius XII at Castelgandolfo, Aug. 4, 1959; member, Pontifical Commn.; Consultor Sacred Oriental Congregation; celebrated Sacerdotal Silver Jubilee, Aug. 1964. Address: Archbishop's House, P.B. 9, Ernakulam-1.

**PAREKH, Hasraukh Thakordas, B.A., B.Sc. (Econ.) (London), A.C.A., Gen. Mgr., The Industrial Credit and Investment Corp. of India Ltd.,** since 1956. b. March 10, 1911; Educ.: Wilson Coll., Bombay; London School of Economics, London. Part-time Lecturer in Economics, St. Xavier's Coll., Bombay, 1937-39; with Messrs. Harkisondass Lukhmildass, Share & Stock Brokers, Bombay, 1936-56; Dir.: Bombay Potteries & Tiles Ltd.; Premier Automobiles Ltd.; Trustee, Unit Trust of India; Bombay State Co-op. Bank Ltd., 1955-61; member, Investment Cttee., L.I.C., 1956-59, widely travelled. Publications: *The Bombay Money Market* (1953 by Oxford Univ. Press); *The Future of Joint Stock Enterprise in India* (1958, by Jaico Publishing House). Address: Kastur Nivas No. 1, French Road, Chowpatty, Bombay 7.

**PAREKH, Nagindas Narandas, Bhashavisharad (G.V.), Gujarati Writer.** b. Aug. 30, 1903; Educ.: Gujarat Vidyapith, Ahmedabad; Visvabharati, Santiniketan. Teacher, Gujarat Vidyapith, 1926-33 and 1935-41; Mg. Editor, Mahagujarat Publishing Co., 1941-42; Reader, Navajivan Prakashan Mandir, 1944-47; Prof.: B. J. Instt. of Learning and Research, Ahmedabad, 1947-54; H.K. Arts, Coll., Ahmedabad, since 1954; Editor: *Kishors* 1934-36; *Buddhiprakash*, 1947-56; member, Gujarati Textbook Cttee., Bombay, 1948-50. Publications: Nearly 50 translations from English and Bengali; *Kavyaparichay*, *Premchand, Navalram, Hindustani Vyakaran Pravesha, Sattavan, Vama, Kalki, Panchbhoot, Natini Pooja, Kavyavichar*, etc. Address: Sardar Patel Nagar, Ahmedabad 6.

**PARIKH, Rasiklal Chhotalal, B.A. (Bom.),** Writer; Dir., B. J. Instt. of Learning & Research (Gujarat Vidya Sabha), Ahmedabad, since 1942. b. Aug. 20, 1897; Educ.: Sadra; Ahmedabad; Fergusson Coll., Poona. Recognised Univ. teacher for M.A. and Ph.D. & member: Senate and Academic Council and Boards of Studies, Sanskrit and Ancient Indian Culture, Gujarat Univ., since 1950; a founder of Gujarat Vidyapith, Ahmedabad; Editor, *Puratattva*; Dean, Faculty of Arts incl. Educ., Gujarat Univ., 1950-55; received Sahitya Akademi Award for "Sharvillaka"—a Gujarati, play 1960; Pres., Sanskrit Sect. All India

Oriental Cfee., Srinagar, 1961; Pres. Gujarati Sahitya Parishad, 1963.; has lectured at Bombay & Gujarat Univ.s. Publications: *Kavyaprakasa Khandana of Siddhi Chandra, Kavyaprakasa Sanketa* named *Kavyadarsa of Somesvara Bhatta, Some Aspects of the Study of Classical Sanskrit Literature*, Ananda Mamsa, lectures, M. S. Univ., Baroda; *Parishadni Atmavyakti*, etc. Address: 11, Bharati Nivas Society, Ellis Bridge, Ahmedabad 6.

**PARKASH, Dr. Baldev, Minister for Finance,** Planning, Statistics, Small Savings, Excise and Taxation, Industries, Cottage Industries, Industrial Training and Industrial Cooperatives and Health, Punjab, since March 1967. b. Oct. 24, 1923; Educ.: D.A.V. Coll., Jullundur; got his diploma in Medicine from Medical School, Amritsar. Has been a social worker and staunch believer in Hindu-Sikh unity, since 1946; is Pres., State Branch of Bhartiya Jan Sangh; member, Punjab Vidhan Sabha, since 1957 representing Amritsar City East Constituency; is a good speaker. Address: Minister for Finance, Punjab, Chandigarh.

**PARMAR, Dr. Y. S., M.L., LL.B. Ph.D., Chief Min., Himachal Pradesh,** since 1963. b. Aug. 4, 1906, at Changhalag, Dist., Sirmur; Educ.: F.C. Coll., Lahore; Canning Coll., Lucknow; Lucknow Univ. Served Sirmur State, 1930-41; resigned due to political differences and exiled from the State, 1941; Pres., Himalayan Hill State Regional Council, All India State Peoples Cfee., 1947; successfully organised Satyagraha in Suket State, culminated in the merger of Hill States into H.P. Nominated to A.I.C.C., 1948; Member: Chief Commr's Adv. Council, 1948; Constituent Assembly, Sept., 1948; Pres., H.P.C.C., 1948-50; Leader, Indian Parly. delegation to the Inter-Parly. Cfee. at Istanbul, 1951; leader, Himachal Territorial Council and Chief Min. 1952-56; M.P., 1957; Pres., H.P.C.C., 1960-63. Publications: *Social and Economic Background of Himalayan Polyandry and Himachal Pradesh—its proper shape and Status.* Address: Simla 4.

**PARSONS, John Michael, Chairman and Mg. Dir., Macneill & Barry Ltd., and Kilburn & Co. Ltd.** b. Oct. 29, 1915; Educ.: Rossall School and Univ. Coll., Oxford. Served with 18th Royal Garhwal Rifles, India and Far East, 1939-45; Brigade Major, 8th Indian Infantry Brigade, Malaya, 1941; mentioned in Despatches; Vice-Chairman, Indian Jute Mills Assoc. 1960 and 1961; Cttee. Member, Bengal Chamber of Commerce & Industry, 1963/1965. Address: 22, Camac Street, Calcutta-16.

**PARTHASARATHI, H.E. Mr. G., B.A. (Hons.) (Madras), B.A. (Oxon.), Barrister-at-Law,** India's Permanent Rep. in U.N., since Aug. 19, 1965 and also India's Rep. in the Security Council. b. July 7, 1912. Educ.: Presidency Coll., Madras; Wadham Coll., Oxford; Lincolns' Inn, London. Asstt. Editor, *The Hindu* 1936-49; Chief Rep.: P.T.I., Reuter, London 1949-52; Chief Editor, P.T.I., 1951-53; Chairman, Int'l Commn. for Cambodia, 1954-55; Chairman, Int'l Supervisory Commn. for Viet Nam, 1955-56; Amb.: to Indonesia, Jan. 1957-June 1958; China, July 1958-July 1961; delegate, U.N., Oct.-Nov. 1961; Chairman, Int'l Commn. for Supervision and Control, Vietnam, Nov. 1961-June 1962; Indian High Commr. in Pakistan, Nov. 1962-Aug. 1965. Address: 35, East 85th Street, New York NY, 10028; C/o Ministry of External Affairs, New Delhi.

**PASHA, Syed Jaffar Sadiq, B.A., B.L.,** Minister for Health, Madras, since March 1967, b. 1930; Educ.: Udumalpet Board High School; Vaniambadi Islamia Coll.; B.A. from Madras Govt. Muslim Coll.; B.L. from Madras Law Coll.; member, General Council of the D.M.K. for several years; took keen interest in labour union activities; member, Udumalpet Municipal Council; was for some time Municipal Chairman; Director and Vice-Pres. Udumalpet Cooperative Urban Bank; is an

Advocate of the Madras High Court. Address: Minister for Health, Fort St. George, Madras 9.

**PATASKAR, Hari Vinayak, B.A., LL.B. (Bombay), LL.D. (Honoris causa) Jabalpur,** Sagar & Vikram Univs., Padma Vibhushan (1963), Ex-Governor, Madhya Pradesh. b. May 15, 1892; Educ.: Fergusson College, Poona; Govt. Law Coll., Bombay, Enrolled as an Advocate, Bombay High Court and subsequently Supreme Court of India; Congressman since 1920; entered Bombay Leg. Council, 1927; resigned as a protest against the incarceration of Gandhiji, 1930; M.L.A. Bombay, 1937 & 1945; member, Constituent Assembly of India, 1947; M.P., Lok Sabha 1952. Imprisoned during freedom movement, 1942; Pres., Borough Municipality, Chalisgaon, continuously for 15 years; Chairman Educl. Soc., Chalisgaon, since 1922; successfully piloted the Hindu Code Bills; was Chairman, Select Cttee., Company Law Bill; successfully mediated in the boundary dispute between Andhra and Madras; member, 4-man Cttee. on Maharashtra-Mysore boundary dispute; Union Min. for Legal Affairs, 1955-57; Min. for Civil Aviation, Dec. 1956-Apr. 1957; Governor, Madhya Pradesh, 1957-65; Chairman, Assam Hill Area Commn., 1965-66. Address: 1, Jantar Mantar Road, New Delhi.

**PATEL, Babubhai Jashbhai, B.A., LL.B. (Bombay), Minister for P.W.D., Electricity and Civil Supplies, Gujarat,** since March 1967. b. Feb. 9, 1911; Educ.: Nadiad, Baroda, Poona and Bombay. Member, Bombay Leg. Assembly, 1937-39 and 1948-57; Parliamentary Secy. to the Chief Minister, Bombay, 1949-52; Dy. Minister for P.W.D. and Transport, Govt. of Bombay, 1952-56; Minister for Planning, Development, Electricity and Housing, 1956-57; Chairman: Gujarat State Khadi and Village Industries Board, 1960-67; Administrative Improvements Cttee., Khadi and Village Industries Commission, 1964-65; Gujarat Mineral Development Corp., 1963-67; Administrative Problems Study Group, Gujarat Govt.; member: All India Khadi & Village Industries Board, 1960-67; Sardar Vallabhbhai Vidyapeeth Syndicate and Senate, 1962-67; Gujarat State Irrigation Board; Gujarat State Advisory Education Council; State Plan Advisory Cttee.; Gandhi Smarak Nidhi (State Board); Gandhi Birthday Centenary Celebration Cttee., etc.; Vice-Chairman, Gujarat Industrial Development Corp., 1964-67; Vice-Chancellor, Sardar Vallabhbhai Vidyapeeth, 1958-61; Secy., Constructive Work Deptt., A.I.C.C., 1957-58; Lala Lajpatral Satabdhi Cttee.; Trustee, Shri Brihad Bharatiya Samaj. Publications: Gujarati booklets on *The Tenancy Reforms of the Bombay State; The Sales Tax Law of Bombay State; Food Controls in Bombay State; Roads of Gujarat*; English booklets on: *Three years of State Transport in Bombay State; State Transport X-rayed.* Address: 'Shreyas', Mission Road, Nadiad; 16, Camp, Ahmedabad-3.

**PATEL, Bhagvatprasad R., M.A., A.I.A., I.C.S., Secy., Deptt. of Defence Supply, Govt. of India,** since Aug. 1966; Chairman, Export-Credit & Guarantee Corp., since June 1964, Educ.: Proprietary High School, Ahmedabad, Gujarat Coll and Baroda Coll.; M.A., 1933; Became Associate of the Instt. of Actuaries, London, 1936. Joined I.C.S., 1936; took service in Sind; served as Asstt. Collr., Asstt. Revenue Officer, Barrage, Collr., Dy. Secy. and Secy., Food & Civil Supplies Deptt.; was in Ministry of Food, Govt. of India, April 1947-Aug. 1948; was Chairman, Capital Selection Cttee. for Saurashtra and Rajasthan; Chief Secy., PEPSU, Aug. 1948-March 1950; Chief Secy., Saurashtra, March 1950-May 1954; Dir.-Gen. of Shipping, May 1954-Aug. 1955. Vice-Chairman & Gen. Mgr. Air India, Sept. 1955-June 1966; Spl. Secy., Union Min. of Commerce, June-July 1966. Address: Ministry of Defence, South Block, New Delhi.



**PATEL, Bhogilal P.**, B.Sc., Bar-at-Law, I.C.S., Chairman, State Trading Corporation of India Ltd., New Delhi. *b.* Oct. 16, 1912; *Educ.*: Primary and Secondary: Khanpur Nar and Baroda; Baroda College and Royal Institute of Science, Bombay; London School of Economics and Middle Temple Inn, England, 1933-37. Asst. Collector, Satara, 1937-41; Settlement Officer, C. D. Sholapur, 1941; Asstt. Commissioner, Central Division, Poona, 1942; Collector of Ahmednagar, 1943; Collector of Ratnagiri, 1943-46; Registrar of Co-operative Societies and Director of Agricultural Marketing and Rural Finance; also Registrar General of Moneylenders, Bombay State, 1946-50; Commissioner, Ahmedabad Municipal Corporation, 1950-54; General Manager, B.E.S.T. Undertaking, Bombay, 1954-56; Managing Director, State Bank of India, Bombay, 1956-60, Adviser (Programme Administration), Planning Commission and Ex-Officio Addl. Secy., Govt. of India, 1960-63. *Address*: Express Bldg., Mathura Road, New Delhi.

**PATEL, Dr. Chaturbhai Shankerbhai**, B.A. (Hons.) & M.Sc. (Bombay), Ph.D. (Chemistry) (Leeds), Vice-Chancellor, M.S. Univ. of Baroda, since April 30, 1964. *b.* Nov. 7, 1897; *Educ.*: Sojitra High School, Sojitra; Baroda Coll., 1914-22; Leeds Univ., 1928-30. Prof. of Chemical Technology and Dye House Supdt., Kalabhavan Tech. Instt., 1921-41; Dir., Technological Instt. & Industrial Chemist, Baroda, 1941-49; member, Bombay Univ. Senate, 1935-47; Prof. of Chemistry, Faculty of Science, M.S. Univ. of Baroda, 1950-51; Prof. of Chemistry and Dean, Faculty of Sc., 1951-54; Pro-Vice-Chancellor, 1953-64; member: Industrial Research Cttee., Govt. of Bombay; Food Industries Panel No. 1 (Milk and milk products), Food Directorate, Govt. of India; Exec. Cttee., Indian Sc. Congress Assoc.; widely travelled. *Publications*: Published jointly papers and abstracts in Indian & Foreign journals. *Address*: 'Dhanvantari', University Road, Baroda 2.

**PATEL, Mr. Justice Dahyabhai Vallabhbhai**, B.Sc., LL.B., Judge, High Court, Bombay. *b.* 1909; *Educ.*: Fergusson Coll., and Law Coll., Poona. Joined the Bar, 1934. *Address*: "Rocky Hill," Flat No. 8, Narayan Dabolkar Road, Malabar Hill, Bombay 6.

**PATEL, Harihar**, B.A., B.L., Minister, Industries, Commerce, Co-operation & Forestry and Fisheries, Orissa Govt. since March 1967. *b.* Sept. 20, 1924; *Educ.*: Matriculation at B. S. High School, Sundargarh (Orissa); B.A., B.L. at Ravenshaw Coll., Cuttack. During student career joined 'Quit India' and Prajamandal movements; Founder Member, Ganatantra Parishad which merged with Swatantra Party later; General Secy., Ganatantra Parishad, 1955-57; elected to Rajya Sabha 1958; resigned from Rajya Sabha after being elected to Orissa Leg. Assembly, 1961; Genl. Secy., Swatantra Party, Orissa Unit, 1964-66. *Publications*: Poetry: *Gunjarana*, in Oriya and many essays on politics and on various problems. *Address*: Minister for Industries, Commerce, Co-operation & Forestry and Fisheries, Orissa, Bhubaneswar-1.

**PATEL, Surg.-Capt. Jal Ratanji**, M.D., F.C.P.S., F.C.C.P., F.I.C.A., F.A.C.C. (U.S.A.), Padma Bhushan (1962), J.P., Chairman, Exec. Council, Central Drug Research Instt., Lucknow; Fellow: American Coll. of Chest Physicians; Intn'l Council of Angiology (U.S.A.); Hony. Physician to the Pres., Indian Republic; Dir., Post-graduate & Research Pharmacology, Grant Medical Coll., Bombay; Examiner in M.D. and Ph.D., Bombay, Lucknow, Madras; Surgeon (Indian Navy); Hon. Cardiologist to the personnel stationed in Bombay of the Naval Hospital; Hon. Consulting Physician, Telephones, Bombay Dist. and Hon. Consulting Physician and Cardiologist, Central and Western Rlys.; Retd. Prof. of Pharmacology, Grant Medical Coll., Bombay; Emeritus Prof.

in Pharmacology, Grant Medical Coll., Bombay; awarded Hony. rank of Surg.-Capt. in the Indian Navy by the Pres. of India, May 1961; nominated member, Maharashtra Medical Council, Aug. 1964. *Publications*: Some observation on the blood pressure of dogs with spl. reference to Supra Renal Cortex; *Experimental Work on Tranquillizer*. *Address*: Bombay House, Bruce Street, Bombay 1.

**PATEL, Jehangir Pestonji, M.A. (Cantab.)**, Cotton Merchant, *b.* Feb. 1, 1905; *Educ.*: St. Xavier's High School, Bombay and Downing Coll., Cambridge. Mgr. Dir., Patel-Volkart Pvt. Ltd.; Dir.: Bhopal Sugar Industries Ltd., G. Claridge & Co. Ltd., The Khatau Makanji Spg. & Wvg. Co. Ltd., Bombay Steam Navigation Co. (1953) Ltd., The Scindia Steam Navigation Co., Ltd.; State Bank of India, Bombay; The Ahmedabad Electricity Co., Ltd.; The Lakshmi-Vishnu Cotton Mills Ltd., etc.; Partner, Messrs. Patel Brothers, Cotton Brokers, Bombay; Member: New York Cotton Exchange; New York and Liverpool Cotton Assoc. Ltd., Liverpool. *Address*: "Goolestan," 37, Cuffe Parade, Bombay 5.

**PATELL, Jehangir J. K.**, B.A., F.C.A., F.C.C.S., R.A., F.C.R.A., F.I.C.S., J.P. and Hon. Presidency Magistrate, Secy., A.I.T., Asian Zone Secretariat; *b.* 2nd August 1905; *Educ.*: St. Xavier's School and Coll.; Davar's Coll. of Commerce and School of Accountancy, London. Vice-Patron and Life Member: Bombay Presidency Olympic Assoc. and the Bombay Symphony Orchestral Soc.; W.I.A.A.; W.I.F.A. Member: Asiatic Soc. of Bombay; Member, Govt. Traffic Adv. Cttee.; was Pres., Soc. of the J.P.s and Hon. Presidency Magistrates of Bombay; Dt. Grd. Pursuivant, Dt. Grd. Lodge, E.C. and Dt. Grd. Almoner, Dt. Grd. Lodge, S.C.; Hon. Grand 'J' of the Grant Chapter, U.S.F.I.C., Hon. Treasurer, B'bay Dt. Soc. of Incorporated Secretaries; member, Assoc. of Secretaries, Bombay. *Address*: Lalchand Mansion, Dubash Estate Road, Colaba, Bombay 5.

**PATHAK, Murlidhar Sadashiv**, B.Sc., B.E. (Mech.), B.E. (Electrical), Master, India Security Press and ex-officio Controller of Stamps, since Aug. 6, 1960. *b.* Aug. 21, 1914; *Educ.*: Govt. High School, Nasik City; Fergusson Coll., & Engg. Coll., Poona. Apprentice: Killick Nixon & Co., Sabarmati Power House, Ahmedabad and Air Conditioning Deptt., Volkart Bros.; joined the Corps of Indian Engrs. at Madras Sappers & Miners, Bangalore, Nov. 1, 1941; commnded as an Emergency Commnded Officer, May 2, 1942; services in Iraq, Iran, Palestine and India; rank on release: War Substantive Captain; released under class 'B' scheme to join India Security Press as Asstt. Master; Asstt. Master, June 5, 1946-March 17, 1951; Master, March 18, 1951-Aug. 5, 1960; undertook observation tour of U.K., Switzerland and Italy in 1963. *Address*: Caxton House, Nasik Road (C. Rly.).

**PATIALA, Lieutenant-General His Highness the Maharajahdhiraj Yadavindra Singh Mahendra Bahadur**, G.C.I.E. 1946; G.B.E. 1942, LL.D., Maharaja of, Ex-Indian Ambassador to Italy. *b.* 1913; *Educ.*: Aitchison Coll., Lahore; Hon. LL.B. Banaras Hindu Univ., 1939, Punjab Univ., 1949. Was Rajpramukh of Patiala and East Punjab States Union till 1956; Founder and Hon. Life Pres., Asian Games Federation; Pres. Indian Olympic Assoc. till Jan. 1960; Chairman, All India Council of Sports; Patron and Pres. of many other organisations; was Chancellor of the Chamber of Princes; served war in Malaya, Italy and Burma 1939-45; Indian Delegate to the XIth Session of the U.N., New York, 1956-57; UNESCO Cfee., Paris, 1958; leader, Indian delegation to F.A.O. Cfee., Rome, 1959 & 1961-62. *Address*: Motibagh Place, Patiala, Punjab (Winter); Rajgarh Palace, Chail (Simla Hills) (Summer).

**PATIL (Sisode), Kalyanrao Pandharinathrao**, B.A., LL.B., Dy. Min. for Home, Food & Civil Supplies, Maharashtra State, since Mar. 67. *b.* March 28, 1931; *Educ.*: Aurangabad, Amravati and Hyderabad. Was a legal practitioner at Paithan and Aurangabad; participated in the freedom movement of Hyderabad State during coll. days; took interest in the economic and social uplift of rural masses; apptd. Hony. Secy., Aurangabad Dvn.1 Devpt. Council; is a pioneer in the Marathwada Youth Congress; participated in the Intn'l Youth Cfee. at Yugoslavia; was Vice-Pres., Paithan Devpt. Block; is associated with Bharat Sevak Samaj, N.C.C., Family Plng., etc.; M.L.A., Maharashtra from Paithan constituency, 1962; & '67; Dy. Min. for Social Welfare, Maharashtra, March 1962-Dec. 1963; Dy. Min. for Home & Labour, Dec. '63-Feb. '67. *Address*: Government Bungalow, B-1, Madame Cama Road, Bombay-1.

**PATIL, Rajaram Anant**, LL.B., Min. for Industry and Electricity, Maharashtra, since March 1967. *b.* Aug. 1, 1920; *Educ.*: Kasegaon, Poona, Baroda and Kolhapur. Has been a prominent political worker in Western Maharashtra; founded the Azad Vidyalyay at Kasegaon; Pres., South Satara Dist. Local Board, 1952-62; Pres., M.P.C.C., and later its Gen. Secy.; took keen interest in the devpt. of rural uplift; was Chairman, Maharashtra Coop. Housing Soc., Bombay; was member, Maharashtra State Electricity Board; Chhatrapati Shivaji Vidyapit; deputed by A.I.C.C. to U. K. to study the parly. activities there, 1960-61; M.L.A., Maharashtra from Walwa Constituency, 1962 & '67; Min. for Revenue & Forests, June '65-Feb. '67. *Address*: Bungalow No. A/4, Opp. Sachivalaya, Bombay 32.

**PATIL, R. M.**, B.A., LL.B., Minister for Municipal Admn., Mysore, since March 14, 1967. *b.* 1909 at Wasan, Dharwar Dist. *Educ.*: B.A. from Willingdon Coll., Sangli; LL.B. from Sykes Law Coll., Kolhapur. Joined Congress, 1930; Pleader in Dharwar, 1938; Dist. Asstt. Public Prosecutor, 1946-51; Dist. Govt. Pleader and Public Prosecutor, Nov. 1951; elected M.L.A., Mysore from Navalgund Constituency, 1957, 1962 and 1967; Minister for Health, 1957-58; Minister for Home and later Minister for Development, Panchayati Raj and Municipal Admn. in the last cabinet. *Address*: Vidhana Soudha, Bangalore 1.

**PATIL, S. K.**, Ex-Minister for Railways, Govt. of India. *b.* Aug. 14, 1900 in Ratnagiri Dist.; *Educ.*: St. Xavier's Coll., Bombay and London Univ. Joined non-co-op. movement 1920 and conducted National School, till 1934; studied journalism at the London School of Economics and London Univ. Took part in C.D. movements and was sentenced 8 times; member: A.I.C.C. for last 31 years; Congress Working Cttee., 1945-51, 56, 57; Treasurer, Cong. Wkg. Cttee., 1960-64; member: C.W.C., since 1965; Central Parly. Board since, 1963; Bombay Municipal Corpn. for 20 years; was Gen. Secy., Bombay P.C.C. for 17 years until he became Pres., in 1946; M.L.A. Bombay 1937-46; was member: Central Board of Film Censors; Chairman, Govt. of India's Film Enq. Cttee. and Cantonment Cttee.; Pres.: Local Self-Govt. Instt. of India; All-India Motor Unions Congress; Marathi Granth Sangrahalaya, Bombay; Intn'l Club and Indo-German Cultural Soc.; Indo-Japan Friendship Assoc.; closely connected with various social orgs. & edu. instts. in Bombay; toured imp. cities of Europe, America and Pacific coast several times to study City Admn. and Motion Picture Industry and met imp. personalities; had the unique honour of being elected Mayor of Bombay for three consecutive terms, 1949-52; member, Constituent Assembly 1947-52; Fellow of the Royal Geographical Soc. for four years; Pres., Brihad Bharatiya Samaj since its inception; toured African and



Middle East countries many times in connection with the work of the Samaj; organized the Congress campaign in the Andhra General Elections of 1955; was Pres., I.M.P.P.A. for a year; was Pres., B.P.C.C., 1946-57; Min. for Irrigation and Power, Govt. of India, 1957-58; Union Min. for Transport and Communications, April 1958—Aug. 1959; Union Min. for Food & Agriculture, 1959-63; resigned as Min. under the "Kamraj Plan," Aug. 1963; Min. for Railways, Govt. of India, June '64—Feb. '67; toured officially all over Europe, U.S.A., Latin American Countries, U.S.S.R. and eastern region; toured U.S. & Latin American Countries & U.K. as a spl. envoy of the Indian Prime Minister to explain India's reaction to the Pakistani aggression and other related matters to the leaders of Western hemisphere, Oct. 13—Nov. 6, 1965. Address: Shanti Kutir, Marine Drive, Bombay 1.

**PATIL, Uttamrao Laxmanrao, M.A., LL.B.,** Politician. b. Feb. 12, 1921; Educ.: Dhulia and Jalgaon Dist.; higher educ. at Baroda, Poona and Kolhapur. Enrolled as Advocate, Bombay, 1947; set up practice at Dhulia, 1948; has been associated with several co-op. and other public bodies as legal adviser; took interest in rural problems; nominated Dir., West Khandesh Central Co-op. Bank, since 1958; elected M.L.C., Bombay, from Graduates' Constituency, Central Dvn., 1954; resigned on Samyukta Maharashtra issue, 1956; became member, Bharatiya Jana Sangh, 1953; elected Pres., Maharashtra Pradesh, 1954-59; member, wkg. Cttee., Jana Sangh, since 1956; nominated Vice-Pres. 1960; was M.P. (Lok Sabha) till 1962; Editor, *Prabodha*, Weekly, 1954-56; Editor and owner, *Sudarshan*, Marathi Weekly. Publications: *Sahakari Shetila Virodh Va Paryaya*; *Mahagai Meemansa*. Address: Agra Road, Dhulia.

**PATIL, Veerendra, B.A., LL.B.,** Minister for Public Works & Electricity, Mysore, since March 14, 1967. b. Feb. 28, 1924, in Chincholi, Gulbarga Dist.; Educ.: Govt. High School, Gulbarga; Osmania Univ., Hyderabad. Practised law for some time from 1947 & again, 1950-55; gave up practice and devoted full time for the Congress organisation; became Gen. Secy., Hyderabad P.C.C.; returned to Hyderabad State Assembly from Aland Constituency, 1952; elected on Congress ticket from Chincholi Constituency in 1957 and 1962; Dy. Minister for Home and Industries, Mysore, till May 16, 1958; Organising Secy., Mysore P.C.C. till 1960; Pres., D.C.C., 1960-61; Minister for Excise and Rural Industries, 1961-62; Minister for Public Works and Transport, 1962; Minister for Public Works, since 1962; member: Exec. Cttee., M.P.C.C.; A.I.C.C., since 1957; Chairman, Rehabilitation Ctte Tungabhadra and Sharavathy Valley Projects; State Advisory Board on ports; is member, National Harbour Board; as Minister was responsible for development of Mangalore as an all-weather port; completion of Sharavathy Valley Project Stage, etc.; visited U.S.S.R. as a member the Indian delegation, June 1965; returned to the Mysore Assembly, 1967. Address: Vidhanasoudha, Bangalore 1.

**PATNAIK, Bijayananda, Ex-Chief Min., Orissa.** b. March 5, 1916; Educ.: Ravenshaw Coll., Cuttack. Joined the Indian National Airways and became its ace pilot; took active part in the "Quit India" movement; courted jail for his activities in the freedom struggle; flew the Indonesian Premier Mr. Sutan Sjahrir to New Delhi during the Indonesian freedom fight against the Dutch; landed the first Indian plane in Kashmir when Pakistan attacked her; took to industries after returning to Orissa; among his concerns is the Kalinga Airways; elected to Orissa Assembly from Choudwar during the mid-term election, 1961; Chief Min., Orissa, 1961-63; resigned under the "Kamraj Plan," Aug. 1963. Address: Bhubaneswar.

**PATNAIK, Kali Charan, Kavichandra (1942).** Natyacharya (1944), Oriya poet and dramatist; writer of Children's Literature. b. Dec. 23, 1900; Educ.: Ravenshaw Coll., Cuttack. Editor, *Puribasi & Sangita Prabha*, 1924-28; Founder-Dir., Sakthigopal Natya Sangh 1926-39; Orissa Theatres 1939-50; Founder: Suralekha Record Productions; Odissi Music & Dance Instt.; Founder-Pres.: Utkal Natya Sangh; Vice-Pres.: Bharatiya Natya Sangh 1958; Chairman, Board of Studies in Music, Utkal Univ., 1949-57; member, Orissa Sangeet Natak Academy, since 1954. Publications: 57 Oriya and 2 Hindi Dramas; Short Stories; Songs; Music; Dance; Dance-Dramas; One-Act Plays; Dir. of the Oriya Film "Lalita" (1948), "Nari" (1963), and 3 Documentary Films in early forties; Lyric composer of three films, 1949-58. Address: "Kavi Nivas", Jagannath Ballav, Cuttack-1 (Orissa).

**PATNAIK, Nagari Mohan, B.A. (Hons.), I.A.S.,** Chief Secy. to the Govt. of Kerala, since Nov. 30, 1962. b. Aug. 12, 1911; Educ.: Angul M.E. School; Ravenshaw Collegiate School and Coll.; Patna Coll., Patna. Held posts in the Orissa Civil Service, Jan. 16, 1935 to Dec. 31, 1947; appointed to the I.A.S. Jan. 1, 1948; Spl. Officer-cum-Under Secy., Govt. of Orissa, 1948; Home Secy., to Delhi Admn., 1948-49; worked as Dy. Secy., Labour Min.; Central Provident Fund Commr.; Dir. Gen., Resettlement and Empl. yment and Chief Labour Commr. till March 1957; Addl. Secy., Political and Services Dept., Govt. of Orissa, 1957-58; Chief Commr., Tripura Admn., 1958-62. Address: Chief Secretary to the Government of Kerala, Trivandrum.

**PATTAMMAL, Smt. D. K.,** Sangeet Natak Akademi Award (1962), Musician (Karnatic Vocal). b. March 19, 1919; Educ.: Kancheepuram. Was awarded the title of "Gana Saraswathi" by the late Tiger Varadachariar in 1943. Address: 7, Srinagar, Madras 15.

**PAVATE, Dr. Dadasaheb Chintamani, B.A. (Hons.) (Bombay), M.A. (Cantab.),** Padma Bhushan (1967), Vice-Chancellor, Karnatak Univ., since July 1954. b. Aug. 2, 1899; Educ.: Karnatak Coll., Dharwar; B.A. (Hons.), first class, Bombay Univ., 1923; Sidney Sussex Coll., Cambridge; obtained a double first class in Mathematics Tripos exams. of the Cambridge Univ. and became a Wrangler, 1927. Prof., Mathematics, Banaras Hindu Univ., 1928-30; admitted to the Bombay Educ. Service Class I, June 1930; Dir. of Public Instruction, Bombay State, 1947-54; member, Official Language Commn., 1955-56; Leader, Indian Delegation to the 19th Intn'l Educl Cfce., Geneva, July 1956; visited several Univ.s abroad; member: Univ. Grants Commn.; Publications: *Elements of Calculus*; *Modern College Algebra*; *Memoirs of An Educational Administrator* and some other books in Mathematics. Address: Vice-Chancellor, Karnatak University, Dharwar.

**PAVRY, Dasturzada Dr. Jal, M.A., Ph.D.,** Spiritual Head of the Liberal Zoroastrian Church of Europe and America; Orientalist and Author. Received highest academic honours at Bombay Univ., 1916-20, and at Columbia Univ., New York, 1921-25. First scholar from India to be elected a Fellow and apptd. a member of Columbia Faculty; awarded the Univ.'s Alumni and Bicentennial Medals; Author of several imp. works on history and religions of Israel and Iran; Pres. Emeritus, Columbia Univ. Alumni Assoc. of India; Vice-Pres., World Alliance for Intn'l Peace through Religion, of World Fellowship of Faiths and of All-Inclusive Spiritual Centre of Geneva; Edited, *Dastur Pavy Centenary Volume* in English, French and German, prepared by 70 savants from 17 countries and to be published by Oxford Univ. Press in England (1964). Address: Malabar Hill, Bombay.

**PAZ, H.E. Mr. Octavio, Amb. of Mexico,** since Sept. 10, 1962. b. March 31, 1914, in Mexico City; Educ.: National Univ. of Mexico. Entered the Mexican Foreign Service, 1944; has occupied different posts in the consular and diplomatic missions of Mexico in San Francisco, New York, Paris, New Delhi, Tokyo, Berne, Geneva etc.; has been, the Dir.-Gen. of Intn'l Org.s of the Min. of Foreign Affairs in Mexico; was a delegate of Mexico to the Gen. Assembly of the U.N. and other intn'l cfce.s of the Org. of American States, UNESCO etc.; was Min. Plenipotentiary and Charge d'Affaires in France. Publications: Several books of poetry and essays (translated into English, French, Italian, Swedish, Greek etc.) Address: 136, Golf Links, New Delhi; 13, Prithviraj Road, New Delhi.

**PEGOV, H. E. Mr. Nikolai Mikhailovitch:** (See page 1043)

**PENDSE, Shripad Narayan, B.Sc. (Bombay),** Marathi Writer; Rockefeller Fellow, 1955-56. b. Jan. 5, 1913; Educ.: Bombay. Wrote his first novel *Elgar*, 1949; awarded a travelling fellowship by the Rockefeller Foundation and toured the Continent, U.K., U.S.A., and South-East Asia, 1955; critics held *Elgar* as a turning point in Marathi fiction. Publications: Three collections of short stories; Novels: *Elgar* (awarded a prize as the best book of the year); *Haddapar* (awarded Govt. prize as best novel of the year) whose English translation is *The Brahmin*; *Garambeechea Eapoo*, awarded Govt. prize for the best novel of the year: *Hatyra* (Oct. 1954); *Kalandar* (1959); *Mahapur* a play (1961); *Rathachakra*—a novel (1962); won Sahitya Akademi Award for the best book in Marathi, 1963; *Raitemaster* (1964), *Yashoda* (1965) and *Garambeechea Eapoo*, are now adopted for the stage; *Jumman* (1966). Address: Gokhale Wadi, B. S. Road, Bombay 28.

**PERANTZES, H.E. Mr. John, Commander of** the Royal Order George I, Commander of the Royal Order of the Phoenix, Military Cross, Distinguished Service Order, Medal for Albania, Middle East, Commander of Italian Republic Order, Silver Cross of Leopold II of Belgium, Silver Cross of Crown of Rumania, Coronation Medal of Queen Elizabeth; Ambassador Extra. and Plenipot. of Greece to India, since Aug. 23, 1965. b. 1909. Joined the Diplomatic Service, 1931; served in Valona (Albania), Cairo & Beirut; during the war, was 2nd Lieut. with the First Greek Brigade at the Battle of El-Alamein; apptd. Head of the Diplomatic Office of Prime Min. & Liaison Officer with the British Civil & Military Authorities when Greece was liberated, 1964; apptd. Dir. of the Diplomatic Office of Prime Min. at the Paris Peace Cfce.; was Charge d'Affaires in Pretoria, Counsellor in Washington and Head of Diplomatic Office of Foreign Min., 1952; Counsellor, Greek Embassy and subsequently also Head of Press Office in London, 1953; Secy. Gen. in Ankara of the Tripartite Ankara Pact and later served at the Foreign Min. in Athens where he took over the European Coop. Deptt. (Council of Europe), 1964. Address: 123, Ashoka Hotel, New Delhi.

**PILLAI, C. I. Parameswaran, B.A., B.L.,** Central Akademi Award for Malayalam Stage Acting (1959), a leading Malayalam Stage Actor; Chairman, Kerala Sangeet Natak Akademi, since Jan. 1965; Advocate and Legal Adv. to Kerala Co-op. Central Land Mortgage Bank Ltd., Trivandrum. b. Feb. 1898, at Alwaye; Educ.: Kottayam, Trichinopoly and Trivandrum; called to the Bar, 1930. Chief Legal Adv. to the Kerala Univ., 1955-60; Vice-Chairman, Kerala Sangeet Natak Akademi, 1956-59; engaged in amateur stage activity for over 40 years; recognised by the public as an outstanding amateur artiste in both English and Malayalam plays especially for character-acting; developed his own style and technique in acting. Address: Advocate, Vanchiyoor, Trivandrum.

**PILLAI, Namakkal Kavignar Ramalingam,** Poet Laureate (1948), M.L.C. (Madras). Tamil Writer. b. Oct. 19, 1888; Educ.: B. H. School, Namakkal; Arts Coll., Coimbatore.



Professional Artist and portrait painter, 1909-20; attended the Coronation Durbar of King George V at Delhi as an artist at the instance of the Madras Govt., 1912; joined the N. C. Movement, 1921; composed songs for the Movement; courted jail in the movement; gave up the artist's profession and contd. composing songs for the Gandhian cult; was popularly called the Gandhian poet; nominated M.L.C., Madras. *Publications*: Books of poetry, novels, research books and treatises: new commentary of *Thirukkural*. *Address*: Namakkal, Dt. Salem, Madras State.

**PILLAI, P. S. Veerusami**, Sangeetha Kalanidhi, Nathaswara Vidva Sironmani, Esakunamani Esaipperingar, Nathaswaram Artist. b. 1901 at Perambur Village, Tanjore Dist.; *Educ.*: Learned Nagaswaram under his father. Had played together with some of the great masters of Nagaswaram like Sempoonarkoil Ramaswami Pillai, Tiruvaidaimarudur Sivakkolundu Pillai and T. N. Rajaratnam Pillai; had further trg. under Vidwan Konerirajapuram Valdyanatha Iyer, Violin Vidwan Govindasami Pillai and Vidwan Nagasuram Natarajasundaram Pillai; became Adheena Vidwan of Tiruvavaduthurai and Dharmapuram and Asthana Vidwan of Nachiar Devasthanam of Srivilliputtur and of T. T. Devasthanam, Tirupathi; had been honoured in the States of Cochin and Travancore and by several public bodies and heads of several Maths and Devasthanams in the South; awarded the title of 'Sangita Kalanidhi', 1962, 'Esaipperingar', 1959 and Mathyarsuna Mahanadhamani, by His Holiness Sankaracharya of Kanchi Puram, 1964. *Address*: Tiruvaidaimarudur (Dt. Thanjavur), S. India.

**PILLAI, Thakashi Sivasankara**, Malayalam Writer; Lawyer. b. April 14, 1914; *Educ.*: Home Village; High School, Karuvatta; Law course, Trivandrum. Began writing at the age of 15; one of the pioneers of realism in Malayalam literature and the progressive movement in Kerala; won the Sahitya Akademi award in 1957 for the novel *Chemmeen* which has been translated into Russian and Czech, and English; his novel *Rantidangazhi* is being translated into all the major languages in India by the Sahitya Akademi; member, Kerala Sahitya Akademi. *Publications*: More than 500 short stories and 15 novels. *Address*: Thakazhi, Ambalapuzhai, Kerala.

**PISHAROTY, Dr. Pisharoth Rama**, B.A. (Hons.), M.A. (Madras), M.A. (Calif.), Ph.D. (Calif.), Scientist; Dir. Instt. of Tropical Meteorology, Poona. b. Feb. 10, 1909; *Educ.*: Trichinopoly, Bangalore and California (Los Angeles). Conducted substantial research under Sir C. V. Raman at Bangalore; joined the India Meteorological Deptt., 1942; Research Meteorologist in U.S.A., 1952-54; was also closely associated with weather forecasting; is a member, Meteorological Soc.s in India, U.K., and U.S.A.; is a Fellow of the Indian Academy of Sci.; Indian rep. at several int'l meetings of the World Meteorological Org.s, since 1964; a member, Adv. Board of the Exec. Cttee., W.M.O. *Publications*: 50 Scientific papers—about ten in physics and the rest on Meteorology and geomagnetism. *Address*: Director, Institute of Tropical Meteorology, Poona 5.

**PITAMBER DAS, B.A., LL.B.**, Politician; Vice-Pres., Bharatiya Jana Sangh, 1961-66. *Educ.*: Devanagiri High School, and Meerut Coll., Meerut. Actively participated in boycott of the Simon Commn. and established Students' Khadi League in Coll.; legal practice, 1932-58; Congressman till 1947; Sanghchalak of R.S.S. for Mawana, U.P., 1946-51; was under detention for six months when ban was imposed on R.S.S., 1948; convicted for 3 months in R.S.S. Satyagrah, 1949; joined Jana Sangh at its inception, 1951; was in jail for three months during Kashmir Satyagrah, 1953 and again one month in 1958 for offering Satyagrah in the Food Agitation

of U.P.; Pres. for Meerut Dist., Jana Sangh, 1951-54; Provincial Secy., U.P., 1955; Pres., Jana Sangh, U.P., 1956-58, & 1961-62; member, U.P., Leg. Council, 1956 and 1962; Pres., Bharatiya Jan Sangh, 1960; member, Roorkee Univ. Syndicate, 1963-66. *Address*: Mawana, Meerut Dist., U.P.

**PODAR, Ramnath Anandilal**, Industrialist and business man. b. Jan. 21, 1910; *Educ.*: Marwari Vidyalaya High School. Joined father's business, 1927; Chairman: Podar Group of Concerns; Indian Cotton Mills Federation, 1963-65; Export Credit Guarantee Corp., 1962-64; Rajasthan Chamber of Commerce & Industry; The Rajasthan Financial Corp.; Millowners' Assoc., Bombay, 1957-60; Cotton Adv. Board, 1957-62; Dir., State Bank of India; J.P.; M.P., 1952-54; Bombay Leg. Assembly, 1956-62; Bombay Municipal Corp., 1942-52; Dy. Chairman, Bombay Textile Research Assoc., 1959-65; Pres., Indian Merchants Chamber; member: Export-Import Adv. Council; Cttee. of F.I.C.C.I.; All India Org. of Industrial Employers; Millowners' Assocn., B'bay; A. I. Assoc. of Industries; Ind. Nat. Cttee. of Intn'l Chamber of Commerce; numerous research, medical relief, social welfare and educ. instts.; Dir., many commercial and industrial enterprises. *Address*: Podar Chambers, Fort, Bombay 1.

**POLSON, Minoo Pestonji**, A.S.E., F.R.S.A., F.R.G.S. F. Inst. D., J.P., Mg. Dir., Polson Ltd. b. Dec. 4, 1909; *Educ.*: Cathedral & John Cannon High School, Bharda New High School and the Imperial Inst. of Animal Husbandry & Dairying. Founder and Ex-Chairman, Bombay Soc. of Model Engrs., an Associate of the Soc. of Engrs., England, 1948; visited Denmark and U.S.A., 1962, under US-Aid Programme, with Food Preservation and Food Canning Industry Study Team sponsored by the National Productivity Council; member, Philatelic Adv. Cttee., Govt. of India, 1962; Fellow of Inst. of Dir.s, London, 1964; awarded specially coined medal by His Holiness Pope Paul VI in appreciation of services rendered during the 38th Intn'l. Eucharistic Cong., 1965. Apptd. on the Central Adv. Board of Educ., Parsi Panchayat, 1965; Pres., Empire of Indian Philatelic Soc.; Ex-Pres., Amateur Cine Soc. of India; Ex-Chairman; English Speaking Union (Bombay Branch); is on Cttees of various trade industry and social orgs. *Address*: Moti Mahal, Churchgate Reclamation, Bombay 1.

**POONACHA, Cheppudira Muthana**, Minister for Railways, Govt. of India, since March 1967. b. 1910, Attur Village, South Coorg; *Educ.*: Mercara and Verajpet in Coorg and St. Aloysius Coll., Mangalore. Left studies to join Satyagraha Movement, 1930; often imprisoned during independence movement; Member, Exec. Cttee., Karnatak P.C.C., 1938; A.I.C.C., 1938; Coorg Dist. Board, 1938, and its Pres., 1941; Coorg Leg. Council and Leader of the Congress Leg. Party in the Council, 1945-46; Constituent Assembly and Provisional Parliament, 1947-51; Chief Min. of Coorg, 1952-56. Min. for Industries and Commerce, 1957 and then for Home and Industries, Mysore; Chairman, S.T.C., 1959-63; Leader, Govt. Trade Delegation to East European countries, 1960 and S.T.C. Delegation to Japan, 1961 & East Europe, 1963; M.P., Rajya Sabha, April 1964; Min. of Revenue and Expenditure, Union Fin. Ministry, Jan. 2-24, 1966; Min. in the Min. of Transport, Aviation, Shipping & Tourism, Govt. of India, Jan. 1966-March 1967. *Address*: 2, Tughlak Road, New Delhi; Home Estate, Attur Post, Via Pollibetta South Coorg, Mysore State.

**POTDAR, Datto Vaman, Mahamahopadhya** (1946), Sahitya Vachaspati, Prayag; B.A., (Bombay), Hony. Doctor of Letters (Banaras Hindu Univ.) (1967), Padma Bhushan (1967), Ex-Vice-Chancellor, Poona Univ. b. Aug. 5, 1890; *Educ.*: Poona. Orator, Educationist; research in Mahatma History and Literature; founded the Indian History

Congress, Poona, 1935; presided over its Delhi session, 1948; President's Award (Sanad) 1961; Chairman, Shikshana Prasarak Mandali, Poona; Pres., Marathi Sahitya Mahamandala; Kul-Guru, Tilak Vidyalay, Poona; Pres., Maharashtra Rashtra Bhasha Sabha; Govt. of Bombay rep. at the 3rd Intn'l Congress on Archives at Florence, 1956; led Vice-Chancellors' delegation to U.S.S.R. and visited the Mongolian Republic 1963. *Potdar Commemoration Volume*, presented on Oct. 28, 1950. *Publications*: *A History of Marathi Prose Literature, Inside Maharashtra, Srots Hol! Me Yuropant Kay Pahlen*, etc. *Address*: 498, Shanwar Peth, Poona 2.

**PRABHA, Smt. B., G.D. Art.** In Painting, Painter. b. Jan. 1, 1931; *Educ.*: G. D. Art in painting in first class from Sir J.J. School of Art, Bombay, 1954. First prize of Maharashtra Govt. exhibition, 1958; many other prizes and medals till 1960; 15 one-man shows of her paintings in India and abroad; visited eastern countries, 1962 and Australia & New Zealand, 1965; painted a mammoth mural at Tokyo for the Indian Embassy; painted murals for Air India office, Bankok and Indian Overseas Bank Building, Madras and Syndicate Bank Ltd. at Manipal, Bangalore, Bombay, Delhi and Melbourne. *Address*: Studio Sea Green, Flat No. 4, Worli Sea Face, Bombay 18.

**PRAKASH, Sri, B.A. (Allahabad), B.A., LL.B.** (Cantab.), Bar-at-Law, Padma Vibhushan 1957. b. Aug. 3, 1890; *Educ.*: B.A., Allahabad, 1911; B.A., LL.B. (Cantab.), 1914; called to the Bar, 1914. Educationist, Journalist and Politician; connected with the Banaras Hindu Univ. and Kashi Vidyapeeth; member, A.I.C.C., 1918-45; Gen. Secy., U.P.C.C., 1928-34, and Indian National Congress (1929-31); Pres., U.P.C.C., 1934-35; M.L.A. (Central), 1934; re-elected, 1945; often imprisoned for Congress activities; member, Indian Constituent Assembly from U.P., 1946; Indian High Commr. in Pakistan, 1947-49; Governor of Assam, 1949-50; Union Min. of Commerce, 1950-51; Union Min. for Natural Resources & Scientific Research, 1951-52; M.P., 1952; later resigned; Governor: Madras, 1952-56; Bombay (later Maharashtra) 1956-62. *Publications*: *Pakistan Birth and Early Days* (In English); *Sphut Vichar*; *Nagarik Shastra* (In Hindi). *Address*: Sevashrama, Varanasi 1; Vishrant Kutir, Rajpur, Dehra Dun.

**PRASAD, Baleshwar, M.A. (English), I.A.S.**, Chief Commissioner, Manipur, since Nov. 1963. b. Jan. 1, 1914; *Educ.*: Patna Coll., Patna Univ. I.A.S. Officer in Bihar, 1950-56; Political Adv. to the Indian Delegation to Intn'l Commn. for Supervision and Control in Viet Nam (1956-59); Dewan of Sikkim (1959-63). *Address*: Chief Commissioner's House, Imphal, Manipur.

**PRASHAD, Tambareshwar, M.Sc.**, Minister for Irrigation and Power, Uttar Pradesh, since April 1967. b. 1929; *Educ.*: M.Sc. degree in Agriculture from Kanpur Agriculture Coll., Kanpur, 1952; did research on agro-industries in Lucknow Univ., has been an active social worker, since his school days; elected to the Vidhan Sabha, U.P., 1957; was deputy leader of opposition in the State Vidhan Sabha; had been to jail twice; is connected with several educational institutions; is convener, Badrinath Temple Cttee.; had been Vice-Pres., All-India Youth Krishak Samaj; has been a prominent organiser of the Krishak Samaj in U.P.; elected to U.P. Vidhan Sabha from Sitapur City constituency, 1967. *Address*: Minister for Irrigation and Power, Uttar Pradesh, Lucknow.

**PRITAM, Smt. Amrita**, Sahitya Akademi award (1956), Writer, Editor, *Nagmani* (monthly). b. Aug. 31, 1919; *Educ.*: Lahore (Punjab). Edited a monthly in Punjabi, *Nagin Dunian*, 1938-40; Staff Artist, A.I.R., 1948-60; started a Punjabi monthly, 'Nagmani', May 1966. *Publications*: Collections of poems, novels, books of short stories, collections of folk songs, book of articles, travelogue. *Address*: K 25, Haus Khas, New Delhi 16.



**PURI, H.E. Yogendra Krishna, I.C.S.,** Indian Amb. to Morocco and Tunisia. b. July 25, 1916; *Educ.*: Govt. Coll., Lahore; Univ. Coll., London. Joined the I.C.S., 1938; served in Assam successively as Asstt. Commr., Under-Secy. (Pol.) and Secy., Supply Deptt. till Oct. 1946; apptd. to the Fin. & Commerce Pool, Govt. of India, 1946; Dy. Secy., Fin. Min., July 1947; Min. without Portfolio, Oct. 1947; Dir.-Gen., Rehab. Min., 1948; Dy. High Commr. for India in Pakistan, Lahore, 1948-51; Dy. Secy., Min. of Ext. Affairs, 1951-53; Counsellor, Indian Embassy, Paris, 1953-55; Counsellor, Indian High Commn., London, Sept. to Dec. 1955; Jt. Secy., Min. of Ext. Affairs, 1956-60; High Commr. in Malaya, 1960-64. *Address*: C/o Ministry of External Affairs, New Delhi.

**PURUSHOTTAM, Jatavallabha, M.A.** (Madras) in Sanskrit and Telugu, Sanskrit Writer; Member, Classical Languages Devpt. Cttee.; Head of the Sanskrit Deptt., P. R. Govt. Coll., Kakinada, since Aug. 1964. b. Aug. 2, 1906; *Educ.*: Taylor High School, Narsapur; Maharajah's Coll., Vizianagaram. Lecturer in Sanskrit, S.R.B. & C.V.R. Govt. Coll., Vijayawada, 1948-61; Principal, S.V.J.V. Sanskrit Coll., Kovvur, 1961-64. Congress Detenu, 1943. *Publications*: *Vedic Women*; *Women in the Smritis*; *Hinduism*; *Introduction to Bhagavat Gita*, *Bharatiya Vaibhava*, *Dharma Manjari*, *Jagadguru Prasamsa*. *Address*: Maria Lane, Kakinada.

**PUTTASAMAYA, B.,** Sahitya Akademi Award (1964), Kannada Writer. b. May 27, 1897; *Educ.*: St. Joseph's Coll., Bangalore. Took up journalism at an early age; worked as leader writer and gen. editor of various Kannada dailies and weeklies, *Janavani*, *Mathru Bhoomi*, *Prajamatha*; Founder-Editor, *Prajavani*, 1948. *Publications*: *Plays: Kurukshetra*; *Dasavathara*; *Ramayan*; *Budha*; etc.; *Novels*: social: *Abhisariki*; *Sushamayi*; *Ardhangi*, etc., *Kranthi Kalyan* Series of six novels (historical); won the Sahitya Akademi Award for the last part of the book published in 1963. *Address*: 1st Cross, Sreeramapuram, Bangalore 9.

**PUVVADA, Seshagiri Rao, 'Kavipadusha',** poet, scholar and writer of Andhra. b. in Movva, 1906. An educationist; addressed and presided over numerous literary and cultural meetings all over India; also a broadcaster; participated in the Nat. Symposium of Poets inaugurated by President Rajendra Prasad, 1958; member, Adv. Panel, Anglo-Intra Indian Multi-Lingual Dictionary; Dir., Dramatic Assoc.; strives for communal harmony. *Publications*: *Kavyas*, novels, plays and essays, *Salapatram*; *Govatsam*; *Taj Mahal*; *Dara*; *Palavelli*; prescribed as text books of Modern Poetry for degree exams. in Andhra, Madras and Utkal Univs., *Eruvaka*; *Aura*; *Evaru*; *Andhra Tejam*; *Parasuramudu*; *Durga Das*; *Delhi Durbar*; *Prithvi Putri*; *Prana Rakshana*; *Shhapankti*; *Silpakavyam*; *Totrupatu*; *Nandanam*; *Raktatarpanam*. *Address*: Professor of Telugu, National College, Masulipatam.

**QURESHI, Mohd. Shafi, M.A., LL.B.,** Deputy Minister of Commerce, Govt. of India, since Jan. 1966. b. Nov. 24, 1929; *Educ.*: Christian Mission Society, Hadow Memorial High School, Dr. Amar Singh Coll. (Srinagar), M.A. & LL.B., from Aligarh Univ. Was advocate in Srinagar; elected to the Rajya Sabha, May 1965; Lok Sabha, 1967; formed the Congress in Kashmir and became founder Pres., Jammu & Kashmir National Congress. *Address*: 13, Ashoka Road, New Delhi; Badshah Chowk, Maisuma Bazar, Srinagar (Kashmir).

**RACHAIAH, Basavaiah, B.Sc., B.L.** Min. for Revenue & Forests, Mysore State, since March, 1967. b. Aug. 10, 1922; *Educ.*: Central Coll. and Govt. Law Coll., Bangalore, B.Sc., 1948; B.L., 1953. Member, Mysore Leg. Assembly from Chamaraajanagar Constituency,

1952, and Santhemorahalli in '57 and '62; Pres., Mysore State Bharatiya Depressed Class League; founded educ. Instts. and harijan hostels; is interested in the amelioration of the weaker sections of the society. Minister for Forests, Fisheries and Sericulture, Govt. of Mysore, Mar. '62-Mar. '67. *Address*: Vidhana Soudha, Bangalore 1.

**RADEAKRISHNAN, Dr. S., O.M., F.R.S.L., M.A., D.Litt. (Hon.), LL.D., D.C.L., Litt. D., F.B.A.,** Bharat Ratna (1954), German pour la merite (1955), Master of Wisdom (Mongolia) (1957), Goethe Plaque (1959), Hon. D.Ph., Teheran Univ. (1963); Hon. Doctor of Laws, Pennsylvania Univ. (1963); Hon. D. Litt., Tribhuvan Univ. (1963); Hon. Ph.D., Moscow Univ. (1964), Hon. Doctor of Laws, National Univ. of Ireland (1964); The Golden Spur (1964); Hon. Doctorate, Zagreb Univ. (1965); Hon. Doctorate, Haile Silassie I Univ. (1965), Hon. Doctor of Letters (B.H.U.) (1967), Ex-President, Indian Republic; Philosopher Statesman. b. 5th Sept. 1888; *Educ.* Madras Christian College. For some time Prof. of Philosophy, Presy. Coll., Madras and in Mysore Univ.; Upton Lecturer in Comparative Religion, Manchester Coll., Oxford; Hibbert lecturer, 1929-30; Vice-Chancellor, Banaras Hindu Univ., 1939-48; Spalding Prof. of Eastern Religions and Ethics, Oxford, 1936-52; George V Prof. of Philosophy, Calcutta, 1921-39; member, Intn'l Cttee. on Intellectual Co-op., 1931-39; member and leader, Indian Delegation, UNESCO, 1946, 1947, 1948, 1949, 1950; Pres., 1952; elected Chairman of the Exec. Board, UNESCO, 1948; Chairman, Univ. Commn., Govt. of India, 1948; Indian Amb. Extraordinary and Min. Plenipotentiary to Soviet Russia, 1949-52; Chancellor, Delhi Univ., 1953-1962; Chairman, Indian P.E.N.; Vice-Pres., Intn'l P.E.N. Elected Vice-Pres., Indian Republic, 1952 and again 1957; went on a two-month goodwill tour of European countries namely Belgium, Poland, Czechoslovakia, the Soviet Union, Hungary and Bulgaria, and African countries namely East and Central Africa, June-July 1956; received the Hony. Professorship of Moscow Univ., June 18, 1956; visited Singapore, Indonesia, Japan and China on a goodwill tour, Sept.-Oct. 1956; went on a three-week tour of the Indo-China States, China, Mongolia and Hong-Kong, Sept. 1957. Attended East-West Philosophers' Cfce. in Honolulu, visited U.S.A., attended the P.E.N. Congress in Germany, July 1959; went on a goodwill tour of England and Scandinavia, Jan.-Feb. 1960; attended the UNESCO Cfce. at Paris, Nov. 1960; visited also the U.S.A.; acted as President of India, June-July 1960 while Dr. Rajendra Prasad was away and Aug.-Sept. 1961 during his illness; elected Hon. Fellow of the British Academy, July 11, 1962; State visit to Great Britain, June 12-23, 1963; apptd. by Queen Elizabeth as an Hon. Member of the Order of Merit, Buckingham Palace, on June 12, 1963; State visit to Nepal, Nov. 4 to 7, 1963; State visit to U.S.S.R. & Ireland, Sept. 1964; awarded by H. H. Pope Paul VI, the Golden Spur, the highest Vatican award, during his visit to Bombay, Dec. 4, 1964; State visit to Yugoslavia, Sept. 30 to Oct. 4, 1965; Czechoslovakia, Oct. 4-7, 1965; Rumania, Oct. 7-10, 1965; Ethiopia, Oct. 10-13, 1965; President, Indian Republic, 1962-67. *Publications*: *Philosophy of Rabindranath Tagore*, *Reign of Religion in Contemporary Philosophy*, *Indian Philosophy 2 Vols.*, *The Hindu View of Life*, *An Idealist View of Life*, *East and West in Religion*, *Kalki or the Future of Civilization*, *The Religion We Need*, *Gautama the Buddha*, *Eastern Religions and Western Thought*, *India and China*, *Religion and Society*, *Education*, *Politics and War*, *Bhagavadgita*, *Dhammapada*, *The Principal Recovery of Faith*, *East and West*, *Some Reflections*, *Brahma Sutra*, *Fellowship of the Spirit*; *On Nehru*, 1965; *Speeches & Writings*, 1965. Articles on Indian Philosophy and others in *Encyclopaedia Britannica*. *Address*: 30, Edward Elliot Road, Madras.

**RAGHAVACHARI, Neman Echambadi Srinivasa, M.A., I.C.S.** Ex-Adviser to the Governor of Kerala. b. June 10, 1912; Venkatagiri Rajah's Coll., Nellore and Presidency Coll., Madras; B.A. (Hons) in Mathematics, 1932; passed I.C.S., 1935. Asstt. Collector, Kurnool, 1936-38; Sub-Collector, Tindivanam and Negapattam, 1938-41; Under-Secy. to Madras Govt. in Public and P.W.D. Deptt., 1942-45; Jt. Provincial Textile Commr., Madras, 1945-47; Agent of Govt. of India in Ceylon, Kandy, 1947-48; First Secy. to the Indian High Commr., Ceylon, 1948-51; Rep., U.N. Tech. Assistance Adm. for Asia and Far East, Bangkok, 1951-53; Collector of Malabar, 1953-54; Dir. of Community Devpt, Madras, 1954-56, Chief Secy. to Govt. of Kerala, Oct. 1956 to Feb. 1960; Dir.-Genl., Supplies & Disposals, Govt. of India, 1960-63, Addl. Secy., Min. of Comm. Devpt. & Co-op., 1963-65. *Address*: C/o Cliffe House, Trivandrum.

**RAGHAVAN, Dr. Venkatarama, Padma Bhushan (1962), M.A., Ph.D.,** Member, L'Ecole Francaise d'Extreme Orient, Hanoi (1948) and Austrian Academy of Sciences (1958); Kane Gold Medal, Bombay Asiatic Soc. 1953, *Kari-Kokila*, 1954, Fellow, Sangeet Natak Akademi, 1964; Sanskrit Scholar; Prof. and Head of the Dept. of Sanskrit, Univ. of Madras. b. Aug. 22, 1908; *Educ.*: Tiruvarur; Presidency Coll., Madras. Research Scholar, Madras Univ., 1931-34; Sanskrit Deptt., Madras Univ. in diverse capacities, 1935-63; visited Europe, U.S.S.R. & U.S.A. on a lecture tour. *Publications*: Over 80: *Bhoja's Srngara Prakasa*; *Number of Rasas*, *Concepts of Alankara Sastra*; *Srngaramanjari*, *Love in the Poems and Plays of Kalidasa*; *Sanskrit & Allied Indological Studies in Europe*; *The Indian Heritage*; many Sanskrit poems & plays & stories, plays & translations in Tamil; 300 papers in research journals. *Address*: Professor of Sanskrit, Univ. of Madras, Madras 5; 7, Srikrishnapuram St., Madras 14.

**RAGHU RAMAIAH, Kotha, M.A., LL.B.,** Bar-at-Law, Min. of State for Petroleum & Chemicals, Govt. of India, since March 1967. b. Aug. 6, 1912; *Educ.*: Andhra Christian Coll., Guntur; Lucknow Univ.; Middle Temple, London. Practised in Madras High Court, 1937-41; held various posts in the Madras Govt. and Govt. of India; resigned from Govt. service, 1961; enrolled as Advocate, Supreme Court; member: Estimates Cttee., Lok Sabha, 1954; Exec. Cttee.; Congress Party in Parliament, 1954; Indian Instt. of Public Adm., 1954; Indian Central Tobacco Cttee., since 1953; in Lok Sabha; Gen. Purposes Cttee., since 1955; Rules Cttee., since 1955; Legal Adv. Cttee., A.I.C.C., since 1956; Secy., Congress Party in Parliament, 1955; Chairman, Petitions Cttee., Lok Sabha, 1955; Alternate delegate to the Cfce. on the "Law of the Sea," Geneva, March 1960; Dy. Min. for Defence, 1957-62; Min. of State in the Defence Min., April-Nov. 1962; Minister of Defence Production, Nov. 1962-June 1964; Union Min. for Supply, Tech. Devpt. & Materials Png., 1964-66; Min. of State in the Min. of Tech. Supply & Social Security, Govt. of India, Jan. 1966-March 1967. *Address*: 14, Asoka Road, New Delhi.

**RAGHUBIR SINGH, Maharaj Kumar Dr., M.A., D.Litt., LL.B.,** Heir-Apparent of Sitamau (Malwa); Hindi writer & Historian. b. Feb. 23, 1908; *Educ.*: At home and the Holkar Coll., Indore; Agra Univ. Pres., Sitamau State Rajya Parishad, 1939-41 and 1945-46; participated in the Chamber of Princes affairs; brought about the formation of the Madhya Bharat Union, 1948; M.P. (Rajya Sabha), 1952-62; awarded the Mangala Prasad Prize, 1945, for his Hindi book *Malwa Men Yugantar* by the Hindi Sahitya Sammelan, Allahabad; awarded a prize by the U.P. Govt. for his Hindi book *Purva-Adhunik Rajasthan*, Feb. 1954; Corresponding member, Ind. Hist. Rec. Comm., 1937-42 and since



1952; *Publications*: (Hindi) *Purva-Madhya-kalin Bharat, Bikhare Phool, Sapta Deep, Malwa Men Yugantar, Shesha Smritiyam, Jeevan Dhuli, Jeevan Kan, Rallam ka Pratham Rajya*; (English) *Malwa in Transition, Indian States and the New Regime*. *Address*: "Raghur-bir Niwas", Sitaman (Malwa-M.P.).

**RAHMAN, Habib, B.E. (Cal.), M. Arch.** (M.I.T.), Padma Shri (1955), Senior Architect to the Govt. of India, since 1953. b. March 1916; *Educ.*: Calcutta Univ. and M.I.T., (U.S.A.). Worked in leading Architectural Firms of Boston and New York, 1944-46; Senior Architect, West Bengal Govt., 1947-53; member, Lalitkala Akadami, 1956; Fellow of Indian Instt. of Architects, 1957; designed and constructed over 100 buildings all over India, imp. among them being West Bengal's 13 storeyed Secretariat, Gandhi Ghat, Calcutta, D. G. P. & T. Building, New Delhi, Auditor General's Bldg., New Delhi, W.H.O. Bldg., New Delhi, Rabindra Bhawan (National Akademies), New Delhi, Maulana Azad's Tomb and New Delhi Zoo. *Address*: 41/C2, Shah Jahan Road, New Delhi 11.

**RAI, Amrit, M.A., Sahitya Akademi Award** (1963), Hindi Writer. b. Aug. 15, 1921; *Educ.*: Lucknow, Banaras and Allahabad; M.A. in 1942. Took to writing at an early age; edited the Hindi Magazine, *Hans*, 1942-52; active in the Progressive Writers' Movement; a Marxist; was in political detention, 1950. *Publications*: Novels: *Beej*; *Nagphani Ka Desh*; *Hathi Ka Dant*; Story Collections: *Itihas*; *Qasbi Ka Ek Din*; *Kathaharey*; *Bhor se Pahle*; *Gili Mitti*; *Chitraphalak*; *Lal Dharti*; *Jeevan Ke Pahlus*; Literary Criticism: *Nayee Sameeksha*; Biography: *Premchand—Qalam Ka Sipahi* (Won the Sahitya Akademi Award for best original work in Hindi, 1963); has translated extensively from English, Urdu and Bengali; for his translation of Howard Fast's Spartacus called *Adimdrohi*, won the Govt. of India's best translation Award, 1958. *Address*: 18, Hastings Road, Allahabad.

**RAI, Jharkhande, Minister for Food and Civil Supplies, Uttar Pradesh, since April 1967.** b. 1921, at Amila, Azamgarh Dist.; *Educ.*: early education in his home district; higher studies in Allahabad Univ. Arrested on the charge of attempting to overthrow the Govt., 1938; sentenced for transportation for life in the Lucknow conspiracy case; released after serving for 10 years; was one of the chief organisers of the secret revolutionary movement in northern India; one of the founders of the Revolutionary Socialist Party of India; was elected to the State Assembly on R.S.P. ticket, 1952; elected on the C.P.I. ticket, 1957, 1962 and 1967; was arrested 10 times and interned for periods ranging from two to six months during the Congress regime in the State. *Address*: Minister for Food and Civil Supplies, Uttar Pradesh, Lucknow.

**RAJA, Shantikumar Tribhuvandas, B.A., LL.B., Bar-at-Law, Padma Shri (1962),** Mg. Dir., National Coal Devpt. Corp. Ltd., Ranchi, since March 5, 1964. b. Oct. 2, 1914. *Educ.*: Elphinstone Coll., & Govt. Law Coll., Bombay; Middle Temple, London. Practising Barrister, 1938-42; Dewan of Jawhar, Janjira & Akalkot States in Maharashtra, 1942-48; Dir. of Food & Civil Supplies, Deccan States, Kolhapur Residency, 1948-47; Food Adv. to the Indian Embassy in Washington, Sept. 1947-Aug. 1948; Under Secy. to the Govt. of India, Min. of Agriculture, 1947-50; Dy. Secy., 1950-53; Administrator, Tubewell Projects, Min. of Agriculture, 1953-56; Jt. Secy. for Co-op. and Marketing, 1956-57; Mg. Dir., Hindustan Antibiotics Ltd., Pimpri, 1957-62; Gen. Mgr., Bourkela Steel Plant, 1962-64. *Publications*: *Self-Sufficiency in Food*; *Ganga Khadar*; *Reclamation of Kana Lands*—Published by the Ministry of Agriculture. *Address*: Mayfield, Station Road, Ranchi Bihar).

**RAJABHOJ, Pandurang Nathuji, J. P.,** Journalist and Agriculturist. b. March 15, 1905; *Educ.*: Poona. Member, I.N. Congress, 1930-36; Secy., All-India Depressed Classes League, 1935-37; Rep. of the depressed classes on the Franchise Cttee. of the Simon Comm.; often imprisoned during Satyagraha movement of Scheduled Castes in Poona, Bombay, M.P., U.P., Nasik, Jabalpur, etc.; Gen. Secy., A.I.S.C.F., 1942-54; attended the first two World Buddhist Cfes.; Pres.: Indian Buddhist Soc.; Bharat Dalit Sevak Sangh; widely travelled; has now rejoined the Congress; member, A.I.C.C., since 1961; a signatory to the Poona Pact; M.P. Lok Sabha, 1952-57; Rajya Sabha, 1957-62; J.P., since 1965. *Publications*: *Lashkari Pesha* (Marathi); pamphlets in Marathi on Buddhism; translation of Dr. Ambedkar's books. *Address*: 207, Ghorpade Peth, Poona 2.

**RAJADHYAKSHA, Mangesh Vitthal, M.A., J.P., Writer; Prof., Elph Coll., Bombay.** b. June 7, 1913; *Educ.*: Elphinstone Coll., Bombay. Taught English at the following Govt. colleges: Gujarat Coll., Ahmedabad; Rajaram Coll., Kolhapur and Ismail Yusuf Coll., Bombay, since 1936; Member, National Book Trust, India, Adv., Board for Marathi, Sahitya Akademi, New Delhi; Govt. of India Panel of Adv.s on the Import of Pornographic Literature; Panel of Adv.s, Board of Film Censors. *Publications*: *Panch Kari* (1946); *Akash Bhashite* (1963); *Khardeghashi* (1963). *Address*: 7, Jairaj House, 141, Colaba Road, Bombay 5.

**RAJAGOPALACHARIAR, C., B.A., B.L.,** Bharat Ratna (1954), Leader, Swatantra Party. b. 1878 in a village near Hosur, Salem Dist.; *Educ.*: Central Coll., Bangalore; Presidency Coll. and Law Coll., Madras. Joined Bar in 1900; joined Satyagraha campaign, 1919 and Freedom Movement in 1920; edited Mahatma Gandhi's *Young India* during the latter's imprisonment; Gen. Secy., Ind. Nat. Congress, 1921-22; member, Working Cttee. of Congress, 1922-42 and 1946-47; imprisoned on five occasions in Congress campaigns; Vice-Pres., Dakshin Bharat Hindi Prachar Sabha; Prime Min., Madras 1937-39; resigned with other Congress Ministers, Oct. 1939; resigned in April 1942 from Congress on account of difference of opinion; assisted Mahatma Gandhi in the Gandhi-Jinnah talks in Sept. 1944; member of Governor-General's Council, Sept. 1946-Aug. 15, 1947; Governor of West Bengal, Aug. 1947; acted as Governor-General of India, Nov. 1947; Governor-General of India, June 1948-Jan. 26, 1950; Min., Govt. of India, without portfolio, May-Dec. 1950 and Home Affairs, Jan.-Nov. 1951; Chief Min., Madras, 1952-54; as Leader, Three-man Indian delegation from the Gandhi Peace Foundation to canvass support for the prohibition of nuclear tests, visited America, England and Italy, Oct. 1962. *Publications*: Tamil books on Socrates, Marcus Aurelius, Bhagavad-Gita, Mahabharata, Ramayana and Upanishads; *Fables and Short Stories*; (In English) *Mahabharata, Ramayana, Bhagavad-Gita, Upanishads, Voices of The Uninvolved, Kambaramayanam-Ayodhya Kadam* (a UNESCO publication); principal contributor, *Swarajya Weekly*; and *Hinduism Doctrine and Way of Life*. *Address*: Naoraji Road, Madras 10.

**RAJAMANNAR, Dr. Pakala Venkata, B.A., B.L., D.Litt., LL.D., Member, Leg. Council; Chairman, 4th Fin. Commn., since May 18, 1964.** b. May 10, 1901; *Educ.*: Madras Christian Coll. & Law Coll.; called to the Bar, 1924. Advocate-General of Madras, 1944-45; Judge, Madras High Court, 1945-48; Chief Justice, Madras High Court, 1948-61; Chairman, National Academy of Music, Drama and Dance since it was established, 1953-61; Chairman, Madras State Lalit Kala Akademi, 1962; Member, Syndicate of the Madras Univ. and Chairman, Board of Studies in Law, Dir., Indian Bank Ltd.; Chairman, Madras State Industrial Co-op. Bank Ltd.; member Salar Jung

Museum Board, Hyderabad. *Publications*: Several full length and one Act plays in Telugu; "One Act Plays". *Address*: 9, Victoria Crecent Road, Egmore, Madras 8.

**RAJAN, V. N., Flute Vidwan.** b. 1919 at Palladam; *Educ.*: Learned music under his father; had coaching under Sangeetha Kalanidhi Sri Karur Chinnaswamy Iyer and later under Sangeetha Kalanidhi Venugana Sironmani Palladam Sanjeeva Rao. Gave his first performance at the age of 14; gave several concerts and earned a name for himself; awarded the title of "VENUGANA KESARI"; was presented a golden shawl by His Holiness Sri Sankaracharya of Kamakoti Peetam; brought up his brothers in the same field; has widely travelled and given performances at Bombay, Delhi, Simla and other imp. cities. *Address*: Agratharam, Palladam.

**RAJAN, Viswanatha Nata, B.A. (Hons.)** (Madras), I.C.S., Dir. Gen., Employees' State Ins. Corpn. since 1960. b. Oct. 22, 1907; *Educ.*: Presidency Coll., Madras; B.A. (Hons.), 1928; London School of Economics; London School of Oriental Studies; passed I.C.S., 1930. Held imp. posts in West Bengal, Govt. of India and Madras till he became Chief Secy., Travancore-Cochin Govt., 1952-54; D.G., Supplies & Disposals, Govt. of India, 1954-60; connected with Int. Social Security Assoc., Geneva, in various capacities, since 1963; Rapporteur, XV Gen. Assembly, ISSA, Washington, 1964 on "Devpt. and Trends in Social Security in Asia & Oceania, 1961-63"; Chairman, Asian Regional Medico-Social Cttee., ISSA, 1964-67; Lecturer on "Adm. Aspects of Social Security", 2nd ILO Asian Regional Course, Tokyo, 1965. *Publications*: Several articles in newspapers and periodicals on *ESIC—Symbol of Social Security*. *Address*: Director-General, Employees' State Ins. Corpn. (Ministry of Labour, Employment & Rehabilitation), New Delhi.

**RAJGURU, Pandit Basavaraj, Ganakokila** 1938, Sangeet Sudhakar, 1941, Sangeet Ratna, 1947, Musician. b. Aug. 24, 1920, at Dharwar; *Educ.*: Took his lessons in music from his father and later from experts like Pandit Panchakshari Buwa of Shivaraya Mandir, Sawal Gandharva and Mr. Suresh Babu Mane. Has recorded many popular songs; has participated in many music cfes.; broadcasts frequently from almost all stations of the A.I.R.; has so far given nine national programmes; is one of the sponsors of the World Congress for General Disarmament and Peace; is member, Sangeet Natak Akademi, Delhi; Chairman, Board of Examiners for Hindustani Music, Mysore State. *Publications*: *Sangeet Tarangini* (under print). *Address*: Balguru Building, Malamaddi, Dharwar.

**RAJNARAIN, B.A., LL.B., M.P., Gen. Secy.,** Samyukta Socialist Party, since June 10, 1964; Social Worker. b. 1917; *Educ.*: Middle School, Gangapur, Harischandra Coll., Banaras Hindu Univ., Varanasi. Was leader of the opposition in the U.P. Assembly, 1952-55 and Chairman, Socialist Party of India; member: National Exec., P.S.P., till 1955; National Cttee., S.S.P., since its formation; M.P., Rajya Sabha, since 1966. *Address*: Leela Niwas, Pandaiba, Lucknow.

**RAJU, Dr. P. T., B.A. (Allahabad), M.A. (Calcutta), Ph.D. (Calcutta), Sastri (Banaras),** Padma Bhushan (1958), Prof. of Philosophy and Indian Studies, The Coll. of Wooster, Ohio, since 1963. b. Sept. 3, 1904. Gen. Pres., Indian Philosophical Congress, 1960; Tata Visiting Prof. of Philosophy, The Asia Instt., New York, 1949; Visiting Prof. of Philosophy, Univ. of California, 1950; Visiting Prof. for Comparative Philosophy, Univ. of Illinois, 1952-53; Merton Guest Prof., Mains Univ., W. Germany, 1961-62; Gillespie Prof., Wooster, Ohio, 1962-63; Member Editorial Board, *Philosophy—East and*



*West, Univ. of Hawaii. Publications:* Philosophical views: *Vedanta and Critical Humanism*. A number of articles in British, Indian and American philosophical journals; *Thought and Reality*; *Comparative Studies in Philosophy*; *Telugu Literature*; *India's Culture and Her Problems*; *Idealistic Thought of India*; *Indian Idealism and Modern Challenges*; *The Concept of Man and chapters in Essays, in East-West Philosophy*; *Cultural Heritage of India*; *Philosophy*; *Eastern and Western and Radhakrishnan*; *Introduction to Comparative Philosophy*. Address: The College of Wooster, Wooster, Ohio, U.S.A.

**RAJU, V. B.**, Minister for Revenue, Andhra Pradesh, since March 1967. b. May 6, 1914, in Vallur, Guntur Dist.; *Educ.*: Diploma in Civil Engg. (with Hons.), from Engineering Coll., Guindy, Madras. Started as a Consulting Engineer and Architect in Hyderabad, 1934; joined Andhra Maha Sabha, 1936; joined the State Congress, 1946; actively participated in the freedom struggle against the Nizam's regime; entered trade union movement in Hyderabad, 1948; was Pres., State Rly. and Transport Workers' Union and Coal Miners' Union; Founder-Pres., All India Airways Employees' Federation; was Minister in Hyderabad, 1950; returned to the State Leg. Assembly, from Secunderabad, 1952; Minister till 1953; Minister for Labour, Industry, Information, Planning and Development, Andhra Pradesh, 1956-59; was General Secy., State Congress party; was Editor, *The Daily News* of Hyderabad; Vice-Pres., State Congress party; 1964-65; Chairman, State Road Transport Organisation, 1965. Address: Minister for Revenue, Andhra Pradesh, Hyderabad.

**RAJU, Mr. Justice Vadrevu Bhadri, M.A.** (First Class), I.C.S. Judge, Gujarat High Court, since May 1960. b. Oct. 28, 1907; *Educ.*: Presidency Coll., Madras; London Univ. Joined the I.C.S., 1930; joined service in Bombay, 1932; was Dy. Secy., Fin. Deptt., and Dir., Food Supplies, Bombay; worked as Dy. Secy. in charge of General Elections, 1946; served as Dist. and Sessions Judge, Poona, Ahmednagar, Kaira, Surat, Sholapur, Dharwar, Kolhapur and Nagpur; Judge, Bombay High Court, June 1959-April 1960; devised a common script for Indian languages, which is adapted for typewriting. *Publications*: *Law of Murder*; *Penal Code*; *Law of Evidence*, etc. Address: Ahmedabad 3.

**RAJWADE, Rao Raja Ramchandra Ganpat, M.A.**, Amb. of India in Austria, since Sept. 18, 1965. b. June 4, 1910; *Educ.*: Deccan Coll. Poona and the Allahabad Univ. Joined Gwalior Civil Service, 1935; Dir. of Food Supplies, Gwalior & M.B., 1942-48; Mem., Indian Delegation to the FAO Cfee. at Quebec City, 1945; Customs & Excise Commr., 1947-48; joined I.F.S., Oct. 1948; Counsellor, Indian Embassy, Cairo, 1953-57; Charge d'Affaires, Rabat, Sept. 1957-Nov. 1958; Amb. of India; Khartoum, Mar. 1959 to Sept. 1960; Addl. Ababa, Oct. 1960-Oct. 1962; Jt. Secy., Min. of Ext. Affairs, New Delhi, Dec. 1962-July 1965. *Publications*: Contributes literary, travel & pol. articles to dailies and magazines. Address: Lashkar, Gwalior; C/o External Affairs, Ministry, New Delhi.

**RAKESH, Mohan, M.A.** (Skt. and Hindi), M.O.L., Sangeet Natak Akademi Award, (1959), Playwright, novelist, an initiator of new short story movement in Hindi. b. Jan. 8, 1925; *Educ.*: Hindu Coll., Amritsar; Oriental Coll., Lahore. Teacher, Elphinstone Coll., Bombay, Bishop Cotton School, Simla and D.A.V. Coll., Jullundur, 1947-57; Editor, *Sarika*, a Times of India Publication, 1962-63; has been writing books since 1950; has travelled widely in India. *Publications*: *Andherey Band Kamrey*; *Akhiri Chhatan Tak* (a travelogue); *Ashadh Ka Ek Din*, *Lehron Ke Rajhans*; collections of short stories and a number of edited and translated books, critical essays. Address: R. 522, New Rajendra Nagar, New Delhi 5.

**RAM, Dr. Atma, M.Sc.** (Allahabad), D.Sc. (Allahabad), Padma Shri (1959), Director-General, Council of Scientific & Industrial Research, since Aug. 22, 1966. b. Oct. 12, 1908; *Educ.*: Allahabad; first in M.Sc. in the Univ. Started career as a scientist in the Industrial Research Bureau, Calcutta, 1935; joined the late Dr. Shanti Swarup Bhatnagar research team, 1940-45; invited by the Governing body of the C.S.I.R. to organise the newly started Central Glass & Ceramic Institute, Calcutta, 1945; was its Officer-in-Charge and Joint Dir. and Director, 1952-66; awarded: Shanti Swarup Bhatnagar Medal (1959) for outstanding contributions to the development of physical sciences and technology in the field of glass and ceramic industry; U.P. Scientific Research Cttee. Gold Medal and Cash Award (1959), and the K. G. Naik Gold Medal of the M. S. Univ. of Baroda (1963); a Plaque of Honour by the All India Glass Mfrs. Assoc. (1964); elected Hon. Fellow, Soc. of Glass Technology, Sheffield, 1966; is a Fellow, National Institute of Sciences of India and Institution of Chemists (India); elected member, International Commission on Glass (1948) and Hon. member, International Academy of Ceramics; Pres.; Indian Ceramic Society, 1952-53; Institution of Chemists, 1962-63; Pres., Indian Science News Assoc., since 1965; Gen. Secy., Indian Science Congress Assoc.; since 1962 and Vice-Pres., National Inst. of Sciences of India, since 1965. *Publications*: Over sixty scientific and technical papers in the field of physical chemistry, glass and ceramics, a book *History of Science*, a book in Hindi; over sixty patents to his credit. Address: Council of Scientific and Industrial Research, Rafi Marg, New Delhi 1.

**RAM, Dr. Bharat, Chairman, Board of Directors and Dir., Mg. Agents, Delhi Cloth & General Mills Co., Ltd.** b. Oct. 5, 1914; *Educ.*: St. Stephen's Coll., Delhi. Pres.: Economic & Scientific Research Foundation; Chairman, Board of Dirs.: Bharat Ball Bearing Co. Ltd.; Bengal Potteries Ltd.; DCM Int'l. Ltd.; Dir.: State Bank of India (Central & Local Board); Hindustan Vacuum Glass Ltd.; East India Hotels Ltd.; Bajaj Electricals Ltd.; Nat. Industrial Devpt. Corp'n. Ltd.; etc.; Member: Cotton Textile Fund Cttee.; All India Council for Tech. Educ.; Nat. Adv. Cttee. for Loan Scholarships Scheme; Export Promotion Adv. Council; Council of Inventions Promotion Board; Export Import Adv. Council; Textile Dvn. Council of Indian Stds. Instt.; Educ. Panel of the Plng. Commn.; Cttee. of Delhi & Punjab Cotton Textile Millowners' Assoc.; Indian Nat. Cttee., Intn'l. Chamber of Commerce; Cttee. of F.I.C.C.I.; Cttee. of All India Org. of Industrial Employers, etc.; Leader, Indian Trade Delegation to: West Germany, 1957; Africa, 1965; Member: Goodwill Trade Mission sponsored by F.I.C.C.I.; Cotton Textile Wage Board, 1957-59; Hony. Doctor of Laws, Aligarh Univ., 1964. Address: 25, Sardar Patel Marg, New Delhi.

**RAM, Charat, Industrialist.** b. Jan. 1, 1918; *Educ.*: St. Stephen's Coll., Delhi. Chairman: Jay Engg. Works Ltd.; India Hard Metals Pvt. Ltd.; India Capacitors Pvt. Ltd.; Shriram Refrigeration Industries Ltd.; Export Inspection Council of India; Vice-Pres., All India Management Assoc.; Mg. Dir., Mg. Agents: the Delhi Cloth & General Mills Co. Ltd.; Dir.: Reserve Bank (Northern Board); Industrial Fin. Corp'n. of India; Amar Dye Chem. Ltd.; Fertilizer Assoc. of India; Shri Ram Associates P. Ltd. Address: 26, Sardar Patel Road, New Delhi-11.

**RAM, Jagjivan, Minister for Food, Govt. of India,** since March 1967. b. April 1908 at Arrah in Bihar; *Educ.*: Banaras Hindu Univ.; Calcutta Univ.; B.Sc., 1930. Was interested in the uplift of Depressed Classes early in life; Pres., All India Depressed Classes League, 1936-46; nominated M.L.C., Bihar, 1936; elected M.L.A., Bihar, 1937; Parly. Secy., Bihar, 1937-39; Secy., Bihar

P.C.C., 1940-46; courted jail in freedom movement; appeared before the Cabinet Mission as the accredited leader of the Scheduled Castes; leader of Indian Delegation to the I.L.O. Cfee., Geneva, June 1947; elected Chairman, Preparatory Asian Regional Cfee., I.L.O. held in New Delhi, Oct.-Nov. 1947; member, Congress Working Cttee., A.I.C.C. since 1948; leader, Indian Delegation to 33rd Session of I.L.O. Cfee., June 1950 and unanimously elected Chairman of the Cfee.; member: Central Parly. Board, A.I.C.C., since 1950; Central Election Cttee., 1951; Congress Eco. Plng. Cttee., since 1950; was Pres. of several trade unions; Labour Min., Govt. of India, Sept. 1946-May 1952; Union Communications Min., May 1952-Dec. 1956; was responsible for the nationalisation of air transport in India; Min. for Transport & Rlys., Dec. 1956-April 1957; Min. for Rlys., April 1957-April 1962; Min. for Transport & Communications, 1962-63; resigned under the "Kamaraj Plan," Aug. 1963; Min. for Labour, Employment & Rehab., Jan. 1966-Mar. 1967. Address: 7, Raisina Road, New Delhi.

**RAM NARAYAN, Pandit, a leading Sarangi player,** b. 1928 in Udaipur. Took to music early in life; was trained in vocal music as well as in sarangi by eminent music teachers; staff artiste with the All India Radio, Lahore, 1942-47; after partition shifted to Delhi and was appointed staff artiste with A.I.R.; later shifted to Bombay; has accompanied on the sarangi almost all the leading musicians of the day; has travelled extensively in several Asian and European countries giving performances; was member, Indian Cultural delegation to Asian countries; toured W. Germany as a guest of the Goethe Institute giving concerts and radio and T.V. performances; gave performance in England; also composed the background music for a film, which he recorded in a single day. Address: 20, Sujata, Swami Vivekananda Road, Bandra, Bombay 50 — AS.

**RAMACHANDRAN, Dr. Smt. T. S. Soundaram, M.B.B.S., D.G.O., Padma Bhushan** (1962), Ex-Min. of Educ., Govt. of India; Social Worker. b. 1905, at Nagercoil; *Educ.*: M.B.B.S., Lady Hardinge Medical Coll., Delhi, 1936. Has been working for women's and children's welfare; Kasturba Gandhi Nat. Memorial Trust's agent for Tamilnad till 1953. A founder, Gandhigram Institute, 1947; was Founder Director, for five years; Treasurer ever since; M.L.A., Madras, from: Athoor, 1952, Vadasandoor, 1957; Hony. Project Exec. Officer, Madurai Periyar Project, 1952-57; founded and started the "Avvai Ashram" for women at Sivasailam; apptd. Vice-Chairman, State Khadi and Village Industries Board, April 1960; nominated member, Family Plng. Board of the Central & State Govt.; M.P. from Dindigul Constituency, 1962-67. Address: C/o Lok Sabha Secretariat, New Delhi.

**RAMAMURTI, P., Ex-M.P., Communist Leader.** b. Sept. 20, 1909; *Educ.*: Banaras Univ. and Presidency Coll., Madras. Courted Jail in 1930-32 Congress Movement; political worker, ever since; was in the executive of the Tamilnad Congress Socialist Party, 1935-39; member, A.I.C.C. for about 4 years; Working Cttee. member, A.I.T.U.C.; a top ranking Trade Union leader in Madras State; is an orator; went to I.L.O. Conference, 1946. *Publications*: *Kandal Deepavati* (on cloth famine, in Tamilnad); *Open Letter to Kumaramani Raja*. Address: 3, Anthony Street, Royappetta, Madras.

**RAMAN, Sir Chandrasekhara Venkata, Kt., M.A., Hon. Ph.D.** (Freiburg), Hon. LL.D. (Glasgow), Hon. D.Sc. (Paris), and Bordeaux, F.R.S., Bharat Ratna (1954), Nobel Prize for Physics (1930); Franklin Medalist of the Franklin Instt., Philadelphia; Int. Lenin Prize for 1957; Foreign member, Soviet Academy of Scs (1957); Foreign Associate, Paris Academy of Scs (1949); Pontifica



Academician (1961), Insignia and diploma of the Rumanian Academy of Sciences, March 1967. *b.* Nov. 7, 1888; *Educ.*: A. V. N. Coll., Vishakapatnam & Presidency Coll., Madras. Officer, Indian Fin. Dept., 1907-17; British Assoc. Lecturer (Toronto), 1924; Research Associate, California Instt. of Tech., 1924; Mateucci Medallist, Rome, 1929; Hughes Medallist of the Royal Society (1930); Hon. Fellow, Zurich Phys. Soc., Hungarian, Czechoslovak and Rumanian Acad., Royal Irish Acad., Chinese Phys. Soc., Royal Phil. Soc., Glasgow, Optical Soc. of America, Franklin Instt., Societe Philomathique (Paris); Pres., Indian Acad. of Scs., 1934; National Research Prof. of Physics, 1949. *Publications*: *Molecular Diffraction of Light*; *Music Instruments*; *The Physiology of Vision*; and many scientific papers in Indian, British and American Journals. *Address*: C/o Raman Research Institute, Hebbal, Bangalore.

**RAMANATHAN, Kalpathi Ramakrishna**, M.A., D.Sc., F.N.I., Padma Bhushan (1965), Scientist, Prof., Physical Research Laboratory, Ahmedabad. *b.* 1893; *Educ.*: Victoria Coll., Palghat; Presidency Coll., Madras. Hon. Dir., Trivandrum Observatory; Madras Univ. Research Scholar under Prof. C. V. Raman, Calcutta, 1921-22; Dy. Dir.-Gen. of Observatories until 1948; Pres., Indian Sc. Congress, Mathematics and Physics Section, Lahore, 1939; Pres.: Intn'l. Assoc. of Meteorology, 1951-54; Intn'l. Union of Geodesy and Geophysics, 1954-57; Chairman: Atmospheric Research Cttee. of Council of Scientific and Industrial Research; Pres.: Intn'l. Ozone Commn., 1959; Central Board of Geophysics, India, 1959; Hony. Fellow, Royal Met. Soc., Lond., 1960; awarded Int. Met. Org. Prize and Medal, 1960; Main fields of research: Problems of molecular scattering of light in fluids; anisotropy of molecules, atmospheric and solar radiation, study of the Indian monsoon, general circulation of the atmosphere, atmospheric ozone, physics of the ionosphere and aeronomy. *Publications*: Contributions to Indian and foreign scientific journals. *Address*: Physical Research Laboratory, Navrangpura, Ahmedabad 9.

**RAMANNA, Dr. Raja, B.Sc. (Hons.), Ph.D.**, Prof., Tata Instt. of Fundamental Research and Dir., Physics Group, Bhabha Atomic Research Centre, Bombay, since 1953. *b.* 1925, at Bangalore; *Educ.*: Bishop Cotton School, Bangalore; Madras Christian Coll., Madras; Ph.D. degree in fission physics from London, 1948. Collaborated in the design of the Apsara reactor; now in charge of the utilisation of the three reactors at Trombay for research in nuclear physics and solid state physics; is also in charge of the 5.5 million volt Van de Graaff machine; attended many Intn'l. Cfecs. and was Chairman of many of the sessions; is Chairman: I.P.A. Project (Neutron Spectrometry); Mg. Cttee., Jt. Project "NORA" between Norway and the Int. Atomic Energy Agency. *Publications*: Many papers on neutron thermalisation, nuclear reactions and fission physics. *Address*: Bhabha Atomic Research Centre, Bombay 1.

**RAMANUJACHARI, R., M.A., Vidyaratna** and *Tattvasastraratna*, Prof. from 1936 and Head of the Deptt. of Philosophy and Dean, Faculty of Philosophy and Educ., since 1953, Annamalai Univ. *b.* Dec. 6, 1902; *Educ.*: Presidency Coll., Madras. Univ. rep. at the 8th Quinquennial Session of the Congress of Univs. of the British Commonwealth at Montreal, and visited Univs. and cultural instts. in U.S.A. and the U.K. *Publications*: Critical editions of Indian philosophical classics with English translations, such as *Nyayakulisa*, *Nitimala*, *Siddhitraya* and *Bhavanopanihad*; publications in Tamil on psychology, such as *Educational Psychology*, *The Children We Teach and Learning and Teaching*. *Address*: Annamalai University, Annamalai Nagar.

**RAMANUJAM, G., Secy., INTUC and Pres.**, Tamilnad Prov. Nat. Trade Union Congress. *b.* Feb. 2, 1916; *Educ.*: Srirangam, Trichinopoly; Dist. Founder Secy., Tamil Nad I.N.T.U.C., 1947-58; Pres., I.N.T.U.C., 1958 and 1959; Pres., Indian Nat. Plantation Workers' Federation, 1960 and Gen. Secy., 1965; Pres., Indian Nat. Textile Workers Fed., 1956; is a member of several Cttees. connected with labour; member: Textile Tripartite Enq. Cttee. apptd. by the Govt. of Madras; 1st and 2nd Central Wage Board for the Cotton Textile Indus. in India; Central Wage Board for Tea Plantation Industry in India; Workers' rep. at the 42nd Session of the I.L.O., 1958 and the British T.U.C. Cfec., Blackpool and the Constitutional Convention of the AFL-CIO in San Francisco, 1959; visited: China, 1954; Japan, 1959; Dir.: Hindustan Machine Tools, Bangalore; Nat. Instruments Ltd., Calcutta. *Address*: "Vengadam", Vivekananda Road, Coimbatore 9.

**RAMA RAU, Smt. Dhanvanthi, M.A. (Hons.)**, (Madras), Padma Bhushan (1959), Kaiser-I-Hind Gold Medal, 1938, Lasker award of America, 1955. Social Worker; Pres., Intn'l. Planned Parenthood Federation; Ex-Pres., Family Plng. Assocn. of India. *b.* May 10, 1893; *Educ.*: Hubli; Presidency Coll., Madras. Has been interested in social work and questions relating to women's suffrage and women's rights for over 45 years; Lecturer in English, Queen Mary's Coll., Madras, 1917-19; Pres., All India Women's Cfec., 1946; member: Family Plng. Board, Govt. of India; ex-member, Central Social Welfare Board; Exec. Chairman, Cttee. of the Intn'l. Planned Parenthood Federation. *Address*: 10-D, Mafatlal Park, Bombay 26.

**RAMASESHIAH, N. B.A., B.L.**, Minister for Health, Orissa, since March 1967. *b.* Sept. 29, 1897. Practised as advocate at Vijayawada, 1924-30; was Pres., Taluk Board, Vijayawada, and member, Municipal Council, Vijayawada for three years; member, Andhra Univ. Senate for three years; Asstt. Dewan, Jeypore Estate, 1930-46; Resident-Dir. and General Manager, Jeypore Sugar Co. and Managing Dir., Jeypore Mining Syndicate, 1946-51; elected to Parliament from Parvatipuram Constituency, as an independent candidate, 1952; elected M.L.A., Orissa, as a Swatantra candidate from Jeypore constituency, 1967; Founder-Pres., Multi-Purpose Co-op. Society at Rayagada; takes active interest in agriculture and was instrumental in introducing various crops in Rayagada Dn. *Address*: Minister for Health, Orissa, Bhubaneswar 1.

**RAMASWAMI, Mr. Justice Vaidyanathier**, M.A., M.Sc., Barrister-at-Law, I.C.S., Judge, Supreme Court, since Jan. 4, 1965. *b.* Oct. 30, 1904; *Educ.*: Madras, Allahabad and Oxford Univ. called to the Bar of the Inner Temple. Joined I.C.S., 1929; Addl. Judge, Patna High Court, Nov. 1, 1947-Oct. 1948; Puisne Judge, Patna High Court, Oct. 28, 1948-April 1956; Chief Justice, Patna High Court, April 1956-Dec. 1964. *Publications*: Articles on legal topics in various periodicals. *Address*: 6, Motilal Nehru Marg, New Delhi.

**RAMASWAMY, K. S., B.A., B.L.**, Deputy Minister of Home Affairs, Govt. of India, since March 18, 1967. *b.* Jan. 1942; *Educ.*: Loyola Coll., Madras; National Coll. Tiruchirappalli; Law Coll., Madras. Was Member: Second Lok Sabha, 1957-62; Estimates Cttee. 1961-62; Delhi Zoological Park Council and Indian Central Sugarcane Cttee., 1960-62; elected to Rajya Sabha from Madras, since 1962. *Address*: Kugalur, Gopichettipalayam Taluk, Via Erode, Madras State; Ministry of Home Affairs, Govt. of India, New Delhi.

**RAMDAS, Dr. Lakshminarayanapuram Ananthakrishna, M.A., Ph.D., M.B.E. (1946)**, "Padma Shri" (1958), F.N.I., F.N.A.Sc., F.A.Sc., F.W.A., F.R. Met., Scientist. *b.* June 3, 1900; *Educ.*: Sreear High School, Trichur; Maharajah's Coll., Ernakulam; Presidency Coll., Madras; Univ. Coll., Calcutta;

Indian Assoc. for the Cultivation of Sc. Calcutta. Palit Research Scholar under Sir C. V. Raman, 1923-26; discovered phenomenon of "Scattering of Light by pure liquid and solid surfaces", 1923; Doctorate for thesis on above subject and allied topics, 1927; recorded "Raman Effect" for the first time in a Vapour (Ether), 1928; Dy. D.G. of Observatories, 1953; Off. Dir.-Gen., 1955; Pres., Physics Sect., India Sc. Congress, 1948; participated in UNESCO's various Arid Zone Research Cttee. Sessions, 1954-64; visited U.S.A., 1960 as a visiting foreign scientist and in 1961 to attend Plng. Cfec. on Atmospheric Sciences at Boston; attended Intn'l. Radiation Symposium, Leningrad, 1964; Intn'l. Cfec. on Biometeorology, Lebanon; Fellow, World Academy of Art and Sc. (FWA), 1963. *Publications*: Numerous original papers in Physics, Meteorology, etc. in various Indian and foreign Scientific Journals. *Address*: Emeritus Scientist, National Physical Laboratory, New Delhi 12.

**RAMPURIA, Ratanlal, Industrialist. b. June 20, 1926. Is a partner of Messrs. Hazarimul Heeralal, Calcutta. Dir. of many industrial concerns; Chairman: Board of Dirs., The Bank of Bikaner Ltd., 1950 & 1958; Hoare Miller & Co., Ltd.; Dir.: Singell Tea Co., Ltd.; Scott & Pickstock Ltd.; Rampuria Bros. (Private) Ltd.; Rampuria Cotton Mills Ltd.; Nat. Ins. Co., Ltd.; Asian Refractories Ltd., etc.; member, Mg. Cttee., Bengal Textile Instt., 1960; created charity trust and apptd. trustee of various charity trusts; Chairman, Refugee Relief Cttee., Bikaner, 1949; patron, life member and member of various indus., commercial and educ. assoc.s, chambers and societies of India; Pres.: Jain Sabha, 1959-60 & 1960-61; Bengal Mill-owners' Assoc., 1961. *Address*: 25/2, Rowland Road, Calcutta.**

**RANADIVE, Bhalchandra Trimbak, M.A. (Bom.)**, Communist Leader. *b.* Dec. 1904; *Educ.*: M.A. Wilson Coll., Bombay, 1927. Joined the C.P.I., 1929; jailed, 1929, 1934, 1940; member, Central Cttee., 1943; member, Secretariat of the National Council at the Amritsar Congress of the Party, 1958; detained under D.I.R., 1962-66. *Publications*: *Crisis of Indian Economy* (1952); *First Five Year Plan* (1954); *Sarvodaya* (1958), etc. *Address*: Vyankatesh Niwas, Bhaudaji Road, Bombay 19.

**RANGA, Prof. N. G., M.P., Pres.**, Swatantra Party; Leader, Swatantra Group, Lok Sabha, since 1959; Principal, Indian Peasants Instt., Nidubrolu. *b.* Nov. 7, 1900; *Educ.*: Oxford. Member, Congress Working Cttee., 1947-51; Ex-Pres., A.P.C.C.; Founder, Indian Peasant Movement; toured extensively in Europe and America spreading Gandhian philosophy and ideals; resigned from Congress, April, 1951; formed the Bharat Krishikar Lok Party, 1951; rejoined Congress, 1955; elected Gen. Secy., Congress Parly. Party; resigned on Co-op. Farming issue, 1959; became the leader of the Swatantra Party, June 1959; presided over the first four conventions held in Bombay, Patna, Agra and Bangalore in 1959, 1960, 1961 & 1964 respectively; elected to the Lok Sabha from Srikakulam Constituency, April 1967. *Publications*: 20 books including *Economic Organisation of Indian Villages*, *Colonial and Coloured Peoples*, *World Role of National Revolution*, *Outlines of National Revolution*, *Peasants and Communists*, *Revolutionary Peasant*, *Towards World Peace*, *Credo of World Peasantry*, *Peasant and Cooperative Farming*, *Panchayat Landlordism Vs. Peasant Economy*. *Address*: Nidubrolu (Post).

**RANGACHARYA, Adya, B.A. (Bombay)**, M.A. (Lond.), Playwright. *b.* Sept. 26, 1904; *Educ.*: Deccan Coll., Poona; School of Oriental Studies, London. Sanskrit Lecturer, Bombay Bdnl. Service, 1930-48; organised song and drama dvn. in the Min. of Inf. & Broadcasting, 1954-56; Drama Producer, A.I.R. Bangalore, 1956-59;



Founder and first Pres., Natya Sangha Theatre Centre, Mysore State; associated with Karnatak Unification and Karnatak Univ. movements; Pres., Kannada Sahitya Sammelan, etc. *Publications*: 30 plays, 50 one-acts, on Gita, laughter and theory of humour (Kannada); books on the origin of Sanskrit drama and Bharat Natya Shastra (English); novels and humorous essays, criticisms, reviews, etc.; Winner, Playwright Award, Central Sangeet Natak Akademi, 1963. Pen-name 'SHRIRANGA'. *Address*: 381, 6th Main Road, Malleswaram, Bangalore 3.

**RANGANATHAN, Saurirajan, M.A. (Madras)**, I.C.S., Comptroller and Auditor-General of India, since Aug. 14, 1966. *b.* Nov. 12, 1908; *Educ.*: P. S. High School, and Presidency Coll., Madras; M.A., 1929. I.C.S.: U.P. Cadre; has been permanently deputed to the Govt. of India; was Secy., Min. of Industry, Govt. of India. *Address*: Delhi.

**RANGANATHAN, Shiyali Ramamrita, M.A.**, D.Litt. (Univ. of Delhi, 1948; Pittsburgh, 1964), L.T., F.L.A., Padma Shri, Educationist. *b.* 1892; *Educ.*: Madras Christian Coll.; Univ. Coll., London. Mathematics Lecturer, Govt. Coll., Madras, 1917-24; Univ. Lib. and Prof. of Lib. Sc., Madras, 1924-44; Banaras, 1945-47; Prof. of Lib. Sc., Delhi Univ., 1947-55; Chairman, Doc. Comm. and Lib. Buildings Comm., Ind. Stand. Inst., since 1947; Chairman, U.G.C. Lib. Comm., 1958 and Courses Comm. in Lib. Sc., U.G.C., 1962; is Natl. Res. Prof. in Lib. Sc., 1965—and Hon. Prof., D.R.T.C., Bangalore, since 1962. *Publications*: *Preface to Lib. Science*; *Rural Adult Education*; *Lib. Devpt. Plan for India*; *Rules for the Rendering of South Asian Names* (Prepared for UNESCO); *Lib. Adm.*; *Social Science Research and Libraries*; *Documentation and its Facets*; etc. *Address*: Documentation Research and Training Centre, 112, Cross Road 11, Bangalore 3.

**RAO, Dr. Aragula Nagaraja, B.Sc. (Mysore), M.Sc. (Calcutta), Dr. Ing. (Berlin)**, Padma Shri (Jan. 1958), Scientist; Ex-Adv. (Industry and Minerals) and Addl. Secy. (Ex-Officio), Png. Commn. *b.* Nov. 15, 1906; *Educ.*: Bangalore, Calcutta and Berlin. Chemical Adv., then Gen. Mgr. and Mgr. Dir., Eastern Chemical Co., 1944-50; Chief of Dvn., Industry, Trade and Transport, Png. Commn., 1950; selected for the I.A.S., 1948; Industrial Adv. (Chemicals), Min. of Commerce & Indus., June 1951; Chief Indus. Adv. and ex-officio Jt. Secy., Min. of C. & I., Sept. 1954; Jt. Secy., Min. of C. & I., July 1958; Chairman, Heavy Engg. Corpn. Ltd., Ranchi, 1959-64. *Publications*: Papers dealing with both pure and applied physico-chemical problems and diverse aspects of sugar and other industries. *Address*: C/o Planning Commission, Yojana Bhavan, New Delhi.

**RAO, B. Shiva, M.A. (Allahabad)** in English Literature, Member, Univ. Grants Commn., since 1962. *b.* Feb. 26, 1891; *Educ.*: Madras and Allahabad. Was on the India Workers' delegation, I.L.O. Cfce., Geneva, 1929-30; a delegate to the Round Table Cfce., London, 1930-31; a member of the Indian delegation to the U.N. Gen. Assembly, 1947-50 and '52; member: Constituent Assembly of India, 1946-50; Lok Sabha, 1952-57; Rajya Sabha, 1957-60. *Publications*: *India's Constitution in the Making*—A collection of Papers by the late Sri B. N. Rau (Allied Publications); *The Industrial Worker in India*. *Address*: 85, Lodi Estate, New Delhi 3.

**RAO, Balantrapu Rajanikanta, B.A. (Hons.)**, Sahitya Akademi Award for Telugu (1961-62), Playwright, Poet, Musician and Musicologist, Asstt. Stn. Dir., A.I.R., Kurseong, since April, 1966. *b.* Jan. 29, 1920; *Educ.*: Andhra Univ. Coll., Waltair; B.A. (Hons.), 1940. Sub-Editor, Andhra Pracharini Ltd., Kakinada, 1940-42; Staff-artist and Playwright, A.I.R., Madras, 1942-44; Programme Asstt.,

A.I.R., Madras, 1944-56; Programme Exec., A.I.R.: Vijayawada, 1956-60; Hyderabad, 1960-66. *Publications*: *Sata Patra Sundari* (Lyrics) (Telugu Bhasha Samiti Award, 1952-53); *Andhra Vaggeya Karacharitam* (Central Sahitya Akademi Award in 1961-62); *Jejimamayya Patalu* (Songs for Children), 1962; *Visuvavina* (Collection of 18 operas), 1964. *Address*: Asstt. Station Director, A.I.R., Kurseong, Darjeeling Dist., West Bengal.

**RAO, Banda Kanakalingeswara, B.A., B.L.**, Drama Producer, A.I.R., Vijayawada. *b.* Jan. 20, 1907; *Educ.*: Noble Coll., Masulipatam; Law Coll., Madras. Practised as a lawyer till 1935; acted in Telugu films "Draupadi", "Sarangadhara", "Balanagamma", "Kalachakram" and "Paduka". Later, took to stage career and formed a drama troupe "Prabhat Theatres, Eluru"; toured Eastern Europe, Soviet Union, etc., in a cultural delegation to study theatres, 1954. Received the Sangeet Natak Akademi Award for Acting on Stage in Telugu; revived the Kuchipudi Dance and founded a Nat. Instt. of Kuchipudi Dance at Kuchipudi Village; Founder Secy., "Sri Siddhendra Kalakshetram, Kuchipudi"; Dir., Kalakshetram, Eluru; member, Central and State Sangeet Natak Akademi. *Publications*: Articles on Stage and Kuchipudi Dance; published volumes of Radio Plays and a Book on Kuchipudi Dance. *Address*: C/o All India Radio, Vijayawada.

**RAO, C. Balakrishna, M.A., I.C.S. (Retd.)**, Writer and Journalist; Editor, *Madhyam* (Hindi Monthly). *b.* Dec. 27, 1913; *Educ.*: Allahabad Univ. and Christ Church, Oxford. Served in U.P., Vindhya Pradesh and Govt. of India until resignation in 1954; Provincial Press Adv., U.P., 1941-42; Collr., Banda and Jaunpur, 1943-45; 1946-48; Chief Secy., Vindhya Pradesh, 1948-49; Dy. D.G., A.I.R., 1949; Dy. Secy., Min. of I. & B., 1949-54; twice officiated as D.G., A.I.R. and Jt. Secy., Min. of I. & B.; visited U.S.A., 1949; toured Europe as member of a Writers' Delegation, 1957; Pres., Hindustani Academy, U.P.; member, Governing Council, Hindi Sahitya Sammelan, Allahabad; Mayor of Allahabad, 1961-62. *Publications*: Collections of poems (Hindi), *Kavi Aur Chhavi*; *Raat Beeti*; *Hamari Rah*. *Address*: 'Amravati', 9, Tagore Nagar, Allahabad.

**RAO, Chandra Rajeswar, Public Worker**; Secy., Andhra Communist Party. *b.* June 6, 1914 at Mangalapuram, Kistna Dt., Andhra Pradesh; *Educ.*: Hindu High School, Masulipatam; Banaras Hindu Univ.; studied up to B.Sc.; joined Vizagapatam Medical Coll., 1936; discontinued, 1937. Joined the Communist Party, 1931 at Banaras; worked in Andhra in youth and peasant movements from 1936; member of Central Cttee., C.P.I., from 1948; Gen. Secy., C.P.I., 1950-51. *Address*: Himayatnagar, Hyderabad.

**RAO, Devulapalli Ramanuja, B.A. (Madras), I.L.B. (Nagpur)**, Author. *b.* Aug. 24, 1917; *Educ.*: Nizam Coll., Madras; Law Coll., Nagpur. Literature, Educ., Journalism and Politics; member, Osmania Univ. Senate (1954-56); Central Adv. Board for Educ., Hyderabad Govt. (1952-55); Central Text Book Cttee. (1952-56); Selection Cttee. for Teachers of Hyderabad Govt. (1952-56); Secy., Andhra Pradesh Sahitya Akademi, Hyderabad; Member, Rajya Sabha, 1960-62; Secy., State Cttee. for Tagore Centenary Celebrations (1960); member: Osmania Univ. Syndicate; AIR Adv. Cttee.; Modern Languages Dev. Cttee. *Publications*: *Narya Kavitha Neerajanamu*; *Vyasa Manjusha*; *Mana Desamu*; *Adima Nivasulu*; *Visalandhra Vachindi*; *Navanthamu*; *Pacha Thoranam*, etc. *Address*: Andhra Saraswatha Parishath, Tilak Road, Hyderabad 1.

**RAO, J. B. Muthyal, Deputy Minister for Parliamentary Affairs, Govt. of India**, since March 18, 1967. *b.* Secunderabad Cantt. Entered upon parliamentary career at a very

early age; elected M.L.A., Hyderabad State from Secunderabad, 1952 General Election; elected M.L.A., A.P. Assembly, 1957; elected M.P. (Lok Sabha) from Mahboobnagar Constituency, 1962 and from Nagarkurnool (S.C.) constituency, 1967; jailed in the freedom movement against Nizam's rule in Hyderabad, 1938; Founder-member, Hyderabad State Cong. Cttee.; held many important positions in the organisation; Whip in the Hyderabad and Andhra Pradesh State Legislatures, 1952-62; Deputy Chief Whip in the Centre, 1962; member: Indian delegation to the 17th session of the U.N.O., 1962; Goodwill Delegation to Fiji Islands, Australia and Singapore, 1964; Inter-Parliamentary Confce., Iran, 1966; was adjudged as the best cadet of the Lok Sahayak Sena and was awarded the Sword of Honour in Hyderabad, 1953. *Address*: Deputy Minister for Parliamentary Affairs, Govt. of India, New Delhi.

**RAO, J. V. Narsing, M.A. (Pol. Sc.), LL.B.**, Minister for Communications, Andhra Pradesh, since March 1967. *b.* Oct. 14, 1914; *Educ.*: Osmania Univ., Muslim Univ., Aligarh and Banaras Hindu Univ.; was advocate, Supreme Court and a leading advocate; P. S., Hyderabad Bar; held many key positions in the Bar Association and the Bar Council; is associated with many Educational and Social Institutions in Hyderabad; was member, Syndicate, Osmania Univ. for more than six years; gave up practice at the Bar to join the Congress, 1955. A.I.C.C., since 1952; Hyderabad P.C.O., 1955-57; Minister for Irrigation and Power and Public Works, Andhra Pradesh, 1956-60; is intimately connected with I.N.T.U.C.; is member, All-India General Council and the Pres., Pradesh Exe.; Chairman, Andhra Pradesh State Electricity Board, 1963-66; was returned to the A.P. Assembly from the Lakshettipet Constituency, 1967. *Address*: "Dwaraka", Gaganmahal Colony, Hyderabad-29 (A.P.).

**RAO, Jagannath, B.A., LL.B.**, Minister of State for Works, Housing and Supply, Govt. of India, since March 13, 1967. *Educ.*: Early education at Aska, Ganjam Dist.; Law from Patna Univ. Enrolled as an Advocate, Madras High Court; practised law at Jeypore (Koraput) for some years; Pres., Koraput Dist. Bar Assoc., 1946-49; Pleader and Public Prosecutor, Koraput, 1946-48; Advocate, Supreme Court of India, 1957; elected M.P. Lok Sabha from Koraput Dist., 1957; from Nowrangpur, 1962 and from Chattrapur, 1967; was on the Panel of Chairmen for the Lok Sabha; was member, Exec. of the Congress Party in Parliament, 1958-62; member: A.I.C.C., since 1963; Parliamentary Delegation to the U.S.S.R., 1958; Indian delegate to the 14th Session of the U.N. General Assembly, 1959; led the Indian delegation to the International Congress of Penal Law at the Hague, Aug. 1964; Deputy Minister, Min. of Works, Housing and Supply, May 1962 and later in the Min. of Economic and Defence Co-ordination; Dy. Min., Min. of Law and Deptt. of Social Security, 1964; was Min. of State, Min. of Labour, Employment and Rehabilitation; Min. of State for Parliamentary Affairs and Communications, 1966-67; also became the Govt. Chief Whip. *Address*: Ministry of Works, Housing and Supply, Govt. of India, New Delhi.

**RAO, Dr. Kannru Lakshman, B.E., M.Sc., Ph.D. (Birm.), M.I.C.E. (Lond.), M.I. Struct. E. (Lond.), M.I.E. (India)**, Padma Bhushan (1963), Min. of State for Irrigation and Power, Govt. of India, since July 1963. *b.* July 15, 1902; *Educ.*: Madras and Birmingham. Chief Engr., Floods, Central Govt.; was engaged in the designs of most of the major river valley projects in the country; has visited most of the dams in Egypt, Europe, U.S.A. and China; Pres., National Cttee. of the Intn'l Cttee. on Soil Mechanics and Foundation Engg.; awarded the President's Gold Medal thrice for the best contributions to the Journal of Instt. of



Indian Engrs. and Hon. D.Sc. degree by Andhra Univ.; Vice-Pres., Intn'l Cfce. on Soil Mechanics and Foundation Engg.; Pres., Instt. of Engrs. for 1959-60 and 1960-61; was Member (Designs & Research), Central Water and Power Commn., Govt. of India and Pres., Central Board of Irrigation & Power; M.P., Lok Sabha, 1962 & 1967. *Publications*: *Calculations, Designs & Testing of Reinforced Concrete*; contributed various articles for various technical institutions. *Address*: New Delhi.

**RAO, Madapati Hanumantha, D.Litt.** (Osmania Univ., 1956), Padma Bhushan (1956), Ex-Chairman, Andhra Pradesh Leg. Council. b. Jan. 28, 1885; *Educ.*: Warangal. Served the then Nizam's Govt. for 14 years. Enrolled and practised as an Advocate of the former Hyderabad High Court for 24 years; was Mayor of Hyderabad, 1951-1954; is popularly called "Andhra Pitamaha" for services rendered to Andhra public in Hyderabad State; Chairman, A. P. Leg. Council, 1958-1964. *Publications*: Telugu: *History of Andhra Movement in Telangana*; Two collections of short stories named *Mallika Gucham* and *Malathi Gucham*. *Address*: Andhra Kutir, Hanuman Tekdi, Hyderabad.

**RAO, Mysore Subba, B.A.** (Mysore), I.C.S., Chairman, Hindustan Steel, Ltd., since Jan. 15, 1963; Dir.: Heavy Engg. Corpn., Ranchi, since Jan. 24, 1964; Nat. Coal Devpt. Corpn., since Dec. 26, 1964. b. Oct. 25, 1907; *Educ.*: Bangalore. Joined the I.C.S., 1931; held several posts in Orissa and Bihar till he became Chief Secy., Bihar, Aug. 1955; Addl. member, Board of Revenue and Land Reform Commn., 1955-56; Ch. Secy., Govt. of Bihar, Aug. 1956-Nov. 1961; Dir. (Personnel), H.S.L., Nov. 1961-Jan. 1963. *Address*: Hindustan Steel Ltd., Ranchi (Bihar).

**RAO, Pandurangi Kodanda, M.A.** Member, Servants of India Society, 1921-58. b. Dec. 25, 1889; *Educ.*: Presidency Coll., Madras. Pvt. Sec. to Rt. Hon. V. S. Srinivasa Sastri in India, England and South Africa, 1922-32; Editor, *Servant of India*, Poona, 1930-33; Carnegie Scholar, Yale Univ., U.S., 1934-35; World Study Tour, 1934-37; Senate, Academic Council and Exec. Council, Nagpur Univ., 1939-42 and 1948; Vice-Pres., Indian Council of World Affairs, New Delhi; Member, Mysore Educl. Reforms Cttee., 1952-53; member, Prohibition Enq. Cttee., Govt. of India, 1955; Pres., Forum of Intn'l Affairs, Bangalore, 1965. *Publications*: *East Versus West*; *Denial of Contrast*; *Culture Conflicts*; *Cause and Cure*; Rt. Hon. V. S. Srinivasa Sastri—*Political Biography*. *Address*: "Aloha," Basavangudi, Bangalore 4.

**RAO, R. Krishna, Diploma in Fine Arts**—Painting, Instructor in Commercial Arts, Govt. School of Arts and Crafts, Madras, since 1948. b. Nov. 4, 1915; *Educ.*: Union Christian High School, Mathurai. Layout Expert, Deptt. of War Publicity, 1945; Textile Designer, 1946-48; his painting 'Street Scene' is in the National Art Gallery, Madras and at the Nat. Gallery of Modern Art, New Delhi; his works have been acquired by Mysore State and Bharatiya Kala Bhavan, Banaras and Madras Govt.; commissioned to do a panel for the mural of Lok Sabha; has been influenced in his paintings of subjects of South Indian interest; participated in the All-India Art Exhibition; member, Exec. Board, Madras State Lalit Kala Akademi; Secy., Progressive Painters' Assoc., Madras. *Address*: 22, Trustpura Major, Madras 24.

**RAO, Dr. Vijayendra Kasturi Ranga Varadaraja, M.A.** (Bombay), B.A., Ph.D. (Cambridge), D.Litt. (Delhi), Minister for Transport & Shipping, Govt. of India, since March 1967; Chairman, Indian Instt. of Foreign Trade, since July 1965; Dir., Instt. of Eco. Growth, 1960-63 and ex-Vice-Chancellor, Delhi Univ. b. July 8, 1908;

*Educ.*: Wilson Coll., Bombay; Gonville and Caius Coll., Cambridge. Dir. of Statistics and subsequently Plng. Adv., Food Dept., Govt. of India (1944-46); Chairman, U.N. Sub-Commn. on Eco. Devpt. (1947-50); Corresponding Member, Instt. de Science Economique Applique, Paris, since 1948; member, Univ. Prof. and Founder Dir., Delhi School of Economics, Univ. of Delhi, 1942-57; Member, Planning Commission, 1963-66. *Publications*: *Taxation of Income in India*; *An Essay on India's National Income, 1925-20*; *The National Income of British India, 1931-32*; *War and Indian Economy*; *Post-war Rupee*. *Address*: New Delhi.

**RATANJANKAR, Dr. Shrikrishna Narayan, B.A.**, Doctor of Music, Padma Bhushan (1957), Music Composer. b. Dec. 31, 1899; *Educ.*: Bombay and Baroda; made a spl. study and practice of Hindusthani vocal classical music; was trained in music by prominent musicians like the late Pt. V. N. Bhatkhande, late Ustad Faiyaz Hussain Khan, etc. Principal, Bhatkhande Coll. of Hindustani Music, Lucknow, 1923-56; Vice-Chancellor, Indira Kala Sangeeth Vishwavidyalaya, Khairagarh, 1957-60; sings at the A.I.R., Lucknow, Delhi and Bombay; has been examiner in music for B.A., M.A. and Ph.D., Univs. of Madras, Delhi, Nagpur, Agra, Saugar, Jabalpur, Vikram, Punjab and Kurukshetra; Vice-Chairman, Music Audition Board, A.I.R.; conducted music auditions at Colombo at the invitation of Radio Ceylon, 1949 and 1951. *Publications*: *Sangeet Shiksha*; *Abhinava Geeta Manjari*; *Tana Sangraha*; *Hindusthani Sangeet Ki Swaralipi*; *Varna Mala*. *Address*: 10A, Hill View, Raghavji Road, Cumballa Hill Post, Bombay 26.

**RATNAM, His Excellency Mr. Perala, M.A.** (Madras), M.A. (Toronto), M.Sc. (Cantab.), Ambassador of India to Mexico, Cuba & Panama, since May 1967. b. July 1, 1911; *Educ.*: Univs. of Andhra, Madras, Toronto and Cambridge (England). Apptd. in the Senior Scale of I.F.S., April 1948; First Secy., Tokyo, 1948-50; Dy. Secy., E. A. Min., 1950-51; Trade Commr., Egypt, June 1951 to May 1953; First Secy., Canberra, June 1953 to Aug. 1955; Counsellor, Moscow, Oct. 1955 to Dec. 1957; Jt. Secy., E. A. Min., Jan. 1958 to June 1959; Amb. of India in Laos (Vientiane), 1959-61; Amb. to Chile, Columbia and Peru, 1962-64; Amb. to Indonesia, Jan. '65-May '67. *Address*: C/o Ministry of External Affairs, New Delhi.

**RAU, Sir Benegal Rama, Kt. (1939), C.I.E.** (1930), M.A. (Cantab.), Ex-Governor, Reserve Bank of India. b. Jan. 14, 1889; *Educ.*: Presidency Coll., Madras, and King's Coll., Cambridge. Entered I.C.S., 1913; Under-Secy. and Dy. Secy., Govt. of Madras, 1919-24; Secy., Indian Taxation Cttee., 1925-26; Dy. Secy., Fin. Dept., Govt. of India, 1926-28; Financial Adv., Simon Commn., 1928-30; Jt. Secy., Industries Dept., Govt. of India, 1930-31; Secy., R.T.C. and Jt. Select Cttee. of Parliament on India Bill, 1931-34; Dy. High Commr. in London, 1934-38; Agent-General and High Commr. for India in the Union of South Africa, 1938-41; Chairman, Bombay Port Trust, 1941-46; Indian Amb. in Tokyo, 1947-48; Leader of Indian Delegation, Commonwealth Cfce. at Canberra, 1947; Indian Amb. in U.S.A., 1948-49; Governor, R.B.I., 1949-57. *Address*: Mafatlal Park, Bombay 26.

**RAU, M. Chalapathi, M.A.**, B.L., Editor, *National Herald*, Lucknow, since 1946. *Educ.*: Presidency Coll. and Law Coll., Madras. Advocate, Madras High Court, 1934; entered journalism, 1936; Asstt. Editor: *National Herald*, 1938-42; *Hindustan Times*, 1943-45; member, UNESCO Press Experts Commn., Paris, 1950; Co-Founder, Intn'l Press Instt., New York, 1950; Pres.: All India Convention of Working Journalists, New Delhi, 1950; Federation of Working Journalists, 1950-55.

member: Press Commn., 1952-54; Official Goodwill Mission to China, 1952; UNESCO Experts' Cfce. on Journalism Educ., Paris, 1956; Delegate, UNESCO Gen. Cfce., New Delhi, 1956; Rep., U.N. General Assembly, 1958; Delegate, UNESCO Gen. Cfce., Paris, 1960; Member, Cttee. on Broadcasting and Inf. Media. *Publications*: Co-Editor, *Gandhiji, Seventy-fifth Birthday volume*, 1964; *Fragments of a Revolution*, 1965. *Address*: National Herald, Lucknow.

**RAU, Nittoor Sreenivasa, B.Sc., B.L.**, Central Vigilance Commr., New Delhi, since Feb. 19, 1964. b. Aug. 24, 1903; *Educ.*: A. V. School, Challakere; Govt. High School, Shimoga; Govt. Collegiate High School, and Central Coll., Bangalore; Govt. Law Coll., Madras. Honorary Teacher, National High School, Bangalore, 1925-26 and 1927-28; Advocate, High Court, Bangalore, 1928-55; Advocate Gen., Mysore State, 1953-55; Judge, High Court of Mysore, Bangalore, 1955-61; Chief Justice of Mysore, 1961-63; acted as Governor of Mysore, Aug.-Sept. 1963. *Address*: 27, Safdar Jang Road, New Delhi 11.

**RAUT ROY, Satchidananda, Padma Shri** (1962), Poet and Writer. Editor, *Diganta* (bi-monthly). b. 1915, in Orissa; *Educ.*: Graduated, 1939. First to introduce modern verse-forms in Oriya literature; ushered in a new era in the literature of Orissa; participated in the Harvard Intn'l Seminar of Arts and Sc. on invitation of Harvard Univ., 1955; Indian rep. at Social Services Seminars held in Australia & New Zealand, 1952; visited South-East Asia, U.K., France, Italy, Switzerland, 1952; member, Delegation of Indian Writers & Journalists, U.S.A., 1962; was given National Sahitya Akademi Award in 1963 for "*Kavita—1962*". *Publications*: *The Boatman Boy and Forty Poems*; *Reference*: *Sochi Raut Roy—A Poet of the People* written by 22 eminent persons of India; *Swagata*; *Pandulipi*; *Avigyan*; *Arjan*; *Palli-Shri*; *Kavita—1962*. Short stories; *Masanir Fulla*; *Matir Taj*; *Chhai*, etc. *Address*: Managing Director, Orissa Board Mills Ltd., Meria Bazar, Cuttack 1.

**RAVAL, Anantrai Manishankar, M.A.**, Ranjitram Gold Medal, 1956; Gujarati Writer; Dir. of Languages, Gujarat State; Member, Gen. Council of Sahitya Akademi, Delhi. b. Jan. 1, 1912; *Educ.*: High School, Amreli; Samaldas Coll., Bhavnagar. Prof. of Gujarati, Gujarat Coll., Ahmedabad, 1934-59; Principal, D. K. V. Coll., Jamnagar, 1959-60; Research Officer, Directorate of Languages, Gujarat State, 1960-64. *Publications*: *Sahitya-Vihar*; *Gandhakshat*; *Sahitya-Vivek*; *Sahitya-Nikash*; *Sameeksha Gujarati Sahitya Part I*, etc.; edited *Nalakhanya*, *Chandrabhas Akyana*; *Madan-mohana*, *Snekmudra*, *Kalapi-no-Kavya Kalap*. *Address*: 2, Sri Sadma Society, Navrangpura, Ahmedabad 9.

**RAY, Dr. Nihar Ranjan, M.A.**, P.R.S. (Cal.), D. Litt. & Phil. (Leiden), Dip. Lib. (London), F.A.S. (Cal.), F.L.A. (Gr. Br.), F.R.A.S., F.R.S.A. (Lond.), Dir., Indian Instt. of Advanced Study, Simla, since June 1, 1965. Dean of the Faculty of Arts and Vice-Pres., Post Graduate Coll. of Arts, Calcutta Univ., since 1959. b. Jan. 14, 1904; *Educ.*: Mymensingh; Sylhet; Calcutta; Univ. Coll., London; Univ. of Leiden. Chief Librarian, 1937-44; Lecturer in Indian History and Culture, 1931-46; member: Central Adv. Boards of Educ., Archaeology and Anthropology; Sangit Natak, Lalit Kala and Sahitya Akademies, since 1960; was Bagisvari Prof. of Indian Art and Culture, Head of the Deptt. of Ancient Indian His. and Culture. *Publications*: *Brahmanical Gods in Burma*; *Sanskrit Buddhism in Burma*; *Theravada Buddhism in Burma*; *Art in Burma*; *Dutch Activities in the East*; *Maurya and Sunga Art*; *Indian Painting*; *Indian Sculpture*; etc. *Address*: 68-4A, Purna Das Road, Calcutta-29; Indian Institute of Advanced Study, Rashtrapati Nivas, Simla.



**RAY, Smt. Renuka, B.Sc. (Econ.) (London),** Ex-Pres., All India Women's Conference; ex-M.P.; member, A.I.C.C. b. Jan. 1904; *Educ.*: Loreto House School and Diocesan Coll., Calcutta; London School of Economics, London Univ. (1922-25). Member and Social Secy., All India Women's Cfee., since 1931; member: Central Leg. Assembly, 1943-46; Central Board of Educ. Govt. of India, 1941-47; Governing Body of Visva-Bharati Univ., Santiniketan, 1941-48 and since 1 May 1958; Constituent Assembly and provisional Parliament, 1948-52; Indian Delegate, U.N. Gen. Assembly, 1949; Pres., All-India Women's Cfee., 1952-54; Min. of Rehab. Govt. of West Bengal, 1952-57, Member of Estimates Cttee., Lok Sabha; 1957-59; Chairman, Cttee. on School Health (Min. of Health); M.P., Lok Sabha, from Malda constituency, 1957-67; leader, Plan Projects Cttee. on Social Welfare; Chairman, Fly. Ping. Natl. Awards Cttee.; Pres., Women's Co-ordinating Council, W. Bengal; was member, Exec. Cttee., Congress Party in Parliament. *Address*: 24/1, Ballygunge Circular Road, Calcutta 19.

**RAY, Satyajit, B.A., Padma Shri (1958),** Padma Bhushan (1965), Film Producer and Dir. b. May 2, 1922; *Educ.*: Presidency Coll., Calcutta; Kalabhavan, Santiniketan; studied under Nandalal Bose for three years at Visva-Bharati Univ., Santiniketan. Entered publicity business in Calcutta, 1942; started work on *Pather Panchali*, October 27, 1952 and finished in March 1955; won the maximum number of awards in foreign festivals in Europe and America for the picture *Pather Panchali*; won the 1959 Selznick award and the gold laurel trophy for his films *Pather Panchali* and *Aparajita*; won the 1963 Selznick's Golden Laurel for the non-American best film showing int'l understanding; his other films are *Aparajita*, *Apur Sansar*, *Paras Pathar*, *Jalsaghar* and *Devi*; a festival of his films was organised at Bombay by Virata, June, 1960; awarded first prize for best film direction for his 'Charulata' by the Berlin Int'l Film Festival, July 1965; special award of honour by the 16th International Film Festival in Berlin in recognition of his high artistic eminence in the world of film, 1966; often wrote on films in leading Western European film journals. *Address*: 3, Lake Temple Road, Calcutta 27.

**REDDI, Dr. Bezvada Gopala, D. Litt.,** Governor of U.P., since May '67; Chairman, Children's Film Society. b. Aug. 5, 1907; *Educ.*: Visva Bharati, Santiniketan. Pres.: Dakshina Bharat Hindi Prachar Sabha (A.P.); Telugu Bhasha Samiti, since 1947; Andhra Pradesh Sahitya Academy, since 1957; All India Chess Federation, since 1959; Hindi Assoc. of Parliament; Chairman: Finance Cttee. Central Sahitya Academi; member, A.I.C.C., since 1931; elected M.L.A., Madras, 1937-46; Minister for Local Administration, Govt. of Madras, 1937-39; Pres., Andhra P.C.C., 1953; Pro-Chancellor, Andhra Univ., 1951-57; Chief Minister, Andhra, 1955-56; Finance Minister, Madras, 1947; Home Minister, Andhra Pradesh, 1956; Finance Minister, A.P., 1957; elected M.P., Rajya Sabha, 1958-60; Lok Sabha, 1962; Minister of Revenue & Civil Expenditure, Govt. of India, 1958-61; Minister for Information & Broadcasting, 1962-63; resigned under the 'Kamaraj Plan', Aug. 1963; Dy. Leader, Congress Parliamentary Party May '65-May '67. *Publications*: *Chitranguda*; has translated some books of Tagore into Telugu from original Bengali. *Address*: Raj Bhavan, Lucknow.

**REDDI, Dinnapati Sadasiva, M.A. (Hons.) (Madras), M.A. (Hons.) (Oxford),** Diploma in Anthropology (Oxon.), Vice-Chancellor, Osmania Univ., Hyderabad, since Nov. 1957; member, U.G.C., since Aug. 1966. b. April 23, 1897; *Educ.*: Madras Christian Coll., Madras; M.A. (Hons.), 1918; St. John's Coll., Oxford; M.A. (Hons.), 1921; Diploma in Anthropology, 1922. Joined the Madras educ. service, 1923;

served in various capacities in the teaching and adm.ive branches; Dir. of Public Instruction, Madras, 1948-52; in Liberia as Head of the UNESCO Tech. Assistance Mission, 1952-1954; again D.P.I., Andhra, 1954-57; awarded the M.B.E. in 1940; Grand Commander of the Order of Star of Africa, 1954 (Liberia); D.Litt. (Hons.), Andhra Univ., Dec. 1960. *Address*: Vice-Chancellor's Lodge, Hyderabad 7.

**REDDI, Kasu Brahmananda, B.A., B.L.,** Chief Minister Andhra Pradesh, since Feb. 29, 1964. b. July 28, 1909. Member, A.I.C.C.; Andhra Univ. Senate; imprisoned, 1941 and detained, 1942; Pres., Guntur Dist. Board, 1936; Member, Madras Assembly, 1946-52; Gen. Secy., A.P.C.C. from March 1955; Fin. and Ping. Min. in Sanjiva Reddy cabinet; Fin. Min., 1960-62; Min. for Fin. & Coop. A.P., March 1962-Feb. 1964; unanimously elected leader, A.P. Leg. Cong. Party, June 26, 1964. *Address*: Anand Nilayam, Begumpet, Hyderabad.

**REDDI, Dr. (Smt.) S. Muthulakshmi, M.B. C.M.,** Padma Bhushan (1956), Politician and social worker. b. 1886; *Educ.*: Madras Univ.; first woman medical graduate of the Univ.; won five gold medals and honours for distinction in medicine, surgery and midwifery. Gave up practice and devoted to the emancipation of women and for the care and protection of children; Indian delegate to the Int'l Cfee. of Women, Paris and America; associated with the Women's Indian Assoc. since its inception, 1917; is now its Pres.; was Pres. and Chairman, A.I.W.C.; presided over the Cong. Constructive Workers' Cfee., 1946; Founder and Dir., Avvai Home for Destitute Children and Women; Founder and Chairman, Cancer Instt., Madras; Vice-Pres., Madras Leg. Council, 1926-30. *Publications*: *Stri Dharma*; *Mrs. Margaret Cousins and her work in India*; *Maternity and Child Welfare*; *Women's Work in Madras*; *My experience as a Legislator*. *Address*: "Shanti", 15, Besant Avenue, Adyar, Madras.

**REDDY, Kyasambally Chengalarya, B.A., B.L., LL.D.** Honoris Causa, Governor, Madhya Pradesh, since Feb. 11, 1965. b. May 4, 1902; *Educ.*: Mysore and Madras. Pres., Mysore Peoples' Federation, 1935-37; was for some time Editor of *Janavani*; Pres.: Mysore Cong., 1937-38 and 1946-47; launched Satyagraha for the establishment of Responsible Govt. in Mysore; Leader of the Assembly thrice since 1947 and was Chief Min., 1947-52; member, Indian Constituent Assembly, 1947-50; elected again M.L.A., Mysore, 1952; M.P., Rajya Sabha, 1952-57; Lok Sabha, 1957-64; member, Exec. Cttee., All-India States Peoples' Cfee., 1944-45; Working Cttee., Mysore Cong., 1937-52; Founder Member, Delhi School of Economics; Union Min. for Production, 1952-57; Min. for Works, Housing & Supply, 1957-61; Union Min. for Commerce and Indus., 1961-63; Dy. Leader, Cong. Party in Parliament, 1963-64; visited U.S.A., U.K., Continent & U.S.S.R. *Address*: Kyasambally Village, P.O., K.G.F., Mysore State; Raj Bhavan, Bhopal.

**REDDY, K. V. Raghunatha, M.A., LL.B.,** Minister of State in the Ministry of Industrial Development and Company Affairs, Govt. of India, since March 13, 1967. b. Sept. 4, 1924, at Virur, Nellore Dist.; *Educ.*: B.A. in Economics and Philosophy from Annamalai Univ., 1945; M.A. in Economics and Sociology and the Law degree from Lucknow Univ. Member, Senate, Annamalai Univ., 1947-50; enrolled as Advocate, Madras High Court, 1950 and Supreme Court 1958; was practising as an advocate in the Andhra Pradesh High Court; elected member, Rajya Sabha, 1952; represented Rajya Sabha at the Common wealth Confee., 1966; visited East Germany, Czechoslovakia and Soviet Union and delivered extension lectures in Humboldt Univ., E.

Germany and at the Institute of Economics and Politics, Prague on "Paths to Socialism and Economic Development" and "Nehru's Contribution to Socialist Thought". *Publications*: *Criminal Law-Procedural and Substantial*; various articles on Banking, Nehru's contribution to socialist theory. *Address*: Ministry of Industrial Development and Company Affairs, Govt. of India, New Delhi.

**REDDY, Dr. M. Chenna, M.B.B.S.,** Minister of Steel, Mines and Metals, Govt. of India, since Mar. 13, 1967. b. Jan., 1919; *Educ.*: Took M.B.B.S. Degree, 1941. One of those who founded the Andhra Yuvajana Samithi and the Andhra Vidyarthi Mahasabha, 1940; took active interest in the political struggle in erstwhile Hyderabad State; became member, Standing Cttee., Hyderabad State Congress and General Secy., Hyderabad City Congress, 1946; suffered imprisonment, 1947; nominated to the Constituent Assembly, 1950; Agriculture Minister, former Hyderabad State, 1952-56; elected M.L.A., Andhra Pradesh, from Tandur constituency, 1962; Min. for Planning, Andhra Pradesh, 1962-64; Finance Minister, 1964-67. *Address*: Minister of Steel Mines and Metals, Govt. of India, New Delhi.

**REDDY, Neelam Sanjiva, Speaker, Lok Sabha,** since Mar. 17, 1967; b. May 19, 1913; *Educ.*: Adyar; Arts Coll., Anantapur. Secy., Andhra P.C.C., 1936-46; courted jail for participation in Satyagraha movement; Congress M.L.A., Madras, from Anantapur General Constituency, 1946; was Secy., Madras Cong. Leg.; member, Indian Constituent Assembly, 1947; Min. for Prohibition, Housing and Forests, Madras, 1949-1951; resigned and elected Pres., Andhra P.C.C.; was Exec. Cttee. member and Parly. Board member of A.I.C.C. till the Avadi Cong. Session; M.P., Rajya Sabha in bye-election, 1952-53; member, Leg. Assembly from Kalahasthi Constituency, 1953 and 1955; unanimously elected Leader, Andhra Cong. Leg. Party; became the first Dy. Chief Min. of Andhra State, 1953; Dy. Chief Min., Andhra, 1955-56; Leader, A.P. Cong. Leg. Party, Oct. 21, 1956; Chief Min. A.P., 1956-60; Pres., Indian Nat. Cong., 1960-62; Chief Min., A.P., 1962-63; M.P. (Rajya Sabha); Union Min. for Steel and Mines, 1964-66; member, Central Election Cttee., A.I.C.C., since May 1966; Min. for Transport, Aviation, Shipping and Tourism, Govt. of India, Jan. '66-May '67. *Address*: New Delhi.

**REDDY, Mr. Justice P. Chandra, B.A., B.L.,** Ex-Chief Justice, High Court, Madras (Nov. 23, 1964-66). b. July 1, 1904; *Educ.*: V. R. High School, Nellore; Pachaiyappa's Coll., Madras; Law Coll., Madras. Enrolled as an Advocate; Madras High Court, Aug. 1928; acted as Crown Prosecutor, 1946; Judge High Court, Madras, 1949-54; Chairman, Society for the Protection of Children, 1953-54; Judge, Andhra High Court, July 1954-Oct. 31, 1956; Judge, Andhra Pradesh High Court, Nov. 1, 1956-Jan. 30, 1958; Offg. Ch. Justice from Jan 31, 1958 to June 15, 1958; Chief Justice, Andhra Pradesh High Court, Jan. 1958-Nov. 1964; acted as Governor of A.P. Nov. 20 to Dec. 19, 1963; Jan.-March 1966. *Publications*: Commentary on the Madras Hindu Religious Endowment Act and the Madras Estates Land Act. *Address*: C/o High Court, Madras.

**REDDY, Mr. Justice Pingle Jaganmohan, B.Com. (Leeds), B.A. (Law Tripos), LL.B. (Cantab),** Barrister-at-Law, Chief Justice, High Court of Andhra Pradesh, since July 19, 1966. b. Jan. 23, 1910; *Educ.*: Hyderabad, Leeds; Law Tripos, Cantab. Practised in the High Courts of Bombay, Madras and Hyderabad, 1937-46; Legal Adviser, State Bank of Hyderabad, Deccan Airways Ltd. and Hyderabad Commercial Corpn.; Expert Member, Leg. Council for Income-tax and Company Law; Addl. Judge, Hyderabad High Court, 1948; Dist. and Sessions Judge,



Secunderabad, 1950-52; Puisne Judge, High Court, Hyderabad, 1952-56; Member, Syndicate, Dean, Faculty of Law, 1952-59; Offg. Vice-Chancellor, Osmania Univ. 1959; Judge, High Court of Andhra Pradesh, 1956-66. *Publications*: *The Hyderabad Excess Profits Tax Act*. Address: 'Lumtini Gardens', Safabad, Hyderabad 22.

**REDDY, Ravi Narayan**, Communist Leader. b. June 4, 1908; *Educ.*: Nizam Coll., Hyderabad. Discontd. college studies and joined the C. D. movement, 1930; one of the founders of the State Congress; joined Andhra Mahasabha, 1933; elected Pres. and presided over three open annual sessions, 1941, 1944, 1945; joined C.P.I., 1939; jailed twice once as a Congressman, 1938 and as a Communist, 1951; was underground for five years; elected to the State Leg., 1957; was Dy. Leader of the Opposition and Chairman, Public Accounts Cttee., Andhra Pradesh Leg. Assembly; elected M.P., from Nalgonda, 1962-67. Address: 24, Janpath, New Delhi.

**REGE, Purushottama Shivarama**, B.A. (Bombay), B.Sc. (Econ.) (Lond.), Marathi poet and writer; Principal and Prof. of Economics, Elphinstone Coll., Bombay. b. Aug. 2, 1910; *Educ.*: Bombay and London; B.A., Bombay, 1931; B.Sc. (Econ.), London, 1934. *Publications*: Books on Scientific Methods and Civics; Poems, Short Stories, Dramas and Novels. Address: Elphinstone Coll., Bombay 1.

**REU, Bisheshwar Nath**, Sahityacharya (1909), Mahamahopadhyaya (1942), Sanskrit Writer and Historian. b. July 2, 1890; *Educ.*: Jodhpur & Jaipur. Supdt., Archaeology & Sumer Public Library, Jodhpur; Examiner for M.A., Banaras Hindu Univ., 1942; Co-opted, as an expert for Ph.D. to the Research Degree Cttee. by Agra Univ., 1945; Corresponding Member to Historical Records Commission, 1938; its Associate member later; member, Cttee. to advise the Govt. of India about the management of the Archives of Indian States, 1947; Chairman, Mg. Cttee., Sumer Public Library, Jodhpur, Feb. 1951-May 1957. *Publications*: *Bharat-ke-Prachin Rajvansh* (Three vols.); *Raja Bhoj*; *Marwar-ka-Itihas* (Two vols.); *Rashtrakuton-ka-Itihas*; *History of Rastrakutas*; *Glories of Marwar and Glorious Rathors*; *Coins of Marwar*; *Rathod-Durgadas*; *Aryavidhanam* (Hindu Law); *Vishveshvar Smriti*; translated *Shait Sudhakar, Rigvedic India*; *The Arctic Home in the Vedas and Orion*; Other works: *Rigved-Par-ek-Aitihasik-Drishti*; *Rigved-ka-Samajik-Sanskritik-aur-Aitihasik-Sar*. Address: Chandpol, Jodhpur.

**RICHE, H. E., Mr. Omar Abou**, M.A., Ambassador of Syria in India. b. 1910; *Educ.*: took M.A. degree; is a member of the Academy of Letters, Damascus and of the Academy of Philology, Rio de Janeiro. Had been Ambassador to Brazil, Argentina, Chile and the U.S.A.; was also Ambassador of the U.A.R. to India and Austria; Syrian Delegate to UNESCO., 1949. *Publications*: Three volumes of poetry in Arabic; some of his literary works have been translated into English, Spanish, French, German and Czech languages. Address: 10, Panch Sheel Marg, Chanakyapuri, New Delhi 21.

**ROY CHOUDHURY, Harendra Kishore**, B.A. (Cal.). Author and Musician; Lecturer, Calcutta and Rabindra Bharati Univs.; A.I.R. Artist. b. Aug. 1, 1903; *Educ.*: Presidency Coll., Calcutta; awarded Bankim Chandra medal for being first in Bengali in B.A.; studied music under the last descendants of Mian Tansen; specialised in the instruments Veena, Rabab Surasingar and Vocal Dhrupad. M.L.A., Bengal, 1937; was M.L.O. during pre-partition days; member, Indian Nat. Cong.; Dir., Hindustan Co-op. Ins.

Soc., 1935-55; member, Jadavpur Univ. Board; Central Music Audition Board, A.I.R.; Fellow, Sangeet Natak Akademi (Central), since 1964; Pres., Gouripur Industries P. Ltd. and Gouripur Music Trust and Natanarayani. *Publications*: *Hindusthan Sangeeta Tansenen Sthan*; *Uttar Bharatiya Sangeet Kala*; *Atmar Pragati*; *Indian Music and Mian Tansen*, etc. Address: 55, Ballygunge Circular Road, Calcutta 19.

**ROY, Pratap Kumar**, M.Sc., General Manager, Bennett, Coleman & Co., Ltd., Proprietors of The Times of India and Allied Publications. b. Dec. 3, 1921; *Educ.*: Presidency Coll., Calcutta & Banaras Hindu Univ. Chairman, Press Trust of India and Director, Audit Bureau of Circulations Ltd.; Trustee, Press Instt. of India; Member, Exec. Cttee., Indian & Eastern Newspaper Soc. and Bombay Management Assor. Address: Gitanjali, 75, Walkeshwar Road, Bombay 6.

**ROY, Smt. Sudha**, B.A. (Calcutta), Trade Unionist; Gen. Secy., United Trades Union Congress. b. Feb. 16, 1913; *Educ.*: Dacca; Ashutosh Coll., Calcutta; B.A., 1934. Connected with trade union movement and women's movement from 1933; Dock Mazdoor Union, Calcutta; rep. to the 3rd Congress of the W.F.T.U. at Vienna; rep. of the Mahila Sanskritik Sammelan to the 3rd Cong. of the Women's Intn'l Democratic Federation, Copenhagen, 1953; visited U.S.S.R., Czechoslovakia & Hungary; N.F.I.W. rep. to 5th World Congress of Women in Moscow, 1963; Pres., Dock Mazdoor Union, Calcutta; member, Central Dock Workers' Adv. Cttee.; Vice-Pres., National Federation of Indian Women; Gen. Secy.: Loka Shiksha Parishad; Mahila Sanskritik Sammelan, Exec. Cttee. member, Water Front Workers' Educ. Assoc. & Save the Children's Cttee. India. Address: 153-A, Motilal Nehru Road, Calcutta 29.

**RUJA, Madanmohan Ramnarain**, B.A., Merchant, Banker and Millowner. b. Aug. 24, 1914; *Educ.*: Marwari Vidyalaya and St. Xavier's Coll., Bombay. Dir.: Ramnarain Sons Pvt. Ltd., United Commercial Bank Ltd., United Agencies Pvt. Ltd., Bombay Oxygen Corp. Ltd., Bajaj Auto Ltd., Baroda Rayon Corp. Ltd., Ramnarain Sons (Pakistan) Ltd., The Great Eastern Shipping Co. Ltd., Dawn Mills Co. Ltd., Century Spg. & Mfg. Co. Ltd., Mukund Iron & Steel Works Ltd., M. Ramnarain Pvt. Ltd., etc.; Pres.: F.I.C.C.I., 1959-60; East India Cotton Assoc. Ltd., Cotton Traders' Assoc.; Trustee, Bombay Port Trust; member: Cotton Imports Adv. Cttee., Bombay, Customs Adv. Cttee., Cttee. of Indian Merchants' Chamber etc.; Leader, Indian delegation to Afro-Asian Eco. Cfce., 1958; Goodwill-cum-Trade Mission to Europe and U.S.A., 1959; Intn'l Businessmen's Cfce., Karachi, 1960. Address: State Bank Building, Bank Street, Fort, Bombay.

**RUJA, Radhakrishna Ramnarain**, B.A., Merchant and Millowner; Chairman, Millowners' Assoc., Bombay, since Sept. 1, 1963; re-elected Chairman for 1967-68. b. 14th Jan. 1916; *Educ.*: Marwari Vidyalaya and St. Xavier's Coll., Bombay. Dir.: Ramnarain Sons Pvt. Ltd.; Phoenix Mills Ltd.; Bradbury Mills Ltd.; Dawn Mills Co. Ltd.; United Agencies Pvt. Ltd., Kolhapur; Malabar Steamship Co. Ltd.; Ruja Industries Pvt. Ltd.; Radhakrishna Ramnarain Pvt. Ltd.; Kolhapur Sugar Mills Ltd., Kolhapur; Ramnarain Sons (Pakistan) Ltd., Karachi; Paper Mill Plant & Machinery Mfrs. Ltd. Morarjee Gokuldas Spg. & Wvg. Co. Ltd.; Coorla Spg. & Wvg. Co. Ltd.; West India Chemicals Ltd.; Vice-Chairman, Indian Cotton Mills Federation; Chairman, Bombay Regional Cttee. on Maintenance of Machinery; Member, Governing Council of Bombay Textile Research Assor.; Board of Management,

V.J.T.I. Address: State Bank Building, Bank Street, Fort, Bombay 1.

**RUJA, Ramniwas Ramnarain**, Merchant, Banker and Millowner; Senior Dir., Ramnarain Sons Private Ltd., Bombay. *Educ.*: Marwari Vidyalaya, Bombay and privately. Entered business at an early age; Dir.: Ramnarain Sons Pvt. Ltd., Phoenix Mills Ltd., Finaly Mills Ltd., Gold Mohur Mills Ltd., Bank of India Ltd., Andhra Valley Power Supply Co. Ltd., New India Assurance Co. Ltd., Modern Family Plng. Products Ltd., Syndicate Pvt. Ltd., Trafford Cotton Co. Ltd., England, Dawn Mills Co. Ltd., Kolhapur Sugar Mills Ltd., National Machinery Mfrs. Ltd., Bradbury Mills Ltd., Intn'l Computers & Tabulators (India) Pvt. Ltd., Indoplast Ltd., Carona Sahu Co. Ltd., Synthetics & Chemicals Ltd., etc.; Member, Assoc. of Indian Trade and Industry. Address: State Bank Building, Bank Street, Fort, Bombay.

**RUKMINI Devi**, Padma Bhushan (1956), Sangeeth Natak Akademi's award for Bharatanatyam, ex-M.P., Pres., Kalakshetra Intn'l Arts Centre, Tiruvanniyur, Madras; Chairman, Animal Welfare Board. b. 1904, Madras. Started dancing under the guidance of Anna Pavlova; conducted research in dance, music, drama; has specialised in Bharata Natya, Music drama, painting and crafts. Dramatic productions include *The Light of Asia*; *Incidents from the Life of Bhishma*; *Rukmini Swayamvaram* (Kathakali); *Kutrala Kuravanji* (Temple drama); *Kumara Sambhasam*; *Ramayana*; *Sita Swayamvaram*; Dance dramas: *Usha Parinayam*; *Kannapar Kuravanji*; *Shyama*; *Andal Charitram*; Dir.: The Besant Theosophical School, Adyar; Pres., The Bharata Samaj; Head of the Intn'l Theosophical Centre, Huizen, Netherlands; Dir., The Arundale Trg. Centre for Teachers, Tiruvanniyur; Member, Exec. Board: Indian Nat. Commn. for Co-op. with UNESCO; Indian Council for Cultural Relations; Central Sangeet Natak Akademi. Address: Adyar, Madras 20.

**SACHAR, Bhim Sen**, B.A., LL.B., Ex-High Commr. for India in Ceylon and also concurrently Amb. to Maldives. b. Dec. 1, 1893; *Educ.*: Punjab Univ. Called to the Bar in 1918; joined N. C. Movement, 1921; Secy., Punjab P.C.C., 1921; Municipal Commr., Gujranwala, 1924-33; Congress M.L.A., Punjab, 1936-47; leader, Cong. Party, Punjab Leg. Assembly, 1940-47; Fin. Min., Punjab Govt., 1946-47; member, Constituent Assembly of Pakistan from West Punjab in 1947 and Dy. Leader of the Cong. Party; leader, Cong. Leg. Party, Punjab, India. April 1949; Chief Min., Punjab, India. 1949 and 1952-56; Governor of Orissa, 1956-57; Governor, Andhra Pradesh, 1959-62. Address: 107, Sunder Nagar, New Delhi 11.

**SADIQ, Ghulam Mohammad**, B.A., LL.B., Chief Minister Jammu & Kashmir State since Feb. 28, 1964. b. 1912; *Educ.*: C. M. S. High School, Srinagar; S. P. Coll., Srinagar; Islamia Coll., Lahore and Muslim Univ., Aligarh. Elected member, first State Leg. Assembly, 1934; courted arrest in agitation against Govt. in 1938; Chairman, Muslim Cfce. when it resolved itself into the National Cfce., 1939; elected Dy. Leader, National Cfce. Assembly party; acted as Head of Adm. of the State during Sheikh Mohammad Abdullah's visit to U.N., Jan.-Feb. 1948; Devpt. Min., 1948-51; elected Pres., Jammu & Kashmir Constituent Assembly, 1951; Health and Educ. Min., 1953-57; Founder Pres., Kashmir Cultural Congress; resigned from the Council of Ministers and the Nat. Cfce., party, 1957 and formed the Democratic Nat. Cfce.; was its Leader till its merger with the Nat. Cfce., 1961; Hon. Vice-Pres., Indian Soc. of Intn'l Law; member, National Defence Council, since July '64; elected unopposed to J. & K. Assmblly, 1967. Address: Gagribal, Srinagar, Kashmir.



**SAFRANI, H. E. Mr. Abid Hasan**, Ambassador of India to Denmark, since March 1967. *b.* 1911; *Educ.*: Berlin. Under Secretary, Ministry of External Affairs, March-May 1949; First Secy., Embassy of India, Cairo, 1949-50; Under Secy., Ministry of Ext. Affairs, 1950-51; First Secy.: Embassy of India, Peking, 1952-54; Embassy of India, Berne, 1954-56; Embassy of India, Baghdad, 1956-58; Counsellor, 1958-59; Consul General in Syria, Feb. 1959-61; Ambassador at Damascus, 1961-64; Amb. to Senegal, Upper Volta & Mauritania, July 1964-March '67. *Address*: C/o External Affairs Ministry, New Delhi.

**SAGARA, Piraji Chimanaji**, Artist. *b.* Feb. 2, 1931, at Ahmedabad; *Educ.*: Passed S.S.C. at Ahmedabad, 1952; studied fresco painting in Banasthali Vidyapith, Jaipur, 1958; Gold medal for the best work in oil, Calcutta: Fine Art Academy, 1960; Gold medal for the best work in Modern Art, Calcutta: Fine Art Academy, 1961; First Prize, Gujarat State Art Exhibition, Surat, 1962; National Award, Lalit Kala Academy, New Delhi, 1963; his paintings have been kept in U.S.A. and Switzerland among private collections; his one man shows: Bombay 1964; Ahmedabad, by State Lalit Kala Akademi, 1964; Lalit Kala Akademi, Delhi has his paintings in its collections. *Address*: Khatriwad, Behind Vaishya Sabha, Ahmedabad I.

**SAHAI, Mr. Justice Kamla**, M.A., B.L., Barrister-at-Law, Judge, High Court, Patna, since July 1953. *b.* Dec. 1, 1904; *Educ.*: Nalanda Collegiate School at Bihar Sharif, Banaras Hindu Univ., Patna Coll. and Patna Law Coll.; M.A., 1927, B.L., 1928, Patna Univ. Enrolled as an Advocate, 1928; called to the Bar from the Middle Temple, London, 1929. Started practice at the Patna High Court, Feb. 1930; part-time Lecturer, Patna Law Coll., 1936-43; Addl. Dist. & Sessions Judge, 1943-44; Dist. & Sessions Judge, 1944-53; Legal Remembrancer & Secy. to the Bihar Govt. in the Law Deptt., May-July 1953. *Address*: Off Fraser Road, Patna-1.

**SAHAY, Bhagwan**, B.Sc. (Allahabad), Padma Bhushan (1961), Governor of Jammu & Kashmir State, since May 15, 1967. *b.* Feb. 15, 1905; *Educ.*: Allahabad Univ.; School of Oriental Studies, London. Jt. Magistrate, U.P., 1929; Dy. Secy. to Govt., U.P., 1936-39; Supdt., Census Operations, 1939-41; Secy., Indian Council of Agr. Research, 1941-43; Jt. Secy., Govt. of India, 1944-45; Commr., Food & Civil Supplies, 1946-49; Chief Secy., U.P. Govt., 1949-51; Chief Commr.: Himachal Pradesh, 1951-52; Bhopal 1952-54; Indian Amb. to Nepal, 1954-59; Chief Commr., Delhi, 1959-63; Lt. Governor, Himachal Pradesh, 1963-65; Governor of Kerala, Feb. '66 to May '67. *Address*: Srinagar.

**SAHAY, Krishna Ballabh**, B.A. (Hons.), Ex-Chief Min., Bihar State. *b.* Dec. 31, 1898; *Educ.*: St. Columba's Coll., Hazaribagh; Patna Coll. and Patna Law Coll.; passed B.A. with distinction; awarded gold medal for being 1st in English Honours. Joined N.C. Movement, 1920; often courted jail for his political activities; Parly. Secy., Bihar Cabinet, 1937; Min. for Land Revenue, Bihar, 1946-57; piloted the Bihar Zamindari Abolition Bill, 1948; Min. for Co-op. & Plng., Bihar, 1962-63; elected Leader, Bihar Leg. Cong. Party, Sept. 24, 1963. *Address*: 155, Chhajubagh, Patna.

**SAHAY, Vishnu**, B.Sc. (Allahabad), I.C.S., Governor of Assam, since Sept. 7, 1962 & Governor of Nagaland, since Dec. 1, 1963. *b.* Nov. 22, 1901; *Educ.*: Allahabad & Oxford. Dy. Commr.; Registrar, Co-op. Soc.; Dir. of Agriculture, Uttar Pradesh; Dir.-Gen., Food; Secy., Min. of Food, 1947-49; Secy. for Kashmir Affairs; Secy., Union Min. of Food and Agriculture, 1951-53; Secy. for Kashmir Affairs and Labour Secy., 1953-57; Actg. Governor of Assam Nov. 1960-Jan. 11, 1961; Cabinet Secy., Govt. of India, 1958-62; member, Plng. Commn., 1962. *Address*: Raj Bhawan, Shillong (Assam).

**SAHNI, Balraj**, M.A., Film Actor, Writer (Punjabi). *b.* May 1, 1913; *Educ.*: Lahore. Taught at Shantiniketan, 1937-39; announcer at B.B.C., London, 1940-44; since 1944 has been working in films at Bombay; outstanding films, *Do Bigha Zamin*, *Seema*, *Kabuliwala*, *Haqeeqat*, *Waqt*, etc. *Publications*: a book of Hindi short stories, a travelogue on Pakistan. *Address*: Turner Royal Lane, Juhu, Bombay 54.

**SAIYIDAIN, Dr. Khwaja Ghulam**, B.A., M.Ed., Doctor of Letters (Honoris Causa), Aligarh, 1962, Padma Bhushan (1967), Dir., Asian Instt. of Educl. Plng. & Adm.; was Educl. Adv.; to the Govt. of India. *b.* Feb. 14, 1904; *Educ.*: Univ. of Aligarh and Leeds (England). Prof. of Educ., Aligarh Muslim Univ., 1926-38; Dir. of Educ., Kashmir Govt., 1938-45; Educl. Adv. to Rampur Govt., 1945-47, to Bombay Govt., 1947-50; Jt. Educl. Adv. to Govt. of India, 1950-61; Pres., Int'l New Educ. Fellowship, London, since 1956; Visiting Prof. and Sachs Memorial Lecturer at Columbia Univ.; Educl. Adv., Kashmir Govt., 1961-62; Visiting Prof. of Educ., Wisconsin Univ., U.S.A., 1963; Visiting Prof. of Educ., Stanford Univ., 1964; member, Indian Educ. Commn., 1964-66. *Publications*: (English and Urdu) *The School of the Future*; *Principles of Education*; *Iqbal's Educational Philosophy*; *Problems of Educational Reconstruction*; *Education for International Understanding*; *Education, Culture and the Social Order*; *Education of the National Character*; *Faith of An Educationist*; *Humanist Tradition in Indian Educational Thought*. *Address*: New Delhi.

**SAMBAMOORTHY, P.**, B.A., B.L., Fellow, Sangeet Natak Akademi (1964), Prof. of Musicology, S. V. Univ., Tirupati, since Nov. 1964. *b.* Feb. 14, 1901; *Educ.*: Christian Coll., Presidency Coll. and Law Coll., Madras; studied Western music, Munich Univ. and State Academy of Music, Munich, Germany. Lecturer in Indian Music, Queen Mary's Coll., Madras, 1928-37; joined the Deptt. of Indian Music, Univ. of Madras, Aug. 1937; retired as Reader and Head of the Dept. of Indian Music, Feb. 1961; Dir., Sangita Vidyalyaya, Madras, 1961-64. *Publications*: *Dictionary of South Indian Music and Musicians*; *South Indian Music Books 1-5*; *History of Indian Music*; *Aids to the Teaching of Music*; *Elements of Western Music for Students of Indian Music*; *Sruthi Vadyas*; *Laya Vadyas*. *Address*: Prof. of Musicology, Sri Venkateswara Univ., Tirupati; 116, Santhome High Road, Mylapore, Madras 4.

**SAMPURNANAND, Dr.**, B.Sc. (Alld.), L.T. (Allahabad), Ex-Governor of Rajasthan. *b.* Jan. 1, 1891; *Educ.*: Queen's College, Banaras; Training College, Allahabad. Headmaster, Dungar Coll., Bikaner, 1918-21; was Editor, *Today* (Eng. Daily now defunct) and *Maryada* (Hindi monthly); Professor, Kashi Vidyapith 1922; Member, A.I.C.C.; since 1922; thrice Secy., U.P.P.C.C.; Pres.; second All-India Socialist Conference, Bombay, 29th Hindi Sahitya Sammelan, Poona Session, 1940; Minister for Education, U.P. Govt., 1938-39; Education, Finance and Labour, U.P., 1946-51; Home and Labour, U.P., 1951-54; Chief Minister, U.P., Jan. 1955-Dec. 1960; resigned, Dec. 1960; Governor, Rajasthan, April 1962-May 1967. *Publications*: Thirty-five books in Hindi and Sanskrit on political, historical and philosophical subjects, and in English on Politics and Philosophy; received Mangala Prasad prize of Rs. 1,200 for his book 'Samajavada' (Socialism). *Address*: Jalpa Devi, Banaras.

**SAMSON, Rear Admiral Benjamin Abraham**, Mg. Dir., Mazagon Dock Ltd., since June 1, 1966. *b.* Sept. 25, 1916; *Educ.*: Trg. Ship "Dufferin". Dufferin Cadet, 1932-34; passed with distinction obtaining an extra 1st class certificate and winning the Viceroy's Gold Medal; served the Merchant Navy for 5 years; commissioned in the Royal Indian

Navy, 1939; was Indian Naval Adv. in the U.K.; Chief of Personnel, Naval Hq.; Commanding Officer, I.N.S. Delhi and Captain Supdt., Naval Dockyard, Bombay; promoted Rear Admiral and apptd. Commandant, N.D.A. Dec. 1958; completed a course at the Imperial Defence Coll., U.K., 1963; Flag Officer Commanding, Indian Fleet, 1964-66. *Address*: Mazagon Dock Ltd., Dockyard Road, Bombay 10.

**SANJIVAYYA, D.**, B.A., B.L., Ex-Minister for Industry, Govt. of India, *b.* Feb. 14, 1921; *Educ.*: B.A. Govt. Arts Coll., Anantapur; B.L. Madras Law Coll. Enrolled as an Advocate, 1950; joined the Congress; Cong. M.P. from the Madras Leg.; Cong. M.L.A. (Madras) from Kurnool Reserved Constituency, 1952; Min. for Co-op. and Housing, Govt. of Madras, 1952-54; Min. for Plng. Labour & Public Health, A.P., 1953-54; Min. for Transport, Taxes, Law & Coop., A.P., 1954-56; Min. for Coop., Social Welfare & Religious Endowments, A. P., 1956-60; Chief Min., 1960-62; Pres. Ind. Nat. Cong., 1962-63; Union Min. for Labour and Employment, 1964-66; Min. for Industry, Govt. of India, 1966-67; M.P. till 1967. *Address*: New Delhi.

**SANKALIA, Dr. Hasmukh Dhirajlal**, M.A., LL.B., Ph.D. (London), Prof. and Head of the Dept. of History and Jt. Dir., Deccan Coll. Post Graduate and Research Instt., Poona. *b.* Dec. 11, 1908; *Educ.*: Elphinstone High School; St. Xavier's Coll. and Law Coll., Bombay; Univ. Coll., London; Bhagwanlal Indraji Prizeman (1933), Silver Jubilee Medal, Bombay Branch, Royal Asiatic Soc. (1944). Conducted excavations and explorations in pre-history and early history relating to Gujarat, 1941-49; Maharashtra, 1945-60; Karnatak, 1949-56; Madhya Pradesh, 1952-66; Andhra, 1960, Mysore, 1964-65. *Publications*: *The University of Nalanda*; *The Godavari Palaeolithic Industry*; *From History to Pre-history of Nevasa*; *Indian Archeology Today*; *Pre-history and Proto-history in India and Pakistan* and *Stone Age Tools: Their Techniques and Probable Functions. An Introduction to Archeology* and 125 papers on Indian History, Epigraphy, Iconography and Pre-history. *Address*: Deccan College Research Institute, Poona 6.

**SANKAR, R.**, B.A., B.L., Ex-Chief Min., Kerala State. *b.* March 30, 1908; *Educ.*: B.A. Science Coll., Trivandrum; B.L., Law Coll., Trivandrum. Started practice at Quilon Dist. Court; joined the State Congress struggle, 1939; was imprisoned; Gen. Secy., State Cong., 1940-44; was Secy. and Pres., S.N.D.P. Yogam; nominated to the Franchise & Delimitation Cttee. in 1946 and Reforms Cttee. in 1947; elected to the Travancore Leg. Assembly, and to the Indian Constituent Assembly, 1948; was member, Travancore Devaswam Board; was Pres., K.P.C.C.; Dy. Chief Min., Kerala, 1960-62; Chief Min., Kerala, 1962-64. *Address*: Lakshminivas, Kunnukuzhi, Trivandrum.

**SANYAL, B. C.**, Painter, Sculptor; Ex-Prof. and Head of the Art Deptt., Delhi Polytechnic, 1952-61. *b.* April 22, 1904; *Educ.*: Calcutta Univ.; Govt. School of Art, Calcutta. Member, Central Board of H.S. Educ.; travelled extensively in Russia, Poland, Hungary etc. as leader of the Artists' delegation, 1955-58; visited: imp. art galleries, museums and institutes in U.S.A. under the leaders and specialists exchange programme of U.S.A. Govt., 1959; Canada on a lecture tour under the auspices of the Canadian Council for Co-op. with UNESCO, 1959; Netherlands to study Dutch painting and culture, 1959 and Nepal under the Colombo Plan to advise on art educ.; works represented in Art Museums in foreign countries and in India; Secy., Lalitkala Akademi. *Publications*: Articles on Art in journals, newspapers and for radio broadcast. *Address*: B-15, Nizamuddin East, New Delhi.



**SANYAL, Probodh Kumar**, Bengali Author, Playwright and Journalist. b. July 7, 1905; Educ.: Scottish Churches School & City Coll., Calcutta. Imprisoned during N.C. 1922; Associate Editor, *Jugantar*, 1937-41; travelled extensively in India, Burma, Tibet, Pakistan and Soviet Union; awarded first prize as the best scenario-writer, 1942-52; Pres., All-India Bengal Literary Conference, Agra, 1956, Burma 1957; Delegate, Afro-Asian Writers' Conference at Tashkent, 1958; member, Indian Cultural Delegation to Pakistan, 1957; Nepal, 1960; again visited U.S.S.R. on invitation by the Soviet Writers' Union Board, 1959; visited Germany, England & France on invitation by Govts. and Cultural organisations, 1962; travelled Austria, Switzerland and Italy; Founder-Pres., Calcutta Himalayan Association. *Publications*: 94 books comprising fiction, travels, dramas, anecdotes, etc.; *Mahaprasthan Pathe* and *Devatatma Himalaya* (forewords by Tagore and Jawaharlal Nehru). Address: 6, Ballygunge Terrace, Calcutta 19.

**SARABHAI, Ambalal**, Industrialist & Company Dir. b. Feb. 25, 1890; Educ.: Gujarat Coll., Ahmedabad. Joined business, 1908; Dir., Karamchand Premchand Ltd., Agents of Calico Mills; Dir.: Bank of India Ltd., Bombay; Bakubhai & Ambalal Ltd., London with branch in New York under the name of Sarabhai Agencies and of Kampala Gen. Agency (1942) Ltd., Kampala; was Pres. Ahmedabad Millowners' Assoc. and member Ahmedabad Municipality; awarded by the former British Govt. Kaiser-i-Hind Gold Medal which he returned on arrest of Mahatma Gandhi in 1930; widely travelled. Address: The Retreat, Shahibag, Ahmedabad.

**SARABHAI, Smt. Bharatidevi**, B.A. (Hons.) (Bom.) and (Oxon.), English and Gujarati Poet and Playwright and Theatre Organiser. b. July 31, 1912; Educ.: Home School, Bombay and Oxford Univ. Prof. of Indian Research and Culture, Post-Graduate Instt. (B.J. Instt. of Learning & Research, Ahmedabad); Principal, Shreya Coll., Gujarat Univ., 1955-61; Pres., Theatre Centre, India, affiliated to the I.T.I. of UNESCO, 1960; Hon. Secy., Gujarat Univ. Commn. (at first unofficial and then apptd. by the Govt.), 1945-47. *Publications*: *The Well of the People* (a poetic drama); *Two Women: Be Nari and Ghar Lakhoti* (in Gujarati). Address: Shahibag, Ahmedabad 4.

**SARABHAI, Dr. Vikram Ambalal**, M.A., Ph.D. (Cantab.), Physicist; Prof. of Cosmic Ray Physics, Dir., Physical Research Laboratory, Ahmedabad. Chairman, Atomic Energy Commn. of India; Secy., Atomic Energy Deptt., Govt. of India. b. Aug. 12, 1919; Educ. Gujarat Coll., Ahmedabad; St. John's Coll., Cambridge; Cavendish Laboratory. Did research for five years on cosmic radiation under Sir C. V. Raman, N. I., at the Indian Instt. of Sc., Bangalore; member: Nat. Ping. Council; Pughwash Continuing Cttee.; Governing Body of the Council of Scientific & Industrial Research (CSIR), & ICAR, New Delhi; Senate, Gujarat Univ.; Central Adv. Board of Educ. Union Min. of Educ.; Chairman: Indian National Cttee. for Space Research of the Dept. of Atomic Energy; Consultative Group on Potentially Harmful Effects of Space Experiments, set up by the Cttee. on Space Research; Dir.: Ahmedabad Textile Industry's Research Assoc., 1947-55; Indian Instt. of Management, 1962-65; Chairman and Dir. of Industrial concerns and banks. S.S. Bhatnagar Memorial Award for Physics, 1962; Padma Bhushan, 1966. *Publications*: Several publications in Physical Review, Nature, Physical Society of London, and Proceedings of the Indian Academy of Sciences. Proceedings of the Royal Soc. Journal of Geophysical Research, Astrophysical Journal etc. Address: "Chidambaram", Ahmedabad 13.

**SARAIYA, Ramanlal Gokaldas**, B.A., B.Sc., Padma Bhushan (1963), J.P., Cotton Merchant and Chairman, Narandas Rajaram & Co. Pvt. Ltd., Bombay, since 1961. b. Jan. 16, 1898; Educ.: B.A., B.Sc. (Bombay Univ.); took post-graduate course in Chem. Engg. in England and diploma of City and Guilds of London in oils, fats and in soap mfg.; Fellow of the Chemical Soc., London. Vice-Pres., Indian Central Cotton Cttee., 1947-52; Pres.: Indian Merchants' Chamber, 1950; F.I.C.C.I., 1953-54; often led the Indian Delegation to the Intn'l Cotton Adv. Cttee.; Chairman, 22nd plenary Session of I.C.A.C., Bangalore, 1963; Hon. Adv. to the Govt. of India on Export Promotion, Bombay; Chairman: Maharashtra State Road Transport Corpn.; Textile Cttee., New Std. Engg. Co. Ltd., etc.; Dir.: Central Board of the R.B.I., Hind Cycles Ltd., Tata Chemicals Ltd., etc.; member: Cotton Adv. Board, the Cttee. of the F.I.C.C.I., Indian Cotton Devpt. Council; R.B.I. Stg. Adv. Cttee. on Agricultural Credit etc. Address: Vasant Vihar, 85, Nepean Sea Road, Bombay 6.

**SARASWATHI BAI, Smt. C.**, Harikatha Performer. b. Dec. 15, 1898, in Gooty; Educ.: Madras; studied under Pandit Krishnachar of Tanjore; attained proficiency in Tamil, Telugu, Kanarese, Marathi Hindi and Sanskrit at a young age. Is one of the pioneers in Harikatha field with over 50 years of experience; toured all over India, and Far East; honoured by many Rajas and Nawabs of former States; conferred several awards, e.g. Kirtanapatu by Lokamanya B. G. Tilak at Poona, 1920; Sangita Ratna by Bharath Dharma Maha Mandal, Kasl, 1938; Sangita Kala Sikhamani, by Indian Fine Arts Society, Madras, 1956; honoured as the best exponent of Harikatha by the Tamiland Sangeetha Nataka Sangham, 1962; Fellow of the Sangitha Natak Academy, by the President of India, 1964. Address: 71, 7th Main Road, Raja Annamalaiapuram, Madras 28.

**SARKAR, Ranadhir Chandra Sarma**, M.A., LL.B. (Cal. Univ.), Gold medals, Prizes etc. from Cal. Univ. & won medals in many debating competitions, Member, Union Public Service Commn., since Jan. 31, 1966; Secy., Min. of Law (Leg. Deptt.), Govt. of India, 1960-66. b. Feb. 1, 1908; Educ.: City Coll. School, Scottish Churches Coll. and Presidency Coll., Calcutta. Lecturer in Economics, 1934; joined West Bengal Civil Service (Judicial) 1935 and served in various capacities; joined Union Min. of Law, 1949; Dy. Secy., 1949; Addl. Draftsman, 1950-55; Jt. Secy., 1955-60; Indian ref. at an Intn'l Cfee. held in Palermo (Italy) on constitution of new states; Editor, Calcutta Univ. Inst. Magazine. Address: 1, King Georges Avenue, New Delhi.

**SARMIENTO C., H. E. Mr. Eduardo**, Engr. (Lima Univ.), Amb. of the Republic of Peru in India, since 1964. b. Sept. 5, 1904; Educ.: Lima, Peru and The United States of North America; Univ. of Lima Engrs. and Univ. of Portland, Oregon, U.S.A. Vice-Consul of Peru in New York, U.S.A., 1930-32; Consul in Portland, Oregon, U.S.A., 1933-42; Consul Gen. in Africa, Chile, 1943; Chief of Deptt. Europe and Asia, Min. of Ext. Affairs in Lima, Peru, 1944; First Secy., Embassy of Peru, Mexico, 1945; Consul Gen. in: Amsterdam, Netherlands, 1946-48; Antwerp, Belgium, 1949-50; Dir. Min. of Ext. Affairs, Lima, Peru, 1951-62; Min. Plenipotentiary of Peru in India to initiate diplomatic relations, 1963. Address: Ashoka Hotel, New Delhi.

**SASTRI, B. S. Krishnamurthy**, Musician; Principal, Kalakshetra, Adyar, Madras. b. April 28, 1896; Educ.: Learnt vocal music under his father Sri Sethurama Sastri; took trg. in vocal music from Konerirajapuram Sri Vaidyanatha Iyer; learned gottuvadyam from Sri Muthia Bhagavathar; has been giving concerts continuously for the last 50 years; awarded by the President a

shawl, a gold *shrinkal* and a sanad in recognition of his service to the cause of instrumental music, 1958; Sangeet Kalanidhi Title conferred by Music Academy, Madras, on Jan. 1, 1964; Visiting Prof. Karnatic Coll., Madras. Address: 27, Urur, Adyar, Madras 20.

**SASTRI, Yajnaswami Mahalinga**, B.A. (History), M.A. (Sanskrit), B.L., Kavi Sarva-bhauma by H. H. Sri Kanchi Kamakoti Peethadhipati (1957), Kavi Sekhara by the Mylapore Sanskrit Academy (1957), Jnana Bhaskara by H. H. Swami Sivananda, 1958, Sanskrit Writer. b. July 31, 1897; Educ.: Finlay Coll., Mannargudi; Presidency Coll. and Law Coll., Madras; M.A. privately. Lawyer, 1920-34; Principal, Oriental Coll., Dharamaputram, 1946-55. *Publications*: Sanskrit (Prose, Poetry and Drama); *Bhasa-katha Sara*; *Kinkini Mala*; *Vyajokti Ratnavali*; *Vana Lata*, *Sringara Naradiyam* (Prah-sanam); *Pratiraja Suyam*; (Natakams), *Suti Pushpopahara Bharati*, *Vishada* (Poems); (Tamil). *Namonru Ninaikka*; *Mappillai Album*; English Journalist and Reviewer. Address: Sahitya Candra Sala, Tiruvallangadu, Via Narsingampet, Tanjore Dist., Madras State.

**SATHE, Dr. Ramchandra Vishwanath**, M.D., (Bombay), F.R.C.P. (Lond.), ex-Vice-Chancellor, Bombay Univ., 1963-66; Pres., Diabetic Assoc. of India; Hony. Dir. of Post-graduate Studies in Medicine and Emeritus Prof. of Medicine, Grant Medical Coll., Bombay; Consulting physician. b. Nov. 28, 1905; Educ.: Elphinstone High School, Elphinstone Coll. and Grant Medical Coll., Bombay; London; won several scholarships, J. J. Gold Medal for Clinical Medicine and Hewlett prize for Hygiene. Member: Medical Council of India and its Post-graduate Medical Educ. Cttee., Maharashtra (Bombay Area) Medical Council; Senate and Faculty of Medicine, Bombay Univ.; Health Survey & Ping. Cttee., Govt. of India; New York Academy of Scs.; Indian Medical Assoc. delegate, World Medical Educ. Cfee., Chicago and World Medical Assoc. Session, Montreal, 1959; Pres., Ind. Med. Assoc., 1962; World Medical Assoc., 1962-63; Dy. Pres., World Cfee. on Medical Educ., 1966. Address: Nagindas Mansion, Girgaum Road, Bombay 4.

**SATPATHY, Smt. Nandini**, M.A., Deputy Minister for Information and Broadcasting, Government of India, since Jan. 29, 1966. b. 1931. Educ.: Orissa. Is an author of short stories and essays in Oriya published in magazines and periodicals; has been a political and social worker; was Secy., Orissa Girl Students' Assoc. and Orissa Women's Relief Cttee.; was member, Orissa State Council for Educ. of Women and Girls; Convener, Women's Deptt., Utkal P.C.C., since 1960; M.P., Rajaya Sabha, 1962; was once associated with the Communist Party of India. Address: Ministry of Information and Broadcasting, New Delhi.

**SATWALEKAR, Madhav**, G.D. Arts, Artist. b. Aug. 13, 1916. Educ.: Completed Painting course in Sir J. J. School of Arts, Bombay; took G. D. Arts, 1936; later studied in Italy at Florence & at the Slade School, London. Since his return to India has had several exhibitions in Bombay & Delhi; spent a year in East Africa painting that country, 1949; has painted portraits of the Pres. & Vice-Pres. of India and others; visited Europe, 1963 to study new art trends & latest methods of art trg.; held exhibitions in Berlin and Zurich; Pres., Federation of Art Instts.; is Chairman of the Bombay Art Soc. Address: "Hasman", 89, Warden Road, Bombay 26.

**SATYAVANIMUTHU, Smt.**, Minister for Harijan Welfare and Information, Madras, since March 6, 1967. b. 1923; Educ.: St. Teresa's Convent, Ernakulam, Kerala; Govt. Secondary School, Egmore; is a homeopathic doctor; Exec. member, Dravida Kazhagam, 1943-49; is one of the founder members of D.M.K. when it splintered from its parent organisation in



1949; is a member, Exec. Cttee. and General Council, D.M.K.; took part in the anti-Hindi and anti-price rise and many other agitations by the party and courted imprisonment; is connected with a number of social welfare institutions and 'Magalir Mandram' (Women's Assoc.); has worked for the uplift of the Scheduled Castes; is Pres., Women's Wing of the Party; elected M.L.A., Madras from Perambur, 1957 and 1967. *Publications*: *A Sketch of the life of Joan of Arc*, in Tamil and many others. *Address*: Minister for Harijan Welfare and Information, Fort St. George, Madras 9.

**SAVANT, Parshuram Krishnarao, B.A., LL.B.**, Minister for Agriculture, Maharashtra State, since March 1967. *b.* June 8, 1908, at Mirya, Ratnagiri Dist.; *Educ.*: Ratnagiri and Bombay. Practised as a lawyer in Bombay till 1940; became a fulltime Congress worker, 1940; member, Bombay Municipal Corpn., 1939-46; Gen. Secy., Bombay Municipal Cong. Party; was Chairman, Markets and Gardens Cttee., was a member, B.P.C.C. and its Gen. Secy., for some time; was member, Bombay State Road Transport Corpn., Bombay, the Labour Welfare Board, etc.; elected M.L.A., Bombay, 1946; Parly. Secy., Bombay Govt., 1946-48; resigned to enter into the trade union movement; was connected with Rashtriya Mill Mazdoor Sangh, Bombay; INTUC and All India Textile Workers' Federation in various capacities; Adv., Workers' Delegation to the I.L.O., Geneva, 1954; is member: Exec. Cttee., Maharashtra Cong. Cttee.; A.I.C.C.; Min. for Agr., Maharashtra, 1960-62; Min. for Public Health, Maharashtra, March-Nov. 1962; Dy. leader, Cong. Leg. Party & Min. for Home, 1962-63; Min. for Agriculture, 1963-65; Min. for Agriculture, Food & Civil Supplies, Maharashtra, 1965-67; elected M.L.A., Maharashtra, 1962 & 1967. *Address*: Sachivalaya, Bombay 32.

**SEETHA DEVI, Smt. Vinjamuri, B.A., M.Litt., Musician**; Asst. Producer of Folk Music, A.I.R., Hyderabad. *b.* Dec. 2, 1926; *Educ.*: P. R. Coll., Kakinada; Madras Univ.; did research in folk music under Prof. P. Sambamurthy; M.Litt. degree of Madras Univ. after submitting thesis on "The Folk Music of Andhra Desa". Gives public performances in lyric and folk music in the country & from A.I.R.; has given records in H.M.V. and Columbia; a play-back singer for many Indian pictures; has given folk tunes to pictures in Telugu, Tamil and Hindi; has acted in Telugu and English dramas; has given radio talks; gave lyric and folk music concerts at Rashtrapathi Bhavan, 1953; UNESCO Seminar, New Delhi, 1950; inauguration of Andhra Pradesh at Hyderabad, 1956; inauguration of A.P. Sangeet Natak Akademi, Hyderabad, 1957, etc. *Publications*: Her thesis for M.Litt., *Folk Music of Andhra Desa*, under publication by the Sangeet Natak Akademi, New Delhi. *Address*: 32, Rama Street, T. Nagar, Madras 17.

**SEGAL, Mrs. Zohra, Eurythmics Diploma, Associate of Drama Board, B.D.L. (Lond.)**, Sangeet Natak Akademi Award for Acting (1963), Actress, B.B.C. Sound and Television. *b.* April 27, 1912; *Educ.*: Queen Mary's Coll., Lahore, Mary Wigman's School of Dance, Dresden. Danced in Uday Shankar's ballet in India, Malaya, Burma, Indonesia, Middle East, Europe and America, 1935-38; Organiser and Teacher, Uday Shankar's Culture Centre, Almora, 1938-43; Co-Dir., Zorah Dance Instt., Lahore, 1943-45; leading Actress and Dance Dir., Prithvi Theatre, Bombay, 1945-59; has also acted in and directed dances for 11 films; Vice-Pres., I.P.T.A., Bombay, 1949; Principal, Natya Academy, New Delhi; Dance Dir., Hindustani Theatre; Dance Critic, *Shankar's Weekly*, 1959-62; acted in nine television plays; invited by U.S.S.R., Germany and Czechoslovakia to lecture on Indian dance and drama, 1962; taught at Ramgopal's School of Dancing and appeared with him at Queen's Theatre, London. *Publications*: Articles in magazines. *Address*: 14, Lyndhurst Gardens, London, N.W. 3.

**SEHGAL, Amarnath, B.Sc., M.A. (Art. Ed.) (U.S.A.)**, Sculptor; Art Consultant to the Govt. of India, since May 1955. *b.* Feb. 5, 1922; *Educ.*: B.Sc. from Govt. Coll., Lahore, 1941; M.A. (Art. Ed.) from New York Univ., U.S.A., 1950. Held one man shows of sculptures in New York, 1950-51, Paris, 1952 and East Africa and India; won sculpture award for 1957; "To space unknown" a bronze, exhibited at P.M.'s house in honour of Yuri Gagarin, world's first cosmonaut; commissioned to decorate Vigyan Bhavan with sculpture relief, won President's award (gold plaque) of Lalit Kala Akademi for his sculpture 'Cries Unheard', 1958; 'Sculpture voices of Africa', presented to Dr. Nkrumah, P.M. of Ghana, 1959; 'A Cricketer' statue presented by Indian P.M. to Pakistani team, 1961; one man sculpture exhibition at Military Museum, Belgrade, 1964; Pauls Krishe Frankfurt/Main, West Germany, 1964; Museum of Modern Art, Paris, 1965; Haus Am Lutzoplatz, West Berlin, 1965. *Publications*: *Arts and Aesthetics*; *Organising Exhibitions in Rural Area*. *Address*: C/o Ministry of Community Development, Govt. of India, Krishi Bhavan, New Delhi.

**SEKSARIA, Kudila, Industrialist and Mill-owner. b.** 1928, in Bombay. Is the Chairman of several commercial and industrial concerns, namely, Govindram Brothers Pvt. Ltd.; The Indore Malwa United Mills Ltd., Seksaria Sugar Mills Pvt. Ltd., etc.; liberally donates to and runs many charitable and educ. instts. e.g. Commerce & Science Colls., Tech. Instts. under Shri Govindram Seksaria Charity Trust, of which he is the Chairman; is interested in philosophy and has been supporting publications and research on Hindu religion and culture. *Address*: 74, Marine Drive, Bombay.

**SEMA, Hokishe, Minister for Finance and Revenue, Nagaland, since March 1967. b.** March 6, 1921 in Mokokchung Dist.; *Educ.*: Matriculation from Mokokchung Govt. High School, 1947; Intermediate Arts from Serampore Coll., West Bengal, 1949; B.A. from St. Anthony Coll., Shillong, Gauhati Univ., 1956; Pres., Sema Students' Union, 1942-52; Sub-Inspector of Schools for Sema and Lotha Tribes, 1952-55; Political Asstt. to Dy. Commissioner, 1956-58; Asstt. Commissioner, 1958; about 1,000 hostiles with 200 rifles surrendered due to his persuasion; Pres., Sema Public Organisation, 1958-60; member, Select Cttee. and Drafting Cttee., Naga People's Convention; elected member, Interim Body, Nagaland, 1961 from Sema area and subsequently elected to the Assembly, Nagaland in 1963; Min. for Finance and P.W.D., Nagaland, 1963-67. *Address*: Kohima.

**SEN, Asoke Kumar, M.P., Ex-Minister for Law, Govt. of India. b.** Oct. 10, 1913. Joined the revolutionary movement in Bengal at the age of 14; is a member, Satirtha Sangha; was under police surveillance, 1931-35; M.A., 1st class in Economics, 1935; M.Sc. in Economics from London School of Economics, 1939; was called to the Bar from Grays Inn, 1941; while in England, joined the India League. Enrolled as Advocate, Calcutta High Court, 1941; Junior Stg. Counsel to the West Bengal Govt., 1950-56; India's delegate to the 10th Assembly of the U.N., 1955; was Editor, *Calcutta Law Journal*; Congress M.P. from Calcutta North West Constituency, 1957; Union Min. for Law, 1958-66; led the U.N. Ctee. on the Paw of the Sea in Geneva, 1958, 1960; leader, Indian Delegation to the U.N. Seminar on human rights held in Tokyo 1960; visited Hungary, Czechoslovakia and Nigeria; visited Egypt and Ghana, Dec. 1962 to present India's case on the question of Sino-Indian border dispute; visited in Oct. 1965, Ghana & Latin American countries to explain India's case on the Indo-Pak conflict of Sept. 1965; rep. of the Indian Prime Minister at the Commonwealth P.M.'s Cfee., Lagos, Jan. 1966; Author of Handbook of Commercial Law; has started Samaj Seva Samities in West Bengal. *Address*: 9, Raisina Road, New Delhi.

**SEN, Binay Ranjan, (Hon.) LL.D.; St. Francis Xavier Univ., Canada & Dublin Univ.; Dir.-Gen., Food and Agriculture Org. of the United Nations, since Nov. 1956. b.** Jan. 1, 1898; *Educ.*: Calcutta and Oxford Univs. Dir. of Civil Evacuation, Bengal, 1942-43; Relief Commr., 1942-43; Dir.-Gen., Food, Govt. of India, 1943-46; Secy. to the Govt. of India, Dept. of Food, 1946; Min. to the Embassy of India in the U.S.A., 1947-50; Indian Amb. to Italy and Yugoslavia, 1950-51 and 1953-54; Indian Amb. to the U.S.A., 1951-52; Member, Indian Delegation to the Gen. Assembly of U.N., 1947; Agr. Secy. to the Govt. of India, 1948; Head of Jt. Mission of F.A.O. and E.C.A.F.E. in the Far East to study agrl. devpt. plans; Head of the Indian Delegation to: E.C.O.S.O.C. (Eco. and Social Council of the U.N.), 1949 and 1953; Annual Cfee. of the F.A.O., 1949 and F.A.O. Council, 1950, '51, '53; Indian Amb. to Japan, 1955-56. *Address*: F.A.O., Rome, Italy.

**SEN, Boshi (Basiswar), B.Sc. (Calcutta), Padma Bhushan (1957), Wattumull Award for Agriculture, 1962. Fellow, A.A.A.S., Ind. Bot. Soc., N.A.S.I., Scientist; Dir., Vivekananda Laboratory, Almora. b.** Nov. 1887; *Educ.*: Calcutta Univ.; research with Sir J. C. Bose, Bose Instt., Calcutta; London Univ.; Strangeways Lab., Cambridge; Marine Biological Lab., Plymouth and New York Univ., New York. Joined J. C. Bose for research, 1911; accompanied him in his world lecture tour as a Spl. Asstt., 1914-15; visited Univs. in Japan, U.S.A. and England, 1923-24; founded the Vivekananda Laboratory in Calcutta for research in Gen. Physiology; joined the short course of Peaceful Uses of Atomic Energy at Oak Ridge, U.S.A., 1955 and attended the First Internl. Cfee. in Geneva; Member: Am. Bot. Soc.; Am. Soc. of Agro. and Crop Sci.; Am. Soc. of Pl. Physiology; Farady Soc.; Physiol. Soc. of G. B.; Pres., Indian Soc. of Pl. Physiol. for 1961. *Publications*: Several scientific papers in Indian, British and American Journals. *Address*: Kundan House, Almora, U.P.

**SEN, Mihir Kumar, B.Sc., LL.B., Barrister-at-Law, Associate Fellow, Br. Inter-Planetary Soc., Padma Shri, Padma Bhushan (1967), Swimmer. b.** Nov. 16, 1930, at Purulia (West Bengal); *Educ.*: Ravenshaw Collegiate School and Ravenshaw Coll., Cuttack, called to the Bar from Lincoln's Inn, Nov. 1954. Set up practice at Calcutta High Court, May 1956; first ever Indian to attempt and swim the English Channel from Dover to Calais on 26th/27th Sept. 1958, with a time of 14 hours 45 minutes, then the fourth fastest in this direction; First Indian to swim the Palk Strait, a distance of 22 miles between India and Ceylon in 25 hrs. 36 mi/5/6 April, 1966; swam the Dardanelles Straits a distance of about 40 miles in 23 hours and 55 minutes, Sept. 12, 1966; swam across the Bosphorus Straits a distance of 14.5 miles without stopping, Sept. 21, 1966; completed his Panama Canal swim covering between 41 and 42 miles in 35½ hours, Oct. 31, 1966; founder, Explorers' Club of India, Calcutta. *Address*: Calcutta.

**SEN, Nikhil Ranjan, D.Sc. (Cal.), Dr. Phil. (Berlin), F.N.I., Scientist. b.** May 23, 1894 at Dacca; *Educ.*: Govt. Schools at Dacca, Rajshahi; M.Sc. from Presidency Coll., Calcutta, 1916; Munich and Berlin Univs. Appointed Post-graduate Lecturer in Applied Math., Calcutta, 1917; studied in Germany and France, 1921-24; Pres., Calcutta Mathematical Society, 1935-57; member, National Cttee. for India, International Mathematical Union; Prof., Applied Maths., Calcutta Univ., 1922-59. *Publications*: Original contributions in Indian and foreign journals on cosmology and theory of turbulence. *Address*: 58A, Block D, New Alipore, Calcutta 53.

**SEN, Paritosh, Diploma from Madras School of Art, Painter; Senior Lecturer for Typography, Design & Layout, School of Printing Technology, Calcutta, since 1956. b.** Oct. 18,



1919; Educ.: Madras School of Art; Paris. Art Master, Duly Coll., Indore, 1943-49; practised as a painter in Paris, 1949-56; exhibited in London and Brussels; Senior Art Master, Bihar Govt.'s New Public School in Neterhat, 1954-56; visited Europe on a study tour; held exhibitions in London. Address: 162 39, Lake Gardens, Calcutta-45.

**SEN, Prafulla Chandra**, Ex-Chief Minister, West Bengal; b. 1897, Sahasbad Dist., Bihar; Educ.: Sasaram, Buxar and Deoghar; B.Sc., the Scottish Church Coll., Calcutta; was articled to a firm of Incorporated Accountants. Joined the Non-co-op. Movement and went to Hooghly Dist. as a teacher, Hooghly Vidyamandir; took a leading part in the mass Civil Disobedience movements in 1930, 1932 and 1942 in Arambagh Sub-divn. of Hooghly Dist.; courted jail several times; worked for Dwarakeswar flood relief in Arambagh, 1932; started Khadi centres in many villages of Arambagh and settled there; Congress M.L.A., West Bengal, from Khanakul Constituency, 1962-67; Chief Min., West Bengal, 1962-67; visited Japan, 1964. Publications: *Purpose & Perspective: New Dimensions: From there to New Horizons*. Address: Calcutta.

**SEN, Dr. Sachin, M.A., B.L., Ph.D.**, Editor, *The Indian Nation* (daily), Patna and former President, All-India Newspaper Editors' Conference; Life member, Patna Univ. Senate. b. Nov. 1902; Educ.: Dacca and Calcutta. Some time Asstt. Secy., British Indian Assoc., Calcutta, and Lecturer, Vidyasagar Coll., Commerce Deptt.; acted as Secy. to Sir P. C. Mitter during the 2nd Round Table Conference in London, 1931; made extensive study tours in the U.S.A., Germany and Japan after the Second World War. Publications: *The Political Thought of Tagore*; *An Introduction to Science of Economics*; *Studies in the Land Economics of Bengal*; *The Birth of Pakistan*; *The Press and Democracy*, etc. Address: *The Indian Nation* Office, Patna.

**SEN, Sali Chandra, B.Sc. (Engg.) (Hons.)** (Glasgow), Principal, Delhi Coll. of Engg. (formerly Delhi Polytechnic), since 1949. b. April 12, 1899; Educ.: Presidency Coll., Calcutta; B.Sc. (Engg.) (Hons.) from Glasgow Univ., 1922; Asstt. Engr., Calcutta Mills, Ahmedabad, 1935-39; Chief Engr., Dhakeswari Cotton Mills, Narayanganj, Dist. Dacca, 1939-41; Vice-Principal, Delhi Polytechnic, Delhi, 1941-49. Address: Kashmere Gate, Delhi 6.

**SEN, H.E. Mr. Samar, B.A. (Osl.), B.Sc. (Lond.), I.C.S., Kaiser-i-Hind (1948)**, Padma Shri (1957), High Commissioner to Pakistan, since Sept. 1966; b. Aug. 10, 1914; Educ.: Bengal, London & Oxford. Entered I.C.S., 1938; held several posts in Bengal, 1939-46; selected for Indian Political Service, 1946; Under-Secy., Dept. of Ext. Affairs, Govt. of India; Liaison Officer, Govt. of India to the U.N., New York, 1948-49; Dy. Secy., Min. of Ext. Affairs and Commonwealth Relations; Head of Chancery, High Comm. of India in London; Dy. Secy., (Ext. Affairs) in charge of Ext. Publicity, 1951-53; Consul Gen. in Switzerland (Geneva) and Indian Rep. to the Int'l Org. at Geneva, 1953-55; Chairman, Int'l Comm., I.C.S., 1955-57; Joint Secy. Min. of Ext. Affairs, 1957-59; High Comm. in Australia and New Zealand, 1959-62; Amb. to Algeria, 1962-64; Amb. to Jordan, Kuwait & Lebanon & High Commissioner to U.N., 1964-66. Address: Min. of External Affairs, Govt. of India, New Delhi.

**SEN, Dr. Samar Ranjan, Ph.D. (Dacca), Ph.D. (London)**, Addl. Secy., Ping. Comm. & July 2, 1916; Educ.: Calcutta Univ., 1935-37; Dacca Univ., 1937-39; London Univ., 1943-47. Took part in Independence Movement, 1932 & 1942; Leader, Indian Agri. Delegation to U.S.S.R., 1944; Chairman, Cttee. on Community Problems, and Tech.

Cttee. on Economics of F.A.O., 1956; Dir., F.A.O. Farm Management Centre, 1957; Chairman, Jute Inv. Cttee., 1957; ECAFE-FAO Expert Group on Agri. Plug, 1960; Pres., All-India Agri. Economics Ctee., 1958-59; Vice-Pres., Indian Soc. of Agri. Statistics; Delegate, U.N. Ctee. on Sci. and Tech., 1963 and U.N. Ctee. on Trade & Devpt., 1964; Chairman, Sugar Enq. Comm., 1965; member, Adv. Cttee., UNCTAD; Board of Trade, 1966; Eco. & Statistical Adv., Govt. of India, 1960-68. Publications: *Economics of Sir James Stuart*; *Employment and Money*; *The Strategy for Agricultural Development*, etc. Address: 12, Mathura Road, New Delhi 1.

**SEN, Mr. Justice Sudhanshu Bhushan, M.A., LL.B.**, Judge, High Court, Madhya Pradesh, Indore, since April 1959. b. Benda-Kalia (Pah.), Oct. 1, 1910; Educ.: Zilla School, Khulna Govt. Coll. Krishnagar, Scottish Church Coll., Calcutta; M.A., Morris Coll., Nagpur; LL.B., Nagpur Univ. Started practice in Nagpur; LL.B. from Nagpur Univ. Started practice in Nagpur, 1936; enrolled as an Advocate, Nagpur High Court, 1939; Public Prosecutor, Nagpur, 1952-55; Govt. Advocate, High Court, Nagpur, 1955; transferred to the High Court at Jabalpur in the same capacity, and served in that capacity till 1959. Address: High Court, Indore.

**SEN, Sukumar, M.A., Ph.D., F.A.S., J.P.**, Writer; member, Sahitya Akademi; was Khaira Prof. of Indian Linguistics and Phonetics, Calcutta Univ. b. 1900; Educ.: Burdwan and Calcutta. Author of several works on Sanskrit and Prakrit Philology and on history of Bengali literature and of Indian literature (from the Vedas upto Avasthathal). Publications: *History of Bengali Literature*, 1935; *Comparative Grammar of Middle Indo-Aryan*, 1960; *History of Bengali Literature*, 1960; in Bengali: *History of Bengali Literature* (in five volumes), etc. Address: 403, Grand Trunk Road, Burdwan.

**SENGUPTA, Monoranjan, B.Sc. (Cal.), B.Sc. (Eng.) First Class (Hons.) Glas., C.P.E. (Glas.), M.I.E.E. (Lond.), M.I. Mech. E. (Lond.), M.I.E. (Ind.), F.I.P.S. (Ind.), M. Brit. I.R.E. (Lond.), F.R.S.A. (Lond.), F.N.I. (Ind.)**, Prof. and Head of the Dept. of Electrical Engg. & Principal, Engg. Coll., Banaras Hindu Univ.; Principal, Industrial Trg. Centre, Directorate of Trg. and Employment, b. June 23, 1903, at Rangpur, Bengal; Educ.: Ananda Mohan Coll., Mymensingh; Rajshahi Coll., Bengal; Glasgow Univ. Member: Mech. & Elec. Engg. Research Cttee.; CSIR; Sds. Inst.; member, Educ. Panel of the Ping. Comm.; member, W. Bengal State Film Board, etc. Publications: Several scientific papers; *Statistics for Engineering Production in India*; *Utilization of Photo Electric Tubes in Industry*; *Modern Trigonometry*; *Training of Post-graduate Engineers*; *Design and Performance of High-gain Amplifier*. Address: Banaras.

**SEN, Dr. Triguna, Dr. Ing. (Munich), M.I.E. (Ind.)**, Padma Bhushan (1966), Minister for Education, Govt. of India, since March 13, 1967; b. Dec. 24, 1905, at Sylhet Dist., Bengal; Calcutta and Germany; took a M.M.E. from Bengal Engg. Coll.; was a Doctor Annand's scholar, 1925-27; was teacher, Jadavpur Engg. Coll.; became Reader, Jadavpur Univ.; participated in India's freedom struggle; courted jail, returned from Bengal under the notorious Bengal Regulation Act; was manager of an engineering firm in Calcutta; Bengal, 1946-48; Principal, Jadavpur Engg. Coll., 1944-55; Mayor of Calcutta, 1955; Reader, Jadavpur Univ., 1955-59; Vice-Chancellor, 1960-67; has been a Director, State Bank of India; member, Education Commission and Senate, Calcutta and Banaras Univs.; visited America, Europe and Germany, 1959; France, 1960; elected Pres., Assoc. of Principals of Technical Institutions (India), 1961 and 1962; Pres., Institution of Engineers

(India), 1963 and 1964; elected Pres., Inter-Univ. Board of India, 1963; has been connected with Calcutta, Gauhati and Roorkee Univs., A.I.C.T.E., Planning Commission and the Central Advisory Board of Education; elected M.P. (Rajya Sabha), April 67. Address: Minister for Education, Govt. of India, New Delhi.

**SENOUPTA, N. K., B.Sc. (Engg.), M.I.E. (India), M.I.T.E., Mg. Dir., Hindustan Cables Ltd., since 1960**, b. Nov. 1, 1912; Educ.: St. Stephen's Coll., Delhi; Banaras Hindu Univ. Joined Tata Iron & Steel Co., 1936; with A.I.R., 1937-38; Asstt. Dy. Engr. (Telegraphs), P. & T. Deptt., 1938; held various assignments in the P. & T. Deptt.; took Controller of Telegraph Stores, Coll. of Telegraph Workshops, Chief Controller, Telegraph Stores Workshops, Dir. of Telegraphs, Mg., Telegraph Workshops, Bombay, etc.; Gen. Mgr., Indian Telephone Industries, Bangalore, 1953-58; Postmaster-Gen., Ambala and Gen. Mgr., Telephones, Bombay Telephone Dist., 1958-60. Address: P.O. Hindustan Cables, Dist. Burdwan (West Bengal).

**SEN GUPTA, Dr. Sudhir Ranjan, B.Sc., (Eng.) & Ph.D. (Glasgow Univ.)**, Dir., Indian Inst. of Tech., Kharagpur. b. Feb. 27, 1907; Educ.: India and England. Lecturer and later Prof., Bengal Coll., Howrah; Dy. Educ. Adv. (Tech.) to Govt. of India, Min. of Educ., New Delhi; Principal, Bengal Engg. Coll., Howrah; visited U.K., France, Germany, Switzerland, Italy, U.S.A. & U.S.S.R. Address: Indian Institute of Technology, Kharagpur, W. Bengal; Res.: 15/1, Dover Rd., Calcutta 19.

**SESHADRI, Thiruvankata Rajendra, M.A. (Madras), Ph.D. (Manc.), D.Sc. (h.c.), F.R.I.C., F.A. Sc., F.N.I., F.R.S., Padma Bhushan (1963)**, member, German Academy of Natural Scientists, Scientist; Prof. and Head of the Chemistry Deptt., Delhi Univ., since 1949. b. Feb. 3, 1900; Educ.: Srirangam, Tiruchirappalli; Presidency Coll., Madras; Univ. of Manchester; Univ. Coll., London; Medical Chemistry Laboratory, Graz, Austria; Deptt. of Medical Chemistry, Univ. of Edinburgh. Soil Chemist, Agri. Research Inst., Coimbatore, 1936-38; Reader and later Prof. and Head of the Deptt. of Chemistry, Andhra Univ., 1938-49. Publications: Over 700 original papers in Chemistry; a book on Chemistry of Vitamins & Hormones. Address: 29, Probyn Road, Delhi University, Delhi 7.

**SETALVAD, Motilal Chimanlal, B.A., LL.B., Padma Bhushan (26 January 1967)**, Hon. Doctor of Laws (B.H.U.) (1967), b. Nov. 12, 1884; Educ.: Nipitstone Coll., Bombay. Enrolled as Advocate, Bombay High Court, 1911; Advocate-General, Bombay, 1937-42; member: Indian Delegation to the U.N. General Assembly, 1947 and 1949; Kashmir Delegation to Security Council, 1948; Leader of the Delegation to U.N. General Assembly, 1949; Principal Representative of India for the Kashmir question at the Security Council, 1950; Chairman, Law Commission, 1955-58; Leader of the Delegation to the first, second, third, fourth and fifth sessions of the Asian-African Legal Consultative Comm., 1957-62 and 1963, presented India's case before the World Court at the Hague regarding dispute with Portugal on the right of passage through Indian territory claimed by that country; delivered Hanlyn lectures in London, India; Chief Justice in Jerusalem, 1963; Pres., Bar Assoc. of India, Corresponding member, London Cttee., The British Council and the British Institute of International Law and Comparative Law; Attorney-General of India, 1960-62; Member of Parliament, (Rajya Sabha), India. Publications: *Legal Education*, *Common Law in India*. Address: 1, Jantar Mantar Road, New Delhi.

**SETHI, Dr. Narendra Kumar, A.M. (Agra & Calcutta), M.F.A. (New York), Ph.D. (New York), M.B.A.S., M.B.H., Sahitya Akademi, Visiting, etc.**, Writer, poet, prof., radio-artist, management consultant and Asstt. Prof.



of Business Management, Long Island Univ. Coll. of Business Admin., Brooklyn, New York and Instructor, The New School of Social Research, New York. Associate Prof. of Management, St. John's Univ., New York. b. July 12, 1923. *Educ.*: Mhow, Indore, Ujjain, Calcutta, London and New York. *Pres.*, Mhow Jain Community Mandal 1953-54; member, Poetry Soc. of America, New York, 1952; broadcast talks and poetry over A.I.R., B.B.C. (London), W.B.V.D. (New York), W.O.R. (New York) and W.B.A.I. (New York); Research Asst. at New York Univ., 1951-52; Chief Sales Mgr., Hindustan Aluminium Corpn. Ltd., U.P., 1954-55; lectured at various univs. and social orgs. in India, and abroad; Dir., India Soc. tre., New York. *Publications*: *The World is Split* (1951); *Sharda Ki Chhaina*; *The Descent of Word* (1951); *Bibliography of Indian Management*; *Song-Lines of a Day* and many articles, manuscripts etc. on religion, practical, industrial, commercial, scientific and other subjects. *Address*: Semolina, Tukoganj, Indore; Long Island Univ., Brooklyn, New York.

**SETHI, Prakash Chandra, B.A., LL.B.**, Minister of State for Steel, Mines & Metals, Govt. of India, since March 67. b. Oct. 19, 1926; *Educ.*: Holkar Coll., Indore; Madhav Coll., Ujjain. Congress worker since 1942; Vice-Pres., Madhya Bharat I.S.T.U.C. till 1950; member, A.I.C.C., 1951; was member, M. B. Prov. Cong. Exec. for many years; was its Treasurer for some time; Pres., Ujjain Dist. Cong. thence, 1951-55; Pres., Ujjain Municipality, 1950; M.P., Rajya Sabha, 1951; member, Eng. Ctee. appd. by A.I.C.C. to go into the question of bogus membership in Bihar, 1953; was a Zonal Rep. of A.I.C.C. in the former Bombay State, 1955; widely travelled abroad; Union Dy. Min. for Steel & Heavy Engg., 1952-54; Union Dy. Min. for Steel & Mines, 1954-56; Dy. Min. for Iron & Steel, Govt. of India, Jan. 55-Mar. '57. *Address*: Anup Bhawan, Madhav Nagar, Ujjain (M.P.); 7, Safdarjung, New Delhi.

**SETHNA, Homi Nusserwanji, B.Sc. (Chemistry & Physics) (Bomb.), B.Sc. (Tech.) (Chemical Engg.) (Bomb.), M.S.E. (Chem. Engg.) (Michigan)**, Padma Shri (1959), Bharati Swarup Bhattacharya Memorial Award (1959), Padma Bhushan (1966). Dir., Engg. Group, Bhabha Atomic Research Centre; Officiating Dir., Bhabha Atomic Research Centre, Trombay, since Feb. 15, 1956; also member, Atomic Energy Commn. in charge of research and depts. b. Aug. 24, 1923; *Educ.*: St. Xavier's School and Coll., Bombay, Dept. of Chemical Tech., Bombay Univ.; Univ. of Michigan (U.S.A.). Has been responsible for the designing and construction of the plutonium plant at Trombay, the first in Asia for reprocessing irradiated fuel elements and one of the first in the world; Project Mgr. (India) for the Canada India Reactor; was responsible for the construction and commissioning of the rare earth plant at Alwaye (Kerala) and the thorium and uranium metal plants at Trombay; is member, Scientific Adv. Ctee. to the Union Cabinet; Dy. Secy-General, Second U.N. Int'l Ctee. on the peaceful uses of atomic energy, Geneva, 1955. *Address*: Bhabha Atomic Research Centre, Old Yacht Club, Apollo Pier Road, Bombay 1.

**SETHNA, Dr. Minocher Jehangirji, Ph.D. (Bomb.)**, Philosopher, Jurist, Writer, Prof. and Counsel; founder and Pres., Indian School of Synthetic Jurisprudence. b. Nov. 1, 1911; *Educ.*: Wilson Coll., Bombay Univ. and at Middle Temple, London. Is Prof. Bombay Univ.; a keen writer and a scholar who has dedicated his life to writing philosophical and legal research; founded the Indian School of Synthetic Jurisprudence, the first of its kind in India July 21, 1956. *Publications*: *Society and the Criminal*; *A Standard Text Book on Jurisprudence*; *A Standard Text Book on Indian Company Law*; *A Standard Text Book on Indian Mercantile Law*; *Civil Wrongs and Their Legal Remedies*; and some

philosophical writings. *Address*: Sethna House, 251, Tardeo Road, Bombay.

**SHAH, Mr. Justice Jeyantil Chhotelal, LL.B., Judge, Supreme Court, since Oct. 12, 1956. b. Jan. 22, 1904; Educ.: Gujarat Coll. and Elphinstone Coll., Bombay. Practised at Ahmedabad Dist. Court and at Bombay High Court; Advocate (G.S.); Chairman, Food Processing Eng. Commn., appd. by the Govt. of India to investigate the causes of food poisoning in Kerala State; Judge, Bombay High Court till Oct. 1956; Chairman, Punjab Commn., 1955. *Address*: 11, Tagore Road, New Delhi.**

**SHAH, K. K., B.A. LL.B.**, Minister for Information and Broadcasting, Govt. of India, since March 13 1957. b. Oct. 15, 1906 at Goragani, Dist., Kolaba; *Educ.*: Gujarat Coll. and New Poona Coll. Started his career as a teacher, Poddar High School, Siona Cruz, Bombay; practised Law, 1934; actively participated in the National Movement and courted jail; was General-Secy., R.P.C.C., for many years; the Vice-Pres. 1954-55, Pres. 1957-59; General-Secy., AICC, 1942-43; played a significant role in the merger of the former Baroda State in Bombay; appointed Legal Adviser to the Maharaja of Baroda, 1944; was member, Bombay Municipal Corporation, for many years; M.L.A., Bombay, 1952; elected to the Rajya Sabha, 1955-1960; has been closely connected with numerous educational, social and cultural organisations like the Senates of the Bombay and Baroda Univs., Bombay State Finance Relief Ctee., etc.; was Pres., Indo-Arab Society and the British Bharatiya Samaj; Chairman, International Forum and the Textile Commission; Gen-Secy., Central Citizens' Council since 1946; Pres. Federation of Class I Employees of the L.I.C. and Oil India Officers' Assn.; has widely travelled in Europe, America and Japan; was leader, Indian delegation to the Conference for Economic Sanctions against South Africa, London, 1954; visited Khen Kharo sector in 1955 at the time of Indo-Pak conflict and took personal interest in the rehabilitation of refugees. *Address*: Minister for Information and Broadcasting, Govt. of India, New Delhi.

**SHAH, Kastoor Mal, Industrialist, Jaipur**; Partner: Shah & Co., Jaipur; Shah Brothers, Jaipur & Bombay; Shah Agro-Chemicals, Jaipur & Shri Mahaveer's Gen. Export Co., Jaipur & Calcutta; Dir.: Shah Bagga (P) Ltd., Jhotwara, Jaipur; Rajasthan Hotel Corp. Ltd., Jaipur; Jaipur Mineral Devpt. Sys. Pvt. Ltd., Jaipur; Vice-Pres.: Urban Coop. Bank Ltd. Jaipur; Chairman: Federation of Assocn. of Small Industries Rajasthan; Member: Federation of Assocn. S.N.I. India; Rajasthan State Sports Council, Jaipur; Rajasthan State Electricity Cooperative Council, Jaipur; Urban Improvement Trust, Jaipur; Board of Rajasthan Industrial Estates (allotment of sheds) Jaipur; Industrial Area Mfr. Assocn., Jhotwara, Jaipur. *Address*: Shah Bldg., Chaura Rasta, Jaipur.

**SHAH, M. L., J.P.**, Prominent business man and industrialist of Calcutta; Commr. for the Port of Calcutta & Assn. 1946. Partner in the firm of Mz. Agents for The Mohini Mills Ltd. Nos. 1 and 2 and Channal Vaidal & Co.; was thence Pres., I.C.C. and Bengal Millowners' Assn., Cal. (a Pres. Ind. Soc. for Quality Control); Dir. of many jute, tea and iron in Cal.; Ex-Pres., A.I.M.O.; Comm. Member: F.I.C.C. & I.; Cotton Adv. Board; Ind. Cotton Mills Federation; Central All-India Cotton, Housing Department, State Implementation & Evaluation Ctee., etc. Ind. Nat. Ctee.; Int'l Chamber of Commerce, New Delhi Regional Comm.; West Bengal (Employees' Provident Fund), Cal.; Pres., All India Textile Assocn. (Cal. Branch); member: Cotton Textile Export Promotion Council, Bombay; All-India Board of Tech. Studies in Textile Tech., New Delhi; Fin. Comm. of the Ind. Red Cross Soc., West Bengal State Branch. *Address*: 22, Canning Street, Calcutta.

**SHAH, Manubhai Mansukhlal, B.Sc. (Hons.), B.Sc. (Tech.)**, Ex-Min. of Commerce, Government of India. b. Nov. 1, 1915; *Educ.*: Baroda Coll., Baroda; Inst. of Science, Bombay. Served in high tech. and admin. posts in the Delhi Ckvt. & General Mills Co. for over 12 years. Min. for Fin. Govt. of Baroda, 1944-54; Union Min. of Commerce, 1944-55; Industry, 1954-55; Union Min. of Int'l Trade, April, 1952-June, 1954. *Address*: C/o. 1, Taghik Road, New Delhi.

**SHAH, Kum. Meena, M.A.**, a leading badminton player. b. Jan. 31, 1937; *Educ.*: Had a brilliant academic career; M.A., Lucknow Univ., 1954; Diploma in German, 1952. Rep. of U.P. in badminton, 1954-55; won All India Women's doubles title, 1955 and All India mixed doubles title, 1955; awarded Lucknow Univ. Gold Star as best sportsman of the year, 1957; joined the Railways, 1959; a rep. of the Railways in All-India Nat. Championships and other major tournaments; ranked India's No. 1, 1957, National Championships, 1958-59; Vice-Captain, Indian Uter Cup team which played inter championships in England, Canada & the U.S.A.; Captain of the team which won the Uter cup tournament defeating the teams of Hong Kong & Japan, 1962 and New Zealand, 1965; awarded the Arjuna Award (the first Indian Woman to get this award, 1965; won the Indian Rupa award, 1965; Captain: Jt. Indian team which toured Europe and the U.A.R., 1965; Indian Uter Cup team, 1966. *Address*: No. 5, Kaiserbagh, Lucknow.

**SHAH, Shantilal Harjivan, B.A., LL.B.**, M.P. (Lok Sabha), Ex-Min. for Public Health, Law & Judiciary, Maharashtra State, Secy., b. July 29, 1904; *Educ.*: Gujarat Coll., Ahmedabad; Elphinstone Coll., Bombay. Congress worker in the Bombay Suburban Dist.; courted imprisonment, 1937-42; member, Bombay Leg. Assembly; Partner, Messrs. Bhambhani Kanga and Co. Chartered Solicitors, Bombay; Min. for Labour and Public Health, Bombay Govt. till 1954; Min. for Educ. and Law, Bombay Govt., 1954-57; Min. for Labour and Law, Bombay State, 1957 & 1960; Min. for Law, Judiciary and Labour, Maharashtra, 1960-62; Min. for Educ., 1962-63; Min. for Public Health, Law & Judiciary, Dec. 1963-Aug. 1964. *Address*: Secretariat, Lok Sabha, New Delhi.

**SHAH, Shantilal Ranchhoddas, B.A. (Hons.)**, Minister for Labour, Social Welfare, Prohibition and Excise, Rehabilitation and Housing, Gujarat, since March 1957 & April 25, 1954; *Educ.*: Netaji and Bhambhani took prominent part in labour welfare activities; elected to the Ahmedabad Municipal Corp., 1951; has been actively associated with the Gujarat State Finance Corp., Central Prohibition Advisory Ctee., Minimum Wages Enquiry Ctee., Labour Advisory Ctee., etc.; has travelled extensively in many countries as a representative of labour; participated in the Trade of Edinburgh Conf. held by the I.L.O.; also studied labour movements in W. Germany, France, Netherlands and other countries; elected to the Gujarat Vidhan Sabha from the Radhial (Ahmedabad) Constituency, 1957. *Address*: Sachivalaya, Ahmedabad 15.

**SHAMSUDDIN, Kwaqa, Ex-Prime Minister, Jammu and Kashmir State. b. 1922, Anantnag; Educ.: Passed Intermediate while in jail, 1947; graduated in Law, 1953. Started off as a petition writer in the early fifties; participated in the Quit Kashmir movement which aimed at complete democratization of Kashmir, and courted jail, 1949; elected to the State Assembly, 1957; appointed Minister for Agriculture, Jammu and Kashmir, 1957; is connected with co-operative banks and Muslim educational religious trusts in Anantnag; unanimously elected leader of the State Legislature National Conference Party to succeed Bakshi Ghulam Mohammed, Oct. 10, 1963. *Address*: Srinagar.**



**SHANKAR, Ravi**, Presidential Award (1962), Padma Bhushan (1967), Musician. b. April 7, 1920; Educ.: Learned music & dancing; began his career in the company of Uday Shankar; travelled extensively in India & abroad; left dancing & devoted himself to sitar with Ustad Allaadin Khan; founder of National Orchestra; Dir. of Music, A.I.R. 1949-55; invited with artistes of western music to participate in the 10th Anniversary celebration of the U.N. & UNESCO's music festival in Paris, 1958; first Indian musician to write music for foreign films; toured U.S.A. & gave 41 concerts, 1961; and 55 in 1964; wrote & conducted orchestral music for a ballet set to Nehru's *Discovery of India*; has written scores for films that won the President's award: *Pathar Panchali*, *Apar Sansar*, *Kabuliwallah* and *Anuradha*, 1961; presented *Melody & Rhythm* in Bombay, 1962 & *Nana Rana Banga*, 1964; opened the Kinnara School of Music, 1962; won coveted Silver Bear for score and Venice Festival Award; taught Sitar to George Harrison of the Beatles, 1966. *Publications*: *Book of Music Memory*; various articles on music and musicians. *Address*: 6, Pavlova, Little Gibbs Road, Bombay 6.

**SHANKAR, Vidya, M.A.**, I.C.S., Secretary, Ministry of Defence, since May 1967, member, Administrative Reforms Commn. b. Nov. 10, 1909 at Partabgarh (Oudh); *Educ.*: Partabgarh; D. A. V. Coll., Kanpur; Univ. School of Arts, Allahabad and St. John's Coll., Oxford. Appointed to I.C.S., 1933; was Asstt. Collector in Western India, 1933-39; with Bombay Govt., 1939-41; Under-Secy. to the Govt. of India, Home Dept., 1941-43; Dy. Secy., 1943-46; Pvt. Secy. to the Home Member, 1946-47; Pvt. Secy. to the Dy. Prime Min., Aug. 1947-50; Jt. Secy.: Min. of States, 1948-52; Min. of Defence, 1952-54; Collr. of Banaskantha, 1954-55; Secy. to the Bombay Govt., Revenue Dept., 1955-58; Dir.-Gen., Post and Telegraphs, 1958-60; Spl. Secy., Min. of Food and Agr., 1960-62; Vice-Pres., I.C.A.R., New Delhi; Secy., Dept. of Food, Ministry of Food & Agriculture, 1962-64; Secy., Deptt. of Aviation, Ministry of Transport, Aviation, Shipping and Tourism, Govt. of India, also Chairman, I.A.C., 1964-67; Vice-Pres., Council of International Civil Aviation Org., 1965-67. *Address*: New Delhi.

**SHANTARAM, V.**, leading Film Producer, Dir., & Actor. b. Nov. 13, 1901; *Educ.*: Kolhapur. Associated with film industry from 1920; founder member, Prabhat Film Co., Poona; has so far produced and directed over 60 pictures, the first in 1926; is considered one of the best dirs. in the world; recipient of National & Int'l Awards for best picture, best direction, best techniques, etc.; was Chief Producer, Govt. Films Dvn.; was member, Censor Board, Film Adv. Board, etc.; 'Shakuntala' produced and directed by him was the first Indian picture commercially released in the U.S.A.; his film "Two Eyes Twelve Hands" won the "Gold Bear" of the Int'l Film Festival, Berlin, The Hollywood Foreign Press Samuel Goldwyn Award for the "Best Picture" and a plaque by the Catholic Film Bureau, Brussels for the "best human document." *Address*: Rajkamal Kalamandir (Pvt.) Ltd., Parel, Bombay 12.

**SHANTILAL, MANGALDAS, B.A.** (Bom.), Mg. Dir., The Jehangir Vakil Mills Co. Ltd., Ahmedabad; Chairman, Gujarat Steel Tubes Ltd. b. 1901. Mg. Dir., New Jehangir Vakil Mills Co., Ltd., Bhavnagar, Navjivan Mills Pvt. Ltd., Kalo (N.G.); Dir. of many other concerns; Pres., F.I.C.C. & I., New Delhi, 1955-56; Pres., Ahmedabad Millowners' Assoc., 1946; Member, Senate of the Bombay Univ., 1928-43; attended the Textile Cttee. meetings of the Int'l Labour Org. at Brussels, 1946 and at Geneva, 1948 as Employers' rep.; takes interest in social work and edne. *Address*: Near Police Lines, Shah-i-Bag, Ahmedabad.

**SHARMA, Benudhar**, Sahitya Akademi Award (1960), Assamese Writer. b. Nov. 15, 1894, at Charing, Sibsagar, Assam; *Educ.*: Charing; Sibsagar Govt. High School, Rangabasi Coll., Calcutta. Joined Non-Coop. Movement, 1920; courted imprisonment; left Congress, 1937; presided over the Silver Jubilee Session of Assam Sahitya Sabha at Dhubri, 1956; is a historian, biographer and short story writer; has widely travelled in India. *Publications*: Assamese; *A Short Sketch of Khan Abdul Gaffar Khan*; *Rangapata*; *Gangagovind Phukan*; *Maniram Dewan*; *Durrin*; *Bangamur Non-jahar Apadaya Karmu*; *Kamrupar Kanciguli Roidat* (1959)—won Sahitya Akademi Award; *Lalanani*; *Dunari*; *Arghyavali*. *Address*: Rehabari, Gauhati.

**SHARMA, Bhagwat Dayal, M.A.**, Ex-Chief Minister, Haryana State, Nov. 1, 1966-67. b. at Beri, Dt. Rohtak, Jan. 26, 1917; *Educ.*: Schooling at Beri; M.A. degree from Banaras Hindu Univ. Entered politics while a student; courted jail in the individual satyagraha, 1941 and in the Quit India Movement, 1942-46; joined as a teacher, Birla High School, Pilsani, 1946; organised labour union at Jagadhari; elected Pres., the Punjab, Himachal Pradesh and Jammu & Kashmir regional unit of the I.N.T.U.C., 1955; toured abroad four times to study the trade union movement; was elected to the Punjab Vidhan Sabha on Congress ticket, 1962; Minister, Punjab, 1962; elected Pres., Punjab P.C.C., 1963; became Pres., Haryana P.C.C., Aug. 1966. *Address*: Chandigarh.

**SHARMA, Dr. B. N. K., M.A.**, Ph.D., 'Vidyabhushana' (1940), 'Shastraakshi' (1964), Sahitya Akademi Award for Research in Sanskrit, 1963, Sanskrit Scholar; Prof. & Head of the Depts. of Sanskrit & Ardhamagadhi, Ruparel Coll., Bombay, since 1953. b. June 9, 1909. *Educ.*: Kumbakonam & Presidency Coll., Madras. Lecturer in Sanskrit, Annamalai Univ., 1931-41; Principal, Sanskrit Colls., Tiruvaiyaru, 1941-49 and Udupi, 1950-51; Vishveshvarananda Vedic Research Instt., Punjab, 1951; Principal, Kanara Coll., Kumta, 1952-53; Prof., K. E. Board's Coll., Dharwar, 1953; Apptd. Editor of a volume of the *Encyclopaedia of Indian Philosophy*, projected by the American Instt. of Indian Studies, Poona. *Publications*: Papers: Nearly 100 papers on many aspects of Sanskrit studies published in Oriental Journals from 1930 to date. *Calcuttatri Bhaskya*; *Sratantrodvasta*; *A History of Devanāgarī Script of Vedānta & Its Literature*, Volume I & II, *Philosophy of Sri Madhvacharya*. *Address*: 4/2, Sha Building, Bhagat Gully, Bombay 16.

**SHARMA, Narendra, M.A.** (Allahabad), Hindi Poet; Programmes Producer, All India Radio, since 1953. b. Feb. 23, 1913; *Educ.*: Khurja and Allahabad; M.A. in 1936. Entered journalism as sub-editor in "Abhyudaya", Hindi Weekly, Allahabad, 1934 and "Bharat", Hindi Daily, Allahabad, 1937; In-charge, Hindi Section, A.I.C.C. Secretariat, Swarni Bhawan, 1938-40; Editor, "Rasopbh", Hindi Monthly (Alid.); Lecturer, Kashividyapith; detained without trial, 1941-42; Lyric-Writer, Bombay Talkies, 1943-47; Freelancer. *Publications*: *Shool-Phool*; *Karn-Phool*; *Prabhat-Pheri*; *Pravasi Ke Ged*; *Mitti Aur Phool*; *Kamini*; *Honemala*; *Rakt Chandan*; *Agni-Shasya*; *Kodali-Van* and *Palash-Van* (collections of verses); *Karavi-Mitki Beaten* and other short stories (collection of stories). *Address*: All India Radio, Parliament Street, New Delhi.

**SHARMA, Ram Bilas, M.A.**, Ph.D. (Lucknow), Hindi writer; Prof. and Head of the Deptt. of English, B. R. Coll., Agra, since 1943. b. Jan. 16, 1912, in Unnao Dist., U.P.; *Educ.*: M.A. in English Literature, 1934 and Doctorate, Lucknow Univ., 1940. Lecturer in English, Lucknow Univ., 1938-43. *Publications*: English; *Introduction to English Romantic Poetry*; *Studies in Nineteenth Century English Poetry*; Hindi: Several Critical Studies—

*Premchand aur unka Yuga*; *Bharatendu Yuga*; *Nirala*; *Sar Saltanat Ki Iqbalism*; *Khasha aur Samaj*, etc.; Poems: *Jaapa-Taranga*. *Address*: 30, New Rajmoudi, Agra.

**SHARMA, Dr. Shanker Dayal, M.A., LL.M.**, Bar-at-Law, D.P.A. (Lond.), F.R.A.S. (Lond.), Ph.D. (Cantab.), Minister for Commerce & Industry, Madhya Pradesh, since Nov. 30, 1964. b. Aug. 1918; *Educ.*: Allahabad, Lucknow and Cambridge Univ.; Brandeis Fellow of Harvard Law School, U.S.A.; Fellow of the Academy of International Law at Hague, Holland; Lecturer, Law Faculty, Cambridge Univ.; Lecturer and Reader in Law, Lucknow Univ.; Editor-in-Chief, Lucknow Univ. Union Journal; Editor, Lucknow Law Journal; Chief Minister, Bhopal; Min. for Education, Law & P.W.D., M.P. till Sept. 1963, Minister for Edu. & Languages, 1963-64. *Publications*: Published literary and legal articles in Indian and foreign periodicals. *Address*: Bhopal.

**SHARMA, Udit Narain, M.A.**, LL.B., Minister for Revenue, Security and Relief and Rehabilitation, Uttar Pradesh, since April 1967. b. 1908 at Ludere; *Educ.*: Early education at Jabalpur; graduated from Banaras Hindu Univ., 1929; M.A. and Law Degrees from Agra Univ., 1936. Joined the Bar at Hamirpur; courted arrest in the freedom movement; left the Congress Party with Acharya Narendra Deo and joined the P.S.P., 1934; Pres., State Unit of the P.S.P., 1958-64; joined the Congress Party again, 1964; elected to the State Assembly from Jhansi on Congress ticket, 1967; joined the Jan Congress, April 1967. *Address*: Minister for Revenue, Uttar Pradesh, Lucknow.

**SHASTRI, Pandit Hiralal, Sahitya Shastri**, B.A., Pres., Banasthali Vidyapith, b. Nov. 24, 1899; *Educ.*: Maharaja's Coll., Jaipur. Secy., Foreign and Home Dept. Council of State, Jaipur; founded Jiwankutir for village uplift; following the death of his daughter, founded Banasthali Vidyapith, national instt. for gen. educ.; Gen. Secy. and Pres., Jaipur Rajya Prajamaandal; Gen. Secy., All India States Peoples' Ctee.; member: Constituent Assembly of India; Provisional Parliament of India; first popular Chief Min., Jaipur State and then Rajasthan State; Editor, "Jawan Sandesh," Hindi Weekly; Founded Navajivan Kutir, Jaipur for gen. educ. of the people; Founder of "Lokvani," Hindi Daily, M.P., Lok Sabha from Savai-Madhwa, 1957-62. *Publications*: *Geet-Pachchisi*, *Narmadan Karyakram*. *Address*: Banasthali Vidyapith, Rajasthan.

**SHASTRI, Smt. Ratan, Social Worker**; Upadhyaksha, Banasthali Vidyapith (Rajasthan). Founded, together with her husband, Banasthali Vidyapith, national instt. for women's educ., following the death of their daughter, 1935; directed Jaipur Satyagraha, 1938; Regional Rep., Kasturba Memorial Trust; member: State Social Welfare Board, Jaipur; Kutir, Navajivan Kutir, Matri Mandir, Mahavidyalaya and Lokvani Soc.; State Board Adv. Board, State Educ. Grants Cttee., Dist. Cttee., Gandhi Memorial Trust; the first person in Rajasthan to be awarded Padma Shri for distinguished services in field of soc. 1955. *Address*: P.O. Banasthali Vidyapith (Rajasthan).

**SHELAT, Mr. Justice J. M., M.A.** (Lond.), Bar-at-Law, Judge, Supreme Court of India, since March 1966. b. July 16, 1908; *Educ.*: Jharkhand Inst., Umreth (Dist. Kaira); B.A. (Hons.) in English literature, Elphinstone Coll., Bombay, 1928; B.A., London Univ.; M.A. by thesis on the "Creation of the Senate" in the U.S. Constitution; called to the Bar (Inner Temple, London), 1933. Started practice in Bombay High Court, 1933; Judge, City Civil Court and Addl. Sessions Judge, Greater Bombay, 1948-54; Principal Judge and Sessions Judge,



1954-57; Addl. Judge, Bombay High Court, Jan. 1957-Nov. 1957; Judge, Bombay High Court, 1957-60; Judge, Gujarat High Court, 1960-62; Chief Justice, Gujarat State, 1963-66; member of Jury for Nehru Prize for Inter-Understanding. *Publications*: *Akbar*; *Trial of Gandhi*; a contributor to *Munshi*, *His Art and Work*. Address: 7, Tagore Lane, New Delhi.

**SHINDE, Amasahib Pandurang, B.A., LL.B.**, Minister of State for Food, Agriculture, Community Devpt. & Co-op., Govt. of India, since March 1967. b. Jan. 21, 1922 at Nasik. Educ.: Law Colls., Poona and Ahmedabad. Went underground and courted imprisonment, 1942-44; was a legal practitioner till May 1962. M.P., Lok Sabha from Kopergaon, 1962; has organised and is associated with many Co-op. Instts like the Pravara Agri. and Industrial Co-op. Soc. at Pravaranagar; member, Mg. Cttee: All India Co-op. Sugar Factories Federation, New Delhi; Maharashtra Co-op. Union; organised Arts, Commerce and Soc. Colls. at Shrirampur and Sangamner; is connected with Sir David Sassoon Trust, Chairman, Federation of Co-op. Sugar Factories, Maharashtra State, 1960-62; Parly. Secy., Union Min. of Food & Agr., 1962-64; Community Devpt. & Co-op., 1964-65; Dy. Min. for Food & Agr., Comm. Devpt. & Co-op., Jan. 66-March 1967; member, Parly. Goodwill Mission to S.E. Asia on Indo-Pak conflict. Address: 9, Raisina Road, New Delhi.

**SHIRWADKAR, V. V. alias Kusumagraja, B.A. (Bom.), Marathi Author and Editor**; Managing Editor, *Kumar* (monthly) for Children. b. Feb. 27, 1912; Educ.: Nasik; B.A. from Bombay, 1934. Worked on the editorial staff of several Marathi journals in Bombay and Poona; Pres., Maharashtra Sahitya Sammelan, Marjona, Goa, 1964. *Publications*: Published the first book of poetry, 1933; and collection of poems 'VISHAKHA', 1944; several volumes of poetry, drama and fiction, noteworthy among them being *Poetries*; *Kinara*, *Samskha*, *Marathi Math*, *Avagat*, *Humaresha*; *Novels*: *Janhavi*, *Footgear*; *Stories*: *Sahariche bel*; *Plays*: *Dusara Peshawa*, *Kuntleya*, *Durache Dice*; *Adaptations*: *Vaijayanit*; *Translations*: Kalidasa's *Meghadoot* and Shakespeare's *Macbeth* and *Othello*; edited school text books. Address: Shivaji Road, Nasik.

**SHIVESHWARKAR, Sadanand Waman, B.Sc. (Bom.), M.A. (Cantab.), M.B.E. (1945)**, I.C.S., Addl. Member (Vigilance), Railway Board. b. March 1, 1912; Educ.: Sawantwadi; Ferguson Coll., Poona; Sydney Sussex Coll., Cambridge; awarded Praiz., Moody's Thackersey scholarship for B.Sc., 1932; Mathematical Tripos at Cambridge Univ. and declared star wrangler, 1932-34; awarded Rafter Prize and Sheepshanks Exhibition, Cambridge Univ.; elected Fellow, Royal Astronomical Soc. of London. Entered I.C.S., 1935; held many posts in the State and Central Govts. as Under Secy., Dy. Secy., Textile Commr., etc., 1935-47; Admtr., Junnarath State, 1947-49; Chief Secy., Hyderabad Govt., till 1951; Chief Secy., Rajasthan Govt., 1951-53; Excise Commr., U.P., 1953-54; Commr., Banaras Div., 1954-57; Commr., Lucknow Div., 1957-60; Chief Settlement Commr. and Custodian Gen. of Evacuee Properties, 1960-62; Jt. Secy., Min. of Food & Agr., 1962-64. *Publications*: *Stellar Dynamic and Galactic Rotation* (1943). Address: Rail Bhavan, New Delhi.

**SHRIMALI, Dr. Kulu Lal, M.A. (Philosophy and Psychology), Ph.D., M.P., Vice-Chancellor**, Mysore Univ., since March 16, 1964. b. Dec. 30, 1909; Educ.: Banaras Hindu Univ.; Calcutta Univ.; Columbia Univ., New York. Headmaster, Varva Bhawan, 1931-42; Principal, Vidya Bhawan Teachers' Coll., 1942-54; member, Secondary Educ. Commn., Indian Govt., 1953; Convener, Rural Higher Educ. Cttee., 1954; Parly. Secy. to the Union Min. for

Educ.; Union Dy. Min. for Educ., 1955-57 and Min. of State in the Union Min. of Educ. and Scientific Research, 1957-58; Union Min. of Educ., 1958-63; resigned under the Kamaraj Plan, Aug. 1963. *Publications*: *The Wardha Scheme*; *Adventures in Education*; *Education in Changing India*; Hindi: *Buchon Ki Kuch Samasyayen*; *Shiksha Aur Bhartiye Loktantra*. Address: Mysore University, Mysore.

**SHRINAGESH, General Satyavant Mallanah, Ex-Governor of Mysore, 1964-65. b. May 11, 1903; Educ.**: Public School in England; Cambridge Univ. and Sandhurst. Was commissioned in 1923; officiated as Brigade Commander, 64 Indian Infantry Brigade of the 19th Indian (Dagger) Divn. in Burma, Aug. 1945; selected to go to Germany as Dy. Chief of the Indian Military Mission, Nov. 1945; worked as Economic Adv. and Counsel, Commandant, Kumaon Regimental Center, 1946; commanded 258 Indian Infantry Brigade, Japan, Jan. 1947; was promoted Major-Gen. and apptd. G.O.C., Madras Area, Sept. 1947; Adjutant-Gen., A.H.Q., India, 1948; over-all command of Indian Forces in Jammu and Kashmir, Sept. 1948; G.O.C.-in-C. Western Command, 1948-53; Southern Command, 1953-55; awarded the Legion of Merit (Degree of Commander) at Washington, Sept. 2, 1955; Chief of the Army Staff, Indian Army, 1955-57; Principal Administrative Staff Coll. of India, Hyderabad, 1957-59; Governor of Assam, 1959-62; A.P., 1962-64; Mysore, 1964-65. Address: 12 A, Friends Colony, New Delhi.

**SHRIVASTAVA, Nirmal Chandra, B.Sc., I.C.S., Secy., Govt. of India, Min. of Mines and Metals, since Dec. 1966. b. Sept. 1, 1913; Educ.**: Patwardhan High School and Nagpur Univ.; School of Oriental Studies, London. Joined I.C.S., 1936; Posts held: Asstt. Commr. and Under Secy., C.P. and Berar Govt. upto Feb. 1942; Under Secy., Dy. Secy. and Dy. Gen. of Recruitment and Employment, Union Dept. of Labour till Aug. 1947; Dy. Secy., Chief Settlement Commr., Chief Claims Commr. and Jt. Secy., Union Min. of Rehab. upto 1957; Gen. Mgr., Bhilai Steel Plant, 1957-61; Adv. (Industry and Minerals), Ping. Commn., 1961-63. Address: 34, Prithviraj Road, New Delhi-11.

**SHRIVASTAVA, Mr. Justice Shivdayal Parmeshwardayal, B.Sc., LL.B., Judge**, High Court, M.P., since Nov. 2, 1958. b. Feb. 28, 1915; Educ.: Gwalior and Agra. Started practice, 1938; enrolled Advocate, 1939; Deputy Govt. Advocate, 1943-55; Professor of Law (Part Time), 1945-53; Member and Vice-Pres., Municipal Cttee., Gwalior, 1945-47; Member (Independent), M. B. Leg. Assembly, 1948-49; Pres., Rotary Club, 1952-53. *Publications*: *Shrivastava's Law Dictionary* (English-Hindi); and *Law Digests*. Address: Parmeshwar Bhawan, Meer; Ram Ashram, 575, South Civil Lines, Jabalpur.

**SHROFF, Kaikhashira Ruttanji P., Padma Bhushan (1967), Ex-Pres., Stock Exchange**, Bombay. b. July 27, 1879; Educ.: Elmhurst New High School and Byramjee Jeejeebhoy Coll. of Commerce. Pres., Stock Exchange, Bombay, May 1923-March 1966; Patron, April 1966; recipient of Silver Jubilee and Coronation Medals. *Publications*: *Elementary Arithmetic and Algebra for P.E. Students*. Address: Sunshine, Churchgate Reclamation, Bombay.

**SHUKLA, Kishorilal, M.A., LL.B., Minister for Food and Civil Supplies, Madhya Pradesh, since March 1967. b. July 4, 1906; Educ.**: Rajnandgaon, Allahabad, Nagpur; B.A. in 1923; M.A. (Econ.) in 1930, occupying second position in the Univ. and LL.B. in 1931 from Nagpur Univ. Practised as Advocate till 1939; joined Bengal Nagpur Cotton Mills Ltd., Rajnandgaon as Labour Welfare Officer, Dec. 1939; left the service while working as Manager, 1955; founded Digvijay Mahavidyalay, Rajnandgaon, 1957; became its Hon.

Founder Member; was Dean, Faculty of Law and member, Excc. Council, East Bikaner Univ., Rajpur, elected Pres., Municipal Comm., Rajnandgaon, 1965; elected M.L.A., Madhya Pradesh, Feb. 1967. Address: Food Minister, Madhya Pradesh, Bhopal.

**SHUKLA, Shambhunath, B.A., LL.B., Min.** for Irrigation, Madhya Pradesh, since Mar. 1967. b. 1903; Educ.: Allahabad Univ. Entered politics during the Indian March, 1932; imprisoned for participating in the 'Quit India' movement; released, 1944; Food and Civil Supplies Min. and later Fin. Min., Rewa State, 1947; nominated M.P. by the Governor-General, 1949; elected M.L.A., Madhya Pradesh, 1952; Founder Editor, *Bhaskar*, Hindi Weekly of Rewa, 1945; was Gen. Secy., V.P.C.C.; its Pres.; organised and managed kh. d. work; M.L.A., M.P.; unanimously elected leader of the Congress Party in the State Assembly and was Chief Min. till Oct. 31, 1958; Min. for Forests, Natural Resources, Co-op., P.W.D. and Educ. M.P., 1958-63; M.L.A., M.P., since 1967; Min. of Finance, M.P. Oct. 1966-Feb. 1967. Address: Bhopal, Madhya Pradesh.

**SHUKLA, Vidya Charan, Minister of State for Home Affairs, Govt. of India since March 1967. b. in Raipur, Aug. 2, 1927; Educ.**: Morris Coll. & Univ. Coll. of Law, Nagpur. As a student, was member of the National Council of the Students Cong., 1946 & Secy., Nagpur Univ. Union, 1956. M.P., Mahasamund Const. of Raipur Dist. since 1957; rep. the Indian Party Group in the meeting of the Commonwealth Parly. Assn. held at Singapore, 1964; Indian Rep. at the Afro-Asian Summit Cttee. at Algiers, 1965; was at the Cttee. of O.A.U. as an observer in Oct. 1966 at Addis; was a member of the Estimates Cttee., 1960-62 and Sec. Cttee. on Administrative Reforms; Dy. Min. for Parly. Affairs & Communications, Jan.-Feb. 1966, member, Cttee. on Media Policy of the Min. of I. & B., which has been examining the future develop. and working of the information media in India; has often visited countries of Africa, America & Europe. Dy. Min. for Home Affairs, 1966-67. Address: Ministry of Home Affairs, New Delhi.

**SHUKLA, Yagneshwar Kalyanji, G.D.Art., Diploma, Royal Academy of Fine Arts, Rome, Artist. b. Sept. 10, 1907; Educ.**: Sir J. J. School of Art, Bombay, 1934; Diploma from Academy of Fine Arts, Rome, 1939; diploma in Painting, 1964. Awarded gold medal of the Poona Fine Art Society, 1934; exhibited in the exhibitions of Modern Indian Art and the Artists of the British Empire Overseas in London, 1934 and 1938; was Inspector of Drawing & Craft Work, Gujarat State; exhibited his works in Italy, Paris, Japan and London; represented in the Prince of Wales Museum, Bombay; National Gallery of Modern Art, India, Late Kala Akademi, Delhi; Picture Gallery and Museum, Baroda; member, National Academy of Art, India. Address: Old Malabar's Bungalow, Ansal Road, Vile Parle (West), Bombay.

**SIDDHARTHACHARRY, H. E., Venkata, M.A., B.A. (Bom.), Civil, Ambassador of India to Congo and Gabon, since Sept. 1965. b. Feb. 12, 1909; Educ.**: English Coll., Jabore, India; Malaya & Magdalen Coll., Oxford, U.K. Head of English Faculty, Delhi S. Dharma Dasa, 1941-44; Head of Eastern Sec., Information Min. Office, 1945-48; I.P.S. from May 1948; Brussels; Priv. Sec. to Sec.-Gen. (India), 1951; First Secy., Colombo, 1951-54; First Secy., Peking 1954-55; Consul Gen. Shanghai, 1956-60; Spl. Officer (Genl), Bombay, 1959-60; Counsellor, London, 1961-62; Counsellor, Bonn, 1962-63; Consul-Gen. Frankfurt/M., 1963-65. Address: C/o Ministry of External Affairs, New Delhi; Temple Road, Mysore.

**SIDDIQI, Muhammad Zabyr, H.A. (Punjab), M.A., B.L. (Patna), Ph.D. (Cambridge)**, first Sir Asutosh Prof. of Islamic Culture,



Calcutta Univ., 1929-1961. *b.* 1896; *Educ.*: Madrasa Aliya of Rampur (U.P.); Oriental Coll., Lahore; Bihar National Coll., Patna; King's Coll., Cambridge. Member, Senate and Syndicate, Calcutta Univ., 15 years Fellow and elected Vice-Pres., Asiatic Soc. of Cal., six years; Hon. member, Islamic Research Soc. of Bombay, Pres., Arabic, Persian, Urdu and Islamic Culture Sect., All India Oriental Cfses., Nagpur, Hyderabad and Darbhanga; awarded certificate and robe of honour by the President of India, 1958. *Publications*: Critical Edition of *Firdausul-Hikmat* of al-Tabari, Berlin 1928 and *Tarikh Nama-i-Harat* of Sayfi, Cal. 1944; *Al-Sayrul-Hathith fi Tadwinil-Hadith*; *Studies in Arabic and Persian*; *Hadith Literature, its Origin, Development and Special Features*, 1961. *Address*: P. 6, Suhrawardy Avenue, Calcutta 17.

**SIKRI, Mr. Justice Sarv Mittra**, Bar-at-Law, Judge, Supreme Court of India. *b.* April 26, 1908. *Educ.*: B.A. (Cantab); Bar-at-Law (Lincoln's Inn). Started practice, Lahore High Court, 1930; Asstt. Advocate-Gen., Punjab, 1949; Advocate-Gen., Punjab, 1951-64; Judge, Supreme Court of India, 1964; Alternate Rep. of the U.N. Cttee. on Codification and Devpt. of Int'l Law, 1947; Legal Adv., Min. of Irrigation and Power, 1949; Member: Int'l Law Assoc. Cttee. on Int'l Rivers, 1955; Indian Law Commn., 1955-58; Indian Delegation to Law of the Sea Cfee., Geneva, 1958; Delegate to World Peace Through Law Cfses., Tokyo, 1961; Athens 1963; Accra Assembly, Accra, Ghana, 1962; Member, Exec. Cttee. and Governing Council, Indian Law Instt.; Indian Commn. of Jurists; Indian Branch of Int'l Law Assoc.; Trustee, Sir Ganga Ram Hospital, 1956. *Address*: 2, Teen Murti Marg, New Delhi.

**SILAM, Sayaji Laxman, B.A., LL.B.**, Lieut.-Governor, Pondicherry. *b.* May 18, 1896; *Educ.*: Wilson Coll. and Govt. Law Coll., Bombay. Gen. Secy., Bombay P.C.C., 1946-49; Vice-Pres., B.P.C.C., 1941; was Chairman, Prohibition Inauguration Celebration Cttee. and member, Greater Bombay Prohibition Cttee.; is connected with several educ. instts.; courted jail in Freedom Movement; member, Bombay Municipal Corpn., 1922-46; was Chairman: Stg. Cttee., Works, Markets and Gardens Cttee. of Corpn.; M.L.A., Bombay, 1946; Prohibition Commr., 1937-38; Secy., Tilak Memorial Cttee.; member, Bombay Univ. Senate, 1948-56; was Chief Whip, Bombay Leg. Cong. Party; Speaker: Bombay and then Maharashtra Assembly, 1956-62; Co-ordinating Convener, State Bharat Sevak Samaj; Pres., Bombay City Soc. Edu. Cttee. *Publications*: *Gitlap* (Marathi). *Address*: 16, Khetwadi 12th Lane, Bombay 4; Pondicherry.

**SINGH, Mr. Justice Anant, B.A., B.L.**, Judge, Patna High Court, since Dec. 1, 1959. *b.* Nov. 1, 1904; *Educ.*: Arrah Model Instt., 1921 and Banaras Hindu Univ., 1923; B.A., Patna Coll., 1925; B.L., Patna Law Coll., 1928. Was school teacher in H. N. Kshatriya High School, Arrah; Inspector of Excise, 1928-31. Served Bihar Judicial Service in different capacities as Munsif, Registrar of Civil Courts, Asstt. Registrar and Dy. Registrar, High Court and Asstt. Sessions Judge; Addl. Dist. and Sessions Judge, 1952-54; Dist. and Sessions Judge, Patna, 1954-56; Registrar, High Court, Patna, 1956-59. *Address*: Patna High Court, Patna.

**SINGH, Air Chief Marshal Arjan, D.F.C.**, Padma Vibhushan, 1965, Chief of the Air Staff, Indian Air Force, since Aug. 1, 1964. *b.* April 15, 1919, at Lyallpur; *Educ.*: Montgomery in West Pakistan; Govt. Coll., Lahore; Pilots trg. at Cranwell, U.K.; Staff Coll., Bracknell, U.K., 1945; was a good sportsman during his student days. Commissioned in the Indian Air Force, Dec. 1939; Flying Officer No. 1, Squadron, 1942; promoted Wing Commander, 1945; Group Captain, 1947;

Air Officer Commanding, Operational Command; Air Officer in Charge, Personnel & Org., Air Hq., 1952; promoted Air Vice-Marshal, June 1960; A.O.C.-in-C., Operational Command, till 1961; A.O. in Charge (Adm.), Air Hq., 1961-62; Dy. Chief, Air Staff, Jan.-Aug. 1963; Vice-Chief, Air Staff, Aug. '63-July '64; Chief-de-Mission, Indian Contingent for the 1956 Olympiad at Melbourne; Overall Commander, Jt. Air Trg. Exercises 'Shiksha' held in India with the U.S. Air Force, R.A.F. and Royal Australian Air Force, Nov. 1963; was member, Indian Defence team, which visited Washington for talks with the U.S.A. Defence officials, 1964; promoted Air Chief Marshal, Jan. 15, 1966. *Address*: Air Hqrs., New Delhi.

**SINGH, Avtar, B.A.**, Commissioner for the Govt. of India in Mauritius. *b.* Oct. 1, 1921; *Educ.*: Punjab Univ. Commissioned in the Indian Army, 1942; saw active service in Burma and received a Military Cross at Meiktila, 1945; joined I.F.S., March 1947; served in the Indian Embassy in Egypt & Legations in Lebanon, Jordan & Syria, 1948-51; External Affairs Min., 1951-52; Permanent Mission of India to the U.N., New York, 1952-55; Political Adviser, Indian Delegation to the Intn. Commn. for Supervision & Control in Viet Nam, 1955-56; Ext. Affairs Ministry, 1956-58; Counsellor, Indian Embassy, Bonn, 1958-61; Chairman, Intn. Commn. for Supervision & Control in Laos with personal rank of Amb., 1961-63; Pol. Officer of India in Sikkim & Bhutan, 1964-66; Amb. to Denmark 1966-67. *Address*: C/o External Affairs Ministry, New Delhi.

**SINGH, Balbir, B.A.**, Padma Shri (1957), leading Hockey Player; Deputy Dir. (Admn.), The Directorate of Sports, Punjab. *b.* Oct. 10, 1924; *Educ.*: Dev Samaj High School, Moga (Punjab); Khalsa Coll., Amritsar, Punjab Univ. Entered Class Hockey, 1942; captained Punjab Univ. Eleven, 1945, captained Punjab State Eleven, 1949; represented India in the World Olympics at London, 1948, won gold medal; captained Indian Hockey Team to Afghanistan, 1950; played two Test Matches against Japanese Hockey team touring India, 1951; represented India in Olympic Games at Helsinki, 1952; won Gold Medal; captained Indian Hockey team to Singapore and Malaya, 1954; captained Indian Olympic team to Melbourne Olympic Games, 1956; won Gold Medal; captained the Indian Hockey Team for the Asian Games at Tokyo, May, 1958; member, I.H.F. Selection Cttee., since 1959. *Address*: Dy. Director, Sports and Youth Programme, Punjab, Chandigarh.

**SINGH, BATUK, M.A., M.B.E. (1943)**, Member, Union Public Service Commn., since April 1963. *b.* Sept. 21, 1903; *Educ.*: Uday Pratap Coll., Varanasi; Allahabad Univ. Joined the Indian Defence Accounts Service, 1929; served in various capacities in Quetta, Meerut and Poona, 1929-44; was with the 10th Army in Iraq and Iran, 1941-42; Dy. Secy. and Jt. Secy., Min. of Fin., Govt. of India, 1944-56; retired as Controller-Gen., Defence Accts., 1959; was Fin. Adv., River Valley Projects Deptt. and State Electricity Board, Bihar. *Address*: Member, Union Public Service Commission, Dhoolpur House, New Delhi 11.

**SINGH, Bhola Prasad, B.A. (Hons.), B.L.**, Minister for Local Self-Govt., Housing and Tourism, Bihar, since March 1967. *b.* Jan. 1, 1932; *Educ.*: B. N. Coll., Patna; Patna Coll., Patna; Law Coll., Patna. Took active part in political and civic affairs of Patna Town while a student; joined Bar, 1952, and Socialist Party, 1955; Secy., Parliamentary Cttee., Socialist Party, Bihar; elected to Bihar Leg. Council, 1962; launched campaign against Congress Chief Minister of Bihar on behalf of opposition; member, State Cttee., Parliamentary Cttee., Sanyukt Socialist Party; Treasurer, S. S. P., Bihar; became Secy., Parliamentary Cttee., S.S.P., Bihar; detained

under D.I.R. along with Dr. Lohia for organising the Patna Bandh, Aug. 10, 1965; again detained under Preventive Detention Act for organising Bihar Bandh, Aug. 9, 1966; elected Dy. Leader, S.S.P. Leg. Party; Leader, S.S.P. Group in Bihar Council; Convener, Jt. Front of Opposition Parties in Bihar, 1967 General Elections. *Publications*: Articles in newspapers on current problems. *Address*: Lohanipur, Patna 3.

**SINGH, Charan, M.A., LL.B.**, Chief Minister, Uttar Pradesh, since March 1967. *b.* Dec. 1902, in a middle class peasant family, Noorpur, Meerut Dist.; *Educ.*: graduated in Science, 1923 and M.A. 1925, from Agra Univ. Practised as a civil lawyer at Ghaziabad, 1922-39; joined Congress, 1929; Vice-Chairman, Meerut Dist. Board, 1932-35; elected to the U.P. Leg. Assembly, 1937, 1946, 1952, 1957, 1962 and 1967 from Chhaprauli Constituency; took leading part in National freedom movement and courted jail; was General Secy. and Pres., Meerut D.C.C., 1940-46; Genl. Secy., U.P. Leg. Congress Party, 1949-56; Parliamentary Secy. in Pt. Pant's Ministry, 1946-50; Minister for Justice and Information, June to Aug. 9, 1951; Agriculture, Animal Husbandry and Information, from August 9, 1951; Minister for Revenue and Agriculture, 1952-54; Minister for Revenue and Transport, 1954-59; Minister for Home and Agriculture, 1960-62; 1962-63; Minister for Forest and Agriculture, 1963-65; assumed the portfolio of Min. for Forest and Local Self-Govt., 1965-67; is the leader of the Sanyukt Vidhayak Dal; has been the main architect of land reforms in the State. *Publications*: Author of about a dozen books including *Abolition of Zamindari*, *Cooperative Farming X-rayed and India's Poverty and its Solution*. *Address*: Chief Minister, Uttar Pradesh, Lucknow.

**SINGH, Sardar Darbara, F.A.**, Ex-Min. for Home Affairs, C. D., Agriculture, Punjab, July 6, 1964-67. *b.* March 2, 1916; *Educ.*: Khalsa Coll., Amritsar. Often imprisoned in the freedom movement; M.L.A., Punjab, since 1952; member, Public Accts. Cttee., 1953; Pres., Jullundur D.C.C., 1946-49; Gen. Secy., 1950-52; Gen. Secy., Punjab P.C.C., 1954-58; Min. for Consolidation, Coop Socs. and Political Sufferers, Punjab, 1956-57; Pres.: Punjab P.C.C., 1958-62; Punjab Coop. Bank, Jullundur; Govt. Nat. Motor Transport Workers' Union; Punjab Coop. Union; Punjab Motor Union; member: Police Commn.; Working Cttee., Indian Nat. Cong., since 1960; Secy., Punjab Pradesh Constructive Work Board. *Address*: Chandigarh.

**SINGH, Dinesh, B.A.**, Min. of Commerce, Govt. of India, since March 1967. *b.* July 19, 1925 at Kalakankar, U.P.; *Educ.*: Doon School, Dehra Dun; Colvin Coll., Lucknow Univ. Private Secy. to the Prime Minister; Secy., High Commission of India in London & Embassy of India, Paris; Mem., 2nd Lok Sabha, Estimates Cttee. of 2nd Lok Sabha; Gen. Secy., Indian Council for Africa; Indian delegate to: F.A.O. Regional Marketing Conference, 1959; U.N. General Assembly, 1960; E.C.A.F.E., 1961; National Tourist Development Council, 1960-61; Tourist Advisory Cttee. (Northern Zones); travelled extensively in Europe, U.S.A. and Africa; attended the All African People's Conference at Tunis, 1960 and Cairo, 1961; Deputy Min. for External Affairs till Jan. 1966; Min. of State for External Affairs, Jan. 1966-Feb. 1967. *Address*: Rajbhavan, Kalakankar, Dt. Pratapgarh (U.P.); Ministry of Commerce, New Delhi.

**SINGH, Ganga Bhakta**, Minister for Cooperation, Uttar Pradesh, since April 1967; *Educ.*: M.A. degree in Economics from the Allahabad Univ., 1952. General Secy., U.P. Jan Sangh and member, All-India Working Cttee.; elected to the State Vidhan Sabha from the Baban (Hardoi) Constituency, 1967; undertook the propagation of Rashtriya Swayam Sewak



Sangh; has been Secy., State Jan Sangh for several years; is Secy., Jan Sangh Legislature Party. Address: Minister for Cooperation, Uttar Pradesh, Lucknow.

**SINGH, Gur Baksh, B.Sc., C.E. (1922),** Punjabi Writer. b. April 26, 1895; Educ.: F. C. Coll., Lahore; Thomason Coll., Roorkee; Michigan Univ., Ann Arbor (U.S.A.). During the Great War, attached with Royal Engrs.; Rly. Engr., 1925-32; Power Farming, 1932-37; founded *Preet Lari*, 1933; founded Preet Nagar, a colony on co-op. lines, 1938; travelled extensively in Europe, Russia, China, U.S.A., Canada, Iraq and Persia; Vice-Pres.: All-India Peace Council; Kendri Punjabi Lekhak Sabha. Publications: *Autobiography*; *Shabnam*; *Adjusted & Balanced Life*; *Unmarried Mother*; *The Strange & Alone, etc.*; *Poem of Life*. Address: Editor, *Preet Lari*, Preet Nagar, Dist. Amritsar.

**SINGH, Gurmukh Nihal, M.Sc. (Econ.),** (Lond.), Barrister-at-Law, Ex-Governor of Rajasthan. b. March 14, 1895; Educ.: Rawalpindi and London; called to the Bar, June 1919. Served in the B.H.U. and other colls. as Prof. and Dean till 1952; elected Speaker, Delhi State Leg. Assembly, May '52; unanimously elected Leader, Congress Vidhan Sabha Party and Chief Min., Delhi State, 1955-56; Governor, Rajasthan State, 1956-62; was member, many Univ. Bodies of the B.H.U., Univ. of Delhi and Univ. of Allahabad, Lucknow and Bombay; organised the First Indian Political Sc. Cfee. at Banaras, 1938; first Secy. and Treasurer of the Assoc. (1939-42); its Pres., 1942; Publications: *Indian States and British India: Their Future Relations*, 1928; *Landmarks in Indian Constitutional and National Devel.*, 1935; *The Changing Concept of Citizenship*, 1958; *Fundamentals of Pol. Sc. and Org.*, etc. Address: C-193, Defence Colony, New Delhi 3.

**SINGH, Sardar Gurnam, B.A., Bar-at-Law,** Chief Minister, Punjab, since March 1967, b. Feb. 25, 1899; Educ.: Graduated from Forman Christian Coll., Lahore, 1924; went to England, 1926 and called to the bar, 1928. Started legal practice at Lyallpur; elected Pres., Bar Assoc., 1946 and 1947; appointed a member, Special Tribunal at Simla to hear Burma Fraud Case, 1948; started practice at the Punjab High Court, Simla, 1949; Judge: PEPSU High Court, 1950-56; the Punjab High Court, 1956-59; entered politics, 1962; successfully contested election to Punjab Assembly on Akali ticket and elected leader, Akali Party in the Punjab Assembly; played a key role in the formation of the Punjabi Suba; re-elected to the Punjab Assembly, 1967 and headed the ministry formed by the United Front of opposition parties. Address: Chief Minister, Punjab, Chandigarh.

**SINGH, Brig. Gyan, Padma Shri (1961),** Leader of the first Indian Expedition to Mount Everest, March-June 1960. b. April 12, 1918 at Ramgarh, Ludhiana Dist.; Educ.: Lucknow. Commissioned in the Artillery Regt., July 1940; served in the Kashmir operations including the Zoji La operation; climbed extensively in connection with reconnaissance duties; held appts. as Commandant, Winter Warfare School, Asstt. Commandant, School of Artillery, Commandant of a Regt. of Artillery and Asstt. Adjutant and Quarter Master Gen. in a dvn.; Principal, H.M.I., Darjeeling, 1958-62; attended Intnl. Mountaineers' Meets, Chamonix (France) and Rosenlaui (Switzerland); visited mountaineering instts. in Austria, Germany, Belgium and England; promoted Brigadier, Feb. 1960; Retd. from Army, Aug. 1964; Principal, Nehru Instt. of Mountaineering, Uttarkashi, U.P., since Aug. 1965. Publications: *Lure of Everest* (The story of a first Indian Attempt on Everest in 1960). Address: Sagarmatha Farms Fazilpur, Meerut.

**SINGH, Maj. Gen. Harkirat, B.A. (Punjab),** M.A. (Cantab.), M.I.E., M.I. Mech. E., Adv. (Construction), Plng. Commn., since May 1965. b. April 7, 1911; Educ.: Govt. Coll., Lahore; Royal Military Academy, Woolwich; Christ's Coll., Cambridge; Mech. Scs. Tripos. Command., Feb. 2, 1933; served in several places till he was promoted Lt.-Col. and posted as Commander, Royal Engrs., U.P. Area, Lucknow, 1946; Grade I Staff Officer with H.Q. British Commonwealth Occupation Forces in Japan, 1947; promoted Brigadier & posted as Chief Engr., Southern Command, Poona, Dec. 1947; Chief Engr., Western Command, 1950-52; Commander of an Infantry Brigade, 1952-54; Commandant, Coll. of Military Engg., 1955-56; promoted Major Gen. and apptd. Dir. of Electrical and Mech. Engg., 1957-59; Engr.-in-Chief, Army H. Q., 1960-65; Pres., Instt. of Engrs. (India), 1960-62; Work Study; Chairman, Central Road Research Instt. Address: 4, Janpath, New Delhi.

**SINGH, Sardar Mukam, LL.B.,** Governor of Rajasthan, since April 16, 1967; b. Aug. 30, 1895, at Montgomery; Educ.: Khalsa Coll., Amritsar; Law Coll., Lahore. Was a prominent member of the Shiromani Akali Dal; entered politics and participated in the Gurudwara Prabandhak Reform movement; arrested and imprisoned, 1924-25; member, S. G. P. Cttee., 1926-41; Pres., Dist. Bar Assoc., 1943 and 1944; Judge, Kapurthala High Court, 1947-48; Pres., S. A. D., 1950; member: Constituent Assembly & Prov. Parliament, Lok Sabha since 1952; Ex-member: Estimates Cttee. of the Parliament; Chairman, Cfee. of Presiding Officers of Leg. Bodies in India; Pres., Indian Parly. Group; member: Parly. delegation to: U.S.S.R., 1955; to Commonwealth Parly. Confce., Delhi 1957; Australia 1959 and London in 1961; Dy. Speaker, Lok Sabha, 1956-62; Leader, Parly. delegation to: U.S.S.R. and Mongolia, 1962; Commonwealth Parly. Cfee., Nigeria, 1962; U.S.A., 1963; Commonwealth Parly. Cfee., Malaysia, 1963; West Germany and U.K., 1964; Philippines, 1965; attended 700th anniversary celebrations, of British Parliament, June 1965; visited Japan, Singapore, Burma, Poland, Canada, U.K. and various other European countries. Founder, *Spokesman*, an English Weekly; Speaker, Lok Sabha, April 1962-April 1967. Publications: *Sikh Case*; *The Problem of the Sikhs*; *Russia—As I saw It*. Address: Raj Bhavan, Jaipur.

**SINGH, Iqbal, Dy. Min. for Works, Housing & Supply, Govt. of India,** since Mar. 1967. b. Oct. 27, 1923, at Killianwall, Punjab; Educ.: M. B. High School, Abohar; Sikh National Coll., Lahore. First Pres., Punjab Students' Congress, 1944-46; member, Working Cttee., All India Students' Cong.; member, Shiromani Gurdwara Prabandhak Cttee.; M.P., Lok Sabha, since 1952; member, A.I.C.C since 1954; Dy. Min. for Petroleum & Chemicals, Govt. of India, Jan. '66-Feb. '67. Address: 15, Ashoka Road, New Delhi.

**SINGH, Jagjit, M.A.,** General Manager, South Eastern Railway. b. May 15, 1912, at Amritsar, Educ.: Hindu Sabha High School, Amritsar, 1927; Khalsa Coll., Amritsar, 1929; B.A. (Hons.), 1931 & M.A., 1933, from Govt. Coll., Lahore. Member, Rly. Board's team sent to U.S.A. for negotiating a loan with the World Bank for the Indian Rlys., 1956; represented India at the Third International Fed. of Operational Research Societies Conf., Oslo, July 1963; Member, Indian delegation to the International Rly. Congress, Dublin, June, 1964; Pres., Operational Research Society of India; Fellow, Royal Statistical Society, London; member; Institute of Mathematical Statistics, North Carolina, U.S.A.; Indian Statistical Institute, Calcutta; Chairman, Editorial Board, C.S.I.R.'s monthly magazine; Science Reporter; conducted research on mathematical statistics and operations research; Adviser on Operations Research to the Govt. of India, Min. of Home Affairs, Dept. of Adm. Reforms, Sept. 1965; took to

science popularisation in 1950; awarded UNESCO'S £1000 Kalinga Prize for 1963. Publications: Books—*Mathematical Ideas—Their Nature and Use*; *Statistical Aids to Railway Operation*; *Some Eminent Indian Scientists*; Technical Papers: *Theories of Probability*; *Quality Control in Railway Workshops*; *Ragnar Frisch on National Planning*; *Operation Research on the North East Frontier Railway*. Address: South Eastern Railway, Calcutta 43.

**SINGH, Jaipal, M.P. & Pres., All-India Adibasi Mahasabha.** b. Jan. 3, 1903; Educ.: St. Paul's School, Ranchi; Grammar School, Darlington, St. Augustine's Coll., Canterbury, and St. John's Coll., Oxford. Full Blue at Oxford for Hockey; captained the Indian Olympic Team at the Olympiad in 1928; Headmaster and Officiating Vice-Principal, Rajkumar College, Raipur, 1936-37; Colonization Minister and Revenue Commissioner, Bikaner State, 1937-39; Civilian Adv., Services Selection Board, 1943-46; Editor, *Adibasi Sakam*, 1941-42; Pres., Jharkhand Party; member. Press Comm. 1952-53; Estimates Cttee. of Parliament, 1952-54; Min., C.D. & Panchayati Raj, Bihar, 1963; member: Rly. Accidents Enq. Cttee.; National Integration Council; Public Accs. Cttee. Publications: Articles on Games and Social Anthropology. Address: Ranchi, Chhota Nagpur.

**SINGH, Lt.-Gen. K. Bahadur, P.Sc., I.D.C.,** N.D.C., Governor, Himachal Pradesh, since May 1967. b. Aug. 5, 1910 at Palaiha, Kotah; Educ.: Prince of Wales Royal Indian Military Coll. Commissioned from Royal Military Coll., Sandhurst, Jan. 29, 1931; graduated from Staff Coll., Camberley; attended a course at the Imperial Defence Coll., London, 1954; served in the 4th battalion and the Training Centre of the Kumaon Regt. before World War II, holding all the normal regimental appointments; proceeded to the Far East with the 4th Kumaon, 1939; was in Singapore disaster; held a number of Staff appointments, including Deputy Secretary (Military) to the Cabinet, and Brigadier, General Staff of a Command; commanded a brigade, and Fourth and Fifth Infantry Divisions. Adjutant General, A.H.O., Sept. 1956-Sept. 1959; First Commandant, National Defence Coll., 1959-63; G.O.C. in C. Central Command, May '63-April '67; member, Indian Council of World Affairs. Address: Simla 4.

**SINGH, Kewal, B.A. (Hons.), LL.B., I.C.S.,** Padma Shri, 1955, Ambassador to U.S.S.R. & Mongolian People's Republic since Mar. 1967. b. June 1, 1915; Educ.: Forman Christian Coll., Lahore; Law Coll., Lahore; joined I.C.S., 1938; Balliol Coll., Oxford, 1938-39. Asstt. Commr., Ferozepore, 1940; S.D.O., Dalhousie, 1940-42; Colonisation Officer, Nili Bar, 1945-46; Dy. Commr., Shahpur, 1946-47; Simla, Turkey, 1948-49; Indian Military Mission, Berlin, 1949-51; Charge d'Affaires, Legation of India, Lisbon, 1951-53; Consul-Gen. of India, Pondicherry, 1953-54; Chief Commr., the State of Pondicherry, Karaikal, Mahe and Yanam, 1954-57; Amb. to: Cambodia, 1957-58; Sweden, Denmark and Finland, 1959-62; Dy. Indian High Commr. in U.K., 1962-65; High Commissioner to Pakistan, Aug. '65-Feb. '67. Address: C/o External Affairs Ministry, New Delhi.

**SINGH, H.E., Mr. K. R. P., M.A., LL.B.,** High Commissioner of India to Uganda & Amb. Extr. & Plenipotentiary to Rwanda & Burundi, since May 1966. b. March 3, 1922; Educ.: Allahabad, Oxford & Sorbonne (Paris). Joined I.F.S., April 1948; was with the High Commission of India, Karachi, Pakistan, 1950-53; Embassy of India, Switzerland, 1953-55; High Commission of India, Australia, 1955-57, Kampala, Uganda, 1958-60; National Chief Passport Officer, May-Nov. 1962; Dir. (Africa & West Asia), 1962-64, Dec. 1964-March 1966. Address: High Commission of India, P.O. Box 3265, Kampala, Uganda; C/o External Affairs Ministry, New Delhi.



**SINGH, Mairambam Koireng**, Chief Minister, Manipur, since July 1, 1963. b. Dec. 19, 1915; *Educ.*: Bengali High School, Imphal. Entered active politics as member, Nikhil Manipuri Mahasabha, a prominent political party in Manipur, 1938; joined I.N.A. (Azad Hind Fauz), 1944; member, Manipur State Leg. Assembly, 1948; member, Electoral Coll., Manipur, 1951; Pres., Manipur State Congress Cttee., 1955-57; member, Manipur Territorial Council, 1957-62 and its Chairman, 1962-63. *Address*: Moirang, P.O. Moirang, Manipur.

**SINGH, Milkha**, Padma Shri, 1960, Leading sportsman; Dy. Director of Sports, Punjab. b. 1935. Started his career, 1953; specialised in 400 meters race; after coming first in the Indo-Pakistan meet at Delhi, 1956, was selected for the World Olympic Games at Melbourne, 1956; Indian rep. in III Asian Games at Tokyo and won the gold medals in 200 and 400 meters; participated in British Empire and Commonwealth Games, Cardiff and won Gold Medal in 440 yards; participated in Olympics, Rome and stood fourth, 1960; also in the fourth Asian Games at Jakarta and won Gold medals for 400 metres, and 4 + 4 relay. *Address*: Deputy Director of Sports (Coaching), Sports Department, Kothi No. 263, Sector 9C, Chandigarh.

**SINGH, Mohan, M.A., M.O.L. (1933)**, Punjabi poet; Mg. Dir., Hind Publishers Ltd., Jullundur; Founder, *The Panj Darya*, Punjabi Monthly. b. Oct. 20, 1905; *Educ.*: Oriental Coll., Lahore. Started the *Panj Darya* at Lahore, 1939; Head of Persian and Punjabi Deptt., Sikh National Coll., Lahore, 1940-44; floated Hind Publishers Ltd., 1946; member: Adv. Board for Punjabi, Sahitya Akademi; Gen. Council, Sahitya Akademi, Delhi; Exec. Council, Sahitya Akademi, New Delhi; first fellow, Punjabi Sahitya Akademi, 1966. *Publications*: *Sawe Pattar*, *Kasunbra*, *Adhwate*, *Asia Da Chanan*, *Kach Sach*, *Awazan*, *Niki Niki Washnan* (short story), *Wadda Walia* 1958; won the Sahitya Akademi's National Award, 1960; *Jandre*. *Address*: Civil Lines, Jullundur.

**SINGH, Dr. Nagendra, M.A., LL.D.** (Cantab.), M.A., B. Litt., LL.D. (Dublin), D. Litt. (Bihar), D.Phil. (Cal.), D.Sc.—Law (Moscow), D.C.L. (Delhi), Bar-at-Law, I.C.S., i.d.e., Associate of the Instt. De Droit Intn'l; Intl. Council of Unidroit, Rome, Secretary to the President, since Dec. 5, 1966. Joined I.C.S., 1938; Dy. Secy., Min. of Defence, 1946-57; Dy. Secy., Min. of Information & Broadcasting, 1948-50; Secy. & later Jt. Secy., Min. of Defence, 1951-58; Chairman, The Mogul Line Ltd., since 1963; Pres. Inter-Govt. Maritime Consultation Org., since Jan., 1964; Sp. Secy., Min. of I. & B. in addition to Dir.-Gen. of Shipping, Min. of Transport, 1964; Secy. & Director General of Shipping, Min. of Transport, 1965-66; Dir. Shipping Corp. of India, 1962-66; Mazagon Dock Ltd., 1961-64; has been Chairman, Hindustan Shipyard Ltd. *Publications*: *Termination of Membership of International Organisations*; *Nuclear Weapons and International Law*; *Defence Mechanism of the Modern State*; *International Conventions of Merchant Shipping*. *Address*: 30, Tughlak Crescent, New Delhi.

**SINGH, Prabhu Narayan, B.A., LL.B.**, Minister for Industries and Labour, Uttar Pradesh, since April 1967. b. 1921 at Banaras; *Educ.*: Banaras Hindu Univ. as a student of LL.B. final, was detained under the Defence of India Rules for participating in the quit India movement, Aug. 1942; released, 1945; left Congress and became a member, Congress Socialist Party, 1948; elected M.L.C., U.P., from Local Bodies' Constituency, 1952-58 and 1964; M.P., Lok Sabha from Chandauli, 1959-62; is Pres., All India Hind Mazdoor Panchayat. *Address*: Minister for Industries and Labour, Uttar Pradesh, Lucknow.

**SINGH, Pratap, M.A., LL.B.**, Minister for Medical and Health, Uttar Pradesh, since April 1967. b. 1932 in Churigarh in Nainital Dist.; *Educ.*: early education in Nainital; M.A. and LL.B. degrees and diploma in Public Administration from Lucknow Univ. Elected to the State Assembly on P.S.P. ticket, 1957 and 1967; imprisoned in the tax agitation, 1958, food agitation, 1960; is associated with a number of educational institutions and social and cultural organisations of Nainital Dist.; is also associated with several labour unions and the Hind Kisan Panchayat; Chairman, U.P. Govt. Employees Federation, 1961; founded the Grade IV Employees Federation. *Address*: Minister for Medical and Health, Uttar Pradesh, Lucknow.

**SINGH, Raja Naresh Chandra**, Raja of Sarangarh and Min. for Tribal and Harijan Welfare, Madhya Pradesh. b. Nov. 21, 1908; *Educ.*: Rajkumar Coll., Raipur, 1918-29; holder of the all-rounder cup for three years, a triple blue and a King Scout. Hon. Asstt. Commr., Raipur, 1929-32; *Educ.* Min. and 1st Class Magistrate, Sarangarh, 1936-37; became Ruler of Sarangarh, April 29, 1946; merged his State with M. P., 1948; elected M.L.A., M.P., 1952; Min. for P.W.D., Electricity and Tribal Welfare, M.P., 1952; Pres., All India Adim Jati Sewak Sangh Sammelan, Jagdalpur, 1954; M.L.A., M.P. from Sarangarh, 1957; Min. for Tribal Welfare 1957; member: D.C. and P.C. Working Cttees., 1959; A.I.C.C.; M.L.A. from Pusaur constituency, 1962 & 1967. *Address*: Bhopal.

**SINGH, Colonel Raja Surendra**, Dir.-Gen. State Farms and ex-officio Addl. Secy., Min. of Food and Agr., Govt. of India and former Ruler of Nalagarh State in the Punjab. b. 1920; *Educ.*: Aitchison Coll., Lahore; had admive. trg. with the Punjab Govt. and held appts in the Police, Revenue, Judicial, Public Health and Forest Deptts. Joined the Indian Army and served with the Dogra Regt.; succeeded to the *Gaddi* 1946; elected M.L.A., PEPSU, in both the General Elections; apptd. Min. for Fin., Png. and Devpt., brought PEPSU's Five-Year Plan uptodate; Indian rep. at the 8th Cfee. of the F.A.O. in Rome, 1955 and 10th Cfee., 1959; Adv.: Min. of Food & Agri., 1958-62; Colonization, Min. of Home Affairs, 1962. Programme Admn. and ex-officio Addl. Secy., Png. Commn., 1962-66; led the Indian Agrl. Machinery Delegation to Russia, 1966; member, Board of Trade. *Address*: 10, Teen Murti Lane, New Delhi 11.

**SINGH, Maj. Gen.-Rajindar**, MVC & BAR, Revenue Minister, Punjab, since March 1967. b. Oct. 3, 1911; *Educ.*: Khalsa Coll., Amritsar. Commissioned from the Indian Military Academy, 1937 and was posted to the 1st Battalion, The King's Regiment (Liverpool); played a prominent role in the Kashmir operations as Commanding Officer of the 7th cavalry; awarded Maha Vir Chakra; was Chief Instructor, Tank School; commanded First Armoured Brigade; became Director, Armoured Corps at Army Hqs. till his promotion to the rank of Maj. Gen.; Commander of the Armoured Division, Indian Army, July 1961-66; elected to the Punjab Vidhan Sabha as an independent candidate from Jullundur Cantt. Constituency, 1967. *Publications*: A number of articles in *Armour* and other journals. *Address*: Minister's House No. 45, Sector No. 2, Chandigarh.

**SINGH, Ram Subhag, Shastri (Banaras), M.A. (Missouri), Ph.D. in Journalism (Missouri)**, M.P., Min. for Parliamentary Affairs & Communications, Govt. of India, since March 1967. b. July 7, 1917; *Educ.*: Sri Kashi-vidyapith, Varanasi; Missouri Univ.; Columbia, U.S.A.; member, Prov. Parliament, 1950-52; M.P., Lok Sabha, since 1952; member: Exec. Cttee. of the Cong. Party in Parliament, since 1954 and its Secy., 1955-62; Cong. Wkg. Cttee., since Jan. 1961; Cong. Central Election Cttee., since May, 1966; Leader, Indian delegation to 8th Session of the Intn'l. Rice Comm. and sixth

F.A.O. Regional Cfee. at Kuala Lumpur, 1962; leader, Indian Delegation, Anglo-Asian Rural Reconstruction Cfee., Kuala Lumpur, Feb.-March 1964; Union Min. of State for Agr., 1962-64; Min. of State for Railways, June '64-Feb. '67. travelled extensively in U.S.A., Canada, U.S.S.R., West Asia and South-east Asia. *Publications*: Articles in some American and Indian papers. *Address*: Khajuria, Dhammar, Arrah (Bihar); 12, Janpath, New Delhi.

**SINGH, Rao Birendra**, Chief Minister, Haryana, since March 1967. b. Feb. 11, 1921, at Rewari, Gurgaon Dist. *Educ.*: Graduated from St. Stephen's Coll., Delhi; Joined the Indian Army as Commissioned Officer during World War II; secured release, 1947; commissioned in Territorial Army, 1950; elected to Punjab Leg. Council, 1954; Deputy Minister, Punjab, 1956-57; Minister, 1957-61; elected to the Punjab Vidhan Sabha, 1967; elected Speaker of the Vidhan Sabha, Haryana and a few days later as Chief Minister; was member: A.I.C.C. Punjab Congress Working Cttee. and Election Board. *Address*: Chief Minister, Haryana, Chandigarh.

**SINGH, S. Lachhman, B.A.**, Transport Minister, Haryana, since March 1967. b. 1922, in Karanpur village, Ambala Dist.; *Educ.*: Graduated from Patiala; took active part in students associations in the college. Was member, Pradesh Congress Cttee., 1953-66; was Pres., Kalka Municipal Cttee. for more than five years and Chairman, Market Cttee., Kalka, for more than two years; elected M.L.A., Haryana as an Independent, 1967; became member, Samyukta Dal of Haryana, March, 1967; has been a business-man. *Address*: Minister for Transport, Haryana, Chandigarh.

**SINGH, Sachindra Lal**, Chief Min., Tripura, since July 1, 1963. b. 1907, in Agartala; *Educ.*: U.K. Academy, Agartala; Victoria Coll., Comilla (East Pakistan). Had an eventful career; an uncompromising fighter; often courted jail in his fight against British Imperialism and the monarchy in Tripura; spent about 14 years in jail; was connected with the Chittagaon-armoury raid; externed from Tripura and detained by the British Govt. for his revolutionary activities; after release, founded "Tripura Rajya Gana Parishad" and the Tripura State Congress Cttee. of which he was Pres. for about 10 years; was again externed for his land reform movement; Adv. to the Chief Commr., Tripura, 1953-57; elected Chairman, Territorial Council, 1957; is the first Chief Min. of Tripura. *Address*: Agartala.

**SINGH, Lt. General Sant**, Colonel, Bihar Regiment; Member, National Defence Council, since July 1964 and Military Affairs Cttee. b. Nov. 28, 1903; *Educ.*: Arya High School, Ludhiana, Khalsa Coll., Amritsar, Royal Military Coll., Sandhurst, England. Commissioned as 2nd Lt. in the Indian Land Army, Jan. 1925; joined Indian Army Bn. 1/14 Punjab Regt.; took part in various N.W.F. operations; served overseas in Iran, Iraq and Malaya and mentioned in Despatches for distinguished services during the 2nd World War; promoted Col., Jan. 1947, Brig., Sept. '47 and Maj. Gen., Dec. 1947; apptd. M.G.O. Army Hqs.; G.O.C.-in-C., Eastern Command, 1953-57; was Hon. A.D.C. to the President of India; officiated as Chief of the Army Staff, 1955 and 1956; member: Central Adv. Cttee. of Territorial Army and Lok Sahayak Sena; Yadavindra Public School, Patiala; Defence Cttee., Punjab State; Board of Governors, Sainik Schools in India; Dir., National Instt. of Sports, 1961-65. *Address*: Dakha, Ludhiana.

**SINGH, Prof. Sher, M.A.**, Minister of State in the Ministry of Education, Govt. of India, since March 18, 1967. b. Sept. 18, 1917; *Educ.*: M. A. degree from Delhi Univ. securing second position in the Univ. Was lecturer, Bharatpur and Jat Coll., Rohtak; was first elected to the United Punjab Leg. Assembly, Lahore, 1946. M.L.C., Punjab, till 1962;



Minister of Irrigation and Power, Punjab, 1956; was Deputy Leader, Congress Leg. Party; founded the Haryana Lok Samiti, 1961; was its Pres., advocated a separate State for the people of Haryana; attended the Peace Congress in Moscow, 1962; visited U.S.A., under the Leader Exchange Programme, 1965; has travelled in several countries of Europe and Asia. *Address*: Ministry of Education, Govt. of India, New Delhi.

**SINGH, Surendra Pal, B.A. (Hons.) (History),** Deputy Minister of External Affairs, Govt. of India, since March 18, 1967. *b.* May 17, 1917; *Educ.*: Col. Brown's School, Dehra Dun; Cambridge Univ., England; Commissioned Officer in the Indian Armoured Corps, 1940-43; and took to farming and fruit gardening with family estate at Unchagaon, Dist. Bulandshahr, 1943; actively co-operated with the National Extension Service Scheme of the Govt.; donated funds for the building of Schools and Hospitals and roads in the rural areas of his home Dist.; was member, Lok Sabha, 1962-67; re-elected to the Lok Sabha, 1967; travelled widely all over Western Europe, 1935-40 and 1951. *Address*: Unchagaon Estate, Dist. Bulandshahr (U.P.); External Affairs Ministry, New Delhi.

**SINGH, Sardar Swaran, B.Sc. (Hons.), M.Sc. (Physics) (Lahore), LL.B.,** Min. for Defence, Govt. of India since Nov. 1966. Member, Png. Commn. *b.* Aug. 19, 1907; *Educ.*: Govt. Coll., Lahore. Elected M.L.A., Punjab, 1946; Min. for Devpt., Food & Civil Supplies, Punjab; member, Security Council to advise Govt. on the day-to-day problems relating to law and order, March 1947; was member, Partition Cttee. to divide the assets of the Punjab; Home, Gen. Admn., Revenue, Irrigation, Electricity Min., Punjab, 1947; Min. of Capital Project, Electricity, Punjab, April-May, 1952; Min. for Works, Housing, Supply, May 1952-March 1957; led the Indian delegation to the sessions of the Eco. Social Council of the U.N., at Geneva, 1954, 1955; elected to the Lok Sabha; led a delegation to U.S.S.R. 1959; Min. for Steel, Mines and Fuel, 1957-62; Min. for Food & Agr., Sept. 1963-June 1964; was Min. for Industry & Supply; visited Nepal Aug. 1964, Burma, Sept. 1964; attended the Cfce. of Foreign Min. of non-aligned countries, Oct. 1964; leader, Indian delegation to U.N. Gen. Assembly, Dec. 1964; was Min. for External Affairs. *Address*: 7, Hastings Road, New Delhi.

**SINGH, Master Tara, Akali Sikh Leader;** Ex-Pres., Shiromani Gurdwara. *b.* June 24, 1885, at Harial, Rawalpindi Dist.; *Educ.*: Rawalpindi; Khalsa Coll., Amritsar. Embraced Sikhism at the age of 17; fought in the Gurdwara Reform Movement for freeing the Sikh holy places from the control of the traditional priesthood; became Secy., Shiromani Gurdwara Prabandhak Cttee.; jailed thrice as a result of clash with the authorities; became Pres., Akali Dal and Gurdwara Cttee.; participated in the C. D. Movement, 1930; elected for the first time Pres., S.G.P.C. while in jail; rejected Cripps proposals on the ground that they provided a loop-hole for the partition of India; organised the Panthic Akali Party in the elections to the provincial legs.; re-elected Pres., A. D., July 27, 1954; again elected Pres., S.G.P.C., Feb. 7 1955; was taken into preventive custody in connection with Punjab Suba agitation, May 24, 1960; resigned S.G.P.C. presidency on grounds of health; formed 'Save Democracy Cttee.' consisting of all opposition parties of Punjab. *Address*: Amritsar.

**SINGH, Tribhuban Prasad, B.A. (Hons.) (Econ.), M.A., I.C.S.,** Secy. to the Govt., Dept. of Expenditure, Min. of Fin., since Feb. 1965. *b.* May 9, 1913; *Educ.*: Patna Univ.; London School of Economics. Joined the I.C.S., 1937; was posted to Bihar; held assignments mostly on the developmental side; Secy., Deptt.

of Supply and Secy., P.W.D. 1946-49; Commr. of Patna and Tirhut Divns., 1949-53; Chief Adm. or., River Valley Projects, Bihar; Addl. Secy. and from Jan. '84 to Feb. 65, Secy. to the Govt. of India, Png. Commn.; is member, Air India and Indian Airlines Corpn.; Heavy Engg. Corpn. *Address*: C/o Ministry of Finance, North Block, Secretariat, New Delhi. *Permanent*: Mohalla Sheikhupura, Patna Town, Bihar.

**SINGH, Trilok, M.P. (Lok Sabha), Dy. Chair-** man, Praja Socialist Party; Pres. Lucknow Educ. Soc. and founder of various educ. & cultural instts. *b.* March 10, 1908; *Educ.*: Church Mission High School and Jubilee Coll., Lucknow, Joined Youth League and Indian National Congress, 1928; Chair- man, Dist. Board, Lucknow, 1939; member, U.P. Leg. Assembly, 1946 and 1957; formed Jan Congress, 1950; joined K.M.P.P., 1951; Leader of the Opposition, U.P. 1950-52 & 1957-62; Gen. Secy., P.S.P., 1954-58. *Address*: Ghasari Mandi, Lucknow, U.P.

**SINGH DEO, Rajendra Narayan, Maharaja** of Patna State, since Feb. 1933 and Chief Minister, Orissa, since March 8, 1967. *b.* Mar. 31, 1912 at Serai Kela; *Educ.*: Mayo Coll., Ajmer; St. Columbia's Coll., Hazaribagh; had a brilliant academic career; was also a good sportsman having won many medals; was member, Chamber of Princes and Vice-Pres., Council of Rulers of the Eastern States Agency; was Chief Patron, 5th All Indian Cultural Unity Confce.; introduced many reforms in his State like removal of untouchability and allowing temple entry to Harijans, organising Praja Sabhas and Leg. Assembly, Cabinet system of Govt. etc.; formed a new party called Ganatantra Parishad, 1949, which merged with the Swatantra Party after the 1962 Parliamentary election; was elected to the Lok Sabha, 1952; elected M.L.A., Orissa, 1957; Leader of the Opposition in the Assembly, 1957-59; was Dy. Leader and Finance Minister, Ganatantra Parishad-Congress coalition Govt., 1959-62; re-elected to the Orissa Assembly, 1962 and became leader of the Opposition; Pres., Orissa Unit of the Swatantra Party; member, Gen. Council, National Executive and Central Parliamentary Board of the Swatantra Party; re-elected M.L.A., Orissa from Bolangir Assembly Constituency, 1967. *Address*: Bhubaneswar 1.

**SINGHANIA, Kailashpat, Banker & Mill-** owner. *b.* 1908; *Educ.*: privately. Vice-Pres- ident, J. K. Organisation; joined J. K. Cotton Spg. & Wvg. Mills Co. Ltd. as Director; became later its Director-in-charge; Director: J. K. Jute Mills Co. Ltd., Kanpur; J. K. Investors (Bombay) Private Ltd., Bombay; Director: J. K. concerns; Bombay Gas Co. Ltd.; Partner: Jugzillal Kamlatpat Bankers; J. K. Hosiery Factory; Kamlatpat Motilal Gutaiya Sugar Mills Co. etc.; Member: St. John Ambulance Corps; Indian Council of World Affairs; Faculty of Commerce, Lucknow Univ.; Merchants Chamber, U.P. Jaipur Chamber of Commerce; All India Marwari Sammelan, etc.; Cttee. member, Royal Western India Turf Club, Bombay. *Publications*: Writes occasionally on economic and industrial topics. *Address*: J. K. House, 59, Warden Road, Bombay.

**SINGHANIA, Lakshmi Pat Industrialist:** is the Head of the Eastern Zone of J. K. Org. with 60 industrial and commercial enterprises. *b.* 1910. Joined business at the age of 20; Dir. Incharge: the Aluminium Corpn. of India Ltd.; the Straw Products Ltd. (Paper and Board Mills); Chairman: J. K. Steel Ltd. Pres., Nat. Ind. Co. Ltd.; Dir.: J. K. Cotton Spg. & Wvg. Mills Co. Ltd.; Bengal & Assam Investors Ltd.; J. K. Industries Pvt. Ltd.; J. K. Iron & Steel Co. Ltd., Nat. Research Devpt. Corpn., etc.; is also one of the few Indian underwriting members of the Lloyds Soc. of London; was Pres.: F.I.C.C. & I.; All India Org. of Industrial Employers; Bharat Chamber of Commerce; member:

Indian Nat. Cttee. of the Intl. Chamber of Commerce; Board of Governors, Indian Instt. of Social Welfare and Business Management; Jagdis Bose Nat. Sc. Talent Search, All-India Heart Foundation and also member of Govt. Bodies like the Industries Devpt. Procedures Cttee., widely travelled. *Address*: (Office): 7, Council House Street, Calcutta; (Res.): J. K. House, 12, Alipore Road, Calcutta 27.

**SINGHANIA, (Sir) Padampat, Industrialist** and business man. *b.* 1905. Pres., J. K. Org. comprising Industrial and Commercial units; founded Merchants' Chamber, U.P., 1932; Past Pres.: F.I.C.C.I.; Vice-Pres.: Seva Samiti, Allahabad; was member, U.P. Leg.; was member Constituent Assembly; member: First Gen. Council of the U.P. Assoc. for the Blind; Indian Instt. of Intl. Affairs' (New Delhi & Kanpur); Board of Governors, Indian Instt. of Tech.; Heavy Industries Adv. Cttee., U.P. Govt.; Adv. Council, Indus. (A) Deptt., Rajas- than; Chairman, Export Sector Cttee. in the Board of Trade; Dir., U.P. State Indus. Corpn., Ltd.; estd. many instts. like J. K. Instt. of Sociology and Human Relations, Lucknow; J. K. Instt. of Radiology and Cancer Research, Kanpur; Chairman, Hindustan Commercial Bank Ltd. *Publications*: Articles on eco. and industrial topics. *Address*: Office: Kamla Tower, Kanpur; *Residence*: Ganga Kutir, Kanpur.

**SINGHI, Maharaja Karan**

(See Jammu & Kashmir under "Who's Who")

**SINHA, Bhuvaneshwar Prasad B.A. (Hons.),** M.A., B.L., LL.D. (Honoris Causa), Patna Univ., April, 1960; Bhagalpur Univ., March 1962, Vikram Univ., Nov. 1962, Ex-Chief Justice, Supreme Court; Exce. Chairman, Indian Law Institute, New Delhi; Pro- Chancellor, Delhi Univ., 1959-66. *b.* Feb. 1, 1899; *Educ.*: Arrah Zila School, Patna College and Patna Law College; topped the list of successful candidates at the B.A. (Hons.) and M.A. Exams. of the Patna Univ. in 1919 and 1921 respectively. Shrimati Radhika Sinha Gold Medalist for standing first in History. Vakil, Patna High Court, 1922-27; Advocate, 1927-35; Lecturer, Govt. Law Coll., Patna, 1928-35; was member, Senate, of the Faculty of Law and of the Board of Examiners in Law, Patna Univ.; member, Court of the Banaras Hindu Univ.; Govt. Pleader, 1935-39; Assistant Govt. Advocate, 1940-42; Judge, Patna High Court, 1943-51; Chief Justice, Nagpur High Court, 1951-54; Judge, Supreme Court, Dec. 1954-Sept. 30, 1959. Chief Justice, Supreme Court, 1959-64. *Address*: Indian Law Institute, New Delhi.

**SINHA, Mr. Chief Justice Deep Narayan,** B.A., Barrister-at-Law (Lincoln's Inn), Chief Judge, Calcutta High Court. *b.* Jan. 14, 1908; *Educ.*: Hastings House; Santiniketan; Presi- dency Coll.; T. N. J. Coll., Bhagalpur; Barrister-at-Law, Lincoln's Inn, London. Joined Cal. High Court, 1931; raised to the Bench, 1950; became Chief Justice, 1965. *Address*: 6, Queen's Park, Ballygunge, Calcutta.

**SINHA, Ganga Sharan, M.P. b. 1905.** Joined non-co-operation movement, 1921; since then has been working in political field; was in the Indian National Congress till 1948; had been member, A.I.C.C. and work- ing Cttee., Bihar P.C.C.; Vice-Pres., & Mg. Trustee, Balika Vidyapath Lakhisarai; left Congress, 1948; member, Bihar Socialist Party, Congress Socialist Party, Socialist Party and Praja Socialist Party; had been member, Working Cttee. and Standing Cttee., All-India and Bihar Sahitya Sammelans; Secy., Central Parliamentary Board of the P.S.P., 1954-56; Life member: Bihar Mahila Charkha Samiti; Kamala Nehru Shishu Vihar; mem- ber: Mg. Cttee. Dr. Rajendra Prasad Med. Res. Instt.; Chairman: Reception Cttee.; Second Asian Socialist Conference, Bombay,



1956; All-India Praja Socialist Party, 1956-59; Central Parliamentary Board of Praja Socialist Party, 1956-63; member, Mg. Cttee., Hindi Vidyapeeth, Deoghar (S.P.); Amigrah Seva Sadan; Leader, P.S.P. in Rajya Sabha 1956-64; Pres.: All India Fed. of Hindi Organisation; Akhil Bharat Hindi Samartha Sangh since 1964. Address: Kharagpur P.O. Bihta, Dt. Patna.

**SINHA, H. E. Rajkumar Raghunath**, of Sitaman, M.A. (Cantab.), Bar-at-Law, I.F.S., Amb. of India to Guinea, since July 15, 1966. b. Dec. 8, 1912; Educ.: St. John's Coll., Agra; Magdalene Coll., Cambridge; Lincoln's Inn, London; Research Scholar, Cambridge Univ. Dewan and Pres., Council of Adm., Sitaman State; Min., Alwar State; joined the I.F.S., 1948; was posted as First Secy., Indian High Commn., London and then in the Indian Embassy, Addis Ababa, Ethiopia; Indian Govt. Trade Commr. in Karachi, 1952; Consul-Gen. of India in Egypt; Consul-Gen. of India for the Western States of the United States, San Francisco; Indian Amb. to: Cambodia; Neatherlands, July 1963-July 1966. Address: Embassy of India, Conakry, Guinea.

**SINHA, Satya Narain**, Min. Without Portfolio, Govt. of India, since March 1967. b. 1900, at Darbhanga (Bihar); Educ.: Patna, Participated in the Non-Co-operation movement and was imprisoned, 1920; member: Bihar Legislature, 1926-30; Indian Constituent Assembly; was Chief Whip, Congress Party in the Central Assembly and Constituent Assembly; Minister of State for Parliamentary Affairs, Govt. of India, 1949-62; returned to the Lok Sabha from Samastipur East Constituency, Bihar in the general elections; re-elected to Lok Sabha, 1962 & 1967; Minister of Parliamentary Affairs, 1962-June 1964, also Minister of I. & B., Sept. 1963-June 1964; Minister for Communications and Parliamentary Affairs, Government of India June '64-Feb. '67; appointed leader of the Lok Sabha, Feb. 1966. Address: 19, Akbar Road, New Delhi.

**SINHA, Mr. Justice Ujjal Narain**, B.A., Barrister-at-Law, Judge, High Court, Patna, since 1957. b. Sept. 29, 1910; Educ.: C. M. S. High School, Bhagalpur; St. Paul's Coll., Calcutta; Lincoln's Inn, London. Enrolled in Patna High Court, 1938; practised mostly on the Civil side. Address: Buddha Marg, Patna-1.

**SIRUR, Gopichand Venkatrao**, B.Sc., B.Sc. (Tech.), M.S. Chem. Engg. (N.U., U.S.A.), Chairman, All India Cottonseed Crushers' Assoc.; Dir.: N. Sirur & Co. Pvt. Ltd., The Modern Mills Ltd., Sundatta Foods & Fibres Ltd., The Mysore Spg. & Mfg. Co. Ltd., b. Dec. 30, 1923; Educ.: Hubli-Dharwar, Poona, Bombay, Evanston, Ill. (U.S.A.); B.Sc., 1945, B.Sc. (Tech.) Chem. Engg. 1947, Univ. of Bombay, and M.S. Chem. Engg., North Western Univ., Evanston Ill., U.S.A., 1948. Worked with M/s. Singmaster & Breyer, Consulting Chemical Engrs., New York City; promoted in coop. with his other colleagues, Sundatta Foods & Fibres Ltd., in India, 1950; is member, reconstituted Devpt. Council for oils, detergents & paints; Chairman, Compound Feeding-stuffs Sub-Cttee. Address: 10A, Mount Pleasant Road, Bombay-6.

**SIVAJI GANESAN** (See under GANESAN, Sivaji)

**SIVASAMBAN, Tiruvalam Kumaraswami**, B.A., B.L., F.C.A., Mg. Dir., A. & F. Harvey Ltd., since April 6, 1965. b. March 14, 1909, at Vishakapatnam; Educ.: Presidency and Law Colls., Madras. Cttee. member: Indian Cotton Mills Federation, Bombay; The Southern India Millowners' Assoc., Coimbatore; Employers Federation of Southern India, Madras; member, of Chartered Accountants, New Delhi; Dir.: Madura Mills Co. Ltd.; Fenner, Cockill Ltd.; South India Viscose Ltd.; National Machinery Mfrs. Ltd.;

Dir. and Chairman: Punalur Paper Mills Ltd.; The Indian Textile Paper Tube Co. Ltd.; Pandyan Insee. Co. Ltd.; Tuticorin Co. Ltd.; Pandyan Hotels Ltd.; Exec. Dir., A. & F. Harvey Ltd., 1963-65. Address: Pasumalai, Madurai.

**SOMAN, Vice-Admiral Bhaskar Sadashiv**, Ex-Chief of the Naval Staff, Indian Navy. b. March 30, 1913, at Gwalior; Educ.: Tilak Vidyalaya of the Indian National Congress; Shahapur, Sangli State; Belgaum; I.M.M.T.S. "Dufferin". After completing Dufferin Trg., was selected for the R.I.M. Trg. in U.K. for 2½ yrs. and returned to India as Sub-Lieutenant, Aug. 1934; promoted Lieut., 1937 and Lieut. Commander, 1945; Actg. Commander, 1946; actg. Captain, 1947; held imp. positions in the Navy as Chief of Personnel, and Chief of Adm., Naval Hqrs., Naval Officer-in-Charge, Vishakapatnam, Commodore-in-Charge, Cochin, Commodore-in-Charge, Bombay; made Substantive Rear-Admiral June 12, 1958 and apptd. Flag Officer, Bombay; Flag Officer Commanding, Indian Fleet, 1960-62; was in command of the Naval Operations during the Goa action, Dec. 1961; apptd. Hon. A.D.C. (Navy) to the President, Aug. 1964; Chief of the Naval Staff, Indian Navy, 1962-66. Address: C/o Naval Headquarters, New Delhi 11.

**SOMANI, Gajadhar**, Industrialist and Mill-owner. b. April 1908; Educ.: Shree Vishudhanand Vidyalaya, Calcutta. Twice M. P.; Ex-Chairman, Bombay Mill-owners' Assoc.; was Pres., All-India Org. of Industrial Employers, New Delhi for four years; ex-Pres., Rajasthan Chamber of Commerce & Indus., Jaipur; is on the Exec. Cttee., F.I.C.C. & I., New Delhi; Mill Owners' Asscn. B'way; Indian Cotton Mills' Fed., B'way; Pres., Cement Mfrs. Asscn.; Pres., Indian Merchants' Chamber, Bombay, 1963-64; Dir. of many companies; is connected with many religious, social and educ. instts.; served on Parly. Consultative Cttees. i.e. of the Ministries of Fin., Commerce & Indus., Labour & Employment; Chairman, Textile Mills Stg. Adv. Cttee. to go into the working on un-economic and sick units in the industry. Address: Shreenivas House, Waudby Road, Fort, Bombay 1.

**SOMASUNDARAM (Somu), M. P., Vidwan** (Madras Univ.), Tamil poet and short story writer; Chief Producer, Features for the Southern Regions, A.I.R. b. June 17, 1921; Educ.: M. D. T. Hindu Coll., Tirunelveli. Is popularly known by his pen name 'Somu'; Editor, *Kalki*—Tamil Weekly, 1954-56; awarded the Bharati Gold Medal, 1938, the first prize in the All-India Tamil short story competition, 1940, the Madras Govt.'s Poetry Prize, 1948; The Madras Govt.'s Short Story Prize in 1961; Sahitya Akademi Award for his travel Book, 1963; deputed from the Infor. & Broadcasting Min. to the B.B.C., 1960; has studied the philosophy of sidhas; knows Sanskrit, Hindi, Malayalam. Publications: Several short stories, poems, essays, novels, a travelogue and co-author of books on Tirumular & Mudal Alwar. Address: C/o AIR, Madras 4.

**SORCAR, Pratul Chandra**, Padma Shri, 1964, Magician. b. Feb. 23, 1913, at Tangail, East Pakistan. Educ.: Calcutta Univ.; F.R.A.S. (Lond.) Took to magic at an early age; won the "Sphinx" Gold Award (the 'Noble Prize' of Magic) from New York twice; hailed as "World's greatest Magician" in Germany & awarded Royal Medallion & the Golden Laurel; Hon. Member of the very exclusive Magicians' Club, Tokyo; Pres., All-India Magic Circle, Calcutta; Founder, Calcutta Branch, Intn'l Brotherhood of Magicians, U.S.A.; cycled on Place de l'Opera, Paris, blindfolded and hooded, 1950; Calcutta, 1936; Times Square, New York City, 1957; at World Magic Convention (Chicago) 1950; has had long shows in Paris, 1955; London, 1956, U.S.S.R., 1962;

Japan, 1964 and 1966; 'Judge' at the World Magic Congress, Boston, U.S.A., 1960. Publications: 16 works on magic and allied subjects in English, Hindi and Bengali; Contributors to French, German, Dutch, Belgian, Spanish, English and American magic journals. Address: "Indrajai," 276/1, Rash Bihari Avenue, Calcutta 19.

**SPASOWSKI, H.E., Mr. Romulad**, Ambassador of the Polish People's Republic to India. b. 1920; Educ.: Warsaw Univ., Joined the army, 1945; Deputy Chief of the Military Mission in Germany, 1946-48; In 1948, consul in Dusseldorf, 1948-49; 1949 — head of section at the Foreign Ministry, 1949-51; First Secy., Polish Embassy in London, 1951-53; Polish Envoy in Buenos Aires, 1953-55; Ambassador in Washington, 1955-61; Director of Asia and Africa Deptt., Foreign Ministry, Ambassador-at-large, 1961-63; Polish Commissioner, International Commission for Supervision and Control in Saigon, 1963-64; Director of Asia and Africa Deptt. at the Foreign Ministry, 1964-67. Address: 22, Golf Links, New Delhi 3.

**SREENIVASULU, K.**, Diploma in Fine Arts (First Class), Painter; Officer in Charge, Design Demonstration Centre, Egmore, Madras. b. Jan. 6, 1923; Educ.: Graduated from school of Arts, Madras, 1943. Artist; won the President's Award for the best picture of the year 'Lotus Garland', 1953; held one man show, Madras, 1955; as a Fullbright Scholar visited the U.S.A. and exhibited his works at India House, New York; displayed his works in U.S.S.R., China, Japan, Philippines and Australia; rep. of Madras State on the Gen. Council of Lalit Kala Akademi, 1956-57; member: Exec. Board, Madras State Lalit Kala Akademi; Cttee. for Purchasing Art Works, National Art Gallery, Madras; Small Scale Indus. and Handicrafts Board, Madras. Address: 31-C, Bhaktavatsalam Nagar, Adyar Madras 20.

**SRI KRISHNA, Dr., C.I.E.** (1942), Ph.D., D.Sc. (Lond.), F.N.I., Scientist. b. July 1896, at Lahore; Educ.: Punjab Univ.; D.S.I.R. (England) Research Scholar, 1919-21; Queen's College, London; King's College, London. Elected Fellow of the Royal Institute of Chemistry, 1925; Reader in Organic Chemistry, Punjab Univ., 1925; Biochemist, Forest Research Institute, Dehra Dun, 1928; Foundation Member, National Institute of Sciences, India, 1937; Pres., Chemistry Section, Indian Science Congress, 1940; Vice-Pres. Forest, Research Institute & Colleges, Dehra Dun, 1947; its Dir. of Forest Research, 1948-50; Leader, Scientific Delegation to Australia, 1948; Dy. Dir., C.S.I.R., New Delhi, 1952-53; Scientific Adviser & Scientific Liaison Officer, Indian High Commission, London, till 1959. Publications: Over a hundred publications, mainly on plant products. Address: 62, Perryn Road, London, W. 3; 88, Bajpur Road, Dehra Dun, U.P.

**Srinivasan, Srinulur Desikacheri, M.A.**, F.I.A., Mg. Dir., Life Insurance Corp. of India, Bombay, since Jan. 1960. b. July 1, 1910; Educ.: Presidency Coll., Madras. Joined insurance as an agent; apptd. as Asstt., 1936; became Mgr., 1947; Gen. Mgr., Nat. Ins. Co. Ltd., Calcutta, 1953-56; Zonal Mgr., L.I.C., Calcutta, 1956-59; Ag. Mg. Dir., L.I.C., 1959-60; Local Rep. of the Instt. of Actuaries, London; Pres.: Actuarial Soc. of India; Fed. of Ins. Instts., Bombay; was Pres., Life Offices' Assoc.; was member, Exec. Cttee., Gen. Ins. Council from its inception; Dir.: Indus. Fin. Corp., New Delhi; Export Credit and Guarantee Corp., Bombay; Oriental Fire & Gen. Ins. Co. Ltd., Bombay; Indian Guarantee & Gen. Ins. Co. Ltd., Bombay; Trustee, Unit Trust of India, Bombay; travelled extensively abroad for life and gen. ins. Address: Yogakshema, Madame Cama Road, Bombay 1.



**SRI RAM, Nilakanta, B.A. (Madras), Pres.,** Theosophical Society. b. Dec. 15, 1889; *Educ.*: Madras. Worked with Dr. Annie Besant on her newspaper, *New India*, 1910-20 & 1923-32; was on the *Leader* staff, 1922-23; has been Secy., Treasurer and Vice-Pres., Theosophical Soc.; elected int'l. Pres., Feb. 1953; has travelled abroad, lecturing and writing. *Publications*: *Thoughts for Aspirants, An Approach to Reality, A Theosophist Looks at the World, The Human Interest, Man, his Origins and Evolution*, etc. Edits the monthly *Theosophist*. *Address*: Adyar, Madras 20.

**SRIVASTAVA, Bishwambhar Nath, M.Sc., D.Sc. (Alld.), F.N.I., F.N.A.Sc., F.P.S. (London),** Scientist; Prof. of Gen. Physics, Indian Assoc. for the Cultivation of Sc., Jadavpur, Calcutta, since 1953. b. Aug. 23, 1905; *Educ.*: Jaunpur, Allahabad and Oxford Univ. Fellow, Nat. Instt. of Scs. of India, 1946; awarded Educ. Minister's gold medal by the Nat. Academy of Scs of India, 1950; elected: Recorder of Physics Sect., Indian Sc. Cong., 1953; Fellow of Physical Soc., London, 1953; Member of Commn. I of Intl. Instt. of Refrigeration, Paris, 1957. *Publications*: Over 100 research papers mainly on thermal ionization, quantum statistics, transport properties of gases, etc.; author (jointly with Prof. M. N. Saha) of *Treatise on Heat*, etc. *Address*: Indian Association for the Cultivation of Science, Calcutta 32.

**SRIVASTAVA, Chandrika Prasad, M.A., LL.B., I.A.S.,** Chairman & Mg. Dir., Shipping Corpn. of India Ltd., Bombay, since March 3, 1966. b. July 8, 1920; *Educ.*: Lucknow & Allahabad. Dy. Secy. to the Govt. of India, 1957-58; Senior Dy. Dir. Gen. of Shipping, 1959-60; Mg. Dir., Shipping Corpn. of India Ltd., 1961-64; Jt. Secy. to the Prime Min. of India, 1964-66. *Address*: Chairman & Managing Director, Shipping Corporation of India Ltd., "Steelcrete House," Churchgate, Bombay-1.

**SRIVASTAVA, J. K., B.Sc. Tech. (Manch.), A.M.C.T., A.T.I., Ex-M.L.A.,** Chief Business Exec., Sir J. P. Srivastava Group of Industries. b. Nov. 13, 1913; *Educ.*: Grimes Tutorial School; Coll. of Tech., Univ. of Manchester. Pres., Upper India Chamber of Commerce, 1957-60; Pres.: Associated Chambers of Comm. of India, 1957, 1959; Employers' Fedrn. of India, Ex-Chairman, Employers' Assoc. of Northern India; Member: State Plng. Board, U.P.; Export Promotion Adv. Council, Govt. of India; Indian Central Cotton Cttee.; Exe. Cttee., Indian Cotton Mills Fed.; All India Board of Tech. Studies in Management; Central Employment Adv. Cttee.; U.P. Leg. Assembly, 1945-52; Cttee., Cotton Adv. Board, Govt. of India and numerous Govt. and Pvt. bodies; Chairman: Northern Regional Cttee., Employers' Fed. of India; Governing Council, Northern India Textiles Research Assoc.; Leader, Indian Delegation, Intl. Org. for stdn., U.S.A., 1952; Delegate, Intl. Chamber of Comm., Paris, 1950. *Address*: Kailash, Nawabganj, Kanpur.

**STACK, Cecil, Chairman and Managing Director, The Dunlop Rubber Co. (India) Ltd.** b. Feb. 15, 1904; *Educ.*: Whitgift School, Croydon, England. Joined Dunlop Rubber Co. Ltd., England, Sept. 1922; posted to India, Dec. 1924; served in various capacities till his appointment as Managing Director in 1951, which post he held until his departure in April, 1957, to take up the position of Deputy Director, Overseas Sales, Dunlop, U.K.; became Overseas General Manager, 1958; returned to India, June 1965; Chairman, Institution of the Rubber Industry (London), Indian Section, and Chairman, Assoc. of Rubber Manufacturers in India. *Address*: 52/3, Ballygunge Circular Road, Calcutta-19.

**SUBBARAMAN, K. N., B.E. (Madras),** Chairman, Neyveli Lignite Corpn., since May 27, 1963. b. Feb. 15, 1911; *Educ.*: Maharaja's Coll., Ernakulam; B.E. Govt. Engg.

Coll., Madras, 1934. Apptd. in the Indian Rly. Service of Engrs., 1935; held posts of Asstt. and Exec. Engr., East Indian Rly., since Sept. 1935; prepared Project Report for Chittaranjan Locomotive Works, Dec. 1947; Supdt. of the Works in this construction, 1948; Dy. Chief Engr., 1949-52; Dy. Chief Engr., Dy. Gen. Mgr. and Dynl. Supdt., Eastern Rly., 1952-56; Chief Engr., Bhilai Steel Project, July 1956-Feb. 1959; Genl. Mgr. (Plng. and Construction), Hindustan Steel Ltd., to plan the expansion of steel capacity in the 3rd Five Year Plan, July-Nov. 1959; Dir. (Construction), Hindustan Steel Ltd.; Jan. 1960-May 1963. *Address*: 22, Lower Boulevard, Neyveli 1, South Arcot Dt., Madras State.

**SUBBARAO, Koka, B.A., B.L., Ex-Chief Judge, Supreme Court of India, Pro-Chancellor, Delhi Univ.,** since May 1966. b. July 15, 1902; *Educ.*: Govt. Arts Coll., Rajahmundry (A.P.); Law Coll., Madras. Practised as Advocate, Madras High Court, 1926-48; Judge, Madras High Court, March 1948-July 1954; Chief Justice, Andhra High Court, July 5, 1954 to Oct. 31, 1956; Chancellor, Sri Venkateswara Univ., 1954-55; Chief Justice, Andhra Pradesh High Court, Nov. 1956-Jan. 1958; acted as Chief Justice of India, Jan. 1965; Judge, Supreme Court of India, Jan. 1958-June 1966; Chief Justice, Supreme Court of India, June '66-May '67. *Address*: C/o. Supreme Court of India, New Delhi.

**SUBBARAO, Rayaprolu, Sahitya Sthapaka,** 1947, Telugu Poet. b. March 1892; *Educ.*: Nizam Coll., Hyderabad; Santiniketan, Joined Osmania Univ., as Head of the Telugu Deptt., 1921; Principal, Univ. Coll., Warangal, 1948-50; Head of the Telugu Deptt., S.V. Univ., 1956-59; Pres., the All Andhra Poets and Pandits Cfee., Rajahmundry, 1934; Jt. Pres., Hyderabad Telugu Academy, 1950; member: Sahitya Akademi Gen. Council. *Publications*: *Lalita*, Poetic work; *Thrinakankan*, pure lyric; *Kashlakamal*; *Swapna Kumar*; *Telugu Tota*; *Sneha Lata*; *Jada Kuchuku*; *Andhravali*; *Vanamala*; *Ramya Lekum*; *Madhuri* and *Kanne Patalu* (verses and songs); *Roopa Navanitam*, drama and translations. *Address*: Lalita Kutir, 44, Nehru Nagar, Secunderabad.

**SUBBULAKSHMI, Smt. Madurai Shanmugavadivu, Padma Bhushan (1954),** President's Award for Karnatic Music (1956), Doctor of Literature by the Rabintra Bharati University for her contribution to Karnatic Music, Jan. 1967, Classical Karnatic Musician. b. Sept. 1916. *Educ.*: Learnt music from her childhood from her mother; as a young girl gave vocal assistance to her mother in the latter's Veena concerts; started giving solo performances in a few years; before 18, was acknowledged as a first-rate musician; came to be known to North India by giving a concert in Bombay under the auspices of the Vikramaditya Celebrations, 1944; her part as heroine in the Hindi film "Meera" won for her all India popularity; has given more than a 100 benefit recitals in aid of many national, social and religious causes; represented Karnatic Music in the Edinburgh Intl. Festival of Arts, 1963; also gave concerts in London, Frankfurt, Geneva and Cairo. *Address*: "Kalki Buildings", 20, Dr. Guruswamy Mudaliar Road, Kilpauk, Madras-10.

**SUBRAMANIAM, C., B.A., B.L. (Madras),** Ex-Minister for Food, Govt. of India. b. Jan. 30, 1910, at Pollachi, Coimbatore Dist.; *Educ.*: Coimbatore and Madras; B.A., 1930, B.L., 1932. Started practice in Coimbatore, 1936; imprisoned thrice in the freedom movement; closely associated with the Coimbatore Textile Labour Movement and Sri Ramakrishna Mission Vidyalaya in Coimbatore Dist.; was Pres., Coimbatore D.C.C.; member: P.C.C., A.I.C.C.; Wkg. Cttee., Tamil Nad Cong.; took a keen interest in students orgs. and youth movements; member, Constituent Assembly, 1946-52; M.L.A., Madras, from the Coimbatore City Constituency, Jan. 1952; and

1957; Fin., Educ. and Law Min., Madras till 1962; M.P., Lok Sabha from Pollachi, 1962; Union Min. for Steel & Heavy Industries, 1962-63; Min. for Steel, Mines & Heavy Engg., Nov. 1963-June 1964; Min. for Food and Agr., June 64-Jan. 66; Min. for Food, Agr., Com. Devpt. and Co-op. Jan. 66-Feb. 67; visited the U.K. and the Continent, 1960; toured Russia, U.S.A., Canada, Japan and Singapore and estd. friendly relations with many of the leading statesmen, adm. ors and industrialists, 1961; led Indian Delegation to the F.A.O. Regional Cfce. at Manila, 1964; Rome, 1965; visited: Australia, April 1965, to study agri. prod.; U.S.A., Dec. 1965, to discuss Indo-US Agri. co-op.; has solved many major political and adm.ive problems, has been a spl. invitee to all wkg. cttee. meetings of the Ind. Nat. Cong. *Publications*: Two travelogues in Tamil; *Countries I have visited and Round the World* and numerous articles. *Address*: New Delhi.

**SUBRAMANIAN, Sitaram, M.A.,** Chairman, Tariff Revision Cttee., Govt. of India, since 1964. b. Aug. 12, 1909; *Educ.*: St. Joseph's Coll., Trichinopoly. Lecturer, Annamalai Univ., 1930-39; Statistician, Min. of Commerce & Industry, and Dir., Adm.ive Intelligence Room 1939-51; Jt. Dir., Central Statistical Org., Statistical Adv., Min. of C. & I., 1951-58; Dir.-Genl., Commercial Intelligence and Statistics, Govt. of India, 1959-64. *Publications*: *Cost of Living Index Numbers in India*; *Guide to Current Official Statistics*; *Recent Social and Economic Trends in India*; *Report on Enquiry into the Family Budgets of Middle Class Employees of the Central Govt.* (1945-46); *History of Indian Statistical Org.*; 35 *Papers on Mathematical, Statistical and Economic Subjects*. *Address*: C/o Ministry of Commerce, Udyog Bhavan, New Delhi 11.

**SUBRAMANYAN, K. G., Diploma in Fine Arts (Viswabharati), Painter; Prof. of Painting, Faculty of Fine Arts, Baroda,** since 1966. b. Feb. 15, 1924; *Educ.*: Presidency Coll., Madras; Kalabhawan, Viswabharati, Santiniketan; Slade School of Art, London. Lecturer in Fine Arts, Baroda Univ., 1951-58; went on a British Council Scholarship to Britain, 1955-56; travelled in France and Italy; Dy. Dir. (Designs), All India Handloom Board, 1958-61; Design Consultant to All India Handloom Board; member: All India Board of Tech. Studies in Applied Art; Reader in Painting, Faculty of Fine Arts, Baroda, 1961-66; one-man shows in Delhi, 1955, 1958 and 1962; Bombay, 1957 and 1960; participated in many int'l exhibitions; received medallion of honourable mention in the Sao Paulo Biennale, 1961 & National award, 1965. *Publications*: Articles in *Marg*, *Viswamanav*, *Kumar*, *Kshiti*. *Address*: Faculty of Fine Arts, Pushpa Bagh, Baroda.

**SUCHARITAKUL, H.E. Mr. Chitti, B.A. (Hons.) (Oxon.),** Barrister-at Law, Ambassador Extraordinary & Plenipotentiary of H.M. the King of Thailand to India, since 1963 & concurrently Amb. to Ceylon and Min. to Afghanistan & Nepal, since 1964. b. March 4, 1908; *Educ.*: Thailand; B.A. (Hons.), Oxford Univ., 1931. Bar-at-Law, Inner Temple, 1933. Min. of Justice, Thailand, 1934; Min. of Foreign Affairs, 1949; Envoy Ext. and Min. Plenipotentiary to the Philippines, 1953; Amb. Extra. & Plen. to the Philippines, 1956; Amb. attached to the Min. of Foreign Affairs & Council Rep. for Thailand to SEATO, 1958; Member, Const. Assembly, 1959; Amb. to Switzerland, 1959; Concurrently Minister to Yugoslavia & Austria, 1960; concurrently Permanent Rep. of Thailand to the European Office of the U.N., 1963. *Address*: Royal Thai Embassy, Chanakyapuri, New Delhi 21.

**SUDHANSHU, Dr. Lakshmi Narayan, M.A., D.Litt., Hindi Author; Ex-Speaker, Bihar Leg. Assembly (1962-67).** b. Dec. 15, 1906 in Rupaspur Village, Purnea Dist.; *Educ.*: Purnea; Bh. galpur; Banaras Hindu Univ. A Congressman since 1927; Chairman, Purnea Dist. Board, 1939-40;



M.L.A., Bihar, since 1946; Chairman, State Hindi Cttee., since 1949; Gen. Secy., Bihar Leg. Congress Party, 1948-49; Pres., Bihar P.C.C., 1950-52; courted jail in the freedom movement; Principal, Hindi Vidyapith, Deogarh, 1935-38; twice Pres., Bihar Hindi Sahitya Sammelan; Editor, *Avantika*, 1953-56; Founder Pres., Purnea Kala Bhavan, since 1955; Adv., Encyclopaedia of Hindi; Pres., Cfee. of Bihar Raj Bhasa Parishad, 1962; awarded the title of "Sahitya Vachaspati" of the All India Hindi Sahitya Sammelan, Allahabad. *Publications*: *Kavya me Abhivyanjana-vada*; *Jivan Ke tattva Aur Kavya Ke Siddhanta*. Address: Village Rupaspur, Dt. Purnea (Bihar); 2, King George Avenue, Patna.

**SUKHADIA, Mohanlal, L.E.E. (Bombay)**, Chief Min., Rajasthan, since Nov. 13, 1954. b. July 31, 1916; *Educ.*: Nathdwara (Udaipur) and Bombay. Interned during 'Quit India Movement'; Min. for Civil Supplies, P.W.D., Relief & Rehab., Mewar State; became Devpt. Min. when the State of Rajasthan was first formed; M.L.A., from Udaipur City constituency; Min. for Civil Supplies and Agr. incl. Irrigation, Vyas Cabinet, Rajasthan, April 26, 1951-March 3, 1952; Min. for Agr., Revenue (except Forests and Co-op.), and Famine Relief Paliwal Cabinet, March 4, 1952-Oct. 31, 1952 and in Vyas Cabinet, Nov. 1, 1952-Nov. 12, 1954; responsible for the land reforms and Panchayati Raj in the State. *Publications*: *Our Administrative Problems*; Articles on political, eco. and social subjects. Address: 8, Civil Lines, Jaipur.

**SUKHATME, Pandurang Vasudeo, B.Sc., Ph.D. (London), D.Sc. (London), F.N.I. Dir., Statistics Dvn., Food and Agr. Org. of the U.N., Rome, since Jan. 1959. b. July 27, 1911; Educ.: Fergusson Coll., Poona; Univ. Coll., London; Galton Laboratory, London; Rothamsted Agrl. Experimental Station, Harpenden. Statistics Adv., I.C.A.R., 1940-51; Chief, Statistics Branch, F.A.O., U.N., 1951-58; Fellow, Nat. Instt. of Sci., India, 1941; was Research Prof., Iowa State Univ., Ames, Iowa, U.S.A.; was Pres., Statistics Sect., Indian Sec. Cong.; awarded the Guy Medal by the Royal Statistical Soc., Gr. Britain, 1963. *Publications*: Co-author of *Statistical Methods for Agrl. Workers*, 1955; *Sampling Theory of Surveys with Applications*, translated into Spanish by Fondo de Cultura Economica, Mexico; *The World's Hunger and Future Food Needs*, 1961, translated and published in French and Spanish by F.A.O.; *Feeding India's Growing Millions*; Published by Asia Publishing House, Bombay and many original research memoirs. Address: Rome, Italy.**

**SUKTHANKAR, Yeshwant Narayan, C.I.E. (June 1941), M.A., LL.B. (Cantab.), Bar-at-Law (Lincoln's Inn), I.C.S. (Retd.), Govt. Dir., Board of Indian Shipping Companies, Bombay. b. Aug. 24, 1897; Educ.: Bombay and Cambridge Univ. Joined the I.C.S., 1922; held many posts in the M. P. Govt. till he was transferred as Dy. Secy., Commerce Dept., Govt. of India, July 1937; Dy. Commr., Aug. 1937; Tea Controller for India, Oct. 1939; Secy., Commerce Dept., Govt. of India, Aug. 1946-Aug. 1947; Secy., Min. of Transport, Aug. 1947-Dec. 1951; Secy., C. and I. Min., Dec. 1951-Dec. 1952; Spl. Secy., Cabinet and Secy., Plng. Commn., Dec. 1952-May 1953; Cabinet Secy. and Secy., Plng. Commn., Govt. of India, 1953-57; Governor of Orissa, 1957-1962. Pres., Maritime Freight Commn. Address: Directorate General of Shipping, Commerce House, Ballard Estate, Bombay 1.**

**SUMATI Morarjee, Smt., Ex-Chairman, Indian National Steamship Owners' Assoc. b. March 13, 1909; Educ.: Privately. Dir.: Mg. Cttee., The Scindia Steam Navigation Co., Ltd.; Kamal Shipping Co., Ltd.; Jalanath Ins. Ltd.; The Eastern Bunkers Ltd.; Narottam & Pereira Ltd.; Member: Sea Cadet Council; All India Handicraft Board; Regional Handicrafts Design Centre; Indian and Tourist**

Industry's Council; Nat. Shipping Board; Merchant Navy Trg. Board; Shipping Coordination Cttee.; Export Promotion Council; Dy. Chairman, Lloyds India Cttee.; Vice-Chairman, Maritime Law Assoc. of India. Address: Palm Bun, Gandhi Gram, Juhu, Bombay 54.

**SUNDARAM, C. R., B.Sc. (London), A.R.C.S. (1933), Chairman, National Small Industries Corp'n Ltd., since Nov. 1961. b. Feb. 28, 1910; Educ.: Presidency Coll., Madras; Imperial Coll. of Sc. and Tech., Univ. of London. Joined Rallis Bros. Ltd.; was trained for a year at their Head Office in London; posted in India as a Covenanted Asstt.; worked as Asstt. Dir. (Textiles), Supply Deptt., Govt. of India until Aug. 1942; with Tata Sons Ltd., Bombay, 1943-49; apptd. as a Dir., Tata Incorporated, New York, 1949; became its Vice-Pres.; was Pres., Indian Chamber of Commerce of America Incorporated; Branch Mgr., Voltas Ltd., New Delhi, 1954-59; Dir.: Nat. Small Indus. Corp'n Ltd., 1960; Bharat Electronics Ltd.; member, Indus. and Mineral Resources Board, M.P., since Oct. 1965. *Publications*: Articles in various Journals. Address: C/o National Small Industries Corporation Ltd., Okhla Industrial Estate, New Delhi.**

**SUNDARAM, Kuthur Vaidyanath Kalyan, B.A. (Hons.) (Madras Univ.), I.C.S., Chief Election Commr. b. Jan. 1, 1904; Educ.: Coimbatore Coll.; Presidency Coll., Madras and Christ's Coll., Cambridge. Joined the I.C.S., 1927; served in Madhya Pradesh as Asstt. Commr., Dist. Judge and later as Registrar, Nagpur High Court, 1927-36; Reforms Officer, Govt. of India, 1936-38; Leg. Deptt., Govt. of India, 1938-48; Secy., Min. of Law, 1948-58. Address: 5, Race Course Road, New Delhi 11.**

**SUNDARAM, Tribhuvandas Purushottamdas Luhar, "Bhasha Visharad" (1929), Gujarati Poet, Short Story Writer and Critic. b. March 22, 1908; Educ.: Gujarat Vidyapith, Ahmedabad. *Publications*: *Kadvi Vani*; *Kavya Mangala*; *Rang Rang Vadalian*; *Vasudha*; *Yatra*; *Hirakani & Other Stories*; *Piyasi*; *Unnayan*; *Dakshinayan*; *Aravachin Kavita*; *Avalokana*; *Maha Yogi Sri Arvind*. Address: Sri Aurobindo Ashram, Pondicherry.**

**SWAMI CHIDANANDA (Pre-monastic name Sridhar Rao), President, Divine Life Society, Rishikesh. b. Sept. 24, 1910, at Mangalore, South Kanara Dist.; Educ.: Mangalore till 1932; then at Madras, B.A. from Loyola coll., Madras. Religiously inclined since birth; sought the company of devotees and saints even in his boyhood and youth; practised yoga at home and developed kindness, compassion, simplicity, devotion, love of solitude and a spirit of selfless *Paropakara*; powerfully influenced by the lives of Ramakrishna Paramahansa, Jesus Christ, Swami Vivekananda, Ramathirtha, Ramana Maharshi, Ramadas and Swami Sivananda; renounced the world and journeyed north to the Himalayas, 1943; met his spiritual Guru H. H. Swami Sivananda at Rishikesh and dedicated himself to the Guru's service; ordained as a sannyasin, 1949; was made General Secy. of the Divine Life Society; travelled over India as Swami Sivananda's spiritual representative till 1959; toured Europe and the Americas to spread the gospel of Divine Life and India's message of Yoga and Vedanta, 1960-61; elected Pres., D.L.S. at passing away of the holy founder, 1963. Address: P. O. Sivanandanagar, Dt. Tehri-Garhwal, U.P.**

**SWAMI, Prajnanananda, Secy., Ramakrishna Vedanta Math, Calcutta. b. 1907. Educ.: City Coll., Calcutta; Varanasi. Joined the Ramakrishna Vedanta Math, 1927. Took Sanyasa initiation from Swami Abhedananda, the direct disciple of Shri Ramakrishna Paramahansa, 1927; studied Nyaya and Vedanta Philosophies at Varanasi. Learnt Indian Classical Music under eminent musicians like**

Harinarayana Mukherjee of Varanasi, Gopswara Banerjee and others; conducted research on History of Indian Music; awarded: Sisir Memorial Prize, 1958, Rabindra Memorial Prize, 1960; awarded fellowship by Sangeet Natak Akademi, New Delhi, 1963; connected with various educ. and cultural instts. *Publications*: On Music: *Historical Derpt. of Indian Music*; *A Historical Study of Indian Music*; *A History of Indian Music*; Bengali: *Bharatiya Sangeeter Itihasa*; *Raga O Rupa*; *Bangala Dhrupadamala* (with notations); Philosophy: *Philosophy of Progress and Perfection*; *Abhedananda-darsana*; *Tirtharenu*; *Mana O Manusa*, etc. Address: Ramakrishna Vedanta Math, 19B, Raja Rajkrishna Street, Calcutta-6.

**SWAMI, Raja Yogi Nathji Ananda, B.A. (Allahabad), Diploma in Hosiery and Textile, Chairman, Visva 'Yoga' Bharati, Borivli, Bombay. b. Feb. 19, 1900; Educ.: Hindu Coll., Delhi; B.A. St. John's Coll., Agra, 1926. Took a vow to lead a life of four varna ashrama in response to a discourse on Hindu dharma by an American lady in 1916 when he was a student in the 9th class; Principal, Govt. Hosiery Instt., Ludhiana, 1926-33; initiated for Dhyana Yoga at the age of 12 and for Raja Yoga at 18; devoted fully to Yoga-prasara during the Vanaprastha Ashrama; founded the 'Visva Yoga Bharati' and its constituent instts. are Raja Yoga Vedanta Centre, Raja Yoga Vanaprastha Ashram, Dhyana-Yoga Brahmachari Gurukula and a Central Yoga-cum-Natural Therapy at Vallabh Nagar, Borivli. *Publications*: *Raja Yoga Thesis*; *India's Message of Spirit Force Development*. Address: Chairman, Visva Yoga Bharati, 5, Vallabh Nagar, Borivli, Bombay 66.**

**SWAMI Ranganathananda, Secy., Ramakrishna Mission Instt. of Culture, Calcutta, since April 1962. b. Dec. 15, 1908. A Sanyasin of the Ramakrishna Order of Monks; joined the Ramakrishna Mission, Mysore in 1926; took orders in 1933; served as Secy. & Librarian of the Ramakrishna Mission Soc., Rangoon, July 1939 to Feb. 1942; Pres., Ramakrishna Math and Mission Branch at Karachi, Aug. 1942-Aug. 1948; Secy., Ramakrishna Mission, New Delhi, 1949-1962. Cultural lecture tours to Japan, 1958, eight South East Asian countries 1960, and 17 European countries, incl. U.K. and U.S.S.R., 1961. *Publications*: *Eternal Values for a Changing Society*, brought out by the Advaita Ashrama, Calcutta, 1958; *The Message of the Upanishads*, (under print). Address: The Ramakrishna Mission Institute of Culture, Gol Park, Calcutta 29.**

**SWAMINATHAN, H.E. Mr. T., M.A. & Diploma in Modern European Languages (Madras), I.C.S., Ambassador in Belgium, since 1966. b. June 18, 1912; Educ.: Presidency Coll., Madras. Entered the I.C.S., 1935; served in different capacities in districts and in the Directorate of Industries in the U.P., 1936-42; Secy. to U.P. Govt., Deptt. of Industries, Labour and Excise, 1947-51; Textile Commissioner, Govt. of India, Bombay, 1951-54; Minister (Economic), High Commission of India, London, 1954-58; Commissioner General of India for Economic Affairs in Europe, London, 1958-61; Addl. Secy. (Industries), Govt. of India, Min. of Commerce & Industry, 1961-62; Addl. Secy. in Charge, Deptt. of Heavy Industries, Min. of Steel & Heavy Industries, Govt. of India, 1962-63; Spl. Secy., Ministry of Economic and Defence Coordination, Govt. of India, July to Aug. 1963; Secy., Govt. of India, Deptt. of Supply and Technical Devpt., 1963-65; Secy., Deptt. of Defence Supplies, Min. of Defence, 1965-66; Secy., Govt. of India, Min. of Iron & Steel, 1966. Address: C/o External Affairs Ministry, New Delhi,**

**TAKRU, Mr. Justice Jawahar Nath, B.A., LL.B., Judge, High Court, Allahabad, since May 6, 1957. b. Dec. 6, 1900; Educ.: The Allahabad and Edinburgh Univs. B.A., 1926; studied abroad for two years, LL.B., 1931; did one year's trg. in the chamber of**



Dr. K. N. Katju; joined the Allahabad Dist. Court Bar and practised in the Dist. Courts for 10 years; shifted to the Allahabad High Court and practised, Dec. 1942-May 1957; Addl. Judge, Allahabad High Court, May 6-Oct. 20, 1957. Address: 12, Sir T. B. Sapru Road, Allahabad, U.P.

**TALEYARKHAN, Homi J. H., B.A. (Bombay),** Ex-Minister for Housing, Printing Presses, Fisheries, Savings and Tourism, Maharashtra State. b. Feb. 9, 1917; Educ.: Bombay Univ.; King's Coll. and Middle Temple, London. Member and Chief Whip, Congress Party, Bombay Municipal Corporation, 1948-52; was Chairman, Works Cttee.; on invitation from President Truman, visited U.S.A. on a goodwill and study tour and spent about four months there explaining India's economic progress and foreign policy; elected M.L.A., Bombay, from Walkeshwar-Mahalaxmi Constituency, 1952, 1957 & 1962; appointed Gen. Secy., Leg. Congress Party; was member, Estimates Cttee. for two years; toured Japan, 1956; toured Germany to study their parliamentary system and economic development, 1960; appointed chief whip of the Leg. Congress Party and Parliamentary Secy. to the Chief Minister, 1957; was mainly responsible for collecting a larger amount than the target and ahead of all other States in the Small Savings Scheme; is member, Exec. Cttee. of the Commonwealth Parliamentary Assoc.; is an Associate delegate of the A.I.C.C.; is Chairman, Society for the Prevention and Rehabilitation of Beggars; pioneered a scheme for low-income group holiday resorts; Pres., Walkeshwar Mahalaxmi Group of Social Welfare Cttee. and Society of Goodwill; Chairman, Workshop for the Blind; Minister for Public Health, Small Savings and Tourism, Maharashtra, 1960-62; also held the portfolios of Food & Civil Supplies, 1962-65. Address: C/o Sachivalaya, Bombay 32.

**TALEYARKHAN, Smt. Thrity Homi Jehangir,** Padma Shri (1965), Social Worker. b. July 22, 1925; Educ.: St. Xavier's Coll., Bombay. Member: All India Handicrafts Board, since 1963; Vice-Pres., Crafts Council of India; Exe. Cttee., Maharashtra State Women's Council; Governing Council, Bharatiya Vidya Bhavan; Board of Governors, Instt. of Catering Tech. and Applied Nutrition; is Cttee. member, Soc. for the Protection of Children in Western India; is founder and Chairman: Shiipi Kendra, Dec. 1963, to promote Indian Handicrafts; two of the Cttees. of Maharashtra State Women's Council; State Cttee. for Small Savings; Adv. Cttee., G. T. Hospital, Bombay; orgd. 'Our Heritage' exhibition, Nov.-Dec. 1964; is founder and Gen. Secy., All India Women's Central Food Council, 1950; Indian rep. to the world Seminar on Women's Problems, in Germany, July-Aug. 1965. Address: 'Seva Sadan', 21, Narayan Dabholkar Road, Bombay 6.

**TALWAR, Sardari Lal, Industrialist.** b. July 17, 1912; Educ.: Lahore. Founded jointly with Mr. Roshan Lal Talwar The Paper Products Co., pioneers of specialised flexible packaging in India, 1935; apptd. Chairman and Mg. Dir., Paper Products Ltd., on its incorporation as a Public Ltd. Co., June 1950; Dir.: The Peshawar Electric Supply Co. Ltd., The Sialkot Electric Supply Co. Ltd., The Gen. Mines & Quarries Ltd. Address: C/o The Paper Products Ltd., 120, Dinshaw Vachha Road, Bombay 1; C/o The Paper Products Ltd., 13-14, Ajmeri Gate Extension, New Delhi 1.

**TALYARKHAN, Rustom Furdoonji Sorabji,** M.A. (Cantab.), Bar-at-Law, Chairman & Chief Exec., Voltas Ltd., Bombay, since April 1966. b. Aug. 30, 1907; Educ.: Clifton Coll., Bristol; Gonville and Caius Coll., Cambridge. Practised at the Bombay High Court, 1929-35; joined Tata Sons Ltd., Bombay, Feb. 1935; Dy. Gen. Mgr., Tata Aircraft Ltd., Bombay, 1946; Dy. Agent, TISCO Ltd., Bombay, 1952; Dir. and Dy. Gen. Mgr., Voltas Ltd., Bombay,

1954; Mg. Dir., Voltas Ltd., Bombay, 1963; Chairman, Henley Cables (India) Ltd., since Jan. 1966; Dir.: Tata Industries Pvt. Ltd.; Intn'l Tractor Co. of India Ltd.; Roche Products Ltd.; Scottish Indian Machine Tools Ltd.; The Gokak Mills Ltd.; Commercial Printing Press Ltd.; Tacar Air-conditioning & Refrigeration Pvt. Ltd. Address: Lyndewode House, Bomonji Petit Road, Cumballa Hill, Bombay 26.

**TANDON, Prakash Lal, B.A., B.A. (Com.)** (Manch.), F.I.C.A. (Eng. & Wales); Chairman, Hindustan Lever Ltd., since 1961. b. June 11, 1911; Educ.: Punjab and Manchester Univs. Joined Lever Bros. (India) Ltd., 1937; Sales Mgr., Hindustan Vanaspathi Mfg. Co., Ltd., 1941; Marketing Contr., 1945 and Marketing Dir., 1951; Co-ordinating Dir., 1956; Adm.ive Dir., 1959; Vice-Chairman, 1960; Chairman, Vanaspathi Mfrs. Assoc.; Pres., Bombay Chamber of Commerce and Indus., 1964-65; Member, Court of Governors, Adm.ive Staff Coll. of India, Hyderabad; Chairman, Indian Instt. of Management, Ahmedabad; Dir.: Hindustan Steel Ltd.; Central Board of the R.B.I.; Food Corp. of India; attended Harvard School of Business Adm.'s Advanced Management Programme, 1958; led a Marketing and Distribution Team of the National Productivity Council of India to the U.K., U.S.A. and West Germany, 1960. Publications: *Punjab Century* 1857-1947, 1961. Address: "Dakshin Pall", D'Monte Park, Bandra, Bombay 50.

**TANDON, Raj Krishna, B.A., LL.B.** (Punjab), B.A. (Hons.) (Cantab.), Barrister-at-Law, Amb. to Ireland, since Jan. 1966. b. Feb. 10, 1910; Educ.: Forman Christian Coll. and Law Coll., Lahore, Emmanuel Coll., Cambridge and Middle Temple, London. Joined Punjab Civil Service; Under-Secy., 1942 and then Dy. Secy., Inf. and Broadcasting Deptt., Govt. of India; Officer on Spl. Duty, Commerce Deptt., Govt. of India, Feb. 1946; Trade Commr. in Ceylon, 1946-48; Dy. Chief Contrl. of Imports & Exports, Bombay, 1948-50; Dy. Secy. and Jt. Chief Contrl. of Imports, Govt. of India, 1950; Consul-General of India, Pondicherry, 1950-53; Ag. Commr. in British East Africa, Federation of Rhodesia and Nyasaland and Ag. Consul-Gen. in Belgian Congo and Ruanda Urundi, 1954; Indian Commr. in Singapore and the Federation of Malaya, 1954-57; Jt. Secy. and Chief of Protocol, Min. of Ext. Affairs; 1957-59; Indian Amb. in Netherlands; 1960-63; High Commr. for India in Kenya, 1964-66. Publications: Articles in various papers. Address: C/o External Affairs Ministry, New Delhi.

**TANGE, E. E. Sir Arthur Harold, Kt.** (cr. 1959), C.B.E. (1955), B.A., Australian High Commr. to India and Australian Amb. to Nepal. b. Aug. 18, 1914; Educ.: Univ. of Western Australia. Bank of New South Wales, 1931; Economics Research, various Commonwealth Deptts., Canberra, 1942-46; First Secy., Australia Mission to the U.N., 1946-48; Counsellor, U.N. Dvn., Canberra, 1948-50; Asstt. Secy., Canberra, 1950-53; Australian Min., Washington, D.C., 1953-54; Secy., Deptt. of Ext. Affairs, 1954-65; Member, Australian Delegations: Bretton Woods Monetary Cfee.; U.N. Preparatory Commn.; Gen. Assembly, Econ. & Social Cl., London and New York; Reparations Cfee., Paris; I.L.O., Paris, Montreal and San Francisco; Intn'l. Trade Cfees., London, Geneva and Havana; British Commonwealth Ministerial Cfees., London, Colombo, Sydney, 1944-64. Publications: *Australia Foots the Bill* (joint author). Address: The Residence, Australian Compound, Shanti Path, Chanakyapuri.

**TARE, Mr. Justico Prabhakar Kesheo,** B.A., LL.B., Judge, M. P. High Court, since Dec. 1957. b. Oct. 11, 1913; Educ.: Powarkhera; Ramjas High School, Delhi; Holkar Coll., Indore; Morris Coll., Nagpur; LL.B., Univ. Coll. of Law, Nagpur, 1936. Enrolled at the Hoshangabad Bar; joined Congress; resigned from Congress as a protest

against the action against Subhas Chandra Bose; joined Forward Bloc, 1939; often courted jail in the freedom struggle; started practice in Nagpur High Court, Oct. 1945; Secy., M.P. Forward Bloc throughout; Secy., All India Forward Bloc; gave up politics, 1952. Address: Judge, M.P. High Court, Pachpedhi, Jabalpur, M.P.

**TARNEJA, Dr. Ram, B.A. (Hons.) (Delhi), M.A. (Delhi & Virginia), Ph.D. (Cornell),** Gold Medallist, Director of Personnel, Sahu Jain Industries. b. December 7, 1931, at Karachi; Educ.: L.R.D.A.V. High School, Karachi; S. B. Coll. of Commerce (B.A. Hons.), 1947-51; awarded, Hora Gold Medal, 1951; St. Stephen's Coll., Delhi (M.A.), 1951-53; Univ. of Virginia, U.S.A. (M.A.), 1953-55; Cornell Univ. (Ph.D.), 1955-57. Governor, Indian Instt. of Management, Calcutta; Council Member, All-India Management Assoc.; member, Board of Studies for Commerce Hons. & Post-Graduate, Andhra Univ.; Pres., Patna Management Assoc.; Vice-Chairman, Calcutta Management Assoc.; member, All India Board of Tech. studies in Management; Faculty Research Fellow, Ford Foundation, 1960-61; Professional Member, Academy of Management, Indian Instt. of Public Adm., etc., Indian Instt. of Personnel Management and Calcutta Management Assoc.; Associate Prof. of Management, Duquesne Univ., U.S.A., and Management Consultant. Publications: Many in journals on business adm. and economics. Address: 11, Clive Row, Calcutta 1; 3C/22, Rohtak Road, New Delhi 5.

**TATA, Jehangir Ratanji Dadabhoi, Industrialist.** b. Paris, France, July 29, 1904; Educ.: India, France, Japan. Chmn., Tata Sons Private Ltd., 1938; founder, Tata Airlines, 1932; Chmn.: Air-India Ltd., 1946; Air-India Intn'l Ltd., 1948; Air-India, 1953; Mem., Indian Airlines Corp., 1953; Chmn.: Tata Industries Pvt. Ltd., Tata Iron and Steel Co. Ltd., Tata Hydro-Electric Agencies Ltd., Tata Oil Mills Co. Ltd., Tata Engg. & Locomotive Co. Ltd., Tata Chemicals Ltd., Tata Ltd., London, Tata Inc., N. Y., Tata A. G., Zug, Tata Intn'l A. G., Zug; Lady Tata Memorial Trust, J. R. D. Tata Trust, J. N. Tata Endowment for Higher Educ. of Indians, Tata Instt. of Fundamental Research; Dir.: Investment Corp. of India Ltd.; Indian Hotels Co. Ltd., Swadeshi Mills Co. Ltd., New India Assurance Co. Ltd. (Vice-Chairman); Trustee, Sir Dorabji Tata Trust; Mem., Exec. Comm. Intn'l Air Transport Assn.; Tata Inst. Social Scs. (governing body); Council, Sc. and Indsl. Research (governing body), Nat. Council of Applied Econ. Research (Gen. Body); Central Adv. Council of Industries; Pres., The Court of the Indian Inst. of Sc.; Jawaharlal Nehru Memorial Fund (Vice-Chairman); decorated Legion of Honour, 1954; named Intn'l Management Man, Nat. Assoc. of Foremen, 1953; Doctor of Sc. (Honoris Causa), Allahabad Univ., 1947, recipient, Padma Vibhushan, Govt. of India, 1955; Hon. member, Iron & Steel Instt., Lond., 1963; Commander Knight of St. Gregory the Great, Feb. 1965; awarded the honorary rank of Air Commodore in the I.A.F. by the President of India, Oct. 1966. Address: Residence: 'The Cairn', Altamont Road, Cumballa Hill, Bombay 26; Office: Tata Sons Private Ltd., Bombay House, Bruce Street, Fort, Bombay 1.

**TAWDE, Dr. Nanasaheb Ramji, B.A.** (Hons.), B.Sc. (Bombay), M.Sc. (Bombay), Ph.D. (Lond.), F. Inst. P. (Fellow of Instt. of Physics, Eng.), F.N.I. (Fellow of Nat. Instt. of Scs., India), F.A.Sc. (Fellow of the Indian Academy of Scs.), Vice-Chancellor, Marathwada Univ., since June 19, 1964. b. Jan. 15, 1898; Educ.: Gen. Educ. Instt., Dadar; St. Xavier's Coll., Bombay; Royal Instt. of Sc., Bombay; London Univ.; Univ. of Stockholm (Sweden). Pres., Physics Sec. of Indian Sc. Cong., Lucknow, 1953; Fellow, Bombay Univ.; was Chairman, Board of Studies in Physics and member, Academic



Council of Bombay Univ.; member: Syndicate, Senate, Academic Council and Board of Studies, Karnatak Univ.; Ag. Vice-Chancellor, Karn. Univ., 1962; member, Instt. of Nuclear Engrs., London, 1960. *Publications*: About 115 on modern problems of Physics; Author of *Jeevan Vidyan*, Sc. text books in Marathi. *Address*: Marathwada Univ., Aurangabad (Deccan).

**THACKER, Prof. Maneklal Sankalchand**, B.Sc. (Eng.), (Bristol), D.Sc., D.Litt., D. (Eng.) (*honoris causa*, of several Indian Univs.), F.N.I., F.I.A.Sc., Fellow, Amer. Inst. of Electrical Engrs., Padma Bhushan (1955); Member, Plng. Commn. in charge of Natural Resources, Irrigation and Power, Health, Housing etc., since Oct. 25, 1962. b. Dec. 3, 1904; *Educ.*: Ahmedabad and Bristol Univ., U.K. Covenanted Officer, Calcutta Electric Supply Corp., 1932-47; Prof., Power Engg., 1947-49 and Dir., Indian Inst. of Sc., Bangalore, 1949-55; Chairman, British Commonwealth Scientific Cttee., 1961-63; Gen.-Pres., U.N. Confer. on application of Sci. & Tech., 1963; Chairman, U. N. Adv. Cttee. on Sc. and Tech. to Devpt.; Fellow or member of several learned and professional bodies in India and abroad; was Pres., Indian Sc. Cong.; has travelled widely and led several scientific delegations to int'l. ctees.; has been chairman of various devpt. ctees. for the promotion of machine tools, engg. industry, scientific instruments, etc.; Secy. and educ. Adv. (Tech.), Min. of S. R. & C. A.; Dir.-Genl., C.S. and I.R.: 1955-62. *Publications*: Papers on electro-technology, high voltage and power engg. and energy devpt. *Address*: 4, Kushak Road, New Delhi 11.

**THACKERSEY, Dr. Smt. Premila Vithaldas**, D. Litt. (Banaras Hindu Univ.) and (S.N.D.T. Univ.), Vice-Chancellor, S.N.D.T. Univ., since 1957; Chairman, Inter-Univ. Board of India & Ceylon, 1966. b. Jan. 8, 1894; *Educ.*: Studied English and Sanskrit at home with the help of learned shastris and profs. Went on a world tour, 1919; began taking interest in social and educ. activities, 1926; nominated Vice-Chancellor, S.N.D.T. Univ., 1951; elected in 1957, 1960 and 1963; Chairman: Kasturba Gandhi National Memorial Trust; Prof., J. P. Trivedi Memorial Trust; Lady Northcote Hindu Orphanage and a prominent worker of Vanita Vishram. *Address*: Parnakuti, Veravda Hill, Poona 6.

**THADANI, Haso Nenumal, B.E. (Mech., Elect.)**, Business man, Industrial and Management Consultant. Mg. Dir., Endesco Pvt. Ltd., Bombay. b. June 20, 1916. a founder Chairman and Mg. Dir., Ibeon Pvt. Ltd., Bombay, 1956-64. Chairman, Instt. of Industrial Engrs. (India), since 1959; Member of the Board of Governors, NITIE; Leader of NPCUSAID Study Team to U.S.A. and Japan for "Industrial Engg.", 1964; Member, Governing Council of NPC; has been Consultant to Govt. of Ceylon, Iraq and Burma for devpt. of new industries. *Address*: Res.—"The Cliff", 11, Carmichael Road, Bombay 26; *Office*:—"Shivaenumb", 205, Dr. A. Besant Road, Worli, Bombay 18.

**THANU Pillai, A., B.A., B.L.**, Governor of Andhra Pradesh, since May 4, 1964. b. July 1885 in Trivandrum; *Educ.*: B.A., Maharaja's Coll., Trivandrum; B.L., Law Coll., Trivandrum. Set up practice in 1920s and soon made his mark as a lawyer; took interest in public affairs; M.L.A., Travancore, 1928; has been M.L.A., Travancore-Cochin and Kerala ever since with a short break when the State Congress members were banned from contesting the seat; was Pres., Travancore State Cong.; Chairman, State Cttee. of the P.S.P.; Chief Min., Travancore, 1948; Travancore-Cochin, 1954; Chief Min., Kerala State, Feb. 1960-Sept. 1962; Governor of Punjab, Oct. 1962-May 1964; was Chief Editor, *Kerala Janata*. *Address*: Raj Bhavan, Hyderabad.

**THAPAR,† General Pran Nath**, Indian Amb. to Afghanistan, since Aug. 1964; Ex-Chief of Army Staff, Indian Army. b. May 8, 1906; *Educ.*: Govt. Coll., Lahore. Commnd. from Sandhurst, 1926; 10 years with the 1st Punjab Regt.; Staff Courses at Quetta and Minleymanor, England; service in Burma, 1941; in the Middle East and Italy, 1943; was Asstt. Military Secy., G.H.Q., India; selected to serve on the Army Reorg. Cttee.; commanded the 1st Bn., 1st Punjab Regt. in Indonesia, 1946; later commanded 161 Indian Infantry Brigade in East Bengal; Dir. of Military Operations and Intelligence, A.H.Q., India, Aug.-Dec. 1947; officiated as Chief of Gen. Staff; Military Secy., 1948-49; M.G.O., 1949-50; G.O.C. of a Dvn., May 1950; Commander of a Corps, 1953-55; attended Imperial Defence Coll. Course, London, Jan. to Dec. 1956; G.O.C.-in-C.: Southern Command, 1957-59, Western Command, 1959-61; Chief of the Army Staff, 1961-62; Hon. Col., Rajputana Rifles. *Address*: C/o Ministry of External Affairs, New Delhi.

**THAPAR, Prem Nath, B.A. (Hons.) (Punjab)**, B.A. (Oxon.), I.C.S. (Retd.), Vice-Chancellor, Punjab Agri. Univ., Chandigarh, since Oct., 1962. b. April 13, 1903; *Educ.*: Govt. Coll., Lahore; New Coll., Oxford. Joined I.C.S., 1926; worked as Dy. Commr., Settlement Officer and Colonization Officer till 1941; Jt. Secy., Govt. of India Inf. and Broadcasting Dept., 1941-48; Secy., Food and Civil Supplies Dept., Punjab, 1946-47; Commr., Lahore and Jullundur Dvn., 1947-48; Fin. Commr., Rehab. and Chief Admr., Chandigarh Capital Project, Punjab, 1948-53; Adv., National Plng. Commn., 1953-54; Secy., Union Min. of Food and Agr., 1954-58; member for Fin. and Adm., Atomic Energy Commn. and Union Fin. Secy., 1958-62; member, Punjab Adm. ve Reforms Commn., 1964-65; Trustee, Intl. Rice Research Instt., Manila. *Address*: Ludhiana, Punjab.

**THIAGARAJAN, Karumuttu**, a leading Textile Industrialist of South India; started The Sree Meenakshi Mills, Ltd., 1924. b. 1893; *Educ.*: St. Thomas' Coll., Colombo. Joined the "Morning Leader" as an apprentice; reported on labour conditions in the plantations in Ceylon; founded a Labour Union; was its Secy. for seven years; improved the terms and conditions of employment of estate labour; joined the Congress, 1914; Secy., Provincial Cong., 1916; member, A.I.C.C., 1917; led the agitation against the introduction of Hindi in Tamil Nad, 1937; Thiagarajar: High Schools, Coll., Coll. of Preceptors, & Coll. of Engg., Madurai; Thiagarajar Polytechnic, Salem and Alagappanagar; Sree Visalakshi Kalasalai, A. Thekkur (Ramnad) etc.; Mg. Editor, *Tamil Nadu*, a leading Tamil Daily published from Madurai. *Address*: "Meenakshi Nilayam", Thirupparankundram Road, Madurai.

**THIMMA REDDY, Peddireddi, B.A.**, Minister for Agriculture and Animal Husbandry, Andhra Pradesh, since March 1967. b. Nov. 24, 1914; *Educ.*: Theosophical Coll., Madanapalli (Madras Univ.). Entered politics while a student; organised Summer Schools in the Rayalaseema districts; became Pres., Rayalaseema Students' Federation; was Vice-Pres., Andhra Rashtra Ryth Sangham; is Pres., 1940-41; elected Vice-Pres., Andhra Congress Cttee., 1946; was Editor, Telugu Weekly *Vahini*, the mouth-piece of peasants; courted jail in the 1942 freedom movement; elected M.L.A., Madras, 1952; Minister, Andhra, 1953; again returned to the Assembly in the 1955 mid-term elections; Minister for Food and Agriculture, Sanjiva Reddy's Cabinet; again elected M.L.A., 1964 & 1967; Chairman, A.P. Khadi & Village Industries Board, 1962-64; visited the U.K. as an agricultural expert, 1961; became Pres., A.P.C.C., 1964. *Address*: Hyderabad.

**THOMAS, A. V.**, Business man. b. Aug. 9, 1891. Mg. Dir., A. V. Thomas & Co. Ltd., and Allied Concerns; controls Planting (Tea, Coffee and Rubber), and other companies with a total

capital of about Rs. four crores; M.P., Lok Sabha, 1952; M.L.A., Madras, 1957; Pres., National Council of Y.M.C.A.s., 1961-65; *Address*: 2/21, First Line Beach, P.B. No. 1603, Madras 1.

**TIDKE, Narendra Mahipati, B.A. (Hons.) (Nagpur)**, LL.B., Min. for Labour, Maharashtra State, since Dec. 5, 1963. b. Nov. 2, 1920; *Educ.*: Nagpur. Org.ing Secy., All India Students Congress; Chairman, Steering Cttee., 1st All India Session of National Union of Students; Secy., Youth wing of Nagpur Pradesh Cong. Cttee.; was jailed for participating in 1942 freedom struggle; was Gen. Secy., Nagpur Pradesh I. N. T. U. C.; Pres.: Rashtriya Mill Mazdoor Sangh, Nagpur; Ballarpur Paper Mill Mazdoor Sabha; was Secy., All-India National Textile Workers' Federation; Indian workers' rep. at 39th Session of I.L.O. at Geneva & participated in the Study Cfee. at Oxford, 1956; was member, Nagpur Univ. Court; Secy., Maharashtra Rajya Shikshan Sanstha; M.L.A., from Saoner Constituency, 1962 & 1967; Dy. Min. for Rural Devpt.; 1960-63. *Address*: Sachivalaya, Bombay 32.

**TRIPATHI, Kamakhya Prasad, M.A.B.L.**, Minister of Finance, Assam State, since Mar. 1967. b. Feb. 1, 1910; *Educ.*: B.A. from Cotton Coll., Gauhati, 1932; M.A. from Calcutta Univ., 1934; B.L. from Calcutta, 1935. Started career as a legal practitioner at Tezpur; Secy., Tezpur Town Congress Cttee., 1937-40; also devoted himself to the work of spreading Hindi at Tezpur; participated in the 1942 Congress movement and was imprisoned; again imprisoned, 1945; elected Pres., Tezpur D.C.C., 1946-53; elected Pres., Assam Branch of the I.N.T.U.C., 1947; Pres., Indian National Plantation Workers' Federation, since 1948; member, A.I.C.C., since 1948; represented India in several international confcs.; represented Indian workers in I.L.O., 1953-57; elected to Parliament in 1952 General Elections; Vice-Pres., I.N.T.U.C., 1950-53; General Secy., I.N.T.U.C., 1953-57; was elected to the Assam Leg. Assembly from Biswanath Constituency, 1957; Minister of Planning, Industries, Labour, etc., 1957-62; again elected to the Assembly, 1962 and 1967. *Publications*: Literary and political articles in newspapers and journals of Assam and tracts on labour problems. *Address*: Minister for Finance and Labour, Assam State, Shillong.

**TRIPATHI, Kamalapati, Shastri (Kashi Vidyapith)**, Pres., U.P.C.C., since 1964; Ex-Minister for Finance, U.P. b. Bhadra Shukla 5, 1962 (Vikram); *Educ.*: Central Hindu School and Kashi Vidyapith. Was Editor, *Aj* and *Sansar* (Hindi dailies) for more than two decades; took active part during the freedom movement; courted jail in 1921, 1930, 1932, 1933, 1940 and 1942; awarded the Mangala Prasad Puraskar for *Bapu Aur Manav*; presided over Prantiya Hindi Sahitya Sammelan, 1947; elected M.L.A., U.P., 1936, 1946, 1952, 1957 and 1962; was member, Constituent Assembly and one of the members of Constitution Translation Sub-Cttee. (Hindi); Minister for Irrigation and Information in Pandit Pant's Ministry; Minister for Home, Education and Information till 1960; resigned Ministership, July 1964. *Publications*: Hindi *Mauya Kaleem Bharat*; *Islami Dunya ke Sartaj*; *Cheer Aur Chiang*; *Bapu Aur Manav*; *Bapu Aur Bharat*; *Bandi ki Chelana*; *Putra Aur Patrakar*; *Yug Purush* and *Bapu Ke Charnon Mea*. *Address*: Aurangabad; Varanasi.

**TRIPATHY, Sadasiba**, Ex-Chief Minister, Orissa State, b. April 1910; *Educ.*: High School, Jeypore, Dist. Koraput. Joined Congress in the early thirties and was elected to the Orissa Legl Assembly, 1937; was M.L.A. continuously for 23 years; elected for the fifth time on Congress ticket from Omerkote Constituency; Revenue Minister, 1948-56; was responsible for planning and implementing the Orissa Estates Abolition

† Due to retire in Sept. 1967 and is being succeeded by Mr. Ashok Nanlal Mehta.



Act; resigned from the Cabinet, Sept. 1956; resigned from the Assembly immediately after the formation of the Coalition Ministry; was member, A.I.C.C., 1938-55; was Exec. Member, Pradesh Congress Cttee., 1938-55; imprisoned for one year during the Individual Satyagraha Movement; detained during Quit India Movement, 1942-45; Secy., Orissa Bhoodan Yagna, 1959-61; Min. for Revenue, Orissa, 1961-65; Chief Minister, Orissa State, Feb. '65-Feb. '67. Address: Bhubaneswar.

**TRIVEDI, Sir Chandulal Madhavlal**, K.C.S.I. (1945), Kt. Bach. (1945), C.S.I. (1941), C.I.E. (1935), O.B.E. (1931), LL.D. (Honoris Causa, Punjab Univ.), Doctor of Letters (Honoris Causa), Andhra Univ., Padma Vibhushan, 1956, Ex-Governor, Andhra Pradesh, b. July 2, 1893; Educ.: B.A., Elphinstone Coll., Bombay, 1913; St. John's Coll., Oxford. Entered I.C.S., 1917; Under-Secy. to C.P. & Berar Govts.; Dy. Secy. and Offg. Jt. Secy. to Govt. of India, Home Deptt.; Commr. in various dvns. in C.P. & Berar; Chief Secy. to Govt., C.P. and Berar; Addl. Secy., Deptt. of Communications, Govt. of India, March-June 1942; Secy., War Deptt., Govt. of India, New Delhi until 1946; Governor of: Orissa, April 1946 to Aug. 1947; Punjab, Aug. 15, 1947-March, 1953; Andhra State, Oct. 1, 1953-Oct. 31, 1956; A.P., 1956-57; member, Png. Commn., 1957-63; Dy. Chairman, Png. Commn., Oct.-Dec. 1963; Arbitrator, U.P.-Bihar Boundary Dispute, Jan.-Aug. '64; Chairman, M.P. Police Commn., 1964-65. Address: Chandra Bhuvan, Kapadwanj, Kaira Dist.

**TRIVEDI,\* Vishnuprasad Chunilal**, B.A. (Hons.), B.A. (Tripos) (Cambridge), M.A. (Cantab.), Amb. of India to Switzerland and concurrently Amb. to the Vatican, since Dec. 1964. b. Feb. 12, 1916; Educ.: Un. va. of Bombay and Cambridge. Served Govt. of Bombay, 1940-44; served Govt. of India in various capacities, incl. Under Secy. and Dy. Secy., Mins. of Commerce and Ext. Affairs, 1945-50; First Secy., Indian Embassy, Tokyo, 1950-53; Counsellor, Indian High Commn., London, 1955-59; Dy. High Commr., Dacca, 1959-60; Ag. High Commr., Karachi, 1960-61; Jt. Secy., Ministry of Ext. Affairs, 1961-64; Rep. to the U.N. Gen. Assembly, 1963 and 65; led the Indian delegation to the 18 Nation Disarmament Cfee. in Geneva, 1965; and Eco. and Social Council, 1965. Address: Indian Embassy, Berne, Switzerland.

**TRIVEDI, Vishnuprasad Ranchhodlal**, M.A. (Bombay), Gujarati Critic; ex-Dir., Chunilal Gandhi Vidya Bhavan, Surat. b. July 4, 1899, at Umreth, Dist. Kaira; Educ.: Thasra, Nadiad and Ahmedabad. Retd. Life Member, Sarvajanic Educ. Soc., Surat; twice Sectional Chairman, Gujarati Sahitya Parishad; Thakkar Vassonji Lecturer of Bombay Univ.; G. M. Tripathi Lecturer, Gujarat Univ.; was Fellow, Gujarat Univ.; Pres., Guj. Sahitya Parishad, 1961; Sahitya Akademi Award, 1963. Publications: *Vivechana*; *Upayana*; *Govardhanram*; *Parishilan*; *Arva-chin Chintanamak Gadya*. Address: 'Maitri', Adarsha Society, Surat.

**TYABJI,† Badruddin Fais Hasan Badruddin**, B.A. (Honours), I.C.S., Indian Amb. to Japan, since March 1965. b. Nov. 12, 1907; Educ.: St. Xavier's School & Coll., Bombay; Balliol Coll., Oxford. Passed I.C.S., 1931; served in the Punjab Govt., 1932-42; Conlir. of Supplies, Govt. of India, Karachi and Bombay, 1942-44; Dy. Secy., Govt. of India Png. & Devpt. 1944-46; Dy. Secy. and Jt. Secy., Constituent Assembly, Secretariat and Min. of Ext. Affairs and Commonwealth Relations, 1946-48; Charge d'Affaires, Indian Embassy, Brussels, Belgium, 1948-50; Jt. Secy., Min. of Ext. Affairs, 1950-52; Commonwealth Secy., 1952-53; Amb. in Indonesia, 1954-56; Iran, 1956-58; W. Germany, 1958-60; Spl. Secy., Ext. Affairs Min., 1961-62; Vice-Chancellor, Aligarh Muslim Univ., Oct. 1962-Feb. 1965. Address: C/o Ministry of External Affairs, New Delhi.

**TYABJI, Mrs. Khadija Shuffi**, Social Worker; Ex-J.P., Hony. Presidency Magistrate; ex-M.L.A., Associate Serving Sister, St. John Ambulance, Bombay State. b. 1885. Member, Municipal Corpn.; first Commr., Municipal Girl Guides; was State Commr. (Guides); is Vice-Pres., Bharat Scouts and Guides; Chairman, Red Cross Reforms, 1930; Chairman, Red Cross Exec., 1928; Vice-Pres., Social Service League; Chairman, Mahila Seva Mandal; member, Port Haj Cttee.; Chairman, Abless and Cama Hospital Adv. Board and is connected with — Govt. Urdu Text Book Cttee.; Infant Welfare Soc.; The Bombay Mothers and Children Welfare Soc.; Soc. for the Protection of Children in Western India, etc.; Pres., All-India Educl. Cfee., Women's Sec., Poona, 1940; awarded Kaiser-i-Hind Silver Medal, 1935; Gold Medal, 1941; awarded Silver Star by the National Hqrs., Bharat Scouts & Guides, 1962. Address: Khatan Mansion, Olmer Park, Warden Road, Bombay 26.

**TYAGI, Mahavir, M.P.**, Ex-Minister for Rehabilitation, Govt. of India. b. 1900, Dhabarsi Village, Moradabad Dist. (U.P.). Educ.: Privately. Has been a Staunch Congressman; courted jail eleven times for Congress activities: member: A.I.C.C., 1923-65; Constituent Assembly of India, 1946-49; Provisional Parliament, 1950; ex-member, U.P. Leg. Assembly; organised Tyagi Police, U.P., Aug. 1947; returned to the Lok Sabha from Dehra Dun District-cum-Bijnor Dist. (North West)-cum-Saharanpur Dist. (West) Constituency, U.P. in the general elections; Minister of Revenue and Expenditure, Govt. of India, 1951-53; Minister, Defence Organisation, 1953-57; Chairman: P.A.C. 1962-64; Direct Taxes Administration Enquiry Committee. Address: New Delhi.

**UKIL, Ranada**, Painter; Ex-Lecturer, Women's Coll., Banaras Hindu Univ. and Dir., Ukil's School of Art, Banaras. b. Sept. 5, 1900; Educ.: Govt. Coll. of Art, Calcutta and Royal Coll. of Art, London; was Govt. of India scholar; specialized in water colour painting under Dr. Abanindra Nath Tagore, Indian Soc. of Oriental Art, Calcutta; was commended twice to do the Mural Painting in India House, London. was honoured by Queen Mary who bought his painting "Shahjahan's Dream of the Taj" in an Arts Exhibition, London. Address: Ukil School of Art, Bhelupura, Varanasi (Banaras).

**UNTWALIA, Mr. Justice Nand Lal**, B.A., B.L., Puisne Judge, High Court, Patna, since Nov. 4, 1958. b. Sept. 2, 1915; Educ.: Sitamarhi H. E. School; G. B. Coll., Muzaffarpur, Univ. Law Coll., Calcutta; B.A., 1937; B.L., 1940. Practised as a Pleader at Muzaffarpur, from Nov. 1940; enrolled Advocate, March 1944; shifted practice to Patna, March 1947; Addl. Judge, Patna High Court, Jan. 2—Nov. 3, 1958. Address: Kadamkuan, Patna.

**UPADHYAYA, Pt. Deendayal**, B.A., L.T., Gen. Secy., Bharatiya Jan Sangh, since 1953. b. Oct. 10, 1917, at Farah village, Dist. Mathura, U.P.; Educ.: Matriculated from Sikar, Jaipur State; Intermediate (Arts), Birla Coll., Pilani; B.A., S. D. Coll., Kanpur, 1939; L. T., Govt. Trg. Coll., Allahabad, 1942. Joined the Rashtriya Swayamsewak Sangh; became R.S.S. Organiser, 1942; Mg. Dir., Rashtra Dharma Prakashan Ltd., Lucknow, 1947-52; Jt. Provincial Organiser, R.S.S. in U.P., 1945-51; Gen. Secy., Bharatiya Jan Sangh, U.P., 1951-53. Publications: in Hindi: *Jagadguru Shankaracharya*; *Chandragupta Maurya*; *Mahan Vishwasghat*; *Bharatiya Arthniti*; *Rashtra Jivana Ki Samsayan*; in English: *The Two Plans: Promises, Performance and Prospects*. Address: Bharatiya Jan Sangh, Ajmeri Gate, Delhi 6.

**UPPAL, Dr. Badri Nath**, Ph.D. (Iowa), Fellow, Indian Academy of Sciences, National Instt. of Sciences, M.B.E. (1945), Padma Shri (1959), Member, Board of Management,

Punjab Agrl. Univ. b. Aug. 6, 1899; Educ.: Punjab Univ.; Iowa State Univ. of Sci. & Tech. (U.S.A.); Rothamsted Experimental Station (England); Rockefeller Inst. for Medical Research (Princeton), Wisconsin Univ. Research Fellow, Iowa Agric. Exp. Station; Dir. of Agr. (Research and Educ.), Dir. of Agr. Bombay till Aug. 1952; Agrl. Commr., Govt. of India, 1952-59; Chairman, Wasteland Survey and Reclamation Cttee., Union Min. of Food & Agr., 1959-61; Agrl. Adv., Punjab Govt., 1960-65. Consultant in Agr., Rajasthan State. Publications: Scientific papers. Address: 223, Sector 9, Chandigarh.

**URS, D. Devaraj, BSc.**, Min. for Animal Husbandry, Fisheries, Sericulture & Publicity, Mysore, since March '67. b. 1915; Educ.: B.Sc., from Central Coll., Bangalore. Member: Mysore Representative Assembly, 1941-48; Mysore Leg. Assembly, 1951-56; elected to the Mysore Leg. Assembly from Hunsur Constituency, 1957; elected unopposed to the Mysore Legislative Assembly from the same Constituency, 1962; was Min. for Labour, Tourism and Transport, Mysore. Address: Bangalore.

**VAGHELA, Gautam Dahyabhai**, Painter; Art Designer, All India Handloom Board. b. Jan. 5, 1936; Educ.: Visharad (Hindi Sahitya Sammelan Prayag), 1954; Diploma in Fine Arts and Art Master's examination from Sir J. J. School of Art, Bombay, 1960 — first rank in both. Has participated in many State and national exhibitions and has won many an award; has twice won the Lalit Kala Academy annual award, 1961 and 1963; a few of his paintings are in the collection of Lalit Kala Academy and the Museum of Modern Arts, New Delhi; won H. H. Aghakhan's Gold Medal for the best group in 28th Annual Exhibition of Akademi of Fine Arts, Calcutta; won awards in Mahakavi Kalidas Art Exhibition, Gwalior in 1961, 62, 63 & 64; First-Prize for 'Modern Style', by Bombay Art Society, 1963; Madras State Art Exhibition, 1964. Address: 3/2, Ellal Ammam Colony, Teynampet, Madras 6.

**VAIDIALINGAM, Mr. Justice C. A.**, B.A., B.L., Judge, Supreme Court of India, since Oct. 1966. b. June 30, 1907; Educ.: P. S. High School, Mylapore; Presidency Coll., and Law Coll., Madras. Enrolled as Advocate, High Court, Madras, Aug. 13, 1931; co-opted as Member, Bar Council, 1948; elected to the Bar Council, 1950 and 1955; Govt. Pleader, Madras, Nov. 1953-March 1957; Amicus Curiae Counsel in the enq. in the Ariyalur Rly. accident, 1956; Judge, High Court, Kerala, March '57 to Sept. 1966. Address: Anantha Sadan, 40-C, Luz Church Road, Mylapore, Madras 4; Supreme Court of India, New Delhi.

**VAIDYA, Murarji Jadavji**, B.Com., F.R.E.S. (Lond.), J.P., Industrialist; also Consul-General for the Republic of Austria. b. Oct. 2, 1908; Educ.: Tutorial High School and Sydenham Coll. of Commerce & Economics, Bombay. Estd. the Bombay Silk Mills, 1932; Leader: Exploratory Mission sponsored by the Indian Council of Foreign Trade, to Egypt, 1953; Chairman: A.I.M.O., 1953-56; Indian Council of Foreign Trade; Vice-Chairman: Silk and Art Silk Mills Assoc. Ltd., 1941-55; Silk and Art Silk Mills Research Assoc., 1950-55; Vice-Pres., Central Silk Board and its Stg. Cttee.; 1941-62; Forum of Free Enterprise; Indo-American Soc.; Pres.: Bombay Productivity Council, 1959-60; Indian Merchants' Chamber, 1956; visited U.S.A. at the invitation of Far East America Council of Commerce and Industry, New York, 1958; led the Indian Delegation to the Intn'l Sericulture Commn. held in Spain, 1959. Publications: Monographs: *High Rate of Exchange, Office Organisation in Bombay, Industrialism in India*, etc. Address: Jadavji Mansions, 3, Cuffe Parade, Bombay 5, (BR).

\* To become Ambassador in Japan in Sept. 1967.

† To be succeeded by Mr. V. C. Trivedi in Sept. 1967.



**VAIDYA, Vijayaraj Kalyanraj, B.A.** (Hons.) (Bom.), (Bombay), Gujarati Critic. Author & Literary Journalist. b. April 7, 1897; Educ.: Wilson Coll., Bombay; Samaldas Coll., Bhavnagar; B.A. (Hons.), 1920. Bank Cashier, 1920-21; Editor: *Chetana*, 1920-23; *Kaumudi*, 1924-35; *Manasi*, 1935-60; Prof. of Gujarati, M.T.B. Coll., Surat and Commerce Coll., Bhavnagar, 1937-52; Editor, *Nishant*, 1952-56. Publications: *Gujarati Sahitya Samiti* Papers 10 and 24 other books. Address: 1882, Krishna Nagar, Bhavnagar.

**VAIDYAR, Poruthiyil Narayanan, Ayurveda** (M.Sc.), Ayurveda Vidwan, Social Worker; Chief Physician and Governing Director, Madhava Pharmacy Ltd. and Madhava Pharmaceutical Laboratories Ltd., Ernakulam. b. Oct. 31, 1915, at Chalavara, Palghat Dist. Takes keen interest in public activities and social work; is member, Faculty of Ayurveda; Board of Examiners for Ayurveda, Kerala Univ.; Examiner, Govt. Diplomas in Ayurveda; Founder Director, Madhava Ayurveda Coll., Ernakulam; awarded many testimonials and certificates from eminent personalities in recognition of his treatment and medicines; has business dealings with Ceylon, Malaysia, Singapore, etc.; Pres., Kerala Ayurveda Mandalam; Vice-Pres., Kerala Rly. Users' Assoc.; member: All India Manufacturers' Organisation; Theosophical Society; Kerala Fine Arts Society; Kathakali Club, Ernakulam; Pres., Ayyappa Dharma Parishad, Ernakulam; has invented some specific and useful. Address: Madhava Pharmaceutical Laboratories, Ernakulam 8.

**VAIRALE, Madhusudan Atmaram, B.A.**, 11. B., Minister for Social Welfare & Tourism, Maharashtra, since March '67. b. Nov. 11, 1928, *Ward*, Akola and Nagpur. Left School to join 1942 movement; jailed four times, 1942-45; was Sub-Editor, *Marathi Samak*, Marathi daily; Gen. Secy.: M.P. Students Congress, M.P. Youth Cong.; won many trophies in Marathi and Hindi debates in the Nagpur Univ.; M.A., Bombay; was Vice-Pres., Viharika P.C.C.; Gen. Secy., Bombay Leg. Cong. Party; member: Nagpur Univ. Court; State Adv. Board for Territorial Army, N.C.C. & Home Guards; Indian Youth delegation to U.S.S.R., China & Viet Nam; Dy. Min. for Agr., Maharashtra, 1960-62; delegate, Commonwealth Parly. Assoc., London; toured Europe, Dy. Min. for Irrigation & Power, 1962-63; Dy. Min. for Irrigation and Power, and Bldgs. & Communications, Dec. 63-Feb. '67. Publications: 100 short stories and articles on politics. Address: Sachivalaya, Bombay 32.

**VAJPAYEE, Atal Bihari, M.A., M.P.** (Rajya Sabha), Ex-Secy., Bharatiya Jan Sangh. Political worker. b. Dec. 25, 1926; Educ.: B.A. from Victoria Coll., Gwalior, 1945; M.A. (Political Science) from D. A. V. Coll., Kanpur, 1947. Joined R.S.S., 1940; courted jail in the freedom movement of 1942; whole-time R.S.S. worker from 1947; joined Bharatiya Jan Sangh since its inception, 1951; elected to Lok Sabha from Belgaum U.P., 1957; member of several Parliamentary Committees like Industrial Consultative Comm. on External Affairs, the All-Party Food Comm., etc.; jailed in the U.P. Food Agitation, 1958; elected to Rajya Sabha from U.P., 1962; re-elected leader, Jan Sangh Parly. Party; visited U.K., U.S.A., France, W. Germany, 1969. member, National Integration Council; Editor: *Sandesh*, daily, Lucknow, 1949; *Peer Aron*, daily, Delhi, 1953-54; *Pancha Janya*, weekly, Lucknow, 1955-56; *Bhaskar Dharma*, monthly, 1958-59. Publications: A number of pamphlets and tracts expounding the Jan Sangh's viewpoint on various issues. Address: 30, Dr. Rajendra Prasad Road, New Delhi.

**VAKIL, Chandulal Nagindas, M.A. (Bom.), M.Sc. (Econ.)** (London), Economist; Dir., Central Board, R.B.I., since Jan. 1962. b. Aug. 22, 1905; Educ.: Bombay and London. On the Staff of the Univ. School of Economics

and Sociology, Bombay, 1921-36; Dir. of the School, 1936-56; Dir., UNESCO Research Centre, Calcutta, 1957-60; Pres., Indian Eco. Cfee., Patna, 1934; Economist to the Plng. Dept., Govt. of India, 1945-46; Pres.; Indian Agrl. Economics Cfee., Trivandrum, 1952; Indian Labour Economics Cfee., Ahmedabad, 1962; Member, Experts Cttee., I.L.O., 1956; member, Panel of Experts on Industrial Management, U.N., 1957. Publications: *Fin. Developments in Modern India, 1860-1924* (1925); *The Falling Rupee* (1943); *The Financial Burden of the War on India* (1943); *Economic Consequences of Divided India* (1950); *Planning for a Shortage Economy* (1952); *Economic Survey of Saurashtra* (1953); *Planning for an Expanding Economy* (1956) and others. Address: 14, Kalpana, 96, Marine Drive, Bombay-2.

**VAN RIJKEVORSEL, H.E. Mr. Jonkheer** Hubert, Doctor of Law, Ambassador of the Netherlands to India and Nepal, since 1965. b. April 26, 1910; Educ.: Univ. of Utrecht. Third Secy., Copenhagen, 1939-40; Second Secy., Stockholm, 1940-45; Ministry of Foreign Affairs, The Hague, 1945-48; First Secy., Paris, 1948-54; Counsellor, Strasbourg, 1954-56; Representative of the Netherlands to the Council of Europe; Consul-General, New York, 1956-60; Ambassador to Finland, 1961-65. Address: 10, Aurangzeb Road, New Delhi.

**VARADARAJAN, Dr. M., M.A., M.O.L., Ph.D.** (1947), Tamil Essayist, novelist & critic, Prof. of Tamil, Univ. of Madras. b. 1912; Educ. Madras Univ. Chairman, Board of Studies in Tamil, Sri Venkateswara Univ., Tirupati and Madras Univ.; Member: Academic Council and Senate, Madras Univ.; Venkateswara Univ., Tirupati; Board of Studies in Tamil, Annamalai; Andhra and Bangalore Univ.; Sahitya Akademi, Delhi; Bureau of Tamil Publications, Madras; Pres., Academy of Tamil Culture, Madras 30; got the Madras State Award during the centenary celebrations of the 1857 uprising, in recognition of his services to Tamil literature. Publications: Novels, short-story collections, biographies, works of literary criticism, etc. Address: Chellammal Street, Madras 30.

**VARDE, Vaman P., B.Com., Hon. Presidency** Magistrate since 1956; Business man; Dir., Industrial Fin. Corp. of India, 1952-63. b. Dec. 2, 1895; Educ.: Sydenham Coll. of Commerce, Bombay. Hon. Mg. Dir., Bombay State Co-op. Bank Ltd., 1946-57; Founder Dir.: Bank of Maharashtra Ltd.; Chairman, 1953-66; Chairman: Saraswat Co-op. Bank Ltd., 1937-65; Swastik Safe Deposit Investments Ltd., since 1939; Dir.: Kirlskar Bros. Ltd.; Kirlskar Oil Engines Ltd.; Mysore Kirlskar Ltd.; Ugar Sugar Works; Local Board, R.B.I., 1949-53; Zonal Board, L.I.C.; Chairman, Bombay Swadeshi Co-op. Store Ltd.; member, Bombay Stock Exchange, 1937-63; Indian rep. to the Int'l Co-op. Congress, 1948; Int'l Cfee. of Agr. and Credit at Berkeley (U.S.A.), 1952; Chairman, Study Group of Non-Agrl. Co-op.s; Partner, R. R. Nabar & Co., Share, Stock & Fin. Brokers, 1934-63. Address: 'Matrismiti', off Turner Road, Bandra, Bombay 50.

**VARMA, Bhagwati Charan, B.A., I.I.B.,** Novelist and Poet. b. Aug. 30, 1903. Educ.: Christ Church Coll., Kanpur; Allahabad Univ. Started writing poems, 1918 and short stories, 1923, practised law 1929-31; engaged in writing 1931-57; served in Films in Calcutta for one year; co-edited a weekly, *Vachak*, Calcutta, 1940-42; Sub-editor in Bombay Times, 1942-44; Editor-in-Chief, *Daily Navajwan*, Lucknow, 1948-49; Hindi Adviser, A.I.R. at Lucknow, 1950-53; at Delhi, 1953-55; again at Lucknow, 1955-57; got Sahitya Akademi Award on *Pinde Disha-chitra*, 1962. Publications: *Madhuban*, *Prem Sangeet*; *Manasa*; *Tripudhaga*, *Rangon De Moh* (Poetry); *Instalment*, *Do Rasta*, *Rakhi Aur Chingri* (short stories); *Patan*, *Chitra-lakha*, *Teen Varsha*, *Tehe Mertiz Raste*, *Akhiri*

*Duen*, *Apane Khianma*, *Rikode Easte Chitra Rakhi*, *Wah Ite Nahin Apan Samantap* (novels); *Chitra-lakha*, *Do Rasta*, *Rakhi Aur Chingri*, *Khanma* (Plays); *Address*: Chittakhia, Mahanagar, Lucknow.

**VARMA, Dr. Dharendra, M.A. (Allahabad), D. Litt. (Paris)**, Hindi Scholar, Educationist, Vice-Chancellor, Jabalpur Univ. since May 11, 1967; Educ.: Dehra Dun, Lucknow, Allahabad and Paris. Patron, Bharatiya Hindi Parishad, Univ. Prof., Allahabad Univ. 1924-60, member, Sahitya Akademi, Delhi; Hindustani Academy, Allahabad; Linguistic Soc. of India, Poona; Chief Editor, *Hindi Encyclopedia*, Varanasi, 1959-61; Prof. of Philosophy and Linguistics, Univ. of Sakar, Nagpur (M.P.), 1961-66. Publications: *History of Hindi Language*—Hindi; *La Langue Hindi*—French; *Devanagari Grammar*; *Letters from Hindi*—Hindi; *Vishakhara*—Collection of essays; *Madhyadesha: My Diary*—Hindi; *Satya Keshi*, Vol. I, II; *Hindi Sahitya*, Vol. I and II; *Hindi Vishvakosh*, Vol. 1, 2, 3, 4, 5, 6, 7, 8, 9, 10, 11, 12; *Pravesh Hindi Patra Samgraha*, *Hindi Sahitya ka Brikat Itihas*, Vol. II. Address: Jabalpur University, Jabalpur (M.P.).

**VARMA, Paripurnanand, Ex-Vice-Pres., U.N.O.'s First World Congress on Crime** Prevention, Geneva Pres.; All India Crime Prevention Soc., Lucknow since 1949; Chairman, Jail Reforms Commn., Katoch Govt. b. Feb. 7, 1908; Educ.: Graduated from Kashi Vishwavidyalaya in History, Economics and Politics. Editor and Jt. Editor of various English and Hindi Journals. Member, Agra Univ. Exec. Council since 1961. Dir.: L. R. Lagg, Works Ltd., Bombay and Kanpur; Pres.: U.P. Art and Culture Soc.; Anguman Tarangini Urdu, Hindustani Bradard, Kanpur; Hindi Bhawan Trust, Kanpur; Adarsh Vyamshala, Kanpur etc. Publications: 35 books incl. *Crime, Criminal and Criminal and Suicide and Sex*. Address: Behari Niwas, Kanpur.

**VARMA, Vrindavan Lal, B.A., I.I.B., D. Litt., Padma Bhushan** (1965), Advocate, Hindi Writer. b. Jan. 9, 1889; Educ.: Victoria Coll., Gwalior; Agra Coll., Agra; called to the Bar, 1916. Formed Seva Samiti to fight against the pneumonic plague of 1918; Chairman: Educ. Cttee., Jhansi Municipal Board, 1926-30; Chairman, Jhansi Dist. Board, 1935-48; Mg. Dir., Jhansi Dist. Co-op. Bank, since 1928, with a break of 2 years. Publications: Many novels, plays and short stories beginning from 1909. *Jamuni of Jhansi* (novel), *Mrigant*, *Teen Kashi* & 1857 *ke Amar Fir* were translated into Russian and Czech languages; *Bharatiya Padma* and other historical novels. Address: C/o Mayur Prakashan, Jhansi, U.P.

**VARTAK, Hari Govindrao, B.A., I.I.B.,** Minister for Food, Civil Supplies, Khar Lands and Fisheries, Maharashtra, since March 1967. b. Feb. 9, 1914; Educ.: *Ward*, *Ward*, *Ward* (A Poona). Started his public life as Secretary of Vihar (1939), Income Pres., *Ward* (1941) Local Board and Vice-Pres., Bombay District Board, Council, Chairman, Maharashtra Housing Board (1946-47); was closely associated as Pres. with many educational, cultural and agricultural institutions in Thana Dist.; was Gen. Secy., M.P. in its Treasury; Deputy Minister, Maharashtra, 1957-60. Address: A 3, Forestone Road, Bombay 1.

**VASAN, S. S., Editor, Ananda Vikatan, a** weekly, Proprietor, Gomati Studios, Madras; Chairman, Gomati Pictures Pvt. Ltd. b. 1906, at Tirunelveli, Tamil Nadu. Took to journalism at an early age and started a Tamil journal, *Ananda Vikatan*, 1929, placing its circulation on the growth of cinema in South India through this weekly. was once a keen painter, turned to film business, 1939; founded the Gomati Studios, 1947, as a producer, occupies a prominent position in the world of talkies; minister, Indian and Eastern Newspaper Soc.; is a contributor of P.T.I., Pres., South Indian Motion Picture



Producers' Assoc.; member: Central Board of Film Censors, Film Censorship Comm.; Dir., Indian Motion Picture Export Corp. Address: 'Gemini House,' Edward Elliot Road, Myslapore, Madras 4.

**VASAVADA, Shamprasad Ropshanker**, M.A., Pres., National Federation of Indian Railwaymen; member: Working Comm., I.N.T.U.C.; National Plng. Comm.; Bonus Comm. 6. Feb. 13, 1953; Educ.: Rajkot; B.A. Honours, Bahadur College, Junagadh, 1925; M.A., History and Economics, 1927. Joined the Textile Labour Assoc., Ahmedabad, 1929; a Secy. of the Assoc., 1943; Municipal Councillor, Ahmedabad, 1944-50; was for several years Chairman, Sanitary Comm., Ahmedabad Municipality; M.L.A., Bombay, 1950 and 1952; was Pres. Indian National Textile Workers' Federation for six years; Pres., I.N.T.U.C., 1954-57; member: Central Adv. Council for Industries; was member: wkz. Group, I.N.D.C.; Dir.: 1. India; Indian Airline India Fin. Corp.; Ex-Dir.: Shadri Petroleum; was Gen. Secy., I.N.T.U.C. Address: Gandhi Nagar, Bevalaya, Bhadra, Ahmedabad.

**VELU PILLAI, Mr. Justice S., B.A., B.L.**, Judge, High Court, Kerala, since Feb. 9, 1950. b. Oct. 14, 1905; Educ.: Chiefy Trivandrum. Enrolled as a member of the Bar in Trivandrum, 1927; directly apptd. as Dist. & Sessions Judge, Nagercoil, Aug. 25, 1948; has been Dist. & Sessions Judge in Kottayam and Trivandrum and in Bonakulam for some time. Publications: Published Commentaries on Jami and Kadayan Act of Travancore as amended by the Act of 1198. Address: High Court Judge, Ernakulam, Kerala.

**VENKATARAMAN, Dr. Krishnasami, M.A.** (Madras), M.Sc. Tech., Ph.D. D.Sc. (Mach.), F.N.I., F.A.Sc. Padma Bhushan (1961). Hon. D.Sc., Moscow Inst. of Chem. Tech. (1952). Fellow of Deutsche Akademie der Naturforscher, Leopoldina; Dir., National Chemical Laboratory, Poona, 1957-66. b. June 7, 1901; Educ.: Madras and Manchester. Dir., Dept. of Chemical Tech., Matunga, Bombay, 1933-57; Chairman, Chemical Research Comm. of the C.S.I.R., 1951-57; Pres., Chemistry Sec., Indian Sc. Cong., 1945; Editorial Adv. Board of *Tetrahedron*, and *Current Science*; Pres., Indian Chem. Soc., 1954-59; Chairman, Devpt. Council for Drugs, Dyes and Intermediates, Min. of Commerce & Indus., 1955-56; Chairman, Dev. Council for Org. Chemical Industries, 1956-62. Publications: *The Chemistry of Synthetic Dyes*, Vols. I & II, Acad. Press, N.Y., 1962 (translated into Russian and Chinese); *Colouring Matters in Review of Textile Progress, 1955-56*; numerous papers—A chapter on 'Flavones and Isoflavones' in *Fortschritte der Chemie organischer Naturstoffe* Vol. XVII, a chapter on 'Methods for Determining the Structure of Flavonoid Compounds' in *The Chemistry of Flavonoid Compounds*, 1962. Address: C/o National Chemical Laboratory, Poona 5.

**VENKATARAMAN, R., M.A., B.L.**, Ex-Minister for Industries and Law, Madras. b. 1910; Educ.: Madras; won Inter-collegiate Oratorical Competition of South India. Joined the bar, 1935; participated in the Quit India Movement and detained in Jail, 1942-44; Editor, *Labour Law Journal*; one of the panel of Indian Lawyers who defended Indian nationalists arrested in connection with the I.N.A. Movement in Singapore and Malaya; Secy., Provincial Bar Federation; M.P., 1950; M.P., Lok Sabha from Tanjore, 1952 and '57; was Secy., Tamilnad Congress Comm.; Leader Indian Delegation to 42nd Session of I.L.O. Conf., Geneva; Delegate of India, to the U.N. Gen. Assembly, 1952, 55, 56, 58-60 and 1961; Secy., Congress Party in Parliament, 1954-55; member, U.N. Administrative Tribunal, 1954-54. Vice-Pres., U.N. Administrative Tribunal. Address: Madras.

**VENKATARAMAN, S. R., B.A., B.L.**, Member, Servants of India Soc.; Vice-Pres., Indian Office of Social Work; Secy., Indian Council of World Affairs, Madras for 10 years; the U.K. Office on the Non-Governmental Orgs., Colombo, 1954; member, Madras State Tribal Adv. Council; Hon. Jt. Secy. and Treasurer, Indian Council for Child Welfare, Madras; Vice-Chairman, Guild of Service; directed a Survey on the administrative set up and fund raising methods of welfare agencies; runs 16 schemes for backward people in South India. Publications: *Lines of Bonade, Gander, Anne Bonad* (English); *Temple Entry Legislation—a Review*; *Harjans Through the Ages*; *The Placement Dilemma*; *Two South Indian Tribes*; *State Responsibility for Social Work*; Edited: Dr. Hon. Sastri's anthropological sketches in Tamil; lectures on the Rights and Status of Women in India; *Sanskrit Annals and Gita Annals*. Address: Servants of India Society, Madras 14.

**VENKATESWARLU, Balasa, M.A.** (Philosophy & Telugu Literature). Sahitya Akademi Award (1955). *Govita Kavita Sarva Samudaya*, Telugu Writer; Lecturer in Telugu, P. E. Govt. Coll., Kakinada. b. April 5, 1908; Educ.: Madras. Joined the stud in Telugu Dept., P. E. Coll., Kakinada; delivered lectures all over Andhra Pradesh on Gita, Upanishads & Hinduism. Publications: *Life of Govita Venkateswara* (Telugu); *Life of Second Ram Tirtha*; *Shravan Tirtha Southam*—the unknown fragments of President Dr. S. Radhakrishnan's *Indian Philosophy*, also translated and published works of Dr. Radhakrishnan. Address: Ramaropeta, Kakinada.

**VENKATESWARLU, Dr. K., D.Sc., M.Sc.**, F. Inst. P., F.A.Sc., Scientist; Prof. and Head of the Dept. of Physics, Kerala Univ., since 1953. b. June 3, 1914, at Nuzvid, Krishna Dist., Andhra; Educ.: Nuzvid; Andhra Christian Coll., Gunter, Andhra; Univ. Coll., Walster for B.Sc. (Hons.) and M.Sc.; Metcalfe Gold Medal for the best thesis for M.Sc. in Physics, 1936. D.Sc. for his thesis "Intensity and related problems in Raman Effect", 1946; fellow of the Inst. of Physics, London, 1947; Spl. Officer for Ground Water Resources, Madras State, 1951-53; Fellow, Indian Academy of Sciences, 1947; Prof. and Head of the Dept. of Physics, Annamalai Univ., July 1955-June 1962. Publications: 100 research papers in scientific journals. Address: 29/23-23, Tadepallam Vm St., Saryasopet, Vijayawada 2; Kerala University, Trivandrum.

**VERMA, Dr. Ajit Ram, M.Sc., Ph.D., F.N.I.**, Dir., National Physical Laboratory, New Delhi, since May 1956. b. Sept. 20, 1921; Educ.: Allahabad and London Univ. Lecturer in Physics, Delhi Univ., 1947-50; British Council Scholar, London Univ., 1950-52; I.C.I. Research Fellow, London Univ., 1952-55; Reader in Physics, Delhi Univ., 1955-58; Prof. and Head, Dept. of Physics, Banaras Hindu Univ., 1958-63; member: Board of Editors of Int'l Journals of solid State Communications & Crystal Growth. Publications: 40 research papers in int'l journals of physics & Proceedings of Royal Soc., London; Proc., Physical Soc., London; Acta Crystallographica, etc.; *Crystal Growth and Induction* published by Butterworths, London; *Polymerism and Polymorphism in Crystals*, John Wiley, New York. Address: Director, National Physical Laboratory, New Delhi.

**VERMA, Jai Ram, M.A.**, Minister for Agriculture including Cane Development, Community Development and Panchayati Raj, Uttar Pradesh, since April 1957. b. 1904, at Faragawn, Faizabad Dist.; Educ.: M.A. in Mathematics from Allahabad Univ. Teacher, 1932-41; offered individual Satyagraha; courted jail in freedom movement; was Principal of a High School in Gossinganj; elected to the State Assembly in 1946, 1952, 1957 and 1967; became Dy. Minister, U.P., 1959; resigned, Dec. 1960; was again Dy.

Minister, March-Sept. 1962 and Oct. 1963 March 14, 1967. Address: Minister for Agriculture, Uttar Pradesh, Lucknow.

**VERMA (Jatav), Man Singh, M.A., L.T.**, Minister for Transport and Tourism, Uttar Pradesh, since April 1957. Former Vice-Pres. of U.P. Jan Sangh. Had been an active social worker since his student days; started his career as Inspector in Education Dept.; also worked as a Hindi instructor teaching Hindi to Central employees; was Vice-Pres., U.P. Jan Sangh. Address: Minister for Transport and Tourism, Uttar Pradesh, Lucknow.

**VERMA, Ram Swarup, M.A., LL.B.**, Minister for Finance, Sales-Tax, Registration, Stamps and Court Fees, Uttar Pradesh, since April 1957. b. Aug. 1922, at Gaurkharan in Kanpur Dist.; Educ.: M.A. degree from Allahabad Univ., 1949; LL.B. degree from Agra Univ., 1950. Entered active politics as a member of the Socialist Party, 1949; elected to the State Assembly in the 1957 and 1967 elections; Deputy Leader, Socialist Party in the Assembly, 1957-60 and its leader, 1960-62. Address: Minister for Finance, Uttar Pradesh, Lucknow.

**VERMA, Mr. Justice Shashikanta, B.A.** (Allahabad), LL.B. (Hons.) (Lond.), Barrister-at-Law, Gray's Inn, Judge, High Court, Allahabad, since Nov. 1958. b. Nov. 6, 1911; Educ.: St. Cecilia's High School; Kapasana Patnashala Intermediate Coll.; B.A., Allahabad Univ., 1933; stood first in Philosophy; awarded Mahendra Nath Dutt gold medal; LL.B. (Hons.), King's Coll. Univ., London; called to the Bar, 1938. Enrolled in Allahabad High Court, 1939; practised until June 1958; Addl. Judge, Allahabad High Court, June-Nov. 1958. Publications: Editing VII Edition 1961 of Sir H. S. Gaur's Penal Law of India. Address: 25, Elgin Road, Allahabad.

**VERMAN, Dr. Lal C., F.N.I., M.I.E., M.I.T.E.**, Ph.D., M.S., B.S., Eng'g I. Padma Shri (1967). Chief Adviser of the Institute of Standards and Industrial Research of Iran, since Dec. 1956; Ex-Dir.-Gen., Indian Standards Inst.; Hon. Adv. on Standardization, Govt. of India, since 1951. b. Sept. 3, 1902 in Amritsar; Educ.: Punjab, California, Michigan and Cornell Univs. Teaching and Research in American Univs., 1925-31; Research Fellow, Indian Inst. of Sci., Bangalore, 1931-33; Research Physicist, London School Research Bureau, 1933-35; Research Officer, Indus. Research Bureau and CSIR, 1935-44; Ag. Dir., Physical Laboratories, C.S.I.R., 1944-47; Vice-Pres., Int'l Org. for Standardization, Geneva, 1948-55; Pres., Inst. of Telecommunication Engrs 1951 & 62; Chairman: Plastics Research Comm., C.S.I.R., 1950-58; Adv. Board of Indian Lac Cess Comm., since 1956; Pres., Mech. Engrs' Assoc. (India), 1960; Fellow: Std. Engrs. Soc., U.S.A.; National Inst. of Sci. of India; member, Inst. of Engrs. (India); responsible for secretariats of I.S.I. and many I.S.O. and I.E.C. Comm.; awarded Leo B. Moore award by the Soc. of America for his contribution and service in the field of Std. 1964. Publications: Over 100 papers in Indian and foreign scientific and tech. periodicals; number of Indian, British and U.S.A. patents on variety of industrial processes. Address: C/o Director-General, Indian Standards Institution, Manak Bhavan, 9, Bahadur Shah Zafar Marg, New Delhi.

**VIKAL, Ram Chandra**, Minister for Animal Husbandry, Fisheries and Forests, Uttar Pradesh, since April 1957. b. 1918; Educ.: Bankur and Agra. Started career as a teacher in a primary school at Baraula village in Indaur district; entered politics as a member, Dadari Mandal Congress Comm. 1937; became member, P.C.C. and later A.I.C.C.; left teaching profession, 1945; elected to the State Assembly on Congress ticket from Bulandshahr Dist., 1952, 1957 and 1962; suspended from Congress Party for vehemently opposing the land surcharge, 1962; returned to the



State Assembly as an Independent candidate, 1967; was elected leader, Samyukt Vidhyak Dal, March 1967; stepped down in favour of Sri Charan Singh, April 1, 1967. *Address*: Minister for Animal Husbandry, Uttar Pradesh, Lucknow.

**VIRA, Dharma**, I.C.S., Governor of W. Bengal, since May 1967. *b.* 1906; *Educ.*: Lucknow and Allahabad Univs.; London School of Economics and Political Sc. Joined I.C.S., 1930; Jt. Magistrate: Aligarh, 1930-34; Almora, 1934-36; Bareilly, 1936; Jt. Secy., Industries & Agrl. Exhibition, Lucknow, 1936-37; Offg. Dist. Magistrate, Bareilly, 1937; Dist. Magistrate: Etah, 1937-38; Almora, 1938-41; with Commerce Deptt., Govt. of India, 1941-44; Dy. Secy., Indus. and Civil Supplies Deptt., 1944-45; Textile Commr., 1945-47; Jt. Secy. to Cabinet, 1947-50; Principal Pvt. Secy. to Prime Min., 1950-51; Commercial Adv., High Comm. in London, 1951-53; Amb. to Czechoslovakia, 1954-56; Secy., Rehab. Min., 1956-62; Secy., Min. of Works, Housing and Rehab., 1962-63; Chief Commr., Delhi, Aug. '63-Nov. '64; Cabinet Secy. & Secy. to the Council of Ministers, Govt. of India, Nov. '64-1966; was Secy., Deptt. of Atomic Energy & Chairman, Atomic Energy Commission; Governor of Punjab & Haryana, 1966-67. *Address*: Raj Bhavan, Calcutta.

**VISHARAD, Mangal Deo**, 'Visharad' (Prayag Hindi Sahitya Sammelan), 'Snatak' (Harijan Gurukul, Dohrihat), Minister for P.W.D. and Govt. Estate Office, Uttar Pradesh, since April 1967. *b.* 1921 in a village in Azamgarh district. Entered active politics during the Quit India Movement, 1942; has been member, District Board, Azamgarh since 1948; Chairman, Dist. Board Education Cttee., 1955-66; joined the S.S.P., 1950; is member, S.S.P. Central Parliamentary Board; elected to the State Assembly on S.S.P. ticket, 1962 and 1967. *Address*: Minister for P.W.D., Uttar Pradesh, Lucknow.

**VISSANJI, Pratapsinh Mathuradas**, Businessman. *b.* March 19, 1916; *Educ.*: New High School, Bombay. Dir., Ahmedabad Advance Mills Ltd.; Indian Mfg. Co. Ltd.; Alsales Ltd.; Western India Match Co. Ltd.; A.C.C. Ltd.; Formica India Ltd.; Bombay Burmah Trading Corp. Ltd.; Great Eastern Shipping Co., Ltd.; Khatau Makanji Spg. & Wvg. Mills Ltd.; Wallace Flour Mills Co. Ltd.; Premier Automobiles Ltd.; Bombay Dyeing & Mfg. Co. Ltd.; Mysore Spg. & Mfg. Co., Ltd.; Tata Chemicals Ltd.; Tata Hydro-Electric & Power Supply Co. Ltd.; W. H. Brady & Co. Ltd.; State Bank of India Central Board & Local Board, Bombay; Lakshmi Vishnu Cotton Mill Ltd., etc. *Address*: Residence: Sir Mathuradas Vissanji Road, Andheri; Office: 9, Wallace Street, Fort, Bombay.

**VISWANATHAN, Venkata**, B.Sc., I.C.S., Governor of Kerala since May 1967. *b.* Jan. 25, 1909; *Educ.*: Central Coll., Bangalore; Univ. Coll., London; Balliol, Oxford. Joined I.C.S., 1930; Asstt. and Jt. Magistrate, Agra, Azamgarh, Banaras, 1931-36; Dist. Magistrate, Banaras, 1936; Asstt. Settlement Officer and Settlement Officer, Bahraich, Kheri, 1936-40; Under-Secy., Govt. of India, 1940; Dy. Secy., Govt. of India, 1942; Secy. to Rep. of the Indian Govt. in Ceylon, Colombo, 1943; Addl. Dy. Secy. and Secy. to Rep. of the Indian Govt. with the Govt. of Burma, 1944; Registrar, Coop. Soc.s, U.P., 1946; Dist. Magistrate, Dehra Dun, 1947; India's Alternate Delegate on U.N. Commn., Palestine, 1947; Dy. High Commr. for India in Pakistan, 1947-48; Chief Secy. and Adv., Madhya Bharat, 1948-50; Chief Commr., Bhopal, 1950-52; Jt. Secy., Min. of States and Min. of Home Affairs, 1952-53; Spl. Secy., Min. of Home Affairs, 1953; Secy., Min. of Home Affairs, Nov. '61-Nov. '64; Chief Commr., Delhi 1964-66; Lt. Governor, H.P., Feb. '66-April '67. *Address*: Raj Bhavan, Trivandrum.

**VON MIRBACH, H. E. Freiherr Dietrich**, Amb. of the Federal Republic of Germany to India. *b.* Sept. 20, 1907; *Educ.*: Studied law at the Univs. of Marburg, Freiburg, Lausanne and Koenigsberg. Joined the Min. of Foreign Affairs, 1935; Embassy of Germany in Ankara, 1935-37; Consulate Gen. in Danzig, 1937-38; Min. of Foreign Affairs, 1938-39; Third Secy., Legation of Germany in Bucharest, 1939-43; First Secy., Min. of Foreign Affairs, 1943-45; Bureau in charge of Trade Agreements, Foreign Trade Assoc. in Frankfurt/Main, 1949-51; Federation of German Chambers of Industry and Commerce, Bonn; Min. of Foreign Affairs, 1951-52; First Secy. and Counsellor, F.R.G. Embassy, Cairo, 1952-55; Min. of Foreign Affairs, 1956-59; F.R.G. Amb., Djakarta, 1959-63; Amb. on Spl. Duty, Min. of Foreign Affairs, 1963. *Address*: 6, Shantipath, Chanakyapuri, New Delhi.

**WADIA, Ardesahir Ruttonji**, Hon. D.Litt. Bar-at-Law, Padma Bhushan (1961), M.P. (Rajya Sabha), 1954-62; Ex-Dir., Tata Inst. of Social Sc.s, Bombay. *b.* June 4, 1888; *Educ.*: St. Xavier's High School and Wilson Coll., Bombay; Middle Temple, London; St. Catherine's, Oxford; Fitzwilliam Hall, Cambridge. Prof., Wilson Coll., Bombay, 1914; Lecturer in Psychology, Bombay Univ., 1914-16; Prof. of Philosophy, Mysore Univ., 1917-42; D.P.I., Mysore (Retd.); Principal, Victoria Coll., Gwalior (1946-49); Pro-Vice-Chancellor, M.S. Univ., Baroda, 1949-52; Indian Delegate to UNESCO Cfce., 1952 & 1954. *Publications*: *The Ethics of Feminism*; *Pragmatic Idealism in Contemporary Indian Philosophy*; *Zoroaster, Religion as a Quest for Values*; *The Future of English in India*; *The Philosophy of Mahatma Gandhi* and other Essays: Philosophical & Sociological; Editorial Board, History of Philosophy: Eastern and Western. *Address*: Kalpana, 96, Netaji Subhas Road, Bombay.

**WADIA, Darashaw Noshervan**, M.A., D.Sc., F.N.I., F.R.S., Padma Bhushan (1958), Geological Adv., Govt. of India. *b.* 1883; *Educ.*: Baroda Coll., Bombay Univ. Prof. of Geology, Prince of Wales Coll., Jammu (Kashmir), 1907-20; Geological Survey of India, 1921-39; did geological survey of N.-W. Punjab, Hazara and Kashmir; Mineral Adv., Ceylon Govt. till 1944; Pres.: Indian Sc. Cong., XXIX Session, 1942; National Inst. of Sc. of India, 1945-46; "Back Award," Royal Geographical Soc., London, 1934; "Lyell Medal" awarded by Geological Soc., London, 1943. *Publications*: *Geology of India*; *Syntaxis of N. W. Himalayas* (1931); *Geology of Nanga Parbat & Gilgit District* (1932). *Structure of the Himalayas* (1938). *Address*: 10, King George Avenue, New Delhi.

**WADIA, Neville Ness**, Chairman, Nowrosjee, Wadia & Sons (Private) Ltd.; The Bombay Dyeing & Mfg. Co. Ltd.; National Peroxide Ltd.; Belapur Co. Ltd.; Sturdia Chemicals Ltd.; Botaniunum Ltd. *b.* Aug. 22, 1911; *Educ.*: Malvern & Trinity, Cambridge. *Address*: Bella Vista, Pedder Road, Bombay 26; Office: The Bombay Dyeing and Mfg. Co. Ltd., Neville House, Ballard Estate, Bombay 1.

**WADIA, Smt. Sophia**, Padma Shri (1961), Editor, *The Aryan Path*, 37th Vol., and *The Indian P.E.N.*, 32nd Vol., Bombay. *b.* Sept. 13, 1901; *Educ.*: Lycee Mollere, Paris; Columbia Univ., New York; School of Oriental Studies, London. Associate of The United Lodge of Theosophists; Lecturer, Founder-Organiser of the P.E.N., All-India Centre; a Founder and Pres. of the Indian Inst. of World Culture, Bangalore; and worker in women's educ., social and cultural movements. *Publications*: *The Brotherhood of Religions*; *Preparation for Citizenship*. *Address*: 40, New Marine Lines, Bombay 1.

**WANCHOO, Mr. Justice Kallas Nath**, B.A. (Allahabad), I.C.S., Chief Justice Supreme Court of India, since April 1967. *b.* Feb. 25, 1903; *Educ.*: Pandit Pirthi Nath High School, Kanpur; Muir Central Coll., Allahabad and Wadham Coll., Oxford. Joined the I.C.S., 1924; served as Jt. Magistrate and Dist. and Sessions Judge in various Dist.s in Uttar Pradesh; Judge, Allahabad High Court, Feb. 1947-Jan. 1951; Chief Justice, Rajasthan High Court, 1951-58; Chairman, U.P. Judicial Reforms Cttee., 1950-51; reported to the Govt. of India on the financial and other implications of the new State of Andhra, Feb. 1953; Sole Member, Indore Firing Enq. Commn., 1954; Chairman, Dholpur Succession Case Commn., 1955; Member, Law Commn., India, 1955; Judge, Supreme Court of India, Aug. '58-April '67. *Address*: 6, Motilal Nehru Place, New Delhi.

**WANCHOO, Niranjan Nath**, M.A. (Punjab), O.B.E. (1945), I.C.S., Secy., Min. of Ind. Development & Company Affairs Govt. of India, since April 1967. *b.* May 1, 1910; *Educ.*: Govt. Coll., Lahore; King's Coll., Cambridge. Joined the I.C.S., 1934; served in Bihar and Orissa; later in the Commerce and Food Deptts. of the Govt. of India; Imperial Defence Coll., London, 1947; D. G. of Ordnance Factories, 1948; Jt. Secy., Min. of Defence & Conlfr.-Gen. of Defence Production, 1948-57; member, Univ. Grants Commn., 1958-61; Secy., Min. of Fin. (Deptt. of Expenditure), 1958-61; Secy., Min. of Steel, Mines & Heavy Engg., 1961-66; Secy., Min. of Iron & Steel, July '61-April '67. *Address*: 4, Akbar Road, New Delhi.

**WANKHEDE, Sheshrao Krishnarao**, B.A., Bar-at-Law, Minister for Finance, Law, Judiciary & Small Savings, Maharashtra, since March '67. *b.* Sept. 24, 1914; *Educ.*: B.A., Morris Coll., Nagpur, 1934; called to the Bar, 1937. An educationist, sportsman and agriculturist; was connected with 67 Inst.s either as an office-bearer or an ordinary member; unanimously elected Chairman, Nagpur Dist. Council, 1938-48; jailed for individual Satyagraha, 1940; member, Nagpur Univ. Exec. Council, 1947; was the first Mayor of Nagpur Corpn.; later elected for two more years; Indian rep. at the F.A.O. Cfce., 1953; a member, Indian Central Cotton Cttee. for 12 years; Ex-Vice-Chairman, M.P. Electricity Council; was Dy. Speaker, M.P. Leg. Assembly, 1952; was Dy. Speaker in enlarged Bombay State's first Assembly; Min. for Plng., Devpt., Electricity and Industries, Bombay State, 1959-60; Min. for Fin., Maharashtra, 1960-62; Min. for Industries, Law & Judiciary, 1962-63; Minister for Finance, Dec. '63-Feb. '67. *Address*: Sachivalaya, Bombay.

**WATSON, Derrick Easthope Browning**, M.A. (Oxon.), Exec. Dir., A. & F. Harvey Ltd., since April 6, 1965. *b.* Nov. 13, 1917, at Bushey, Herts, U.K. Dir.: Madura Mills Co. Ltd.; Punalur Paper Mills Ltd.; The Indian Textile Paper Tube Co. Ltd.; Fenner, Cockill Ltd.; Pandyan Ins. Co. Ltd.; Tuticorin Co. Ltd.; Pandyan Hotels Ltd.; Overseas Associate Member, Tech. Sect., British Paper and Board Makers' Assoc. (Incorporated), U.K. *Address*: Res.: 11, Race Course, Madurai, South India.

**WAZIR, Mr. Justice Janki Nath**, B.A. (Punjab), LL.B. (Lond.), Bar-at-Law, Middle Temple, Chief Justice, High Court of Jammu and Kashmir, since April 1948. *b.* Dec. 6, 1905; *Educ.*: Kashmir and London Univ. Was enrolled as an Advocate of the Lahore High Court, 1931; Part-time Law Lecturer, Law Coll., Lahore, 1933-36; Judge, High Court of Jammu and Kashmir State, Dec. 1936-April 1948; Vice-Chancellor, Univ. of Jammu and Kashmir, June 1950-57. *Address*: Srinagar.



**WELLINGDON, B., B.A.,** Minister for Health, Kerala, since March 1967. *b.* 1929. After graduation worked as a teacher for some time; entered politics through the Students' Congress; became an active trade unionist and was one of the pioneers of the I.N.T.U.C. movement in Quilon (1952); associated with the Anti-Communist Front in 1956 and was elected its Kerala Pres.; broke away from the Congress on account of its anti-peasant policies, 1961; was Secy., Malanad Karshaka Union for some time; General Secy., Karshak Thozhilali Party from its inception, 1962; elected to the State Assembly from Kalpettah Constituency, 1967. *Address:* Minister for Health, Trivandrum.

**WINCHESTER, Most Hon. the Marchioness of (the former Miss Bapsy Pavry), M.A.,** Litterateur; Honorary Member of British-American Society; Member of Council of World Alliance for International Friendship; conferred Order of Merit by the Shah of Iran (1955); accorded Civic Reception by the Mayor of Winchester at the historic Guildhall (1958); *Educ.:* Queen Mary High School and St. Xavier's College, Bombay; M.A., Columbia University; has travelled extensively abroad on several occasions; received by Heads of State of several countries in Europe, Asia and America; was guest of many European and Asian Kings and Queens; attended the historic Reception given in Paris by the President of France in honour of King George and Queen Elizabeth (1938), and in honour of Queen Elizabeth and Prince Philip by the President of India in New Delhi (1961); attended the historic Peace Conference in Paris (1946), Asian Relations Conference in New Delhi (1947), Parliamentary Conference on World Govt. (London, 1954), and represented Karnatak Univ. at Columbia Univ. Bicentennial Convocation (New York, 1954); awarded Bicentennial Medal. *Publications:* *Heroines of Ancient Iran* (Cambridge, 1930); limited deLuxe edition of 250 numbered copies (Hutchinson, London, 1955). *Address:* Malabar Hill, Bombay.

**YADAV, Shyam Lal, M.A., LL.B.,** Minister for Judicial, Legislative and Information, Uttar Pradesh, since April 1967. *b.* 1927. Has been a practising lawyer at Varanasi; elected to the Vidhan Sabha on Congress ticket, 1957; was member, U.P. Congress Cttee. for a long period; is associated with various social and educational institutions; was manager, D.A.V. Coll., Varanasi, and Vice-Pres., Sakaldaha Coll., Varanasi; joined the Jana Congress, April 1967. *Address:* Minister for Judicial, Legislative and Information, Uttar Pradesh, Lucknow.

**YAGNIK, Bhanushankar Manchharam,** Minister for Prohibition, Maharashtra, since March 1967. *b.* Feb. 1, 1915; *Educ.:* Saldhi (Bhavnagar Dist.) and Bombay. Gen. Secy., B.P.C.C., 1953-60; Pres., B.P.C.C., 1960-63; member, A.I.C.C. since 1950; founded Bombay Youth

League, 1930; associated with various social organisations in various capacities; elected unopposed to the Bombay Municipal Corporation, 1938 by-election, re-elected, 1948; elected to Bombay Leg. Assembly from Fana-wadi, Girgaon and Kumbharwada Constituencies, 1952 and 1957; re-elected M.L.A., Maharashtra, from Kumbharwada (Bombay) Constituency, 1962 and 1967; Edited and published *Audicha Udaya* monthly, was on the editorial staff of *Yug Prabhav & Sangam* Gujarati and Hindi Weeklies. *Publications:* *Hruday Manthan* (Experiences in Jail in Gujarati). *Address:* 121/16, "Rock-Side", Walkeshwar Road, Malabar Hill, Bombay 6.

**YASHPAL, B.A. (Lahore),** leading Hindi writer. *b.* Dec. 3, 1903, at Ferozepur Cantt.; *Educ.:* Gurukul Kangri and National Coll., Lahore; graduated, 1926. Courted jail in the freedom movement; started *Viplava*, a monthly magazine. *Publications:* Numerous short story collections, novels, travel books; book of reminiscences, humorous essays; One Act Plays and socio-political books; his works have been translated into all Indian and some foreign languages; e.g., *Divya, Amila, Deshdrohi, Manushya Ke rup, Jutha Sach, Pinjare-ki-Uran, Chitra ka Shirshak, Gyandan, Abhishapt, Gandhivad Ki Shao Pariksha* (Post-mortem of Gandhism). *Address:* Res.: 335-B, Mahanagar; Office: 'Viplava', 21, Shivaji Marg, Lucknow.

**ZAHEER, Syed Ali, B.A., LL.B.,** Bar-at-Law, Ex-Minister for Justice, Leg. & Muslim Waqfs, U.P. *b.* March 21, 1896; *Educ.:* M.A.O. Coll., Aligarh; Canning Coll., Lucknow; Law Coll., Allahabad; Oxford. Called to Bar, 1922; member, Leg. Council, 1930-37 and again from 1939 till supersession of leg.; left Muslim League, 1937; org'd Shia community; Pres., All India Shia Pol. Cfce., 1941, 1945; same year convened Shia All-Parties' Cfce. which agreed to dissociate itself from Muslim League policy; Member for Law and Communications, Nehru's first Interim Cabinet; resigned in Oct. 1946 when Muslim League joined Viceroy's Exec. Council; Indian Amb. in Iran, 1947-51; Min. in Iraq, concurrently, 1949-51; Min. of Justice and Labour, U.P. Cabinet in Aug. 1951; M.L.A., Jan. 1952; Min. for Justice and Excise, 1952-55; Min. for Justice and L.S.G., 1955-57; Min. for Justice, Food, Civil Supplies & Forests, U.P., 1957-58; Min. for Fin. & Forests, U.P., 1958-60; member, A.I.C.C., since 1955. *Publications:* *The Dead Past*; Articles published in various newspapers and magazines. *Address:* "Alleys", 9A, Clyde Road, Lucknow, U.P.

**ZAHEER, Dr. Syed Husain, M.A. (Oxon),** Dr. Phil. Nat. (Heidelberg), F.R.I.C., Ex-Dir. Gen., Scientific and Industrial Research, and Ex-Secy. (*ex-officio*), Min. of Educ. (Deptt. of Sc.); Chairman: Inventions Promotion

Board; Board of Dirs., National Research Devpt. Corp'n. of India. *b.* Nov. 7, 1901; *Educ.:* Lucknow, Oxford and Heidelberg (Germany). Member, Indian National Congress, 1935-47; courted jail during Quit India Movement; Dir., Regional Research Laboratory, Hyderabad, 1948-62; Discussion Leader, Indian delegation in four sessions of the U.N. Cfce. on the Application of Sc. and Tech. for the Benefit of Less Developed Areas held at Geneva, Feb. 1963; leader, Indian delegation to the Sixth World Petroleum Congress at Frankfurt, June 1963; leader, Scientists' delegation to U.A.R., July 1963; associated with: several expert Cttees. concerning educ. as well as industrial devpt. projects; preparation of project reports and blue prints for starting many new industries in the country; has 60 patents to his credit. *Publications:* 90 research papers; *Address:* C/o 87, Lodi Estate, New Delhi-3.

**ZAKARIA, Dr. Rafiq, M.A. (1st class), Ph.D. (London),** Bar-at-Law, Chancellor's Gold Medalist (Bombay Univ.), Minister for Public Health & Waqfs, Maharashtra, since March 1967. *b.* April 5, 1920; *Educ.:* Anglo-Urdu High School, Poona; Ismail Yusuf Coll., Govt. Law Coll., Bombay; London Univ. and Lincoln's Inn. Political correspondent on Indian affairs for the 'Observer' (London), 1947-48; Pres.: London Majlis, 1945-47; Chairman, Federation of Indian Students' Soc.s in British Isles and Europe, 1947; Delegate to Inaugural Session of Int'l Union of Students held at Prague, 1946; Gen. Secy., Bombay Youth Cong., 1950-1; Pres.: Indo-Arab Soc.; Founder and Pres., Maulana Azad Coll. of Arts, Sc. & Commerce, Aurangabad; has travelled widely; has written for several Indian and foreign newspapers and broadcasts often; nominated M.L.C., Maharashtra, June, 1960; apptd. Cong. Chief Whip of the Maharashtra Leg. Council, July 1960; M.L.A., Maharashtra from Aurangabad constituency, Feb. 1962 & 1967; member: Exec. Cttee., M.P.C.C., and A.I.C.C.; Dy. Min. for Bldgs. & Communications, Maharashtra, 1962-64; is Advocate, Bombay High Court; Indian rep. to the 20th session of the U.N. Gen. Assembly, Oct. 1965; Min. for Urban Devpt. & Waqfs, Feb. '64-Feb. '67. *Publications:* *A Study of Nehru*. *Address:* B-7, Foreshore Road, Bombay 1.

**PEGOV, His Excellency Mr. Nikolai Mikhailivitch,** Ambassador for U.S.S.R. in India. *b.* 1905. Has been associated with various economic, public and State activities of considerable importance for a number of years; Secretary of the Presidium of the Supreme Soviet of the U.S.S.R., 1953-56; was also elected Deputy of the Supreme Soviet of the U.S.S.R. during this period; has been in the foreign service of the U.S.S.R., since 1956; Russian Ambassador to Iran, 1956-63; Ambassador to Algeria, 1964-67. *Address:* Russian Embassy, New Delhi.



## LATE PARTICULARS

Under this we publish articles and give notes on items which could not be included in the body of the text.

### AKHIL BHARAT HINDU MAHASABHA \*

(Hindu Mahasabha Bhawan, Mandir Marg, New Delhi 1.)

**President :** Nitya Narain Banerjee.

**Vice-Presidents :** Prof. Ram Singh, Mahant Digvijay Nath, Jnanendra Nath Banerjee, Giani Pindi Dass, Yashwant Rao Joshi, Dr. D. S. Parchure.

**General Secretary :** Pt. Brijnarayan Brajesh.

**Total membership of Party :** 7,12,000.

The aim of the Hindu Mahasabha is to establish a really democratic Hindu State in Bharat, based on the culture and tradition of Hindu Rashtra and to re-establish Akhand Bharat by all constitutional means.

**Other Activities :** The Hindu Mahasabha organized in December, 1965 a conference "Vishwa Hindu Dharma Sammelan" (World Hindu Religious Convention) of Hindus including the Buddhists, Jains and Sikhs etc. all over the world. A permanent committee of the "Vishwa Hindu Dharma Sammelan" is being formed to carry on the aims and objects connected with it.

#### MANIFESTO

The election manifesto of the Sabha says that it is absolutely essential to amend the Constitution in such a way as to guarantee the fullest civil liberty to all citizens of Hindustan, including the minorities, irrespective of their allegiance to any caste or creed but whose loyalty to the State is above doubt.

It promises "just and fair treatment" to all non-Hindu minorities with full opportunities to develop their language, religion and culture and recruitment to services strictly on the principle of merit. But the Sabha insists that they should merge themselves in the main current of Hindu nationalism and give up separate national consciousness on the basis of religion and culture.

#### Foreign Policy

On foreign policy, the Sabha stands for befriending all neighbouring Hindu nations such as Nepal, Sikkim, Bhutan, Burma and Ceylon and calls for non-involvement and non-interference in the affairs of other countries.

The manifesto also stands for the liberation of Indian territory from the control of foreign Powers by "all possible means" and the liberation of Tibet from Chinese domination so that it should serve as a buffer State between India and China.

The Sabha wants India's withdrawal from the Commonwealth so that India becomes a "really independent country, free from British influence in our internal and external policies."

The Sabha wants the Government to manufacture nuclear weapons for defence purposes "without being bullied by our enemies".

It promises training in guerilla and mountain warfare in border regions and the creation of a 20-mile-broad safety zone along the Pakistani border.

#### Language Policy

On language, the Sabha stands for resisting all attempts made to dislodge Hindi from the place it has been given in the Constitution as a Union language.

The Sabha wants all administrative work to be conducted in the language which the masses speak.

On Kashmir, the Sabha stands for the abrogation of Article 370 of the Constitution which gives special status to that State.

It also wants the imposition of "effective curbs" on the activities of foreign Christian missionaries.

The party has also promised the nationalisation of all key industries, including coal and steel, means of transport and communication and the industries dealing with war materials and defence weapons.

It has also promised equal opportunity to all and equitable distribution of industrial profits between workers, the entrepreneurs and consumers by the setting up of proper control machinery.

The Sabha has also promised a ban on cow slaughter.

### ALL INDIA FORWARD BLOC

(Central Office, Chhindwara, Madhya Pradesh.)

**Chairman :** Hemanta Kumar Bose, M.L.A.

**General Secretary :** R. K. Haldulkar.

The party advocates the nationalisation of all key industries in the country, equitable redistribution of land with special provision to allot land to the landless peasants, fair wage to the workers, right to strike and full trade union rights to the workers, appointment of a Commission to go into the economic condition of

kisans and suggest means of greater production of foodgrains to meet the deficit, action to vacate aggression of China on the northern frontiers of the country, free education to the students upto the degree level and up-to-date training of our defence forces to meet any aggression from outside.

The Party is opposed to any talks with Pakistan over the Kashmir issue and wants military action to vacate the Pak-occupied portion of Jammu and Kashmir.

The 9th Plenary Session and the Silver Jubilee Session of the party in the 25th year of its existence was held at Madurai from 18th to 20th February 1966. The Party has increased its strength from 12,000 to 40,000 in membership and it was decided to contest the forthcoming 1967 General Elections in full strength if possible in alliance with other opposition political parties. The Party has removed Hammer and Sickle from the Flag of the Party to distinguish it from the Communist Party.

### BHARATIYA JAN SANGH

(Ajmere Gate, Delhi.)

**President :** Prof. Balraj Madhok.

**Vice-Presidents :** Jupudi Yagnanarain; Bhairon Singh Shekhawat.

**General Secretary :** Pt. Deendayal Upadhyaya.

**Secretaries :** Jagannathrao Joshi; Sunder Singh Bhandari; Nanaji Deshmukh; Yagya Dutt Sharma.

**Treasurer :** Bachhraj Vyas.

**Office Secretary :** J. P. Mathur.

**Total membership of party in country :** more than 25,00,000.

Has branches all over India including NEFA, Tripura & Kashmir.

#### AIMS AND OBJECTS

Integral Humanism is the ideal. Unitary form of Government by democratic peaceful means. Establishment of Dharma-Rajya i.e. the Rule of Law. Ending all disparities in economic and social structure of the Society.

The present emergency in the country should go.

Kashmir an integral part of India.

No plebiscite in Kashmir; and no special position to Kashmir in the Indian Union: same status as other States. Stands for merger of territories previously held by the French and

Portuguese, into the adjoining States.

Stands for (1) primary education through the mother tongue, (2) secondary and higher education through the regional language and Hindi as compulsory subject, (3) making learning of one regional language compulsory for Hindi-speaking students, (4) compulsory course of Sanskrit studies, (5) recognition of graduates of Hindi and of other recognised Indian languages as on par with English, (6) autonomy of educational institutions and universities, (7) regional language to be allowed as medium of instruction upto the highest class; (8) Provincial language to be made administrative language in their respective areas.

\* The articles in this section are based on the material provided by the parties themselves.



Free and compulsory education at the primary and secondary stages. Free education to poor but deserving students at the higher stages.

The party is opposed to co-operative farming.

### 1967 ELECTION MANIFESTO

The working committee of the Jan Sangh declares in its election manifesto that the party would constitute a high-power commission to inquire into cases of corruption even at the highest level.

A code of conduct for representatives of the people would be framed and a special law enacted to penalise corruption at the political level.

The Jan Sangh will institute an inquiry into the assets of all ex-Ministers and other high officials. The party will relax all controls.

The party would make uniform pay scales and emoluments for employees engaged in Central, provincial and local bodies, and create an effective and fully representative negotiating machinery on the lines of the British Whitley Councils to allay the grievances of government employees without delay.

### FREE EDUCATION

No restrictions will be placed on fundamental rights and democratic privileges, which could be misused by the administration to throttle democracy and suppress individual liberty."

The party would try to implement free compulsory education to all children up to the age of

11 within the next five years and would further seek to make education free up to the higher secondary stage.

Education system is to be reformed so as to bring it in tune with modern attainments and national values.

Jan Sangh would bridge gulf between the people's sentiments and the Government policies and take all necessary steps to regain the lost territories.

The manifesto stated that the policy of non-alignment can neither be our creed nor a permanent basis of our foreign policy. With a view to safeguarding the nation's interests and integrity, the Jan Sangh would follow an independent foreign policy and enter into bilateral alliances with countries irrespective of their allegiance to the power blocs.

It added, India had no quarrel with the people of Pakistan. Jan Sangh sympathises with all the movements of Pakistani people organised for freedom and has faith in the ultimate unification of India and Pakistan. The Sangh will lend full support to the struggle of the African peoples against apartheid and the illegal white government of Rhodesia.

If voted into power, the Sangh, on the one hand shall adopt short-term measures to alleviate the acute food and foreign exchange crisis and arrest the upward movement of prices and on the other a long-term plan will be formulated to lay the foundations of a self-reliant, prosperous and egalitarian economy.

### PUBLIC SECTOR

So far as the public sector is concerned, there will be a planning cell in each Ministry and it will prepare detailed plans of each project.

The manifesto proposed to replace the present Planning Commission by a small committee or commission of experts who will prepare a perspective plan and from time to time will apprise the Government and the people about the overall trends in the economy.

On the food front, the programme to be undertaken by the Jan Sangh will include the setting up of a food corporation with branches in all States, abolition of the system of levy and monopoly purchases and the abolition of food zones.

### INCENTIVES TO FARMER

There will be remunerative and incentive prices for food crops and the Food Corporation will enter into forward contracts with the producers and advance them money.

To step up production, farmers will be given fertilizers, seeds, bullocks and implements at subsidised rates, while marketing or multi-purpose co-operative societies will act as agents for the food corporation.

The Jan Sangh would give first priority to agriculture and introduce land reforms relating to the abolition of intermediaries.

The Jan Sangh will oppose the nationalisation of banks and the expansion of the public sector in any other field except power, mineral oils and defence industries.

## COMMUNIST PARTY OF INDIA (MARXIST)

Central Committee Office :

66/1A, Balihak Khana Road, Calcutta.

The Communist Party of India (Marxist), is the party of the Indian working class wedded to the ideology of Marxism-Leninism with the aim of building Socialism and Communism in India through the establishment of a People's Democratic State as the first stage.

The Communist Party has today grown to become one of the strongest opposition parties in the country.

The Seventh Congress of the Party held in Calcutta in October-November, 1964 adopted a programme based on Marxism-Leninism for carrying forward the Indian people's struggle for Socialism to success.

The Programme envisages the replacement of the present State and Government by a State of People's Democracy and a Government led by the working class on the basis of a firm worker-peasant alliance. The People's Democratic Revolution is essentially anti-feudal, anti-imperialist, anti-monopolistic and democratic.

The Programme lays emphasis on the task of carrying out radical agrarian and other reforms in the interests of the peasantry. The programme includes eradication and summary expulsion of

the foreign monopoly capital from our national economy and thus free the economic, political and social life of our people from all its disastrous influences.

The Party is represented in the Lok Sabha, Rajya Sabha and is recognized in the four States of Kerala, Andhra Pradesh, West Bengal and Tripura by the Election Commission.

The structure of the Party is the Branch in the factory, other establishments and villages, with the Local or Town Committee above it, then the Taluk Committee, the District Committee with its Secretariat, the State Committee with its Secretariat and the Central Committee with its Polit Bureau.

The Party runs a central English weekly "People's Democracy" and a Hindi weekly "Swadhinta", and has dailies in Kerala (Deshabhimani) and Andhra Pradesh (Janashakti) and weeklies in Tamilnad (Theekkathir), Karnataka (Aikya Ranga), Maharashtra (Jeevan Marg), West Bengal (Desh Hitaish), Assam (Gana-shakti), Orissa (Janapatha), Punjab (Lok Jamhuriat) and in Jammu and Kashmir (Jammu Sandesh).

**Polit Bureau :** General Secretary : P. Sundar-ayya, **Members :** E. M. S. Namboodiripad ; A. K. Gopalan ; P. Ramamurti ; M. Basavapurniah ; B. T. Ranadive ; Promode Dasgupta ; Jyoti Basu and Harkishan Singh Surjeet.

### ELECTION MANIFESTO

Despite the sharp ideological feud, the Communist Party of India (Marxist) reveals a close similarity in its overtures to the electorates.

The party stands for nationalisation of banks, reduction of taxes on the basic necessities of life, radical agrarian reforms and greater autonomy for the States. It wants to scrap the 'Emergency' and 'Defence of India Act' and other repressive laws. Free and compulsory education upto the secondary stage and equality of all languages with the status of second regional language for Urdu in States with sizable Urdu-speaking population are favoured by the party. As in the case of its counterpart (C.P.I.), this party also is in favour of nationalisation of foreign trade and foreign capital in several key industries. This party has also promised a "people's plan" for economic development of the country.

## COMMUNIST PARTY OF INDIA (RIGHT)

(7/4, Asaf Ali Road, New Delhi.)

**Chairman :** S. A. Dange ; **General Secretary :** C. Rajeswara Rao.

### The Policy :

Reorganise administration and services in such a way as to make them subordinate and responsible to popularly elected State organs at all levels.

Grant universal and equal suffrage to all male and female citizens of India who have attained

the age of 18 years in elections to Parliament, legislative assemblies and local bodies through secret ballot ; introduce proportional representation in all elections and right of recall of elected representatives by majority of electors.

Abolish second chambers and such reactionary, out-dated institutions and practices as the post of State Governors, rule by ordinances, detention without trial and privy purses and other privileges of the princes.

Enforce directive principles of the Constitution like right to work, living wage, free education, social security, etc.

Ensure inviolability of person and domicile unhampered freedom of conscience, religious belief and worship, speech, press, assembly and organisation, strike and combination, freedom of movement and occupation.

Abolish social disabilities from which women suffer.



Abolish social and economic oppression of one caste by another. Make such oppression punishable by law. Strengthen secular basis of the State.

Separate judiciary from the executive. Ensure simpler, cheaper and speedier justice within reach of the common man. Provide free legal aid for poorer sections of population.

Reorganise taxation system and base it on principle of capacity to bear burden. Introduce ceiling on profits, and incomes and graded tax system in industry, trade and agriculture.

Introduce state-trading in essential commodities like foodgrains, cloth, etc. and supply them to people at reasonable prices.

National minimum wage should be fixed and workers should be assisted in securing fair wages which should be above the minimum. Sliding scale of D.A., bonus, gratuity and holidays with pay.

Enlarge and liberalise social security measures, such as provision against unemployment, ill-health and old age. Provide housing facilities at cheap rent.

Guarantee full trade union and democratic rights.

Break concentration of land by abolishing all forms of landlordism, by imposing effective ceilings on landholdings and distributing surplus land to agricultural labourers and poor peasants free of cost.

All land reform measures be implemented with the help of popular committees of accredited

representatives of peasants and agricultural labourers. Financial and technical aid also be distributed in a similar way.

Introduce graded land tax based on income, exempting all uneconomic holdings from tax.

Organise multipurpose cooperatives to provide cheap credit, seed, manure, pesticides, etc. to peasants and ensure remunerative prices for their products. Provide cheap irrigation facilities; start agro-industries in the countryside.

Ensure adequate wages and living conditions for agricultural labourers.

#### 1967 ELECTION MANIFESTO

The C.P.I. stands for the elimination of the Congress rule.

The manifesto explains the differences between C.P.I. and its Marxist counterpart as well as certain other opposition parties.

It stands for the total elimination of foreign monopolies. All industrial concerns, financial and business enterprises owned by foreign monopolies should, therefore, be nationalised. It stands for the closing down of speculative markets and exchanges, nationalisation of banks, a "people's plan" to replace the Fourth Plan, stoppage of payment of compensation to big landlords and of privy purses, overhauling of the tax structure to give relief to the common man, reorganisation of the public sector, ensuring for the working class a minimum need-based wage, enforcement of effective and far-reaching land reforms and the prescription of an adequate minimum wage for agricultural labour.

The party wants removal of inter-State conflicts and the vesting of greater power and authority on the States. All regions and States should be evenly developed. Compact tribal areas should be demarcated to form separate States or autonomous regions according to their size. Muslims have to be guaranteed full protection of their specific cultural, social and religious rights.

The introduction of Hindi as the official language should be done in a gradual manner, based upon the consent of the non-Hindi-speaking States.

While recognising the importance of improving the quality and breeds of cattle, the party does not support the demand for a total ban on cow-slaughter. It wants the removal of the "inhibitions, nuances and anti-democratic and obsolete practices of the old imperial army" in the defence forces.

In the sphere of foreign policy, the party generally supports the Government policy but is critical of its "vacillations and compromises under the pressure of Anglo-American blackmail." It calls for full support to the Viet Name people and effective action to stop U.S. bombing of North Viet Nam. It urges diplomatic recognition to East Germany and the continuance of efforts to reach a lasting accord with Pakistan on the basis of making the existing cease-fire line in Kashmir the international boundary with mutually agreed adjustments. Despite the continued hostile attitude of China, it wants to explore all avenues for a peaceful settlement with China either directly or through the good offices of friendly neutral powers and proposes a no-war pact with that country.

## DRAVIDA MUNNETRA KAZHAGAM

(Arivaham, Suryanaryana Chetty Street, Royapuram, Madras.)

General Secretary : C. N. Annadurai.

#### AIMS

The election manifesto of the Dravida Munnetra Kazhagam, which is instrumental in uniting the Opposition forces to fight the Congress in the 1967 General Elections, reiterates the party's determination to work for the establishment of a Dravida Nad within the Indian Union and to preserve the language and culture of the South.

The party will work for establishing closer contacts among the four southern States of Tamil

Nad, Andhra, Kerala and Mysore, which have cultural and linguistic affinities. It will oppose any move by any party to dominate other parties in the name of national integration.

The manifesto promises to strive for the protection of the rights and privileges of the States and for uniform economic development.

The party will try to amend the Constitution to change the present allocation of powers between the Centre and the States with a view to giving greater powers to the States.

The manifesto also promises land to the tiller, the formation of a land army to step up food production, debt relief to farmers and measures to check the commodity price spiral.

The party stands committed to the nationalisation of banks, bus transport and cinema theatres.

It also gives a promise to reduce the tax burden.

In the General Election the party secured an absolute majority and replaced the Congress by forming its own Ministry in the State.

## INDIAN NATIONAL CONGRESS

(7, Jantar Mantar Road, New Delhi.)

President : K. Kamaraj.

General Secretaries : T. Manan, Sadiq Ali.

Treasurer : Atulya Ghosh.

Working Committee : D. Sanjivayya, Smt. Indira Gandhi, Atulya Ghosh, Morarji Desai, Jagjivan Ram, S. K. Patil, K. Kamaraj, Mohanlal Sukhadia, Y. B. Chavan, Ram Subhag Singh, Gulzarilal Nanda, S. Nijalingappa, Sadiq Ali, Fakhruddinali Ahmed, Biju Patnaik, Darbara Singh and T. Manan.

Central Parliamentary Board : Smt. Indira Gandhi, Jagjivan Ram, K. Kamaraj, Morarji Desai, S. K. Patil, Y. B. Chavan, Fakhruddinali Ahmed, Atulya Ghosh.

Central Disciplinary Action Committee : Morarji Desai, Jagjivan Ram, S. K. Patil, Atulya Ghosh, Gulzarilal Nanda.

Leader, Congress Party, Parliament : Smt. Indira Gandhi.

Deputy Leaders, Congress Party, Parliament : K. Hanumanthaiya (Lok Sabha); S. N. Mishra (Rajya Sabha).

Secretaries : Chandrasekhar, Jagannath Pahadia.

Treasurer : Kamalnayan Bajaj.

Total membership of Party in country : (1965): Primary : 1,73,40,000; Active : 332,000.

The Indian National Congress includes the following bodies :

The All-India Congress Committee, the Working Committee, Pradesh or Territorial Congress Committees, District or City Congress Committees, Block Congress Committees and Committees subordinate to the Block Congress Committees to be determined by the Pradesh Congress concerned.

There are 20 Pradesh Congress Committees :

Andhra, Assam, Bihar, Bombay, Delhi, Gujarat, Haryana, Himachal, Jammu & Kashmir,

Kerala, Madhya Pradesh, Maharashtra, Mysore, Punjab, Rajasthan, Tamilnad, Utkal, Uttar Pradesh, West Bengal and Tripura.

There are five Territorial Congress Committees : Goa, Manipur, Nagaland, NEFA and Pondicherry.

The A.I.C.C. also has on it representatives of allied institutions and organizations.

#### AIMS AND OBJECTS

The ideology, outlook and policy may be described as follows :

The object of the Indian National Congress is the well-being and advancement of the people of India and the establishment in India by peaceful and constitutional means of a Socialist State based on Parliamentary Democracy in which there is equality of opportunity and of political, economic and social rights, aiming at world peace and fellowship.



The provision of the basic needs of food, clothing and shelter, and of opportunity for cultural growth for all people.

With a view to achieving the above objects planning should take place with a view to the establishment of a socialistic pattern of society where the principal means of production are under social ownership, or control and there is equitable distribution of national wealth.

Full employment should be achieved in ten years.

The State should initiate and operate large-scale schemes, providing services such as power, transport; have over-all control of resources, social purposes and trends; maintain strategic controls; prevent private trusts and cartels; maintain standards of labour and production; the public sector must progressively play a greater part particularly in the establishment of basic industries; the private sector should function in terms of the national plan.

Organization of industry, commerce, agriculture on a co-operative basis.

Participation of workers in management of industry.

Perspective planning; flexible short-term plans in the context of a long-term plan.

Backward areas and regions should be specially helped to develop themselves.

The per capita income should be doubled in fifteen years.

Belief in a secular State; all citizens to have equal rights; removal of barriers which divide people on the basis of religion, caste, class or region.

#### Land Reform

Abolition of old and out-dated agrarian systems of tenure; security of tenure and fair rents for tenants and tillers of the soil.

Land reform should be effected quickly, agricultural prices stabilized at a reasonable level and facilities for rural credit greatly enlarged.

There should be a ceiling on holdings.

Co-operative farming; the village as the unit of co-operative management.

Local administration through Panchayats.

Promotion of small-scale and cottage industries as supplier of consumer goods and source of employment; organization of cottage industries in industrial co-operatives.

State trading should be undertaken whenever the balance of advantages lies in favour of such a course.

Control of distribution is essential in times of scarcity.

Redirection of public expenditure, imposition of estate duties and of tax on wealth and spending for the removal of inequalities and the provision of resources for the Second Plan.

There should be a reasonable relationship between maximum and minimum incomes.

Better housing for workers.

Effective machinery to commend good work and condemn bad work in the public services.

Summary method to deal with corruption.

#### Education

Basic education will provide the future pattern of primary as well as secondary education. Primary Schools will be converted to the Basic type in a well-planned manner within ten years.

Multi-purpose schools will be established.

Manual work as part of curriculum of higher education; no degree or diploma without manual work.

The medium of instruction at the primary stage must be the mother tongue. Where the mother tongue of a child is not identical with the regional language instruction in the mother

tongue should be made available, provided there is a reasonable number of persons demanding such instruction.

At the secondary stage instruction should ordinarily be in the regional language, though other languages could be used if there is a large enough demand.

At the university stage, the regional language should be the medium, though Hindi and even English could be used as this will facilitate inter-provincial cultural intercourse.

In the teaching of scientific and technical subjects the transition from English to Hindi or the regional language should be gradual.

Hindi should be a compulsory second language at the Secondary stage.

The study of English should be taken up at the secondary school stage and continued at the university.

Progressively, examinations for the all-India services should be held in English, Hindi and the regional languages. Candidates who have chosen Hindi or a regional language should pass separately in English.

Successful non-Hindi candidates should take a test in Hindi at an early stage.

Hindi Prachar Sabhas in the headquarters of every Taluka in the south.

It is desirable for people in Hindi-speaking areas to learn at least one regional language.

Proper representation to minorities in legislatures and other public bodies.

Social and legal disabilities hindering the progress of women should be removed and women should be placed on a footing of equality in the matter of marriage, property, inheritance and divorce through a series of Hindu law reform bills.

Formation of regions within a State may be necessary for the full development of a language or culture.

On the whole, it is best not to have relatively small units.

The Congress is committed to prohibition.

#### Foreign Policy

Independent line in foreign policy; friendly relations with all countries.

India's relations with foreign countries will be governed by the Panch Shila. They should also be the basis of the relations between all nations.

Regional military pacts which happen to serve specific interests of the Great Powers will not promote the cause of peace.

India will not be aligned to any power bloc, and will not take part in other people's wars.

China must be admitted to the United Nations. Membership should, in fact, be universal.

In general, people under colonial rule should be free.

Racialism should end.

#### Congress Unit in Kashmir

The Kashmir National Conference had been functioning on the same lines as that of the Congress. Many people in Kashmir and the rest of the country had expressed a strong desire that the National Conference should become an integral part of the Congress. In the plenary session this decision was adopted and moved, and initial work for the establishment of a Congress Unit in Kashmir started from January 26, 1965.

#### Jaipur Session

The 71st Plenary session of the Indian National Congress was held in Jaipur from 9 to 13th Feb. 1966.

**Condolence:** Condolence resolutions expressing deep sense of sorrow and grief at the death of Shri Lal Bahadur Shastri and other prominent leaders and congressman were moved from the Chair and passed.

In this session the A.I.C.C. has reviewed the short-fall of agricultural production and impressed the necessity of becoming self-sufficient in the matter of foodgrains. It has given highest priority to agricultural programmes, but next to defence of the country.

#### ELECTION MANIFESTO

India under the leadership of the Indian National Congress has made a choice in favour of an open and democratic society. For this, the Congress emphasises its central concept of political emancipation and has decided to bring about through the open and democratic process the social and economic changes our society needs.

Electricity in industry and agriculture is revolutionizing the life of the people who are enjoying it. The Congress aim is to take it to every village. It is also laying the foundation for the use of atomic energy for constructive and peaceful purposes. Establishment of the panchayat institutions is a revolutionary step promoting mass participation in the administrative process and the economic reconstruction of the country at the village level.

The set-backs to progress brought about by the Chinese invasion, aggression by Pakistan, unprecedented droughts in the country, and aftermaths of the struggle against Pakistani aggression, make it all the more necessary that the coming years should see increased and redoubled effort to speed up the full development of our economy. During the coming few years it will be the aim of the Congress to intensify its efforts for a self-reliant and progressive economy. The Indian National Congress hopes that technological self-reliance will be the key-note of the coming years.

The Congress calls on the Government to so alter the conditions of work and service as to attract our best men from whichever part of the world they may be working now.

While recognising that during the initial stage of economic development external assistance plays an important role, it is essential to reduce the period to the minimum and to diminish speedily the amount and range of external assistance. The Indian National Congress realises that the spirit of Swadeshi needs to be urgently strengthened in the new context of economic and industrial development. A comprehensive programme of decentralised industry in the rural area implemented with drive, and a sense of paramount urgency can make a large contribution to the vast problem of unemployment.

The earliest attainment of self-sufficiency in food grains should be the main moving force of the agricultural programme of the country. The Indian National Congress attaches the highest importance to the efficient administration of agricultural research and extension. The closest link should be developed between agriculture and research. The Government should also take early steps for providing insurance of crops and cattle against natural and other calamities.

It is also necessary that certain amenities are made available in rural areas to landless labour as also others who hold small holdings. House sites of suitable size should be provided by land acquisition to all such families as require them free of cost in some cases, and at concessional rates to others.

Drinking water should be provided in all rural areas by a national programme of wells, conservation of water and utilisation of scientific methods.

An extensive road building programme which will connect villages to the main roads will, apart from providing part employment, promote rural development.

India has 21 per cent of her land under forest. These forests possess abundant resources of timber, wild fruits, medicinal herbs and the game. With the assistance of science and technology and with a proper organisation of the forests India can add to the national product substantially in a matter of years.



Abolish social and economic oppression of one caste by another. Make such oppression punishable by law. Strengthen secular basis of the State.

Separate judiciary from the executive. Ensure simpler, cheaper and speedier justice within reach of the common man. Provide free legal aid for poorer sections of population.

Reorganise taxation system and base it on principle of capacity to bear burden. Introduce ceiling on profits, and incomes and graded tax system in industry, trade and agriculture.

Introduce state-trading in essential commodities like foodgrains, cloth, etc. and supply them to people at reasonable prices.

National minimum wage should be fixed and workers should be assisted in securing fair wages which should be above the minimum. Sliding scale of D.A., bonus, gratuity and holidays with pay.

Enlarge and liberalise social security measures, such as provision against unemployment, ill-health and old age. Provide housing facilities at cheap rent.

Guarantee full trade union and democratic rights.

Break concentration of land by abolishing all forms of landlordism, by imposing effective ceilings on landholdings and distributing surplus land to agricultural labourers and poor peasants free of cost.

All land reform measures be implemented with the help of popular committees of accredited

representatives of peasants and agricultural labourers. Financial and technical aid also be distributed in a similar way.

Introduce graded land tax based on income, exempting all uneconomic holdings from tax.

Organise multipurpose cooperatives to provide cheap credit, seed, manure, pesticides, etc. to peasants and ensure remunerative prices for their products. Provide cheap irrigation facilities; start agro-industries in the countryside.

Ensure adequate wages and living conditions for agricultural labourers.

### 1967 ELECTION MANIFESTO

The C.P.I. stands for the elimination of the Congress rule.

The manifesto explains the differences between C.P.I. and its Marxist counterpart as well as certain other opposition parties.

It stands for the total elimination of foreign monopolies. All industrial concerns, financial and business enterprises owned by foreign monopolies should, therefore, be nationalised. It stands for the closing down of speculative markets and exchanges, nationalisation of banks, a "people's plan" to replace the Fourth Plan, stoppage of payment of compensation to big landlords and of privy purses, overhauling of the tax structure to give relief to the common man, reorganisation of the public sector, ensuring for the working class a minimum need-based wage, enforcement of effective and far-reaching land reforms and the prescription of an adequate minimum wage for agricultural labour.

The party wants removal of inter-State conflicts and the vesting of greater power and authority on the States. All regions and States should be evenly developed. Compact tribal areas should be demarcated to form separate States or autonomous regions according to their size. Muslims have to be guaranteed full protection of their specific cultural, social and religious rights.

The introduction of Hindi as the official language should be done in a gradual manner, based upon the consent of the non-Hindi-speaking States.

While recognising the importance of improving the quality and breeds of cattle, the party does not support the demand for a total ban on cow-slaughter. It wants the removal of the "inhibitions, nuances and anti-democratic and obsolete practices of the old imperial army" in the defence forces.

In the sphere of foreign policy, the party generally supports the Government policy but is critical of its "vacillations and compromises under the pressure of Anglo-American blackmail." It calls for full support to the Viet Name people and effective action to stop U.S. bombing of North Viet Nam. It urges diplomatic recognition to East Germany and the continuance of efforts to reach a lasting accord with Pakistan on the basis of making the existing cease-fire line in Kashmir the international boundary with mutually agreed adjustments. Despite the continued hostile attitude of China, it wants to explore all avenues for a peaceful settlement with China either directly or through the good offices of friendly neutral powers and proposes a no-war pact with that country.

## DRAVIDA MUNNETRA KAZHAGAM

(Arivaham, Suryanaryana Chetty Street, Royapuram, Madras.)

General Secretary : C. N. Annadurai.

### AIMS

The election manifesto of the Dravida Munnetra Kazhagam, which is instrumental in uniting the Opposition forces to fight the Congress in the 1967 General Elections, reiterates the party's determination to work for the establishment of a Dravida Nad within the Indian Union and to preserve the language and culture of the South.

The party will work for establishing closer contacts among the four southern States of Tamil

Nad, Andhra, Kerala and Mysore, which have cultural and linguistic affinities. It will oppose any move by any party to dominate other parties in the name of national integration.

The manifesto promises to strive for the protection of the rights and privileges of the States and for uniform economic development.

The party will try to amend the Constitution to change the present allocation of powers between the Centre and the States with a view to giving greater powers to the States.

The manifesto also promises land to the tiller, the formation of a land army to step up food production, debt relief to farmers and measures to check the commodity price spiral.

The party stands committed to the nationalisation of banks, bus transport and cinema theatres.

It also gives a promise to reduce the tax burden.

In the General Election the party secured an absolute majority and replaced the Congress by forming its own Ministry in the State.

## INDIAN NATIONAL CONGRESS

(7, Jantar Mantar Road, New Delhi.)

President : K. Kamaraj.

General Secretaries : T. Mannaen, Sadiq Ali.

Treasurer : Atulya Ghosh.

Working Committee : D. Sanjivayya, Smt. Indira Gandhi, Atulya Ghosh, Morarji Desai, Jagjivan Ram, S. K. Patil, K. Kamaraj, Mohanlal Sukhadia, Y. B. Chavan, Ram Subhag Singh, Gulzarilal Nanda, S. Nijalingappa, Sadiq Ali, Fakhruddin Ahmed, Biju Patnaik, Darbara Singh and T. Mannaen.

Central Parliamentary Board : Smt. Indira Gandhi, Jagjivan Ram, K. Kamaraj, Morarji Desai, S. K. Patil, Y. B. Chavan, Fakhruddin Ahmed, Atulya Ghosh.

Central Disciplinary Action Committee : Morarji Desai, Jagjivan Ram, S. K. Patil, Atulya Ghosh, Gulzarilal Nanda.

Leader, Congress Party, Parliament : Smt. Indira Gandhi.

Deputy Leaders, Congress Party, Parliament : K. Hanumanthaiya (Lok Sabha); S. N. Mishra (Rajya Sabha).

Secretaries : Chandrasekhar, Jagannath Pabadia.

Treasurer : Kamalnayan Bajaj.

Total membership of Party in country : (1965): Primary : 1,73,40,000 ; Active : 332,000.

The Indian National Congress includes the following bodies :

The All-India Congress Committee, the Working Committee, Pradesh or Territorial Congress Committees, District or City Congress Committees, Block Congress Committees and Committees subordinate to the Block Congress Committees to be determined by the Pradesh Congress concerned.

There are 20 Pradesh Congress Committees : Andhra, Assam, Bihar, Bombay, Delhi, Gujarat, Haryana, Himachal, Jammu & Kashmir,

Kerala, Madhya Pradesh, Maharashtra, Mysore, Punjab Rajasthan, Tamilnad, Utkal, Uttar Pradesh, West Bengal and Tripura.

There are five Territorial Congress Committees : Goa, Manipur, Nagaland, NEFA and Pondicherry.

The A.I.C.C. also has on it representatives of allied institutions and organizations.

### AIMS AND OBJECTS

The ideology, outlook and policy may be described as follows :

The object of the Indian National Congress is the well-being and advancement of the people of India and the establishment in India by peaceful and constitutional means of a Socialist State based on Parliamentary Democracy in which there is equality of opportunity and of political, economic and social rights, aiming at world peace and fellowship.



# THE REPUBLICAN PARTY OF INDIA

(Gandhi Road, Chanda.)

**President :** Dadasaheb Gaikwad, M.P.

**General Secretary,** B. D. Khobragade, M.P.

The main aims and objects of the Party are to realise the aims and objects set out in the preamble to the Indian Constitution, namely :

The equality of all persons; the right of self-development; freedom of religion; and economic and political freedom; equality of opportunity with the proviso that those who had none in the past should have priority; freedom from exploitation of man by man, class by class; nation by nation; the parliamentary system of government.

For the 1967 Election, it decided to have local electoral adjustments with opposition parties. It was also decided to put up 100 candidates for the Maharashtra Assembly and 15 for the Lok Sabha, out of which nine candidates for the Assembly and two for Lok Sabha from Bombay.

## REVOLUTIONARY SOCIALIST PARTY

(780, Ballimaran, Delhi 6.)

**General Secretary,** Tridib Kumar Chaudhuri, M.P.

The party is a Marxist Leninist Party and relies on mass and class action. It is organized on the principle of democratic centralism. But it is opposed to subservience to the foreign policy of Russia or China.

It believes in the redistribution of land with ceilings, joint cooperative farming and mechanization. It believes in the policy of heavy industrialization, nationalization of all basic industries and of all large-scale organized indus-

tries, with private sector limited to small and cottage industries only and their organization on cooperative lines. It also advocates the introduction of appropriate democratic devices for workers' and consumers' control over publicly owned industries, enterprises and financial institutions. The party also favours balanced regional economic development. On China, it condemns the Chinese aggression and supports the Colombo Proposals as a basis for negotiations between the two countries.

According to the 1967 election manifesto, the party stands for changing the Constitution to

ensure effective political power to the elected representatives and annulment of the emergency, of the Defence of India Rules and the Preventive Detention Act and amend what it called 'other repressive atrocities.'

It wants 'regional autonomy' to tribal areas, nationalisation of basic and key industries, overhauling of the planning organisation and annulment of rural indebtedness.

The party has branches in Assam, West Bengal, Bihar, Uttar Pradesh, Delhi, Rajasthan, Maharashtra, Madras and Kerala.

## SAMYUKTA SOCIALIST PARTY

**Central Office :** Kendra Karyalaya,  
179, South Avenue, New Delhi 11.

**Office Bearers :** Chairman : S. M. Joshi ;  
General Secretary : Ramsevak Yadav ; Treasurer :  
M. R. Sahrawat.

### Aims and Objects

To achieve, by democratic and peaceful means, a socialist society, free from social, political and economic exploitation of man by man and of nation by nation.

The Party will organise, guide and lead peaceful revolutionary class struggles, mass movements and civil disobedience; promote constructive efforts; and also use parliamentary

methods to secure political power in order to eliminate all forms of injustice and feudal-capitalist exploitation.

The Party is active on the trade union front through the Hind Mazdoor Panchayat, a central organisation of trade unions. On the youth front, it works through the Samajwadi Yuva Jan Sabha, while a women's front is being organised through the Samajwadi Mahila Sabha. The Hind Kisan Panchayat organises the small farmers and agricultural labourers.

The abolition of land revenue in whatever form it exists, democratisation of the district adminis-

tration, greater use of State languages in administration and the constitution of an anti-corruption commission with the right of probe not only into the conduct of Government officials but also of Ministers, legislators and political leaders, are some of the suggestions contained in the draft election manifesto of the Samyukta Socialist Party for the 1967 General Elections.

It also emphasises that while the Minister must lay down the policy, the Government officer must implement it thereby doing away with the prevailing "confusion" of their powers and positions.

## SHIROMANI AKALI DAL

Broadly speaking there are three groups among the Sikhs. One group is the main body of the Shiromani Akali Dal. It is in favour of maintaining the separate identity of the Sikh community and the formation of a Punjabi Suba.

At present there are two rival groups of the Akali Dal, one the Master Tara Singh group and the Sant Fateh Singh group.

**President :** Giani Bhupinder Singh.

**Gen. Secretary :** Sardar Atma Singh.

"The Shiromani Akali Dal held its 16th All India Akali conference at Babbar Akali Nagar, Jullundur on 26th and 27th February, 1966 to give a lead to the Sikhs on Punjabi Suba issue. Giani Bhupinder Singh President of S. A. Dal declared that existing Punjabi region of the state of Punjab be carved out into Punjabi Suba and launched on a programme of direct action from Anandpur Sahib from 6th March, 1966, and the direct action was launched by defacing the

Hindi sign boards and mile stones in the Punjabi Region as a token direct action.

The Congress working Committee under the Presidentship of K. Kamaraj decided on March 9, 1966 through a resolution that Punjabi Suba be carved out of the State of Punjab.

Soon after the Parliamentary Committee with S. Hukam Singh, Speaker, Lok Sabha, as Chairman recommended to the Union Government that Punjabi Region of the state of Punjab with minor modifications be made a Punjabi Suba. Thereupon the Union Government accepted the Congress working Committees resolution as well as the report of the Parliamentary sub Committee on Punjabi Suba but appointed a Boundary Commission with Justice Shah of Supreme Court of India as chairman with two other members to submit its report by end of May, 1966. The Shiromani Akali Dal boycotted this commission on the ground that it had no faith on such commissions appointed by the Government. The Boundary commission recommended

with minor alterations the existing Punjab region be declared Punjabi Suba and Hindi region be divided into state of Haryana and Himachal Pradesh.

The Union Government accepted the report of Boundary Commission except in case of Chandigarh and Kharar Tehsil. It decided to make Chandigarh into a Union territory and Punjabi speaking area of Kharar was merged with Punjabi Suba. The Shiromani Akali Dal turned down this decision of the Union Government and declared that the S. A. D. will have Chandigarh in the Punjabi Suba and as a capital of this new State. It also declared that either Union Government or the Haryana has no claim over Chandigarh as it is a part and parcel of the Punjabi Region.

The struggle for inclusion of Chandigarh in Punjabi Suba is going on although the Punjabi Suba and Haryana Prant have already come into force.



The Shiromani Akali Dal (Master Tara Singh group) in its election manifesto has demanded the creation of a Sikh homeland within the Indian Union.

It demanded that all Sikh areas "deliberately" cut off and not included in the new Punjab, must now be returned to it so as to form a well-knit administrative unit to be the Sikh homeland. Such a State should be granted an autonomous status on the analogy of the special position given to Jammu and Kashmir before 1950.

The manifesto said the Akali Dal had come to the inescapable conclusion that a section of "political Hindus" holding key power, had a firm plan of "degrading and liquidating" Sikhs from the mainstream of free India. The boundaries of the new Punjab had been determined by the Central Government in a manner to eventually relegate and contain Sikhs in a "narrow

under-developed and suppressed reserved area."

"The Sikhs resolve and proclaim their determination to resist through all legitimate means, all such attempts to devalue and liquidate them in free India," it added.

The manifesto further said that after 20 years of independence the Congress had reduced the country, Punjab and the Sikh people as well as other minorities to a "state of ruin and despondency."

It called upon the Sikhs and other patriotic elements in the Punjab to vote for the Akali candidates in the coming election. The Dal was the only organisation representing the majority of true Punjabis and capable of forming an alternative government.

According to the manifesto, the Akali Dal was prepared to co-operate and associate with all

parties and associations at the Centre and in the States who were democratic, patriotic and sympathetic towards its aims and objectives.

The Dal, among other things stood for building up a strong defence potential, including nuclear weapons, so as to defend and preserve the independence and prestige of India and also to regain areas lost since August 15, 1947.

It aspired for a free and self-regulated access to and control of all Sikh sacred shrines in the west and east of India from where the Sikhs had been driven out in the recent past. The Dal was pledged to help destroy caste distinctions, social inequalities and curtailment of human freedom which were contrary to the teachings of the great Gurus as well as the conscience of man. It favoured self-owned and self-cultivated viable agricultural farms in the Punjab run with generous State aid on modern lines.

## SWATANTRA PARTY

( 143, Mahatma Gandhi Road, Bombay 1. )

**President :** Prof. N. G. Ranga.

**Vice-Presidents :** K. M. Munshi, Prof. M. Ruthnaswamy, H. H. Maharani Gayatri Devi of Jaipur.

**General Secretary :** M. R. Masani.

**Treasurers :** Sir Homi Mody, Dr. R. C. Cooper, C. Rai; **Joint Secy.,** N. Dandekar.

The Swatantra Party was established in Bombay on August 1 and 2, 1959.

The Swatantra Party is pledged to social justice and equality of opportunity for all people without distinction of religion, caste, occupation or political affiliation.

### Manifesto for 1967 General Elections

Governments formed or backed by the Swatantra Party will:

Pull the economy out of the ditch in which it has been landed by those in office during the past twenty years.

Cut Governmental expenditure.

Cut taxes, direct and indirect, and abolish land revenue.

Check rising prices by increasing production in field and factory and provide a stable and honest rupee.

Help the farmer to grow enough to feed the people.

Free agriculture, trade and industry, as also panchayats and cooperative societies, from the fetters of needless State control and interference.

End Permit-Quota-Licence Raj and thereby remove a major source of corruption and favouritism.

Dissolve the Planning Commission and scrap the disastrous Fourth Plan.

End all monopolies, whether in the State or free sector.

Restore fair and free competition in the service of the consumer.

Give back to the people what is theirs.

Restore respect for India in the eyes of the world.

Ensure free and compulsory elementary education.

Provide a better life to the people here and now.

Make today's prosperity the foundation of tomorrow's growth.

The Party's Programme of Ordered Progress :

### THE COMMON MAN

The Swatantra Party stands, first and foremost, for the common man and for provision of his food, drinking water, clothing and shelter

under hygienic conditions through opportunities of gainful employment as the primary concern of Government.

The Swatantra Party believes in building a democracy in which the inviolability of personal freedom and of individual possessions and the incentives to individual effort form the basis and where economic power, as Gandhiji had envisaged, is decentralised and ownership is as widely diffused as possible. In such a society, the self-employed man, whether he is a farmer, artisan, shop-keeper or professional, has the fullest opportunity to thrive and grow without any arbitrary restrictions.

The entire economy has as its foundation the provision of the infrastructure, that is, of certain essential services which have been badly neglected by the Congress Government during the past twelve years, such as the supply of water, electric power, highways and village roads, railways, waterways, ports, post, telegraphs and telephones and the provision of hygienic conditions in rural areas. These objectives are large enough to stretch the financial resources and managerial capacity of Government to the utmost and to give a sense of satisfaction to the most dedicated Administration.

The Party will uphold the principle that the welfare of citizens is too sacred to be sacrificed to any dogma, theory or policy.

### AGRICULTURE

This is India's Basic Industry. It can provide enough food for our people, raw materials for our industry and full employment. It is the foundation on which India's prosperity can be built. It should therefore be given very high priority. This will involve *inter alia* the repeal of the 17th Amendment, the acceptance of the right of tenants to a fair rent and security of tenure, the abolition of land revenue, the adequate provision of essential requirements such as credit, water, fertiliser, pesticides, seed and electric power, the provision of increasing incentives to the farmer, the acceptance of his right to the best price he can get for his produce in the free market and guaranteed floor price. The Party stands for the creation of harmonious cooperation among owners, tenants, workers and all others concerned in agricultural production.

The Swatantra Party stands for the removal of all compulsory procurement and all zonal and other barriers to the free movement of agricultural products throughout the country.

The Party will undertake to expand irrigation of cultivable land by a scheme of digging wells whose ownership will be passed on to the *kisans* on payment by instalments spread over a period of years.

The Party will strive for the formation of an All-India Famine Insurance Fund to strengthen the efforts of States affected from time to time by natural calamities.

A considerable section of India's working population consists of landless agricultural labourers. Unlike industrial workers, they are unorganised and have been the worst sufferers due to under-employment, rising prices and the heavy incidence of taxation on articles of common consumption. The Swatantra Party stands for their protection by insisting upon:

Just and adequate protection of those permanently employed in agriculture and all agricultural labourers; a fair deal for the farmers who employ them; growing opportunities for alternative employment in the countryside through land improvement schemes such as village road-building, drainage, soil conservation and reclamation and small scale rural industries; a drastic reduction in the incidence of indirect taxation and arresting the rising cost of living; provision of free house-sites and drinking water facilities; provision of subsidised building material for their homes; credit facilities for purchasing livestock and poultry; abolition of hereditary debts and maximum relief from agricultural indebtedness in whatever form.

Large size Government farms, which are a source of recurring loss, and other cultivable Government lands being parcelled out in small holdings and let out to landless agricultural workers.

### INDUSTRY AND TRADE

The immediate need is to change the stagnant and deteriorating situation by restoring vigour to the investment market and fostering productive investment by reducing taxation, progressively abolishing controls and providing incentives so that the investor, manager and worker may cooperate and increase production and productivity and share in the gains.

The Swatantra Party stands for a more balanced development in which small and medium labour-intensive industries have priority over capital-intensive industries with low and slow returns which have so far been favoured.

Until such time as they are able to give a reasonable return on the people's hard earned savings, there should be no further wasteful investment of the tax-payers' money in Government Sector industries which have failed to function effectively. Bokaro must be halted in favour of more fertiliser plants.

The Swatantra Party is opposed to all monopoly, whether in the State or free sector, and will seek to re-establish competition, wherever possible, for the benefit of the consumer. Monopolies, where tolerated, will be subject to essential control.



Where, owing to temporary scarcity of certain vital resources, regulation becomes inevitable, there should be a quasi-judicial authority to indicate the necessary priorities and allocations.

**Labour:** The Swatantra Party stands for a fair deal to labour, both industrial and agricultural. The Party accepts the workers' right to organise themselves in order to improve their conditions of life and work. Strong and responsible trade unions managed by the workers themselves and not, as at present, play-things in the hands of political parties, are an integral part of a democratic industrial order. The Party stands for the workers' right to collective bargaining involving, where necessary, the right to withdraw their labour.

The Swatantra Party stands for closer association of the workers and the management of industries, so that a spirit of partnership may develop among all those engaged in production.

The Party stands for a good wage for a good day's work. Encouragement should be given to "progress sharing" through an increase in earnings of employees alongside of an increase in productivity without detriment to the overall aim of national prosperity through the reduction of costs.

**Planning:** The Swatantra Party believes in democratic planning by persuasion such as is practised in countries like France, Britain and the Scandinavian countries, and is opposed to the Soviet-type coercive planning which has failed so miserably here and wherever it has been tried.

The proposed Fourth Plan as it stands, which shares all the defects of the Second and Third Plans, which have brought this country to the brink of bankruptcy, should be scrapped.

The Swatantra Party will dissolve the Planning Commission which has become in effect a parallel Government unknown to the Constitution and which has shown its unfitness for its task and will replace it with genuinely expert advisory bodies with which Agriculture, Industry, Labour and other interests would also be associated. The principal objective of such planning bodies should be to help Government to plan its own business.

### FISCAL AND MONETARY POLICY

The primary need is to provide an Honest Rupee and stable prices through: (a) the abandonment of deficit finance and other inflationary policies and practices, including extravagant and wasteful domestic borrowing, (b) a drastic cut in the wasteful bureaucratic expenditure of the Union and State Governments; and (c) a substantial reduction in the incidence of direct and indirect taxes.

**Banks:** The Swatantra Party is opposed to the nationalisation of banks contemplated by the Congress Party which is utterly irrelevant to the country's problems and would retard development besides being fatal to monetary stability, security and savings by placing the savings of lakhs of small depositors at the mercy of a Government seeking to lay its hands on all available resources.

**Foreign Loans:** The Swatantra Party's repeated warnings against extravagant and wasteful borrowings from foreign Governments have proved fully justified. No more Government-to-Government loans should be taken except for the purpose of strengthening and expanding the infrastructure. The flow of foreign private equity capital coming into the country at its own risk should be encouraged.

**Gold Control:** Gold control should be entirely abolished.

### THE CONSTITUTION AND PUBLIC ADMINISTRATION

The Swatantra Party deplores the repeated Amendments to the country's Constitution, which have resulted in a serious erosion of the fundamental rights of the citizen and pledges itself to restore these rights in the Constitution to their original form at the earliest possible opportunity.

The Swatantra Party would end the State of Emergency which has been needlessly prolonged and which has been misused by the Congress Government for party purposes. Full civil liberties would be restored immediately.

All legislation will be such as respects the rights of the citizen to seek redress in the courts on disputed questions of law.

The Party will give the country clean, honest, impartial and efficient administration. It will ensure that there is no interference by politicians, either of the ruling Party or any other Party, in the day-to-day administration, nor any by-passing or interfering with the independence of the Union and State Public Service Commissions.

The highest priority will be attached to the restoration of law and order, the first duty of the State being the protection of life and property. The Party is of the view that whenever Government fails to provide this, just compensation shall be paid to the victims.

Justice should be speedy and inexpensive.

In order to check corruption and the arbitrary infringement of the rights of the citizens, the Party will continue to press for the establishment of an independent authority at the Centre and in the States on the lines of the Ombudsman in Scandinavian countries to investigate into the grievances of citizens and any administrative vagaries or injustices and to give due redress and other suitable authority for justice in regard to nonjusticiable executive decisions.

The Party stands for the satisfactory rehabilitation of ex-servicemen and their families.

The Party stands for a revision of the scales of pensions paid to retired low-grade government servants in line with the sharp rise in the cost of living.

**Electoral Reform:** The Swatantra Party stands for a reform of the electoral system which would: (a) reduce the influence of money power and the expenses to be incurred by candidates; and (b) evolve a system such as would result in fairly representing the will of the electorate in Parliament and State Legislatures and reducing, if not ending, the distortion that is to be found in the composition of the present Lok Sabha and many State Assemblies.

### INTERNATIONAL RELATIONS AND DEFENCE

The Swatantra Party regards enlightened national self-interest as well as progress towards world unity as the bases of a sound foreign policy.

The Party also stands for a more imaginative policy towards the peoples on our borders so as to help the defence of the country as a whole and strengthen the bonds between us.

The Party stands pledged to a firm and vigilant policy in dealing with Communist China and for active steps to end its aggression and to reoccupy Indian territory in its possession at the earliest possible moment. The Party stands for the liberation of Tibet and for the recognition of the Dalai Lama as the Head of the Government of Tibet in exile.

While the Swatantra Party believes that normal and friendly relations between India and Pakistan are required in the interest and security of the entire subcontinent, it is of the view that Pakistani aggression last year has deprived Pakistan of whatever *locus standi* it might have had in regard to the Kashmir problem.

### EDUCATION

In order to arrest the prevailing disintegration and the unfortunate spirit of cynicism and disorder that is sweeping the ranks of students and youth the Party will: (a) introduce in education a spiritual element alongside of the humanities and sciences in order to provide an adequate background of human values and national unity for the citizen of the future; (b) provide free scope and encouragement to voluntary agencies to impart moral and religious instruction to the young without forcing any such instruction on sections belonging to other denominations.

The Party stands for: (a) raising the quality of education in primary schools which should be the direct responsibility of State Governments; (b) raising the status and remuneration of the teaching profession; (c) the rejection of measures like the nationalisation of textbooks calculated to indoctrinate the younger generation; (d) the vindication of the Fundamental Right of the citizen to educate his children according to his choice in an atmosphere untrammelled by official directives; and (e) the autonomy of Universities and other educational institutions.

This is the age of Science and Technology. It is, therefore essential to make the people work and science-minded and technologically oriented, starting at the very first rung of the educational ladder and going right through to the technological application of science to agriculture and industry. To that end, the Swatantra Party would equip schools and educational institutions with adequate laboratory and workshop facilities.

### RELIGION

The Swatantra Party believes that, while every citizen should be free to choose his religious beliefs and be entitled to an unrestricted exercise of the right to religious freedom guaranteed by the Constitution, religion is of vital concern to the State as it provides a dynamic force for strengthening moral and spiritual values which furnish the motive and the sanction for right conduct even more than any law or regulation of the State.

The Swatantra Party will, therefore, do everything possible to restore religion to its legitimate place in life and in particular: (a) ensure respect for all communities in regard to their religious institutions and practices; (b) secure for each religion the autonomous management and the full benefit of its endowed and other properties without interference from Government, and (c) make incomes and properties of and donations to religious institutions and charities, tax free.

**Minorities and Backward Classes:** (a) The Party will more faithfully and effectively carry out the provisions of the Constitution for the protection of the rights and interests of Muslims, Christians, Sikhs and other minorities including linguistic minorities, and of those who work under economic and social handicaps such as Harijans, Adivasis and other Backward Classes, who shall be listed, irrespective of their religion. The total eradication of untouchability will be actively pursued.

(b) The Party will not look upon an association for the protection of the rights of any class or community as a communal organisation to be discouraged or banned.

Despite warnings, the Congress Party has persisted in following policies which have resulted in disintegrating tendencies. Linguism is now becoming a separatist force and a protective cover for those in power in the States to reduce all minorities to the position of second class citizens. The Swatantra Party will take steps to halt this deterioration.

The Party stands for the establishment of permanent quasi-judicial commissions for minority affairs at the Centre and in the States.

### MEDIA OF MASS COMMUNICATION

The Swatantra Party is opposed to all attempts at the establishment of monopoly or official control over the various media of mass communications. The Party is of the view that the operation of Broadcasting and Television Services and the Films Division should be entrusted to autonomous corporations and that other radio, television film enterprises should be allowed to enter into competition with these statutory authorities.

The Party will do everything possible to sustain the independence of the Press against all attempts to bring it under the influence of the Party in office.



## GENERAL ELECTIONS (1967)

India, the second most populous country in the world went to the polls on February 15, 1967 for the fourth time after she attained independence on August 15, 1947. In this operation 250,681,530 people were entitled to vote as against 216 million in the 1962 election. The total electorate exceeds the total population of two of the world's biggest countries—the United States and the Soviet Union. Goa, Daman and Diu and Dadra and Nagar Haveli, the former Portuguese Colonies participated in the elections. For the first time a representative was elected to the Lok Sabha from Andaman and Nicobar Islands and Laccadive, Minicoy and Amindivi Islands. Jammu and Kashmir now directly elected its representatives to the Lok Sabha. Thus the enfranchised area has been extended to almost every part of India except North-East Frontier Agency which still has a nominated member in the Parliament.

### ELECTION PROGRAMME

The Election Commission notified on Jan. 12, 1967 the programme for election to parliamentary and assembly constituencies in all the States and Union Territories.

The dates for filing nominations were from January 13 to 20, 1967 and for scrutiny of nominations January 21, 1967. The 1st date for withdrawals of candidature was January 23.

The only exception was Kerala where the dates for filing nominations were from January 16 to 23, 1967 and for scrutiny of nominations January 24. The last date for withdrawals of candidature was January 27.

The dates of poll in the various States and Union Territories were as below :

*Andhra Pradesh* : February 15, 18 and 21, 1967; *Assam* : February 17 and 21, 1967; *Bihar* : February 15, 17, 19 and 21, 1967; *Gujarat* : February 15, 18 and 21, 1967; *Haryana* : February 19, 1967; *Jammu & Kashmir* : February 21, 1967; *Kerala* : February 20, 1967; *Madhya Pradesh* : February 16, 17 and 20, 1967; *Maharashtra* : February 15, 18 and 21, 1967; *Madras* : February 15, 18 and 21, 1967; *Mysore* : February 15 and 19, 1967; *Orissa* : February 21, 1967; *Punjab* : February 19, 1967; *Rajasthan* : February 15, 18 and 20, 1967; *Uttar Pradesh* : February 15, 17, 19 and 21, 1967; *West Bengal* : February 19, 1967; *Delhi* : February 19, 1967; *Himachal Pradesh* : February 18 and 21, 1967; *Manipur* : February 15, 20, 24 and 28, 1967; *Tripura* : February 18, 1967.

In the following State and Union Territories elections were held only for the parliamentary constituency/ies on the dates indicated against each :

*Nagaland* : February 16, 17, 18, 20 and 21, 1967; *Andaman & Nicobar Islands* : February 18, 1967; *Chandigarh* : February 19, 1967; *Dadra & Nagar Haveli* : February 21, 1967; *Goa, Daman & Diu* : March 28, 1967; *Pondicherry* : February 26, 1967; *Laccadive, Minicoy & Amindivi & Islands* : February 18, 1967.

Election for the assembly constituencies was completed before February 25, 1967 and for the parliamentary constituencies before April 1, 1967. In the case of Manipur assembly constituencies the election was completed before March 7, 1967.

Among the States, Bihar has registered the highest increase, a little over 25 per cent. Among the Union Territories Delhi has shown an increase of about 25 per cent. The lowest rise was in Kerala, about eight per cent. In Pondicherry, the electorate has decreased by two per cent from what it was in 1962.

### POLITICAL PARTIES AND SYMBOLS

For the 1967 Election, the Election Commission had prescribed 23 symbols. Sixteen of

them were "Reserved Symbols" and the remaining seven "Free Symbols."

The Commission classified political parties as recognised and others. A political party which contests in more than one State and secures more than 4 per cent of the votes cast in the country as a whole in a general election is classified as a recognised multi-State party for the next general election. Each recognised party is allotted a reserved symbol and the candidate sponsored by it for contesting from different States are allotted the same symbol.

### RECOGNISED MULTI-STATE PARTIES

There are now eight recognised multi-state parties. Their names and symbols allotted to them are : 1. *Indian National Congress* : Two bullocks with the yoke on ; 2. *Communist Party of India* : Ears of corn and sickle ; 3. *Swatantra Party* : Star ; 4. *Communist Party of India (Marxist)* : Hammer, sickle and star ; 5. *Bharatiya Jana Sangh* : Lamp ; 6. *Praja Socialist Party* : Hut ; 7. *Samyukta Socialist Party* : 3 and 8. *Republican Party of India* : Elephant.

### RECOGNISED PARTIES IN DIFFERENT STATES

The names of recognised State Parties, their States and symbols respectively are :

1. Muslim League ; Kerala ; Ladder.
2. Kerala Congress ; Kerala ; Horse.
3. (i) Dravida Munnetra Kazhagam ; Madras ; (ii) United Goans (Fourtado Group) ; Rising Sun.
4. Peasants and Workers' Party ; Maharashtra ; Cart.
5. (i) Shiromani Akali Dal (Master Tara Singh Group) ; Punjab ; United Goans (Sequeira Group), Goa, Daman and Diu : Hand.
6. (i) Forward Bloc ; West Bengal ; (ii) Maharashtrawadi Gomantak ; Goa, Daman and Diu : Lion.
7. All Party Hill Leaders' Conference ; Assam : Flower.
8. Shiromani Akali Dal (Sant Fateh Singh Group) ; Punjab ; Scales.
9. Jammu and Kashmir National Conference ; Jammu and Kashmir ; Plough.

The following symbols, though reserved for multi-state parties (Tree for P.S.P. and Elephant for the Republican Party) have also been made available to :

1. Democratic National Conference ; Jammu and Kashmir : Tree.
2. (i) Frente Populare ; Goa, Daman and Diu ; (ii) People's Front ; Pondicherry : Elephant.

### FREE SYMBOLS

The free symbols, as already stated, are available for allotment to candidates of political parties which are not recognised and to independent candidates, such candidates can indicate the free symbol which they wish to be allotted. The Election Commission has laid down the procedure to be followed if two or more candidates indicate their preference for the same symbol. If one of the candidates is a sitting member of the Lok Sabha or the State Assembly and had been allotted that symbol at the previous election, the returning officer will allot the symbol to that candidate. In all other cases the allotment will be by draw of lots.

### INCREASE IN NUMBER OF MEMBERS

In the 1967 General Elections the number of members of Parliament in the Lok Sabha has gone up by 18 to 521 as against 508 in the 1962 election. Of the 521 seats, 520 are filled by direct elections and the one (allotted to NEFA) by nomination. Seats reserved for Scheduled Castes number 77 and those for Scheduled Tribes 37.

The number of members of Legislative Assemblies in various States and Union Territories

is 3,563 in the 1967 Elections, 158 more than in the 1962 Elections. The State Assemblies will have 3,383 seats and the Union Territories' Assemblies 180. Seats reserved for Scheduled Castes and Scheduled Tribes number 481 and 226 respectively in State Assemblies and 22 and 21 respectively in the Assemblies of Union Territories.

### ELECTION OF PRESIDENT AND VICE-PRESIDENT

The polling for the Presidency took place on 6th May and the result was declared on 9th. Seventeen candidates filed their nomination papers. The candidates were Mr. Bhamburkar Shrinivas Gopal, Mr. Brahma Deo, Mr. Chandradutt Senani, Mr. U. P. Ghugani, Dr. M. C. Davar, Ch. Hari Ram, Mr. Khubi Ram, Mr. Koka Subba Rao, Mr. Krishna Kumar Chatterjee, Mr. Kumar Kamta Singh, Dr. Man Singh, Mrs. Manohara Holkar, Mr. Motilal Bhikabhai Patel, Mr. Seetharamaiah Ramaswamy Sharma Hoysala, Swamy Satyabhakti, Mrs. Yamuna Prasad Trishulia and Dr. Zakir Hussain.

Of 8,38,038 valid votes cast in the polling the result was as follows :

Dr. Zakir Hussain 4,71,244 ; Koka Subba Rao 3,63,971 ; Khubi Ram 1,369 ; Swamy Satyabhakti 750 ; Brahma Deo 232 ; S. G. Bhamurkar 222 ; K. K. Chatterjee 125 and K. K. Singh 125.

The remaining nine candidates secured no votes at all.

The polling for the Vice-Presidency also took place on 6th May and the result was declared on the same day. Two candidates filed their nomination papers. They were Mr. V. V. Giri and Prof. M. Habib. The result of the polling was as follows. Mr. V. V. Giri—483. Prof. M. Habib—193. There were three invalid votes.

### LOK SABHA—ALL-INDIA ANALYSIS

Electorate : 248,889,960. Votes polled : 152,077,606. Polling percentage : 61.10. Valid votes : 145,363,987. Invalid votes : 6,713,619. Percentage : 4.41.

#### Votes polled by parties :

| Name of party                        | Valid votes | Percentage |
|--------------------------------------|-------------|------------|
| 1. Congress ..                       | 59,373,023  | 40.85      |
| 2. Jan Sangh ..                      | 13,560,023  | 9.33       |
| 3. Swatantra ..                      | 12,487,711  | 8.59       |
| 4. S.S.P. ..                         | 7,212,317   | 4.96       |
| 5. C.P.I. ..                         | 7,053,217   | 4.85       |
| 6. C.P.I.(M.) ..                     | 6,502,614   | 4.47       |
| 7. P.S.P. ..                         | 4,435,839   | 3.05       |
| 8. Republicans ..                    | 3,646,957   | 2.51       |
| 9. Other parties and Independents .. | 31,091,925  | 21.30      |

### ASSEMBLIES : ALL-INDIA ANALYSIS

Electorate : 246,814,410. Votes polled : 150,966,356. Polling percentage : 60.66. Valid votes : 142,509,589. Invalid votes : 8,456,787. Percentage : 5.60.

#### Votes polled by parties :

| Name of party                        | Valid votes | Percentage |
|--------------------------------------|-------------|------------|
| 1. Congress ..                       | 57,153,632  | 40.10      |
| 2. Jan Sangh ..                      | 12,454,500  | 8.74       |
| 3. Swatantra ..                      | 9,481,005   | 6.66       |
| 4. S.S.P. ..                         | 7,403,294   | 5.19       |
| 5. C.P.I.(M.) ..                     | 6,007,205   | 4.24       |
| 6. C.P.I. ..                         | 6,078,240   | 4.27       |
| 7. P.S.P. ..                         | 4,802,335   | 3.37       |
| 8. Republican ..                     | 2,171,148   | 1.53       |
| 9. Other parties and Independents .. | 38,356,190  | 26.51      |



Below we give particulars about the electorate and the number of seats, valid votes polled, uncontested gains and number of Scheduled Caste and Scheduled Tribe members in Lok Sabha and Assemblies in the 1967 General Elections :

| Lok Sabha                             |             |       |                     |                     |                           |                       | Assemblies |                     |                     |                           |                       |
|---------------------------------------|-------------|-------|---------------------|---------------------|---------------------------|-----------------------|------------|---------------------|---------------------|---------------------------|-----------------------|
| States and<br>Union Territories       | Electorate  | Seats | Scheduled<br>Castes | Scheduled<br>Tribes | Uncon-<br>tested<br>gains | Valid votes<br>polled | Seats      | Scheduled<br>Castes | Scheduled<br>Tribes | Uncon-<br>tested<br>gains | Valid votes<br>polled |
| Andhra Pradesh .. ..                  | 21,081,308  | 41    | 6                   | 2                   | 1                         | 13,583,682            | 287        | 40                  | 11                  | 2                         | 13,748,230            |
| Assam .. ..                           | 5,719,425   | 14    | 1                   | 2                   | 1                         | 2,987,767             | 126        | 8                   | 10                  | 5                         | 3,108,442             |
| Bihar .. ..                           | 27,702,803  | 53    | 7                   | 5                   | —                         | 13,521,325            | 318        | 45                  | 29                  | —                         | 13,527,859            |
| Gujarat .. ..                         | 10,687,202  | 24    | 2                   | 3                   | —                         | 6,479,237             | 168        | 11                  | 22                  | —                         | 6,381,052             |
| Haryana .. ..                         | 4,367,140   | 9     | 2                   | —                   | —                         | 3,052,129             | 81         | 15                  | —                   | —                         | 3,012,518             |
| Jammu & Kashmir .. ..                 | 2,000,986   | 6     | —                   | —                   | 2                         | 842,624               | 75         | 6                   | —                   | 22                        | 761,479               |
| Kerala .. ..                          | 8,612,534   | 19    | 2                   | —                   | —                         | 6,271,567             | 133        | 11                  | 2                   | —                         | 6,280,941             |
| Madhya Pradesh .. ..                  | 18,544,559  | 37    | 5                   | 8                   | —                         | 9,273,571             | 296        | 39                  | 61                  | —                         | 9,113,155             |
| Madras .. ..                          | 20,871,983  | 39    | 7                   | —                   | —                         | 15,438,094            | 234        | 42                  | 2                   | —                         | 15,242,529            |
| Maharashtra .. ..                     | 22,138,628  | 45    | 3                   | 3                   | —                         | 13,620,171            | 270        | 15                  | 16                  | 1                         | 13,073,701            |
| Mysore .. ..                          | 12,755,264  | 27    | 4                   | —                   | —                         | 7,714,569             | 216        | 29                  | 2                   | 2                         | 7,563,236             |
| Nagaland .. ..                        | 2,09,942    | 1     | —                   | —                   | 1                         | —                     | 46         | —                   | —                   | —                         | —                     |
| Orissa .. ..                          | 9,852,824   | 20    | 3                   | 5                   | —                         | 4,061,491             | 140        | 22                  | 34                  | —                         | 3,970,116             |
| Punjab .. ..                          | 6,284,672   | 13    | 3                   | —                   | —                         | 4,306,559             | 104        | 23                  | —                   | —                         | 4,248,372             |
| Rajasthan .. ..                       | 12,214,393  | 23    | 4                   | 3                   | —                         | 6,935,476             | 184        | 31                  | 21                  | —                         | 6,749,543             |
| Uttar Pradesh .. ..                   | 42,171,592  | 85    | 18                  | —                   | —                         | 21,743,215            | 425        | 89                  | —                   | —                         | 21,359,677            |
| West Bengal .. ..                     | 20,152,009  | 40    | 8                   | 2                   | —                         | 12,861,554            | 280        | 55                  | 16                  | —                         | 12,924,768            |
| Andaman & Nicobar Islands             | 46,253      | 1     | —                   | —                   | —                         | 36,732                | —          | —                   | —                   | —                         | —                     |
| Chandigarh .. ..                      | 73,337      | 1     | —                   | —                   | —                         | 49,155                | —          | —                   | —                   | —                         | —                     |
| Dadra & Nagar Haveli .. ..            | 29,564      | 1     | —                   | 1                   | —                         | 21,248                | —          | —                   | —                   | —                         | —                     |
| Delhi .. ..                           | 1,686,065   | 7     | 1                   | —                   | —                         | 1,121,161             | —          | —                   | —                   | —                         | —                     |
| Goa, Daman & Diu .. ..                | 388,133     | 2     | —                   | —                   | —                         | —                     | 30         | —                   | —                   | —                         | —                     |
| Himachal Pradesh .. ..                | 1,581,444   | 6     | 1                   | —                   | —                         | 528,061               | 60         | 14                  | 3                   | —                         | 698,346               |
| Laccadive, Minicoy & Amindivi Islands | 14,504      | 1     | —                   | 1                   | —                         | 11,807                | —          | —                   | —                   | —                         | 312,005               |
| Manipur .. ..                         | 470,896     | 2     | —                   | 1                   | —                         | 315,162               | 30         | —                   | 9                   | 1                         | —                     |
| Pondicherry .. ..                     | 216,669     | 1     | —                   | —                   | —                         | 158,872               | 30         | 5                   | —                   | —                         | 433,602               |
| Tripura .. ..                         | 599,350     | 2     | —                   | 1                   | —                         | 438,758               | 30         | 3                   | 9                   | —                         | —                     |
| Total .. ..                           | 250,312,559 | 520   | 77                  | 37                  | 5                         | 145,363,987           | 3,563      | 503                 | 247                 | 33                        | 142,509,571           |

## PARTY POSITION — LOK SABHA

|                                       | Cong. |           | Swa. |           | CPI |           | CPI(M) |           | PSP |           | SSP |           | JS  |           | Rep. |           | Others |           | Ind. |           | Total |       |
|---------------------------------------|-------|-----------|------|-----------|-----|-----------|--------|-----------|-----|-----------|-----|-----------|-----|-----------|------|-----------|--------|-----------|------|-----------|-------|-------|
| States and Union Territories          | Seats | Contested | Won  | Contested | Won | Contested | Won    | Contested | Won | Contested | Won | Contested | Won | Contested | Won  | Contested | Won    | Contested | Won  | Contested | Won   |       |
| Andhra Pradesh .. ..                  | 41    | 41        | 35   | 19        | 3   | 20        | 1      | 11        | —   | 1         | —   | 3         | —   | 6         | —    | 3         | —      | 61†       | 2†   | —         | —     | 163   |
| Assam .. ..                           | 14    | 13        | 10   | 1         | —   | 4         | 1      | —         | —   | 4         | 2   | 2         | —   | 3         | —    | —         | —      | —         | —    | 18        | —     | 46‡   |
| Bihar .. ..                           | 53    | 53        | 34   | 25        | —   | 17        | 5      | 2         | —   | 32        | 1   | 34        | 7   | 48        | 1    | —         | —      | 105†      | 5†   | —         | —     | 314   |
| Gujarat .. ..                         | 24    | 24        | 11   | 21        | 10  | —         | —      | —         | —   | 3         | —   | 2         | —   | —         | 2    | —         | —      | 30†       | 3†   | —         | —     | 80    |
| Haryana .. ..                         | 9     | 9         | 7    | 2         | —   | 2         | —      | —         | —   | 1         | —   | 5         | —   | 7         | 1    | 2         | —      | 36†       | 1†   | —         | —     | 67    |
| Jammu & Kashmir a                     | 6     | 5         | 4    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | 3         | —    | —         | —      | 2†        | —    | —         | —     | 13    |
| Kerala b                              | 19    | 19        | 1    | 3         | —   | 3         | 3      | 9         | 9   | 3         | —   | 3         | 3   | 4         | —    | 1         | —      | 10†       | 1    | —         | —     | 60    |
| Madhya Pradesh .. ..                  | 37    | 37        | 24   | 2         | 1   | 6         | —      | —         | —   | 15        | —   | 11        | —   | 32        | 10   | 7         | —      | 64†       | 2    | —         | —     | 174   |
| Madras c                              | 39    | 39        | 3    | 8         | 6   | 6         | —      | 5         | 4   | 1         | —   | —         | —   | 4         | —    | 2         | —      | —         | —    | 37        | 1     | 127   |
| Maharashtra d                         | 45    | 45        | 37   | 4         | —   | 7         | 2      | —         | —   | 8         | 1   | 5         | 2   | 24        | —    | 17        | —      | 31†       | 1†   | —         | —     | 151   |
| Mysore e                              | 27    | 27        | 18   | 12        | 5   | —         | —      | 2         | —   | 6         | 2   | 2         | 1   | 4         | —    | 3         | —      | 39†       | 1†   | —         | —     | 100   |
| Nagaland f                            | 1     | —         | —    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | —     |
| Orissa g                              | 20    | 20        | 6    | 17        | 8   | 3         | —      | —         | —   | 5         | 4   | 2         | 1   | 2         | 1    | —         | —      | 14†       | 1†   | —         | —     | 65    |
| Punjab h                              | 13    | 13        | 9    | 6         | —   | 3         | —      | 2         | —   | —         | —   | 1         | —   | 8         | 1    | 3         | —      | 23†       | —    | —         | —     | 75    |
| Rajasthan .. ..                       | 23    | 22        | 10   | 15        | 8   | 1         | —      | 3         | —   | 1         | —   | 5         | —   | 6         | 3    | 1         | —      | 52†       | 2†   | —         | —     | 116   |
| Uttar Pradesh .. ..                   | 85    | 85        | 47   | 39        | 1   | 17        | 5      | 5         | 1   | 28        | 2   | 41        | 8   | 77        | 12   | 24        | 1      | 191†      | 8†   | —         | —     | 507   |
| West Bengal .. ..                     | 40    | 40        | 14   | 3         | —   | 11        | 5      | 16        | 5   | 2         | 1   | 3         | 1   | 7         | —    | 1         | —      | 57†       | 14†  | —         | —     | 140   |
| Andaman & Nicobar Islands             | 1     | —         | 1    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | 6     |
| Chandigarh .. ..                      | 1     | —         | —    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | 1    | —         | —      | —         | —    | —         | —     | 10    |
| Dadra & Nagar Haveli                  | 1     | —         | 1    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | 5     |
| Delhi .. ..                           | 7     | —         | 1    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | 6         | —    | —         | —      | —         | —    | —         | —     | 46    |
| Goa, Daman & Diu                      | 2     | —         | —    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | —     |
| Himachal Pradesh .. ..                | 6     | —         | 4    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | 25    |
| Laccadive, Minicoy & Amindivi Islands | 1     | —         | —    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | —     |
| Manipur .. ..                         | 2     | —         | —    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | —     |
| Pondicherry .. ..                     | 1     | —         | 1    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | 10    |
| Tripura .. ..                         | 2     | —         | 2    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | 4     |
| All India Total .. ..                 | 520   | —         | —    | —         | —   | —         | —      | —         | —   | —         | —   | —         | —   | —         | —    | —         | —      | —         | —    | —         | —     | 2,712 |

† Includes independents. ‡ Includes one candidate from All Parties Hill Leaders' Conference. a National Conference : Seats contested 4 ; Seats won 1 ; Democratic National Conference : Seats contested 2 ; Seats won 2. Kerala Congress : Seats contested 5 ; Seats won : Nil. c. DMK : Seats contested 25 ; Seats won 25. d. Peasants and Workers' Party : Seats contested 10 ; Seats won 2. e. Jan Paksha : Seats contested 4 ; Seats won : Nil. Lok Sevak Sangha : Seats contested 1 ; Seats won : Nil. f. Jharkhand Party : Seats contested 2 ; Seats won : Nil. g. Akali Dal (Sant) : Seats contested 9 ; Seats won 3. Akali Dal (Master) : Seats contested 7 ; Seats won : Nil. h. Naga Nationalists Organisation affiliated to Congress : Seat won 1.



## PARTY POSITION — ASSEMBLIES

| States and Union Territories   | Seats | Congress  |     | Swatantra |     | C.P.I.    |     | C.P.I.(M) |     | P.S.P.    |     | S.S.P.    |     | J.S.      |     | Rep.      |     | Independents including others |     |
|--------------------------------|-------|-----------|-----|-----------|-----|-----------|-----|-----------|-----|-----------|-----|-----------|-----|-----------|-----|-----------|-----|-------------------------------|-----|
|                                |       | Contested | Won | Contested | Won | Contested | Won | Contested | Won | Contested | Won | Contested | Won | Contested | Won | Contested | Won | Contested                     | Won |
| Andhra Pradesh .. ..           | 287   | 285       | 165 | 89        | 29  | 101       | 10  | 84        | 9   | 2         | —   | 9         | 1   | 80        | 3   | 11        | 2   | 403                           | 68  |
| Assam† .. ..                   | 126   | 119       | 73  | 13        | 2   | 22        | 7   | 13        | —   | 34        | 5   | 19        | 4   | 20        | —   | —         | —   | 239*                          | 24* |
| Bihar .. ..                    | 318   | 318       | 128 | 125       | 3   | 97        | 24  | 125       | 3   | 181       | 18  | 198       | 68  | 267       | 26  | 3         | 1   | 795                           | 46  |
| Gujarat†† .. ..                | 168   | 168       | 93  | 144       | 64  | —         | —   | —         | —   | 37        | 3   | 14        | —   | 17        | —   | 9         | —   | 108                           | 5   |
| Haryana .. ..                  | 81    | —         | 48  | —         | 3   | —         | —   | —         | —   | —         | —   | —         | —   | 12        | —   | 2         | —   | —                             | 16  |
| Jammu & Kashmir <i>a</i> .. .. | 75    | 51        | 38  | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | 29        | 3   | —         | —   | 42                            | 2   |
| Kerala <i>b</i> .. ..          | 133   | 133       | 9   | —         | —   | 22        | 19  | 59        | 52  | —         | —   | 21        | 19  | —         | —   | —         | —   | 43                            | 15  |
| Madhya Pradesh .. ..           | 296   | 296       | 167 | 20        | 7   | 31        | 1   | 10        | —   | 112       | 9   | 112       | 10  | 265       | 78  | 40        | —   | 658                           | 24  |
| Madras <i>c</i> .. ..          | 234   | 234       | 49  | 27        | 20  | 31        | 2   | 22        | 11  | 4         | 4   | 3         | 2   | 24        | —   | 15        | —   | 258                           | 7   |
| Maharashtra <i>d</i> .. ..     | 270   | 269       | 202 | 138       | —   | 41        | 10  | 11        | 1   | 64        | 8   | 48        | 4   | 165       | 4   | 80        | 5   | 211                           | 16  |
| Mysore .. ..                   | 216   | 214       | 126 | 45        | 16  | 7         | 2   | 9         | —   | 50        | 20  | 16        | 6   | 39        | 4   | 13        | 2   | 332                           | 40  |
| Nagaland .. ..                 | 46    | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —                             | —   |
| Orissa <i>e</i> .. ..          | 140   | 139       | 30  | 100       | 49  | 30        | 7   | 10        | 1   | 31        | 21  | 9         | 2   | 19        | —   | —         | —   | 199                           | 3   |
| Punjab <i>f</i> .. ..          | 104   | 102       | 48  | 9         | —   | 20        | 5   | 12        | 3   | 9         | —   | 8         | 1   | 49        | 9   | 17        | 3   | 257                           | 9   |
| Rajasthan .. ..                | 184   | 182       | 89  | 108       | 49  | 20        | 1   | 21        | —   | 17        | —   | 38        | 8   | 63        | 22  | 6         | —   | 437                           | 15  |
| Uttar Pradesh .. ..            | 425   | 425       | 198 | 211       | 12  | 96        | 14  | 56        | 1   | 165       | 11  | 255       | 44  | 400       | 97  | 163       | 9   | 1,239                         | 37  |
| West Bengal .. ..              | 280   | 280       | 127 | 21        | 1   | 62        | 16  | 135       | 43  | 26        | 7   | 26        | 7   | 58        | 1   | 1         | —   | 407                           | 65  |
| Delhi .. ..                    | —     | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —                             | —   |
| Goa, Daman & Diu .. ..         | 30    | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —                             | —   |
| Himachal Pradesh .. ..         | 60    | 60        | 33  | 5         | —   | 16        | 2   | —         | —   | 2         | —   | 1         | —   | 33        | 7   | 4         | —   | 148                           | 13  |
| Manipur .. ..                  | 30    | 28        | 16  | —         | —   | 6         | 1   | 5         | —   | 5         | —   | 12        | 4   | —         | —   | —         | —   | 99                            | 9   |
| Pondicherry .. ..              | 30    | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —                             | —   |
| Tripura .. ..                  | 30    | 30        | 27  | —         | —   | 7         | 1   | 16        | 2   | —         | —   | 1         | —   | 5         | —   | —         | —   | 28                            | —   |
| All India Total .. ..          | 3,563 | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —         | —   | —                             | —   |

\* Only independents. † All Parties Hill Leaders' Conference: Seats contested 12; Seats won 9. ††Mahagujarat Janata Parishad: Seats contested 36; Seats won 2. Hindu Mahasabha: Seats contested 7; Seats won: Nil. *a* National Conference: Seats contested 40; Seats won 8. Democratic National Conference: Seats contested 18; Seats won: Nil. *b*. Kerala Congress: Seats contested 62; Seats won 5. Muslim League: Seats contested 15; Seats won 14. *c*. D.M.K.: Seats contested 173; Seats won 138. *d*. Peasants and Workers' Party: Seats contested 10; Seats won 2. *e*. Jana Congress: Seats contested 48; Seats won 26. Jharkhand: Seats contested 10; Seats won: Nil. *f*. Akali Dal (Sant): Seats contested 58; Seats won 24. Akali Dal (Master): Seats contested 61; Seats won 2.

## 1962 AND 1967 ELECTIONS

|                                 | 1962   | 1967   |                               | 1962        | 1967        |
|---------------------------------|--------|--------|-------------------------------|-------------|-------------|
| <b>Lok Sabha :</b>              |        |        | <b>Percentage of Poll :</b>   |             |             |
| No. of seats ..                 | 494    | 521    | Parliamentary constituencies  | 55.42       | 61.10       |
| No. of constituencies ..        | 494    | 521    | Assembly constituencies ..    | 52.64       | 60.66       |
| No. of contesting candidates .. | 1,983  | 2,334  | Number of polling stations .. | 238,031     | 260,000     |
| <b>Legislative Assemblies :</b> |        |        | Number of ballot boxes ..     | 1,180,000   | 1,300,000   |
| No. of seats ..                 | 3,195  | 3,563  | Number of ballot papers ..    | 420,000,000 | 500,000,000 |
| No. of constituencies ..        | 3,175  | —      | Electorate ..                 | 216,372,215 | 250,681,530 |
| No. of contesting candidates .. | 12,764 | 16,215 |                               |             |             |
| Period of poll days ..          | 10     | 9      |                               |             |             |



## VOTES POLLED — LOK SABHA

(Votes polled in thousands)

|                  | Congress     |                      | Swatantra    |                      | C.P.I.       |                      | C.P.I.(M)    |                      | P.S.P.       |                      | S.S.P.       |                      | J.S.         |                      | Republicans  |                      | Independents including others |                      |
|------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|-------------------------------|----------------------|
| States           | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled                  | Per-centage of total |
| Andhra Pradesh   | 6,365        | 46.86                | 1,866        | 13.73                | 1,551        | 11.42                | 1,003        | 7.39                 | 23           | 0.17                 | 57           | 0.42                 | 195          | 1.44                 | 68           | 0.50                 | 2,455                         | 18.07                |
| Assam*           | 1,280        | 45.89                | 29           | 1.03                 | 2,47         | 8.88                 | —            | —                    | 382          | 13.71                | 114          | 4.10                 | 104          | 5.73                 | —            | —                    | 463                           | 16.62                |
| Bihar            | 4,747        | 35.12                | 457          | 3.39                 | 1,262        | 9.35                 | 42           | 0.31                 | 997          | 7.38                 | 2,433        | 17.93                | 1,504        | 11.14                | —            | —                    | 2,079                         | 15.38                |
| Gujarat          | 2,913        | 45.89                | 2,379        | 37.48                | —            | —                    | —            | —                    | 199          | 3.14                 | 11           | 0.18                 | —            | —                    | 131          | 2.13                 | 841                           | 13.67                |
| Haryana          | 1,345        | 44.08                | 171          | 5.60                 | 52           | 1.70                 | 25           | 0.83                 | 11           | 0.36                 | 168          | 5.50                 | 606          | 19.85                | 71           | 2.32                 | 604                           | 19.78                |
| Jammu & Kashmir† | 426          | 50.52                | —            | —                    | —            | —                    | —            | —                    | —            | —                    | —            | —                    | 171          | 20.34                | —            | —                    | 5                             | 0.57                 |
| Kerala           | 2,267        | 36.16                | 147          | 2.34                 | 501          | 7.99                 | 1,540        | 24.56                | 15           | 0.24                 | 516          | 8.23                 | 87           | 1.39                 | 4            | 0.07                 | 458                           | 7.30                 |
| Madhya Pradesh   | 3,774        | 40.69                | 254          | 2.74                 | 132          | 1.42                 | —            | —                    | 464          | 5.01                 | 338          | 3.63                 | 2,735        | 29.50                | 158          | 1.70                 | 1,419                         | 15.31                |
| Madras           | 6,437        | 41.69                | 1,414        | 9.16                 | 273          | 1.77                 | 1,058        | 6.85                 | 12           | 0.08                 | —            | —                    | 34           | 0.22                 | 31           | 0.20                 | 655b                          | 4.25                 |
| Maharashtra‡     | 6,618        | 48.59                | 148          | 1.09                 | 701          | 5.15                 | —            | —                    | 347          | 2.55                 | 510          | 3.74                 | 1,006        | 7.39                 | 1,729        | 12.69                | 1,532                         | 11.25                |
| Mysore           | 3,755        | 48.76                | 1,158        | 15.04                | —            | —                    | 123          | 1.60                 | 432          | 5.60                 | 200          | 2.60                 | 162          | 2.10                 | 237          | 3.08                 | 1,225                         | 15.91                |
| Nagaland         | ..           | ..                   | ..           | ..                   | ..           | ..                   | ..           | ..                   | ..           | ..                   | ..           | ..                   | ..           | ..                   | ..           | ..                   | ..                            | ..                   |
| Orissa§          | 1,353        | 33.32                | 1,254        | 30.87                | 156          | 3.85                 | —            | —                    | 654          | 16.10                | 183          | 4.50                 | 56           | 0.64                 | —            | —                    | 368                           | 9.00                 |
| Punjab¶          | 1,599        | 37.12                | 219          | 5.09                 | 183          | 4.26                 | 81           | 1.88                 | —            | —                    | 17           | 0.41                 | 541          | 12.56                | 181          | 4.21                 | 331                           | 7.68                 |
| Rajasthan...     | 2,722        | 39.26                | 1,990        | 28.70                | 21           | 0.30                 | 169          | 2.43                 | 6            | 0.08                 | 227          | 3.27                 | 673          | 9.71                 | 12           | 0.17                 | 1,115                         | 16.08                |
| Uttar Pradesh    | 7,290        | 33.53                | 1,039        | 4.78                 | 710          | 3.28                 | 260          | 1.20                 | 816          | 3.75                 | 2,237        | 10.29                | 4,780        | 21.93                | 946          | 4.35                 | 3,665                         | 16.86                |
| West Bengal      | 5,116        | 39.80                | 99           | 0.77                 | 1,155        | 8.99                 | 2,012        | 15.66                | 218          | 1.70                 | 191          | 1.49                 | 1.79         | 1.39                 | 85           | 0.66                 | 3,797                         | 29.54                |

Note: Votes polled are in numbers. \* All Parties Hill Leaders' Conference: Valid votes polled 112,000; Percentage of total 4.04. † National Conference: Valid votes polled 210,000; Percentage of total 24.92. Democratic National Conference: Valid votes polled 31,000; Percentage of total 3.65. a Muslim League: Valid votes polled 414,000; Percentage of total 6.60; Kerala Congress: Valid votes polled 321,000; Percentage of total 5.12. b Only Independents. c DMK: Valid votes polled 5,525,000; Percentage of total 35.78. d Peasants and Workers' Party: Valid votes polled 1,029,000; Percentage of total 7.55. e Jan Paksha: Valid votes polled 266,000; Percentage of total 3.46. f Jharkhand Party: Valid votes polled 67,000; Percentage of total 1.65. g Akali Dal (Sant): Valid votes polled 871,000; Percentage of total 20.49; Akali Dal (Master): Valid votes polled 194,000; Percentage of total 4.56.

## VOTES POLLED — ASSEMBLIES

(Votes polled in thousands)

|                 | Congress     | Swatantra            | C.P.I.       | C.P.I.(M)            | P.S.P.       | S.S.P.               | J.S.         | Republicans          | Independents including others |                      |       |       |       |       |     |      |       |       |
|-----------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|--------------|----------------------|-------------------------------|----------------------|-------|-------|-------|-------|-----|------|-------|-------|
| States          | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled | Per-centage of total | Votes polled                  | Per-centage of total |       |       |       |       |     |      |       |       |
| Andhra Pradesh  | 6,269        | 45.60                | 1,363        | 9.91                 | 1,028        | 7.48                 | 1,071        | 7.79                 | 5                             | 0.04                 | 53    | 0.39  | 292   | 2.12  | 46  | 0.33 | 3,621 | 26.34 |
| Assam*          | 1,350        | 43.55                | 40           | 1.48                 | 152          | 4.90                 | 61           | 1.97                 | 209                           | 6.74                 | 108   | 3.48  | 57    | 1.84  | —   | —    | 1,010 | 32.56 |
| Bihar           | 4,480        | 33.12                | 331          | 2.45                 | 931          | 6.88                 | 178          | 1.32                 | 952                           | 7.04                 | 2,367 | 17.49 | 1,397 | 10.33 | 24  | 0.18 | 2,867 | 21.19 |
| Gujarats        | 2,913        | 45.89                | 2,379        | 37.48                | —            | —                    | —            | —                    | 199                           | 3.14                 | 24    | 0.37  | 131   | 2.06  | 22  | 0.34 | 444   | 6.99  |
| Haryana         | 1,248        | 40.0                 | 96           | 4.0                  | 28           | 1.0                  | 11           | 0.5                  | 6                             | —                    | 105   | 4.0   | 406   | 13.5  | 89  | 3.5  | 1,023 | 33.5  |
| Jammu & Kashmir | 400          | 52.49                | —            | —                    | —            | —                    | —            | —                    | —                             | —                    | —     | —     | 132   | 17.31 | —   | —    | 66    | 8.67  |
| Kerala          | 2,225        | 35.4                 | —            | —                    | 538          | 8.5                  | 1,476        | 23.5                 | —                             | —                    | 528   | 8.4   | —     | —     | —   | —    | 614   | 9.9   |
| Madhya Pradesh  | 3,726        | 40.66                | 232          | 2.54                 | 97           | 1.06                 | 25           | 0.20                 | 428                           | 4.70                 | 482   | 5.28  | 2,578 | 28.28 | 77  | 0.84 | 1,488 | 16.39 |
| Madras          | 6,329        | 41.52                | 794          | 5.21                 | 256          | 1.68                 | 623          | 4.09                 | 136                           | 0.89                 | 84    | 0.55  | 22    | 0.14  | 24  | 0.16 | 776   | 5.10  |
| Maharashtras    | 6,263        | 47.91                | 151          | 1.15                 | 670          | 5.13                 | 126          | 0.92                 | 520                           | 3.98                 | 591   | 4.52  | 1,091 | 8.34  | 889 | 6.81 | 1,832 | 14.04 |
| Mysore          | 3,653        | 49.56                | 487          | 6.61                 | 48           | 0.65                 | 66           | 0.90                 | 575                           | 7.81                 | 165   | 2.24  | 200   | 2.71  | 59  | 0.81 | 2,117 | 28.71 |
| Nagaland        | —            | —                    | —            | —                    | —            | —                    | —            | —                    | —                             | —                    | —     | —     | —     | —     | —   | —    | —     | —     |
| Orissas†        | 1,216        | 30.65                | 899          | 22.66                | 200          | 5.04                 | 47           | 1.17                 | 483                           | 12.66                | 61    | 1.53  | 22    | 0.54  | —   | —    | 464   | 11.70 |
| Punjab†         | 1,590        | 37.42                | 21           | 0.51                 | 206          | 4.85                 | 139          | 3.27                 | 21                            | 0.51                 | 30    | 0.72  | 398   | 9.36  | 92  | 2.16 | 6.86  | 16.15 |
| Rajasthan       | 2,797        | 41.44                | 1,516        | 22.46                | 64           | 0.95                 | 78           | 1.15                 | 55                            | 0.81                 | 321   | 4.76  | 784   | 11.61 | 11  | 0.16 | 1,124 | 16.66 |
| Uttar Pradesh†  | 6,862        | 32.10                | 1,012        | 4.73                 | 733          | 3.43                 | 255          | 1.19                 | 860                           | 4.02                 | 2,179 | 10.19 | 4,602 | 21.53 | 837 | 4.01 | 4,020 | 18.80 |
| West Bengal     | 5,201        | 40.24                | 103          | 0.79                 | 1,040        | 8.05                 | 2,352        | 18.20                | 232                           | 1.79                 | 248   | 1.92  | 177   | 1.37  | 1   | 0.01 | 2,994 | 23.17 |

Note : Votes polled are in numbers. \* All Parties Hill Leaders' Conference. † Vaidya

Note: Votes polled are in numbers. \* All Parties Hill Leaders' Conference: Valid votes polled 108,000; Percentage of total 3.48. a Mahagujarat Janata Parishad: Valid votes polled 229,000; Percentage of total 3.61. Hindu Mahasabha: Valid votes polled 8,000; Percentage of total 0.12. b National Conference: Valid votes polled 141,000; Percentage of total 18.56. Democratic National Conference 23,000; Percentage of total 2.97. c Kerala Congress: Valid votes polled 475,000; Percentage of total 7.6. Muslim League: Valid votes polled 424,000; Percentage of total 6.7. d D.M.K.: Valid votes polled 6,222,000; Percentage of total 40.82. e Peasants and Workers' Party: Valid votes polled 940,000; Percentage of total 7.20. f Jana Congress: Valid votes polled 547,000; Percentage of total 13.78; Jharkhand: Valid votes polled 26,000; Percentage of total 0.65; Socialist Unity: Valid votes polled 26,000; Percentage of total 0.65. g Akali Dal (Sant): Valid votes polled 871,000; Percentage of total 20.49; Akali Dal (Master): Valid votes polled 194,000; Percentage of total 4.56. h Forward Bloc: Valid votes polled 577,000; Percentage of total 4.46.



## ANDHRA PRADESH LEGISLATIVE COUNCIL

Strength :—90.

An estimate of party position is as follows :—  
Congress 64, Communist Unity Committee 2; Communist Party of India (Marxist) 5; Communist Party 3; Jan. Sangh 2; Vacant 1; Swatantra 2; National Democrat 5; Independent 6.

Chairman : G. Brahmayya; Dy. Chairman : M. Anandam; Secretary : G. V. Chowdary; Asstt. Secretary : Sadasiva Reddy.

### Local Authorities' Constituencies (31)

Mohd. Arif Khan (Cong.), (Adilabad).  
G. Nagabhushanam (Cong.), (Anantapur).  
Smt. Katta Subbamma (Chittoor).  
P. Narasimha Reddy (Cong.), (Chittoor).  
A. Chengal Reddy (Cong.), (Cuddapah).  
R. Ramalinga Raju (Cong.), (Godavari-East).  
V. Satyanarayana Murthy (Cong.), (Godavari-East).  
Ch. C. Subba Rao (Ind.), (Godavari-West).  
T. Veerabhadra Rao (Cong.), (Godavari-West).  
B. Adi Narayana Rao (Cong.), (Guntur).  
V. Satyanarayana Rao (Cong.), (Guntur).  
M. Manik Rao (Cong.), (Hyderabad).  
E. Satyanarayana (Cong.), (Hyderabad).  
M. Chenna Kesava Reddy (Cong.), (Karimnagar).  
Heeralal Moria (Cong.), (Khammam).  
Smt. V. Kamala Kumari (Cong.), (Krishna).  
G. Krishnamurthy (Cong.), (Krishna).  
P. Ranga Reddy (Cong.), (Kurnool).  
D. Subba Reddy (Cong.), (Kurnool).  
K. Ramachandra Reddy (Cong.), (Mahboobnagar).  
K. Subrahmanyam (Cong.), (Mahboobnagar).  
S. Lakshma Reddy (Cong.), (Medak).  
Ch. Shankar Rao (Cong.), (Nalgonda).

P. Veera Raghava Reddy (Cong.), (Nellore).  
S. Venkata Krishna Reddy (Cong.), (Nellore).  
Ch. Hanumantha Reddy (Cong.), (Nizamabad).  
B. Narayana Murthy (N.D.), (Srikakulam).  
T. Rama Murthy (Cong.), (Srikakulam).  
A. Appanna Dora (Cong.), (Visakhapatnam).  
N. V. Ganga Raju (Cong.), (Visakhapatnam).  
Vacant (Warangal).

### Elected by the Legislative Assembly (31)

Abu Yusuf (Cong.).  
G. Brahmayya (Cong.).  
S. Siddha Reddy (Cong.).  
M. Shamsheer Baig (Cong.).  
P. Ramaiah (Cong.).  
Joseph Appikatha (Cong.).  
Kondiah Chowdary Divi (Swa.).  
Y. V. Krishna Rao (C.P.I.).  
L. N. Karlapalem (C.P.I.-M.).  
R. Narapa Reddy (Cong.).  
J. Raghotham Reddy (Cong.).  
N. V. Jagannatham (Cong.).  
I. Lingayya (Cong.).  
N. M. Williams (Cong.).  
K. V. Pratap Reddy (Cong.).  
Meda Subbaiah (Cong.).  
Smt. Alluri Annapurnamma (Cong.).  
Makhdoom Mohiuddin (C.P.I.).  
P. Venkataswami Reddy (Cong.).  
Pyndah Venkatanarayana (Swa.).  
M. B. Gautam (Cong.).  
D. Govinda Rajulu (C.U.C.).  
T. Ramaswami (Cong.).  
N. Ramachandraiah (C.P.I.-M.).  
G. V. Sudhakar Rao (Cong.).  
S. Malkonda Reddy (Cong.).  
Akkala Kotaiah (Cong.).  
G. Appalaswamy (Cong.).  
A. Chitambara Reddy (Cong.).

N. Durgamallikarjuna Prasada Rao (C.P.I.-M.).  
Smt. P. Vani Rama Rao (Cong.).

### Graduates' Constituencies (8)

Dr. T. Kanakaraju (Cong.), (Circars-Central).  
N. Somayajulu (N.D.), (Circars-North).  
T. Swatma Rama Rao (N.D.), (Circars-South).  
V. Rama Rao (J.S.), (Hyderabad).  
T. Panchajanyam (Ind.), (Hyderabad).  
Y. C. Ranga Reddy (N.D.), (Rayalaseema-East).  
B. V. Subbaraju (Cong.), (Rayalaseema-West).  
M. Anandam (Cong.), (Telangana).

### Teachers' Constituencies (8)

D. S. Subrahmanyam (Ind.), (Circars-Central).  
T. P. V. Kurmacharyulu (N.D.), (Circars-North).  
C. Lakshmaiah (N.D.), (Guntur).  
P. Sreerama Murthy (C.U.C.), (Krishna).  
S. Ramakrishnaiah (C.P.I.-M.), (Rayalaseema-East).  
V. Vijayarama Raju (C.P.I.), (Rayalaseema-West).  
J. Mutha Reddy (Ind.), (Telangana-East).  
V. P. Raghavachari (N.D.), (Telangana-West).

### Nominated by the Governor (12)

A. Venkatesubbarao alias Chakrapani (Ind.).  
M. Azamuddin (Cong.).  
Smt. Zubeda Begum (Cong.).  
Smt. A. Shyamala Devi (Cong.).  
K. Koti Reddy (Cong.).  
Guram Jashua (Cong.).  
S. Sambhu Prasad (Ind.).  
G. V. Sesha Sastry (Cong.).  
S. Ahmadullah Qadri (Cong.).  
Dr. (Miss) H. M. Lazarus (Cong.).  
M. Narsing Rao (Cong.).  
P. Suryachandra Rao (Cong.).

## ANDHRA PRADESH LEGISLATIVE ASSEMBLY

Speaker : B. V. Subba Reddy; Deputy Speaker : V. K. Naik; Secretary : G. V. Chowdary.

The party position in the Andhra Pradesh Legislative Assembly is as follows : Congress 165; Communist Party 11; Communist Marxists 9; Peoples Democratic Party 33; Jana Congress Party 21; Samyukta Socialist Party 2; Republican Party 2; Swatantra 24; Independents 19; Nominated 1; Vacant 1; Total 288.

P. Mahendra Nath (Cong.), (Achampet).  
Dasri Perumallu (Cong.), (Achanta).  
Dasri Prakasam (Cong.), (Addanki).  
Kastal Ramakistoo (C.P.I.), (Adilabad).  
T. G. L. Timmaiah (Cong.), (Adoni).  
Anireddy Punna Reddy (Cong.), (Alair).  
T. Chendra Sekhara Reddy (Cong.), (Alampur).  
G. Timma Reddy (P.D.P.), (Allagadda).  
B. V. Ramanaya (Rep.), (Allavaram).  
Bezada Papireddy (Ind.), (Allur).  
D. Govinda Doss (Swa.), (Alur).  
Prabhakara Rao (P.D.P.), (Amalapuram).  
Som Bhopal (P.D.P.), (Amarachinta).  
K. Govinda Rao (C.P.I.), (Anakapalli).  
T. Nagireddy (C.P.I.-M.), (Anantapur).  
V. Ramakrishna Chowdary (Cong.), (Anaparti).  
C. Rajanarasimha (Cong.), (Andole).  
T. Ranga Reddy (Cong.), (Armoor).  
K. Bhim Rao (Cong.), (Asifabad).  
M. M. Hashim (Cong.), (Asifnagar).  
P. Ramachandra Reddy (Swa.), (Atmakur).  
K. V. Narasimha Raju (Cong.), (Attili).  
S. R. P. Yarlagadda (Cong.), (Avanigadda).  
B. Veera Reddy (Cong.), (Badvel).  
G. Rajaram (Cong.), (Balkonda).  
P. Lakshmana Rao (Cong.), (Bandar).  
M. Munuswamy (Cong.), (Bangaripalem).  
M. Sreenivasa Rao (Cong.), (Banswada).  
K. Prabhakar Rao (Cong.), (Bapatta).  
K. Kannalish Dora (Cong.), (Bhadrachalam).  
P. V. Gajapathi Raju (Cong.), (Bheemunipatnam).  
B. Vijayakumar Raju (Ind.), (Bhimavaram).

K. Appadu Dora (Cong.), (Bhogapuram).  
K. Lakshman Bapuji (Cong.), (Bhongir).  
S. A. Devshah (Cong.), (Bouth).  
R. S. R. Ranga Row (Ind.), (Bobbili).  
R. Bhoom Rao (J.C.), (Bodhan).  
Y. Mohan Reddy (Cong.), (Buggaram).  
K. Ramayya (Cong.), (Burgampahad).  
K. Veeranna (Cong.), (Burgupudi).  
N. Ramulu (P.D.P.), (Chalakurthi).  
Sultan S. Owasi (Ind.), (Charminar).  
Rama Rao Tadde (P.D.P.), (Cheepurupalli).  
Smt. N. G. Vimala Devi (Cong.), (Chennur).  
Boddu Abraham (C.P.I.), (Cheriyal).  
D. Satya Narayana (J.C.), (Chevella).  
C. B. Krishnam Raju (J.C.), (Cheyyeru).  
K. Butchiah (Swa.), (Chilakaluripeta).  
K. Rajamallu (Cong.), (Chinnur).  
G. Vishnumurthy (Cong.), (Chintalapudi).  
D. Kondala Rao (Cong.), (Chintapalli).  
Pragada Kotaiah (Cong.), (Chirala).  
D. Anjaneyulu Naidu (Cong.), (Chittoor).  
Vechalapu Palavelli (Swa.), (Chodavaram).  
Mohd. Rahmatulla (Cong.), (Cuddapah).  
R. Mahanada (J.C.), (Darsi).  
M. Ramamohan Rao (Cong.), (Dendulur).  
Narayana Reddy (Cong.), (Deverakonda).  
Pallem Venkatesan (Swa.), (Dharmavaram).  
K. V. Krishnamurthy (P.D.P.), (Dhone).  
M. Bheem Reddy (Ind.), (Dommat).  
M. Ramachandra Reddy (Cong.), (Dornakal).  
A. Ramireddy (J.C.), (Duggirala).  
N. Satyanarayana (Ind.), (Elamanchilli).  
M. Venkatanarayana (Cong.), (Eluru).  
N. A. Narsu Naidu (Cong.), (Etcherla).  
Gopal Reddy (P.D.P.), (Gadivala).  
V. Krishnaji Naik (Cong.), (Gagan Mahal).  
P. Sambasiva Rao (J.C.), (Gajapatnagar).  
G. Saidiah (Cong.), (Gajwel).  
Velivela Sitaramayya (Cong.), (Gannavaram).  
T. Lakshma Reddy (Ind.), (Ghanpur).  
Panduranga Reddy (J.C.), (Giddalur).  
G. Krishnam Naidu (Cong.), (Gompa).

R. Ramachandra Goud (P.D.P.), (Gooty).  
T. Veera Raghavulu (Cong.), (Gopalapuram).  
Smt. Padma Bhaskara Reddy (Cong.), (Gorantla).  
Smt. M. Kasturi Devi (Cong.), (Gudivada).  
V. Ramachandra Reddy (J.C.), (Gudur).  
Sanakkayala Ankamma (Cong.), (Guntur I).  
Chebrolu Hanumaiah (Cong.), (Guntur II).  
K. Venkateswarlu (Cong.), (Gurajala).  
K. Krishnamurthy (Swa.), (Harischandrapuram).  
R. Narasimharamaiah (Cong.), (Hasanparthy).  
K. Anjana Reddi (Ind.), (Hindupur).  
Polsani Narsing Rao (Cong.), (Huzurabad).  
A. Vasudevarao (Cong.), (Huzurnagar).  
M. N. Lakshmi Narasiah (Cong.), (Ibrahimpatnam).  
Landa Karaiah Reddy (Swa.), (Ichapuram).  
B. Lakshmikantha Rao (Cong.), (Indurthy).  
Laxminarasimha Reddy (P.D.P.), (Jadcherla).  
Pantam Kamaraju (P.D.P.), (Jaggampeta).  
R. B. Rama Seshayya Sresthi (Cong.), (Jaggayyapet).  
K. L. Narasimha Rao (Cong.), (Jagtial).  
G. Butchi Appara (Swa.), (Jami).  
Kunda Ramaiah (Ind.), (Jammalamadugu).  
Mohd. K. Ahmed (Cong.), (Jangaon).  
Bathina Subba Rao (Cong.), (Kadiam).  
K. V. Vema Reddy (Cong.), (Kadiri).  
C. Panduranga Rao (J.C.), (Kaikalur).  
C. V. K. Rao (Ind.), (Kakinada).  
B. G. Subbaramireddy (P.D.P.), (Kalahasti).  
Gopal Reddy (P.D.P.), (Kalkakurthi).  
T. C. Mareppa (Ind.), (Kalyandurg).  
K. V. Narayana Reddy (Cong.), (Kamalapur).  
N. Pulla Reddy (P.D.P.), (Kamalapuram).  
P. Madhusudhan Reddy (J.C.), (Kamareddy).  
N. Chenchurama Reddy (Cong.), (Kandukur).  
P. Venkata Reddy (Cong.), (Kanigiri).  
A. Bhaskara Rao (Cong.), (Kankipadu).  
J. Chokka Rao (Cong.), (Karimnagar).  
G. Subbanaidu (J.C.), (Kavali).  
B. V. Gurumurthy (Cong.), (Khairatabad).  
Rajab Ali Mohd. (C.P.I.-M.), (Khammam).



K. Achuta Reddy (Cong.), (Kodangal).  
 P. Rajaratna Rao (P.D.P.), (Kodumur).  
 Penchalaiah (Swa.), (Kodur).  
 B. V. Subba Reddy (Cong.), (Koilkuntla).  
 B. Narasimha Reddy (P.D.P.), (Kollapur).  
 C. Rosayya Naidu (Cong.), (Kondupi).  
 M. V. Subba Raju (Cong.), (Kothapeta).  
 Meenaka Subbanna (Cong.), (Kothuru).  
 Vemareddy Venkureddy (Cong.), (Kovur).  
 K. Butchi Rayudu (S.S.P.), (Kovvur).  
 A. Bhagavantharao (Cong.), (Kuchinapudi).  
 Vithal Reddy (Ind.), (Kukkal).  
 D. Venkatesam (P.D.P.), (Kuppam).  
 K. E. Madanna (Cong.), (Kurnool).  
 R. Rajagopala Reddy (Cong.), (Lakkireddipalli).  
 J. V. Narasinga Rao (Cong.), (Luxettipet).  
 V. Linga Reddy (Cong.), (Macherla).  
 M. B. Raja Rao (P.D.P.), (Madakasira).  
 A. Narasinga Rao (Cong.), (Madanapalle).  
 Duggineni Venkaiah (Cong.), (Madhira).  
 Smt. Rama Kumari Devi (Cong.), (Madugula).  
 Badrivishalpetti (S.S.P.), (Maharajgunj).  
 T. Satyanarayana (C.P.I.), (Mahbubabad).  
 Mehd. Ibrahim Ali (Cong.), (Mahbubnagar).  
 K. Ramachandra Rao (Cong.), (Makthal).  
 Smt. Sarojini Pulla Reddy (Cong.), (Malakpet).  
 B. Niranjana Rao (J.C.), (Mallewarum).  
 T. Nageswara Rao (Cong.), (Mangalagiri).  
 P. V. Narasimha Rao (Cong.), (Manthani).  
 C. Vengalah (Ind.), (Markapur).  
 M. A. Ramachandra Reddy (Cong.), (Medak).  
 Smt. Sumitra Devi (Cong.), (Medchal).  
 C. Satyanarayana Rao (Ind.), (Melpalli).  
 T. C. Krishna Reddy (Cong.), (Miryalguda).  
 Gaddana (P.D.P.), (Mudhole).  
 Kaza Ramanatham (J.C.), (Mudinepalli).  
 Santosh (J.C.), (Mulug).  
 P. Goverdhan Reddy (Cong.), (Mungode).  
 T. Anjiah (Cong.), (Musheerabad).  
 Gadapalli Ramulu (Cong.), (Mydaram).  
 S. P. Nagireddy (Cong.), (Mydukur).  
 C. Venkata Rao (Cong.), (Mylavaram).  
 Gaddam Mahalakshmi (Cong.), (Nagaram).  
 K. Gopal Naidu (Cong.), (Nagari).  
 T. Papa Rao (Cong.), (Nagarikatakam).  
 V. N. Goud (P.D.P.), (Nagarkurnool).  
 S. P. Rudra Raju (Swa.), (Nagur).  
 N. Raghava Reddi (C.P.I.-M.), (Nakrekal).  
 C. Srinivasa Rao (Cong.), (Nalgonda).  
 K. Ramachandra Reddy (Cong.), (Nallamada).  
 A. Suryanarayana Rao (Cong.), (Nandigama).  
 C. Rambhupal Reddy (Cong.), (Nandikotkur).  
 S. B. Nabi Saheb (Cong.), (Nandyal).  
 K. Sudarshan Reddy (Cong.), (Narasampet).  
 S. Jagannadham (Swa.), (Narasannapeta).  
 R. Satyanarayana Raju (C.P.I.-M.), (Narasapur).  
 Shetker Shiva Rao (Cong.), (Narayankhed).  
 K. Brahmananda Reddy (Cong.), (Narasaraopet).  
 C. Jagannath Rao (Cong.), (Narsapur).  
 S. Suryanarayana Raju (Cong.), (Narsipatnam).

A. Madhava Rao (J.S.), (Nellore).  
 Gotte Bhoopathi (P.D.P.), (Nerella).  
 K. Someswara Rao (Cong.), (Nidumolu).  
 P. Narasa Reddy (Cong.), (Nirmal).  
 K. V. Gangadhar (J.C.), (Nizamabad).  
 Butti Rajaram (Cong.), (Nustulapur).  
 M. R. Appa Rao (Cong.), (Nuzvid).  
 C. Ramachandra Reddy (Cong.), (Ongole).  
 T. Chitti Naidu (Cong.), (Paderu).  
 P. Seshavatharam (C.P.I.), (Palacode).  
 K. Santhalah (Cong.), (Palair).  
 Jammanna Joji (Swa.), (Palakonda).  
 T. C. Rajan (Swa.), (Palamaner).  
 P. Pichalah (Cong.), (Palwancha).  
 S. Venkatarreddi (P.D.P.), (Pamarru).  
 Venkata Reddy (P.D.P.), (Panyam).  
 G. Venkata Reddy (Cong.), (Parchur).  
 Rama Reddy (P.D.P.), (Parji).  
 C. Janga Reddy (J.S.), (Parkal).  
 S. R. A. S. Appalanaidu (Cong.), (Paravada).  
 Venkata Rami Naidu (Swa.), (Parvatipuram).  
 Pothula Gunnayya (Cong.), (Patapatnam).  
 K. Easwara Reddy (C.P.I.-M.), (Pattikonda).  
 G. Suryanarayana (Cong.), (Payakaraopeta).  
 Narayana Appalaidu (J.C.), (Pedamanapuram).  
 G. Ramaswamy Reddy (Cong.), (Peddakurapadu).  
 J. Malla Reddy (P.D.P.), (Peddapalli).  
 V. Narayana Murthy (C.P.I.), (Peddapuram).  
 J. Lakshmayya (Cong.), (Penugonda).  
 Narayana Reddy (Cong.), (Penukonda).  
 G. V. C. Reddy (Cong.), (Pileru).  
 Y. Suryanarayana Murthy (Cong.), (Pithapuram).  
 K. Narayanaswami (Cong.), (Podili).  
 K. Rami Reddy (Cong.), (Polavaram).  
 C. Satyanarayana (Swa.), (Ponduru).  
 P. A. Prasadarao (Cong.), (Ponnur).  
 M. Chinna Nagiah (Swa.), (Prathipadu).  
 M. Veeraraghavarao (J.C.), (Pratipadu).  
 R. Ramasubba Reddy (Cong.), (Prodatur).  
 P. Basi Reddy (Cong.), (Pulivendla).  
 V. Ramaswamy Reddy (Cong.), (Punganur).  
 Gandhamaneni Sivayya (C.P.I.), (Puttur).  
 C. P. Chowdary (C.P.I.), (Rajahmundry).  
 Ratnasabhapathy (J.C.), (Rajampeta).  
 N. Veerajulu (P.D.P.), (Ramachandrapuram).  
 V. Kasi Ram (Cong.), (Ramannapet).  
 Smt. B. Ratnamma (Cong.), (Ramayanpet).  
 A. C. Subba Reddy (Cong.), (Rapur).  
 M. Krishna Reddy (Cong.), (Rayachoti).  
 Trippaswamy (Swa.), (Rayadurg).  
 N. Ganeswara Rao (Cong.), (Razole).  
 Y. Chenniah (Cong.), (Repale).  
 J. Rajayya Boina (P.D.P.), (Salur).  
 C. Venkataratnam (Cong.), (Sampara).  
 Narsimha Reddy (P.D.P.), (Sangareddy).  
 V. C. Kesavarao (Cong.), (Santhanuthalapad).  
 S. Vemayya (C.P.I.), (Sarvepalli).  
 V. Gopalakrishnayya (Ind.), (Sattenapalli).

K. Munuswamy (Swa.), (Satyavedu).  
 K. S. Narayana (Cong.), (Secunderabad).  
 V. Rama Rao (Cong.), (Secunderabad Cantt.).  
 Dr. K. Naganna (Cong.), (Shadnagar).  
 V. B. Raju (Cong.), (Siddipet).  
 K. C. Sree Rangaiah (Cong.), (Singanamala).  
 C. Rajeswar Rao (C.P.I.), (Sirceila).  
 G. Sanjiva Reddy (Cong.), (Sirpur).  
 Ahmed Hussain (Ind.), (Sitarambagh).  
 G. Latchanna (Swa.), (Sompeta).  
 T. Satyanarayana (Swa.), (Srikakulam).  
 K. Appala Naidu (P.D.P.), (Srungavarampukota).  
 P. Venkatasubbaiah (P.D.P.), (Sullurpet).  
 Uppala Malsoor (C.P.I.-M.), (Suryapet).  
 C. Subbarayudu (Cong.), (Tadpatri).  
 A. Krishna Rao (Cong.), (Tadepalligudam).  
 G. V. Rattalah (Cong.), (Tadikonda).  
 E. Vadapalli (Cong.), (Tallarevu).  
 Vacant (Tandur).  
 Satyanarayana Gannamani (P.D.P.), (Tanuru).  
 N. Ramulu (Swa.), (Tekkali).  
 Smt. Doddapaneni Indira (Cong.), (Tenali).  
 Smt. T. N. Anasvyamma (Cong.), (Thampallapalle).  
 B. N. Reddy (C.P.I.-M.), (Thungathurthy).  
 A. Easwarareddy (Swa.), (Tirupathi).  
 V. Kurmayya (Cong.), (Tiruvur).  
 V. Venkatakrishnam Raju (Cong.), (Tuni).  
 D. Narasimham (Swa.), (Udayagiri).  
 K. Kusumeswa Rao (P.D.P.), (Undi).  
 S. P. M. Raju (Cong.), (Ungutur).  
 G. China Venkanna (Cong.), (Urvakonda).  
 P. Thimma Reddy (Cong.), (Vayalpad).  
 J. Ven. ala Rao (Cong.), (Vemsoor).  
 Y. Venkata Rao (Swa.), (Vemur).  
 O. Venkatasubbaiah (P.D.P.), (Venkatagiri).  
 V. Muniswamappa (Cong.), (Vepanjeri).  
 A. Ramaswamy (Cong.), (Vicarabad).  
 Dr. T. V. S. Chalapathi Rao (Cong.), (Vijayawad-East).  
 Appalaswamy Marupilla (Cong.), (Vijayawad-West).  
 Smt. B. Jayaprada (Cong.), (Vinukonda).  
 Vacant (Visakhapatnam I).  
 P. Sanyasirao (C.P.I.-M.), (Visakhapatnam II).  
 V. Rama Rao (J.S.), (Vizianagaram).  
 P. Mudile Babu (Ind.), (Vunukuru).  
 K. Venkateswara Rao (J.C.), (Vuyyuru).  
 Smt. J. Kumudini Devi (Cong.), (Wanaparthy).  
 T. S. Murthy (P.D.P.), (Warangal).  
 T. Purushothama Rao (J.C.), (Wardhanapet).  
 Khaja Nizamuddin (Ind.), (Yakutpura).  
 G. Satyanarayana Rao (Cong.), (Yellandu).  
 Smt. J. Easwari Bai (Rep.), (Yellareddy).  
 C. Mallikharjuna (Cong.), (Yellavaram).  
 Satyanarayana Raju (Cong.), (Yemmiganur).  
 P. Subbayya (C.P.I.), (Yerragondapalem).  
 M. Baga Reddy (Cong.), (Zahirabad).  
 Mrs. M. Godfrey (Nominated Anglo-Indian).

## ASSAM LEGISLATIVE ASSEMBLY

Seats: 126 (S.C. 8; S.T. 24); Electorate: 54,39,305.

Speaker: Hareswar Goswami.

Dy. Speaker: Mohi Kanta Das.

An estimate of party position is given below:  
 Congress 72; All Party Hill Leaders' Conference 9; Praja Socialist Party 5; Communist Party 7; Swatantra 2; R.C.P.L. 1; Samyukta Socialist Party 3; Independents and others 25; Vacant 2.  
 K. N. Banikya (S.C.) (Ind.), (Abhayapuri (R)).  
 Vacant (R. for S.T.) (Aijal-East).  
 A. Thanglura (S.T.) (Cong.), (Aijal-West).  
 Pushpadhar Chaliha (Cong.), (Amguri).  
 Maulana A. J. Chowdhury (Cong.), (Badarpur).  
 J. U. Ahmed (Ind.), (Bagbar).  
 Capt. W. A. Sangma (S.T.) (A.P.H.L.C.), (Bagmara (R)).  
 D. B. Bongpi (S.T.) (Cong.), (Baithalangso (R)).  
 Biswadev Sarma (Cong.), (Balpara).  
 Surendranath Das (S.T.) (Cong.), (Barama (R)).  
 Gaurisankar Bhattacharyya (Ind.), (Barbhag).  
 Kehoram Hazarika (C.P.I.), (Barhampur).  
 Dr. Surendranath Das (P.S.P.), (Barpeta).  
 Dharanidhar Choudhury (Cong.), (Bhabanipur).  
 Premadhor Bora (Ind.), (Bihpuria).  
 Golok Chandra Patgiri (Cong.), (Bijni).

Giasuddin Ahmed (Ind.), (Bilasipara).  
 K. P. Tripathi (Cong.), (Biswanath).  
 Upendranath Sanath (Cong.), (Bogdang).  
 Salsai Terang (S.T.) (Cong.), (Bokajan (R)).  
 Lakshwar Das (S.C.) (Cong.), (Bokakhat (R)).  
 M. N. Hazarika (S.C.) (Cong.), (Bokani (R)).  
 P. K. Choudhary (Cong.), (Boko).  
 Mathura Mohan Sinha (Cong.), (Bongaigaon).  
 A. H. Mazumdar (Cong.), (Borkhola).  
 D. C. Barua (Ind.), (Charaibahi).  
 A. R. Chaudhury (Cong.), (Chenga).  
 Hareswar Goswami (Cong.), (Chhaygaon).  
 Stanley D. D. Nichols (S.T.) (A.P.H.L.C.), (Cherrapunjee (R)).  
 Mody Marak (S.T.) (A.P.H.L.C.), (Dainadubi (R)).  
 S. C. Baruah (Cong.), (Dalgao).  
 Narendranath Sarma (Cong.), (Dergaon).  
 Nameswar Pegu (S.T.) (C.P.I.), (Dhakuakhana (R)).  
 Smt. Pushpa Lata Das (Cong.), (Dhekiajuli).  
 Romesh Mohan Kouli (Swa.), (Dhemaji).  
 M. Shamsul Huda (Ind.), (Dhing).  
 J. M. Barbhuiya (S.C.) (Ind.), (Dholai (R)).  
 Syed Ahmed Ali (Cong.), (Dhubri).  
 R. C. Barooah (Cong.), (Dibrugarh).  
 Jadu Nath Bhuyan (Cong.), (Digboi).

Malla Tanti (Cong.), (Doom-Dooma).  
 Sarat Chandra Rabha (S.T.), (C.P.I.), (Dudnai (R)).  
 M. M. Choudhury (Cong.), (Gauhati-East).  
 Govinda Kalita (C.I.L.), (Gauhati-West).  
 Md. Azad Ali (P.S.P.), (Gauripur).  
 Benoy Krishna Ghose (Ind.), (Goalpara-East).  
 S. A. Jotter (P.S.P.), (Goalpara-West).  
 Bashnulal Upadhyaya (Cong.), (Gohpur).  
 Soneswar Bora (S.S.P.), (Golaghat).  
 K. C. Roy Pradhani (Ind.), (Golakganj).  
 Mathius Tudu (Cong.), (Gossaigaon).  
 J. B. Hagjer (S.T.), (Cong.), (Haflog (R)).  
 A. M. Mazumdar (Cong.), (Hailakandi).  
 Bismuram Medhi (Cong.), (Hajo).  
 Jenab Rahimuddin Ahmed (Swa.), (Hojai).  
 Chatrasing Teron (S.T.) (Cong.), (Howraghat (R)).  
 Sailen Medhi (Ind.), (Jalukbari).  
 Lakshmi Prasad Goswami (Cong.), (Jamunamukh).  
 Ataur Rahman (Cong.), (Jania).  
 Jogen Saikia (Cong.), (Jorhat).  
 Edwingson Bareh (S.T.) (A.P.H.L.C.), (Jowai (R)).  
 Bhadra Kanta Gogoi (Ind.), (Joypur).

Note: L.C.P. = Legislature Communist Party.



Dardiram Dutta (Cong.), (*Kalaigaon*).  
 A. C. Goswami (S.S.P.), (*Kaliabor*).  
 L. D. Chaudhury (P.S.P.), (*Kamalpur*).  
 Botindra Nath Sen (Ind.), (*Karimnagar-North*).  
 Prafulla Choudhury (S.C.) (Cong.), (*Karimganj-South* (R)).  
 A. K. Nurul Haque (Cong.), (*Kaligora*).  
 Tazammul Ali Laskar (Ind.), (*Katlicherra*).  
 R. Basumatari (S.T.) (Cong.), (*Kokrajhar* (R)).  
 Rani Manjula Devi (Cong.), (*Kokrajhar-East*).  
 Md. Abul Kasom (Cong.), (*Laharighat*).  
 Smt. Lily Sen Gupta (Cong.), (*Lahowal*).  
 Mira Chouba Singha (Cong.), (*Lakhipur*).  
 S. Banjan Sarkar (Cong.), (*Lumding*).  
 Vacant (S.T.), (*Lungleh* (R)).  
 Ratneswar Konger (Cong.), (*Mahmara*).  
 Mohidhar Pegu (S.T.) (Ind.), (*Mazuli* (R)).  
 Md. Mathebuddin (Ind.), (*Mangaldoi*).  
 Zahirul Islam (Ind.), (*Mankachar*).  
 Gajen Tanti (Cong.), (*Mariani*).  
 Mohi Kanta Das (Cong.), (*Missamari*).  
 Smt. Padma Kumari Gohain (Cong.), (*Moran*).  
 Pitsing Konwar (S.T.) (Ind.), (*Morigaon* (R)).  
 P. N. Choudhury (Cong.), (*Nalbari-East*).  
 Dr. Bhumidhar Barman (Cong.), (*Nalbari-West*).

Dr. Bhupen Hazarika (S.C.) (Ind.), (*Naoboicha* (R)).  
 Karuna Kanta Gogoi (Cong.), (*Nazira*).  
 B. B. Lyngdoh (S.T.) (A.P.H.L.C.), (*Nongpoh* (R)).  
 Hopingstone Lyngdoh (S.T.) (A.P.H.L.C.), (*Nongstoin* (R)).  
 Govinda Chandra Bora (Cong.), (*North Lakhipur*).  
 Phani Bora (C.P.I.), (*Nowgong*).  
 Abala Kanta Goswami (Ind.), (*Palasbari*).  
 Hiralal Patwary (Ind.), (*Panery*).  
 Bhubaneswar Barman (P.S.P.), (*Patacharkuchi*).  
 Motilal Kanoo (Ind.), (*Patharkandi*).  
 Bronson Momin (S.T.) (A.P.H.L.C.), (*Phulbari* (R)).  
 Sarat Chandra Goswami (Cong.), (*Raha*).  
 Nakul Chandra Dass (S.C.), (Cong.), (*Rangamati* (R)).  
 K. M. Sarma (C.P.I.), (*Rangiya*).  
 Bishwanath Upadhyaya (Cong.), (*Ratabari*).  
 Mussawir Choudhury (Ind.), (*Rupohihat*).  
 D. N. Hazarika (Cong.), (*Saikowa*).  
 D. K. Barooah (Cong.), (*Samaguri*).

Matilal Nayak (S.C.) (Ind.), (*Sarukhetri* (R)).  
 C. G. Karmakar (Cong.), (*Sarupathar*).  
 Hoover Hynniewta (A.P.H.L.C.), (*Shillong*).  
 P. C. Gogoi (C.P.I.), (*Sibsagar*).  
 Uttam Chandra Brahma (S.T.) (Cong.), (*Sidli* (R)).  
 Satindra Mohan Dev (Cong.), (*Silchar*).  
 M. H. Choudhury (Cong.), (*Sonai*).  
 Bimala Prasad Chaliha (Cong.), (*Sonari*).  
 Mrs. Ptanita Talukdar (Cong.), (*Sorbhog*).  
 Bazbul Basit (Cong.), (*South Salmara*).  
 N. C. Bhuyan (Cong.), (*Soolea*).  
 Maneswar Boro (S.T.) (Ind.), (*Tamulpur* (R)).  
 Manik Chandra Das (Cong.), (*Tingkhath*).  
 Tilok Gogoi (Cong.), (*Teok*).  
 Bishnu Prasad Rava (Ind.), (*Tezpur*).  
 Durgeswar Saikia (Cong.), (*Thowra*).  
 Bhadreswar Gogoi (S.S.P.), (*Tingkhong*).  
 Paramananda Gogoi (Cong.), (*Tinsukia*).  
 Debeswar Sarmah (Cong.), (*Titabar*).  
 Grohonsing Marak (S.T.) (A.P.H.L.C.), (*Tura* (R)).  
 Bahadur Basumatary (S.T.) (Cong.), (*Udalguri* (R)).  
 Jagannath Sinha (Cong.), (*Udharband*).

### BIHAR LEGISLATIVE COUNCIL

Seats : 96.

Chairman : Dev Saran Sinha. Deputy Chairman : Theodore Bodra.

#### Graduates (8)

Ravaneswar Mishra (Cong.), (*Bhagalpur-cum-Saharsa-cum-Purnea*).  
 Lokesh Nath Jha (Cong.), (*Darbhanga*).  
 Ram Ashraya Prasad Sinha (U.O.), (*Gaya-cum-Shahabad*).  
 Harendra Prasad Jha (Cong.), (*Monghyr-cum-Santal Parganas-cum-Hazaribagh-cum-Dhanbad*).  
 Trivikramdev Narain Sinha (Ind.), (*Muzaffarpur-cum-Saran-cum-Champaran*).  
 Ram Easwar Sinha (Cong.), (*Patna*).  
 Purender Narayan Singh (U.O.), (*Patna*).  
 Anil Kumar Sen (U.O.), (*Ranchi-cum-Singhbhum-cum-Palamau*).

#### Teachers (8)

Bindhyeshwar Mishra (Cong.), (*Bhagalpur-cum-Saharsa-cum-Purnea*).  
 Baij Nath Rai (Cong.), (*Gaya-cum-Shahabad*).  
 Hargauri Tiwari (Cong.), (*Monghyr*).  
 P. Narayan Sharma (Cong.), (*Patna*).  
 Mahendra Prasad (Cong.), (*Ranchi-cum-Singhbhum-cum-Palamau*).  
 Badri Narayan Mishra (Cong.), (*Santal Parganas-cum-Hazaribagh-cum-Dhanbad*).  
 Brinda Prasad Rai (Cong.), (*Tirhut Division*).  
 Kailash Singh (Cong.), (*Tirhut Division*).

#### Local Authorities (34)

Narayan Prasad Singh (Cong.), (*Bhagalpur*).  
 Shiva Shankar Kanodia (Ind.), (*Champaran*).  
 Smt. Prabhavati Gupta (Cong.), (*Champaran*).  
 Smt. Kishori Devi (Cong.), (*Darbhanga*).

Baidyanath Panjiar (Cong.), (*Darbhanga*).  
 Musay Nayak (Ind.), (*Darbhanga*).  
 Braj Mohan Agrawal (Cong.), (*Dhanbad*).  
 Ram Prakash Lal (Cong.), (*Hazaribagh*).  
 Rameshwar Prasad (Cong.), (*Hazaribagh*).  
 Krishna Mohan Pyare Singh (Cong.), (*Monghyr*).  
 Radha Krishna Prasad Singh (Cong.), (*Monghyr*).  
 Nitishwar Prasad (Cong.), (*Muzaffarpur*).  
 Raghunath Dass (U.O.), (*Muzaffarpur*).  
 Gulzar Prasad (Cong.), (*Muzaffarpur*).  
 Ram Lakhnan Pandey (Cong.), (*Palamau*).  
 Sayed Nazir Hyder (Cong.), (*Patna-cum-Gaya*).  
 Ram Bilas Sarma (Cong.), (*Patna-cum-Gaya*).  
 Smt. Saraswati Devi (Cong.), (*Patna-cum-Gaya*).  
 Kumar Jha (Cong.), (*Patna-cum-Gaya*).  
 Beer Narayan Chand (Cong.), (*Purnea*).  
 Dinesh Kumar Singh (Cong.), (*Purnea*).  
 Ram Ratan Ram (Cong.), (*Ranchi*).  
 Amant Ali (Cong.), (*Ranchi*).  
 Nurullah Saheb (Cong.), (*Saharsa*).  
 Prithi Chand Kishku (Cong.), (*Santal Parganas*).  
 Ram Charan Sah (Cong.), (*Santal Parganas*).  
 Ramanand Singh (Cong.), (*Saran*).  
 Tribhuwan Nath Pathak (Cong.), (*Saran*).  
 Nagishwar Sinha (Cong.), (*Saran*).  
 Indra Kumar (U.O.), (*Shahabad*).  
 Vishnu Shankar (Ind.), (*Shahabad*).  
 Subhodh Kumar Sen (U.O.), (*Singhbhum*).  
 Sameharan Tubid (Cong.), (*Singhbhum*).

#### Legislative Assembly (36)

Baburam Himbrom (Cong.).  
 Sudhama Mishra (Cong.).  
 Jagannath Sarkar (C.P.I.).  
 Jagishwar Mandal (Cong.).  
 Jagishwar Prasad Khalish (Cong.).  
 Smt. Rampyari Devi (Cong.).  
 Abdur Sami Nadvi (Cong.).

Theodore Bodra (U.O.).  
 Jagar Imam (Cong.).  
 Chandrika Ram (Cong.).  
 Maheshwari Prasad Sinha (Cong.).  
 Upendranath Jah (Cong.).  
 Anisur Rahman (Cong.).  
 Rajandhari Sinha (Cong.).  
 Smt. Rajeshwari Saroj Das (Cong.).  
 Mungeri Lal (Cong.).  
 Abdul Ahab Muhammad Noor (Cong.).  
 Umer Saheb (Ind.).  
 Ram Khelawan Sinha (Cong.).  
 Ram Govind Singh (Cong.).  
 Rajeshwari Prasad (Cong.).  
 Gajendra Prasad Sinha (Cong.).  
 Subodh Narain Yadav (Cong.).  
 Ramraj Jajwara (Cong.).  
 Pasupati Singh (Cong.).  
 Kishto Kalinath Sahdev (Cong.).  
 Justine Richard (U.O.).  
 Kumar Dhanushdhar Sinha (Cong.).  
 Bhola Prasad Sinha (S.S.P.).  
 Basawan Sinha (P.S.P.).  
 Brajmohan Sinha (Cong.).  
 Indradeep Sinha (C.P.I.).  
 Jamuna Prasad Sinha (Cong.).

#### Nominated (12)

Fazlur Rahman (Cong.).  
 Shyama Prasad Sinha (Cong.).  
 Parmanand (Cong.).  
 Lady Anis Imam (Ind.).  
 Smt. Parwati Devi (Cong.).  
 Gauri Shankar Dalmia (Cong.).  
 B. P. Sinha (Cong.).  
 Smt. Ahmadi Sattar (Cong.).  
 Narayan Soren (Cong.).  
 Chendamani Saran Nath Sadevi (Cong.).  
 Kuwar Ram (Cong.).  
 Mathura Prasad Singh (Cong.).

### BIHAR VIDHAN SABHA

Speaker : Dhaniklal Mardal.

Dy. Speaker : Yoganand Prasad.

Party-wise position of the Assembly is as follows : Congress 126, Samyukta Socialist Party 67, Jan Sangh 26, Praja Socialist Party 19, Communist Party 25, Communist Marxist 4, Independents 45, Swatantra 2, Republican Party 1 and Revolutionary Socialist Party 1.  
 Ahmed Karim (Ind.), (*Adapur*).  
 Abu Jafar (Cong.), (*Ajamnagar*).  
 Lal Singh Tyagi (Cong.), (*Akangarsarai*).  
 Vidyakar Kavi (Cong.), (*Alamnagar*).  
 Mishri Sada (S.C.) (Cong.), (*Alauli* (R)).  
 Sukh Narain Singh (S.S.P.), (*Amarpur*).

Hasivaur Rahman (P.S.P.), (*Amaur*).  
 Smt. Sumitra Devi (Cong.), (*Arrah*).  
 Seethal Prasad Gupta (Cong.), (*Arriah*).  
 Shah Johair (C.P.I.), (*Arwal*).  
 Dr. B. P. Jawahar (Cong.), (*Ashawa*).  
 Kishori Prasad (Ind.), (*Atori*).  
 Sarayu Singh (P.S.P.), (*Aurangabad*).  
 Vaid Nath Prasad Singh (S.S.P.), (*Bachhwara*).  
 Narsingh Baitha (S.C.) (Cong.), (*Bagha* (R)).  
 Madan Mohan Singh (Ind.), (*Baghmara*).  
 Dr. Basant Narain Singh (Ind.), (*Bagodar*).  
 Dillip Narain Jha (P.S.P.), (*Bahadurganj*).  
 Shibu Ranjan Khan (Ind.), (*Baharagoda*).  
 Basistha Narain Singh (S.S.P.), (*Baheri*).

Sabbapati Singh (S.S.P.), (*Baikunthpur*).  
 Indra Jithendra Narain Singh (Ind.), (*Baisi*).  
 Dharm Veer Singh (Cong.), (*Baktiarmur*).  
 Jugul Kishor Sharma (S.C.) (CPI-M), (*Bakhari* (R)).  
 Awadesh Mishra (S.S.P.), (*Balia*).  
 Smt. Uma Pandey (Cong.), (*Baniapur*).  
 Babulal Mandal (J.S.), (*Banka*).  
 Vishnucharan Bharati (S.C.) (Cong.), (*Barachatti* (R)).  
 Vasudeo Prasad Singh (Cong.), (*Barari*).  
 Chandra Sekhar Singh (C.P.I.), (*Barauli*).  
 Bhulan Rai (Ind.), (*Baroli*).  
 Shiv Shankar Singh (Cong.), (*Barbigha*).

U.O. = United Opposition.



- Tarni Prasad Singh (Ind.), (*Barh*).  
 Masih Soren (S.T.) (Ind.), (*Barhait* (R)).  
 Ambikacharan Singh (Cong.), (*Barhara*).  
 Abdul Zaili (C.P.I.), (*Barharia*).  
 Kapil Deo Singh (S.S.P.), (*Barhiya*).  
 Ram Jeewan Singh (S.S.P.), (*Bariyarpur*).  
 Mahesh Ram (S.C.) (J.S.), (*Barkagaon* (R)).  
 Prenav Chatterjee (S.S.P.), (*Bazor*).  
 Bhola Singh (C.P.I.), (*Begusarai*).  
 Chaturbhuj Prasad Singh (S.S.P.), (*Belhar*).  
 Chandreswar Narain Prasad Singh (Cong.), (*Belsand*).  
 Tej Narain Jha (C.P.I.), (*Benipatti*).  
 Vinodanand Jha (Cong.), (*Benipur*).  
 Vindeshwari Dube (Cong.), (*Berme*).  
 Karm Chand Bhagat (S.T. (Cong.)), (*Bero* (R)).  
 Hargun Prasad Shahi (Ind.), (*Betiya*).  
 Shyam Narain Pandey (Cong.), (*Bhabhua*).  
 Vijay Kumar Mitra (J.S.), (*Bhagalpur*).  
 Shankar Pratap Deo (Cong.), (*Bhavnathpur*).  
 Raj Mangal Mishra (Cong.), (*Bhore*).  
 Vijay Kumar Yadav (C.P.I.), (*Bihar*).  
 Ganeshwar Prasad Yadav (J.S.), (*Bihpur*).  
 Mahabir Gop (Cong.), (*Bikram*).  
 Krishna Raj Singh (Cong.), (*Bikramganj*).  
 Mahabir Prasad (S.S.P.), (*Biraul*).  
 Seeta Ram Razak (S.C.) (S.S.P.), (*Bocheha* (R)).  
 Rameshwar Majhi (S.C.) (Cong.), (*Bodhaya* (R)).  
 Jetha Kisku (S.T.) (Ind.), (*Boriyo* (R)).  
 Surya Narain Sharma (Ind.), (*Brahmpur*).  
 Bagun Sumbruyee (S.T.) (Ind.), (*Chaibasa* (R)).  
 Mangal Charan Singh (Cong.), (*Chainpur*).  
 Srikrishna Singh (S.S.P.), (*Chakai*).  
 Majhiya Majhe (S.T.) (J.S.), (*Chakradharpur* (R)).  
 Shashibhushan Bauri (S.C.) (Ind.), (*Chandan-kiyori* (R)).  
 Ram Raj Prasad Singh (Cong.), (*Chandi*).  
 Pramod Kumar Mishra (Cong.), (*Chanpatia*).  
 N. P. Narain Singh (J.S.), (*Chapra*).  
 Kunjilal Sardar (S.C.) (S.S.P.), (*Chathapur* (R)).  
 Keshav Prasad Singh (Ind.), (*Chatra*).  
 Niranjan Prasad Singh (Ind.), (*Chauparen*).  
 Jagdambi Mandal (S.S.P.), (*Chautham*).  
 Chathu Ram (S.C.) (Cong.), (*Chenari* (R)).  
 Yaswant Kumar Chaudhury (Swa.), (*Dalsingh Sarai*).  
 Puran Chand (S.S.P.), (*Daltonganj*).  
 Ram Sevak Singh (S.S.P.), (*Danapur*).  
 Krishna Pratap Singh (J.S.), (*Darauli*).  
 Rameshwar Prasad Sinha (Cong.), (*Darbhanga*).  
 Ram Naresh Singh (P.S.P.), (*Daudnagar*).  
 Abdul Quayum Ansari (Cong.), (*Dehari*).  
 Baleswar Das (S.C.) (J.S.), (*Deoghar* (R)).  
 Satyanarain Sharma (P.S.P.), (*Dhakha*).  
 Yogendra Prasad (P.S.P.), (*Dhanaha*).  
 Puneet Rai (Cong.), (*Dhanbar*).  
 Dr. Lakshmi Narain Sudhashu (Cong.), (*Dhan-daha*).  
 Ram Dhan Singh (Cong.), (*Dhanbad*).  
 Ram Ashish Singh (S.S.P.), (*Dinara*).  
 Singeswar Mandal (S.C.) (Cong.), (*Dorepa* (R)).  
 Gopal Marandi (S.T.) (J.S.), (*Dumka* (R)).  
 Harihar Prasad Singh (Ind.), (*Dumrao*).  
 Paltan Ram (S.C.) (S.S.P.), (*Fatepur* (R)).  
 Ramchandra Prasad (S.C.) (J.S.), (*Fatuha* (R)).  
 Sarayu Mishra (Cong.), (*Forbesganj*).  
 Laxmi Prasad (Cong.), (*Garhua*).  
 Vishwanath Bhagat (S.C.) (S.S.P.), (*Garkha* (R)).  
 Gopal Ravidas (S.C.) (Cong.), (*Gava* (R)).  
 Gopal Mishra (J.S.), (*Gaya*).  
 Ramchandra Yadav (S.S.P.), (*Gaya Muffasil*).  
 Nitishwar Prasad Singh (Cong.), (*Gayghatti*).  
 Ram Ayodhya Prasad (P.S.P.), (*Ghorasahan*).  
 Ramashray Prasad Singh (C.P.I.), (*Ghosi*).  
 Raghunandan Ram (Cong.), (*Giridih*).  
 Deep Narain Choudhury (Cong.), (*Godda*).  
 Thakur Muniswarnath Singh (Cong.), (*Goh*).  
 Hari Shankar Singh (S.S.P.) (Gopalganj).  
 Muni Ram Singh (C.P.I.), (*Gopalpur*).  
 Smt. Shyama Patel (Cong.), (*Goraul*).  
 Krishnakant Singh (Cong.), (*Goreyakothi*).  
 Druv Narain Mani Tripathy (Cong.), (*Govind-ganj*).  
 Amrit Prasad (Cong.), (*Govindpur*).  
 Ropna Urao (S.T.) (J.S.), (*Gumla* (R)).  
 Kishori Prasan Singh (J.S.), (*Hajipur*).  
 Vaidnath Yadav (J.S.), (*Harlakhi*).  
 S. M. Abdulla (C.P.I.), (*Harsidhi*).  
 Gagendra Prasad Himanshu (S.S.P.), (*Hasanpur*).  
 Raghunandan Prasad (Ind.), (*Hazaribagh*).  
 Awadesh Kumar Singh (Cong.), (*Hilsa*).  
 Satrugnan Sharan Singh (Cong.), (*Hiswa*).  
 Baleswar Ram (S.C.) (Cong.), (*Hoyaghat* (R)).  
 Bhishm Narain Singh (Cong.), (*Hussainabad*).  
 Prabhat Kumar Aditya Deo (Cong.), (*Ichagarh*).  
 Deo Dhari Ram (S.C.) (Cong.), (*Imamganj* (R)).  
 Vivekanand Pareya (S.T.) (Cong.), (*Jagannath-pur* (R)).  
 Shiv Poojan Rai (Cong.), (*Jagdishpur*).  
 Syed Fida Hussain (Cong.), (*Jahanabad*).  
 Rampal Paswan (S.C.) (Cong.), (*Jainagar* (R)).  
 Kamakshya Narain Singh (Ind.), (*Jalalpur*).  
 Kadir Hussain (C.P.I.), (*Jale*).  
 Munshi Hasada (S.T.) (Ind.), (*Jama* (R)).  
 Prof. Bhagwat Prasad Yadav (S.S.P.), (*Jamal-pur*).  
 Smt. Madhu Jyotsana Akhauri (Cong.), (*Jamshed-pur-East*).  
 Chotelal Vyas (Cong.), (*Jamshedpur-West*).  
 Satrugna Vesara (C.P.I.), (*Jamtara*).  
 Sadanand Prasad (Cong.), (*Jamua*).  
 Tripurari Prasad Singh (P.S.P.), (*Jamui*).  
 Bhuneshwar Chaudhury (Cong.), (*Jandaha*).  
 Smt. Shashank Manjari (Ind.), (*Jaridih*).  
 Sanath Raut (Ind.), (*Jarmundi*).  
 Jowar Hussain (Cong.), (*Jeradei*).  
 Sivanandan Jha (S.S.P.), (*Jhajha*).  
 Harinath Mishra (Cong.), (*Jhanjharpur*).  
 Shyamsunder Prasad (Cong.), (*Jharua*).  
 Nazmuddin (P.S.P.), (*Jokihat*).  
 M. Rasraj Tudu (S.T.) (Cong.), (*Jugasalai* (R)).  
 Nageshwar Prasad Singh (C.P.I.), (*Kahalgau*).  
 Jananajaynath Chaube (Ind.), (*Kake*).  
 Brahma Deo Narain Singh (S.S.P.), (*Kalyanpur*).  
 Mahesh Prasad Singh (Cong.), (*Kanti*).  
 Tulsei Singh (S.S.P.), (*Karakat*).  
 Ram Narain Mandal (Cong.), (*Kaswa*).  
 Bhadri Mahra (S.C.) (Cong.), (*Kateya*).  
 Jag Bandhu Adhikari (J.S.), (*Katihar*).  
 Peuthambar Singh (J.S.), (*Kesoriya*).  
 Hukumdev Narain Yadav (S.S.P.), (*Kevati Renve*).  
 Ram Bahadur Azad (S.S.P.), (*Khagaria*).  
 Narmadeswar Singh Azad (P.S.P.), (*Khajauli*).  
 Shamsheer Jang Bahadur Singh (S.S.P.), (*Kharagpur*).  
 Devilal Matlsay (S.T.) (J.S.), (*Kharsawa* (R)).  
 Rupas Laurence Hiro (S.T.) (Ind.), (*Khijori* (R)).  
 T. M. Roy Munda (S.T.) (Cong.), (*Khoomti* (R)).  
 Susheela Kapoor (P.S.P.), (*Kishnaganj*).  
 Vinayak Prasad Yadav (S.S.P.), (*Kishanpur*).  
 Viswanath Modi (S.S.P.), (*Kodarma*).  
 Bhole Paswan Shastri (S.C.) (Cong.), (*Kodha* (R)).  
 N. E. Horo (S.T.) (Ind.), (*Kolebira* (R)).  
 Upendranath Verma (S.S.P.), (*Konch*).  
 Seeta Ram Kishore Puria (J.S.), (*Kotoria*).  
 Nagina Rai (Ind.), (*Kuchaitkot*).  
 Krishnanand Sahay (Cong.), (*Kudhani*).  
 Jal Kumar Singh (S.S.P.), (*Kumarkhand*).  
 Jagdev Prasad (S.S.P.), (*Kurtha*).  
 Deep Narain Singh (Cong.), (*Lalganj*).  
 Jhman Singh (S.T.) (Cong.), (*Latehar* (R)).  
 Sukhdeo Sahu (Cong.), (*Laukaha*).  
 Sathru Madan Sahl (Ind.), (*Lauriya*).  
 Jag Narain Pathak (Cong.), (*Lesaliganj*).  
 Bhagat Murmu (S.T.) (Ind.), (*Litipara* (R)).  
 Bihari Lakara (S.T.) (Cong.), (*Lohardaga* (R)).  
 Bosudeo Prasad Malato (S.S.P.), (*Madhepur*).  
 Mahabir Prasad Yadav (S.S.P.), (*Madhepura*).  
 Devilaji (S.S.P.), (*Madhauri*).  
 Mahendra Bharati (C.P.I.), (*Madhubani*).  
 Shafidulla Ansari (Cong.), (*Madhubani*).  
 Ajeet Kumar Banerjee (J.S.), (*Madhupur*).  
 Rajpati Ram (Cong.), (*Mahagama*).  
 Kaushikendraprasad Sahl (P.S.P.), (*Maharaj-ganj*).  
 Paul Hansda (S.T.) (Ind.), (*Maheshpur* (R)).  
 Parameshwar Kumar (S.S.P.), (*Mahishi*).  
 Braj Kishore Rai (Cong.), (*Mahnar*).  
 Girdhari Ram (S.C.) (C.P.I.-M.), (*Mairara* (R)).  
 Poornachandra Virua (S.T.) (Ind.), (*Majhgaon* (R)).  
 Ram Briksha Ram (S.C.) (S.S.P.), (*Majhor-ganj* (R)).  
 Krishna Bhagat (S.T.) (Cong.), (*Mander* (R)).  
 Balwant Nath Singh (Ind.), (*Mandu*).  
 Nagendra Jha (Cong.), (*Manigachi*).  
 Yuv Raj (P.S.P.), (*Manihara*).  
 Ram Bahadur Singh (S.S.P.), (*Manjhe*).  
 Ratnakar Nayak (S.T.) (S.S.P.), (*Manoharpur* (R)).  
 Bhuneshwar Sharma (C.P.I.), (*Masaurhi*).  
 Prabhunath Singh (Cong.), (*Mushrak*).  
 Mahant Ram Kishor Das (S.S.P.), (*Meenapur*).  
 Siya Bihari Saran (R.S.P.), (*Mirganj*).  
 Ramkrishna Ram (S.C.) (Cong.), (*Mohaniya* (R)).  
 Smt. Prem Lata Rai (S.S.P.), (*Mohiuddin Nagar*).  
 Vishnu Dhari Lal (R.P.I.), (*Mokama*).  
 Haseem (S.S.P.), (*Monghyr*).  
 Chanrika Prasad Yadav (J.S.), (*Motihari*).  
 Lohari Ram (S.C.) (S.S.P.), (*Mukhdumpur* (R)).  
 Ram Nagina Singh (Ind.), (*Mumer*).  
 Shashi Nath Jha (P.S.P.), (*Murliganj*).  
 Mohan Lal Gupta (Cong.), (*Muzafarpur*).  
 Satyendra Narain Singh (Cong.), (*Nabinagar*).  
 Viseshwar Khan (C.P.I.), (*Nalla*).  
 Satya Narain Yadav (Cong.), (*Narpalganj*).  
 Kamaleswari Jha (Cong.), (*Nathnagar*).  
 Kadar Pandey (Cong.), (*Nautan*).  
 Ram Swarup Prasad Yadav (Cong.), (*Navada*).  
 Lal Bihari Prasad (S.C.) (C.P.I.), (*Navanagar* (R)).  
 Ram Narain Sharma (Cong.), (*Nirsa*).  
 Guthali Singh (Cong.), (*Nokha*).  
 Raghuvansh Kumar Singh (Cong.), (*Obra*).  
 Chandra Madhav Prasad Singh (Cong.), (*Orai*).  
 Badrikanath Jha (J.S.), (*Pakur*).  
 Muhammad Ajeemuddin (Ind.), (*Palasi*).  
 Chandradev Prasad Verma (S.S.P.), (*Paliganj*).  
 Ram Deo Ram (S.C.) (J.S.), (*Panki* (R)).  
 Daroga Prasad Rai (Cong.), (*Parea*).  
 Shiv Sharan Singh (S.S.P.), (*Paru*).  
 Satish Prasad Singh (S.S.P.), (*Parvata*).  
 Rampati Singh (P.S.P.), (*Patahi*).  
 Ghan Shyam Mahto (Cong.), (*Patamda*).  
 Ram Deo Mahto (J.S.), (*Patna East*).  
 Ram Lakhan Singh Yadav (Cong.), (*Patna South*).  
 Mahamaya Prasad Sinha (Ind.), (*Patna West*).  
 Ambika Prasad (C.P.I.), (*Peerpatti*).  
 Veegu Ram (S.C.) (Cong.), (*Pipara* (R)).  
 Radha Mohan Rai (S.S.P.), (*Piro*).  
 Munshi Muramu S.T., (*Poreyhat* (R)).  
 Mahabir Paswan (S.C.) (Ind.), (*Punpun* (R)).  
 Nasiruddin Hedar Khan (Cong.), (*Pupari*).  
 Kamal Deo Narain Sinha (Cong.), (*Purnea*).  
 Dilkeswar Ram (S.C.), (*Rafiganj* (R)).  
 Harivansh Narain Singh (J.S.), (*Raghopur*).  
 Asheshwar Goit (S.S.P.), (*Raghopura*).  
 Ram Deo Singh (S.S.P.), (*Raghunathpur*).  
 Smt. Shanti Devi (Cong.), (*Rajauli*).  
 Yadunandan Prasad (S.C.) (J.S.), (*Rajgir* (R)).  
 Nathmal Dokaniya (Swa.), (*Rajmahal*).  
 Ramkrishna Mahto (S.C.) (Cong.), (*Rajnagar* (R)).  
 Taraprasad Bakshi (Ind.), (*Ramgarh*).  
 Sachitanand Singh (S.S.P.), (*Ramgarh*).  
 Narain Vikram Sah (Cong.), (*Ramnagar*).  
 Nari Gopal Mitra (J.S.), (*Ranchi*).  
 Dumarlal Baltha (S.C.) (Cong.), (*Raniganj* (R)).  
 Vindhychal Singh (S.S.P.), (*Razaul*).  
 Ramakant Jha (S.S.P.), (*Rosara*).  
 Vivekanand Giri (Cong.), (*Runnisaidpur*).  
 Chabinath Sharma (C.P.I.), (*Rupauli*).  
 Bithal Chamor (S.C.) (Cong.), (*Sahar* (R)).  
 Ramesh Jha (Cong.), (*Saharsa*).  
 Naval Kishor Singh (Cong.), (*Sahebganj*).  
 Kevelal Mahato (S.C.) (S.S.P.), (*Sakara* (R)).  
 Rajendra Narain Sharma (S.S.P.), (*Samastipur*).  
 Ram Sakal Singh (S.S.P.), (*Sadeshi*).  
 Ram Bilas Mishra (S.S.P.), (*Sarairanjan*).  
 Rudrapratap Sarangi (J.S.), (*Sarajkela*).  
 Nalini Kumar Singh (Cong.), (*Sarath*).  
 Vinod Bihari Singh (Cong.), (*Sasaram*).  
 Vivekanand Swami (S.C.) (S.S.P.), (*Secundra* (R)).  
 Ramanand Tiwari (S.S.P.), (*Shahpur*).  
 Loknath Mochi (S.C.) (C.P.I.), (*Sheikhpura* (R)).  
 Mustak Alikhan (Ind.), (*Sherghatti*).  
 Poornachandra Virua (S.T.) (Ind.), (*Majhgaon* (R)).  
 Ram Briksha Ram (S.C.) (S.S.P.), (*Majhor-ganj* (R)).  
 Krishna Bhagat (S.T.) (Cong.), (*Mander* (R)).  
 Balwant Nath Singh (Ind.), (*Mandu*).  
 Nagendra Jha (Cong.), (*Manigachi*).  
 Yuv Raj (P.S.P.), (*Manihara*).  
 Ram Bahadur Singh (S.S.P.), (*Manjhe*).  
 Ratnakar Nayak (S.T.) (S.S.P.), (*Manoharpur* (R)).



Rajaram Chaudhury (Cong.), (*Siwan*).  
 Ram Nandan Rai (Ind.), (*Sonharsa*).  
 Ram Jaipal Singh Yadav (Cong.), (*Sonpur*).  
 Smt. Yashoda Devi (S.C.) Cong., (*Sonvarsha (R)*).  
 Bansari Prasad Sharma (P.S.P.), (*Sultanganj*).  
 Mohanlal Mody (J.S.), (*Sugauli*).  
 Uma Shankar Singh (Cong.), (*Supaul*).  
 Smt. Pratiba Devi (Cong.), (*Sursand*).  
 Bhagwat Prasad Mehta (P.S.P.), (*Suryagarh*).  
 Karpuri Thakur (S.S.P.), (*Tajpur*).

Bhaicha Ram Munda (S.T.) (Cong.), (*Tamar (R)*).  
 Dharm Nath Singh (S.S.P.), (*Taraiya*).  
 Vijay Narain Prastant (S.S.P.), (*Tarapur*).  
 Mohd. Hussain Azad (Cong.), (*Thakurganj*).  
 Savan Pattan (S.T.) (Cong.), (*Torpa (R)*).  
 Anup Lal Yadav (S.S.P.), (*Triveniganj*).  
 Gottuleshwar Mishra (Ind.), (*Tundi*).  
 Mohanlal Sharma (S.S.P.), (*Vadhanas*).  
 Laliteswar Prasad Shahi (Cong.), (*Vaishali*).  
 Baldev Sarag (S.C.) (Cong.), (*Vanmankhi (R)*).

Ram Sewak Hajari (S.C.) (S.S.P.), (*Varisnagar (R)*).  
 Sohanlal Jain (Ind.), (*Varsai*).  
 Shuk Dev Giri (Ind.), (*Varuraj*).  
 Sachidanand Sinha (S.S.P.), (*Velaganj*).  
 Parmanand Singh Madan (C.P.I.), (*Vibhutipur*).  
 Rajkumar Purve (C.P.I.), (*Visaki*).  
 Ram Dani Ram (S.C.) (Cong.), (*Vishrampur (R)*).  
 Devanandan Prasad (C.P.I.), (*Warsaliganj*).  
 Nominated : Smt. L. C. Ajiyar.

## GOA LEGISLATIVE ASSEMBLY

Seats : 30, Electorate : 4,18,394

Speaker : Gopal Appa Kamat.

Dy. Speaker : Monju B. Naik Gaonkar.

Secretary : P. B. Venkatasubramanian.

An estimate of party position is given below :  
 Maharashtrawadi Gomantak 16 ; United Goans 12 ; Independents 2.

O. S. J. S. Lobo (U.G.), (*Aldona*).  
 Mrs. Elu Jose Miranda (U.G.), (*Benaulim*).  
 D. K. Chopdenkar (M.G.), (*Bicholim*).  
 Valente Sequeira (U.G.), (*Calangute*).  
 M. B. Naik Gaonkar (M.G.), (*Canacona*).  
 Dr. L. P. Barbosa (U.G.), (*Cortalim*).

R. S. Fernandes (U.G.), (*Cuncolim*).  
 Abdul Razak (U.G.), (*Curcholem*).  
 R. J. Barneto (U.G.), (*Curtorim*).  
 M. M. Bhathela (Ind.), (*Daman*).  
 Naraina S. Fugro (Ind.), (*Diu*).  
 Anthony J. D'Souza (M.G.), (*Mandrem*).  
 G. G. Mayekar (M.G.), (*Mapusa*).  
 Dayanand B. Bandodkar (M.G.), (*Marcaim*).  
 Anant N. Naik (U.G.), (*Margao*).  
 Gajanan Patil (U.G.), (*Mormugoa*).  
 Leo Mauricio Velho (U.G.), (*Navelim*).  
 A. K. S. Usgaonker (M.G.), (*Pale*).

Yeshwant S. Desai (U.G.), (*Panjim*).  
 Babal L. Kinlekar (M.G.), (*Pernem*).  
 Mrs. S. G. Kakodkar (M.G.), (*Ponda*).  
 Shaba K. Desai (M.G.), (*Quepem*).  
 Morajkar Vasudev Datta (M.G.), (*Sanguem*).  
 T. F. Pereira (U.G.), (*Santo Andre*).  
 Pratap Srinivas Bakal (M.G.), (*St. Estevan*).  
 Dr. Jack de Sequeira (U.G.), (*Santa Cruz*).  
 G. A. Kamat (M.G.), (*Satari*).  
 P. P. Achrekar (M.G.), (*Siolim*).  
 V. S. Karmali (M.G.), (*Siroda*).  
 Jaisingh Rao Bane (M.G.), (*Tivim*).

## GUJARAT LEGISLATIVE ASSEMBLY

Constituencies 168 ; S.C. 11 ; S.T. 21.

Speaker : R. T. Leuva ; Dy. Speaker : Vasantlal V. Mehta.

An estimate of party position is given below :  
 Congress : 93 ; Swatantra : 65 ; P.S.P. : 3 ;  
 Janta Parishad : 2 ; Jan Sangh : 1 ; Independent : 4.

Premji Bhavanji Thacker (Cong.), (*Abadasa*).  
 Shambhubhai Devji Patel (Cong.), (*Alia*).  
 Narsinhdas Gordhandas Gondhiya (Cong.), (*Amreli*).  
 Shankerbhai Desaiabhai Vaghela (Cong.), (*Anand*).  
 Smt. Nirmalaben Hassanand Gajwani (Cong.), (*Anjar*).  
 Amrutlal Ambalal Patel (Cong.), (*Ankleshwar*).  
 Manharlal Tuljashanker Shukla (Cong.), (*Asarva*).  
 Jinabai Devrajibhai Kansagra (Cong.), (*Babra*).  
 Natwarsinh Kesarisinhji Solanki (Swa.), (*Balasinar*).  
 Ratanbhai Govindbhai Gavit (S.T.) (P.S.P.), (*Bansda*).  
 Bhulabhai Vithalabhai Patel (Cong.), (*Bardoli*).  
 Chandrakant Muljibhai Parikh (Swa.), (*Baroda City*).  
 Khodubha Abhesinh Vaghela (Swa.), (*Baroda Rural*).  
 Lalsinhji Kishorsinhji Rahewar (Swa.), (*Bayad*).  
 Madhavsinh Fulsinh Solanki (Cong.), (*Bhadran*).  
 Devjibhai Sadabhai Parmar (S.C.) (Swa.), (*Bavla*).  
 Pratapray Tarachand Shah (Cong.), (*Bhavnagar*).  
 Ambashanker Jaduram Trivedi (Swa.), (*Bhiloda*).  
 Mahipatray Mulshanker Mehta (Cong.), (*Bhuj*).  
 Ramanlal Dhanabhai Patel (Cong.), (*Borsad*).  
 Yuvaraj Shri Pravinchandrasinhji Gambirsinhji (Cong.), (*Botad*).  
 Chandrashanker Manishanker Bhatt (Cong.), (*Broach*).  
 Keshavji Ratanji Patel (Cong.), (*Bulsar*).  
 Madhavlal Bhailalabhai Shah (Cong.), (*Cambay*).  
 Bhogilal Kanjibhai (Patel) (Swa.), (*Chanasma*).  
 Bhajibhai, Garbadbhai Tadvi (Cong.), (*Chhota Udepur*).  
 Smt. Arunaben Gambhirbhai Patel (S.T.) (Cong.), (*Chikhli*).  
 Urmilaben Premshanker Bhatt (Cong.), (*Chorasi*).  
 Dharmendrasinhji Bahadursinhji Rana (Swa.), (*Chotila*).  
 Narharilal Ishwarilal Purohit (Swa.), (*Dabhoi*).  
 Fuljibhai Dohjibhai Patel (Cong.), (*Danta*).  
 Trikamlal Jamnadas Patel (Cong.), (*Dariapur-Kazipur*).  
 Chunilal Popatlal Chudgar (Swa.), (*Dasada*).  
 Vadilal Lallubhai Mehta (Swa.), (*Daskroi*).  
 Chunilal Bijalabhai Vasava (S.T.) (Swa.), (*Dedapada*).  
 Shantilal Swarupchand Shah (Cong.), (*Dessa*).

Manharbhai Chandulal Shah (Swa.), (*Dehgam*).  
 Gumansinhji Viramsinhji Vaghela (Cong.), (*Deodar*).  
 Maharajval Shrijaideepsinhji (Swa.), (*Devgad-Baria*).  
 Vinubhai Bhagvandas Kotdawala (Swa.), (*Dhan-dhuka*).  
 Balashanker Jeyshanker Joshi (Swa.), (*Dhanera*).  
 Bahadurbhai Kuthabhai Patel (S.T.) (Cong.), (*Dharampur*).  
 Raghavji Thobhanbhai Leuva (S.C.) (Cong.), (*Dhari-Kodinar*).  
 Kantilal Fulchandbhai Ghiya (Cong.), (*Dholka*).  
 Mohanlal Ghokalabhai Patel (Cong.), (*Dhoraji*).  
 H. M. Patel (Swa.), (*Dhrangadhra*).  
 Javsinh Mansinh Solanki (S.T.) (Cong.), (*Dohad*).  
 Keshavji Gokaldas Raichura (Cong.), (*Dwarka*).  
 Ratilal Khushaldas Patel (Ind.), (*Ellisbridge*).  
 Ranjitsinhji Bhavsinhji Gohil (Swa.), (*Gadhada*).  
 Thakorabhai Manibhai Desai (Cong.), (*Gandevi*).  
 Shamalbhai Lallubhai Patel (Swa.), (*Gandhinagar*).  
 Dhirajlal Bakordas Mehta (Cong.), (*Ghogha*).  
 Gaurishanker Dhaneshwar Pathak (Swa.), (*Godhra*).  
 Balubhai Harjibhai Patel (Cong.), (*Gondal*).  
 Amarsinh Deepsinh Parmar (Cong.), (*Halol*).  
 Maharaja Shri Daljitsinhji Hamatsinhji (Swa.), (*Himatnagar*).  
 Manabhai Revabhai Bhambhi (S.C.) (Swa.), (*Idar*).  
 Zinabhai Ramsangbhai Vasava (S.T.) (Cong.), (*Jaghadia*).  
 Gonsalabhai Chhibabhai Patel (Cong.), (*Jalal-pore*).  
 Abdulrahim Tajuji<sup>o</sup> Kundiwala (Swa.), (*Jamal-pur*).  
 Vinodchandra Chunilal Shah (Cong.), (*Jambusar*).  
 Nathalal Premji Patel (Swa.), (*Jam-Jodhpur*).  
 Liladhar Patel (Swa.), (*Jamnagar*).  
 Shivraj Kumar Khachar (Swa.), (*Jasdan*).  
 Naranbhai Kalidas Patel (Cong.), (*Jelpur*).  
 Manekbhai Somabhai Tadvi (S.T.) (Swa.), (*Jelpur*).  
 Smt. Hiraben Lalchand Ninama (S.T.) (Cong.), (*Jhalod*).  
 Chandrasinhji Dipsinhji Jadeja (Swa.), (*Jodiya*).  
 Prabhulal Kanji Dave (Cong.), (*Junagadh*).  
 Palabhai Narandas Parmar (S.C.) (Swa.), (*Kadi*).  
 Bhanji Bhimji Patel (Cong.), (*Kalawad*).  
 Arjunsinh Bhartsinh Thakor (Cong.), (*Kalol*).  
 Vijaysinhji Bharatsinhji Chanhan (Swa.), (*Kalol*).  
 Jesinghbhai Govindbhai Parmar (S.C.) (Cong.), (*Kankaria*).  
 Jayantilal Virchand Shah (Cong.), (*Kankrej*).  
 Kasturbhai Nagindas Doshi (Swa.), (*Kapadwanj*).

Nagjibhai Govindbhai Arya (S.C.) (Swa.), (*Karjan*).  
 Abhesinh Kodarbhai Parmar (Swa.), (*Kathlal*).  
 Manubhai Harilal Palkhiwala (J.P.), (*Kalupur*).  
 Dharmasinhbhai Dayabhai Patel (Swa.), (*Keshod*).  
 Marthandaray Gangashanker Shastri (P.S.P.), (*Khadia*).  
 Dwarkadas Vithaldas Barai (Swa.), (*Khambhalia*).  
 Zethabhai Bhurabhai Rathod (S.T.) (Swa.), (*Khedbrahma*).  
 Vasantlal Vrijlal Parikh (Ind.), (*Kheralu*).  
 Bhagwanbhai Kanjibhai Patel (Swa.), (*Kundla*).  
 Bechar Bhagvanji Gajera (Swa.), (*Kutiyana*).  
 Smt. Sumitraben Hariprasad Bhatt (Cong.), (*Lathi*).  
 Haribhai Ratanbhai Doria (S.C.) (Swa.), (*Limbdli*).  
 Titabhai Meghjibhai Hathila (S.T.) (Cong.), (*Limdi*).  
 Virsinh Bhulabhai Pasaya (S.T.) (Swa.), (*Limkheda*).  
 Kamalshanker Bhuleshwar Dave (Swa.), (*Lunavada*).  
 Amarsinh Bhupatsinh Vaghela (Swa.), (*Mahudha*).  
 Chhotubhai Nathubhai Rathod (S.T.) (Cong.), (*Mahuva*).  
 Chhabildas Pragji Mehta (Cong.), (*Mahuva*).  
 Kanjibhai Kachara Mori (Cong.), (*Malia*).  
 Manharbhai Amra Chavda (S.C.) (Cong.), (*Manavadar*).  
 Jumakhilal Lakhmichand Mehta (Cong.), (*Mandvi*).  
 Prabhubhai Dhanabhai Patel (S.T.) (Cong.), (*Mandvi*).  
 Naran Pala Gadhia (Ind.), (*Mangrol*).  
 Ramjibhai Rupabhai Chaudhari (S.T.) (Cong.), (*Mangrol*).  
 Chunibhai Ganeshdas Patel (Swa.), (*Mansa*).  
 Gangaben Amritlal Vagheia (S.C.) (Cong.), (*Matar*).  
 Jamubhai Punjiram Bhatt (Swa.), (*Meghraj*).  
 Jalamsinh Himatsinhji Jadav (Cong.), (*Mehmadabad*).  
 Kantiprasad Jayshanker Yagnik (Swa.), (*Mehsana*).  
 Naranbhai Shivjibhai Patel (Swa.), (*Modasa*).  
 Vasantlal Valabhdas Mehta (Swa.), (*Morvi*).  
 Ramubhai Balubhai Jadav (S.T.) (Cong.), (*Mota Pondha*).  
 Virji Bhimji Dafada (S.C.) (Swa.), (*Mundra*).  
 Babubhai Jashbhai Patel (Cong.), (*Nadiad*).  
 Himatbhai Mathurbhai Rajvadi (S.T.) (Cong.), (*Nandod*).  
 Virumal Khushaldas Tarachandani (Cong.), (*Naroda*).



|                                                                       |                                                                           |                                                                                |
|-----------------------------------------------------------------------|---------------------------------------------------------------------------|--------------------------------------------------------------------------------|
| Parsotambhai Ukadbhai Bhil (S.T.) (Cong.), (Naswadi).                 | Karshanbhai Haribhai Chaudhari (Cong.), (Sami).                           | Maharajkumar Shri Shivabhadrasinhji Krishnakumarsinhji Gohil (Swa.), (Talaja). |
| Suleman Usaf Unia (Cong.), (Navsari).                                 | Dahyabhai B. Jadav (Swa.), (Sanand).                                      | Smt. Vasantben Jaisukhbhai Shah (Cong.), (Tankara).                            |
| Hitendrabhai Kanaiyalal Desai (Cong.), (Olpad).                       | Chimanbhai Jivabhai Patel (Cong.), (Shankheda).                           | Madhubhai Dadubhai Desai (Swa.), (Thasra).                                     |
| Jashavantlal Saubhagyachand Shah (Cong.), (Padra).                    | Kishoresinh Kalusinh Parmar (Cong.), (Santram-pur).                       | Satubhai Devubhai Thakaria (S.T.) (Cong.), (Umbergaon).                        |
| Anandlal Chimar'al Mehta (Cong.), (Palanpur).                         | Bhailalbhail Dyabhai Patel (Swa.), (Sarsa).                               | Udesinh Virsinh Vadodiya (Swa.), (Umreth).                                     |
| Dalsukhbhai Jerambhai Patel (Cong.), (Palitana).                      | Manibhai Asharam Shah (Cong.), (Savli).                                   | Parmananddas Jivabhai Oza (Cong.), (Una).                                      |
| Uttambhai Harjibhai Patel (S.T.) (Cong.), (Pardi).                    | Somabhai C. Desai (J.P.), (Shahpur).                                      | Shankerlal Mohanlal Patel (Swa.), (Unjha).                                     |
| Vijaykumar Madhavrai Trivedi (Cong.), (Patan).                        | Fatesinhrao Pratapsinhrao Gaekwad (Cong.), (Sayajiganj).                  | Jayaram Anandbhai Patel (Cong.), (Upleta).                                     |
| Anvarbeg Ahmedbeg Mirza (Cong.), (Pellad).                            | Parvatsinh Ghamirsinh Parmar (Cong.), (Shehera).                          | Navalchand Motilal Kansara (Cong.), (Vagra).                                   |
| Popatlal Dahyabhai Kakkad (Cong.), (Porbandar).                       | Madhavlal Lalluram Pandya (Cong.), (Sidhpur).                             | Gangaram Chunilal Raval (Cong.), (Vijapur).                                    |
| Narendrasinh Agarsinhji Jhala (Swa.), (Prantij).                      | Manubhai Pancholi (Cong.), (Sihor).                                       | Govindbhai Haribhai Patel (Cong.), (Viramgam).                                 |
| Raysinhji K. Jadeja (Swa.), (Radhanpur).                              | Indubhai Chaturbhai Patel (Cong.), (Sojitra).                             | Kurji Dungar Patel (Swa.), (Visaradar).                                        |
| Chimanlal Harilal Shukla (J.S.), (Rajkot-I).                          | Keshar Bhagwan Dodiya (Swa.), (Somnath).                                  | Smt. Shantaben Bholabhai Patel (Cong.), (Visnagar).                            |
| Yuvaraj Shri Manoharsinhji Pradyumansinhji Jadeja (Ind.), (Rajkot-2). | Bhimsingbhai Fojsinh Vasava (S.T.) (Swa.), (Songadh).                     | Bhimsingbhai Sivabhai Gamit (S.T.) (Cong.), (Vyara).                           |
| Jashwantray Nanubhai Mehta (Cong.), (Rajula).                         | Gordhandas Ranchhoddas Chokhawala (Cong.), (Surat City East).             | Maharana Shri Surendrasinhji Joravarsinhji Jhala (Swa.), (Wadhwan).            |
| Shantilal Ranchhoddas Shah (Cong.), (Rakhial).                        | Cap. Golandaz Shri Mohmed Husein Abdul Shamad (Cong.), (Surat City West). | Mangaldas Gordhandas Pola (Cong.), (Wagodia).                                  |
| Sanatkumar Maganlal (P.S.P.), (Raopura).                              | Popatlal Mulshanker Vyas (Cong.), (Surat City North).                     | Yuvaraj Shri Digvijaysinhji Pratapsinhji (Swa.), (Wankaner).                   |
| Bhupendrasinhji Gajsinhji Jadeja (Swa.), (Rapar).                     |                                                                           | Jagtabhai Purabhai Parmar (S.C.) (Swa.), (Wav).                                |
| Ramubhai Jethabhai Bhatia (Swa.), (Salia).                            |                                                                           |                                                                                |

## HARYANA VIDHAN SABHA

Seats : 81.

Speaker : Ch. Sri Chand ; Dy. Speaker : Sh. Manphool Singh ; Secretary : Sh. Tarlok Chand.

**Estimated Party Position :** State Congress (Indian National) Legislature Party . . . Opposition 33 ; Haryana Congress Legislature Party 14 ; Naveen Haryana Janta Legislature Party 16 ; Jan Sangh Legislature Party 13 ; Republican Legislature Party 2 ; Swatantra Legislature Party 2 ; Vacant seat 1 ; Total 81.

No scheduled caste member has been nominated in the Haryana Vidhan Sabha.

Hari Singh (Adam Pur.).

Fakir Chand Aggarwal (Ambala).

Dev Raj Anand (Ambala Cantl.).

Nihal Singh (Ateli).

Chand Ram (Babain).

Maj. Amir Singh ((Badhra).

Mani Ram Godara (Badopal).

Hardwari Lal (Bahadurgarh).

Tubi Ram (Ballabgarh).

Ram Dhari Balmiki (S.C.) (Baroda).

Parbhu Singh (S.C.) (Barwala).

Kanhiya Lal (S.C.) (Bawal).

Jagan Nath (Bawanikhera).

Partap Singh Daulata (Beri).

Bhagwan Dev Parbhakar (Bhiwani).

Ram Parkash (S.C.) (Chhachhrauli).

Kesra Ram (S.C.) (Dabwali).

Ganpat Rai (S.C.) (Dadri).

Partap Singh (Ellenabad).

Kamal Dev Kapil (Faridabad).

Gobind Rai Butra (Fatehabad).

Din Mohammad (Ferozepur).

Mool Chand Jain (Gharuanda).

Ram Dhari Gaur (Gohana).

Rao Birendra Singh (Gurgaon).

Partap Singh Thakran (Gurgaon).

Hari Singh (Hantri).

Gaya Lal (S.C.) (Hassan Pur).

Sri Chand (Hassangarh).

Debi Singh Tewatia (Hathin).

Smt. Sneh Lata (Hissar).

Smt. Prazanna Devi (Indri).

Om Parkash (Jagadhri).

Jaswant Singh (Jatusana).

Daya Krishan (Jind).

Dal Singh ((Julana).

Ram Kishan Azad (S.C.) (Jundla).

Rajinder Singh (Kailana).

Om Prabha Jain (Kaithal).

Nasib Singh (Kalanur).

Maru (S.C.) (Kalayat).

Lachman Singh (Kalka).

Dalip Singh (Kaniala).

Ram Lal Chaudhri (Karnal).

Sheryo Nath (Kiloi).

Hira Nand (Loharu).

Hari Singh (Mahendragarh).

Maha Singh (Meham).

Ram Parhad (Mullana).

Jaswant Singh (Mundhal-Khurd).

Smt. Lekhwati Jain (Naggal).

Lall Singh (Naraingarh).

Pt. Panwari Lal Chhakkar (Narnaul).

Rameshwar Datt (Narnaund).

Shamsher Singh (Narwana).

Multan Singh (Naultha).

Shiv Ram Verma (Nilokheri).

Rahim Khan (Nuh).

Manphool Singh (Palandi).

Dhan Singh (Palwal).

Fateh Chand (Panipat).

Chaman Lal Gupta (Pehowa).

Ram Pal Singh (Pundri).

Rizak Ram (Rai).

Ran Singh (S.C.) (Rajaund).

Rajkumari Sumitra Devi (Rewari).

Brahm Singh (S.C.) (Rohtak S.C.).

Mangal Sein (Rohtak).

Prem Sukh Dass (Rori).

Siri Krishan (Safidon).

Phool Chand (Salhawas).

Randhir Singh (Samhalka).

Jagdish Chander (Shahabad).

Pohloo Jagjit Singh (Sherhada).

Lachhman Das Arora (Sirsa).

Mahabir Singh (Sohana).

Mohan Lal Thakar (Somepat).

Om Parkash Sharma (Thanesar).

Harpal Singh (Tohana).

Bansi Lal (Tosham).

Bhagwat Dayal Sharma (Yamuna Nagar).

## HIMACHAL PRADESH VIDHAN SABHA

Seats : 61 (S.C. 14, S.T. 1). Elected : 58 ; Nominated : 3.

Speaker : Des Raj Mahajan.

Dy. Speaker : Amin Chand.

An estimate of party position is as follows : Congress 38 (including three nominated) ; Jan Sangh 7 ; Independent 14 ; Communist 2.

Hari Ram (Cong.), (Amb.).

Hira Singh Pal (Ind.), (Arki).

Bansi Ram (C.P.I.), (Bajnath).

Piru Ram (S.C.) (Cong.), (Bath).

Des Raj Mahajan (Cong.), (Banikhet).

Indar Singh (J.S.), (Bhatiyat).

Dhian Singh (J.S.), (Bhota).

D. B. Shankhyan (Cong.), (Bilaspur).

Karam Singh (Cong.), (Chachiot).

Kishori Lal (J.S.), (Chamba).

Keval Ram Negi (Ind.), (Chopal).

Ved Bhushan (Ind.), (Dehra).

Kashmir Singh (Cong.), (Dharampur).

Kultar Chand (Cong.), (Dharamsola).

Lokh Ram (Ind.), (Doon).

Dhinoor Ram (S.C.) (Cong.), (Gangah).

Mehnga Singh (S.C.) (Cong.), (Gagrel).

Nikkoo Ram (S.C.) (Cong.), (Geharwin).

Khazan Singh (Cong.), (Ghumarwin).

Hari Singh (Ind.), (Gopalpur).

Churamani (Ind.), (Gulor).

Kanshi Ram (J.S.), (Hamirpur).

Paras Ram (C.P.I.), (Jaswan).

Ram Chandra (Cong.), (Jawali).

Gopi Rao (S.C.) (Cong.), (Jogindernagar).

Ram Lal (Cong.), (Jubbal).

Nek Ram (S.C.) (Cong.), (Kandaghat).

Hari Ram (Cong.), (Kangra).

Mansa (S.C.) (Ind.), (Karsog).

Sita Ram (Cong.), (Kasumpti).

T. S. Negi (S.T.) (Ind.), (Kinnaur).

Lall Chand Prarthi (Cong.), (Kulu).

Ranjit Singh (Ind.), (Kulbhar).

Sukh Ram (Cong.), (Mandi).

Amar Singh (S.C.) (J.S.), (Mewa).

Babu Ram (Ind.), (Nadavim).

Amin Chand (Cong.), (Nadaunta).

Hardial (Cong.), (Nagrota).

Tapindra Singh (Cong.), (Nahan).

Arjan Singh (Cong.), (Nalagarh).

Kartar Singh (Cong.), (Nurpur).

Zalam Singh (S.C.) (Cong.), (Pachhad).

Kunj Bihari (Cong.), (Palampur).

Guman Singh (Cong.), (Paonta).

Dr. Y. S. Parmar (Cong.), (Rainka).

Wazir (S.C.) (Cong.), (Rajgir).

Vidya Dhar (S.C.) (Cong.), (Rajnagar).

Nalu Ram (S.C.) (Ind.), (Rampur).

Padam Dev (Cong.), (Rohru).

Vidya Sagar (Ind.), (Santokhgarh).

Daulat Ram Chauhan (J.S.), (Simla).

Dib Ram Shabab (Cong.), (Siraj Inner).

Ishar Dass (S.C.) (Cong.), (Siraj Outer).

Keshav Ram (S.C.) (Cong.), (Solan).

Durga Chand (J.S.), (Sulah).

Lachhmi Datt (Cong.), (Sundernagar).

Jai Behari Lal Khachi (Ind.), (Theog).

Parkash Chand (Ind.), (Una).

Nominated

Brahmanand (Cong.), (Kangra).

N. L. Verma (Cong.), (Simla).

Surat Singh Vaid (Cong.), (Sirmur).



# JAMMU AND KASHMIR LEGISLATIVE COUNCIL

Strength : 36.

Chairman : Pt. Sheonarayan Fotedar.

Deputy Chairman : Chunilal Sharma.

## Elected by the Legislative Assembly :

Jotshi Ram Krishen.  
Sardar Piara Singh.  
Wazir Paras Ram.  
Peer Ghyas-Ud-Din.  
Gulzar Ahmed.  
Ghulam Mustafa.  
Amir-Ullah Khan.  
Syed Hussain.  
Munshi Habib Ullah.  
Jatendar Dev.  
Noor Mohamed.

Maulvi Mohamad Anwar Shah Masodi.  
Gurmukh Singh.  
Mohamad Din Bandey.  
Sardari Lal Mahajan.  
Dina Nath.  
Ghulam Hassan Mir.  
Sonam Wangil.  
Harnam Singh.

## Elected by Local Authorities :

Dina nath Mahajan.  
Ghulam Hassain Gilani.

## Panchayat Constituency :

Mangat Ram Sharma.  
Mukhtar Ahmed.  
Ghulam Ahmed Mir.

## Nominated by the Governor :

Major Piar Singh.  
Saif-Ud-Din Mukdoml.  
Madan Lal.  
Haji Mir Alam.  
Mohamed Shaffi.  
Col. R. N. Chopra.

# JAMMU AND KASHMIR LEGISLATIVE ASSEMBLY

Seats : 75 (including 6 seats reserved for Schedule Castes) ; Electorate : 20,30,366.

Speaker : Ghulam Mohammed Rajpori.

Dy. Speaker : Beli Ram.

An estimate of party position is given below :  
Congress 60 ; National Conference 7 ; Jan Sangh 3 ; Independent 3 ; Vacant 3.

Dharma Pal (Cong.), (Akhnoor).  
Gulam Mohamad Sadiq (Cong.), (Amira Kadal).  
Shamasud-Din (Cong.), (Anantnag).  
Hakim Syed Madhi (N.C.), (Badgam).  
Moh'd Anwar Khan (Cong.), (Bandipora).  
Moh'd Akhtar (N.C.), (Banihal).  
Shamas Ud Din (N.C.), (Baramulla).  
Mahant Ram (Cong.), (Basohli).  
Abdul Quddus Azad (Cong.), (Beerwa).  
Jagat Ram Aryan (Cong.), (Bhaderwah).  
Mufti Moh'd Sayeed (Cong.), (Bajbehara).  
Randhir Singh (Cong.), (Billawar).  
Bhagar Chajjoo Ram (S.C.) (Cong.), (Bishnah (R)).  
Ghulam Mohd Mir (Cong.), (Chadora).  
Abdul Qayoom (Cong.), (Chararsharif).  
Chajjoo Ram (Cong.), (Chhamb).  
Moh'd Hussain (Cong.), (Darhal).  
Manohar Nath Kaul (Cong.), (Devsar).  
Lassa Wani (Cong.), (Doda).

Moh'd Maqbool Bhat (Cong.), (Ganderbal).  
Mohammad Ayub Khan (Cong.), (Ghulab Garh).  
Sardar Surrinder Singh (N.C.), (Gulmarg).  
Srikant Kaul (Cong.), (Haba Kadal).  
Abdul Gani Lone (Cong.), (Handwara).  
Abdul Gani Mir (Cong.), (Harl).  
Moh'd Yahya Siddiqi (N.C.), (Hazaratbal).  
Abdul Gani Goni (Cong.), (Inderwal).  
Trilochan Dutta (Cong.), (Jammu Cantt.).  
Prem Nath Dogra (J.S.), (Jammu North).  
Ram Nath (J.S.), (Jammu South).  
Kanwar Ranjit Singh (Cong.), (Jandra-Garota).  
Girdhari Lal Dogra (Cong.), (Jasmugarh).  
Bashir Ahmed-Mian (Cong.), (Kangan).  
Vacant (Kargil).  
Mohamad Younis (Cong.), (Karnah).  
Panjabu Ram (S.C.) (Cong.), (Kathua (R)).  
Ghulam Ahmed (Cong.), (Khanyar).  
Abdul Gani Namthali (Cong.), (Khansahib).  
Ghulam Mustafa (Cong.), (Kishtwar).  
Moh'd Ashraf Khan (Cong.), (Kothar).  
Moh'd Yaqub Butt (Cong.), (Kulgam).  
Mohd Sultan Tantry (Cong.), (Kupwara).  
Sonam Wangyal (Cong.), (Leh).  
Ghulam Nabi Wani (Cong.), (Lolab).  
Guran Ditta Mal (S.C.) (Cong.), (Marh (R)).  
Mohammad Aslam (Cong.), (Mendhar).  
Abdul Rahman (Cong.), (Nandi).

Abdul Aziz (Cong.), (Noorabad).  
Hassan-ud-Din (Cong.), (Nowbug).  
Beli Ram (Cong.), (Nowshera).  
Makhan Lal (Cong.), (Pahalgam).  
Peer Mubarak Shah (Cong.), (Pampore).  
Ghulam Rasool Dar (N.C.), (Pattan).  
Mir Ghulam Moh'd (Cong.), (Poonch).  
Sana Ullah Master (Cong.), (Pulwama).  
Ghulam Rasool Kar (Cong.), (Rafiabad).  
Abdul Rashid (Cong.), (Rajouri).  
Ghulam Moh'd Rajpori (Cong.), (Rajpora).  
Hans Raj (Cong.), (Ramban).  
Dina Nath (Cong.), (Ramgarh).  
Chandu Lal (Cong.), (Ramnagar).  
Bansi Lal Kohistani (Cong.), (Reasi).  
Kulbir Singh (Cong.), (R. S. Pora).  
Vacant (Safa Kadal).  
Parmanand (S.C.) (Cong.), (Samba (R)).  
Abdul Aziz Parrey (Cong.), (Sonawari).  
Ghulam Nabi Marcha (Cong.), (Sapora).  
Shamin Ahmed Shamin (Ind.), (Spopian).  
Noor Mohammad (Cong.), (Tankipora).  
Shiv Charan Gupta (J.S.), (Tikri).  
Ali Mohammed Naik (Ind.), (Tral).  
Hem Raj Jandial (Cong.), (Udhampur).  
Mohamad Muzaffar Khan (Cong.), (Uri).  
Mir Qasim (Cong.), (Verinag).  
Syed Abdulla (N.C.), (Zadibal).

# KERALA LEGISLATIVE ASSEMBLY

Constituencies : 134 (including one nominated) ;

Seats : 134.

Speaker : D. Damodaran Potti.

Deputy Speaker : M. P. Mohammed Jaffer Khan.

An estimate of party position is given below :

Indian National Congress 9 ; Kerala Congress 5 ; Communist Party of India (Marxist) 52 ; Communist Party of India 19 ; Muslim League 14 ; Revolutionary Socialist Party 6 ; Samyukta Socialist Party 19 ; Karshaka Thozhilali Party 2 ; Kerala Socialist Party 1 ; Independents 7 ; Nominated 1.

P. Ramalingam (C.P.I.), (Adoor).  
J. A. Chacko (K.C.), (Akalkunnam).  
R. Krishnan (C.P.I.) (M), (Alathur).  
M. K. A. Hameed (C.P.I.-M.—Ind.), (Alwaye).  
V. S. Achyudanandan (C.P.I.-M.), (Ambalapuzha).  
A. P. Kurian (C.P.I.-M.), (Ankamali).  
P. N. Chandrasenan (S.S.P.), (Aranmula).  
Mattapalli Majeed (S.S.P.), (Aryanaad).  
K. P. Kosalarama Das (C.P.I.-M.), (Attingal).  
M. Krishnan (S.S.P.), (Balagara).  
A. K. Appu (S.S.P.), (Bakuserry).  
K. Chathunni Master (C.P.I.-M.), (Beyyore).  
P. C. Raghavan Nair (C.P.I.-M.), (Calicut-I).  
M. A. Abubacker (M.L.), (Calicut-II).  
E. Ahamed (M.L.), (Cannanore).  
D. Damodaran Potti (S.S.P.), (Chadayamangalam).  
P. P. George (Cong.), (Chalakydy).  
K. G. Neelakantan Nambodiripad (C.P.I.), (Changanacherry).  
P. Ravindran (C.P.I.), (Chathannur).  
P. G. Purushottaman Pillai (C.P.I.-M.), (Chengannur).  
P. Kunhan (C.P.I.-M.), (Chelakkara-S.C.).  
K. A. Sivarama Bharathy (S.S.P.), (Chittur).  
P. K. Gopalakrishnan (C.P.I.), (Cranganore).  
N. Ganapathy (Cong.), (Devicolum-S.C.).

C. Kannan (C.P.I.-M.), (Edakkad).  
R. S. Unni (R.S.P.), (Eravipuram).  
Alexander Parambithara (Cong.), (Ernakulam).  
P. P. Wilson (S.S.P.), (Ettumanoor).  
B. V. Seethi Thangal (M.L.), (Guruvayoor).  
C. B. Chandrasekhara Warriar (C.P.I.-M.), (Haripad).  
N. K. Balakrishnan (S.S.P.), (Hosdurg).  
E. P. Krishnan Nambiar (C.P.I.-M.), (Irikkur).  
C. K. Rajan (C.P.I.), (Irinjalakuda).  
Joseph Chazhikkattu (K.C.), (Kaduthuruthy).  
Dr. K. George Thomas (Cong.), (Kalloopara).  
Mustafa Kamal (C.P.I.-M.), (Kanjirapally).  
M. M. Thomas (K.T.P.-Ind.), (Karimannoor).  
Baby John (R.S.P.), (Karunagappally).  
U. P. Kurikullaya (Ind.), (Kasaragod).  
M. Hakimji Sahib (M.L.), (Kazhakuttam).  
C. K. Balakrishnan (C.P.I.-M.), (Kilimannoor-S.C.).  
P. S. Namboodiri (C.P.I.), (Kodakara).  
C. Vasudeva Menon (C.P.I.-M.), (Kollengode).  
Sayed Ummer Bafakih (M.L.), (Kondotty).  
Pandalam P. R. Madhavan Pillai (C.P.I.), (Konni).  
T. M. Meethiyan (C.P.I.-M.), (Kothamangalam).  
E. Chandrasekharan Nair (C.P.I.), (Kottarakara).  
M. K. George (C.P.I.-M.), (Kottayam).  
J. Camalias Moraes (S.S.P.-Ind.), (Kovalam).  
P. Unnikrishna Pillai (C.P.I.), (Krishnapuram).  
P. K. Sukumaran (C.P.I.-M.), (Kundara).  
V. Kuttikrishnan Nair (S.S.P.), (Kunnamangalam).  
A. S. N. Nambissan (C.P.I.-M.), (Kunnamkulam).  
K. Chandrasekhara Sastri (R.S.P.), (Kunnathur).  
K. K. Aboo (S.S.P.), (Kuthuparamba).  
K. K. Kumara Pillai (R.S.P.), (Kuttanad).  
C. M. Kutty (M.L.), (Kuttiapuram).  
O. Koran (S.S.P.), (Kuzalmanam-S.C.).  
K. Karunakaran (Cong.), (Mala).

N. I. Devassykutty (Cong.), (Manalur).  
M. Chadayan (M.L.), (Manjeri-S.C.).  
K. Mahabala Bhandari (Ind.), (Manjeshwar).  
S. Damodaran (C.P.I.-M.), (Mararikulam).  
M. P. Mohammed Jaffer Khan (M.L.), (Mattancherry).  
G. Gopanatha Pillai (S.S.P.), (Mavelikkara).  
M. K. Kelu (C.P.I.-M.), (Meppayar).  
P. V. Abraham (C.P.I.), (Muvattupuzha).  
E. V. Kumaran (C.P.I.-M.), (Nadapuram).  
A. S. Purushothaman (C.P.I.-M.), (Narakkal).  
T. K. Krishnan (C.P.I.-M.), (Nattika).  
K. G. Kunjukrishna Pillai (C.P.I.), (Nedumangad).  
M. Madasivan (C.P.I.-M.), (Nemom).  
R. Gopalakrishnan Nair (Cong.), (Neyyattinkara).  
K. Kunjali (C.P.I.-M.), (Nilambur).  
V. V. Kunhambu (C.P.I.-M.), (Nileswar).  
A. V. Aryan (C.P.I.-M.), (Ollur).  
P. P. Krishnan (C.P.I.-M.), (Ottappalam).  
K. M. Mani (K.C.), (Palai).  
R. Krishnan (C.P.I.-M.), (Palghat).  
P. Gangadharan (C.P.I.-M.), (Palluruthy).  
P. K. Kunjachen (C.P.I.-M.), (Pandalam-S.C.).  
N. Gamaliel (Cong.), (Parassala).  
K. T. George (Cong.), (Parur).  
K. Karunakaran Nair (C.P.I.-M.-Ind.), (Palhanamthitta).  
P. K. Raghavan (C.P.I.), (Pathanapuram-S.C.).  
A. V. Kunhambu (C.P.I.-M.), (Payyannur).  
K. I. Rajan (C.P.I.-M.), (Peermade-S.C.).  
V. V. Dakshinamoorthy (C.P.I.-M.), (Perambra).  
Paloli Mohammed Kutty (C.P.I.-M.), (Perinthalmanna).  
P. Govinda Pillai (C.P.I.-M.), (Perumbavoor).  
V. P. Cherukoya Thangal (M.L.), (Ponnani).  
K. M. George (K.C.), (Poonjar).  
E. M. George (C.P.I.-M.), (Puthupally).  
P. Kunhiraman Kidav (S.S.P.), (Quilandy).



M. K. Divakaran (C.P.I.), (Ranni).  
N. Prabhakara Thandar (C.P.I.-M.), (Sherthalai).  
C. Govinda Panicker (C.P.I.-M.), (Sreekrishnapuram).  
K. P. Raghava Poduval (C.P.I.-M.), (Tali-paramba).  
M. Moideenkutty Haji (M.L.), (Tanur).  
K. P. R. Gopalan (C.P.I.-M.), (Tellicherry).  
K. Avukkaderkutty Naha Haji (M.L.), (Thirurangadi).

E. John Jacob (K.C.), (Thiruvalla).  
K. C. Zacharia (C.P.I.-Ind.), (Thodupuzha).  
K. Moideenkutty Haji (M.L.), (Tirur).  
K. Sekharan Nair (C.P.I.-M.), (Trichur).  
T.K. Ramiakrishnan (C.P.I.-M.), (Trippunithura).  
E. T. Kunhan (C.P.I.-M.), (Trithala-S.C.).  
B. Madhavan Nair (S.S.P.), (Trivandrum-I).  
K. C. Vamadevan (R.S.P.), (Trivandrum-II).  
K. T. Jacob (C.P.I.), (Udumbanchola).  
N. K. Seshan (S.S.P.), (Vadakkanchery).

E. Balanandan (C.P.I.-M.), (Vadakkikara).  
P. S. Srinivasan (C.P.I.), (Vaikom).  
N. Vasudevan Pillai (C.P.I.-M.), (Vamanapuram).  
Abdul Majid (C.P.I.), (Varkala).  
K. Purushothaman Pillai (C.P.I.), (Vazhoor).  
C. S. Neelakantan Nair (S.S.P.), (Vilappil).  
K. K. Annan (C.P.I.-M.), (North Wynad-S.T.).  
M. Ramunny (S.S.P.), (South Wynad-S.T.).  
S. P. Luiz (Nominated).

## MADHYA PRADESH LEGISLATIVE ASSEMBLY

Seats : 297 (inclusive of one nominated) Scheduled Castes 39 ; Scheduled Tribes 61 ; Electorate 183,85,315.

Speaker : Kashiprasad Pande.

Dy. Speaker : Narbada Prasad Shrivastava.

An estimate of party strength is as follows :  
Cong. 166 ; Jan Sangh 67 ; Kranti Kari Vidhayak Dal 34 ; Samyukta Socialist Party 9 ; Praja Socialist 10 ; Independents 9 ; Communist Party 1 ; Nominated 1.  
Narain Rao Panchi Ram (Cong.), (Abhanpur).  
Bhure Lal (S.C.) (J.S.), (Agar (R)).  
Ram Gopal Tiwari (Cong.), (Akaltara).  
Bhagirath Bhewar (S.T.) (S.S.P.), (Alirajpur (R)).  
Madan Lal (S.C.) (J.S.), (Alot (R)).  
Ramhit (J.S.), (Amarpatan).  
S. S. Jhan Singh Takur (J.S.), (Amarcanda).  
Rati Ram (S.C.) (K.K.V.D.), (Ambah (R)).  
Dr. S. N. Tripathi (Cong.), (Ambikapur).  
Pachchita (S.C.) (Cong.), (Amanaganj (R)).  
Chandmal Birdichand (Cong.), (Anjar).  
K. Kosaria (S.C.) (Cong.), (Arang (R)).  
Multan Mal (K.K.V.D.), (Ashoknagar).  
Gopi Das Goel (S.C.) (J.S.), (Ashta (R)).  
Hargian Singh Bohare (P.S.P.), (Attair).  
Kanaihyalal Mehta (K.K.V.D.), (Badnagar).  
Dr. G. O. Sharma (J.S.), (Badnagar).  
T. Virendra Singh (K.K.V.D.), (Baderara).  
Laxman (Cong.), (Bagicha).  
Kailash Chandra Joshi (J.S.), (Bagli).  
Raj Bhanu Shukla (J.S.), (Bahoriband).  
Mahipal Singh (S.T.) (Cong.), (Baihar (R)).  
K. Ramchandra Singh Deo (Cong.), (Baikunthpur).  
Arjan Das (J.S.), (Bairagarh).  
Laxmi Narain Sharma (J.S.), (Bairiya).  
Gowardhandas Khandelwal (J.S.), (Baitul).  
Jodha Singh (S.T.) (Cong.), (Bajag (R)).  
Bundaru Mahadeo (S.T.) (K.K.V.D.), (Bakaband (R)).  
Nand Kishore Sharma (Cong.), (Balaghat).  
Hiralal Sonbojir (Cong.), (Balod).  
Rameswar Prasad Sharma (Cong.), (Baloda).  
Brijlal Verma (Cong.), (Baloda Bazar).  
Ramcharan Pujari (J.S.), (Banda).  
Than Singh (Cong.), (Barasirani).  
Darshan Singh (J.S.), (Barelli).  
Ravindranath Bhargava (Cong.), (Barghat).  
S. P. Chanpuria (S.S.P.), (Bargi).  
Amolak Chand Jain (Cong.), (Barwah).  
Daval Nana (S.T.) (J.S.), (Barwani (R)).  
Mahendra Bahadur Singh (Cong.), (Basana).  
Hiralal Pappal (S.C.) (K.K.V.D.), (Basoda (R)).  
G. D. R. Tanaskar (P.S.P.), (Bemetara).  
Daddu Singh Balajee (S.T.) (J. S.), (Bhaidehi (R)).  
Kishorilal Hans (S.C.) (K.K.V.D.), (Bhandar (R)).  
T. J. Ram Ravare (S.T.) (P.S.P.), (Bhanupratappur (R)).  
Shivalal Mehta (Cong.), (Bhatapara).  
Keju Ram (Ind.), (Bhatnagaon).  
Preet Ram Mangalu Ram (S.C.) (Cong.), (Bhatgaon (R)).  
Anup Singh Bhagwan Singh (Cong.), (Bhikanaganj).  
Dharam Pal Singh Gupta (Cong.), (Bhilai).  
Raghubir Singh Kuswah (S.S.P.), (Bhind).  
Gulabchand Thamad (Cong.), (Bhojpur).  
Shakir Ali Khan (C.P.I.-M.), (Bhopal).  
Darbari (S.T.) (Cong.), (Bichhiya (R)).  
Keshari Shah (S.T.) (Ind.), (Bijapur (R)).  
Kedar Nath (Cong.), (Bijawar).  
Dr. Ram Charan Rai (Cong.), (Bilaspur).  
Chitra Kant Jayaswal (Cong.), (Bilha).  
Brij Kishor Patariya (Cong.), (Bina).  
Babulal Jain (Cong.), (Bohani).  
Mohan Lal Shishir (J.S.), (Budhni).

Paramanand (J.S.), (Burhampur).  
Ramkisor Shukla (Cong.), (Byauhari).  
Bishnu Das (Cong.), (Champa).  
Sagar Singh Sisodiya (K.K.V.D.), (Chanchawra).  
Bhavanilal Verma (Cong.), (Chandrapur).  
T. Deo Prasad Arya (S.T.) (S.S.P.), (Chanki (R)).  
Devilal Sharma (Cong.), (Chaurai).  
Thakur Deep Singh (S.T.), (Cong.), (Chhapara).  
Mahendra Kumar (Cong.), (Chattarpur).  
Smt. Vidyawati Mehta (Cong.), (Chhindwara).  
Chandra Pratap Tiwari (P.S.P.), (Chirhot).  
Magadu Ganga (S.T.) (S.S.P.), (Chitrakot (R)).  
Ram Nandan Singh (P.S.P.), (Chitrakut).  
Jagan Nath Singh (K.K.V.D.), (Dabara).  
Prabhu Narayan Tandu (Cong.), (Damoh).  
Paras Ram Ghurve (S.T.) (Cong.), (Damua (R)).  
Rama Boti (S.T.) (K.K.V.D.), (Danteicara (R)).  
Shyam Sundar Shyam (K.K.V.D.), (Datia).  
Vinay Kumar Diwan (Cong.), (Dewa).  
Parshu Ram (J.S.), (Deori).  
Tribhuvan Singh (S.T.) (Cong.), (Deosar (R)).  
Chote Lal (S.C.) (Cong.), (Deotlab (R)).  
Bhagwat Sabu (Cong.), (Depalpur).  
Hate Singh (Cong.), (Dewas).  
Dr. Tuman Lal (S.C.) (Cong.), (Dhamdha (R)).  
Bhopal Rao Bissujee (Cong.), (Dhamtari).  
Vasant Rao (J.S.), (Dhar).  
Chandra Chud Prasad Singh (Cong.), (Dharmajai-garh).  
Fateh Bhanu Singh (S.T.) (Cong.), (Dharmapuri (R)).  
Munna Lal (Cong.), (Dharsivan).  
Gorelal Bhau Singh (S.T.) (Cong.), (Dhoolkot (R)).  
Sumer Singh Amralya (S.C.) (K.K.V.D.) (Dimmi (R)).  
Sunderlal Uralti (S.T.) (P.S.P.), (Didori (R)).  
Jemuklal Bhedia (S.T.) (Cong.), (Dondilohra (R)).  
Madan Tiwari (S.S.P.), (Dongargaon).  
Ganeshmal Bhandari (Cong.), (Dongargarh).  
Ratnakar Jha (Cong.), (Durg).  
Shyam Sundar Narain Mushram (Cong.), (Gadarwara).  
Mohanlal Sethia (J.S.), (Garoth).  
Bhanu Pratap Singh (S.T.) (J.S.), (Garghoda (R)).  
Madu (S.T.) (J.S.), (Ghoradongri (R)).  
Parvat Singh (S.T.) (Cong.), (Ghuguri (R)).  
Rao Jagdish Singh (K.K.V.D.), (Gird).  
Lalman Singh (S.T.) (Cong.), (Gobadbanas (R)).  
K. L. Kacherumal (S.C.) (K.K.V.D.), (Gohad (R)).  
T. S. Bhushan Singh (Cong.), (Golegaon).  
K. N. Pradhan (Cong.), (Govindpura).  
Muni Prasad (Cong.), (Gudh).  
Inder Singh (J.S.), (Gulana).  
Raman Lal Premi (K.K.V.D.), (Guna).  
Vasudev Chandrakar (Cong.), (Gunderdehi).  
Jagdish Prasad Gupta (J.S.), (Gwalior).  
Nanhe Lal Patel (Cong.), (Harda).  
Kali Charan Sakargaye (Cong.), (Harsud).  
J. K. Bajaj (Cong.), (Hata).  
Smt. Shusheel Devi Dixit (Cong.), (Hoshangabad).  
A. B. Koramat Beg (S.S.P.), (Indore I).  
Gangaram Tiwari (Cong.), (Indore II).  
Kalyan Jain (S.S.P.), (Indore III).  
Yogdutt Sharma (K.K.V.D.), (Indore IV).  
Haril Prasad Chaturvedi (Cong.), (Itarsi).  
Man Mohan Das (Cong.), (Jabalpur Cant.).  
Jagdish Narayan Awasthi (Cong.), (Jabalpur East).  
P. Kunjilal Dube (Cong.), (Jabalpur West).  
Deva Kosa (S.T.) (J.S.), (Jagdalpur (R)).

Ram Prasad Singh (S.T.) (Cong.), (Jaisinghnagar (R)).  
Bhagwan Deen Gaur (S.T.) (Cong.), (Jaitpur (R)).  
Bankal Lal (Cong.), (Jaora).  
Muhammad Bashir Khan (Cong.), (Jarhagaon).  
Johan (S.T.), (Cong.), (Jashpur (R)).  
Narendra Singh Judeo (Cong.), (Jalara).  
Birendra Kumar Sakhlecha (J.S.) (Jawad).  
Ram Charan Lal (Ind.), (Jaura).  
Ajmer Singh (S.T.) (Cong.), (Jawal (R)).  
Bapu Singh (S.T.) (Cong.), (Jhabua (R)).  
Vishram Dangai (S.T.) (Cong.), (Kankur (R)).  
Smt. Vijaya Raje Sindhiya (K.K.V.D.), (Karera).  
Dr. Kanaiya Lal Sharma (Cong.), (Kasdol).  
Vipan Lal Patel (Cong.), (Katangi).  
Dwaraka Prasad Mishra (Cong.), (Katangi).  
B. L. Naubathram (Cong.), (Katghora).  
T. V. Raj Singh (K.K.V.D.), (Kavardha).  
Takur Nathuram Mals (S.T.) (J.S.), (Kesal (R)).  
Kum. Vimala Verma (Cong.), (Kerlari).  
Virendra Singh (K.K.V.D.), (Khachrod).  
Maj. Raj Bahadur Virendra Bahadur Singh (Cong.), (Kairagarh).  
Shankarlal Tiwari (Cong.), (Khairalangi).  
Krishna Rao (J.S.), (Khandva).  
Balbant Rukhmaji (Cong.), (Kharagaon).  
Prabhu Dayal Gahlot (Cong.), (Khilchipur).  
Rilli Ram (S.C.) (Cong.), (Kharagpur (R)).  
Narbada Prasad Kinkir (J.S.), (Khategaon).  
Haril Prasad Shukla (Cong.), (Kherji).  
Kunji Lal Chaudhury (S.C.) (J.S.), (Khurai (R)).  
Jhankar Singh (Cong.), (Kirnapur).  
Jagdish Prasad Verma (K.K.V.D.), (Kolaras).  
M. Lachh Ram (S.T.) (K.K.V.D.), (Kondagaon (R)).  
Dhansay (S.T.) (Cong.), (Konta (R)).  
Mathura Prasad Dube (Cong.), (Kota).  
Mrigendra Singh (Cong.), (Kotma).  
Chhatu Singh (S.T.) (Cong.), (Kukshi (R)).  
Tarachand Ram Dayal (Cong.), (Kurud).  
Krishna Kumar Nutan (J.S.), (Kurwai).  
S. P. Tripathi (J.S.), (Lahar).  
Vasant Rao Ulke (S.T.), (Cong.), (Lakhandon (R)).  
Deveswar Singh (J.S.), (Lakhanpur).  
Narbada Prasad Srivastava (Cong.), (Lanji).  
Sheetala Sahay (J.S.), (Lashkar).  
Smt. Saroj Kumari (Ind.), (Laundi).  
Rajendra Prasad Shukla (Cong.), (Lormi).  
Chamru Vissai (S.T.) (Cong.), (Lundra (R)).  
Lachman Das (S.C.) (Cong.), (Maharajpur (R)).  
Nemichand Simal (Cong.), (Mahasamund).  
Seeta Ram Sadhu Ram (S.C.) (Cong.), (Maheswar (R)).  
Ram Chandra (J.S.), (Mahidpur).  
R. C. Jal (Cong.), (Mahu).  
Gopal Saran Singh (Cong.), (Maihar).  
Govind Singh Joo Deo (Ind.), (Malehra).  
Ved Ram (S.C.) (Cong.), (Malkharoda (R)).  
Nand Ram Das (Cong.), (Manasa).  
Shiv Bhanu Solanki (S.T.) (Cong.), (Manawar (R)).  
Smt. Narayani Devi Jha (Cong.), (Mandla).  
Thakur Mohan Singh (J.S.), (Mandsaur).  
Dharma Pal Singh (S.T.), (Manendragarh (R)).  
Rukmini Ram Pratap Singh (Cong.), (Mangava).  
Lal Chandra Sekhar Singh (S.T.) (Cong.), (Marwahi (R)).  
Budh Rao Daulat Rao (Cong.), (Masod).  
Godilprasad (S.C.), (Cong.), (Masturi (R)).  
Jagdish Prasad (Ind.), (Mauganj).



Raj Singh Bhadauriya (K.K.V.D.), (*Mehgaon*).  
 Dharam Prasad Patra (S.C.) (Cong.), (*Morar (R)*).  
 Johar Singh (J.S.), (*Morena*).  
 Ganesh Ram Anant (S.C.) (Cong.), (*Mungeli (R)*).  
 Rao Chandan Singh (K.K.V.D.), (*Mungawli*).  
 Bal Krishna Rao Deo Rao (Cong.), (*Multi*).  
 Gulab Chand Gupta (Cong.), (*Mundwara*).  
 Nareshchandra Johari (J.S.), (*Murar*).  
 Visweshwar Prasad (S.C.) (Cong.), (*Nagaud (R)*).  
 Badrinath Jaideo (S.T.) (K.K.V.D.), (*Narainpur*).  
 Mahendra Singh Kiledar (Cong.), (*Narsinghpur*).  
 Krishna Mohan (J.S.), (*Narsinghgarh*).  
 Jagan Nath (S.T.) (Cong.), (*Nawrojabad (R)*).  
 Khuman Singh (J.S.) (*Neemuch*).  
 Radha Krishna (J.S.), (*Nirmarkheri*).  
 Lala Ram (Cong.) (*Niwadi*).  
 Fateh Singh (S.T.) (Cong.), (*Niwasi (R)*).  
 Kunj Bihari Lal Guru (Cong.), (*Nohta*).  
 Deosay Marabi (S.T.) (Cong.), (*Pal (R)*).  
 Bhavar Singh (Cong.), (*Palari*).  
 Mahavir Kurre (S.C.) (Cong.), (*Pamgar (R)*).  
 Parmanand Bai Patel (Cong.), (*Panagar*).  
 Phoolchand Varma (S.C.) (J.S.), (*Pandhana (R)*).  
 Madhav Lal Dube (Cong.), (*Pandhurna*).  
 Het Ram Dube (Cong.), (*Panna*).  
 B. R. Amrit Rao (S.C.) (Cong.), (*Parasia (R)*).  
 Pratap Lal (Cong.), (*Paraswada*).  
 Smt. Asha Lata (S.C.), (Cong.), (*Patan (R)*).  
 Umed Singh (S.T.) (Cong.), (*Pathalgaon (R)*).  
 K. L. Bhav Singh (S.C.) (Cong.), (*Patharia (R)*).  
 Ram Sewak (Cong.), (*Pawai*).  
 Bel Singh (S.T.) (Cong.), (*Pellawad (R)*).  
 Laxmi Narain Gupta (K.K.V.D.), (*Pichhore*).  
 Smt. Ratan Kumari Devi (Cong.), (*Piparia*).  
 B. P. S. Giri Raj Singh (Cong.), (*Pithaura*).  
 Babu Lal Arjun (S.C.) (K.K.V.D.), (*Pohari (R)*).  
 Sahdeo Singh (S.T.) (J.S.), (*Premnagar (R)*).  
 Lalan Singh (S.T.) (Cong.), (*Pushprajgarh (R)*).

Raja Nareshchandra Singh (Cong.), (*Pusaur*).  
 Prabhu Lal Jadav (S.C.), (K.K.V.D.), (*Ragho-*  
*garh (R)*).  
 R. K. Laxmandas Agrawal (P.S.P.), (*Raigarh*).  
 S. C. Raghuvir Prasad Tiwari (Ind.), (*Raipur*).  
 Bijay Singh (Cong.), (*Rajgarh*).  
 Shyam Charan Shukla (Cong.), (*Rajim*).  
 Kishori Lal Shukla (Cong.), (*Rajnandgaon*).  
 Baraku Mahadu (S.T.) (Cong.), (*Raipur (R)*).  
 Pyarelal (S.T.) (Cong.), (*Rampur (R)*).  
 Govind Narain Singh (Cong.), (*Rampur Baghelan*).  
 Dr. Devi Singh (Cong.), (*Rattam*).  
 Raghbir Singh (K.K.V.D.), (*Raun*).  
 Narmada Prasad Tiwari (J.S.), (*Rehli*).  
 Satrugnan Singh Tiwari (Cong.), (*Reeva*).  
 Brij Raj Singh (K.K.V.D.), (*Sabalgarh*).  
 Dalchand Jain (Cong.), (*Sagar*).  
 Smt. Indumati Devi (Cong.), (*Sakti*).  
 Pabhu Dayal (S.T.) Cong., (*Sailana (R)*).  
 Larang Say (S.T.) (J.S.), (*Samari (R)*).  
 Babulal Kaluji (S.T.) (J.S.), (*Samwer (R)*).  
 Kundan Lal (S.C.) (J.S.), (*Sanchi (R)*).  
 Jai Dev Satpati (Cong.), (*Saraipali*).  
 Kunj Ram (S.C.) (Cong.), (*Saramgarh (R)*).  
 Ganga Ram Jadav (S.C.) (J.S.), (*Sarangpur (R)*).  
 Babu Singh (S.T.) (J.S.), (*Sardarpur (R)*).  
 Smt. Kanta Parekh (Cong.), (*Satna*).  
 M. R. Narayan Rao Chavare (Cong.), (*Sausar*).  
 Moksha Madan Singh (S.T.) (Cong.), (*Seetapur*  
*(R)*).  
 Mikala Moti (S.T.) (J.S.), (*Sendhawa (R)*).  
 Surya Deo Sharma (K.K.V.D.), (*Sevoda*).  
 Manohar Rao Jatar (Cong.), (*Sewani*).  
 Babulal (Cong.), (*Shakpur*).  
 Ramesh Chandra (J.S.), (*Shajapur*).  
 Sivacharan Tiwari (J.S.), (*Sheopur*).  
 Susheel Bahadur (J.S.), (*Shivapuri*).

Veerchand (J.S.), (*Shujalpur*).  
 Keshav Prasad Singh (P.S.P.), (*Sidhi*).  
 Pusau Ram (S.T.) (Cong.), (*Sihara (R)*).  
 Rajmal Mewade (J.S.), (*Sihor*).  
 Kashi Prasad Pandey (Cong.), (*Sihora*).  
 Prem Singh (S.T.) (Cong.), (*Singaroli (R)*).  
 Yamuna Prasad Shastri (P.S.P.), (*Sirman*).  
 Mangal Singh (J.S.), (*Siroj*).  
 Rajendra Singh Sirodiya (J.S.), (*Sitamau*).  
 Krishna Pal Singh (Cong.), (*Sohagpur*).  
 Khoobchand Golia (S.C.) (J.S.), (*Sonkutch (R)*).  
 Brajeshwar Sharan Singh (Cong.), (*Surajpur*).  
 Narmada Prasad Rai (S.C.) (J.S.), (*Surakhi (R)*).  
 Shivalal (J.S.), (*Susner*).  
 Champalal Arya (S.C.) (J.S.), (*Suwasara (R)*).  
 Manharam Lal (J.S.), (*Takhatpur*).  
 Lal Kirti Kumar Singh (S.T.) (Ind.), (*Tanakar*  
*(R)*).  
 Keddar Nath (S.T.) (J.S.), (*Tapkara (R)*).  
 Madhav Singh (J.S.), (*Tarana*).  
 Radu Singh (S.T.) (S.S.P.), (*Thandala (R)*).  
 Gyanendra Singh (Cong.), (*Tikamgarh*).  
 G. L. Choudhury (S.C.) (Cong.), (*Timran (R)*).  
 Kamaleswar Singh (Cong.), (*Tyothar*).  
 Dr. Shankar Dayal Sharma (Cong.), (*Udaipur*).  
 Mahadeo Joshi (K.K.V.D.), (*Ujjain North*).  
 Ganga Ram Parmar (S.C.) (J.S.), (*Ujjain South*).  
 Arjun Singh (Cong.), (*Umaria*).  
 Shanbhu Singh (K.K.V.D.), (*Vidisha*).  
 Jag Mohan Singh (K.K.V.D.), (*Vijaypur*).  
 Laxmi Shankar (Cong.), (*Vijay Raghogarh*).  
 Khan Singh Komarra (S.T.) (J.S.), (*Vindranawa-*  
*garh (R)*).  
 Malu Ram Singhanla (K.K.V.D.), (*Virendra-*  
*nagar*).  
 Jagan Nath (J.S.), (*Vyawara*).  
 F. A. Lemos (*Jabalpur*)—Nominated.

## MADRAS LEGISLATIVE COUNCIL

(An estimate of party strength is as follows :  
 Congress 41 ; United Party 6 ; Dravida Munnetra  
 Kazhagam 5 ; Indian Union Muslim League 1 ;  
 Toilers Commonweal Party 1 ; Independents  
 4; Vacant 5.

**Chairman :** M. A. Manickavelu ; **Deputy**  
**Chairman :** V. K. Palaniswamy Gounder ; **Secre-**  
**tary :** G. M. Alagarwamy.

### Legislative Assembly Constituency (21)

K. S. Abdul Wahab (I.U.M.L.).  
 T. S. Arunachalam (Cong.).  
 C. P. Chitrarasu (D.M.K.).  
 M. Ethirajulu (Cong.).  
 A. Krishnaswamy Vandayar (Cong.).  
 S. V. Lakshmanan (Cong.).  
 Smt. Lakshmi Krishnamoorthy (Cong.).  
 M. A. Manickavelu (Cong.).  
 Molanlal Mehta (Cong.).  
 S. Muthu (D.M.K.).  
 N. V. Natarajan (D.M.K.).  
 V. K. Palaniswamy Gounder (Cong.).  
 A. Ponnappa Naidu (Cong.).  
 S. R. P. Ponnuswamy Chettiar (Cong.).  
 J. Ponnuswamy Villavarayar (Cong.).  
 C. V. Rajagopal (D.M.K.).

K. Rajaram (Cong.).  
 K. Ramadass (Cong.).  
 K. Ramakrishna Achari (Cong.).  
 Raman Nair (Cong.).  
 R. Venkataraman (Cong.).

### Local Authorities Constituency (18)

A. Chidambaram Mudaliar (Cong.).  
 T. V. Devaraja Mudaliar (Cong.).  
 K. Doraiswamy (Cong.).  
 S. Jayaram Reddiar (Cong.).  
 M. Jengal Reddiar (Cong.).  
 K. K. Kothandaraman (Cong.).  
 C. Muthiah (Cong.).  
 S. Rajamarthandan (Cong.).  
 S. S. Ramaswamy Padayatchi (T.C.P.).  
 V. K. Ramaswamy Mudaliar (Cong.).  
 A. Sambasiva Reddiar (Cong.).  
 M. Sivasubramania Pandian (Cong.).  
 T. S. Srinivasam Pillai (Cong.).  
 T. K. Subbiah (Cong.).  
 N. R. Thiagarajan (Cong.).  
 R. Venkatachalam (D.M.K.).  
 Wilson Apollon (Cong.).  
 G. Vijayarangam (Cong.).

### Graduates Constituency (5)

K. Balasubramania Ayyar (U.P.).  
 A. R. Damodaran (U.P.).  
 Dr. A. Lakshmanaswami Mudaliar (U.P.).  
 D. Santosham (U.P.).  
 Dr. T. V. Sivanandam (Cong.).

### Teachers Constituency (5)

Dr. A. Chidambaramathan (U.P.).  
 G. R. Damodaran (Ind.).  
 G. Krishnamoorthy (U.P.).  
 M. Rajah Iyer (Ind.).  
 M. Sankaralingam Pillai (Ind.).

### Nominated (5)

M. Aiyaswamy (Cong.).  
 Smt. S. Manjubashini (Cong.).  
 M. A. Muthiah Chettiar (Cong.).  
 Dr. P. V. Rajamannar (Ind.).  
 V. Ramalingam Pillai (Cong.).  
 O. P. Ramaswami Reddiar (Cong.).  
 Smt. Saraswathi Pandurangam (Cong.).  
 S. D. Sundaram (Cong.).  
 Smt. T. L. Thirupurasundari (Cong.).

## MADRAS LEGISLATIVE ASSEMBLY

Constituencies : 234.

Seats : 235 (S.C. 40 ; S.T. 2).

**Speaker :** S. P. Aditanar. **Dy. Speaker :** Pulavar  
 K. Govindan.

An estimate of party position is given below :  
 D.M.K. 137 ; Cong. 51 ; Swa. 20 ; Com. M. 10 ;  
 P.S.P. 4 ; M.L. 3 ; S.S.P. 2 ; Ind. 2 ; Com. 2 ;  
 Republican Party 1 ; Tamil Arasu Kazhakam 1 ;  
 F.B. 1 ; Nominated 1.

P. S. Ellappan (S.C.) (Swa.), (*Acharapakkam*).  
 A. Marimuthu (Cong.), (*Aduthurai*).  
 K. V. Subbiah (D.M.K.), (*Alangudi*).  
 V. Arunachalam (D.M.K.), (*Alangulam*).  
 G. Gomathysankara Dikshidar (Cong.), (*Amba-*  
*samudram*).  
 M. Panneerselvam (S.C.) (D.M.K.), (*Ambur*).

E. M. Natarajan (D.M.K.), (*Andhiyur*).  
 K. N. Ramachandran (D.M.K.), (*Andimadam*).  
 S. Paramasivam (Swa.), (*Andipatti*).  
 A. Duraiyarasan (D.M.K.), (*Aranthangi*).  
 A. Kandasamy Gounder (Swa.), (*Aravakurichi*).  
 N. Veeraswamy (D.M.K.), (*Arcoil*).  
 R. Kuruppath (Cong.), (*Ariyalur*).  
 S. J. Ramaswamy (D.M.K.), (*Arkonam*).  
 A. C. Narasimhan (D.M.K.), (*Arni*).  
 Sowdi S. Sundara Bharathi (Swa.), (*Aruppu-*  
*kottai*).  
 K. N. Sivaperumal (D.M.K.), (*Attur*).  
 V. S. S. Mani (D.M.K.), (*Athoor*).  
 R. K. Gounder (Swa.), (*Avanashi*).  
 M. B. Kannan (D.M.K.), (*Basin Bridge*).  
 A. M. Raja (D.M.K.), (*Bhavani*).

V. K. Ramarasan (S.C.) (D.M.K.), (*Bhavanisagar*).  
 A. Govindarasan (D.M.K.), (*Bhuvanagiri*).  
 S. Srinivasan (Cong.), (*Bodinayakanur*).  
 P. S. Santhanam (S.C.) (D.M.K.), (*Chengam*).  
 D. S. Authimoolan (Swa.), (*Cheranmahadevi*).  
 Pulavar K. Govindan (D.M.K.), (*Cheyyar*).  
 R. Kanakasabai (Cong.), (*Chidambaram*).  
 C. G. Viswanathan (D.M.K.), (*Chingleput*).  
 M. Bhupathy (Com. M.), (*Coimbatore East*).  
 K. Govindarajulu (D.M.K.), (*Coimbatore West*).  
 A. Chidambaramathan Nadar, (Cong.), (*Colachel*).  
 J. Belle Gowder (D.M.K.), (*Coonoor*).  
 Ere. Elamvazhuthi (D.M.K.), (*Cuddalore*).  
 V. P. Palaniammal Tirumathi (S.C.) (D.M.K.),  
 (*Dharapuram*).



- M. Subramania Gounder (D.M.K.), (*Dharmapuri*).  
 A. Balasubramanyam (Com. M.), (*Dindigul*).  
 A. Arumugam (D.M.K.), (*Edappadi*).  
 A. V. P. Asaithambi (D.M.K.), (*Egmore*).  
 M. Chinnasamy (D.M.K.), (*Erode*).  
 R. Ramachandira Dorai (Cong.), (*Gandarvakottai*).  
 A. Karuppiyah (SC) (D.M.K.), (*Gangaikondan*).  
 V. Munuswami (D.M.K.), (*Gingee*).  
 K. M. Ramaswami Gounder (Swa.), (*Gobichethipalayam*).  
 C. Nanjan (SC) (Cong.), (*Gudalur*).  
 V. K. Kothandaraman (Com.M.), (*Gudiyattam*).  
 K. Vezhavendan (D.M.K.), (*Gummidipundi*).  
 Habibullah Baig (M.L.), (*Harbour*).  
 N. Theerthagiri (SC) (Cong.), (*Harur*).  
 B. Venkataswamy (Swa.), (*Hosur*).  
 V. Mal. ikannan (D.M.K.), (*Ilaiyankudi*).  
 A. K. Moorthy (SC) (D.M.K.), (*Jayankondam*).  
 C. V. Velappan (D.M.K.), (*Kapilamalai*).  
 M. Alangaram (SC) (D.M.K.), (*Kadaladi*).  
 C. V. M. Annamalai (D.M.K.), (*Kadambathur*).  
 K. K. Muthiah (Cong.), (*Kadavur*).  
 A. R. Subbiah Mudaliar (Ind.), (*Kadayanallur*).  
 S. Murugian (D.M.K.), (*Kalasapakkam*).  
 D. Kesavalu (D.M.K.), (*Kallakurichi*).  
 N. Krishnan (D.M.K.), (*Kancheepuram*).  
 M. Ramon (SC) (D.M.K.), (*Kandamangalam*).  
 A. Senapathi (Cong.), (*Kangayam*).  
 L. Balaraman (Cong.), (*Kaniyambadi*).  
 B. Mahadevan (Cong.), (*Kanyakumari*).  
 S. Meiyappan (Swa.), (*Karaiakudi*).  
 A. B. Perumal (Swa.), (*Kariapathi*).  
 T. M. Nallaswamy (Cong.), (*Karur*).  
 G. Natarajan (D.M.K.), (*Katpadi*).  
 B. Sivasubramanian (SC) (Cong.), (*Kattumannarkoil*).  
 E. Pattabi Naidu (Cong.), (*Kaveripathinam*).  
 M. William (Cong.), (*Killyoor*).  
 M. Kannappan (D.M.K.), (*Kinathukadavu*).  
 C. Krishnamoorthi (D.M.K.), (*Kodavasal*).  
 S. Aalgraisamy (Com.), (*Koilpatti*).  
 A. K. Subbiah (SC) (Com.), (*Kottur*).  
 P. M. Muniswamy Gounder (Cong.), (*Krishnagiri*).  
 P. Soundarapandian (SC) (D.M.K.), (*Krishnarayapuram*).  
 M. Kandaswamy (D.M.K.), (*Kulithalai*).  
 N. Kasiraman (Cong.), (*Kumbakonam*).  
 M. Gopal (SC) (D.M.K.), (*Kunnathur*).  
 N. Rajangam (SC) (D.M.K.), (*Kurinjipadi*).  
 G. Bharathi Mohan (Com. M.), (*Kuttalam*).  
 M. K. D. Natarajan (D.M.K.), (*Lalgudi*).  
 C. Govindarajan (D.M.K.), (*Madurai Central*).  
 Smt. K. P. Janakiammal (Com. M.), (*Madurai East*).  
 N. Sankariah (Com. M.), (*Madurai West*).  
 K. Cheemalchamy (Swa.), (*Manamadurai*).  
 A. Krishnan (SC) (D.M.K.), (*Mangalur*).  
 T. S. Swaminatha Odayar (Cong.), (*Mannarkudi*).  
 Kolathur Kothandam (D.M.K.), (*Mathuranthagam*).  
 N. Kittappa (D.M.K.), (*Mayuram*).  
 R. R. Muniswamy (D.M.K.), (*Melamalanur*).  
 Haji M. M. Peer Mohammed (M.L.), (*Melapalayam*).  
 P. Malaichamy (D.M.K.), (*Melur*).  
 O. P. Raman (SC) (D.M.K.), (*Melur South*).  
 T. T. S. Thippia (Cong.), (*Mettupalayam*).  
 Surendran (P.S.P.), (*Methur*).  
 K. B. Nallasivam (S.S.P.), (*Modakkurichi*).  
 A. Govindaswamy (D.M.K.), (*Mugaiyur*).  
 B. Bethina Thevar (Swa.), (*Mudukulathur*).  
 P. S. Muthuselvan (D.M.K.), (*Musiri*).  
 Rama Aranganal (D.M.K.), (*Mylapore*).  
 K. R. Gnanasambandan (Com. M.), (*Nagapathinam*).  
 M. C. Balan (D.M.K.), (*Nagercoil*).  
 M. Muthusamy (D.M.K.), (*Namakkal*).  
 N. Duraisundaram (Cong.), (*Nanguneri*).  
 P. Jayaraj (SC) (Cong.), (*Nannilam*).  
 T. C. Thimmaraya Gounder (D.M.K.), (*Natram-palli*).  
 C. Govindarajan (Com. M.), (*Nellikuppam*).  
 A. Muniyandi (SC) (D.M.K.), (*Nilakkottai*).  
 C. Palani (SC) (D.M.K.), (*Omalur*).  
 K. Bojan (Swa.), (*Ootacamund*).  
 L. Ganesan (D.M.K.), (*Orathanad*).  
 N. Nachimuthu (D.M.K.), (*Ottanchatram*).  
 M. Muthiah (SC) (Swa.), (*Ottapidaram*).  
 V. George (Cong.), (*Padmanabhapuram*).  
 K. Murugesan (Cong.), (*Palacode*).  
 K. Krishnamoorthi (SC) (D.M.K.), (*Palani*).  
 K. N. Kumarasamy (P.S.P.), (*Palladam*).  
 T. Ponnimalai (D.M.K.), (*Panamarampatti*).  
 S. Ramachandran (D.M.K.), (*Panruti*).  
 R. Soundararaja Moopnar (Cong.), (*Papanasam*).  
 T. K. Sivalmeetan (SC) (D.M.K.), (*Paramakudi*).  
 H. V. Hande (Swa.), (*Park Town*).  
 A. R. Marimuthu (P.S.P.), (*Pattukottai*).  
 P. K. C. Muthuswamy (Cong.), (*Pennagaram*).  
 J. S. Rasu (SC) (D.M.K.), (*Perambalur*).  
 Dr. Satyavanimuthu (SC) (D.M.K.), (*Perambur*).  
 V. D. Annamalai (D.M.K.), (*Pernamallur*).  
 P. Jayaraman (SC) (D.M.K.), (*Peranampattu*).  
 M. Krishnamoorthi (D.M.K.), (*Peranrani*).  
 M. Metha (D.M.K.), (*Periakulam*).  
 S. Balasubramanian (S.S.P.), (*Perunthurai*).  
 N. Narudachalam (SC) (Cong.), (*Perur*).  
 A. P. Sh. nmugasundaram (D.M.K.), (*Pollachi*).  
 Thirumathi S. Kuppammal (D.M.K.), (*Polur*).  
 P. N. Paramasiva Gounder (D.M.K.), (*Pongalur*).  
 P. Nagalingam (SC) (D.M.K.), (*Ponneri*).  
 R. Vijaya Raghunatha Thondaiman (Cong.), (*Pudukkottai*).  
 V. S. Govindarajan (D.M.K.), (*Purasawalkam*).  
 N. Soundarapandian (Cong.), (*Radhapuram*).  
 A. A. Subbaraja (Ind.), (*Rajapalayam*).  
 T. Thangappan (D.M.K.), (*Ramanathapuram*).  
 M. Abdul Ghaffoor Sahib (M.L.), (*Ranipet*).  
 P. Periasamy (D.M.K.), (*Rasipuram*).  
 M. Anandan (SC) (D.M.K.), (*Rishivandiyam*).  
 M. Karunanidhi (D.M.K.), (*Saidapet*).  
 K. Jayaraman (D.M.K.), (*Salem-I*).  
 E. R. Krishnan (D.M.K.), (*Salem-II*).  
 P. Durairaj (SC) (D.M.K.), (*Sankarankoil*).  
 R. Nallamuthu (SC) (D.M.K.), (*Sankari*).  
 S. P. Pachaiyappan (D.M.K.), (*Sankarapuram*).  
 P. G. Karuthiruman (Cong.), (*Satyamangalam*).  
 T. Martin (Cong.), (*Sattangulam*).  
 S. Ramaswamy Naidu (Swa.), (*Sattur*).  
 V. Thavaman Thevar (Swa.), (*Sedappatti*).  
 S. Ganesan (D.M.K.), (*Sembarkoil*).  
 A. Sella Gounder (ST) (Cong.), (*Sendamangalam*).  
 P. S. Manian (D.M.K.), (*Sholavandan*).  
 R. N. Aranganathan (D.M.K.), (*Sholinghur*).  
 P. Velusamy (P.S.P.), (*Singalur*).  
 K. B. S. Mani (Rep.), (*Sirkali*).  
 S. Sethuraman (D.M.K.), (*Sivaganga*).  
 S. Alagu Thevar (F.B.), (*Sivakasi*).  
 D. Irarathinam (D.M.K.), (*Sriperumbudur*).  
 S. Ramalingam (SC) (Cong.), (*Srirangam*).  
 S. P. Aditanar, (*Srivaikuntam*).  
 K. Gurusamy (SC) (D.M.K.), (*Srivilliputhur*).  
 M. G. Ramachandran (D.M.K.), (*St. Thomas Mount*).  
 M. Marimuthu (SC) (D.M.K.), (*Talavasal*).  
 K. R. Govindan (D.M.K.), (*Toramangalam*).  
 I. A. Chidambaram Pillai (Cong.), (*Tenkasi*).  
 K. Sahadeva Gounder (Cong.), (*Thandambattu*).  
 A. Y. S. Parisutha Nadar (Cong.), (*Thanjavur*).  
 Palanivel Rajan (D.M.K.), (*Theni*).  
 M. P. Sivagnanam (Tamil Arusu Kazhakam), (*Thiragarayanagar*).  
 N. S. V. Chithan (Cong.), (*Thirumangalam*).  
 Kariamanickam Ambalam (Swa.), (*Thiruvadanai*).  
 N. Dharmalingam (D.M.K.), (*Thiruthuraiyandi*).  
 Pulavar G. Murugaiyan (D.M.K.), (*Thiruvaryar*).  
 P. S. Dhanushkodi (SC) (Com. M.), (*Thiruvavur*).  
 V. Swaminathan (Cong.), (*Thiruverumbur*).  
 R. Manickavachagam (D.M.K.), (*Thondamuthur*).  
 S. K. Vadivel (D.M.K.), (*Thottiyam*).  
 K. A. Mathiasagan (D.M.K.), (*Thousand Lights*).  
 K. Ramamoorthy (Cong.), (*Tindivanam*).  
 G. R. Edmund Fernando (D.M.K.), (*Tiruchendur*).  
 T. A. Rajavelu (D.M.K.), (*Tiruchengode*).  
 M. S. Mani (D.M.K.), (*Tiruchirappalli-I*).  
 R. Nagasundaram (D.M.K.), (*Tiruchirappalli-II*).  
 E. M. Subramaniam (Cong.), (*Tirukoilur*).  
 Pulavar P. Ponnambalam (D.M.K.), (*Tirumayam*).  
 A. L. Subramaniam (D.M.K.), (*Tirunelveli*).  
 S. Agni Raju (D.M.K.), (*Tirupparankundram*).  
 C. K. Chinnarajee Gounder (D.M.K.), (*Tirupattur*).  
 S. Madhavan (D.M.K.), (*Tiruppathur*).  
 Adhi Munu (D.M.K.), (*Tirupporur*).  
 S. Duraisamy (D.M.K.), (*Tiruppur*).  
 K. Vinayakam (Cong.), (*Tiruttani*).  
 S. M. Dorairaj (SC) (D.M.K.), (*Tiruvallur*).  
 D. Vijayaraj (Cong.), (*Tiruvannamalai*).  
 J. James (Cong.), (*Tiruvallur*).  
 A. P. Arasu (D.M.K.), (*Tiruvattinur*).  
 V. R. Nedunchezhiyan (D.M.K.), (*Triplicane*).  
 M. S. Sivasami (D.M.K.), (*Tuticorin*).  
 K. S. Kothandaramiah (Swa.), (*Uddanapalle*).  
 S. J. Sadiq Pasha (D.M.K.), (*Udumalpet*).  
 M. Kandasamy Padayachi (Cong.), (*Uthendurpet*).  
 T. P. Alagamuthu (D.M.K.), (*Uppiliapuram*).  
 P. K. Thevar Mookiah (Swa.), (*Usilampatti*).  
 T. Theerthagiri Gounder (Cong.), (*Uthangarai*).  
 K. M. Rajagopal (D.M.K.), (*Uthiramerur*).  
 P. Thambi Naicker (Cong.), (*Vadamadurai*).  
 N. Somasundaram (SC) (D.M.K.), (*Valangiman*).  
 E. Ramasami (SC) (D.M.K.), (*Valparai*).  
 S. A. Rajamannar (Cong.), (*Vaniyambadi*).  
 A. G. Balakrishnan (SC) (D.M.K.), (*Vanur*).  
 R. Narayanan (D.M.K.), (*Varahur*).  
 A. Velladurai (D.M.K.), (*Vasudevanallur*).  
 P. Venkatachala Thevar (Cong.), (*Vedaranyam*).  
 N. Varadarajan (Com. M.), (*Vedasandur*).  
 S. Arumugam (D.M.K.), (*Veerapandi*).  
 K. N. Saminatha Gounder (D.M.K.), (*Vellakoil*).  
 M. P. Sarathi (D.M.K.), (*Vellore*).  
 M. Rathinasapathy (D.M.K.), (*Vilathikulam*).  
 R. Ponnappa Nadar (Cong.), (*Vilavancode*).  
 M. Shanmugam (D.M.K.), (*Villupuram*).  
 V. S. Shanmugam (D.M.K.), (*Viralimalai*).  
 P. Sreenivasan (D.M.K.), (*Virudhunagar*).  
 G. Bhuvaram (Cong.), (*Vridhachalam*).  
 S. Muthulingam (SC) (D.M.K.), (*Wandiwash*).  
 M. Vedachalam (D.M.K.), (*Washermenpet*).  
 V. Chinnasamy (ST) (D.M.K.), (*Yercaud*).  
 Thirumathi A. Soares (D.M.K.), (*Nominated*).

## MAHARASHTRA LEGISLATIVE COUNCIL

Strength: 78.

Chairman: V. . Page.

Dy. Chairman: V. N. Desai.

Secretary: S. H. Belavadi.

Dy. Secretary: S. R. Kharabe.

Party position: Congress 53; Independents 10;  
 Jan Sangh 5; Samyukta Maharashtra Samiti  
 3; Praja Socialist 1; Vacant 6.

## Local Authorities (22)

Vishvanath Chimanji Pawar (Cong.), (*Ahmednagar*).  
 Vinayakumar Ramlal Parashar (Cong.), (*Akola and Buldana*).  
 Ramdayal Ayodhya Prasad (Ind.), (*Amravati*).  
 Baburao Govindrao Jadhav (*Aurangabad*).  
 Chandan Prasad R. Pandye (Cong.), (*Bhandara*).  
 Keshav Pandurang Fulkar (Cong.), (*Chanda and Rajura*).

Gajmal Dalpat Mali (Cong.), (*Dhulia*).  
 Waman P. Bapat (S.M.S.), (*Bombay*).  
 Moiduddin Harris (Ind.), (*Gr. Bombay*).  
 Ramrao Dagadu Patil (Cong.), (*Jalgaon*).  
 Janardan Vishnu Lele (Cong.), (*Kolaba*).  
 Sadashivrao A. Shinde (Cong.), (*Kolhapur*).  
 Rikhalchand K. Sharma (Cong.), (*Nagpur*).  
 Lakshminchand R. Abad (Cong.), (*Nasik*).  
 Ramrao D. Avargaokar (Cong.), (*Osmanabad and Bhir*).



Abasaheb D. Deshmukh (Cong.), (*Parbhani*).  
 Harischandra S. Barmukh (Cong.), (*Poona*).  
 Tukaram K. Shetye (Cong.), (*Ratnagiri*).  
 Dhulappa B. Navale (Cong.), (*Sangli and Satara*).  
 Manikrao P. Mandgulkar (Cong.), (*Sholapur*).  
 Zumberlal M. Kalantri (Cong.), (*Thana*).  
 Dattarao M. Deshmukh (Cong.), (*Wardha*).

### Elected by Legislative Assembly (30)

Smt. Kamlabai C. Ajmera (Cong.).  
 Jagannath S. Anjekar (Cong.).  
 Ramrao N. Balbudhe (Cong.).  
 Balwant D. Baralay (Cong.).  
 Ishavar N. Bhosikar (Cong.).  
 John M. Coelho (Cong.).  
 Bhadra V. Desai (Cong.).  
 Safdarali Deshmukh (Cong.).  
 Ramkrishna S. Gavai (Rep.).  
 Vishram N. Haralkar (Cong.).  
 Jethamal Kisanlal (Cong.).  
 Pralhad N. Khode (Cong.).

Jagannath N. Korpe (Cong.).  
 Madhav P. Limaye (P.S.).  
 Panditrao B. More (Cong.).  
 Rajmal J. Mantri (Cong.).  
 Vithal S. Page (Cong.).  
 Madhav Gotu Patil (Cong.).  
 Pandarinath V. Patil (Cong.).  
 Vishvanath C. Pawar (Cong.).  
 Bhaurao V. Shende (Cong.).  
 Bhausaheb Laxmanrao Shirole (Cong.).  
 Smt. Ashatai M. Tale (Cong.).  
 Sambhajirao M. Thorat (Cong.).  
 Vacant 6.

### Teachers (7)

Jagannath Ganesh Bhawe (Ind.), (*Gr. Bombay*).  
 Kamalakar W. Desai (Ind.), (*Gr. Bombay*).  
 Mukund T. Kulkarni (Ind.), (*Gr. Bombay*).  
 Shankar L. Ogle (Ind.), (*Gr. Bombay*).  
 Mahadeo N. Anjekar (Ind.), (*Vidarbha*).  
 Haribhau Sakharajji Hatwar (Ind.), (*Vidarbha*).  
 D. H. Sahasrabuddhe (Ind.), (*Vidarbha*).

### Graduates (7)

Dr. Vasantkumar R. Pandit (J.S.), (*Gr. Bombay*).  
 Anant S. Sthalekar (Cong.), (*Gr. Bombay*).  
 Uttamrao Laxman Patil (J.S.), (*Maharashtra*).  
 Ganesh P. Pradhan (P.S.), (*Maharashtra*).  
 Bachharaj Shyamlal Byas (J.S.), (*Vidarbha*).  
 Ramjiwan F. Choudhury (J.S.), (*Vidarbha*).  
 Shridhar A. Sohoni (J.S.), (*Vidarbha*).

### Nominated (12)

Smt. Sevigne G. P. Athaide (Ind.).  
 Chandrashekhar N. Bajpai (Cong.).  
 Dayaram Y. Bhandalkar (Cong.).  
 Swami Ramananda Bharati (Cong.).  
 Vishnuprasad N. Desai (Cong.).  
 Ramchandra Balwant Ghorpade (Cong.).  
 Narayan W. Karwade (Cong.).  
 Salimuddin H. Kazi (Cong.).  
 Narhar W. Limaye (Cong.).  
 G. D. Madgulkar (Cong.).  
 Ratanlal Mohanlal (Cong.).  
 Nashikrao Khantadu Tirpude (Cong.).

## MAHARASHTRA LEGISLATIVE ASSEMBLY

Seats: 271 (including one Anglo-Indian nominee). S.C. 15; S.T. 16. Total Electorate: 19,395,795.

**Speaker:** T. S. Bharde, B.A., LL.B. **Dy. Speaker:** K. T. Girmé, LL.B. **Secretary:** S. H. Belavadi, B.Sc., LL.B., H. (H.S.). **Dy. Secretaries:** S. R. Kharabe, B.A., LL.B., H. (H.S.); A. B. Palekar, I.A.A.S., B.A. (Hon.), LL.B.

An estimate of party position is as follows:  
 Cong. 202; S.M.S. (P.W.) 21; S.M.S. (Com.) 10;  
 S.M.S. (C.M.) 1; S.M.S. (S.S.) 5; S.M.S. (Ind.) 5;  
 S.M.S. (M.L.) 1; D.F. (P.S.) 6; D.F. (Ind.) 10;  
 J.S. 4; Rep. 3; Ind. 1; Nominated 1; Vacant 1.  
 Narsingrao S. Deshmukh (Cong.), (*Achalpur*).  
 Moreshwar Nama Waldekar (Rep.), (*Adyar*).  
 M. B. Sangvikar (Cong.), (*Admedpur*).  
 Kisanrao B. M. Laske (Cong.), (*Ahmednagar North*).

Dr. S. V. Nisal (Cong.), (*Ahmednagar South*).  
 Smt. Nirmala Raje V. Bhosale (Cong.), (*Akkalkot*).  
 Jamanlal S. Goenka (Cong.), (*Akola*).  
 G. B. Khedkar (Cong.), (*Akoti*).  
 D. N. Patil (S.M.S.—P.W.), (*Alibag*).  
 K. M. Patil (Cong.), (*Amalner*).  
 Annasaheb A. Udhan (Cong.), (*Ambad*).  
 Vacant (*Ambegaon*).  
 Laxmanrao B. Mankar (J.S.), (*Amgaon*).  
 K. N. Nawathe (Cong.), (*Amravati*).  
 Dr. Vasudev G. Rawal (Cong.), (*Andheri*).  
 Dina V. Naravane (S.T.), (Cong.), (*Armori*).  
 J. G. Kadam (Cong.), (*Arvi*).  
 Nivrutti Ugale (S.M.S.—Com.), (*Ashti*).  
 B. S. Kore (Cong.), (*Alpadi-Kavathe-Mahankal*).  
 Dr. Rafiq Zakaria (Cong.), (*Aurangabad West*).  
 Vishwambarrao S. Musande (Cong.), (*Ausa*).  
 K. B. Shringare (Rep.), (*Badnera*).  
 Pandit D. Patil (Cong.), (*Baglan*).  
 Madhusudan A. Vairale (Cong.), (*Balapur*).  
 P. G. Kher (Cong.), (*Bandra*).  
 S. G. Pawar (Cong.), (*Baramati*).  
 Smt. Prabhatai S. Zudbuke (Cong.), (*Barshi*).  
 W. A. Nayak (Cong.), (*Basmat*).  
 H. G. Vartak (Cong.), (*Bassein*).  
 R. J. Deotale (Cong.), (*Bhadravati*).  
 A. T. Kale (S.C.), (Cong.), (*Bhagur (R)*).  
 D. D. Dhote (D.F.—Ind.), (*Bhandara*).

Tikamdas D. Memjade (S.C.) (Cong.), (*Bhawani Peth*).  
 Shivajirao Baburao Chauré (Cong.), (*Bhir*).  
 B. S. Patil (S.M.S.—P.W.), (*Bhiwandi*).  
 Shankarrao B. Chawan (Cong.), (*Bhokar*).  
 Baburao J. Kale (Cong.), (*Bhokardan*).  
 Kakasaheb alias S. M. Bheke (Cong.), (*Bhor*).  
 P. S. Phalak (Cong.), (*Bhusawal*).  
 Jayaram Gangaram Ambekar (Cong.), (*Biloli*).  
 Nikantha S. Sapkal (Cong.), (*Borgaon-Manju*).  
 Jamnadas G. Dathani (Cong.), (*Borirli*).  
 Baliram N. Gorpude (Cong.), (*Brahmapuri*).  
 Smt. Sumanbai Shivajirao Patil (Cong.), (*Buldana*).

G. B. Ganacharya (S.M.S.—Com.), (*Byculla*).  
 Dinkar D. Chavan (S.C.), (*Chalisgaon*).  
 Eknath D. Salve (Cong.), (*Chanda*).  
 V. K. Chavan Patil (Cong.), (*Chandgad*).  
 B. G. Jadhav (Cong.), (*Chandur*).  
 Raghnathrao G. Gunjal (Cong.), (*Chandwad*).  
 Vishwanathrao A. Darade (S.M.S.—Com.), (*Chausala*).  
 Hashu Parsharam Advani (J.S.), (*Chembur*).  
 Tryambakrao B. Khedekar (Cong.), (*Chikhali*).  
 M. D. Tumpalliwar (Cong.), (*Chimur*).  
 P. K. Savant (Cong.), (*Chiplun*).  
 Maganlal Nagindas (D.F.—Ind.), (*Chopda*).  
 B. K. Boman Behram (Ind.), (*Colaba*).  
 V. B. Hire (Cong.), (*Dabhadi*).  
 Dr. Waman S. Malkar (Cong.), (*Dadar*).  
 Mahadev G. Kadu (S.T.), (Cong.), (*Dahanu*).  
 R. V. Bhelose (Cong.), (*Dapoli*).  
 Narayanrao U. Deshmukh (Cong.), (*Daryanpur*).  
 V. B. Ghuikhedkar (D.F.—Ind.), (*Darwaha*).  
 Ramchandra B. Munj (D.F.—P.S.), (*Deogad*).  
 Madhukar R. Ghate (S.C.) (Cong.), (*Degloor*).  
 Mohanlal B. Popat (Cong.), (*Dhobitalao*).  
 J. T. Pataskar (Cong.), (*Dhond*).  
 C. N. Patil (Cong.), (*Dhulia North*).  
 Dr. R. B. Choudhari (S.M.S.—Com.), (*Dhulia South*).  
 M. B. Mahindre (Cong.), (*Digras*).  
 Shankar B. Potinde (S.T.) (S.M.S.—P.W.), (*Dindori*).  
 Smt. Pratibha Devisinh Patil\* (Cong.), (*Edla-bad*).  
 D. S. Patil (Cong.), (*Erandol*).  
 Vishwesharrao Dharmarao (S.T.) (D.F.—Ind.), (*Gadchiroli*).  
 Tukaram K. Kolekar (S.M.S.—P.W.), (*Gadhinglaj*).  
 Tryambak M. Samant (S.C.) (Cong.), (*Gangakhed*).  
 B. R. Pawar (Cong.), (*Gangapur*).  
 S. T. Pawar (S.M.S.—Com.), (*Georai*).  
 Dr. Datta N. Samant (S.M.S.—Ind.), (*Ghatkopar*).  
 A. N. Namjoshi (Cong.), (*Girgaon*).  
 Dr. Gopalnarayan S. Bajpai (Cong.), (*Gondia*).  
 P. D. Rahangdale (Cong.), (*Goregaon*).  
 Mahadev Somaji Kesarkar (Cong.), (*Guhagar*).  
 B. K. Deshmukh (Cong.), (*Hadgaon*).  
 Babasaheb B. Khanjire (Cong.), (*Haikanangale*).  
 M. D. Magar (Cong.), (*Haveli*).  
 Kesharao M. Zade (Cong.), (*Hinganghat*).  
 Chandrakant Patil (S.M.S.—S.S.), (*Hingoli*).  
 Shankarrao G. Chavare (S.T.) (Cong.), (*Igatpuri*).  
 Shankarrao Bajirao Patil (Cong.), (*Indapur*).  
 T. T. Salunke (Cong.), (*Jalgaon*).  
 Radhakrishnan B. Jaiswal (S.M.S.—S.S.), (*Jalna South*).  
 B. G. Gadhe (Cong.), (*Jalna North*).  
 A. N. Patil (Cong.), (*Jamner*).  
 Bhiku Daji Bhilare (Cong.), (*Jaoli*).  
 Shivrudra T. Ramane (S.C.) (Cong.), (*Jath*).  
 Smt. Kalavati Shankar (S.T.) (Cong.), (*Jaunhar*).  
 Sundarlal V. Kalamkar (Cong.), (*Jintur*).  
 D. B. Kakde (Cong.), (*Junnar*).

Daulatrao A. Nikam (Cong.), (*Kagal*).  
 S. A. Solanki (Cong.), (*Kaij*).  
 S. K. Wankhede (Cong.), (*Kalameshwar*).  
 Devadattaji T. Mohite (Cong.), (*Kalamb*).  
 Vithalrao C. Naik (S.M.S.—Com.), (*Kalamnuri*).  
 D. R. More (S.T.) (Cong.), (*Kalwan (R)*).  
 K. N. Dhulup (S.M.S.—P.W.), (*Kalyan*).  
 S. A. Pathan (Cong.), (*Kamptee*).  
 K. S. Dhondge (S.M.S.—P.W.), (*Kandhar*).  
 Sitaram S. Sawant (S.M.S.—P.W.), (*Kankoli*).  
 Narayanrao G. Patil (Cong.), (*Kannad*).  
 Y. B. Patil (Cong.), (*Karad North*).  
 Y. J. Mohite (Cong.), (*Karad South*).  
 E. B. Nimbalkar (Cong.), (*Karjat*).  
 Kisan G. Kamble (S.C.) (Cong.), (*Karmala*).  
 Shripathrao S. Bondre (Cong.), (*Karvir*).  
 Rajaram V. Sumda (S.T.) (Cong.), (*Kasa*).  
 R. V. Telang (Cong.), (*Kasba Peth*).  
 Jivanlal S. Chankak (D.F.—Ind.), (*Katol*).  
 T. D. Deshmukh (Cong.), (*Kelapur*).  
 Sumant Rajaram Raut (S.M.S.—P.W.), (*Khal-pur*).  
 Govinddas R. Bhatia (Cong.), (*Khamgaon*).  
 S. S. Mane (Cong.), (*Khanapur*).  
 Ramchandra G. Patil (Cong.), (*Khatav*).  
 S. M. Satkar (Cong.), (*Khed-Alandi*).  
 Hussain M. Dalwai (Cong.), (*Khed-Bunder*).  
 Manohar N. Gogate (Cong.), (*Khetwadi*).  
 U. B. Rathod (Cong.), (*Kinwat*).  
 T. S. Karkhanis (S.M.S.—P.W.), (*Kolhapur*).  
 A. N. Phalke (Cong.), (*Koregaon*).  
 B. M. Yagnik (Cong.), (*Kumbharwada*).  
 Dr. T. R. Naravane (Cong.), (*Kurla*).  
 Shashishekar Kashinath Athaley (S.S.), (*Lanja*).  
 Vithal R. Kaldate (S.M.S.—S.S.), (*Latur*).  
 Kisanrao Tukaram Sangle (Cong.), (*Lonar*).  
 P. T. Patil (S.C.), (Cong.), (*Lovegrove*).  
 Sampatrao M. Patil (Cong.), (*Madha*).  
 S. B. Sawant (Cong.), (*Mahad*).  
 H. J. Taleyarkhan (Cong.), (*Mahalaxmi*).  
 F. M. Pinto (Cong.), (*Mahim*).  
 D. S. Patel (Cong.), (*Malad*).  
 Ahmed Moulavi M. Usman Nihal (S.M.S.—Ind.), (*Malegaon*).  
 Abarao S. Deshmukh (Cong.), (*Malkapur*).  
 S. N. Mohite (Cong.), (*Malshiras*).  
 V. G. Prabhugaonkar (Cong.), (*Malwan*).  
 Dr. P. T. Sonawane (Cong.), (*Man*).  
 Kisanlal R. Marda (Cong.), (*Mangalwedha*).  
 Pandurang R. Sanap (S.M.S.—P.W.), (*Mangaon*).  
 C. U. Raghuvanshi (Rep.), (*Mangrulpir*).  
 S. N. Tribhuwan (S.C.), (*Manjlegaon*).  
 L. P. Shah (Cong.), (*Matunga*).  
 Raghnath S. Satkar (Cong.), (*Mawal*).  
 Dr. V. K. Toraskar (Cong.), (*Mazgaon*).  
 Ramrao G. Zanak (Cong.), (*Medshi*).  
 Sitaram Chinkaji Lodhe (Cong.), (*Mehkar*).  
 Dayaram N. Patel (S.T.), (Cong.), (*Melghat*).  
 G. D. Patil (Cong.), (*Miraj*).  
 Govind B. Burgute (Cong.), (*Mohol*).  
 K. W. Wankhede (Cong.), (*Morshi*).  
 Namdeo S. Mohol (Cong.), (*Mulshi*).  
 P. V. Upadhyay (Cong.), (*Mulund*).



S. G. Gholap (Cong.), (Murbad).  
 Smt. Pratibha Bhagivant Tidke (Cong.), (Murtizapur).  
 B. K. Deshmukh (S.T.), (S.M.S.-Com.), (Nagar-Akola).  
 Alamadi Usman Shaikh (Cong.), (Nagpada).  
 Madangopal Jodhraj Agrawal (Cong.), (Nagpur-Central).  
 Yadavrao R. Deogade (Cong.), (Nagpur-East).  
 Dr. (Smt.) Sushilabai Balraj (Cong.), (Nagpur-West).  
 P. R. Wasnik (S.C.) (Cong.), (Nagpur North).  
 Ram Arjun Mahadik (D.F.-P.S.) (Naigaon).  
 S. Farook Pasha S. Mukdum (Cong.), (Nanded).  
 Shivram D. Hire (S.M.S.-S.S.) (Nandgaon).  
 V. N. Naik (Cong.), (Nasik).  
 D. J. Kokni, (S.T.) (Cong.), (Navapur).  
 Sivajirao B. Patil (Cong.), (Nilanga).  
 Dattatraya B. Patil (Cong.), (Niphad).  
 B. S. Chalukya (Cong.), (Omurga).  
 V. G. Patil (Cong.), (Osmanabad).  
 Supdu B. Patil (Cong.), (Pachora).  
 K. P. Patil (Cong.), (Paithan).  
 Navnitrai B. Shah (D.F.-P.S.), (Palghar).  
 A. K. Patil (Cong.), (Pandharpur).  
 Dinkar B. Patil (S.M.S.-P.W.), (Panne).  
 Annasaheb R. Gavhane (S.M.S.-P.W.), (Parbhani).  
 Krishnaji G. Desai (S.M.S.-Com.), (Parel).  
 Konderao H. Patil (Cong.), (Paranda).  
 N. R. Gunjal (Cong.), (Parner).  
 G. N. Pawar (Cong.), (Parola).  
 Ramrao N. Yadav (Cong.), (Partur).  
 Daulatrao S. Desai (Cong.), (Patan).  
 T. S. Bharde (Cong.), (Pathardi).  
 Sakharan G. Nakhati (Cong.), (Pathri).  
 Anant P. Shetye (S.M.S.-P.W.), (Pen).  
 K. R. Bhoite (Cong.), (Phallon).  
 K. T. Girm (Cong.), (Poona Cantt.).  
 Narayanrao R. Kale (S.M.S.-P.W.) (Pulgaon).  
 D. B. Khaire (Cong.), (Parandar).  
 V. P. Naik (Cong.), (Pusad).

Govind T. Kalikate (S.M.S.-P.W.) (Radhanagari).  
 B. B. Tarapore (Cong.), (Rahuri).  
 Laxman R. Hatankar (D.F.-P.S.), (Rajapur).  
 Shrihari B. Jivtode (D.F.-Ind.), (Rajura).  
 M. N. Bhalawi (S.T.) (Cong.), (Ralegaon).  
 Gunderao F. Mahajan (Cong.), (Ramtek).  
 S. L. Peje (Cong.), (Ratnagiri).  
 M. D. Choudhari (Cong.), (Raver).  
 A. G. Gite (Cong.), (Renapur).  
 Shamrao Pagaji Kapgate (J.S.) (Sakoli).  
 Uttamrao Ratan Nandre (S.M.S.-Com.), (Sakri).  
 Smt. Laxmibai B. Bhuvad (Cong.), (Sangamner).  
 B. J. Khatal (Cong.), (Sangamner).  
 Appasaheb B. Birnale (Cong.), (Sangli).  
 G. A. Deshmukh (S.M.S.-P.W.), (Sangola).  
 W. V. Gaddamvar (Cong.), (Saoli).  
 N. M. Tidke (Cong.), (Saoner).  
 D. S. Jagtap (Cong.), (Salara).  
 S. K. Bhonsale (Cong.), (Sawantwadi).  
 S. G. Patkar (S.M.S.-Com.), (Sewree).  
 S. B. Pawar (S.T.) (Cong.), (Shahada).  
 Rau Dhondi Patil (S.M.S.-P.W.), (Shahuwadi).  
 Tulsiram P. Dhokne (Cong.), (Shegaon).  
 M. S. Ghule (Cong.), (Shevgaon).  
 Narayanrao S. Patil (Cong.), (Shindkheda).  
 V. A. Naik (Cong.), (Shirala).  
 Mohanrao A. Gade (D.F.-Ind.), (Shirdi).  
 R. B. Kumbhar (Cong.), (Shiradi).  
 Shivajirao G. Patil (Cong.), (Shirpur).  
 Balwant D. Killedar (S.M.S.-P.W.), (Shivajinagar).  
 G. B. Burgute (Cong.), (Sholapur).  
 Ramkrishna V. Bet (Cong.), (Sholapur City North).  
 V. R. Patil (S.M.S.-Ind.), (Sholapur City South).  
 B. K. Mane (S.M.S.-Ind.), (Sholapur North).  
 V. G. Shivdare (Cong.), (Sholapur South).  
 B. M. Bharaskar (S.C.) (Cong.), (Shrigonda).  
 Jagannathrao Wamanrao Banker (Cong.), (Shrirampur).

A. R. Gafoor Antule (Cong.), (Shrivardhan).  
 Ramchandra K. Mhalgi (J.S.), (Sukrawar Peth).  
 Gangaram S. Mankar (Cong.), (Sillod).  
 N. S. Patil (Cong.), (Sindhkheda).  
 Smt. Rukhminibai V. Wage (Cong.), (Sinnar).  
 J. Y. Sakhare (S.C.) (D.F.-Ind.), (Sironcha).  
 Shyamkant D. More (D.F.-P.S.), (Sirur).  
 Sitaram Sayaji Bhoje (S.T.) (S.M.S.-Ind.), (Surguna).  
 Smt. Vahijabai Padvi (S.T.), (Cong.), (Taloda).  
 Balasaheb G. Patil (Cong.), (Tasgaon).  
 D. K. Rajarshi (Cong.), (Thana).  
 Bhalyalal L. Petle (Cong.), (Tirora).  
 S. S. Patil (Cong.), (Tuljapur).  
 K. A. Pardhi (Cong.), (Tumsar).  
 Pralhadrao S. Sarwade (S.C.) (Cong.), (Udgir).  
 Sanmukh C. Israni (Cong.), (Ulhasnagar).  
 Bhausaheb A. Mane (Cong.), (Umarkhed).  
 G. H. Banatwalla (M.L.), (Umerkhadi).  
 Suresh B. Deotale (Cong.), (Umrer).  
 Keshav N. Ghatgi (S.C.) (Cong.), (Vadgaon).  
 V. P. Patil (Cong.), (Vaijapur).  
 Pundalik A. Kinlekar (D.F.-P.S.), (Vengurla).  
 Pranlal Harikisandas Vora (Cong.), (Vileparle).  
 Prataprao B. Bhonsale (Cong.), (Wai).  
 U. B. Mahalle (Cong.), (Walgaon).  
 Homi Jehangir Taleyarkhan (Cong.), (Walke-shwar).  
 R. A. Patil (Cong.), (Walwa).  
 Dr. V. Y. Gohokar (Cong.), (Wani).  
 Ramchandra Marotrao Ghangare (S.M.S.-C.M.), (Wardha).  
 Smt. Manabai M. Khirade (S.C.) (Cong.), (Washim).  
 Dr. Madhav N. Birje (Cong.), (Worki).  
 Jiwaram T. Mahajan (Cong.), (Yawal).  
 Madhavrao T. Patil (Cong.), (Yeola).  
 Jambhuantrao B. Dhote (D.F.-Ind.), (Yeotmal).  
 Mrs. M. C. Fernandes (Nominated).

### MANIPUR LEGISLATIVE ASSEMBLY

Speaker : S. Tombi Singh. Dy. Speaker : Kh. Chaoba Singh.

Constituencies : 32.

An estimate of party strength : Congress 24, Samyukta Socialist Party 4 ; Communist Party 1 ; Independents 3.

L. Ibomcha Singh (Cong.), (Bishenpur).  
 Lalroukung (Cong.), (Churachandpur).  
 Th. Anoubi Singh (S.S.P.), (Hiyanglam Sugnoo).  
 S. Bijoy Singh (S.T.) (Cong.), (Jiribam).  
 Y. Nimai Singh (S.S.P.), (Kachhing).  
 L. Thambou Singh (Cong.), (Keisamthong).  
 Md. Chaoba (Cong.), (Khangabok).  
 K. Borthakur Sarma (S.S.P.), (Khurai).  
 S. Tombi Singh (Cong.), (Konthoujam).  
 Md. Alimuddin (Cong.), (Lilong).  
 Ch. Rajmohan Singh (Cong.), (Mayang Imphal).

Shonkthothang Ashon (S.T.) (Cong.), (Mao East).  
 Siba Larho (ST) (Cong.), (Mao West).  
 Y. Yaima Singh (Ind.), (Nambal).  
 K. Envy Mashangva (S.T.) (Cong.), (Phungyar Pheisat).  
 S. Gambir Singh (Cong.), (Sagolband).  
 M. Ibohah Singh (C.P.I.), (Sagolmang).  
 Kh. Chaoba (Cong.), (Sekmai Lamsang).  
 A. Birmagol Singh (Ind.), (Singjamei).  
 Demjalam Kipgen (S.T.) (Cong.), (Tamei).

K. Kakhangai (S.T.) (Cong.), (Tamenglong).  
 Paokhohang (S.T.) (Cong.), (Tengnoupal).  
 M. Krinreng Singh (Cong.), (Thanga).  
 Gonkhenpau (S.T.) (Cong.), (Thanlon).  
 S. Angou Singh (Cong.), (Thongju).  
 W. Mani Singh (Cong.), (Thoubal).  
 Md. Ashraf Ali (Cong.), (Top Chingtha).  
 I. Solomon (Cong.), (Ukhrul).  
 N. Tombi Singh (Cong.), (Uripok (Thangmeiband)).  
 L. Achaw Singh (S.S.P.), (Wangkhei).  
 Smt. R. T. Shining (Cong.), (Nominee).

### MYSORE LEGISLATIVE COUNCIL

Chairman : S. C. Edke

Dy. Chairman : S. D. Gaonkar

Party position : Congress 49 ; P.S.P. 3 ; Independent 5 ; Jan Sangh 1 ; Communist 1 ; Total 63.

#### Elected by Legislative Assembly (21) :

K. R. Achar (Cong.).  
 K. S. Channappa (Cong.).  
 C. S. Balakrishna Gowda (Ind.).  
 S. C. Kubasam (Cong.).  
 Smt. Lakshamma (Cong.).  
 M. Madiha (Cong.).  
 J. B. Mallaradhya (Ind.).  
 Miss S. H. Marker (Cong.).  
 S. S. Narayana Murthy (Cong.).  
 R. B. Naik (Cong.).  
 K. V. Narasappa (Cong.).  
 M. C. Narasimhan (C.P.I.).  
 D. Rajagopal (Ind.).  
 B. Rangappa (Cong.).  
 M. V. Rama Rao (Cong.).  
 T. M. K. Peer Sab (Ind.).  
 Jivaraj Birachand Shah (Cong.).  
 K. Kanthappa Shetty (Cong.).  
 M. T. Sreekantiah (Ind.).  
 A. H. Sivananda Swamy (P.S.P.).  
 V. Venkatappa (Cong.).

#### Local Authorities (21)

R. Subbanna (Cong.), (Bangalore).  
 M. Krishnappa (Cong.), (Bangalore).

G. B. Patil (Cong.), (Belgaum).  
 R. S. Mahanthshetty (Cong.), (Belgaum).  
 K. Channabasavanna Goud (Cong.), (Bellary).  
 S. G. Khelgi (Cong.), (Bidar).  
 P. M. Nadgouda (Cong.), (Bijapur).  
 I. Doddaveerappa (Cong.), (Chitradurga).  
 V. Siddangauda (Ind.), (Dharwar).  
 G. V. Hallikeri (Cong.), (Dharwar).  
 A. V. Patil (Cong.), (Gulbarga).  
 K. Lakkappa (Cong.), (Hassan).  
 V. Muniswamy (Cong.), (Kolar).  
 K. V. Shankara Gowda (Cong.), (Mandya).  
 H. K. Shivarudrappa (Cong.), (Mysore-cum-Coorg).  
 M. Linganna (Cong.), (Mysore-cum-Coorg).  
 S. D. Gaonkar (Cong.), (North Kanara).  
 Viswanatha Swamy (Cong.), (Raichur).  
 K. T. Shamalah Gowda (Cong.), (Shimoga-cum-Chikmagalur).  
 K. Suryanarayana Adiga (Cong.), (South Kanara).  
 A. S. Nandeesh (Cong.), (Tumkur).

#### Graduates' Constituency (6)

G. V. Anjanappa (P.S.P.), (Bangalore).  
 Smt. M. R. Lakshamma (Cong.), (Bangalore).

Y. S. Patil (J.S.), (Mysore Central).  
 S. C. Edke (Cong.), (Mysore North).  
 M. V. Venkatappa (Cong.), (Mysore South-East).  
 V. Srinivasa Shetty (P.S.P.), (Mysore South-West).

#### Teachers' Constituency (6)

Vacant (Mysore North Central).  
 K. R. Nitturkar (Cong.), (Mysore North East).  
 B. G. Deshpande (Cong.), (Mysore North West).  
 S. Mukunda Rao (Cong.), (Mysore South Central).  
 S. P. Rajanna (Cong.), (Mysore South East).  
 C. Bandi Gowda (Cong.), (Mysore South West).

#### Nominated (9)

K. Doomappa (Cong.).  
 Akbar Salt A. Kayum (Cong.).  
 Smt. Abbasia Begum Mecci (Cong.).  
 A. B. Patel (Cong.).  
 M. Govardhan Rao (Cong.).  
 Dharamprakash L. S. V. Rao (Cong.).  
 Tej Singh Rathod (Cong.).  
 M. P. L. Sastry (Cong.).  
 K. Subba Rao (Cong.).



## MYSORE LEGISLATIVE ASSEMBLY

No. of Seats 216; S.C.: 29; S.T.: 2.

An estimate of party position is given below:  
Congress 126; Ind. 34; P.S.P. 19; Swatantra 13; Janatapaksha 7; S.S.P. 6; Jana Sangh 4; Com. 3; L.L.S. 2; R.P.I. 1; Vacant 1. Total 216.

Speaker: B. Vaikunta Baliga. Dy. Speaker: D. Manjunath.

N. S. Patil (Cong.), (Afzalpur).  
Digambara Rao B. Kalmankar (P.S.P.), (Aland).  
R. Muniswamaiah (S.C.) (Cong.), (Anekal).  
D. S. Nadakarni (P.S.P.), (Ankola).  
A. R. Panchagavi (Cong.), (Arbhavi).  
H. N. Nanje Gowda (Swa.), (Arkalagud).  
G. Channabasappa (Cong.), (Arsikere).  
D. B. Pawar (Cong.), (Athani).  
Manikrao Shama Rao (Cong.), (Aurad).  
K. M. Pattanshetti (Ind.), (Badami).  
B. T. Murnal (Cong.), (Bagalkot).  
A. Muniyappa (S.C.) (Cong.), (Bagepalli).  
C. L. Pattan Shetti (Cong.), (Bagewadi).  
B. S. Patil (Cong.), (Bagewadi).  
B. A. Bolashetti (Cong.), (Bailhongal).  
Subba Rao Halsnad (P.S.P.), (Baundur).  
S. S. Arakeri (S.C.) (R.P.I.), (Ballolli).  
T. P. Boriah (Ind.), (Bannur).  
Smt. K. Leelavati Rai (Cong.), (Bantwal).  
P. Thimmaiah (Ind.), (Basavangudi).  
Siddaramappa Khuba (Ind.), (Basavakalyan).  
B. B. Sayanak (Ind.), (Belgaum).  
V. Nagappa (Swa.), (Bellary).  
S. H. Puttaranganath (S.C.) (Swa.), (Belur).  
B. Vaikunta Balika (Cong.), (Belthangady).  
E. Narayana Gowda (Cong.), (Bethamangala).  
Abdul Khuddus Anwar (P.S.P.), (Bhadraavathi).  
S. Bhimanna (Cong.), (Bhalgi).  
G. Dugappa (S.C.) (Janatapaksha), (Bharamasagara).  
M. A. Amalorpavam (Cong.), (Bharathynagar).  
M. M. Jalisatgi (P.S.P.), (Bhatkal).  
G. Chandrakanth (J.S.), (Bidar).  
B. M. Patil (Cong.), (Bijapur).  
R. M. Desai (Cong.), (Bilgi).  
D. M. Siddaiah (Cong.), (Biligeri).  
M. Mallappa (Janatapaksha), (Birur).  
S. Jayaprakash Shetty (Swa.), (Brahmavar).  
Mahadev Gadigeppa Banakar (P.S.P.), (Byadagi).  
B. L. Gowda (Cong.), (Challakere).  
S. Puttaswamy (Janatha Paksha), (Chamarajanagar).  
R. Dayananda Sagar (Cong.), (Chamarajpet).  
K. Puttaswamy (Cong.), (Chamundeswari).  
N. G. Halappa (S.S.P.), (Channagiri).  
T. V. Krishnappa (Ind.), (Channapatna).  
C. M. S. Sastry (P.S.P.), (Chickmagalur).  
Vatal Nagaraj (Ind.), (Chickpet).  
K. M. Puttaswamy (Cong.), (Chikkaballapur).  
C. K. Rajaiiah Shetty (P.S.P.), (Chicknayakanahalli).  
B. S. Soudagar (S.C.) (Cong.), (Chikodi).  
Veenendra Patil (Cong.), (Chinnholi).  
T. K. Gangi Reddy (Com.L.), (Chintamani).  
S. Rudrappa (Cong.), (Chitapur).  
H. C. Boraiiah (Cong.), (Chitradurga).  
Smt. Winnifred F. Fernandes (P.S.P.), (Coondapur).  
Kondajji Basappa (Cong.), (Dananagere).  
Sadasivappa Patil (Ind.), (Deodurg).  
D. S. Gowdh (Cong.), (Devanahally).  
K. M. Dasankop (Cong.), (Dharwar).  
S. V. Agnihotri (Cong.), (Dharwar Rural).  
G. Rame Gowda (Ind.), (Doddaballapura).  
T. R. Shamanna (Ind.), (Fort).  
K. H. Patil (Janata Paksha), (Gadag).  
Smt. Nagarathnamma Hiremath (Cong.), (Gandhinagar).  
B. Nanjappa (Cong.), (Gandari).  
Thimmala Deva Raya (Cong.), (Ganganathi).  
L. S. Naik (S.T.) (Cong.), (Gokak).  
B. N. Lakshmiopathy (Ind.), (Gowribidanur).

Chikke Gowda (Cong.), (Gubbi).  
Mohamed Ali (Cong.), (Gulbarga).  
M. R. Pattanshetti (Cong.), (Guledgud).  
Ganga Bovi (S.C.) (P.S.P.), (Gulur).  
Smt. K. S. Nagarathnamma (Cong.), (Gundlupet).  
Narasappa Yenappa (S.C.) (Cong.), (Gurumitkal).  
N. M. Kotrabasaiah Sogi (Cong.), (Hadagalli).  
Ramakrishna Hedge (Cong.), (Haliyal).  
B. R. Patil (Ind.), (Hangal).  
Yenka Nayak (S.C.) (Cong.), (Harapanahalli).  
H. Siddaveerappa (Janata Paksha), (Harihar).  
H. B. Jwalanaiah (Swa.), (Hassan).  
B. V. Magavi (Cong.), (Haveri).  
R. Peeranna (S.C.) (Cong.), (Heggadadevanakote).  
G. B. Shankar (Cong.), (Hirekerur).  
D. Manjunath (S.C.) (Cong.), (Hiriyur).  
B. Parameswarappa (Janata Paksha), (Holalkere).  
H. D. Devegowda (Ind.), (Holenarasipur).  
D. Parameswarappa (Cong.), (Honnali).  
H. Nagappa (Cong.), (Honur).  
M. Ramappa (Cong.), (Hosadurga).  
I. Somashekarappa (Cong.), (Hosanagar).  
N. Chikke Gowda (Cong.), (Hoskote).  
R. Nagan Goud (Cong.), (Hospet).  
Sadashiva Shankarappa Shettar (Janasangha), (Hubli).  
M. R. Patil (Cong.), (Hubli Rural).  
Patil Satyagowda, Satagowda (Cong.), (Hukkeri).  
N. Hutchmasty Gowda (Ind.), (Huliyurguda).  
Prabhurao Dhondiba Jagadale (S.C.) (Cong.), (Hulsoor).  
V. N. Patil (Com.), (Humnabad).  
S. R. Kanthi (Cong.), (Hungund).  
D. Devaraja Urs (Cong.), (Hunsur).  
G. N. Patil (Cong.), (Huvinahippargi).  
M. K. Surpur (Swa.), (Indi).  
J. R. Halaswamy (Cong.), (Jagalur).  
B. D. Jatti (Cong.), (Jamkhandi).  
Sharanaganda Inamdar (Swa.), (Jewargi).  
K. M. Thammiah (Ind.), (Kadur).  
Smt. Champabai Bogle (S.C.) (Cong.), (Kagwad).  
F. S. Patil (Ind.), (Kalgatgi).  
M. Kalyan Rao (Cong.), (Kalgai).  
B. Ganganna (Cong.), (Kallambella).  
Smt. Nagamma (Cong.), (Kalmala).  
Smt. Lalithabai Chandrasekhar (Cong.), (Kamalapur).  
K. G. Thimme Gowda (Cong.), (Kanakapura).  
Bola Raghurama Shetty (J.S.), (Karkal).  
B. P. Kadam (Ind.), (Karwar).  
B. Bhasker Shetty (P.S.P.), (Kaup).  
N. B. Sardesai (Ind.), (Khanapur).  
G. Made Gowda (Cong.), (Kirugavalu).  
B. M. Sanikop (Cong.), (Kittur).  
P. Venkatagiriappa (Ind.), (Kolar).  
S. Rajagopal (S.C.) (Cong.), (Kolar Gold Field).  
B. Basavaiah (S.C.) (Cong.), (Kollegal).  
Virupakshagouda B. Malipatil (Cong.), (Koppal).  
T. S. Sivanna (Cong.), (Koratagere).  
S. Channiah (Ind.), (Krishnaraja).  
M. Basavaraju (Ind.), (Krishnarajanagar).  
M. K. Bomme Gowda (Janata Paksha), (Krishnarajpet).  
M. M. J. Sadyojatha (Cong.), (Kudlgi).  
Solur Saddappa (Cong.), (Kudur).  
R. M. Hedge (Ind.), (Kumta).  
S. R. Bommal (L.S.S.), (Kundgol).  
G. Thammanna (Cong.), (Kunigal).  
Allum Karibasappa (Cong.), (Kurugodu).  
E. Pundaleekappa (Cong.), (Kushlagi).  
K. Sanganagowda (Cong.), (Lingsugur).  
M. Nanche Gowda (Cong.), (Maddur).  
G. T. Govinda Reddy (Cong.), (Madhugiri).  
C. B. Range Gowda (P.S.P.), (Magadi).  
M. Mallikarjuna Swamy (S.C.) (Cong.), (Malavalli).  
M. S. Krishnan (Cong.), (Mallanwaram).

H. C. Linga Reddy (Cong.), (Malur).  
Nagappa (Cong.), (Mandya).  
M. Srinivas Nayak (Cong.), (Mangalore-I).  
B. M. Idinabba (Cong.), (Mangalore-II).  
Smt. Basavarajeswari (Cong.), (Manvi).  
A. P. Appanna (Cong.), (Mercara).  
S. H. Basanna (Cong.), (Molakalmuru).  
K. Ratnakumara Shetty (Swa.), (Mudabidri).  
S. M. Guraddi (Cong.), (Muldebihal).  
K. P. Nadagauda (Swa.), (Mudhol).  
K. H. Ranganath (S.C.) (P.S.P.), (Mudigere).  
T. Channaiah (S.C.) (Cong.), (Mulbagal).  
Dr. C. M. Churchiehalmath (Cong.), (Mundargi).  
K. Singari Gowda (Cong.), (Nagamangala).  
L. Srikantaiah (Ind.), (Nanjangud).  
M. Raja Sekhara Murthy (Cong.), (T. Narasipur).  
Azeez Sait (S.S.P.), (Narasimharaja).  
R. V. Doddamani (S.C.) (Cong.), (Nargund).  
R. M. Patil (Cong.), (Navalgund).  
Alur Hanumanthappa (Cong.), (Nelamangala).  
G. K. Manvi (Ind.), (Nipani).  
N. A. Channe Gowda (Ind.), (Pandavapura).  
H. V. Koujalgi (Cong.), (Parasgad).  
P. Anjinappa (S.C.) (Cong.), (Pavagada).  
H. M. Channabasappa (Ind.), (Periyapatna).  
V. Vithaldas Shetty (Cong.), (Puttur).  
V. L. Patil (Cong.), (Raibagh).  
M. Nagappa (S.S.P.), (Raichur).  
B. R. Dhananjeya (Ind.), (Ramanagaram).  
Smt. Saradavva, M. Pattan (Cong.), (Ramdrug).  
N. L. Bellad (P.S.P.), (Ranibennur).  
A. J. Doddameti (Cong.), (Ron).  
Patil Shidagovda Shivagouda (Cong.), (Sadala).  
K. H. Srinivasa (Cong.), (Sagar).  
K. P. Chikke Gowda (Swa.), (Sakalespur).  
M. Y. Ghorpade (Cong.), (Sandur).  
S. D. Kothavale (Cong.), (Sankeswar).  
B. Rachaiiah (S.C.) (Cong.), (Santhamaranahalli).  
H. Puttadasa (S.C.) (Ind.), (Sathnur).  
J. P. Sarvesh (S.C.) (Ind.), (Serun).  
Vacant (Shahapur).  
A. Nanjappa (Cong.), (Shanthinagar).  
S. Nijalingappa (Cong.), (Shiggon).  
G. Basavannappa (S.C.) (S.S.P.), (Shikaripura).  
A. R. Badrinarayan (Cong.), (Shimoga).  
Siddiah Kashimath (Swa.), (Shirhatti).  
Raja Pid Naik (Cong.), (Shorapur).  
S. Sivappa (P.S.P.), (Shrovanabelagola).  
B. Venkatarayappa (Cong.), (Sidlaghatta).  
C. M. Desai (Cong.), (Sindgi).  
G. Amaregonda (L.S.S.), (Sindhnoor).  
B. N. Rame Gowda (Cong.), (Sira).  
M. H. Jayaprakash Narayan (S.C.) (P.S.P.), (Sirsi).  
M. Doddanagoud (Cong.), (Siruguppa).  
H. R. Abdul Gaffar (Cong.), (Shivajinagar).  
G. M. Manjanathaiah (Swa.), (Somvarpet).  
S. Bangarappa (S.S.P.), (Sorab).  
K. N. Veerappa Gowda (Cong.), (Sringeri).  
B. L. Narayana Swamy (Ind.), (Srinivasapur).  
B. Doddabore Gowda (Ind.), (Srirangapatna).  
A. Ramachandra (S.C.) (Swa.), (Sullya).  
P. V. Aithala (P.S.P.), (Surathkal).  
Hanji Shivanna (P.S.P.), (Tarikere).  
S. Gopala Gowda (S.S.P.), (Thirthahalli).  
S. B. Vastrad (Cong.), (Tikola).  
M. S. Neelakanta Swamy (Cong.), (Tiptur).  
B. P. Gangadhar (P.S.P.), (Tumkur).  
M. N. Ramanna (Cong.), (Tururekere).  
P. B. Nandihalli (Ind.), (Uchagaon).  
S. K. Amin (Cong.), (Udipi).  
Y. Ramakrishnan (S.C.) (Cong.), (Uttarahalli).  
K. Prabhakar (S.C.) (Cong.), (Varthur).  
G. Narayana Gowda (Cong.), (Venagal).  
N. Lokayya Naik (S.T.) (J.S.), (Virajpet).  
Viswanatha Reddy (Ind.), (Yadgir).  
B. Narayanaswamappa (Ind.), (Yelahanka).  
Channabasangouda Hanamanthagouda (Cong.), (Yelburga).  
Anglo-Indian Nominee: P. F. De'Mello.



## NAGALAND LEGISLATIVE ASSEMBLY

Speaker : K. Shikhu.

Dy. Speaker : Riga Thong.

Secretary : S. Kar Gupta.

Seats : 46 ; Elected : 46.

Ihezhe Sema (*Aghunato*).  
 Hokishe Sema (*Akuluto*).  
 Zulutemba (*Alongtaki*).  
 T. N. Angami (*Angami-West*).  
 Kekuo Angami (*Angami-North I*).  
 K. V. Kreditsu (*Angami-North II*).  
 K. Khieya (*Angami-South I*).  
 Hosal Kin (*Angami-South II*).  
 R. C. Chiten Jamir (*Arkakong*).  
 K. Shikhu (*Atoizu*).  
 J. Maputemgen Ao (*Aunglenden*).  
 T. Kikon (*Bhandari*).  
 P. Demo (*Chazouba I*).  
 Netsutso Theyo (*Chazouba II*).  
 Thisetsu Venuh (*Chizami*).  
 Deblal Mech (*Dimapur*).

Gobinda Chandra Paira (*Dimapur Town*).  
 Langkam Kuki (*Ghaspani*).  
 Kuramoa Jamin (*Impur*).  
 Imchalembo Ao (*Jangpekong*).  
 Jasokie Angami (*Kohima Town*).  
 K. Tiayanger (*Koridang*).  
 Amon (*Meluri*).  
 Santsurhomo Ezung (*Moilan Wozhuro*).  
 Asamwati Longkumar (*Mokokchung Town*).  
 T. Imtiteren Jamir (*Mongoya*).  
 Ikiesing Thou (*Peren*).  
 Wezulhi C. Krome (*Pfutsero*).  
 Thuthipru Vasa (*Phek*).  
 Kiyelho Sema (*Pughoboto*).  
 Mhondamo Kithan (*Sanis*).  
 K. Yeahito Sema (*Satakha*).

Nihovi Sema (*Suruhoto*).  
 Ialkholam Kuki (*Tening*).  
 Riga Thong (*Tsemnyu*).  
 K. A. Imlong (*Kohima*) (*Tuensang*).  
 Kilongba Piri Yimchunger (*Keosar Village*) (*Tuensang*).  
 Litingse Sangtam (*Chalc Village*) (*Tuensang*).  
 Lipikyu Sangtam (P. O. Tuensang) (*Tuensang*).  
 Shangyu V. Konyak (*Wakching*) (*Tuensang*).  
 Tochi Hanso (P. O. Tuensang) (*Tuensang*).  
 I. Merachiba (*Tuli*).  
 T. A. Ngullie (*Tyui-Longchum*).  
 N. L. Odyuo (*Wokha*).  
 Suzumar Imsong (*Yisemyong*).  
 Kihoto Sema (*Zunheboto*).

## ORISSA LEGISLATIVE ASSEMBLY

Number of Constituencies : 140 ; Number of Seats : 140 ; Reserved for Scheduled Castes : 22 ; Scheduled Tribes : 34.

Speaker : Nanda Kishor Misra.

Deputy Speaker : Harihar Bahinipati.

Party Position : Congress 30 ; Swatantra 49 ; Jan Congress 24 ; Praja Socialist Party 21 ; Communist 7 ; S.S.P. 1 ; Independent 4 ; Communist (Marx.) 1.  
 Bhubanananda Jena (S.C.) (Cong.), (*Anandapur*).  
 Kumud Chandra Singh (J.C.), (*Angul*).  
 Harihar Das (C.P.I.), (*Aska*).  
 Surendra Pradhan (Ind.), (*Athamallik*).  
 Radhanath Rath (Ind.), (*Athgarh*).  
 Dibakar Nath Sarma (Cong.), (*Aul*).  
 Sunaram Soren (S.T.) (J.C.), (*Bahalda*).  
 Prasannakumar Dash (P.S.P.), (*Bairinga*).  
 Rabindra Mohan Das (P.S.P.), (*Balasore*).  
 Baikunthanath Mohanty (P.S.P.), (*Balikuda*).  
 Harihar Bhoi (S.C.) (J.C.), (*Balipatna*).  
 Naresh Pradhan (S.T.), (Swa.), (*Belliguda*).  
 Jogesh Chandra Rout (Ind.), (*Banki*).  
 Radhamohan Nayak (S.T.), (Swa.), (*Bangripoti*).  
 Raghunath Misra (Cong.), (*Banpur*).  
 Bharat Ch. Hota (Cong.), (*Baragarh*).  
 Pratap Chandra Patnaik (J.C.), (*Baramb*).  
 Jagannath Das (P.S.P.), (*Barchana*).  
 Santosh Kumar Sahu (Cong.), (*Baripada*).  
 Chintamani Jena (Cong.), (*Basta*).  
 Harekrushna Mahtab (J.C.), (*Basudebpur*).  
 Gangadhar Palikray (C.P.I.), (*Begunia*).  
 Binayak Acharya (Cong.), (*Berhampur*).  
 Nityananda Mahapatra (J.C.) (*Bhadrak*).  
 Deenabandhu Behera (Cong.), (*Bhanjanagar*).  
 Smt. Saraswati Pradhan (Cong.), (*Bhathi*).  
 Dayanidhi Nayak (S.C.) (Swa.), (*Bhawani-patna*).  
 Pyari Mohan Das (P.S.P.), (*Bhogari*).  
 Mrs. Subhadra Mahtab (Jan. Cong.), (*Bhubaneswar*).  
 Mohan Nag (S.C.) (Cong.), (*Bijepur*).  
 Balishab Charan Mallick (S.C.), (P.S.P.), (*Binj-harpur*).  
 Narasingha Ch. Misra (Swa.), (*Binka*).  
 Krushna Chandra Nayak (S.T.), (Swa.), (*Bisra*).  
 Biswanath Choudhury (S.T.) (Swa.), (*Bissam-Cuttack*).  
 Maharaja R. N. Singh Deo (Swa.), (*Bolangir*).  
 Hemendra Prasad Mahapatra (S.T.), (Swa.), (*Bonai*).  
 Himansa Sekhar Padhi (J.C.), (*Boudh*).  
 Brajamohan Mohanty (Cong.) (*Brahmagiri*).  
 Prasannakumar Panda (C.P.I.), (*Brairajnagar*).  
 Kshetra Mohan Nalk (S.T.), (Swa.), (*Chempua*).  
 Manmohan Das (S.C.), (J.C.), (*Chandbali*).  
 Lakshman Mahapatra (C.P.I.), (*Chatrapur*).  
 Nabaghan Nayak (S.C.) (J.C.), (*Chhendipada*).

Dibakar Patnaik (Cong.), (*Chikati*).  
 Akulananda Behera (P.S.P.), (*Choudwar*).  
 Biren Mitra (Cong.), (*Cuttack City*).  
 Sukadev Jena (S.C.) (J.C.), (*Cuttack Sadar*).  
 Dambaru Majhi (S.T.) (Swa.), (*Dabugam*).  
 Bhabagrahi Nayak (S.C.) (Swa.), (*Daspla*).  
 Bhanuganga Tribhuban Deb (Swa.), (*Deogarh*).  
 Smt. Satyabhama Del (J.C.), (*Dhamragarh*).  
 Paramananda Mohanty (P.S.P.), (*Dharamsala*).  
 L. D. Majhi (S.C.) (Swa.), (*Dharamgarh*).  
 Rajamata Ratnaprava Devi (Swa.), (*Dhenkanal*).  
 Mohan Nayak (S.C.) (Cong.), (*Dura*).  
 Lokanath Choudhury (C.P.I.), (*Erasama*).  
 Haladhar Misra (Swa.), (*Gondia*).  
 Muralidhar Kanungo (J.C.), (*Govindpur*).  
 Bhagirathi Gamnago (S.T.) (Cong.), (*Gunupur*).  
 Brundaban Nayak (Cong.), (*Hinjili*).  
 Udayanath Naik (S.C.), (Cong.), (*Jagannath Prasad*).  
 K. C. Mallick (S.C.), (P.S.P.), (*Jagatsinghpur*).  
 Prasannakumar Paul (P.S.P.), (*Jaleswar*).  
 Santanu Kumar Das (S.C.), (J.C.), (*Jajpur East*).  
 Prafulla C. Ghadei (J.C.), (*Jajpur West*).  
 Durga Charan Nayak (S.T.) (Swa.), (*Jashipur*).  
 N. Rama Seshiah (Swa.), (*Jeypore*).  
 Murariprasad Misra (Swa.), (*Jharsuguda*).  
 Maheswar Nayak (Swa.), (*Junagarh*).  
 Gatekrishna Swain (C.P.I.), (*Kakrapur*).  
 Brundaban Tripathy (Swa.), (*Kamakhyannagar*).  
 Loknath Rai (S.C.) (Swa.), (*Kantabanji*).  
 Prafullakumar Das (S.T.), (Swa.), (*Karanjia*).  
 Dandapani Swain (C.P.I.), (*Kavisuryannagar*).  
 Govinda Munda (S.T.) (Swa.), (*Keonjhar*).  
 S. K. Kanungo (P.S.P.), (*Kendrapara*).  
 Bhagaban Bhoi (Swa.), (*Kesinga*).  
 Narayan Sahu (S.S.P.), (*Khallikote*).  
 H. S. B. Mardaraj Roy (Cong.), (*Khandapara*).  
 Anup Singh Deo (Cong.), (*Khariar*).  
 Harchand Hasda (S.T.) (P.S.P.), (*Khunta*).  
 Raja Birakishore Deb (J.C.), (*Khurda*).  
 Banamali Maharana (P.S.P.), (*Kodala*).  
 Jhitrui Naik (S.C.) (Swa.), (*Kodinga*).  
 Raghunath Praharaj (Swa.), (*Koksara*).  
 Suryanarayan Mahji (S.T.) (Cong.), (*Kotpad*).  
 Kanhai Singha (S.T.) (Swa.), (*Kuchinda*).  
 Lal Rajendra Singh (S.T.) (Swa.), (*Laikera*).  
 Nandkishore Misra (Swa.), (*Loisingha*).  
 Birajprasad Ray (P.S.P.), (*Mahanga*).  
 Gadgadhar Madli (S.T.) (Cong.), (*Malkangiri*).  
 Birendra Kumar Sahu (Swa.), (*Melchahmunda*).  
 Tareni Sardhara (S.T.) (Cong.), (*Mohana*).  
 Sakila Soren (S.T.) (P.S.P.), (*Muruda*).

Malu Santa (S.T.) (Cong.), (*Nandapur*).  
 Bidika Mallanna (S.T.) (Swa.), (*Narayanpatna*).  
 Arichal Majhi (S.T.) (Swa.), (*Narla*).  
 Onkar Singh (S.T.) (Cong.), (*Nawapara*).  
 Sadasiba Tripathy (Cong.), (*Nawarangpur*).  
 Achutananda Mohanty (Ind.), (*Nayagarh*).  
 Banamali Das (C.P.I.M.), (*Nilgiri*).  
 Nilamani Sitha (S.C.) (J.C.), (*Nimapara*).  
 Bira Bikramaditya Singh Bariha (J.C.), (*Padampur*).  
 Pabitra Mohan Pradhan (J.C.) (*Pal Lahara*).  
 Vacant, (*Parlakimedi*).  
 Chakradhar Satpathy (P.S.P.) (*Palkura*).  
 Biswanath Malik (S.C.) (P.S.P.), (*Patamundai*).  
 Ramary Munda (S.T.) (Swa.), (*Patna*).  
 Ainthu Sahu (Swa.), (*Patnagarh*).  
 Banamali Patnaik (J.C.), (*Pipli*).  
 Barada Prasanna Khar (S.T.) (Swa.), (*Phulbani*).  
 Harihar Bahinipati (P.S.P.), (*Puri*).  
 Bhikari Suna (S.C.) (Swa.), (*Rairakhole*).  
 K. C. Majhi (S.T.) (Swa.), (*Rairangpur*).  
 Primchand Bhagat (S.T.) (Swa.), (*Rajgangpur*).  
 Raja S. N. Bhanj Deo (Ind.), (*Rajnagar*).  
 Rajaballabh Misra (Swa.), (*Ramachandrapur*).  
 Arjun Singh (S.T.) (Cong.), (*Ramagiri*).  
 Bajradhar Narendra Mahapatra (Cong.), (*Ranpur*).  
 Anantaram Majhi (S.T.) (Cong.), (*Rayagada*).  
 Rajkishore Samantaray (P.S.P.), (*Rourkela*).  
 R. C. Singh Bhoi (Swa.), (*Saintala*).  
 Surendranath Patnaik (J.C.), (*Salipur*).  
 Banamali Babu (Cong.), (*Sambalpur*).  
 Gangadhar Mahapatra (Cong.), (*Satyabadi*).  
 Ustab Charan Jena (S.C.) (P.S.P.), (*Simulia*).  
 Nilambar Raiguru (Swa.), (*Sonepur*).  
 Haraprasad Mahapatra (Swa.), (*Soro*).  
 Smt. Anandamanjari Debi (J.C.), (*Sukinda*).  
 Harihar Patel (Swa.), (*Sundergarh*).  
 A. N. Singh Deo (Swa.), (*Suruda*).  
 Gangadhar Pradhan (S.T.) (Swa.), (*Talasara*).  
 K. C. Bahara (S.C.) (J.C.), (*Talcher*).  
 Bagirathi Mahapatra (S.T.) (Swa.), (*Telkoi*).  
 Nishamani Khuntia (P.S.P.), (*Tirtol*).  
 Achyutananda Mahanand (Swa.), (Ind.), (*Titilagarh*).  
 Radhamohan Misra (Swa.), (*Tusra*).  
 Manmohan Tudu (S.T.) (J.C.), (*Udala*).  
 Gopal Pradhan (S.T.) (Swa.), (*Udayagiri*).  
 Rabi Singh Majhi (S.T.) (Cong.), (*Umerkote*).



## PONDICHERY LEGISLATIVE ASSEMBLY

No. of Constituencies 30 (Pondicherry 20, Karikal 7, Mahe 2, Yanam 1).

Speaker : P. Shanmugam.

Deputy Speaker : V. N. Purushothaman.

An estimate of party position is as follows:

Congress 16; United Democratic Front 14.

P. Rathnavelu (U.D.F.), (*Ariancupom*).

R. Thangavelu Clemencea (S.C.) (U.D.F.), (*Bahour* (R)).

C. M. Achraff (U.D.F.), (*Bussy*).

M. K. Jeevarathina Udayar (Cong.), (*Calapeth*).

A. S. Kankeyan (U.D.F.), (*Classicade*).

G. Nagarajan (S.C.) (Cong.), (*Cotchery* (R)).

Padmini Chandrasekharan (Cong.), (*Couroussou-coupom*).

Subramanyan Padayachi (Cong.), (*Courouvinallam*).

P. Angammal (S.C.) (Cong.), (*Embalom* (R)).

V. M. C. Varada Pillai (Cong.), (*Grand Aldee*).

Farook Marikar (Cong.), (*Karikai North*).

Mohamad Ibrahim Maricar (U.D.F.), (*Karikai South*).

Valavil Kesavan (Cong.), (*Mahe*).

Manickavasava Reddiar (Cong.), (*Mannadipeth*).

V. K. Subbiah (U.D.F.), (*Modeliarpet*).

P. Shanmugam (Cong.), (*Muthalpet*).

P. Shanmugam (Cong.), (*Nedouncadou*).

N. Ranganadin (U.D.F.), (*Nellitope*).

Nagamoutou Pillai (Cong.), (*Neravy*).

V. Venkatasubha Reddiar (Cong.), (*Nettiapacom*).

S. Govindassamy (U.D.F.), (*Oulgaret*).

Raja G. Perumal (Cong.), (*Oupalom*).

N. Harikrishnan (S.C.) (Cong.), (*Oussoudou* (R)).

V. N. Purushothaman (Cong.), (*Pallour*).

N. Gurusamy (U.D.F.), (*Pulusaram*).

Edouard Goubert (U.D.F.), (*Raj Nivas*).

R. Kulandai (S.C.) (Cong.), (*Tiroubouvane* (R)).

Subbarayalu (U.D.F.), (*Tirounoular*).

S. T. Kanakarasu (U.D.F.), (*Villianur*).

Kamichetty P. V. R. Naidou (U.D.F.), (*Yanam*).

## PUNJAB VIDHAN PARISHAD

Strength : 42 (including Chairman & Dy. Chairman).

An estimate of party strength : Congress 31; Independent 8; Jan Sangh 2; Communist 2; Vacant 1.

Chairman : Durga Das Khanna.

Deputy Chairman : S. F. Deane.

## Local Authorities (14)

Hans Raj Sharma (Cong.), (*Amritsar-cum-Kapurthala*).

Sardar Prem Singh Lalpur (Cong.), (*Amritsar-cum-Kapurthala*).

Amrit Pal Singh (Ind.), (*Bhatinda*).

Sardar Jagmohan Singh (Cong.), (*Ferozepore*).

Kundanlal Ahooja (Cong.), (*Ferozepore*).

K. Ram Sarin (Cong.), (*Gurdaspur*).

Ch. Amar Singh (Cong.), (*Hoshiarpur*).

Dr. Chanan Singh (Cong.), (*Jullundur*).

Lekh Raj (Cong.), (*Jullundur*).

Sardar Ramdial Singh (Cong.), (*Ludhiana*).

Sat Paul Mittal (Cong.), (*Ludhiana*).

Sardar Bhagwant Singh (Cong.), (*Patiala-cum-Rupar*).

Ram Nath (Cong.), (*Patiala-cum-Rupar*).

Sardar Rajinder Singh (Cong.), (*Sangrur*).

## Legislative Assembly (16)

Mit Ahluasher (Cong.).

Sardar Puran Singh Azad (Cong.).

Smt. Sita Devi (Cong.).

Avatar Narain Gujral (Cong.).

Durga Das Khanna (Cong.).

G. Gurmukh Singh Musaffir (Cong.).

Prof. Yeshwant Rai (Cong.).

Kanwarlal Sharma (Cong.).

Giani Gurmukh Singh (Cong.).

Master Hari Singh (C.P.I.).

Sardar Kapoor Singh (Cong.).

Maharaj Sardar Nihal Singh (Cong.).

Ch. Kartar Singh (Ind.).

Com. Teja Singh Swantantar (C.P.I.).

Dr. Shyamlal Thapar (Ind.).

Vacant 1.

## Graduates (3)

Murari Lal Kapoor (J.S.), (*Punjab Central*).

Krishan Lal (J.S.), (*Punjab North*).

Mrs. Ila Rani Ahooja (Cong.), (*Punjab South*).

## Teachers (3)

Master Gurcharan Singh (Cong.), (*Punjab Central*).

Gopal Krishan Chatrath (Ind.), (*Punjab North*).

Pt. Prem Chand Markanda (Cong.), (*Punjab South*).

## Nominated (6)

S. F. Deane (Cong.).

Mrs. Gian Kaur Vidyarthi (Cong.).

Kustar Singh (Ind.).

Smt. Prabhjot Kaur (Cong.).

Mrs. Pritpal Kaur Wasu (Cong.).

Ravindra Nath (Ind.).

## PUNJAB LEGISLATIVE ASSEMBLY

Strength 104; S.C. 24.

Party-wise estimate is : Congress 48, Akali Dal (Sant) 24, Jan Sangh 9; Communist 5, Communist (Marxist) 3; Republican 3; Akali Dal (Master Tara Singh) 2; Samyukta Socialist 1; Independent 9.

Speaker : Lieut. Col. Sardar Joginder Singh.

Dy. Speaker : Dr. Jagjit Singh Chohan.

Ch. Satya Dey (J.S.), (*Abohar*).

Ch. Darshan Singh (Cong.), (*Adampur*).

Dalip Singh Tapiala (C.P.I.-M.), (*Ajnala*).

Lieut. Bhag Singh (S.C.) (Cong.), (*Amloh*).

Balramji Das Tandon (J.S.), (*Amritsar Central*).

Dr. Baldev Prakash (J.S.), (*Amritsar East*).

S. P. Dang (C.P.I.), (*Amritsar West*).

Harbans Lal Khanna (J.S.), (*Amritsar South*).

T. Jagtar Singh (Cong.), (*Anandpur*).

Sardar Shangara Singh\* (S.C.) (Cong.), (*Attari*).

Sardar Gurcharan Singh (A.D.-S.) (*Bagha Purama*).

Harbhaj Ram (S.C.) (A.D.-S.) (*Banga*).

Ch. Baloo Ram Bant\* (Cong.), (*Balachaur*).

Sardar Prem Singh Prem (Cong.), (*Banur*).

Sardar Surjit Singh (A.D.-S.), (*Barnala*).

Harkishan Singh Surjit (C.P.I.-M.) (*Bara Pind*).

Pt. Mohan Lal (Cong.), (*Batala*).

J. Sohan Singh Jalal Usman (Cong.), (*Beas*).

Ch. Baloo Ram Bant\* (Cong.), (*Balachaur*).

Bhan Singh Bhaura (S.C.) (C.P.I.) (*Bhadaur*).

Faqir Chand Gupta (Ind.), (*Bhatinda*).

Sardar Gurdev Singh (Cong.), (*Budhlada*).

Maharaja Yadendra Singh (Ind.), (*Dakala*).

Sardar Jagir Singh (S.C.) (Cong.), (*Dakha*).

B. Ram Prakash Dass (Ind.), (*Dasuya*).

Hardit Singh Bhathal (C.P.I.-M.), (*Dhanaula*).

Sardar Lachhman Singh Gill (A.D.-S.), (*Dharankot*).

Sardar Surat Singh (Cong.), (*Dhariwal*).

Sardar Tirth Singh (C.P.I.-M.), (*Dhuri*).

Jai Muni (S.C.) (Cong.), (*Dina Nagar*).

Bhagar Singh (S.C.) (A.D.-S.), (*Faridkot*).

Sardar Natha Singh Dalam (A.D.-S.), (*Fategarh*).

Ch. Radha Kishan (Cong.), (*Fazilka*).

Sardar Gardhara Singh (Cong.), (*Ferozepur*).

Sardar Mohinder Singh Gill (Cong.), (*Ferozepur Cantt.*).

Capt. Rattan Singh (Cong.), (*Garh Shankar*).

Sardar Harcharan Singh Brar (Cong.), (*Giddimbaha*).

Prabodh Chandra (Cong.), (*Gurdaspur*).

R. G. Bakhtawar Singh (Ind.), (*Guruahar Sahai*).

Ch. Balbir Singh (S.S.P.), (*Hoshiarpur*).

Sardar Gurcharan Singh (Cong.), (*Jagraon*).

Phuman Singh (C.P.I.), (*Jalalabad*).

Darshan Singh (S.C.) (Cong.), (*Jamshir*).

Sardar Amrik Singh (S.C.) (Cong.), (*Jandiala*).

Gen. Rajinder Singh (Ind.), (*Jullundur Cantt.*).

L. C. Saberwal (J.S.), (*Jullundur North*).

Manmohan Kalia (J.S.), (*Jullundur South*).

Sardar Kirpal Singh Dhillon (Cong.), (*Kapurthala*).

Piara Ram Dhannowali (S.C.) (Rep.), (*Kartarpur*).

Jathendar M. Singh (Cong.), (*Khadoor Sahib*).

J. Mohan Singh Nagote (*Khadoor Sahib*).

Dr. Gurcharan Singh (S.C.) (R.P.I.), (*Khanna*).

Sardar Baldev Singh (A.D.-S.), (*Kharar*).

Sardar Harbhagwan Singh (A.D.-S.), (*Kotkapura*).

Gen. Mohan Singh (Cong.), (*Kum Kalan*).

Ch. Shiv Chand\* (S.C.) (Cong.), (*Lambi*).

Brish Bhan (Cong.), (*Lehra*).

Kapur Chand Jain (J.S.), (*Ludhiana North*).

A. Vishwanathan (J.S.), (*Ludhiana South*).

Gurmial Singh (S.C.) (Cong.), (*Mahilpur*).

Sardar Prakash Singh Gill (A.D.-S.), (*Majitha*).

Nawab Iftikar Ali Khan (Cong.), (*Malerkotla*).

Sardar Gurmit Singh (Cong.), (*Malout*).

Jangir Singh (C.P.I.), (*Mansa*).

Nachhattar Singh Gill (Cong.), (*Moga*).

Prithvi Singh Azad (S.C.) (Cong.), (*Morinda*).

Bashambar Nath Makkar (Ind.), (*Mukerian*).

Sardar Gurudev Singh (S.C.) (A.D.-S.), (*Muktesar*).

Narinder Singh (Ind.), (*Nabha*).

Sardar Darbar Singh (Ind.), (*Nakodar*).

Sarala Parasher (Cong.), (*Nangal*).

Ch. Sunder Singh (S.C.), (Cong.), (*Narot Mehra*).

Sardar Hardit Singh (S.C.) (A.D.-S.), (*Nathana*).

Bedi Singh (Cong.), (*Nathin*).

Sardar Dilbagh Singh (Cong.), (*Nawanshahr*).

Munsha Singh (S.C.) (C.P.I.), (*Nihal Singh Wala*).

Sardar Darbars Singh (Ind.), (*Nur Mahal*).

Sardar Karnail Singh (A.D.-S.), (*Pakka Kalan*).

Chajju Ram Gupta (J.S.), (*Patankot*).

Sardar Harbans Singh Sidhu (Cong.), (*Phul*).

Sardar Singh Kohli (A.D.), (*Patiala*).

Smt. Ram Kaur (Cong.), (*Patti*).

Sardar G. S. Rarewala (Cong.), (*Payel*).

Sadhu Ram (S.C.) (Cong.), (*Phaguera*).

Sardar Amar Singh (Cong.), (*Phillaur*).

Sardar Satnam Singh Bajwa (Cong.), (*Qadian*).

Sardar Gurnam Singh (A.D.-S.), (*Quila Raipur*).

Sardar Jagdev Singh Gill (A.D.-S.), (*Raikot*).

Satpal Kapur (Cong.), (*Raipur*).

Chanti Prakash (Cong.), (*Rajpura*).

Sardar Gurbachan Singh (Cong.), (*Ropar*).

Ch. Bhajan Lal (S.C.) (Ind.), (*Samana*).

Sardar Jasdev Singh (A.D.-S.), (*Samrala*).

Sardar J. S. Phaguwala (A.D.-S.), (*Sangrur*).

Sardar Harbhajan Singh (A.D.-S.), (*Sardulgarh*).

Bhagar Guran Dass (S.C.) (Cong.), (*Sham Chaurasi*).

Kundan Singh (S.C.) (A.D.-S.), (*Sherpur*).

Gurdev Singh (A.D.-M.), (*Sirhind*).

Sardar Sikandar Singh (Cong.), (*Srihargobindpur*).

Sardar Balwant Singh\* (Cong.), (*Sultanpur*).

Gurbachan Singh (A.D.-S.), (*Sunam*).

Jathendar Dasodha Singh (A.D.-S.), (*Talwandi Sabo*).

Jagjit Singh (Rep.), (*Tanda*).

Sardar Harjinder Singh Behla (A.D.-S.), (*Tarn Taran*).

Sardar Karnail Singh (S.C.) (A.D.-S.), (*Verka*).

Sardar Hazara Singh Gill (A.D.-S.), (*Valtoha*).

Sardar Harcharan Singh Hudhara (A.D.-S.), (*Zira*).

\* Defected from the Congress and joined the United Opposition.



## RAJASTHAN LEGISLATIVE ASSEMBLY\*

Speaker : N. N. Acharya.

Dy. Speaker : Poonam Chand Bisnoi.

An estimate of party position is : Congress 89 ; Swatantra 49 ; Jan Sangh 22 ; Samyukta Socialist Party 8 ; Communist Party 1 ; Independents 15.

Gama (Cong.), (Abu).  
Madho Singh (Cong.), (Ahoze).  
V. N. Bhargava (Cong.), (Ajmer).  
Amba Lal (J.S.), (Ajmer East).  
Bhagwan Das (J.S.), (Ajmer West).  
Bitthal Prasad (Swa.), (Aklera).  
R. N. Agarwal (C.P.I.), (Alwar).  
Sahdev (Swa.), (Amber).  
G. L. Vyas (Cong.), (Asind).  
Ram Charan (J.S.), (Atru).  
Lalit Singh (Cong.), (Badi Sadri).  
Nathuram (S.T.), (Cong.), (Bagidora).  
Dheer Singh (Cong.), (Bairath).  
Prithvi Singh (Swa.), (Bali).  
P. R. Bamanwas (Swa.), (Bamanwas).  
Harideo Joshi (Cong.), (Banaswara).  
V. N. Joshi (Cong.), (Bandikui).  
Yaswant Singh (Cong.), (Banera).  
Badri Prasad (Ind.), (Bansur).  
Devi Dutta (J.S.), (Baran).  
Balwant (S.C.), (Cong.), (Bari).  
Birdhi Chand (Cong.), (Barmer).  
Kanhaiya Lal (S.C.) (Swa.), (Bassi).  
M. Behari Lal (S.S.P.), (Bayana).  
Fateh Singh (Swa.), (Beawar).  
Hari Singh (Ind.), (Begun).  
Ami Lal (S.S.P.), (Behror).  
Hans Raj (Cong.), (Bhadra).  
Nathi Singh (S.S.P.), (Bharatpur).  
R. P. Ladha (Cong.), (Bhilwara).  
Jas Raj (Swa.), (Bhinai).  
Aidan Singh (Swa.), (Bhimmal).  
Parasram Maderna (Cong.), (Bhopalgarh).  
Karni Singh (Ind.), (Bikaner).  
Gokal Prasad (Cong.), (Bikaner).  
Kaluram Arya (Cong.), (Bilari).  
B. S. Sharma (Cong.), (Bundi).  
Prem Singh (J.S.), (Chhabra).  
Ram Kumar (Cong.), (Chittor).  
Onkarlal Bohra (Cong.), (Chittor).  
Abdul Hadl (Ind.), (Choktan).  
Rajeshwar Singh (Swa.), (Chomu).  
Ratan Lal (Cong.), (Chorasi).  
Megh Raj (Ind.), (Churu).  
Lachhman (J.S.), (Dag).  
Madan Singh (J.S.), (Danta Ramgarh).  
Doonga Ram (S.C.) (Swa.), (Dausa).  
Mathuradas Mathur (Cong.), (Deodwana).  
Aditendra (S.S.P.), (Deeg).  
Gauri Punya (Cong.), (Degana).  
Daulat Ram (S.C.) (Swa.), (Desuri).  
Banwari Lal (Cong.), (Dholpur).  
Suwalal (Swa.), (Dudu).  
M. Laxman Singh (Swa.), (Dungarpur).  
Daulat Ram (Ind.), (Durgargarh).  
Alam Ali (Swa.), (Fatehpur).  
Mahendra Singh Panwar (Swa.), (Gandhinagar).

Kedar Nath (S.S.P.), (Ganganagar).  
R. C. Paliwal (Cong.), (Gangapur).  
Ganesh Lal (S.C.) (Cong.), (Gangrar).  
Rajeshwar Singh (Swa.), (Ghomu).  
Devendra Kumar (S.T.) (Cong.), (Gogunda).  
S. N. Singh (Cong.), (Gudha).  
Braj Prakash (Cong.), (Hanumangarh).  
Sarvan Lal (S.C.) (J.S.), (Hindaun).  
Kesari Singh (J.S.), (Hindoli).  
Kalyan Mal (S.T.) (Cong.), (Jhazpur).  
Maharani Gayatri Devi (Swa.), (Jaipur).  
Bal Singh (Swa.), (Jaisalmer).  
Sankar Lal (Cong.), (Jaitaran).  
Jepa Ram (S.C.) (Swa.), (Jalore).  
Nathu Lal (Swa.), (Jamuwa Ramgarh).  
Ram Singh (Ind.), (Jayal).  
R. P. Bohra (Ind.), (Jhalrapatan).  
Sumitra (Cong.), (Jhunjhunu).  
Barakatulla Khan (Cong.), (Jodhpur).  
S. C. Agarwal (J.S.), (Johari Bazar).  
Majilis (Cong.), (Kaman).  
Shankar Lal (Cong.), (Kapasan).  
Gurdip Singh (Cong.), (Karanpur).  
Maharajkumar Brijendra Pal (Cong.), (Karauli).  
Ganga Sahai (S.C.), (J.S.), (Kathumar).  
Devi Lal (Swa.), (Kekri).  
Manphool Ram (Cong.), (Keshrisinghpur).  
Gokul Chand (S.C.) (Cong.), (Khairthal).  
Chunni Lal (Swa.), (Khandar).  
Ram Chandar (Ind.), (Khandela).  
Harish Chandra (J.S.), (Khanpur).  
Surendra Singh (Swa.), (Kharchi).  
Vidya Sagar (Cong.), (Kherwara).  
Raghuveer Singh (Swa.), (Khetri).  
Nand Lal (J.S.), (Kishanganj).  
Maharaja Sumer Singh (Swa.), (Kishanganj).  
Bhalron Singh (J.S.), (Kishanpole).  
Kanta Khaturia (Cong.), (Kolayat).  
Krishna Kumar Goel (J.S.), (Kota).  
Sri Ram (Swa.), (Kotpulli).  
Hira Lal (Cong.), (Kumbhalgarh).  
Man Singh (Ind.), (Kumher).  
Hira (S.S.P.), (Kushalgarh).  
Nath Mal (Swa.), (Lachhmangarh).  
Harjiram Burdak (Swa.), (Ladnu).  
Shambhu Ram (Swa.), (Lalsot).  
Jai Narain (Cong.), (Lasadia).  
P. C. Vishnoi (Cong.), (Luni).  
Bhim Sain (Cong.), (Lunkaransar).  
S. C. Singh (Cong.), (Mahuwa).  
Vijay Singh (Swa.), (Makrana).  
Damodarlal Vyas (Cong.), (Malpura).  
K. K. Shivcharan (Cong.), (Mandal).  
Manohar Singh (Ind.), (Mandalgarh).  
Ram Narain (Cong.), (Mandawa).  
Hari Prasad (Cong.), (Mandawar).  
Narain Singh (Cong.), (Masuda).  
Goverdhan (Swa.), (Merta).  
Nathi Lal (Ind.), (Nadbai).

Mohammad Usman (Cong.), (Nagaur).  
Vajai Singh (Swa.), (Nasirabad).  
Kishan Lal (Cong.), (Nathdwara).  
S. M. Basotiya (Swa.), (Nawalgarh).  
Kishan Lal (Swa.), (Nawan).  
Mohan Lal (Cong.), (Nam-ka-Thana).  
Srinivas (Cong.), (Nimbahera).  
Jai Narain (S.C.) (Swa.), (Niwai).  
Ram Chandra (Swa.), (Nohar).  
Chuni Lal (Ind.), (Nokha).  
Ranjit Singh (Cong.), (Osian).  
Mrs. Madan Kaur (Cong.), (Pachpadra).  
Mahendra Kumar (Cong.), (Padwak).  
Shanker Lal (Cong.), (Pali).  
Paras Ram (S.C.), (Swa.), (Parbatkar).  
Nand Lal (Cong.), (Patan).  
L. R. Sulania (Swa.), (Phagi).  
Nather Das (Swa.), (Phalasia).  
Deep Chand (Ind.), (Phalodi).  
P. K. Chaudhri (Cong.), (Phulera).  
Vittthal (S.S.P.), (Pipal Khunt).  
Mahendra Singh (J.S.), (Pipalda).  
Kanhaiya Lal (Swa.), (Pirawa).  
Har Lal (S.T.) (Cong.), (Pratapgarh).  
Mulk Raj (Cong.), (Raisinghnagar).  
Samrath Lal (Swa.), (Rajgarh).  
Prabhuman Singh (Cong.), (Rajakhara).  
Mehar Singh (Ind.), (Rajsamand).  
Jujhar Singh (J.S.), (Ramganj).  
Shobha Ram (Cong.), (Ramgarh).  
Moti Lal (Swa.), (Reodar).  
Shish Ram (Cong.), (Sadulpur).  
Bheekha Bhai (Cong.), (Sagwara).  
Roshan Lal (Cong.), (Salumber).  
Ram Kumar (J.S.), (Sapotra).  
Devi Lal (Cong.), (Sarada).  
Om Dutt (J.S.), (Sardarpura).  
Roop Singh (Ind.), (Sardar Shahr).  
H. V. Sharma (Swa.), (Sawai Madhopur).  
Bhura (Cong.), (Shahpura).  
Khet Singh (Cong.), (Shergarh).  
Hukam Singh (Cong.), (Shiv).  
Ramdev Singh (Cong.), (Sikar).  
Kishan Lal (S.T.) (Cong.), (Sikrai).  
Madan Singh (Cong.), (Sirohi).  
Kalu (Swa.), (Siwana).  
Pukhraj (Swa.), (Sojat).  
Har Lal Singh (J.S.), (Sri Madhopur).  
Suraj Mal (Swa.), (Surajgarh).  
P. C. Bafna (Swa.), (Sumerpur).  
Man Phool Singh (Cong.), (Suratgarh).  
Jai Krishan (Cong.), (Thanagasi).  
Aminuddin (Cong.), (Tijara).  
Chuttan Lal (Cong.), (Toda Bhim).  
Jagan Nath (Cong.), (Todaraisingh).  
Damodar Vyas (Cong.), (Tonk).  
Mohan Lal Sukhadia (Cong.), (Udaipur).  
Digvijay Singh (Swa.), (Uniar).  
Gulab Singh (Cong.), (Vallabhnagar).  
Ram Kishan (S.S.P.), (Weir).

## TRIPURA LEGISLATIVE ASSEMBLY

Constituencies : 30 ; Seats : 30.

Speaker : Mahindra Lal Bhowmick.

Dy. Speaker : Monoranjan Nath.

An estimate of party position is as follows :

Congress 27 ; Communist 1 ; Communist (Marxist) 2.

Dr. Benod Behari Das (S.C.) (Cong.), (Agartala Sadar I).

Sachindra Lal Singh (Cong.), (Agartala Sadar II).

Tarit Mohan Dasgupta (Cong.), (Agartala Sadar III).

Krishnadas Bhattacharjee (Cong.), (Agartala Town).

Upendra Kumar Roy (Cong.), (Belonia).  
Bajuban Riyan (S.T.) (Cong.), (Birganj).  
Umesh Lal Singh (Cong.), (Bishalgarh).  
Agoor Deb Barma (S.T.) (C.P.I.), (Charilam).  
B. B. Banerjee (Cong.), (Dharmanagar North).  
Monoranjan Nath (Cong.), (Dharmanagar South).  
R. C. Deb Rankhal (S.T.) (Cong.), (Dumburnagar).  
R. Ranjan Gupta (Cong.), (Fatikroy).  
Abdul Wazid (Cong.), (Kadamtala).  
M. Lal Bhowmick (Cong.), (Kailasahar).  
B. C. Deb Barma (S.T.) (C.P.I.-M.), (Kalyanpur).  
Kshitish Chandra Das (S.C.) (Cong.), (Kamalpur).  
R. P. Chowdhury (S.T.) (Cong.), (Kanchanpur).  
S. C. Dutta (Cong.), (Khowai).

Ganashyam Dewan (S.T.) (Cong.), (Kulaihour).  
P. R. Dasgupta (Cong.), (Mohanpur).  
S. C. Choudhury (Cong.), (Mohuripur).  
Jagindra Kumar Majumdar (Cong.), (Old Agartala).  
N. K. Sarkar (Cong.), (Radhakishorepur).  
Angju Mog (S.T.) (Cong.), (Sabroom).  
Ershad Ali Choudhury (Cong.), (Salgarh).  
D. K. Choudhury (Cong.), (Sonamura North).  
Muncher Ali (Cong.), (Sonamura South).  
M. D. Barma (S.T.) (Cong.), (Takarjala).  
Prafulla Kumar Das (S.C.) (Cong.), (Teliamura).  
A. D. Barma (S.T.) (C.P.I.-M.), (Uttar Debendranagar).

\* List incomplete.



## UTTAR PRADESH LEGISLATIVE COUNCIL

Strength : 108.

Chairman : Darbarilal Sharma.

Dy. Chairman : Virendra Swarup.

An estimate of party position is as follows:—  
Congress 69, Ind. 8, Nationalist Party 10, Jan Sangh 7, Republican 1, Samyukta Socialist 6, Praja Socialist 2, Communist 1.

## Elected by Legislative Assembly (39)

Ajai Kumar Basu (Cong.).  
Istafa Husain (Cong.).  
(Vacant).  
Smt. Begum Mohsina Khalil Kidwai (Cong.).  
Darbarilal Sharma (Cong.).  
Jagar Nath (S.S.P.).  
Gend Lal (Cong.).  
Kalyan Chand (Cong.).  
H. P. Singhania (Ind.).  
Nathu Ram (Cong.).  
Rudra Dutt Giri (Cong.).  
Smt. Sunita Chauhan (Cong.).  
Khan Bahadur Mohd. Aziz Husain (Cong.).  
Dr. Purshottam Das Kapoor (Jan Sangh).  
Shiv Prasad Singh (J.S.).  
Shakir Ali Siddiqi (Cong.).  
Ram Prakash Gupta (J.S.).  
Rajendra Pal Singh (Cong.).  
Smt. Shanti (Cong.).  
Mohd. Shaluid Fakhiri (Cong.).  
Sita Ram (J.S.).  
Chedilal Sathi (Rep.).  
(Vacant).  
Ramji Verma (Cong.).  
Virendra Shah (J.S.).  
Ram Dhari Pandey (Cong.).  
Rani Tandon (Cong.).  
Banshi Dhar Shukla (Cong.).  
Ram Charan (Cong.).  
Beni Prasad Madhav (P.S.P.).  
(Vacant).  
Gopinath Singh (Cong.).  
Gopal N. Saxena alias Palanji (Socialist).  
Vasudev Misra (Cong.).  
Ram Sagar (S.S.P.).  
Smt. Shivrajwati Nehru (Cong.).  
Pitamber Das (J.S.).  
Smt. Daya Vati (Cong.).

## Local Authorities (39)

S. P. Gupta (Cong.), (Agra).  
(Vacant), (Allahabad-cum-Fatehpur-cum-Banda).  
Vacant, (Aligarh).

Mangla Prasad (Cong.), (Allahabad-cum-Fatehpur-cum-Banda).  
Bindhyachal Rai (Cong.), (Azamgarh-cum-Ballia-cum-Ghazipur).  
Jagannath Singh (Cong.), (Azamgarh-cum-Ballia-cum-Ghazipur).  
Tej Bahadur (Com.), (Azamgarh-cum-Ballia-cum-Ghazipur).  
Hukum Singh Visen (Cong.), (Bahraich-cum-Gonda).  
Kr. D. Pratap Singh (Cong.), (Bahraich-cum-Gonda).  
Sachidanand Tripathi (Cong.), (Basti-cum-Gorakhpur-cum-Deoria).  
Harishankar Pd. (Basti-cum-Gorakhpur-cum-Deoria).  
Jagannath Acharya (Cong.), (Basti-cum-Gorakhpur-cum-Deoria).  
Mathura Pd. Pandey (Cong.), (Basti-cum-Gorakhpur-cum-Deoria).  
Saeedul Hasan (Cong.), (Bulandshahr).  
Maulana Abdur Rauf Khan (Cong.), (Badaun).  
Ram Lakhan (Cong.), (Budaun-cum-Rampur-cum-Bareilly).  
Heera Singh, (Faizabad).  
Behari Lal Vashishtha (Cong.), (Hamirpur-cum-Jhansi).  
Raghuraj Singh (Cong.), (Jalun-cum-Elawah).  
Raja Chandra Bhal Deo, (Jaunpur).  
Harcharan Lal Agarwal (J.S.), (Jaunpur).  
C. L. Paliwal (Cong.), (Kanpur-cum-Farrukhabad).  
Virendra Bahadur Singh Chandel (P.S.P.), (Kanpur-cum-Farrukhabad).  
Smt. Kudsia Begum (Begam Aizaz Rasul) (Cong.), (Kheri-cum-Sitapur-cum-Hardoi).  
Dr. M. P. Mehrey (Cong.), (Kheri-cum-Sitapur-cum-Hardoi).  
Kr. Guru Narsin (Cong.), (Lucknow-cum-Unnao-cum-Rae-Bareilly).  
Dr. Ram Narain Pandey (Cong.), (Lucknow-cum-Unnao-cum-Rae-Bareilly).  
Sultan Singh Pachori (Cong.), (Mainpuri-cum-Etah-cum-Mathura).  
Nawab Singh Yadav (Cong.), (Mainpuri-cum-Etah-cum-Mathura).  
Madan Mohan Lal (Cong.), (Meerut-cum-Muzaffarnagar).  
Kailash Prakash (Cong.), (Meerut-cum-Muzaffarnagar).  
Ram Ghulam (Cong.), (Moradabad).  
Kr. Jyoti Prasad (Cong.), (Pilibhit-cum-Shahjahanpur).  
Vacant, (Pratapgarh-cum-Sultanpur-cum-Bara Banki).

Vacant, (Pratapgarh-cum-Sultanpur-cum-Bara Banki).

Din Dayalu Shastri (Cong.), (Saharanpur-cum-Dehradun).

L. S. Adhikari (Cong.), (Uttarkhand-cum-Kumaun-cum-Bijnore).

Pyarelal Gupta (Cong.), (Uttarkhand-cum-Kumaun-cum-Bijnore).

Onkar Nath Upadhyaya (Cong.), (Varanasi-cum-Mirzapur).

Prabhu Narain Singh (S.S.P.), (Varanasi-cum-Mirzapur).

## Graduates (8)

Purshottam Das, (Agra).  
Dr. Ishwari Prasad (Ind.), (Allahabad).  
Ravindra Nath Sanyal (Ind.), (Gorakhpur-cum-Faizabad).  
Virendra Swarup (Ind.), (Kanpur-cum-Jhansi).  
Hari Krishna Awasthi, (Lucknow).  
Madan Mohan (Ind.), (Meerut).  
Satya Keta Vidyalankar (J.S.), (Rohilkhand).  
Jagannath Sharma, (Uttarkhand-cum-Kumaun).  
Hriday Narain Singh, (Varanasi).

## Teachers (8)

Lallu Singh Chauhan (N.P.), (Agra).  
Ahsanullah (N.P.), (Allahabad).  
Devi Pd. Misra (S.S.P.), (Gorakhpur-cum-Faizabad).  
Raja Ram Pande (N.P.), (Kanpur).  
B. P. Bajpai (N.P.), (Lucknow).  
Hariraj Singh (N.P.), (Meerut).  
Jagdish Prasad Agarwal, (Rohilkhand).  
Vidya Sagar Dikshit (N.P.), (Uttarkhand-cum-Kumaun).  
Harihar Pandey, (Varanasi).

## Nominated (12)

Dr. K. N. Gairola (Cong.).  
Capt. V. R. Mohan (Ind.).  
Smt. Shanta Bai Kher (Cong.).  
Dr. Charan Singh.  
Suraj Pd. Avasthi (Cong.).  
L. N. Sarin (Cong.).  
Shiv Kumar Singh Visen (Cong.).  
Smt. Prabha Shome (Cong.).  
S. M. Ghosh, (Ind.).  
Raja Ram Shastri (Cong.).  
R. C. Gupta (Cong.).  
Smt. Premwati Tewari (Cong.).

## UTTAR PRADESH LEGISLATIVE ASSEMBLY

Seats : 425 (S.C. 80).

Speaker : Jagdish Saran Agrawal.

Dy. Speaker : Shripat Mishra.

An estimate of party position is given below :

Congress 197 ; Jan Sangh 98 ; S.S.P. 44 ; Independent 36 ; Communist 14 ; Swatantra 12 ; P.S.P. 11 ; Republican 9 ; Com. M. 1 ; Vacant 3.  
Chaudhury Girdharilal (S.C.) (Cong.), (Afzalgarh).  
Jagbir Singh (Rep.), (Agaul).  
Harihar Nath Agrawal (Cong.), (Agra Cantt.).  
Rama Shankar Agrawal (J.S.) (Agra East).  
Man Singh (Republican), (Agra West).  
Dohare Ram Charan (S.C.) (S.S.P.), (Ajitmal).  
Jai Ram Varma (Cong.), (Akbarpur).  
Ram Prasad (Ind.), (Akeshtar).  
Naval Kishore (Cong.), (Alampur).  
Laturi Singh (Cong.), (Aliganj).  
Indrapal Singh (J.S.), (Aligarh).  
Smt. Rajendra Kumari Vajpayee (Cong.), (Allahabad North).  
Kalyanchandra Mohile (S.S.P.), (Allahabad South).  
Chaudhury Naunihal Singh (Cong.), (Allahabad West).  
Ramchandra (J.S.), (Almora).  
Ravindra Pratap Singh (J.S.), (Amethi).  
Sarajat Hussain (Com. M.), (Amroha).

Dhruv Kumar (J.S.), (Anupshahr).  
Bhrigunath (Bhaguram) (S.S.P.), (Arajeeline).  
Jawaharlal Jatav (S.C.) (Cong.), (Aryanagar).  
Kalyan Singh (J.S.), (Atrauli).  
Mankandey (S.S.P.), (Atraulia).  
Nihal Singh (Cong.), (Aurai).  
Chauhan Bharat Singh (S.S.P.), (Auraiya).  
Sohanlal (S.C.) (J.S.), (Awanyapur).  
Om Pratash (S.C.) (J.S.), (Awala).  
Brajkishore (J.S.), (Ayodhiya).  
Bhima Prasad (S.S.P.), (Azamgarh).  
Dash Ray Singh (Cong.), (Baberu).  
Sadam Prasad Goswami (Cong.), (Babina).  
Ram Dulare (S.C.) (Cong.), (Bachhrawan).  
Mo Azrar Ahmed (Rep.), (Badayun).  
Gangadhar (Cong.), (Badrikedar).  
Gopal Ramdas (S.C.) (Cong.), (Bageshwar).  
Ram Das (J.S.), (Bah).  
Ramlakhan Singh (Cong.), (Bahadurpur).  
Rupnath (S.S.P.), (Bahadurpur).  
Ram Murty (Cong.), (Bahedi).  
Bishanlal (Cong.), (Bahjoi).  
Krishna Bahadur Mishra (J.S.), (Bahraich).  
Rameshwar Singh (J.S.), (Ballia).  
Pratap Narain Tiwari (J.S.), (Balrampur).  
Gauri Shanker Soraf (J.S.), (Banda).  
Mahipal Singh (J.S.), (Banganga).  
Shiv Gopal (J.S.), (Bangarmau).

Durga Prasad (J.S.), (Bankeganj).  
Bajinath Singh (J.S.), (Bansdih).  
Prabhu Dayal (Cong.), (Bansi).  
Acharya Deepa Shanker (Com.), (Baraut).  
Ugra Sen (S.S.P.), (Barhail).  
Ram Ballabh (J.S.), (Bareilly Cantt.).  
Jagdish Saran Agrawal (Cong.), (Bareilly City).  
Kishanlal (J.S.), (Barkhera).  
Jamadar Singh (Ind.), (Barnaua).  
Kamala Prasad (Cong.), (Barrathi).  
Jagdish Singh (S.S.P.), (Bargaon).  
Lal Krishna Kumar Pal (Swat.), (Basti).  
Ganga Bhakat Singh (J.S.), (Bawan).  
Munindra Pal Singh (P.S.P.), (Beraspur).  
Ganga Swarup Bhatnagar (Cong.), (Behata).  
Angane Lal (S.C.) (J.S.), (Beniganj).  
Ram Dec (S.S.P.), (Berapur).  
Hari Gain Ram (S.C.) (Cong.), (Bhadohi).  
Bhagawati Singh Visarad (P.S.P.), (Bhagwant Nagar).  
Jasodanand (J.S.), (Bhanpur).  
Sahdeo Singh (S.S.P.), (Bharthana).  
Ayodhya Prasad Arya (Cong.), (Bhatpara Rani).  
Ram Chandra Singh (Cong.), (Bhawan).  
Kamala Prasad Advocate (J.S.), (Bhinga).  
Jagdish Narain Tripathi (Com.), (Bhogson).  
Keshori Lal (S.C.) (S.S.P.), (Bhoganipur).  
Harish Kumar Gangwar (J.S.), (Bhojipura).



Ramadhan Singh (Cong.), (Bidiya).  
 Kanaiyalal Balmiki (S.C.) (Cong.), (Bihani).  
 Ram Swarup (S.C.) (Cong.), (Bihar).  
 Kuvar Satya Bir (Cong.), (Bijnor).  
 Raj Bahadur Dwivedi (Cong.), (Bikapur).  
 Ram Kishor (Swat.), (Bikramjeth).  
 Smt. Kalarani (Cong.), (Bilgram).  
 Motilal Dehlavi (S.C.) (S.S.P.), (Bilhaur).  
 Gauri Singh Rathor (Cong.), (Binawar).  
 Ram Kant (Cong.), (Bindki).  
 Munshi Lal (Swat.), (Bilaspur).  
 Shyam Singh (J.S.), (Bisauli).  
 Gaya Prasad Mehrotra (J.S.), (Biswan).  
 Lal Bahadur (Cong.), (Biyalsi).  
 Hemvathi Nandan Bahuguna (Cong.), (Bora).  
 Shamim Alam (Rep.), (Buland Shahr).  
 Dr. Jawahar Lal (S.C.) (Cong.), (Chail (R)).  
 Bechan Ram (S.C.) (S.S.P.), (Chakia).  
 Bob Badore (S.S.P.), (Chamanganj).  
 Swami Brahmashram (J.S.), (Chanave).  
 Chandra Shekhar (S.S.P.), (Chandauli).  
 Keshav Deo (Ind.), (Chandausi).  
 Smt. Indra Mohini (Cong.), (Chandausi).  
 Nar Deo Singh (Ind.), (Chandpur).  
 Gajadhar Prasad Arya (S.C.) (J.S.), (Charda).  
 Jayendra Singh (Ind.), (Charkhari).  
 Harish Chandra (S.C.) (S.S.P.), (Charthwal).  
 Ram Kumar (Ind.), (Chaubzpur).  
 Charan Singh (Cong.), (Chhaprauli).  
 Teekam Singh (J.S.), (Chhata).  
 Dharam Singh (S.C.) (Cong.), (Chhatari).  
 Ram Prakash Tripathi (J.S.), (Chhibramau).  
 Kanata Singh (Com.), (Chilukhor).  
 Kalpnath Singh (Cong.), (Chillupur).  
 Himmat Bahadur (Cong.), (Chirgaon).  
 Raj Narain Singh (Cong.), (Chunar).  
 Tej Singh (Cong.), (Dadri).  
 Ram Murty Anchal (Cong.), (Dadraul).  
 Shiv Shankar Singh (Cong.), (Dalmou).  
 Girja Shanker (Cong.), (Daryabad).  
 Harish Chandra Singh (Ind.), (Dalaganj).  
 Himmat Singh (J.S.), (Debai).  
 Ram Swarup (Ind.), (Dehra Dun).  
 Phool Singh (Cong.), (Deoband).  
 Indra Mani (Ind.), (Deo Prayag).  
 Farak Chisti (Cong.), (Deoria).  
 Nityanand Pandey (Cong.), (Derapur).  
 Govind Sahay (Cong.), (Dhampur).  
 Balj Nath (S.S.P.), (Dhanapur).  
 Jayam Nath Prasad (P.S.P.), (Dhaurahara).  
 Gopal Dutt Ojha (Cong.), (Didihat).  
 Krishnanand Rai (Cong.), (Dildar Nagar).  
 Jai Dutt Singh (J.S.), (Domariaganj).  
 Ayodhya Prasad (S.C.) (J.S.), (Dudhi).  
 Hari Dutt Kandpal (Cong.), (Dwarahat).  
 Shiv Mangal Singh (Cong.), (Dwara).  
 Bhagwati (S.C.) (J.S.), (Ekauna).  
 Ram Bali Mishra (Cong.), (Esauli).  
 Ganga Prasad Varma (Swat.), (Etah).  
 Bhuvanesh Bhushan (J.S.), (Etawa).  
 Gauri Ram (Ind.), (Ferozabad).  
 Om Prakash Singh (Cong.), (Faridpur).  
 Muhram Singh (Cong.), (Farrukhabad).  
 Kedar Raj Jang Bahadur Rana (J.S.), (Farwarpur).  
 Hukum Singh (S.S.P.), (Fatehabad).  
 Manhelal (S.C.) (S.S.P.), (Fatehpur).  
 Shabbear Hassan (Cong.), (Fatehpur).  
 Raghu Nath Singh (J.S.), (Fatehpur-Sikri).  
 Ram Narain Rai (Cong.), (Fatilnagar).  
 Rajaram (Ind.), (Ferozabad).  
 Sukakhan Lal (S.C.) (Cong.), (Gangeswari).  
 Babu Singh (P.S.P.), (Gangiri).  
 Chandra Ball (Ind.), (Gauri Bazar).  
 Giri Raj Singh (Ind.), (Gauri Ganj).  
 Sardar Baldeo Singh (J.S.), (Gesadi).  
 Beni Singh (Cong.), (Ghatampur).  
 Pyarelal (Rep.), (Ghaziabad).  
 Pabbar Ram (Com.), (Ghaziapur).  
 Raghubir Singh (Swat.), (Ghior).  
 Jhorkhande Rai (Com.), (Ghosi).  
 Smt. Yashoda Devi (S.C.) (Cong.), (Ghuriyapur).  
 Khema (S.C.) (Ind.), (Gobarahan).  
 Ganga Prasad (Cong.), (Gokul).  
 Ishwar Saran (Cong.), (Gonda).  
 Mukli Nath Rai (Cong.), (Gopalpur).  
 Udai Pratap (J.S.), (Gorakhpur).  
 Balbir Singh (Ind.), (Gorhukhiwar).  
 Devi Sevak (J.S.), (Gorhwar).  
 Mohd Rauf (Cong.), (Gorhwar).  
 Kanaiya Lal (J.S.), (Goroutha).  
 Prabhkar Tripathi (Cong.), (Govindnagar).

Jugal Kishore (Cong.), (Gunnar).  
 Murlidhar (J.S.), (Gyanpur).  
 Jang Bahadur Verma (S.S.P.), (Haidergarh).  
 Santu (S.C.) (J.S.), (Haisar Bazar).  
 Indra Lal (S.C.) (Cong.), (Haldwani).  
 Bajrangbali Brahmachari (J.S.), (Hamirpur).  
 Athai Ram (Ind.), (Hamdiya).  
 Devi Dayal Sain (S.C.) (Rep.), (Hapur).  
 Dharamgaj Singh (Ind.), (Hardoi).  
 Mohant Ghan Shyam Giri (Ind.), (Hardwar).  
 Salik Ram (S.C.) (J.S.), (Hargaon).  
 Manilal (S.C.) (Cong.), (Hariharori).  
 Smt. Shakuntala Devi (S.C.) (Cong.), (Harora).  
 Buddhi Ram (S.C.) (J.S.), (Harriya (R)).  
 Sriman Tiwari (Cong.), (Hasanganj).  
 Rayesuddin (Cong.), (Hasanpur).  
 Dr. Ramjalal Sahayak (S.C.) (Cong.), (Hastinapur).  
 Jai Narain Singh (Cong.), (Haswa).  
 Rajaram (Cong.), (Hata).  
 Ram Saran Singh (J.S.), (Hathras).  
 Raj Rajeshwar (J.S.), (Hyderabad).  
 Mohanlal Gautam (Cong.), (Iglas).  
 Ram Sewak (S.C.) (J.S.), (Jagdishpur).  
 Badal Ram (S.C.) (S.S.P.), (Jahangirbad).  
 Sripathi Mishra (Cong.), (Jaisinghpur).  
 Deoram (S.C.) (Cong.), (Jakharia).  
 Bal Singh (J.S.), (Jalalabad).  
 Jagdamba Prasad (Ind.), (Jalalpur).  
 Udalbir Singh (S.C.) (Cong.), (Jalesar).  
 Ram Sunder Shastri (Com.), (Jamaniya).  
 Gangaram (J.S.), (Janaral Ganj).  
 Shugan Chand Majdur (Cong.), (Jansath).  
 Raghu Nath Singh Verma (Cong.), (Jasrana).  
 Mulayan Singh (S.S.P.), (Jaswant Nagar).  
 Kamalpathy Tripathy (Cong.), (Jaunpur).  
 Hari Singh (S.C.) (P.S.P.), (Jewar).  
 Ram Pati (S.C.) (S.S.P.), (Jhagaba).  
 Udit Narain (Cong.), (Jhansi).  
 Sukh Deo (S.C.) (Cong.), (Kadipur).  
 Shaftat Jang (Cong.), (Kairana).  
 Drigraj Singh (J.S.), (Kaisaraji).  
 S. G. Dutta (Cong.), (Kalyanpur).  
 Chaudhury Shanker Singh (J.S.), (Kalpi).  
 Balbir Singh (J.S.), (Kamala Ganj).  
 Basant Lal (S.C.) (Cong.), (Kanch).  
 Virendra Varma (Cong.), (Kandhala).  
 Pati Ram Aharwar (Cong.), (Kannau).  
 Devi Sahay Vajpayee (Cong.), (Kanpur Cantt.).  
 Jagar Singh (Ind.), (Kanth).  
 Sheetal Deen (Ind.), (Karchhana).  
 Yogeshwar Prasad (Cong.), (Karan Prayag).  
 Madan Mohan Singh (Ind.), (Karnail Ganj).  
 Kalicharan Agrawal (Cong.), (Kasgari).  
 Ram Dutt (P.S.P.), (Kashipur).  
 Raghubir (Com.), (Kasmabad).  
 Ram Deo (J.S.), (Katara Bazar).  
 Ram Narain Tripathi (Cong.), (Katehari).  
 Shiva Nath Singh (Cong.), (Kaudihar).  
 Ashwani Kumar (S.S.P.), (Kaudi Ram).  
 Girish Chandra Tiwari (J.S.), (Kayam Ganj).  
 Ram Samjavan (S.C.) (Cong.), (Kerakat).  
 Laxmi Shanker (Cong.), (Kudhan).  
 Chandrakishor (Rep.), (Khaga).  
 Pyarelal (Cong.), (Khair).  
 Prem Dutt (Cong.), (Khajuh).  
 Peetam Singh (Cong.), (Khakara).  
 Dhanus Dhar Pan le (Cong.), (Khalilabad).  
 Sardar Singh (Com.), (Khatauli).  
 Ram Prasad (Cong.), (Kheragarh).  
 Jagam Prasad Rawat (Cong.), (Kheragarh).  
 Raj Bahadur Chand (Cong.), (Khesraha).  
 Banarasi Das (Cong.), (Khurja).  
 Badri Prasad (S.C.) (Cong.), (Kishanpur).  
 Shivraj Singh (S.S.P.), (Kishni).  
 Manjur Ahmed (S.S.P.), (Kithor).  
 Kishanlal Diler (S.C.) (J.S.), (Kol).  
 Udai (Com.), (Kolastah).  
 Sri Narain Tiwari (Cong.), (Kopachit).  
 Manshilal Charmar (S.C.) (Swat.), (Korhal).  
 Ram Sajeevan (Com.), (Korvi).  
 Maya Hassan (Cong.), (Kunda).  
 Mahilal (S.C.) (Ind.), (Kunderki).  
 Ram Monesh (S.S.P.), (Kushinagar).  
 Bipin Bihari (J.S.), (Laharpur).  
 Kanaiya Lal (S.C.) (S.S.P.), (Lakhana).  
 Syed Ahmed (Cong.), (Lakhsar).  
 Chetran Varma (J.S.), (Lakhimpur).  
 Triveni (Cong.), (Lalganj).  
 Ayodhya Prasad (S.C.) (Cong.), (Lalitpur).  
 Uma Dutt (Cong.), (Lammhua).

Bhairav Dutt Dhuliya (Swat.), (Lansdowne).  
 Ram Monesh Shukla (Cong.), (Laxmanpur).  
 Raghu Raj (J.S.), (Lazmipur).  
 Badri Prasad Awasthi (J.S.), (Lucknow Cantt.).  
 Susheel Kumar Vidyarthi (J.S.), (Lucknow Central).  
 Radha Shyam Kapoor (J.S.), (Lucknow East).  
 Shanker Sharma (J.S.), (Lucknow West).  
 Jawahirlal (S.C.) (J.S.), (Machhrehata).  
 Govind Narain (Cong.), (Madhavgarh).  
 Babulal (Swat.), (Mahadeva).  
 Duryodhan (Cong.), (Maharajganj).  
 Ram Pal Trivedi (Cong.), (Mahona).  
 Joravar (S.C.) (J.S.), (Mahova).  
 Gaya Prasad (J.S.), (Mahasi).  
 Malkhan Singh (J.S.), (Mainpuri).  
 Bechan Ram (S.C.) (Cong.), (Majhava).  
 Basant Lal (S.C.) (Cong.), (Maliabad).  
 Lalon Sharma (Ind.), (Mallowan).  
 Indrapal (S.C.) (J.S.), (Manikpur).  
 Avaidh Nath (Ind.), (Maniram).  
 Nathu Ram Teacher (S.C.) (J.S.), (Manjanpur).  
 Kuvar Anand Singh (Cong.), (Mankapur).  
 A. Laxmiraman (Cong.), (Mant).  
 Raj Kishore (Cong.), (Mariahun).  
 Zarmilu Rehman (Cong.), (Masauli).  
 Devi Charan Agnihotri (Ind.), (Mathura).  
 Brij Mohandas Agrawal (J.S.), (Mau).  
 Basant Singh (J.S.), (Maudaha).  
 Dasharath (Cong.), (Maurangiya).  
 Smt. Beni Bai (S.C.) (Cong.), (Mauranipur).  
 Rajballi (Com.), (Maya).  
 Kuvar Devendra Singh (Ind.), (Mazibabad).  
 Vireshwar Tyagi (S.S.P.), (Meerut Cantt.).  
 Mohanlal Kapoor (J.S.), (Meerut).  
 Chandra Shekhar Singh (J.S.), (Mehdawal).  
 Janu (S.C.) (J.S.), (Mehnagar).  
 Raghu Nath Singh (J.S.), (Mehrani).  
 Dharm Bir (S.C.) (Cong.), (Meja).  
 Ram Lal Mishra (Cong.), (Mikipur).  
 Ashwani Kumar (S.S.P.), (Mirzapur).  
 Raj Bahadur (Cong.), (Misrikh).  
 Bikhilal (S.C.) (Com.), (Miyaganj).  
 Sarju Prasad (Rep.), (Modinagar).  
 Shyamlal Yadav (Cong.), (Moghalsarai).  
 Mannalal (J.S.), (Mohamadi).  
 Bhagwati Prasad (S.S.P.), (Mohammadabad).  
 Vijay Shanker Singh (Cong.), (Mohammadabad).  
 Rajendra Singh Yadav (Cong.), (Mohammadabad).  
 Sri Nath (S.C.) (Cong.), (Mohammadabad Gohna).  
 Narain Das (S.C.) (Cong.), (Mohanlalaganj).  
 Omkar Saran (Cong.), (Moradabad City).  
 Kishan Singh (Cong.), (Moradabad).  
 Rajendra Dutta (Cong.), (Morana).  
 Arjun (S.C.) (Cong.), (Moringanj).  
 Vishwanath (Cong.), (Mubarakpur).  
 Ram Dulare (J.S.), (Mujehana).  
 G. S. Chaudhury (Ind.), (Murad Nagar).  
 Gulab Singh (Cong.), (Mussoori).  
 Mulki Raj (S.S.P.), (Muzzafarabad).  
 Vishnu Swarup (Ind.), (Muzzafarnagar).  
 Ram Singh (S.C.) (Cong.), (Nagal).  
 Atikur Rahman (Cong.), (Nagina).  
 Pratap Singh (P.S.P.), (Nainital).  
 Narain Singh (Ind.), (Nakur).  
 Kishan Lal (J.S.), (Nanpura).  
 Jagpat Singh (J.S.), (Naraini).  
 Mangal Deo (S.C.) (S.S.P.), (Nathupur).  
 Dhanraj Yadav (J.S.), (Naugarh).  
 Chetram Pachpeda (J.S.), (Nawabganj).  
 Anant Ram (S.S.P.), (Nawabganj).  
 Karan Singh (Cong.), (Nighasan).  
 Raghubir Singh (Cong.), (Nighaulikala).  
 Ram Nath (P.S.P.), (Nigoha).  
 Khub Singh (Cong.), (Noorpur).  
 Chandra Deo (Cong.), (Padrauna).  
 Bir Bahadur (Cong.), (Paniyara).  
 Trimal Singh (Cong.), (Patiyali).  
 Ram Kinkar (S.C.) (Cong.), (Patti).  
 Chandra Singh Rawat (Cong.), (Paudi).  
 Baushi Dhar Mishra (Cong.), (Phool Behend).  
 Ram Bachan (Cong.), (Phoolpur).  
 Dr. Baluram Prabhati (S.C.) (J.S.), (Pilibhit).  
 Mudhekar Didhe (S.S.P.), (Pipraichi).  
 Narendra Singh Vishat (Cong.), (Pithoragarh).  
 Ajeet Pratap (Cong.), (Pratapgarh).  
 Muzaffar Hasan (Cong.), (Pratapgarh).  
 Mohanlal Acharya (Cong.), (Puranpur).  
 Laxhan (S.C.) (J.S.), (Purva).  
 Kandhal Lal (S.C.) (Cong.), (Puvaya).



Madan Mohan Mishra (Cong.), (*Rai Bareilly*).  
 Ram Nath Pathak (Cong.), (*Rajgarh*).  
 Ram Swarup Varma (S.S.P.), (*Rajipur*).  
 Raj Deo (Cong.), (*Ramkola*).  
 Ram Asare (S.S.P.), (*Ramnagar*).  
 Akhtar Ali Khan (Swat.), (*Rampur*).  
 Ram Anjor Mishra (Cong.), (*Rampur Khas*).  
 Chandra Bhanu Gupta (Cong.), (*Ranikhet*).  
 Jitendra Nath Mishra (S.S.P.), (*Raniki Soray*).  
 Raj Bahadur (Ind.), (*Rari*).  
 Ram Ratan Prasad (S.C.) (Cong.), (*Rasada*).  
 Ram Shree Rajput (J.S.), (*Rath*).  
 Ram Prasad (S.C.) (Cong.), (*Raukha*).  
 Rup Narain (S.C.) (Cong.), (*Robertsganj*).  
 Hari Singh (S.C.) (Cong.), (*Rohata*).  
 J. M. Singh (Cong.), (*Roorkee*).  
 Abdul Muiz Khan (Cong.), (*Rudauli*).  
 Chandra Kumar (Ind.), (*Rudauli*).  
 Dr. Seetaram (S.C.) (Cong.), (*Rudrapur*).  
 Ashraj Ali Khan (Cong.), (*Sadabad*).  
 Raj Nath (Cong.), (*Sadat*).  
 Vishnu Pratap Singh (Cong.), (*Sadulla Nagar*).  
 Narvadeshwar (Com.), (*Sagadi*).  
 Hakeem Abdul Khalik (Cong.), (*Saharanpur*).  
 Ram Karan (P.S.P.), (*Sahjanwa*).  
 Asharfi Lal (J.S.), (*Sahsawan*).  
 Atma (Cong.), (*Saidpur*).  
 Badam Singh (Rep.), (*Sakeet*).

Awadesh Pratap Mal (Cong.), (*Salempur*).  
 Dal Bahadur Singh (Cong.), (*Salon*).  
 Mahesh Kumar (J.S.), (*Sambhal*).  
 Kashi Nath (J.S.), (*Sandila*).  
 Dharm Veer Singh (Ind.), (*Sardhana*).  
 Raghu Nath Singh (Cong.), (*Sarvankhera*).  
 Guptar Singh (Cong.), (*Sareni*).  
 Vijay Kumar (Cong.), (*Sarojini Nagar*).  
 Shashi Bhushan Singh (P.S.P.), (*Sarsaul*).  
 Mohamed Mahmud Ali Khan (Cong.), (*Sarsawa*).  
 Ram Prasad Deshmukh (S.C.) (Cong.), (*Sasni*).  
 Rajendra Pratap Singh (Cong.), (*Satao*).  
 Sohanlal Ghusiyal (S.C.) (Cong.), (*Saughat*).  
 Shiv Lal (S.S.P.), (*Seeyar*).  
 Genda Singh (Cong.), (*Sevrahi*).  
 Raja Harihar Baksh Singh (Cong.), (*Shahabad*).  
 Banshi Dhar (S.C.) (Cong.), (*Shahabad*).  
 Mata Prasad (S.C.) (Cong.), (*Shahganj*).  
 Mohd. Rafi Khan (Cong.), (*Shahjahanpur*).  
 Kumar Mahendra Pratab Singh (J.S.), (*Shergarh*).  
 Ram Swarup (Cong.), (*Shikohabad*).  
 Ram Achal Singh Segor (J.S.), (*Shivpur*).  
 Bhrigunath Chaturvedi (Cong.), (*Shyamendurva*).  
 Mansadeen (S.C.) (J.S.), (*Sidhauli*).  
 Ghan Shyamdas (S.C.) (Cong.), (*Sidhauli*).  
 Raja Ram Singh (Ind.), (*Sikandarapur*).  
 Ram Chandra Vikal (Ind.), (*Sikandarabad*).  
 Mekram Sharma (Ind.), (*Sikandra Rao*).

Mangal Prasad Tiwari (Cong.), (*Sirathi*).  
 Yadvendra Singh (Cong.), (*Sisava*).  
 Tambreshwar Prasad (J.S.), (*Sitapur*).  
 Naimpal Singh (P.S.P.), (*Siyam*).  
 Janaki Prasad (S.C.) (Cong.), (*Sohawal*).  
 Siya Ram (S.C.) (J.S.), (*Soro*).  
 Ram Dulane Patel (S.S.P.), (*Sorav*).  
 Ram Pyare Shukla (J.S.), (*Sultanpur*).  
 Maksud Hussain (Swat.), (*Tada*).  
 Ramchandra Azad (Cong.), (*Tanda*).  
 Sheetal Prasad Singh (Cong.), (*Tarabganj*).  
 Trepan Singh (Cong.), (*Tehri*).  
 Ahmedulla Khan (Swat.), (*Thakurdwara*).  
 Surendra Vikram (Cong.), (*Tilhar*).  
 Vasi Naqavi (Cong.), (*Tiloi*).  
 Subh Deo Prasad (S.C.) (J.S.), (*Tulsipur*).  
 Multan Singh (S.S.P.), (*Tundala*).  
 Ziyaur Rahman (Cong.), (*Unnao*).  
 Chaturbhuj Sharma (Cong.), (*Urai*).  
 Hari Lal Yadav (S.S.P.), (*Urmada*).  
 Brijpal Singh (J.S.), (*Usehat*).  
 Rafi Mohammed Khan (Cong.), (*Utraula*).  
 Krishna Singh (Cong.), (*Uttarkashi*).  
 Varmeshwar Pandey (J.S.), (*Varanasi Cantt.*).  
 Vishwanath Prasad (J.S.), (*Varanasi North*).  
 Rustam Saiti (Com.), (*Varanasi South*).  
 Ram Adhar (S.S.P.), (*Vidhuna*).  
 A. C. Grais (*Nominated*).

## WEST BENGAL LEGISLATIVE COUNCIL

Strength : 75.

Chairman : Dr. Pratap Chandra Guha Ray.

Dy. Chairman : Upendranath Barman.

### Local Authorities' Constituencies (27)

Bibhutibushan Ghatak (*Bankura*).  
 Debendra Kumar Mukhopadhyay (*Birbhum*).  
 Narayan Chandra Chaudhury (*Burdwan*).  
 Dr. Rudranath Ghosh (*Burdwan*).  
 Amulya Chandra Sirkar (*Calcutta*).  
 Mohit Kumar Moitra (*Calcutta*).  
 Kumar Dutt (*Calcutta*).  
 Sudhir Chandra Niyogi (*Cooch Behar*).  
 R. S. Prasad (*Darjeeling*).  
 Byomkesh Chakravarti (*Dinajpur West*).  
 Sudhindra Nath Mukherjee (*Hooghly*).  
 Kali Charan Ghose (*Hooghly*).  
 Dwijindranath Mitra (*Howrah*).  
 Lalit Mohan Chatterjee (*Howrah*).  
 Dharendra Nath Moitra (*Jalpaiguri*).  
 Smt. Uma Ray (*Malda*).  
 Chittaranjan Roy (*Midnapur*).  
 Ramdas Ramanujdas Mohanta (*Midnapur*).  
 Dr. Das Behari Pal (*Midnapur*).  
 Abdus Sattar (*Murshidabad*).  
 Durgapada Sinha (*Murshidabad*).  
 Dr. Biswaranjan Roy (*Nadia*).  
 Dharendra Nath Bhattacharya (*Purulia*).  
 Dr. Janaki Ballabha Bhattacharyya (*24-Parganas*).  
 Hansadhwaj Dhara (*24-Parganas*).

Pijush Chandra Ghose (*24-Parganas*).  
 Monmotho Nath Banerjee (*24-Parganas*).

### Graduates' Constituencies (6)

Narendra Nath Das (*Calcutta*).  
 Gopal Haldar (*Calcutta*).  
 Nanda Kishore Ghose (*Calcutta*).  
 Dr. Charu Chandra Sanyal (*West Bengal—North*).  
 Nirmalya Bagchi (*West Bengal—S. West*).  
 Rebatu Raman Manna (*West Bengal—S. East*).

### Teachers' Constituencies (6)

Satya Priya Roy (*Calcutta*).  
 Smt. Anila Debi (*Calcutta*).  
 Rajkumar Chakraverty (*24-Parganas*).  
 Jatindra Singha (*West Bengal—North*).  
 Santosh Kumar Bhattacharyya (*West Bengal—S. East*).  
 Manoranjan Sen Gupta (*West Bengal—S. West*).

### Elected by Legislative Assembly (27)

Upendranath Barman.  
 Sukumar Dutta.  
 Dr. Esmail Ebrahim.  
 Nar Bahadur Gurung.  
 Dhajadhari Mondal.  
 Nirmal Bose.  
 Biswanath Mukherjee (*Cal.*).  
 Snehangshu Kanta Acharyya.  
 Manoranjan Gupta.

Krishna Kumar Chatterjee.  
 Amar Prasad Chakrabarty.  
 Mohammad Sayeed Mia.  
 Dr. Pratap Chandra Guha Ray.  
 Ashutosh Ghosh.  
 Subodh Sen.  
 Sudhir Kumar Banerjee.  
 Jatin Chakravorty.  
 Abdullah Rasul.  
 Rezaul Karim.  
 Smt. Ava Chatterjee.  
 Ram Lagan Singh.  
 Dharamchand Sarawgi.  
 Rabindranath Sikder.  
 Rabindralal Sinha.  
 Makhan Paul.  
 Nirmal Chandra Battacharyya.  
 Biswanath Mukherjee (*Midnapur*).  
**Nominated by Governor (9)**  
 Dr. Anil Chandra Banerjee.  
 Smt. Reba Sen.  
 Ahmad Hossain.  
 Promotho Nath Bisi.  
 Musharruf Hossain.  
 Hazi Mohiuddin Ahmed.  
 Kedar Nath Mukerjee.  
 Gobindlal Saraogi.  
 Dr. Sarala Ghosh.

## WEST BENGAL LEGISLATIVE ASSEMBLY

Seats : 280. S.C. 53 ; S.T. 16.

Speaker : Bijoy Kumar Banerjee.

Dy. Speaker : Haridas Mitra.

An estimate of party position is as follows :  
 Congress 127 ; C.P.I.(M.) 43 ; Bangla Congress 35 ; C.P.I. 16 ; Forward Bloc 14 ; Ind. 13 ; S.S.P. 7 ; P.S.P. 7 ; R.S.P. 6 ; Lok Sevak Sangh 4 ; S.U.C. 3 ; Gurkha League 2 ; Workers Party 1 ; Swa. 1 ; Jan Sangh 1.

Mani Sanyal (C.P.I.), (*Alipore*).  
 Mani Bhattacharya (R.S.P.), (*Alipur Duars*).  
 Netaji Bhandari (C.P.I.-M.), (*Amta*).  
 Ajoy Kumar Mukhopadhyaya (Bangla Cong.), (*Arambagh*).  
 Brajablasi Mukherjee (Cong.), (*Arsha*).  
 Dr. Gopika Ranjan Mitra (Cong.), (*Asansol*).  
 Sadhan Kumar Sen (C.P.I.), (*Ashokenagar*).  
 Krishna Chandra Halder (S.C.) (C.P.I.-M.), (*Ausgram*).  
 Quazi Abdul Gaffar (Cong.), (*Baduria*).  
 Apurba Lal Majumdar (S.C.) (F.B.), (*Bagdaha*).

Dr. Ranjit Ghosh Choudhury (Cong.), (*Bagnan*).  
 Hare Krishna Das (S.C.) (Cong.), (*Balagarh*).  
 Gobardhan Majhi (S.T.) (L.S.S.), (*Balarampur*).  
 Sailendra Nath Mukherjee (Cong.), (*Bally*).  
 Jyoti Bhushan Bhattacharya (Ind.), (*Ballygunge*).  
 Mukul Basu (R.S.P.), (*Balughat*).  
 Kandru Majhi (L.S.S.), (*Banduan*).  
 Satyanarayan Mitra (Cong.), (*Bankura*).  
 Mihir Upadhyay (Cong.), (*Barabani*).  
 Iswardas Jalan (Cong.), (*Bara Bazar*).  
 Jyoti Basu (C.P.I.-M.), (*Baranagar*).  
 Hemanta Kumar Basu (F.B.), (*Barasat*).  
 Arun Chatterjee (Cong.), (*Barjora*).  
 Kumud Ranjan Mandal (S.C.) (S.S.P.), (*Baruipur*).  
 Amalendra Lal Roy (R.S.P.), (*Barwan*).  
 Shakila Khatun (Cong.), (*Basanti*).  
 Amiya Bhushan Bandopadhyay (C.P.I.), (*Basirhat*).

Niranjan Mukherjee (C.P.I.-M.), (*Behala East*).  
 Rabin Mukherjee (C.P.I.-M.), (*Behala West*).  
 Abdul Latif (Cong.), (*Belganga*).  
 Lakshmi Charan Sen (C.P.I.-M.), (*Belgachia*).  
 Krishna Pada Ghosh (C.P.I.-M.), (*Beliaghata North*).  
 Gonesh Prosad Roy (S.C.) (Cong.), (*Beliaghata South*).  
 Sreepada (Madan) Bhattacharyya (Cong.), (*Berhampore*).  
 Satyabrata Bhattacharyya (Cong.), (*Bhagaban-gola*).  
 Smt. Abha Maiti (Cong.), (*Bhagabanpur*).  
 Dr. Amirali Molla (Bangla Cong.), (*Bhangar*).  
 Sripathi Sinha (Cong.), (*Bharatpur*).  
 Santimoy Hazra (Cong.), (*Bhatar*).  
 Dayaram Beri (Cong.), (*Bhatpara*).  
 Jagadish Chandra Das (C.P.I.-M.), (*Bijpur*).



- Mangal Chandra Saren (S.T.) (Cong.), (Binpur).  
Sundar Kumar Naskar (S.C.) (C.P.I.-M.), (Bishnupur East).  
Provash Chandra Roy (C.P.I.-M.), (Bishnupur West).  
Dr. Radha Krishna Sinha (Ind.), (Bolpur).  
Kalipada Bhowmick (Cong.), (Bongaon).  
Bihoy Singh Nahar (Cong.), (Bow Bazar).  
Khitl Bhusan Roy Barman (C.P.I.-M.), (Budge Budge).  
Syed Shahedullah (C.P.I.-M.), (Burdwan North).  
Sashi Bhusan Choudhury (Cong.), (Burdwan South).  
Nikhil Das (R.S.P.), (Burtola).  
Adhar Chandra Halder\* (S.C.) (Bangla Cong.), (Canning).  
Haridas Mitra (Bangla Cong.), (Chakdah).  
Jagannath Kolay (Cong.), (Chhatna).  
Byomkes Majumdar (Cong.), (Champdani).  
Bhabani Mukherjee (C.P.I.-M.), (Chandernagore).  
Mohamed Abdul Latif (Ind.), (Chanai tala).  
Dr. Indrajit Roy (Cong.), (Chandrakona).  
Jagannath Mojumdar (Bangla Cong.), (Chapra).  
Sambhu Charan Ghose (F.B.), (Chinsurah).  
Afaq Chowdhury (Cong.), (Chopra).  
Siddhartha Shankar Ray (Cong.), (Choveringhee).  
Makhan Lal Das (Cong.), (Contai North).  
Sudhir Chandra Das (P.S.P.), (Contai South).  
Mati Ranjan Tar (Cong.), (Cooch Behar North).  
Santosh Kumar Roy (Cong.), (Cooch Behar South).  
Prasenjit Barman (Cong.), (Cooch Behar West).  
Sushil Kumar Paul (Cong.), (Cossipur).  
Deendra Nath Das (Bangla Cong.), (Dantan).  
Deoprasad Rai (Gurkha League), (Darjeeling).  
Bankim Chandra Sasmal (Cong.), (Daspur).  
Kshudiram Chakraborty (Bangla Cong.), (Debra).  
Jehangir Kabir (Bangla Cong.), (Deganga).  
Semnath Lahiri (C.P.I.), (Dhakuria).  
Kripasindhu Saha (S.C.) (F.B.), (Dhaniakhali).  
Arindhar Guha Neogi (S.S.P.), (Dhupguri).  
Abdul Quiyom Molla (C.P.I.-M.), (Diamond Harbour).  
Kamal Kanti Guha (F.B.), (Dinhata).  
Ahmad Hossain Mondal (Cong.), (Domjur).  
Md. Abdul Bari (Master) (C.P.I.-M.), (Domkal).  
Khagendra Nath Bandopadhyay (Ind.), (Dubrajpur).  
Tarun Kumar Sen Gupta (C.P.I.-M.), (Dum Dum).  
Dillip Kumar Majumdar (C.P.I.-M.), (Durgapur).  
Pahari Bibhuti (P.S.P.), (Egra).  
Santi Gopal Sen (Cong.), (Englishbazar).  
Dr. Abu Asad Mohd. Obaidul Ghanl (C.P.I.), (Entally).  
Jagadananda Roy (S.C.) (P.S.P.), (Falakata).  
Jyotish Roy (C.P.I.-M.), (Falta).  
T. A. Nuran Nabi\* (Bangla Cong.), (Farakka).  
Manoranjan Baksi (Bangla Cong.), (Faridpur).  
Chandipada Mitra (Ind.), (Gaighata).  
Dashukaran Murmu (S.T.) (Cong.), (Gajol).  
Phakir Chandra Roy (Bangla Cong.), (Galsi).  
Guiram Maji (S.C.) (Bangla Cong.), (Gangajalghati).  
Khalil Sayed (Cong.), (Gangarampur).  
S. M. Abdullah (Cong.), (Garden Reach).  
Kali Kinkar Chalak (S.C.) (Cong.), (Garhbata East).  
Panchanan Sinha Ray (Cong.), (Garhbata West).  
Smt. Nanda Rani Dai (S.C.) (C.P.I.-M.), (Ghatal).  
Ajit Kumar Biswas (S.C.) (F.B.), (Gohat).  
Mohammed Salimuddin (P.S.P.), (Goalpokhor).  
Dhananjay Kar (S.S.P.), (Gopiballavpur).  
Girindra Nath Mandal (S.C.) (Jan Sangh), (Gosaba).  
Boila Murmu (S.T.) (Cong.), (Habibpur).  
Jayati Prasanna Mukherjee (Bangla Cong.), (Habra).  
Shiromani Prasad (S.C.) (Cong.), (Hansan).  
Charu Mihir Sarkar (S.C.) (Bangla Cong.), (Hanskhali).  
Shamsuddin Ahmed (Cong.), (Hariharpara).  
Mohammad Karim Baksh (Bangla Cong.), (Haringhata).  
Amala Chandra Majumdar (S.S.P.), (Haripal).  
Md. Elias Razi (Workers Party), (Harishchandrapur).  
Gangadhar Pramanick (S.C.) (Bangla Cong.), (Haroa).  
Harendra Nath Mazumdar (Bangla Cong.), (Hasnabad).  
Brahmachari Bholanath† (S.C.) (Ind.), (Hingalganj).  
Shibdas Ghatak (Cong.), (Hirapur).  
Dwijendranath Mitra (Cong.), (Howrah Central).  
Saila Kumar Mukherjee (Cong.), (Howrah North).  
Bejoy Krishna Bhattacharya (Cong.), (Howrah South).  
Samanendra Ojha (Ind.), (Hura).  
Pagal Chandra Mal (S.C.) (Bangla Cong.), (Indas).  
Binode Behari Maji (S.C.) (Cong.), (Indpur).  
Dr. Zainal Abedin (Cong.), (Itahar).  
Bikesh Chandra Guha (C.P.I.-M.), (Jadavpur).  
Brindaban Behari Bose (C.P.I.-M.), (Jagatballavpur).  
Ramakrishna Mahato (Cong.), (Jaipur).  
Azizur Rahman (Cong.), (Jalangi).  
Khagendra Nath Das Gupta (Cong.), (Jalpaiguri).  
Puranjoy Pramanik (S.C.) (Cong.), (Jamalpur).  
Tinkari Mondal (S.C.) (S.S.P.), (Jamuria).  
Manindra Nath Jana (C.P.I.-M.), (Janjipara).  
Abdul Haque (Bangla Cong.), (Jangipur).  
Chittaranjan Mahato (F.B.), (Jhalda).  
Dr. Prafulla Chandra Ghosh (Ind.), (Jhargram).  
Hara Prasad Chatterjee (C.P.I.-M.), (Jorabagan).  
Rajendra Kumar Poddar (Cong.), (Jorasanko).  
Nandalal Gurung (Gurkha League), (Jorebungalow).  
Subodh Banerjee (S.U.C.), (Joynagar).  
Balai Bhusan Paul (Cong.), (Kabitirtha).  
Hansadhwaj Dhara (Cong.), (Kakdwip).  
Denis Lakra (S.T.) (Cong.), (Kalehini).  
Nuhul Islam (C.P.I.-M.), (Kaliachak).  
Syama Prasad Barman (S.C.) (Cong.), (Kaliaganj).  
S. N. Fazlur Rahman (Cong.), (Kaliganj).  
Smt. Biva Mitra (Cong.), (Kalighat).  
Krishna Bahadur Gurung (Cong.), (Kalimpong).  
Hare Krishna Konar (C.P.I.-M.), (Kalna).  
Sunil Kumar Mitra (Bangla Cong.), (Kalyanpur).  
Radhika Ranjan Banerji (C.P.I.-M.), (Kamarhati).  
Goalbadan Trivedi (Cong.), (Kandi).  
Haji Sajjad Hussain (P.S.P.), (Karandighi).  
Dr. Nalinaksha Sanyal (Bangla Cong.), (Karimpur).  
Shankar Narayan Singh Deo (Cong.), (Kashipur).  
Subodh Choudhury (C.P.I.-M.), (Katwa).  
Budhan Chandra Tudu (S.T.) (Cong.), (Keshiari).  
Rajani Kanta Doloi (S.C.) (Cong.), (Keshpur).  
Prabhakar Mandal (S.C.) (Cong.), (Ketugram).  
Bimal Palk (S.C.) (Cong.), (Khajuri).  
Madan Saha (S.C.) (C.P.I.-M.), (Kharakul).  
Pramathanath Dhibar (S.C.) (Cong.), (Khanda-ghosh).  
Narayan Choubey (C.P.I.), (Kharagpur).  
Deben Das (C.P.I.), (Kharagpur Local).  
Dr. Golam Yazdani (Ind.), (Kharba).  
Sadhan Kumar Chakraborty (C.P.I.-M.), (Khardah).  
Sudhir Kumar Mondal (Cong.), (Khargram).  
Kashi Kanta Maitra (S.S.P.), (Krishnagar East).  
Amritendu Mukherjee (C.P.I.-M.), (Krishnagar West).  
Sasthidas Sarkar (Bangla Cong.), (Kotulpur).  
Nalini Kanta Haldar (S.C.) (Cong.), (Kulpi).  
Joynarayan Sharma (Cong.), (Kulti).  
Maharaja Bose (Cong.), (Kumarganj).  
Pijush Kanti Mukherjee (Cong.), (Kumargram).  
Jatendra Mohan Roy (S.C.) (Cong.), (Kushmandi).  
Satya Narayan Bandyopadhyay (Cong.), (Labhpur).  
Abdus Sattar (Cong.), (Lalgola).  
Dhirendra Narjinarai (S.T.) (Cong.), (Madarihat).  
Radhikanath Pramanik (S.C.) (C.P.I.-M.), (Magrahat East).  
Jaynal Abdin (Bangla Cong.), (Magrahat West).  
Nitaipada Ghosh (Cong.), (Mahammad Bazar).  
Sushir Chandra Bhandari (C.P.I.-M.), (Mahesh-tola).  
Sushil Kumar Dhara (Bangla Cong.), (Mahi-shadal).  
Jajneswar Ray (S.C.) (Bangla Cong.), (Maina-guri).  
Antoni Topna (S.T.) (Cong.), (Mal).  
Mahammad Sayeed Mia (Cong.), (Malda).  
Girish Mahato (L.S.S.), (Manbazar).  
Nurunnesa Sattar (Cong.), (Manickot).  
Smt. Ila Mitra (C.P.I.), (Manicktola).  
Rajendra Singh Singhi (Swa.), (Manikchak).  
Dinesh Chandra Dakua (S.C.) (C.P.I.-M.), (Mathabhanga).  
Hrishikesh Haldar (S.C.) (Bangla Cong.), (Mathurapur).  
Narayan Chandra Chaudhuri (Cong.), (Man-teswar).  
Kanai Saha (S.C.) (Cong.), (Mayureswar).  
Amarendra Nath Roy Prodhan (S.C.) (F.B.), (Mekliganj).  
Paramananda Bishayee (Cong.), (Memari).  
Kamakhya Charan Ghose (C.P.I.), (Midnapur).  
Kanai Bhowmik (C.P.I.), (Moyna).  
Baneswar Maity (Ind.), (Mugheria).  
Bazle Ahamad (Ind.), (Muralai).  
Syed Kazem Ali Meerza (Cong.), (Murshidabad).  
Sachindra Mohon Nandy (Cong.), (Nabadwip).  
Amalendu Kumar Bagchi (Cong.), (Nabagram).  
Parash Chandra Goswami (Cong.), (Nadanghat).  
Budhu Bhagat (S.T.) (Cong.), (Nagrakata).  
Golokesh Bhattacharjee (Cong.), (Naihati).  
Manindra Chandra Mondal (S.C.) (Bangla Cong.), (Nakashipara).  
Golam Mahiuddin (Ind.), (Nalhati).  
Bhupal Chandra Panda (C.P.I.), (Nandigram).  
Srihidhar Jash (S.C.) (Cong.), (Nanur).  
Mohammed Israil (Cong.), (Naoda).  
Suwendu Roy (Cong.), (Noapara).  
Krishnadas Roy (Cong.), (Narayangarh).  
Prasanta Kumar Gayen (Bangla Cong.), (Nar-ghat).  
Jagatpati Hansda (S.T.) (Bangla Cong.), (Naya-gram).  
Smt. Sudharani Dutta (Cong.), (Onda).  
Parupati Mukhopadhyay (Cong.), (Panchla).  
Rajnarayan Kundu (Cong.), (Pandua).  
Gopal Krishna Bhattacharyya (C.P.I.-M.), (Panihat).  
Smt. Geetha Mukhopadhyay (C.P.I.), (Panskura East).  
Rajani Kanta Pramanik (Bangla Cong.), (Panskura West).  
Satis Bauri\* (S.C.) (Bangla Cong.), (Para).  
Kamakshyanandan Das Mahapatra (C.P.I.), (Palaspur).  
Rabin Mandal (S.U.C.), (Patharprathima).  
Tenzing Wangdi (S.T.) (Cong.), (Phansidewa).  
Gouranga Samanta (C.P.I.), (Pingla).  
Brindaban Chattopadhyay (Cong.), (Polba).  
Lalit Hazra (C.P.I.-M.), (Purbasthali).  
Santi Mohan Roy (Cong.), (Pursurah).  
Bibhuti Bhusan Das Gupta (L.S.S.), (Purulia).  
Nepal Bauri (S.T.) (Cong.), (Raghunathpur).  
Nishitha Nath Kundu (P.S.P.), (Raiganj).  
Dasarathi Tah (P.S.P.), (Raina).  
Bhabatosh Saren (S.T.) (Bangla Cong.), (Raipur).  
Sallendra Nath Das (S.C.) (C.P.I.-M.), (Rajarhat).  
Bhabendra Nath Roy Hakim (S.C.) (S.S.P.), (Rajganj).  
Siddheswar Mandal (F.B.), (Rajnagar).  
Trilokyanath Pradhan (Cong.), (Ramnagar).  
Sasanka Sekhar Mondal (F.B.), (Rampurhat).  
Nitaipada Sarkar (S.C.) (C.P.I.), (Ranaghat East).  
Benoy Kumar Chattopadhyay (Cong.), (Rana-ghat West).  
Babulal Hemram (S.T.) (Cong.), (Ranibandh).  
Haradhan Roy (C.P.I.-M.), (Raniganj).  
Bijoy Kumar Banerjee (Ind.), (Rashbehari).  
Sowindra Mohan Misra (Cong.), (Ratua).  
Trilokes Misra (Cong.), (Sagar).  
Ambika Charan Das (S.C.) (Cong.), (Sagardighi).  
Amulya Ratan Mahato (Bangla Cong.), (Saibani).  
Debendra Nath Sinha (S.T.) (Cong.), (Sandesh-khali).  
Nitya Nanda Bhunia (S.C.) (Cong.), (Sankrail).  
Kanai Pal (C.P.I.-M.), (Santipur).  
Pratap Chandra Chunder (Cong.), (Sealdah).  
Gopal Das Nag (Cong.), (Serampore).  
Gobinda Chandra Dey (Cong.), (Shampukur).  
Mrityunjay Banerjee (Cong.), (Shibpur).  
Sasabindu Bera (F.B.), (Shyampur).  
Arun Kumar Moitra (Cong.), (Siliguri).  
Probhakar Pal (Cong.), (Singur).  
Md. Fazle Hoque (Cong.), (Sitai).  
Kanai Saha (S.C.) (Cong.), (Sonamukhi).  
Gangadhar Naskar (S.C.) (C.P.I.-M.), (Sonarpur).  
Abul Barkat Atawal (Cong.), (Sujaipur).  
Baidyanath Bandopadhyay (Cong.), (Suri).  
Mahatab Chand Das (S.C.) (Bangla Cong.), (Sutahata).

† Joined the Congress on 19-6-1967.

\* Decision to join the Congress has been announced.



Shish Mahammad (R.S.P.), (*Suti*).  
Jamini Ranjan Sen (C.P.I.), (*Swarupnagar*).  
Purabi Mukhapadhyay (Cong.), (*Taldangra*).  
Karam Hossain (Cong.), (*Taltala*).  
Ajay Malakar (Bangla Cong.), (*Tamluk*).  
Nathaniel Murmu (S.T.) (R.S.P.), (*Tapan*).

Ram Chatterjee (F.B.), (*Tarakeswar*).  
Sankar Das Banerji (Cong.), (*Tehatta*).  
Krishna Kumar Shukla (Cong.), (*Titagarh*).  
Nirenjan Sen Gupta (C.P.I.-M.), (*Tollygunge*).  
Ishore Sankar Sen (S.C.) (Cong.), (*Tufanganj*).  
Panna Lal Maji (C.P.I.-M.), (*Udaynarayanpur*).

Haradhan Mondal (S.C.) (Cong.), (*Ukhra*).  
K. B. Mandel (S.C.) (F.B.), (*Uluberia North*).  
Biswanath Das Ghose (F.B.), (*Uluberia South*).  
Monoranjan Hazra (C.P.I.-M.), (*Uttarpara*).  
Narayan Chandra Roy (C.P.I.-M.), (*Vidyasagar*).  
Bhudeb Chandra Mandal (Cong.), (*Vishnupur*).

## RAJYA SABHA

Total no. of seats : 240.

Chairman : V. V. Giri.

Dy. Chairman : Smt. Violet Alva.

Secretary : B. N. Banerjee.

Joint Secretary : S. S. Bhalarao.

Dy. Secretaries : P. N. Krishna Mani, M. S. Panigrahi, S. P. Ganguly.

Under-Secretaries : Kewal Krishan, P. K. Bhor, Kishan Singh, I. N. Chary, Amar Nandi, M. K. Jain.

An estimate of party position in the Rajya Sabha is: Congress 156; Praja Socialist Party 6; Communist 6; Communist (Marxist) 2; Samyukta Socialist 4; Jan Sangh 5; Independents 11; Republican 2; D.M.K. 2; Jharkhand 1; Forward Bloc 1; Akali Dal 1; Muslim League 1; Nominated 12; Swatantra Party 9; Vacant 14.

### ANDHRA PRADESH—18

M. V. Bhadram; J. C. Nagi Reddi; P. K. Kumaran; Akbar Ali Khan; Smt. Seeta Yudhvir; Kota Punnaiah; Miss Mary Naidu; Dr. M. Chenna Reddy; Smt. Yashoda Reddy; K. Vengala Reddy; Yerrapureddi Adinarayana Reddy; N. Narotham Reddy; Narla Venkateswara Rao; K. P. Mallikarjunudu; Yella Reddy; K. V. Raghunatha Reddy; D. Sanjivayya; Smt. C. Ammannara Raja.

### ASSAM—7

Smt. Usha Barthakur; Mahitosh Purakayastha; Baharul Islam; Robindra Nath Kakati; Purnananda Chetia; Prafulla Goswami; Imonsing Sangma.

### BIHAR—22

Bipin Behary Verma; Chaudhary A. Moham-mad; Shyamnandan Mishra; Dharendra Chandra Mallik; Dr. Syed Mahmud; Raghunath Prasad Khaitan; Pratul Chandra Mitra; Bhupendra Narayan Mandal; Mahabir Dass; Sheel Bhadra Yajee; Shishir Kumar; Braja Kishore Prasad Sinha; Ganga Sharan Sinha; Rajendra Pratap Sinha; Anand Chand; Rama Bahadur Sinha; Lalit Narayan Mishra; Jagat Kishore Prasad Narayan Singh; Mohan Singh Oberoi; Awad-heshwar Prasad Sinha; Smt. Jahanara Jaipal Singh; Vacant 1.

### GUJARAT—11

Khandubhai K. Desai; Dr. Biharilal Naranji Antani; Kumari Maniben Vallabhbhai Patel; Dahyabhai V. Patel; Suresh J. Desai; Maneklal Chunilal Shah; Smt. Puspaben Janardanrai Mehta; Jaisukhlal Hathi; Khemchandbhai Shomabhai Chavda; Manganbhai Shankerbhai Patel; Gulam Haider Valimohmed Momin.

### HARYANA—5

Jagat Narain; Neki Ram; Ram Chander, Krishan Kant; Mukhtar Singh.

### KERALA—9

Smt. Devaki Gopidas; Palat Kunhi Koya; Salay Mohamed Sait; Kizhedath Damodaran; Thazhava K. saven; P. Balachandra Menon; B. V. Abdullah Koya; K. Chandras kharan; A. Kaimal.

### MADHYA PRADESH—16

Niranjan Singh; Syed Ahmad; Pandit Bhawani Prasad Tiwari; Smt. Vidyawati Chaturvedi; Laxmi Narayan Das; Raja Shankar Pratap Singh; Dayal Das Kurre; Vimalkumar Mannalalji Chordia; Ram Sahai; R. S. Khandekar; Chakrapani Shukla; Khub Chand Baghel; A. D. Mani; Nand Kishore Bhatt; Niranjan Varma; Shivdutta Upa-dhyaya.

### MADRAS—18

K. Sundaram; Dr. S. Chandrasekhar; N. R. M. Swami; S. S. Vasan; V. V. Ramaswamy; G. P. Somasundaram; M. Ruthnaswamy; S. S. Mariswamy; P. Thanulingam; N. Rama-krishna Iyer; Smt. Lalitha Rajagopalan; T. V. Anandan; T. Chengalvarayan; R. T. Partha-sarathy; A. K. A. Abdul Samad; K. S. Rama-swamy; J. Sivashanmugam Pillai; M. J. Jamal Moideen.

### MAHARASHTRA—19

Abid Ali; Ganpatrao Devji Tapase; Bidesh Tukaram Kulkarni; Babubhai M. Chinai; M. C. Chagla; Smt. Tara Ramchandra Sathe; Vithalrao Tukaram Nagpure; Mohan Manik-chand Dharla; Pandharinath Sitaramji Patil; Kodardas Kalidas Shah; Gulabrao Ragu-nathrao Patil; Shankarrao Bajirao Bobdey; Dhairyashilrao Yeshwantrao Pawar; Sadashiv Krishna Vaishampayan; Bhaurao Krishnarao Gaikwad; B. D. Khobaragade; B. S. Savnekar; Vacant 2.

### MYSORE—12

M. D. Narayan; D. P. Karmarkar; Smt. Annapurna Devi Thimmarreddy; Mulk Govinda Reddy; Patil Puttappa; M. S. Gurupadaswamy; J. Venkatappa; M. Govinda Reddy; N. Sri Rama Reddy; Shri Sherkhan; Smt. Violet Alva; T. Siddalingappa.

### ORISSA—10

Mohammed Haneef; Binoy Kumar Mahanti; Bhabani Charan Pattanayak; Narayan Patra; Manmathnath Misra; Smt. Nandini Satpathy; Lokanath Misra; Sundar Mani Patel; Banka Behary Das; Vacant—1.

### PUNJAB—7

Narindar Singh Brar; Diwan Chaman Lall; Uttam Singh Dugal; Dr. Anup Singh; Sardar Raghbir Singh Panjhzari; Surjit Singh Atwal; Bhupinder Singh Jhindwala.

### RAJASTHAN—10

Maulana Abdul Shakoor; Sundar Singh Bhandari; Devi Singh; Dr. (Mrs.) Mangia Devi Talwar; Sadiq Ali; Shantilal Kothari;

P. N. Kathju; Dalpat Singh; Ramniwas Mirdha; H. C. Mathur.

### UTTAR PRADESH—34

G. S. Pathak; Dattopant Thengari; Lila Dhar Asthana; Sukhdev Prasad; Smt. Anis Kidwai; C. D. Pande; Smt. Shyam Kumari Khan; Jogesh Chandra Chatterji; Colonel Bashir Husain Zaidi; A. C. Gilbert; Mustafa Rashid Shervani; Jogendra Singh; Tarkeshwar Pande; Dr. M. M. S. Siddhu; Hayatullah Ansari; Sitaram Jaipuria; Kunj Behari Lal Rathi; Smt. Sarla Bhadauria; Ram Singh; T. N. Singh; Umashankar Dikshit; Chandra Shekhar; P. N. Sapru; Rajnarain; Dr. Z. A. Ahmed; Gaure Murahari; Hira Vallabha Tripathi; Dr. Dharam Prakash; Pandit Sham Sunder Narain Tankha; Mahabir Prasad Shukla; M. P. Bhargava; Arjun Arora; Vacant—2.

### WEST BENGAL—16

Satyendra Prasad Ray; Debabrata Mooker-gee; A. P. Chatterjee; R. S. Doogar; Biren Roy; Dwijendra Lal Sen Gupta; Bhupesh Gupta; Ramprasanna Ray; R. K. Bhuiwala; Chitta Basu; Dr. Shrimati Phulrenu Guha; Muhammad Ishaque; Syed Nausher Ali; Mriganka Mohan Sur; Surendra Mohan Ghose; Niren Ghosh.

### JAMMU AND KASHMIR—4

Om Mehta; Gulam Nabi Untoo; A. M. Tariq; Tirath Ram.

### NAGALAND—1

Melupura Vero.

### DELHI—3

Santokh Singh; Kumari Shanta Vasisht; Inder Kumar Gujral.

### HIMACHAL PRADESH—3

C. L. Varma; Shivanand Ramaul.

### MANIPUR—1

Sinam Krishnamohan Singh.

### PONDICHERY—1

Bhadauria P. Abraham.

### TRIPURA—1

Vacant.

### NOMINATED BY THE PRESIDENT—12

M. Ajmal Khan; Maheshwar Nath Kaul; G. Ramachandran; Jairamdas Daulatram; M. C. Setalvad; Dr. Gopal Singh; Smt. Shakun-tala Paranjpye; B. R. Diwakar; Dr. Harbant Rai Bachechan; Dr. D. R. Gadgil; Prof. Satya-rata Siddhantankar; Dr. Tara Chand.



# LOK SABHA

Seats : 523 ; No. of seats reserved for S.C. : 75 ; No. of seats reserved for S.T. : 34 ; Nominated under Article 371 of the Constitution by the President : 3.

Speaker : N. Sanjiva Reddy ; Dy. Speaker : B. K. Khadilkar. Secretary : S. L. Shakhder.

An estimate of party position is given below :—  
Congress : 279 ; Communist : 24 ; Praja Socialist Party : 14 ; Jan Sangh : 35 ; Swatantra : 42 ; Samyukta Socialist Party : 22 ; Republican : 1 ; All Party Hill Leaders' Conference : 1 ; Dravida Munnetra Kazhagam : 25 ; Independents : 46 ; Communist (Marxist) : 19 ; P.W.P. : 2 ; Forward Bloc : 2 ; Vacant : 8.

## ANDHRA PRADESH (41)

P. Ganga Reddy (Cong.), (Adilabad).  
B. S. Murthy (Cong.), (Amalapuram).  
M. S. Murthy (Cong.), (Anakapalli).  
P. Antony Reddy (Cong.), (Anantapur).  
Smt. B. K. Radhabai (Cong.), (Bhadrachalam—S.T.).  
Karri Narayana Rao (Cong.), (Bobilli).  
N. P. C. Naidu (Cong.), (Chittoor).  
Y. Easwara Reddy (Cong.), (Cuddalpur).  
Kommareddi Suryanarayana (Cong.), (Eluru).  
Meganti Ankineedu (Cong.), (Gudivada).  
K. Raghuramaiah (Cong.), (Guntur).  
N. Sanjiva Reddy (\*Speaker), (Hindpur).  
G. S. M. Ikote (Cong.), (Hyderabad).  
M. Thirumala Rao (Cong.), (Kakinada).  
J. Ramapathi Rao (Cong.), (Karimnagar).  
R. Dasaratha Rama Reddy (Cong.), (Kavali).  
T. Lakshminikanthamma (Cong.), (Khamman).  
Y. Gadilingana Goud (Swa.), (Kurnool).  
J. Rameshwar Rao (Cong.), (Mahabubnagar).  
Y. Ankineedu Prasad (Cong.), (Machilipatnam).  
Smt. Sangam Luxmi Bai (Cong.), (Medak).  
G. S. Reddi (Cong.), (Niryalguda).  
J. B. Muthyal Rao (Cong.), (Nagarkurnool—S.C.).  
Mohammad Yunus Saleem (Cong.), (Nalgonda).  
P. Venkata Subbalaiah (Cong.), (Nandyal).  
D. Balarama Raju (Cong.), (Narasapur).  
Maddi Sudarshan (Cong.), (Narasaraopet).  
B. Anjanappa (Cong.), (Nellore).  
M. Narayan Reddy (Ind.), (Nizamabad).  
K. Jaggaiah (Cong.), (Ongole).  
Viswaraj Narasimha Rao (Swa.), (Parvathipuram).  
M. R. Krishna (Cong.), (Peddapalli).  
D. S. Raju (Cong.), (Rajahmundry).  
P. Parthasarathy (Cong.), (Rajampet).  
Bakar Ali Mirza (Cong.), (Secunderabad).  
G. Venkateswamy (Cong.), (Siddipet—S.C.).  
Vacant, (Srikakulam).  
C. Dass (Cong.), (Tirupathi—S.C.).  
Dr. K. L. Rao (Cong.), (Vijayawada).  
Tenneti Viswanatharao (Ind.), (Visakhapatnam).  
R. Surender Reddy (Cong.), (Warangal).

## ASSAM—14

G. G. Swell (APHLIC), (Autonomous Districts—S.T.).  
Y. A. Ahmed (Cong.), (Barpeta).  
Smt. Jyotsna Chanda (Cong.), (Cachar).  
Jahan Uddin Ahmed (P.S.P.), (Dhubri).  
J. N. Hazarika (Cong.), (Dibrugarh).  
Dhireswar Kalita (Com.), (Gauhati).  
Rajen Barua (Cong.), (Jorhat).  
Bedabrata Barua (Cong.), (Kaliabor).  
N. B. Laskar (Cong.), (Karinganji—S.C.).  
R. N. Brahma (Cong.), (Kokrajhar).  
B. N. Sastri (Cong.), (Lakhimpur).  
Hem Barua (P.S.P.), (Mangaldai).  
Liladhar Kotoki (Cong.), (Nouongong).  
B. Bhagavati (Cong.), (Tezpur).

## BIHAR—53

T. Ram (Cong.), (Araria—S.C.).  
Mudrika Sinha (Cong.), (Aurangabad).  
Bhola Raut (Cong.), (Bagaha—S.C.).  
Beni Shanker Sharma (J.S.), (Banka).  
Tarkeshwari Sinha (Cong.), (Barh).  
Yogindra Sharma (Com.), (Begusarai).  
K. N. Tewari (Cong.), (Bettiah).  
Bhagwat Jha Azad (Cong.), (Bhagalpur).  
Shiropujan Shashtri (S.S.P.), (Bikramganj).  
Dr. Ram Subhag Singh (Cong.), (Buzar).

Ramshekhar Prasad Singh (Cong.), (Chapra).  
Smt. Vijaya Raje (Ind.), (Chatra).  
Satya Narain Sinha (Cong.), (Darbhanga).  
Rani Lalita Rajya Laxmi (Ind.), (Dhanbad).  
S. C. Beera (Cong.), (Dumka—S.T.).  
Ram Dhani Das (Cong.), (Gaya—S.C.).  
Imteyazuddin Ahmad (Cong.), (Giridih).  
Prabhu Dayal Himatsinghka (Cong.), (Godda).  
Pandit D. N. Tewari (Cong.), (Gopalganj).  
Valmiki Choudhary (Cong.), (Hajipur).  
Dr. B. N. Singh (Ind.), (Hazaribagh).  
Chandra Sekhar Singh (Com.), (Jehanabad).  
Bhogendra Jha (Com.), (Jainagar).  
N. T. Das (Cong.), (Jamui).  
Shiva Chandika Prasad (Cong.), (Jamshedpur).  
Sitaram Keshri (Cong.), (Katihar).  
Kamla Misra Madhukar (Com.), (Kesaria).  
Kameshwar Singh (S.S.P.), (Khagaria).  
Jaipal Singh (Cong.), (Khunti).  
Lakhan Lal Kapoor (P.S.P.), (Kishanganj).  
Kartik Oraon (Cong.), (Lohardaga).  
Bindheshwari Prasad Mandal (S.S.P.), (Madhubani).  
Shiva Chandra Jha (S.S.P.), (Madhubani).  
Mrityun Jay Prasad (Cong.), (Maharajgarh).  
Madhu Limaye (S.S.P.), (Monghyr).  
Bibhuti Mishra (Cong.), (Motihari).  
Digvijaya Narain Singh (Cong.), (Muzaffarpur).  
Siddheshwar Prasad (Cong.), (Nalanda).  
Dr. Surya Prakash Puri (Ind.), (Nasrabad).  
Smt. Kamla Kumari (Cong.), (Palamau—S.C.).  
Ramavatar Shastri (Com.), (Patna).  
Shashi Ranjan (Cong.), (Purbi).  
Phani Gopal Sen Gupta (Cong.), (Purnea).  
Iswar Marandi (Cong.), (Rajmahal—S.T.).  
P. K. Ghosh (Cong.), (Ranchi).  
Kedar Paswan (S.S.P.), (Roseria—S.C.).  
Gunanand Thakur (S.S.P.), (Saharsa).  
Yamuna Prasad Mandal (Cong.), (Samastipur).  
Jagjivan Ram (Cong.), (Sasaram—S.C.).  
Bali Ram Bhagat (Cong.), (Shahabad).  
Kolai Birua (Ind.), (Singbhum—S.T.).  
Nagendra Prasad Yadav (Cong.), (Sitamarhi).  
Mohammad Yusuf (Cong.), (Siwan).

## GUJARAT—24

Indulal Yajnik (Ind.), (Ahmedabad).  
Smt. Jayaben Shah (Cong.), (Amreli).  
Narendrasingh Mahida (Cong.), (Anand).  
Manubhai Amersey (Swa.), (Banaskantha).  
Pashabhai Patel (Swa.), (Baroda).  
Vacant, (Bhavnagar).  
M. B. Rana (Cong.), (Broach).  
Nanubhai N. Patel (Cong.), (Bulsar—S.T.).  
Manubhai Patel (Cong.), (Dabhoi).  
R. K. Amin (Swa.), (Dhandhuka).  
Bhaljibhai Ravjibhai Parmar (Cong.), (Dohad—S.T.).  
S. M. Solanki (Cong.), (Gandhinagar).  
Pilo Mody (Swa.), (Godhra).  
N. Dandekar (Swa.), (Jamnagar).  
Viren Shah (Swa.), (Junagadh).  
Pravinsinh Natavarsinh Solanki (Swa.), (Kaira).  
Tulsidas Sheth (Cong.), (Kutch).  
C. M. Kedarla (Cong.), (Mandvi—S.T.).  
Ramechandra Amin (Swa.), (Mehsana).  
Dahyabhai Parmar (Swa.), (Patan—S.C.).  
M. R. Masani (Swa.), (Rajkot).  
C. C. Desai (Swa.), (Sabarkantha).  
Morarji Desai (Cong.), (Surat).  
Meghrajji (Swa.), (Surendranagar).

## HARYANA—9

Suraj Bhan (J.S.), (Ambala—S.C.).  
A. Ghani Dhar (Ind.), (Gurgaon).  
Ram Krishan Gupta (Cong.), (Hissar).  
Sher Singh (Cong.), (Jhajjar).  
G. L. Nanda (Cong.), (Kaithal).  
M. R. Sharma (Cong.), (Karnal).  
Gajraj Singh Rao (Cong.), (Mahendragarh).  
Chaudhari Randhir Singh (Cong.), (Rohtak).  
Choudhary Dalbir Singh (Cong.), (Sirsa—S.C.).

## JAMMU AND KASHMIR—8

Mohamed Shaffi Qureshi (Cong.), (Anantnag).  
Syed Ahmad Aga (Cong.), (Baramulla).  
Inder J. Malhotra (Cong.), (Jammu).  
Kushok Bakula (Cong.), (Ladakh).  
G. M. Bakshi (Ind.), (Srinagar).  
Dr. Karan Singh (Cong.), (Udhampur).

## KERALA—19

P. C. Adichean (Com.), (Adoor—S.C.).  
Smt. Suseela Gopalan (Com. M.), (Ambalapuzha).  
Arangil Sreedharan (S.S.P.), (Badagara).  
K. Anrudhan (Com. M.), (Chirayinkil).  
V. Viswanatha Menon (Com. M.), (Ernakulam).  
A. K. Gopalan (Com. M.), (Kasargod).  
K. M. Abraham (Com. M.), (Kottayam).  
Ebrahim Sulaiman Sait (Ind.), (Kozhikode).  
M. Mohammad Ismail (Ind.), (Manjeri).  
G. P. Mangalathumadam (S.S.P.), (Mavelikara).  
P. P. Esthose (Com. M.), (Muvathupuzha).  
P. Govinda Menon (Cong.), (Mukundapuram).  
E. K. Nayanar (Com. M.), (Palghat).  
P. K. Vasudevan Nair (Com.), (Peermade).  
C. K. Chakrapani (Com. M.), (Ponnani—S.C.).  
N. Sreekantan Nair (Ind.), (Quilon).  
Pattiam Gopalan (Com. M.), (Tellicherry).  
D. Janardhanan (Com.), (Trichur).  
P. Viswambharan (S.S.P.), (Trivandrum).

## MADHYA PRADESH—37

C. D. Gautam (Cong.), (Balaghat).  
Jhadu Sunder Lal (Ind.), (Bastar—S.T.).  
Narendra Kumar Selve (Cong.), (Betul).  
Yashwant Singh Kushwah (J.S.), (Bhind).  
Jagannathrao Joshi (J.S.), (Bhopal).  
A. S. Seigal (Cong.), (Bilaspur).  
Garishankar Ramkrishna Mishra (Cong.), (Chhindwara).  
Manibhai J. Patel (Cong.), (Damoh).  
Bharat Singh Chowhan (J.S.), (Dhar).  
V. Y. Tamaskar (Cong.), (Durg).  
J. B. Kripalani (Ind.), (Guna).  
Ram Awtar Sharma (J.S.), (Gwalior).  
Chaudhary Nitiraj Singh (Cong.), (Hoshangabad).  
Prakash Chand Bhanwarlal Sethi (N.A.), (Indore).  
Dr. Govind Das (Cong.), (Jabalpur).  
Smt. Minimata Agam Daes Guru (Cong.), (Jangir).  
Sursingh (Cong.), (Jhabua—S.T.).  
Trilokshah Lal Priendra Shah (J.S.), (Kanker—S.T.).  
Gangacharan Dixit (Cong.), (Khandwa).  
Shashi Bhushan (Cong.), (Khargon).  
Vidya Charan Shukla (Cong.), (Mahasamund).  
N. G. Uikey (Cong.), (Nandla—S.T.).  
S. S. Kothari (J.S.), (Mandsaur).  
Atamdas (Ind.), (Monena—S.C.).  
Lakhan Lal Gupta (Cong.), (Raipur).  
Kumar Rajni Devi (Cong.), (Raigarh—S.T.).  
Smt. Padmawati Devi (Cong.), (Rajnandgaon).  
S. N. Shukla (Cong.), (Rewa).  
Ram Singh (J.S.), (Sagar—S.C.).  
Devendra Vijay Singh (Cong.), (Satna).  
Smt. Girija Kumari (Cong.), (Shahdol—S.T.).  
Dr. Baburao Patel (J.S.), (Shahjapur).  
Maharaja Bhanu Prakash Singh of Narsinghgarh (Cong.), (Sidhi).  
Babunath Singh (Cong.), (Suruja—S.T.).  
Nathu Ram Atherwar (Cong.), (Tikamgarh—S.C.).  
Hukam Chand Kachhway (J.S.), (Ujjain—S.C.).  
Pandit Shiv Sharma (J.S.), (Vidisha).

## MADRAS—39

V. Mayavan (D.M.K.), (Chidambaram—S.C.).  
C. Chittibabu (D.M.K.), (Chingleput).  
K. Ramani (Com. M.), (Coimbatore).  
V. Krishnamoorthy Goundar (D.M.K.), (Cuddalore).



C. T. Dhandapani (D.M.K.), (Dharampuram — S.C.).  
 N. Anbuchezhian (D.M.K.), (Dindigul).  
 P. A. Saminathan (D.M.K.), (Gobichettipalayam).  
 C. Muthusamy (Swa.), (Karur).  
 M. Deiveekan (D.M.K.), (Kallakuruchi).  
 M. Kamalanathan (D.M.K.), (Krishnagiri).  
 Era Sezhyan (D.M.K.), (Kumbakonam).  
 Krishnan Manoharan (D.M.K.), (Madras North).  
 C. N. Annadurai (D.M.K.), (Madras South).  
 P. Ramamurti (Com. M), (Madurai).  
 K. Subravelu (D.M.K.), (Mayuram — S.C.).  
 S. Kandappan (D.M.K.), (Mettur).  
 V. Sambasivam (Cong.), (Nagapattinam).  
 A. Nesamony (Cong.), (Nagercoil).  
 M. K. Nanja Gowder (Swa.), (Nilgiris).  
 A. Durairasu (D.M.K.), (Perambalur — S.C.).  
 H. Ajmal Khan (Swa.), (Periakulam).  
 B. Narayanan (D.M.K.), (Pollachi).  
 R. Uma Nath (Com. ML), (Pudukkottai).  
 S. Mohammed Sheriff (Ind.), (Ramanathapuram).  
 K. Rajaram (D.M.K.), (Salem).  
 Thandavan Kiruttinan (D.M.K.), (Sivaganja).  
 P. Ramamoorthy (Swa.), (Sivakasi).  
 P. Sivasankaran (D.M.K.), (Sriperumbudur — S.C.).  
 R. S. Arumugam (Cong.), (Tenkasi — S.C.).  
 D. Somasundaram Gopalar (D.M.K.), (Thanjavur).  
 T. D. Ramabhadra Naidu (D.M.K.), (Tindivanam).  
 Dr. N. Santosham (Swa.), (Tiruchandur).  
 K. Ambazhagan (D.M.K.), (Tiruchengode).  
 K. Anandan Nambiar (Com. M), (Tiruchirappalli).  
 S. Xavier (Swa.), (Tirunelveli).  
 R. Muthu Gounder (D.M.K.), (Tiruppattur).  
 S. K. Sambandham (D.M.K.), (Tiruttani).  
 G. Kuchelar (D.M.K.), (Vellore — S.C.).  
 G. Viswanathan (D.M.K.), (Wandiwash).

## MAHARASHTRA—45

Anantrao Patil (Cong.), (Ahmednagar).  
 K. M. Asghar Husain (Cong.), (Akola).  
 K. G. Deshmukh (Cong.), (Amravati).  
 B. D. Deshmukh (Cong.), (Aurangabad).  
 Tulsidas Jadhav (Cong.), (Baramati).  
 Asoka Mehta (Cong.), (Bhandara).  
 Nana Ramchandra Patil (Com.), (Bhir).  
 Sonubhau Dagau Baswat (Cong.), (Bhiwandi).  
 R. D. Bhandare (Cong.), (Bombay Central).  
 S. A. Dange (Com.), (Bombay Central South).  
 Smt. Tara Govind Sapre (Cong.), (Bombay North-East).  
 Shantilal Shah (Cong.), (Bombay North West).  
 George Fernandes (S.S.P.), (Bombay South).  
 S. R. Rane (Cong.), (Buldana).  
 K. M. Koushik (Ind.), (Chanda).  
 R. M. Hajarnavis (Cong.), (Chimur).  
 H. H. Raja Yeshwantrao M. Mukne (Cong.), (Dahanu — S.T.).  
 Chudaman Ananda Patil (Cong.), (Dhulia).  
 Maharani Vijayamala Rajaram Chhatrapati Bhonsale (P.W.P.), (Hatkanangale).  
 S. S. Syed (Cong.), (Jalgaon).  
 V. N. Jadhav (Cong.), (Jalna).  
 D. R. Chavan (Cong.), (Karad).  
 Arjun Shripat Kasture (Cong.), (Khamgaon — S.C.).  
 R. K. Khadilkar (Cong.), (Khed).  
 D. K. Kunte (P.W.P.), (Kolaba).  
 Shankarrao Mane (Cong.), (Kolhapur).  
 Annasaheb P. Shinde (Cong.), (Kopergaon).  
 Tulsiram Dashrath Kamble (Cong.), (Latur).  
 Zambru Manglu Kahandole (Cong.), (Malegaon).  
 Narendra Ramchandraji Deoghare (Cong.), (Nagpur).  
 Venkatrao Tarodekar (Cong.), (Nanded).  
 Tukaram Hurji Gavit (Cong.), (Nandurbar).  
 Bhanudas Ramchandra Kavade (Cong.), (Nasik).  
 T. A. Patil (Cong.), (Osmanabad).  
 Tayappa Hari Sonavane (Cong.), (Pandharpur).  
 Shivajirao S. Deshmukh (Cong.), (Parbhani).  
 S. M. Joshi (S.S.P.), (Panna).  
 Nath Pal (P.S.P.), (Rajapur).  
 A. G. Sonar (Cong.), (Ramtek).  
 Smt. Sharda Mukerjee (Cong.), (Ratnagiri).  
 Y. B. Chavan (Cong.), (Satara).  
 S. D. Patil (Cong.), (Sangli).  
 S. R. Damani (Cong.), (Sholapur).  
 Kamalnayan Bajaj (Cong.), (Wardha).  
 Deorao S. Patil (Cong.), (Yatmal).

## MYSORE—27

S. B. Patil (Cong.), (Bagalkot).  
 K. Hanumanthaiya (Cong.), (Bangalore).  
 M. N. Naghnor (Cong.), (Belgaum).  
 V. K. R. V. Rao (Cong.), (Bellary).  
 Ramchander Veerappa (Cong.), (Bidar — S.C.).  
 G. D. Patil (Swa.), (Bijapur).  
 S. M. Siddiah (Cong.), (Chamarajanagar — S.C.).  
 B. Shankaranand (Cong.), (Chikodi — S.C.).  
 M. Huche Gowda (P.S.P.), (Chikmagalur).  
 J. M. Imam (Swa.), (Chitradurga).  
 Dr. Sarojini Mahishi (Cong.), (Dharwar North).  
 F. H. Mohsin (Cong.), (Dharwar South).  
 Mahadevappa Rampure (Cong.), (Gulbarga).  
 Nuggehalli Shivappa (Swa.), (Hassan).  
 M. V. Krishnappa (Cong.), (Hoskote).  
 Dinkar Desai (Ind.), (Kanara).  
 M. V. Rajasekharan (Cong.), (Kanakapura).  
 G. Y. Krishnan (Cong.), (Kolar — S.C.).  
 S. A. Agadi (Cong.), (Koppal).  
 Mali Mariyappa (Cong.), (Naduhogiri).  
 M. K. Shivananjappa (Cong.), (Mandya).  
 C. M. Poonacha (Cong.), (Mangalore).  
 H. D. Tulsidas (Cong.), (Mysore).  
 Raja Venkatappa Naik (Swa.), (Raichur).  
 J. H. Patel (S.S.P.), (Shimoga).  
 K. Lakkappa (P.S.P.), (Tumkur).  
 J. N. Lobo Prabhu (Swa.), (Udipi).

## ORISSA—20

D. N. Deb (Swa.), (Angul).  
 Samanendra Kundu (P.S.P.), (Balasore).  
 Dharni Dhar Jena (Swa.), (Bhadrak — S.C.).  
 A. T. Sarma (Cong.), (Bhanjanagar).  
 Chintamani Panigrahi (Cong.), (Bhubaneswar).  
 R. R. Singh Deo (Swa.), (Bolangir).  
 Janannath Rao (Cong.), (Chatrapur).  
 Srinibas Misra (P.S.P.), (Cuttack).  
 K. P. Singh Deo (Swa.), (Dhenkanal).  
 Baidhar Behera (P.S.P.), (Jaipur — S.C.).  
 H. H. Maharaja Pratap Keshari Rao (Swa.), (Kalahandi).  
 Surendranath Dwivedy (P.S.P.), (Kendrapara).  
 G. C. Naik (Swa.), (Keonjhar — S.T.).  
 Ramachandra Ulaka (Cong.), (Koraput — S.T.).  
 Mahendra Majhi (Swa.), (Mayurbhanj — S.T.).  
 Khagapathi Pradhani (Cong.), (Nowrangpur — S.T.).  
 Anirudha Dipa (Swa.), (Phulbani — S.C.).  
 Rabi Ray (S.S.P.), (Puri).  
 S. Supakar (Cong.), (Sambalpur).  
 Debananda Amat (Swa.), (Sundargarh — S.T.).

## PUNJAB—13

Yajna Datt Sharma (J.S.), (Amritsar).  
 Kikar Singh (Ind.), (Bhatinda — S.C.).  
 Sardar Iqbal Singh (Cong.), (Fazilka).  
 Sohan Singh Basl (Ind.), (Ferozepore).  
 Diwan Chand Sharma (Cong.), (Gurdaspur).  
 Ram Kishan (Cong.), (Hoshiarpur).  
 Swaran Singh (Cong.), (Jullundur).  
 Devinder Singh (Cong.), (Ludhiana).  
 Smt. Mohinder Kaur (Cong.), (Patiala).  
 Chowdhury Sadhu Ram (Cong.), (Phillaur).  
 Sardar Bhuta Singh (Cong.), (Rupar — S.C.).  
 Sardarni Nirlep Kaur (Ind.), (Sangrur).  
 G. S. Dhillon (Cong.), (Taran Taran).

## RAJASTHAN—23

Bashweshwar Nath Bhargava (Cong.), (Ajmer).  
 Bhola Nath Master (Cong.), (Alwar).  
 Heerji Bhai (Cong.), (Banswara).  
 Amrit Nahata (Cong.), (Barmer).  
 Brijendra Singh (Ind.), (Bharatpur).  
 Ramesh Chandra Vyas (Cong.), (Bhilwara).  
 H. H. Maharaja Dr. Karni Singh of Bikaner (Ind.), (Bikaner).  
 Onkar Lal Bohra (Cong.), (Chittorgarh).  
 Charanjit Rai (Swa.), (Dausa).  
 Panna Lal Barupal (Cong.), (Ganganagar).  
 Jagannath Pahadia (Cong.), (Hinduan — S.C.).  
 Maharani Gayatri Devi of Jaipur (Swa.), (Jaipur).  
 D. N. Patodia (Cong.), (Jalore).  
 Brijraj Singh Kotah (J.S.), (Jhalawar).  
 R. K. Birla (Swa.), (Jhunjhunu).  
 B. K. Sanghi (Cong.), (Jodpur).  
 O. L. Berwa (J.S.), (Kota — S.C.).  
 N. K. Somani (Swa.), (Nagaur).  
 Sunendra Kapur Tapuriah (Swa.), (Pali).

M. L. Neena (Swa.), (Sawai Madhopur — S.T.).  
 S. G. Saboo (J.S.), (Sikar).  
 Jamna Lal Barwa (Com.), (Tonk — S.C.).  
 Dhuleshwar Meena (Cong.), (Udaipur — S.T.).

## UTTAR PRADESH—85

Seth Achal Singh (Cong.), (Agra).  
 Ramji Ram (Rep.), (Akbanpur — S.C.).  
 Shiv Kumar Shastri (Ind.), (Aligarh).  
 Hari Kriehna (Cong.), (Allahabad).  
 J. B. S. Bist (Cong.), (Almora).  
 Maulana Ishaq Sambhali (Com.), (Amroha).  
 Vidya Dhar Bajpal (Cong.), (Amethi).  
 Smt. Savitri Shyam (Cong.), (Amla).  
 Chandra Jit (Cong.), (Azamgarh).  
 Raghuvir Singh Shastri (Ind.), (Baghpat).  
 K. K. Nayar (J.S.), (Bahraich).  
 Atal Bihari Vajpayee (J.S.), (Balrampur).  
 Chandrik Prasad (Cong.), (Ballia).  
 Jageshwar Yadav (Com.), (Banda).  
 Molahu Prasad (S.S.P.), (Bansgaon — S.C.).  
 Ram Sewak Yadav (S.S.P.), (Bara Banki).  
 Brijbhushan Lal (J.S.), (Bareilly).  
 Sheo Narain (Cong.), (Basti — S.C.).  
 Swami Ramanand Shastri (Cong.), (Bijnor — S.C.).  
 Smt. Sushila Rohatgi (Cong.), (Bilhaur).  
 Omkar Singh (J.S.), (Budaun).  
 Surendra Pal Singh (Cong.), (Bulandshahr).  
 Masuriya Din (Cong.), (Chail — S.C.).  
 Nihal Singh (S.S.P.), (Chandauli).  
 Yashpal Singh (Ind.), (Dehra Dun).  
 Bishwanath Roy (Cong.), (Deonia).  
 N. S. Sharma (J.S.), (Domanaganj).  
 Rohanlal Chaturvedi (Cong.), (Etah).  
 Arjun Singh Bhadoria (S.S.P.), (Etawah).  
 Ramkrishna Sinha (Cong.), (Faizabad).  
 Awadesh Chandra Singh (Cong.), (Farukhabad).  
 Sant Bun Singh (Cong.), (Fatehpur).  
 Shiv Charan Lal (S.S.P.), (Firozabad — S.C.).  
 Bhakt Darshan (Cong.), (Garhwal).  
 Tula Ram (Cong.), (Ghatampur — S.C.).  
 Sarjoo Pandey (Com.), (Ghazipur).  
 Jai Bahadur Singh (Com.), (Ghosi).  
 Smt. Sucheta Kripalani (Cong.), (Gonda).  
 Digvijay Nath (Ind.), (Gorakhpur).  
 Swami Brahmanand (J.S.), (Hamirpur).  
 Prakash Vir Shastri (Ind.), (Hapur).  
 Kinder Lal (Cong.), (Hardoi — S.C.).  
 Nardeo Snatak (Cong.), (Hathras — S.C.).  
 Chowdhury Ram Sewak (Cong.), (Jaluan — S.C.).  
 Rajdeo Singh (Cong.), (Jaunpur).  
 Dr. Sushila Nayar (Cong.), (Jhansi).  
 Ghayoor Ali Khan (S.S.P.), (Kairana).  
 Smt. Shakuntala Nayar (J.S.), (Kaisarganj).  
 Dr. Ram Manohar Lohia (S.S.P.), (Kannauj).  
 S. M. Banerjee (Ind.), (Kapur).  
 Mushir Ahmad Khan (Cong.), (Kasganj).  
 Ranjeet Singh (J.S.), (Khalilabad).  
 Balgovind Verma (Cong.), (Kheri).  
 Ram Charan (P.S.P.), (Khurja — S.C.).  
 Ram Dhan (Cong.), (Lalganj — S.C.).  
 Anand Narain Mulla (Ind.), (Lucknow).  
 Nageshwar Dwivedi (Cong.), (Machhlishahr).  
 Mahadeva Prasad (Cong.), (Maharajganj).  
 Naraj Singh (Cong.), (Mainpuri).  
 Girraj Saran Singh (Ind.), (Mathura).  
 Maharaj Singh Bharti (S.S.P.), (Meerut).  
 Vansh Narain (J.S.), (Mirzapur).  
 Sankta Prasad (Cong.), (Mirrith — S.C.).  
 Smt. Ganga Devi (Cong.), (Mohanalganj — S.C.).  
 Om Prakash Tyagi (J.S.), (Moradabad).  
 Latifat Ali Khan (Com.), (Muzaffarnagar).  
 Krishan Chandra Pant (Cong.), (Nainital).  
 Kashi Nath Pandey (Cong.), (Padrauna).  
 Smt. Vijaya Lashmi Pandit (Cong.), (Phulpur).  
 Mohan Swarup (P.S.P.), (Pilibhi).  
 Dinesh Singh (Cong.), (Pratapgarh).  
 Smt. Indira Nehru Gandhi (Cong.), (Rai Bareilly).  
 Zulfiqar Ali Khan (Swa.), (Rampur).  
 Balj Nath Kureel (Cong.), (Ramsanehighat S.C.).  
 Ram Swarup (Cong.), (Robertsganj — S.C.).  
 Sunder Lal (Cong.), (Saharanpur).  
 Shambu Nath (Cong.), (Sidapur — S.C.).  
 Vishwa Nath Pandey (Cong.), (Salempur).  
 J. B. Singh (J.S.), (Shahbad).  
 Prem Krishan Khanna (Cong.), (Shahjahanpur).  
 Sharda Nand (J.S.), (Sitapur).  
 Gaupat Sahai (Cong.), (Sultanpur).



Lt. Col. H. H. Maharaja Manabendra Shah of  
Theri Garhwal (Cong.), (*Tehri Garhwal*).  
Krishna Dev Tripathi (Cong.), (*Unnao*).  
Satya Narain Singh (Com. M), (*Varanasi*).

## WEST BENGAL—40

Indrajit Gupta (Com.), (*Alipore*).  
Amiya Nath Bose (F.B.), (*Arambagh*).  
Deven Sen (S.S.P.), (*Asansol*).  
Bhagwan Das (Com. M), (*Ausgram — S.C.*).  
Jatindra Nath Pramanik (Cong.), (*Balurghat — S.C.*).  
J. M. Biswas (Com.), (*Bankura*).  
Dr. Ranen Sen (Com.), (*Barasat*).  
Mohammad Ismail (Com. M), (*Barrackpore*).  
Humayun Kabir (Ind.), (*Basirhat*).  
Tridib Chaudhuri (Ind.), (*Berhampur*).  
Anil K. Chanda (Cong.), (*Bholpur*).  
N. C. Chatterjee (Ind.), (*Burduwan*).  
H. N. Mukerjee (Com.), (*Calcutta North East*).  
A. K. Sen (Cong.), (*Calcutta North West*).  
Ganesh Ghosh (Com. M) (*Calcutta South*).  
Samar Guha (P.S.P.), (*Contai*).  
Benoy Krishna Daschowdhury (F.B.), (*Cooch-Bihar — S.C.*).  
Dr. (Mrs.) Maitreyee Bose (Ind.), (*Darjeeling*).  
Jyotirmoy Bosu (Com. M), (*Diamond Harbour*).  
Dr. Sirir Kumar Saha (Cong.), (*Dirbhum — S.C.*).  
Parimal Ghosh (Cong.), (*Ghatal*).  
Bijoy Modak (Com. M), (*Hooghly*).  
Krishna Kumar Chatterjee (Cong.), (*Howrah*).  
B. N. Katham (Cong.), (*Jalpaiguri — S.T.*).  
Hazi Lutfal Haque (Cong.), (*Jangipur*).  
Amiya Kumar Kisku (Ind.), (*Jhargram — S.T.*).  
Chitta Ranjan Ray (Ind.), (*Joynagar — S.C.*).  
Dwaipayan Sen (Cong.), (*Katua*).  
H. P. Chatterjee (Ind.), (*Krishnagar*).  
Smt. Uma Roy (Cong.), (*Malda*).  
Kansari Halder (Com.), (*Mathurapur — S.C.*).  
Sachindra Nath Maiti (Ind.), (*Midnapore*).  
Syed Badrudduja (Ind.), (*Mutshidabad*).  
P. B. Thakury (Ind.), (*Nabadwip — S.C.*).  
Bhajahari Mahato (Ind.), (*Purutea*).  
C. K. Bhattacharyya (Cong.), (*Raiganj*).  
Bimalkanti Ghosh (Cong.), (*Serampore*).

\* Nominated by the President.

S. C. Samanta (Ind.), (*Tamluk*).  
Jugal Mondal (Cong.), (*Uluberia*).  
Dr. P. Nandal (Cong.), (*Vishnupur — S.C.*).

## DELHI—7

Ram Gopal Shalwale (J.S.), (*Chandnichowk*).  
Kanwar Lal Gupta (J.S.), (*Delhi Sadar*).  
Hardayal Devgun (J.S.), (*East Delhi*).  
R. S. Vidyarthi (J.S.), (*Karol Bagh — S.C.*).  
M. L. Sondhi (J.S.), (*New Delhi*).  
Chowdhry Brahm Perakash (Cong.), (*Outer Delhi*).  
Bal Raj Madhok (J.S.), (*South Delhi*).

## HIMACHAL PRADESH—6

Vikram Chand (Cong.), (*Chamba*).  
Prem Chand Verma (Cong.), (*Hamirpur*).  
Hem Raj (Cong.), (*Kangra*).  
Vacant (*Mahasu*).  
Lalit Sen (Cong.), (*Mandi*).  
Pratap Singh (Cong.), (*Simla*).

## MANIPUR—2

M. Meghachandra (Com.), (*Inner Manipur*).  
Paokai Haokip (Ind.), (*Outer Manipur — S.T.*).

## TRIPURA—2

Srijut Maharaj Manikya Kirit Bikram Kishore  
Debbarma Bahadur (Cong.), (*Tripura East — S.T.*).  
J. K. Choudhury (Cong.), (*Tripura West*).

## ANDAMAN AND NICOBAR ISLANDS—1

K. R. Ganesh (Cong.).

## LACCADIVE, MINICOY AND AMINDIVI ISLANDS—1

P. M. Sayeed (Ind.).

## DADRA AND NAGAR HAVELI—1

Sanjibhai Rupjibhai Delkar (Cong.).

## GOA, DAMAN AND DIU—2

Vacant (*Panjim*).

Vacant (*Mormugao*).

## NORTH EAST FRONTIER TRACT—1\*

D. Ering (Cong.).

## NAGALAND—1

S. C. Jamir (Cong.).

## PONDICHERRY—1

N. Sethuramane (Cong.).

## ANGLO-INDIANS—2\*

Frank Anthony (Ind.).  
A. E. T. Barrow (Ind.).

## CHANDIGARH—1

Shri Chand Goyal (J.S.).

## ESTIMATES COMMITTEE (1967-68) :

Chairman : P. Venkatasubbalah ; Members :  
Panna Lal Barupal, Onkar Lal Berwa, Maharaaj  
Singh Bharti, Bibhuti Mishra, R. K. Birla,  
Jyotirmoy Bosu, Tridib Chaudhuri, Hardayal  
Devgun, Y. Gadilingana Goud, J. N. Hazarika,  
J. M. Imam, Tulshidas Jadhav, Dhireswar  
Kalita, S. Kandappan, Baij Nath Kureel,  
Yashwant Singh Kushwah, K. Lakhappa,  
Smt. Sangam Laxmi Bai, J. M. Lobo Prabhu,  
Inder J. Malhotra, Yamuna Prasad Mandal,  
Dhuleshwar Meena, F. H. Mohsin, Chintamani  
Panigrahi, Rajdeo Singh, Gajraj Singh Rao,  
Smt. Jayaben Shah, Shantilal Shah, P. Sivasan-  
karan.

## PUBLIC ACCOUNTS COMMITTEE (1967-68) :

Chairman : M. R. Masani ; Members : C. K.  
Bhattacharyya, Sardar Buta Singh, Shivajirao S.  
Deshmukh, R. Muthu Gounder, D. K. Kunte,  
N. R. Laskar, V. Viswanatha Menon, K. K.  
Nayar, Mohammad Yunus Saleem, Narinder  
Kumar Salve, Yogendra Sharma, Sheo Narain,  
Smt. Tarkeshwari Sinha, P. Viswambharan,  
Smt. Devaki Gopidas, P. K. Kumaran, Om  
Mehta, Gaure Murahari, M. C. Shah, Dr. M. M. S.  
Siddhu, B. K. P. Sinha.

## AWARDS—(Contd.).

**R-Day Awards (1967) :** None has been  
awarded the Bharat Ratna this year. There are  
four recipients of the Padma Vibhushan, 24 of  
Padma Bhushan and 91 of Padma Shri.

The four who have been awarded the Padma  
Vibhushan are B. N. Jha, chairman of the Union  
Public Service Commission\* ; C. K. Daphtary,  
Attorney-General of India, Hafiz Mohammed  
Ibrahim, a former Governor of the Punjab ; and  
P. V. R. Rao, a former Defence Secretary.

The recipients of the Padma Bhushan are  
Maj.-Gen. C. K. Lakshmanan, secretary-general  
of the Indian Red Cross Society ; Dr. D. C.  
Pavate, vice-chancellor of Karnatak University ;  
Mahamahopadhyaya P. V. Potdar, Sanskrit  
scholar ; D. P. Kohli, director of the Central  
Bureau of Investigation ; K. R. P. Shroff, a  
former president of the Bombay Stock Exchange ;  
Dr. K. G. Saiyidain, well-known educationist ;  
Dr. Mulk Raj Anand, chairman of the Lalit  
Kala Akademi ; and four social workers, in-  
cluding Mrs. Tara Cherian, wife of the Governor  
of Maharashtra, Mrs. Pupul Jayakar ; V. B.  
Patil and K. V. Mehta, Dr. (Mrs.) V. S. Padma-  
vati, professor of medicine, Lady Hardinge  
Medical College, New Delhi ; Dr. T. M. P.  
Mahadevan, professor of philosophy, Madras  
University ; Mulk Raj Chopra, vice-chancellor  
of Roorkee University ; Dr. Tulsi Das, director,  
Research and Medical Education, Punjab ; and  
K. K. Handique, a former vice-chancellor of  
Gauhati University.

Those who have been awarded the Padma  
Shri are Abdul Quadir, a former director-general,  
Employment and Training ; Ali Sardar Jafri,

Urdu poet ; Dr. A. R. Gopal Ayengar, director,  
biology group, Bhabha Atomic Research Centre ;  
B. B. Borkar, Marathi poet from Goa ;  
Chandravadan Mehta, Gujarati poet and play-  
wright ; Miss Vidith Helen Paull, who has just  
retired as staff officer (nursing) in the Indian  
Red Cross Society ; Dr. M. S. S. Swaminathan,  
director of the Indian Agricultural Research  
Institute ; Ved Bhattan Mohan, industrialist,  
U.P. ; V. K. Shah, industrialist, Maharashtra ;  
and Mrs. Prabhjot Kaur, Punjabi poet ; Ajit  
Singh, farmer, Punjab ; Dr. Anar Prasad Ray,  
director, National Malaria Eradication Pro-  
gramme ; Balbir Singh Saigal, chief construction  
engineer, Sonauli-Pokhra road project in Nepal ;  
Chandi Dan, agriculturist, Rajasthan ; Syed  
Fareeduddin, head, chemical engineering divi-  
sion, Bhabha Atomic Research Centre ; Frank  
Sathyanarayan Dewars, a former First Secretary,  
Indian High Commission, Pakistan ; Dr. G. V.  
Chalam, joint controller (cereals), Ministry of  
Food and Agriculture ; Gurdial Singh, Doon  
School, Dehra Dun ; H. G. Patil, agriculturist,  
Maharashtra ; Dr. H. Santapau, director, Bot-  
anical Survey of India, Calcutta ; K. Subba Rao,  
M.L.A. (Andhra Pradesh) ; Kashi Prasad Pande,  
chairman, State Co-operative Central Bank,  
Madhya Pradesh ; Kiran Chandra Banerjee,  
general manager, Rifle Factory, Ishapore ;  
Krishnachandra Moreshwar alias Daji Bhata-  
wadekar, Marathi actor and director ; Lal Chand  
Verma, former director-general, Indian Stan-  
dards Institution ; Lt.-Col. Lal Singh, farmer,  
U.P. ; M. R. Patel, social worker, Gujarat ;  
Mayadhar Mansinha, Orissa poet ; N. Chettiar,  
chairman, Leather Export Promotion Council,

Madras : Dr. N. Veeraraghavan, director,  
Pasteur Institute, Coonoor, Priya Ranjan Sen,  
social worker, West Bengal ; Dr. P. M. Joseph,  
principal, Lakshmi College of Physical Educa-  
tion, Gwalior ; Sasadhar Mukerji, film producer,  
Bombay ; Shanti Prasad, Inspector-general of  
police, U.P. ; and V. V. L. Narasimha Rao, actor  
and playwright, Madras.

**Sportsmen, Journalists, Writers and  
Musicians :**—The recipients of the Padma  
Bhushan are Ramanathan Krishnan, Tennis  
player ; Mihir Sen, Swimmer ; Akshay  
Kumar Jain, Editor "The Navbharat Times" ;  
B. Shiv Rao, Journalist ; A. K. Sarkar, Editor,  
"The Anand Bazar Patrika" ; Ali Akbar Khan,  
the noted Author ; Mrs. M. L. Vasanthakumari  
and Ravi Shankar, musicians.

Those who have been awarded the Padma  
Shri are Nawab of Pataudi, Cricket player ;  
Shankar Laxman, hockey Captain ; Prithipal  
Singh, hockey player ; Mohammed Rafi, play-  
back Singer ; Mrs. Siddheswari Devi and Vasant  
Desai, musicians.

**National Awards :**—Certificates of honour  
were presented to five educationists by the  
President on April 11, 1967. They are Dr. V. V.  
Mirashi, K. S. Sastri, K. Chattopadhyaya,  
Maulana Abdul Majid Daryabadi and Qazi  
Sajjad Husain.

Shanti Prasad, V. K. Desai, V. R. Mohan and  
V. H. Shah were also honoured with Padma  
Shri on the same day by the President.

**State Awards Renamed :**—The Ashoka Chakra  
and Vishisht Seva Medals have been renamed.

\* Now retired.



The Ashoka Chakra Class I will be known as "Ashoka Chakra", Class II as 'Kirti Chakra' and Class III as "Shaurya-Chakra."

The Vishisht Seva Medal Class I will be known as "Param Vishisht Seva Medal", Class II as "Ati Vishisht Seva Medal" and Class III as "Vishisht Seva Medal."

These awards will, however, continue to be given on the same principles that govern the decorations under the current names.

**Jawaharlal Nehru Award for International Understanding** :—The first Nehru Award for International Understanding was given to the U.N. Secretary General, U Thant on April 12, 1967 by the President, Dr. S. Radhakrishnan.

**Arjuna Award** :—The following Sportsmen and Sportswomen were selected for Arjuna Awards for 1966: Chandu Borde (Cricket); Jaideep Mukherjee (Tennis); Rima Dutta (Swimming); Ajmer Singh and B. S. Barua (Athletics); Yusuf Khan (Football); V. J. Peter, Gurbux Singh and Miss Sunita Puri (Hockey); Usha Sundarraj (Table Tennis); Mohan Lal Ghosh (Weightlifting); Bhim Singh (Wrestling); Hawa Singh (Boxing) and P. G. Sethi (Golf).

**President's Award** :—The President awarded a Certificate of appreciation to William James Rabb, Senior Supdt., Flying Squad of Central Excise in appreciation of his meritorious services and valourous deeds even at the risks of life.

**Awards for Inventions** :—The Inventions Promotion Board has on Jan. 25, 1967 declared 23 prize awards totalling Rs. 17,500. Twelve of these awards are of Rs. 1,000 each.

The prize winning inventions together with their inventors are as follows :

Jagman Singh Rs. 1,000 for a hydraulic press for cold bending of girders.

K. Sreenivasan, S. Govindarajan and S. Parthasarathy Rs. 1,000 for their invention "Sitra Super Drafting System".

K. V. Shetty and M. M. Basole Rs. 1,000 for their invention "Economic Steel Structure".

H. V. Udupa and Associates Rs. 1,000 for their invention "Improvements in or relating to the production of Benzidine and substituted Benzidines by electrochemical process".

Y. Nayudamma, A. Ganesan, T. J. Desassy, I. M. S. Patel, L. M. Prasad and M. B. Charan Rs. 1,000 for their invention "Process for the manufacture of Shark fish skin leathers".

Dr. K. K. Bhattacharya and Co-workers Rs. 1,000 for their invention "Reforming of Iomex".

Dr. Satyarath Prakash and Mrs. Pushpa Rani Bhatnagar Rs. 1,000 for their invention "Electrical Resistance Wire Bond Strain Gauges".

H. S. Narayana Rao Rs. 1,000 for his invention "Linear Electric drive Unit".

Natrajan Ganesan Rs. 1,000 for his invention "An Inspection gauge for tube thickness".

Bibhuti Bhusan Sarkar Rs. 1,000 for his invention "Ophthalmoscope".

A. Venkateswara Rao Rs. 1,000 for his invention "AVRO System of Prestressed Concrete".

Edwin Francis D'Souza Rs. 1,000 for his invention "Digitronics".

B. B. Nandrajog Rs. 500 for his invention "Dynamic Dumbbell Damper".

Haji Aftab Rs. 500 for his invention "Stelelevator".

P. S. Venkatachalam Rs. 500 for his invention "Use of Medium Heavy Buffalo hides for processing fashion leathers like shrunken grain leather".

S. G. Nanjunda Swamy Rs. 500 for his invention "Indigenous Penetrants for the detection of surface and sub-surface cracks in materials".

P. K. Kulkarni Rs. 500 for his invention "Rubber Flap with a soft sealing ring for foot valve function of a foot valve".

Bharat Lal Mehrotra Rs. 500 for his invention "A seismic type displacement pick-up".

Dr. N. N. Godbole Rs. 500 for his invention "A Home Pasteuriser".

Bhagwan Pandurang Choudhari Rs. 500 for his invention "Preparation of Potassium Schoenite by dissolution".

K. Nagesha Rao Rs. 500 for his invention "Development of Aluminium-Tin Alloy (With lesser tin content) as a bearing material in place of conventional lead bronze".

N. M. Gopalaratnam Rs. 500 for his invention "Fool Proof Camera".

K. Ranga Ramanujam Rs. 500 for his invention "Improved Electric Leather Shrinkage Tester".

**Books for Akademi Award (1966)** :—Assamese: *Bedanar Ulka* (poetry), by the late Ambikagiri Roychoudhury; Bengali: *Nisi-Kutumba* (novel) by Manoj Basu; Hindi: *Mukti-bodh* (novelette) by Jainendra Kumar; Kannada: *Hamsa Damayanti* *Matthu* *Ithara* *Rupakagalu* (musical palyas) by P. T. Narasimhachar; Maithili: *Mithila-Balbhav* (philosophical treatise) by Yashodhar Jha; Malayalam: *Kala Jeevitam Thanne* (essays) by K. M. Kuttikrishna Marar; Marathi: *Sri Shiv Chhatrapati* (historical research) by the late T. S. Shejwalkar; Oriya: *Banka O. Sidha* (poems) by the late Godavarish Mahapatra; Sanskrit research: *Bhoja's Sringara Prakasa* (aesthetics) by Dr. V. Raghavan; Sindhi: *Surahi* (poems) by Lekhranj 'Aziz'; and Tamil: *Vallalor Kanda Orumaippadu* (biography) by M. P. Sivagnanam.

This year's awards have not gone to books in English, Gujarati, Kashmiri, Punjabi, Telugu and Urdu. A book in the Maithili language has received the award for the first time.

**Children's Literature Books** :—Each prize consists of Rs. 1,000):

Assamese "Samay Balir Khojbor" by Hindra Nath Sarma; Bengali: Professor Shanku"—Satyajit R.; Gujarati: "Hirani Khan"—Balabhai Vehand Desai; Hindi: "They The Chacha Nehru"—Mrs. Snehgarwal and "Bachon Ke Liye Dhaw"—Ramji Singh; Kannada: "Chandana Mele Elidaru" (manuscript)—Shashi Kumar; Malayalam: "Kunhikoonan"—P. Narendranath; Marathi: "Parl Ga Pari"—G. V. Karandikar; Oriya: "Odisara Benga"—Dr. Basanta Kaur Bohura; Punjabi: "Morr Sada Quami Panckhi"—Baljit Singh Bali; Sindhi: "Jawahar Darshan"—Deepchandra Trilokchand; Telugu: "Bangaru Nandichina Baata"—K. Sadananda; Tamil: "Behruvinkathai"—Val Subramania; Urdu: "Amol Ratan" (manuscript)—Atha Parveez.

#### FILMFARE AWARDS FOR 1966

**Best Actor** : Dev Anand (Guide).  
**Best Actress** : Waheeda Rehman (Guide).  
**Best Supporting Actor** : Ashok Kumar (Afsana).  
**Best Supporting Actress** : Simi (Do Badan).  
**Best Comedian** : Mahmood (Pyar Kiye Jaa).  
**Best Playback Singer** : Mohammed Rafi (Suraj).  
**Best Art Director** : Shanti Das (Pool Aur Patthar).  
**Best Cinematographer (Black and White)** : Jaywant Pathare (Anupama).  
**Best Cinematographer (Colour)** : Fall Mistry (Guide).  
**Best Art Director (Black and White)** : Sant Singh (Yeh Raat Phir Na Aayegi).  
**Best Director, Best Dialogue Writer** : Vijay Anand (Guide).  
**Best Music** : Shanker-Jaikishan (Suraj).  
**Best Story** : R. K. Narayan (Guide).  
**Best Lyricist** : Haart Jaipuri (Suraj).  
**Best Editor** : Vasant Borkar (Phool Aur Patthar).  
**Best Sound Recording** : Mahohar Amberkar (Mera Saaya).

**Best Documentary Film of 1966 (Colour)**. "Handicrafts of Rajasthan", directed by Clement T. Baptista from a script by Shanti P. Chowdhury.

#### BEST REGIONAL FILMS OF 1966

Bengali : "Balika Bodhu".

Marathi : "Gurukilli".

Tamil : "Ramu".

Telugu : "Aasthi Paralu".

Malayalam : "Chemmeen".

**Lalit Kala Akademi Award (1967)** :—Winners: M. Suryamurthi (wood cut); K. C. S. Paniker (words and symbol); Bimal Banerjee (etching); S. K. Rajavelu (Charioteers); D. G. Kulkarni (Life egg); S. G. Vasudev (Procession) & Anand Mohan Naik (The Swan).

**Sangeet Natak Akademi (1967)** : Kelu Charan Mahapatra, Orissa (Dance); V. B. Ramaiyya Pillai (Bharata Natyam); Mrs. Swarna Saraswati (Bharata Natyam); Shakoor Khan (Hindustani Instrumental: Sarangi); P. S. Veeruswami Pillai (Karnatak—Instrumental: Nagaswaram); Mrs. Siddeswari Devi (Hindustani—Vocal); M. R. Srirangam Iyengar (Karnatak—Vocal).

**Fellowship** :—Dr. Asuthosh Bhattacharya, Sombhu Mitra, Jaya Chamaraja Wadiyar and S. Krishna Iyer.

**Awards for Acts of Courage** :—The Indian Council for Child Welfare selected the following for national awards for 1966 for acts of courage and adventure.

The recipients were: Sankar Roy (West Bengal), Subaschander Rath (Orissa), Kumar Avinash Vasantrao Naik, son of the Chief Minister of Maharashtra (Maharashtra), John G. Nadupparambil Hall (Kerala) and Wangtham Pancha (Assam).

**International Awards for Children** :—The highest international awards for artistic and literary talent for 1965 for children in the Shankar's competition have been awarded to two 13-year-old girls—Linda Degastaldi of Argentina and Yvone Cole of New Zealand.

Linda Dagastaldi got the President's gold medal and Yvone Cole got the Vice-President's gold medal. Mrs. Gandhi gave away prizes to 407 winners.

The largest number of prizes—38—were bagged by Japanese children among whom were two Nehru award winners—Yukari Saito (6) and Ota Setuko (14).

The prize-distribution ceremony was run by a presidium of children on the dais.

Among the Nehru award winners was nine-year-old Panchal N. Mathura Das of Ahmedabad.

The youngest among prize winners was Deepak Kumar Joshi of Bombay, a four-year-old boy.

**Jnanpith Award** :—The Bengali novelist, Mr. Tara Shankar Banerji's "Ganadevata" has been selected for the Bharatiya Jnanpith award for 1966. The award carries Rs. 1 lakh.

**Bonn Institutes Nehru Award** :—To honour the memory of Jawaharlal Nehru, West Germany has instituted at Delhi University an annual prize of the value of 3,000 DM (Rs. 5,400).

The Nehru Award of the Federal Republic of Germany will be conferred, from next year, for the best essay by an Indian university or college teacher on any topic dealing with Indo-German cultural relations, including the influence exercised by India on the culture of German-speaking regions and vice versa.

Entries, which have been invited by the university, will be evaluated by the Vice-chancellor, assisted by a panel of specialists.

The award will be formally given away jointly by the Vice-chancellor and the German Ambassador at a special function arranged in connection with the death anniversary of Nehru.



## BROADCASTING—(Contd.)

More than 1.18 lakh unlicensed radio sets were detected in the country during 1966. A Penalty of about Rs. 15 lakhs was collected from the owners. The number of radio licences during the year 1966-67 rose by 10 lakhs. Their number was 64 lakhs at the end of 1965 compared with 54 lakhs in the previous year. The total revenue collected was about Rs. 9 crores.

## ALL-INDIA CORPORATIONS—(Contd.)

### THE INDUSTRIAL FINANCE CORPORATION OF INDIA

(Head Office : Burmah-Shell House (Annexe II), Connaught Circus, New Delhi; Bombay Office : Liberty Buildings, 8, Marine Lines; Calcutta Office : 23, Rajendra Nath Mukherjee Road; Madras Office : Devraj Mansion, 123, Mount Road).

Authorised Capital : Rs. 10 crores ; Issued and Paid-up capital : Rs. 8.35 crores.

The I.F.C. was established in 1948 with the object of making medium and long-term credits more readily available to industrial concerns in the private sector in India.

Any public limited company or co-operative society incorporated and registered in India which is engaged or proposing to engage in the manufacture, preservation or processing of goods, or in the shipping, mining or hotel industry or in the generation or distribution of electricity or any other form of power is eligible for financial assistance. The finances of the I.F.C. are also available for the setting up of new industrial projects, renovation, modernisation, expansion or diversification of existing ones.

Total assistance sanctioned by the I.F.C. upto 30th June, 1966 is Rs. 292.75 crores in respect of 831 applications from 430 industrial units out of which assistance to the extent of Rs. 201.53 crores had been disbursed. Total assistance outstanding on 30th June 1966 aggregated Rs. 148.97 crores.

During 1965-66, 127 applications aggregating Rs. 43.52 crores were sanctioned to 96 industrial units as against Rs. 33.44 crores for 98 units in the previous year. The quantum of assistance disbursed during the year was Rs. 30.37 crores, out of which cash outgoings amounted to Rs. 28.20 crores. The corresponding figures for the preceding year were Rs. 31.92 crores and Rs. 21.96 crores respectively.

The net profit for the year came to Rs. 132.94 lakhs as against Rs. 131.42 lakhs for the preceding year.

Chairman : A. Bakshi ; General Manager : C. D. Khanna ; Secretary : Baldev Pasricha.

### THE NATIONAL SMALL INDUSTRIES CORPORATION LTD.

New Industrial Estate, Okhla, New Delhi 20.

A Government of India concern, started in February 1955, the main objects being to assist, counsel, finance and promote the interest of small industries in the country.

Authorised capital : Rs. 50 lakhs.

Paid-up : Rs. 50 lakhs divided into 50,000 shares of Rs. 100 each. All shares are held by the President of India and his nominees.

The Government Purchase Division of the Corporation maintains liaison with D.G.S. & D. in order to assist small scale industries in procuring government contracts.

During the ten years of its existence, 6,000 small-scale units had profited by the hire-purchase facility extended by the Corporation and secured machines and equipment costing Rs. 84 crores.

In addition to the marketing of machine tools produced at the Prototype Production and Training Centres, the Corporation has undertaken to market the machine tools produced at the Central Government production centres at Ettumanur and Tiruvalla.

The Corporation constructed two model industrial estates, one at Okhla and the other at Naini.

The Prototype Production and Training Centres have been set up at Okhla, Howrah and Rajkot in collaboration with the Government of Federal Republic of West Germany, Governments of Japan and U.S.A. respectively. The main function of the Centres is to develop prototypes of machines for the purpose of passing them on to the small industrial units for production on mass scale and to train artisans drawn from the small scale industries. The Centre at Okhla is at present engaged in the prototyping work in respect of three machines, namely, Weller Lathe, Tool and Cutter Grinder and Milling Machine, the manufacturing rights in respect of which have been presented to the Government of India by the Government of Federal Republic of West Germany. The Centre at Howrah is also engaged in the prototyping work of two machines, namely 80 C.T. Die Casting and 45 mm. P.V.C. Extruder. The number of trainees

at the above Centres is about 600. In all over 2,000 trainees had graduated from the above centres.

Chairman : C. R. Sundaram.

**Tourism Development Corporation (Contd.) :** The India Tourism Development Corporation—formed during Oct. 1966 by merging three corporations—has made a small profit in six months.

All the three corporations—Hotel Corporation of India, India Tourism Corporation and India Tourism Transport Undertaking—which were formed to promote tourism ended their first year, 1965-66, with losses of Rs. 1.49 lakhs, Rs. 55,000 and Rs. 1.34 lakhs respectively.

After amalgamation, the transport division made a profit of Rs. 1.60 lakhs while the production and publicity division reported "no-profit-no-loss." Only the hotel division incurred a loss of Rs. 1.55 lakhs. Thus, the new corporation (ITDC) made a profit of Rs. 5,000 in 1966-67 after merger.

**National Buildings Construction Corporation (Contd.) :** The National Buildings Construction Corporation, a Government concern, incurred a loss of Rs. 20.5 lakhs on works valued at Rs. 364.39 lakhs executed by it during 1965-66.

A sub-committee had recommended that the corporation should switch over to specialised type of construction like mechanised road-work, fabrication of steel structures, pile driving, multi-storeyed buildings and sewage works.

**National Projects Construction Corporation—(Contd.) :** The report on the National Projects Construction Corporation for 1965-66 presented to the Rajya Sabha reveals that works of over Rs. 38 crores were executed yielding a profit of Rs. 160.94 lakhs during nine years of its existence. During the year, the output of works was of the value of Rs. 940.95 lakhs, the highest so far.

In 1965-66 three new works of the value of Rs. 1.9 crores were executed in Jammu and Kashmir and the Union Territory of Delhi. Amongst these was construction of two tunnels in the Chenani hydro-electric project in Jammu and Kashmir costing nearly Rs. 1.2 crores.

## STATE CORPORATIONS—(Contd.)

### U. P. FINANCIAL CORPORATION 7/154, Swarupnagar K.

The Corporation was established on Nov. 1, 1954. It has an authorised capital of Rs. 3 crores, which is divided into 3 lakh fully paid-up shares of Rs. 100 each. The paid-up capital of the Corporation as on date is Rs. 1 crore divided into 1 lakh shares of Rs. 100 each fully paid-up. These shares have been distributed in this way : 55,360 State Government ; 15,000 Reserve Bank ;

27,096 Scheduled Banks, Co-operative Banks, Insurance Companies, Investment Trusts and other Financial Institutions ; 2,544 others.

The object is to provide finance to small and medium scale industries.

The Corporation received during the year 1965-66 (upto March 31, 1966) 47 applications as against Corporation Funds and 95 applications forwarded by the Director of Industries as against

Government Funds placed at the disposal of the Corporation.

Out of the above applications received, 12 applications amounting to Rs. 75,17,000 were sanctioned against Corporation and 61 applications amounting to Rs. 42,04,500 were sanctioned against Government Funds.

Profit for 1965-66 : Rs. 9,85,418.49.

Bharat Bhushan (Managing Director) ; B. L. Manchanda (Secretary).



## EDUCATION—(Contd.)

### TECHNICAL EDUCATION

The All-India Council for Technical Education was set up by the Government of India in November 1945 to advise them on all matters relating to the co-ordination and development of technical education in the country after the high school stage. Its personnel have been drawn from Government of India Departments, State Governments, Parliament, industry and commerce, professional and educational bodies.

Five Higher Technological Institutions of national importance, one in each region, at Kharagpur, Bombay, Madras, New Delhi and Kanpur have been set up. Besides these higher technological institutions, fourteen large-sized regional engineering colleges, a number of other engineering colleges, technological institutions and polytechnics have been set up. For specialised courses such as Mining, Engineering and Metallurgy, a number of centres have been established both for degree and diploma courses. For Printing Technology, four regional schools one each at Madras, Calcutta, Allahabad and Bombay have been established. New faculties have been added in institutions whose activities were previously restricted. For instance, Tele-communication Engineering, Chemical Engineering, Architecture, Textile Technology, Petroleum Technology, Production Technology, Geophysics are some of the subjects in which several institutions are today offering courses. Besides the establishment of new institutions and new courses, the old institutions have also been expanded and developed. In 1947 there were only 38 institutions for degree courses in engineering and technology and 53 institutions for diploma courses with an admission capacity of 2,940 and 3,670 respectively. By the end of the Second Plan period viz. by 1960-61, the number of institutions for degree and diploma courses rose to 102 and 195 with an admission capacity of 13,824 and 25,501 respectively and by 1964-65 the number of institutions has risen to 131 and 264 with an admission capacity of 23,757 and 46,243 respectively. By 1965-66 the number of institutions has risen to 133 and 274 with an admission capacity of 24,695 and 48,048 respectively. Thus since 1947 admissions to degree courses have increased nearly eight-fold and admissions to diploma courses more than thirteen fold. Prior to 1947, facilities for post-graduate courses were practically non-existent. Today a large number of Centres have been developed and about 2,200 places have been made available for advanced training for post-graduate courses and research. Thought has also been given to technical training at secondary stage and facilities for technical education at this level have been created by establishing junior technical schools, a special type of schools, designed specially for those who wish to enter industry and other technical occupations. 104 Junior Technical Schools have been established by the academic year 1965-66.

#### All India Council

The Council represents all the interests which are concerned with the technical education. It consists of representatives of all State Governments, Ministries of the Central Government, Parliament, Industry, Commerce, Labour, Professional and learned societies, Universities, Technical Institutions and various other concerned interests. Its functioning, *inter-alia*, includes the preparation of plans for the development of technical man-power of different types and suggesting measures to meet them, suggesting improvement in the pattern of technical education from time to time to suit changing conditions, establishing liaison between industry, Government departments and other organisations on the one hand and technical institutions on the other, coordinating the activities of States, recommending grants and other forms of assistance that might be given by the Centre to the State Government institutions, University institutions and other organisations for develop-

ment of technical education. For the proper discharge of its functions, the Council has set up a Coordinating Committee, four Regional Committees and seven Boards of Technical Studies. The regional committees assist the Council in promoting a coordinated development of technical education in the regions. The coordinating committee is the Executive of the Council and coordinates work of the regional committees and the boards of studies.

#### Courses

Technical Education in India is a four-tiered structure comprising post-graduate courses and research; first degree courses; diploma courses; and Vocational or Industrial training. Each tier is a self-contained aspect intended to serve a specific purpose.

A scheme has also been formulated for a two-year diploma course for training technicians, with higher secondary as the admission qualification. The scheme aims at giving specialised training in particular fields of engineering directly related to the functions of a diploma holder in industry. It is proposed to introduce the scheme in about 30 selected engineering colleges each with an annual capacity of 90 students.

Another scheme has been formulated for part-time diploma courses in engineering for persons working in the industry. To begin with, 25 centres with about 2,500 annual admissions will be organised at existing polytechnics. Out of 25 centres approved for the purpose, 16 centres have already started functioning.

**Higher Institutes of Technology:** Five Higher Technological Institutes have been established one in each region, at Kharagpur, Bombay, Madras, Kanpur and Delhi. The institutes have started functioning since 1951, 1958, 1959, 1960 and 1961 respectively. The ultimate student enrolment at the Kharagpur institute is 2,500 (2,000 under-graduates and 500 post-graduate and research workers). In the case of other institutes, the target is 1,600 under-graduates and 400 at the post-graduate and research level. These institutions have been declared as institutions of national importance by an Act of Parliament. A high-powered council under the chairmanship of Minister of Scientific Research and Cultural Affairs\* as provided under the Act, has been set up to coordinate the activities of these Higher Technological Institutions. The concept behind the establishment of these institutions is that for the training of the highest possible grades of technologists who are required in large numbers, national institutes provided with all necessary resources and full freedom to adapt themselves to the fast changing situations are necessary. In addition to the training of technical personnel, the institutions should be the fountain-heads of scientific and technical knowledge and should contribute through research and other activities to the industrial achievement of the country.

The admission to these institutes at the under-graduate level are made on the basis of a common entrance examination conducted at several centres in the country and one centre at London.

**Indian Institute of Science, Bangalore:** An important centre of post-graduate studies in Engineering is the Indian Institute of Science, Bangalore, established in 1911. In the last 15 years, the institute has become a centre of advanced technology with particular reference to Power Engineering, Aeronautical Engineering, Metallurgy, Internal Combustion Engineering and Electrical Communication Engineering.

**School of Planning and Architecture, Delhi:** The School offers graduate courses in Architecture for the Bachelor's degree course of the university of Delhi and the National Diploma course of the All India Council for Technical Education. Besides, post-graduate courses in Town and Country Planning—both part-time and full-time and in Housing (full-time) are run by the School.

**All India Institute of Management, Calcutta and Ahmedabad:** The institutes were established by the Central Government in 1962-63 in collaboration with the State Governments, local industrialists and Ford Foundation. They conduct post-graduate courses and research in management and related fields. The institutes also do consultancy work in response to requests from Government departments and private enterprises.

**Administrative Staff College, Hyderabad:** Established in 1957 as a joint enterprise of the Central Government and private industry and commerce, this institute offers a 12-week course to young administrators from all walks of national life in the principles and techniques of organisation, administration and leadership in civil life.

**Central School of Printing, Kalyani:** To meet the demands for trained technical personnel at the higher executive levels for efficient and economic management of the presses particularly those engaged in quality printing, the Central Government will establish during the Fourth Plan a Central School of Printing at Kalyani near Calcutta. Apart from preparing students to degree level, the School will also provide research facilities and prepare students to play an effective role in the ever expanding areas of graphic arts, photography, printing and packaging.

**National Institute for Training in Industrial Engineering, Bombay:** Established in 1964 with the U.N. Special Assistance Fund, the institute is intended to train suitably qualified persons in industrial engineering and to conduct research in industrial engineering methods and techniques.

**National Institute of Foundry & Forge Technology, Ranchi:** With a view to providing training facilities in foundry engineering and forging, the Central Government had approved the establishment of the institute in 1966-67. It will also conduct short-term refresher courses in the latest methods and techniques of production, design and development for persons working in the industry.

In the Third Plan a much larger outlay has been made. An amount of Rs. 140.35 crores is proposed to be spent on the expansion of technical education—Rs. 69.44 crores by the Central Government and Rs. 70.91 crores by the States.

**Foreign Aid:** The extent of foreign aid received for technical education during 1963 is as below:

(i) Number of foreign experts—16; (ii) Equipment—Rs. 0.44 million; (iii) Number of Fellowships for the training abroad—17.

#### Third Plan Programmes

The Third Plan envisaged provision of 25,000 admission to first degree courses and 50,000 admission to diploma courses in engineering and technology by 1965-66. To achieve these targets, plans had been formulated to develop fully higher technological institutions, certain other institutions and establishment of 23 new engineering colleges and 94 new polytechnics. Out of these, 21 engineering colleges and 76 polytechnics have been started by the end of Third Plan period. Intake capacity of certain existing institutions has also been increased. The revised targets have nearly been reached.

A provision for the establishment of 117 junior technical schools and 24 technical institutions for girls has also been made in the Third Plan out of which 48 junior technical schools and 17 technical institutions for girls have been started in the first four years of the Plan-period.

#### Fourth Plan Programme

At the degree level, a provision of about 1,300 additional seats is suggested in the Fourth Five Year Plan for specialised courses like Instrument Technology, Nuclear Power Engineering and Electronics, etc.

\* Now Minister of Education.



At the diploma level, a provision of about 14,000 additional seats (including 3,500 for part-time courses) is envisaged.

It is also proposed to provide facilities for correspondence courses in engineering and technology.

In pursuance of the recommendations made at the Conference of State Education Ministers held at Madras in June, 1966, the Central Government has appointed a high powered Committee under the Chairmanship of Dr. V. K. R. V. Rao, Member (Education), Planning Commission, to reassess the requirements of technical personnel in different specialities required for the Fifth and subsequent Plan periods and to review the physical targets suggested above. Therefore, the precise order of expansion of technical education during the Fourth Five Year Plan and fixation of their relative priorities will depend on the recommendations of the Rao Committee.

The All India Council for Technical Education has also appointed a Committee of seven persons including educationists and industrialists to examine the various problems in technical education and to suggest ways and means to bring about improvement in quality.

The Plan also envisages to provide post-graduate and research training facilities for 20 per cent of the output of graduates in engineering.

The Council has approved in principle, the establishment of institute for training in foremanship and supervision in collaboration with industry.

The Council has recommended that for the needs of automobile industry, special courses at the diploma level in automobile engineering should be provided at various centres on full-time as well as sandwich pattern basis.

The Council has also recommended that the institutions charging fees at high rate should bring down their fees so that no institution in the country realises a fee more than Rs. 400 for degree courses and Rs. 220 for diploma courses per year from the students.

**Practical Training Stipends Scheme:** Under this scheme, senior stipends of the value of Rs. 250 per month are given to degree holders and junior stipends of the value of Rs. 150 per month are given to diploma holders. The duration of the training is one to two years.

**Merit-cum-Means Scholarships Scheme:** Under the scheme, 1,969 scholarships were instituted during the Second Five Year Plan. Under the Third Plan, 12,905 scholarships for fresh entrants for degree and diploma courses have been instituted. Each scholarship is tenable for the full course of studies of the students concerned (provided the progress is satisfactory), and is of the value of Rs. 75 per month for degree students and Rs. 50 per month for diploma students. In addition, the scholarship holders are exempted from the tuition fees.

**Technical Teachers Training Programme:** Under the scheme, fellowships of the value of Rs. 400 per month are awarded to young graduates who have obtained at least 60 per cent marks in the qualifying examination in the appro-

prate branch of engineering, metallurgy or architecture. The training period lasts for two to three years. On the completion of training, they are posted as lecturers in the technical institutions.

**Mine Surveyor's Examination:** The examinations for the Mine Surveyor's and the Second class Manager's Certificate of Competency are held twice a year.

The State Governments have been advised to create facilities for part-time education of mine workers to prepare them for "Shortfired" and "Sirdors" examination.

The Government of India have under consideration a scheme for vocational training of all mine workers. It has been decided to set up a National Mine Safety Council *inter alia* to arrange for refresher courses for members of supervisory staff.

Table below shows the progress made in this field—the number of institutions in existence, the intake of students and the outturn of students:

|              |         | 1947  | 1951  | 1956   | 1961   | 1964   |
|--------------|---------|-------|-------|--------|--------|--------|
| Institutions | Degree  | 38    | 53    | 71     | 111    | 133    |
|              | Diploma | 53    | 89    | 109    | 209    | 274    |
| Intake       | Degree  | 2,940 | 4,788 | 6,612  | 15,850 | 24,695 |
|              | Diploma | 3,670 | 6,216 | 10,318 | 27,701 | 48,048 |
| Outturn      | Degree  | 1,270 | 2,693 | 4,337  | 7,026  | 10,282 |
|              | Diploma | 1,440 | 2,626 | 4,103  | 10,349 | 17,699 |

#### U. G. C. Report

According to the University Grants Commission's report for 1965-66 the total enrolment in the university colleges and departments during 1965-66 was 2,07,558 against 15,21,215 in the affiliated colleges. Thus, about 88 per cent. of the students were receiving their education in the affiliated colleges during 1965-66.

The enrolment, according to the report, rose from 7,12,697 in 1955-56 to 17,28,773 in 1965-66.

The report states UGC paid Rs. 10.90 crores as grants during 1965-66 to the Central and State universities for the development of higher education. This included Rs. 2.51 crores for science subjects, Rs. 1.38 crores for humanities and social sciences and Rs. 1.92 crores for engineering and technology.

During the Third Plan the number of universities rose from 45 in 1960 to 64 in 1966. The number of colleges functioning in 1965-66 was 2,572 against 1,783 in 1961-62.

## FOREIGN AID TO INDIA

INDIA has received technical assistance from many friendly foreign countries and specialised institutes of the United Nations. The total amount of loans and credits authorised from all sources (excluding PL-480 and PL-665 assistance) since the inception of the First Five Year Plan up to the end of the Third Five Year Plan amounted to Rs. 38,686.5 million. Of this a sum of Rs. 2,946.1 million was repayable in rupees. Repayment in the case of

U.S.S.R. and other East European countries are mostly in the form of export of goods. Besides the above, grant assistance during the three plan periods totalled Rs. 4,013.0 million while the commodity assistance under the PL-480 and PL-665 programme including Third Country Currency assistance amounted to Rs. 15,982.8 million.

Against the total assistance of Rs. 42,699.5

million extended by various donor countries and international agencies, exclusive of commodity assistance a sum of Rs. 31,036.7 million had been utilised up to the end of March 1966.

The following table shows at a glance the aid received from all sources up to March 31, 1966. The rupee equivalents of foreign aid have been shown at predevaluation rates as it covers the period ending March 31, 1966.

TABLE SHOWING AID FROM ALL SOURCES

(Rupees Million)

| Source of Assistance           | Authorisation                      |                                     |                                    |  | Total<br>(2 + 3 + 4) | Utilisation                        |                                     |                                    | Total<br>(6 + 7 + 8) | Balance<br>available for<br>Fourth Plan<br>1-4-66 to<br>31-3-71 |
|--------------------------------|------------------------------------|-------------------------------------|------------------------------------|--|----------------------|------------------------------------|-------------------------------------|------------------------------------|----------------------|-----------------------------------------------------------------|
|                                | First Plan<br>1-4-51 to<br>31-3-56 | Second Plan<br>1-4-56 to<br>31-3-61 | Third Plan<br>1-4-61 to<br>31-3-66 |  |                      | First Plan<br>1-4-51 to<br>31-3-56 | Second Plan<br>1-4-56 to<br>31-3-61 | Third Plan<br>1-4-61 to<br>31-3-66 |                      |                                                                 |
| 1                              | 2                                  | 3                                   | 4                                  |  | 5                    | 6                                  | 7                                   | 8                                  | 9                    | 10                                                              |
| A. Loans                       | 2,268.9@@                          | 12,864.8                            | 23,552.8                           |  | 38,686.5             | 1,264.2@@                          | 7,299.5                             | 19,093.3                           | 27,657.0             | 11,029.5                                                        |
| 1. Austria                     | —                                  | —                                   | 84.9                               |  | 84.9                 | —                                  | —                                   | 47.0                               | 47.0                 | 37.9                                                            |
| 2. Belgium                     | —                                  | —                                   | 114.2                              |  | 114.2                | —                                  | —                                   | 48.9                               | 48.9                 | 65.3                                                            |
| 3. Britain                     | —                                  | 1,226.6                             | 2,419.8                            |  | 3,646.3              | —                                  | 1,218.5                             | 1,704.2                            | 2,922.7              | 723.6                                                           |
| 4. Canada                      | —                                  | 157.1                               | 309.7                              |  | 466.8                | —                                  | 157.1                               | 115.4                              | 272.5                | 194.3                                                           |
| 5. Czechoslovakia              | —                                  | 231.0                               | 400.0                              |  | 631.0@               | —                                  | —                                   | 126.1                              | 126.1                | 504.9                                                           |
| 6. Denmark                     | —                                  | —                                   | 10.3                               |  | 10.3†                | —                                  | —                                   | 6.0                                | 6.0                  | 4.3                                                             |
|                                |                                    |                                     | 13.8                               |  | 13.8                 |                                    |                                     |                                    |                      |                                                                 |
| 7. Federal Republic of Germany | —                                  | 1,392.8                             | 3,081.2                            |  | 4,474.0              | —                                  | 1,250.8                             | 2,197.3                            | 3,448.1              | 1,025.9                                                         |
| 8. France                      | —                                  | —                                   | 571.3                              |  | 571.3                | —                                  | —                                   | 209.8                              | 209.8                | 361.5                                                           |
| 9. Italy                       | —                                  | —                                   | 813.2                              |  | 813.2                | —                                  | —                                   | 116.5                              | 116.5                | 696.7                                                           |
| 10. Japan                      | —                                  | 268.1                               | 1,380.8                            |  | 1,648.9              | —                                  | 160.1                               | 882.2                              | 1,042.3              | 606.6                                                           |

@ Represents loans repayable in rupees.

@@ includes amounts authorised and utilised prior to First Plan period.



TABLE SHOWING AID FROM ALL SOURCES—(Contd.)

(Rupees Million)

| Source of Assistance                                     | Authorisation                |                               |                              |                   | Utilisation                  |                               |                              |                   | Balance available for Fourth Plan 1-4-66 to 31-3-71 |
|----------------------------------------------------------|------------------------------|-------------------------------|------------------------------|-------------------|------------------------------|-------------------------------|------------------------------|-------------------|-----------------------------------------------------|
|                                                          | First Plan 1-4-51 to 31-3-56 | Second Plan 1-4-56 to 31-3-61 | Third Plan 1-4-61 to 31-3-66 | Total (2 + 3 + 4) | First Plan 1-4-51 to 31-3-56 | Second Plan 1-4-56 to 31-3-61 | Third Plan 1-4-61 to 31-3-66 | Total (6 + 7 + 8) |                                                     |
| 1                                                        | 2                            | 3                             | 4                            | 5                 | 6                            | 7                             | 8                            | 9                 | 10                                                  |
| 11. Netherlands ..                                       | —                            | —                             | 219.0                        | 219.0             | —                            | —                             | 95.1                         | 95.1              | 123.9                                               |
| 12. Poland .. ..                                         | —                            | 143.0                         | 270.0                        | 413.0*            | —                            | —                             | 113.4                        | 113.4             | 299.6                                               |
| 13. Sweden .. ..                                         | —                            | —                             | 22.1                         | 22.1              | —                            | —                             | —                            | —                 | 22.1                                                |
| 14. Switzerland ..                                       | —                            | 65.4                          | 179.7                        | 245.1             | —                            | —                             | 60.4                         | 60.4              | 184.7                                               |
| 15. U.S.S.R. .. ..                                       | 674.4                        | 3,190.7                       | 1,005                        | 4,843.1*          | —                            | 748.5                         | 2,072.3                      | 2,820.8           | 2,022.3                                             |
| 16. United States of America                             |                              |                               |                              |                   |                              |                               |                              |                   |                                                     |
| 1. Wheat Loan (1951)                                     | 903.1                        | —                             | —                            | 903.1             | 903.1                        | —                             | —                            | 903.1             | —                                                   |
| 2. Exim Loan ..                                          | —                            | 1,026.3                       | 924.3                        | 1,950.6           | —                            | 309.4                         | 1,313.2                      | 1,622.6           | 328.0                                               |
| 3. (a) DLF Loans ..                                      | —                            | 1,940.5                       | 485.0                        | 2,426.1@          | —                            | 768.7                         | 1,473.6                      | 2,242.3           | 188.8                                               |
| (b) TCA Loans dollar portion only                        | 146.3                        | 275.9                         | —                            | 422.2@            | 22.9                         | 399.3                         | —                            | 422.2             | —                                                   |
| (c) Orissa Iron Ore Project .. ..                        | —                            | 87.5                          | —                            | 87.5@             | —                            | 0.2                           | 84.3                         | 84.5              | 3.0                                                 |
| 4. AID Loan ..                                           | —                            | —                             | 6,793.3                      | 6,793.3           | —                            | —                             | 4,981.3                      | 4,981.3           | 1,812.0                                             |
| 5. U.S. Banks Loan                                       | —                            | 59.0                          | 199.8                        | 258.8             | —                            | 59.0                          | 109.3                        | 168.3             | 90.5                                                |
| 17. Yugoslavia .. ..                                     | —                            | 190.5                         | 23.8                         | 214.3*            | —                            | —                             | 97.1                         | 97.1              | 117.2                                               |
| 18. (a) IBRD                                             |                              |                               |                              |                   |                              |                               |                              |                   |                                                     |
| (i) Public ..                                            | 320.1                        | 1,815.8                       | 738.1                        | 2,874.0           | 289.7                        | 1,395.0                       | 756.0                        | 2,441.3           | 432.7                                               |
| (ii) Private ..                                          | 252.0                        | 794.6                         | 707.5                        | 1,754.1           | 48.5                         | 832.3                         | 477.6                        | 1,358.4           | 395.7                                               |
| (b) IDA .. ..                                            | —                            | —                             | 2,785.5                      | 2,785.5           | —                            | —                             | 2,006.3                      | 2,006.3           | 799.2                                               |
| B. Grants .. ..                                          | 1,379.6                      | 1,254.7                       | 1,378.7                      | 4,013.0           | 701.8                        | 1,606.4                       | 1,071.5                      | 3,379.7           | 633.3                                               |
| 1. Australia .. ..                                       | 110.8                        | 22.0                          | 123.9                        | 256.7             | 52.0                         | 74.4                          | 70.3                         | 196.7             | 60.0                                                |
| 2. Britain .. ..                                         | 3.9                          | 4.2                           | 9.9                          | 18.0              | 0.3                          | 4.3                           | 8.0                          | 12.6              | 5.4                                                 |
| 3. Canada .. ..                                          | 323.4                        | 571.0                         | 863.1                        | 1,757.5           | 197.0                        | 603.0                         | 543.6                        | 1,343.6           | 418.9                                               |
| 4. Czechoslovakia ..                                     | —                            | —                             | 4.0                          | 4.0               | —                            | —                             | 4.0                          | 4.0               | —                                                   |
| 5. Federal Republic of Germany .. ..                     | —                            | 20.9                          | 4.7                          | 25.6              | —                            | 6.1                           | 19.1                         | 25.2              | 0.4                                                 |
| 6. Japan .. ..                                           | —                            | 3.5                           | 1.3                          | 4.8               | —                            | 3.5                           | 1.3                          | 4.8               | —                                                   |
| 7. Newzealand .. ..                                      | 17.2                         | 17.1                          | 8.5                          | 42.8              | 3.3                          | 29.0                          | 6.2                          | 38.5              | 4.3                                                 |
| 8. Norway .. ..                                          | 6.6                          | 18.7                          | 26.0                         | 51.3              | 6.6                          | 18.7                          | 26.0                         | 51.3              | —                                                   |
| 9. Sweden .. ..                                          | —                            | —                             | 36.5                         | 36.5              | —                            | —                             | 25.8                         | 25.8              | 10.7                                                |
| 10. U.S.S.R. .. ..                                       | —                            | 11.5                          | 38.1                         | 49.6              | —                            | 11.5                          | 38.1                         | 49.6              | —                                                   |
| 11. U.S.A. TCA Grants other than PL-480 and PL-665 .. .. | 861.6                        | 441.1                         | 170.1                        | 1,472.8           | 420.0                        | 761.7                         | 247.6                        | 1,429.3           | 43.5                                                |
| 12. U.N. Social Fund ..                                  | —                            | 40.1                          | 44.8                         | 84.9              | —                            | —                             | 18.3                         | 18.3              | 66.6                                                |
| 13. Ford Foundation ..                                   | 56.1                         | 104.6                         | 47.8                         | 208.5             | 22.6                         | 94.2                          | 63.2                         | 180.0             | 28.5                                                |
| C. Other Assistance ..                                   | 169.2                        | 11,307.3                      | 4,506.3                      | 15,982.8          | 50.7                         | 5,448.1                       | 8,532.2                      | 14,031.0          | 1,951.8                                             |
| 1. PL-480 Imports ..                                     | —                            | 11,130.0                      | 4,506.3                      | 15,636.3          | —                            | 5,155.0                       | 8,529.5                      | 13,684.5          | 1,951.8**                                           |
| 2. PL-665 Imports ..                                     | 169.2                        | 149.5                         | —                            | 318.7             | 50.7                         | 268.0                         | —                            | 318.7             | —                                                   |
| 3. Third Country Currency Assistance ..                  | —                            | 27.8                          | —                            | 27.8 *            | —                            | 25.1                          | 2.7                          | 27.8              | —                                                   |
| Grand Total of A + B + C ..                              | 3,817.7                      | 25,426.8                      | 29,437.8                     | 58,682.3          | 2,016.7                      | 14,354.0                      | 28,697.0                     | 45,067.7          | 13,614.6                                            |

NOTE: (1) This statement excludes—

- (i) Suppliers credit other than those forming a part of Consortium Aid.
- (ii) Rockefeller Foundation.
- (iii) Assistance under Title II and III of PL-480.
- (iv) Technical assistance in the form of experts, trainees etc.
- (v) *Ad hoc* grants in the form of equipment and supplies where the value is not known.

(2) In the case of PL 480 the amount "authorised" represents the value of Commodities and the term "Utilised" represents the value of rupee deposits made against the commodities imported.

(3) \*\* Includes undischursed balances under completed agreements against which further imports are not expected. The real carryover to the Fourth Plan will be about Rs. 1,076.5 million.

(4) @ Represents loans repayable in Rupees.

(5) \* Represents loans repayable generally through export of goods.

Source: "External Assistance 1965-66" brought out by the Ministry of Finance, Department of Economic Affairs, Government of India.

## WORLD BANK

India has been receiving long term loans from the World Bank for financing various development projects both in the public and private sectors since 1949. The loans given by the World Bank to private parties in India are guaranteed by the Govt. of India as required under the Articles of Agreement of the World Bank. The Bank has also helped India in raising external finance for the implementation of the Five Year Plans, by organising a Consortium of developed

countries (which are members of the World Bank) interested in India's economic development.

Upto March 31, 1966, i.e. till the end of the Third Five Year Plan, the total amount of loans made available by the World Bank (net of cancellations), for both the public and private sector projects and programmes, was \$971.9 million (Rs. 4,628 million). Against this, as much as \$597.9 million (Rs. 3,800 million) was actually drawn upto March 31, 1966, leaving an

amount of \$174 million (Rs. 828 million) to be utilised during the Fourth Five Year Plan.

A purpose-wise distribution of the loans given by the World Bank is given below (Figures in million dollars): Railways 377.81; Ports 61.00; Aviation 5.60; Power (generation and transmission) 175.44; Steel Plants 176.15; Coal Industry 29.06; Other industries (through loans to LIC) 139.65; Agriculture 7.20. Total 971.91.



## IBRD LOANS AS ON MARCH 31, 1966

| Sl. No.                   | Name of the Loan         | Date of Agreement | Rate of Interest | Period of loan (years) | Amount of loan \$ mil. | Amount drawn \$ mil. | Amount Repaid \$ mil. |
|---------------------------|--------------------------|-------------------|------------------|------------------------|------------------------|----------------------|-----------------------|
| 1                         | 2                        | 3                 | 4                | 5                      | 6                      | 7                    | 8                     |
| <b>(a) Public Sector</b>  |                          |                   |                  |                        |                        |                      |                       |
| 1.                        | Agriculture .. ..        | 29-9-49           | 3½%              | 7                      | 7.20                   | 7.20                 | 7.20                  |
| 2.                        | Railways-I .. ..         | 18-8-49           | 4%               | 15                     | 32.80                  | 32.80                | 32.80                 |
| 3-6.                      | Railways-II .. ..        | 12-7-57           | 5½%              | 15                     | 90.01                  | 90.01                | 32.24                 |
| 7.                        | Railways-III .. ..       | 16-9-58           | 5½%              | 20                     | 85.00                  | 85.00                | 12.05                 |
| 8.                        | Railways-IV .. ..        | 15-7-59           | 6%               | 20                     | 50.00                  | 50.00                | 6.64                  |
| 9.                        | Railways-V .. ..         | 29-7-60           | 5½%              | 20                     | 70.00                  | 70.00                | 6.57                  |
| 10.                       | Railways-VI .. ..        | 13-10-61          | 5½%              | 20                     | 50.00                  | 50.00                | 2.74                  |
| 11.                       | D. V. C. I .. ..         | 18-4-50           | 4%               | 20                     | 16.72                  | 16.72                | 10.80                 |
| 12.                       | D. V. C. II .. ..        | 23-1-53           | 4½%              | 25                     | 10.50                  | 10.50                | 3.58                  |
| 13.                       | D. V. C. III .. ..       | 23-7-58           | 5½%              | 20                     | 22.00                  | 22.00                | 4.39                  |
| 14.                       | Koyna .. ..              | 8-4-59            | 5½%              | 25                     | 18.70                  | 18.70                | 0.54*                 |
| 15.                       | Air India .. ..          | 5-3-57            | 5½%              | 9                      | 5.60                   | 5.60                 | 5.60                  |
| 16.                       | Calcutta Port-I .. ..    | 25-6-58           | 5½%              | 20                     | 29.00                  | 29.00                | 3.89                  |
| 17.                       | Calcutta Port-II .. ..   | 17-8-61           | 5½%              | 25                     | 21.00                  | 9.91                 | —                     |
| 18.                       | Madras Port .. ..        | 25-6-58           | 5½%              | 20                     | 11.00*                 | 10.00                | 2.06                  |
| 19.                       | Power Transmission .. .. | 11-6-65           | 5½%              | 25                     | 70.00*                 | —                    | —                     |
| 20.                       | Kothagudam Power .. ..   | 11-6-65           | 5½%              | 25                     | 14.00*                 | 5.24                 | —                     |
| <b>TOTAL (a) .. ..</b>    |                          |                   |                  |                        | <b>603.53</b>          | <b>512.68</b>        | <b>131.10</b>         |
| <b>(b) Private Sector</b> |                          |                   |                  |                        |                        |                      |                       |
| 21.                       | IISCO-I .. ..            | 18-12-52          | 4½%              | 15                     | 29.20                  | 29.20                | 21.41                 |
| 22.                       | IISCO-II .. ..           | 19-12-56          | 5%               | 11                     | 19.95                  | 19.95                | 14.21                 |
| 23.                       | IISCO-III .. ..          | 22-12-61          | 5½%              | 12                     | 19.50                  | 4.72                 | —                     |
| 24.                       | TISCO-I .. ..            | 26-6-58           | 4½%              | 15                     | 75.00                  | 75.00                | 35.37*                |
| 25.                       | TISCO-II .. ..           | 20-11-57          | 6%               | 13½                    | 32.50                  | 32.50                | 20.20                 |
| 26.                       | Trombay-I .. ..          | 19-11-54          | 4½%              | 20                     | 13.85                  | 13.81                | 5.15                  |
| 27.                       | Trombay-II .. ..         | 29-5-57           | 5½%              | 18                     | 9.67                   | 9.58                 | 2.83*                 |
| 28.                       | ICICI-I .. ..            | 14-3-55           | 4½%              | 15                     | 9.88                   | 9.88                 | 5.38                  |
| 29.                       | ICICI-II .. ..           | 15-7-59           | Variable         | 10                     | 9.77                   | 9.75                 | 4.78*                 |
| 30.                       | ICICI-III .. ..          | 28-10-60          | do.              | 10                     | 20.00                  | 18.75                | 5.75                  |
| 31.                       | ICICI-IV .. ..           | 28-2-62           | do.              | 15                     | 20.00                  | 16.64                | 0.55                  |
| 32.                       | ICICI-V .. ..            | 5-6-63            | do.              | Not fixed              | 30.00                  | 16.75                | 0.18                  |
| 33.                       | ICICI-VI .. ..           | 28-5-65           | 5½%              | 28                     | 50.00                  | 0.44                 | —                     |
| 34.                       | Coal Industry .. ..      | 9-8-61            | 5½%              | 15                     | 29.06                  | 28.27                | —                     |
| <b>TOTAL (b) .. ..</b>    |                          |                   |                  |                        | <b>368.38</b>          | <b>285.24</b>        | <b>115.81</b>         |
| <b>GRAND TOTAL .. ..</b>  |                          |                   |                  |                        | <b>971.91</b>          | <b>797.92</b>        | <b>246.91</b>         |

\* These loans have been sanctioned in pursuance of the commitments made by the World Bank at the various Consortium meetings from May 1961 onwards.

The following figures indicate the authorisation and utilisation respectively of various loans during each of the three Five Year Plans (Figures in Rs. millions): Up to the end of the First Five Year Plan: 572.1; 338.2; During the Second Five Year Plan 2,610.4; 2,227.9; During the Third Five Year Plan: 1961-62: 664.6; 359.1; 1962-63: —; 335.9; 1963-64: 142.9; 149.4; 1964-65: —; 175.9; 1965-66: 638.1; 213.3; Total 4,628.1; 3,799.7.

## INTERNATIONAL DEVELOPMENT ASSOCIATION

I.D.A. Credits are generally repayable over periods ranging upto 50 years with a moratorium of 10 years. No interest is charged on these

credits though a service charge of 3/4 of one per cent per annum, to cover the Association's administrative expenses, is payable on the amounts outstanding from time to time. Up to end of the Third Five Year Plan, i.e. March 31, 1966, the IDA has extended seventeen credits

to India in pursuance of the commitments made in the Consortium meetings. The names of the projects for which the credits were sanctioned and the amounts of credits and draws upto end of March 1966 are given below:—

(Million Dollars)

| Sl. No.            | Name of the Project                                                   | Date of Agreement | Amount of the Credit | Amount drawn  |
|--------------------|-----------------------------------------------------------------------|-------------------|----------------------|---------------|
| 1.                 | Construction of National Highways .. ..                               | 21-6-61           | 60.00*               | 51.69         |
| 2.                 | U.P. Tubewell Irrigation .. ..                                        | 6-9-61            | 6.00                 | 6.00          |
| 3.                 | Shetrunji Irrigation Project in Gujarat .. ..                         | 22-11-61          | 4.50                 | 3.39          |
| 4.                 | Salandi Irrigation Project in Orissa .. ..                            | 22-11-61          | 8.00                 | 1.57          |
| 5.                 | Punjab Flood Protection and Drainage .. ..                            | 22-11-61          | 10.00                | 9.43          |
| 6.                 | Installation of Third Unit at DVC's Thermal Station at Durgapur .. .. | 14-2-62           | 18.50                | 12.00         |
| 7.                 | Sone Barrage in Bihar .. ..                                           | 29-8-62           | 15.00                | 11.56         |
| 8.                 | Purna Irrigation & Power Project in Maharashtra .. ..                 | 18-7-62           | 13.00                | 9.41          |
| 9.                 | Second Stage of Koyna Hydro-Electric Project in Maharashtra .. ..     | 8-8-62            | 17.50                | 9.05          |
| 10.                | Improvements in Bombay Port .. ..                                     | 14-9-62           | 18.00                | 3.42          |
| 11.                | Telecommunications I .. ..                                            | 14-9-62           | 42.00                | 35.55         |
| 12.                | Railways (VII) .. ..                                                  | 22-3-63           | 67.50                | 67.50         |
| 13.                | Kothagudem Power I .. ..                                              | 24-5-63           | 20.00                | 13.46         |
| 14.                | Industrial Imports I .. ..                                            | 9-6-64            | 90.00                | 89.45         |
| 15.                | Telecommunications (II) .. ..                                         | 6-7-64            | 33.00                | 20.28         |
| 16.                | Railways (VIII) .. ..                                                 | 26-10-64          | 62.00                | 62.00         |
| 17.                | Industrial Imports II .. ..                                           | 11-8-65           | 100.00               | 15.56         |
| <b>Total .. ..</b> |                                                                       |                   | <b>585.00</b>        | <b>421.32</b> |

The following figures indicate the year-wise authorisation and utilisation respectively from inception to the end of March 1966 (Rs. millions): 1961-62: 509.5; 12.3; 1962-63: 823.7; 90.4; 1963-64: 95.2; 420.7; 1964-65: 880.9; 584.0; 1965-66: 476.2; 898.9; Total 2,785.5; 2,006.3.

\* An amount of \$530,000 has since been cancelled on 4-4-1966.



## CONSORTIUM AID TO INDIA

The International Bank for Reconstruction and Development has been making a signal contribution to India's development efforts not only by giving direct loans but also by convening conferences of friendly countries under its auspices and invoking international cooperation with a view to ensuring an adequate and sustained flow of assistance for India's Five Year Plans.

The number of countries represented at these conferences has been steadily increasing. The original members of the Consortium were Canada, Japan, United Kingdom, the U.S.A., West Germany and the World Bank. At the meeting held in May-June 1961, France and the newly formed International Development Association also joined. Besides, Austria, Denmark, Norway, Sweden and the International Monetary Fund had sent observers to these meetings. With the joining of Austria, Belgium, Italy and the Netherlands in 1962 the number of members rose to 12. The International Monetary Fund continues to send an observer.

The Aid-India Consortium been considering India's requirements of external assistance for the Five Year Plans in its periodical meetings since May-June 1961. Taking into account the aid pledged by the Consortium in its last meeting in April 1965 (to consider aid to India for the year 1965-66), the total aid made available by the Consortium for India's Third Five Year Plan amounts to \$5472 million (Rs. 26,058 million) as shown in the table below.

(U. S. \$ million)

| Sl. No. | Country                                      | Pledges for (Indian Fiscal Years) |                 |                 |                 |                 | Five-Year Total |
|---------|----------------------------------------------|-----------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|
|         |                                              | 1961-62                           | 1962-63         | 1963-64         | 1964-65         | 1965-66         |                 |
| 1       | 2                                            | 3                                 | 4               | 5               | 6               | 7               | 8               |
| 1.      | Austria .. .. .                              | —                                 | 5.00            | 7.00            | 0.85            | 5.00            | 17.85           |
| 2.      | Belgium .. .. .                              | —                                 | 10.00           | 10.00           | —               | 4.00            | 24.00           |
| 3.      | Canada .. .. .                               | 28.00                             | 33.00           | 30.50           | 41.16           | 41.16           | 173.82          |
| 4.      | France .. .. .                               | 15.00                             | 45.00           | 20.00           | 20.00           | 20.00           | 120.00          |
| 5.      | Germany .. .. .                              | 225.00                            | 139.00          | 99.50           | 95.00           | 85.90           | 644.40          |
| 6.      | Italy .. .. .                                | —                                 | 53.00           | 45.00           | 36.00           | 36.00           | 170.00          |
| 7.      | Japan .. .. .                                | 50.00                             | 55.00           | 65.00           | 60.00           | 60.00           | 290.00          |
| 8.      | Netherlands .. .. .                          | —                                 | 11.00           | 11.00           | 11.10           | 11.10           | 44.20           |
| 9.      | United Kingdom .. .. .                       | 182.00                            | 84.00           | 84.00           | 84.00           | 84.00           | 518.00          |
| 10.     | United States .. .. .                        | 545.00                            | 435.00          | 435.00          | 435.00          | 435.00          | 2,285.00        |
| 11.     | IBRD & IDA .. .. .                           | 250.00                            | 200.00          | 245.00          | 245.00          | 245.00          | 1,185.00        |
|         | <b>TOTAL .. .. .</b>                         | <b>1,295.00</b>                   | <b>1,070.00</b> | <b>1,052.00</b> | <b>1,028.11</b> | <b>1,027.16</b> | <b>5,472.27</b> |
|         | <b>Rs. million (within brackets) .. .. .</b> | <b>(6,167)</b>                    | <b>(5,095)</b>  | <b>(5,010)</b>  | <b>(4,896)</b>  | <b>(4,890)</b>  | <b>(26,058)</b> |

The following is a statement showing the amounts for which agreements have been signed, value of overseas orders placed and amounts disbursed against foreign loans and credits at the end of June 1966 :

(Figures at Post-Devaluation Rates)

(Rs. crores)

| Name of the lending country/<br>Institution | Amounts for<br>which agree-<br>ments have<br>been signed<br>up to June<br>30, 1966 | Value of<br>equipment<br>orders ordered<br>up to June<br>30, 1966 | Loan amount<br>disbursed up<br>to June 30,<br>1966 |
|---------------------------------------------|------------------------------------------------------------------------------------|-------------------------------------------------------------------|----------------------------------------------------|
| Austria .. .. .                             | 13.37                                                                              | 11.45                                                             | 7.88                                               |
| Belgium .. .. .                             | 17.99                                                                              | 11.40                                                             | 7.72                                               |
| Britain .. .. .                             | 620.42                                                                             | 563.70                                                            | 474.16                                             |
| Canada .. .. .                              | 75.00                                                                              | 71.65                                                             | 45.51                                              |
| Czechoslovakia .. .. .                      | 99.38                                                                              | 41.18                                                             | 22.02                                              |
| Denmark .. .. .                             | 7.05                                                                               | 3.37                                                              | 1.57                                               |
| West Germany .. .. .                        | 704.64                                                                             | 632.55                                                            | 558.41                                             |
| France .. .. .                              | 89.97                                                                              | 61.61                                                             | 33.26                                              |
| Hungary .. .. .                             | 25.00                                                                              | —                                                                 | —                                                  |
| Italy .. .. .                               | 128.03                                                                             | 52.56                                                             | 18.66                                              |
| Japan .. .. .                               | 273.31*                                                                            | 241.12                                                            | 190.68                                             |
| Netherlands .. .. .                         | 35.91                                                                              | 30.48                                                             | 16.35                                              |
| Poland .. .. .                              | 65.05                                                                              | 21.58                                                             | 18.10                                              |
| Sweden .. .. .                              | 6.96                                                                               | 2.98                                                              | —                                                  |
| Switzerland .. .. .                         | 36.04                                                                              | 22.56                                                             | 13.64                                              |
| U.S.S.R. .. .. .                            | 762.75                                                                             | 504.02                                                            | 454.71                                             |
| U.S.A. (other than P.L. 480) .. .. .        | 2161.60†                                                                           | 1936.17                                                           | 1696.62                                            |
| Yugoslavia .. .. .                          | 93.75                                                                              | 28.32                                                             | 10.75                                              |
| I.B.R.D. .. .. .                            | 728.90                                                                             | 631.32                                                            | 606.69                                             |
| I.D.A. .. .. .                              | 506.93                                                                             | 446.70                                                            | 339.04                                             |
| <b>Grand Total</b>                          | <b>6,452.10</b>                                                                    | <b>5,314.81</b>                                                   | <b>4,524.77</b>                                    |

\* Includes Japanese *ad hoc* credit of 1959 amounting to Rs. 13.61 crores (post-devaluation) which is fully disbursed.

† Excludes an amount of Rs. 31.01 crores (post-devaluation) made available from P.L. 665 counterpart funds in the three Development Assistance Loans.

Note : This statement excludes : (i) commodity assistance under P.L. 480 and P.L. 665 ; (ii) drawings from I.M.F. ; (iii) Kuwait loan of Rs. 53.85 crores (post-devaluation) and Bahrain loan of Rs. 12.36 crores (post-devaluation) on account of repatriation of special Indian Notes which were in circulation as legal tender in the respective countries, and (iv) Grant assistance.



EXTERNAL ASSISTANCE — AUTHORIZATIONS AND UTILISATIONS (SUMMARY)  
(Latest)

(Rs. crores)

|                                                      |                            |  |  | Loans and credits<br>repayable in |        | Grants | Total     | Assistance<br>under US<br>PL 480/665<br>etc. | Grand<br>Total |           |          |           |  |
|------------------------------------------------------|----------------------------|--|--|-----------------------------------|--------|--------|-----------|----------------------------------------------|----------------|-----------|----------|-----------|--|
|                                                      |                            |  |  | Foreign<br>currency               | Rupees |        |           |                                              |                |           |          |           |  |
| <b>A. Authorisations—</b>                            |                            |  |  |                                   |        |        |           |                                              |                |           |          |           |  |
| 1.                                                   | Upto the end of First Plan |  |  | ..                                | ..     | ..     | 212.26    | 14.63                                        | 137.96         | 364.85    | 16.92    | 381.77    |  |
| 2.                                                   | During Second Plan         |  |  | ..                                | ..     | ..     | 1064.73   | 230.15                                       | 125.47         | 1420.35   | 1130.73  | 2551.08   |  |
| 3.                                                   | During Third Plan          |  |  | ..                                | ..     | ..     | 2301.74   | 49.55                                        | 137.87         | 2489.16   | 450.63   | 2939.79   |  |
|                                                      | of which in                |  |  |                                   |        |        |           |                                              |                |           |          |           |  |
|                                                      | 1961-62                    |  |  | ..                                | ..     | ..     | 343.85    | 48.52                                        | 23.44          | 415.81    | ..       | 415.81    |  |
|                                                      | 1962-63                    |  |  | ..                                | ..     | ..     | 602.14    | ..                                           | 14.74          | 616.88    | 43.33    | 660.21    |  |
|                                                      | 1963-64                    |  |  | ..                                | ..     | ..     | 451.98    | 1.03                                         | 14.72          | 467.73    | 4.91     | 472.64    |  |
|                                                      | 1964-65                    |  |  | ..                                | ..     | ..     | 491.92    | ..                                           | 25.66          | 517.58    | 225.19   | 742.77    |  |
|                                                      | 1965-66                    |  |  | ..                                | ..     | ..     | 411.95    | ..                                           | 59.31          | 471.26    | 177.20   | 648.46    |  |
| Total, upto the end of Third Plan                    |                            |  |  | ..                                | ..     | ..     | 3578.73   | 294.35                                       | 401.30         | 4274.36   | 1598.28  | 5872.64   |  |
| <b>B. Utilisations—</b>                              |                            |  |  |                                   |        |        |           |                                              |                |           |          |           |  |
| 1.                                                   | Upto the end of First Plan |  |  | ..                                | ..     | ..     | 124.13    | 2.29                                         | 70.18          | 196.60    | 5.07     | 201.67    |  |
| 2.                                                   | During Second Plan         |  |  | ..                                | ..     | ..     | 610.85    | 115.92                                       | 160.64         | 887.41    | 544.81   | 1433.22   |  |
| 3.                                                   | During Third Plan          |  |  | ..                                | ..     | ..     | 1763.56@  | 156.39                                       | 107.15         | 2027.10   | 853.22   | 2880.32@  |  |
|                                                      | of which in                |  |  |                                   |        |        |           |                                              |                |           |          |           |  |
|                                                      | 1961-62                    |  |  | ..                                | ..     | ..     | 190.41    | 38.51                                        | 21.74          | 250.66    | 88.01    | 338.67    |  |
|                                                      | 1962-63                    |  |  | ..                                | ..     | ..     | 238.74    | 58.83                                        | 14.85          | 312.42    | 122.72   | 435.14    |  |
|                                                      | 1963-64                    |  |  | ..                                | ..     | ..     | 357.02    | 29.41                                        | 16.32          | 402.75    | 185.19   | 587.94    |  |
|                                                      | 1964-65                    |  |  | ..                                | ..     | ..     | 461.84    | 17.07                                        | 20.02          | 498.93    | 218.12   | 717.05    |  |
|                                                      | 1965-66                    |  |  | ..                                | ..     | ..     | 486.05    | 12.57                                        | 34.22          | 532.84    | 239.18   | 772.02    |  |
| Total upto the end of Third Plan                     |                            |  |  | ..                                | ..     | ..     | 2498.54   | 275.50                                       | 337.97         | 3112.01   | 1403.10  | 4515.11   |  |
| C. Balance available for use in Fourth Plan (A—B) .. |                            |  |  |                                   |        |        | 1080.19   | 18.83                                        | 63.33          | 1162.88   | 195.18   | 1357.53   |  |
| D. Authorisation on 1-4-66 to 31-12-66               |                            |  |  | ..                                | ..     |        | 1016.72   | 24.75                                        | 3.92           | 1045.39   | 282.40   | 1327.79   |  |
|                                                      |                            |  |  |                                   |        |        | (1295.72) | (32.99)                                      | (5.23)         | (1333.94) | (497.49) | (1831.43) |  |
| <b>E. Utilisation on 1-4-66 to 31-12-66</b>          |                            |  |  |                                   |        |        |           |                                              |                | ..        | ..       | ..        |  |
|                                                      |                            |  |  |                                   |        |        | 424.24    | 7.93                                         | 11.72          | 443.89    | 233.08   | 676.97    |  |
|                                                      |                            |  |  |                                   |        |        | (617.32)  | (12.06)                                      | (17.97)        | (647.35)  | (358.39) | (1005.74) |  |
| F. §Balance available on 1-1-1967                    |                            |  |  | ..                                | ..     | ..     | 2220.11   | 45.37                                        | 90.19          | 2355.67   | 411.74   | 2767.41   |  |
|                                                      |                            |  |  |                                   |        |        | (2948.36) | (60.49)                                      | (120.25)       | (3129.50) | (548.98) | (3678.08) |  |

§ Rupee figures in this line are at post-devaluation rate.

@ Includes Rs. 20.86 crores from France and Rs. 8.64 crores ad-hoc credit from Japan for which yearwise break up of utilization is not available.

NOTE.—1. Figures in brackets are in million U.S. dollars.

2. Unspent balance of foreign aid has been converted into rupees at the post devaluation rate of exchange.

3. For conversion into rupees of aid authorised or utilised the prevalent rate of exchange has been used.

## FOREIGN INVESTMENTS IN INDIA—(Contd.)

**India's Foreign Indebtedness:**—India's net external indebtedness increased by Rs. 440 crores to Rs. 3,705 crores during the year ended March, 1966.

Total foreign assets increased by just Rs. 66 crores to Rs. 694 crores, while aggregate foreign liabilities swelled by Rs. 506 crores to Rs. 4,399 crores.

More than 80 per cent. of the additional net indebtedness, as in the previous year, was incurred by the official sector. The official sector's foreign assets rose by Rs. 32 crores to Rs. 570 crores, while foreign liabilities shot up by Rs. 477 crores to Rs. 3,307 crores. Outstanding loans accounted for Rs. 2,768 crores at the end of March, 1966, against Rs. 2,352 crores at the end of March, 1965.

The private sector attracted a further inflow of foreign investment, raising its net indebtedness to Rs. 960 crores from Rs. 905 crores.

## GOVERNMENT INDUSTRIAL UNDERTAKINGS—(Contd.)

## ATOMIC ENERGY

The Department of Atomic Energy and its units under the stewardship of Dr. Vikram A. Sarabhai kept up the momentum of progress achieved in the days of the late Dr. Bhabha.

The three reactors, Apsara, Cirus and Zerlina, were fully utilised for research and isotope production, according to the annual report of the Department of Atomic Energy.

Apsara was operated on a round-the-clock schedule, producing a power output of 2.69 million kilowatt-hours, the highest since it became critical on August 4, 1956.

Isotopes and labelled compounds produced in the Bhabha Atomic Research Centre found a market in Australia, Ceylon, Czechoslovakia, East Germany, France, Hong Kong and the Philippines earning about Rs. 64,000 in foreign exchange, apart from meeting requirements within the country.

The production of nuclear grade uranium was maintained to meet the needs of Cirus and Zerlina.

The Chemistry Division prepared and supplied a number of high purity chemicals worth about Rs. 1 lakh, while the Chemical Engineering Division prepared organic and inorganic compounds labelled with heavy hydrogen to meet the requirements within BARC. The foreign exchange saving in this respect was around Rs. 28,000.

The Technical Physics Division fabricated various items of equipment worth about Rs. 6.4 lakhs, of which the foreign exchange component was only Rs. 1.8 lakhs. The c.i.f. value of these items, if wholly imported, would have been Rs. 23.9 lakhs.

The Electronics Division has undertaken the fabrication of control equipment worth more than Rs. 10 lakhs for the Tarapur atomic power project.

During 1966-67, foreign exchange earnings from the export of rare earths products were twice that in the previous year. The entire output of rare earths products was exported and over Rs. 1 crore in foreign exchange was realised. Persistent efforts enabled the Indian Rare Earths Ltd., to gain a foothold in the American market, and, for the first time, zircon was exported in bulk to Japan.

CHITTARANJAN LOCOMOTIVE WORKS  
(Chittaranjan, Burdwan Dt., West Bengal)

Branch Office: Hindustan Buildings, 4, Chittaranjan Avenue, Calcutta 13

The plant, originally planned for production of 120 steam locomotives with 50 spare boilers a year, has made considerable progressive strides towards increasing the production, bringing down the cost and reducing the import content.

The cost of the first locomotive turned out was over Rs. 7 lakhs. The cost of a locomotive has



now come down to Rs. 4.8 lakhs. Likewise the import content per locomotive has come down from over Rs. 2.5 lakhs to about Rs. 10,000.

Manufacture of Electric Locomotives was undertaken in 1960 and the first DC Locomotive "LOKAMANYA" was commissioned on 14th Oct., 1961 and the first Chaittaranjan built 25 Kv AC Electric Locomotive "BIDHAN" was commissioned on 16th Nov., 1963. The ultimate aim is to progressively taper down the production of steam locomotives and utilise the capacity to step up production of electric locomotives to 150 per year and manufacture traction equipment as also a limited number of Diesel Shunters. While the cost of an AC Locomotive stands at Rs. 12.68 lakhs the import content thereof is Rs. 6 lakhs. The figure will be considerably brought down during the Fourth Plan with the development of indigenous capacity and after the Project for the manufacture of traction equipment which is well under way is completed.

The Galvanising Plant was installed here in 1959 for galvanising steel masts required for the Railway Electrification at a cost of approximately Rs. 15.13 lakhs. The Plant was commissioned in 1959. The galvanizing of the masts at Chittaranjan has resulted in savings worth more than the cost of the plant itself.

**Steel Foundry:** The annual capacity of the Steel Foundry is 10,000 tonnes of steel castings per annum including 1,000 tonnes of manganese steel crossings. During a short period of about three years all the steel castings required for Steam, Electric and Diesel locomotives have been fully developed.

#### HINDUSTAN CABLES LIMITED

Ministry of Industry and Supply  
Govt. of India.

(P. O. Hindustan Cables,  
Rupnarainpur Rly. Station,  
Burdwan Dt., West Bengal)

Hindustan Cables Ltd., is the only organisation in the country engaged in the manufacture of various types of telecommunication Cables and wires. It is a public sector organisation under the Ministry of Industry, Govt. of India.

Envisaged soon after the independence of the Country, the factory, situated near Chittaranjan, first went into production in September, 1954. Technical collaboration was provided by Messrs. Standard Telephones & Cables, London.

#### Shown Local Exchange Cables

The first line of manufacture was for Dry Core paper insulated lead sheathed and steel tape armoured underground telephone cables ranging from sizes 20 pairs to 1,000 pairs. This type of cables still forms the basic product of the Company. These cables are primarily intended for local exchange systems as also for tool working.

Commencing with a modest production of 180 Kilometers in 1954-55, the Company manufactured over 3,572 Kilometers of this type of cables during the financial year ending on 31st March, 1966.

#### Co-axial Cables

In late 1960, Hindustan Cables Limited set up a manufacturing unit for production of 2 core .375 PDWI Co-axial Cables suitable for 960 channel long distance working. This unit was set up to fit in with the Indian P & T Department's ambitious plan to link up the major trunk centres in the country with a Co-axial cables network. The production during the financial year ending on 31st March 1966 reached 839 Kilometers.

The capacity has been further added by the Company which will enable it to step up its production of two tube Co-axial Cables to 1,200 Kilometers a year. Besides this .375 type Co-axial Cables, a plant for the manufacture of .163B Small Co-axial Cables and a plant for 300

channel long distance workings have been set up recently and regular production has also commenced. In 1965-66, 224 Kilometres of cables were produced.

#### Plastic Cables and Wires

The Company has also lately gone into production of a few varieties of Plastic insulated Cables and wires required by the P & T Departments and other users for Telephone Communication. Some of these are suitable for underground use and some others for indoor and overhead outdoor use. The Company manufactured over 18,400 Core kms. of these products in 1965-66.

#### Expansion

To meet the rapid increase in the demand of telecommunication Cables in the Country and to achieve self-sufficiency by the end of the 4th Plan period, the Company has already taken up schemes for further expansion which include the setting up of additional manufacturing capacity as below:—

(a) Setting up of an Aluminium sheathed Telecommunication Cables Project of capacity of 1,000 km per annum.

(b) Expansion of capacity at Rupnarainpur to 8,000 km per annum for underground Telephone Cables.

(c) Setting up of a second factory elsewhere at the rated capacity of 8,000 km per annum for underground Telephone Cables.

#### General

With the factory, the township is also fast growing. Rupnarainpur, situated only 150 miles away from Calcutta, is rapidly developing into an Industrial Complex. The Company employs more than 2,000 people at present who work round-the-clock to meet the ever increasing demand for telephone Cables.

The Company runs its own township which is developing rapidly. It has provided several welfare and other amenities. To cite a few, it provides free education in the Company's schools to children of lower grade employees. Free tiffin and uniforms are provided to all school going children. The Company actively assists the Employees' Co-operative Society which supplies ration and food stuffs, general provisions etc. and runs a fair vegetable shop and a laundry.

The Company also assists the employees recreational club as also the Women's Organisation which look after several welfare matters. The Company has also opened a cinema hall and regular film shows are.

Hindustan Cables is thus developing fast and growing into one of the premier industries of the country and as one of the most successful public sector undertakings, has been recognised through Presidential Awards for three consecutive years, 1960-61, 1961-62 and 1962-63.

#### BHARAT ELECTRONICS LTD.

The B.E.L. produced goods worth Rs. 928.74 lakhs in 1965-66. The company earned a net profit of Rs. 144.10 lakhs in 1965-66. Out of the net profit Rs. 74.33 lakhs had been ploughed back into business.

The foreign exchange saved during 1965-66 was Rs. 593 lakhs on completed equipment only.

During the year, 26 major types and 40 minor types of equipment were produced. A number of VHF trans-receivers were modified to increase the scope of operation.

During the year, 3.6 million transistors and 900,000 diodes were manufactured. *Mg. Dir.: Lt. Gen. A. C. Iyappa. (B. V. Baliga has retired).*

#### HINDUSTAN INSECTICIDES LTD.

**DDT output:**—Hindustan Insecticides Limited set up an all-time production record of DDT in 1966-67.

The output at the Delhi and Alwaye factories of this public-sector undertaking totalled 3,097 tonnes—1,560 tonnes at the Delhi factory and 1,537 tonnes at Alwaye. The gross profit of the

undertaking in 1966-67 it is estimated, would be Rs. 56.62 lakhs against Rs. 48.87 lakhs in the preceding year.

#### HINDUSTAN MACHINE TOOLS

Production at the State-owned Hindustan Machine Tools at Bangalore reached the Rs. 15-crore mark during the financial year ended March 31, 1967. Production for 1965-66 was about Rs. 13 crores, according to a press note.

The machine tool factories at Jalahalli near Bangalore, Pinjore in Haryana, Kalamassery, in Kerala and Hyderabad in Andhra Pradesh, accounted for a combined output of 2,682 machines, valued at Rs. 12.5 crores. The combined production for the previous year was 2,048 machines, valued at Rs. 11 crores. The watch factory accounted for the balance production worth Rs. 2.5 crores, having turned out 240,100 watches.

There has been an increase of 25 per cent. in watch production.

With a further diversification of its production lines in 1966-67 by the addition of broaching machines and horizontal boring machines, HMT is now in a position to meet a substantial portion of the country's requirements in machine tools and also accelerate its export efforts.

The wide range of machine tools include high precision high-speed lathes, milling machines, radial drills, general purpose lathes and cylindrical grinding machines.

**Kalamassery Factory:** The one thousandth machine turned out by the State-owned Hindustan Machine Tools (HMT) at Kalamassery, since its commissioning on October 2, 1964, rolled out of the factory's assembly line on March 30, 1967.

During the financial year 1966-67, 670 machines valued at about Rs. 260 lakhs were produced against 331 machines valued at Rs. 140 lakhs during the last year. This represented a 100 per cent increase in production.

The machines depatched by the HMT factory at Kalamassery included two machines exported to New Zealand.

#### INDIAN TELEPHONE INDUSTRIES

The State-owned Indian Telephone Industries at Bangalore registered a record turnover of Rs. 16.5 crores during 1966-67, an increase of nearly Rs. 4.5 crores or about 30 per cent. over the previous year. This also shows an increase of about 80 per cent over the turnover of 1963-64.

The company also increased its exports from about Rs. 9.5 lakhs in 1965-66 to over Rs. 80 lakhs in the year ended March 1967.

#### PRAGA TOOLS

The sales of machine tools produced by the Praga Tools Limited, dropped from Rs. 145.82 lakhs in 1964-65 to Rs. 117.40 lakhs in 1965-66, according to the annual report of the company for 1965-66.

According to the report the gross profit of the company in 1965-66 before providing for depreciation, development rebate, etc., amounted to Rs. 24.22 lakhs against Rs. 28.21 lakhs in the year before.

With the slump in sales and an increase in expenditure on certain items like cost of raw materials, wage bill, etc., the company showed lower operating profit during the year.

#### STEEL PLANTS

The total investment in the steel industry in the public sector so far amounts to Rs. 1,028.5 crores, according to an official review released in March 1967 on the working of Hindustan Steel Limited.

During 1966-67 alone the Government had advanced loans of Rs. 60.4 crores to the company raising the total amount of loans sanctioned so far to Rs. 500.5 crores.



As against this the company's net profits showed a fall from Rs. 2.14 crores in 1964-65 to Rs. 1.66 crores in 1965-66.

The cumulative loss from the inception of the Company to the end of March 1966 came down to Rs. 59.3 crores from Rs. 77.4 crores at the end of 1964-65.

In 1965-66 the Durgapur steel plant incurred a net loss of Rs. 2.3 crores as against a profit of Rs. 53 lakhs in the previous year.

### EXPANSION PLANS

As regards the expansion of existing steel plants the review says that the entire expansion of the Bhilai steel plant which will take its annual capacity to 2.5 million ingot tonnes, is now almost complete except for the wire rod mill, which is likely to be commissioned by about the middle of this year.

At Bourkela, where annual capacity is being expanded to 1.8 million tonnes, a new L.D. converter has been commissioned and a fifth is almost ready.

In Durgapur, where the plant is being expanded to a capacity of 1.6 million tonnes a year, part of a new coke oven battery was lighted recently and the other part is also now ready.

In the Durgapur alloy steels project, whose initial capacity will be 60,000 tonnes of finished products, the steel melting shop, the forge shop and a part of the bar mill have started production.

According to the review, it is envisaged that during the Fourth Plan Bhilai would be expanded from 2.5 to 3.2 million tonnes ingot capacity, Durgapur from 1.6 to 3.4 million tonnes and Bourkela from 1.8 to 2.5 million tonnes.

## IMPORT AND EXPORT TRADE—(Contd.)

### EXPORTS

India's exports in the eight months after devaluation (June, 1966, to January, 1967) declined by \$129.9 million, according to the latest official review of the foreign trade.

The review, also estimates a fall of \$130 million in exports in 1966-67, compared with the previous year.

The total exports during the eight months after devaluation are estimated at \$1,021.8

million, against \$1,151.7 million in the corresponding period of the previous year.

The total exports in 1966-67 are estimated at \$1,560-1,565 million against \$1,690 million in 1965-66.

## INDIA'S FRONTIER WITH CHINA

The course of the frontier may, broadly speaking, be described as follows.

India's northern frontier with China extends over 2,500 miles from north-west Kashmir to the tripartite junction of India, Burma and China near the Talu Pass. The frontier is traditional and well enough known.

In some sectors it has also been demarcated or defined. It runs along the Muztagh and the Karakoram ranges through the Karakoram pass and then along the Kuen Lun ranges to a point east of 80° longitude. Thereafter, it follows the watershed and runs through Lanak pass and along the Changchengmo range. Cutting across the Pangong Tso and the Spanggur Tso, it runs through Chang pass and along the Kailash range. It then turns south-west near Demchok and skirting the Hanle mountains cuts across the Para Chu river south of Chumar. It then follows the watershed between the Spiti and the Para Chu and the watershed between the Ganga and the Sutlej to the tri-junction of India, Nepal and China.

The boundary of Sikkim and Tibet is also a watershed, while the crest of the Himalayas forms the boundary between Bhutan and Tibet.

The north-east frontier of India, about 700 miles long, from the eastern Limits of Bhutan to a point near the Talu pass, is for the most part the northern watershed of the Brahmaputra. This is the so-called McMahon Line.

**Frontier of Kashmir with Tibet:** The frontier in this sector is about 1,100 miles long. About 300 miles of the extreme western sector is covered by the territory of Kashmir which is illegally occupied by Pakistan. The major part of Kashmir's frontier with China runs along a well-defined watershed, and the eastern section in particular has been recognised by custom for over three centuries. It was also confirmed by treaties signed between Ladakh and Tibet circa 1684 and in 1842. This boundary includes in India, the whole of the Aksaichin plateau, the Changchengmo valley, and the Pangong, Rupshu and Hanle areas. However, Chinese maps have been showing the boundary in this area much further west so as to include about 6,000 square miles—the greater part of Aksaichin, and parts of the Changchengmo valley, and the Pangong, Spanggur Tso and Chang La areas—in Tibet. The road constructed by the Chinese runs for about a hundred miles through the eastern part of Aksaichin. In September 1957 it was announced that this road had been completed. Indian parties have been arrested near the northern extremity of Aksaichin in 1958 and in the Spanggur area in 1959.

**The Punjab-Tibet Frontier:** This is about 70 miles in length. In the southern part of this sector, some Chinese maps show the boundary four to five miles west of the traditional boundary which is the watershed between the Spiti and Para Chu rivers. In 1956 and 1957, Chinese parties visited this area.

**Himachal Pradesh and Uttar Pradesh boundary with Tibet:** It is about 320 miles long and follows well-defined watersheds. In Himachal Pradesh it is the watershed between the eastern and western tributaries of the Sutlej, and in Uttar Pradesh that between the Sutlej on the one hand and the Kali, Alaknanda and Jadhganga on the other. The six passes on the watershed—Shipki, Mana, Niti, Kungri Bingri Darma, and Lipu Lekh—have been mentioned in the 1954 Agreement as passes between India and China. The Great Himalayan Range in this region lies in some places thirty to forty miles south of the watershed. The Nilang-Jadhanga area, about a hundred square miles in area, has always been Indian territory.

**Sikkim-Tibet Frontier:** This was defined in the Anglo-Chinese Convention of 1890, and was later, in 1895, demarcated on the ground. All Chinese maps seem to show this boundary correctly.

**Bhutan-Tibet Frontier:** This is a customary boundary and follows the crest of the Himalayan Range for about three hundred miles. Chinese maps level out Bhutan in two sectors in the north and include a considerable part of south-eastern Bhutan in Tibet.

**McMahon Line:** From the eastern border of Bhutan to a point near the Talu pass, the frontier is a customary one which was defined in detail at the Simla Conference of 1914. The line follows the northern watershed of the Brahmaputra except where the Lohit, Dihang, Subansiri and the Namjang rivers break through. This watershed is for its greater part the Himalayan Range and in other places the highest range in the area. In one place the Line departed from the watershed to leave two sacred lakes, the village of Migyitun and a pilgrimage route in Tibet.

The line shown on Chinese maps includes in Tibet nearly 32,000 square miles of our territory in this area. This piece of territory comprises the whole of three Divisions of the North-East Frontier Agency—Kameng, Subansiri and Siang—and the major part of the fourth—the Lohit Frontier Division. In the extreme west it includes a belt of the Assam plains also.

### INDIAN CASE

Having traced the course of the customary frontier between India and China we may next describe the Indian point of view.

Briefly it is this.

India's traditional frontier with China is well known being based partly on treaty, partly on custom and partly on agreement.

The present controversy arose because, the Chinese Government laid claim for the first time to extensive areas of Indian territory in the Chinese Prime Minister's letter of 8th September 1959.

The tension on the India-China border increased in 1959 and 1960 because Chinese forces had been pushing forward to assert their claims, and this has resulted in clashes involving the death of Indian personnel.

The Government of India have stated that in spite of recent Chinese provocations they will always explore the possibilities of a peaceful settlement. But they cannot accept the Chinese contention that the entire India-China frontier is undelimited. Negotiations on this basis are unacceptable to the Government of India. But they are prepared to discuss with the Chinese Government existing disputes and such minor rectifications of the frontier as may be considered necessary by agreement.

Though this is not part of the Indian case it may be added that the precise nature of the Chinese claims have not been stated by Chinese authorities. They can only be inferred from Chinese maps published from time to time.

The entire length of this border has been either defined by treaty or recognized by custom or by both, and until the present controversy no Chinese Government had ever protested against the exercise of jurisdiction by the Government of India up to the customary border.

The Government of the People's Republic of China contend in their letters that this boundary is entirely undelimited. This is wholly incorrect. The traditional border has been well-known for centuries. It follows the geographical principle of the watershed which is in most places the crest of the Himalayan mountains.

Moreover, in most parts the boundary has the sanction of specific international agreements.

### NORTH-EASTERN FRONTIER

In the north-east, the traditional boundary was formalized at a Tripartite Conference held in



Simla from October 1913 to July 1914 and attended by the Plenipotentiaries of the Governments of India, Tibet and China. The Indian, Tibetan and Chinese Plenipotentiaries had equal status. The boundary between India and Tibet in the sector east of Bhutan was confirmed by an exchange of notes between the Tibetan and Indian representatives on 24th and 25th March 1914. The boundary was delineated on two sheets of a large-scale map of the north-east frontier. Two copies of the map were signed and sealed by the Indian and Tibetan representatives. The line was drawn after full discussion and later re-affirmed by a formal exchange of notes. The Indo-Tibetan boundary line as agreed upon by the Indian and Tibetan Plenipotentiaries was incorporated on the map attached to the draft convention and was never challenged by the Chinese representative at that time or afterwards.

There is nothing to indicate that the Tibetan authorities were, in any way, dissatisfied with the delineation. On the other hand, Lonchen Shatra, the Tibetan Plenipotentiary, stated explicitly in the letters exchanged that he had received orders from Lhasa to agree to the boundary as marked on the map.

There is no doubt that the McMahon Line (so called after McMahon, the British representative at the Conference) merely confirmed the natural, traditional, ethnic and administrative boundary in the area. It runs mostly along the crest of the High Himalayan Range which forms the natural frontier between the Tibetan plateau in the north and the submontane region in the south. The Monba, Aka, Dafia, Miri, Abor and Mishmi tribes, who inhabit the area, are of the same ethnic stock as the other hill-tribes of Assam and have no kinship with the Tibetans. The Tibetans refer to these tribes as Lopus—southern barbarians beyond the pale.

It has to be appreciated however that boundaries between any two countries are not determined by ethnic affiliations of people living in frontier regions. It is also possible that people of the same racial stock live on either side of a border. India is a multi-national State in which many racial minorities enjoy rights of citizenship. In this context, it is relevant to mention that there are thousands of Indian citizens of Tibetan origin in our frontier areas. The fact is that the ethnic composition of frontier peoples is not a determining factor.

The important consideration to bear in mind is that Tibetan authorities had not exercised jurisdiction at any time in this area. On the other hand, the exercise of jurisdiction by the Government of India has been long and continuous.

Both the Simla Convention and the map attached to it were signed by Ivan Chen, the Chinese Representative. Although the Chinese Government later repudiated his signature, the objections to the Simla Convention listed in their memorandum of 25th April, 1st May and 13th June 1914 and 30th May 1919 were solely in regard to the boundary between Inner Tibet and China and between Inner Tibet and Outer Tibet. China neither protested against the boundary between India and Tibet nor did she seek modification of it after the Simla Convention. It is significant too that the Chinese Government agreed in 1956-57 to consider the eastern sector of the McMahon Line, which for about 120 miles forms the boundary between Burma and China, as the traditional boundary between the two countries.

#### CENTRAL SECTOR

The central sector of the boundary between Tibet and India is the frontier of Uttar Pradesh, Himachal Pradesh and the Punjab States in north India. The boundary between Uttar Pradesh and Tibet follows the watershed between the Sutlej on the one hand and the Ganges (the Kali, the Alaknanda and the Jadhganga) on the other. In this sector, the High Himalayan Range, with passes at a height of about 17,000 feet, runs 30 miles south of the water-parting, which is a lower range easily crossed from the Tibetan plateau. However, this watershed has been the traditional and well-known boundary. Revenue

records of the Garhwal district as far back as 1850 establish this. Even Chinese maps upto 1958 showed the watershed as the frontier. The Nilang-Jadhang area, Bara Hoti, Laphthal and Sangcha Malla, which according to the contention of the Chinese Government lie in Tibet, are in fact well on the Indian side of the watershed.

Nilang-Jadhang is an area of about 700 square miles north of the main Himalayan range but south of the watershed. Bara Hoti, a small area of about 1½ square miles, also lies between the highest range of the Himalayas and the main watershed. Laphthal and Sangcha Malla are south-east of Bara Hoti, in Almora district in Uttar Pradesh. The boundary between Himachal Pradesh and Tibet is the water-parting between the eastern and the western tributaries of the Sutlej; and the boundary between the Punjab and Tibet is the major watershed between the Pare Chu and the Spiti river systems.

#### LADAKH

The boundary of Jammu and Kashmir with Sinkiang and Tibet is about 1,100 miles in length. Of this the frontier of Ladakh (which is part of Jammu and Kashmir) forms nearly two-thirds.

This boundary between Ladakh and Tibet, long sanctified by custom, was reaffirmed by the Treaty of 1842 signed by the representatives of Kashmir on the one hand and the Dalai Lama and the Emperor of China on the other. The Tibetan text of the treaty confirms that China was a party to it. It is true that the treaty did not define the boundary but referred merely to the "old established frontiers". This was because these frontiers were well-known and did not require any formal delimitation. In 1847 the Chinese Government informed the British Government that as the boundary was sufficiently and distinctly fixed, there was no need for additional measures for fixing them. The area was surveyed by Indian officials and, once a detailed first-hand knowledge was obtained of the region, official Indian maps began to show the boundary with precision. Even an official Chinese map of 1893 showed the boundary in this area as depicted in official Indian maps today.

For many years after 1949, when the People's Republic was established, there was no reason to believe that the Chinese authorities either were unaware of the traditional boundary or disputed its alignment. In 1950 the Chinese Government expressed their gratification over the desire of the Government of India "to stabilize the Chinese-Indian border" and the Government of India replied that "the recognized boundary between India and Tibet should remain inviolate". The Chinese Government questioned neither the location nor the recognition of this boundary, and the Government of India saw no reason to assume that there was any doubt regarding the border. On various occasions in 1951 and 1952, Indian interests in Tibet were discussed but the Chinese Government never suggested that there was any frontier issue to be negotiated.

The only cause for doubting whether the Chinese authorities accepted the traditional boundary was the fact that different alignments were being shown on Chinese maps. The alignments included about 36,000 square miles of territory on the north-eastern frontier and an area of about 15,000 square miles in north-eastern Ladakh within China.

#### COLOMBO PROPOSALS

"1. The Conference considers that the existing *de facto* cease fire period is a good starting point for a peaceful settlement of the Indian-Chinese conflict.

"2. (a) With regard to the Western Sector, the Conference would like to make an appeal to the Chinese Government to carry out their 20 kilometres withdrawal of their military posts as has been proposed in the letters of Prime Minister Chou En-lai to Prime Minister Nehru on November 21 and November 28, 1962.

- (b) The Conference would make an appeal to the Indian Government to keep their existing military position.
- (c) Pending a final solution of the border dispute, the area vacated by the Chinese military withdrawals will be a demilitarised zone to be administered by civilian posts of both sides to be agreed upon, without prejudice to the rights of the previous presence of both India and China in that area.

"3. With regard to the Eastern Sector, the Conference considers that the line of actual control in the areas recognised by both the Governments could serve as a cease fire line to their respective positions. Remaining areas in this sector can be settled in their future discussion.

"4. With regard to the problems of the Middle Sector, the Conference suggests that they will be solved by peaceful means, without resorting to force.

"5. The Conference believes that these proposals, which could help in consolidating the cease fire, once implemented, should pave the way for discussions between representatives of both parties for the purpose of solving problems entailed in the cease fire position.

"6. This Conference would like to make it clear that a positive response for the proposed appeal will not prejudice the position of either of the two Governments as regards its conception of the final alignment of the boundaries."

#### Clarifications

On a request from the Government of India, the Ceylon Prime Minister, Mrs. Bandaranaike, Mr. Ali Sabry of the U.A.R. and Mr. Ofori Atta of Ghana gave clarifications of paragraphs two, three and four of the Colombo proposals during their negotiations in New Delhi from January 10 to 15, 1963. The clarifications were also conveyed to the Chinese Government by the Ceylon Premier. Following is the text of the clarifications:

*Western Sector (Para 2 of the proposals).*

(i) The withdrawal of Chinese forces proposed by the Colombo Conference will be 20 kilometres as proposed by Prime Minister Chou En-lai to Prime Minister Nehru in the statement of the Chinese Government dated 21st November and in Prime Minister Chou En-lai's letter of 28th November 1962, i.e., from the line of actual control between the two sides as of November 7, 1959, as defined in Maps III and V circulated by the Government of China.

(ii) The existing military posts which the forces of the Government of India will keep to will be on and up to the line indicated in (i) above.

(iii) The demilitarised zone of 20 kilometres created by Chinese military withdrawals will be administered by civilian posts of both sides. This is a substantive part of the Colombo Conference proposals. It is as to the location, the number of posts and their composition that there has to be an agreement between the two Governments of India and China.

*Eastern Sector (Para 3 of the proposals).*

The Indian forces can, in accordance with the Colombo Conference proposals, move right up to the south of the line of actual control, i.e., the McMahon Line, except for the two areas on which there is difference of opinion between the Governments of India and China. The Chinese forces similarly can move right up to the north of the McMahon Line except for these two areas. The two areas referred to as the remaining areas in the Colombo Conference proposals, arrangements in regard to which are to be settled between the Governments of India and China according to the Colombo Conference proposals, are Che Dong or the Thagla ridge area and the Longju area, in which cases there is a difference of opinion as to the line of actual control between the two Governments.

*Middle Sector (Para 4 of the proposals).*



The Colombo Conference desires that the *status quo* in this sector should be maintained and neither side should do anything to disturb the *status quo*.

#### India Accepts

On Jan. 24, 1963, Mr. Nehru announced in the Lok Sabha that India would accept *in toto* the Colombo proposals as clarified by the delegations of Ceylon, the United Arab Republic and Ghana during their talks with the Union Govt. in Delhi on Jan. 12 and 13, 1963. The proposals were thoroughly discussed in Parliament. Since they were on the whole in conformity with her own stand on the issues involved and as proof of her sincere desire to co-operate with the Colombo Conference and make its initiative a success, the Lok Sabha approved the Govt. policy on the proposals. India accepted the proposals *in toto* and the Prime Minister of Ceylon was informed accordingly.

#### China Rejects

The Chinese Government, however, have rejected the essential features of the Colombo proposals. They are opposed to the proposal that the demilitarised area in the Western Sector should have civilian posts of both India and China. They insist that they alone should have

the right to re-establish the seven posts that they claim they maintained in this area prior to Sept. 7, 1962 and that there should be no Indian presence of any kind in this demilitarized zone. And, in the Eastern Sector, contrary to the Colombo proposals, they insist that Indian troops should not move up to the frontier. By taking up this attitude, they are clearly flouting the Colombo Conference powers, and spurning their efforts to promote a settlement.

#### CHINA'S BORDER AGREEMENT WITH OTHER COUNTRIES

China has so far concluded border agreements with Burma, Nepal, Outer Mongolia and Pakistan. All these agreements are a post-1959 feature. The manner of reaching these agreements and their timing lead strongly to the suspicion that these agreements have been concluded not out of any desire for peaceful settlement of disputes with neighbours, but as instruments in China's strategy of isolating India. It could not be without significance that China made serious moves for border agreements about the same time as she made her big territorial claims on India in September 1959.

Another noteworthy feature common to most of China's border agreements is the leisurely way China initially set about negotiating them

until 1959-60, when the dispute with India came to a head. The pace of negotiations was markedly accelerated thereafter. The talks with Burma for a border pact were begun in 1956 and after dragging on for nearly four years, were concluded in January 1960, about four months after China openly laid claim to large Indian territory. With Nepal, the Sino-Nepalese Boundary Committee was set up on August 11, 1960. On October 5, 1961 the boundary treaty was concluded.

The same was the case in respect of the so-called Sino-Pakistan "border treaty". The Pakistan Government had sent the Chinese their first note on this subject on March 28, 1961. The Chinese authorities replied to this after nearly a year, that is, early in February 1962. On May 3, 1962, the two Governments announced that they had agreed to conduct negotiations. An "agreement in principle" was announced by the two Governments on December 26, 1962 on the eve of the first round of Indo-Pak talks to discuss Kashmir and other related matters. The agreement itself was signed on March 2, 1963 in Peking.

China's border pacts are but another phase of her aggressive diplomacy. The aim of this strategy is to isolate and weaken India, so that China can lord it over the smaller nations of Asia.

## LAC INDUSTRY

The final estimate of production of the 1966 the preliminary estimate of 7,170 tonnes. The (1961-65) average production was 6,480 tonnes.

katki lace crop, issued by the regional office of lac development, was 6,325 tonnes only, against lac production in 1965 and 1964 was 6,230 tonnes and 2,780 tonnes respectively. The five-year

## MINES AND MINERALS

**Mineral Production (1966):**—The total value of mineral production in the country (excluding Goa) during 1966 was higher by 4.8 per cent at Rs. 2,471 million as against Rs. 2,357 million in the previous year, according to the Indian Bureau of Mines. This estimate excludes the value of petroleum, minor minerals and

minerals declared as prescribed substances under the Atomic Energy Act, 1948.

Coal and lignite constituted the leading group with an output of 67.97 million tonnes and 2.57 million tonnes respectively.

**Production:** (ferrous group): Chromite

78,000 tonnes; iron ore 19.97 million tonnes; manganese ore 1,598,000 tonnes.

**Production:** (non-ferrous): Bauxite 746,000 tonnes; copper ore 481,000 tonnes; gold 3,740 kilograms; silver 1,220 kilograms; ilmenite 30,000 tonnes; lead concentrates 5,151 tonnes and zinc concentrates 8,900 tonnes.

## PORTS

**Gujarat:** The total traffic at the ports of Gujarat increased from 32,62,759 tonnes in 1965-66 to 35,70,792 tonnes in 1966-67 thus recording a net increase of 9.5 per cent over the previous year.

During 1966-67, both exports and imports showed a rise, of 1,64,358 tonnes and 1,43,675 tonnes, respectively.

## RUBBER INDUSTRY—(Contd.)

**Rubber Industry:**—According to official statistics, the actual production of all rubbers in India during the period April to January was higher during 1966-67 than during the same period of 1965-66 or of 1964-65.

Production for 10 months  
(April-January)

|                    | (In tonnes)<br>1965-66 | (In tonnes)<br>1966-67 |
|--------------------|------------------------|------------------------|
| Natural .. ..      | 45,983                 | 49,466                 |
| Synthetic .. ..    | 14,741                 | 17,655                 |
| Reclaimed .. ..    | 8,132                  | 9,629                  |
| <b>TOTAL .. ..</b> | <b>68,856</b>          | <b>76,750</b>          |

Imports into India for 10 months

|                    |               |               |
|--------------------|---------------|---------------|
| Natural .. ..      | 15,983        | 18,965        |
| Synthetic .. ..    | 2,511         | 5,101         |
| Reclaimed .. ..    | —             | —             |
| <b>TOTAL .. ..</b> | <b>18,494</b> | <b>24,066</b> |

Total Supply and Consumption

|                                               |                |                |
|-----------------------------------------------|----------------|----------------|
| Imported .. ..                                | 87,350         | 100,816        |
| Production .. ..                              | 79,067         | 84,734         |
| <b>Total consumption of all rubbers .. ..</b> | <b>166,417</b> | <b>185,550</b> |
| Period of supply over period of demand ..     | 8,283          | 16,082         |

The Stock Position as at the close of January:  
In tonnes.

|            | Natural | Synthetic | Reclaimed | Total  |
|------------|---------|-----------|-----------|--------|
| 1966 .. .. | 20,525  | 8,055     | 2,135     | 30,715 |
| 1967 .. .. | 26,143  | 8,016     | 2,209     | 36,368 |

The Total Availability Position may be Best Seen as follows: Upto and at the end of January:

|                           | 1966   | 1967    |
|---------------------------|--------|---------|
| Supply of all rubber ..   | 87,350 | 100,816 |
| Consumption of all rubber | 79,067 | 84,734  |
| Stock in the Country ..   | 30,715 | 36,368  |



## TEA INDUSTRY—(Contd.)

**Production & Export:**—The achievement of India's tea industry has indeed been magnificent with a record production of 375 million kg. in 1966.

From this performance it appears that the

ambitious revised target of 420 million kg. for the 1970-71 will be comfortably achieved. There is always, however, the proviso about whether other unforeseen hurdles would come in the way.

The revised export target for the Fourth Plan end is 240 million kg. Last year the export achievement was less than 200 million kg., and a watch is being kept on the declining trend since devaluation.

## POSTS AND TELEGRAPHS—(Contd.)

**New Postal Rates:** The revision of postal and tele-communication tariffs proposed in the 1967-68 Budget, with existing tariffs upto June 15, 1967 in brackets is as follows:—

Registered newspapers up to 100 grammes 5 paise (2 P), between 101 and 250 gr. 10 paise (3 P for 101 to 200 gr.), additional 250 grammes 5 paise (3 P per additional 200 gr.).

Parcels per 400 gr. 65 paise (60 paise).

Registration fee 60 paise (55 paise), express delivery fee 15 paise (13 P).

Air surcharge on packets, including registered newspapers, per 10 grammes five paise (4 P), book packets up to 100 gr. 10 Paise (8 P), per additional 50 gr. 5 paise (3 P), printed books per 50 gr. 5 paise (5 P up to 50 gr. and 3 P per additional 25 gr.).

Insurance fee for value up to Rs. 100 : 45 paise (40 P), per additional Rs. 100 up to Rs. 5,000 25 paise (20 P), per additional Rs. 1,000 up to Rs. 10,000 one rupee (same).

Telegrams : non-press inland telegrams up to eight words one rupee for ordinary and Rs. 2

for express (same rate for first 10 words), per additional word 10 paise for ordinary and 20 paise for express (same), greetings telegrams up to 8 words 80 paise for ordinary and Rs. 1.60 for express (75 paise and Rs. 1.50 respectively), per additional word 10 paise and 20 paise (same). Teleprinter annual rental Rs. 1,500 (Rs. 1,200), rental for part-time telegraph—teleprinter circuit (other than to newspapers and agencies); for first hour 50 per cent of full-time rental when circuit is not required for more than 8 hours (1/6 full-time rental); for per additional hour full-time rental (1/24 full-time rental).

## A TOURIST'S GUIDE—(Contd.)

### NEW INDIA

**New Townships and Industrial colonies:** Large scale industrialisation has brought in its wake construction of new townships and colonies. River valley schemes, steel and fertiliser plants, refineries, research laboratories, technical Institutes... all were allotted freshly developed areas and townships. In the private sector too, new units came to be established with colonies for workers and staff. Gandhidhams and Gandhinagars have sprung up at many places; Gandhinagar, Kasturbadham, Pantnagar, Vallabh Vidyanagar, Tilaknagar, Tatanagar, Ogalewadi are some of the new townships, having "national" names.

**Jamshedpur:** In Bihar the first steel city, bearing the founder's name, with Tatanagar as the name of the railway station nearby, is an ideal new town, complete with all modern requirements. Health, sanitation, education are all looked after by the private sector industry and all services run efficiently.

**Ogalewadi:**—Near Karad, near the confluence of the Krishna and the Koyna (Dist. Satara).

Ogalewadi is the glass-town founded by one of the pioneering industrialists, Mr. Ogale. The activities at present include enamelling, making of hurricane lanterns, and safety stoves. Another unit for making electrical equipment is recently added.

**Tatanagar:**—see *Jamshedpur*.

**Vallabh Vidyanagar:**—Near Anand, (Dist. Kaira) is the seat of Sardar Vallabhbhai Patel University, with arts & science, engineering, agricultural, teachers' training, colleges on the extensive campus. Some industrial units (pre-stressed concrete, electrical wire) are also working in the vicinity. The township and the educational institutes, including hostels, guest house and staff quarters are on an ideally laid out plan. There is a railway station (Western) with the same name nearby; but fast trains do not stop there and Anand is a more convenient station that way for this University town.

## FOURTH PLAN—(Contd.)

### Review 1966-67

Several vital targets in the annual Plan for 1966-67, the first year of the Fourth Plan, have not been reached despite increased financial expenditure.

The latest official data on the progress of the 1966-67 Plan show that apart from the lag in agriculture, production of fertilisers, steel, aluminium, cement and coal fell short of the targets.

Shortfalls in respect of railway freight traffic, irrigation and power targets are also indicated.

Production in some industries, such as textile machinery, railway wagons and castings, actually declined during the year.

The main reasons for the physical shortfalls are stated to be the recurrence of drought and the steep rise of 16.5 per cent in the general price level in 1966-67.

Against the original Plan outlay of Rs. 2,092 crores, the expenditure in 1966-67 is estimated

at Rs. 2,228 crores. But most of the increase in expenditure was due to devaluation.

The outlay of Rs. 2,082 crores, when expressed in post-devaluation terms, amounted to Rs. 2,250 crores. Thus, the estimated expenditure of Rs. 2,228 crores is actually somewhat lower than the cost of the original Plan.

Despite the step-up in the Plan expenditure, actual achievements were lower. Drought not only affected agricultural production but also caused a rise in prices and wages, which in turn, affected costs and the demand for goods.

Food production in 1966-67, estimated at 76 million tonnes, was 21 million tonnes less than the estimated production potential of 97 million tonnes. Drought also affected production of other agricultural commodities and cash crops.

Consumption of nitrogenous fertilisers during the year was 800,000 tonnes against the targeted one million tonnes.

The fall in agricultural production also led to reduced output in agro-based industries like jute, textiles, cotton textiles, sugar and vanaspathi.

The output of steel ingots rose marginally from 6.2 million tonnes in 1965-66 to 6.4 million tonnes in 1966-67, against the target of seven million tonnes.

Similarly, cement production at 11 million tonnes was just at the previous year's level, while the target had been fixed at 12.5 million tonnes.

Although considerable importance was attached to aluminium as a medium of import substitution, its production at 88 million tonnes was markedly lower than the target of 100 million tonnes. In 1965-66 aluminium output was 69 million tonnes.

Owing to the slow pace of industrial growth, the freight traffic of the railways, also showed a small increase from 203 million tonnes in 1965-66 to 207 million tonnes in 1966-67, against the target of 215 million tonnes.

Because of the stagnation in industries and railway traffic, coal output in 1966-67 remained almost at the previous year's level of 68 million tonnes.



## MAHARASHTRA—(Contd.)

### TATA PROJECTS

The hydro-electric undertakings in the State are the three schemes developed and brought into operation by Tata Sons, Ltd., and continued under their management until 1929, when they were transferred to the management of the Tata Hydro-Electric Agencies, Ltd., in which Messrs. Tata Sons retain a majority interest. These undertakings are :—

- The Tata Hydro-Electric Power Supply Company, Ltd. Supply started in 1915.
- The Andhra Valley Power Supply Company, Ltd. Supply started in 1922.
- The Tata Power Company, Ltd. Supply started in 1927.

The three Hydro-Electric Companies are interconnected with Chola Steam Station of the Central Railway and the newly commissioned Koyna Hydro generating station of Maharashtra State which feeds bulk power to the Tata system

at Trombay over 220 kV transmission lines. Together they are operated as a Hydro-Thermal system under the co-ordinated control of the Hydro Companies.

The three Hydro Companies have constructed a modern Steam Thermal Station of 338 MW capacity at Trombay which is also inter-connected to the system.

The Tata Hydro-Electric System serves an area in Maharashtra State of more than 2,072 sq. kilometres.

Electric service is rendered to the textile mills and other industries of Bombay and the suburban areas, to local authorities, and, in bulk for retail distribution, to the electrical undertakings including the State Electricity Board, supplying Greater Bombay, Poona and ten other localities within the area.

The transmission net work of the Tata system consists of 1,013 circuit kilometres of 100,000-volt overhead lines and 24 circuit kilometres of 100

KV gas filled underground cables and the distribution network of 336 circuit kilometres of 22,000-volt overhead as well as 208 circuit kilometres of 22,000-volt and 192 circuit kilometres of 6,600-volt underground cables. There are also 44 circuit kilometres of 6,600-volt overhead lines.

Substantial additions to the transmission and distribution network are expected to be made during the next few years.

During 1965 the peak demand on the Tata Rly. System reached a figure of 694 MW.

The sales by Tatas during 1964-65 was 3,393 million units and the purchase from Koyna to supplement Hydro system during the year was 1,370 million units.

NOTE : Because of security reasons, we have been asked not to publish any information relating to location of electricity generating Plants.

## RAJASTHAN—(Contd.)

### CENTRAL MECHANIZED FARM, SURATGARH

The 30,000-acre Central Mechanized Farm at Suratgarh, in the Ganganagar district of Rajasthan, is the first State-run farm in the country. Started with the three-fold objective of producing improved seeds, raising pedigree breeds of cattle, sheep and poultry and developing orchards, the farm has made considerable progress towards realising these objectives.

The farm has a fleet of about 100 tractors, 60 harvester combines, and various types of other modern machines for farm operations like winnowing, grading, harrowing, seed-drilling, etc. Most of this machinery has come as gift from the Soviet Union. A workshop, with a foundry, helps to maintain, repair and overhaul the machines.

Despite recurring floods and non-availability of sufficient water, the Farm has established high records of productivity. It grows mainly food crops like wheat, jowar, paddy and bajra and cash crops like cotton, oilseeds and sugarcane. Under favourable conditions, the average yield

per acre from a 15-acre plot has reached : wheat 44.5 mds.; paddy 43 mds.; jowar and gram about 34 mds.; cotton 26 mds.; sugarcane 824 mds. The highest yield per acre of sugarcane has reached 1,400 mds.

The area under Kharif and Rabi crops in 1964-65 was 8,273 and 17,560 acres respectively. The Farm has supplied 17,392 quintals of pure pedigree (nucleus) seeds to various States in 1966. The Farm has also recently started multiplying Sonora-64, a high-yielding variety of Mexican wheat, in an area of 911 acres. During the last 10 years, the Farm has produced food-grains, oilseeds, cotton, sugarcane, etc., of the value of over Rs. 300 lakhs.

Orchards :—Upto August 1964, the Farm had established orchards over an area of 440 acres and raised over 36,000 plants of various fruits. It has developed an area of 244 acres under orchards and established a nursery of about 11 acres which raises saplings of fruit and forest plants.

Animal Husbandary :—The Farm has established a small dairy with 26 cows, two bulls

and 50 calves. The Sheep-rearing Section has 212 ewes, 7 rams and 119 young stock. There are 365 birds, including 238 White Leghorn hens and 19 cocks in the Poultry Section.

Afforestation :—Under its afforestation scheme, the farm has by now grown about, 1,00,000 sheesham, over 5,00,000 babul, 1,000 eucalyptus, 1,000 bottle-brush and 2,000 mulberry trees. These have not only relieved the drabness of the area, but have also helped in checking the wind velocity and conserving moisture in the soil.

Irrigation :—The Farm gets its irrigation supplies from the Bhakra Irrigation system. The farm has taken steps to construct protection bunds against floods.

Jetsar Farm :—The second 30,000-acre Mechanized Farm at Jetsar, near Suratgarh, was started in May 1964. The Jetsar Farm is being developed to the extent possible with the available non-perennial water supply from the Rajasthan Canal. Kharif is the main crop season, the major crops being cotton, groundnut, jowar and bajra.

## SPORTS

The sports come within the purview of the Ministry of Education.

An advisory body, called the All India Council of Sports, composed of 20 persons eminent in the field of sports and games advises the Ministry in all matters relating to development of Sports in the country.

The All India Council of Sports has been reconstituted for a period of 2 years with effect from 16-7-1965 with Gen. K. M. Cariappa as President and B. P. Bagchi, Jt. Secretary, Ministry of Education, as Secretary.

The Government of India have set up a National Institute of Sports at Patiala to provide adequate facilities for the training of coaches of the highest calibre in various games and sports.

### TOURNAMENTS

Below we give the results of the national tournaments and principal sporting events of the year 1966-67 :

#### Athletics

##### Men's Events

100 metres : R. B. Tawde (Bihar) ; 200 metres : B. Thomas (Madhya Pradesh) ; 400 metres : P. C. Ponnappa (Mysore) ; 800 metres : Jarnail Singh (Punjab) ; 1,500 metres : E. Sequeira (Maharashtra) ; 3,000 metres steeplechase : Gurdiyal Singh (Delhi) ; 5,000 metres : Edward Sequeira (Maharashtra) ; 10,000 metres : Maqbool Ahmed (Andhra) ; 110 metres hurdles : Nirmal Singh (Punjab) ; 400 metres hurdles : C. H. Shobhanachalam (Madras) ; Long Jump : P. Bannerjee (W. Bengal) ; High Jump : R. M. David (Madras) ; Hop, step and jump : L. R. Beedue (Madras) ; Pole Vault : W. A. Naqvi (Bihar) ; Javelin Throw : D. Ghosh (Bengal) ; Discus Throw : Bahadur Singh (Bihar) ; Shot Put : Jagaraj Singh (Bihar) ; Hammer Throw : Mohan Singh (Rajasthan) ; 4 × 100 metres relay : Mysore 1 ; 4 × 400 metres relay : Mysore 1 ; Decathlon : S. Puttur (Maharashtra) ; 20 kilometres walk : V. Sen (W. Bengal) ; 50 kilometres walk : A. N. Shome (W. Bengal) ; Marathon : S. Ghadigaonkar (Maharashtra).

#### Women's Event

100 metres : Chitra Kandukur (Maharashtra) ; 200 metres : Georgina Wakefield (Maharashtra) ; 800 metres : Palmira Ferdinand (Maharashtra) ; 4 × 100 metres relay : Maharashtra 1 ; Discus Throw : Kamallesh Chatwal (Delhi) ; Long Jump : Christine Forage (Maharashtra) ; Pentathlon : K. M. Rosamma (Madras) ; Team Championship : Maharashtra.

#### Aquatics

Men : 100 Metres freestyle : Ramchandra Singh (Services) ; 100 metres backstroke : Chandram Singh (Services) ; 100 metres butterfly : Arun Shaw (Railways) ; 100 metres breaststroke : Ramdeo Singh (Services) ; 200 metres backstroke : Chandram Singh (Services) ; 200 metres freestyle : Ramchandra Singh (Services) ; 200 metres butterfly : Thammu Singh (Services) ; 200 metres breaststroke : Ramdeo Singh (Services) ; 1,500 metres freestyle : Ram Singh (Services) ; 4 × 100 metres freestyle relay : (Services) ; 4 × 200 metres freestyle relay : (Services) ; High Board Diving : Sohan Singh



(Services); Spring Board: Hardial Singh (Services); Water Polo: Railways.

Women: 100 metres freestyle: Rima Dutta (Rajasthan); 100 metres backstroke: Rima Dutta; 100 metres breaststroke: Rima Dutta; 200 metres freestyle: Rima Dutta; 4 x 100 metres relay: Delhi.

#### Badminton

Men's Singles: Dinesh Khanna (Punjab); Men's Doubles: Khor Cheng Chye and Lee Guan Choong (Malaysia); Mixed Doubles: Nandu Natekar and Manda Kelkar (Maharashtra); Women's Singles: Sarojini Apte (Railways); Women's Doubles: Shobha Moorathi and Manda Kelkar (Maharashtra); Juniors: Ravi Dhingra (U.P.)

#### Basketball

Men: Services.  
Women: Maharashtra.

#### Billiards

Billiards: Wilson Jones.  
Snooker: Thomas Monteiro.

#### Boxing

Light-flyweight: T. R. Velu (Services); Flyweight: C. Narayana (Services); Bantamweight: M. Velu (Services); Featherweight: Hav. D. Swamy (Services); Lightweight: Hav. J. B. Thapa (Services); Light-selter weight: J. Irani (Maharashtra); Welterweight: Nk. K. S. Bhosle (Services); Light-middleweight: Nk. Gyan Singh (Services); Middle weight: Piara Singh (Services); Heavyweight: Hav. Inder Singh (Services); Light-heavyweight: Ajit Singh (Services).

#### Bridge

Team-of-four duplicate: Dr. Narang's team, Delhi; Master Pairs: S. K. Kantha and H. Paul (Calcutta); Team of four Progressive: Kumars Four (Calcutta).

#### Cricket

The series between India and West Indies resulted in two victories for the visiting team and one draw.

Principal scores:

At Bombay (First Test): India 296 (C. G. Borde 121, S. A. Durani 55, Nawab of Pataudi 44; Hall 2/54, Griffith 3/68, Sobers 3/46, Holford 2/68) and 316 (Jaisimha 44, Baig 42, Nawab of Pataudi 51, B. K. Kunderan 79; Sobers 2/79, Griffith 1/53, Holford 3/94, Gibbs 4/67) lost to West Indies 415 (Hunte 101, Lloyd 82, Holford 80, Sobers 50, Hendricks 48; Chandrasekar 7/157, Venkataraghavan 2/120, Durrani 1/83) and 192 for 4 (Hunte 40, Lloyd 78 not out, Sobers 53 not out).

At Calcutta (Second Test): West Indies 390 (Kanhai 90, Sobers 70, Hunte 43; Surti 2/106, Chandrasekar 3/107, Bedi 2/92, Jaisimha 1/11)

beat India 167 (Kunderan 90, Jaisimha 87; Sobers 3/42, Gibbs 5/51, Hall 1/32) and 178 (Hauumantsingh 87, Surti 81, Jaisimha 81; Hall 1/35, Sobers 4/56, Gibbs 2/36, Lloyd 2/23).

At Madras (Third Test): India 404 (F. M. Engineer 109, C. G. Borde 125, Surti 50 not out; Hall 2/68, Griffith 1/96, Sobers 2/69, Gibbs 3/87, Hunte 1/25, Bynoe 105) and 323 (Wadekar 67, Borde 49, Hanumant Singh 50, Subramaniam 61; Hall 2/67, Gibbs 4/96, Griffith 4/61) drew with West Indies 405 (Sobers 95, Hunte 49, Bynoe 48, Kanhai 77; Chandrasekar 4/130, Surti 3/68, Bedi 1/55, Prasanna 2/118) and 270 for 7 (Sobers 74 not out, Griffith 40 not out; Bedi 4/81, Prasanna 3/106).

#### Ranji Trophy

Bombay beat Rajasthan in the final.  
Duleep Trophy: South Zone  
Irani Trophy: Rest of India  
Rohinton Baria Trophy (Inter-University): Osmania.  
Cooch-Bihar Trophy (Schools): West Zone.

#### Cycling

Men: 1,000 metres time trial: Dalbir Singh Gill (Punjab); 1,000 metres sprint: Kersi R. Batiwalla (Maharashtra). 4,000 metres team pursuit: (Services); Team trial championship: (Services).

Women: 2,000 metres lap race: Miss Zarin M. Jasawalla (Maharashtra).

#### Football

National Championship: Andhra. Rover's Cup: Mohun Bagan. F.A. Shield: Mohun Bagan. Durand: Gorkha Regiment.

#### Golf

Hashoishi (Japan).

#### Hockey

National: Railways and Madras joint winners; Aga Khan Cup: Punjab Police. Beighton Cup: East Bengal.

#### Kabbaddi

Men: Railways.  
Women: Maharashtra.

#### Kho Kho

Men: Bombay.  
Women: Baroda.

#### National Chess

Rusi Madon.

#### Wrestling

Middleweight: Amarsingh (M.P.); Light-heavy: Makhardwaj Ray (Services); Heavyweight: Amarsingh (M.P.); Welter: Gayaprasad (Railways); Bantamweight: Bishamber Singh (Railways); Featherweight: Shamlal

(Railways); Lightweight: Rajnarayan (D.C.M.); Mosquito weight: Jagdish (Delhi); Flyweight: Maruti Adker (Maharashtra); Hind Kesari: Hazrat Patel (Maharashtra).

#### Weight-lifting

Lightweight: L. K. Das (Railways); Middleweight: Raghbir Singh (Services); Heavyweight: Balbir Singh (Delhi); Lt. Heavy: M. R. Roy (Services); Team Championship: (Services); Bharat Shree: T. K. Mathai (Services).

#### Table Tennis

Men's Singles: F. R. Khodaiji (Maharashtra); Men's Doubles: N. Nicolay & M. Remuaid. (U.S.S.R.); Mixed Doubles: N. Nicolay and Miss B. Zaimu (U.S.S.R.).

Women's Singles: Usha Sunderraj (Madras); Women's Doubles: B. Zaimu and Bella (U.S.S.R.).

Boys' Singles: S. A. Mehta (Maharashtra). Boys' Doubles: S. Mehta and A. Buta (Maharashtra). All three team championships won by Maharashtra.

#### National Tennis

Men's Singles: Premjit Lal. Men's Doubles: Krishnan and Mukherjee. Mixed Doubles: A. Metravelli and Ivanova (U.S.S.R.). Women's Singles: Ivanova. Women's Doubles: Ivanova and Abzhandaze (U.S.S.R.). Juniors' Singles: Anand Amrit Raj. Doubles: Ajit Ranade and S. S. Menon.

Asian Championships: Men's Singles: A. Metrevelli (U.S.S.R.); Men's Doubles: T. Koch and E. Mandarino (Brazil). Mixed Doubles: A. Metrevelli and Ivanova. Women's Singles: Abzhandaze (U.S.S.R.).

#### Volleyball

Men: Services.  
Women: Andhra Pradesh.

#### Bombay Races

1,000 Guineas: J. D. Banatwalla's 'River Haven'; 2,000 Guineas: Suresh Mahindra's 'Multirosa'; Indian St. Leger: Mrs. Mary H. Wadia's 'Nijinsky'; Oaks: Suresh Mahindra's 'Multirosa'; Derby: Mrs. Mary H. Wadia's 'Nijinsky'.

#### Poona Races

Turf Club Cup: Mr. & Mrs. T. G. Gaokar's 'Monitor'.

#### Calcutta Races

Calcutta Derby: H. S. Grewal's 'Ramkripal'. Turf Invitation, Invitation Cup: C. K. Mehtab's 'Prince Regent'.

#### Madras Races

South India Derby: S. K. Sunderram's 'Grand Jury'.

#### Rugby

Ceylon Combined.

## PUBLIC FINANCE\*

### SOURCES OF REVENUE AND EXPENDITURE

THE principal sources of Central revenue are: customs duties, excise duties levied by the Central Government, corporation tax, income tax (excluding taxes on agricultural income), wealth tax, estate and succession duty, the earnings from the mints, terminal taxes on goods or passengers carried by railway, sea or air, taxes on railway fares and freights, taxes (other than stamp duty) on transactions in stock exchange and future markets, stamp duty on bills of exchange, cheques, bills of lading, letters of credit, insurance policies, transfer of shares, etc., taxes on sale and purchase of newspapers and on advertisements in newspapers.

The railways and the posts and telegraphs contribute to the Central revenues. There are also the profits on the Government industrial undertakings.

About as much as 81 per cent of the revenue is derived from the customs, excise duties, corporation and income-taxes.

The principal sources of revenue for the individual States are: State taxes (on agricultural income, lands and buildings, mineral rights, consumption or sale of electricity, sale or purchase of goods other than newspapers, advertisements other than in newspapers, goods and passengers carried by road or on inland

water-ways, vehicles, animals, boats, tolls, professions, trades, luxuries, amusements), capitation taxes, stamp duties, excise duties on alcoholic liquors, opium and other narcotics.

A point about the Sales Tax is worth mentioning here. The Union has the power of declaring any commodity as essential for the life of the community and thereby vetoing any sales tax levied on it by a State Government. This power comes from the Essential Goods Act of 1952.

Then there are the subventions from the Central Government. Part of the proceeds of the income-tax and excise duties are distributed

\* At the time of going to press the Central Budget for 1967-68 was just presented to the Parliament. As such, only those details as pre-

sented on that day are given in this article.



among the States. There are also special grants which are made to certain States.

Collection and appropriation of taxes are not always vested in the same authority. Some taxes are levied by the Central Government but collected and appropriated by the States (stamp duties, excise duties, duties on medicines and toilet preparations). Some are levied and collected by the Union but assigned to the States (estate duties on property other than agricultural, terminal taxes on passengers, railway fares, freights, stock exchange, future markets, newspapers or advertisements). Corporation tax is collected and retained by the Union, but taxes on other incomes are levied and collected by the Union and distributed between the Union and States.

The two biggest items of expenditure of the Central Government are outlay on development programmes (capital account) and defence.

Three important heads of expenditure of the States under the revenue account are: irrigation, security and social services.

Then there is public debt which consists of rupee loans, sterling loans and loans received from other countries. The rupee debt may be divided into three classes, long term loans and money market liabilities, the unfunded debt which includes provident funds, postal deposits, saving certificates, and last the deposits.

The Deputy Prime Minister, Mr. Morarji Desai, presented to the Parliament on May 25, 1967 a balanced Budget with a nominal surplus of Rs. 85 lakhs after taking into account a net additional tax burden of Rs. 68.71 crores proposed by him.

Mr. Desai made sharp increases in excise duties on a number of consumer and industrial commodities, calculated to yield Rs. 115.52 crores in a full year, of which nearly Rs. 23 crores would go to the States. He combined these with "selective but minor" concessions to individuals and the private sector, and a reduction of export duties on sacking, carpet-backing, jute specialities, other hessians, manganese and iron-ore fines.

The excise duties on coffee, tea, cigarettes, cigars and cheroots, jute manufacture, petroleum products, rayon and synthetic fibres, artificial or synthetic resin or plastic materials, cotton twist yarn and thread, and aluminium ingots were all marked up.

The Deputy Prime Minister reimposed the excise duty on footwear and parts and, for the first time, brought rubber piping, tubing and belting under excise. He put up postal, telegraph and telephone rates and tariffs to raise Rs. 3 crores in the current year and Rs. 4.44 crores in a full year.

The sharp mark-up in duties on cigarettes, tea and coffee, and motor spirit drew gasps of shock and surprise from members in the Lok Sabha. Otherwise, the House remained largely undemonstrative during the eighty minutes Mr. Desai took to read his speech.

Mr. Desai spared the corporate sector from direct burdens but conscious that he was belying expectations of a substantial cut in corporate taxation, argued that at present he saw no chance of sizable concessions contributing to larger revenues by stimulating activity or revenues in general.

The concessions to individuals and the corporate sector will cost the exchequer just Rs. 5 crores.

Mr. Desai raised from Rs. 25,000 to Rs. 50,000 the upper limit of income for widely-held domestic companies for qualifying for the concessional rate of 45 per cent. He extended the tax holiday for undertakings to eight years and included Indian-run hotels among priority industries receiving concessional treatment.

The Deputy Prime Minister made proposals for removing certain disabilities in the way of amalgamation of companies. He raised the rate

of development rebate for machinery and plant for scientific research from 20 to 35 per cent.

Although he made no mention of these in his Budget speech, Mr. Desai provided certain minor concessions also in respect of inter-corporate dividends, capital gains in the case of non-corporate employees, and relief to industry in respect of additional costs incurred by it due to devaluation, on capital assets imported by it from abroad before the date of devaluation on deferred payment terms and foreign loans.

The concessions, announced by Mr. Desai on personal income included raising of the exemption limit on the surcharge on unearned income to Rs. 30,000, exclusion from taxable income of dividend income not exceeding Rs. 500 during a year, and raising the limit of approved savings for tax relief to 30 per cent. of the total income. There were also minor amendments to the annuity deposit scheme.

The reduction in export duties will cost Rs. 14.35 crores in a full year.

There was no overall gap in the interim Budget but changes since then resulted in a gap of Rs. 41.86 crores, which subsequently increased to Rs. 67.86 crores on account of a proposed provision of Rs. 10 crores for financial institutions and Rs. 16 crores for contingencies. This gap is now covered by the Budget proposals.

The total receipts in the Budget year taking into account the impact of the taxation proposals are estimated at Rs. 4,519.92 crores comprising Rs. 2,768.14 crores of revenue receipts and Rs. 1,751.78 crores of capital receipts. The total expenditure is estimated at Rs. 4,519.07 crores, consisting of revenue expenditure of Rs. 2,454.49 crores and capital expenditure of Rs. 2,064.58 crores. This leaves a nominal surplus of Rs. 85 lakhs.

Mr. Desai's Budget is essentially aimed at restoring price stability by keeping the Plan outlays strictly in check. The provision for the Plan in the Budget for Central schemes, assistance to the States and to the financial institutions taken together is not materially different from the level of the first year of the current Plan.

Over and above the provision made in the interim Budget, Central assistance to the States has been increased by Rs. 98 crores, including Rs. 38 crores for the scarcity affected areas. An additional provision of Rs. 45 crores has been made for the Central Plan over and above the provision of Rs. 1,176 crores made in the interim Budget.

## PROPOSALS IN BRIEF

### DIRECT TAXES

#### Personal Concessions

1. Fixed allowance of Rs. 400 for the maintenance of dependent parents or grand-parents. (Loss Rs. 2 crores).

2. Exemption limit on surcharge on unearned income raised to Rs. 30,000. (Loss Rs. 75 lakhs).

3. Dividend income from Indian companies not exceeding Rs. 500 during the year excluded from taxable income. (Loss Rs. 1.50 crores).

4. Limit of approved savings in life insurance, Government and recognised provident funds, and cumulative time deposits in post offices, which qualify for tax relief, increased to 30 per cent. of total income.

5. Annuity deposit scheme continued with some marginal modifications.

6. Indian scientists, professors and research workers who spend a part of the year abroad allowed to deduct from their taxable income 50 per cent. of the remuneration received from foreign sources.

#### Corporate Reliefs

1. Concessional rate of 45 per cent. extended to widely-held domestic companies having total income not exceeding Rs. 50,000. Relief to small-scale industries. (Loss Rs. 18 lakhs).

2. Priority industry treatment for approved hotels run by Indian companies.

3. Carry-forward of unabsorbed benefit of tax holiday relating to assessment year 1967-68 onwards up to eight years from the year of commencement of business.

4. To promote desirable amalgamation of companies, existing disabilities in law will be removed.

5. Industrial units employing displaced persons from East Pakistan and repatriates from Burma, Ceylon and East Africa to deduct 50 per cent. of their profits in computing taxable income.

6. Industries damaged or destroyed by enemy action or natural calamity will be given certain tax concessions.

7. To promote scientific research the rate of development rebate on machinery and plant installed for scientific research after March 31, 1967, enhanced from the existing general rate of 20 per cent. to the priority rate of 35 per cent. Capital expenditure incurred after March 31, 1967 on assets used for scientific research allowed as a deduction in the year in which it is incurred.

#### Postal Rates

Rates of postage on parcels, registered newspapers, book packets, etc., registration fee and fees for express delivery, insurance and air mail fee on packets raised.

Minimum charge on ordinary greetings telegram and rate for express greetings telegram raised.

Rate for non-press inland telegrams unchanged, but minimum charge will be for first 8 words, instead of first 10 words.

Rental for teleprinter raised. Revision proposed in rental for part-time telegraph and teleprinter circuits other than those given to the press.

### INDIRECT TAXES

#### Excise and Customs

1. Excise on coffee and tea raised. (Yield Rs. 8.40 crores in a full year).

2. Duty on jute manufactures raised. Basic duties on hessian and other jute manufactures raised to Rs. 375 and Rs. 175 per tonne. (Yield Rs. 8 crores). Effect of higher excise on tea exports neutralised by a reduction in export duties by 24 paise per kg.

3. Duty on footwear and parts reimposed. (Yield Rs. 2.75 crores a year).

4. Duties on cigarettes raised substantially (Yield Rs. 28.50 crores a year). Some increase on cigars and cheroots. (Yield Rs. 1 lakh).

5. Basic duty on motor spirit raised from Rs. 451.05 per kilolitre to Rs. 550 and on refined Diesel and vaporising oils from Rs. 441.05 to Rs. 461.05. Excise on petroleum products not otherwise specified, raised from 10 per cent. to 20 per cent. ad valorem. No increases in kerosene, Diesel used by agriculturists or fuel oil used by industrialists (Yield Rs. 25.60 crores).

6. Basic duty on artificial or synthetic resins and plastic materials raised from 20 per cent. to 30 per cent. ad valorem. (Yield Rs. 4.5 crores a year).

7. Substantial increase in duty on rayon and synthetic fibres. Increase on cellulosic fibres and yarn lower than increase on non-cellulosic materials. (Yield Rs. 22 crores a year).

8. Basic duty on aluminium ingots raised from Rs. 300 to Rs. 950 per tonne. On plates, sheets, circles and strips it will be up from Rs. 500 to Rs. 1,450 per tonne. On foils, increase is from Rs. 600 to Rs. 2,000 per tonne. Duties on pipes, tubes and extruded shapes and sections doubled (Yield Rs. 10.98 crores a year). Increase on aluminium, rayon and synthetic fibres to be absorbed by producers. If that is not possible without a change in the consumer price, remedial action to be taken.



9. Excise on cotton twist, yarn and thread, used in the production of fine and superfine fabrics in the powerloom sector up. This will not affect handloom sector as duty on hank yarn is not raised. Duty on mill fabrics will be unchanged (Yield Rs. 7.80 crores a year).

10. Excise to be imposed on rubber piping, tubing and belting at 15 per cent. ad valorem. (Yield Rs. 1.98 crores a year).

No increases in import duties, but wherever excise has been increased or modified, countervailing duties on imported goods equivalent to such increases to be charged in addition to existing duties.

In the case of imported aluminium ingots and wire bars, increase in the countervailing duty will not be to the full extent of excise increases but will be lower. Increases in countervailing duties will yield annual revenue of Rs. 7.33 crores.

#### Export Duties

Duty on sacking (other than cotton bagging) cut by Rs. 150 per tonne, on carpet backing and jute specialities by Rs. 300 per tonne and on other heasians by Rs. 150 per tonne. (Loss Rs. 13.50 crores in full year).

Reduction of Rs. 7.50 per tonne in duty on manganese-ore having 10 per cent. or more but not more than 48 per cent. of manganese content. This will offset the effect of recent increase in railway freight on manganese-ore. Marginal reduction of Rs. 1 per tonne in duty on iron-ore fines, including blue dust. (Loss Rs. 83 lakhs in full year).

The following table shows the budget estimates of revenue and expenditure of the Government of India for 1967-68 as compared with the budget and revised estimates for 1966-67 and actuals for 1964-65 :

#### Revenue Receipts of the Central Government

(In lakhs of Rs.)

| Heads of Revenue                                    | 1965-66<br>Accounts | 1966-67<br>Revised | 1967-68<br>Budget  |
|-----------------------------------------------------|---------------------|--------------------|--------------------|
| <b>TAX REVENUE</b>                                  |                     |                    |                    |
| Customs .. .. .                                     | 5,38,97             | 5,96,00            | 6,54,00            |
| Union Excise duties .. .. .                         | 8,97,92             | 10,30,21           | 11,15,88           |
| Corporation Tax .. .. .                             | 3,04,84             | 3,45,00            | 3,50,00            |
| Taxes on Income .. .. .                             | 2,71,80             | 2,80,00            | 2,90,00            |
| Estate Duty .. .. .                                 | 6,66                | 6,75               | 7,25               |
| Taxes on Wealth .. .. .                             | 12,06               | 12,25              | 12,50              |
| Expenditure Tax .. .. .                             | 42                  | 11                 | 9                  |
| Gift Tax .. .. .                                    | 2,26                | 1,85               | 1,50               |
| Other Heads .. .. .                                 | 25,74               | 28,99              | 32,00              |
| <b>TOTAL .. .. .</b>                                | <b>20,60,67</b>     | <b>23,01,16</b>    | <b>24,63,22</b>    |
| <b>NON-TAX REVENUE</b>                              |                     |                    |                    |
| Debt Services .. .. .                               | 3,07,67             | 3,71,73            | 4,09,11            |
| Administrative Services .. .. .                     | 9,25                | 9,39               | 9,30               |
| Social and Developmental Services .. .. .           | 19,38               | 22,23              | 22,87              |
| Multi-purpose River Schemes, etc. .. .. .           | 12                  | 14                 | 15                 |
| Public Works, etc. .. .. .                          | 4,59                | 4,31               | 4,60               |
| Transport and Communications .. .. .                | 7,73                | 9,59               | 10,95              |
| Currency and Mint .. .. .                           | 63,67               | 65,80              | 78,02              |
| Miscellaneous .. .. .                               | 27,00               | 22,08              | 21,42              |
| Contributions and Miscellaneous Adjustments .. .. . | 33,70               | 41,46              | 41,64              |
| Extraordinary Items .. .. .                         | 86,67               | 8,53               | 9,48               |
| <b>TOTAL .. .. .</b>                                | <b>5,59,78</b>      | <b>5,55,26</b>     | <b>6,07,54</b>     |
| <b>TOTAL — GROSS REVENUE .. .. .</b>                | <b>26,20,45</b>     | <b>28,56,42</b>    | <b>30,70,76</b>    |
| <b>Deduct—States Share—</b>                         |                     |                    |                    |
| Income Tax .. .. .                                  | (—) 1,23,34         | (—) 1,37,10        | (—) 1,31,58        |
| Estate Duty .. .. .                                 | (—) 6,79            | (—) 4,54           | (—) 6,94           |
| <b>TOTAL .. .. .</b>                                | <b>(—) 1,30,13</b>  | <b>(—) 1,41,64</b> | <b>(—) 1,38,52</b> |
| <b>TOTAL—NET REVENUE .. .. .</b>                    | <b>24,90,32</b>     | <b>27,14,78</b>    | <b>29,32,24</b>    |
| <b>DEFICIT ON REVENUE ACCOUNT .. .. .</b>           | <b>..</b>           | <b>..</b>          | <b>..</b>          |
| <b>TOTAL .. .. .</b>                                | <b>24,90,32</b>     | <b>27,14,78</b>    | <b>29,32,24</b>    |

#### Revenue Expenditure of the Central Government

(In lakhs of Rupees)

| Heads of Expenditure                                | 1965-66<br>Accounts | 1966-67<br>Revised | 1967-68<br>Budget |
|-----------------------------------------------------|---------------------|--------------------|-------------------|
| Collection of Taxes and Duties .. .. .              | 30,07               | 32,41              | 34,53             |
| Debt Services .. .. .                               | 3,70,62             | 4,62,81            | 5,09,97           |
| Administrative Services .. .. .                     | 95,40               | 1,22,90            | 1,23,77           |
| Social and Developmental Services .. .. .           | 1,79,72             | 1,95,92            | 2,47,44           |
| Multi-purpose River Schemes, etc. .. .. .           | 1,28                | 2,33               | 3,16              |
| Public Works, etc. .. .. .                          | 23,24               | 25,79              | 28,39             |
| Transport and Communications .. .. .                | 11,07               | 12,92              | 18,99             |
| Currency and Mint .. .. .                           | 17,19               | 20,55              | 21,45             |
| Miscellaneous .. .. .                               | 1,23,75             | 1,83,02            | 1,73,50           |
| Contributions and Miscellaneous Adjustments .. .. . | 4,74,75             | 6,39,21            | 6,87,23           |
| Extraordinary Items .. .. .                         | 81,29               | 15,14              | 10,48             |
| Defence Services (Net) .. .. .                      | 7,62,18             | 8,27,29            | 8,45,49           |
| <b>TOTAL—EXPENDITURE .. .. .</b>                    | <b>21,70,56</b>     | <b>25,40,29</b>    | <b>26,99,40</b>   |
| <b>SURPLUS ON REVENUE ACCOUNT .. .. .</b>           | <b>3,19,76</b>      | <b>1,74,49</b>     | <b>2,32,84</b>    |
| <b>TOTAL .. .. .</b>                                | <b>24,90,32</b>     | <b>27,14,78</b>    | <b>29,32,24</b>   |

## CAPITAL RECEIPTS AND DISBURSEMENTS

The estimates of receipts and disbursements on capital account of the Central Government are explained below. Capital disbursement either leads to creation of physical and financial assets or involves reduction in recurring liabilities. Similarly, capital receipt involves either creation of liability or reduction in financial assets. Disbursements on capital account also include items of expenditure like capital grants to States and food losses, etc., which are debited in the first instance to capital and are written back to revenue in the subsequent years. Likewise receipts also include items like the provision for reduction or avoidance of debt which is transferred to capital by debit to the revenue budget.

Mainly, disbursements on capital account include capital schemes undertaken by the Central Government and the loan assistance and capital grants given to State Governments and other parties. Thus the entire Plan activity of a capital nature whether undertaken by the Centre on its own account or by way of assistance through loans and capital grants to States is reflected here. On the side of receipts, these include borrowings abroad, market loans, sale of treasury bills, small savings, annuity deposits, State Provident Funds, investments of P.L. 480 deposits and various deposits under the Income-tax Act, depreciation and reserve funds of departments like Railways and Posts and Telegraphs and special *ad hoc* funds created from time to time by Government.

In brief the capital account shows the capital requirements of Government and how these are financed. Among the principal sources for meeting these requirements first, there is the revenue surplus. Secondly, regular loans are floated in the market. Thirdly, funds accrue to Government through small savings, annuity deposits and State Provident Funds, and through miscellaneous deposits and advances. Lastly, there are external borrowings. To the extent receipts from these sources fall short of the capital requirements the deficit is made good by the issue of treasury bills and drawal from cash balance.

The statement below gives a summary of the capital transactions :

The Budget for 1966-67 assumed an overall deficit of Rs. 31.75 crores. The deficit during the current year is now estimated at Rs. 350 crores (ignoring Rs. 50 crores of *ad-hoc* treasury bills converted into dated securities). The Budget next year shows neither a deficit nor a surplus as the expenditure provisions have been restricted to resources in sight on the basis of the existing levels of taxation and anticipated receipts and disbursements on Capital Account. The estimated receipts and disbursements on Capital Account by Major Heads of Account have been shown in the Annual Financial Statement of the Central Government. The Statement below gives by broad categories a summary of the estimated receipts and disbursements.



## Capital Receipts of the Central Government

(In lakhs of Rupees)

|                                                                                                  | Accounts<br>1965-66 | Revised<br>1966-67 | Budget<br>1967-68 |
|--------------------------------------------------------------------------------------------------|---------------------|--------------------|-------------------|
| Capital Receipts outside Revenue Account                                                         |                     |                    |                   |
| Public Debt raised in India ..                                                                   | 8,34,10             | 8,29,59            | 8,51,70           |
| Public Debt raised outside India (Other than P.L. 480 loans) ..                                  | 4,82,41             | 6,42,24            | 8,35,00           |
| P.L. 480 Loans and P.L. 480 Deposits invested in special securities :                            |                     |                    |                   |
| (i) P.L. 480 Loans ..                                                                            | 80,00               | 3,50,00            | 1,50,00           |
| (ii) P.L. 480 Deposits ..                                                                        | 1,33,96             | (—) 26,74          | 1,35,00           |
| Floating Debt (Other than Treasury Bills) (Net) (mainly securities issued to IMF, IBRD & IDA) .. | 53,57               | 3,48,59            | 2,49              |
| Repayment of loans and Advances :                                                                |                     |                    |                   |
| (i) State and Union Territory Govts. ..                                                          | 2,76,25             | 2,75,00            | 3,43,00           |
| (ii) Other loans and advances ..                                                                 | 97,24               | 1,09,00            | 87,00             |
| Inter-State Settlement (Net)                                                                     | ..                  | ..                 | ..                |
| Contingency Fund of India ..                                                                     | 3,40                | 1,34               | ..                |
| Unfunded Debt :                                                                                  |                     |                    |                   |
| (i) Small Saving Schemes (Net) ..                                                                | 1,51,35             | 1,25,10            | 1,30,10           |
| (ii) State Provident Funds (Net) ..                                                              | 54,80               | 51,20              | 55,07             |
| (iii) Income Tax Annuity Deposits (Net) ..                                                       | 37,34               | 22,00              | 22,00             |
| (iv) Compulsory Deposits (Net) ..                                                                | (—) 1,61            | (—) 1,00           | (—) 50            |
| (v) Other Items (Net) ..                                                                         | 1,25                | 1,24               | 1,28              |
| Deposits, Advances & Remittances :                                                               |                     |                    |                   |
| (i) Depreciation and Other Reserve Funds (Net) ..                                                | 22,53               | (—) 14,24          | 21,60             |
| (ii) Special Development Fund (Net) ..                                                           | (—) 1,81,33         | 4,32,42            | 1,75,67           |
| (iii) Other Items (Net) ..                                                                       | 2,44,50             | 74,71              | (—) 11,47         |
| TOTAL—CAPITAL RECEIPTS                                                                           | 17,88,86            | 27,20,45           | 22,97,94          |
| Add—Surplus on Revenue Account ..                                                                | 3,19,76             | 1,74,49            | 2,82,84           |
| Overall deficit ..                                                                               | 1,22,76             | 3,00,00*           | ..                |
| GRAND TOTAL ..                                                                                   | 22,31,38            | 31,94,94           | 25,30,78          |

\* Excludes Rs. 50 crores of *ad hoc* Treasury Bills converted into dated securities.

## Capital Disbursements of the Central Government

(In lakhs of Rupees)

|                                                                             | Accounts<br>1965-66 | Revised<br>1966-67 | Budget<br>1967-68 |
|-----------------------------------------------------------------------------|---------------------|--------------------|-------------------|
| Civil:                                                                      |                     |                    |                   |
| Social & Developmental Services :                                           |                     |                    |                   |
| Investment in Industrial and Economic Development :                         |                     |                    |                   |
| (i) Govt. companies and corporations ..                                     | 1,50,39             | 1,16,29            | 1,59,16           |
| (ii) Other Investments ..                                                   | ..                  | 65,10              | 42,15             |
| Other Items ..                                                              | 2,17                | 2,72               | 9,09              |
| Multipurpose River Schemes, Irrigation & Electricity Schemes ..             | 20,63               | 18,95              | 24,81             |
| Public Works (Including Roads) and Schemes of Miscellaneous Improvements .. | 74,11               | 67,55              | 59,33             |
| Transport and Communications (Other than Roads) ..                          | 18,14               | 11,65              | 12,00             |

\* The outstanding foreign loans (other than P.L. 480 loans) as on 31-3-1967 have been worked out after writing up the balances as on 6-6-1966 by 57.5 per cent consequent on the change in the par value of the rupee.

## Capital Disbursements of the Central Government—(Contd.)

(In lakhs of Rupees)

|                                                                                                           | Accounts<br>1965-66 | Revised<br>1966-67 | Budget<br>1967-68 |
|-----------------------------------------------------------------------------------------------------------|---------------------|--------------------|-------------------|
| Currency and Mint :                                                                                       |                     |                    |                   |
| (i) Payments to IMF, IBRD, IDA & Asian Development Bank towards subscription on account of devaluation .. | ..                  | 2,06,15            | ..                |
| (ii) Other Expenditure ..                                                                                 | 80,79               | 14,55              | 19,96             |
| Miscellaneous—                                                                                            |                     |                    |                   |
| (i) Purchase and sale of foodgrains ..                                                                    | (—) 86,73           | 1,57,50            | 1,02,45           |
| (ii) Purchase and sale of Fertilizers ..                                                                  | 4,44                | 67,02              | 56,49             |
| (iii) Trading losses financed from ordinary Revenues ..                                                   | (—) 18,26           | (—) 18,29          | (—) 23,47         |
| (iv) Other State Trading Schemes ..                                                                       | 16,37               | 4,47               | 2,86              |
| (v) Transfer of loan assistance to S.D.F. ..                                                              | 80,00               | 3,50,00            | 1,50,00           |
| (vi) Others ..                                                                                            | 29,64               | 45,73              | 29,17             |
| TOTAL—CIVIL ..                                                                                            | 3,76,69             | 11,09,39           | 6,44,09           |
| Defence Capital Outlay                                                                                    | 1,22,58             | 1,14,96            | 1,23,88           |
| Railway Capital Outlay ..                                                                                 | 2,45,09             | 1,75,14            | 1,61,75           |
| Posts & Telegraphs Capital Outlay ..                                                                      | 31,38               | 27,60              | 28,68             |
| Loans and Advances : States and Union Territories ..                                                      | 8,28,92             | 9,20,87            | 7,39,25           |
| Other loans and advances :                                                                                |                     |                    |                   |
| (i) Govt. companies & Corporations ..                                                                     | 3,71,09             | 3,62,63            | 2,14,33           |
| (ii) Other parties ..                                                                                     | ..                  | 1,29,84            | 1,64,82           |
| TOTAL—LOANS AND ADVANCES ..                                                                               | 12,00,01            | 14,13,34           | 11,18,40          |
| Repayment of Debt:                                                                                        |                     |                    |                   |
| Debt raised in India ..                                                                                   | 1,73,77             | 1,86,33            | 2,58,50           |
| Debt raised outside India ..                                                                              | 80,52               | 1,68,15            | 1,95,44           |
| TOTAL—REPAYMENT OF DEBT ..                                                                                | 2,54,29             | 3,54,48            | 4,53,94           |
| Inter State settlement                                                                                    | ..                  | 3                  | 4                 |
| Contingency Fund of India ..                                                                              | 1,34                | ..                 | ..                |
| TOTAL—DISBURSEMENTS ..                                                                                    | 22,31,38            | 31,94,94           | 25,30,78          |
| Surplus ..                                                                                                | ..                  | ..                 | ..                |
| GRAND TOTAL ..                                                                                            | 22,31,38            | 31,94,94           | 25,30,78          |

## DEBT POSITION

The outstanding Public debt of the Government of India is expected to amount to Rs. 10,841.05 crores at the end of the current year and Rs. 11,726.31 crores at the end of 1967-68 comprising :—

## Summary of Debt Position

(In Crores of Rupees)

|                              | As on<br>31st March,<br>1967 | As on<br>31st March,<br>1968 |
|------------------------------|------------------------------|------------------------------|
| Debt raised in India ..      | 6,217.50                     | 6,313.19                     |
| Debt raised outside India .. | 4,623.55*                    | 5,413.12                     |
|                              | 10,841.05                    | 11,726.31                    |

\* The outstanding foreign loans (other than P.L. 480 loans) as on 31-3-1967 have been worked out after writing up the balances as on 6-6-1966 by 57.5 per cent consequent on the change in the par value of the rupee.



## Summary of Debt Position—(Contd.)

(In crores of Rupees)

|                                                                                               | As at the end of |                  |                  |                  |
|-----------------------------------------------------------------------------------------------|------------------|------------------|------------------|------------------|
|                                                                                               | 1960-61          | 1965-66          | 1966-67          | 1967-68          |
| Public Debt .. .. .                                                                           | 4,738.98         | 8,000.27         | 10,841.05        | 11,726.51        |
| Small Savings Schemes .. .. .                                                                 | 969.00           | 1,638.21         | 1,963.51         | 1,788.41         |
| Provident Funds .. .. .                                                                       | 280.14           | 527.03           | 576.22           | 623.29           |
| P.L. 400 Deposits .. .. .                                                                     | 240.41           | 561.45           | 334.24           | 600.34           |
| Deposits under Compulsory Deposit Schemes .. .. .                                             | ..               | 80.12            | 29.12            | 28.03            |
| Income-tax Annuity Certificates .. .. .                                                       | ..               | 77.61            | 96.61            | 121.01           |
| Reserve Funds and Deposits .. .. .                                                            | 283.02           | 500.05           | 552.62           | 600.79           |
| Other Items .. .. .                                                                           | 21.82            | 25.38            | 26.00            | 27.82            |
| <b>TOTAL—LIABILITIES</b> .. .. .                                                              | <b>6,544.24</b>  | <b>11,529.12</b> | <b>14,355.27</b> | <b>15,607.60</b> |
| Less—Estimated amount due from Pakistan on account of her share of pre-partition debt .. .. . | - 300.00         | - 300.00         | - 300.00         | - 300.00         |
| <b>Net</b> .. .. .                                                                            | <b>6,244.24</b>  | <b>11,029.12</b> | <b>14,055.27</b> | <b>15,307.60</b> |

## Debt, Liabilities, Capital Outlay and Loans

| Particulars                                                           | As at the end of |                 |                 |                  |                  |
|-----------------------------------------------------------------------|------------------|-----------------|-----------------|------------------|------------------|
|                                                                       | 1955-56          | 1960-61         | 1965-66         | Revised 1966-67  | Revised 1967-68  |
| 1                                                                     | 2                | 3               | 4               | 5                | 6                |
| (In crores of Rupees)                                                 |                  |                 |                 |                  |                  |
| <b>A—Debt raised in India</b>                                         |                  |                 |                 |                  |                  |
| (a) <i>Permanent Debt—</i>                                            |                  |                 |                 |                  |                  |
| (i) Current Loans .. .. .                                             | 1,508.63         | 2,555.72        | 3,417.28        | 3,552.58         | 3,649.45         |
| (ii) Prize Bonds .. .. .                                              | ..               | 15.63           | 11.35           | 10.35            | 7.55             |
| (iii) 15-Year Annuity Certificates .. .. .                            | 0.96             | 3.45            | 3.78            | 3.68             | 3.56             |
| (iv) Loans in course of repayment .. .. .                             | 12.22            | 22.73           | 33.72           | 42.78            | 42.18            |
| <b>TOTAL—PERMANENT DEBT</b> .. .. .                                   | <b>1,521.81</b>  | <b>2,597.53</b> | <b>3,465.13</b> | <b>3,609.39</b>  | <b>3,702.74</b>  |
| (b) <i>Floating Debt—</i>                                             |                  |                 |                 |                  |                  |
| (i) Treasury Bills .. .. .                                            | 595.25           | 1,106.29        | 1,611.82        | 1,918.82         | 1,908.82         |
| (ii) Special Floating Loans .. .. .                                   | 212.00           | 274.18          | 340.70          | 689.29           | 681.78           |
| (iii) Treasury Deposit Receipts and other floating loans .. .. .      | ..               | ..              | ..              | ..               | ..               |
| <b>TOTAL—FLOATING DEBT</b> .. .. .                                    | <b>807.25</b>    | <b>1,380.47</b> | <b>1,952.52</b> | <b>2,608.11</b>  | <b>2,590.60</b>  |
| <b>TOTAL A—DEBT RAISED IN INDIA</b> .. .. .                           | <b>2,329.06</b>  | <b>3,978.00</b> | <b>5,417.65</b> | <b>6,217.50</b>  | <b>6,293.34</b>  |
| <b>B—Debt raised outside India</b>                                    |                  |                 |                 |                  |                  |
| (i) Defence Certificates .. .. .                                      | ..               | ..              | ..              | ..               | ..               |
| (ii) England—                                                         |                  |                 |                 |                  |                  |
| India Stocks, Rly. Debentures and Rly. Annuities .. .. .              | 2.61             | 0.12            | 0.04            | 0.06             | 0.06             |
| U.K. Govt. loans .. .. .                                              | ..               | 108.52          | 265.41          | 481.72           | 519.17           |
| Lazard Bros. & Co. Ltd. .. .. .                                       | ..               | 15.33           | ..              | ..               | ..               |
| (iii) U.S.A.—                                                         |                  |                 |                 |                  |                  |
| Loans from U.S.A. .. .. .                                             | 91.72            | 210.64          | 749.53          | 1,415.06         | 1,552.09         |
| U.S. Export-Import Bank .. .. .                                       | ..               | 25.41           | 101.30          | 153.24           | 147.55           |
| P.L. 480 .. .. .                                                      | ..               | 77.88           | 528.36          | 877.00           | 1,008.30         |
| (iv) U.S.S.R. .. .. .                                                 | ..               | 57.48           | 245.47          | 364.90           | 367.76           |
| (v) Canada .. .. .                                                    | ..               | 14.07           | 17.06           | 38.12            | 53.49            |
| (vi) Federal Republic of Germany .. .. .                              | ..               | 103.19          | 206.25          | 345.61           | 349.22           |
| (vii) Japan .. .. .                                                   | ..               | 9.38            | 62.29           | 122.09           | 140.44           |
| (viii) Switzerland .. .. .                                            | ..               | ..              | 5.70            | 21.45            | 27.55            |
| (ix) Czechoslovakia .. .. .                                           | ..               | ..              | 9.06            | 24.65            | 43.63            |
| (x) Yugoslavia .. .. .                                                | ..               | ..              | 7.02            | 12.00            | 19.74            |
| (xi) Poland .. .. .                                                   | ..               | ..              | 4.40            | 10.65            | 13.61            |
| (xii) Austria .. .. .                                                 | ..               | ..              | 2.98            | 7.29             | 8.78             |
| (xiii) Netherlands .. .. .                                            | ..               | ..              | 7.56            | 18.30            | 19.82            |
| <b>Subtotal</b> .. .. .                                               | ..               | ..              | ..              | 6,775            | 8,116            |
| (xiv) Northern Rhodesia .. .. .                                       | ..               | ..              | ..              | ..               | ..               |
| (xv) New Zealand .. .. .                                              | ..               | ..              | ..              | ..               | ..               |
| <b>Subtotal</b> .. .. .                                               | ..               | ..              | ..              | 1,000            | 1,000            |
| (xvi) Kuwait .. .. .                                                  | ..               | ..              | 10.20           | 25.31            | 26.54            |
| <b>Subtotal</b> .. .. .                                               | ..               | ..              | ..              | ..               | ..               |
| (xvii) Bahrain .. .. .                                                | ..               | ..              | 7.86            | 7.43             | 6.50             |
| (xviii) International Bank for Reconstruction and Development .. .. . | 19.20            | 140.11          | 119.57          | 274.00           | 270.75           |
| (xix) International Development Association .. .. .                   | ..               | ..              | 171.00          | 416.05           | 407.11           |
| (xx) Miscellaneous .. .. .                                            | ..               | ..              | ..              | ..               | ..               |
| <b>TOTAL B—DEBT RAISED OUTSIDE INDIA</b> .. .. .                      | <b>119.63</b>    | <b>700.96</b>   | <b>2,560.62</b> | <b>4,623.55</b>  | <b>5,137.15</b>  |
| <b>TOTAL—PUBLIC DEBT*</b> .. .. .                                     | <b>2,448.69</b>  | <b>4,738.96</b> | <b>8,000.27</b> | <b>10,841.05</b> | <b>11,726.51</b> |

\* Excludes a sum of Rs. 26.00 crores (21,400,000) representing unexpired liability for British Government 8 per cent War Loan 1929-47, the liability for which remains suspended.

\*\* The outstanding foreign loans (other than P.L. 480 loans) have been worked out after writing up the balances as on 1.4.1968 by 12.5 per cent consequent on the change in the par value of the rupee.



# LATE PARTICULARS

1099

Debt, Liabilities, Capital Outlay And Loans—(Contd.)

As at the end of

| Particulars                                                                              | 1955-56  | 1956-57  | 1957-58   | Revised<br>1957-58 | Revised<br>1957-58 |
|------------------------------------------------------------------------------------------|----------|----------|-----------|--------------------|--------------------|
| 1                                                                                        | 2        | 3        | 4         | 5                  | 6                  |
| (In Crores of Rupees)                                                                    |          |          |           |                    |                    |
| <b>I.—PUBLIC DEBT</b> .. .. .                                                            | 2,442.35 | 4,728.96 | 8,009.27  | 10,841.05          | 11,726.31          |
| <b>I.—SMALL SAVINGS SCHEMES—</b>                                                         |          |          |           |                    |                    |
| (a) Post Office Savings Bank Deposits .. .. .                                            | 223.02   | 421.05   | 644.75    | 704.75             | 771.75             |
| (b) Post Office Certificates .. .. .                                                     | 239.28   | 459.43   | 732.59    | 779.60             | 822.70             |
| (c) Commission Time Deposits .. .. .                                                     | ..       | 2.64     | 54.47     | 54.47              | 54.47              |
| (d) Treasury Savings Deposit and Indenture Deposit Certificates .. .. .                  | 41.40    | 76.75    | 124.27    | 127.99             | 131.99             |
| (e) Other Small Savings Certificates .. .. .                                             | 9.43     | 9.12     | ..        | ..                 | ..                 |
| <b>TOTAL I—SMALL SAVINGS SCHEMES</b> .. .. .                                             | 574.81   | 966.93   | 1,533.21  | 1,662.31           | 1,780.41           |
| <b>II.—OTHER UNFUNDED DEBT—</b>                                                          |          |          |           |                    |                    |
| (a) Provident Funds .. .. .                                                              | 105.57   | 289.14   | 527.02    | 575.22             | 633.29             |
| (b) P. L. 400 Deposits .. .. .                                                           | ..       | 249.41   | 541.45    | 594.74             | 646.74             |
| (c) Deposits under Compulsory Deposits Scheme .. .. .                                    | ..       | ..       | 39.13     | 39.13              | 39.13              |
| (d) Income-tax Annuity Deposits .. .. .                                                  | ..       | ..       | 77.45     | 94.31              | 121.41             |
| (e) Other Items .. .. .                                                                  | 17.41    | 21.82    | 25.36     | 26.60              | 27.87              |
| <b>TOTAL II—OTHER UNFUNDED DEBT</b> .. .. .                                              | 182.98   | 551.37   | 1,221.50  | 1,268.29           | 1,481.13           |
| <b>III.—RESERVE FUNDS AND DEPOSITS—</b>                                                  |          |          |           |                    |                    |
| (a) Bearing Interest—                                                                    |          |          |           |                    |                    |
| (i) Reserve Funds .. .. .                                                                | 174.23   | 116.61   | 249.64    | 225.03             | 256.46             |
| (ii) Other Deposit Accounts .. .. .                                                      | 14.58    | 26.18    | 25.39     | 5.72               | 3.16               |
| (b) Not bearing Interest—                                                                |          |          |           |                    |                    |
| (i) Deposits of Local Funds .. .. .                                                      | 2.17     | 3.42     | ..        | ..                 | ..                 |
| (ii) C.I.D. Deposits .. .. .                                                             | 56.25    | 57.09    | 112.90    | 152.71             | 159.46             |
| (iii) Other Deposits .. .. .                                                             | 43.17    | 21.99    | 36.43     | 36.43              | 36.43              |
| (iv) Emergency Reserve (Goods & Factories), Insurance Funds .. .. .                      | ..       | ..       | 42.36     | 45.34              | 48.34              |
| (v) Other Insurance Fund .. .. .                                                         | ..       | ..       | ..        | 1.48               | 1.86               |
| (vi) Other Accounts .. .. .                                                              | 19.25    | 9.13     | 47.56     | 46.22              | 50.67              |
| <b>TOTAL III—RESERVE FUNDS AND DEPOSITS</b> .. .. .                                      | 366.96   | 286.92   | 549.95    | 546.92             | 606.75             |
| <b>TOTAL—LIABILITIES</b> .. .. .                                                         | 3,511.07 | 6,544.24 | 11,329.12 | 14,355.27          | 15,697.60          |
| Amount due from Pakistan on account of her share of pre-partition debt (approx.) .. .. . | - 300.00 | - 300.00 | - 300.00  | - 300.00           | - 300.00           |
| <b>Net—Liabilities of the Central Government</b> .. .. .                                 | 3,211.07 | 6,244.24 | 11,029.12 | 14,055.27          | 15,397.60          |
| <b>Excess of Capital Outlays and Loans over Liabilities</b> .. .. .                      | ..       | ..       | 935.11    | ..                 | 155.58             |
|                                                                                          | 3,211.07 | 6,244.24 | 11,964.23 | 14,055.27          | 15,553.18          |
| <b>A.—CAPITAL OUTLAY—</b>                                                                |          |          |           |                    |                    |
| <b>I.—OUTLAY ON DEPARTMENTAL UNDERTAKINGS—</b>                                           |          |          |           |                    |                    |
| Railways .. .. .                                                                         | 259.57   | 1,509.57 | 2,272.42  | 2,547.15           | 3,006.90           |
| Posts and Telegraphs .. .. .                                                             | 80.28    | 129.80   | 284.96    | 282.58             | 321.26             |
| Overseas Communications Service .. .. .                                                  | 1.35     | 2.40     | 3.88      | 4.34               | 5.51               |
| Mints .. .. .                                                                            | 3.89     | 5.13     | 4.44      | 4.65               | 5.85               |
| Road and Water Transport Schemes .. .. .                                                 | 0.06     | 1.23     | ..        | ..                 | ..                 |
| Electricity Schemes .. .. .                                                              | 0.43     | 2.68     | 1.05      | 1.62               | 5.93               |
| Irrigation .. .. .                                                                       | 1.19     | 1.37     | 3.24      | 4.00               | 5.00               |
| Security Printing Press .. .. .                                                          | 0.73     | 0.81     | 1.43      | 1.57               | 1.80               |
| Atomic Energy Development .. .. .                                                        | 0.56     | 15.34    | 63.65     | 125.13             | 170.46             |
| Undertakings of Industrial and Economic Development .. .. .                              | 7.74     | 1.91     | 5.28      | 7.12               | 12.23              |
| Kolar Gold Mines .. .. .                                                                 | ..       | ..       | 4.42      | 4.62               | 5.37               |
| <b>TOTAL I—OUTLAY ON DEPARTMENTAL UNDERTAKINGS</b> .. .. .                               | 1,054.30 | 1,689.43 | 3,029.96  | 3,194.44           | 3,681.22           |
| <b>II.—INVESTMENTS IN AUTONOMOUS CORPORATIONS — COMPANIES, ETC.—</b>                     |          |          |           |                    |                    |
| (a) Government Companies and Corporations—                                               |          |          |           |                    |                    |
| Damodar Valley Corporation .. .. .                                                       | 22.46    | 36.47    | 57.51     | 66.15              | 81.94              |
| Air Corporations .. .. .                                                                 | 12.24    | 35.40    | 49.78     | 49.78              | 49.78              |
| Shipping Corporation .. .. .                                                             | 4.55     | 29.48    | 29.48     | 29.48              | 29.48              |
| Heavy Electricals Co. Ltd. .. .. .                                                       | ..       | ..       | ..        | ..                 | ..                 |
| Hindustan Steel .. .. .                                                                  | 0.34     | 300.00   | 50.00     | 50.00              | 50.00              |
| Bokaro Steel .. .. .                                                                     | ..       | ..       | 19.50     | 37.90              | 107.90             |
| Oil and Natural Gas Commission .. .. .                                                   | ..       | 17.10    | 104.12    | 112.50             | 113.96             |
| Hindustan Antibiotics .. .. .                                                            | 1.14     | 2.18     | 2.90      | 2.08               | 2.06               |
| Indian Telephone Industries .. .. .                                                      | 2.90     | 3.50     | 3.50      | 3.50               | 3.90               |
| Hindustan Machine Tools .. .. .                                                          | 2.90     | 4.10     | 19.79     | 11.20              | 11.20              |
| Heavy Engineering Corporation .. .. .                                                    | ..       | 0.05     | 88.85     | 85.75              | 85.75              |



## Debts, Liabilities, Capital Outlay And Loans—(Contd.)

As at the end of

| Particulars                                                    | 1955-56       | 1960-61       | 1965-66         | Revised<br>1966-67 | Budget<br>1967-68 |
|----------------------------------------------------------------|---------------|---------------|-----------------|--------------------|-------------------|
| 1                                                              | 2             | 3             | 4               | 5                  | 6                 |
| (In Crores of Rupees)                                          |               |               |                 |                    |                   |
| National Coal Development Corporation .. .. .                  | ..            | 26.98         | 61.06           | 75.07              | 85.92             |
| Neyveli Lignite Corporation .. .. .                            | ..            | 48.29         | 70.42           | 79.42              | 79.42             |
| Hindustan Shipyard .. .. .                                     | 3.15          | 4.70          | 5.97            | 6.24               | 6.99              |
| Indian Oil Corporation .. .. .                                 | ..            | 6.90          | 65.29           | 69.69              | 69.69             |
| National Instruments Ltd. .. .. .                              | ..            | ..            | 1.37            | 1.97               | 2.24              |
| Hindustan Salt Company .. .. .                                 | ..            | ..            | 1.79            | 1.79               | 1.79              |
| Hindustan Insecticides Ltd. .. .. .                            | ..            | ..            | .94             | .94                | .94               |
| Cochin Refineries Ltd. .. .. .                                 | ..            | ..            | 3.67            | 3.70               | 3.70              |
| Pyrites and Chemicals Development Company .. .. .              | ..            | ..            | 1.15            | 2.55               | 5.40              |
| Instrumentation Ltd. .. .. .                                   | ..            | ..            | 2.58            | 3.28               | 3.53              |
| Hindustan Organic Chemicals Ltd. .. .. .                       | ..            | ..            | 2.21            | 3.21               | 7.21              |
| National Newsprint Paper Mills Ltd. .. .. .                    | ..            | ..            | 2.50            | 2.50               | 2.50              |
| Moghul Lines Ltd. .. .. .                                      | ..            | ..            | 2.95            | 2.95               | 2.95              |
| Indian Rare Earths Ltd. .. .. .                                | ..            | ..            | 1.00            | 1.00               | 1.00              |
| Rehabilitation Industries Corporation .. .. .                  | ..            | ..            | 2.20            | 2.27               | 2.62              |
| Fertilizers and Chemicals Travancore Ltd. .. .. .              | ..            | ..            | 3.50            | 3.50               | 3.50              |
| Hindustan Teleprinters .. .. .                                 | ..            | ..            | .82             | .82                | 1.00              |
| National Buildings Construction Corporation .. .. .            | ..            | ..            | 1.35            | 1.35               | 1.35              |
| Hindustan Photo Film Manufacturing Company .. .. .             | ..            | ..            | 4.70            | 4.70               | 5.35              |
| Cement Corporation .. .. .                                     | ..            | ..            | .47             | 1.90               | 5.43              |
| Bharat Heavy Electricals Ltd. .. .. .                          | ..            | ..            | 46.61           | 61.69              | 65.00             |
| Madras Refineries .. .. .                                      | ..            | ..            | .35             | 6.26               | 8.26              |
| Central Warehousing Corporation .. .. .                        | ..            | ..            | 1.00            | 1.39               | 1.79              |
| Fertilizer Corporation of India .. .. .                        | 17.04         | 39.64         | 51.50           | 57.90              | 64.60             |
| Ashoka Hotel .. .. .                                           | 0.26          | 1.34          | 1.34            | 1.34               | 2.34              |
| Indian Drugs and Pharmaceuticals Ltd. .. .. .                  | ..            | ..            | 21.50           | 21.50              | 21.50             |
| Food Corporation of India .. .. .                              | ..            | ..            | 9.00            | 14.37              | 21.37             |
| Hindustan Cables .. .. .                                       | 1.06          | 1.06          | 1.79            | 2.79               | 4.22              |
| Maharashtra Fisheries Corporation .. .. .                      | ..            | ..            | ..              | ..                 | .40               |
| Machine Tool Corporation of India Ltd. .. .. .                 | ..            | ..            | ..              | .05                | 1.11              |
| Bharat Heavy Plates & Vessels .. .. .                          | ..            | ..            | ..              | .24                | 3.78              |
| Central Inland Water Transport Corporation .. .. .             | ..            | ..            | ..              | .50                | 1.35              |
| National Small Industries Corporation .. .. .                  | ..            | ..            | .50             | .50                | .50               |
| Singareni Collieries .. .. .                                   | ..            | 1.20          | 2.24            | 2.24               | 2.24              |
| National Mineral Development Corporation .. .. .               | ..            | 1.63          | 10.47           | 16.22              | 25.32             |
| National Projects Construction Corporation .. .. .             | ..            | ..            | 1.00            | 1.00               | 1.00              |
| State Trading Corporation .. .. .                              | ..            | 2.00          | 2.00            | 2.00               | 2.00              |
| Minerals and Metals Trading Corporation .. .. .                | ..            | ..            | 2.00            | 3.00               | 3.00              |
| National Seeds Corporation .. .. .                             | ..            | ..            | .16             | .50                | 1.00              |
| State Agro-industries Corporation .. .. .                      | ..            | ..            | .25             | 1.25               | 6.25              |
| Central Fisheries Corporation .. .. .                          | ..            | ..            | .15             | .31                | .31               |
| Hindustan Latex Ltd. .. .. .                                   | ..            | ..            | ..              | .15                | .50               |
| Mining and Allied Machinery Corporation .. .. .                | ..            | ..            | 1.12            | 19.74              | 19.99             |
| Tungabhadra Steel Ltd. .. .. .                                 | ..            | ..            | ..              | .51                | .51               |
| Triveni Structurals Ltd. .. .. .                               | ..            | ..            | .05             | .84                | 1.02              |
| Mysore Iron and Steel .. .. .                                  | ..            | ..            | ..              | 1.97               | 2.97              |
| Bharat Aluminium Ltd. .. .. .                                  | ..            | ..            | .09             | .79                | 6.79              |
| Hindustan Zinc Ltd. .. .. .                                    | ..            | ..            | 1.38            | 4.66               | 5.61              |
| Central Road Transport Corporation .. .. .                     | ..            | ..            | .25             | .29                | .29               |
| Other Government Companies and Corporations .. .. .            | 1.88          | 7.78          | 1.98            | 2.76               | 9.81              |
| <b>TOTAL (a)—Government Companies and Corporations .. .. .</b> | <b>69.81</b>  | <b>591.83</b> | <b>1,340.70</b> | <b>1,459.15</b>    | <b>1,618.65</b>   |
| <b>(b) Financial Institutions—</b>                             |               |               |                 |                    |                   |
| Reserve Bank of India .. .. .                                  | 11.12         | 11.12         | 5.93            | 5.93               | 5.93              |
| International Monetary Fund .. .. .                            | 201.00        | 296.28        | 353.18          | 527.05             | 527.05            |
| International Bank for Reconstruction and Development .. .. .  | 36.93         | 36.93         | 36.93           | 56.73              | 56.73             |
| International Development Association .. .. .                  | ..            | 4.42          | 19.22           | 29.16              | 29.16             |
| Life Insurance Corporation .. .. .                             | ..            | 5.00          | 5.00            | 5.00               | 5.00              |
| Industrial Finance Corporation .. .. .                         | 1.00          | 1.00          | ..              | ..                 | ..                |
| Asian Development Bank .. .. .                                 | ..            | ..            | ..              | 6.08               | 19.08             |
| International Finance Corporation .. .. .                      | ..            | 2.11          | 2.11            | 2.11               | 2.11              |
| Export Credit and Guarantee Corporation .. .. .                | ..            | 0.50          | .50             | .50                | .50               |
| Film Finance Corporation .. .. .                               | ..            | 0.20          | .50             | .50                | .50               |
| Other Institutions .. .. .                                     | 0.09          | 0.39          | .86             | .86                | 1.06              |
| <b>TOTAL (b) —Financial Institutions .. .. .</b>               | <b>250.14</b> | <b>357.95</b> | <b>424.23</b>   | <b>634.82</b>      | <b>642.00</b>     |



## Debts, Liabilities, Capital Outlay And Loans—(Contd.)

As at the end of

| Particulars                                                                          | 1955-56         | 1960-61         | 1965-66          | Revised<br>1966-67 | Budget<br>1967-68 |
|--------------------------------------------------------------------------------------|-----------------|-----------------|------------------|--------------------|-------------------|
| 1                                                                                    | 2               | 3               | 4                | 5                  | 6                 |
| (In Crores of Rupees)                                                                |                 |                 |                  |                    |                   |
| (c) Other Companies, Corporations, etc.—                                             |                 |                 |                  |                    |                   |
| Bolani Ores Ltd. .. .. .                                                             | ..              | 0.25            | .51              | .51                | .51               |
| Oil India Ltd. .. .. .                                                               | ..              | 8.00            | 26.50            | 26.50              | 26.50             |
| Sindhu Resettlement Corporation .. .. .                                              | .25             | .50             | .50              | .50                | .50               |
| Machinery Manufacturing Corporation .. .. .                                          | .25             | .25             | .28              | .31                | .3                |
| Sikkim Mining Corporation .. .. .                                                    | ..              | .07             | .25              | .25                | .25               |
| Indian Explosives Ltd. .. .. .                                                       | .10             | .60             | .60              | .60                | .60               |
| Manganese Ore (India) Ltd. .. .. .                                                   | ..              | ..              | .37              | .37                | .37               |
| British India Corporation .. .. .                                                    | ..              | ..              | 1.06             | 1.06               | 1.06              |
| Lube-India Ltd. .. .. .                                                              | ..              | ..              | ..               | .42                | 1.72              |
| Other Companies .. .. .                                                              | 20              | .20             | 2.82             | 2.82               | 2.86              |
| <b>TOTAL (C)—Other Companies Etc. .. .. .</b>                                        | <b>.80</b>      | <b>9.97</b>     | <b>32.89</b>     | <b>33.34</b>       | <b>34.69</b>      |
| <b>TOTAL II—INVESTMENTS IN AUTONOMOUS CORPORATIONS,<br/>COMPANIES ETC. .. .. .</b>   | <b>320.75</b>   | <b>959.75</b>   | <b>1,797.82</b>  | <b>2,127.31</b>    | <b>2,295.34</b>   |
| III.—OTHER CAPITAL OUTLAY—                                                           |                 |                 |                  |                    |                   |
| Defence Services .. .. .                                                             | 314.43          | 454.34          | 874.13           | 939.09             | 1,112.97          |
| Agricultural Improvement .. .. .                                                     | 1.22            | 18.05           | 31.64            | 32.80              | 39.51             |
| Broadcasting .. .. .                                                                 | 3.31            | 7.20            | 13.55            | 15.03              | 17.31             |
| Public Works (Including Roads) .. .. .                                               | 83.19           | 180.37          | 424.96           | 476.82             | 518.55            |
| Delhi Capital Outlay .. .. .                                                         | 35.79           | 62.40           | 106.95           | 113.97             | 122.01            |
| Dandakaranya Development .. .. .                                                     | ..              | 7.23            | 26.90            | 30.38              | 33.88             |
| Currency and Coinage .. .. .                                                         | .25             | 9.05            | 35.19            | 44.69              | 56.69             |
| Aviation .. .. .                                                                     | 14.04           | 28.63           | 45.15            | 49.82              | 54.80             |
| Government Trading Schemes—                                                          |                 |                 |                  |                    |                   |
| (i) Purchase of Foodgrains .. .. .                                                   | 18.63           | 137.21          | 89.73            | 232.65             | 314.37            |
| (ii) Other Schemes .. .. .                                                           | —13.11          | —15.12          | 19.54            | 48.24              | 104.85            |
| Ports .. .. .                                                                        | 14.07           | 24.89           | 43.01            | 48.78              | 53.69             |
| Miscellaneous Schemes of Industrial and Economic Development..                       | 5.14            | 20.63           | 39.19            | 45.58              | 45.95             |
| Other Items .. .. .                                                                  | 4.20            | 12.95           | 46.00            | 67.36              | 93.73             |
| <b>TOTAL III—OTHER CAPITAL OUTLAY .. .. .</b>                                        | <b>481.16</b>   | <b>947.83</b>   | <b>1,756.86</b>  | <b>2,195.21</b>    | <b>2,568.31</b>   |
| <b>Total—Capital Outlay .. .. .</b>                                                  | <b>1,866.21</b> | <b>3,590.21</b> | <b>6,584.66</b>  | <b>7,616.18</b>    | <b>8,395.8</b>    |
| B.—LOANS ADVANCED BY THE CENTRAL GOVERNMENT                                          |                 |                 |                  |                    |                   |
| State Governments .. .. .                                                            | 819.39          | 1,909.63        | 3,970.57         | 4,600.42           | 4,976.54          |
| Union Territory Governments .. .. .                                                  | 13.36*          | ..              | 40.61            | 56.62              | 76.75             |
| Foreign Governments, etc. .. .. .                                                    | .11             | 29.17           | 27.65            | 41.32              | 54.81             |
| Government Servants .. .. .                                                          | 4.15            | 5.32            | 11.63            | 14.45              | 16.46             |
| Other Parties .. .. .                                                                | 105.83          | 590.36          | 1,329.11         | 1,696.10           | 1,972.75          |
| <b>Total B—Loans Advanced .. .. .</b>                                                | <b>942.89</b>   | <b>2,534.48</b> | <b>5,379.57</b>  | <b>6,408.91</b>    | <b>7,097.31</b>   |
| <b>Total—Capital Outlay and Loans Advanced by the Central<br/>Government .. .. .</b> | <b>2,809.10</b> | <b>6,124.69</b> | <b>11,964.23</b> | <b>14,025.09</b>   | <b>15,493.18</b>  |
| <b>Excess of Liabilities over Capital Outlay and Loans advanced ..</b>               | <b>401.97</b>   | <b>119.55</b>   | <b>..</b>        | <b>30.18</b>       | <b>..</b>         |
|                                                                                      | <b>3,211.07</b> | <b>6,244.24</b> | <b>11,964.23</b> | <b>14,055.27</b>   | <b>15,493.18</b>  |

\* Erstwhile Part "C" States.

## TRANSFER OF RESOURCES TO THE STATES

The following statement shows the resources transferred from the Centre to the States.

(In lakhs of Rupees)

| Purpose                                      | 1st Five<br>Year Plan<br>Actuals | 2nd Five<br>Year Plan<br>Actuals | 3rd Five<br>Year Plan<br>Actuals | 4th Five Year Plan |                   |
|----------------------------------------------|----------------------------------|----------------------------------|----------------------------------|--------------------|-------------------|
|                                              |                                  |                                  |                                  | Revised<br>1966-67 | Budget<br>1967-68 |
| 1. Taxes and Duties                          |                                  |                                  |                                  |                    |                   |
| (a) Income-tax .. .. .                       | 2,78.24                          | 3,74.67                          | 5,55.52                          | 1,37.10            | 1,31.58           |
| (b) Union Excise Duties :                    |                                  |                                  |                                  |                    |                   |
| (i) Basic Duties .. .. .                     | 46.06                            | 1,52.96                          | 3,98.87                          | 1,84.40            | 1,95.80           |
| (ii) Additional Duties .. .. .               | ..                               | 1,28.27                          | 2,15.94                          | 46.51              | 35.77             |
| (c) Taxes on Railway Passenger Fares .. .. . | ..                               | 42.56                            | ..                               | ..                 | ..                |
| (d) Estate Duty .. .. .                      | 2.44                             | 12.67                            | 25.55                            | 4.54               | 6.94              |
| <b>Total Part I .. .. .</b>                  | <b>3,26.74</b>                   | <b>7,11.13</b>                   | <b>11,95.88</b>                  | <b>3,72.55</b>     | <b>3,70.09</b>    |
| 2. Grants met from Revenue .. .. .           | 2,48.01                          | 6,67.93                          | 11,51.45                         | 3,56.38            | 3,94.60           |
| 3. Grants from Central Road Fund .. .. .     | 15.93                            | 18.96                            | 12.40                            | 5.67               | 3.42              |
| 4. Grants met from Capital .. .. .           | 23.76                            | 59.06                            | 1,39.22                          | 57.44              | 45.04             |
| 5. Loans .. .. .                             | 7,98.53                          | 14,10.84                         | 31,01.34                         | 9,16.15            | 7,28.78           |
| <b>GRAND TOTAL .. .. .</b>                   | <b>14,12.97</b>                  | <b>28,67.92</b>                  | <b>56,10.39</b>                  | <b>17,08.19</b>    | <b>15,41.93</b>   |

NOTE.—In the actuals for the Third Five Year Plan the figures for 1965-66 added to the figures for the other four years of the Plan, are provisional.



## UNION EXCISE DUTIES

Following is a summary of revenue from Union Excise Duties.

|                                                                   | Actuals<br>1965-66 | Revised<br>1966-67 | Budget<br>1967-68 |
|-------------------------------------------------------------------|--------------------|--------------------|-------------------|
| (In lakhs of Rupees)                                              |                    |                    |                   |
| Food and Beverages .. .. .                                        | 89,39              | 1,29,21            | 1,24,50           |
| Tobacco .. .. .                                                   | 1,09,13            | 1,26,71            | 1,29,00           |
| Petroleum products .. .. .                                        | 2,78,11            | 3,21,70            | 3,74,55           |
| Vegetable Oils and Fats .. .. .                                   | 8,55               | 7,55               | 8,30              |
| Chemicals .. .. .                                                 | 31,93              | 36,42              | 42,11             |
| Metals .. .. .                                                    | 86,22              | 87,74              | 96,64             |
| Manufactured goods .. .. .                                        | 2,42,05            | 2,56,93            | 2,71,22           |
| Machinery and Transport equipment .. .. .                         | 42,54              | 46,44              | 50,97             |
| Cesses on various commodities .. .. .                             | 17,24(a)           | 23,86              | 24,89             |
| Miscellaneous .. .. .                                             | 2,20               | 65                 | 70                |
| Total—Gross Revenue from all duties of excise .. .. .             | 9,07,36            | 10,37,21           | 11,22,88          |
| Deduct—Refunds and drawbacks .. .. .                              | — 9,44             | — 7,00             | — 7,00            |
| TOTAL—NET REVENUE FROM ALL DUTIES .. .. .                         | 8,97,92            | 10,30,21           | 11,15,88          |
| Break-up of the above :                                           |                    |                    |                   |
| (i) Basic excise duties (net) .. .. .                             | 7,87,52            | 9,26,43            | 10,07,95          |
| (ii) Special excise duties (net) .. .. .                          | 58,14              | 54,01              | 57,37             |
| (iii) Additional excise duties in lieu of sales tax (net) .. .. . | 46,93              | 48,42              | 50,56             |
| (iv) Regulatory duties (net) .. .. .                              | 5,33               | 1,35               | ..                |

(a) Excludes revenue from handloom cesses which is included under manufactured goods.

## TAX PAYABLE BY A MARRIED INDIVIDUAL WITH MORE THAN ONE CHILD

| Income before<br>deduction of<br>Annuity Deposit | Annuity Deposit<br>1967-68 | Total income<br>1967-68 | Amount of Tax on                    |                        |                                       |                        |
|--------------------------------------------------|----------------------------|-------------------------|-------------------------------------|------------------------|---------------------------------------|------------------------|
|                                                  |                            |                         | Wholly earned<br>income†<br>1967-68 | Percentage‡<br>1967-68 | Wholly unearned<br>income†<br>1967-68 | Percentage‡<br>1967-68 |
| Rs.                                              | Rs.                        | Rs.                     | Rs.                                 |                        | Rs.                                   |                        |
| 4,000                                            | ..                         | 4,000                   | ..                                  | ..                     | ..                                    | ..                     |
| 5,000                                            | ..                         | 5,000                   | 11                                  | 0.22                   | 11                                    | 2.01                   |
| 6,000                                            | ..                         | 6,000                   | 121                                 | 2.01                   | 121                                   | 2.01                   |
| 7,000                                            | ..                         | 7,000                   | 231                                 | 3.30                   | 231                                   | 3.30                   |
| 8,000                                            | ..                         | 8,000                   | 341                                 | 4.26                   | 341                                   | 4.26                   |
| 9,000                                            | ..                         | 9,000                   | 451                                 | 5.01                   | 451                                   | 5.01                   |
| 10,000                                           | ..                         | 10,000                  | 561                                 | 5.61                   | 561                                   | 5.61                   |
| 12,000                                           | ..                         | 12,000                  | 891                                 | 7.42                   | 891                                   | 7.42                   |
| 14,000                                           | ..                         | 14,000                  | 1,221                               | 8.72                   | 1,221                                 | 8.72                   |
| 15,000                                           | ..                         | 15,000                  | 1,386                               | 9.24                   | 1,386                                 | 9.24                   |
| 16,000                                           | 500                        | 15,500                  | 1,496                               | 9.35                   | 1,518                                 | 9.49                   |
| 18,000                                           | 900                        | 17,100                  | 1,848                               | 10.27                  | 1,940                                 | 10.78                  |
| 20,000                                           | 1,000                      | 19,000                  | 2,266                               | 11.33                  | 2,442                                 | 12.21                  |
| 24,000                                           | 1,800                      | 22,200                  | 3,212                               | 13.38                  | 3,577                                 | 14.90                  |
| 25,000                                           | 1,800                      | 22,200                  | 3,212                               | 13.38                  | 3,577                                 | 14.90                  |
| 25,000                                           | 1,880                      | 23,120                  | 3,516                               | 14.06                  | 3,942                                 | 15.76                  |
| 30,000                                           | 2,250                      | 27,750                  | 5,346                               | 17.82                  | 6,138                                 | 20.46                  |
| 36,000                                           | 2,700                      | 33,300                  | 8,151                               | 22.64                  | 9,504                                 | 26.40                  |
| 42,000                                           | 4,000                      | 38,000                  | 10,736                              | 25.56                  | 12,606                                | 30.02                  |
| 48,000                                           | 4,800                      | 43,200                  | 13,596                              | 28.32                  | 16,038                                | 33.41                  |
| 60,000                                           | 6,000                      | 54,000                  | 19,976                              | 33.20                  | 23,826                                | 39.71                  |
| 72,000                                           | 8,000                      | 64,000                  | 26,576                              | 36.91                  | 32,076                                | 44.55                  |
| 90,000                                           | 11,250                     | 78,750                  | 36,792                              | 40.88                  | 44,846                                | 49.83                  |
| 1,00,000                                         | 12,500                     | 87,500                  | 43,049                              | 43.05                  | 52,667                                | 52.67                  |
| 5,00,000                                         | 62,500                     | 4,37,500                | 2,18,770                            | 63.75                  | 3,65,479                              | 73.09                  |
| 10,00,000                                        | 1,25,000                   | 8,75,000                | 3,78,505                            | 67.85                  | 7,56,495                              | 75.65                  |

† The amount shown in this column, in respect of income levels over Rs. 15,000, represents the tax payable on the income after deduction of annuity deposit. ‡ The figure shown in this Column in respect of income levels over Rs. 15,000, represents the percentage with reference to the income before deduction of annuity deposit.



# BUDGETARY POSITION OF STATES 1965-66 TO 1967-68

(Figures are in Rs. Crores)

1965-66 (Accounts)

| States                       | Revenue Account |             |                                  | Capital Account |              | Overall<br>Surplus (+)<br>or<br>Deficit (-) |
|------------------------------|-----------------|-------------|----------------------------------|-----------------|--------------|---------------------------------------------|
|                              | Revenue         | Expenditure | Surplus (+)<br>or<br>Deficit (-) | Receipts*       | Expenditure@ |                                             |
| 1. Andhra Pradesh .. .. .    | 151.79          | 159.57      | - 7.78                           | 111.37          | 109.76       | + 1.61                                      |
| 2. Assam .. .. .             | 64.61           | 80.45       | - 15.84                          | 20.46           | 18.65        | + 1.81                                      |
| 3. Bihar .. .. .             | 127.88          | 125.21      | + 2.67                           | 79.67           | 78.75        | + 0.92                                      |
| 4. Gujarat .. .. .           | 120.70          | 113.51      | + 7.19                           | 44.71           | 47.79        | - 3.08                                      |
| 5. Haryana .. .. .           | —               | —           | —                                | —               | —            | —                                           |
| 6. Jammu and Kashmir .. .. . | —               | —           | —                                | —               | —            | —                                           |
| 7. Kerala .. .. .            | 82.10           | 81.83       | + 0.27                           | 44.47           | 34.36        | + 10.11                                     |
| 8. Madhya Pradesh .. .. .    | 123.07          | 125.68      | - 2.61                           | 69.58           | 80.60        | - 11.02                                     |
| 9. Madras .. .. .            | 172.80          | 180.66      | - 7.86                           | 82.63           | 75.28        | + 7.35                                      |
| 10. Maharashtra .. .. .      | 227.39          | 241.12      | - 13.73                          | 108.81          | 117.39       | - 8.58                                      |
| 11. Mysore .. .. .           | 120.49          | 125.46      | - 4.97                           | 59.12           | 58.79        | + 0.33                                      |
| 12. Orissa .. .. .           | 80.39           | 91.31       | - 10.92                          | 36.67           | 43.14        | - 6.47                                      |
| 13. Punjab .. .. .           | 139.43          | 124.89      | + 14.54                          | 60.39           | 59.01        | + 1.38                                      |
| 14. Rajasthan .. .. .        | 96.88           | 100.39      | - 3.51                           | 71.34           | 70.88        | + 0.46                                      |
| 15. Uttar Pradesh .. .. .    | 263.97          | 259.68      | + 4.29                           | 147.12          | 136.84       | + 10.28                                     |
| 16. West Bengal .. .. .      | 169.82          | 167.54      | + 2.28                           | 61.74           | 46.67        | + 15.07                                     |
| Total All States .. .. .     | 1,876.71        | 1,896.85    | - 20.14                          | 977.62          | 959.26       | + 18.36                                     |

1966-67 (Revised Estimates) (Figures are in Rs. Crores)

| States                       | Revenue Account |             |                                  | Capital Account |             | Overall<br>Surplus (+)<br>or<br>Deficit (-) |
|------------------------------|-----------------|-------------|----------------------------------|-----------------|-------------|---------------------------------------------|
|                              | Revenue         | Expenditure | Surplus (+)<br>or<br>Deficit (-) | Receipts*       | Expenditure |                                             |
| 1. Andhra Pradesh .. .. .    | 177.43          | 185.84      | - 8.41                           | 59.77           | 87.18       | - 27.41                                     |
| 2. Assam .. .. .             | 83.76           | 87.58       | - 3.82                           | 18.79           | 19.75       | - 0.96                                      |
| 3. Bihar .. .. .             | 135.12          | 138.43      | - 3.31                           | 84.73           | 88.60       | - 3.87                                      |
| 4. Gujarat .. .. .           | 130.23          | 126.45      | + 3.78                           | 40.60           | 40.09       | + 0.51                                      |
| 5. Haryana .. .. .           | —               | —           | —                                | —               | —           | —                                           |
| 6. Jammu and Kashmir .. .. . | —               | —           | —                                | —               | —           | —                                           |
| 7. Kerala .. .. .            | 105.39          | 101.20      | + 4.19                           | 30.67           | 32.58       | - 1.91                                      |
| 8. Madhya Pradesh .. .. .    | 139.77          | 152.22      | - 12.45                          | 34.90           | 45.75       | - 10.85                                     |
| 9. Madras .. .. .            | 192.17          | 199.62      | - 7.45                           | 62.86           | 62.46       | + 0.40                                      |
| 10. Maharashtra .. .. .      | 276.44          | 277.78      | - 1.34                           | 80.66           | 106.09      | - 25.43                                     |
| 11. Mysore .. .. .           | 160.45          | 155.19      | + 5.26                           | 48.87           | 52.80       | - 3.93                                      |
| 12. Orissa .. .. .           | 110.52          | 110.51      | + 0.01                           | 38.13           | 43.66       | - 5.53                                      |
| 13. Punjab .. .. .           | 139.10          | 130.75      | + 8.35                           | 61.18           | 59.83       | + 1.35                                      |
| 14. Rajasthan .. .. .        | 96.73           | 115.77      | - 19.04                          | 58.52           | 58.06       | + 0.46                                      |
| 15. Uttar Pradesh .. .. .    | 298.85          | 298.85      | —                                | 131.46          | 130.55      | + 0.91                                      |
| 16. West Bengal .. .. .      | 188.98          | 197.77      | - 8.79                           | 30.51           | 29.26       | + 1.25                                      |
| Total All States .. .. .     | 2,151.18        | 2,190.38    | - 39.20                          | 762.80          | 836.91      | - 74.05                                     |

\* Capital receipts comprise (1) revenue surplus or deficit, (2) receipts of public debt (net), (3) receipts of loans and advances by the State Government, (4) Unfunded debt, deposits and remittances (net) and (5) opening cash balance.

@ Capital expenditure comprises (1) capital outlay and (2) loans and advances by the State Government.



1957-58 Budget Estimates

Figures are in Rs. Lakhs

| States               | Revenue Account |             |                               | Capital Account |              | Overall<br>Surplus (+) or<br>Deficit (-) |
|----------------------|-----------------|-------------|-------------------------------|-----------------|--------------|------------------------------------------|
|                      | Revenue         | Expenditure | Surplus (+) or<br>Deficit (-) | Revenue*        | Expenditure† |                                          |
| 2. Andhra Pradesh    | 152.32          | 155.15      | - 2.83                        | 14.55           | 45.35        | - 30.80                                  |
| 3. Assam             | 55.34           | 55.15       | + 0.19                        | 17.00           | 21.22        | - 4.22                                   |
| 8. Bihar             | 155.47          | 151.25      | + 4.22                        | 25.21           | 25.55        | - 0.34                                   |
| 4. Gujarat           | 145.71          | 137.24      | + 8.47                        | 22.42           | 43.08        | - 20.66                                  |
| 5. Haryana           | 55.24           | 55.45       | - 0.21                        | 15.55           | 23.55        | - 8.00                                   |
| 6. Jammu and Kashmir | —               | 25.45       | —                             | —               | 15.25        | —                                        |
| 7. Kerala            | 115.52          | 117.52      | - 2.00                        | 22.22           | 22.22        | —                                        |
| 9. Madhya Pradesh    | 155.32          | 152.14      | + 3.18                        | 22.22           | 42.15        | - 19.93                                  |
| 4. Madras            | 224.32          | 211.25      | + 13.07                       | 22.12           | 45.22        | - 23.10                                  |
| 20. Maharashtra      | 225.14          | 222.25      | + 2.89                        | 71.25           | 23.15        | + 48.10                                  |
| 11. Mysore           | 155.22          | 171.21      | - 15.99                       | 47.22           | 52.22        | - 5.00                                   |
| 12. Orissa           | 114.44          | 114.55      | - 0.11                        | 22.21           | 24.21        | - 2.00                                   |
| 13. Punjab           | 95.55           | 95.79       | - 0.24                        | 45.17           | 45.71        | - 0.54                                   |
| 14. Rajasthan        | 111.55          | 127.45      | - 15.90                       | 41.14           | 44.14        | - 3.00                                   |
| 15. Uttar Pradesh    | 315.25          | 311.71      | + 3.54                        | 115.25          | 111.25       | + 4.00                                   |
| 16. West Bengal      | 225.14          | 225.57      | - 0.43                        | 22.24           | 44.74        | - 22.50                                  |
| Total All States     | 2,545.15        | 2,555.24    | - 10.09                       | 635.45          | 755.21       | - 119.76                                 |

## RAILWAYS—(Contd.)

## 1957-58 BUDGET

The following is an account of the Railway Budget as it was presented to the Parliament on May 22, 1957.

Presenting the railway budget to the Parliament on May 22, 1957, the Railway Minister, Mr. C. M. Prasad, announced changes both in passenger fares and freight rates to bring a total increase of Rs. 48 crore in the remaining months of the current financial year. The increase was to take effect from June 15, 1957.

The additional amount of Rs. 14 crore from increase in passenger fares alone was proposed to be paid for the Budget to cover the extra 1,000 million passengers cross-country for the first time ever by rail.

Thus, the maximum fare of one paise for the journey up to ten kilometers has been raised to 15 paise—a 50 per cent increase. The increase justified the increase in the ground that increasing and ease of such fares alone had about 5-74 paise.

The increase is then progressively stepped up to one to three paise for journey between a distance of 10 to 25 km., 4 to five paise for distance of 25 km. to 47 km., and for more and a half per cent of the fares for journey up to 200 km.

A 50 per cent increase of 50 paise was proposed for all journeys beyond one km. by ordinary class.

The maximum fare for journey by mail or express trains has been raised by 100 per cent for journeys up to 1,000 km. At that distance, the increase will work at Rs. 4.75, and this will be the first year of increase for all journeys beyond a distance of 1,000 km.

Thus, the fare for first class from Delhi to Madras, for example, will be Rs. 50.75 from Rs. 33 against Rs. 40.00 now.

The Minister happened to notice the difference between the fare for Madras by ordinary and express or mail train, namely, with a view to increasing passenger traffic, long distance trains for every class journey.

## UPPER CLASSES

In the case of upper classes, Mr. Prasad has proposed a 15 per cent increase in first and second-class fares and a 10 per cent increase in the journey for air-conditioned third-class travel.

The increase in the fare of first class will amount to Rs. 11.25 up to 1,000 km., and this has been subject to the first year of increase for journeys beyond that distance as well.

In the second-class fare, a 10 per cent increase is being made to cover mail or express or mail train and ordinary fares. The mail and express fares will be raised by 15 per cent, as in the case of first class and the fare of Rs. 4.75 raised to 5.50 km. will be subject to the first year of increase beyond that distance as well.

The maximum fare by ordinary train is, however, to be raised by 110 per cent, up to 1 km. and 100 per cent beyond that km. and to 1,000 km., and the fare of Rs. 4.40 will be raised to that amount with the effect, as the first year of increase beyond that distance.

The Minister has also proposed to raise monthly season ticket charges for third class by a percentage of Rs. 1 to the monthly fare and Madras area will also for the first time.

Besides raising passenger fares, Mr. Prasad has increased the reservation charges from 10 paise to Rs. 1 for first class and from 5 paise to 10 paise for second class.

The price of platform tickets has been reduced from 10 to 5 paise.

## FREIGHT RATES

As regards freight rates, Mr. Prasad proposed to increase the supplementary rate in goods freight rates from 10 to 15 per cent. From June 15, 50 per cent of the increase in the rate of freight will be paid for the first year.

In addition, he proposed to make some adjustment in freight rates to cover the distance between and km. as the present freight rate was moving toward the maximum 100 km. and some amount of the cost of 100 km. These amounts would bring another 10 per cent to a full year.

The price for "small" consignments which short of full wagon loads—was also to be raised.



yield an additional revenue of Rs. 2 crores a year. Similarly, the special rates applicable to manganese-ore and iron-ore exports are to be raised as these exports have been enjoying a price advantage after devaluation.

Earlier, the Minister told the Lok Sabha that there might be a reduction of Rs. 17 crores in the estimated gross traffic receipts in the current year as revealed in his interim budget of March. Because of a shortfall in goods traffic, he now estimated the earnings on the basis of the existing freight rates at Rs. 668 crores against Rs. 685 crores assumed in March.

With the proposed increase in fares and freight rates, the gross earnings were expected to total up to Rs. 847 crores in 1967-68. Thus, there would be a net additional earning of Rs. 21 crores, of which it was proposed to appropriate Rs. 6 crores to the depreciation reserve fund, raising the contribution from Rs. 99 crores as shown in the March budget to Rs. 105 crores.

Even this provision, the Minister pointed out, would be Rs. 10 crores less than the contribution of Rs. 115 crores recommended by the railway convention committee for 1967-68.

#### NOMINAL SURPLUS

Taking into account an increase of Rs. 14 crores in ordinary working expenses and a re-

duction of Rs. 24 lakhs in the dividend as estimated in March, Mr. Pannu said, the railways to be left with a surplus of Rs. 1.28 crore at the end of the current financial year.

For this nominal surplus, he said, it would be evident that the revision of fares and freight rates has been kept down to the absolute minimum necessary for avoiding a deficit.

He was, however, conscious of the possibility of wages and prices continuing to rise beyond the present level and of the expected additional traffic failing to materialise. If that happened, the railways would still end the current year with a deficit.

A part from an increase of Rs. 70 lakhs to allow for the increase in steel prices from May 1, the entire increase of Rs. 14 crores over the March budget of working expenses consisted of an ad hoc provision for a possible increase in the dearness allowance after the Gajendraradkar Commission's report on dearness allowance had been considered by the Government.

Though coal prices were revised from April 1, no provision had been made at this stage because the provision in the March budget constituted a cushion, roughly equal to the fuel saved by the shortfall in goods traffic last year.

The increase in fares will be the lowest for third-class passengers by ordinary trains who amount for almost 90 per cent of non-subsidised railway travel, and the highest for the air-conditioned class of accommodation.

Revision of passenger fares is expected to bring about Rs. 16 crores this year, which comes to about eight per cent. of the passenger earnings.

The revision of freight rates is expected to bring in about Rs. 16 crores this year which comes to only 3.7 per cent. of goods earnings at present rates.

The main reason for this increase was that against an anticipated increase of four to five billion tonnes of goods traffic, the actual increase would be barely 2.5 million tonnes. As a consequence a shortfall of Rs. 14 crores was likely in earnings from goods traffic. In the interim budget, these earnings had already been scaled down to Rs. 498 crores from the budget of Rs. 512 crores.

Ordinary working expenses were likely to be Rs. 4.24 crores less and the dividend payable to General Revenue Rs. 24 lakhs less. With interest and other variations, the deficit for 1966-67 was likely to increase by Rs. 9 crores.

#### BUDGET AT A GLANCE

(In crores of rupees)

|                                            | Actuals<br>1966-66 | Approximate<br>1966-67 | Interim<br>Budget<br>1967-68 | Final<br>Budget<br>1967-68 |
|--------------------------------------------|--------------------|------------------------|------------------------------|----------------------------|
| <b>TRAFFIC RECEIPTS :</b>                  |                    |                        |                              |                            |
| Gross Traffic Receipts                     | 732.57             | 770.29                 | 829.00                       | 847.00*                    |
| <b>WORKING EXPENSES :</b>                  |                    |                        |                              |                            |
| Ordinary Working Expenses                  | 465.85             | 531.36                 | 553.21                       | 567.21‡                    |
| Appropriation to Depreciation Reserve Fund | 85.00              | 100.00                 | 99.00                        | 105.00§                    |
| Appropriation to Pension Fund              | 12.00              | 13.50                  | 14.90                        | 14.90                      |
| Payments to Worked Lines                   | 0.19               | 0.14                   | 0.14                         | 0.14                       |
| Total Working Expenses                     | 563.04             | 645.00                 | 667.25                       | 687.25                     |
| <b>NET TRAFFIC RECEIPTS†</b>               | 159.53             | 125.29                 | 156.75                       | 159.75                     |
| <b>MISCELLANEOUS TRANSACTIONS:</b>         |                    |                        |                              |                            |
| Receipts                                   | 0.19               | 0.16                   | 0.52                         | 0.52                       |
| Expenditure                                | 15.88              | 16.47                  | 17.43                        | 17.43                      |
| Net Miscellaneous Expenditure              | 15.69              | 16.31                  | 16.91                        | 16.91                      |
| Net Revenue                                | 144.84             | 108.98                 | 141.84                       | 142.84                     |
| Dividend to General Revenue                | 114.28             | 132.66                 | 141.54                       | 141.54                     |
| Net Surplus (+) Deficit (—)                | +18.56             | —23.65°                | ...                          | +1.28                      |

\* The net deficit for last year, which was expected to be Rs. 15.27 crores in March, is now Rs. 4.61 crores higher. This is because of a shortfall in traffic receipts to the extent of Rs. 13.46 crores, according to latest figures of approximate available, offset by savings of Rs. 4.85 crores in expenses.

† This figure has been recomputed on a lower base of the traffic receipts for 1966-67 of Rs. 770.29 crores against Rs. 732.57 crores assumed in the March Budget and takes into account (i) additional earnings to the tune of Rs. 29 crores expected from additional traffic at current tariffs and (ii) additional earnings of Rs. 34 crores expected to be realised from the proposed adjustments in fares and freight rates.

‡ Includes an additional provision of Rs. 14 crores mainly to cover a possible revision in the rates of dearness allowance to staff in view of the increase in the cost of living since the last revision of the rates of dearness allowance in October, 1966.

§ The additional provision of Rs. 6 crores has been made so as to bring the appropriation to the Fund closer to the figure of expected withdrawal of Rs. 110 crores for expenditure during the current year.



Mr. Poonacha recalled his statement in March that the deficit in the interim budget was to be met by withdrawal from the railway's Revenue Reserve Fund. This deficit having risen to Rs. 24 crores, and considering the general budgetary position and the various other demands on the general resources, he said, there was no question of filling the current year's gap by a further withdrawal from this fund.

This fund was banked with General Finances and formed part of the balances of the Government of India and a withdrawal from it would affect the Government's ways and means position adversely.

#### ADDITIONAL REVENUE

The proposed revision of fares and freight rates would bring an additional revenue of Rs. 19 crores under each of the two heads, passenger revenues and goods traffic earnings, during the remaining period of 9½ months of the current financial year.

In a full year, the additional revenue would be Rs. 24 crores under passenger revenue and Rs. 23 crores under goods traffic earnings.

The following are the details of the proposed revision of fares and freight rates :

The increase in third-class fares by ordinary trains will vary from nil in a few cases to two,

three or five paise in others because opportunity has been taken to round off the fares to the nearest five paise.

Rounding off to multiples of five paise would reduce the constant complaints about shortage of change at stations and consequent inconvenience or loss to passengers.

The minimum fare for the air-conditioned class is to be raised from Rs. 5 to Rs. 10.

Minimum fares of Rs. 5 for first class and Rs. 3 for second class are also to be laid down for journeys by mail and express trains.

There will be no increase in season ticket fares for students.

The following table indicates the increase contemplated in the fares between certain selected centres :

|                     | A.C.     |          | I Class  |          | II Class Mail |          | III Class Mail |          |
|---------------------|----------|----------|----------|----------|---------------|----------|----------------|----------|
|                     | Existing | Proposed | Existing | Proposed | Existing      | Proposed | Existing       | Proposed |
| 1. Delhi-Bombay     | 183.50   | 211.00   | 97.25    | 111.75   | 57.75         | 66.40    | 31.75          | 35.70    |
| 2. Bombay-Howrah    | 250.00   | 287.50   | 131.25   | 146.75   | 78.00         | 87.25    | 42.40          | 46.60    |
| 3. Bombay-Madras    | 170.75   | 196.25   | 90.75    | 104.25   | 53.90         | 62.00    | 29.70          | 33.40    |
| 4. New Delhi-Madras | 275.25   | 316.50   | 144.25   | 159.75   | 85.70         | 94.95    | 46.50          | 50.70    |
| 5. Delhi-Howrah     | 189.75   | 218.25   | 100.50   | 115.50   | 59.70         | 68.65    | 32.75          | 36.85    |
| 6. Madras-Howrah    | 214.25   | 246.50   | 113.00   | 128.50   | 67.15         | 76.40    | 36.70          | 40.90    |

Explaining the rationale behind these increases, Mr. Poonacha pointed out that third-class fares for journeys by ordinary trains up to 50 km. had been traditionally kept at a specially low level because of the very large proportion of passengers (87 per cent.) performing such journeys. The increase is being kept as low as possible.

Mr. Poonacha said that revision of the minimum fare for third class ordinary from 10 paise to 15 paise would not mean a significant

burden on travellers since the distance between two stations was normally more than five km. excepting in the suburban areas where most of the passenger traffic was on season tickets which carried a very heavy element of concession and which would not be affected by this change.

#### CONCESSIONS

The Railway Minister, Mr. C. M. Poonacha, announced in the Lok Sabha on June 5, 1967

that food grains would be exempted from the supplementary freight charge envisaged in the Railway Budget. He also announced that he had decided to reduce the 7.5 per cent increase in third-class fare to only 5 per cent.

Mr. Poonacha announced the Rs. 3.7-crore concessions while replying to the Railway Budget debate. He said he also proposed to appoint a parliamentary committee to go into the problems of passenger amenities *de novo* and also examine ways to improve catering.



**FAMOUS  
HOUSES**  
AND INSTITUTIONS

*serving*

*India*





# J. B. ADVANI & CO. PRIVATE LTD.

ESTABLISHED 1908

## HEAD OFFICE: BOMBAY

IN 1908, three intimate friends, Kanwalsing Pohumal, Vasanmal Kishenchand and Jotsing Harising, formed themselves into a Company called J. B. Advani & Company with a view to specializing in the import of Paper and Printing Materials. This Concern was the first of its kind in Sind. The pioneers, who envisaged a great future for this line of business, opened an office in Karachi. In a very short time their confidence was justified and the venture became a huge success. The markets within reach having been tapped to the fullest extent, a Branch was opened in Bombay in 1921. In spite of the very keen competition that usually prevails in Bombay, which is the premier and largest paper market in India, the Company very soon became one of the leading firms in the line with its business growing in volumes from year to year.

In 1925, the proprietors decided to convert their firm into a Private Limited Company—J. B. Advani & Co. Ltd.—with a capital of Rs. 6,00,000.

In 1925, the management began to explore the Punjab market more energetically with a view to developing the business handled by the Head Office at Karachi and a Branch was accordingly opened in Lahore. This was followed by the opening of a Branch in Madras in 1927, which has made steady progress year by year. Three years later, another Branch was opened, this time in Calcutta. Branches have since been opened in Delhi, Jullundur, Cochin and Visakhapatnam.

The Directors of this Company started a new concern under the name and style of J. B. Advani & Co. (Mysore) Private Ltd. at Bangalore.

After partition of India, the Company's interests in Pakistan were converted into a non-resident company.—J. B. Advani & Co. (Pakistan) Ltd., with Head Office at Karachi and a branch at Lahore.

With its network of branches in all the important centres in India, J. B. Advani & Co. Private Ltd. today reaches every notable consuming centre in India.

The Company has a Paid-up Capital of and Reserves of Rs. 50,00,000. Besides, it has the substantial backing of its Directors and their relatives, and the Working Capital is actually in the vicinity of Rs. 1,50,00,000. The Company, with its branches and its tradition of over half a century as the largest importers of Paper in India, with a turnover of Rs. 3,00,00,000 per annum, have since the last few years entered and specialised in machinery trade, dealing in Refractory Products, Arc & Resistance Welding Machinery & Equipment, Machine Tools, Plate & Sheet Metal Working Machinery, Building Machinery, Graphite Electrodes, all precision Machines to manufacture clocks, Time-pieces, watches and parts, bicycle parts, Refrigerator parts, etc. of Swiss and German origin, Gas or Oil fired Furnaces, Printing Inks etc. and is open to take up representation of Indian and foreign manufacturers of Paper and Machinery. The Company also exports, specially Tea, Textiles and Malabar Hill products.

In 1951 some of the Directors jointly started a modern Printing Ink Factory in collaboration with foreign experts at Bhandup, Bombay and today J. B. A. PRINTING INKS PRIVATE LIMITED have their vast clientele spread all over India and the neighbouring countries.

Another enterprise with which they are associated is the one for the manufacture of Welding Electrodes, probably the first major attempt in this field of industry in India. In partnership with the Oerlikon Machine Tool Works (Messrs. Buehrle & Co.), Zurich, Switzerland, the world famous manufacturers of Welding Electrodes, a new company has been floated under the name of J. B. ADVANI-OERLIKON ELECTRODES PRIVATE LTD. with 80 per cent of the share capital subscribed by J. B. Advani & Co. Private Ltd. With an up-to-date factory and most modern production line, this factory, situated at BHANDUP (Central Rly.), Greater Bombay, is producing now some of the best Welding Electrodes in the world. They have amongst their patrons, Government, Railways, Shipyards, and Great Steel fabricators of India. Branch factories to manufacture electrodes have been set up at Raipur and Madras while a new factory with Czech collaboration is set up at Chinchwad, Poona to manufacture Arc Welding Generators. It is now in production.

A third enterprise with which they are connected is the one for the manufacture of Drinking Straws and Waterproof Kraft Paper. Messrs. IDEAL WRAPPERS PRIVATE LTD. have the leading Aerated Water manufacturers and Textile Mills as their patrons. This factory is also located at Bhandup.

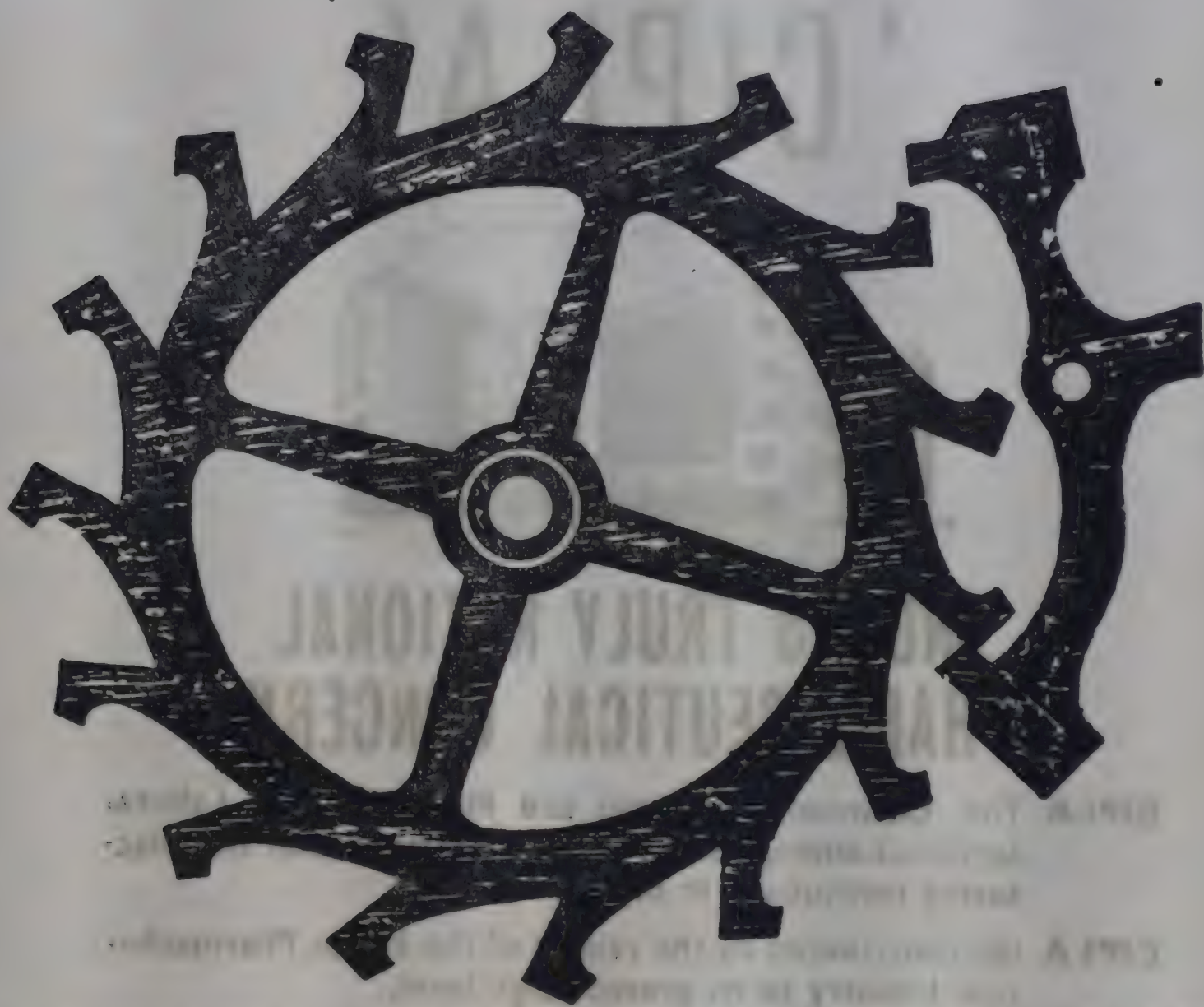
Now they have their own factory at Hay Bunder, Sewri, manufacturing Arc Welding Transformers accepted by users as perhaps some of the best, comparable with similar types manufactured in advanced Western countries.

### Managing Directors :

H. K. MALKANI, L. V. MALKANI, B. J. ADVANI, D. J. LALVANI

Branches : CALCUTTA — DELHI — MADRAS — JULLUNDUR — COCHIN — VISAKHAPATNAM





## EVERY MINUTE TOWARDS YOUR PROSPERITY"

The industrial wheel is moving—and the nation moves towards prosperity—this minute, this very minute, every minute for that matter. Count ten—and the contour of the nation changes. So fast, so sure and so inspiring are the ways of the wheel. Far-reaching, too. The wheel turns toiling millions into true citizens. It brings laughter and

gaiety to their lives; adds a new meaning and dimension to their existence. We at J. K. have been busy with it for the last century—and a half. Today we employ about 45,000 persons in our chains of industries ranging from machinery to paints, jute to typewriters, textile to chemicals. We endeavour to make life fuller and worth living.

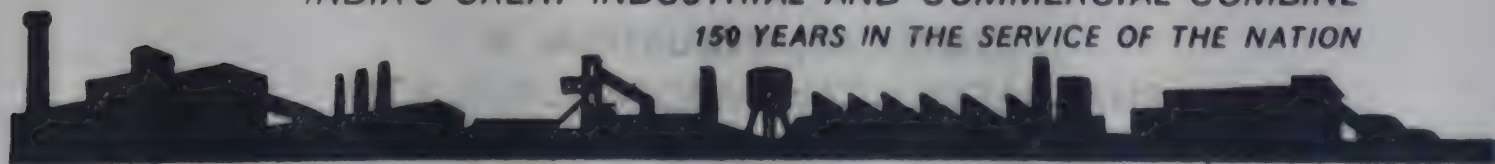


### J.K. ORGANISATION

KANPUR ■ BOMBAY ■ CALCUTTA

INDIA'S GREAT INDUSTRIAL AND COMMERCIAL COMBINE

150 YEARS IN THE SERVICE OF THE NATION





# 'CIPLA'



## INDIA'S TRULY NATIONAL PHARMACEUTICAL CONCERN

**CIPLA** The Chemical, Industrial and Pharmaceutical Laboratories—is among the foremost pharmaceutical manufacturing institutions in India.

**CIPLA** has contributed to the raising of the Indian Pharmaceutical Industry to its present high level.

**CIPLA** has established a tradition for **Quality, Purity and Dependability.**

**CIPLA** products, as a result of scrupulous care and attention at all stages of manufacture, analytical control, biological testing and standardization, rank among the world's best and have thus gained the approval and the fullest confidence of the medical profession in India and abroad.

**CIPLA** is always at the service of the Medical Profession and the Nation.

**CIPLA REMEDIES ARE AMONG THE WORLD'S BEST.**

---

CHEMICAL, INDUSTRIAL &  
PHARMACEUTICAL LABORATORIES, LTD.

289, BELLASIS ROAD, BYCULLA, BOMBAY-8.

---



## GENERAL INDEX

| A                                                 |                         | PAGE     |                                                          | PAGE          |
|---------------------------------------------------|-------------------------|----------|----------------------------------------------------------|---------------|
| Aarey Milk Colony .. .. .                         |                         | 366      | Air Training (Civil Aviation) .. .. .                    | 252           |
| Abrasives .. .. .                                 | 498, 553, 666           |          | AIR Stations (Broadcasting) .. .. .                      | 133           |
| Academy of Administration, National .. .. .       |                         | 247      | Air Transport (Civil Aviation) .. .. .                   | 251           |
| Accidents (Labour) .. .. .                        |                         | 80       | Airlines Corporation, Indian .. .. .                     | 179, 251      |
| Accounting Machines .. .. .                       |                         | 666      | Airways Companies .. .. .                                | 178           |
| Acetylene & Oxygen Gas Generator Mfrs. .. .. .    |                         | 666      | Akali Dal, Shiromani .. .. .                             | 1049          |
| Acids & Allied Products .. .. .                   |                         | 666      | Akhil Bharat Hindu Mahasabha .. .. .                     | 1044          |
| Adding and Calculating Machines .. .. .           |                         | 666      | Akola District .. .. .                                   | 377           |
| Administration of Justice .. .. .                 |                         | 59       | Alcohol Industry .. .. .                                 | 93            |
| High Courts .. .. .                               |                         | 59       | Aligarh University .. .. .                               | 430           |
| Hindu Law Reform .. .. .                          |                         | 60       | Alkali Industry .. .. .                                  | 243           |
| Law Commission Report .. .. .                     |                         | 61       | Allahabad University .. .. .                             | 430           |
| Supreme Court .. .. .                             |                         | 59       | All-India Corporations .. .. .                           | 85, 1081      |
| Administrative Reforms, Department of .. .. .     |                         | 250      | " Forward Bloc .. .. .                                   | 1044          |
| " Personnel, Central Govt. .. .. .                | 929-943                 |          | " Harijan Sevak Sangh .. .. .                            | 434           |
| " " States .. .. .                                | 914-928                 |          | " Institute of Local Self Government .. .. .             | 467           |
| " Vigilance Division .. .. .                      | 249                     |          | " Institute of Physical Medicine and                     |               |
| Advertising Agencies Assocn. of India .. .. .     |                         | 450      | Rehabilitation .. .. .                                   | 467           |
| " Agents and Consultants .. .. .                  | 553, 667, 865           |          | " Manufacturers' Organisation .. .. .                    | 450           |
| " and Publicity Agents .. .. .                    | 498, 529                |          | " Radio .. .. .                                          | 133           |
| " Gifts & Novelties .. .. .                       | 669                     |          | " Services (Public Services) .. .. .                     | 247           |
| Aerated Water Manufacturers .. .. .               |                         | 669      | " Trade Union Congress .. .. .                           | 434           |
| " " Requisites .. .. .                            | 669                     |          | " Women's Conference .. .. .                             | 434           |
| Aerodromes (Civil Aviation) .. .. .               |                         | 251      | Alloy Steel Project .. .. .                              | 124           |
| Aeronautical Communication Services .. .. .       |                         | 252      | Aluminium (Non-Ferrous Industry) .. .. .                 | 198           |
| Aeronautics Ltd., Hindustan .. .. .               | 8, 120                  |          | " Ladder Mfrs. .. .. .                                   | 674           |
| Agarbatti and Dhoop .. .. .                       |                         | 669      | " Manufacturers and Dealers .. .. .                      | 866           |
| Agencies, Social Service .. .. .                  |                         | 16       | " Sheets, Rods etc. .. .. .                              | 674           |
| Agency for International Development (U.S. Aid    |                         |          | Ambar Charkha (Cottage Industries) .. .. .               | 94            |
| to India) .. .. .                                 |                         | 187      | Ambassadors, Indian .. .. .                              | 943           |
| Agents and General Merchants .. .. .              |                         | 669      | " Foreign .. .. .                                        | 950           |
| Agents, Insurance .. .. .                         |                         | 671      | Amendment of the Constitution .. .. .                    | 64            |
| Agents/Representatives of Overseas Firms in       |                         |          | Amplifier Mfrs. & Exporters .. .. .                      | 674           |
| Bombay .. .. .                                    |                         | 582      | Amravati District .. .. .                                | 377           |
| Agra University .. .. .                           |                         | 430      | Amreli District .. .. .                                  | 338           |
| Agricultural Education .. .. .                    |                         | 271      | Analysts .. .. .                                         | 674           |
| " Credit Societies .. .. .                        |                         | 35       | Andaman and Nicobar Islands .. .. .                      | 315           |
| " Labour .. .. .                                  |                         | 80       | Andhra Chamber of Commerce .. .. .                       | 446           |
| " Machinery .. .. .                               | 499, 671, 865           |          | Andhra Pradesh .. .. .                                   | 316           |
| " Marketing Societies .. .. .                     |                         | 37       | Associations, Institutions, etc. .. .. .                 | 432           |
| " Production (Tables) .. .. .                     | 273                     |          | Classified List of Trades & Professions .. .. .          | 486           |
| " Re-Finance Corporation .. .. .                  | 80                      |          | Commercial Firms .. .. .                                 | 485           |
| " Research .. .. .                                | 271                     |          | Fisherjes .. .. .                                        | 255           |
| " Science University .. .. .                      | 394                     |          | Universities .. .. .                                     | 319-320       |
| " Universities .. .. .                            | 319, 394, 397, 424, 431 |          | Andhra Paper Mills .. .. .                               | 127           |
| Agriculture .. .. .                               |                         | 269      | " Pradesh State Corporations .. .. .                     | 89            |
| Land Policy .. .. .                               |                         | 272      | Annamalai University .. .. .                             | 419           |
| Statistics .. .. .                                | 269, 273                |          | Antimony (Non-Ferrous Industry) .. .. .                  | 197           |
| Tenancy Reform .. .. .                            |                         | 272      | Architects and Surveyors .. .. .                         | 675           |
| Ahmedabad District .. .. .                        |                         | 338      | Areca-nut Industry .. .. .                               | 44            |
| Classified List of Trades and Professions .. .. . |                         | 529      | Armed Forces Medical Services (Defence Services) .. .. . | 9             |
| Commercial Firms .. .. .                          |                         | 528      | Arms and Ammunition .. .. .                              | 675           |
| Ahmednagar District .. .. .                       |                         | 377      | Army, Indian (Defence Services) .. .. .                  | 10            |
| Aid to India, Foreign .. .. .                     |                         | 1083     | Aromatic Chemicals .. .. .                               | 675           |
| " " U.N. .. .. .                                  |                         | 26       | Asbestos Products .. .. .                                | 500, 676, 867 |
| " " U.S. .. .. .                                  |                         | 187      | Aseb Meter Works .. .. .                                 | 127           |
| Air Agreements .. .. .                            |                         | 253      | Ashoka Hotels Ltd. .. .. .                               | 117           |
| " Compressors .. .. .                             |                         | 671      | Assam Gas Company Ltd. .. .. .                           | 127           |
| " Conditioning & Refrigeration .. .. .            | 499, 671                |          | " Oil Company .. .. .                                    | 199           |
| Aircraft, Aircraft Parts & Accessories .. .. .    |                         | 672      | Assam State .. .. .                                      | 321           |
| Aircraft Manufacturing Depot .. .. .              |                         | 8        | Associations .. .. .                                     | 433           |
| Air Force, Indian .. .. .                         |                         | 12       | N.E.F.A. .. .. .                                         | 325           |
| " India .. .. .                                   |                         | 179, 251 | University of Gauhati .. .. .                            | 325           |



## A—Contd.

|                                                  | PAGE      |
|--------------------------------------------------|-----------|
| Assam State Corporations .. .. .                 | 89        |
| Atomic Energy .. .. .                            | 169, 1087 |
| " Minerals (Research) .. .. .                    | 169       |
| " Power Stations, Tarapur .. .. .                | 170       |
| " Reactors .. .. .                               | 170       |
| " Research Centre, Bhabha .. .. .                | 169       |
| Attorneys and Solicitors' Firms .. .. .          | 676       |
| Auctioneers .. .. .                              | 677       |
| Audit Bureau of Circulations Ltd. .. .. .        | 451       |
| Aurangabad District .. .. .                      | 377       |
| Automobile and Automobile Parts and Accessories  |           |
| Dealers and Engineers 486, 500, 530, 555, 867    |           |
| " Engineers .. .. .                              | 677       |
| " Industry .. .. .                               | 289       |
| Automotive Research Association of India .. .. . | 292       |
| Auxiliary Air Force .. .. .                      | 12        |
| Aviation, Naval (Defence Services) .. .. .       | 11        |
| Awards & Prizes .. .. .                          | 221, 1079 |

## B

|                                                     |               |
|-----------------------------------------------------|---------------|
| Baekward Classes .. .. .                            | 261           |
| Badges .. .. .                                      | 680           |
| Bakelite .. .. .                                    | 680           |
| Bakers & Confectioners .. .. .                      | 680           |
| Balak Mandir .. .. .                                | 467           |
| Balance of Payments .. .. .                         | 104           |
| Ballpen and Refills Mfrs. .. .. .                   | 681           |
| Balkan-Ji-Bari .. .. .                              | 459           |
| Ball and Roller Bearings .. .. .                    | 502, 680, 868 |
| Banaras Hindu University .. .. .                    | 430           |
| Banaskantha District .. .. .                        | 338           |
| Bangalore Trades and Professions .. .. .            | 845           |
| " University .. .. .                                | 393           |
| Banking .. .. .                                     | 180           |
| Bank & Bankers (Maharashtra) .. .. .                | 575           |
| Baptist Churches .. .. .                            | 66            |
| Baroda District .. .. .                             | 339           |
| " Trades & Professions .. .. .                      | 544           |
| " University .. .. .                                | 339           |
| Barrels .. .. .                                     | 681           |
| Basic Chemicals, Pharmaceuticals & Soaps Export     |               |
| Promotion Council .. .. .                           | 451           |
| " Schools .. .. .                                   | 219           |
| Batteries .. .. .                                   | 682, 868      |
| Bearings & Shaftings .. .. .                        | 682           |
| Bee-keeping Industry .. .. .                        | 96            |
| Belting, Leather, Manufacturers and Dealers .. .. . | 869           |
| Benevolent Institutions in Greater Bombay .. .. .   | 456           |
| BEST .. .. .                                        | 374           |
| Bhabha Atomic Research Centre .. .. .               | 169, 1087     |
| Bhadra Project (Irrigation) .. .. .                 | 301           |
| Bhagalpur University .. .. .                        | 412           |
| Bhakra-Nangal Project (Irrigation) .. .. .          | 301           |
| Bhandara District .. .. .                           | 378           |
| Bhandarkar Oriental Research Institute .. .. .      | 471           |
| Bharat Earthmovers Ltd. .. .. .                     | 117           |
| " Electronics Ltd. (Govt. of India Under-           |               |
| " takings) .. .. .                                  | 118, 1088     |
| " Heavy Electricals Ltd. .. .. .                    | 118           |
| " Sewak Samaj .. .. .                               | 435           |
| Bharata Itihasa Samshodhaka Mandala .. .. .         | 471           |
| Bharatiya Adimjati Sevak Sangh .. .. .              | 435           |
| " Jan Sangh .. .. .                                 | 1044          |
| " Natya Sangh .. .. .                               | 435           |
| " Vidya Bhawan .. .. .                              | 467           |
| Bhatnagar Awards .. .. .                            | 223           |

|                                                            |               |
|------------------------------------------------------------|---------------|
| Bhavnagar District .. .. .                                 | 339           |
| Bhir District .. .. .                                      | 378           |
| Bhilai Steel Project (Govt. of India Undertakings) .. .. . | 123           |
| Bhoodan .. .. .                                            | 131           |
| Bicycles (Misc. Industries) .. .. .                        | 194           |
| Bihar State .. .. .                                        | 406           |
| " " Associations .. .. .                                   | 423           |
| " " Corporations .. .. .                                   | 89            |
| " " Insulator Factory .. .. .                              | 128           |
| " " Superphosphate Factory .. .. .                         | 128           |
| " University .. .. .                                       | 412           |
| Biological Science Societies .. .. .                       | 166           |
| Birla Research Institute for Applied Sciences .. .. .      | 445           |
| Blind Men's Association .. .. .                            | 456           |
| Biscuit Manufacturers .. .. .                              | 683, 869      |
| Blind Students' Institutions .. .. .                       | 12            |
| Blowers .. .. .                                            | 683           |
| Board of Secondary Education .. .. .                       | 148           |
| Board of Film Censors, Central .. .. .                     | 265           |
| Bobbins .. .. .                                            | 530, 683      |
| Boilers—Agents, Preservatives and Compositions .. .. .     | 683           |
| Bokaro Steel Plant .. .. .                                 | 118           |
| Bolts, Nuts & Screws .. .. .                               | 684, 869      |
| Bombay Agents/Representatives of Overseas Firms            | 582           |
| " Associations (Trade and Commercial) .. .. .              | 450           |
| " Banks & Bankers .. .. .                                  | 575           |
| " Benevolent Institutions .. .. .                          | 456           |
| " Chambers of Commerce .. .. .                             | 455           |
| " City .. .. .                                             | 370           |
| " " Social Education Committee .. .. .                     | 467           |
| " Classified List of Overseas Firms .. .. .                | 582           |
| " " List of Trades & Professions .. .. .                   | 666           |
| " Clubs .. .. .                                            | 456           |
| " Commercial Firms .. .. .                                 | 597-665       |
| " Cultural and Scientific Institutions .. .. .             | 459           |
| " Dumb & Deaf Institution .. .. .                          | 467           |
| " Educational Institutions .. .. .                         | 465           |
| " Hospitals .. .. .                                        | 469           |
| " Missionary and Religious Societies .. .. .               | 470           |
| " Municipal Corporation .. .. .                            | 371           |
| " Railway Personnel .. .. .                                | 923           |
| " Rainfall .. .. .                                         | 376           |
| " Technical Institutions .. .. .                           | 465           |
| " University .. .. .                                       | 374           |
| Bonus Commission (Labour) .. .. .                          | 82            |
| Book-binding Cloth Mfrs. & Dealers .. .. .                 | 684           |
| Booksellers, Printers & Publishers .. .. .                 | 870           |
| " and Publishers .. .. .                                   | 502, 556, 685 |
| Border Roads (Roads) .. .. .                               | 173           |
| Bottles & Corks .. .. .                                    | 686           |
| Box Manufacturers .. .. .                                  | 686           |
| Brass (Non-Ferrous Industry) .. .. .                       | 199           |
| Brassware .. .. .                                          | 686           |
| Brick and Tile Manufacturers and Merchants .. .. .         | 687           |
| Brihad Bharatiya Samaj, Shri .. .. .                       | 464           |
| British Council, The .. .. .                               | 467           |
| " Information Services (The Press) .. .. .                 | 288           |
| " Institute of Engg. Technology .. .. .                    | 467           |
| Broach District .. .. .                                    | 339           |
| Broadcasting .. .. .                                       | 132, 1081     |
| Brokers .. .. .                                            | 687           |
| Brush Manufacturers .. .. .                                | 688           |
| Buckets, Barrels, Drums and Hollow ware Manu-              |               |
| " facturers .. .. .                                        | 688           |
| Budget (Central), 1967-68 .. .. .                          | 1096          |
| " (Railways), 1967-68 .. .. .                              | 1104          |
| Budgets (States), 1965-66 to 1967-68 .. .. .               | 1103          |



## B—Contd.

|                                                 | PAGE     |
|-------------------------------------------------|----------|
| Builders & Contractors .. ..                    | 688, 871 |
| „ Hardware .. ..                                | 689      |
| Building Construction Corp'n. Ltd., National .. | 87       |
| „ Materials .. ..                               | 689      |
| Buldana District .. ..                          | 378      |
| Bullion .. ..                                   | 225      |
| Bulsar District .. ..                           | 339      |
| Burdwan University .. ..                        | 405      |
| Burmah-Shell Refineries Ltd. .. ..              | 201      |

## C

|                                                                        |           |
|------------------------------------------------------------------------|-----------|
| Cables & Wire Mfrs. .. ..                                              | 504, 690  |
| Calcutta list of Trades & Professions .. ..                            | 864       |
| Calcutta Commercial Firms .. ..                                        | 851       |
| Calcutta Municipal Corporation .. ..                                   | 405       |
| Calcutta University .. ..                                              | 405       |
| Calendar Manufacturers .. ..                                           | 691       |
| Caltex Oil Refining (India) Ltd. .. ..                                 | 201       |
| Canners (Fruits and Vegetables) .. ..                                  | 691       |
| Canteen Stores Suppliers .. ..                                         | 691       |
| Capital Market .. ..                                                   | 227       |
| Capital Issues .. ..                                                   | 228       |
| Public Companies .. ..                                                 | 229       |
| Share Markets .. ..                                                    | 227       |
| Capital Outlay and Loans, Debts, Liabilities<br>(Public Finance) .. .. | 1098-1101 |
| Capital Receipts and Disbursements (Public<br>Finance) .. ..           | 1096      |
| Card Board & Corrugated Boxes Mfrs. .. ..                              | 692, 872  |
| CARE .. ..                                                             | 435       |
| Carpets Manufacturers, Exporters & Dealers .. ..                       | 692       |
| Casein Manufacturers .. ..                                             | 693       |
| Cash crops (Agriculture) .. ..                                         | 276       |
| Cashew Export Promotion Council .. ..                                  | 443       |
| Catholic Churches .. ..                                                | 66        |
| Catering College (Education) .. ..                                     | 148       |
| Cattle (Livestock) .. ..                                               | 310       |
| Caustic Soda .. ..                                                     | 243       |
| Cement and Concrete Companies .. ..                                    | 693       |
| „ Industry .. ..                                                       | 191       |
| „ Corporation of India Ltd. .. ..                                      | 85        |
| Census (Population) 1961 .. ..                                         | 150       |
| Central Board of Film Censors (Film Industry) ..                       | 265       |
| „ Board of Secondary Education .. ..                                   | 148       |
| „ Budget (1967-68) .. ..                                               | 1096      |
| „ Bureau of Investigation .. ..                                        | 250       |
| „ Cooperative Banks .. ..                                              | 35        |
| „ Food Tech. Research Instt. .. ..                                     | 933       |
| „ Health Service .. ..                                                 | 247       |
| „ Inland Fisheries Research Instt. .. ..                               | 936       |
| „ Labour Institute .. ..                                               | 81        |
| „ Land Mortgage Banks (Cooperative Move-<br>ment) .. ..                | 36        |
| „ Machine Tool Institute .. ..                                         | 473       |
| „ Mechanized Farm (Rajasthan) .. ..                                    | 1093      |
| „ Road Transport Corporation Ltd. .. ..                                | 85        |
| „ Schools .. ..                                                        | 144       |

|                                                                         | PAGE          |
|-------------------------------------------------------------------------|---------------|
| Central Silk Board .. ..                                                | 53            |
| „ Social Welfare Board .. ..                                            | 16            |
| „ Training Institute .. ..                                              | 144           |
| Central Warehousing Corporation .. ..                                   | 85            |
| Chain Pulley Blocks .. ..                                               | 693           |
| Chambers of Commerce in Bombay .. ..                                    | 455           |
| Chanda District .. ..                                                   | 378           |
| Chemical & Pharmaceutical Industry .. ..                                | 243           |
| Chemical and Pharmaceutical Product Mfrs. 505, 558, 873                 |               |
| „ Engineering Equipment .. ..                                           | 694           |
| „ Manufacturers .. ..                                                   | 694           |
| Chemicals (Importers and Stockists) .. ..                               | 873           |
| „ (Pharmaceuticals) .. ..                                               | 699           |
| Chemists & Druggists .. ..                                              | 506, 531, 699 |
| Chittaranjan Locomotive Works (G.I.U.) .. ..                            | 1087          |
| Chola, Koyna Projects .. ..                                             | 364           |
| Christian Missions in India .. ..                                       | 82            |
| Chromite .. ..                                                          | 233           |
| Churches in India .. ..                                                 | 66            |
| Cinema and Motion Pictures .. ..                                        | 702           |
| Cinematograph Importers .. ..                                           | 703           |
| Circlips .. ..                                                          | 703           |
| Cities and population .. ..                                             | 152           |
| Civil Aviation .. ..                                                    | 251           |
| Classified List of Overseas Firms and their Bombay<br>Agents etc. .. .. | 582           |
| Classified List of Trades & Professions in Bombay                       | 666-913       |
| Clearing and Forwarding Agents .. ..                                    | 532, 703, 877 |
| Cloth Merchants, Wholesale and Retail .. ..                             | 705           |
| Clubs in Bombay .. ..                                                   | 456           |
| Coal (Mines and Minerals) .. ..                                         | 233           |
| Coal and Coke .. ..                                                     | 705           |
| Coal Mines Welfare Fund .. ..                                           | 80            |
| „ Washeries .. ..                                                       | 124           |
| Cochin Refineries Ltd. .. ..                                            | 128, 200      |
| Cocks and Valves .. ..                                                  | 705           |
| Code of Discipline (Labour) .. ..                                       | 81            |
| Coffee Industry .. ..                                                   | 45            |
| „ Board .. ..                                                           | 45            |
| Coimbatore District .. ..                                               | 417           |
| Commercial Firms .. ..                                                  | 570           |
| Trades and Professions .. ..                                            | 570           |
| Coir Industry .. ..                                                     | 46            |
| Collapsible Tubes .. ..                                                 | 706           |
| Collieries, Singaneri .. ..                                             | 127           |
| Colombo Plan .. ..                                                      | 27            |
| Commercial Associations in Greater Bombay ..                            | 450           |
| „ & Classified Firms in States .. ..                                    | 485           |
| „ Establishments Acts, Shops and<br>(Labour) .. ..                      | 76            |
| Commercial Firms (See under each State and District)                    |               |
| Communist Party of India .. ..                                          | 1045          |
| Community Development Projects and Panchayats                           | 31            |
| Company Law (Industrial Structure and Policy) ..                        | 232           |
| Compulsory Education .. ..                                              | 145           |
| Condiment Manufacturers .. ..                                           | 706           |
| Congress, Indian National .. ..                                         | 1046          |
| Constitution of India .. ..                                             | 61            |



## C—Contd.

|                                                                 | PAGE          |
|-----------------------------------------------------------------|---------------|
| Consular Offices in India, Foreign .. ..                        | 952           |
| Consulates-General, and Consulates, Indian ..                   | 948           |
| Consulting Engineers .. ..                                      | 707           |
| Consumer Price Index Numbers .. ..                              | 39            |
| Cooley Fund (U.S. Aid) .. ..                                    | 189           |
| Co-operative Banks .. ..                                        | 35            |
| " for American Relief Everywhere ..                             | 435           |
| Co-operative Movement, (1963-64), The ..                        | 35            |
| Co-operative Sugar Factories (Table) ..                         | 54            |
| Land Mortgage Banks .. ..                                       | 36            |
| Co-operative Societies (Table) .. ..                            | 36            |
| Copper .. ..                                                    | 234           |
| Copper and Brassware Mfrs. and Dealers ..                       | 707           |
| Corporations, All India .. ..                                   | 85, 1081      |
| " State .. ..                                                   | 89, 1081      |
| Cottage Industries .. ..                                        | 94            |
| Cotton .. ..                                                    | 56, 270       |
| Cotton and Yarn Merchants .. ..                                 | 712           |
| Cotton Dealers .. ..                                            | 708           |
| Cotton Mills .. ..                                              | 532, 709      |
| Council of Applied Economic Research, National ..               | 439           |
| " Cultural Relations, India .. ..                               | 437           |
| " Medical Research, Indian .. ..                                | 437           |
| " of Scientific and Industrial Research ..                      | 167           |
| Cow-Dung Gas .. ..                                              | 97            |
| Credit & Investment Corporation of India Ltd., Industrial .. .. | 86            |
| Crafts Council of India .. ..                                   | 461           |
| Crucible Manufacturers and Dealers .. ..                        | 712           |
| Cultural, Political, Professional Institutions in Bombay .. ..  | 459           |
| Cultural Scholarships .. ..                                     | 223           |
| Cutlery Mfrs. and Merchants .. ..                               | 713           |
| Cuttack Iron & Steel Products Ltd. .. ..                        | 131           |
| Cycle & Cycle Accessories Importers & Dealers                   | 507, 533, 713 |

## D

|                                                           |      |
|-----------------------------------------------------------|------|
| Dadra and Nagar Haveli .. ..                              | 331  |
| Dairy Companies .. ..                                     | 714  |
| Dairying (Livestock) .. ..                                | 312  |
| Daman & Diu, Goa .. ..                                    | 329  |
| Damodar Valley Project (Irrigation) .. ..                 | 301  |
| Dandakaranya Project (Refugees & Rehabilitation) ..       | 185  |
| Dangs District .. ..                                      | 340  |
| Dearness Allowance .. ..                                  | 77   |
| Debt Position (Public Finance) .. ..                      | 1097 |
| Deccan College Post-Graduate and Research Institute .. .. | 472  |
| Decorators .. ..                                          | 714  |
| Defence Services .. ..                                    | 7    |
| Gallantry Awards .. ..                                    | 9    |
| Indian Air Force .. ..                                    | 12   |
| Indian Army .. ..                                         | 10   |
| Indian Navy .. ..                                         | 11   |
| Delhi .. ..                                               | 328  |
| Associations, Societies, etc. .. ..                       | 434  |
| Classified Trades and Professions .. ..                   | 498  |
| Commercial Firms .. ..                                    | 490  |

|                                                            |          |
|------------------------------------------------------------|----------|
| Municipal Corporation .. ..                                | 328      |
| University .. ..                                           | 328      |
| Demographic Training & Research Centre ..                  | 461      |
| Denotified Communities .. ..                               | 261      |
| Dental Council of India .. ..                              | 436      |
| Dental Education .. ..                                     | 140      |
| " Goods .. ..                                              | 714      |
| Deposit Insurance Corporation .. ..                        | 86       |
| Development in Trade Policy (Import & Export Trade) .. ..  | 105      |
| " Council for Automobiles .. ..                            | 290      |
| " in Exchange Control .. ..                                | 239      |
| Dhulia District .. ..                                      | 379      |
| Diamond Dressing Tools .. ..                               | 714      |
| Diamond Precious Stone and Pearl Merchants ..              | 715      |
| Diesel Engines .. ..                                       | 715      |
| Directorate of Advertising & Visual Publicity ..           | 288      |
| Disinfectants and Insecticides Mfrs. ..                    | 716      |
| Displaced Persons from Pakistan .. ..                      | 185      |
| Divine Life Society .. ..                                  | 477      |
| Dock Workers' Act (Labour) .. ..                           | 72       |
| Domestic Electric Appliances .. ..                         | 716      |
| Dravida Munnetra Kazhagam .. ..                            | 1046     |
| Drawing Office and Survey Requisites ..                    | 716, 879 |
| Drug Research Laboratories .. ..                           | 128      |
| Drugs and Pharmaceuticals .. ..                            | 246      |
| Drums and Containers Mfrs. .. ..                           | 717      |
| "Dufferin," Training Ship .. ..                            | 468      |
| Durgapur Steel Plant (Govt. Industrial Undertakings) .. .. | 124      |
| Dyeing, Printing & Bleaching Companies .. ..               | 717      |
| Dyes and Chemicals Dealers .. ..                           | 508      |
| Dyestuffs .. ..                                            | 717      |

## E

|                                                                      |                    |
|----------------------------------------------------------------------|--------------------|
| Earthmoving & Material Handling Equipment                            | 719, 879           |
| Education .. ..                                                      | 141, 1082          |
| Education Allowance (Public Services) ..                             | 250                |
| Education & Research (Forests) .. ..                                 | 305                |
| Educational Institutions (See under individual States and Districts) |                    |
| Educational Statistics .. ..                                         | 212                |
| " & Vocational Guidance .. ..                                        | 143                |
| Elections (General) (1967) .. ..                                     | 1052               |
| Electric Fans .. ..                                                  | 719, 879           |
| " Goods (Importers, Stockists & Dealers) ..                          | 720                |
| " Motor Starters .. ..                                               | 720                |
| " Power Development .. ..                                            | 83                 |
| Electrical and Mechanical Engineers and Contractors .. ..            | 487, 509, 534, 722 |
| Electrical Engineers, Mfrs. & Dealers in Electric Goods .. ..        | 487, 559, 722, 880 |
| Electrical Goods and Appliances .. ..                                | 510, 534, 725, 880 |
| " Instruments and Meters .. ..                                       | 727                |
| Electrodes .. ..                                                     | 727                |
| Electronic Instruments Mfrs. .. ..                                   | 728                |
| Electroplaters, Electrotypers & Guilders ..                          | 728                |
| Electroplating Materials Mfrs. and Dealers                           | 728, 881           |



## PAGE

|                                                           | PAGE      |
|-----------------------------------------------------------|-----------|
| Film Industry .. .. .                                     | 263       |
| „ Institute of India .. .. .                              | 472       |
| Films Division .. .. .                                    | 264       |
| Filter & Filter Installations .. .. .                     | 884       |
| Finance, Public .. .. .                                   | 1094      |
| Budget (1967-68) (Central) .. .. .                        | 1096      |
| Income-tax .. .. .                                        | 1102      |
| Finance Corporations, State .. .. .                       | 89, 1081  |
| Fire-Bricks & Refractories .. .. .                        | 512, 734  |
| Fish Seed Committee Report .. .. .                        | 255       |
| Fisheries .. .. .                                         | 253       |
| Five-Year Plan, Fourth .. .. .                            | 277       |
| Fixation of Ceiling (Agriculture) .. .. .                 | 272       |
| Flood Control and Soil Conservation (Irrigation) .. .. .  | 300       |
| Flooring Tile and Compositions Mfrs. .. .. .              | 735       |
| Flying Clubs .. .. .                                      | 252       |
| Food .. .. .                                              | 307       |
| Food Corporation of India .. .. .                         | 86        |
| Foodgrains .. .. .                                        | 270       |
| Footwear Industry (Hides, Skins & Leather) .. .. .        | 193       |
| Ford Foundation .. .. .                                   | 436       |
| Foreign Aid to India .. .. .                              | 1083      |
| „ Consular Offices in India .. .. .                       | 952       |
| „ Business Investments .. .. .                            | 268       |
| „ Exchange Controls .. .. .                               | 239       |
| „ Investments in India .. .. .                            | 266, 1087 |
| „ News Agencies (The Press) .. .. .                       | 288       |
| „ Trade (Import and Export Trade) .. .. .                 | 104       |
| „ „ by Country (tables) .. .. .                           | 108       |
| Foreign Trained Technicians & Technical Personnel .. .. . | 145       |
| Foreigners in India (Population) .. .. .                  | 163       |
| Forests .. .. .                                           | 304       |
| Forward Bloc, All India .. .. .                           | 1044      |
| Founders and Foundry Equipment .. .. .                    | 736       |
| Foundry and Foundry Requisites .. .. .                    | 884       |
| Foundry Fluxes and Stores .. .. .                         | 736       |
| Fountain Pens Importers, Mfrs. & Dealers .. .. .          | 736       |
| Fourth Five Year Plan .. .. .                             | 277, 1092 |
| Free and Compulsory Education .. .. .                     | 145       |
| Freight Brokers .. .. .                                   | 737       |
| Frontier With China, India's .. .. .                      | 1089      |
| Fruit (Agriculture) .. .. .                               | 270       |
| Fuel-Injection Equipment .. .. .                          | 737       |
| Fundamental Rights (Constitution of India) .. .. .        | 61        |
| Furniture and Fitting Mfrs. and Dealers .. .. .           | 737, 885  |

## G

|                                               |    |    |        |
|-----------------------------------------------|----|----|--------|
| Gallantry Awards (Defence Services)           | .. | .. | 9, 223 |
| Gandak Project (Irrigation)                   | .. | .. | 302    |
| Gandhisagar Power Station                     | .. | .. | 356    |
| Gandhi Seva Sadan                             | .. | .. | 444    |
| Gandhi Smarak Nidhi                           | .. | .. | 436    |
| Garage Tools and Equipment                    | .. | .. | 738    |
| Garden Reach Workshops Ltd. (Govt. Ind. Und.) |    |    | 119    |
| Gauges & Instruments                          | .. | .. | 738    |
| Gauhati University                            | .. | .. | 325    |
| General Elections (1967)                      | .. | .. | 1052   |



## G—Contd.

|                                                      | PAGE      |
|------------------------------------------------------|-----------|
| General Insurance .. .. .                            | 183       |
| Geography (Physiography) .. .. .                     | 1         |
| Gilt Edged Market (Capital Market) .. .. .           | 227       |
| Glass .. .. .                                        | 739, 886  |
| " Industry .. .. .                                   | 98        |
| " Manufacturers and Merchants .. .. .                | 740       |
| Goa, Daman & Diu .. .. .                             | 329       |
| Goats (Live stock) .. .. .                           | 311       |
| Gokhale Institute of Politics & Economics.. .. .     | 472       |
| Gold and Silver (Bullion) .. .. .                    | 226       |
| " Mining Undertakings, Kolar .. .. .                 | 126       |
| Gorakhpur University .. .. .                         | 431       |
| Government of India Administrative Personnel .. .. . | 929-942   |
| " " " (States) .. .. .                               | 914-928   |
| Government Central Industrial Workshop .. .. .       | 129       |
| " Ceramic Factory .. .. .                            | 127       |
| " Electric Factory .. .. .                           | 129       |
| Government Industrial Undertakings .. .. .           | 117, 1087 |
| Bharat Electronics Ltd. .. .. .                      | 118, 1088 |
| Bokaro Steel Ltd. .. .. .                            | 118       |
| Chittaranjan Locomotive Works .. .. .                | 1087      |
| Fertiliser Corporation of India .. .. .              | 118       |
| Hindustan Machine Tools Ltd. .. .. .                 | 121       |
| Hindustan Shipyard .. .. .                           | 122       |
| " Steel .. .. .                                      | 123, 1088 |
| Indian Drugs and Pharmaceuticals Ltd. .. .. .        | 124       |
| " Oil Corporation .. .. .                            | 125       |
| " Rare Earths Ltd. .. .. .                           | 125       |
| " Telephone Industries Ltd. .. .. .                  | 125       |
| Integral Coach Factory .. .. .                       | 125       |
| Kolar Gold Mining Undertakings .. .. .               | 126       |
| Neyveli Lignite Corporation .. .. .                  | 126       |
| State-Owned and State Aided Undertakings .. .. .     | 127       |
| Government of India Personnel .. .. .                | 929-942   |
| " " " Constitution .. .. .                           | 61        |
| " " " Trade Representatives .. .. .                  |           |
| Abroad .. .. .                                       | 949       |
| " Porcelain Factory .. .. .                          | 129       |
| " Precision Instruments Factory .. .. .              | 131       |
| " Sandalwood Oil Factories .. .. .                   | 130       |
| " Services .. .. .                                   | 247       |
| " Silk Weaving Factory .. .. .                       | 128       |
| " Soap Factory .. .. .                               | 130       |
| Greater Bombay .. .. .                               | 370       |
| Associations, Institutions etc. .. .. .              | 450       |
| Greeting Cards.. .. .                                | 740       |
| Guide to Taxes on Income .. .. .                     | 1102      |
| Gujarat State .. .. .                                | 332       |
| Ahmedabad District .. .. .                           | 338       |
| Associations, etc.. .. .                             | 441       |
| Classified List of Trades & Professions .. .. .      | 529       |
| Commercial Firms .. .. .                             | 528       |
| Fisheries .. .. .                                    | 255       |
| Irrigation Projects .. .. .                          | 336       |
| Corporations .. .. .                                 | 89        |
| University .. .. .                                   | 338       |
| Gums (Wholesale) .. .. .                             | 741       |
| Gunny Bags, Hessian Cloth & Twine Merchants .. .. .  | 741       |
| Gur and Khandsari (Cottage Industries) .. .. .       | 96        |
| Gypsum (Mines and Minerals) .. .. .                  | 234       |

## H

|                                             |     |
|---------------------------------------------|-----|
| Haffkine Institute .. .. .                  | 461 |
| Handicrafts .. .. .                         | 103 |
| " Handlooms Exports Corpn. of India .. .. . |     |
| Ltd. .. .. .                                | 86  |

## PAGE

|                                                                  |               |
|------------------------------------------------------------------|---------------|
| Handloom Board, All India .. .. .                                | 932           |
| " Merchants & Exporters .. .. .                                  | 561           |
| Handlooms (Cottage Industry) .. .. .                             | 95            |
| Handmade Paper Industry .. .. .                                  | 96            |
| Hard Board .. .. .                                               | 741           |
| Hardware Dealers & Iron Mongers .. .. .                          | 513, 741, 887 |
| " Importers .. .. .                                              | 743           |
| Haryana .. .. .                                                  | 343           |
| Health, Public .. .. .                                           | 135           |
| Heavy Electricals Ltd. (Govt. Ind. Undertakings) .. .. .         | 119           |
| " Engg. Corpn. (Govt. Ind. Undertakings) .. .. .                 | 119           |
| " Vehicles Factory (Govt. Ind. Undertakings) .. .. .             | 120           |
| " Water Plant .. .. .                                            | 169           |
| Hides, Skins and Leather .. .. .                                 | 192           |
| " & Skins.. .. .                                                 | 563           |
| High Commissions in India (Foreign) .. .. .                      | 951           |
| " " Abroad, Indian .. .. .                                       | 946           |
| " Courts (Administration of Justice) .. .. .                     | 59            |
| High & Higher Secondary Schools .. .. .                          | 213           |
| Highways, National (Roads).. .. .                                | 172           |
| Himachal Pradesh .. .. .                                         | 343           |
| Hindu Law Reform .. .. .                                         | 60            |
| " Mahasabha, Akhil Bharat .. .. .                                | 1044          |
| Hindustan Aeronautics Ltd. (Govt. Ind. Under-<br>takings).. .. . | 120           |
| " Antibiotics Ltd. (Govt. Ind. Under-<br>takings).. .. .         | 120           |
| " Cables Ltd. (Govt. Ind. Undertakings) .. .. .                  | 1088          |
| " Housing Factory Ltd. (Govt. Ind. Under-<br>takings).. .. .     | 120           |
| " Insecticides Ltd. (Govt. Ind. Under-<br>takings).. .. .        | 121, 1088     |
| " Machine Tools Ltd. (Govt. Ind. Under-<br>takings).. .. .       | 121           |
| " Organic Chemicals Ltd. (Govt. Ind.<br>Undertakings) .. .. .    | 121           |
| " Photo Film Mfg. Co. Ltd. (Govt. Ind.<br>Undertakings) .. .. .  | 121           |
| " Salts Ltd. (Govt. Ind. Undertakings) .. .. .                   | 121           |
| " Shipyard Ltd. (Govt. Ind. Undertakings) .. .. .                | 122           |
| " Steel Ltd. (Govt. Ind. Undertakings) .. .. .                   | 123, 1088     |
| " Teleprinters Ltd. (Govt. Ind. Under-<br>takings).. .. .        | 124           |
| " Zinc Ltd. (Govt. Ind. Under-<br>takings) .. .. .               | 124           |
| Hirakud Dam Project (Irrigation) .. .. .                         | 302           |
| Hoisting Machinery .. .. .                                       | 744           |
| Hoses (Rubber & Canvas) .. .. .                                  | 744           |
| Hosiery Manufacturers & Dealers .. .. .                          | 745           |
| Hospital Equipment and Supplies .. .. .                          | 745           |
| Hospitals in Greater Bombay .. .. .                              | 469           |
| Hotel Corporation of India .. .. .                               | 86            |
| Hotels (Tourist's Guide) .. .. .                                 | 24            |
| Hotels & Restaurants.. .. .                                      | 745           |
| House and Estate Agents .. .. .                                  | 746           |
| Housing .. .. .                                                  | 134           |
| Hutti Gold Mines Co. Ltd. .. .. .                                | 130           |
| Hyderabad Municipal Corporation .. .. .                          | 320           |
| " & Secunderabad Commercial Firms .. .. .                        | 485           |
| " " Trades & Professions .. .. .                                 | 486           |
| " Tanneries Ltd. .. .. .                                         | 127           |

## I

|                                |          |
|--------------------------------|----------|
| I.D.A., World Bank and .. .. . | 31, 1084 |
| I.L.O., India and the .. .. .  | 81       |



I-Contd.

|                                                               | PAGE      |                                                         | PAGE     |
|---------------------------------------------------------------|-----------|---------------------------------------------------------|----------|
| IMC Economic Research & Training Foundation ..                | 468       | Industrial Credit and Investment Corporation ..         | 86       |
| Import & Export Firms ..                                      | 747       | „ Development Bank of India ..                          | 86       |
| „ „ „ Trade ..                                                | 103, 1089 | „ Disputes Act ..                                       | 74       |
| „ of Metals and Alloys ..                                     | 235       | „ Estates (Small Scale Industries) ..                   | 209      |
| Important Events of the year 1966 ..                          | 276       | „ Finance Corporation of India ..                       | 1081     |
| Importers, Exporters and Stockists ..                         | 515, 888  | „ Home for the Blind Women ..                           | 457      |
| Incandescent Lamps & Gas Mantles ..                           | 751       | „ Information Centre ..                                 | 443      |
| Income, National ..                                           | 241       | „ Housing Scheme ..                                     | 134      |
| Income Distribution Committee ..                              | 242       | „ Management Pool ..                                    | 249      |
| Income-Tax (Public Finance) ..                                | 1102      | „ Production 1965 ..                                    | 40       |
| Index Numbers of Wholesale Prices ..                          | 39        | „ Safety and Respiratory Equipment ..                   | 752      |
| India Foundation ..                                           | 472       | „ Structure and Policy ..                               | 230      |
| „ Government Silver Refinery ..                               | 124       | „ Undertakings ..                                       | 117      |
| „ Tourism Corporation ..                                      | 86        | Industry & Mining (F.-Y. Plan) ..                       | 279      |
| „ „ Development Corpn. ..                                     | 124       | Information Services (The Press) ..                     | 288      |
| India's Frontier with China ..                                | 1089      | Ink Manufacturers ..                                    | 890      |
| Indian Air Force (Defence Services) ..                        | 12        | Institute for Training in Industrial Engg. ..           | 468      |
| „ „ Lines Corporation ..                                      | 179, 251  | „ of Chartered Accountants of India ..                  | 438      |
| „ Army (Defence Services) ..                                  | 10        | „ „ Communicable Diseases, National ..                  | 137      |
| „ Cancer Society ..                                           | 461       | „ „ Nuclear Medicines and Allied Sciences ..            | 438      |
| „ Committee for Cultural Freedom ..                           | 462       | „ „ Medical Sciences ..                                 | 434      |
| „ Constitution ..                                             | 61        | „ „ Office Management in India ..                       | 438      |
| „ Cotton Mills Federation ..                                  | 453       | Institution of Work Study ..                            | 438      |
| „ Council of Foreign Trade ..                                 | 453       | Institutions for the Blind in India ..                  | 12       |
| „ „ for Management Executives ..                              | 462       | „ „ for Research in Humanities ..                       | 171      |
| „ Drugs and Pharmaceuticals Ltd. (G.I.U.) ..                  | 124       | Instrumentation Ltd. (G.I.U.) ..                        | 125      |
| „ Federation of University Women's Associa-<br>tion ..        | 437       | Insulation Materials ..                                 | 752      |
| „ Federation of Working Journalists ..                        | 437       | Insurance ..                                            | 181      |
| „ Govt. Trade Representatives Abroad ..                       | 949       | „ Companies ..                                          | 753, 890 |
| „ Institute of Management ..                                  | 441       | Integral Coach Factory (G.I.U.) ..                      | 125      |
| „ Institute of Public Administration ..                       | 437       | Interdenominational Missions ..                         | 82       |
| „ „ „ Science ..                                              | 473       | International Association ..                            | 1085     |
| „ „ „ Technology ..                                           | 468       | „ Bank for Reconstruction and Deve-<br>lopment ..       | 954      |
| „ Institution of Mass Communications ..                       | 133       | „ Chamber of Commerce ..                                | 438      |
| „ Investment Centre ..                                        | 437       | „ Commission on Irrigation & Drainage ..                | 438      |
| „ Law Institute ..                                            | 437       | „ Confederation of Free Trade Unions ..                 | 438      |
| „ Mathematical Society ..                                     | 437       | „ Conference of Social Work ..                          | 462      |
| „ Merchants' Chamber ..                                       | 455       | „ Cultural Centre ..                                    | 438      |
| „ Military College ..                                         | 9         | „ Development Agency, U.S.A. ..                         | 187      |
| „ Motion Pictures Export Corpn. Ltd. ..                       | 86        | „ Highways (Roads) ..                                   | 173      |
| „ National Congress ..                                        | 1046      | „ Human Family Society Award ..                         | 224      |
| „ „ Trade Union Congress ..                                   | 437       | „ Labour Organisation, India and<br>Welfare Agencies .. | 81<br>16 |
| „ Navy (Defence Services) ..                                  | 11        | INTUC ..                                                | 437      |
| „ News Agencies ..                                            | 288       | Iron Ore (Mines and Minerals) ..                        | 233      |
| „ Nursing Council ..                                          | 437       | Iron, Steel & Brass Works ..                            | 754      |
| „ Oil Corporation Ltd. ..                                     | 125, 200  | Iron & Steel Merchants ..                               | 754, 890 |
| „ Political Representatives Abroad ..                         | 943       | „ Irrigation ..                                         | 299      |
| „ Railway Passengers Conference Association ..                | 462       | Investment Position Abroad, India's ..                  | 267      |
| „ Rare Earths Ltd. (G.I.U.) ..                                | 125       |                                                         |          |
| „ Red Cross Society ..                                        | 437       |                                                         |          |
| „ School of International Studies ..                          | 437       |                                                         |          |
| „ „ of Public Administration ..                               | 438       |                                                         |          |
| „ Soldiers', Sailors' and Airmen's Board ..                   | 9         |                                                         |          |
| „ Standards Institution ..                                    | 438       |                                                         |          |
| „ Telephone Industries Ltd. (G.I.U.) ..                       | 125, 1088 |                                                         |          |
| „ Tourism Corporation ..                                      | 86        |                                                         |          |
| Indians Overseas ..                                           | 112       |                                                         |          |
| Indira Kala Sangeet Vishwavidyalaya ..                        | 359       |                                                         |          |
| Indirect Taxes (Public Finance) ..                            | 1095      |                                                         |          |
| Indo-American Society ..                                      | 462       |                                                         |          |
| Indo-American Technical Assistance ..                         | 190       |                                                         |          |
| Indo-Pakistan Relations ..                                    | 303       |                                                         |          |
| Indore University ..                                          | 359       |                                                         |          |
| Industries Development & Regulation Act ..                    | 231       |                                                         |          |
| Industrial and Commercial Management & Cost<br>Consultants .. | 751, 889  |                                                         |          |

## J

|                                                |      |
|------------------------------------------------|------|
| Jabalpur University ..                         | 359  |
| Jadavpur University ..                         | 405  |
| Jalgaon District ..                            | 379  |
| Jammu and Kashmir State ..                     | 344  |
| Jammu & Kashmir State Financial Corporation .. | 90   |
| „ „ „ University ..                            | 346  |
| Jamnagar District ..                           | 340  |
| Jan Sangh, Bharatiya ..                        | 1044 |
| Janpath Hotels Ltd. ..                         | 125  |
| Jawaharlal Nehru Krishi Vishwa Vidyalaya ..    | 359  |
| Jeevan Raksha Awards ..                        | 223  |
| Jewellers, Gold & Silversmiths ..              | 755  |
| Jiwaji University ..                           | 359  |



## J—Contd.

|                                               | PAGE      |
|-----------------------------------------------|-----------|
| Jnanpith Award .. .. .                        | 224, 1080 |
| Jodhpur University .. .. .                    | 400       |
| Judiciary (Administration of Justice) .. .. . | 59        |
| Junagadh District .. .. .                     | 340       |
| Jute & Jute Products .. .. .                  | 756       |
| " Industry .. .. .                            | 47        |
| " Mills .. .. .                               | 891       |

## K

|                                                        |     |
|--------------------------------------------------------|-----|
| Kadana Project .. .. .                                 | 336 |
| Kaira District .. .. .                                 | 340 |
| Kalakahetra .. .. .                                    | 447 |
| Kalinga Award .. .. .                                  | 225 |
| Kalyani Spinning Mills Ltd. .. .. .                    | 131 |
| " University .. .. .                                   | 405 |
| Kameshwara Singh Darbhanga Sanskrit University .. .. . | 412 |
| Karnatak University .. .. .                            | 393 |
| Kashmir State, Jammu & .. .. .                         | 344 |
| Kasturba Gandhi National Memorial Trust .. .. .        | 445 |
| Kerala Associations .. .. .                            | 443 |
| " Govt. Ceramics .. .. .                               | 128 |
| " Premo Pipe Factory .. .. .                           | 128 |
| " Soaps & Oils Ltd. .. .. .                            | 128 |
| " State .. .. .                                        | 346 |
| " " Corporations .. .. .                               | 90  |
| Kerala University .. .. .                              | 352 |
| " State Fisheries .. .. .                              | 256 |
| Khadi and Village Industries Commission .. .. .        | 94  |
| " " " " Boards .. .. .                                 | 94  |
| Khandala .. .. .                                       | 382 |
| Kolaba District .. .. .                                | 379 |
| Kolar Gold Mining Undertakings .. .. .                 | 126 |
| Kolhapur District .. .. .                              | 380 |
| Korba Thermal Station .. .. .                          | 356 |
| Kosi Project (Irrigation) .. .. .                      | 302 |
| Kurukshetra University .. .. .                         | 342 |
| Kutch District .. .. .                                 | 341 |

## L

|                                                  |               |
|--------------------------------------------------|---------------|
| Laboratory Chemicals .. .. .                     | 516, 756, 892 |
| " Equipment .. .. .                              | 757           |
| Labour .. .. .                                   | 71            |
| Accidents .. .. .                                | 80            |
| Agricultural Labour .. .. .                      | 80            |
| Central Labour Institute .. .. .                 | 81            |
| Code of Discipline .. .. .                       | 81            |
| Employees' State Insurance Corporation .. .. .   | 79            |
| Employment and Training .. .. .                  | 78            |
| Maternity Benefit Act .. .. .                    | 73            |
| Tripartite Labour Machinery .. .. .              | 81            |
| Wages, Minimum .. .. .                           | 77            |
| Welfare Activities .. .. .                       | 80            |
| Labour Institute, Bombay .. .. .                 | 460           |
| Lac Industry .. .. .                             | 48, 1091      |
| Laccadive, Minicoy and Amindivi Islands .. .. .  | 352           |
| Ladders .. .. .                                  | 759           |
| Lalit Kala Akademi .. .. .                       | 438           |
| Land Acquisition and Development Scheme .. .. .  | 135           |
| " Mortgage Banks (Co-operative Movement) .. .. . | 36            |
| " Policy (Agriculture) .. .. .                   | 272           |
| Late Particulars .. .. .                         | 1044          |
| Law Commission Report .. .. .                    | 61            |
| Laws of 1984 .. .. .                             | 65            |
| Lead (Non-Ferrous Industry) .. .. .              | 197           |
| Lead-zinc Ore (Mines & Minerals) .. .. .         | 234           |

## PAGE

|                                              |               |
|----------------------------------------------|---------------|
| Leather, Hides, Skins & .. .. .              | 192           |
| Leather Goods .. .. .                        | 564, 759, 892 |
| Legations in India .. .. .                   | 951           |
| Legislative Councils, Assemblies .. .. .     | 1056-1076     |
| Leprosy .. .. .                              | 138           |
| Lifts .. .. .                                | 760           |
| Life Insurance Corporation .. .. .           | 181           |
| Lighthouses (Ports) .. .. .                  | 68            |
| Light Railway Materials .. .. .              | 760           |
| Lignite Corporation Ltd., Neyveli .. .. .    | 126           |
| Lime Manufacturing Industry .. .. .          | 97            |
| Literacy Rate (Population) .. .. .           | 154           |
| Lithographers, Photo Offset Printers .. .. . | 760           |
| Livestock .. .. .                            | 310           |
| Loan Scholarships .. .. .                    | 144           |
| Locomotive Works, Chittaranjan .. .. .       | 1087          |
| Lok Sabha .. .. .                            | 1053, 1077    |
| Lonavala .. .. .                             | 382           |
| Low-Income Group Housing Scheme .. .. .      | 134           |
| Lubricating Oil and Greases .. .. .          | 761           |
| Lucknow University .. .. .                   | 431           |
| Lutheran Churches .. .. .                    | 67            |
| " Societies .. .. .                          | 82            |

## M

|                                                             |                         |
|-------------------------------------------------------------|-------------------------|
| Machine Tool Prototype Factory (G.L.U.) .. .. .             | 129                     |
| " Tools .. .. .                                             | 761, 893                |
| Machinery Manufacturers, Importers and Dealers .. .. .      | 488, 536, 504, 573, 893 |
| Machkund Hydro-Electric Scheme .. .. .                      | 318                     |
| Madhya Pradesh .. .. .                                      | 354                     |
| Associations, Societies, etc. .. .. .                       | 445                     |
| Five-Year Plans .. .. .                                     | 358                     |
| Irrigation Schemes .. .. .                                  | 358                     |
| Universities .. .. .                                        | 359                     |
| Madhya Pradesh State Corporations .. .. .                   | 90                      |
| Madras State .. .. .                                        | 413                     |
| Annamalai University .. .. .                                | 419                     |
| Associations, Societies .. .. .                             | 445                     |
| Classified List of Trades and Professions .. .. .           | 553                     |
| Coimbatore District .. .. .                                 | 417                     |
| Commercial Firms .. .. .                                    | 548                     |
| Corporation .. .. .                                         | 417                     |
| Educational Institutions .. .. .                            | 418                     |
| Fisheries .. .. .                                           | 256                     |
| Madras University .. .. .                                   | 418                     |
| Madras State Corporations .. .. .                           | 90-91                   |
| Madurai University .. .. .                                  | 418                     |
| Magadh University .. .. .                                   | 412                     |
| Magnesite (Mines & Minerals) .. .. .                        | 234                     |
| Mahableshwar .. .. .                                        | 383                     |
| Maharaja Sayajirao University of Baroda .. .. .             | 339                     |
| Maharashtra Electricity Board .. .. .                       | 364                     |
| " Labour Welfare Board .. .. .                              | 366                     |
| " Small-Scale Industries Development Corp'n. Ltd. .. .. .   | 91                      |
| Maharashtra State .. .. .                                   | 360, 419, 1093          |
| Associations (Trade & Commercial) in Greater Bombay .. .. . | 450                     |
| Banks & Bankers .. .. .                                     | 373                     |
| Basic Facts & Figures .. .. .                               | 201                     |
| Benevolent Institutions in Greater Bombay .. .. .           | 456                     |
| Chambers of Commerce in Greater Bombay .. .. .              | 456                     |
| Districts .. .. .                                           | 377-383, 471            |
| Educational Institutions in Greater Bombay .. .. .          | 466                     |
| Electric Power Development .. .. .                          | 363                     |



## M—Contd.

|                                                                | PAGE          |
|----------------------------------------------------------------|---------------|
| Fisheries .. .. .                                              | 257           |
| Greater Bombay .. .. .                                         | 370           |
| Greater Bombay Corporation .. .. .                             | 371           |
| Housing .. .. .                                                | 365           |
| Irrigation .. .. .                                             | 367           |
| Milk Scheme .. .. .                                            | 366           |
| Rainfall of Bombay .. .. .                                     | 376           |
| Road Transport .. .. .                                         | 365           |
| Maharashtra State Corporations .. .. .                         | 91            |
| Managing Agency System (Industrial Structure & Policy) .. .. . | 231           |
| Manganese Ore .. .. .                                          | 233           |
| Manipur .. .. .                                                | 385           |
| Marble and Tile Mfrs. & Merchants .. .. .                      | 765           |
| Maritime Union of India .. .. .                                | 454           |
| Marathwada University .. .. .                                  | 377           |
| Match Industry .. .. .                                         | 97            |
| Material and Mechanical Handling & Conveyors .. .. .           | 765           |
| Matheran Hill Station .. .. .                                  | 379           |
| Maternity Benefit Act .. .. .                                  | 73            |
| Maternity and Nursing Home .. .. .                             | 469           |
| Mazagon Dock Ltd. (Govt. Ind. Undertakings) .. .. .            | 126           |
| Measures, Metric System of Weights & .. .. .                   | 5             |
| Measuring Tapes & Instruments .. .. .                          | 766           |
| Medical Council of India .. .. .                               | 439           |
| " Education (Public Health) .. .. .                            | 140           |
| " Science Societies .. .. .                                    | 166           |
| Mehsana District .. .. .                                       | 341           |
| Mental Hospitals .. .. .                                       | 139           |
| Metal Cutting Tools .. .. .                                    | 766           |
| Metal Mfrs. & Merchants .. .. .                                | 767           |
| Meteorology .. .. .                                            | 2             |
| Metric System of Weights & Measures .. .. .                    | 5             |
| Mica .. .. .                                                   | 233           |
| Middle Income Group Housing .. .. .                            | 135           |
| Middle Schools .. .. .                                         | 213           |
| Milk Colony, Aarey .. .. .                                     | 366           |
| Mill & Gin Stores Suppliers .. .. .                            | 538, 768, 894 |
| Millets .. .. .                                                | 270           |
| Mineral Development Corporation, National .. .. .              | 87            |
| Mineral Merchants .. .. .                                      | 771, 895      |
| Minerals & Metals Trading Corporation of India Ltd. .. .. .    | 87            |
| Minerals Produced in India (tables) .. .. .                    | 236           |
| Mines and Minerals .. .. .                                     | 232, 1091     |
| Minicoy & Amindivi Islands .. .. .                             | 352           |
| Mining Corporation, Andhra Pradesh .. .. .                     | 89            |
| Minimum Wages Act, 1948 .. .. .                                | 72            |
| Ministries (States) and (Central) .. .. .                      | 914-943       |
| Minor Irrigation .. .. .                                       | 300           |
| Miscellaneous Chemicals .. .. .                                | 244           |
| Miscellaneous Industries .. .. .                               | 193           |
| Missionary & Religious Societies in Greater Bombay .. .. .     | 470           |
| Money Supply .. .. .                                           | 240           |
| Monsoon, Rainfall Summary .. .. .                              | 4             |
| Motion Pictures Export Corporation, Indian .. .. .             | 86            |
| Motorcycles, Scooters & Three Wheeler Vehicles .. .. .         | 291           |
| Motors & Trucks (Automobiles) .. .. .                          | 771           |
| " Body Builders .. .. .                                        | 772           |
| " Body Building Materials .. .. .                              | 565, 772      |
| " Transport Workers Act, 1961 .. .. .                          | 76            |
| " Tyres and Accessories .. .. .                                | 772           |
| " Vehicles .. .. .                                             | 174, 293      |
| Moulding Machines and Boxes .. .. .                            | 772           |
| Mountain wall (Physiography) .. .. .                           | 1             |
| Multi-purpose Schools .. .. .                                  | 142           |
| Mysore Chrome Tanning Co. Ltd. .. .. .                         | 130           |
| Mysore Govt. Silk Wvg. Factory .. .. .                         | 130           |

|                                           | PAGE  |
|-------------------------------------------|-------|
| Mysore Iron and Steel Ltd. .. .. .        | 130   |
| Mysore State .. .. .                      | 385   |
| Association, Societies, etc. .. .. .      | 473   |
| Educational Institutions .. .. .          | 393   |
| Fisheries .. .. .                         | 258   |
| Trades and Professions, Bangalore .. .. . | 845   |
| Universities .. .. .                      | 393   |
| Mysore State Corporations .. .. .         | 91-92 |

## N

|                                                      |          |
|------------------------------------------------------|----------|
| Nagaland .. .. .                                     | 394      |
| Nagarjunasagar Project (Irrigation) .. .. .          | 302      |
| Nagpur District .. .. .                              | 380      |
| " University .. .. .                                 | 380      |
| Nahan Foundry Ltd. (Govt. Ind. Undertakings) .. .. . | 126      |
| Nanded District .. .. .                              | 380      |
| Nangal Fertilizer Unit .. .. .                       | 119      |
| Narmada Project .. .. .                              | 336      |
| Nasik District .. .. .                               | 381      |
| National Academy of Administration .. .. .           | 247      |
| National Academy of Sciences .. .. .                 | 478      |
| National Association for the Blind .. .. .           | 458      |
| National Awards, Shram Vir .. .. .                   | 224      |
| " Book Trust of India .. .. .                        | 439      |
| " Buildings and Construction Corporation .. .. .     | 87, 1081 |
| " Cadet Corps (Defence Services) .. .. .             | 8        |
| " Coal Development Corpn. Ltd. .. .. .               | 87       |
| " Cooperative Development Corpn. .. .. .             | 87       |
| " Council of Applied Economic Research .. .. .       | 439      |
| "    " of Educational Research and .. .. .           |          |
| Training .. .. .                                     | 147      |
| "    " of Women in India .. .. .                     | 448      |
| " Defence Academy .. .. .                            | 9        |
| " Development Council .. .. .                        | 939      |
| " Federation of Coop. Sugar Factories .. .. .        | 439      |
| " Fitness Corps. .. .. .                             | 142      |
| " Highways (Roads) .. .. .                           | 172      |
| " Income .. .. .                                     | 241      |
| " Indian Association .. .. .                         | 463      |
| " Industrial Development Corporation .. .. .         | 87       |
| " Institute of Sciences of India .. .. .             | 439      |
| " Institute for Training in Industrial Engi- .. .. . |          |
| neering .. .. .                                      | 468      |
| "    " of Communicable Diseases .. .. .              | 137      |
| " Instruments Ltd. (Govt. Ind. Under- .. .. .        |          |
| takings) .. .. .                                     | 126      |
| " Laboratories .. .. .                               | 167      |
| " Mineral Development Corporation .. .. .            | 87       |
| " Newsprint and Paper Mills Ltd. .. .. .             | 129      |
| " Productivity Council .. .. .                       | 439      |
| " Projects Construction Corporation .. .. .          | 88, 1081 |
| " Research Development Corporation .. .. .           | 88       |
| " Scholarships .. .. .                               | 147      |
| " Seeds Corporation Ltd. .. .. .                     | 1081     |
| " Small Industries Corporation .. .. .               | 88       |
| Nationalised Transport (Roads) .. .. .               | 175      |
| Navy Indian (Defence Services) .. .. .               | 11       |
| NEFA .. .. .                                         | 325      |
| Nehru Prize .. .. .                                  | 225      |
| News Agencies, Indian .. .. .                        | 288      |
| Newspapers (The Press) .. .. .                       | 285, 288 |
| " & Periodicals .. .. .                              | 518, 773 |
| Newsprint .. .. .                                    | 50       |
| News-reels (Film Industry) .. .. .                   | 264      |
| News Services Division .. .. .                       | 133      |



## S—Contd.

|                                                                   | PAGE      |
|-------------------------------------------------------------------|-----------|
| Ship Builders .. .. .                                             | 807       |
| Shipchandlers .. .. .                                             | 807       |
| Shipping Agents .. .. .                                           | 808       |
| " Companies and Airways .. .. .                                   | 175       |
| " Industry .. .. .                                                | 206       |
| Shiromani Akali Dal .. .. .                                       | 1049      |
| " Gurdwara Parbandhak Committee .. .. .                           | 476       |
| Shivaji Military School .. .. .                                   | 473       |
| " University .. .. .                                              | 380       |
| Sholapur District .. .. .                                         | 384       |
| Shops and Commercial Establishments Act .. .. .                   | 76        |
| Shram Vir National Awards .. .. .                                 | 224       |
| Silk Board, Central .. .. .                                       | 53        |
| Silk Industry .. .. .                                             | 50        |
| Silk & Art Silk Mills and Factories .. .. .                       | 808       |
| Silver Refinery, India Govt. .. .. .                              | 124       |
| Sindri Unit (Fertilizer Corpn.) .. .. .                           | 119       |
| Singaneri Collieries .. .. .                                      | 127       |
| Sizing Materials .. .. .                                          | 810       |
| Slum Clearance Improvement Scheme .. .. .                         | 134       |
| Small-Scale Industries .. .. .                                    | 208       |
| S.N.D. Thackersey Women's University .. .. .                      | 375       |
| Snow-bound Areas (population) .. .. .                             | 152       |
| Soap .. .. .                                                      | 568       |
| " and Toilet Manufacturers .. .. .                                | 906       |
| Social Education .. .. .                                          | 145       |
| " Institutions in Gr. Bombay .. .. .                              | 459       |
| " Welfare in India .. .. .                                        | 15        |
| Soil Conservation .. .. .                                         | 271       |
| Soldiers', Sailors' and Airmen's Board (Defence Services) .. .. . | 9         |
| Solvents (Organic & Inorganic) .. .. .                            | 811       |
| Southern Languages Book Trust .. .. .                             | 449       |
| Space Research (Research) .. .. .                                 | 171       |
| Special Courts (Administration of Justice) .. .. .                | 60        |
| Sports .. .. .                                                    | 1093      |
| " Goods Manufacturers & Dealers .. .. .                           | 812, 906  |
| Spring Manufacturers .. .. .                                      | 812       |
| Sri Venkateswara University, Tirupati .. .. .                     | 320       |
| Srisaillam Hydro-Electric Scheme .. .. .                          | 318       |
| St. John Ambulance Association .. .. .                            | 440       |
| Stainless Steel Utensils Manufacturers & Dealers .. .. .          | 812       |
| State Associations .. .. .                                        | 432       |
| State Bank of India .. .. .                                       | 580       |
| " Budgets, 1965-66 to 1967-68 .. .. .                             | 1103      |
| " Co-operative Banks .. .. .                                      | 35        |
| " Corporations .. .. .                                            | 89, 1081  |
| State-Owned or State-Aided Undertakings .. .. .                   | 127       |
| State Plans .. .. .                                               | 288       |
| State Trading Corporation of India .. .. .                        | 88        |
| State-wise Distribution of Newspapers .. .. .                     | 285       |
| " " of Population .. .. .                                         | 152       |
| States Adm. Personnel .. .. .                                     | 914-928   |
| States/Territories .. .. .                                        | 1         |
| Stationery Mfrs. and Dealers .. .. .                              | 813, 907  |
| Steamship Agents .. .. .                                          | 815       |
| " Companies .. .. .                                               | 815       |
| Steel .. .. .                                                     | 815       |
| " Furniture .. .. .                                               | 815, 907  |
| " Industry .. .. .                                                | 261       |
| " Plants .. .. .                                                  | 123, 1088 |
| " Projects, Alloy .. .. .                                         | 124       |
| " Re-Rolling Mills .. .. .                                        | 263       |
| Stevedores and Dubashes .. .. .                                   | 816, 908  |
| Straw-Boards .. .. .                                              | 816       |
| Structural Engineers & Contractors .. .. .                        | 817       |
| Subsidiary Food (Food) .. .. .                                    | 309       |

|                                               | PAGE     |
|-----------------------------------------------|----------|
| Subsidised Industrial Housing Scheme .. .. .  | 134      |
| Sugar Industry .. .. .                        | 53       |
| " Mill Machinery & Other Requirements .. .. . | 817      |
| Suppliers .. .. .                             | 818      |
| Mills .. .. .                                 | 234      |
| Sulphur (Mines and Minerals) .. .. .          | 243      |
| Sulphuric Acid .. .. .                        | 128      |
| Superphosphate Factory, Bihar .. .. .         | 59, 943  |
| Supreme Court of India .. .. .                | 225      |
| Sur-Singar Samsad's Film Award .. .. .        | 342      |
| Surat District .. .. .                        | 342      |
| Surendranagar District .. .. .                | 818, 908 |
| Surgical Instruments and Appliances .. .. .   | 818      |
| Surveying & Measuring Instruments .. .. .     | 1050     |
| Swatantra Party .. .. .                       | 125      |
| Synthetic Drugs Project .. .. .               | 202      |
| " Fibres (Rayon Industry) .. .. .             | 204      |
| " Rubber (Rubber Industry) .. .. .            |          |

## T

|                                                         | PAGE     |
|---------------------------------------------------------|----------|
| Tallow Importers, Dealers and Mfrs. .. .. .             | 819      |
| Talukas, Area & Population .. .. .                      | 155      |
| Tank Manufacturers .. .. .                              | 819      |
| Tanneries Ltd., Hyderabad .. .. .                       | 819      |
| Tapes, Twines & Bandings .. .. .                        | 170      |
| Tarapur Atomic Power Station .. .. .                    | 107      |
| Tariff Commission (Import and Export Trade) .. .. .     | 820      |
| Tarpaulin .. .. .                                       | 469      |
| Tata Hydro-Electric Projects .. .. .                    | 469      |
| Tata Institute of Fundamental Research .. .. .          | 1093     |
| " " of Social Sciences .. .. .                          | 356      |
| " Projects .. .. .                                      | 1095     |
| Tawa Project .. .. .                                    | 232      |
| Tax Proposals (Public Finance) .. .. .                  | 76       |
| Taxation Policy (Industrial Structure & Policy) .. .. . | 210      |
| Tea Districts Emigrant Labour Act .. .. .               | 821      |
| Tea Industry .. .. .                                    | 142, 217 |
| " & Coffee Mfrs. & Merchants .. .. .                    | 1082     |
| Teacher Training .. .. .                                | 465      |
| Technical Education .. .. .                             | 14       |
| " Institutions, Bombay .. .. .                          | 13       |
| Tele Communications (Posts & Telegraphs) .. .. .        | 14       |
| Telegraphs, Posts and .. .. .                           | 124      |
| Telephones .. .. .                                      | 132      |
| Teleprinters Ltd., Hindustan .. .. .                    | 272      |
| Television (Broadcasting) .. .. .                       | 10       |
| Tenancy Reform (Agriculture) .. .. .                    | 821      |
| Territorial Army (Defence Services) .. .. .             | 822      |
| Textile Auxiliaries, Mfrs. & Dealers .. .. .            | 55       |
| " Engineers .. .. .                                     | 543, 823 |
| " Industry .. .. .                                      | 824      |
| " Machinery Mfrs. and Dealers .. .. .                   | 823      |
| Textile Wooden Articles .. .. .                         | 384      |
| Textiles .. .. .                                        | 825      |
| Thana District .. .. .                                  | 525, 826 |
| Timber Merchants .. .. .                                | 58       |
| Tin Printers and Box Mfrs. .. .. .                      | 826      |
| Tobacco Industry .. .. .                                | 828      |
| Toiletries .. .. .                                      | 826, 910 |
| Tool, Alloy and Special Steel Merchants .. .. .         | 1081     |
| " Mfrs. and Merchants .. .. .                           | 19       |
| Tourism Development Corporation .. .. .                 | 17, 1092 |
| Tourist Centres .. .. .                                 | 25       |
| Tourist's Guide, A .. .. .                              | 163      |
| Tourist Traffic .. .. .                                 | 129      |
| Towns (Population) .. .. .                              |          |
| Traco Cable Company .. .. .                             |          |





# RAMTIRTH BRAHMI OIL

Special No. 1  
Registered.

An invaluable hair tonic for falling hair, RAMTIRTH BRAHMI OIL is manufactured scientifically with many precious ingredients, which cools brain, and brings sound sleep. Most ideal for body massage. It is useful to everyone in all seasons. Available everywhere.

## RAMTIRTH (HINDI MONTHLY)

Editor : Yogiraj Shri Umeshchandraji

The main idea behind this Magazine is to develop the Physical, Mental and Moral Aspect of the common man. Attractive three-colour cover page gives Stories, Questions-Answers, Articles on Vedanta, Yoga, Gita, Nature Cure, etc.

Annual Subscription Rs. 5/- only. Single  
Copy 65 P. only

Foreign : Annual Subscription 13 sh. Single  
copy 2 sh. (including Postage).



*Yogiraj Shri Umeshchandraji*

## UMESH YOGA DARSHAN (First Part)

In four Languages: English, Hindi, Gujarati & Marathi. (Author: Yogiraj Shri Umeshchandraji)

An excellent treatise on the true meaning of Yoga, which explains to you how to control your digestive, nervous, respiratory, urinary and other body systems. The book is fully illustrated with 108 real Asana photographs and explains to you about their efficacy in attaining complete remedy of various ailments or disorders through the medium of Yoga, Naturopathy Chromopathy, Psycho-Therapy etc.

Useful for men and women alike, young or old, healthy or unhealthy. Deserves a rightful place in every home, hospital and library.

**PRICE: Rs. 15/- Plus Postage Rs. 2-50 Extra.**

### YOGASANA CHART

A Chart printed on Art-glazed paper and fully illustrated with attractive pictures is also available here. You can perform the Asanas shown therein at your home, which will keep you fit and healthy. Price: Rs. 3/- including Postage to be sent by M. O. only.

### YOGIC CLASSES

are also regularly conducted in the morning and evening at Shri Ramtirth Yogashram. Special classes for Ladies are also conducted. Lady teachers instruct Ladies.

## SHRI RAMTIRTH YOGASHRAM

Dadar, Central Rly., Bombay-14 (India). Phone: 442899.



